YAMAHA

TONE GENERATOR

TG500

OWNER'S MANUAL

FCC INFORMATION (U.S.A.)

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.
2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
3. **NOTE:** This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

   Relocate either this product or the device that is being affected by the interference.

   Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

   In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

   If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA 90620

   The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

Dette apparat overholder det gaeldende EF-direktiv vedrørende radiostøj.

Cet appareil est conforme aux prescriptions de la directive communautaire 87/308/CEE.

Diese Geräte entsprechen der EG-Richtlinie 82/499/EWG und/oder 87/308/EWG.

This product complies with the radio frequency interference requirements of the Council Directive 82/499/EEC and/or 87/308/EEC.

Questo apparecchio è conforme al D.M.13 aprile 1989 (Direttiva CEE/87/308) sulla soppressione dei radiodisturbi.

Este producto está de acuerdo con los requisitos sobre interferencias de radio frequencia fijados por el Consejo Directivo 87/308/CEE.

YAMAHA CORPORATION

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

* This applies only to products distributed by YAMAHA - KEMBLE MUSIC (U.K.) LTD.

Litiumbatteri!
Bör endast bytas av servicepersonal.
Explosionsfara vid felaktig hantering.

VAROITUS!
Lithiumparisto, Räjähdysvaara.
Pariston saa vaihtaa ainoastaan alan ammattimies.

ADVARSEL!
Lithiumbatteri!
Eksplosionsfare. Udskiftning må kun foretages af en sagkyndig, – og som beskrevet i servicemanualen.

CANADA

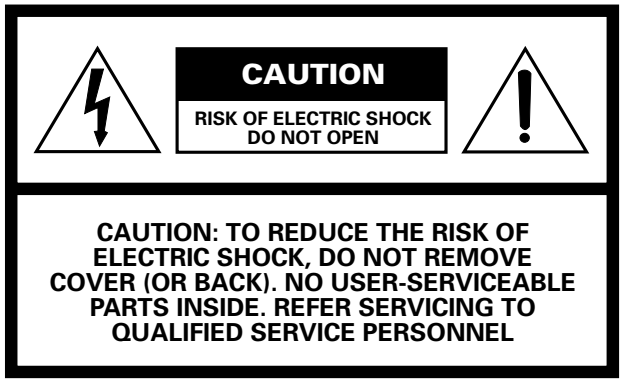
THIS DIGITAL APPARATUS DOES NOT EXCEED THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATION OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

LE PRESENT APPAREIL NUMERIQUE N'EMET PAS DE BRUITS RADIOELECTRIQUES DEPASSANT LES LIMITES APPLICABLES AUX APPAREILS NUMERIQUES DE LA "CLASSE B" PRESCRITES DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE EDICTE PAR LE MINISTERE DES COMMUNICATIONS DU CANADA.

* This applies only to products distributed by YAMAHA CANADA MUSIC LTD.

SPECIAL MESSAGE SECTION

PRODUCT SAFETY MARKINGS: Yamaha electronic products may have either labels similar to the graphics shown below or molded/stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated on this page and those indicated in the safety instruction section.



● **Explanation of Graphical Symbols**

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

IMPORTANT NOTICE: All Yamaha electronic products are tested and approvend by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

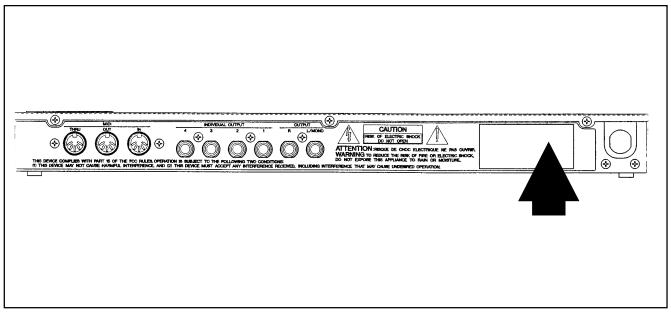
Battery Notice: This product MAY contain a small non-rechargcable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes neccessary, contact a qualified service representative to perform the replacement.

Warning: Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

Disposal Notice: Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

NOTICE: Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial nunber, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.



Model _____

Serial No. _____

Purchase Date _____

This information on safety is provided to comply with U.S.A. laws, but should be observed by users in all countires.

IMPORTANT SAFETY INSTRUCTIONS

INFORMATION RELATING TO PERSONAL INJURY, ELECTRICAL SHOCK, AND FIER HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING — When using any electrical or electronic product, basic precautions should always be followed. These precautions include, but are not limited to, the following:

1. Read all Safety Instructions, Installation Instructions, Special Message Section items, and any Assembly Instructions found in this manual BEFORE making any connections, including connection to the main supply.

2. Main Power Suplly Verifications: Yamaha products are manufactured specifically for the supply voltage in the area where they are to be sold. If you should move, or if any doubt exists about the supply voltage in your area, please contact your dealer for supply voltage verification and (if applicable) instructions. The required supply voltage is printed on the name plate. For name plate location, please refer to the graphic found in the Special Message Section of this manual.

3. This product may be equipped with a polarized plug (one blade wider than the other). If you are unable to insert the plug into the outlet, turn the plug over and try again. If the problem persists, contact electrician to have the obsolete outlet replaced. Do NOT defeat the safety purpose of the plug.

4. Some electronic products utilize external power supplies or adapters. DO NOT connect this type of product to any power supply or adapter other than one described in the owners manual, on the name plate, or specifically recommended by Yamaha.

5. WARNING: Do not place this product or any other objects on the power cord or place it in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimume wire size for a 25' cord (or less) is 18 AWG. NOTE: The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

6. Ventilation: Electronic products, unless specifically designed for enclosed installations, should be placed in locations that do not interfere with proper ventilation. If instructions for enclosed installations are not provided, it must be assumed that unobstructed ventilation is required.

7. Temperature considerations: Electronic products should be installed in locations that do not significantly contribute to their operating temperature. Placement of this product close to heat sources such as; radiators, heat registers and other devices that produce heat should be avoided.

8. This product was NOT designed for use in wet/damp locations and should not be used near water or exposed to rain. Examples of wet/damp locations are; near a swimming pool, spa, tub, sink, or wet basement.

9. This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by the manufacturer. If a cart, rack, or stand is used, please observe all safety markings and instructions that accompany the accessory product.

10. The power supply cord (plug) should be disconnected from the outlet when electronic products are to be left unused for extended periods of time. Cords should also be disconnected when there is a high probability of lightening and/or electrical storm activity.

11. Care should be taken that objects do not fall and liquids are not spilled into the enclosure through any openings that may exist.

12. Electrical/electronic products should be serviced by a qualified service person when:

a. The power supply cord has been damaged; or
b. Objects have fallen, been inserted, or liquids have been spilled into the enclosure through openings; or
c. The product has been exposed to rain; or
d. The product does not operate, exhibits a marked change in performance; or
e. The product has been dropped, or the enclosure of the product has been damaged.

13. Do not attempt to service this product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

14. This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the cars, you should cousult an audiologist. IMPORTANT: The louder the sound, the shorter the time period before damage occurs.

15. Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied as a part of the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

PLEASE KEEP THIS MANUAL

This information on safety is provided to comply with U.S.A. laws, but should be observed by users in all countires.

The TG500 Tone Generator delivers the incredible Yamaha AWM2 sound with improved quality and versatility. In addition to superior sound, the TG500 features “Quick Edit” modes that provide fast, easy access to the most important voice and performance editing jobs so you can customize the sound without having to deal with the details. Of course, you still have full programming power when you want to do some serious voicing. In terms of sound and programming power, the TG500 offers unprecedented levels of quality and performance.

We urge you to read the owner’s manuals thoroughly in order to realize the full potential of the TG500 (see “About the Manual” on page 5), and keep the manuals in a safe place for future reference.

MAIN FEATURES

● AWM2 Sound, 64-note Polyphony

2nd-generation Advanced Wave Memory (AWM2) technology delivers dazzling, true-to-life sound with 64-note polyphony.

● Large-capacity Waveform ROM

A huge 8-megabyte waveform ROM provides the kind of capacity required for stunning, true-to-life sound.

● Expandable Waveform RAM

Up to 1-megabyte of waveform RAM can be installed to allow loading of external samples via waveform cards or the MIDI Sample Dump protocol.

● 4-layer Performance Combinations

Voices can be played individually, or up to four voices can be combined and “layered” to form performance combinations.

● 384 Presets and 192 User RAM Locations

The TG500 has 384 presets including 252 voices, 4 multi-instrument drum voices, and 128 performance combinations. 192 internal RAM locations additionally store 126 voices, 2 drum voices, and 64 performance combinations. The TG500 also provides RAM memory for 16 multi-play setups.

● Advanced Digital Filters

Programmable digital filters allow the TG500 sound to be tailored as required. The filters also feature a resonance parameter equivalent to that found on the SY77 and SY99 Music Synthesizers.

● Top-quality Effects

The basic quality of the TG500 voices is further enhanced by a range of programmable effects offering quality rivalling some of the finest separate signal processing systems.

● Other Features

- Slots for dual external memory card sets (VOICE and WAVE).
- Easy-to-read 24-character × 2-line backlit LCD display.
- Recognizes individual key aftertouch.
- Stereo L/R and 4 individual audio outputs.

GETTING STARTED

FEATURE REFERENCE

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VOICE EDIT MODE

DRUM VOICE EDIT MODE

MULTI EDIT MODE

UTILITY MODE / WAVE EDIT MODE

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Getting Started

Precautions

!! PLEASE READ THIS BEFORE PROCEEDING !!

■ Location

Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage.

- Direct sunlight (e.g. near a window).
- High temperatures (e.g. near a heat source, outside, or in a car during the daytime).
- Excessive humidity.
- Excessive dust.
- Strong vibration.

■ Power Supply

- Turn the power switch OFF when the instrument is not in use.
- The power supply cord should be unplugged from the AC outlet if the instrument is not to be used for an extended period of time.
- Unplug the instrument during electric storms.
- Avoid plugging the instrument into the same AC outlet as appliances with high power consumption, such as electric heaters or ovens. Also avoid using multi-plug adapters since these can result in reduced sound quality and possibly damage.

■ Turn Power OFF When Making Connections

- To avoid damage to the instrument and other devices to which it is connected (a sound system, for example), turn the power switches of all related devices OFF prior to connecting or disconnecting audio and MIDI cables.

■ MIDI Connections

- When connecting the TG500 to MIDI equipment, be sure to use high-quality cables made especially for MIDI data transmission.
- Avoid MIDI cables longer than about 15 meters. Longer cables can pick up electrical noise that can causes data errors.

■ Handling and Transport

- Never apply excessive force to the controls, connectors or other parts of the instrument.
- Always unplug cables by gripping the plug firmly, not by pulling on the cable.
- Disconnect all cables before moving the instrument.
- Physcal shocks caused by dropping, bumping, or placing heavy objects on the instrument can result in scratches and more seious damage.

■ Cleaning

- Clean the cabinet and panel with a dry soft cloth.
- A slightly damp cloth may be used to remove stubborn grime and dirt.
- Never use cleaners such as alcohol or thinner.
- Avoid placing vinyl objects on top of the instrument (vinyl can stick to and discolor the surface).

■ Electrical Interference

- This instrument contains digital circuitry and may cause interference if placed too close to radio or television receivers. If this occurs, move the instrument further away from the affected equipment.

■ Data Backup

- The TG500 contains a special long-life battery that retains the contents of its internal voice, performance, multi, and wave memory (when installed) even when the power is turned OFF. The backup battery should last for several years. When the backup battery needs to be replaced "Change battery!" will appear on the display when the power is turned on. When this happens, have the backup battery replaced by qualified Yamaha service personnel. DO NOT ATTEMPT TO REPLACE THE BACKUP BATTERY YOURSELF!
- Internal memory data can be corrupted due to incorrect operation. Be sure to "save" important data to memory card frequently so you have a backup to revert to if something happens to damage the data in memory.

■ Service and Modification

- The TG500 contains no user serviceable parts. Opening it or tampering with it in anyway can lead to irreparable damage and possibly electric shock. Refer all servicing to qualified YAMAHA personnel.

■ Third-party Software

- Yamaha can not take any responsibility for software produced for this product by third-party manufacturers. Please direct any questions or comments about such software to the manufacturer or their agents.

YAMAHA is not responsible for damage caused by improper handling or operation.

About the Manual

The TG500 manual has two sections — ***Getting Started*** and ***Feature Reference***.

■ The Getting Started Section

In addition to an overview of the TG500 controls and connectors (page 8), the ***Getting Started*** section contains five chapters that take you through the main procedures you will need to know to become familiar with your TG500:

1. Setting Up Your System [Page 12]
Basic system connections, MIDI settings, and powering up your system.

2. Selecting And Playing Voices [Page 16]
Selecting and playing voices from the INTERNAL, PRESET and CARD memories.

3. The Performance Mode [Page 22]
Selecting and playing performance combinations from the INTERNAL, PRESET and CARD memories, and programming original performance combinations.

4. The Multi Mode [Page 35]
Creating and using multi setups that allow up to 16 separate "instruments" to be independenty controlled from an external sequencer, computer, or similar device.

5. Voice Editing & Effects [Page 39]
Some ideas to help you program original voices in a smooth and efficient manner.

We recommend that you go through the chapters in sequence while actually carrying out the procedures on your TG500. Once you've gone through the entire Getting Started section in this way, you should be familiar enough with the TG500 to need only the Feature Reference section in future.

■ Icons

The following simple icons are used throughout the Getting Started section of the manual to draw attention to important points and information where necessary. The icons also make it easier to differentiate between information that you should read immediately and information that can be skipped until later, hopefully helping you to become familiar with the TG500 in the quickest, most efficient manner possible.

This icon warns of possible hardware damage, software malfunction, or any other serious problem that may occur due to improper operation or set up.

*This icon marks information that you **must read** — i.e. important steps or procedures that are essential for proper, efficient, or easy operation.*

The magnifying-glass icon indicates information that may not be essential for general operation, but is a more detailed explanation of a feature, a description of the principle involved, etc. You can skip this information if full details are not required immediately.

Hints or ideas that are not specifically musical but may make operation easier or more interesting are marked by the lightbulb icon.

■ **The** Feature Reference **Section**

The Feature Reference section is the “nuts and bolts” reference for the TG500, individually describing its many functions in detail. The Feature Reference section is divided into 5 main chapters, each describing the various functions within a particular TG500 edit or utility mode.

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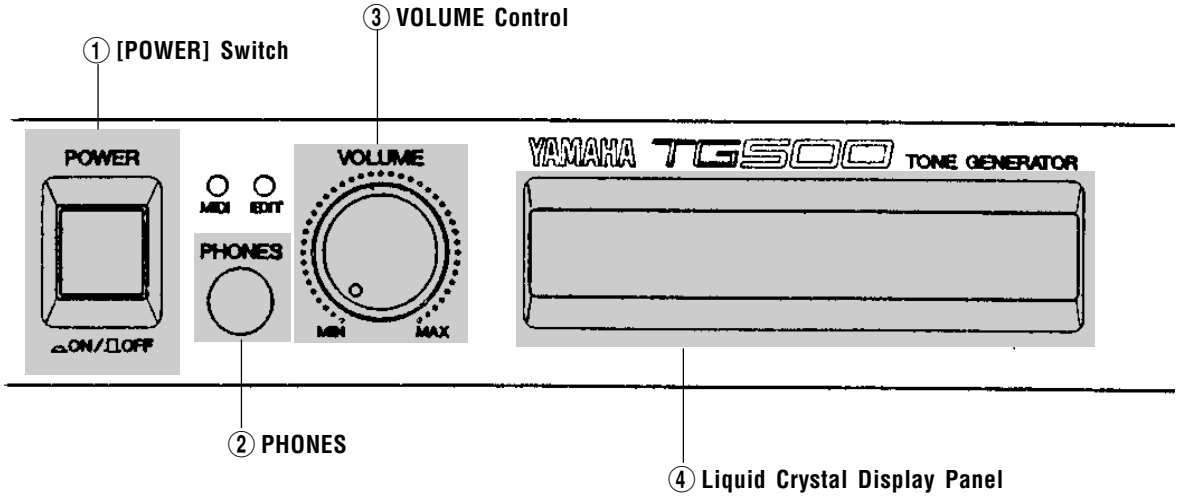
4. Multi Edit Mode..... .....[Page 197]
5. Utility Mode/Wave Edit Mode..... [Page 219]

Once you have become familiar with the way the TG500 works by going through the Getting Started section, you should only need to refer to the Feature Reference section from time to time to get details on functions you’ve never used before, or refresh your memory about functions that you don’t use very often.

Each chapter of the Feature Reference section has its own table of contents, so you should be able to locate any particular function quickly and easily. Functions and references can also be located by referring to the index at the back of the manual.

The Controls & Connectors

■ Front Panel



① [POWER] Switch

Press to turn the TG500 power on or off.

page 15.

② PHONES Jack

Accepts a standard pair of stereo headphones (1/4" stereo phone plug) for headphone monitoring of the TG500 sound without the need for external amplification equipment.

③ VOLUME Control

Adjusts the volume of the sound delivered via the rear-panel OUTPUT jacks as well as the PHONES jack.

page 12.

④ Liquid Crystal Display Panel

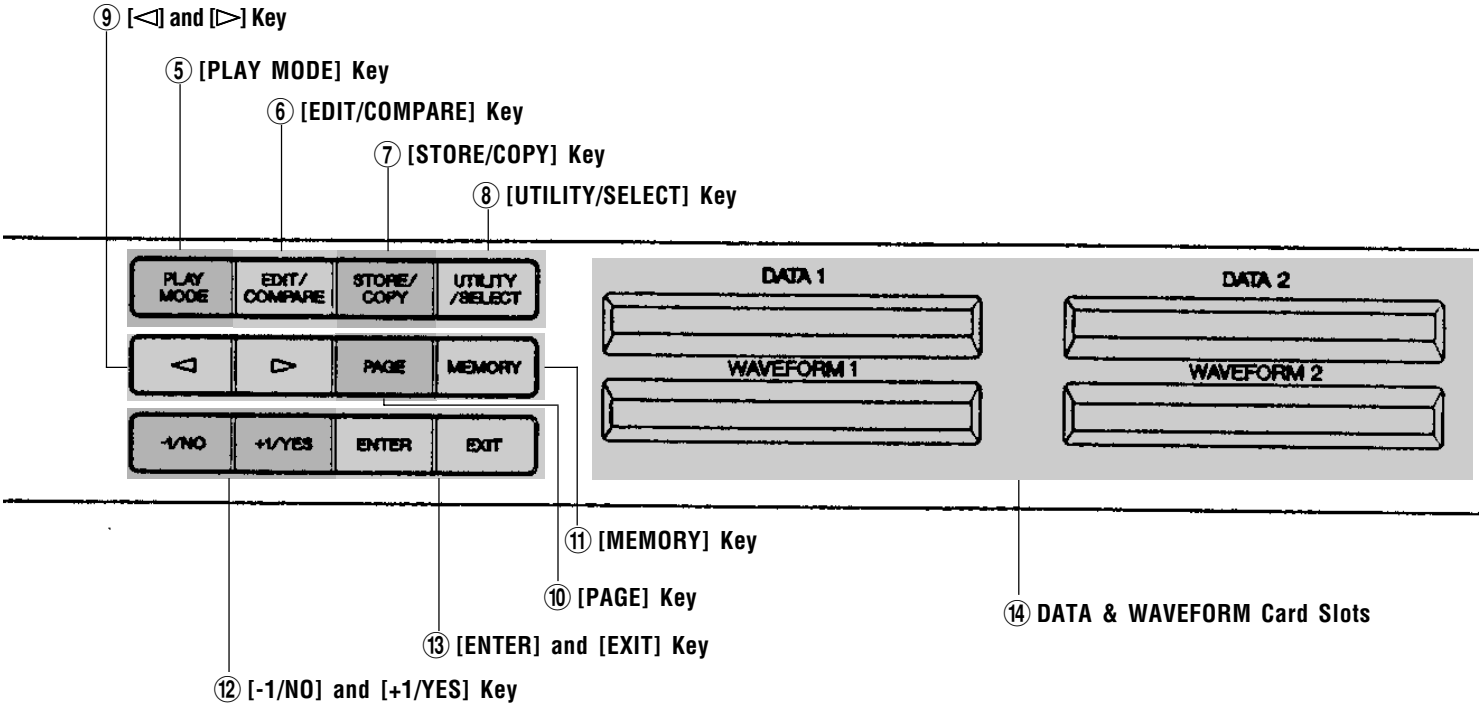
This 24-character × 2-line backlit liquid crystal display panel shows all essential information for easy operation and programming.

page 17.

⑤ [PLAY MODE] Key

Alternately selects the TG500's voice, performance, and multi play modes.

page 14.



⑥ [EDIT/COMPARE] Key

Accesses the edit mode for the currently selected play mode. If the voice play mode is selected, for example, pressing the [EDIT/COMPARE] key engages the voice edit mode. When an edit mode is already selected, the [EDIT/COMPARE] key turns the edit compare function on and off.

page 27.

⑦ [STORE/COPY] Key

Used to store edited data to an internal or card memory location. When an appropriate edit mode is engaged the [STORE/COPY] key is also used call the corresponding data copy function.

page 33.

⑧ [UTILITY/SELECT] Key

This key selects the TG500 utility mode, containing a range of utility functions *and* the wave edit mode. In the performance edit mode the [UTILITY/SELECT] key is also used for layer selection and muting, while in the mutli edit mode it is used for multi instrument selection.

page 29.

⑨ [◁] and [▷] Keys

These keys do not function in the TG500 play modes (voice, performance, or multi), but in the edit and utility modes they are used to move the cursor to the parameter to be edited. Logically, the [◁] key moves the cursor to the left and the [▷] key moves it to the right. In the edit mode the [◁] and [▷] keys can also be used while holding the [PAGE] key to switch directly between edit screens.

page 14.

⑩ [PAGE] Key

In any of the edit and utility modes this key calls a menu that allows the desired screen to be specified and accessed by number.

page 13.

⑪ [MEMORY] Key

Selects the memory area — internal 1, internal 2, or card — from which voices or performance combinations will be selected.

page 18.

⑫ [-1/NO] and [+1/YES] Keys

Used to select voices, performance combinations, multi setups, and editing functions. These keys are also used to edit parameter values in any of the TG500 edit modes. Either key can be pressed briefly for single stepping in the specified direction, or held for continuous scrolling. Even faster scrolling is achieved by pressing the opposite key while holding the key corresponding to the direction you want to scroll in.

The [-1/NO] and [+1/YES] keys are also used to respond to the “Sure?” confirmation prompt when saving or initializing data.

page 13.

⑬ [ENTER] and [EXIT] Keys

The [ENTER] key is used to engage a variety of modes and functions, while the [EXIT] key can generally be used to exit from any mode or function.

page 13 and 28.

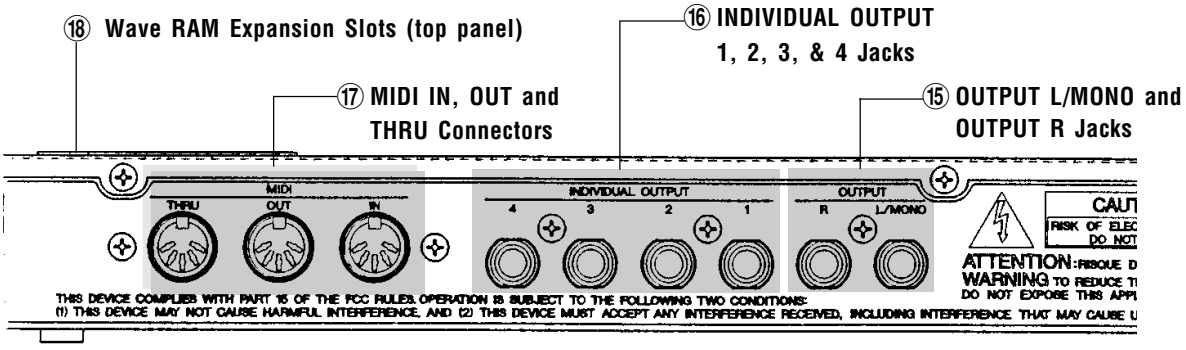
⑭ DATA & WAVEFORM Card Slots

The DATA slot accepts Yamaha MCD64 Memory Cards for storage and retrieval of TG500 voices and performance combinations. It will also accept pre-programmed ROM voice/performance cards. The WAVEFORM slot accepts pre-programmed ROM cards containing wave data that can be used by the TG500. The card wave data can be loaded into the TG500’s internal wave RAM memory.

CAUTION: Do not attempt to plug a waveform card into a data card slot, and vice versa. Plugging the wrong card into the wrong slot can result in physical damage.

page 17.

■ Rear Panel



⑮ OUTPUT L/MONO and OUTPUT R Jacks

These are the main stereo outputs from the TG500. If a plug is inserted only into the L/MONO jack, the left and right-channel signals are combined and delivered via this jack (for connection to a monaural sound system).

page 12.

⑯ INDIVIDUAL OUTPUT 1, 2, 3, & 4 Jacks

These are most ideally used as “additional outputs” for multi-play setups in which each multi instrument can be individually assigned to the normal stereo outputs described above, or a specified INDIVIDUAL OUTPUT. The multi-play voices can thus be distributed to four outputs and send to a mixing console. Drum voice instruments can also be separately assigned to the stereo and individual outputs.

page 12.

⑰ MIDI IN, OUT and THRU Connectors

The MIDI IN connector receives the data from an external keyboard, sequencer or other MIDI device which is to control or transmit data to the TG500. The MIDI THRU connector simply re-transmits the data received at the MIDI IN connector, allowing convenient chaining of MIDI devices. The MIDI OUT connector transmits bulk data when one of the MIDI data transmission functions are activated.

page 13.

⑱ Wave RAM Expansion Slots (top panel)

One or two Yamaha SYEMB06 Memory Expansion Boards can be installed here to provide 512 kilobytes (1 board) or 1 megabyte (2 boards) of extra RAM for storage of waveforms loaded either from a waveform card plugged into the WAVEFORM2 slot or via the MIDI Sample Dump protocol.

page 282.

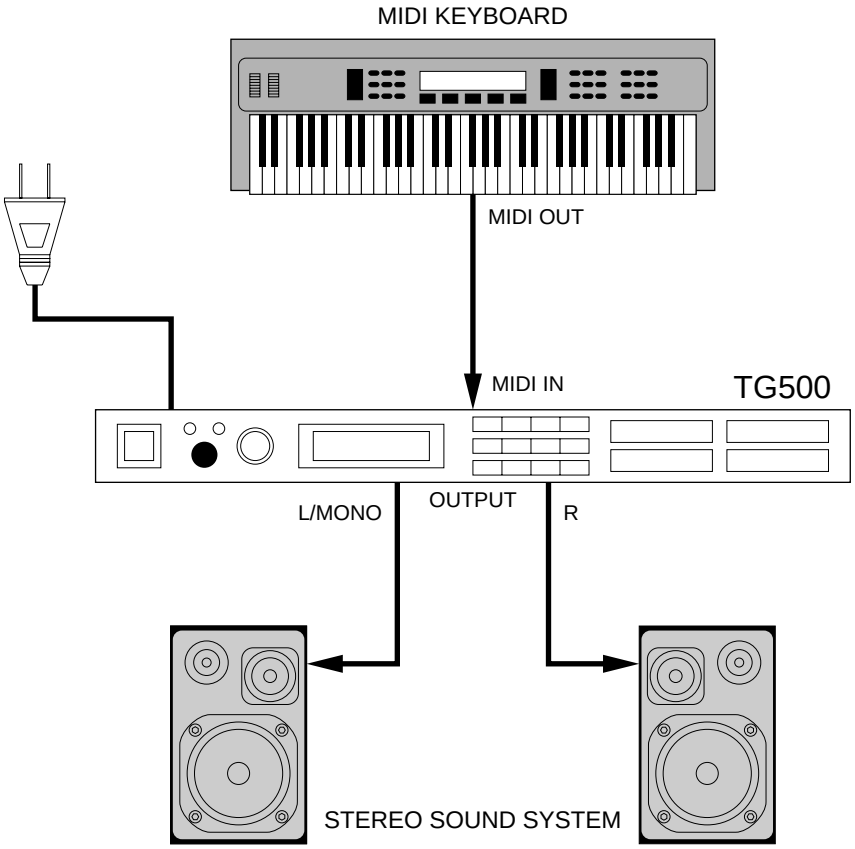
1. Setting Up Your System

■ Connections

The diagram below shows the basic connections in a setup using the TG500, a MIDI keyboard (with built-in sequencer), and a stereo sound system.

CAUTION

Make sure that the TG500, your keyboard, and your sound system are turned OFF when making connections.



● AUDIO CONNECTIONS

If your TG500 is to be connected to a stereo sound system only, use the OUTPUT L/MONO and R jacks. These are the main stereo outputs from the TG500, and the ones controlled by the panel [VOLUME] control. If you have a monaural sound system, connect only the L/MONO jack.

If you plan to use the TG500 with a mixing console or an integrated multitrack recorder/mixer, you might want to take advantage of the INDIVIDUAL OUTPUT jacks (1, 2, 3 and 4) in addition to the OUTPUT L/MONO and R output jacks. These six outputs can be connected to separate input channels of the mixer. In the multi mode, for example, you could assign instruments you want to process separately to the INDIVIDUAL OUT jacks while the remaining instruments are delivered in stereo to the OUTPUT L/MONO and R outputs (see page 201 for multi instrument output assignment).

● MIDI CONNECTIONS & SETTINGS

The MIDI OUT connector of the keyboard, sequencer, or other controller which is to control the TG500 must be connected to the MIDI IN connector of the TG500. You'll also have to make sure that the receive channel of the TG500 is set to match the transmit channel of your keyboard.

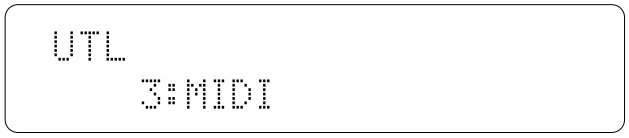
Basic MIDI Settings

1 Select the UTILITY mode.

Press the [UTILITY/SELECT] key to select the UTILITY mode.

2 Select the MIDI functions.

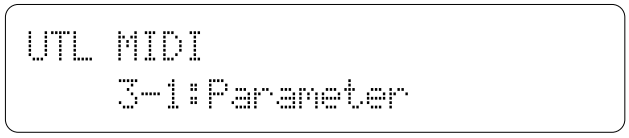
Use the [-1/NO] and [+1/YES] keys to select "3:MIDI".



3 Press [ENTER].

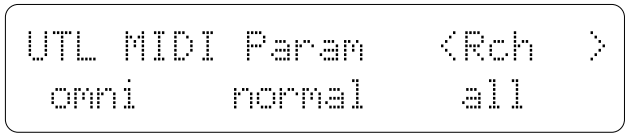
4 Select the "Parameter" screen.

Press the [PAGE] key and then use the [-1/NO] and [+1/YES] keys to select the "3-1:Parameter" screen.



5 Press [ENTER].

Press [ENTER] to select the UTILITY mode MIDI functions PARAMETER screen.



6 Set the MIDI parameters.

Use the [◁] to move the underline cursor to the leftmost parameter ("<Rch >" will appear in the upper right corner of the display). This is the receive channel parameter. Use the [-1/NO and [+1/YES] keys to set it to the appropriate channel number (1 through 16) or "omni" to receive on all channels.

If the center parameter is not already set to "normal" as shown in the display above, press the [▷] key to move the cursor to that parameter ("<PgmCh >" will appear in the upper right corner of the display), then use the [-1/NO] and [+1/YES] keys to set it to "normal". This allows program change numbers transmitted from your MIDI keyboard or controller to select voices or performance combinations 0 through 63.

7 Press [PLAY MODE] when done.

Press the [PLAY MODE] key to exit from the UTILITY mode and return to the TG500 play mode.

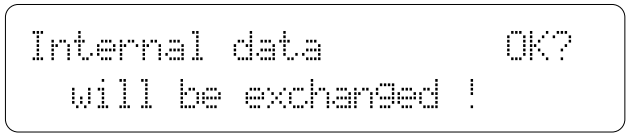
If your system requires more detailed MIDI settings, first read "General Editing Procedure" on page 45, then study the MIDI parameters described on pages 227 through 232 of the UTILITY MODE section.

● PLAY THE DEMO

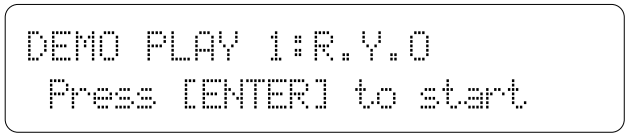
The TG500 includes a demonstration playback function that you can try out once your system is set up.

1 Engage the demo mode.

Press the [EXIT] key while holding the [PLAY MODE] key to engage the demo mode. The following display will appear:

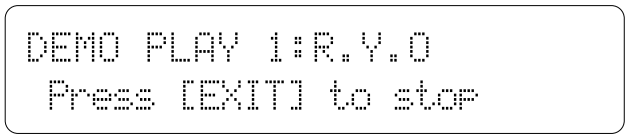


This display warns that if you actually enter the demo mode the internal voice and performance memory will be re-loaded with the initial factory-preset voices and performance combinations. Any edited voices and performance combinations will therefore be erased. Press [+1/YES] if you want to go ahead, or [-1/NO] if you want to cancel and return to the previous mode.



2 Select a DEMO and press [ENTER].

Use the [-1/NO] and [+1/YES] keys to select one of the three demo sequences provided, then press [ENTER] to start playback.



3 Press [EXIT] to stop playback.

Press [EXIT] when you want to stop playback. You can now select and play a different demo, or press [EXIT] again to exit from the demo mode.

■ Power-on Procedure

Believe it or not, there's actually a "right" way to turn on a sound system that will minimize the possibility of damage to the equipment (and your ears!).

1 Make sure your sound system's volume control and the TG500 volume control are turned all the way down prior to turning power on.

2 Turn on your keyboard or other MIDI controller.

3 Turn on the TG500.

4 Turn on the sound system.

5 Raise the sound system volume to a reasonable level.

6 Gradually raise the TG500 VOLUME control while playing the keyboard/controller to set the desired listening level.

2. Selecting And Playing Voices

One of the first things you'll want to do with your TG500 is select and play some of its outstanding voices … this section will show you how to do just that.

■ The Preset, Internal, & Card Voice Memories

Voices played by the TG500 can come from three different sources: the PRESET voice memory, the INTERNAL voice memory, or CARD voice memory. Each of these memory areas further contains a number of "banks," each containing 64 voices. Any voice in any of these voice memories can be selected and played while the TG500 is in the VOICE PLAY mode.

PRESET VOICE MEMORY

Voice numbers that begin with a "P" are in the PRESET voice memory. The PRESET voice memory contains 256 pre-programmed voices in ROM (Read Only Memory) that cannot be overwritten or changed in any way. The 256 voices are organized in 4 banks of 64 voices each.

PRESET VOICE MEMORY

P_{I} ..... Preset voice bank 1 (00 … 63).
P_{II} ..... Preset voice bank 2 (00 … 63).
P_{III} ..... Preset voice bank 3 (00 … 63).
P_{IV} ..... Preset voice bank 4 (00 … 63).

INTERNAL VOICE MEMORY

INTERNAL voice numbers begin with the letter "I". The INTERNAL voice memory is a RAM (Random Access Memory) area which initially contains 128 voices that you can use "as-is" or edit to create variations or totally new voices. The 128 voices are organized as 2 banks of 64 voices each. Voices in the INTERNAL memory can also be moved around and stored in different INTERNAL memory locations, or new voices can be loaded from an external memory card. The initial factory-set INTERNAL voices are different from the PRESET voices, and will be lost if edited or changed in any way. The initial INTERNAL voices are automatically reloaded when the TG500 demonstration is played (page 14).

INTERNAL VOICE MEMORY

I_{I} ..... Internal voice bank 1 (00 … 63).
I_{II} ..... Internal voice bank 2 (00 … 63).

CARD VOICE MEMORY

CARD memory voice numbers begin with the letter "C". The CARD memory is one or two optional Yamaha MCD64 Memory Card (or pre-programmed voice cards) plugged into the TG500 DATA 1 and/or DATA 2 slot. Memory cards are convenient for external storage and transportation of voices you or others create. You can also store sets of related voices on different memory cards. An MCD64 Memory Card holds four banks of 64 voices each — a total of 256 voices per card. Each card is also divided into two banks, each holding two voice banks of 64 voices each. The card bank to be accessed (1 or 2) must be selected via the UTILITY mode "4:Card" function "4-1:Bank" parameter (page 233). Thus, 128 of the 256 voices stored on a card can be accessed at a time.

DATA 1 CARD VOICE MEMORY

C_{I} ..... Card voice bank 1 (00 ... 63).
C_{II} ..... Card voice bank 2 (00 ... 63).

DATA 2 CARD VOICE MEMORY

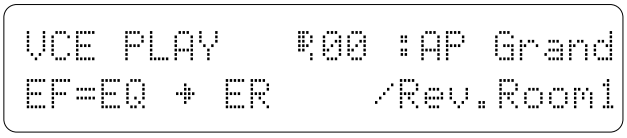
C_{III} ..... Card voice bank 3 (00 ... 63).
C_{IV} ..... Card voice bank 4 (00 ... 63).

A properly formatted Yamaha MCD64 memory card (or an appropriate pre-programmed voice card) must be inserted in the DATA 1 and/or DATA 2 slot before the card memory can be selected.

■ Select a Voice & Play

1 Select the Voice Play Mode

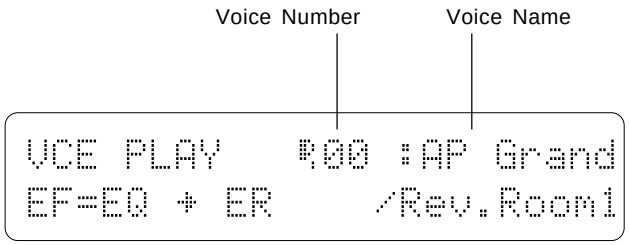
Press the [PLAY MODE] key as many times as necessary to select the voice play mode. "VCE PLAY" will appear on the top line of the LCD panel.



The information displayed on the bottom display line tells you about the current effect mode and what effects are assigned to the TG500's two effect processors. See the "Effects" section beginning on page 251 for more details.

2 Select a Memory Area & Bank

The [MEMORY] key is used to access the TG500's internal, preset, and card memory areas, and the different memory banks they contain. Try pressing the [MEMORY] key a few times while watching the voice number on the display.



The voice number and name appear on the upper line of the display. "I" at the beginning of the number stands for "Internal," "P" stands for Preset," and "C" stands for "Card" ("C" only appears if an appropriate voice card is plugged into either or both the DATA 1 or DATA 2 card slots). Notice that in each memory area several roman-numeral subscripts appear below the letter at the beginning of the voice number. These indicate the individual voice banks within each memory area.

Pressing the [MEMORY] key should call the following voice number prefixes in sequence (the card memory, shown in parentheses below, only appears if cards are inserted in the DATA slots):

$$\ldots\ I_{I} \rightarrow I_{II} \rightarrow P_{I} \rightarrow P_{II} \rightarrow P_{III} \rightarrow P_{IV} \rightarrow (C_{I} \rightarrow C_{II} \rightarrow C_{III} \rightarrow C_{IV}) \rightarrow I_{I}\ \ldots$$

3 Select a Voice

After selecting a voice bank, you can select any of the 64 voices it contains by using the [-1/NO] and [+1/YES] keys.

Either key can be pressed briefly to single-step in the specified direction, or held for continuous scrolling. Even faster scrolling is achieved by pressing the opposite key while holding the key corresponding to the direction you want to scroll in.

4 Play

Try playing the selected voice on the keyboard or controller. Select a number of different voices and try them out. Here's an abbreviated voice list for easy reference.

■ Voice List

● Preset Voice Lists 1

No.	Voice Name	No.	Voice Name
00	AP Grand	32	BR Tpts
01	AP Chors	33	BR TpSfz
02	AP Dance	34	BR Stab
03	AP Rock	35	BR EnsSF
04	AP Tack	36	BR East
05	AP Touch	37	BR Syn 1
06	BA Wood	38	BR Syn 2
07	BA Pitz	39	BR Syn 3
08	BA Fingr	40	BR Syn 4
09	BA Frtls	41	BR Saw
10	BA Pick1	42	BR SawSF
11	BA Pick2	43	BR Swell
12	BA Slap	44	BR Tooth
13	BA Thump	45	BR Rezz
14	BA Syn 1	46	BR Toto
15	BA Syn 2	47	BR Wow
16	BA Syn 3	48	CH Aah
17	BA Syn 4	49	CH Ooh
18	BA Syn 5	50	CH Pure
19	BA Syn 6	51	CH Breth
20	BA Syn 7	52	CH Ghost
21	BA Syn 8	53	CH Quire
22	BA Syn 9	54	CH Vespa
23	BA Syn 10	55	CH Vocod
24	BA Syn 11	56	Fl Blue1
25	BA Syn 12	57	Fl Blue2
26	BR Trump	58	Fl Dudel
27	BR Mute	59	Fl DulcD
28	BR Horn	60	Fl DulcM
29	BR Tromb	61	Fl Harp
30	BR Tuba	62	Fl Kalim
31	BR TpEns	63	DR Kit

● Preset Voice Lists 2

No.	Voice Name	No.	Voice Name
00	Fl Lip	32	KY Hrpsi
01	Fl Sitar	33	KY Acrdn
02	GT Nylon	34	KY Cali1
03	GT Dark	35	KY Cali2
04	GT Steel	36	ME Bottl
05	GT 12Str	37	ME Gizmo
06	GT Jazz	38	ME Grind
07	GT Strt1	39	ME Hand
08	GT Strt2	40	ME Kali
09	GT Strt3	41	ME Mello
10	GT Mute	42	ME Orch1
11	GT Harm	43	ME Orch2
12	GT Comp1	44	ME OrchR
13	GT Comp2	45	ME Soro
14	GT Dist	46	ME Templ
15	GT Warm	47	ME Tink
16	GT Wah	48	ME Tomi
17	GT Feed	49	ME Voics
18	KY EP 1	50	OR Jaz B
19	KY EP 2	51	OR Smoke
20	KY EP 3	52	OR Airy
21	KY EP 4	53	OR Dist
22	KY EP 5	54	OR Cheap
23	KY EP 6	55	OR Pipes
24	KY EP 7	56	OR Click
25	KY EP 8	57	OR Perc
26	KY EP 9	58	SC Aha!
27	KY EP 10	59	SC Bari
28	KY EP 11	60	SC Bell
29	KY EP 12	61	SC Clav
30	KY Clav1	62	SC Digi1
31	KY Clav2	63	DR Zones

● Preset Voice Lists 3

No.	Voice Name	No.	Voice Name
00	SC Digi2	32	SE Pops
01	SC Digi3	33	SE Rain
02	SC Ecko	34	SE Rezo
03	SC Fingr	35	SE S&H
04	SC Housy	36	SE Star
05	SC Jrney	37	SE Up&Up
06	SC Metal	38	SE Wind
07	SC Mute	39	SL Cutty
08	SC Pan	40	SL Digi
09	SC Perc	41	SL Dist
10	SC Rezz	42	SL Hamma
11	SC Spike	43	SL Lead
12	SC Sqiff	44	SL Lyle
13	SC Synnr	45	SL Pulse
14	SC Topia	46	SL Saw 1
15	SC Vocal	47	SL Saw 2
16	SC Vox	48	SL Squar
17	SC Wires	49	SL Sync
18	SC Wondr	50	SL Whisl
19	SE Alert	51	SP Abyss
20	SE Templ	52	SP Big
21	SE BDup	53	SP Exita
22	SE Chou	54	SP Freqs
23	SE Demon	55	SP Glass
24	SE Dropr	56	SP Goner
25	SE Gobln	57	SP Hyper
26	SE Heli	58	SP Makro
27	SE Hell	59	SP Mello
28	SE Hyena	60	SP Movie
29	SE Indus	61	SP Nasty
30	SE It	62	SP Nehan
31	SE Noize	63	DR GMIDI

● Preset Voice Lists 4

No.	Voice Name	No.	Voice Name
00	SP Paddy	32	TP Hands
01	SP Phaze	33	TP Siam
02	SP Poly	34	TP Steel
03	SP SawSt	35	TP Loggy
04	SP Slow	36	TP Bambu
05	SP Smoky	37	TP Mrmba
06	SP Space	38	TP Timp
07	SP Sqare	39	TP Syn
08	SP Sweep	40	TP SynDr
09	SP Sweet	41	TP Tinkl
10	SP Vizon	42	TP Agone
11	SP Wine	43	TP Angle
12	ST Violn	44	WN Sopr
13	ST JeanL	45	WN Alto
14	ST Sectn	46	WN Tenor
15	ST Power	47	WN Bari
16	ST Deep	48	WN SaxSF
17	ST Dark	49	WN Picc
18	ST Brite	50	WN Flute
19	ST Arco	51	WN Pan
20	ST Sfz	52	WN Clari
21	ST Pizz	53	WN Oboe
22	ST Tron	54	WN Basso
23	ST Anlog	55	WN Recor
24	ST Sizzl	56	WN Breth
25	ST Synth	57	MI Crash
26	ST Thin	58	MI EPNP
27	ST Combo	59	MI Hiss
28	TP Glock	60	MI Ride
29	TP Xylo	61	MW EGBia
30	TP Vibes	62	AT EGBia
31	TP Tubal	63	DR Efect

● Internal Voice Lists 1

No.	Voice Name	No.	Voice Name
00	AP Brite	32	KY Hrpzi
01	AP Dark	33	KY EP 13
02	AP Chrs2	34	KY EP 14
03	BA Pluck	35	KY EP 15
04	BA Soul	36	KY EP 16
05	BA Stick	37	KY EP 17
06	BA Low	38	KY EP 18
07	BA Head	39	KY Harm
08	BA Tri	40	KY SyClv
09	BR Punch	41	ME Bnshe
10	BR TpSf1	42	ME Bubbl
11	BR Movin	43	ME Hit
12	BR Ruber	44	ME Marin
13	BR CS80	45	ME Mojo
14	BR Strai	46	ME Poot
15	BR Lush	47	ME Sweep
16	BR TpSf2	48	ME Tabla
17	CH Quiet	49	ME Treml
18	CH Kwire	50	ME Angel
19	CH Spirt	51	ME Whisl
20	CHAnalg	52	OR Door0
21	CH VoxPc	53	OR Jazz
22	DR Tom	54	OR Pipe
23	Fl Banjo	55	OR Rock
24	Fl Koto	56	OR Smoth
25	Fl Sitr2	57	SC Anti
26	Fl Tamba	58	SC Bell2
27	GT Fingr	59	SC Bhind
28	GT Amod	60	SC Blot
29	GT Strat	61	SC Chop
30	GT Pedal	62	SC Klav
31	GT Dist2	63	DR Revrs

● Internal Voice Lists 2

No.	Voice Name	No.	Voice Name
00	SC Hool	32	SL Glnt
01	SC Hand	33	SL Oth
02	SC WooDX	34	SL Sqsaw
03	SC Wire	35	SL Ut
04	SC Pain	36	SP 1980
05	SC Pluck	37	SP Decay
06	SC Reflx	38	SP Ear
07	SC Sprkl	39	SP Glas2
08	SC Thumb	40	SP It
09	SC Uzzy	41	SP Lash
10	SC Vxcla	42	SP Latt
11	SC Walk	43	SP Lonly
12	SC Wits	44	SP Lyle
13	SC Wow	45	SP Melo
14	SE Alien	46	SP Nsty2
15	SE Clox	47	SP Oscil
16	SE Crck	48	SP Ray
17	SE Crsh	49	SP SloMo
18	SE Duel	50	ST Cello
19	SE Fear	51	ST Cntra
20	SE Roll	52	ST Chamb
21	SE Lava	53	ST Arco2
22	SE Laze	54	ST High
23	SE Mono	55	ST Anlg2
24	SE Saw	56	TP Bell
25	SE Swmp	57	TP Clock
26	SE Vaqum	58	TP GSvib
27	SE Vektr	59	TP Tabla
28	SE Zip	60	TP Boink
29	SL lck	61	WN Flut1
30	SL 2VCO1	62	WN Flut2
31	SL Ash	63	DR Voice

Note that the voices are arranged in categories for easier access. The category of each voice is identified by a two-character prefix, as follows:

AP ..... Acoustic Piano
OR ..... Organ
KY ..... Keyboard
BR ..... Brass
ST ..... Strings
BA ..... Bass
GT ..... Guitar
FI ..... Folk Instruments
WN ..... Wind
CH ..... Chorus
TP ..... Tuned Percussion
SP ..... Synth Pad
SC ..... Synth Comp
SL ..... Synth Lead
ME ..... Musical Effect
SE ..... Sound Effect
DR ..... Drums

A more detailed voice list is provided in the appendix (page 303).

If you don't get any sound at this point: Make sure your sound system is turned ON and the volume is turned up to a reasonable level, make sure that the TG500 VOLUME control is turned up to a reasonable level, and check all connections carefully.

3. The Performance Mode

The TG500 PERFORMANCE mode makes it possible to combine up to four voices in "performance combinations" that significantly enhance the instrument's performance capabilities. 128 performance combinations can be stored in internal memory and recalled in the same way as the voices. Before we look at how you can create your own performance combinations, try selecting and playing some of the combinations provided with the TG500.

■ The Preset, Internal, & Card Performance Memories

TG500 performance combinations can come from three different sources: the PRESET performance memory, the INTERNAL performance memory, or CARD performance memory. The PRESET performance memory area further contains 2 "banks," each containing 64 voices. Any performance combination in any of these memory areas can be selected and played while the TG500 is in the PERFORMANCE PLAY mode.

PRESET PERFORMANCE MEMORY

Performance numbers that begin with a "P" are in the PRESET performance memory. The PRESET performance memory contains 128 pre-programmed performance combinations in ROM (Read Only Memory) that cannot be overwritten or changed in any way. The 128 performance combinations are organized in 2 banks of 64 voices each.

PRESET PERFORMANCE MEMORY

P_I ..... Preset performance bank 1 (00 … 63).
P_{II} ..... Preset performance bank 2 (00 … 63).

INTERNAL PERFORMANCE MEMORY

INTERNAL performance numbers begin with the letter "I". The INTERNAL voice memory is a RAM (Random Access Memory) area which initially contains 64 performance combinations that you can use "as-is" or edit to create variations or totally new voices. Performance combinations in the INTERNAL memory can also be moved around and stored in different INTERNAL memory locations, or new performance combinations can be loaded from an external memory card. The initial factory-set INTERNAL performance combinations are different from the PRESET performance combinations, and will be lost if edited or changed in any way. The initial INTERNAL performance combinations are automatically reloaded when the TG500 demonstration is played (page 14).

INTERNAL PERFORMANCE MEMORY

I ..... Internal performance bank 1 (00 … 63).

CARD PERFORMANCE MEMORY

CARD memory performance numbers begin with the letter "C". The CARD memory is one or two optional Yamaha MCD64 Memory Card (or pre-programmed voice cards) plugged into the TG500 DATA 1 and/or DATA 2 slot. An MCD64 Memory Card holds 128 performance combinations *in addition to* 256 voices per card. Each card is divided into two banks, each holding two voice banks of 64 performance combinations each. The card bank to be accessed (1 or 2) must be selected via the UTILITY mode "4:Card" function "4-1:Bank" parameter (page 233). Thus, 64 of the 128 performance combinations stored on a card can be accessed at a time.

DATA 1 CARD PERFORMANCE MEMORY

C_{I} ..... Card performance bank 1 (00 … 63).

DATA 2 CARD PERFORMANCE MEMORY

C_{II} ..... Card performance bank 2 (00 … 63).

A properly formatted Yamaha MCD64 memory card (or an appropriate pre-programmed voice card) must be inserted in the DATA 1 and/or DATA 2 slot before the card memory can be selected.

■ Play the Performance Combinations

1 Select the Performance Play Mode

Press the [PLAY MODE] key as many times as necessary to select the performance play mode. “PFM PLAY” will appear on the top line of the LCD panel.

The information displayed on the bottom display line tells you about the current effect mode and what effects are assigned to the TG500’s two effect processors. See the “Effects” section beginning on page 251 for more details.

2 Select a Memory Area & Bank

The [MEMORY] key is used to access the internal, preset, and card performance memory areas in exactly the same way as in the VOICE PLAY mode.

Pressing the [MEMORY] key should call the following performance number prefixes in sequence (the card memory, shown in parentheses below, only appears if cards are inserted in the DATA slots):

$$\ldots\ \mathrm{I} \rightarrow \mathrm{P_I} \rightarrow \mathrm{P_{II}} \rightarrow (\mathrm{C_I} \rightarrow \mathrm{C_{II}}) \rightarrow \mathrm{I}\ \ldots$$

3 Select a Performance Combination

As in the VOICE PLAY mode, the [-1/NO] and [+1/YES] keys are used to select any of the 64 performance combinations in the currently selected bank.

4. Play

Try playing some of the performance combinations. In some cases you’ll hear several voices “layered” on top of one another, in others you’ll get a split keyboard effect with one voice on the left-hand side of the keyboard and another on the right. Select a number of different performance combinations and try them out. Here’s an abbreviated performance list for easy reference.

■ Performance List

● **Preset Performance Lists 1**

No.	Voice Name	No.	Voice Name
00	CO Dream	32	CO Jazzr
01	KY Piano	33	OR Gimme
02	SP Aztec	34	SP Lite
03	SC Wyrz	35	SC Buzz
04	CH Choir	36	CH Munch
05	BA Pick1	37	BA Rezzo
06	ST Rosin	38	ST Dark
07	BR Stab	39	BR Saw
08	CO Soire	40	CO E.S.P
09	OR Bee	41	KY Elek
10	SP Lush	42	SP Stars
11	SC Rude	43	SC Snaps
12	CH Breth	44	CH Abyss
13	BA Swap	45	BA Mini
14	ST Octvs	46	ST 2002
15	BR Pro5	47	BR Obie
16	CO Orch	48	CO Pnooh
17	KY Digi1	49	OR Nave
18	SP Faery	50	SP Ace
19	SC Talk	51	SC Point
20	CH OohAh	52	CH Comet
21	BA Pick2	53	BA Guppy
22	ST Pitz	54	ST Big
23	BR Sfz	55	BR Fatti
24	CO Sable	56	CO Inca
25	KY Roady	57	KY Funky
26	SP Slide	58	SP Vekta
27	SC Klav	59	SC Pizza
28	CH Vespa	60	CH Oral
29	BA -Fret	61	BA Doom
30	ST Rings	62	ST Tron
31	BR Forte	63	BR Swell

● **Preset Performance Lists 2**

No.	Voice Name	No.	Voice Name
00	CO Ncert	32	CO Gospl
01	KY Loud	33	OR Cheap
02	SP Carol	34	SP Pluto
03	SL Mitey	35	SC Clank
04	ME Orion	36	ME Ecko
05	GT Amped	37	GT Harm
06	SE Rolls	38	SE Zoom
07	WN Tenor	39	BR Reeds
08	CO DXStr	40	CO Ethos
09	OR Sine	41	KY PnoMW
10	SP Venus	42	SP Synth
11	SL Chick	43	FI Santo
12	ME Glitz	44	ME Alien
13	GT Strat	45	GT El12
14	SE C-tar	46	SE Delay
15	WN Sacks	47	BR Lips
16	CO Stass	48	CO Kings
17	KY Digi2	49	KY Calio
18	SP Whino	50	SP Anlog
19	SL L7	51	SC Wind
20	ME Honto	52	ME Spark
21	GT Phunk	53	GT 12Str
22	SE Xeno	54	SE Flies
23	WN Alto	55	BR Miles
24	CO Megin	56	CO Happi
25	KY Jerry	57	KY Digi3
26	SP Hinx	58	SP Arpeg
27	SL Eazy	59	TP Bells
28	ME Mars	60	ME Hit
29	GT Rock	61	GT Acstc
30	SE Storm	62	SE Hero
31	WN Panic	63	BR Fanfr

● **Internal Performance Lists**

No.	Voice Name	No.	Voice Name
00	CO Aster	32	SP Atrio
01	AP Piano	33	SC Woody
02	SP Mtrix	34	ME Chorl
03	SC Skank	35	GT Round
04	ME Sprk2	36	BR Sfz2
05	BA Drive	37	SE Rado
06	BR Fnfr2	38	ST LgSm
07	SE Devil	39	SL Meteo
08	ST Moin	40	CO Clock
09	FI Dulcm	41	OR Mite
10	CO Bells	42	SP Wind
11	KY Knock	43	SC Arred
12	SP Fanta	44	ME Chom
13	SC Elec1	45	CO FMpad
14	ME Gokrk	46	BR Tpts
15	BA Susud	47	SE Indst
16	BR Forth	48	CO Nuage
17	SE Swmp	49	SP Lodge
18	ST Legat	50	SC Oz
19	GT Pedal	51	CO Japan
20	CO Gloom	52	KY Hrpzi
21	OR Cool	53	SL Sqsaw
22	SP Flash	54	BR CShrn
23	SC Gob	55	CO Laura
24	ME Max	56	CO Orch2
25	BA Sldge	57	ME Hits
26	BR Synth	58	ST Solo
27	SE Wall	59	CO Soul
28	ST Accat	60	GT Wires
29	GT Steel	61	OR Pan
30	CO India	62	BR 3 Osc
31	OR Rock	63	CO Fire

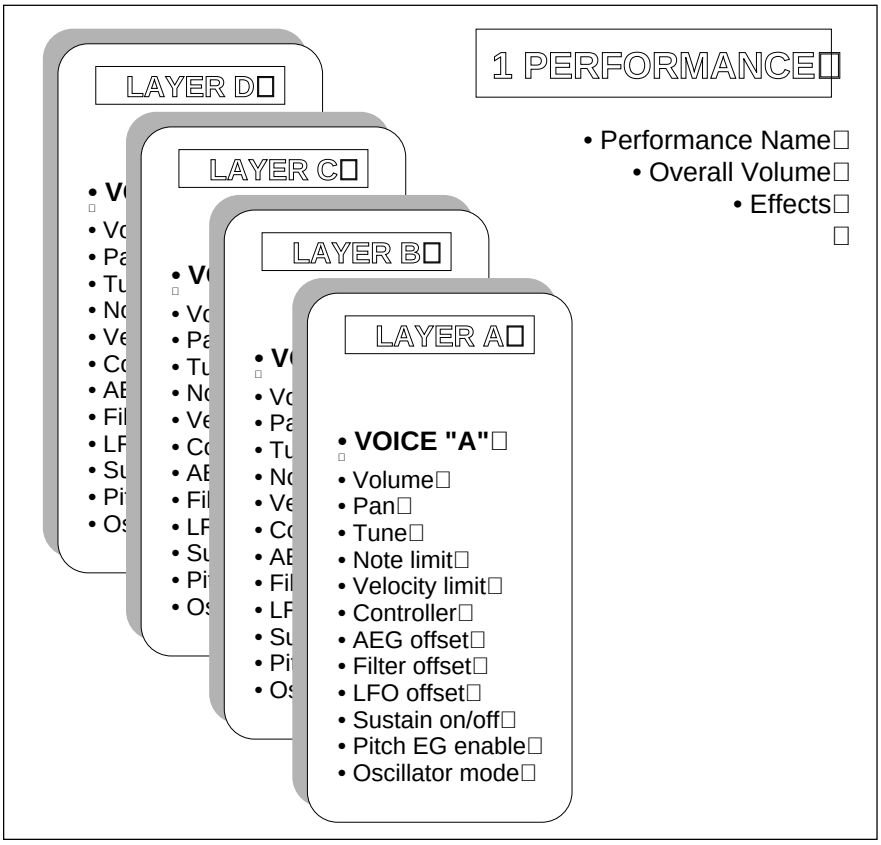
Note that the performance combinations are arranged in categories for easier access. The category of each performance combinations is identified by a two-character prefix, as follows:

AP ..... Acoustic Piano
OR ..... Organ
KY ..... Keyboard
BR ..... Brass
ST ..... Strings
BA ..... Bass
GT ..... Guitar
FI ..... Folk Instruments
WN ..... Wind
CH ..... Chorus
TP ..... Tuned Percussion
SP ..... Synth Pad
SC ..... Synth Comp
SL ..... Synth Lead
ME ..... Musical Effect
SE ..... Sound Effect
CO ..... Combination

A more detailed performance list is provided in the appendix (page 300).

■ Programming Your Own Performance Combinations

A single TG500 “performance combination” can have one, two, three, or four “layers,” each having a different voice and several other important attributes.

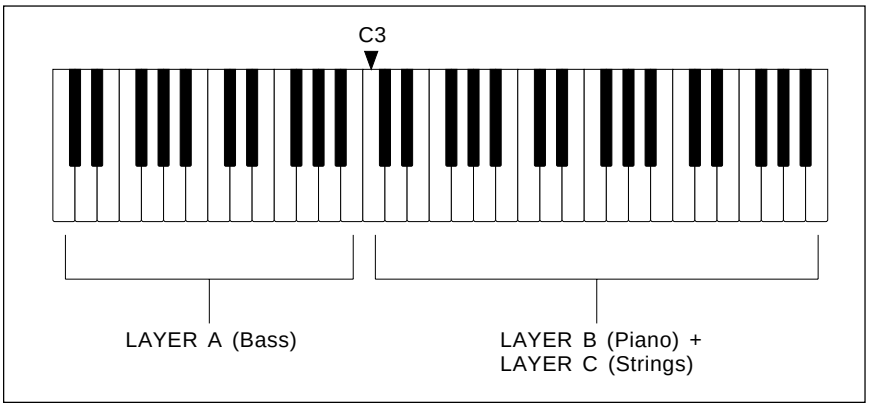


In addition to the individual attributes that can be programmed for each layer, overall characteristics such as volume, effects, and the performance name can also be programmed.

Layers can be played simultaneously across the entire keyboard, limited to specific ranges to create split keyboard setups, or overlapped in any way required. It’s also possible to use “velocity switching” to assign different velocity ranges to different layers so that, for example, one voice sounds when you play softly and a completely different voice takes over (or overlaps the first voice) when you play harder.

● AN EXAMPLE

Follow these steps to create a 3-layer voice in which you play a bass voice on the lower octaves of the controlling keyboard (below C3), and piano plus strings on the upper octaves.



Although we won't use anywhere near the TG500's full complement of performance parameters, this exercise will help you get a feel for the performance mode and standard editing procedures.

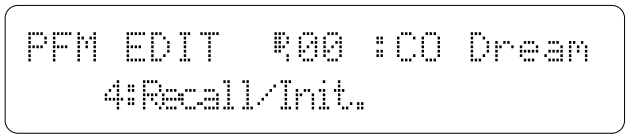
1 Select a Performance Combination

Engage the PERFORMANCE PLAY mode and select any performance combination, as described in the preceding section.

2 Initialize the Selected Performance Combination

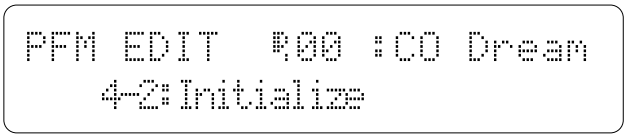
2-1

Make sure that the PERFORMANCE PLAY mode is selected, and then press the [EDIT/COMPARE] key. Use the [-1/NO] and [+1/YES] keys to select the "4:Recall/Init." screen.



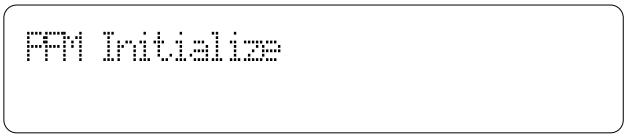
2-2

Press [ENTER], then [PAGE], and then use the [-1/NO] and [+1/YES] keys to select the “4-2:Initialize” screen.



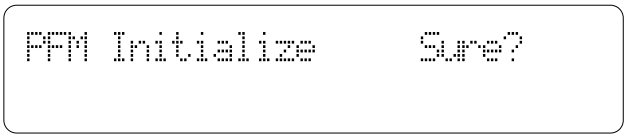
2-3

Press [ENTER].



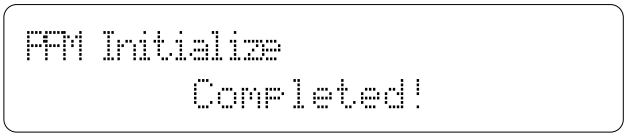
2-4

Press [ENTER] again.



2-5

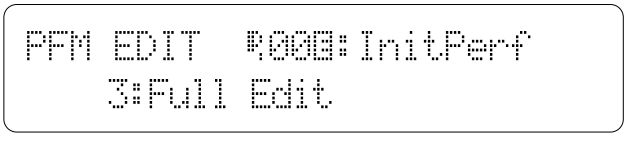
Press [+1/YES] to execute the performance initialize job. “Completed!” will appear briefly when the performance data has been initialized.



3 Select the Performance Edit “LAYER” Mode

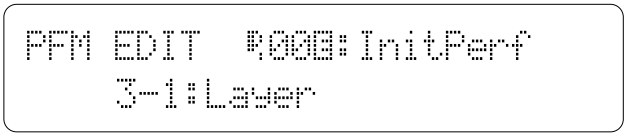
3-1

Press [EXIT] to return to the performance edit menu, then use the [-1/NO] and [+1/YES] keys to select the “3:Full Edit” screen.



3-2

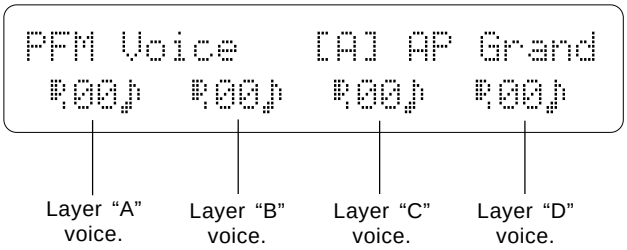
Press [ENTER], then use the [-1/NO] and [+1/YES] keys to select the "3-1:Layer" screen.



When you've located this screen, press [ENTER] to engage the performance edit "Layer" mode.

4 Select the Voices for Each Layer

If the "PFM Voice" display doesn't appear as soon as you engage the performance layer mode, press [PAGE], use the [-1/NO] and [+1/YES] keys to select the "3-1-01:Voice" screen, then press [ENTER].



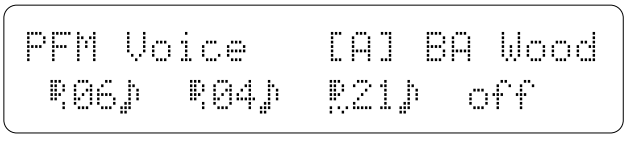
The voice numbers assigned to each layer are shown across the bottom of the display. After initialization, voice "**P**$_{I}$00" is assigned to all four layers.

Use the [◁] key to place the underline cursor under the layer-A voice number (note that the selected layer is shown in square brackets and the voice name is shown in the upper right corner of the display), then use the [-1/NO] and [+1/YES] keys to select voice number "**P**$_{I}$06" (BA Wood).

Next press the [▷] key to select the layer-B voice number, and use the [-1/NO] and [+1/YES] keys to select voice number "**P**$_{I}$04" (AP Tack).

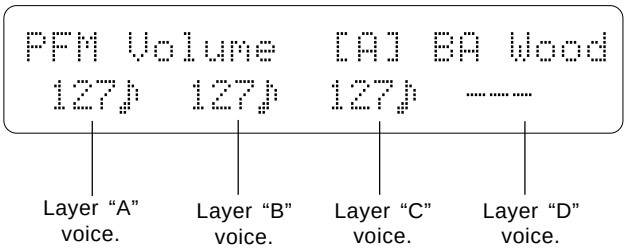
Next press the [▷] key to select the layer-C voice number, and select voice number "**P**$_{IV}$21" (ST Pizz).

Finally, move the cursor to the layer-D voice number and, while holding the [UTILITY/SELECT] key, press the [MEMORY] key to turn layer-D "off" (page 50).



5 Lower the Volume of the Strings Voice

Press the [PAGE] key, use the [-1/NO] and [+1/YES] keys to select the "3-1-02:Volume" screen, then press [ENTER].



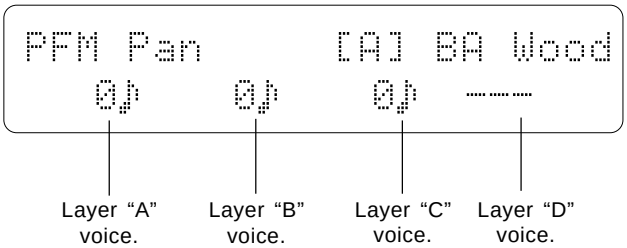
You can now use the [◁] and [▷] keys to move the cursor to the volume parameters for each layer, and use the [-1/NO] and [+1/YES] keys to set the volume levels as required. The volume range is from "0" to "127", with "127" being maximum volume.

For now, just lower the volume of the layer-C strings voice to "98". Notice that since layer D is turned "off", no parameter appears for the layer-D voice.

Instead of pressing the [PAGE] key, then selecting the number of the screen you want, and the pressing [ENTER], it is possible to move directly between screens in the same function group by using the [◁] and [▷] keys while holding the [PAGE] key. From the "PFM Voice" screen, for example, you can go straight to the "PFM Volume" screen by pressing [▷] while holding [PAGE].

6 Pan the Piano & Strings Voices

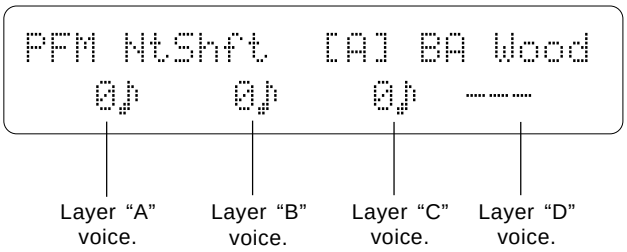
Press the [PAGE] key, use the [-1/NO] and [+1/YES] keys to select the "3-1-03:Pan" screen, then press [ENTER] (or simply press [▷] while holding [PAGE]).



Set the layer-B pan parameter to "-15" and the layer-C pan parameter to "+15". This pans the piano voice slightly to the left and the strings voice slightly to the right for a broader, more spacious sound (the bass voice is left in the center — "+0").

7 Shift the Bass Voice Up One Octave

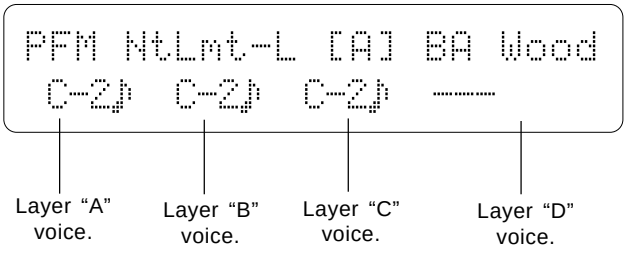
Press the [PAGE] key, use the [-1/NO] and [+1/YES] keys to select the "3-1-04:Note Shift" screen, then press [ENTER] (or simply press [▷] while holding [PAGE]).



Since the bass voice we have selected will sound too low if played only on the lower octaves of the controlling keyboard, we'll shift its pitch up one octave. Move the cursor to the layer-A "NtShft" (Note Shift) parameter and set it to "+12".

8 Set the Low Note Limits

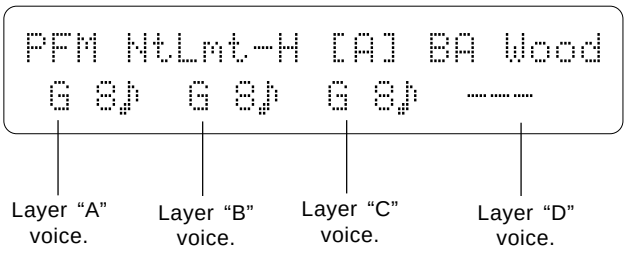
Press the [PAGE] key, use the [-1/NO] and [+1/YES] keys to select the "3-1-06:Note Limit-L" screen, then press [ENTER] (or simply press [▷] *two times* while holding [PAGE]).



Set the layer-B and layer-C low note limits to "C3".

9 Set the High Note Limits

Press the [PAGE] key, use the [-1/NO] and [+1/YES] keys to select the "3-1-07:Note Limit-H" screen, then press [ENTER] (or simply press [▷] while holding [PAGE]).



Set the upper note limit for the layer-A voice to "B2".

Although the current layer-A lower limit (C-2) as well as the layer-B and layer-C upper limits (G8) extend beyond the range of most keyboards, these settings won't adversely affect our performance combination so we won't bother to change them.

10 Play

Try playing our new performance combination on the controlling keyboard. You should hear only the "I05" (BA Stick) voice when playing on the lower octaves (notes up to B2), and a combination of the "I01" (AP Dark) and "I53" (ST Arco2) voices when playing on the upper octaves (C3 and above).

The COMPARE Function

The COMPARE function lets you compare the sound of the edited performance combination with that of the original performace combination. To engage the COMPARE mode, press the [EDIT/COMPARE] key while in the performance edit mode. The EDIT indicator will flash and you'll hear the original pre-edit performance combination when you play on the keyboard.

Press the [EDIT/COMPARE] key again to exit from the COMPARE mode and return to the edited data.

11 Go Back And Customize the Parameters

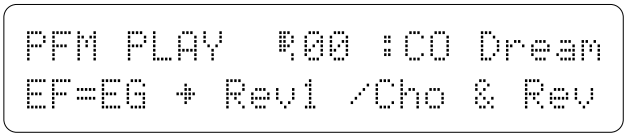
Now you know what the parameters we've just edited do, go back and modify them to create a performance combination that suits *your* musical needs.

12 Store Your Performance Combination

Once you're satisfied with the sound of your original performance combination, you can store it to an internal performance memory location as follows:

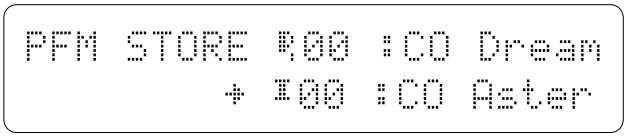
12-1

Press the [PLAY MODE] key to return to the PERFORMANCE PLAY mode.



12-2

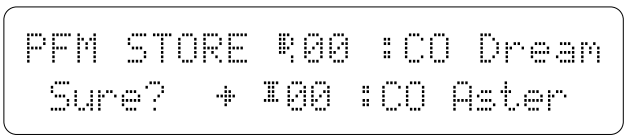
Press the [STORE/COPY] key.



Use the [-1/NO] and [+1/YES] keys to select the internal performance number to which you want to store your new performance combination (you can also use the [MEMORY] key to select the card memory if a properly formatted and write-enabled MCD64 memory card is inserted into one or both of the DATA slots).

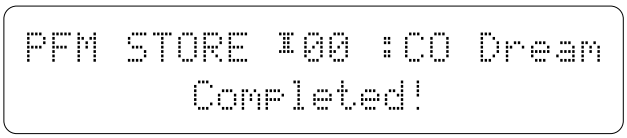
12-3

Press [ENTER].



12-4

Press [+1/YES] again.



"Completed !" will appear briefly when the data has been stored, then the TG500 will return to the PERFORMANCE PLAY mode.

When you return to the PERFORMANCE PLAY mode, an inverse letter "E" will appear to the right of the performance number, indicating that it has been edited but not stored. You can call the STORE function at this point and proceed as described above. If you select a different performance combination before storing, however, the edited data will be lost. Also note that any previous data in the performance memory location you store to will be overwritten by the new data.

You can use the PERFORMANCE NAME function described on page 61 to give your performance combination an original name before storing it.

■ Further Possibilities ...

When you're ready to explore the many other possibilities the TG500 provides for performance programming, read through the "PERFORMANCE EDIT MODE" mode (page 49).

4. The Multi Mode

If you've been going through the tutorials section in sequence as we recommended, so far you've used the VOICE PLAY, PERFORMANCE PLAY, and PERFORMANCE EDIT modes. If, however, your intention is to use the TG500 with a sequencer or computer to play a number of different voices simultaneously, the modes you'll use most frequently are the MULTI PLAY and MULTI EDIT modes.

The TG500 provides16 INTERNAL memory locations for complete "multi" setups. This allows you to create up to 16 original "orchestras" with different combinations of voices that can be recalled whenever needed.

● WHAT'S IN A MULTI SETUP?

A single multi setup can consist of up to 16 different voices assigned to "instruments" 1 through 16. Each instrument is controlled via the correspondingly numbered MIDI channel. These voices can then be controlled independently from a sequencer, music computer, or other controller transmitting on the appropriate channels.

Each instrument has several parameters that can be individually edited in the MULTI EDIT mode:

Voice/performance number ..... page 200.
Volume ..... page 200.
Stereo pan position ..... page 200.
Effect send level ..... page 200.
Note shift ..... page 201.
Fine tuning ..... page 201.
Output assignment ..... page 201.
Name ..... page 202.

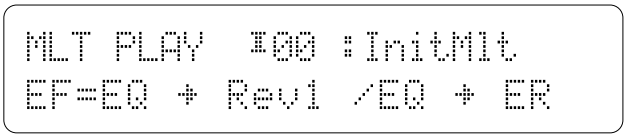
There are also a range of effect settings that affect the entire setup (page 204).

● MULTI PLAY POLYPHONY & DYNAMIC VOICE ALLOCATION

The TG500 actually consists of two 32-note tone generator units ("A" and "B"), giving it a total polyphony of 64 notes. Some of the preset waves are produced by tone gerator "A," while others are produced by tone generator "B." Thus, each voice is produced by one or the other tone geneator depending on which wave is assigned to it. To find out which of the tone generator units a voice is produced by, select either the voice edit mode "1-1:Wave Select" or "3-1-01:Wave Select" function (pages 107 and 108) and look at the inverse letter following the assigned wave name — it will be either "**A**" or "**B**" corresponding to the tone generator unit it is produced by. The wave assignments are also listed in the complete voice list given in the Appendix (page 303). In terms of multi polyphony this means that if all the voices assigned to a multi setup are generated by the same tone generator unit ("A" or "B" only), the maximum polyphony for that multi setup will be 32 notes. It is therefore a good idea to use a well-balanced combination of voices produced by both tone generator units to ensure maximum polyphony.

● SELECTING A MULTI SETUP

MULTI PLAY setups are selected in essentially the same way as voices and performance combinations: first use the [PLAY MODE] key to engage the MULTI PLAY mode, then use the [-1/NO] and [+1/YES] keys to select the desired multi setup (00 … 15).



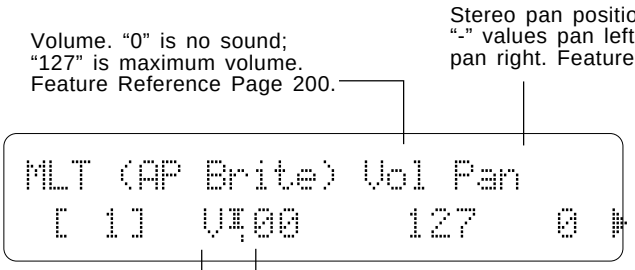
The information displayed on the bottom display line tells you about the current effect mode and what effects are assigned to the TG500's two effect processors. See the "Effects" section beginning on page 251 for more details.

■ Editing a Multi Setup

After selecting the multi setup you want to edit, press the [EDIT/COMPARE] key to enter the MULTI EDIT mode, press the [PAGE] key to call the menu, use the [-1/NO] and [+1/YES] keys to select the "1:Parameter" screen, then press [ENTER].

You now have access to the three multi parameter edit screens shown below. To move from screen to screen simply move the cursor past the end of the current screen. A flashing arrow at either or both ends of the screen indicates that the cursor can be moved in that direction to access another screen. Simply move the cursor to the required parameter and edit using the [-1/NO] and [+1/YES] keys.

● THE MULTI PARAMETER EDIT SCREENS

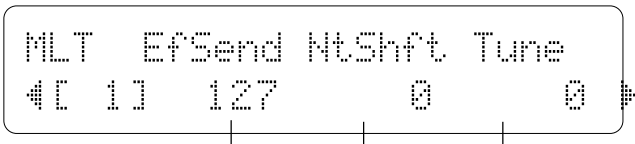


Volume. “0” is no sound; “127” is maximum volume. Feature Reference Page 200.

Stereo pan position. “0” for center, “-” values pan left; “+” values pan right. Feature Reference page 200.

The voice or performance number. The [MEMORY] key can be used to select the memory area. Feature Reference page 200.

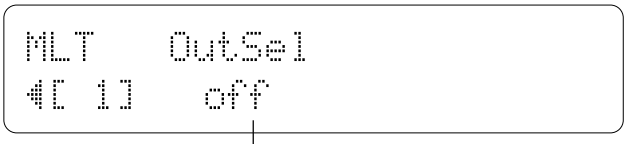
Place the cursor here and select “V” to assign a voice to the current instrument or “P” to assign a performance combination. Feature Reference page 200.



Effect send level. “0” for no effect send; “127” for maximum send. Feature Reference page 200.

Note shift in semitone increments. “-” values shift down; “+” values shift up. Feature Reference page 201.

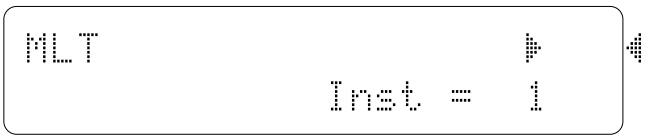
Fine tuning. “-” values tune down; “+” values tune up. Feature Reference page 201.



Output select. “off” or “Ind1” ... “Ind4” (individual 1 through 4) for normal voices. “off” or “drm” for drum voices. Feature Reference page 201.

● SELECTING DIFFERENT INSTRUMENTS FOR EDITING

The currently selected multi instrument (1 of 16) is shown in square brackets in the lower left hand corner of each screen. A different instrument can be selected for editing in this mode by using the [-1/NO] and [+1/YES] keys while holding the [UTILITY/SELECT] key.



● NO STORE OPERATION REQUIRED

When you're finished editing a multi setup, simply press the [PLAY MODE] key to return the MULTI PLAY mode. The edited data is automatically stored in the multi setup you selected prior to editing — there is no need to specifically "store" the edited data as there is in the VOICE and PERFORMANCE modes.

The [STORE/COPY] key can, however, be used to copy the current multi setup to a different location. Operation is the same as in the store procedure described on page 33.

■ Further Possibilities …

Be sure to read through the "MULTI EDIT MODE" (page 197) for full details on all parameters available for multi programming.

5. Voice Editing & Effects

For the programmer who wants to get serious about voice programming, the TG500 offers an extensive range of parameters that allow extremely fine control. All parameters are discussed in detail in the VOICE EDIT mode (page 95), and we recommend that the dedicated programmer study the Feature Reference section carefully before embarking on any major voicing projects. The TG500's dual-processor effect system is also quite complex, allowing detailed effect setups to be programmed for each voice. The effect system is described in detail in the Feature Reference section (page 251).

The following is an outline of the steps you should normally follow when programming any new voice.

1: Oscillator Parameters

Page 107 ... 110

The first thing you'll need to do when programming a new voice is to decide what "wave" you're going to use. The TG500 provides 244 (Preset 1) + 50 (Preset 2) waves in ROM memory from which you can choose. Others can be loaded into optional wave RAM memory. The wave you select determines the fundamental sound of the voice.

Other oscillator parameters determine whether the selected wave will be played as a pitched voice or fixed at a specified pitch, fine tuning, note shift in semitone increments, random pitch variation, and whether the wave will be played in the normal forward direction or in reverse.

2: Amplitude Envelope Generator

Page 111 ... 118

Next to the basic wave you use, the amplitude envelope generator settings have the greatest effect on the final sound of your voice. It is the amplitude envelope generator that determines the speed and shape of the sound's attack, how fast it decays while a key is held, how fast it decays once the key is released, etc.

The AEG parameters also include level scaling parameters that can be used to produce natural level variations across the range of the keyboard, and sensitivity parameters that determine how the envelope responds to changes in note velocity.

3: Filter

Page 119 … 130

Once you've set up the oscillator and shaped the amplitude envelope as required, the TG500's sophisticated filter system can be used to determine both the static and dynamic timbre of the voice. Low-pass, high-pass, band-pass, and band-elimination response can be selected as required, and a complex 6-segment filter envelope generator makes it possible to produce dynamic filtering patterns. There's also a resonance parameter that allows you to boost the cut-off-frequency peak … all the way into oscillation if you like. The filter cutoff frequency can be also be controlled via MIDI control change data or keyboard aftertouch for real-time timbre control.

4: Pitch Envelope Generator

Page 131 … 135

Not all voices will need it, but the pitch envelope generator can be applied to produce time based pitch variations. These can be used to simulate the slight pitch rise that occurs naturally on the attack of some instruments, or to create more pronounced pitch slides. Like the amplitude and filter envelope generators, the pitch envelope generator also has sensitivity parameters that determine how it responds to note velocity.

5: Low Frequency Oscillator

Page 136 … 140

Most voices benefit from a touch of vibrato, tremolo, or wah-wah modulation, and it is the LFO parameters that produce these effects. The LFO is usually set up to apply the desired type of modulation via a controller such as a modulation wheel or foot controller. Which controller produces what type of modulation is determined by the "Controller" parameters, below.

6: Controller

Page 141 … 149

Since the TG500 has no controllers of its own, all modulation and bias control must be applied by MIDI control change data received from the controlling keyboard or other device. The TG500 accepts control from four different control devices, and it is the parameters in this section that determine how these four controllers function. Pitch bend range and aftertouch depth parameters are also provided.

7: Effects

Page 150 … 162

The last step in programming any voice is selecting and adjusting the effects you need to give your sound the required warmth and "spaciousness". Of course, you might simply want to edit the effects applied to an existing voice, in which case this will be the only step!

The TG500 offers 90 digital effects with two high-performance internal digital signal processors. The two effect processors can be interconnected in several ways, providing a wide range of parallel and series processing configurations. A range of programmable parameters for each effect make it possible to customize the sound over a wide range.

8: Give Your Voice a Name

Page 106

Always use the "Name" function to give any new voice an original name that makes it easily identifiable. If you don't change the name you're likely to end end up with more than one voice that has the same name … very confusing!

9: Store the Voice

Page 166

Don't forget this obvious but important step!

IMPORTANT

If you select a different voice before storing, the edited data will be lost. Also note that any previous data in the voice memory location you store to will be overwritten by the new data.

■ Bypassing the Effects While Editing

Since effects can alter the sound of a voice and make editing difficult, the internal effect system can be bypassed (turned off) in the voice, performance, and multi edit modes by pressing the [PLAY MODE] key while holding the [UTILITY/SELECT] key. ">BYP<" will apear in the upper right corner of the display while the [UTILITY/SELECT] key is held when the effects are bypassed. Simply repeat this step to turn the effects back on. The effects are automatically turned back on when you exit from the edit mode.

■ Further Possibilities …

When you're ready to explore the many possibilities the TG500 provides for voice programming, read through the "VOICE EDIT MODE" (page 95).

Feature Reference

GENERAL EDITING PROCEDURE

The TG500 makes editing easy by providing a consistent, logical control interface via which parameters can be located and edited. Once you've learned the general procedure, you can locate and edit any of the TG500's many parameters quickly and easily.

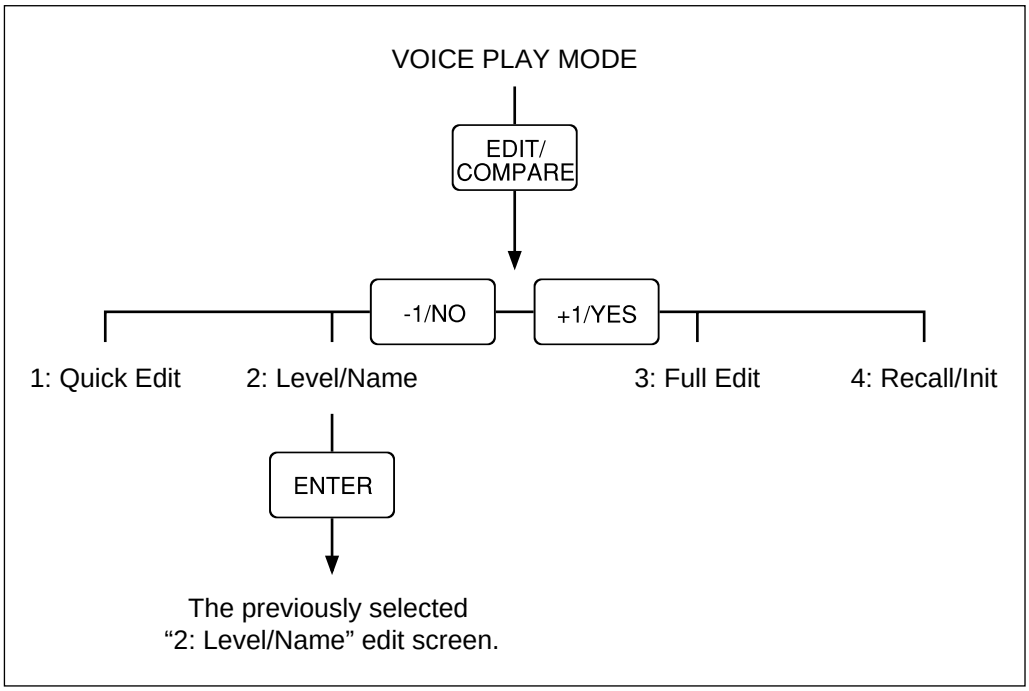
■ Edit Mode Access

The TG500 voice, performance, and multi edit modes are are accessed by first selecting the corresponding play mode via the [PLAY MODE] key, and then pressing the [EDIT/COMPARE] key. This takes you to the top level of the edit mode function "tree."

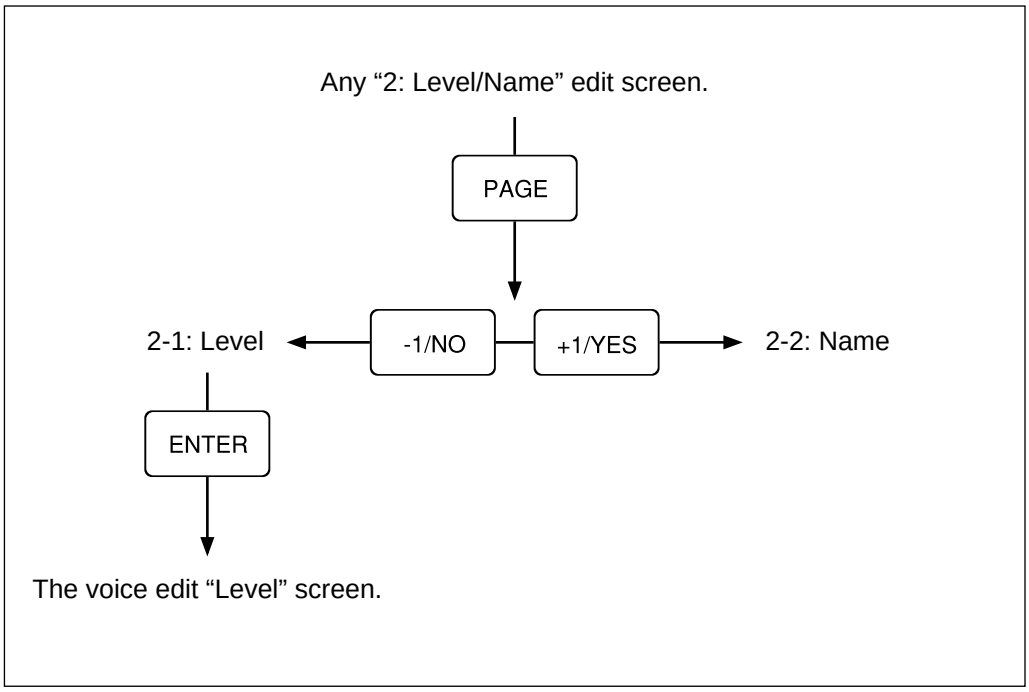
The only exception is the "Wave Edit" mode which is accessed by pressing the [EDIT/COMPARE] key from the Utility mode "5:Wave" screen (page 237).

■ Selecting Specific Edit Functions

The uppermost layer of the edit mode function tree is a menu that is used to select the desired group of functions. Use the [-1/NO] and [+1/YES] keys to select the function group you want to access, then press [ENTER] to go directly to the last edit screen that was selected in that function group.



Once you’re in a function group, you can select different functions within the group by first pressing the [PAGE] key to call the function menu, then using the [-1/NO] and [+1/YES] keys to select the function you want, and finally pressing [ENTER] to access the selected function screen.



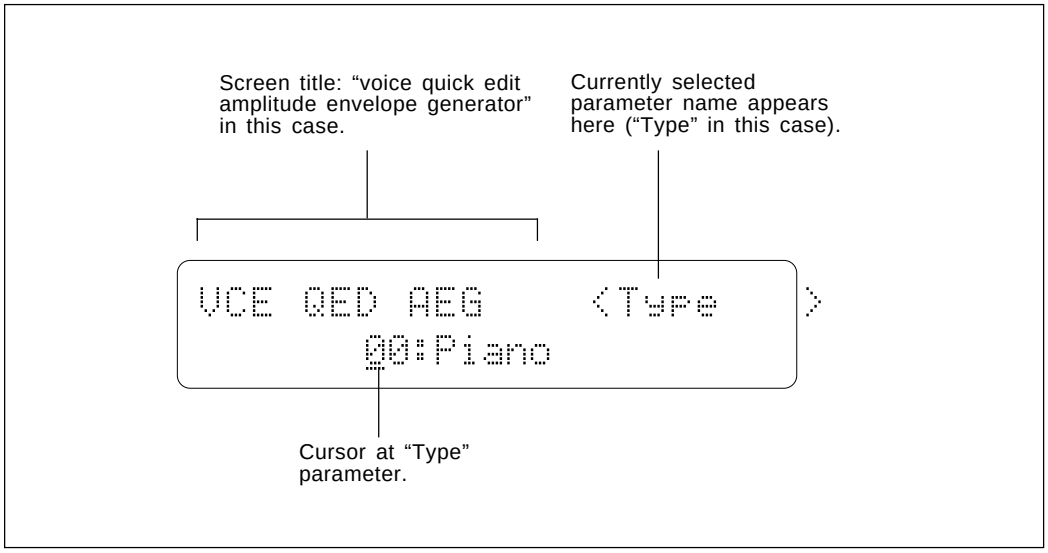
An alternative method is to use the [◁] and [▷] keys while holding the [PAGE] key. This lets you switch directly between adjacent edit screens without having to go to the menu first.

In some cases there is another layer of functions below the first layer (the voice edit mode “3:Full Edit” functions, for example). But these are accessed and selected in the same way.

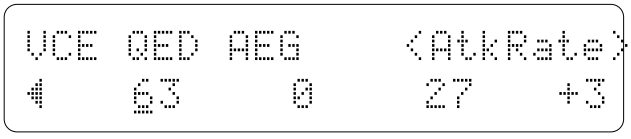
The [EXIT] key will always take you up to the next highest layer, until finally you return to the corresponding play mode. You can also return directly to the play mode by pressing the [PLAY MODE] key.

■ Selecting & Editing Parameters

Most TG500 edit screens contain several parameters that can be selected and edited. The parameters are edited by first moving the cursor to the required parameter by using the [◁] and [▷] keys, and then by using the [-1/NO] and [+1/YES] keys to adjust the parameter's value. In most cases the name of the currently selected parameter will appear between triangular brackets in the upper right corner of the display, while in others the name of each parameter appears directly above the parameter.



If there are more parameters than will fit on a single screen, a flashing pointer ("◁" or "▷") will appear at either or both ends of the bottom display line, indicating that more parameters are available. Move to the next screen by simply moving the cursor beyond the last parameter on the current screen, in the indicated direction.



PERFORMANCE EDIT MODE

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- 4-1: Recall 91
- 4-2: Initialize 92

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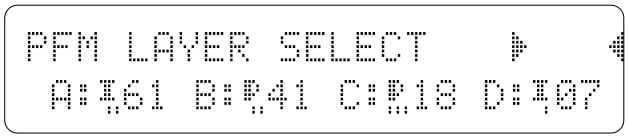
Performance Store 94

LAYER SELECTION & MUTING

● Layer Selection

Many functions in the performance edit mode allow a single layer to be edited individually (see page 26 of the "Getting Started" section to learn about peformance combinations and layers). The layer to be edited is selected by using the [◁], [▷], [PAGE], and [MEMORY] keys while holding the [UTILITY/SELECT] key:

- [◁] selects Layer A.
- [▷] selects Layer B.
- [PAGE] selects Layer C.
- [MEMORY] selects Layer D.



The display will return to the current edit screen as soon as you release the [UTILITY/SELECT] key. The currently selected layer is shown in square brackets in appropriate layer edit screens.

Programming All Layers Simultaneously

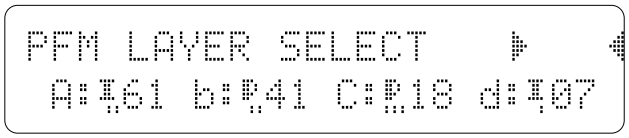
In some cases you may want to set all the same parameters for all four layers to the same value. This can be done easily by activating the "layer sync" mode: press the [STORE/COPY] key while holding the [UTILITY/SELECT] key. When the layer sync mode is active the current layer will appear as an inverse character (A, B, C, or D) in the layer edit screens. Simply repeat this procedure to return to the normal individual layer editing mode.

● Layer Muting

It is also possible to mute (turn the sound off) specific layers while editing so you can more easily hear the effect of parameter changes on the active layers. Layers are muted or re-activated by using the [-1/NO], [+1/YES], [ENTER], and [EXIT] keys while holding the [UTILITY/SELECT] key:

- [-1/NO] mutes or re-activates Layer A.
- [+1/YES] mutes or re-activates Layer B.
- [ENTER] mutes or re-activates Layer C.
- [EXIT] mutes or re-activates Layer D.

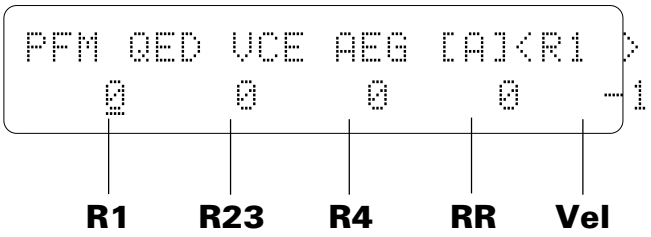
Active layers appear as upper-case characters and muted layers appear as lower-case characters while the [UTILITY/SELECT] key is held. In the following display, for example, layers “A” and “C” are active while layers “b” and “d” are muted.



1-1: VOICE AMPLITUDE EG OFFSET

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE -> 1-1 : Voice AEG -> [ENTER]

These parameters allow the amplitude envelopes of the voices assigned to each layer to be modified to some degree. The actual amplitude EG parameters of the voices are not affected. These "offset" values are only effective in the performance mode.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

R1 (Attack rate)

Range: -63 ... +63

Modifies the "R1" parameter of the voice amplitude EG — see page 112. Plus (+) values produce a faster attack rate while minus (–) values produce a slower attack rate.

No matter how much offset is applied, the minimum and maximum EG attack rates cannot be exceeded.

R23 (Decay 1 rate)

Range: -63 ... +63

Modifies the "R2" and "R3" parameters of the voice amplitude EG — see page 112. Plus (+) values produce a faster decay rate while minus (–) values produce a slower decay rate.

No matter how much offset is applied, the minimum and maximum EG decay rates cannot be exceeded.

R4 (Decay 2 rate)

Range: -63 ... +63

Modifies the "R4" parameter of the voice amplitude EG — see page 112. Plus (+) values produce a faster decay rate while minus (–) values produce a slower decay rate.

No matter how much offset is applied, the minimum and maximum EG decay rates cannot be exceeded.

RR (Release rate)

Range: -63 ... +63

Modifies the "RR" parameter of the voice amplitude EG — see page 112. Plus (+) values produce a faster release rate while minus (–) values produce a slower release rate.

No matter how much offset is applied, the minimum and maximum EG release rates cannot be exceeded.

Vel (Velocity sensitivity)

Range: -14 ... +14

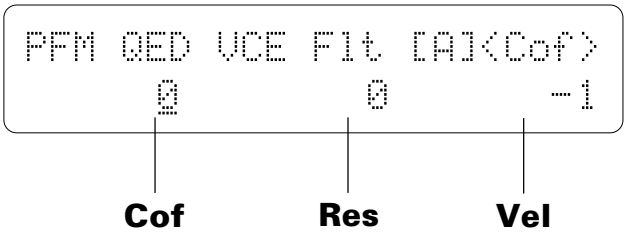
Modifies the amplitude EG velocity sensitivity setting (see page 117). Plus "+" settings increase sensitivity while minus "–" settings reduce sensitivity.

No matter how much offset is applied, the minimum and maximum velocity values cannot be exceeded.

1-2: VOICE FILTER OFFSET

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE -> 1-2 : Voice Filter -> [ENTER]

These parameters allow the main filter parameters of the voices assigned to each layer to be modified to some degree. The actual filter parameters of the voices are not affected. These "offset" values are only effective in the performance mode.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Cof (Filter cutoff frequency)

Range: -127 ... +127

Modifies the filter cutoff frequency (this corresponds to the voice filter "Cof" parameter — see page 122). Plus (+) values increase the cutoff frequency while minus (–) values lower the cutoff frequency. This parameter cannot be used if the filter is set to "Thru". In this case "---" appears in place of the parameter value.

No matter how much offset is applied, the minimum and maximum cutoff frequency values cannot be exceeded.

Res (Filter resonance)

Range: -99 ... +99

Modifies the height of the filter's resonant peak (this corresponds to the filter "Res" parameter — see page 122). Plus (+) values increase resonance while minus (–) values reduce resonance. This parameter cannot be used if the filter is *not* set to "LPF". In this case "---" appears in place of the parameter value.

No matter how much offset is applied, the minimum and maximum resonance values cannot be exceeded.

Vel (Velocity sensitivity)

Range: -127 ... +127

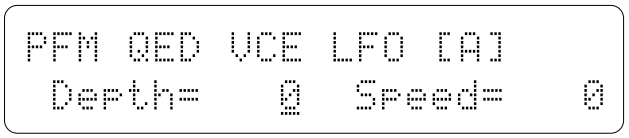
Modifies the filter velocity sensitivity setting (see page 129). Plus "+" settings increase sensitivity while minus "–" settings reduce sensitivity.

No matter how much offset is applied, the minimum and maximum velocity values cannot be exceeded.

1-3: VOICE LFO OFFSET

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE -> 1-3 : Voice LFO -> [ENTER]

These parameters allow the main LFO parameters of the voices assigned to each layer to be modified to some degree. The actual LFO parameters of the voices are not affected. These "offset" values are only effective in the performance mode.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Depth (LFO depth)

Range: -99 ... +99

Modifies the amplitude, pitch, and frequency modulation depth of the LFO (this corresponds to the "Pmod", "Amod", and "Fmod" parameters of the main voice LFO — see page 138). Plus (+) values produce greater modulation depth while minus (–) values reduce the modulation depth.

No matter how much offset is applied, the minimum and maximum LFO depth values cannot be exceeded.

Speed (LFO speed)

Range: -99 ... +99

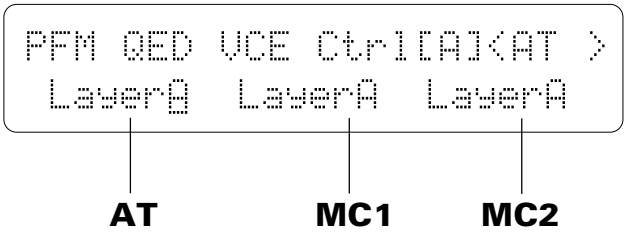
Modifies the speed of the LFO (this corresponds to the "Speed" parameter of the main voice LFO — see page 136). Plus (+) values increase the LFO speed while minus (–) values reduce the speed.

No matter how much offset is applied, the minimum and maximum LFO speeds cannot be exceeded.

1-4: VOICE CONTROLLER

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE -> 1-4 : Voice Control -> [ENTER]

These parameters determine how the performance layers are affected by keyboard aftertouch response and the control devices assigned to MIDI Controller 1 and MIDI Controller 2 (MIDI controller assignments are made via the "UTILITY" mode "2:Controller" screen — page 223).



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

AT (Aftertouch)

Range: off, LayerA, LayerB, LayerC, LayerD

The aftertouch control settings from the voice assigned to the selected layer (LayerA, LayerB, LayerC, or LayerD) are applied to the layer being edited. Select "off" to turn aftertouch control off for the layer being edited.

MC1 (MIDI controller 1)

Range: off, LayerA, LayerB, LayerC, LayerD

The MIDI Controller 1 settings from the voice assigned to the selected layer (LayerA, LayerB, LayerC, or LayerD) are applied to the layer being edited. Select "off" to turn MIDI Controller 1 off for the layer being edited.

MC2 (MIDI controller 2)

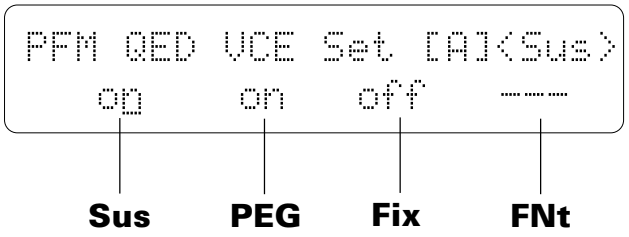
Range: off, LayerA, LayerB, LayerC, LayerD

The MIDI Controller 2 settings from the voice assigned to the selected layer (LayerA, LayerB, LayerC, or LayerD) are applied to the layer being edited. Select "off" to turn MIDI Controller 2 off for the layer being edited.

1-5: VOICE SETTING

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE -> 1-5 : Voice Setting -> [ENTER]

Other parameters that can be individually set for each performance layer are provided in this screen: sustain enable, pitch envelope generator enable, oscillator fixed note mode and note number.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Sus (Sustain)

Range: off, on

Turns sustain off or on for the selected layer. Interesting effects can be produced by setting some layers to respond to the sustain footswitch in the normal way, while others do not sustain at all.

PEG (Pitch EG enable)

Range: off, on

Turns pitch envelope generator control of the selected layer off or on.

Fix (Oscillator fix)

Range: off, on

Turns the oscillator fixed-pitch mode off or on (see page 109). The “FNt” parameter described below can be used to set the note produced when the “fix” mode is turned on.

FNt (Oscillator fix note number)

Range: C-2 ... G8

Sets the frequency (note) at which the selected layer will be played when the “fix” mode is turned on (“---” is displayed in place of the note when the “fix” mode is turned off).

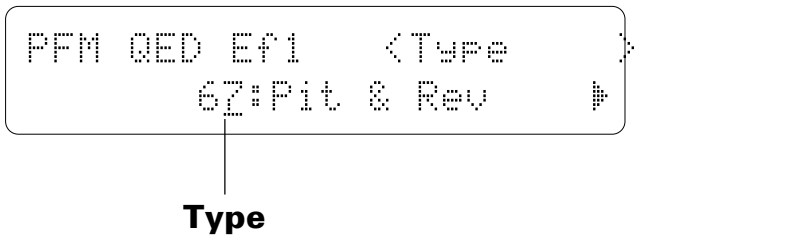
The C-2 to G8 range of this parameter covers a full 10-1/2 octaves. “C3” corresponds to “middle C” on a keyboard.

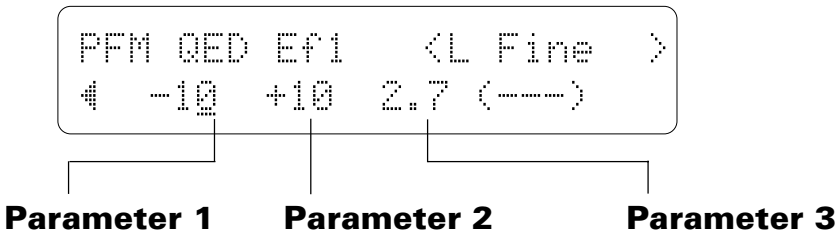
1-6: EFFECT 1 / 1-7: EFFECT 2

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE
-> 1-6 : Effect 1 -> [ENTER]
-> 1-7 : Effect 2 -> [ENTER]

The TG500 features a complex, high-performance effect system that can be programmed easily via the parameters presented here and in the following screen.

For full effect parameters see page 84.





Type (Effect type)

Range: 0 ... 90

The “Type” parameter selects any of the TG500’s 90 effect types for the effect 1 or effect 2 processor, depending on whether the “Effect 1” or “Effect 2” edit screen is selected. See page 251 for more details on the TG500 effect system.

Parameters 1 ... 3

Range: Depends on the selected effect and parameter.

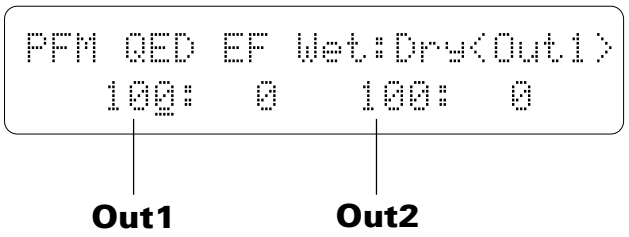
Use the [▷] key to scroll to the parameter screen. This screen provides access to the three main parameters each for the current selected effect 1 or effect 2, depending on whether the “Effect 1” or “Effect 2” edit screen is selected. As usual, the name of the selected parameter is shown in the upper right corner of the display, while in this screen the parameter unit (“s” for seconds, “%” for percent, “dB” for decibels, etc.) is shown in parentheses in the lower right corner.

The parameters are different for each effect (refer to page 271 for details). The Full Edit Parameters screens described on page 84 provides full access to all 8 effect parameters.

1-8: EFFECT WET:DRY BALANCE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> PAGE -> 1-8 : Effect Wet:Dry -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameters provided in this screen provide precise balance control.



Out1, Out2 (Out 1 & Out 2 Wet:Dry Balance)

Range: 0 ... 100

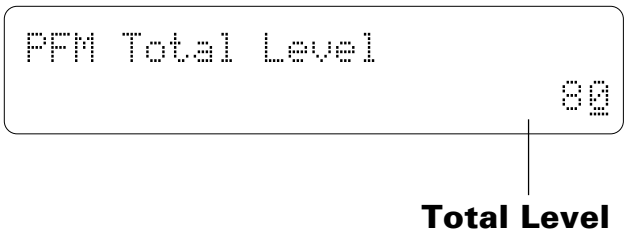
Balances the effect ("wet") and direct ("dry") signals delivered via the corresponding effect processors. Higher "Wet" values produce more effect sound in relation to the direct, dry sound of the voice.

The "Wet" and "Dry" parameters are adjusted simultaneously (their total is always 100%).

2-1: PERFORMANCE TOTAL LEVEL

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 2: Level/Name -> [ENTER] -> PAGE -> 2-1 : Total Level -> [ENTER]

This parameter sets the overall volume level of the current performance combination in relation to the others, making it possible to match levels for smooth transition when switching between performance combinations.



Total Level

Range: 0 ... 127

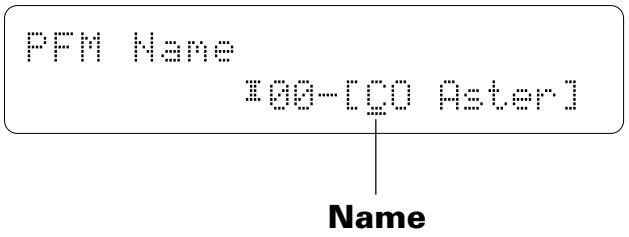
Adjusts the volume level of the current performance combination.

A setting of “0” produces no sound while a setting of “127” produces maximum volume.

2-2: PERFORMANCE NAME

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 2: Level/Name -> [ENTER] -> [PAGE] -> 2-2 : Name -> [ENTER]

Your original performance combinations should naturally have original names. This function can be used to assign a name of up to 8 characters to the current performance.



Name

Range: See character list, below

Assigns a name of up to 8 characters to the current performance.

Use the [◁] key to move the character cursor to the left, and the [▷] key to move the cursor to the right. Use the [-1/NO] and [+1/YES] keys to select a character for the current cursor position. The available characters are listed below.

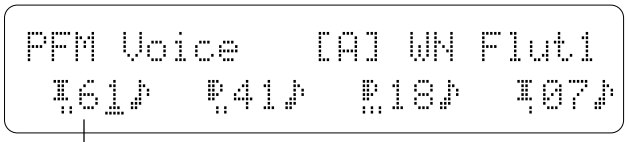
The entire name can be cleared by pressing the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] key, and a space can be entered at the cursor position by pressing the [STORE/COPY] key while holding the [UTILITY/SELECT] key.

(Space)!"#$%&'()*+,-./0123456789:
;<=>?@ABCDEFGHIJKLMNOPQRSTUVWX
YZ[¥]^_`abcdefghijklmnopqrstuv
wxyz{|}→←

3-1-01: VOICE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-01 : Voice -> [ENTER]

TG500 performance combinations can have up to four voices assigned to different "layers" — A, B, C and D. This screen lets you assign voices to the layers.



Voice (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Voice Number A, B, C, D

Range: off, 00 ... 62 (internal banks I ... II, preset & card banks I ... IV)

After moving the cursor to the layer you want to edit, use the [MEMORY] key to select the memory area from which the voice is to be selected, and then use the [-1/NO] and [+1/YES] keys to select the voice. Please note that only internal and preset voices can be used in internal performance combinations, only card banks 1 and 2 and preset voices can be used in card bank 1 performance combinations, and only card banks 3 and 4 and preset voices can be used in card bank 2 performance combinations.

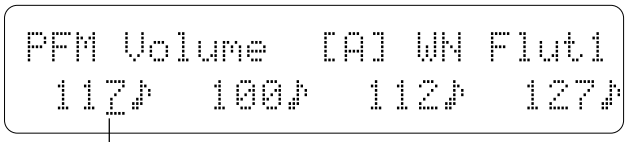
The voices can individually turned on or off by using the [◁], [▷], [PAGE], and [MEMORY] keys while holding the [UTILITY/SELECT] key (this is the same procedure used to select layers for editing — see page 50).
Re-selecting the layer that is already selected alternately turns the voice off and on.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

3-1-02: VOLUME

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-02 : Volume -> [ENTER]

For optimum balance between the voices in a performance combination, this screen allows the volume of each voice to be adjusted individually.



Volume (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Volume

Range: 0 ... 127

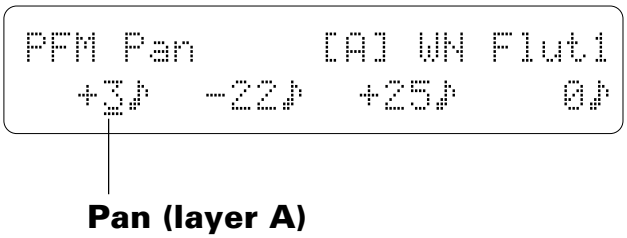
Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to adjust the volume levels of the voice assigned to that layer. A setting of "0" produces no sound, while a setting of "127" produces maximum volume.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

3-1-03: PAN

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-03 : Pan -> [ENTER]

In multi-layer performance combinations, interesting stereo effects can be produced by placing the output from different layers at different locations in the stereo sound field. The parameters in this screen determine the position in the stereo sound field in which the sound from each active layer will be heard (left to right).



The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Pan

Range: -31 ... +31

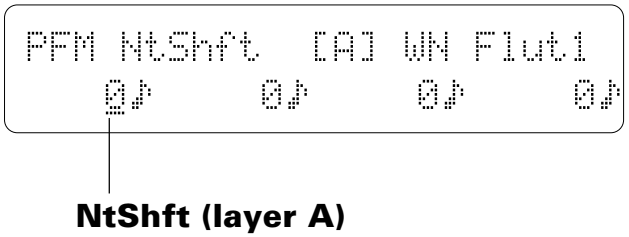
Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to adjust the pan position of the voice assigned to that layer. Minus values represent panning to the left, and positive values represent panning to the right. “0” positions the sound of the selected layer in the center of the stereo sound field.

The name of the currently selected voice is shown in the upper right corner of the display (“--------” appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

3-1-04: NOTE SHIFT

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-04 : Note Shift -> [ENTER]

The note shift parameters individually shift the pitch of each layer up or down in semitone steps, making it possible to create harmony effects between layers.



NtShft (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

NtShft (Note shift)

Range: -63 ... +63

Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to adjust the pitch of the voice assigned to that layer. A setting of "-12," for example, shifts the pitch of the selected layer down by one octave; a setting of "+4" shifts the pitch up by a major third.

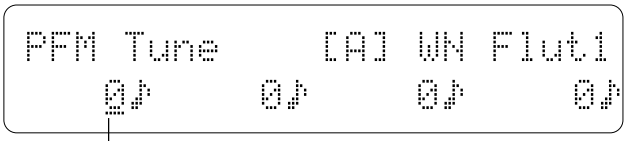
The Note Shift parameter can be used to transpose a voice to its most useful range, or to create harmony (intervals) between different layers in a performance combination.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

3-1-05: TUNE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-05 : Tune -> [ENTER]

The fine tune parameters allow slight upward or downward pitch adjustment of each layer, making it possible to create voice-thickening detune effects between layers.



Tune (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Fine (Fine tuning)

Range: -7 ... +7

Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to adjust the pitch of the voice assigned to that layer. The maximum minus setting of "-7" produces a downward pitch shift of approximately 2 cents (a "cent" is 1/100th of a semitone), and the maximum plus setting of "+7" produces an upward pitch shift of approximately 2 cents. A setting of "0" produces no pitch change.

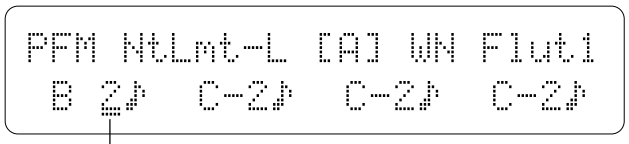
The Fine parameter allows different layers in a performance combination to be slightly detuned in relation to each other, thereby "thickening" the overall sound.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

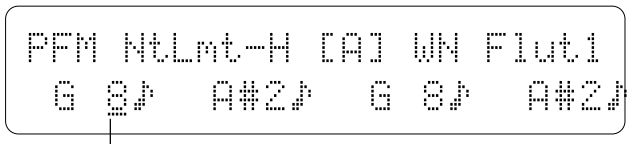
3-1-06: NOTE LIMIT-L / 3-1-07: NOTE LIMIT-H

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-06 : Note Limit-L -> [ENTER]
-> 3-1-07 : Note Limit-H -> [ENTER]

The low and high note limit parameters make it possible to create a range of split keyboard effects using the performance layers. You could have two layers on either side of a single split point, a four-way split keyboard, or any other possible combination.



NtLmt-L (layer A)



NtLmt-H (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

NtLmt-L (Low note limit)

Range: C-2 ... G8

Individually sets the low note limit for each active layer (the lowest note that each layer will produce).

Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to set the low note limit of the voice assigned to that layer.

The C-2 to G8 range of this parameter covers a full 10-1/2 octaves. “C3” corresponds to “middle C” on a keyboard.

This parameter, in conjunction with the High Note Limit parameter described below, allows the sound from a layer to be limited to a specific region of the keyboard. If the Low Note Limit is set to C3 and the High Note Limit for the same layer is set to C4, for example, the sound from that layer will only be produced between C3 and C4 — the octave immediately above middle C. This makes it simple to produce split voices.

If the High Note Limit is set to a note that is *lower* than the Low Note Limit for the same layer, it will set a range of notes in the middle that the layer will not play.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

NtLmt-H (High note limit)

Range: C-2 ... G8

Individually sets the high note limit for each active layer (the highest note that each layer will produce).

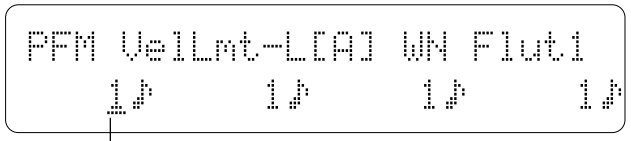
Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to set the high note limit of the voice assigned to that layer.

See the "NtLmt-L" parameter, above, for more details.

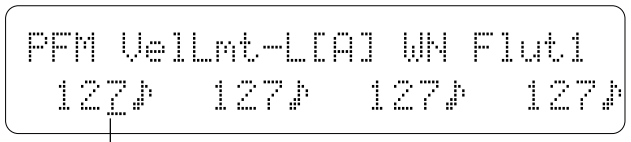
3-1-08: VELOCITY LIMIT-L / 3-1-09: VELOCITY LIMIT-H

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-08 : Vel Limit-L -> [ENTER] 3-1-09 : Vel Limit-H -> [ENTER]

The high and low velocity limit parameters make it possible to produce a range of "velocity switching" effects in which different layers of a performance combination are set up to produce sound only when the keyboard is played at a certain velocity. You could, for example, produce a flute sound by playing softly, and a horn sound by playing harder.



VelLmt-L (layer A)



VelLmt-H (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

VelLmt-L (Low velocity limit)

Range: 1 ... 127

Sets the lowest velocity value for a range of velocity values over which each active layer will produce output.

Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to set the low velocity limit of the voice assigned to that layer.

Every note played on a keyboard or other MIDI controller produces a "velocity" value that tells the tone generator how hard the note has been played. The range of MIDI velocity values is from 1 to 127 — thus the 1 ... 127 range of this parameter.

The Low Velocity Limit parameter, in conjunction with the High Velocity Limit parameter described below, makes it possible to specify a range of velocity values over which the selected layer will produce sound. You could, for example, set Low Velocity Limit to "60" and High Velocity Limit to "127." This would cause that layer to produce output only when a velocity value between 60 and 127 was received — i.e. when a fairly loud note is played. A second layer could then be set to produce output *only* when velocity values below 60 are received, so that completely different sounds are produced on soft and loud notes.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

VelLmt-H (High velocity limit)

Range: 1 ... 127

Sets the highest velocity value for a range of velocity values over which each active layer will produce output.

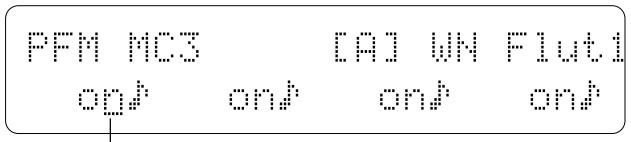
Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to set the high velocity limit of the voice assigned to that layer.

See the "VelLmt-L" parameter, above, for more details.

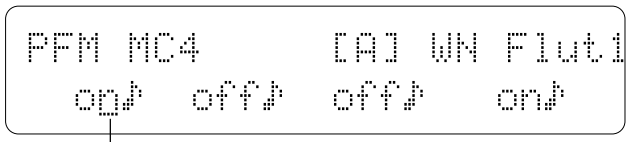
3-1-10: MC3 ENABLE / 3-1-11: MC4 ENABLE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-10 : MC3 Enable -> [ENTER]
3-1-11 : MC4 Enable -> [ENTER]

MIDI control change data received by the TG500 can be used to control the level of individual layers or specified groups of layers in the performance play mode. This screen specifies which MIDI control device (assigned via the “UTILITY” mode “2:Controller” screen) controls which layers.



MC3 (layer A)



MC4 (layer A)

The layer to be edited can be selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

MC3 (MIDI controller 3 enable)

Range: on, off

Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to turn MIDI control of that layer on or off.

The name of the currently selected voice is shown in the upper right corner of the display (“--------” appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

MC4 (MIDI controller 4 enable)

Range: on, off

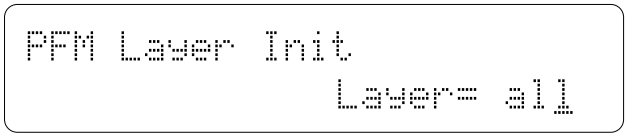
Use the [◁] and [▷] keys (or the standard layer selection procedure) to select the layer to be edited, then use the [-1/NO] and [+1/YES] keys to turn MIDI control of that layer on or off.

The name of the currently selected voice is shown in the upper right corner of the display ("--------" appears if the voice is turned off). An animated musical note appears to the right of voices that are on and active (i.e. not muted).

3-1-12: LAYER INITIALIZE

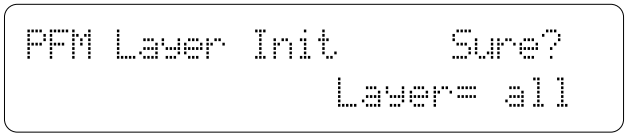
[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER] -> [PAGE] -> 3-1-12 : Initialize -> [ENTER]

When you want to program a totally new performance combination “from scratch,” rather than editing an existing combination, use this function to initialize layer data.



Use the [-1/NO] and [+1/YES] keys to select “all” if you want to initialize layer data currently in the edit buffer, or select “A”, “B”, “C”, or “D” if you only want to initialize one specific layer.

Press [ENTER] to begin the initialize procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the initialize operation (which will erase all current edited data), or press [-1/NO] to cancel.

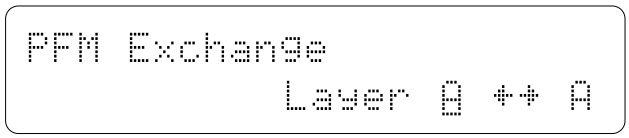
“Completed!” will appear briefly on the display when the layer data has been initialized.

For initial layer data, see page 283.

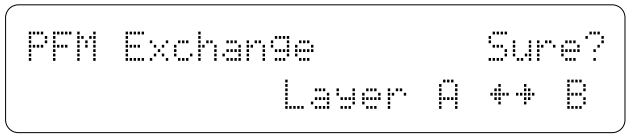
3-1-13: LAYER EXCHANGE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER]
-> [PAGE] -> 3-1-13 :Exchange -> [ENTER]

This function can be used to eliminate the audible effects of slight note delays that can occur in the performance play mode. The notes played by layers A, B, C, and D are sounded in sequence in the performance play mode. Normally the delay is so slight that it is not audible. If a voice with a sharp attack is assigned to one of the later layers (C or D), however, the delay can "soften" the attack of the voice. The problem can be overcome by using this function to exchange layers A and D, for example, so that the voice with the strong attack is assigned to layer A instead of layer D. Since layer A is sounded first, the sharpness of the attack will be retained.



Use the [◁] and [▷] keys to position the cursor, and the [-1/NO] and [+1/YES] keys to select the layers to be exchanged (A through D), then press [ENTER] to begin the layer exchange procedure. The following confirmation display will appear:



Press [+1/YES] again to confirm that you want to go ahead with the layer exchange operation, or press [-1/NO] to cancel.

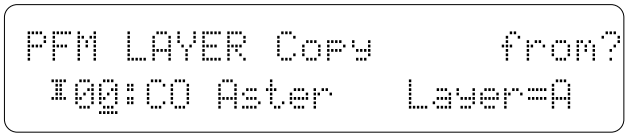
"Completed!" will appear briefly on the display when the data has been exchanged.

LAYER DATA COPY

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1:Layer -> [ENTER] -> [STORE/COPY]

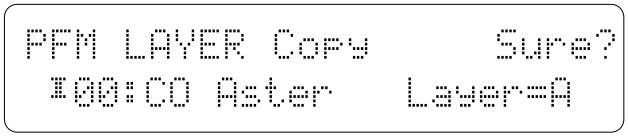
This function facilitates performance editing by allowing the layer parameters from any layer in any other performance (the “source” performance) to be copied to the current layer. You can copy a layer setup that is close to the type you want, then edit it to produce the required sound.

Press the [STORE/COPY] key while in the layer edit mode.



Position the cursor at the left parameter (press the [◁] key) and then use the [MEMORY] key to select the internal, preset, or card memory; then use the [-1/NO] and [+1/YES] keys to select the performance combination from the which the data is to be copied. Move the cursor to the right parameter (press the [▷] key) and use the [-1/NO] and [+1/YES] keys to select layer from which the data is to be copied (A, B, C, or D).

Once the source performance combination and layer have been selected, press the [ENTER] key. “Sure?” will appear on the display.

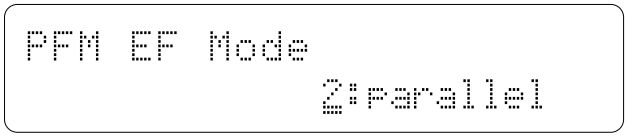


Press the [+1/YES] key to copy the layer data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, “Completed!” will appear on the display briefly, then the display will return to the layer edit mode.

3-2-01: MODE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-01 : Mode -> [ENTER]

The TG500 features a dual-processor effect system that includes 90 top-quality digital effects. Two different effects can be connected in series or parallel, providing an extensive range of possible configurations.



Mode

Range: 0:off, 1:serial, 2:parallel

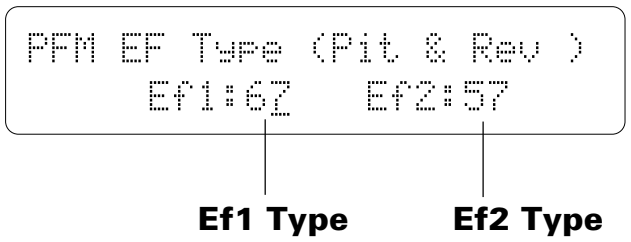
Determines whether the TG500's two effect processors are connected in series ("1:serial") or in parallel ("2:parallel"), or whether the entire effect system is turned off ("0:off").

See page 251 for effect mode diagrams.

3-2-02: TYPE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-02 : Type -> [ENTER]

These parameters assign any of the TG500's 90 effects independently to the EFECT 1 and EFFECT 2 signal processors.



Ef1 Type

Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 1 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

Ef2 Type

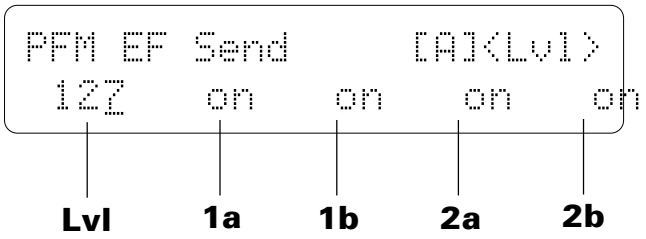
Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 2 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

3-2-03: SEND

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-03 : Send -> [ENTER]

The parameters provided here determine to which of the TG500 effect stages the output from the voice assigned to each layer is sent, and at what level.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Lvl (Send level)

Range: 0 ... 127

This parameter adjusts the amount of direct voice signal that is sent to the effect processors, determining the strength of the final effect sound. A setting of “0” results in no effect, leaving only the “dry” sound of the voice. The maximum setting of “127” produces the maximum amount of effect.

1a, 1b, 2a, and 2b (Send switches)

Range: See text below.

Determines to which of the EFFECT 1 and EFFECT 2 effect stages the output from the current layer is sent. The [-1] and [+1] keys can then be used to turn the selected stage on or off.

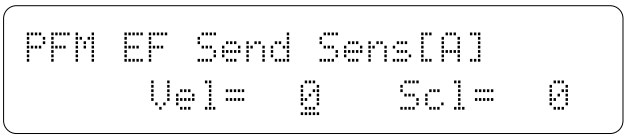
If a “single” type effect is selected then only stage “a” can be selected. If a “dual” type effect is selected, then both stages “a” and “b” can be selected. An effect stage that cannot be selected is represented by “---” on the display.

See the “EFFECTS” section beginning on page 251 for more details.

3-2-04: SEND SENSITIVITY

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-04 : Send Sens. -> [ENTER]

These parameters determine how the effect send level is affected by keyboard dynamics and key scaling.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Vel (Send velocity sensitivity)

Range: -7 ... +7

Determines how the send level from the selected layer is affected by velocity changes (e.g. keyboard dynamics).

Plus "+" settings produce higher send levels in response to higher velocity values — i.e. the harder a key is played, the higher the send level, and therefore the deeper the effect. The maximum setting of "+7" produces the maximum level variation in response to velocity changes. Minus "–" settings produce the opposite effect: lower send level in response to higher velocity. A setting of "+0" results in no send level variation.

Scl (Send key scaling)

Range: -7 ... +7

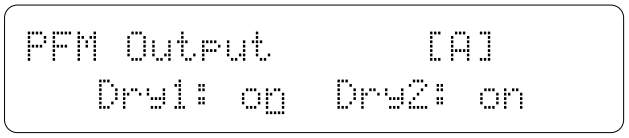
Allows the send level for the selected layer to be varied across the entire pitch range (i.e. keyboard range).

Plus ("+") settings produce a higher send level for the high notes and a lower send level for the low notes. The maximum "+7" setting provides the greatest send level variation across the pitch range. Minus ("–") settings produce the opposite effect — a lower high-note send level and higher low-note send level. A setting of "+0" results in no send level variation.

3-2-05: OUTPUT

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-05 : Output -> [ENTER]

These parameters turn the “dry lines” (i.e. the signal paths which bypasses each effect processor) on or off, determining whether any dry signal output can occur at the OUTPUT.



The layer to be edited is selected as described on page 50. The currently selected layer is shown in square brackets on the upper display line.

Dry1

Range: off, on

Turns the “dry line” bypassing the EFFECT 1 signal processor on or off. When this parameter is turned “off,” the “WET:DRY” parameters (page 154) have no effect.

Dry2

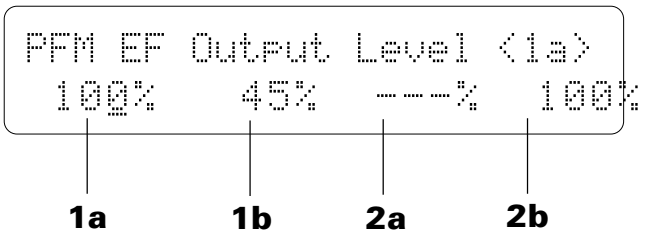
Range: off, on

Turns the “dry line” bypassing the EFFECT 2 signal processor on or off. When this parameter is turned “off,” the “WET:DRY” parameters (page 154) have no effect.

3-2-06: OUTPUT LEVEL

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER] -> [PAGE] -> 3-2-06 : Output Level -> [ENTER]

Depending on the selected effects the TG500 effect system can have up to four separate output levels that are adjusted by the parameters provided in this screen.



1a, 1b, 2a, and 2b (Effect output levels)

Range: 0 ... 100

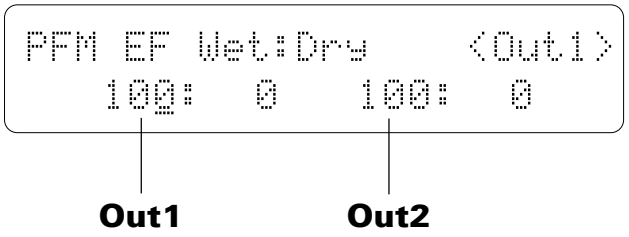
A setting of “0” turns output from the corresponding effect stage off, while a setting of “100” produces maximum output level.

If the selected effect is a “single” type, then only the “1a” or “2a” output level is available. If it is a “cascade” type, then only the “1b” or “2b” output level is available. Both the “1a” and “1b” or “2a” and “2b” levels are available only if the selected effect is a “dual” type. See page 251 for details on the effect stages and the TG500 effect system in general.

3-2-07: WET:DRY

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-07 : Wet:Dry -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameters provided in this screen provide precise balance control.



Out1, Out2 (Out 1 & Out 2 Wet:Dry Balance)

Range: 0 ... 100

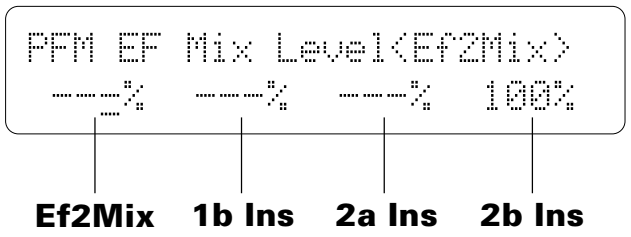
Balances the effect ("wet") and direct ("dry") signals delivered via the corresponding effect processors. Higher "Wet" values produce more effect sound in relation to the direct, dry sound of the voice.

The "Wet" and "Dry" parameters are adjusted simultaneously (their total is always 100%).

3-2-08: MIX LEVEL

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-08 : Mix Level -> [ENTER]

These parameters determine the mix level between each effect send and the output of the preceding effect stage. Refer to the section beginning on page 251 for details on the overall TG500 effect system.



EF2Mix (Effect 2 mix level)

Range: 0 ... 100

Mixes the output of the EFFECT 2 processor with that of the EFFECT 1 processor. This parameter can only be used with the “serial” effect mode is selected. If any other mode is selected (“off” or “parallel”), “---” appears on the display in place of the value.

1b Ins, 2a Ins, 2b Ins (Insert levels)

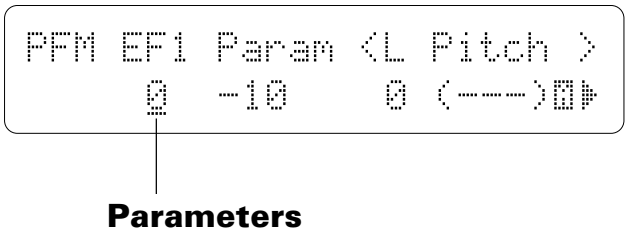
Range: 0 ... 100

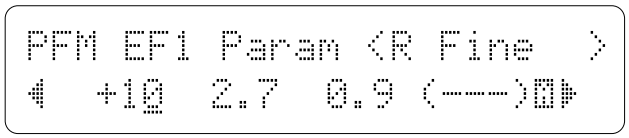
These parameters mix the dry signal sent to the corresponding effect stage with the output of the preceding effect stage. The higher the value the greater mix level. If the current effect configuration does not allow one of these mix parameters, “---” will appear in place of the mix level parameter.

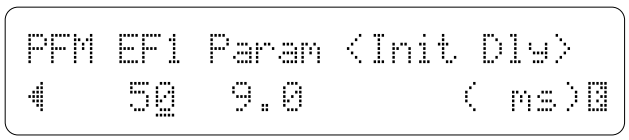
3-2-09: PARAMETER 1 / 3-2-10: PARAMETER 2

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-09 : Parameter 1 -> [ENTER] -> 3-2-10 : Parameter 2 -> [ENTER]

Each of the TG500's 90 effects has 8 parameters that can be edited via the parameters in these three screens to fine-tune the effect.







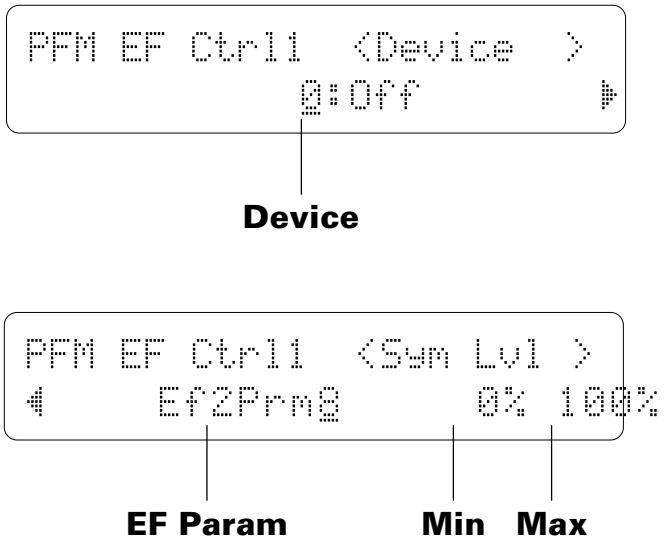
Use the [◁] and [▷] keys to select the parameters and switch between the three parameter screens. The name of the selected parameter is shown in the upper right corner of the display, while the parameter unit ("s" for seconds, "%" for percent, "dB" for decibels, etc.) is shown in parentheses in the lower right corner.

The parameters are different for each effect (refer to page 271 for details).

3-2-11: CONTROL 1 / 3-2-12: CONTROL 2

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-11 : Control 1 -> [ENTER]
-> 3-2-12 : Control 2 -> [ENTER]

MIDI control change data received by the TG500 can be assigned to control two different effect parameters in real time while playing in the voice or performance modes. The parameters provided in these screens determine which effect parameters are to be controlled by which MIDI control devices. It is also possible to select the minimum and maximum parameter values.



Device (MIDI control device)

Range: 000 ... 120, AfterTch, Velocity, KeyScale, LFO

This parameter specifies which MIDI control change number will control the parameter selected via the “EF Param” parameter, below. Some control change numbers are already defined (modulation wheel, foot controller, etc.), while others are not assigned to any specific controller (see chart below). Additional settings include “AfterTch” for keyboard aftertouch control, “Velocity” for keyboard velocity control, “KeyScale” for key scaling control, and “LFO” for internal LFO control.

MIDI CONTROL CHANGE NUMBER/DEVICE

0:	"off"	91:	"Effect D"
1:	"Mod.Whl."	92:	"TremoloD"
2:	"Breath C"	93:	"Chorus D"
4:	"Foot Cnt"	94:	"CelesteD"
5:	"Porta.Sp"	95:	"Phaser D"
6:	"Data Ent"	96:	"Inc. "
7:	"Foot Vol"	97:	"Dec. "
8:	"Balance "	98:	"NRPN LSB"
10:	"Panpot "	99:	"NRPN MSB"
11:	"Express."	100:	"RPN LSB"
64:	"Hold 1 "	101:	"RPN MSB"
65:	"Porta.Sw"	121:	"AfterTch"
66:	"Sostenut"	122:	"Velocity"
67:	"Soft "	123:	"KeyScale"
69:	"Hold 2 "	124:	"LFO "

EF Param (Effect parameter)

Range: Depends on selected effects.

Selects the effect parameter to be controlled by the specified MIDI device. "Ef1Prm1" through "Ef1Prm8" on the display stand for "effect 1 parameter 1" through "effect 1 parameter 8". Likewise "Ef2Prm1" through "Ef2Prm8" on the display stand for "effect 2 parameter 1" through "effect 2 parameter 8". The parameters available for each effect are different, but the name of the selected parameter will be shown between the parentheses on the top line of the display. Parameters that can not be assigned to the sliders are indicated by dashes ("--------") instead of a parameter name. In addition to the indivual effect parameters a range of send level, balance, and LFO parameters are also available, as listed below:

Ef1Prm1	Ef2Prm2	Out2_Wet
Ef1Prm2	Ef2Prm3	Ctrl1Min
Ef1Prm3	Ef2Prm4	Ctrl1Max
Ef1Prm4	Ef2Prm5	LFO_Wave
Ef1Prm5	Ef2Prm6	LFO_Spd
Ef1Prm6	Ef2Prm7	LFO_Dly
Ef1Prm7	Ef2Prm8	Ef_Ins1b
Ef1Prm8	Ef_Out2a	Ef_Ins2a
Ef_Out1a	Ef_Out2b	Ef_Ins2b
Ef_Out1b	Ef2_Mix	
Ef2Prm1	Out1_Wet	

Min (Minimum parameter value)

Range: 0 ... 100

Sets the lower limit of the control range. A setting of “0”, for example, means that when the lowest control change value is received the assigned parameter will also be set to its lowest value. A setting of “50” means that the lowest control change value will set the assigned parameter to about 50% of its range (a parameter with a range of 0 to 127, for example, would be set to about 63).

Max (Maximum parameter value)

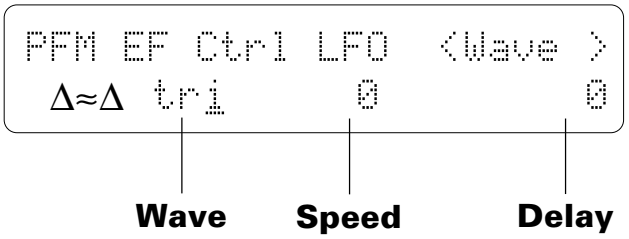
Range: 0 ... 100

Sets the upper limit of the control range. A setting of “100”, for example, means that when the highest control change value is received the assigned parameter will also be set to its highest value. A setting of “80” means that the highest control change value will set the assigned parameter to about 80% of its range (a parameter with a range of 0 to 127, for example, would be set to about 102).

3-2-13: CONTROL LFO

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [PAGE] -> 3-2-13 :Control LFO -> [ENTER]

All of the modulation-type effects — chorus, flanging, etc. — require LFO control. The TG500 has an independent effect LFO that is set up by the following parameters.



Wave (LFO waveform)

Range: tri, dwn, up, squ, sin, S/H, 1tm

Determines the waveform of the effect LFO.

"tri" = Triangle.	"dwn" = Downward sawtooth.
"up" = Upward sawtooth.	"squ" = Square.
"sin" = Sine.	"S/H" = Sample and hold.
	"1tm" = Upward 1-shot.

Speed (LFO speed)

Range: 0 ... 99

Sets the speed of the effect LFO.

"0" is the slowest speed setting, producing an LFO speed of approximately 0 Hertz. The fastest setting of 99 produces an LFO speed of approximately 25 Hertz.

Delay

Range: 0 ... 99

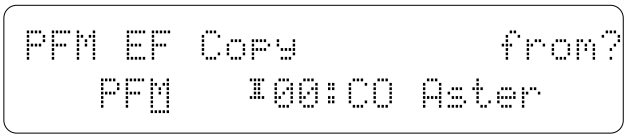
Sets the delay time between the beginning of a note and the beginning of effect LFO operation for the selected element.

The minimum setting "0" results in no delay, while the maximum setting of "99" produces a delay of approximately 2.66 seconds before the LFO begins operation (5.3 seconds before it reaches maximum depth).

EFFECT DATA COPY

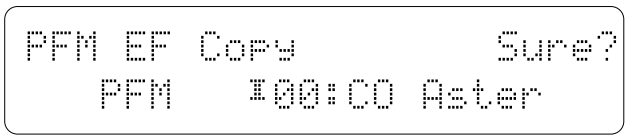
[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [STORE/COPY]

This function facilitates performance effect editing by allowing the effect parameters from any other performance combination, voice, or multi setup to be copied to the current performance combination. You can copy an effect setup that is close to the type you want, then edit it to produce the required sound.



Move the cursor to the left parameter (press the [◁] key) and use the [-1/NO] and [+1/YES] keys to select the mode containing the desired voice and effect data ("PFM" = PERFORMANCE, "VCE" = VOICE, and "MLT" = MULTI). Move the cursor to the right parameter (press the [▷] key) and, if a voice or performance combination is selected as the source, use the [MEMORY] key to select the memory area from which the source voice or performance combination is to be selected. Use the [-1/NO] and [+1/YES] keys to select the source voice or performance number. The [-1/NO] and [+1/YES] keys can be used to select the source multi number (0 … 15) when "MLT" is selected.

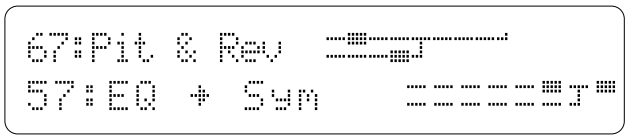
Once the source performance combination, voice, or multi setup has been selected, press the [ENTER] key. "Sure?" will appear on the display.



Press the [+1/YES] key to copy the effect data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, "Completed!" will appear on the display briefly, then the display will return to the effect edit mode.

EFFECT SIGNAL FLOW DISPLAY

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2:Effect -> [ENTER]
-> [UTILITY/SELECT] + [EDIT/COMPARE]



This function provides a graphic indication of the current effect system configuration while in the effect edit mode.

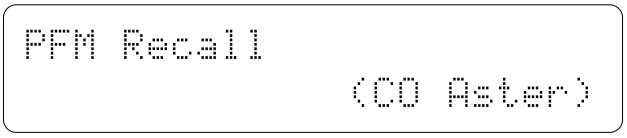
In the effect edit mode press the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] to see the overall effect system signal flow.

Refer to the section beginning on page 251 for details on the effect system.

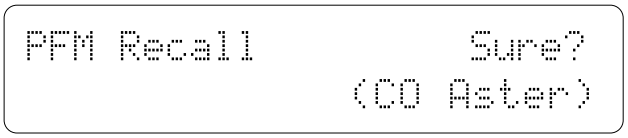
4-1: RECALL

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 4: Recall/Init. -> [ENTER] -> 4-1 : Recall -> [ENTER]

If you're dissatisfied with the results of edits you've made to a performance combination, or have accidentally lost track of changes made, use the RECALL function to recall the pre-edit performance data from the TG500's backup buffer memory.



Press [ENTER] to begin the recall procedure. The following confirmation display will appear:



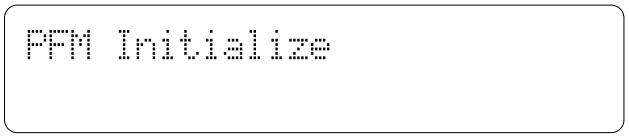
Press [+1/YES] to confirm that you want to go ahead with the recall operation (which will erase all current edited data), or press [-1/NO] to cancel.

"Completed!" will appear briefly on the display when the original voice data has been recalled.

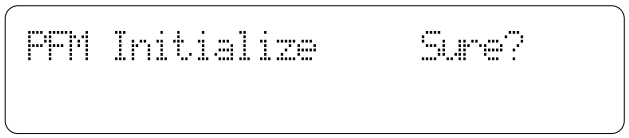
4-2: INITIALIZE

[PLAY MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 4: Recall/Init. -> [ENTER] -> 4-2 : Initialize -> [ENTER]

When you want to program a totally new performance combination "from scratch," rather than editing an existing combination, use this function to initialize all performance parameters.



Press [ENTER] to begin the initialize procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the initialize operation (which will erase all current edited data), or press [-1/NO] to cancel.

"Completed!" will appear briefly on the display when the performance data has been initialized.

For initial performance parameter, see page 283.

PERFORMANCE COMPARE

[EDIT/COMPARE]

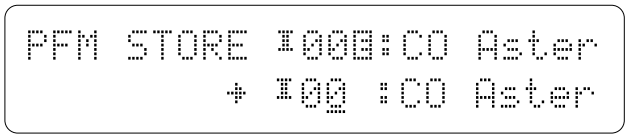
The performance compare function makes it possible to compare the sound of a performance combination being edited with the same performance combination prior to editing.

To temporarily recall the original performance data while editing, press the [EDIT/COMPARE] key. The [EDIT] LED will flash, indicating that the compare mode is engaged. Press [EDIT/COMPARE] a second time to return to the edit mode and the performance combination being edited.

PERFORMANCE STORE

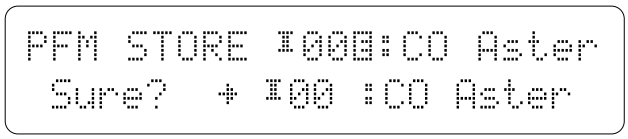
[STORE/COPY]

When you're satisfied with a new performance combination you've created in the performance edit mode, use the store function described below to store the new performance combination to an internal or card memory location.



When you've finished editing, return to the performance play mode (press the [PLAY MODE] key), and *before selecting a different performance combination* press the [STORE/COPY] key. You can now use the [MEMORY], [-1/NO] and [+1/YES] keys to select the memory location to which your new performance combination is to be stored.

Once the store location has been specified, press [ENTER] to begin the store procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the store operation (which will erase all previous data in the specified memory location), or press [-1/NO] to cancel.

When the performance data has been stored, "Completed!" will appear briefly on the display, then the display will return to the performance play mode.

VOICE EDIT MODE

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Voice Compare 165

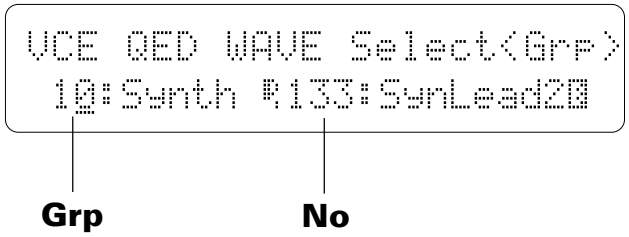
Voice Store 166

1-1: WAVE SELECT

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> [PAGE]
-> 1-1 : Wave Select -> [ENTER]

These parameters provide a fast, easy way to select a new wave for the current voice.

For full oscillator parameters see page 109.



Grp (Wave group)

Range: 0 ... 15

For fast, easy selection of the preset TG500 waves this parameter selects 16 different wave categories or “groups”, each containing a number of waves that can be individually selected by using the “No” parameter, below.

Wave Groups

01:Piano	Acoustic pianos.
02:Key	Other keyboards.
03:Brass	Brass instruments.
04:Wind	Wind instruments.
05:Str.	Strings.
06:A.Gtr	Acoustic guitars.
07:E.Gtr	Electric guitars.
08:Bass	Acoustic & electric bass.
09:Folk	Folk & ethnic instruments.
10:Synth	Synthesizer sounds.
11:Choir	Choir & human voice.
12:Tprc	Tuned percussion.
13:Drum	Drums.
14:Perc.	Percussion instruments.
15:SE	Sound effects.
16:OSC	Basic oscillator waveforms.

No (Wave number)

Range: 1 ... 244 (Preset 1), 1 ... 50 (Preset 2)

Selects the wave (AWM waveform) to be used in the current voice. Use the "Grp" parameter, above, to select the group containing the wave that is to be selected. The [MEMORY] key can also be used to select the memory area from which the wave is to be selected, including internal wave memory if SYEMB06 memory expansion board are installed (page 282) or card if an appropriate wave card is plugged into the waveform 1 or 2 card slot. A complete listing of the preset waves is given in the Appendix, on page 309 and 310.

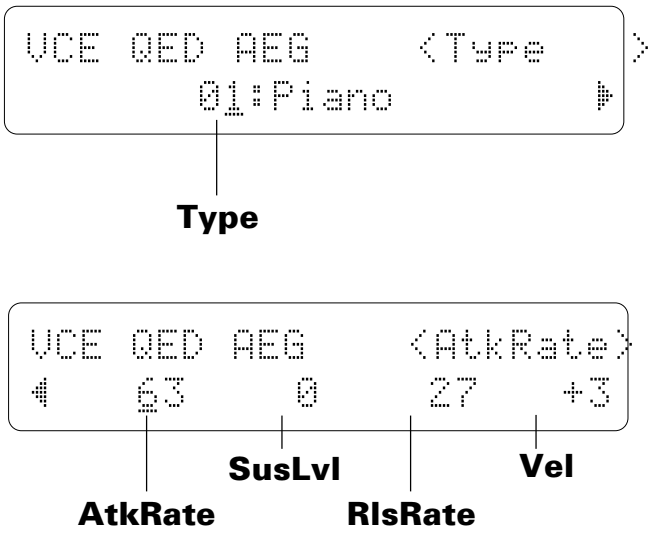
The TG500 actually incorporates two 32-note polyphonic tone generator units — "A" and "B". The inverse character "A" or "B" that appears to the right of the wave name indicates whether that wave is produced by tone generator unit A or tone generator unit B. This information is useful, for example, when creating performance combinations. Combining two "A" voices results in a maximum polyphony of 32 notes because both voices are produced by the same tone generator unit. An "A" voice combined with a "B" voice, however, results in a maximum polyphony of 64 notes. The same basic principle applies when combining voices in multi setups.

1-2: AMPLITUDE EG

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> [PAGE]
-> 1-2 : AEG -> [ENTER]

Rather than having to set numerous level and rate values via the full-edit amplitude EG parameters, these parameters let you select from a range of preset envelope types, and then modify the overall attack, sustain, and release characteristics as required.

For full amplitude EG parameters see page 111.



Type (Envelope type)

Range: 00 ... 21

Selects either the envelope defined by the current amplitude envelope parameter settings (page 111), or one of 21 preset amplitude envelope types for the current voice. The envelope types are:

Quick Edit Envelope Types

00:--------	Full-edit envelope.
01:Piano	Acoustic piano.
02:Brass	Brass.
03:SfzBrass	Sforzando brass.
04:SynBrass	Synthesizer brass.
05:StFast	Fast-attack strings.
06:StSlw/Pd	Slow-attack strings (pad).
07:E.Bass	Electric bass.
08:SynBass1	Synthesizer bass 1.
09:SynBass2	Synthesizer bass 2.
10:Organ	Organ.
11:Guitar	Guitar.
12:Pluck1	Plucked instrument 1.
13:Pluck2	Pluched instrument 2.

14:SynPad	Synthesizer pad.
15:SynComp	Synthesizer comping (backing).
16:Percusiv	Percussive.
17:S.Ideal1	Sound ideal envelope 1.
18:S.Ideal2	Sound ideal envelope 2.
19:S.Ideal3	Sound ideal envelope 3.
20:S.Ideal4	Sound ideal envelope 4.
21:Init	Initialized envelope.

AtkRate (Attack rate)

Range: 0 ... 63

Sets the attack rate for the selected envelope. “63” produces the fastest attack, while “0” produces the slowest attack.

SusLvl (Sustain level)

Range: 0 ... 63

Sets the sustain level for the selected envelope.

RlsRate (Release rate)

Range: 0 ... 63

Sets the release rate for the selected envelope.

Vel (Velocity sensitivity)

Range: -7 ... +7

Determines how the output level of the current voice changes in response to velocity changes (e.g. keyboard dynamics).

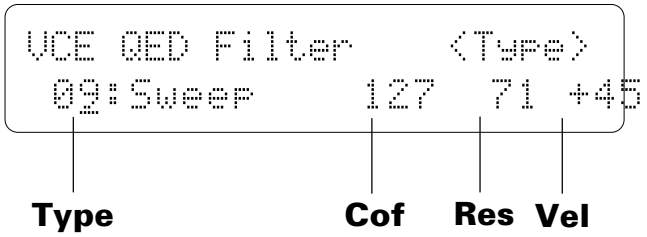
Plus “+” settings produce higher output level in response to higher velocity values — i.e. the harder a key is played, the louder the sound. The maximum setting of “+7” produces the maximum level variation in response to velocity changes. Minus “–” settings produce the opposite effect: lower level in response to higher velocity. A setting of “+0” results in no level variation.

1-3: FILTER

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> [PAGE]
-> 1-3 : Filter -> [ENTER]

The simplified filter parameters provided here have been specifically created for fast, efficient filter programming.

For full filter parameters see page 119.



Type (Filter type)

Range: 0 ... 15

Selects either the filter defined by the current filter parameter settings (page 119), or one of 15 preset filter types for the current voice. The filter types are:

Quick Edit Filter Types

00:--------	Full-edit filter.
01:VeloSoft	Velocity sensitive, soft response.
02:VeloWide	Velocity sensitive, wide response.
03:VeloHard	Velocity sensitive, hard response.
04:VeloReso	Velocity sensitive, resonant.
05:SynBass1	Synthesizer bass 1.
06:SynBass2	Synthesizer bass 2.
07:SynBras1	Synthesizer brass 1.
08:SynBras2	Synthesizer brass 2.
09:Sweep	Sweep-frequency filter.
10:SlowAtak	Slow-attack filter.
11:LPF_Init	Initialized LPF.
12:HPF_Init	Initialized HPF.
13:BPF_Init.	Initialized BPF.
14:BEF_Init	Initialized BEF.
15:Thru	No filter.

Cof (Cutoff frequency)

Range: 0 ... 127

Sets the cutoff frequency of the selected filter.

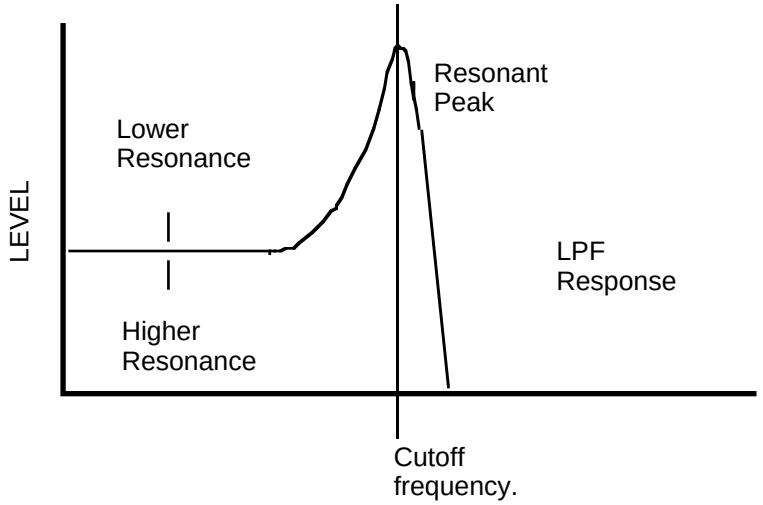
Lower cutoff values produce a lower cutoff frequency and higher values produce a higher cutoff frequency. If the “Thru” filter type is selected, no cutoff frequency can be set and “---” appears on the display in place of the parameter.

Res (Resonance)

Range: 0 ... 99

Determines the degree of filter resonance.

This parameter has a similar effect to the "resonance" settings on traditional analog synthesizer filters — i.e. it determines the height of a peak in the filter response at the cutoff frequency. If a filter type other than "LPF" is selected, no resonance can be produced and "--" appears on the display in place of the parameter.



Higher resonance values produce a higher resonant peak and reduce the overall bandwidth of the filter, passing a narrow band of frequencies at the filter's cutoff.

Vel (Velocity sensitivity)

Range: -63 ... +63

Determines how the filter cutoff frequency changes in response to velocity changes (e.g. keyboard dynamics).

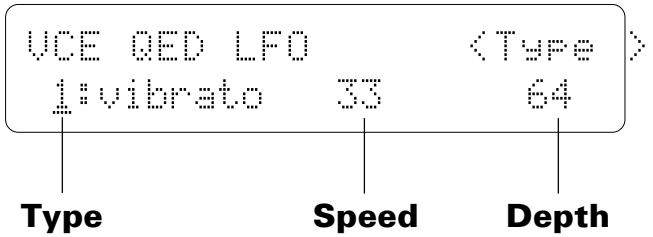
Plus "+" settings produce higher cutoff frequencies in response to higher velocity values — i.e. the harder a key is played, the higher the cutoff frequency. The maximum setting of "+63" produces the maximum level variation in response to velocity changes. Minus "–" settings produce the opposite effect: lower cutoff in response to higher velocity. A setting of "+0" results in no cutoff variation.

1-4: LFO

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> [PAGE]
-> 1-4 : LFO -> [ENTER]

Here, the main LFO parameters are simplified and concentrated in a single screen for quick, easy programming.

For full LFO parameters see page 136.



Type (LFO modulation type)

Range: --------, 1: vibrato, 2: tremolo, 3: wahwah

Determines whether the LFO will produce vibrato (pitch modulation), tremolo (amplitude modulation), or wahwah (filter cutoff modulation) effects. The current LFO parameter settings (page 136) are selected when this parameter is set to "--------".

Speed

Range: 0 ... 99

Sets the speed of the LFO.

"0" is the slowest speed setting, producing an LFO speed of approximately 0 Hertz. The fastest setting of 99 produces an LFO speed of approximately 25 Hertz.

Depth

Range: 0 ... 127

Sets the maximum amount of amplitude (tremolo), pitch (vibrato), or filter cutoff (wahwah) modulation that can be applied to the current voice.

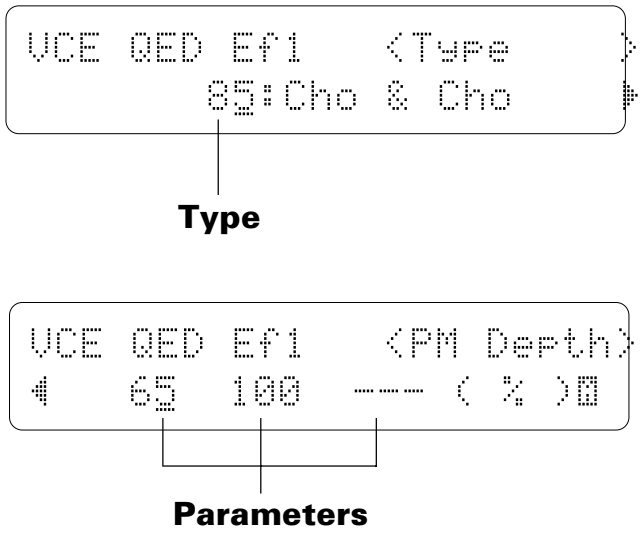
A "0" setting produces no modulation while a setting of "127" produces maximum modulation.

1-5: EFFECT 1 / 1-6: EFFECT 2

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> [PAGE]
-> 1-5 : Effect 1 -> [ENTER]
-> 1-6 : Effect 2 -> [ENTER]

The TG500 features a complex, high-performance effect system that can be programmed easily via the parameters presented in these screens.

For full effect parameters see page 156.



Type (Effect type)

Range: 0 ... 90

The "Type" parameter selects any of the TG500's 90 effect types for the effect 1 or effect 2 processor, depending on whether the "Effect 1" or "Effect 2" edit screen is selected. See page 251 for more details on the TG500 effect system.

Parameters 1 ... 3

Range: Depends on the selected effect and parameter.

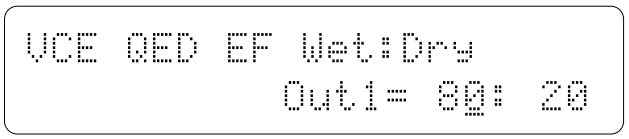
Use the [▷] key to scroll to the parameter screen. This screen provides access to the three main parameters each for the current selected effect 1 or effect 2, depending on whether the "Effect 1" or "Effect 2" edit screen is selected. As usual, the name of the selected parameter is shown in the upper right corner of the display, while in this screen the parameter unit ("s" for seconds, "%" for percent, "dB" for decibels, etc.) is shown in parentheses in the lower right corner.

The parameters are different for each effect (refer to page 271 for details). The Full Edit Parameters screens described on page 156 provides full access to all 8 effect parameters.

1-7: EFFECT WET:DRY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Quick Edit -> [ENTER] -> [PAGE]
-> 1-7 : Effect Wet : Dry -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameter provided in this screen provides precise balance control.



Out1 (Out 1 Wet:Dry Balance)

Range: 0 ... 100

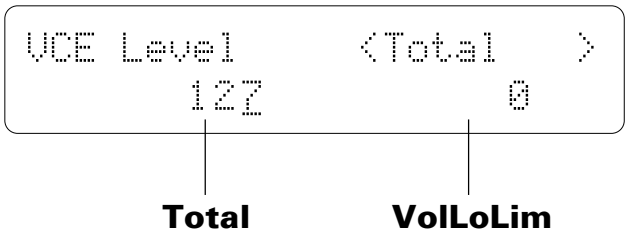
Balances the effect ("wet") and direct ("dry") signals delivered via the corresponding effect processors. Higher "Wet" values produce more effect sound in relation to the direct, dry sound of the voice.

The "Wet" and "Dry" parameters are adjusted simultaneously (their total is always 100%).

2-1: LEVEL

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 2: Level/Name -> [ENTER] -> [PAGE]
-> 2-1 : Level -> [ENTER]

The ability to independently adjust the volume of each voice makes it possible to match levels for smooth transition when switching between voices. It is also possible to set the minimum volume level that can be set via MIDI control.



Total (Total level)

Range: 0 ... 127

Adjusts the volume of the current voice.

A setting of “0” produces no sound while a setting of “127” produces maximum volume.

VolLoLim (Minimum controller volume level)

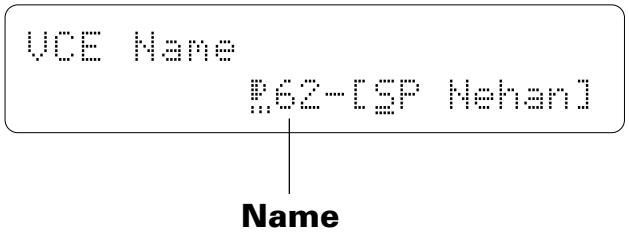
Range: 0 ... 127

Determines the minimum volume level that can be set by a MIDI control device assigned to volume control. If this parameter is set to “0,” the minimum MIDI control value will produce no sound. A setting of “63” will result in about half volume when the control device is set to its minimum position.

2-2: NAME

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 2: Level/Name -> [ENTER] -> [PAGE]
-> 2-2 : Name -> [ENTER]

Your original voices should naturally have original names. This function can be used to assign a name of up to 8 characters to the current voice.



Name

Range: See character list, below

Assigns a name of up to 8 characters to the current voice.

Use the [◁] key to move the character cursor to the left, and the [▷] key to move the cursor to the right. Use the [-1/NO] and [+1/YES] keys to select a character for the current cursor position. The available characters are listed below.

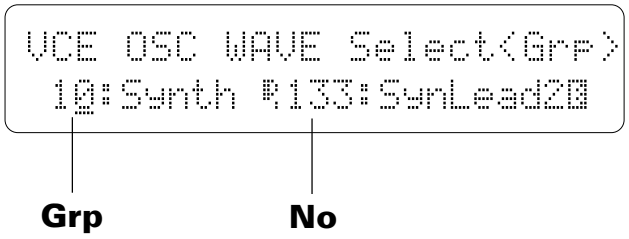
The entire name can be cleared by pressing the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] key, and a space can be entered at the cursor position by pressing the [STORE/COPY] key while holding the [UTILITY/SELECT] key.

(Space)!"#$%&'()*+,-./0123456789:
;<=>?@ABCDEFGHIJKLMNOPQRSTUVWX
YZ[¥]^_`abcdefghijklmnopqrstuv
wxyz{|}→←

3-1-01: WAVE SELECT

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1: Oscillator -> [ENTER] -> [PAGE] -> 3-1-01: Wave Select -> [ENTER]

This parameters provided in this screen are used to select the waveform on which the voice will be based.



Grp (Wave group)

Range: 0 ... 15

For fast, easy selection of the preset TG500 waves this parameter selects 16 different wave categories or "groups", each containing a number of waves that can be individually selected by using the "No" parameter, below.

Wave Groups	
01:Piano	Acoustic pianos.
02:Key	Other keyboards.
03:Brass	Brass instruments.
04:Wind	Wind instruments.
05:Str.	Strings.
06:A.Gtr	Acoustic guitars.
07:E.Gtr	Electric guitars.
08:Bass	Acoustic & electric bass.
09:Folk	Folk & ethnic instruments.
10:Synth	Synthesizer sounds.
11:Choir	Choir & human voice.
12:Tprc	Tuned percussion.
13:Drum	Drums.
14:Perc.	Percussion instruments.
15:SE.	Sound effects.
16:OSC	Basic oscillator waveforms.

No (Wave number)

Range: 1 ... 244 (Preset 1), 1 ... 50 (Preset 2)

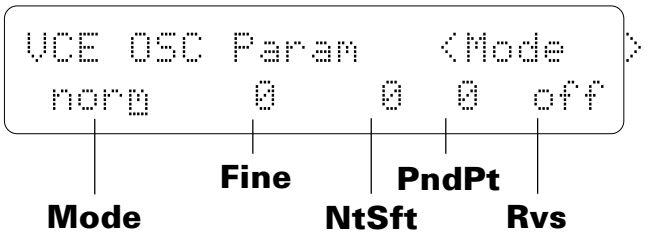
Selects the wave (AWM waveform) to be used in the current voice. Use the "Grp" parameter, above, to select the group containing the wave that is to be selected. The [MEMORY] key can also be used to select the memory area from which the wave is to be selected, including internal wave memory if SYEMB06 memory expansion board are installed (page 282) or card if an appropriate wave card is plugged into the waveform 1 or 2 card slot. A complete listing of the preset waves is given in the Appendix, on page 309 and 310.

The TG500 actually incorporates two 32-note polyphonic tone generator units — "A" and "B". The inverse character "A" or "B" that appears to the right of the wave name indicates whether that wave is produced by tone generator unit A or tone generator unit B. This information is useful, for example, when creating performance combinations. Combining two "A" voices results in a maximum polyphony of 32 notes because both voices are produced by the same tone generator unit. An "A" voice combined with a "B" voice, however, results in a maximum polyphony of 64 notes. The same basic principle applies when combining voices in multi setups.

3-1-02: PARAMETER

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-1: Oscillator -> [ENTER] -> [PAGE] -> 3-1-02: Parameter -> [ENTER]

The five parameters provided here all affect how the AWM waveform assigned to the voice is reproduced, thereby determining the basic sound of the voice.



Mode (Oscillator mode)

Range: fix, norm

Determines whether the selected wave is reproduced in the normal (variable pitch) or fixed-pitch mode.

Normally you want the pitch of the AWM wave (or waves) used in a voice to be controllable from a keyboard or other type of controller, in which case the "norm" mode should be selected. In some cases — sound effects in particular — you might want the same pitch to be produced no matter what note you play on the keyboard or other controller. In this case, the "fix" mode is appropriate. The Note parameter described below can be used to set the note produced when the "fix" mode is selected.

Fine (Fine tuning)

Range: -63 ... 0 ... +63

Allows fine tuning of the selected AWM wave. Each increment corresponds to approximately 1.17 cents (a "cent" is 1/100th of a semitone) so the lowest setting (-63) shifts the pitch down by almost three quarters of a semitone, while the highest setting (+63) shifts the pitch up by the same amount. A setting of "+0" produces standard concert pitch (A3 = 440 Hertz).

Please note that this parameter is used to individually tune the current voice. Overall tuning control is provided by the master "Tune" parameter available in the UTILITY mode.

NtShft (Note shift)/Note (Fixed note)

Range: C-2 ... G8, -64 ... +63

When the "fix" mode is selected this parameter sets the frequency (note) at which the selected wave will be played. The C-2 to G8 range of this parameter covers a full 10-1/2 octaves. "C3" corresponds to "middle C" on a keyboard.

When the "norm" mode is selected, this parameter is used to shift the overall pitch of the entire keyboard up or down in semitone increments (i.e. a "note shift" function). In this case the range of the parameters is from -64 through 0 to +63. A setting of "-12," for example, shifts the pitch down by one octave; a setting of "+4" shifts the pitch up by a major third.

RndPt (Random pitch)

Range: 0 ... 7

Sets the amount of random pitch variation produced each time a note is played.

When this parameter is set to a value other than "0," the pitch changes randomly each time a note is played. The random pitch change is applied independently to each note in a chord. A setting of "7" produces the greatest amount of random pitch change.

This function is ideal for simulating the sound of instruments like the clavichord, string sections or other ensembles in which the pitch of each note is rarely in perfect tune with the others.

Rvs (Reverse)

Range: off, on

When this parameter is turned "on," the selected wave is played in reverse.

When Rvs is "on," the pitch EG "Loop" parameter described on page 132 is automatically turned "off."

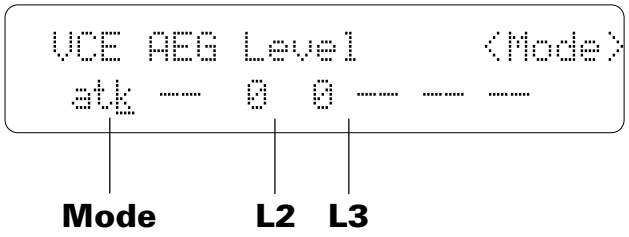
3-2-01: LEVEL / 3-2-02: RATE

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2: AEG -> [ENTER]
-> [PAGE] -> 3-2-01: Level -> [ENTER]
-> 3-2-02: Rate -> [ENTER]

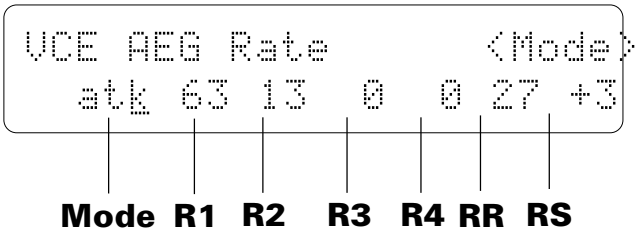
The TG500's main AEG (Amplitude Envelope generator) has five individually programmable rates and two levels for exceptional envelope programming flexibility. Next to the fundamental waveform used, the amplitude envelope is one of the most important factors determining the overall sound of a voice.

Although the AEG levels and rates are accessed via separate screens, they will be described together in this section in order to provide a clearer overall picture of AEG operation.

- **3-2-01: Level**



- **3-2-02: Rate**



Mode (Amplitude EG attack/hold mode)

Range: atk, hold

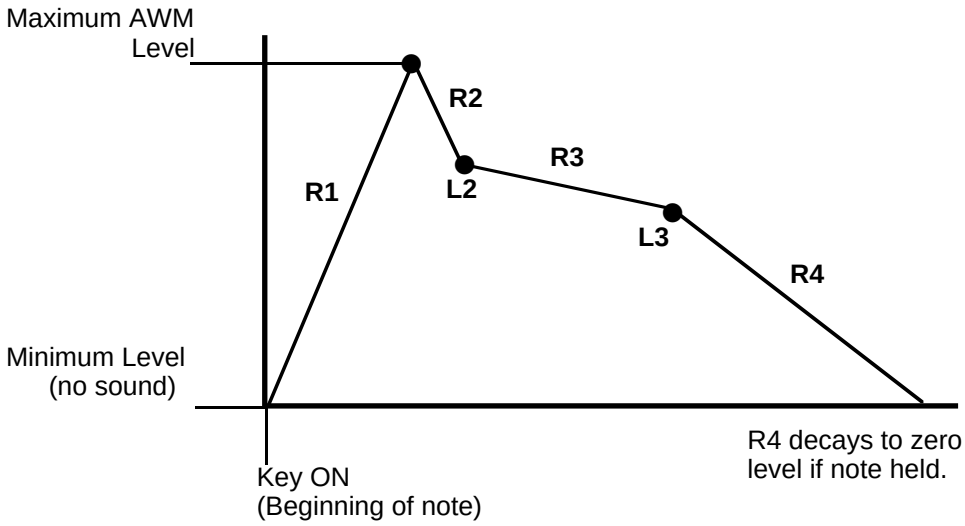
The "atk" and "hold" mode settings affect the initial attack of the sound, determining how the amplitude envelope begins. In the "atk" mode, the envelope begins from zero level, reaching the maximum AWM level at a rate determined by the R1 (Rate 1) parameter. In this mode there will always be a slight delay between the initiation of a note and maximum level.

L2 ... L3, R1 ... RR (AEG levels & rates)

Range: 0 ... 63

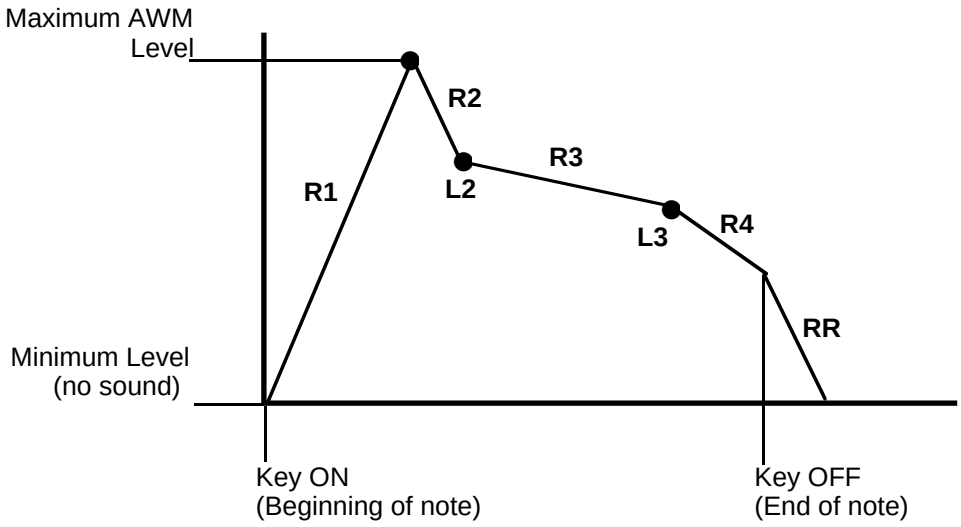
The following diagrams illustrate how the AEG rate and level parameters determine the overall shape of the amplitude envelope.

● **"Atk" Mode**



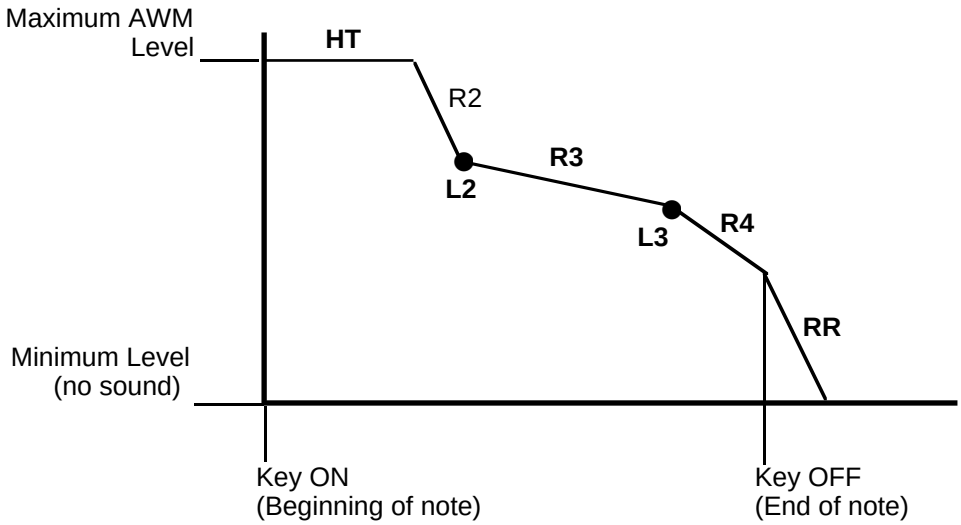
The envelope begins at zero level, reaches maximum level at the rate determined by the R1 parameter, moves to L2 (Level 2) at R2 (Rate 2), moves on to L3 (Level 3) at R3 (Rate 3), and finally decays to zero level at R4 (Rate 4) if the note is held the entire time.

If the note is released before the end of the envelope described above, then the sound decays to zero level from the point at which the note is released at the rate determined by the RR (Release Rate) parameter.



● "hold" Mode

If the "hold" mode is selected, the envelope begins immediately from maximum AWM level, allowing the fast attack transients of waveforms to pass unaffected. In this case the R1 parameter is replaced by the HT (Hold Time) parameter. The HT parameter determines the length of time between the beginning of the envelope and the point at which the envelope begins to move towards L2 (Level 2) at R2 (Rate 2), as shown below.



For the level parameters, a setting of “0” corresponds to the lowest possible level (no sound) while a setting of 63 produces the highest output level. A “0” rate parameter setting produces the slowest rate between levels, while the maximum setting of “63” produces the fastest (almost instantaneous) change.

RS (Rate scaling)

Range: -7 ... +7

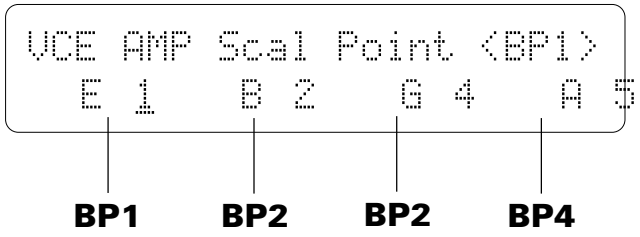
Allows the overall amplitude envelope generator decay rate to be varied across the entire pitch range.

Plus (“+”) settings produce a longer overall envelope time for the low notes and a shorter envelope time for the high notes. This is useful for simulating instruments such as piano, in which the low notes take much longer to decay than the high notes. The maximum “+7” setting produces the greatest envelope length variation across the pitch range. Minus (“–”) settings produce the opposite effect — short low notes and long high notes. A setting of “+0” results in no envelope length variation.

3-2-03: SCALE POINT

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2: AEG -> [ENTER]
-> [PAGE] -> 3-2-03: Scale Point -> [ENTER]

Level scaling produces natural level variations across the range of the keyboard by allowing different level "offset" values to be applied to each of four "breakpoints" set at appropriate keys.



BP1 ... BP4 (Break points 1 ... 4)

Range: C-2 ... G8

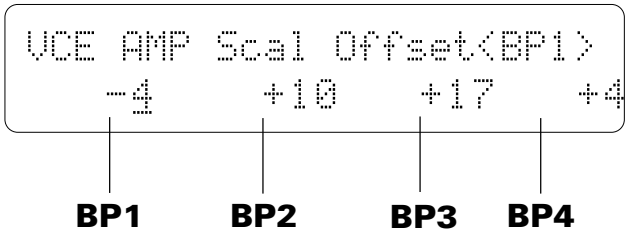
Allows four separate amplitude envelope generator level-scaling breakpoints to be set at any notes between C-2 and G8 for the selected element. The level offsets for each breakpoint are set using the "Scale Offset" parameters in the next screen.

No breakpoint can be set to a key lower than the breakpoint to its left.

3-2-04: SCALE OFFSET

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2: AEG -> [ENTER]
-> [PAGE] -> 3-2-04: Scale Offset -> [ENTER]

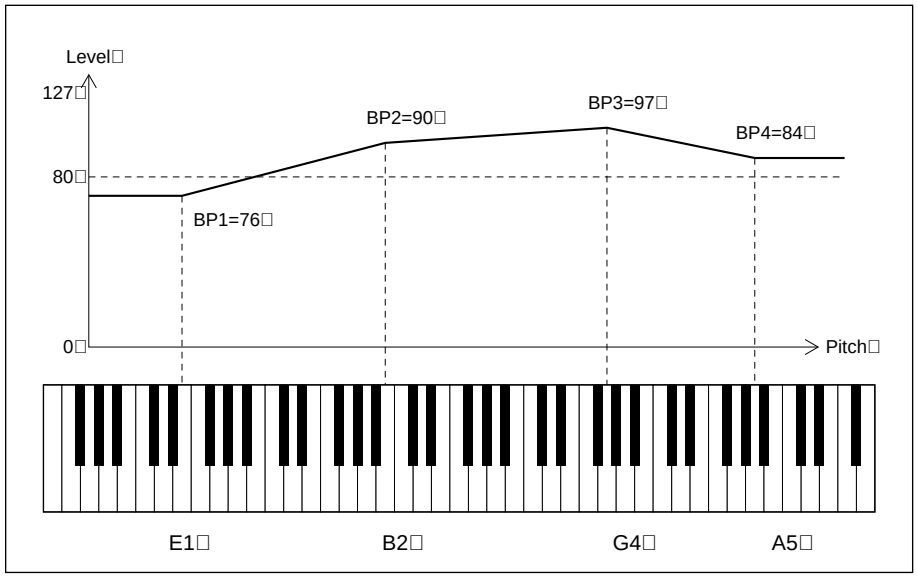
These parameters set the amount of level offset for each of the four level-scaling breakpoints set by the “Scale Point” parameters in the preceding screen.



BP1 ... BP4 (Breakpoint 1 ... 4 level offset)

Range: -127 ... +127

Negative values reduce the level, and positive values increase the level at the corresponding breakpoint. No matter what value is chosen, the EG level will never exceed its minimum or maximum levels. When different offset values are applied to adjacent breakpoints, the level varies smoothly between the breakpoints.



3-2-05: SENSITIVITY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-2: AEG -> [ENTER]
-> [PAGE] -> 3-2-05: Sensitivity -> [ENTER]

The parameters provided here determine how the amplitude envelope generator responds to changes in keyboard velocity and range.

Vel (Velocity sensitivity)

Range: -7 ... +7

Determines how the output level of the current voice changes in response to velocity changes (e.g. keyboard dynamics).

Plus "+" settings produce higher output level in response to higher velocity values — i.e. the harder a key is played, the louder the sound. The maximum setting of "+7" produces the maximum level variation in response to velocity changes. Minus "–" settings produce the opposite effect: lower level in response to higher velocity. A setting of "+0" results in no level variation.

RateVel (Attack rate velocity sensitivity)

Range: -7 ... +7

Determines how key velocity values (keyboard dynamics) affect the attack time of the amplitude envelope generator.

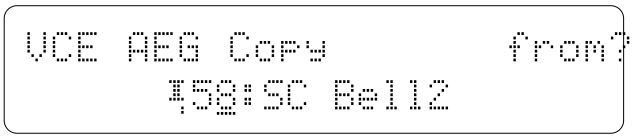
Plus ("+") settings produce an increase in attack time in proportion to key velocity, while minus ("–") settings produce a decrease in attack time in proportion to key velocity. The greater the value the greater the change in envelope length.

AEG DATA COPY

[PLAY MODE] -> VCE PLAY -> EDIT/COMPARE -> 3: Full Edit -> [ENTER] -> 3-2: AEG -> [ENTER]

This function facilitates voice editing by allowing the amplitude EG data from any other voice (the “source” voice) to be copied to the current voice. You can copy an envelope that is close to the type you want, then edit it to produce the required sound.

Press the [STORE/COPY] key while in the AEG edit mode.



Use the [MEMORY] key to select the internal, preset, or card memory; then use the [-1/NO] and [+1/YES] keys to select the voice from the which the AEG data is to be copied.

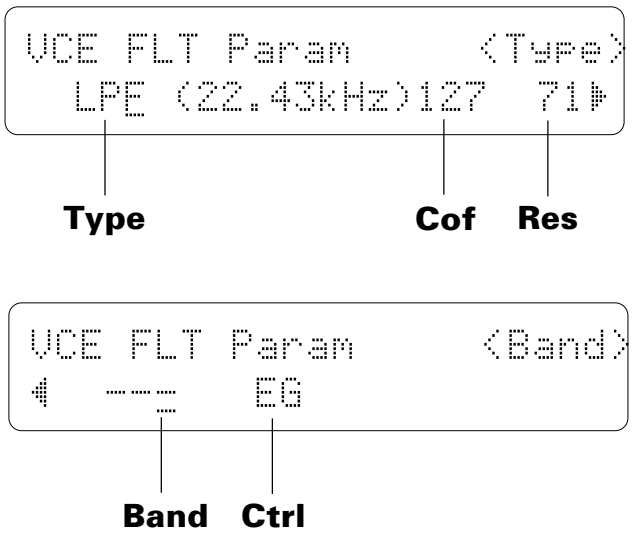
Once the source voice has been selected, press the [ENTER] key. “Sure?” will appear on the display.

Press the [+1/YES] key to copy the AEG data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, “Completed!” will appear on the display briefly, then the display will return to the AEG edit mode.

3-3-01: PARAMETER

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-3: Filter -> [ENTER]
-> [PAGE] -> 3-2-01: Parameter -> [ENTER]

The TG500 features a sophisticated digital filter system that can be used to shape the timbre of the voice being edited in a number of ways. Changes in the response and cutoff frequency can be used to define the basic timbre of the voice, while EG-controlled filter sweeps can produce a virtually unlimited range of time-based timbre variations.



Type (Filter type)

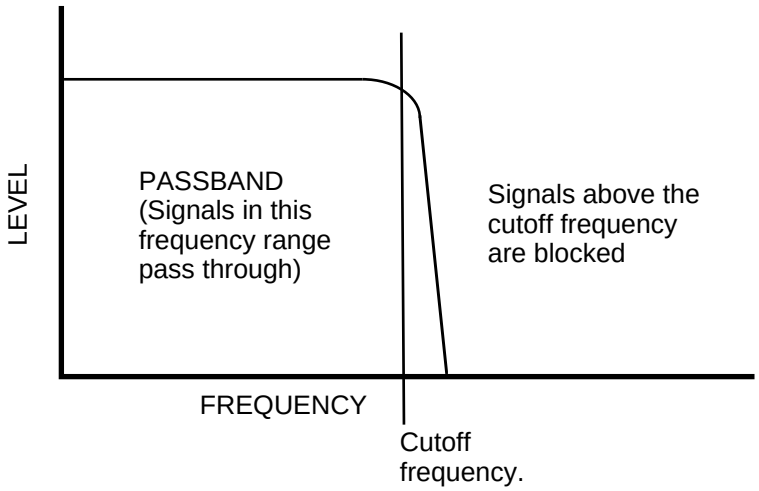
Range: THRU, LPF, HPF, BPF, BEF, LP12

Determines the type of filter response used.

The "THRU" (THROUGH) setting turns the filter OFF.

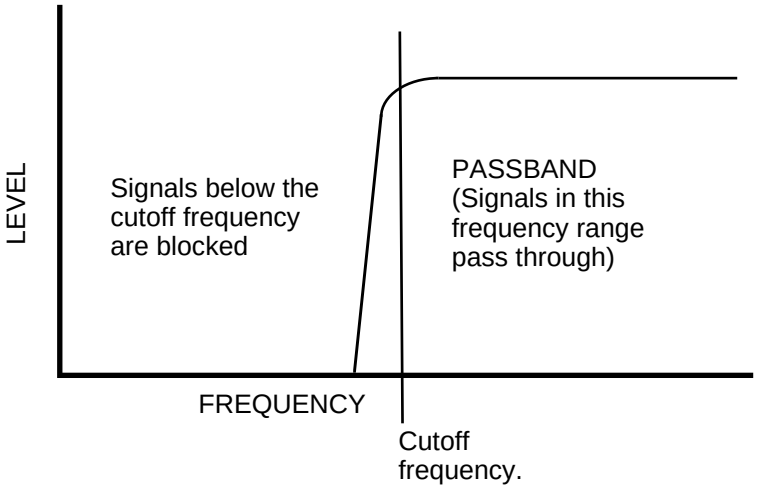
● "LPF" and "LP12" Types

The "LPF" (Low Pass Filter) and "LP12" settings produces a filter response that allows only frequencies *below* the cutoff frequency (See "Cutoff" below) to pass. The "LPF" filter type has a steep 24-dB/octave cutoff slope, while the "LP12" type has a gentler 12-dB/octave slope.



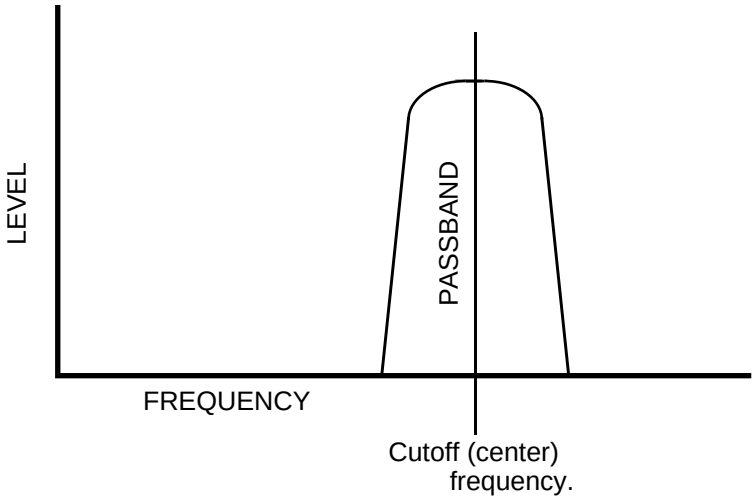
● **"HPF" Type**

The "HPF" (High Pass Filter) setting produces a filter response that allows only frequencies *above* the cutoff frequency (See "Cutoff" below) to pass.



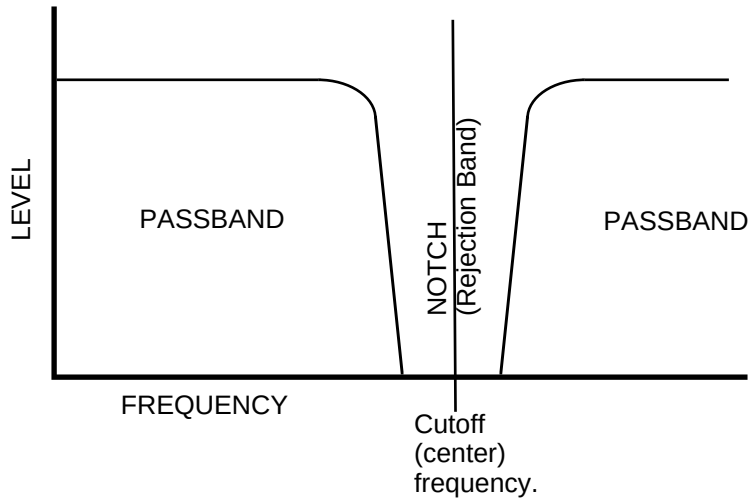
● **"BPF" Type**

The "BPF" (Band Pass Filter) setting produces a filter response that allows only a band of frequencies centered at the cutoff frequency (See "Cutoff" below) to pass. The "Band" parameter (below) determines the width of the pass band.



● **"BEF" Type**

The "BEF" (Band Elimination Filter) setting produces a filter response that eliminates a band of frequencies centered at the cutoff frequency (See "Cutoff" below) to pass. The "Band" parameter (below) determines the width of the elimination band.

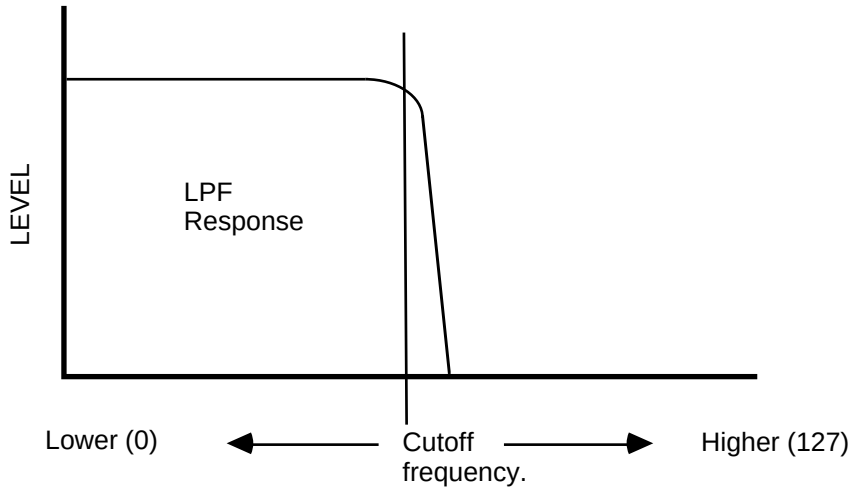


Cof (Cutoff frequency)

Range: 0 ... 127

Sets the cutoff frequency of the selected filter.

Lower cutoff values produce a lower cutoff frequency and higher values produce a higher cutoff frequency.



With an LPF response (selected by the "Type" parameter, above), a lower cutoff frequency reduces the range of high frequencies passed, making the sound "darker" or "rounder."

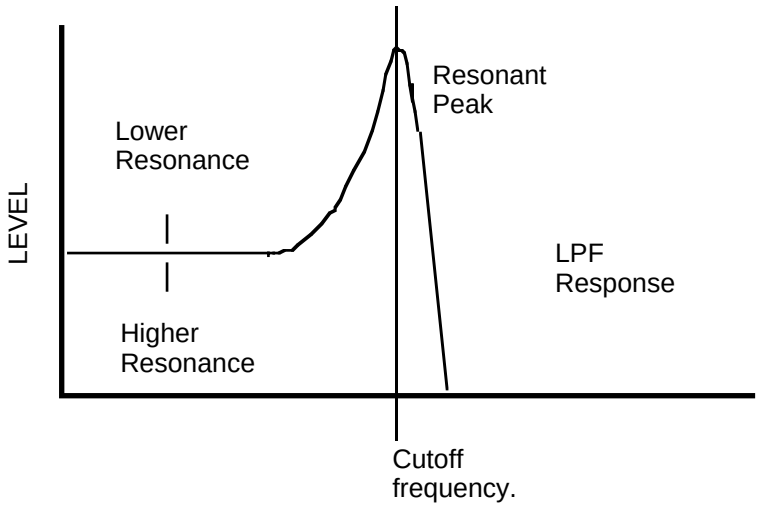
With a HPF response, a higher cutoff frequency reduces the range of low frequencies passed, making the sound "thinner" or "sharper."

Res (Resonance)

Range: 0 ... 99

Determines the degree of filter resonance when the "LPF" filter type is selected ("--" appears in place of the resonance parameter when any other filter type is selected).

This parameter has a similar effect to the "resonance" settings on traditional analog synthesizer filters — i.e. it determines the height of a peak in the filter response at the cutoff frequency.



Higher resonance values produce a higher resonant peak and reduce the overall bandwidth of the filter, passing a narrow band of frequencies at the filter's cutoff.

Band (BPF & BEF bandwidth)

Range: 0 ... 127

Determines the width of the frequency pass or elimination band for the BPF and BEF filter types, respectively. The minimum setting of "0" produces an extremely narrow pass or elimination band, while the maximum setting of "127" produces a wide band.

Ctrl (Filter control)

Range: EG, LFO

Determines whether the cutoff frequency of the selected filter will be controlled by the LFO or by the filter envelope generator (EG).

Varying the filter cutoff frequency can create "sweep" or "wah-wah" type effects. If the cutoff is controlled via the LFO a cyclic variation based on the "shape" of the selected LFO waveform is produced. If EG control is selected, the filter envelope generator (see "FILTER EG LEVEL & RATE" below) can be set up to produce a wide range of time-based variations.

Please note that if "LFO" is selected, the filter cutoff envelope generator parameters have no effect on the sound. If "EG" is selected, any controller assigned to filter cutoff control will not function while a note is being played.

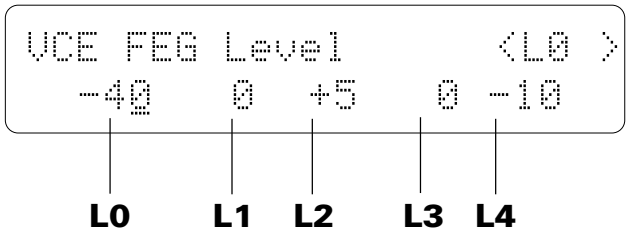
3-3-02: LEVEL / 3-3-03: RATE

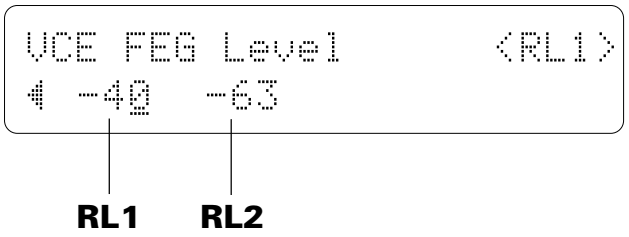
[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-3: Filter -> [ENTER]
-> [PAGE] -> 3-3-02: Level -> [ENTER]
-> 3-3-03: Rate -> [ENTER]

The filter envelope generator is entirely separate from the amplitude EG, and is used specifically to create time-based timbre variations. It can be used to simulate the natural timbre variations produced by acoustic instruments, or to create more pronounced electronic effects.

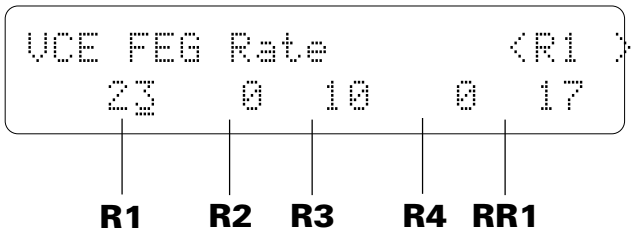
Although the filter EG levels and rates are accessed via separate screens, they will described together in this section in order to provide a clearer overall picture of filter EG operation.

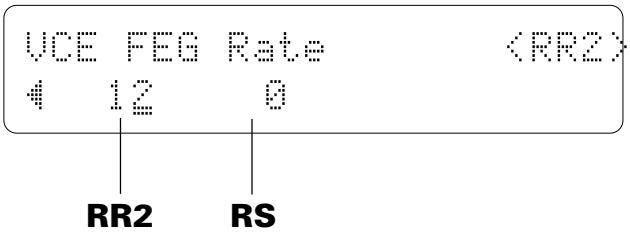
- **3-3-02: Level**





- **3-3-03: Rate**





L0 ... L4, RL1, RL2 (Levels 0 ... 4, release levels 1 & 2)

Range: -63 ... +63

The level parameters work in conjunction with the rate parameters described below to determine the "shape" of the cutoff envelope generator for the selected filter. This function is only available if the "Ctrl" parameter (page 123) is set to "EG."

The cutoff envelope generator level parameters correspond to cutoff frequency. Plus "+" values produce higher cutoff frequencies while minus "–" values produce lower cutoff frequencies. "0" level values produce the normal cutoff frequency as determined by the cutoff parameter (See "Cof" on page 122).

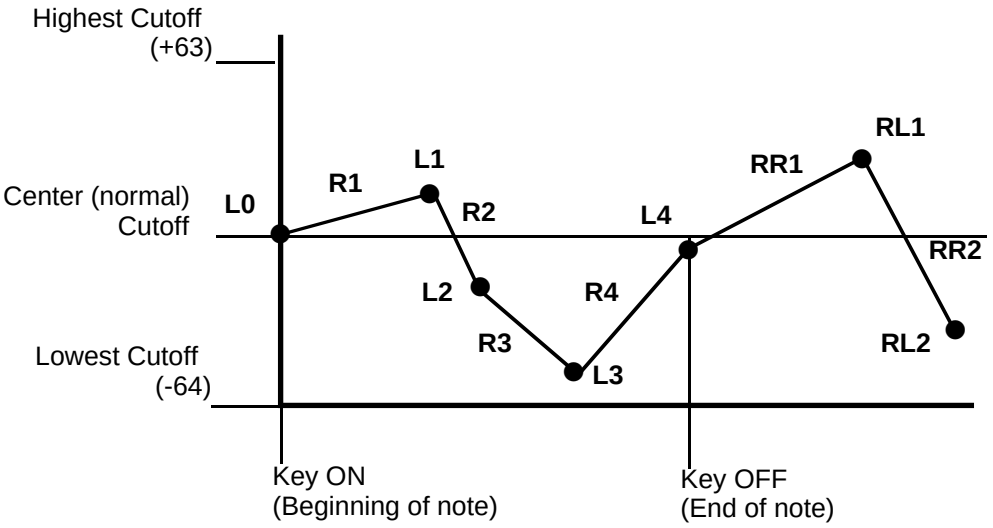
R1 ... R4, RR1, RR2 (Rates 1 ... 4, release rates 1 & 2)

Range: 0 ... +63

These parameters work in conjunction with the level parameters described above to determine the "shape" of the cutoff envelope generator for the selected filter. This function is only available if the "Ctrl" parameter (page 123) is set to "EG."

The "Rate" parameters work in the same way as the amplitude and pitch envelope generator rate parameters: a setting of "63" produces the fastest (almost instantaneous) rate between levels, while the minimum setting of "0" produces the slowest change.

The filter envelope begins at L0 (Level 0), moves to L1 (Level 1) at a rate determined by the setting of R1, then to L2 (Level 2) at R2 (Rate 2), then to L3 (Level 3) at R3 (Rate 3), and then to L4 (Level 4) at R4 (Rate 4). The cutoff stays at L4 until the key is released, and then moves to RL1 (Release Level 1) at the rate determined by RR1 (Release Rate 1), and finally to RL2 (Release Level 2) at RR2 (Release Rate 2).



RS (Rate scaling)

Range: -7 ... +7

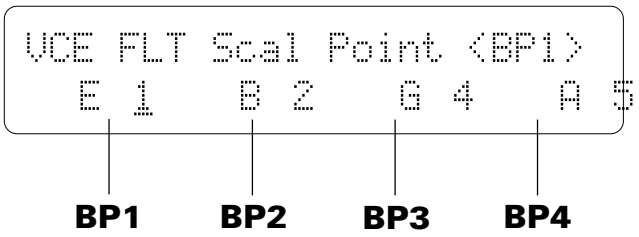
Allows the overall cutoff envelope generator rate for the selected filter to be varied across the entire pitch range (i.e. keyboard range). This function is only available if the "Ctrl" parameter (page 123) is set to "EG."

Plus ("+") settings produce a longer overall envelope time for the low notes and a shorter envelope time for the high notes. The maximum "+7" setting produces the greatest envelope length variation across the pitch range. Minus ("–") settings produce the opposite effect — a shorter low-note envelope and longer high-note envelope. A setting of "+0" results in no envelope length variation.

3-3-04: SCALE POINT

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-3: Filter -> [ENTER]
-> [PAGE] -> 3-3-04: Scale Point -> [ENTER]

Cutoff scaling produces natural timbre variations across the range of the keyboard by allowing different filter cutoff frequency "offset" values to be applied to each of four "breakpoints" set at appropriate keys.



BP1 ... BP4 (Breakpoints 1 ... 4)

Range: C-2 ... G8

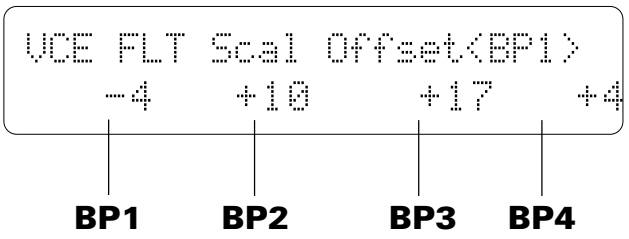
Allows four separate cutoff envelope generator level-scaling breakpoints to be set at any notes between C-2 and G8 for the selected filter. The level offsets for each breakpoint are set using the "Scale Offset" parameters in the next screen.

No breakpoint can be set to a key lower than the breakpoint to its left.

3-3-05: SCALE OFFSET

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-3: Filter -> [ENTER]
-> [PAGE] -> 3-3-05: Scale Offset -> [ENTER]

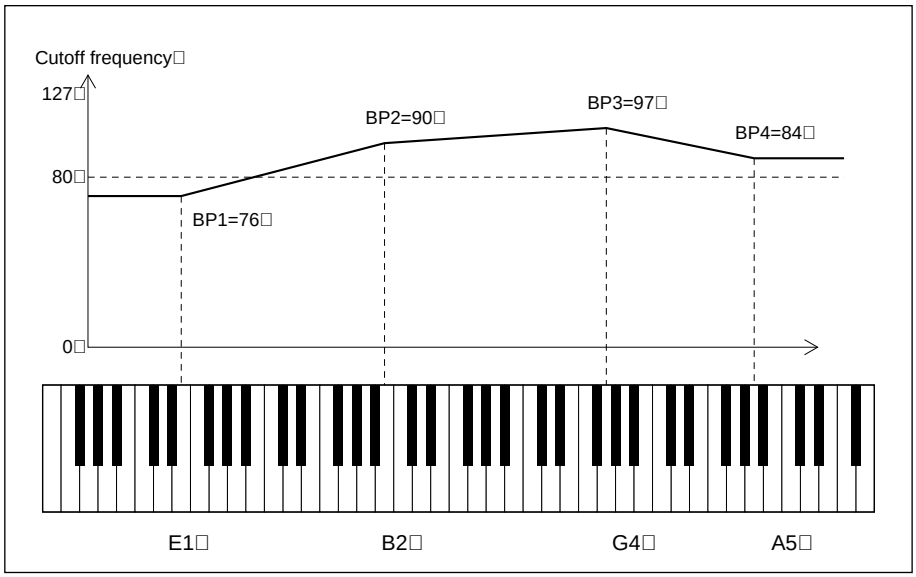
The Scale Offset parameters set the amount of level offset for each of the four level-scaling breakpoints set by the “Scale Point” parameters in the preceding screen.



BP1 ... BP4 (Breakpoint 1 ... 4 offsets)

Range: -127 ... +127

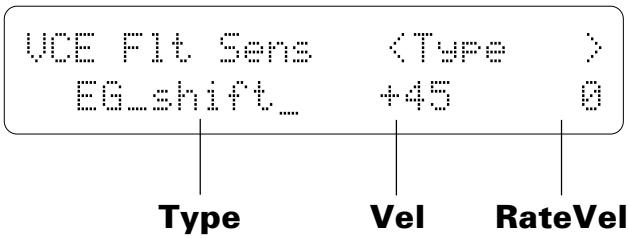
Negative values lower the cutoff frequency, and positive values increase the cutoff frequency at the corresponding breakpoint. No matter what value is chosen, the cutoff frequency will never exceed its minimum or maximum value. When different offset values are applied to adjacent breakpoints, the cutoff frequency varies smoothly between the breakpoints.



3-3-06: SENSITIVITY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-3: Filter -> [ENTER]
-> [PAGE] -> 3-3-06: Sensitivity -> [ENTER]

These parameters determine how the filter envelope generator is affected by keyboard dynamics.



Type (Velocity sensitivity type)

Range: EG_attack, EG_shift

Determines whether changes in key velocity (keyboard dynamics) affect the attack level of the filter EG or its cutoff frequency. When set to “EG_attack”, velocity affects filter EG attack level, and when set to “EG_shift”, velocity affects the filter cutoff frequency.

Vel (Velocity sensitivity)

Range: -63 ... +63

Determines how the filter cutoff frequency changes in response to velocity changes (e.g. keyboard dynamics).

Plus “+” settings produce higher cutoff frequencies in response to higher velocity values — i.e. the harder a key is played, the higher the cutoff frequency. The maximum setting of “+63” produces the maximum level variation in response to velocity changes. Minus “–” settings produce the opposite effect: lower cutoff in response to higher velocity. A setting of “+0” results in no cutoff variation.

RateVel (Attack rate velocity sensitivity)

Range: -63 ... +63

Determines how key velocity (keyboard dynamics) affect the attack portion of the filter EG envelope.

Plus (“+”) settings produce an increase in attack time in proportion to key velocity, while minus (“–”) settings produce a decrease in attack time in proportion to key velocity. The greater the value the greater the change in attack time.

FILTER DATA COPY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-3: Filter -> [ENTER]

This function facilitates voice editing by allowing the filter parameters from any other voice (the “source” voice) to be copied to the current voice. You can copy a filter setup that is close to the type you want, then edit it to produce the required sound.

Press the [STORE/COPY] key while in the filter edit mode.

Use the [MEMORY] key to select the internal, preset, or card memory; then use the [-1/NO] and [+1/YES] keys to select the voice from which the filter data is to be copied.

Once the source voice has been selected, press the [ENTER] key. “Sure?” will appear on the display.

Press the [+1/YES] key to copy the filter data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, “Completed!” will appear on the display briefly, then the display will return to the filter edit mode.

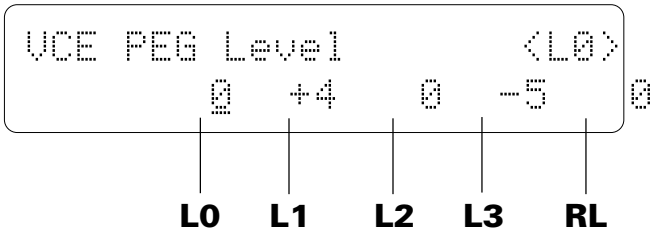
3-4-01: LEVEL / 3-4-02: RATE

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-4: PEG -> [ENTER]
-> [PAGE] -> 3-4-01: Level -> [ENTER]
-> 3-4-02: Rate -> [ENTER]

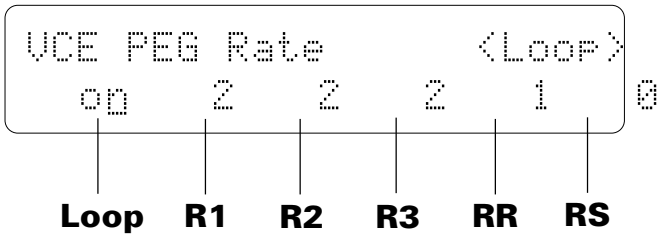
In addition to the amplitude and filter envelope generators, the TG500 has an independent pitch EG that can be used to produce subtle or pronounced time-based pitch variations. The pitch EG has 5 programmable levels and 4 rates for extended flexibility.

Although the pitch EG levels and rates are accessed via separate screens, they will be described together in this section in order to provide a clearer overall picture of pitch EG operation.

- **3-4-01: Level**



- **3-4-02: Rate**



L0 ... L3, RL (Levels 0 ... 3, release level)

Range: -63 ... +63

These parameters work in conjunction with the rate parameters described below to determine the "shape" of the pitch envelope generator for the selected element.

Unlike the amplitude envelope generator, the "Level" parameters of which actually correspond to volume levels, the pitch envelope generator level parameters correspond to pitch. Plus "+" values produce higher pitch while minus "–" values produce lower pitch. "0" level values produce normal pitch.

Loop

Range: off, on

When the Loop parameter is set to "on" the pitch EG cycle repeats from the beginning (L0) to the L3 level until the keys being played are released. When set to "off," the L3 level is maintained until the keys being played are released.

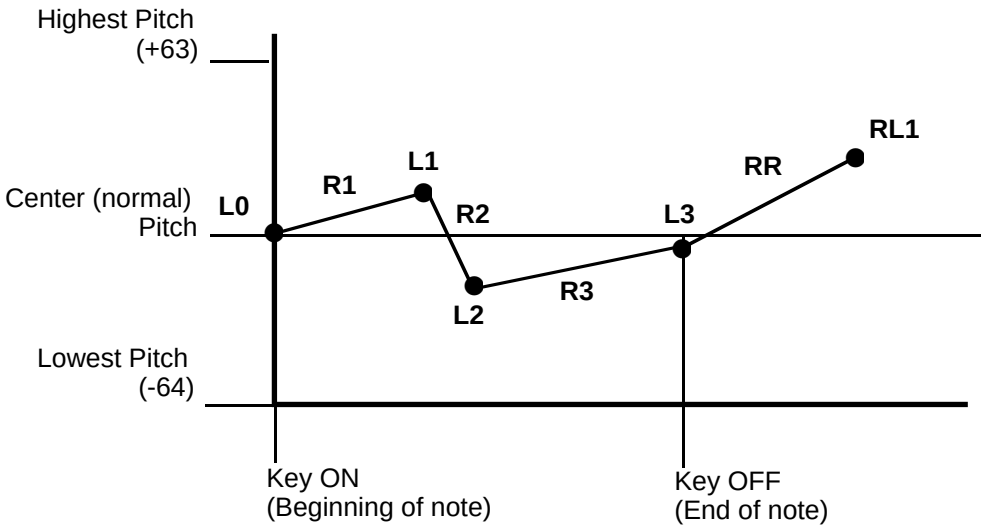
R1 ... R3, RR (Rates 1 ... 3, release rate)

Range: 0 ... +63

These parameters work in conjunction with the level parameters described above to determine the "shape" of the pitch envelope generator for the selected element.

The "Rate" parameters work in the same way as the amplitude envelope generator rate parameters: a setting of "63" produces the fastest (almost instantaneous) rate between levels, while the minimum setting of "0" produces the slowest change.

The pitch envelope begins at L0 (Level 0), moves to L1 (Level 1) at a rate determined by the setting of R1, then to L2 (Level 2) at R2 (Rate 2), and then to L3 (Level 3) at R3 (Rate 3). The pitch stays at L3 until the key is released, and then moves to RL1 (Release Level 1) at the rate determined by RR (Release Rate).



RS (Pitch EG rate scaling)

Range: -7 ... +7

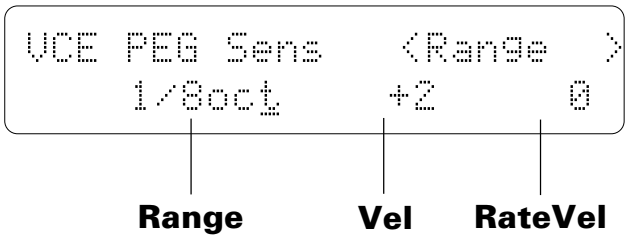
Allows the overall pitch envelope generator rate for the selected element to be varied across the entire pitch range.

Plus ("+") settings produce a longer overall envelope time for the low notes and a shorter envelope time for the high notes. The maximum "+7" setting produces the greatest envelope length variation across the pitch range. Minus ("–") settings produce the opposite effect — a shorter low-note envelope and longer high-note envelope. A setting of "+0" results in no envelope length variation.

3-4-03: SENSITIVITY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-4: PEG -> [ENTER]
-> [PAGE] -> 3-4-03: Sensitivity -> [ENTER]

These parameters determined the overall range of the pitch EG, and how it is affected by variations in keyboard velocity.



Range (Maximum PEG range)

Range: 1/8oct, 1/2oct, 1oct, 2oct

Sets the maximum range of pitch envelope generator pitch variation.

This parameter determines the *total maximum* range of the pitch envelope generator, so a setting of "2oct" means that the maximum range is ±1 octave. That is, if a level parameter is set to +63, for example, the pitch at that point will be one octave above normal pitch.

Vel (Pitch EG velocity sensitivity)

Range: -7 ... +7

Determines how the overall envelope depth of the pitch envelope generator is controlled by velocity information.

Plus ("+") values produce a deeper pitch envelope in response to higher velocity, while minus ("–") values produce a shallower pitch envelope in response to higher velocity values. The greater the value the greater the change in pitch envelope depth.

RateVel (Pitch EG rate velocity sensitivity)

Range: -7 ... +7

Determines how the overall envelope length of the pitch envelope generator is controlled by velocity information.

Plus ("+") values produce a longer pitch envelope in response to higher velocity, while minus ("–") values produce a shorter pitch envelope in response to higher velocity values. The greater the value the greater the change in pitch envelope length.

PITCH EG DATA COPY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-4: PEG -> [ENTER]

This function facilitates voice editing by allowing the pitch EG parameters from any other voice (the “source” voice) to be copied to the current voice. You can copy a pitch EG setup that is close to the type you want, then edit it to produce the required sound.

Press the [STORE/COPY] key while in the PEG edit mode.

Use the [MEMORY] key to select the internal, preset, or card memory; then use the [-1/NO] and [+1/YES] keys to select the voice from which the PEG data is to be copied.

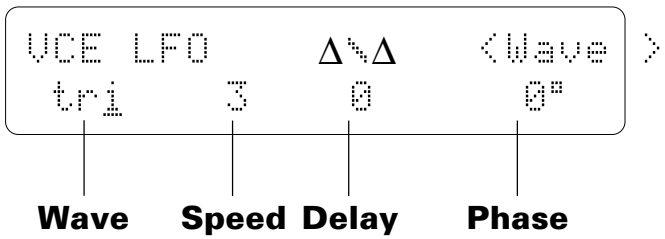
Once the source voice has been selected, press the [ENTER] key. “Sure?” will appear on the display.

Press the [+1/YES] key to copy the PEG data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, “Completed!” will appear on the display briefly, then the display will return to the PEG edit mode.

3-5-01: PARAMETER

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-5: LFO -> [ENTER]
-> [PAGE] -> 3-5-01: Parameter -> [ENTER]

These parameters define the operation of the TG500's main LFO (Low Frequency Oscillator). The main LFO controls amplitude, pitch, frequency, and filter cutoff modulation applied via the modulation wheel, the foot controller, and keyboard aftertouch response.



Wave (LFO waveform)

Range: tri, dwn, up, squ, sin, S/H

Determines the waveform of the LFO.

"tri" = Triangle.	"dwn" = Downward sawtooth.
"up" = Upward sawtooth.	"squ" = Square.
"sin" = Sine.	"S/H" = Sample and hold.

Speed (LFO speed)

Range: 0 ... 99

Sets the speed of the LFO.

"0" is the slowest Speed setting, producing an LFO speed of approximately 0 Hertz. The fastest setting of 99 produces an LFO speed of approximately 25 Hertz.

Delay (LFO start delay)

Range: 0 ... 99

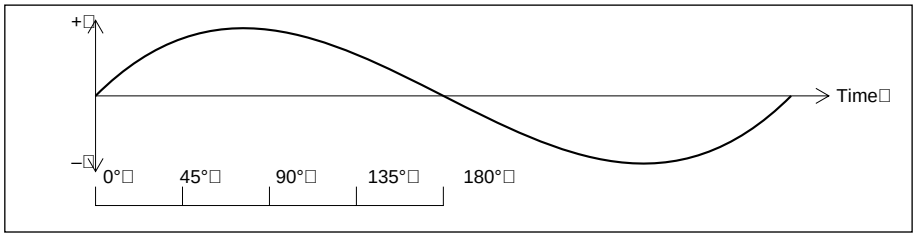
Sets the delay time between the beginning of a note and the beginning of LFO operation for the selected element.

The minimum setting "0" results in no delay, while the maximum setting of "99" produces a delay of approximately 2.66 seconds before the LFO begins operation (5.3 seconds before it reaches maximum depth).

Phase (LFO start phase)

Range: 0 ... 180

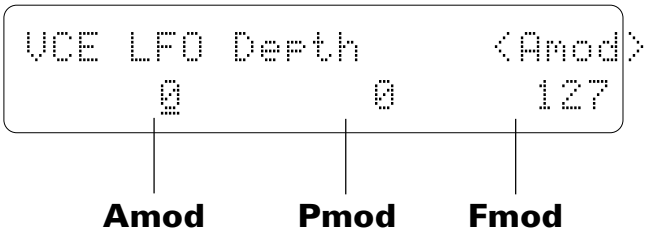
Determines at which point in the LFO waveform the LFO will begin operation for the selected element. The values 0 through 180 correspond to phase angles in degrees. The illustration below shows how the various phase angles correspond to points on the LFO waveform (a sine wave is used for clarity).



3-5-02: DEPTH

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-5: LFO -> [ENTER]
-> [PAGE] -> 3-5-02: Depth -> [ENTER]

The LFO can be used to apply amplitude, pitch, and frequency modulation. These parameters set the maximum depth of each type of modulation.



Amod (Amplitude modulation depth)

Range: 0 ... 127

Sets the maximum amount of amplitude modulation that can be applied to the current voice.

A “0” setting produces no modulation while a setting of “127” produces maximum modulation. Amplitude modulation produces a periodic variation in the volume of the sound, thus creating a tremolo effect.

Please note that the amplitude modulation depth parameter for the control device which is to be used to apply amplitude modulation (see page 142 and 145) must also be set to an appropriate value before amplitude modulation can be applied.

Pmod (Pitch modulation depth)

Range: 0 ... 127

Sets the maximum amount of pitch modulation that can be applied to the current voice.

A “0” setting produces no modulation while a setting of “127” produces maximum modulation. Pitch modulation produces a periodic pitch variation, thereby creating a vibrato effect.

Please note that the pitch modulation depth parameter for the control device which is to be used to apply pitch modulation (see page 142 and 145) must also be set to an appropriate value before pitch modulation can be applied.

Fmod (Frequency modulation depth)

Range: 0 ... 127

Sets the maximum amount of filter cutoff modulation that can be applied to the current voice.

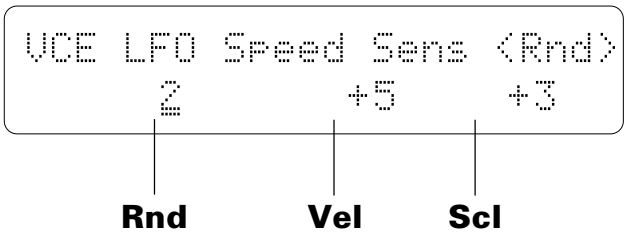
A “0” setting produces no modulation while a setting of “127” produces maximum modulation. Filter cutoff modulation produces wah-wah type effects.

Please note that the filter cutoff modulation depth parameter for the control device which is to be used to apply cutoff modulation (see page 143 and 146) must also be set to an appropriate value before cutoff frequency modulation can be applied.

3-5-03: SENSITIVITY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-5: LFO -> [ENTER]
-> [PAGE] -> 3-5-03: Sensitivity -> [ENTER]

The speed of the TG500 LFO can be varied randomly, and according to variations in keyboard velocity and range. Such variations can produce more natural, musical effects.



Rnd (Random speed)

Range: 0 ... 7

Sets the amount of random LFO speed variation produced each time a note is played.

When this parameter is set to a value other than "0," the LFO speed changes randomly each time a note is played. A setting of "7" produces the greatest amount of random speed change.

Vel (Velocity sensitivity)

Range: -7 ... +7

Determines how the LFO speed changes in response to velocity changes (e.g. keyboard dynamics).

Plus "+" settings produce higher LFO speed in response to higher velocity values — i.e. the harder a key is played, the higher the LFO speed. The maximum setting of "+7" produces the maximum speed variation in response to velocity changes. Minus "–" settings produce the opposite effect: lower speed in response to higher velocity. A setting of "+0" results in no speed variation.

Scl (Key scaling)

Range: -7 ... +7

Determines how the LFO speed changes in response to the key played.

Plus "+" settings produce higher LFO speed when higher notes on the keyboard are played. The maximum setting of "+7" produces the maximum speed variation. Minus "–" settings produce the opposite effect: lower speed when higher notes are played. A setting of "+0" results in no speed variation.

LFO DATA COPY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-5: LFO -> [ENTER]

This function facilitates voice editing by allowing the LFO parameters from any other voice (the “source” voice) to be copied to the current voice. You can copy an LFO setup that is close to the type you want, then edit it to produce the required sound.

Press the [STORE/COPY] key while in the LFO edit mode.

Use the [MEMORY] key to select the internal, preset, or card memory; then use the [-1/NO] and [+1/YES] keys to select the voice from the which the LFO data is to be copied.

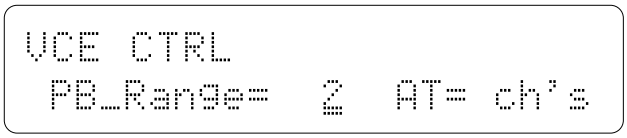
Once the source voice has been selected, press the [ENTER] key. “Sure?” will appear on the display.

Press the [+1/YES] key to copy the LFO data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, “Completed!” will appear on the display briefly, then the display will return to the LFO edit mode.

3-6-01: PITCH BEND, AFTER TOUCH

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-6: Controller -> [ENTER]
-> [PAGE] -> 3-6-01: PB, AT -> [ENTER]

This screen includes parameters that set the TG500's pitch bend range and the aftertouch mode.



PB_Range (Pitch bend range)

Range: 0 ... 12

Sets the maximum pitch bend range.

Each increment from "0" to "12" represents a semitone. A setting of "0" produces no pitch bend. A setting of "12" allows a maximum pitch bend of plus or minus one octave, while a setting of "4" allows a maximum pitch bend of plus or minus a major third.

AT (Aftertouch mode)

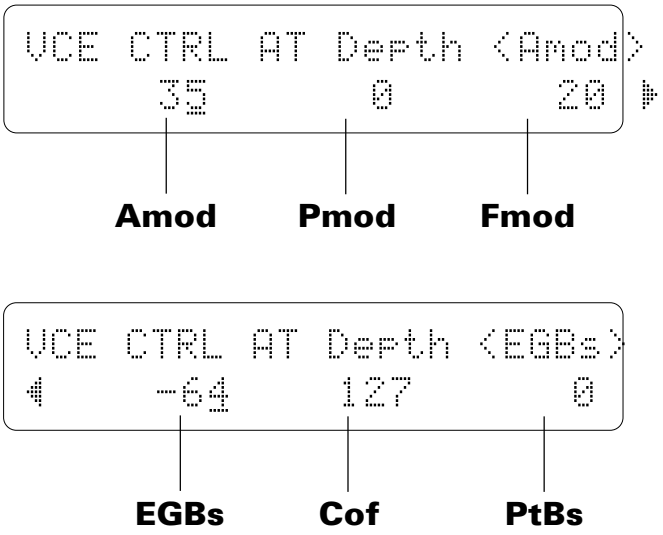
Range: ch's, key's

Selects the channel or individual (polyphonic) key aftertouch response mode. If "ch's" is selected, the channel aftertouch response mode is engaged and only a single aftertouch value is received via a single MIDI channel. If "key's" is selected, the individual key aftertouch repsonse mode is engaged and individual aftertouch values are recognized for every note played.

3-6-02: AFTER TOUCH DEPTH

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-6: Controller -> [ENTER] -> [PAGE] -> 3-6-02: AT Depth -> [ENTER]

For truly “intimate” modulation control, the TG500 allows a number of modulation effects to be controlled via keyboard aftertouch response. The parameters in this screen set the depth of the aftertouch modulation effects.



Amod (Amplitude modulation depth)

Range: 0 ... 127

Sets the maximum depth of amplitude modulation (tremolo effects) applied via keyboard aftertouch.

A setting of “0” allows no amplitude modulation, while a setting of 127 results in maximum amplitude modulation depth.

When setting up the low-frequency oscillator to apply amplitude modulation, this parameter must be set to a value *other than* “0” if amplitude modulation is to be applied via keyboard after touch.

Pmod (Pitch modulation depth)

Range: 0 ... 127

Sets the maximum depth of pitch modulation (vibrato effects) applied via keyboard aftertouch.

A setting of “0” allows no pitch modulation, while a setting of 127 results in maximum amplitude modulation.

When setting up the low-frequency oscillator to apply pitch modulation, this parameter must be set to a value *other than* “0” if pitch modulation is to be applied via keyboard aftertouch.

Fmod (Frequency modulation depth)

Range: 0 ... 127

Sets the maximum depth of filter cutoff frequency modulation (wah-wah type effects) applied via keyboard aftertouch.

A setting of "0" allows no frequency modulation, while a setting of 127 results in maximum frequency modulation.

When setting up the LFO (low-frequency oscillator) to apply cutoff modulation, this parameter must be set to a value *other than* "0" if cutoff modulation is to be applied via keyboard aftertouch. Also, the filter "Ctrl" parameter (page 123) must be set to "LFO" in order to vary the cutoff frequency continuously.

EGBs (EG bias depth)

Range: -127 ... +127

Sets the depth and "direction" of EG bias produced by aftertouch response. EG bias increases or decreases the amplitude envelope generator levels, simulating the dynamic variations that can be produced on an acoustic instrument more accurately than simple volume control.

A setting of "0" produces no change in EG levels. Plus ("+") settings produce an increase in level when aftertouch is applied, and minus ("–") settings produce a decrease in level when aftertouch is applied. The greater the value, the greater the change in level.

Cof (Cutoff frequency depth)

Range: -127 ... +127

Sets the maximum depth of filter cutoff frequency variation applied via keyboard aftertouch.

Plus "+" settings produce higher cutoff frequencies in response to aftertouch — i.e. the greater the aftertouch pressure, the higher the cutoff frequency. The maximum setting of "+127" produces the maximum cutoff variation. Minus "–" settings produce the opposite effect: lower cutoff in response to greater aftertouch pressure. A setting of "+0" results in no cutoff variation. The filter "Ctrl" parameter (page 123) must be set to "LFO" in order to vary the cutoff frequency continuously.

PtBs (Pitch bias depth)

Range: -12 ... +12

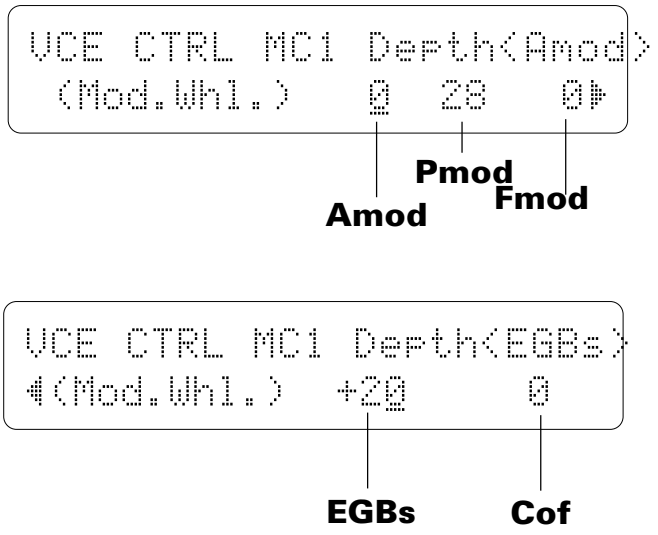
Sets the maximum pitch variation range achievable via after-touch control.

Each increment represents a semitone. A setting of “0” produces no pitch variation. A setting of “+12” allows a maximum pitch variation of one octave up, while a setting of “-12” allows a maximum pitch variation of one octave down corresponding to aftertouch key pressure.

3-6-03: MIDI CONTROLLER 1 / 3-6-04: MIDI CONTROLLER 2

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-6: Controller -> [ENTER]
-> [PAGE] -> 3-6-03: MIDI Ctrl 1 -> [ENTER]
-> [PAGE] -> 3-6-04: MIDI Ctrl 2 -> [ENTER]

The parameters in these two screens set the maximum depth of modulation that can be produced by "MC1" (MIDI Controller 1) and "MC2" (MIDI Controller 2).



MIDI controller assignments are made via the "UTILITY" mode "2:Controller" screen — page 223.

Amod (Amplitude modulation depth)

Range: 0 ... 127

Sets the maximum depth of amplitude modulation (tremolo effects) applied via MIDI controller 1 or 2.

A setting of "0" allows no amplitude modulation, while a setting of 127 results in maximum amplitude modulation depth.

When setting up the low-frequency oscillator to apply amplitude modulation, this parameter must be set to a value *other than* "0" if amplitude modulation is to be applied via MIDI controller 1 or 2.

Pmod (Pitch modulation depth)

Range: 0 ... 127

Sets the maximum depth of pitch modulation (vibrato effects) applied via MIDI controller 1 or 2.

A setting of "0" allows no pitch modulation, while a setting of 127 results in maximum amplitude modulation.

When setting up the low-frequency oscillator to apply pitch modulation, this parameter must be set to a value *other than* "0" if pitch modulation is to be applied via MIDI controller 1 or 2.

Fmod (Frequency modulation depth)

Range: 0 ... 127

Sets the maximum depth of filter cutoff frequency modulation (wah-wah type effects) applied via MIDI controller 1 or 2.

A setting of "0" allows no frequency modulation, while a setting of 127 results in maximum frequency modulation.

When setting up the LFO (low-frequency oscillator) to apply cutoff modulation, this parameter must be set to a value *other than* "0" if cutoff modulation is to be applied via MIDI controller 1 or 2. Also, the filter "Ctrl" parameter (page 123) must be set to "LFO" in order to vary the cutoff frequency continuously.

EGBs (EG bias depth)

Range: -127 ... +127

Sets the depth and "direction" of EG bias produced by MIDI controller 1 or 2. EG bias increases or decreases the amplitude envelope generator levels, simulating the dynamic variations that can be produced on an acoustic instrument more accurately than simple volume control.

A setting of "0" produces no change in EG levels. Plus ("+") settings produce an increase in level when MIDI controller 1 or 2 is applied, and minus ("–") settings produce a decrease in level when MIDI controller 1 or 2 is applied. The greater the value, the greater the change in level.

Cof (Cutoff frequency depth)

Range: -127 ... +127

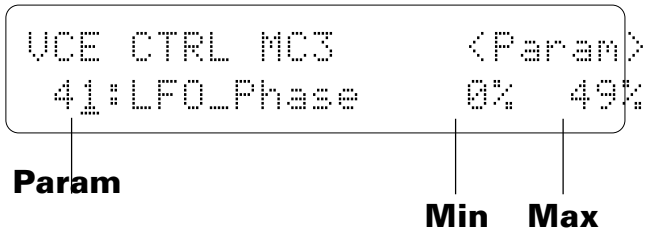
Sets the maximum depth of filter cutoff frequency variation applied via MIDI controller 1 or 2.

Plus "+" settings produce higher cutoff frequencies in response to MIDI controller 1 or 2 — i.e. the higher the control value, the higher the cutoff frequency. The maximum setting of "+127" produces the maximum cutoff variation. Minus "–" settings produce the opposite effect: lower cutoff in response to higher control values. A setting of "+0" results in no cutoff variation. The filter "Ctrl" parameter (page 123) must be set to "LFO" in order to vary the cutoff frequency continuously.

3-6-05: MIDI CONTROLLER 3 / 3-6-06: MIDI CONTROLLER 4

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-6: Controller -> [ENTER]
-> [PAGE] -> 3-6-05: MIDI Ctrl 3 -> [ENTER]
-> 3-6-06: MIDI Ctrl 4 -> [ENTER]

"MC3" (MIDI Controller 3) and "MC4" (MIDI Controller 4) can be assigned to control a wide range of voice parameters in real time while playing the TG500. MIDI controller assignments are made via the "UTILITY" mode "2:Controller" screen — page 223. These parameters assign a voice parameter to MIDI controller 3 or 4, and



set the maximum and minimum limits of the control range.

Param (MC3 or MC4 parameter)

Range: 0 ... 75

Assigns any of 75 different voice parameters to be controlled via MIDI controller 3 or 4.

The numbers and abbreviations associated with each voice parameter are listed below:

MC3 or MC4 PARAMETER LIST (0 ... 39)

0:	"No_Assign "	20:	"EF_SendLvl"
1:	"CT_MW_Pmod"	21:	"OS_FrqFine"
2:	"CT_MW_Amod"	22:	"OS_Random "
3:	"CT_MW_Fmod"	23:	"PEG_Rate1 "
4:	"CT_MW_Coff"	24:	"PEG_Rate2 "
5:	"CT_MW_EGBs"	25:	"PEG_Rate3 "
6:	"CT_FC_Pmod"	26:	"PEG_RlsRe "
7:	"CT_FC_Amod"	27:	"PEG_Level0"
8:	"CT_FC_Fmod"	28:	"PEG_Level1"
9:	"CT_FC_Coff"	29:	"PEG_Level2"
10:	"CT_FC_EGBs"	30:	"PEG_Level3"
11:	"CT_AT_Pmod"	31:	"PEG_RlsLvl"
12:	"CT_AT_Amod"	32:	"PEG_Range "
13:	"CT_AT_Fmod"	33:	"PEG_LvlVel"
14:	"CT_AT_Coff"	34:	"PEG_RtVel "
15:	"CT_AT_EGBs"	35:	"LFO_Speed "
16:	"CT_AT_PtBs"	36:	"LFO_Delay "
17:	"CT_PBRange"	37:	"LFO_Pmod "
18:	"CT_VLLoLim"	38:	"LFO_Amod "
19:	"TotalLevel"	39:	"LFO_Fmod "

MC3 or MC4 PARAMETER LIST (40 ... 75)

40: "LFO_Wave "	58: "FLT_Rate1 "
41: "LFO_Phase"	59: "FLT_Rate2 "
42: "LFO_SpdVel"	60: "FLT_Rate3 "
43: "LFO_SpdRnd"	61: "FLT_Rate4 "
44: "AEG_Rate1 "	62: "FLT_RlsRt1"
45: "AEG_Rate2 "	63: "FLT_RlsRt2"
46: "AEG_Rate3 "	64: "FLT_Level0"
47: "AEG_Rate4 "	65: "FLT_Level1"
48: "AEG_RlsRt "	66: "FLT_Level2"
49: "AEG_Level2"	67: "FLT_Level3"
50: "AEG_Level3"	68: "FLT_Level4"
51: "AEG_LvlVel"	69: "FLT_RlsLv1"
52: "AEG_RtVel "	70: "FLT_RlsLv2"
53: "FLT_Reso "	71: "OS_NoteSft"
54: "FLT_CofVel"	72: "FLT_BPLvl1"
55: "FLT_ARVel "	73: "FLT_BPLvl2"
56: "FLT_Band "	74: "FLT_BPLvl3"
57: "FLT_CofFrq"	75: "FLT_BPLvl4"

Min

Range: 0 ... 100

Sets the lower limit of the MIDI controller 3 or 4 range. A setting of "0", for example, means that when MIDI controller 3 or 4 is set to its minimum position the assigned parameter will also be set to its lowest value. A setting of "50" means that the lowest controller position will set the assigned parameter to about 50% of its range (a parameter with a range of 0 to 127, for example, would be set to about 63).

Max

Range: 0 ... 100

Sets the upper limit of the MIDI controller 3 or 4 range. A setting of "100", for example, means that when MIDI controller 3 or 4 is set to its maximum position the assigned parameter will also be set to its highest value. A setting of "80" means that the highest controller position will set the assigned parameter to about 80% of its range (a parameter with a range of 0 to 127, for example, would be set to about 102).

CONTROLLER DATA COPY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-6: Controller -> [ENTER]

This function allows the controller parameters from any other voice (the “source” voice) to be copied to the current voice. You can copy a controller setup that is close to the type you want, then edit it to produce the required sound.

Press the [STORE/COPY] key while in the controller edit mode.

Use the [MEMORY] key to select the internal, preset, or card memory; then use the [-1/NO] and [+1/YES] keys to select the voice from the which the controller data is to be copied.

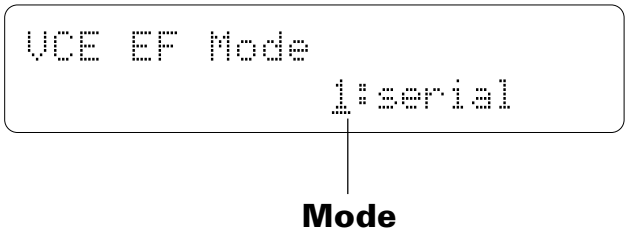
Once the source voice has been selected, press the [ENTER] key. “Sure?” will appear on the display.

Press the [+1/YES] key to copy the controller data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, “Completed!” will appear on the display briefly, then the display will return to the controller edit mode.

3-7-01: MODE

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-01: Mode -> [ENTER]

The TG500 features a dual-processor effect system that includes 90 top-quality digital effects. Two different effects can be connected in series or parallel, providing an extensive range of possible configurations.



Mode

Range: 0:off, 1:serial, 2:parallel

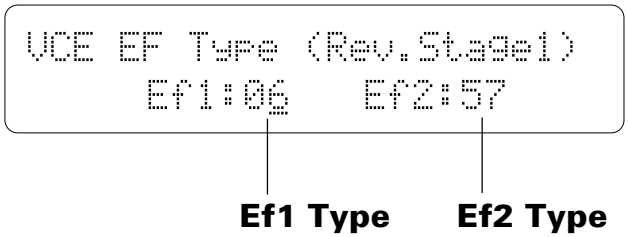
Determines whether the TG500's two effect processors are connected in series ("1:serial") or in parallel ("2:parallel"), or whether the entire effect system is turned off ("0:off").

See page 251 for effect mode diagrams.

3-7-02: TYPE

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-02: Type -> [ENTER]

These parameters assign any of the TG500's 90 effects independently to the EFECT 1 and EFFECT 2 signal processors.



Ef1 Type

Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 1 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

Ef2 Type

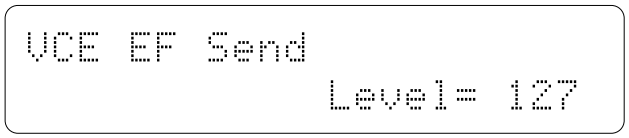
Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 2 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

3-7-03: SEND

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-03: Send -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big different to the final sound. The "Send" parameter plays a vital role in determining the depth of the effect sound.



Level (Send level)

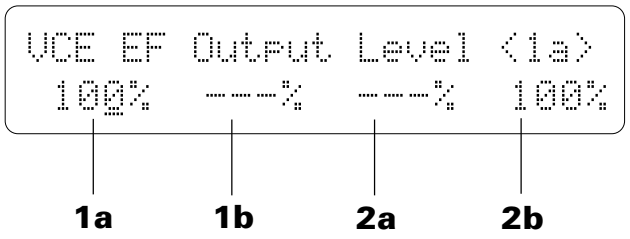
Range: 0 ... 127

This parameter adjusts the amount of direct voice signal that is sent to the effect processors, determining the strength of the final effect sound. A setting of "0" results in no effect, leaving only the "dry" sound of the voice.
The maximum setting of "127" produces the maximum amount of effect.

3-7-04: OUTPUT LEVEL

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-04: Output Level -> [ENTER]

Depending on the selected effects the TG500 effect system can have up to four separate output levels that are adjusted by the parameters provided in this screen.



1a, 1b, 2a, and 2b (Effect output levels)

Range: 0 ... 100

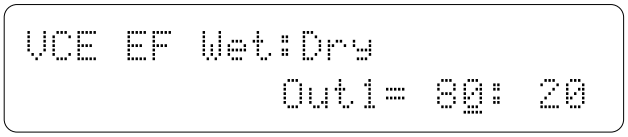
A setting of “0” turns output from the corresponding effect stage off, while a setting of “100” produces maximum output level.

If the selected effect is a “single” type, then only the “1a” or “2a” output level is available. If it is a “cascade” type, then only the “1b” or “2b” output level is available. Both the “1a” and “1b” or “2a” and “2b” levels are available only if the selected effect is a “dual” type. See page 251 for details on the effect stages and the TG500 effect system in general.

3-7-05: WET:DRY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-05: Wet;Dry -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameter provided in this screen provides precise balance control.



Out1 (Out 1 wet:dry balance)

Range: 0 ... 100

This parameter balances the effect ("wet") and direct ("dry") signals delivered via the OUTPUT L & R jacks. Higher "Out1 Wet" values produce more effect sound in relation to the direct, dry sound of the voice.

The "Wet" and "Dry" parameters are set simultaneously so that their total is always 100(%).

3-7-06: MIX LEVEL

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-06: Mix Level -> [ENTER]

This parameter determines how the output of the EFFECT 2 processor is mixed with that of the EFFECT 1 processor when the serial effect mode is selected. See page 251 for details on effect signal flow.

EF2 Mix (Effect 2 mix level)

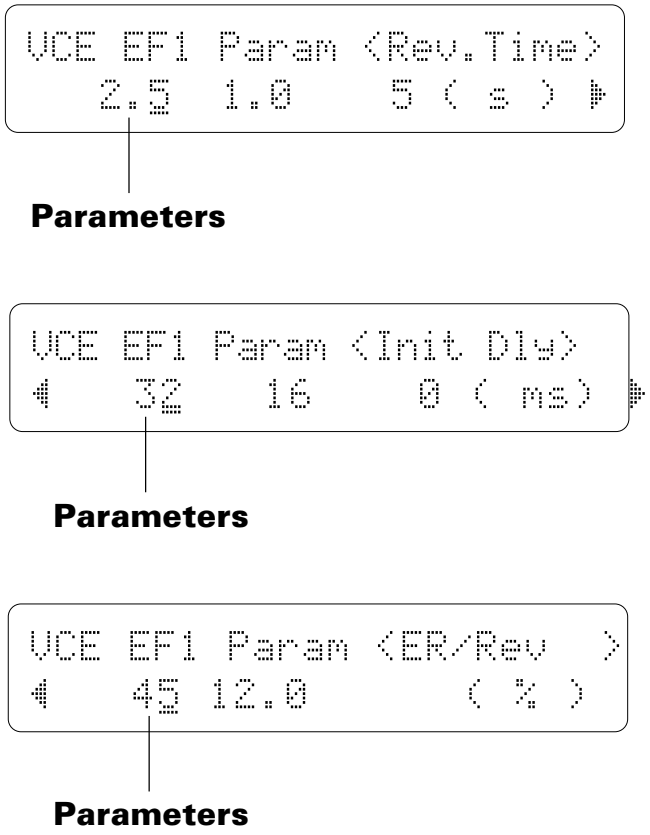
Range: 0 ... 100

This parameter can only be used with the “serial” effect mode is selected. If any other mode is selected (“off” or “para”), “---” appears on the display in place of the value. “0” produces minimum mix level (no EFFECT 2 signal is mixed with the EFFECT 1 output), while “100” produces maximum mix level.

3-7-07: PARAMETER 1 / 3-7-08: PARAMETER 2

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-07: Parameter 1 -> [ENTER]
-> 3-7-08: Parameter 2 -> [ENTER]

Each of the TG500's 90 effects has 8 parameters that can be edited via the parameters in these three screens to fine-tune the effect.



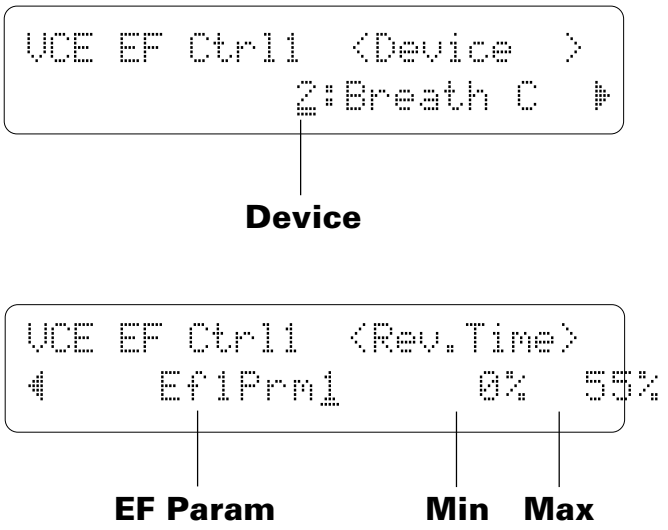
Use the [◁] and [▷] keys to select the parameters and switch between the three parameter screens. The name of the selected parameter is shown in the upper right corner of the display, while the parameter unit ("s" for seconds, "%" for percent, "dB" for decibels, etc.) is shown in parentheses in the lower right corner.

The parameters are different for each effect (refer to page 271 for details).

3-7-09: CONTROL 1 / 3-7-10: CONTROL 2

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-09: Control 1 -> [ENTER]
-> 3-7-10: Control 2 -> [ENTER]

MIDI control change data received by the TG500 can be assigned to control two different effect parameters in real time while playing in the voice or performance modes. The parameters provided in these screens determine which effect parameters are to be controlled by which MIDI control devices. It is also possible to select the minimum and maximum parameter values.



Device (MIDI control device)

Range: 000 ... 120, AfterTch, Velocity, KeyScale, LFO

This parameter specifies which MIDI control change number will control the parameter selected via the “EF Param” parameter, below. Some control change numbers are already defined (modulation wheel, foot controller, etc.), while others are not assigned to any specific controller (see chart below). Additional settings include “AfterTch” for keyboard aftertouch control, “Velocity” for keyboard velocity control, “KeyScale” for key scaling control, and “LFO” for internal LFO control.

MIDI CONTROL CHANGE NUMBER/DEVICE

0:	"off"	91:	"Effect D"
1:	"Mod.Whl."	92:	"TremoloD"
2:	"Breath C"	93:	"Chorus D"
4:	"Foot Cnt"	94:	"CelesteD"
5:	"Porta.Sp"	95:	"Phaser D"
6:	"Data Ent"	96:	"Inc. "
7:	"Foot Vol"	97:	"Dec. "
8:	"Balance "	98:	"NRPN LSB"
10:	"Panpot "	99:	"NRPN MSB"
11:	"Express."	100:	"RPN LSB"
64:	"Hold 1 "	101:	"RPN MSB"
65:	"Porta.Sw"	121:	"AfterTch"
66:	"Sostenut"	122:	"Velocity"
67:	"Soft "	123:	"KeyScale"
69:	"Hold 2 "	124:	"LFO "

EF Param (Effect parameter)

Range: Depends on selected effects.

Selects the effect parameter to be controlled by the specified MIDI device. "Ef1Prm1" through "Ef1Prm8" on the display stand for "effect 1 parameter 1" through "effect 1 parameter 8". Likewise "Ef2Prm1" through "Ef2Prm8" on the display stand for "effect 2 parameter 1" through "effect 2 parameter 8". The parameters available for each effect are different, but the name of the selected parameter will be shown between the parentheses on the top line of the display. Parameters that can not be assigned are indicated by dashes ("--------") instead of a parameter name. In addition to the indivual effect parameters a range of send level, balance, and LFO parameters are also available, as listed below:

Ef1Prm1	Ef2Prm2	Out2_Wet
Ef1Prm2	Ef2Prm3	Ctrl1Min
Ef1Prm3	Ef2Prm4	Ctrl1Max
Ef1Prm4	Ef2Prm5	LFO_Wave
Ef1Prm5	Ef2Prm6	LFO_Spd
Ef1Prm6	Ef2Prm7	LFO_Dly
Ef1Prm7	Ef2Prm8	Ef_Ins1b
Ef1Prm8	Ef_Out2a	Ef_Ins2a
Ef_Out1a	Ef_Out2b	Ef_Ins2b
Ef_Out1b	Ef2_Mix	
Ef2Prm1	Out1_Wet	

Min (Minimum parameter value)

Range: 0 ... 100

Sets the lower limit of the control range. A setting of "0", for example, means that when the lowest control change value is received the assigned parameter will also be set to its lowest value. A setting of "50" means that the lowest control change value will set the assigned parameter to about 50% of its range (a parameter with a range of 0 to 127, for example, would be set to about 63).

Max (Maximum parameter value)

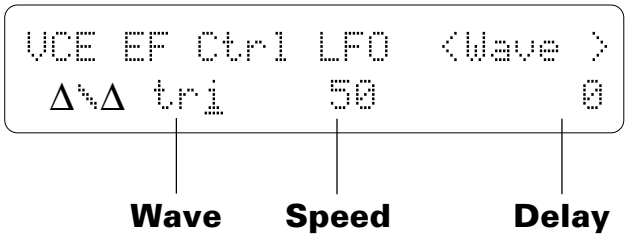
Range: 0 ... 100

Sets the upper limit of the control range. A setting of "100", for example, means that when the highest control change value is received the assigned parameter will also be set to its highest value. A setting of "80" means that the highest control change value will set the assigned parameter to about 80% of its range (a parameter with a range of 0 to 127, for example, would be set to about 102).

3-7-11: CONTROL LFO

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]
-> [PAGE] -> 3-7-11: Control LFO -> [ENTER]

All of the modulation-type effects — chorus, flanging, etc. — require LFO control. The TG500 has an independent effect LFO that is set up by the following parameters.



Wave (LFO waveform)

Range: tri, dwn, up, squ, sin, S/H, 1tm

Determines the waveform of the effect LFO.

"tri" = Triangle.	"dwn" = Downward sawtooth.
"up" = Upward sawtooth.	"squ" = Square.
"sin" = Sine.	"S/H" = Sample and hold.
	"1tm" = Upward 1-shot.

Speed (LFO speed)

Range: 0 ... 99

Sets the speed of the effect LFO.

"0" is the slowest Speed setting, producing an LFO speed of approximately 0 Hertz. The fastest setting of 99 produces an LFO speed of approximately 25 Hertz.

Delay (LFO start delay)

Range: 0 ... 99

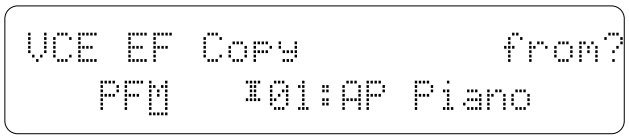
Sets the delay time between the beginning of a note and the beginning of effect LFO operation for the selected element.

The minimum setting "0" results in no delay, while the maximum setting of "99" produces a delay of approximately 2.66 seconds before the LFO begins operation (5.3 seconds before it reaches maximum depth).

EFFECT DATA COPY

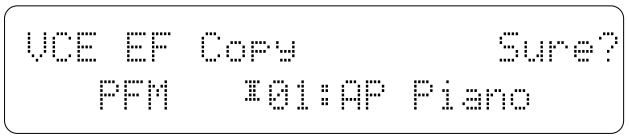
[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]

This function facilitates voice effect editing by allowing the effect parameters from any other voice, performance combination, or multi setup to be copied to the current voice. You can copy an effect setup that is close to the type you want, then edit it to produce the required sound.



Move the cursor to the left parameter (press the [◁] key) and use the [-1/NO] and [+1/YES] keys to select the mode containing the desired voice and effect data ("PFM" = PERFORMANCE, "VCE" = VOICE, and "MLT" = MULTI). Move the cursor to the right parameter (press the [▷] key) and, if a voice or performance combination is selected as the source, use the [MEMORY] key to select the memory area from which the source voice or performance combination is to be selected. Use the [-1/NO] and [+1/YES] keys to select the source voice or performance number. The [-1/NO] and [+1/YES] keys can be used to select the source multi number (0 … 15) when "MLT" is selected.

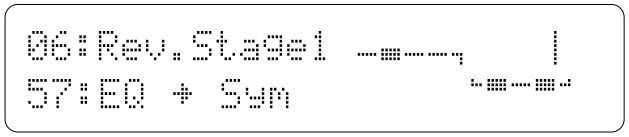
Once the source voice, performance combination, or multi setup has been selected, press the [ENTER] key. "Sure?" will appear on the display.



Press the [+1/YES] key to copy the effect data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, "Completed!" will appear on the display briefly, then the display will return to the effect edit mode.

EFFECT SIGNAL FLOW DISPLAY

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Full Edit -> [ENTER] -> 3-7: Effect -> [ENTER]



This function provides a graphic indication of the current effect system configuration while in the effect edit mode.

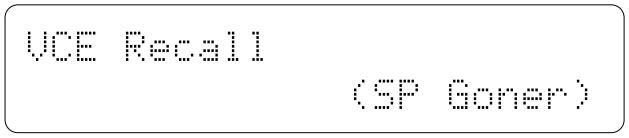
In the effect edit mode press the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] to see the overall effect system signal flow.

Refer the to section beginning on page 251 for details on the effect system.

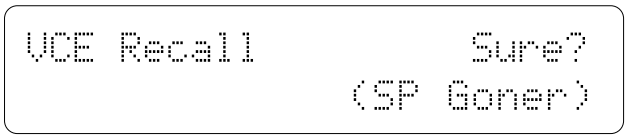
4-1: RECALL

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Recall/Init. -> [ENTER] -> 4-1: Recall -> [ENTER]

If you're dissatisfied with the results of edits you've made to a voice, or have accidentally lost track of changes made, use the RECALL function to recall the pre-edit voice data from the TG500's voice backup buffer memory.



Press [ENTER] to begin the recall procedure. The following confirmation display will appear:



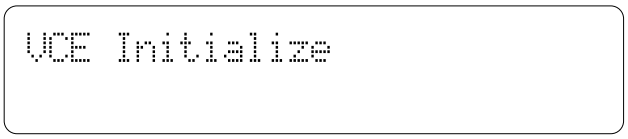
Press [+1/YES] to confirm that you want to go ahead with the recall operation (which will erase all current edited data), or press [-1/NO] to cancel.

"Completed!" will appear briefly on the display when the original voice data has been recalled.

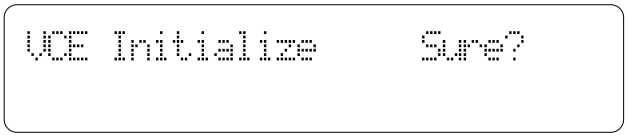
4-2: INITIALIZE

[PLAY MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Recall/Init. -> [ENTER] -> 4-2: Initialize -> [ENTER]

When you want to program a totally new voice “from scratch,” rather than editing an existing voice, use this function to initialize all voice parameters.



Press [ENTER] to begin the initialize procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the initialize operation (which will erase all current edited data), or press [-1/NO] to cancel.

“Completed!” will appear briefly on the display when the voice data has been initialized.

For initial voice parameter, see page 284.

VOICE COMPARE

[EDIT/COMPARE]

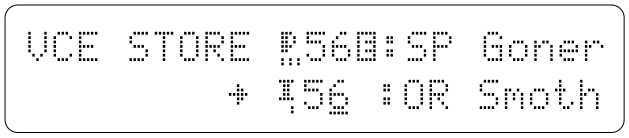
The voice compare function makes it possible to compare the sound of a voice being edited with the same voice prior to editing.

To temporarily recall the original voice data while editing, press the [EDIT/COMPARE] key. The [EDIT] LED will flash, indicating that the compare mode is engaged. Press [EDIT/COMPARE] a second time to return to the edit mode and the voice being edited.

VOICE STORE

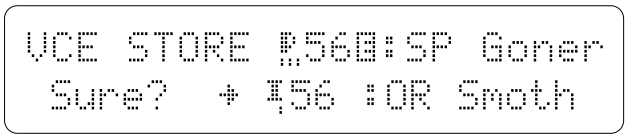
[STORE/COPY]

When you're satsfied with a new voice you've created in the voice edit mode, use the store function described below to store the new voice to an internal or card memory location.



When you've finished editing, return to the voice play mode (press the [PLAY MODE] key), and *before selecting a different voice* press the [STORE/COPY] key. You can now use the [MEMORY], [-1/NO] and [+1/YES] keys to select the memory location to which your new voice is to be stored.

Once the store location has been specified, press [ENTER] to begin the store procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the store operation (which will erase all previous data in the specified memory location), or press [-1/NO] to cancel.

When the voice data has been stored, "Completed!" will appear briefly on the display, then the display will return to the voice play mode.

DRUM VOICE EDIT MODE

1: Key Parameter
- 1-1: Parameter 168
- 1-2: Initialize 171
- 1-3: Exchange 172
- Drum Key Copy 173

2: Level/Name
- 2-1: Level 174
- 2-2: Name 175

3: Quick Edit
- 3-1: Effect 1 176
- 3-2: Effect 2 176
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4: Effect
- 4-01: Mode 178
- 4-02: Type 179
- 4-03: Send 180
- 4-04: Send Sensitivity 181
- 4-05: Output 182
- 4-06: Output Level 183
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- 4-08: Mix Level 185
- 4-09: Parameter 1 186
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- 4-12: Control 2 187
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- Effect Data Copy 191
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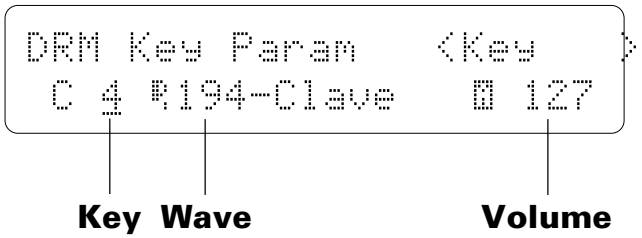
5: Recall/Init.
- 5-1: Recall 193
- 5-2: Initialize 194

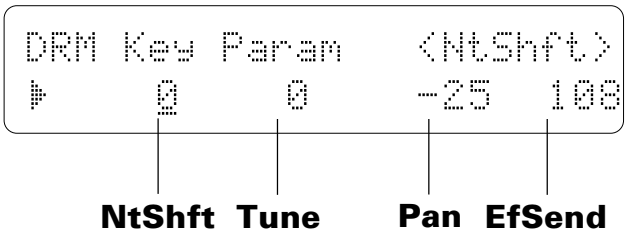
Drum Voice Compare 195

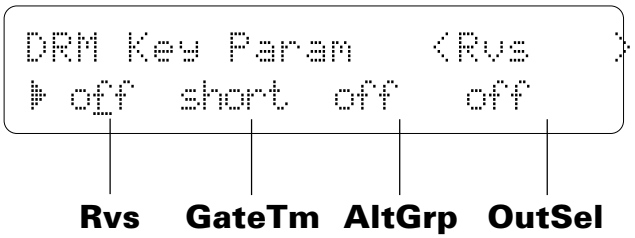
Drum Voice Store 196

1-1: PARAMETER

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1. Key Parameter -> [ENTER] -> [PAGE]
-> 1-1: Parameter -> [ENTER]







Key (Key number)

Range: C1 ... C5

Selects the the drum key to be edited. In addition to using the [-1/NO] and [+1YES] keys, the drum key can be selected by simply pressing the appropriate key on a keyboard connected to the TG500 MIDI IN terminal.

Wave

Range: 1 ... 244 (Preset 1), 1 ... 50 (Preset 2)

Selects the wave (AWM waveform) to be played by the current drum key. Use the [MEMORY] key to select the memory area from which the wave is to be selected, and the [-1/NO] and [+1YES] keys to select the desired wave.
A complete listing of the preset waves is given in the Appendix, on page 309 amd 310.

The TG500 actually incorporates two 32-note polyphonic tone generator units — "A" and "B". The inverse character "A" or "B" that appears to the right of the wave name indicates whether that wave is produced by tone generator unit A or tone generator unit B. This information is useful, for example, when creating performance combinations. Combining two "A" voices results in a maximum polyphony of 32 notes because both voices are produced by the same tone generator unit. An "A" voice combined with a "B" voice, however, results in a maximum polyphony of 64 notes. The same basic principle applies when combining voices in multi setups. With drum voices, tone generator unit combinations are significant when using the "AltGrp" parameter, described below.

Volume

Range: 0 ... 127

For optimum balance between the instruments in a drum "kit," this parameter allows the volume of the current drum key to be adjusted independently. A setting of "0" produces no sound, while a setting of "127" produces maximum volume.

NtShft (Note shift)

Range: -48 ... +36

Shifts the pitch of selected drum key up or down in semitone steps.

A setting of "-12," for example, shifts the pitch of the selected layer down by one octave; a setting of "+4" shifts the pitch up by a major third.

Tune (Fine tuning)

Range: -63 ... +63

Allows upward or downward pitch adjustment of the current drum key in approximately 1.7-cent steps (a "cent" is 1/100th of a semitone).

The maximum minus setting of "-63" produces a downward pitch shift of approximately three quarters of a semitone, and the maximum plus setting of "+63" shifts the pitch up by the same amount. A setting of "0" produces no pitch change.

Pan

Range: -31 ... +31

Interesting stereo effects can be produced by placing the sound of different drum instruments at different locations in the stereo sound field. This parameter determines the position in the stereo sound field in which the sound from the current drum key will be heard (left to right).

Minus values represent panning to the left, and positive values represent panning to the right. "0" positions the sound of the selected key in the center of the stereo sound field.

EfSend (Effect send level)

Range: 0 ... 127

Sets the effect send level for the selected drum key. The ability to set different effect send levels for each drum key provides extremely fine control over the drum effect sound. Please note that this parameter affects the individual output level.

Rvs (Reverse)

Range: off, on

When this parameter is turned "on," the selected wave is played in reverse.

GateTm (Gate time)

Range: short, norm, long, vlong

Sets the length of the note played by the selected drum key to short, normal ("norm"), long, or very long ("vlong"). Please note that this parameter will not extend the length of the waveform assigned to the current drum key, so no change may be heard even if you select the "vlong" gate time for a short wave.

AltGrp (Alternate group)

Range: off, 1 ... 5

Assigns the selected drum key to an "alternate group" numbered between 1 and 5. No two drum keys assigned to the same alternate group number can sound at the same time. This is most commonly used to create a realistic hi-hat cymbal effect: the closed and open hi-hat keys are assigned to the same alternate group, so that when the closed hi-hat key is played the open hi-hat sound is immediately cut off. Turn this parameter "off" if you don't want the current drum key to be assigned to any alternate group.

Please note that the "AltGrp" parameter can only be used with voices that use waves from the same tone generator unit: A or B.

OutSel (Individual output select)

Range: off, Ind1, Ind2, Ind3, Ind4

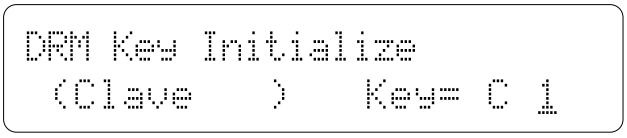
Sends the sound of the selected drum key to one of the TG500's four individual outputs (the drum voice sound is always delivered via the stereo outputs). If the "off" setting is selected the current drum key sound is not sent to any individual output.

If the utility mode "1-3: OUTPUT" function (page 222) is set to "indiv," voices assigned to individual outputs 1 through 4 are not delivered via the stereo outputs. If set to "norm," voices assigned to individual output 3 and 4 are not output.

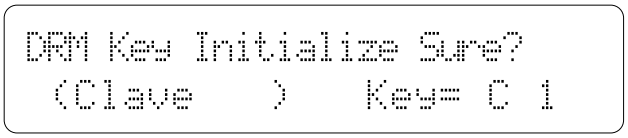
1-2: INITIALIZE

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Key Parameter -> [ENTER] -> [PAGE]
-> 1-2: Initialize -> [ENTER]

When you want to program a single drum key “from scratch,” rather than editing an existing key, use this function to initialize all data for the specified drum key.



Use the [-1/NO] and [+1/YES] keys or the keyboard connected to the TG500 to enter the drum key you want to initialize (C1 … C5), then press [ENTER] to begin the initialize procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the initialize operation (which will erase all current edited data), or press [-1/NO] to cancel.

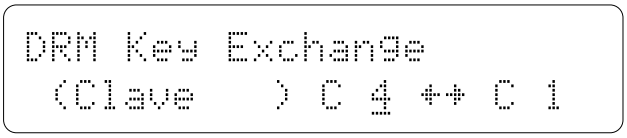
“Completed!” will appear briefly on the display when the drum key data has been initialized.

See page 285 through 292 for initial drum voice chart.

1-3: EXCHANGE

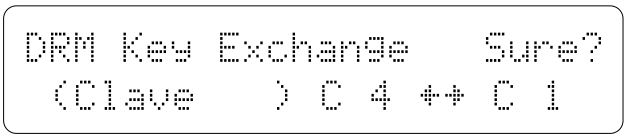
[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Key Parameter -> [ENTER] -> [PAGE]
-> 1-2: Exchange -> [ENTER]

This function makes it simple to re-arrange you drum key layout by directly exchanging the data between any two specifed drum keys.



Use the [◁] and [▷] keys to position the cursor, and the [-1/NO] and [+1/YES] keys to select the drum keys to be exchanged (C1 … C5). The keyboard connected to the TG500 can also be used to directly enter the keys after moving the cursor to the appropriate parameter.

Press [ENTER] to begin the layer exchange procedure. The following confirmation display will appear:



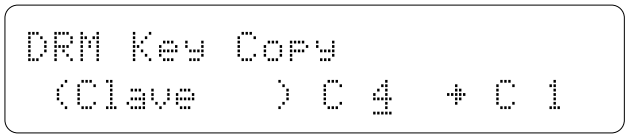
Press [+1/YES] again to confirm that you want to go ahead with the key data exchange operation, or press [-1/NO] to cancel.

“Completed!” will appear briefly on the display when the data has been exchanged.

DRUM KEY COPY

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 1: Key Parameter -> [ENTER] -> [STORE/COPY]

This function facilitates drum voice editing by allowing the data from one drum key (the “source” key) to be copied to any other drum key. You can copy the data from a key that is close to the sound you want, then edit it as required.



Use the left parameter to select the source key, and the right parameter to select the destination key. The source and destination keys can also be selected by simply pressing the appropriate key on the keyboard connected to the TG500 after placing the cursor at the source or destination parameter position. The name of the wave currently assigned to the key at which the cursor is positioned is displayed in parentheses.

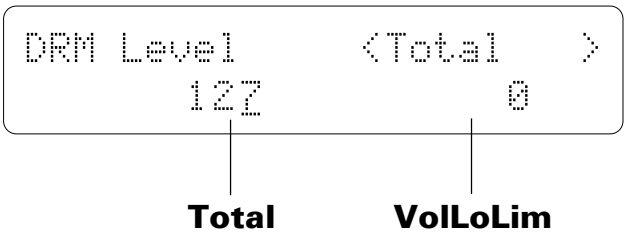
Once the source and destination keys have been selected, press the [ENTER] key. “Sure?” will appear on the display.

Press the [+1/YES] key to copy the drum key data, or press [-1/NO] to cancel the copy operation. “Completed!” will appear on the display briefly once the copy operation has finished, then the display will return to the key parameter edit mode.

2-1: LEVEL

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 2: Level/Name -> [ENTER] -> [PAGE]
-> 2-1: Level -> [ENTER]

This parameter sets the overall volume of the current drum voice in relation to the others, making it possible to match levels for smooth transition when switching between voices.



Total Level

Range: 0 ... 127

Adjusts the volume of the current drum voice.

A setting of “0” produces no sound while a setting of “127” produces maximum volume.

VolLoLim (Minimum volume level)

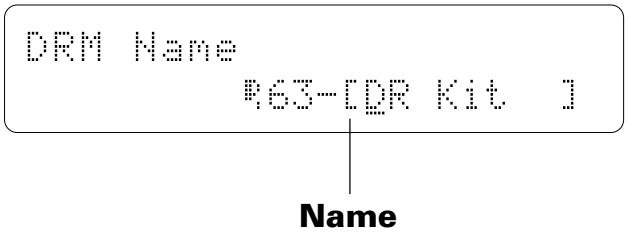
Range: 0 ... 127

Determines the minimum volume level that can be set by the foot volume control MIDI volume control data. If this parameter is set to “0,” the minimum foot volume control position will produce almost no sound. A setting of “63” will result in about half volume when the control is set to its minimum position. This parameter does not affect keyboard velocity response.

2-2: NAME

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 2: Level/Name -> [ENTER] -> [PAGE] -> 2-2: Name -> [ENTER]

Your original drum voices should naturally have original names. This function can be used to assign a name of up to 8 characters to the current drum voice.



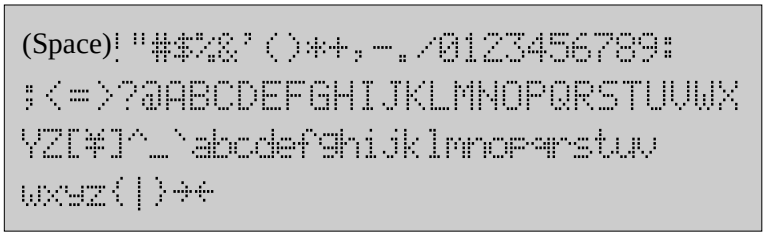
Name

Range: See character list, below

Assigns a name of up to 8 characters to the current drum voice.

Use the [◁] key to move the character cursor to the left, and the [▷] key to move the cursor to the right. Use the [-1/NO] and [+1/YES] keys to select a character for the current cursor position. The available characters are listed below.

The entire name can be cleared by pressing the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] key, and a space can be entered at the cursor position by pressing the [STORE/COPY] key while holding the [UTILITY/SELECT] key.

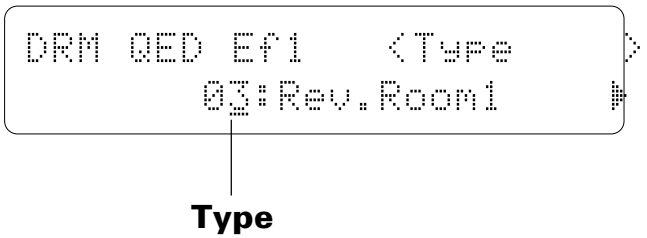


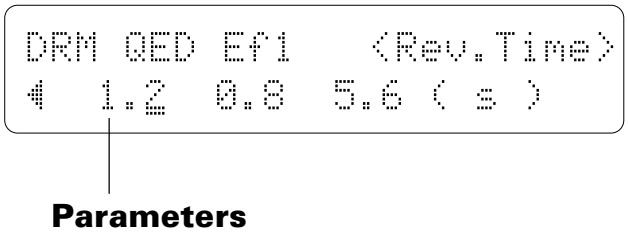
3-1: EFFECT 1 / 3-2: EFFECT 2

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Quick Edit -> [ENTER] -> [PAGE]
-> 3-1: Effect 1 -> [ENTER]
-> 3-2: Effect 2 -> [ENTER]

The TG500 features a complex, high-performance effect system that can be programmed easily via the parameters presented in these screens.

For full effect parameters see page 186.





Type (Effect type)

Range: 0 ... 90

The “Type” parameter selects any of the TG500’s 90 effect types for the effect 1 or effect 2 processor, depending on whether the “Effect 1” or “Effect 2” edit screen is selected. See page 251 for more details on the TG500 effect system.

Parameters 1 ... 3

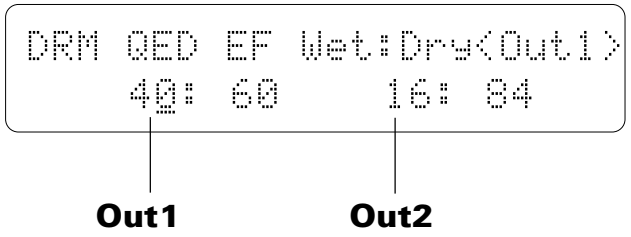
Range: Depends on the selected effect and parameter.

Use the [▷] key to scroll to the parameter screen. This screen provides access to the three main parameters each for the current selected effect 1 or effect 2, depending on whether the “Effect 1” or “Effect 2” edit screen is selected. As usual, the name of the selected parameter is shown in the upper right corner of the display, while in this screen the parameter unit (“s” for seconds, “%” for percent, “dB” for decibels, etc.) is shown in parentheses in the lower right corner.

3-3: EFFECT WET:DRY

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 3: Quick Edit -> [ENTER] -> [PAGE]
-> 3-3: Effect Wet:Dry -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameters provided in this screen provide precise balance control.



Out1, Out2 (Out 1 & Out 2 Wet:Dry Balance)

Range: 0 ... 100

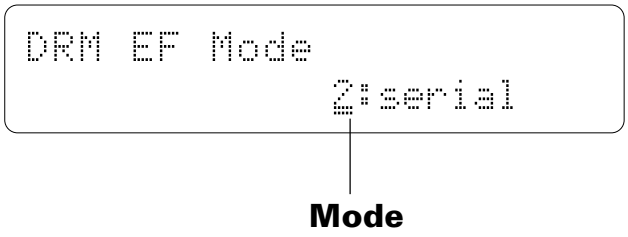
Balances the effect ("wet") and direct ("dry") signals delivered via the corresponding effect processors. Higher "Wet" values produce more effect sound in relation to the direct, dry sound of the voice.

The "Wet" and "Dry" parameters are adjusted simultaneously (their total is always 100%).

4-01: MODE

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-01: Mode -> [ENTER]

The TG500 features a dual-processor effect system that includes 90 top-quality digital effects. Two different effects can be connected in series or parallel, providing an extensive range of possible configurations.



Mode

Range: 0:off, 1:serial, 2:parallel

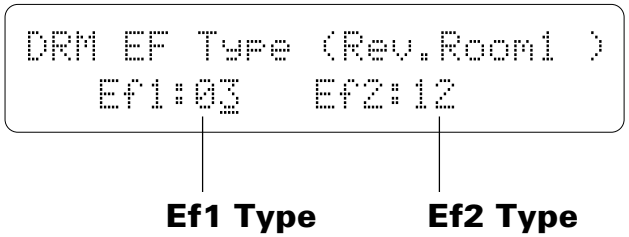
Determines whether the TG500's two effect processors are connected in series ("1:serial") or in parallel ("2:parallel"), or whether the entire effect system is turned off ("0:off").

See page 251 for the effect diagrams.

4-02: TYPE

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-02: Type -> [ENTER]

These parameters assign any of the TG500's 90 effects independently to the EFECT 1 and EFFECT 2 signal processors.



Ef1 Type

Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 1 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

Ef2 Type

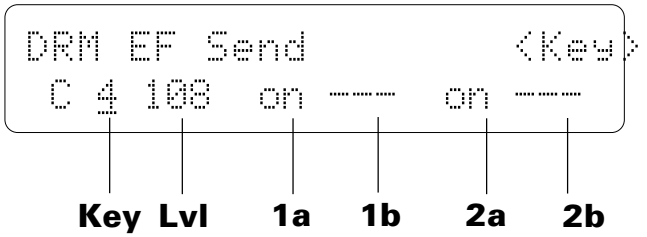
Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 2 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

4-03: SEND

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-03: Send ->[ENTER]

The parameters provided here determine to which of the TG500 effect stages the output from the voice assigned to each layer is sent, and at what level. Individual settings can be made for each drum key.



Key (Key number)

Range: C1 ... C5

Selects the the drum key to be edited. In addition to using the [-1/NO] and [+1YES] keys, the drum key can be selected by simply pressing the appropriate key on a keyboard connected to the TG500 MIDI IN terminal.

Lvl (Send level)

Range: 0 ... 127

This parameter adjusts the amount of direct voice signal that is sent to the effect processors, determining the strength of the final effect sound. A setting of “0” results in no effect, leaving only the “dry” sound of the voice.
The maximum setting of “127” produces the maximum amount of effect. Please note that this parameter affects the individual output level.

1a, 1b, 2a, and 2b (Send switches)

Range: See text below.

Determines to which of the EFFECT 1 and EFFECT 2 effect stages the output from the current layer is sent. The [-1/NO] and [+1/YES] keys can then be used to turn the selected stage on or off.

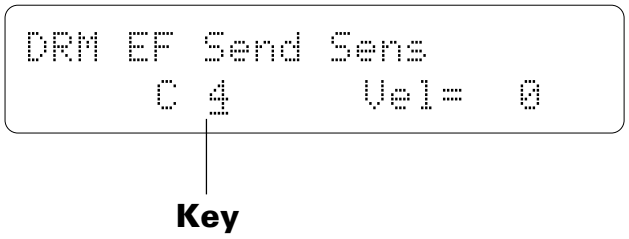
If a “single” type effect is selected then only stage “a” can be selected. If a “dual” or “cascade” type effect is selected, then both stages “a” and “b” can be selected.
An effect stage that cannot be selected is represented by “---” on the display.

See the “EFFECTS” section beginning on page 251 for more details.

4-04: SEND SENSITIVITY

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-04: Send Sens. ->[ENTER]

These parameters determine how the effect send level of each drum key is affected by keyboard dynamics and key scaling.



Key (Key number)

Range: C1 ... C5

Selects the the drum key to be edited. In addition to using the [-1/NO] and [+1/YES] keys, the drum key can be selected by simply pressing the appropriate key on a keyboard connected to the TG500 MIDI IN terminal.

Vel (Send velocity sensitivity)

Range: -7 ... +7

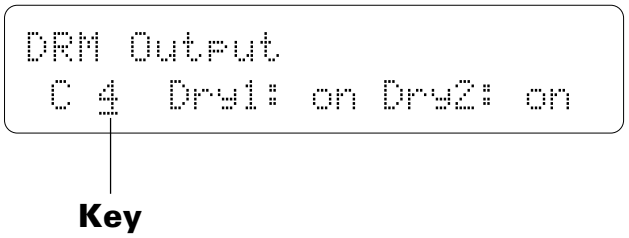
Determines how the send level from the selected layer is affected by velocity changes (e.g. keyboard dynamics).

Plus "+" settings produce higher send levels in response to higher velocity values — i.e. the harder a key is played, the higher the send level, and therefore the deeper the effect. The maximum setting of "+7" produces the maximum level variation in response to velocity changes. Minus "–" settings produce the opposite effect: lower send level in response to higher velocity.
A setting of "+0" results in no send level variation.

4-05: OUTPUT

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-05: Output ->[ENTER]

These parameters turn the “dry lines” (i.e. the signal paths which bypasses each effect processor) on or off, determining whether any dry signal output can occur at OUTPUT 1 and OUTPUT 2. Individual settings can be made for each drum key.



Key (Key number)

Range: C1 ... C5

Selects the the drum key to be edited. In addition to using the [-1/NO] and [+1YES] keys, the drum key can be selected by simply pressing the appropriate key on a keyboard connected to the TG500 MIDI IN terminal.

Dry1

Range: off, on

Turns the “dry line” bypassing the Output 1 on or off. When this parameter is turned “off,” the “WET:DRY” parameters (page 184) have no effect.

Dry2

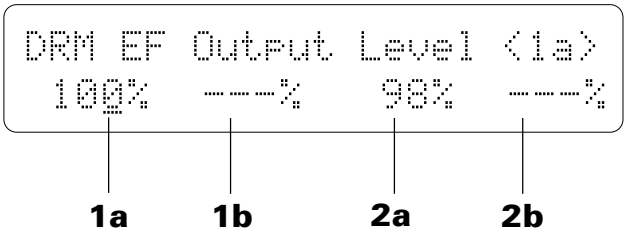
Range: off, on

Turns the “dry line” bypassing the Output 2 on or off.

4-06: OUTPUT LEVEL

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-06: Output Level ->[ENTER]

Depending on the selected effects the TG500 effect system can have up to four separate output levels that are adjusted by the parameters provided in this screen.



1a, 1b, 2a, and 2b (Effect output levels)

Range: 0 ... 100

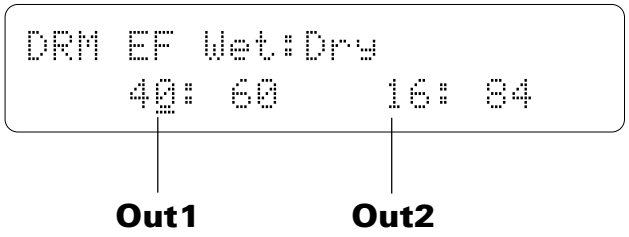
A setting of “0” turns output from the corresponding effect stage off, while a setting of “100” produces maximum output level.

If the selected effect is a “single” type, then only the “1a” or “2a” output level is available. If it is a “cascade” type, then only the “1b” or “2b” output level is available. Both the “1a” and “1b” or “2a” and “2b” levels are available only if the selected effect is a “dual” type. See page 251 for details on the effect stages and the TG500 effect system in general.

4-07: WET:DRY

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-07: Wet:Dry ->[ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameters provided in this screen provide precise balance control.



Out1, Out2 (Out 1 & Out 2 wet:dry balance)

Range: 0 ... 100

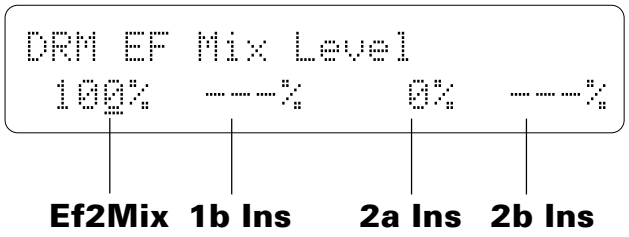
These parameters balance the effect (“wet”) and direct (“dry”) signals delivered via the corresponding effect processors. The “wet” level is shown to the left of the colon in each parameter and the “dry” level is shown to the right of the colon. Higher “Wet” values produce more effect sound in relation to the direct, dry sound of the voice.

The “Wet” and “Dry” parameters are adjusted simultaneously so that their total is always 100(%).

4-08: MIX LEVEL

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-08: Mix Level ->[ENTER]

These parameters determine the mix level between each effect send and the output of the preceding effect stage. Refer to the section beginning on page 251 for details on the overall TG500 effect system.



EF2Mix (Effect 2 mix level)

Range: 0 ... 100

Mixes the output of the EFFECT 2 processor with that of the EFFECT 1 processor. This parameter can only be used with the "serial" effect mode is selected. If any other mode is selected ("off" or "parallel"), "---" appears on the display in place of the value.

1b Ins, 2a Ins, 2b Ins (Insert levels)

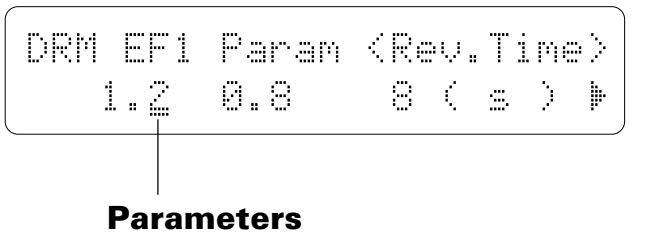
Range: 0 ... 100

These parameters mix the dry signal sent to the corresponding effect stage with the output of the preceding effect stage. The higher the value the greater mix level. If the current effect configuration does not allow one of these mix parameters, "---" will appear in place of the mix level parameter.

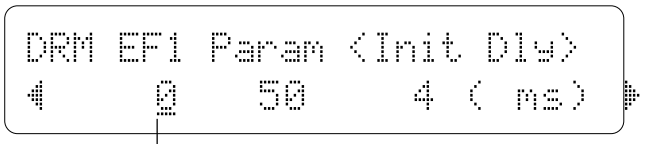
4-09: PARAMETER 1 / 4-10: PARAMETER 2

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-09: Parameter 1 ->[ENTER]
-> 4-10: Parameter 2 ->[ENTER]

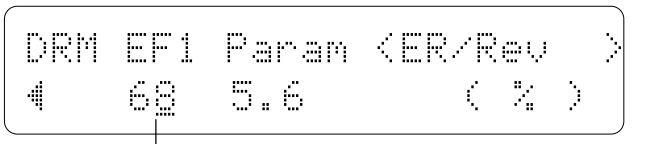
Each of the TG500's 90 effects has 8 parameters that can be edited via the parameters in these three screens to fine-tune the effect.



Parameters



Parameters



Parameters

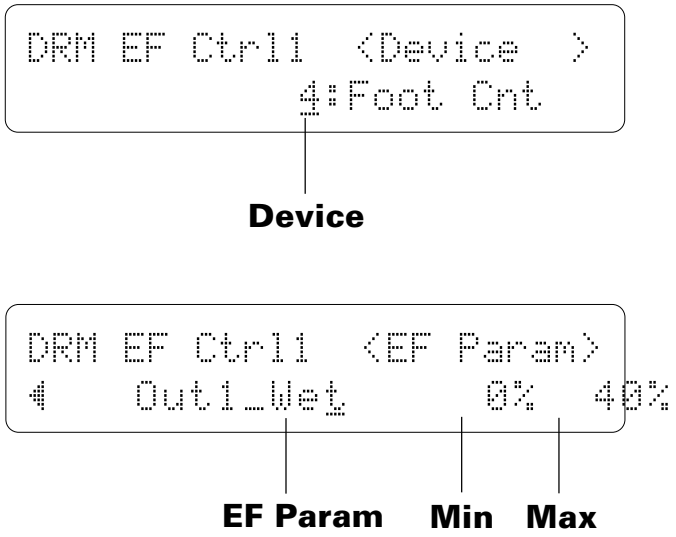
Use the [◁] and [▷] keys to select the parameters and switch between the three parameter screens. The name of the selected parameter is shown in the upper right corner of the display, while the parameter unit ("s" for seconds, "%" for percent, "dB" for decibels, etc.) is shown in parentheses in the lower right corner.

The parameters are different for each effect (refer to page 271 for details).When this parameter is turned "off," the "WET:DRY" parameters (page 184) have no effect.

4-11: CONTROL 1 / 4-12: CONTROL 2

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-11: Control 1 ->[ENTER]
-> 4-12: Control 2 ->[ENTER]

MIDI control change data received by the TG500 can be assigned to control two different effect parameters in real time while playing in the voice or performance modes. The parameters provided in these screens determine which effect parameters are to be controlled by which MIDI control devices. It is also possible to select the minimum and maximum parameter values.



Device (MIDI control device)

Range: 000 ... 120, AfterTch, Velocity, KeyScale, LFO

This parameter specifies which MIDI control change number will control the parameter selected via the “EF Param” parameter, below. Some control change numbers are already defined (modulation wheel, foot controller, etc.), while others are not assigned to any specific controller (see chart below). Additional settings include “AfterTch” for keyboard aftertouch control, “Velocity” for keyboard velocity control, “KeyScale” for key scaling control, and “LFO” for internal LFO control.

MIDI CONTROL CHANGE NUMBER/DEVICE

0:	"off"	91:	"Effect D"
1:	"Mod.Whl."	92:	"TremoloD"
2:	"Breath C"	93:	"Chorus D"
4:	"Foot Cnt"	94:	"CelesteD"
5:	"Porta.Sp"	95:	"Phaser D"
6:	"Data Ent"	96:	"Inc. "
7:	"Foot Vol"	97:	"Dec. "
8:	"Balance "	98:	"NRPN LSB"
10:	"Panpot "	99:	"NRPN MSB"
11:	"Express."	100:	"RPN LSB"
64:	"Hold 1 "	101:	"RPN MSB"
65:	"Porta.Sw"	121:	"AfterTch"
66:	"Sostenut"	122:	"Velocity"
67:	"Soft "	123:	"KeyScale"
69:	"Hold 2 "	124:	"LFO "

EF Param (Effect parameter)

Range: Depends on selected effects.

Selects the effect parameter to be controlled by the specified MIDI device. "Ef1Prm1" through "Ef1Prm8" on the display stand for "effect 1 parameter 1" through "effect 1 parameter 8". Likewise "Ef2Prm1" through "Ef2Prm8" on the display stand for "effect 2 parameter 1" through "effect 2 parameter 8". The parameters available for each effect are different, but the name of the selected parameter will be shown between the parentheses on the top line of the display. Parameters that can not be assigned are indicated by dashes ("--------") instead of a parameter name. In addition to the indivual effect parameters a range of send level, balance, and LFO parameters are also available, as listed below:

Min (Minimum parameter value)

Range: 0 ... 100

Sets the lower limit of the control range. A setting of "0", for example, means that when the lowest control change value is received the assigned parameter will also be set to its lowest value. A setting of "50" means that the lowest control change value will set the assigned parameter to about 50% of its range (a parameter with a range of 0 to 127, for example, would be set to about 63).

Max (Maximum parameter value)

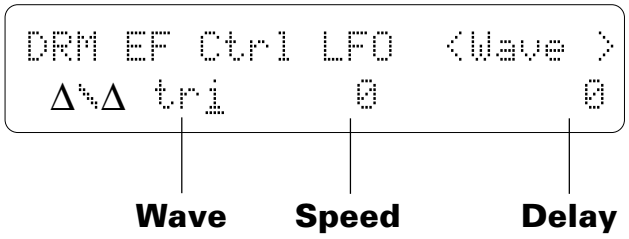
Range: 0 ... 100

Sets the upper limit of the control range. A setting of “100”, for example, means that when the highest control change value is received the assigned parameter will also be set to its highest value. A setting of “80” means that the highest control change value will set the assigned parameter to about 80% of its range (a parameter with a range of 0 to 127, for example, would be set to about 102).

4-13: CONTROL LFO

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-13: Control LFO ->[ENTER]

All of the modulation-type effects — chorus, flanging, etc. — require LFO control. The TG500 has an independent effect LFO that is set up by the following parameters.



Wave (LFO waveform)

Range: tri, dwn, up, squ, sin, S/H, 1tm

Determines the waveform of the effect LFO.

"tri" = Triangle.	"dwn" = Downward sawtooth.
"up" = Upward sawtooth.	"squ" = Square.
"sin" = Sine.	"S/H" = Sample and hold.
	"1tm" = Upward 1-shot.

Speed (LFO speed)

Range: 0 ... 99

Sets the speed of the effect LFO.

"0" is the slowest speed setting, producing an LFO speed of approximately 0 Hertz. The fastest setting of 99 produces an LFO speed of approximately 25 Hertz.

Delay (LFO start delay)

Range: 0 ... 99

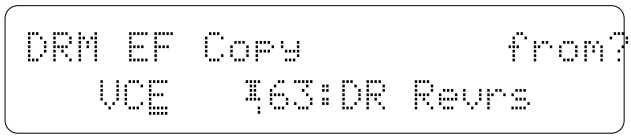
Sets the delay time between the beginning of a note and the beginning of effect LFO operation for the selected element.

The minimum setting "0" results in no delay, while the maximum setting of "99" produces a delay of approximately 2.66 seconds before the LFO begins operation (5.3 seconds before it reaches maximum depth).

EFFECT DATA COPY

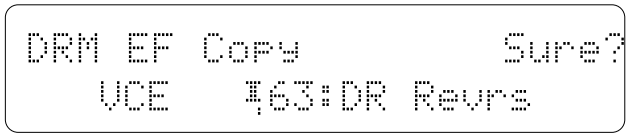
[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [STORE/COPY] ->[ENTER]

This function facilitates drum voice editing by allowing the effect parameters from any other voice, performance combination, or multi setup to be copied to the current drum voice. You can copy an effect setup that is close to the type you want, then edit it to produce the required sound.



Move the cursor to the left parameter (press the [◁] key) and use the [-1/NO] and [+1/YES] keys to select the mode containing the desired voice and effect data ("PFM" = PERFORMANCE, "VCE" = VOICE, and "MLT" = MULTI). Move the cursor to the right parameter (press the [▷] key) and, if a voice or performance combination is selected as the source, use the [MEMORY] key to select the memory area from which the source voice or performance combination is to be selected. Use the [-1/NO] and [+1/YES] keys to select the source voice or performance number. The [-1/NO] and [+1/YES] keys can be used to select the source multi number (0 … 15) when "MLT" is selected.

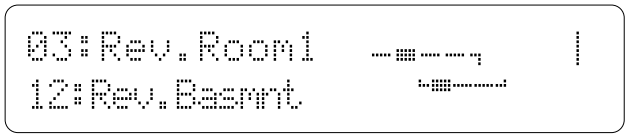
Once the source voice, performance combination, or multi setup has been selected, press the [ENTER] key. "Sure?" will appear on the display.



Press the [+1/YES] key to copy the effect data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, "Completed!" will appear on the display briefly, then the display will return to the effect edit mode.

EFFECT SIGNAL FLOW DISPLAY

[PLAY/MODE] -> VCE PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [UTILITY/SELECT] -> [EDIT/COMPARE]



This function provides a graphic indication of the current effect system configuration while in the effect edit mode.

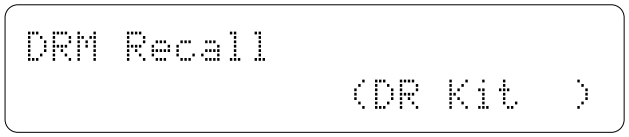
In the effect edit mode press the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] to see the overall effect system signal flow.

Refer the to section beginning on page 251 for details on the effect system.

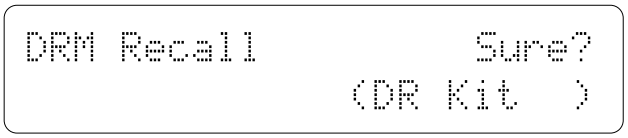
5-1: RECALL

[PLAY/MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 5: Recall/Init. -> [ENTER] -> [PAGE]
-> 5-1: Recall ->[ENTER]

If you're dissatisfied with the results of edits you've made to a drum voice, or have accidentally lost track of changes made, use the RECALL function to recall the pre-edit drum voice data from the TG500's backup buffer memory.



Press [ENTER] to begin the recall procedure. The following confirmation display will appear:



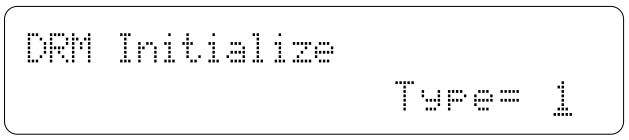
Press [+1/YES] to confirm that you want to go ahead with the recall operation (which will erase all current edited data), or press [-1/NO] to cancel.

"Completed!" will appear briefly on the display when the original drum voice data has been recalled.

5-2: INITIALIZE

[PLAY/MODE] -> PFM PLAY -> [EDIT/COMPARE] -> 5: Recall/Init. -> [ENTER] -> [PAGE]
-> 5-2: Initialize ->[ENTER]

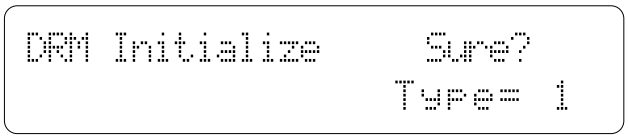
When you want to program a totally new drum voice "from scratch," rather than editing an existing voice, use this function to initialize all parameters.



Use the [-1/NO] and [+1/YES] keys to select the type of initial drum voice data you want.

Type= 1: SY/RY format (same as SY-series synthesizers and RY-series rhythm programmers).
Type= 2: Zone (Related instruments grouped in "zones").
Type= 3: GM format (Modified General MIDI System Level 1 format).
Type= 4: Standard format with emphasized effects.

Press [ENTER] to begin the initialize procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the initialize operation (which will erase all current edited data), or press [-1/NO] to cancel.

"Completed!" will appear briefly on the display when the performance data has been initialized.

DRUM VOICE COMPARE

[EDIT/COMPARE]

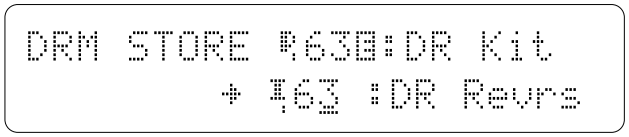
The drum voice compare function makes it possible to compare the sound of a drum voice being edited with the same drum voice prior to editing.

To temporarily recall the original drum voice data while editing, press the [EDIT/COMPARE] key. The [EDIT] LED will flash, indicating that the compare mode is engaged. Press [EDIT/COMPARE] a second time to return to the edit mode and the drum voice being edited.

DRUM VOICE STORE

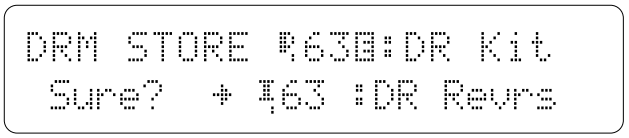
[STORE/COPY]

When you're satisfied with a new drum voice you've created in the drum voice edit mode, use the store function described below to store the new drum voice to an internal or card memory location.



When you've finished editing, return to the druml voice play mode (press the [PLAY MODE] key), and before selecting a different voice, press the [STORE/COPY] key. You can now use the [MEMORY] key to select the memory location to which your new drum voice is to be stored.

Once the store location has been specified, press [ENTER] to begin the store procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the store operation (which will erase all previous data in the specified memory location), or press [-1/NO] to cancel.

When the drum voice data has been stored, "Completed!" will appear briefly on the display, then the display will return to the voice play mode.

MULTI EDIT MODE

1: Parameter 199

2: Name 202

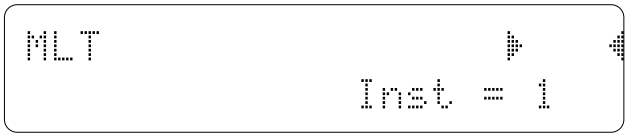
3: Initialize 203

4: Effect 204

- 4-01: Mode 204
- 4-02: Type 205
- 4-03: Send 206
- 4-04: Output 208
- 4-05: Output Level 209
- 4-06: Wet:Dry 210
- 4-07: Mix Level 211
- 4-08: Parameter 1 212
- 4-09: Parameter 2 212
- 4-10: Control 1 213
- 4-11: Control 2 213
- 4-12: Control LFO 216
- Effect Data Copy 217
- Effect Signal Flow Display 218

MULTI INSTRUMENT SELECTION

TG500 multi setups have 16 separate “instruments” controllable via the corresponding MIDI channels. The multi edit mode functions allow each instrument to be individually set up as required. The instrument to be edited in the multi edit mode is selected by using the [-1/NO] and [+1/YES] keys while holding the [UTILITY/SELECT] key.

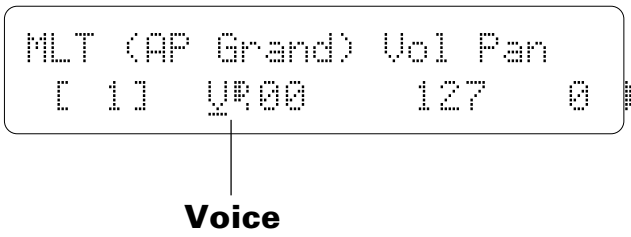


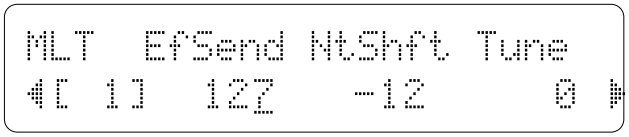
Select “Inst = 1” through “Inst = 16” depending on the instrument you want to edit. The display returns to the multi edit mode as soon as you release the [UTILITY/SELECT] key.

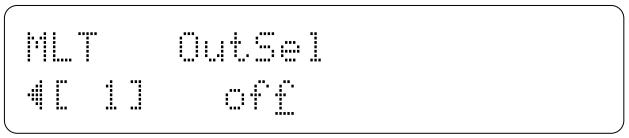
1: PARAMETER

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 1: Parameter -> [ENTER]

Each TG500 “multi setup” that can have up to 16 voices or performance combinations assigned to “instruments” 1 trough 16. Each instrument is controlled via the correspondingly numbered MIDI channel. These screens let you assign voices to each instrument and specify a range of basic parameters for each instument.







The instrument to be edited (1 … 16) is selected as described on page 198. The number of the currently selected instrument appears between square brackets on the display.

Voice

Range: ----, Any voice or performance combination.

The cursor can be placed at two locations in the voice number parameter: under the "P" or "V" to the left of the number, and under the number itself. With the cursor at the leftmost position select "P" if you want to assign a performance combination to the current instrument, "V" to assign a voice, or "----" to turn the current instrument off (no voice assigned). Use the [MEMORY] key to select a preset, internal, or card memory area and then, with the cursor under the voice number, use the [-1/NO] and [+1/YES] keys to select the voice or performance number. The name of the currently selected voice or performance combination is shown in parentheses above the voice parameter.

Vol (Volume)

Range: 0 ... 127

For optimum balance between the instruments in a multi setup, this parameter allows the volume of each voice to be adjusted individually. A setting of "0" produces no sound, while a setting of "127" produces maximum volume.

Pan

Range: -31 ... +31, VCE/PFM

In a multi setup, interesting stereo effects can be produced by placing the output from different voices at different locations in the stereo sound field. The parameters in this screen determine the position in the stereo sound field in which the sound from each active voice will be heard (left to right).

Minus values represent panning to the left, and positive values represent panning to the right. "0" positions the sound of the selected layer in the center of the stereo sound field. The next setting above "+31" is "VCE" if a voice is assigned to the current instrument and "PFM" if a performance combination is assigned. When "VCE" or "PFM" is selected the preset pan position for the selected voice or performance combination is used.

EfSend (Effect send level)

Range: 0 ... 127

The ability to individually adjust the effect send level for each voice in a multi setup allows the optimum amount of effect to be applied to each voice. A setting of "0" produces no effect, while a setting of "127" produces maximum send level and therefore maximum effect sound.

Please note that if the "Src" parameter in the "4-03: SEND" screen (page 206) is set to "VCE" or "PFM" for any instrument, the send level of that instrument cannot be changed. In this case "---" will appear on the display in place of the send level value. Also note that this parameter affects the individual output level.

NtShft (Note shift)

Range: -63 ... +63

Individually shifts the pitch of the currently selected instrument up or down in semitone steps. A setting of "-12," for example, shifts the pitch of the selected instrument down by one octave; a setting of "+4" shifts the pitch up by a major third. Please note that note shift cannot be applied to drum/percussion voices (the Note Shift value is displayed as "---").

The Note Shift parameter can be used to transpose a voice to its most useful range, or to create harmony (intervals) between different voices in a multi setup.

Tune (Fine tuning)

Range: -63 ... +63

Allows slight upward or downward pitch adjustment of the currently selected instument. More than just simple tuning, the tune parameters make it possible to create sound-thickening detune effects between voices. Each increment corresponds to approximately 1.17 cents (a "cent" is 1/100th of a semitone). The maximum minus setting of "-63" produces a downward pitch shift of almost three-quarters of a semitone, and the maximum plus setting of "+63" produces an upward pitch shift of the same amount. A setting of "0" produces no pitch change.

Please note that tuning cannot be applied to drum/percussion voices (the Tune value is displayed as "---").

OutSel (Individual output select)

Range: off, Ind1, Ind2, Ind3, Ind4

Sends the sound of the selected instrument to one of the TG500's four individual outputs (the multi sound is always delivered via the stereo outputs). If the "off" setting is selected the current multi instrument sound is not sent to any individual output.

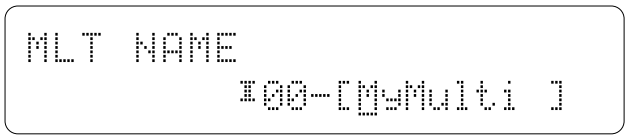
If a drum voice is assigned to the current instrument this parameter can be set to "off" or "drm".

If the utility mode "1-3: OUTPUT" function (page 222) is set to "indiv," instruments assigned to individual outputs 1 through 4 are not delivered via the stereo outputs. If set to "norm," instruments assigned to individual output 3 and 4 are not output.

2: NAME

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 2: Name -> [ENTER]

Your original multi setups should naturally have original names. This function can be used to assign a name of up to 8 characters to the current multi setup.

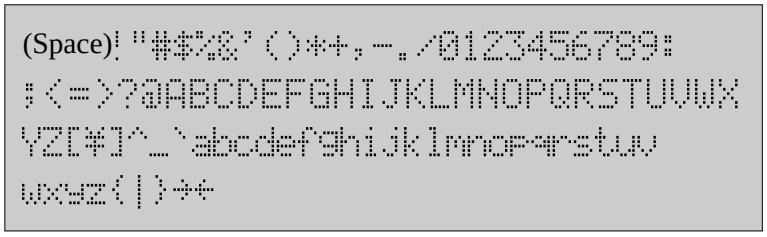


Name

Range: See character list, below

Use the [◁] key to move the character cursor to the left, and the [▷] key to move the cursor to the right. Use the [-1/NO] and [+1/YES] keys to select a character for the current cursor position. The available characters are listed below.

The entire name can be cleared by pressing the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] key, and a space can be entered at the cursor position by pressing the [STORE/COPY] key while holding the [UTILITY/SELECT] key.

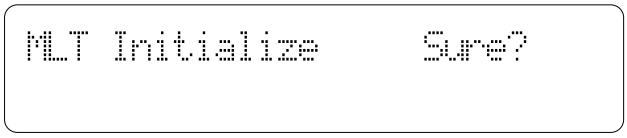


3: INITIALIZE

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 3: Initialize -> [ENTER]

When you want to program a totally new multi setup “from scratch,” rather than editing an existing setup, use this function to initialize all multi parameters.

Press [ENTER] to begin the initialize procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the initialize operation (which will erase all current edited data), or press [-1/NO] to cancel.

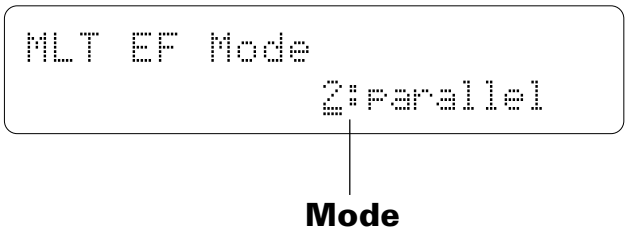
“Completed!” will appear briefly on the display when the multi data has been initialized.

See page 293 for initial multi parameters.

4-01: MODE

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-01: Mode -> [ENTER]

The TG500 features a dual-processor effect system that includes 90 top-quality digital effects. Two different effects can be connected in series or parallel, providing an extensive range of possible configurations.



Mode

Range: 0:off, 1:serial, 2:parallel

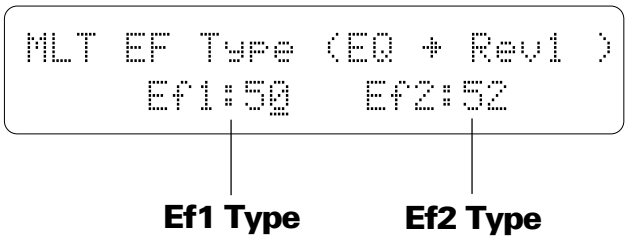
Determines whether the TG500's two effect processors are connected in series ("1:serial") or in parallel ("2:parallel"), or whether the entire effect system is turned off ("0:off").

See page 251 for effect mode diagrams.

4-02: TYPE

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-02: Type -> [ENTER]

These parameters assign any of the TG500's 90 effects independently to the EFFECT 1 and EFFECT 2 signal processors.



Ef1 Type

Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 1 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

Ef2 Type

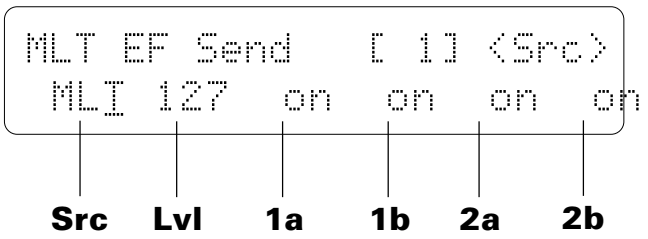
Range: 0 ... 90

Selects any of the TG500's 90 effect types for the EFFECT 2 processor. The name of the selected effect is shown in parentheses in the upper right corner of the display when this parameter is selected. See page 251 for more details on the TG500 effect system, and page 271 for a complete list of the available effects.

4-03: SEND

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-03: Send -> [ENTER]

The parameters provided here determine to which of the TG500 effect stages the output from the voice assigned to each instrument is sent, and at what level.



The instrument to be edited is selected as described on page 198. The currently selected instrument is shown in square brackets on the upper display line.

Src (Source)

Range: MLT, VCE, PFM

When “MLT” is selected the “Lvl”, “1a”, “1b”, “2a”, and “2b” parameters, described below, can be applied to the selected instrument. If a voice is assigned to the selected instrument, the “Src” parameter can also be set to “VCE”, causing the switch and send levels of the assigned voice to be used. In the same way, if a performance combination is assigned to the selected instrument, the “Src” parameter can be set to “PFM”, causing the switch and send levels of the assigned performance combination to be used. If “VCE” or “PFM” is selected, the “Switch” and “Level” parameters in this screen and the “Output” parameters in the following screen cannot be edited (“---” appears in place of the parameters).

Lvl (Send level)

Range: 0 ... 127

This parameter adjusts the amount of direct voice signal that is sent to the effect processors, determining the strength of the final effect sound. A setting of “0” results in no effect, leaving only the “dry” sound of the voice. The maximum setting of “127” produces the maximum amount of effect. Please note that this parameter affects the individual output level.

1a, 1b, 2a, and 2b (Send switches)

Range: See text below.

Determines to which of the EFFECT 1 and EFFECT 2 effect stages the output from the current layer is sent. The [-1] and [+1] keys can then be used to turn the selected stage on or off.

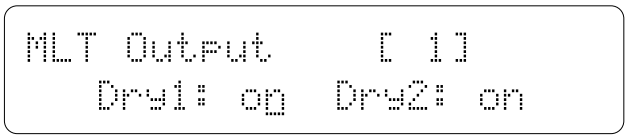
If a "single" type effect is selected then only stage "a" can be selected. If a "dual" or "cascade" type effect is selected, then both stages "a" and "b" can be selected. An effect stage that cannot be selected is represented by "--" on the display.

See the "EFFECTS" section beginning on page 251 for more details.

4-04: OUTPUT

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-04: Output -> [ENTER]

These parameters turn the “dry lines” (i.e. the signal paths which bypasses each effect processor) on or off, determining whether any dry signal output can occur at OUTPUT 1 and OUTPUT 2.



The instrument to be edited is selected as described on page 198. The currently selected instrument is shown in square brackets on the upper display line.

Dry1

Range: off, on

Turns the “dry line” bypassing the EFFECT 1 signal processor on or off. When this parameter is turned “off,” the “WET:DRY” parameters (page 210) have no effect. If the “Src” in parameter in the proceding screen is set to “VCE” or “PFM”, this parameter cannot be edited (“---” appears on the display).

Dry2

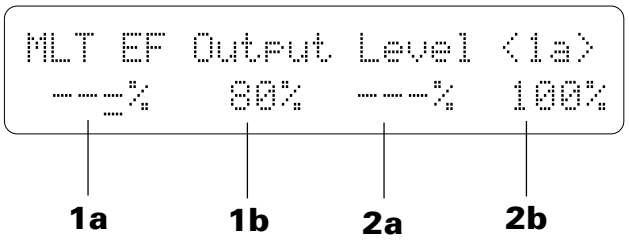
Range: off, on

Turns the “dry line” bypassing the EFFECT 2 signal processor on or off. When this parameter is turned “off,” the “WET:DRY” parameters (page 210) have no effect. If the “Src” in parameter in the proceding screen is set to “VCE” or “PFM”, this parameter cannot be edited (“---” appears on the display).

4-05: OUTPUT LEVEL

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-05: Output Level -> [ENTER]

Depending on the selected effects the TG500 effect system can have up to four separate output levels that are adjusted by the parameters provided in this screen.



1a, 1b, 2a, and 2b (Effect output levels)

Range: 0 ... 100

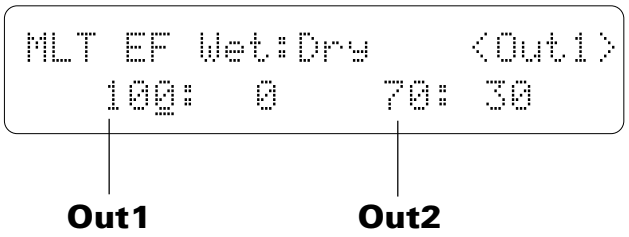
A setting of “0” turns output from the corresponding effect stage off, while a setting of “100” produces maximum output level.

If the selected effect is a “single” type, then only the “1a” or “2a” output level is available. If it is a “cascade” type, then only the “1b” or “2b” output level is available. Both the “1a” and “1b” or “2a” and “2b” levels are available only if the selected effect is a “dual” type. See page 251 for details on the effect stages and the TG500 effect system in general.

4-06: WET:DRY

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> [PAGE] -> 4: Effect -> [ENTER]
-> [PAGE] -> 4-06: Wet:Dry -> [ENTER]

The balance between the direct sound of the voice and the effect sound is a delicate thing. Even slight changes can make a big difference to the final sound. The parameters provided in this screen provide precise balance control.



Out1, Out2 (Out 1 & Out 2 wet:dry balance)

Range: 0 ... 100

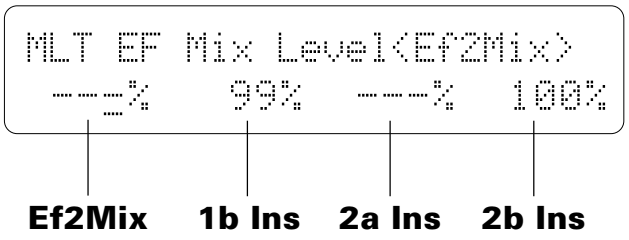
These parameters balance the effect ("wet") and direct ("dry") signals delivered via the corresponding effect processors. The "wet" level is shown to the left of the colon in each parameter and the "dry" level is shown to the right of the colon. Higher "Wet" values produce more effect sound in relation to the direct, dry sound of the voice.

The "Wet" and "Dry" parameters are adjusted simultaneously so that their total is always 100(%).

4-07: MIX LEVEL

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-07: Mix Level -> [ENTER]

These parameters determine the mix level between each effect send and the output of the preceding effect stage. Refer to the section beginning on page 251 for details on the overall TG500 effect system.



Ef2Mix (Effect 2 mix level)

Range: 0 ... 100

Mixes the output of the EFFECT 2 processor with that of the EFFECT 1 processor. This parameter can only be used with the "serial" effect mode is selected. If any other mode is selected ("off" or "parallel"), "---" appears on the display in place of the value.

1b Ins, 2a Ins, 2b Ins (Insert levels)

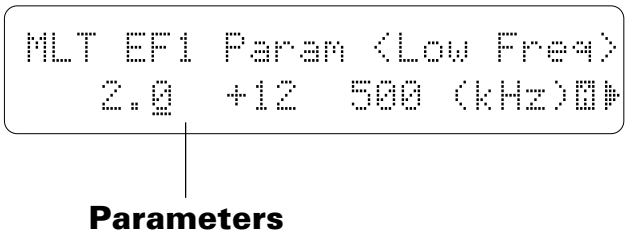
Range: 0 ... 100

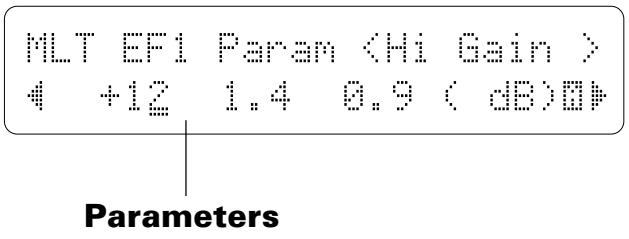
These parameters mix the dry signal sent to the corresponding effect stage with the output of the preceding effect stage. The higher the value the greater mix level. If the current effect configuration does not allow one of these mix parameters, "---" will appear in place of the mix level parameter.

4-08: PARAMETER 1 / 4-09: PARAMETER 2

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-08: Parameter 1 -> [ENTER]
-> 4-09: Parameter 2 -> [ENTER]

Each of the TG500's 90 effects has 8 parameters that can be edited via the parameters in these three screens to fine-tune the effect.





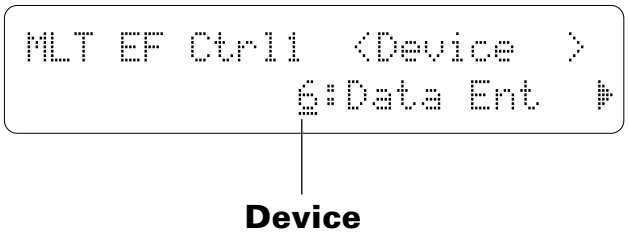
Use the [◁] and [▷] keys to select the parameters and switch between the three parameter screens. The name of the selected parameter is shown in the upper right corner of the display, while the parameter unit ("s" for seconds, "%" for percent, "dB" for decibels, etc.) is shown in parentheses in the lower right corner.

The parameters are different for each effect (refer to page 271 through 281 for details).

4-10: CONTROL 1 / 4-11: CONTROL 2

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE]
-> 4-10: Control 1 -> [ENTER]
-> 4-11: Control 2 -> [ENTER]

MIDI control change data received by the TG500 can be assigned to control two different effect parameters in real time while playing in the voice or performance modes. The parameters provided in these screens determine which effect parameters are to be controlled by which MIDI control devices. It is also possible to select the minimum and maximum parameter values.



Device

EF Param **Min** **Max**

Device (MIDI control device)

Range: 000 ... 120, AfterTch, Velocity, KeyScale, LFO

This parameter specifies which MIDI control change number will control the parameter selected via the “EF Param” parameter, below. Some control change numbers are already defined (modulation wheel, foot controller, etc.), while others are not assigned to any specific controller (see chart below). Additional settings include “AfterTch” for keyboard aftertouch control, “Velocity” for keyboard velocity control, “KeyScale” for key scaling control, and “LFO” for internal LFO control.

In all MIDI controller operations occurring on the any channel, priority is given to the last data received.

EF Param (Effect parameter)

Range: Depends on selected effects.

Selects the effect parameter to be controlled by the specified MIDI device. “Ef1Prm1” through “Ef1Prm8” on the display stand for “effect 1 parameter 1” through “effect 1 parameter 8”. Likewise “Ef2Prm1” through “Ef2Prm8” on the display stand for “effect 2 parameter 1” through “effect 2 parameter 8”. The parameters available for each effect are different, but the name of the selected parameter will be shown between the parentheses on the top line of the display. Parameters that can not be assigned to the sliders are indicated by dashes (“--------”) instead of a parameter name. In addition to the indivual effect parameters a range of send level, balance, and LFO parameters are also available, as listed below:

Ef1Prm1	Ef2Prm2	Out2_Wet
Ef1Prm2	Ef2Prm3	Ctrl1Min
Ef1Prm3	Ef2Prm4	Ctrl1Max
Ef1Prm4	Ef2Prm5	LFO_Wave
Ef1Prm5	Ef2Prm6	LFO_Spd
Ef1Prm6	Ef2Prm7	LFO_Dly
Ef1Prm7	Ef2Prm8	Ef_Ins1b
Ef1Prm8	Ef_Out2a	Ef_Ins2a
Ef_Out1a	Ef_Out2b	Ef_Ins2b
Ef_Out1b	Ef2_Mix	
Ef2Prm1	Out1_Wet	

Min (Minimum parameter value)

Range: 0 ... 100

Sets the lower limit of the control range. A setting of “0”, for example, means that when the lowest control change value is received the assigned parameter will also be set to its lowest value. A setting of “50” means that the lowest control change value will set the assigned parameter to about 50% of its range (a parameter with a range of 0 to 127, for example, would be set to about 63).

Max (Maximum parameter value)

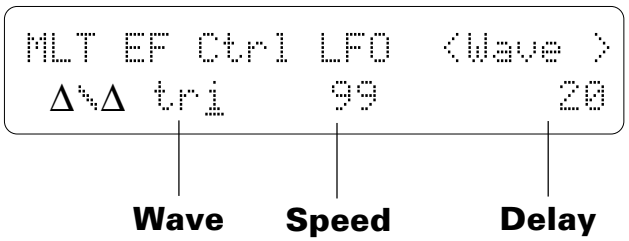
Range: 0 ... 100

Sets the upper limit of the control range. A setting of “100”, for example, means that when the highest control change value is received the assigned parameter will also be set to its highest value. A setting of “80” means that the highest control change value will set the assigned parameter to about 80% of its range (a parameter with a range of 0 to 127, for example, would be set to about 102).

4-12: CONTROL LFO

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [PAGE] -> 4-12: Control LFO -> [ENTER]

All of the modulation-type effects — chorus, flanging, etc. — require LFO control. The TG500 has an independent effect LFO that is set up by the following parameters.



Wave (LFO waveform)

Range: tri, dwn, up, squ, sin, S/H, 1tm

Determines the waveform of the effect LFO.

"tri" = Triangle.	"dwn" = Downward sawtooth.
"up" = Upward sawtooth.	"squ" = Square.
"sin" = Sine.	"S/H" = Sample and hold.
	"1tm" = Upward 1-shot.

Speed (LFO speed)

Range: 0 ... 99

Sets the speed of the effect LFO.

"0" is the slowest speed setting, producing an LFO speed of approximately 0 Hertz. The fastest setting of 99 produces an LFO speed of approximately 25 Hertz.

Delay (LFO start delay)

Range: 0 ... 99

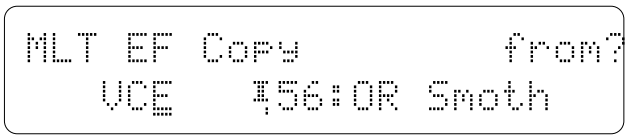
Sets the delay time between the beginning of a note and the beginning of effect LFO operation for the selected element.

The minimum setting "0" results in no delay, while the maximum setting of "99" produces a delay of approximately 2.66 seconds before the LFO begins operation (5.3 seconds before it reaches maximum depth).

EFFECT DATA COPY

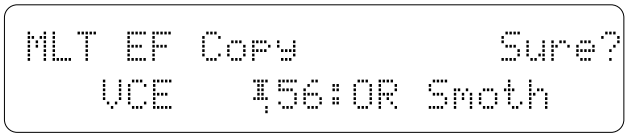
[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER] -> [STORE/COPY]

This function facilitates multi editing by allowing the effect parameters from any other performance combination, voice, or multi setup to be copied to the current multi setup. You can copy an effect setup that is close to the type you want, then edit it to produce the required sound.



Move the cursor to the left parameter (press the [◁] key) and use the [-1/NO] and [+1/YES] keys to select the mode containing the desired voice and effect data ("PFM" = PERFORMANCE, "VCE" = VOICE, and "MLT" = MULTI). Move the cursor to the right parameter (press the [▷] key) and, if a voice or performance combination is selected as the source, use the [MEMORY] key to select the memory area from which the source voice or performance combination is to be selected. Use the [-1/NO] and [+1/YES] keys to select the source voice or performance number. The [-1/NO] and [+1/YES] keys can be used to select the source multi number (0 … 15) when "MLT" is selected.

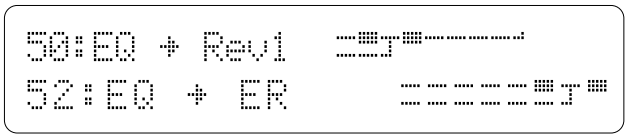
Once the source performance combination, voice, or multi setup has been selected, press the [ENTER] key. "Sure?" will appear on the display.



Press the [+1/YES] key to copy the effect data, or press [-1/NO] to cancel the copy operation. Once the copy operation has finished, "Completed!" will appear on the display briefly, then the display will return to the effect edit mode.

EFFECT SIGNAL FLOW DISPLAY

[PLAY/MODE] -> MLT PLAY -> [EDIT/COMPARE] -> [PAGE] -> 4: Effect -> [ENTER]
-> [UTILITY/SELECT] + [EDIT/COMPARE]



This function provides a graphic indication of the current effect system configuration while in the effect edit mode.

In the effect edit mode press the [EDIT/COMPARE] key while holding the [UTILITY/SELECT] to see the overall effect system signal flow.

Refer the to section beginning on page 251 for details on the effect system.

UTILITY MODE
WAVE EDIT MODE

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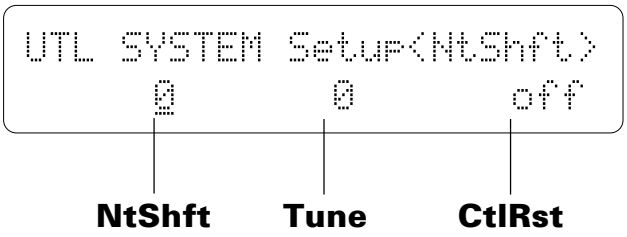
5: Wave (Only available when SYEMB06 installed)
- Waveform Number select 237
  - Wave Edit Mode 238
    - 1: Waveform
      - 1-1: Assign 239
      - 1-2: Enable 240
      - 1-3: Name 241
    - 2: Sample 242
    - 3: Initialize 245
    - 4: Sample Dump
      - 4-1: Sample Receive 246
      - 4-2: Sample Transmit .. 247
    - 5: Card Load 248

1-1: SETUP

[UTILITY/SELECT] -> 1: System -> [ENTER] -> [PAGE] -> 1-1: Setup -> [ENTER]

This screen includes several parameters that affect overall operation of the TG500.



NtShft (Note shift)

Range: -63 ... +63

Shifts the overall pitch of the TG500 up or down in semitone steps.

A setting of "-12," for example, shifts the pitch down by one octave; a setting of "+4" shifts the pitch up by a major third.

Tune (Master tuning)

Range: -63 ... +63

Fine tunes the overall pitch of the TG500 in approximately 1.17-cent steps (a "cent" is 1/100th of a semitone).

The maximum minus setting of "-63" produces a downward pitch shift of almost three-quarters of a semitone, and the maximum plus setting of "+63" produces an upward pitch shift of the same amount. A setting of "0" produces no pitch change.

CtlRst (Control reset)

Range: on, off

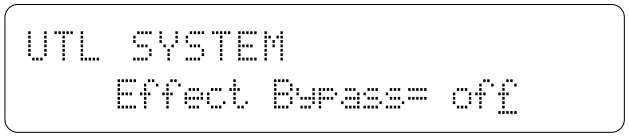
Determines whether controller settings are held ("off") or reset ("on") when voices or multi-play setups are switched.

If this function is set to "off," then if, for example, you have applied modulation to a voice via a modulation wheel and switch to a new voice while maintaining the same modulation wheel position, then the same amount of modulation will be applied to the new voice. If "on" is selected, than all controller values are reset when a new voice, performance, or multi-play setup is selected.

1-2: EFFECT BYPASS

[UTILITY/SELECT] -> 1: System -> [ENTER] -> [PAGE] -> 1-2: Effect Bypass -> [ENTER]

This parameter turns the entire TG500 effect system on or off.



Effect Bypass

Range: off, on

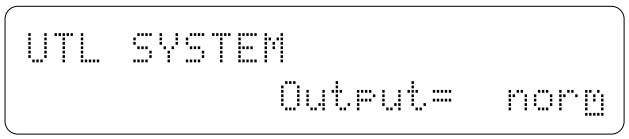
When effect bypass is turned “off” the TG500 effect system is active and the effect sound will be delivered via the TG500 outputs. When turned “on,” the internal effect system is completely bypassed and only the direct (dry) sound of the tone generator will be delivered via the outputs.

Use the “on” setting if you plan to use external signal processing equipment with the TG500.

1-3: OUTPUT

[UTILITY/SELECT] -> 1: System -> [ENTER] -> [PAGE] -> 1-3: Output -> [ENTER]

This parameter determines which of the TG500's outputs are active.



Output

Range: norm, indiv

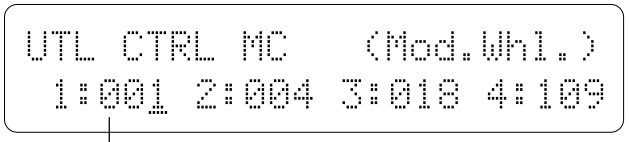
When set to "norm," the stereo outputs (OUTPUT L and R) and individual outputs 1 and 2 are active. In this case individual outputs 3 and 4 can not be used.

When "indiv" is selected individual outputs 3 and 4 can also be used. In this case voices assigned to individual outputs 1, 2, 3 and 4 are not delivered via the stereo output and phone jacks. The sound of the effects delivered via the stereo outputs may vary slightly when "indiv" is selected.

2-1: MIDI CONTROL

[UTILITY/SELECT] -> 2: Controller -> [ENTER] -> [PAGE] -> 2-1: MIDI Control -> [ENTER]

The four parameters provided in this screen allow any MIDI control device numbers to be assigned to TG500 controllers 1, 2, 3, and 4 (MC1, MC2, MC3, and MC4).



Controllers 1 ... 4

MIDI Controllers 1 ... 4

Range: 000 ... 119

Position the cursor at the controller number you want to assign (TG500 controller numbers appear to the left of the colon in each parameter), then use the [-1/NO] and [+1/YES] keys to assign the desired MIDI control change number. Some controller numbers are assigned to specific control devices (see list below), while others have no specific controller assignment. If a control device is assigned to the selected MIDI control number, an abbreviation of the device name appears in parentheses in the upper right corner of the display.

For example, set the controller 1 parameter to “001” if you want the modulation wheel on the keyboard connected to the TG500 to function as Controller 1 (“MC1”).

No.	Control Device	Abbreviation
000	Bank Select	(Bank Sel)
001	Modulation wheel	(Mod.Whl.)
002	Breath controller	(Breath C)
004	Foot controller	(Foot Cnt)
005	Portamento time	(Porta.Tm)
006	Data entry control	(Data Ent)
007	Main volume control	(Main Vol)
008	Balance control	(Balance)
010	Pan pot	(Panpot)
011	Expression pedal	(Express.)
032	Bank Select	(Bank Sel)
064	Hold 1 switch	(Hold 1)
065	Portamento switch	(Porta.Sw)
066	Sostenuto switch	(Sostenut)
067	Soft switch	(Soft)
069	Hold 2 switch	(Hold 2)
091	Effect depth	(Effect D)
092	Tremolo depth	(TremoloD)
093	Chorus depth	(Chorus D)
094	Celeste depth	(CelesteD)
095	Phaser depth	(Phaser D)
096	Increment switch	(Inc.)
097	Decrement switch	(Dec.)
098	Non-registered parameter	(NRPN LSB)
099	Non-registered number	(NRPN MSB)
100	Registered parameter	(RPN LSB)
101	Registered number	(RPN MSB)

2-2: VOLUME CONTROL

[UTILITY/SELECT] -> 2: Controller -> [ENTER] -> [PAGE] -> 2-2: Volume Control -> [ENTER]

This parameters specifies which MIDI control device will control the TG500's overall volume level.

Volume

Range: 000 ... 119

The normal setting for this parameter is "007" (this is the MIDI "main volume control" device assignment). Any other controller number can be assigned, as required.

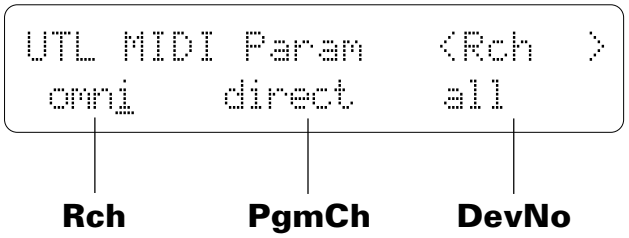
Some MIDI control change numbers are assigned to specific control devices (see list below), while others have no specific controller assignment. If a control device is assigned to the selected controller number, an abbreviation of the device name appears in parentheses in upper right corner of the display.

No.	Control Device	Abbreviation
000	Bank Select	(Bank Sel)
001	Modulation wheel	(Mod.Whl.)
002	Breath controller	(Breath C)
004	Foot controller	(Foot Cnt)
005	Portamento time	(Porta.Tm)
006	Data entry control	(Data Ent)
007	Main volume control	(Main Vol)
008	Balance control	(Balance)
010	Pan pot	(Panpot)
011	Expression pedal	(Express.)
032	Bank Select	(Bank Sel)
064	Hold 1 switch	(Hold 1)
065	Portamento switch	(Porta.Sw)
066	Sostenuto switch	(Sostenut)
067	Soft switch	(Soft)
069	Hold 2 switch	(Hold 2)
091	Effect depth	(Effect D)
092	Tremolo depth	(TremoloD)
093	Chorus depth	(Chorus D)
094	Celeste depth	(CelesteD)
095	Phaser depth	(Phaser D)
096	Increment switch	(Inc.)
097	Decrement switch	(Dec.)
098	Non-registered parameter	(NRPN LSB)
099	Non-registered number	(NRPN MSB)
100	Registered parameter	(RPN LSB)
101	Registered number	(RPN MSB)

3-1: PARAMETER

[UTILITY/SELECT] -> 3: MIDI -> [ENTER] -> [PAGE] -> 3-1: Parameter -> [ENTER]

The MIDI channel parameters provided here are essential to ensure proper communication between the TG500 and other MIDI instruments.



Rch (Receive channel)

Range: 1 ... 16, omni

Sets the MIDI receive channel to any channel between 1 and 16, or the "omni" mode for reception on all channels. Make sure that the TG500 MIDI receive channel is either set to the channel that your external controller is transmitting on, or the omni mode.

PgmCh (Program change type)

Range: off, normal, direct, table

Determines how the TG500 will respond to MIDI program change messages for remote voice/performance selection.

The "off" setting turns MIDI program change reception off, so operating the voice selectors on an external controller will not cause the corresponding TG500 voice or performance setup to be selected.

In the "normal" mode, program change numbers 1 through 64 select TG500 voices or performance combinations 0 through 63, depending on the current mode.

The "direct" mode allows, in addition to the voice and performance selection of the "normal" mode, selection of the various TG500 modes by reception of the MIDI program bank change messages listed below.

	Control change #0 Data	Control change #32 Data	Play mode	Memory
	000	000	Voice	Internal 1
	000	001	Voice	Card 1
	000	002	Voice	Preset 1
	000	003	Voice	Internal 2
	000	004	Voice	Card 2
	000	005	Voice	Preset 2
	000	007	Voice	Card 3
	000	008	Voice	Preset 3
	000	010	Voice	Card 4
	000	011	Voice	Preset 4
*	000	032	Multi/Voice	Internal 1
	000	033	Multi/Voice	Card 1
	000	034	Multi/Voice	Preset 1
	000	035	Multi/Voice	Internal 2
	000	036	Multi/Voice	Card 2
	000	037	Multi/Voice	Preset 2
	000	039	Multi/Voice	Card 3
	000	040	Multi/Voice	Preset 3
	000	042	Multi/Voice	Card 4
	000	043	Multi/Voice	Preset 4
	000	064	Performance	Internal 1
	000	065	Performance	Card 1
	000	066	Performance	Preset 1
	000	068	Performance	Card 2
	000	069	Performance	Preset 2
*	000	080	Multi/Performance	Internal 1
	000	081	Multi/Performance	Card 1
	000	082	Multi/Performance	Preset 1
	000	084	Multi/Performance	Card 2
	000	085	Multi/Performance	Preset 2
	000	086	Multi	Internal

*: Control change message #32 with data values of 32 ~ 43, or 80 ~ 85 will only be responded to if the TG500 is in multi play mode. This message will switch the voice or performance memory of the receiving channel.

When “table” is selected, transmission conforms to the program change table (see “3-4: PROGRAM CHANGE TABLE,” below), while reception is the same as in the “direct” mode, above.

DevNo (Device number)

Range: off, 1 ... 16, all

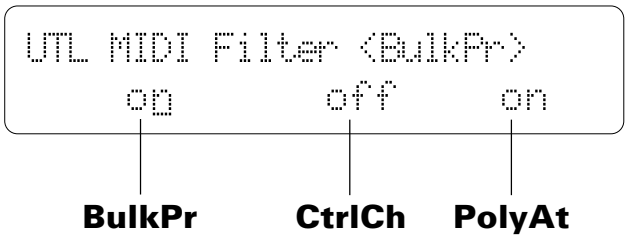
Sets the TG500 MIDI device number — i.e. the MIDI channel on which all system exclusive data will be received and transmitted.

The device number is important for transfer of voice data and other system exclusive data between the TG500 and other Yamaha MIDI devices — e.g. another TG500 or SY-series synthesizer, a Yamaha MIDI sequence recorder such as the QX3, etc. Bulk voice data, for example, is transmitted and received on the channel specified by the device number. Make sure that the TG500 device number is matched to that of other devices in your system with which such data transfers will take place.

3-2: FILTER

[UTILITY/SELECT] -> 3: MIDI -> [ENTER] -> [PAGE] -> 3-2: Filter -> [ENTER]

More MIDI parameters that determine how the TG500 responds to external MIDI control.



BulkPr (Bulk receive protect)

Range: off, on

Enables or disables bulk data reception. When this function is set to "off," the TG500 will automatically receive a bulk dump of voice, multi-play or system data from an external device connected to its MIDI IN terminal when the appropriate bulk dump data is received (assuming that the TG500 and transmitting device are both set to the same device number).

Turn bulk protect "on" to disable bulk dump reception (this prevents accidental disruption of the TG500 during use).

CtrlCh (Control change filter)

Range: off, on

Enables or disables control change data reception. When this parameter is turned "on" the TG500 will not respond to MIDI control change data received from the controlling device.

PolyAt (Polyphonic aftertouch filter)

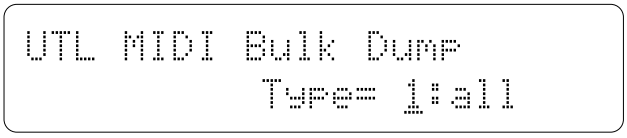
Range: off, on

Enables or disables polyphonic aftertouch data reception. When this parameter is turned "on" the TG500 will not respond to MIDI polyphonic aftertouch data received from the controlling device.

3-3: BULK DUMP

[UTILITY/SELECT] -> 3: MIDI -> [ENTER] -> [PAGE] -> 3-3: Bulk Dump -> [ENTER]

Initiates MIDI bulk transmission of the selected voice, performance, multi-play, and/or system data.



Type

Range: all, 1 PFM, 1VCE, 1 MLT

The various data types are as follows:

1: all	All internal data.
2: 1 PFM	The currently selected performance combination.
3: 1 VCE	The currently selected voice.
4: 1 MLT	The currently selected multi setup.

Press [ENTER] to begin the bulk dump procedure. The following confirmation display will appear:

Press [+1/YES] to confirm that you want to go ahead with the bulk dump operation, or press [-1/NO] to cancel.

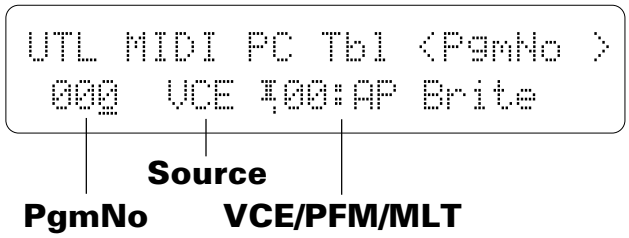
"Executing!" appears on the display while the data is being transmitted (no other operations can be performed during transmission). When the data has been transmitted, "Completed!" will appear briefly on the display.

This function is useful for transferring synthesizer, and/or system data from one TG500 to another. If the MIDI OUT of the transmitting TG500 is connected to the MIDI IN of the receiving TG500 via a MIDI cable, the receiving unit will automatically receive and load the data as long as its BULK RECEIVE PROTECT (page 230) function is turned "off" and it is set to the same device number as the transmitting TG500. Another possibility is to transfer the data to an external MIDI bulk data storage device for long-term storage.

3-4: PROGRAM CHANGE TABLE

[UTILITY/SELECT] -> 3: MIDI -> [ENTER] -> [PAGE] -> 3-4: PC Table -> [ENTER]

These parameters determine which voice, performance combination, or multi setup will be selected when a specific MIDI program change number is received.



PgmNo (Program change number)

Range: 00 ... 127

Sets the MIDI program change number that will select the voice, performance combination, or multi setup specified by the "Source" and "VCE/PFM/MLT" parameters described below.

Source

Range: PFM, VCE, MLT

Specifies a performance combination (PFM), voice (VCE), or multi setup (MLT) to be selected when the MIDI program change number specified by the "PgmNo" parameter, above, is received.

VCE/PFM/MLT (Voice, performance, or multi number)

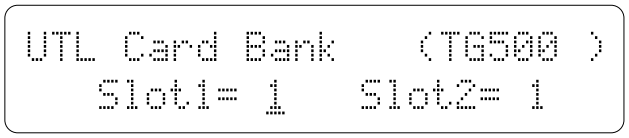
Range: 00 ... 63 (VCE/PFM), 0 ... 15 (MLT)

Specifies the number of the performance, voice, or multi setup to be selected when the program change number specified by the "PgmNo" parameters, described above, is received.

4-1: BANK

[UTILITY/SELECT] -> 4: Card -> [ENTER] -> [PAGE] -> 4-1: Bank -> [ENTER]

This function is used to select bank 1 or 2 of Yamaha MCD64 memory cards plugged into the DATA 1 and DATA 2 slots.



Slot1, Slot2 (Slot 1 and slot 2 card banks)

Range: 1, 2

Each MCD64 memory card has two separate banks which are selected for access via these parameters. The “Slot1” parameter selects bank 1 or 2 of the card plugged into the DATA 1 slot, and the “Slot2” parameter selects bank 1 or 2 of the card plugged into the DATA 2 slot.

The format of the card plugged into the selected slot is indicated in parentheses in the upper right corner of the display. “TG500” indicates that the card has been properly formatted for use with the TG500. “------” indicates that either no card is inserted or the card is not formatted for use with the TG500. New MCD64 memory cards, or cards that have been formatted for use with other equipment, must first be formatted by using the “4-4: FORMAT” function (page 236) before they can be used with the TG500.

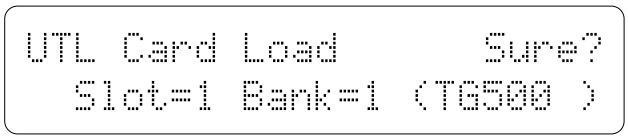
4-2: LOAD

[UTILITY/SELECT] -> 4: Card -> [ENTER] -> [PAGE] -> 4-2: Load -> [ENTER]

Loads all internal voices and performance combinations from a Yamaha MCD64 memory card plugged into the DATA 1 or DATA 2 card slot.

Position the cursor at the “Slot=” parameter and select “1” if you want to load from a card plugged into the DATA 1 slot, or “2” to load from the DATA 2 slot. Next position the cursor at the “Bank=” parameter and select “1” or “2”, depending on the bank you want to load from. Before actually executing the load operation, check the card status as shown in parantheses in the lower right corner of the display. If the display shows “(TG500)”, a properly formatted MCD64 is installed and the load operation can be executed. If the wrong type of card (wrong format) or no card is installed in the selected slot, however, the card status display will show “(------)” and no load operation is possible. You will have to use the card format job (4-4: FORMAT, page 236) to format a new memory card or one that has been formatted for use with a different instrument before the card can be used with the TG500.

Press [ENTER] to begin the card load procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the card load operation, or press [-1/NO] to cancel.

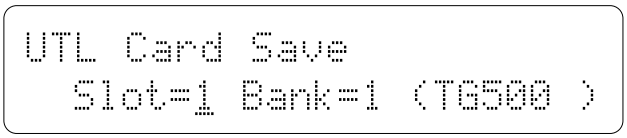
When the data has been loaded, “Completed!” will appear briefly on the display.

SY85 Compatibility: Cards created by the Yamaha SY85 Music Synthesizer can be used by the TG500, and vice versa. Since the SY85 handles MCD64 memory cards as a single bank of 64 kilobytes while the TG500 handles the same type of card as two banks of the 32 kilobytes each, however, some limitiations arise when using performance combinations. When an SY85 card is used with the TG500, only voices from voice banks I and II can be used with performance combinations in performance bank I, and only voices from voice banks III and IV can be used with performance combinations in performance bank II. If a performance bank I voice uses a voice in voice bank III or IV, the same-numbered voice from voice bank I or II is used, respectively. The opposite is also true: if a performance bank II voice uses a voice in voice bank I or II, the same-numbered voice from voice bank III or IV is used, respectively.

4-3: SAVE

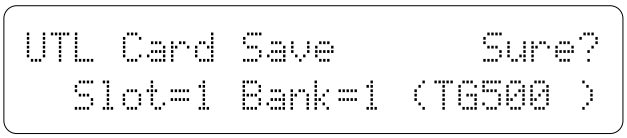
[UTILITY/SELECT] -> 4: Card -> [ENTER] -> [PAGE] -> 4-3: Save -> [ENTER]

Saves all internal voices and performance combinations to a Yamaha MCD64 memory card plugged into to the DATA 1 or DATA 2 card slot.



Position the cursor at the “Slot=” parameter and select “1” if you want to save to a card plugged into the DATA 1 slot, or “2” to save to the DATA 2 slot. Next position the cursor at the “Bank=” parameter and select “1” or “2”, depending on the bank you want to save to. Before actually executing the save operation, check the card status as shown in parantheses in the lower right corner of the display. If the display shows “(TG500)”, a properly formatted MCD64 is installed and the save operation can be executed. If the wrong type of card (wrong format) or no card is installed in the selected slot, however, the card status display will show “(------)” and no save operation is possible. You will have to use the card format job (4-4: FORMAT, page 236) to format a new memory card or one that has been formatted for use with a different instrument before the card can be used with the TG500. Also make sure that the card write protect switch (see MCD64 Memory Card operation manual) is set to the “OFF” position before attempting to save data to the card.

Press [ENTER] to begin the card save procedure. The following confirmation display will appear:



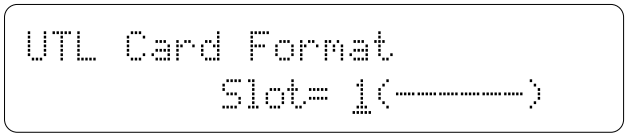
Press [+1/YES] to confirm that you want to go ahead with the card save operation, or press [-1/NO] to cancel.

When the data has been saved, “Completed!” will appear briefly on the display.

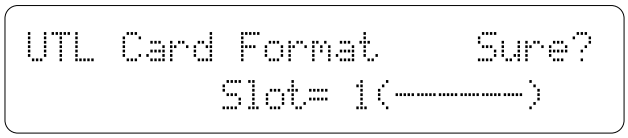
4-4: FORMAT

[UTILITY/SELECT] -> 4: Card -> [ENTER] -> [PAGE] -> 4-4: Format -> [ENTER]

New memory cards, or cards that have been formatted for use with a different instrument or device, will have to be formatted specifically for use with the TG500. Note that this operation will erase any existing data on the card.



Position the cursor at the “Slot=” parameter and select “1” if you want to format a card plugged into the DATA 1 slot, or “2” to format the DATA 2 slot. After plugging the card to be formatted into the appropriate card slot, press [ENTER] to begin the card format procedure. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the card format operation, or press [-1/NO] to cancel.

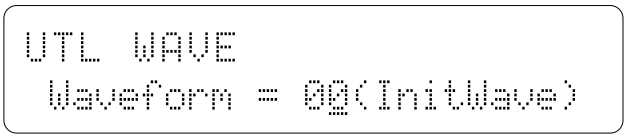
When the card has been formatted, “Completed!” will appear briefly on the display.

5: WAVE

[UTILITY/SELECT] -> 5: Wave -> [ENTER]

This function only appears if one or two SYEMB06 Memory Expansion Boards are installed in the TG500 expansion memory slot (see page 282 for details on memory expansion).

Specifies the number of the waveform to be edited using the WAVE EDIT functions (accessed by pressing the [EDIT/COMPARE] key from this screen), and the number of the waveform to which a sample loaded from card will be assigned.



Waveform

Range: 00 ... 63

The name of the selected waveform appears between parentheses on the upper display line.

THE WAVE EDIT MODE

Unlike the other TG500 edit modes, the WAVE mode is not directly accessed from a play mode. To access the WAVE mode, press the [EDIT/COMPARE] key while utility mode “UTL WAVE” screen (“5: Wave”) is showing.

The wave edit mode can only be accessed if one or two SYEMB06 Memory Expansion Boards are installed in the TG500 expansion memory slot (see page 282 for details on memory expansion).

1-1: ASSIGN

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 1: Waveform -> [ENTER] -> [PAGE] -> 1-1: Assign -> [ENTER]

This function assigns the selected sample(s) to the currently selected "waveform" (the waveform is selected via the utility mode "Waveform" parameter (page 237).

The "2: Sample" functions, described below, allow each sample assigned to a waveform to be mapped to a specific range of the keyboard, as well as allowing the volume, pitch, and loop characteristics of each sample to be set individually.

From, To (Sample number range)

Range: 00 ... 63

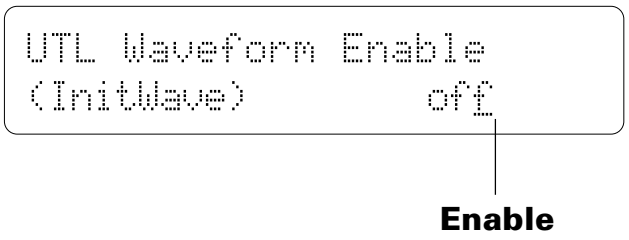
The "From" and "To" parameters specify the range of samples to be assigned to the current waveform. "From" specifies the first sample and "To" specifies the last sample in the range to be assigned. If both the "From" and "To" parameters are set to the same sample number, then only that sample is assigned to the waveform. If, for example, "From" is set to "2" and "To" is set to "5", then sample numbers 2, 3, 4, and 5 are assigned to the waveform.

Up to 64 samples can be assigned to all used waveforms. For example, if 4 waveforms are in use, a total of 64 samples can be assigned for all 4 waveforms. Sample numbers must be assigned to the active waveforms in sequence. For example, if samples 0 and 1 are assigned to waveform 1, and samples 2 and 3 are assigned to waveform 3, then no samples can be assigned to waveform 2. If, of the other hand, samples 0 and 1 are assigned to waveform 1, and samples 3 and 4 are assigned to waveform 3, then only sample 2 can be assigned to waveform 2.

1-2: ENABLE

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 1: Waveform -> [ENTER] -> [PAGE] -> 1-2: Enable -> [ENTER]

Turns waveform assignment on or off.



Enable

Range: off, on

Set to “on” to turn wave assignment on. If wave assignment is turned “off”, “---” appears in place of the “From” and “To” parameters in the preceding screen. This parameter can only be turned “on” if an assignable sample is available.

1-3: NAME

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 1: Wavefrom -> [ENTER] -> [PAGE]
-> 1-3: Name -> [ENTER]

This function can be used to assign a name of up to 8 characters to the current sample.

Name

Range: See character list, below

Use the [◁] key to move the character cursor to the left, and the [▷] key to move the cursor to the right. Use the [-1/NO] and [+1/YES] keys to select a character for the current cursor position. The available characters are listed below.

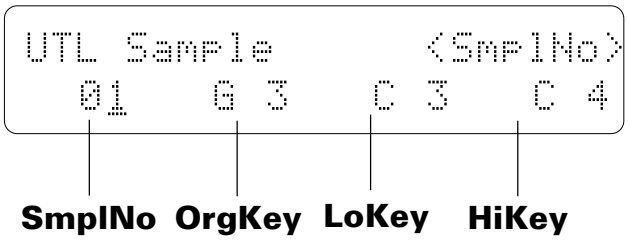
(Space)!"#$%&'()*+,-./0123456789:
;<=>?@ABCDEFGHIJKLMNOPQRSTUVWX
YZ[¥]^_`abcdefghijklmnopqrstuv
wxyz{|}→←

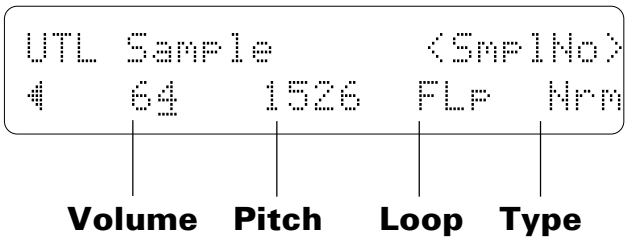
SAMPLE

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 2: Sample -> [ENTER]

The parameters in the first screen here are used to "map" the samples assigned to the waveform to specific regions of the keyboard. If more than one sample is assigned, start by selecting the sample you want to map via the "SmplNo" parameter, then use the "OrgKey", "LoKey", and "HiKey" parameters to map the specified sample.

The parameters in the second screen allow the volume, pitch, and loop characteristics of each sample assigned to the waveform to be set individually.





SmplNo (Sample number)

Range: 00 ... 63

Selects the sample to be mapped using the parameters described below. Only numbers of samples that are actually available can be selected.

OrgKey (Original key)

Range: C-2 ... G8

This parameter specifies the "original key" to which the pitch of the raw waveform will be assigned.

If, for example, the raw sample has a pitch of C3, then setting this parameter to "C3" will cause the right note to sound when the C3 key is played. If, however, the same sample is mapped to C4, then playing the C4 key will produce a pitch of C3 while playing the C3 will produce a pitch of C2.

LoKey/HiKey (Low and high key limits)

Range: C-2 ... G8

These parameters specify the lowest and highest notes on the keyboard on which the selected sample will sound.

If "Low" is set to "C1" and "High" is set to "C3", for example, then the current sample will sound only when keys between (and including) C1 and C3 are played.

Volume

Range: 0 ... 127

Sets the volume of the selected sample. A setting of "0" produces minimum volume (almost no sound), and a setting of "127" produces maximum volume.

Use this parameter to balance the levels of the different samples used in a waveform.

Pitch

Range: -5376 ... +5334

Fine-tunes the pitch of the selected range over a wide range. Minus (–) settings decrease the pitch of the sample while plus (+) settings raise the pitch of the sample. Each increment corresponds to a pitch change of approximately 1.7 cents (a "cent" is one-hundredth of a semitone).

Loop

Range: FOn, FLp, BOn, BLp

Selects the type of loop to be used for playback of the selected sample. The settings are:

FOn = Forward one-shot. The sample is played in the normal forward direction and is not looped (i.e. the sound stops a the end of the sample).

FLp = Forward loop. The sample is played in the normal forward direction and is looped (repeated) as long as the key is held.

BOn = Backward one-shot. The sample is played backward and is not looped (i.e. the sound stops at the beginning of the sample).

BLp = Backward loop. The sample is played backward and is looped (repeated) as long as the key is held.

Type (Loop type)

Range: Nrm, Alt

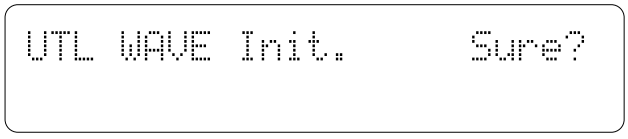
This parameter is only available when either the “FLp” or “BLp” loop type is selected (see “Loop”, above). When set to “Nrm” (normal), the sample is repeatedly looped in either the forward or reverse direction, as specified by the Loop parameter. If “Alt” (alternate) is selected, the sample is alternately played forward and backward.

INITIALIZE

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 3: Initialize -> [ENTER]

This function erases and initializes all wave memory, the specified type of wave memory, or a single specified sample.

Press [ENTER] to begin the wave initialize procedure. The following confirmation display will appear:



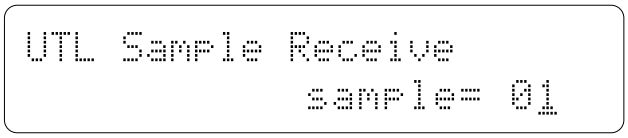
Press [+1/YES] to confirm that you want to go ahead with the initialize operation, or press [-1/NO] to cancel.

When the specified wave memory has been initialized, “Completed!” will appear briefly on the display.

4-1: SAMPLE RECEIVE

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 4: Sample Dump -> [ENTER] -> [PAGE] -> 4-1: Sample Receive -> [ENTER]

This function initiates reception of MIDI Sample Dump data from an external MIDI device. Both the MIDI IN and OUT terminals must be connected to the external MIDI device, since the TG500 transmits a sample dump request message to initiate transmission by the external device.

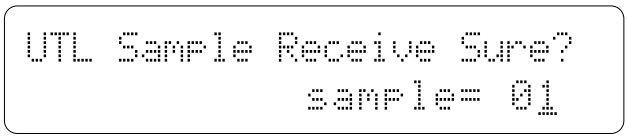


sample (Sample number)

Range: 00 ... 99

This parameter specifies the number of the sample to be received from the transmitting device.

When ready to receive the data, press the [ENTER] key. The following comfirmation display will appear:



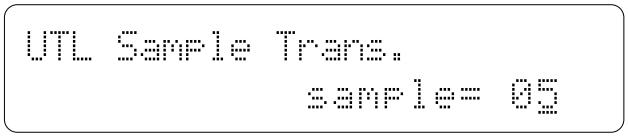
Press [+1/YES] to confirm that you want to go ahead with the reception, or press [–1/NO] to cancel.

This initiates transmission of a sample dump request message, then the TG500 waits for the sample dump data. The received data is appended to the sample data previously residing in the TG500 memory.

4-2: SAMPLE TRANSMIT

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 4: Sample Dump -> [ENTER] -> [PAGE] -> 4-2: Sample Transmit -> [ENTER]

This function initiates transmission of MIDI Sample Dump data to an external MIDI device.

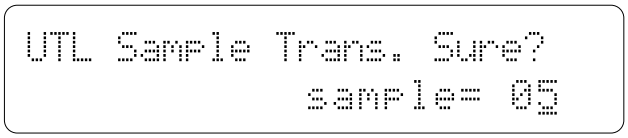


sample (Sample number)

Range: 00 ... 63

This parameter specifies the number of the sample to be transmitted ("--" appears on the display if no samples are available).

When ready to transmit the data, press the [ENTER] key. The following confirmation display will appear:



Press [+1/YES] to confirm that you want to go ahead with the transmission, or press [-1/NO] to cancel.

"Executing" appears while the data is being transmitted.

The [EXIT] key can be used to cancel transmition at any time.

A key symbol will appear next to the sample number if the sample is a protected sample that has been loaded from a waveform card. Protected samples cannot be transmitted.

CARD LOAD

[UTILITY/SELECT] -> 5: Wave -> [ENTER] -> [EDIT/COMPARE] -> 5: Card Load -> [ENTER]

Loads all samples from a pre-programmed card plugged into the WAVEFORM 2 card slot.

Plug the memory card containing the waveform data you want to load into the WAVEFORM 2 slot, then press [ENTER] to begin the card load procedure.

Press [+1/YES] to confirm that you want to go ahead with the card load operation, or press [-1/NO] to cancel.

When the data has been loaded , “Completed!” will appear briefly on the display.

Appendix

■ Effects 251

■ Installation of the SYEMB06 Expansion Memory Board 282

■ Initial data 283

■ Specifications 311

■ Error messages 312

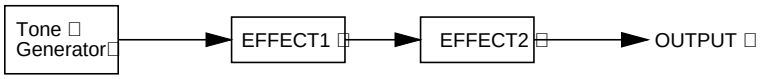
■ Trouble shooting 315

■ Index 317

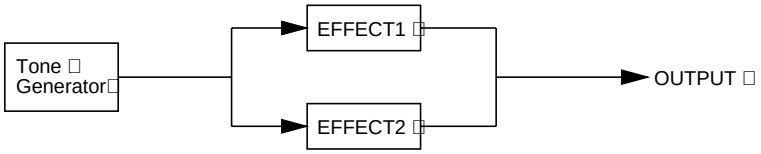
EFFECTS

The TG500 features a sophisticated effect system that affords extraordinary sound-shaping potential. It includes two separate effect processors — referred to a EFFECT 1 and EFFECT 2 in this manual — that can be connected either in series or in parallel via the effect "Mode" parameter (page 150 for voice effects, page 178 for drum voice effects, page 76 for performance effects, page 204 for multi effects). In simplified block diagram form the serial and parallel modes look like this:

SERIAL MODE



PARALLEL MODE

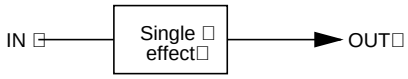


The TG500 has 90 different effects including reverb, early reflections, delay, pitch change, modulation and more. Any of these can be assigned to the EFFECT 1 and EFFECT 2 processors via the "EF1 Type" and "EF2 Type" parameters (page 151 for voice effects, page 179 for drum voice effects, page 77 for performance effects, page 205 for multi effects). Each effect has up to 8 different parameters that can be edited via the PARAMETER 1 and PARAMETER 2 screens (page 156 for voice effects, page 186 for drum voice effects, page 84 for performance effects, page 212 for song mode effects). A complete list of the effects and their parameters is provided on page 274.

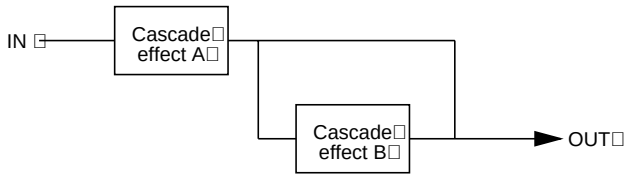
The 90 effects are further divided into three types:

Effects 00 - 30	"Single"
Effects 31 - 60	"Cascade"
Effects 61 - 90	"Dual"

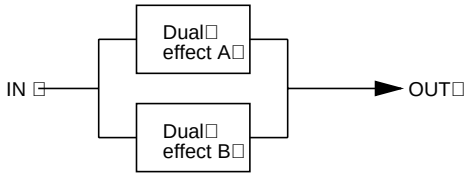
The "Single" effects are, as the name applies, single effects.



The “Cascade” effects actually include two effects connected in a cascade configuration. Effect number 33 (Flg → Rev), for example, includes cascaded flanger and reverb.



The “Dual” effects include two effects connected in parallel.



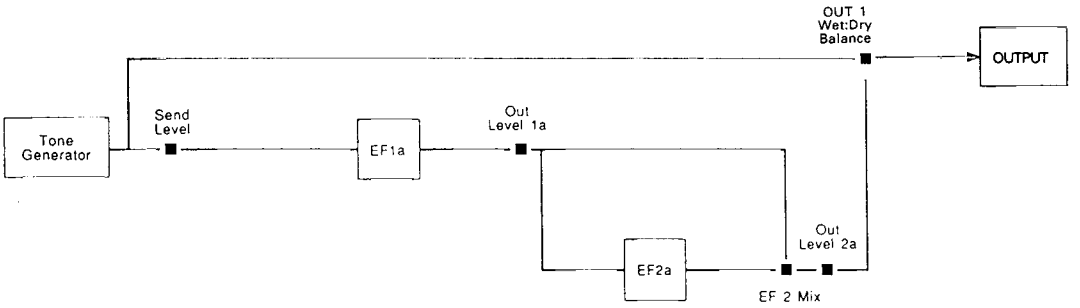
Clearly, the possibilities for combining effect modes with effect types allows a large variety of effect system configurations. Further versatility is provided by a range of parameters that allow the effect signals to be combined and mixed in a number of ways. The effect signal flow diagrams provided in the following section should help you understand the effect signal flow and how the various effect parameter function. Since the signal flow is somewhat different in the normal voice mode and the other modes (drum voice, performance, and song), different sets of flow diagrams are provided.

■ Effect Signal Flow Diagrams — Voice Mode

The following diagrams illustrate effect signal flow with different effect mode and effect type combinations in the normal voice mode. In the diagrams a diamond (◆) indicates an on/off switch parameter, and a block (■) indicates a continuously variable level,or mix parameter. Although abbreviated in the diagrams, the direct and effect output signal paths are stereo.

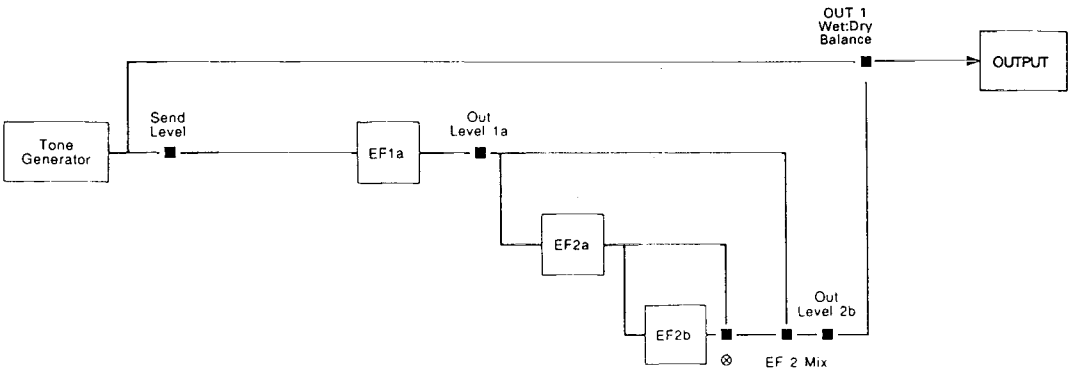
● EFFECT MODE = off.

● EFFECT MODE = serial. EFFECT 1 = single. EFFECT 2 = single.

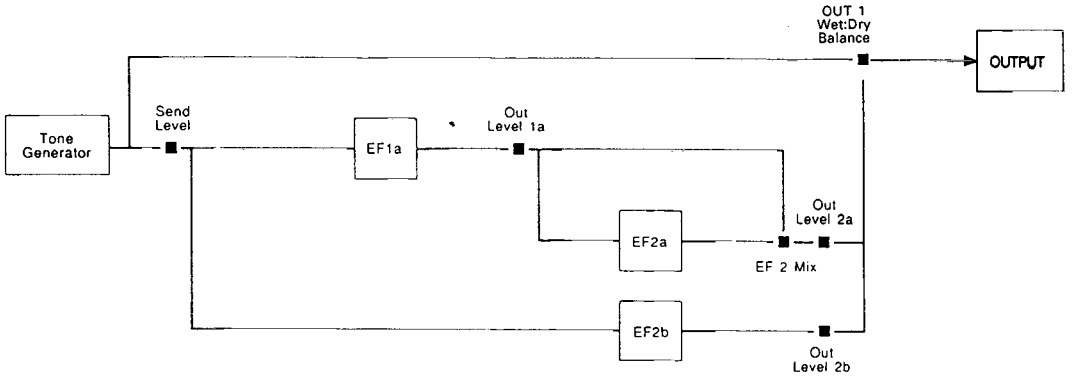


● EFFECT MODE = serial. EFFECT 1 = single. EFFECT 2 = cascade.

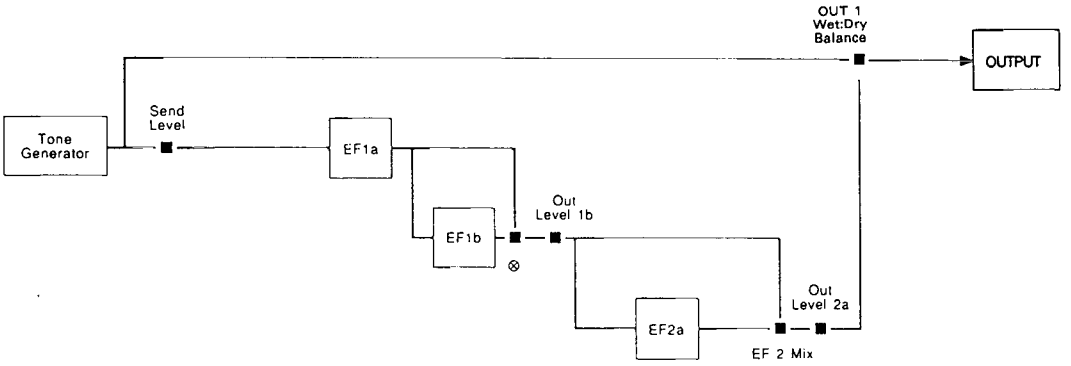
(⊗ = effect parameter number 8)



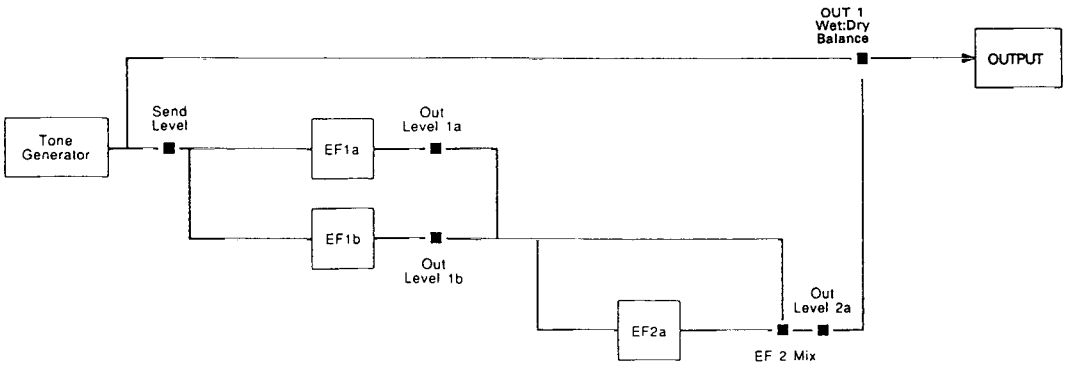
● **EFFECT MODE = serial. EFFECT 1 = single. EFFECT 2 = dual.**



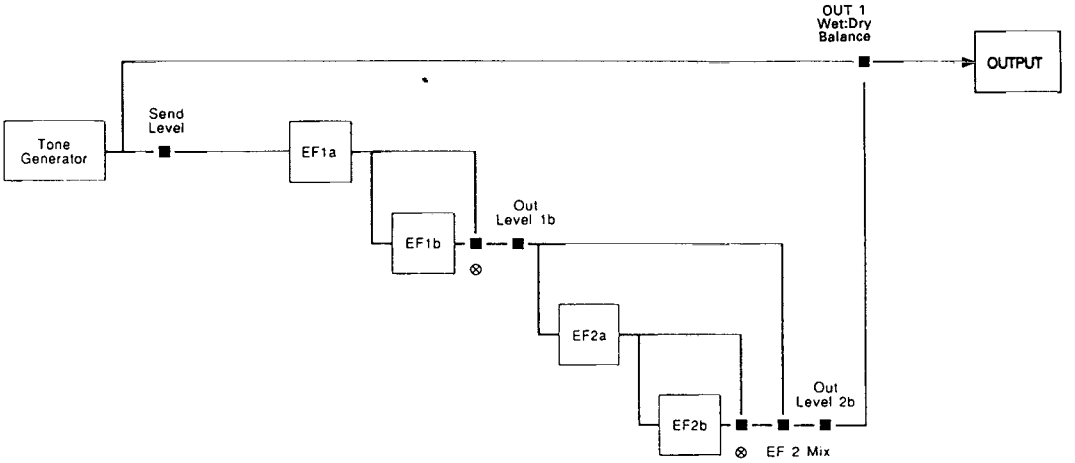
● **EFFECT MODE = serial. EFFECT 1 = cascade. EFFECT 2 = single.**
(⊗ = effect parameter number 8)



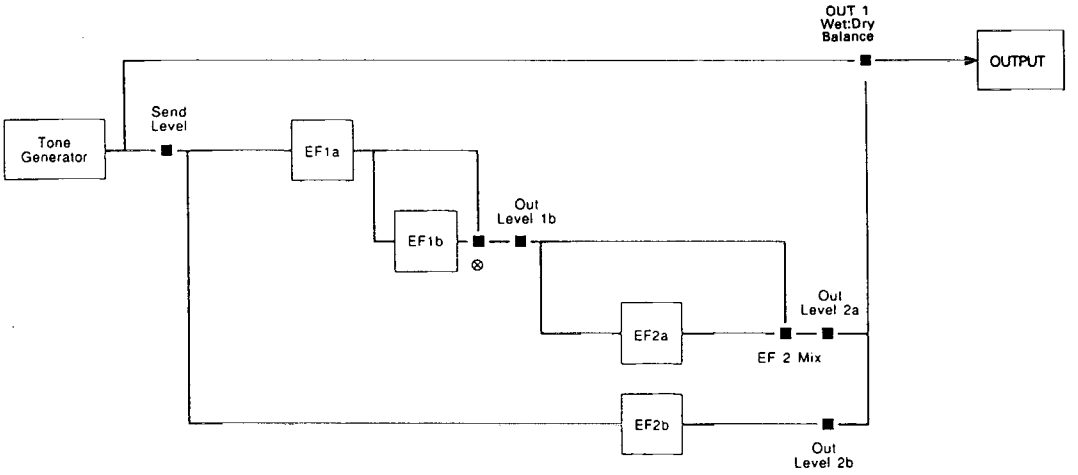
● **EFFECT MODE = serial. EFFECT 1 = dual. EFFECT 2 = single.**



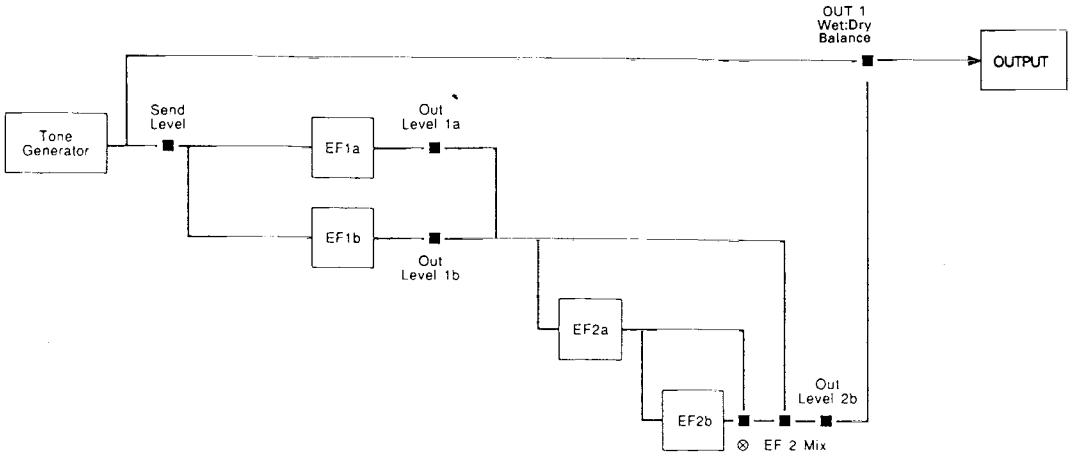
● **EFFECT MODE = serial. EFFECT 1 = cascade. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



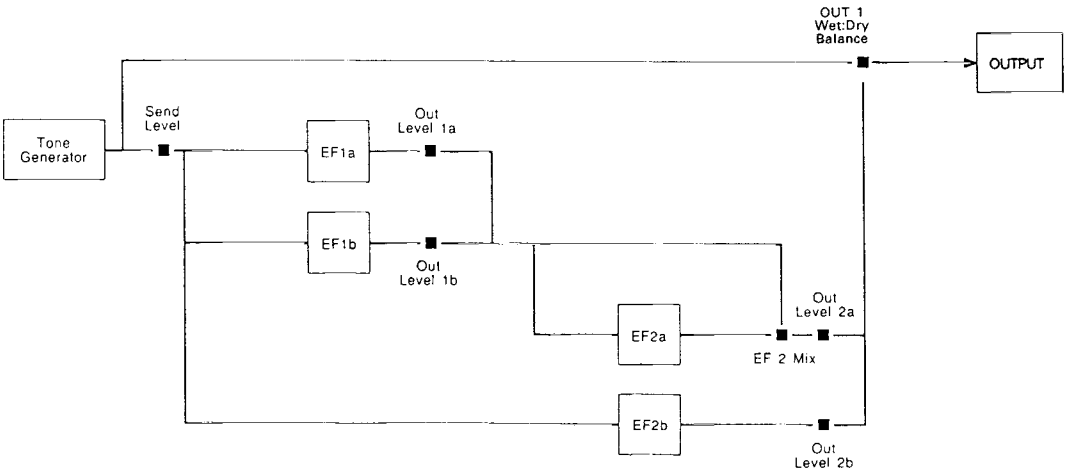
● **EFFECT MODE = serial. EFFECT 1 = cascade. EFFECT 2 = dual.**
(⊗ = effect parameter number 8)



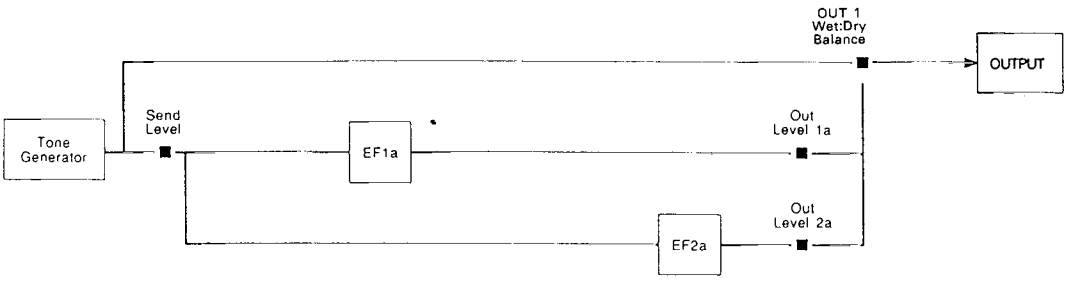
● **EFFECT MODE = serial. EFFECT 1 = dual. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



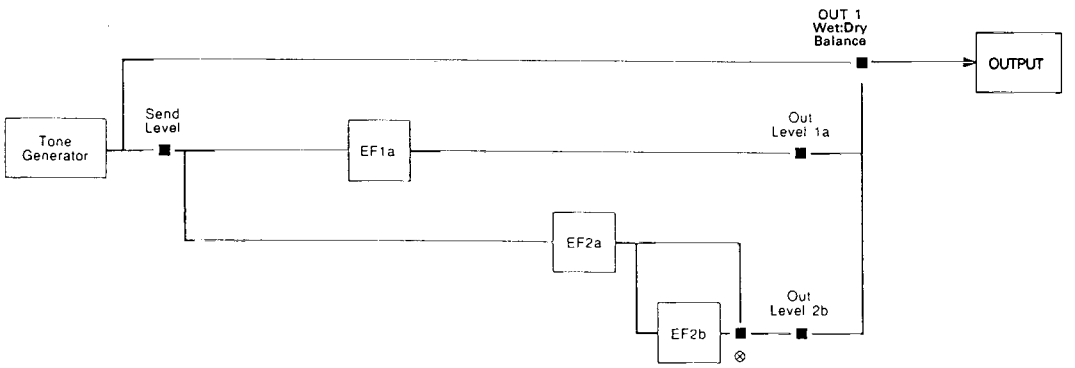
● **EFFECT MODE = serial. EFFECT 1 = dual. EFFECT 2 = dual.**



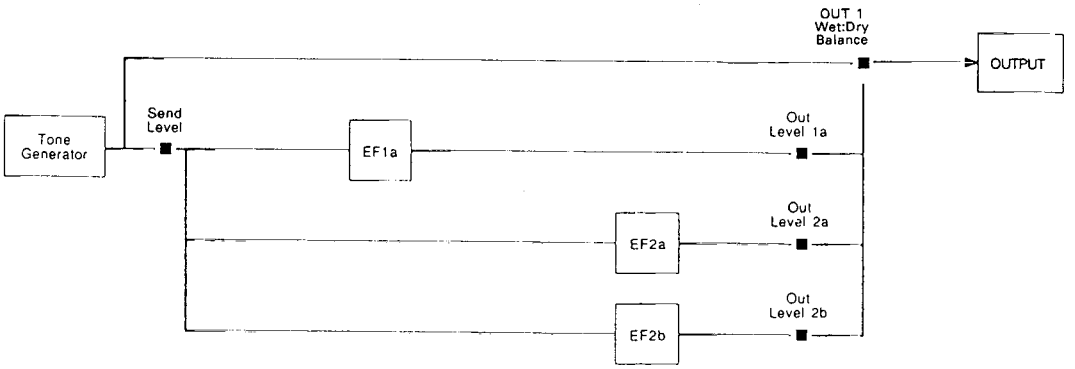
● **EFFECT MODE = parallel. EFFECT 1 = single. EFFECT 2 = single.**



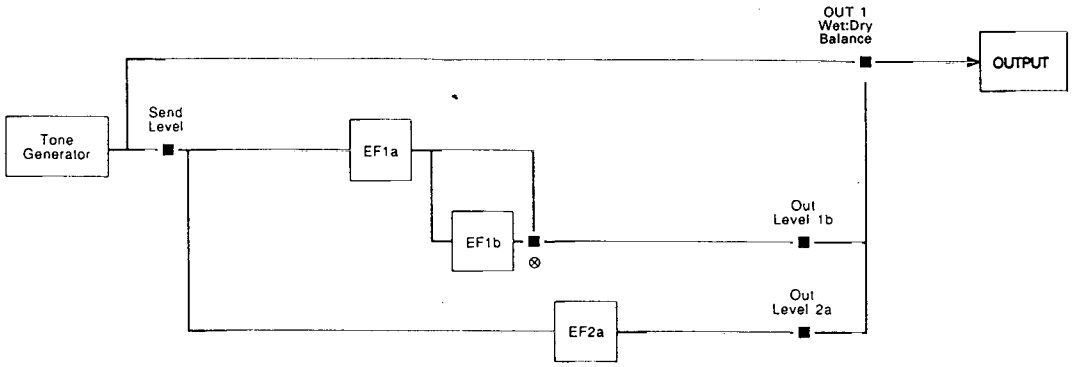
● **EFFECT MODE = parallel. EFFECT 1 = single. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



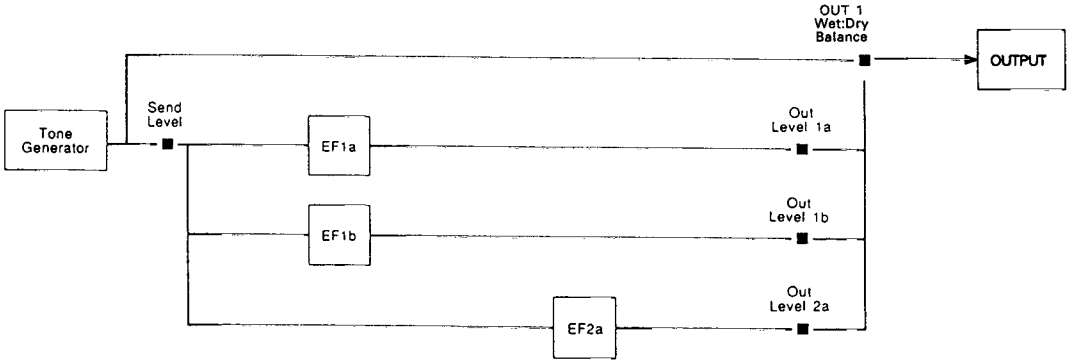
● **EFFECT MODE = parallel. EFFECT 1 = single. EFFECT 2 = dual.**



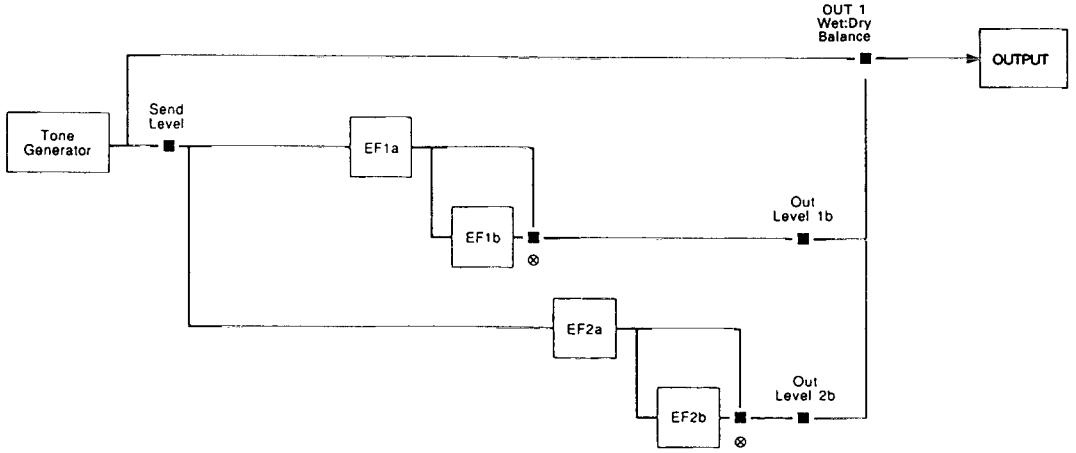
● **EFFECT MODE = parallel. EFFECT 1 = cascade. EFFECT 2 = single.**
(⊗ = effect parameter number 8)



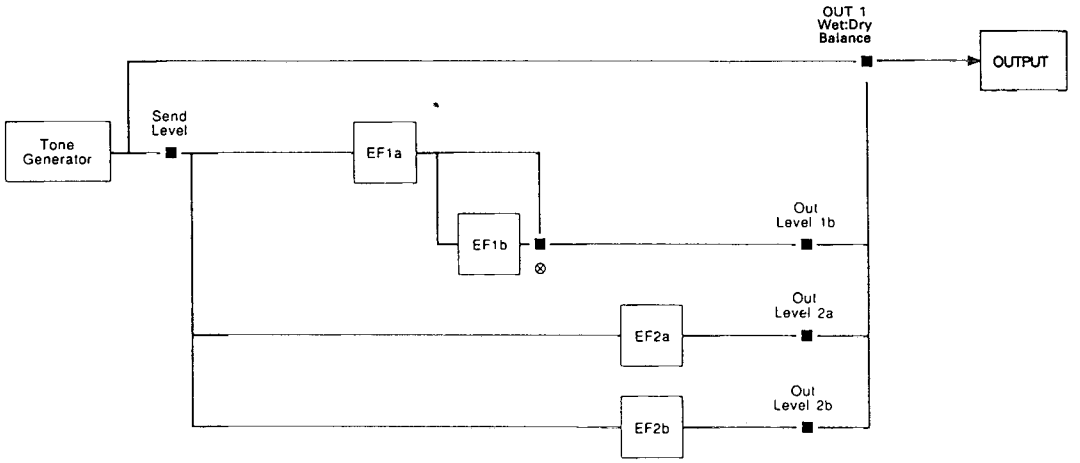
● **EFFECT MODE = parallel. EFFECT 1 = dual. EFFECT 2 = single.**



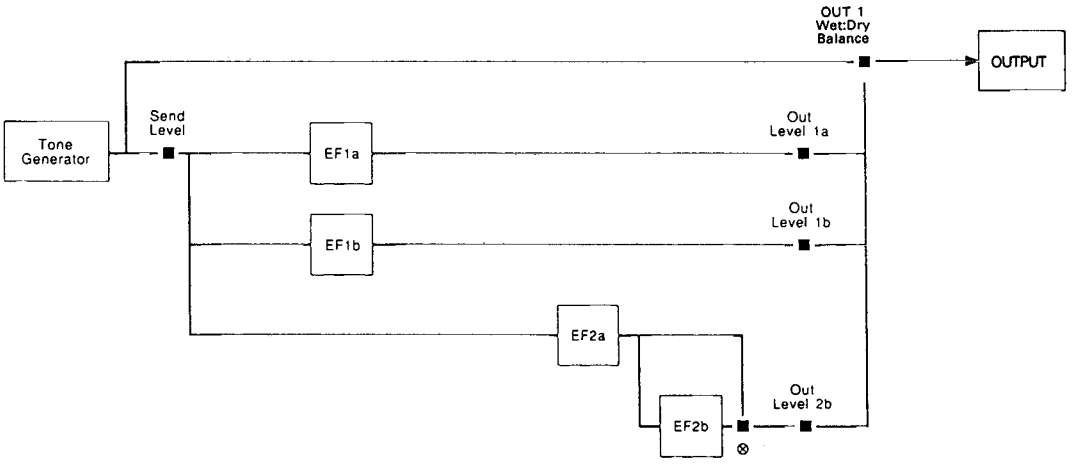
● **EFFECT MODE = parallel. EFFECT 1 = cascade. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



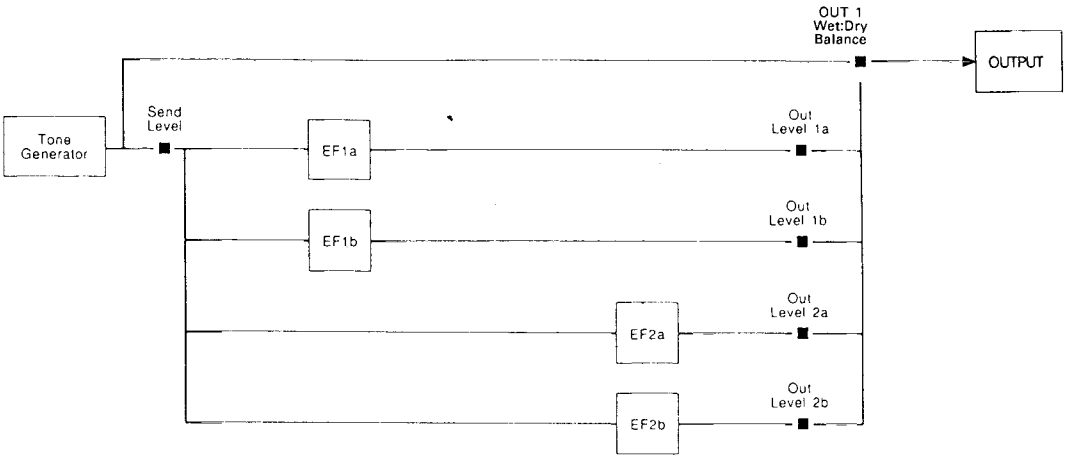
● **EFFECT MODE = parallel. EFFECT 1 = cascade. EFFECT 2 = dual.**
(⊗ = effect parameter number 8)



● **EFFECT MODE = parallel. EFFECT 1 = dual. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



● **EFFECT MODE = parallel. EFFECT 1 = dual. EFFECT 2 = dual.**



■ Effect Signal Flow Diagrams — Drum Voice, Performance, and Multi Modes

The following diagrams illustrate effect signal flow with different effect mode and effect type combinations in the drum voice, performance, and song modes. The "Tone Generator" block has slightly different meanings in each of these modes:

- **Drum Voice**
  "Tone Generator" corresponds to the output from a single drum/percussion instrument. The other instruments are mixed into the effect signal path behind the "Dry1" and "Dry2" parameters or the "Switch" parameters, as indicated by a star (★) in the diagrams.

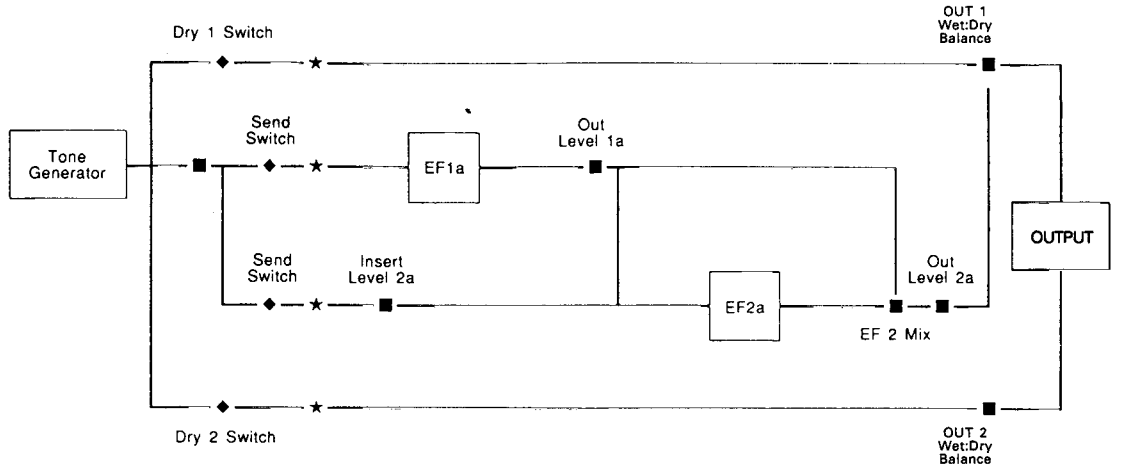
- **Performance**
  "Tone Generator" corresponds to the output from a single layer. The other layers are mixed into the effect signal path behind the "Dry1" and "Dry2" parameters or the "Switch" parameters, as indicated by a star (★) in the diagrams.

- **Multi**
  "Tone Generator" corresponds to the output from a single multi instrument. The other instruments are mixed into the effect signal path behind the "Dry1" and "Dry2" parameters or the "Switch" parameters, as indicated by a star (★) in the diagrams.

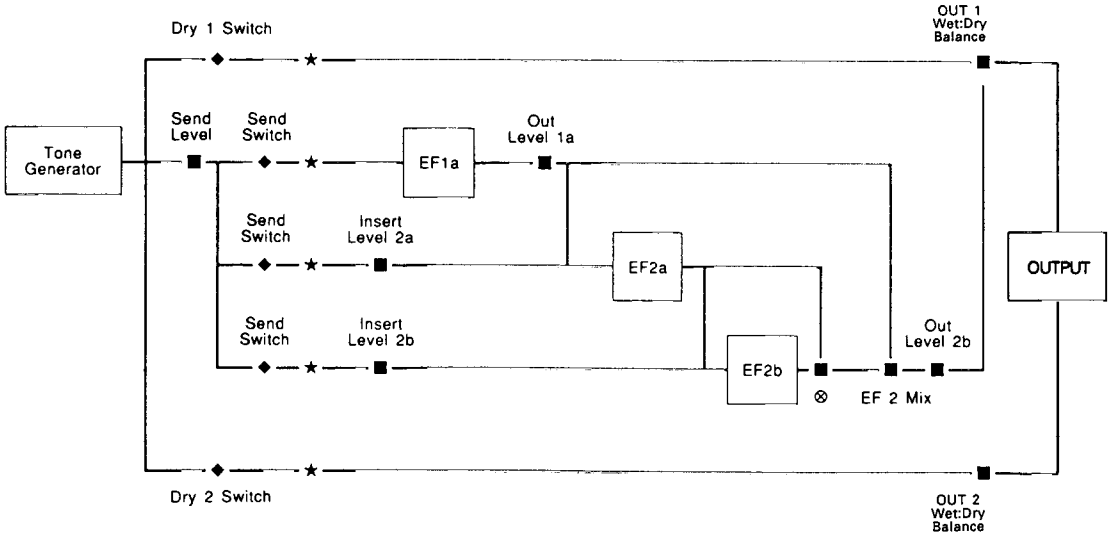
In the diagrams a diamond (◆) indicates an on/off switch parameter, and a block (■) indicates a continuously variable level or mix parameter. Although abbreviated in the diagrams, the direct and effect signal paths are stereo.

- **EFFECT MODE = off.**

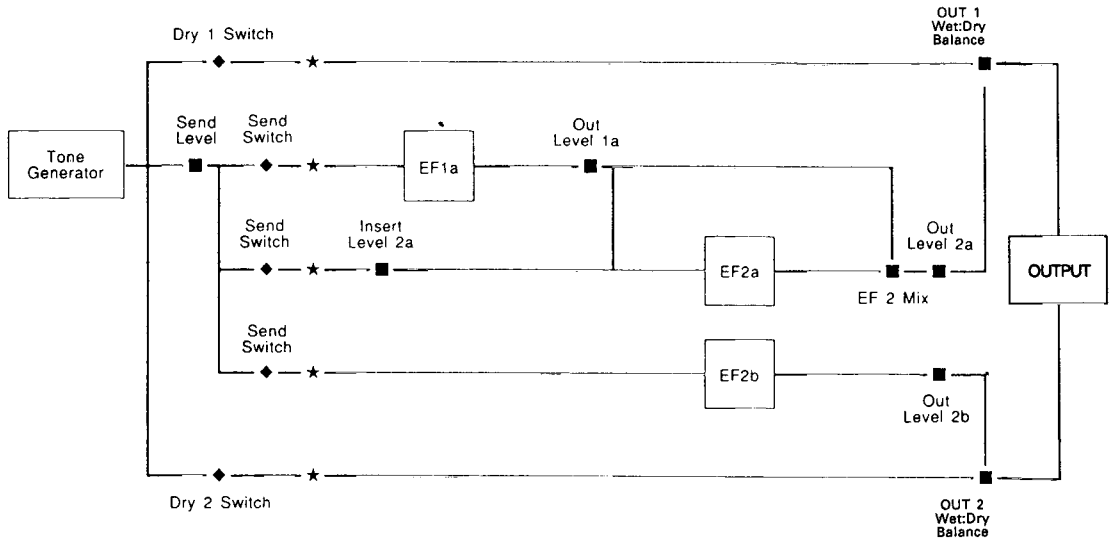
● **EFFECT MODE = serial. EFFECT 1 = single. EFFECT 2 = single.**



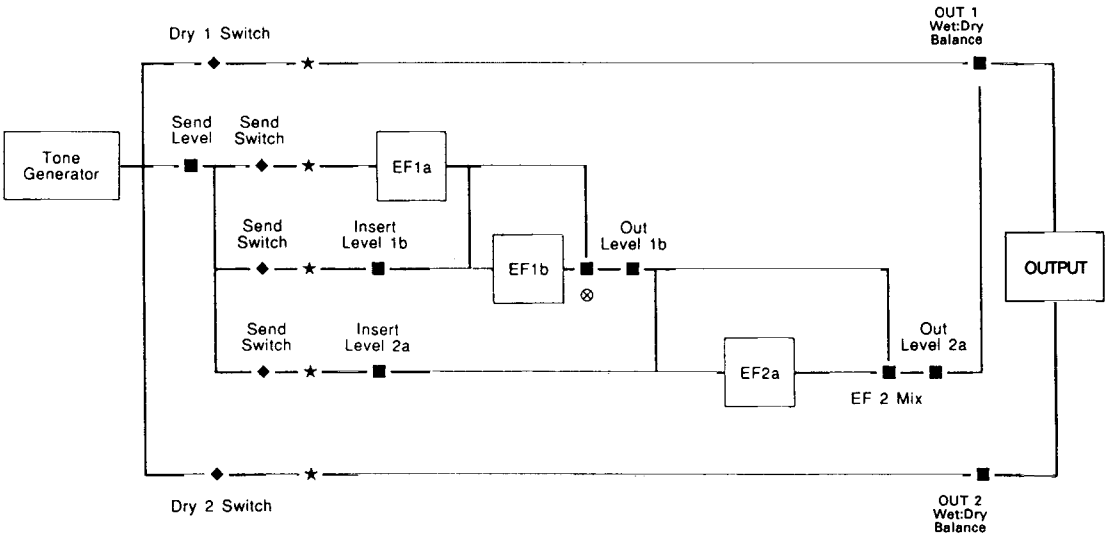
● **EFFECT MODE = serial. EFFECT 1 = single. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



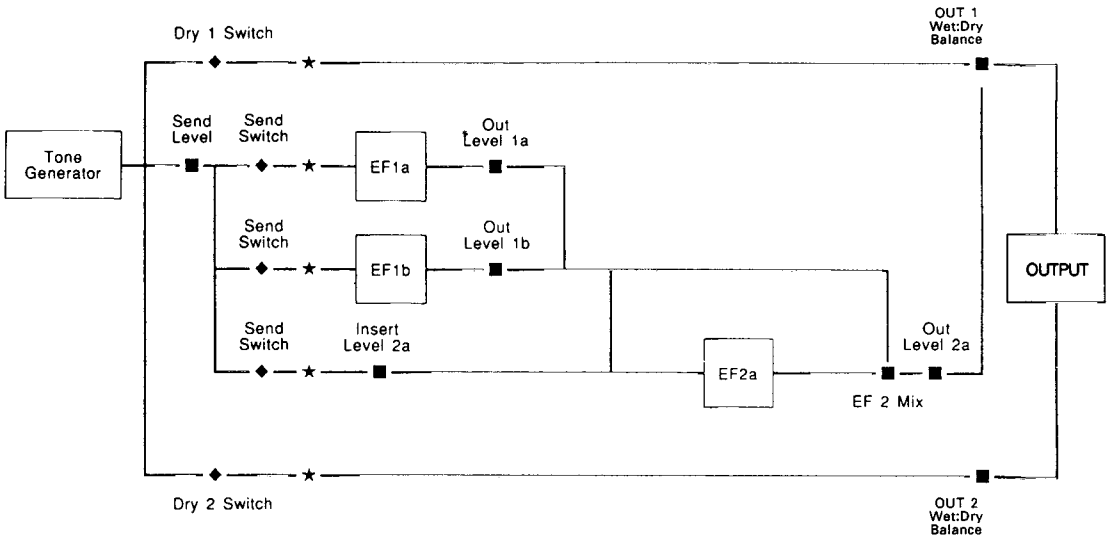
● **EFFECT MODE = serial. EFFECT 1 = single. EFFECT 2 = dual.**



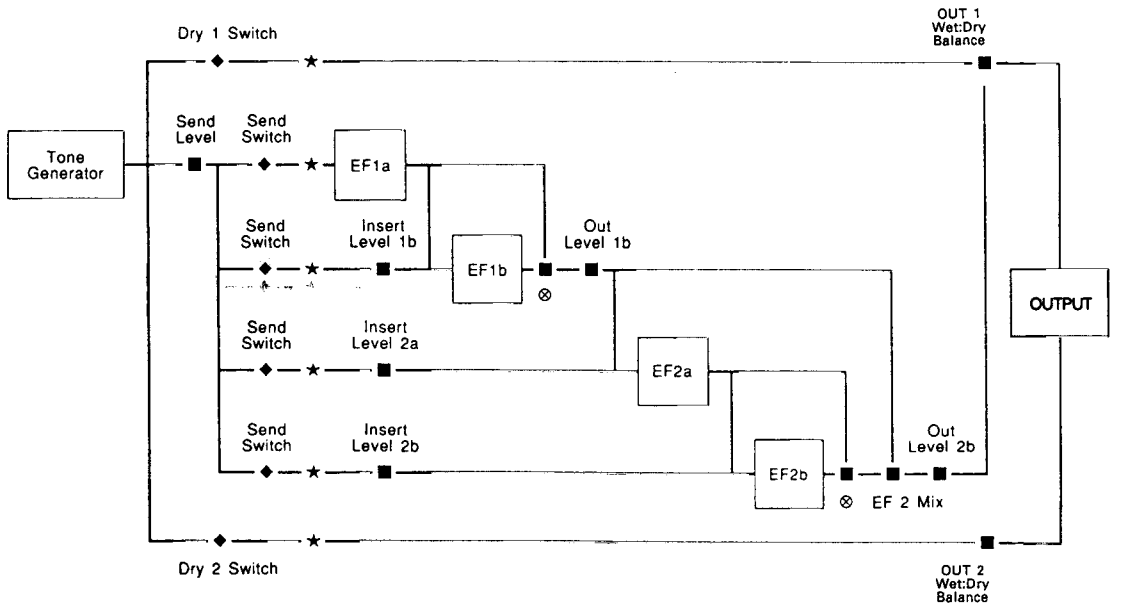
● **EFFECT MODE = serial. EFFECT 1 = cascade. EFFECT 2 = single.**
(⊗ = effect parameter number 8)



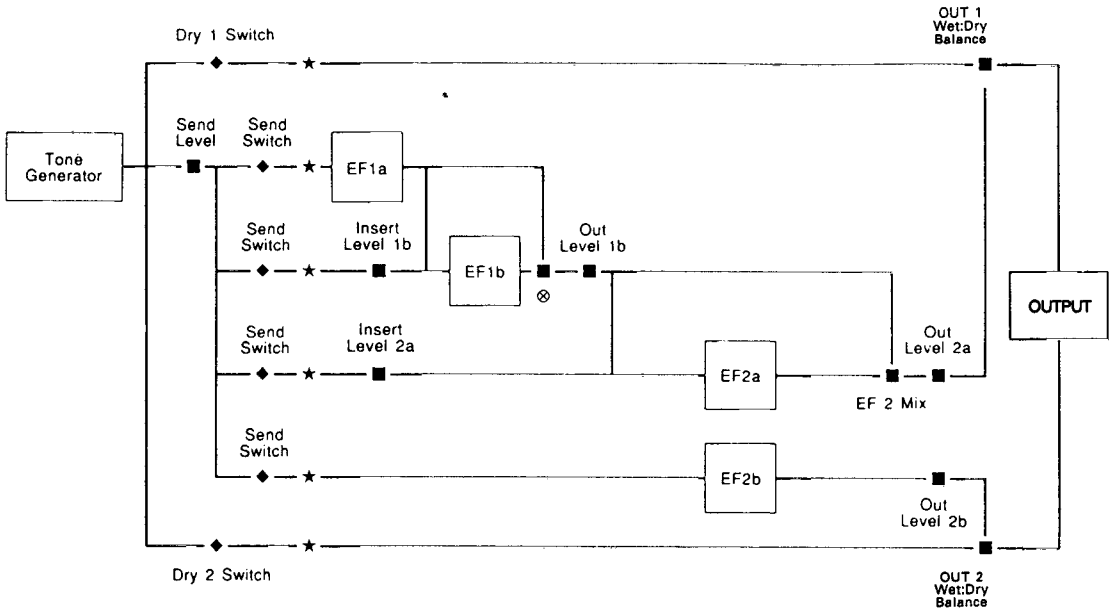
● **EFFECT MODE = serial. EFFECT 1 = dual. EFFECT 2 = single.**



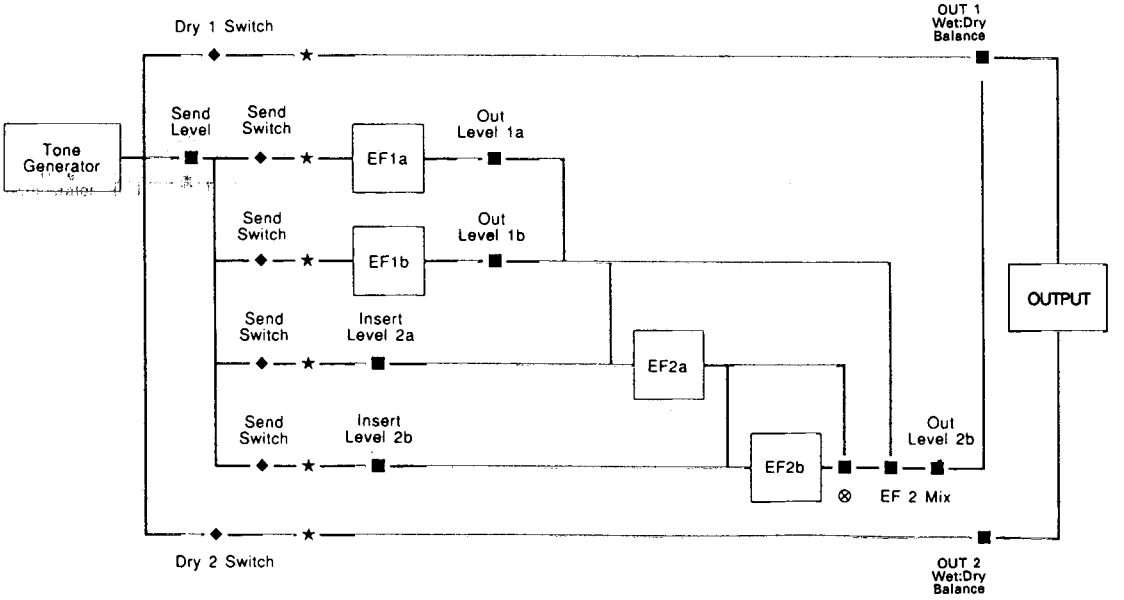
● **EFFECT MODE = serial. EFFECT 1 = cascade. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



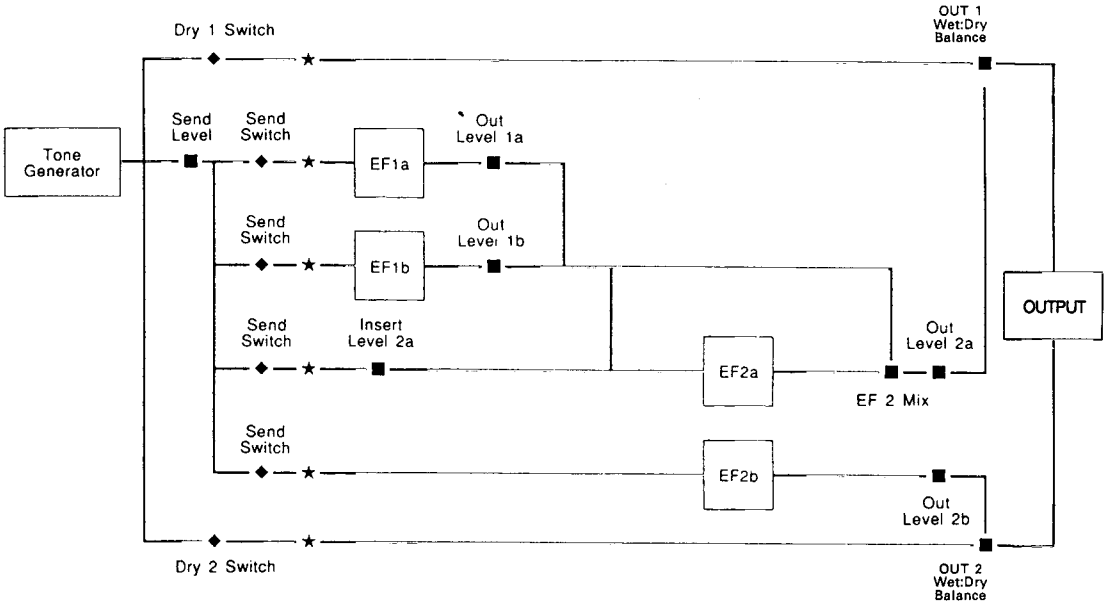
● **EFFECT MODE = serial. EFFECT 1 = cascade. EFFECT 2 = dual.**
(⊗ = effect parameter number 8)



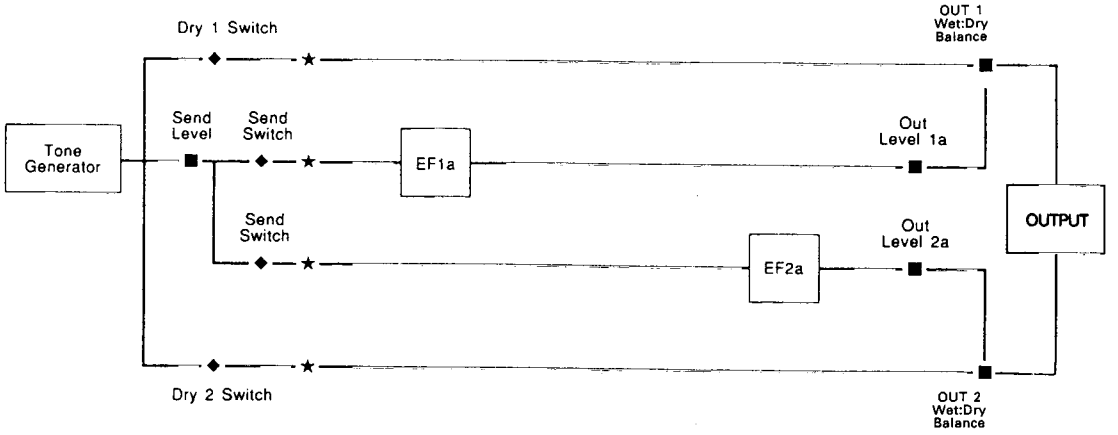
● **EFFECT MODE = serial. EFFECT 1 = dual. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



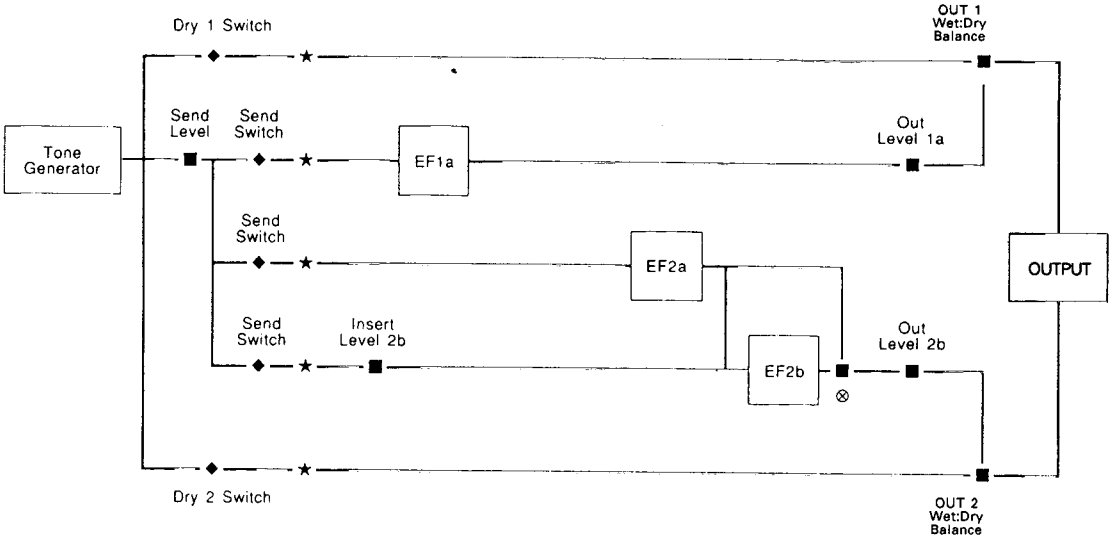
● EFFECT MODE = serial. EFFECT 1 = dual. EFFECT 2 = dual.



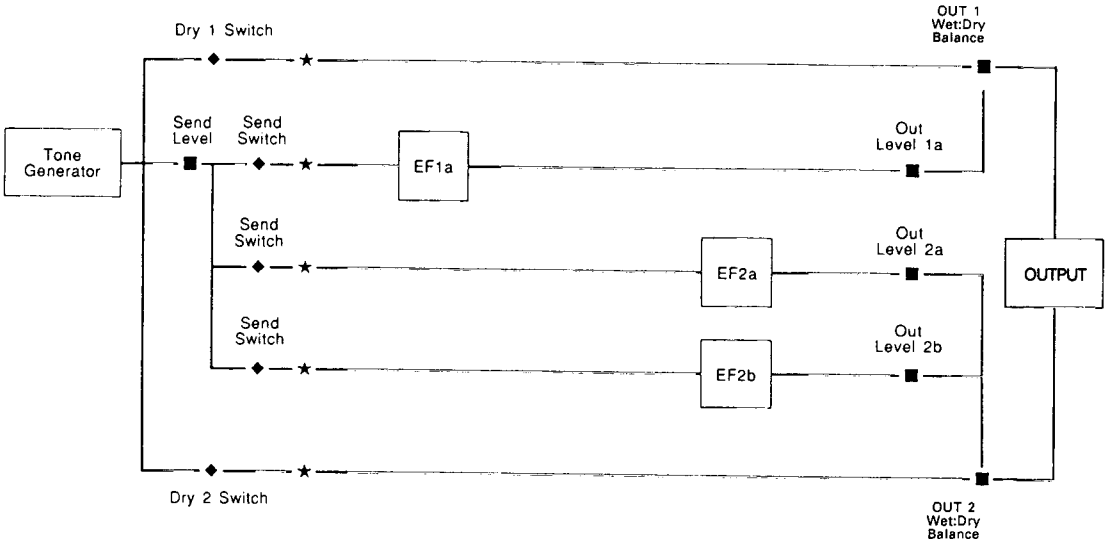
● EFFECT MODE = parallel. EFFECT 1 = single. EFFECT 2 = single.



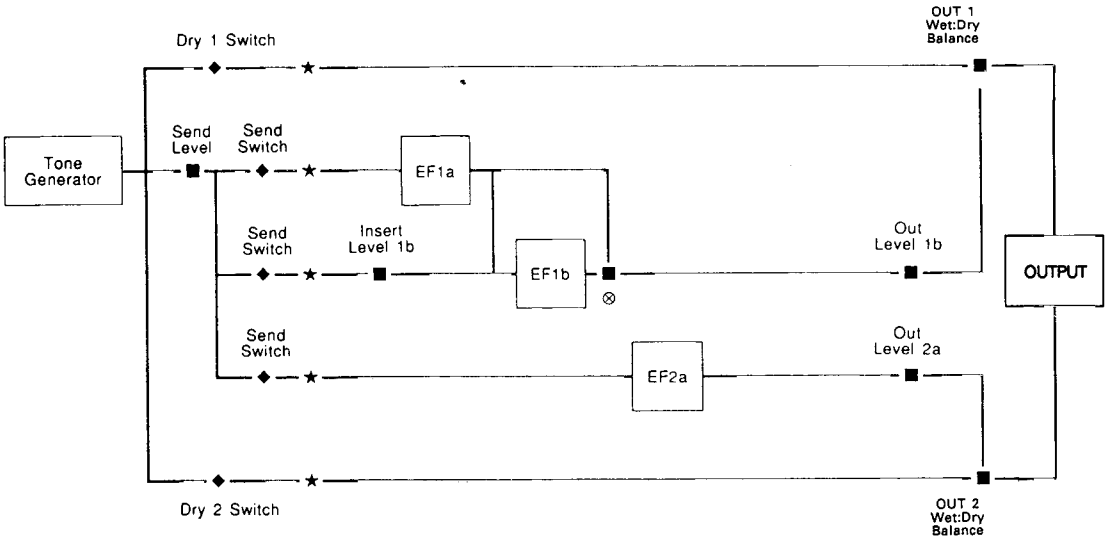
● **EFFECT MODE = parallel. EFFECT 1 = single. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



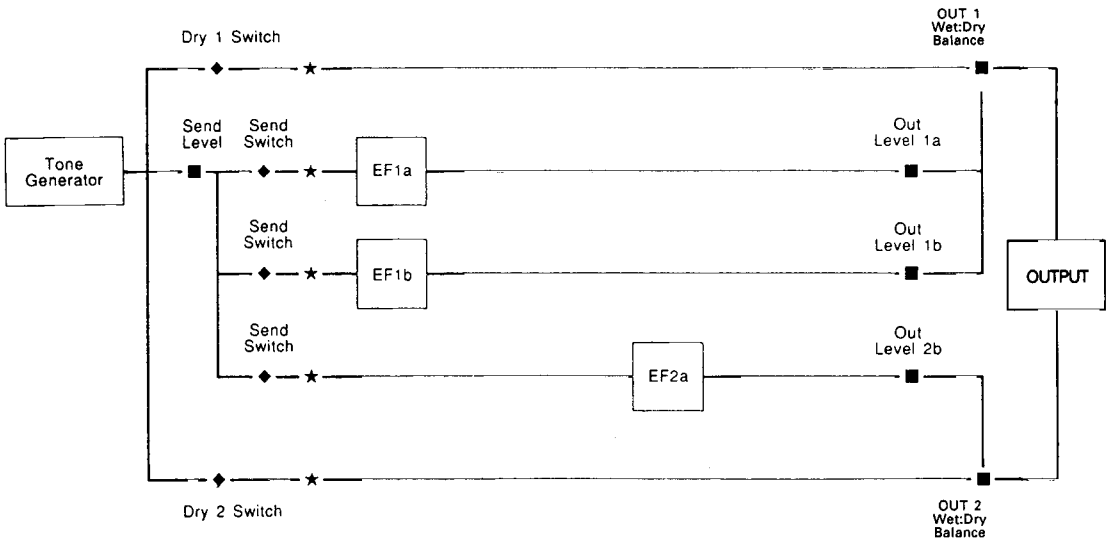
● **EFFECT MODE = parallel. EFFECT 1 = single. EFFECT 2 = dual.**



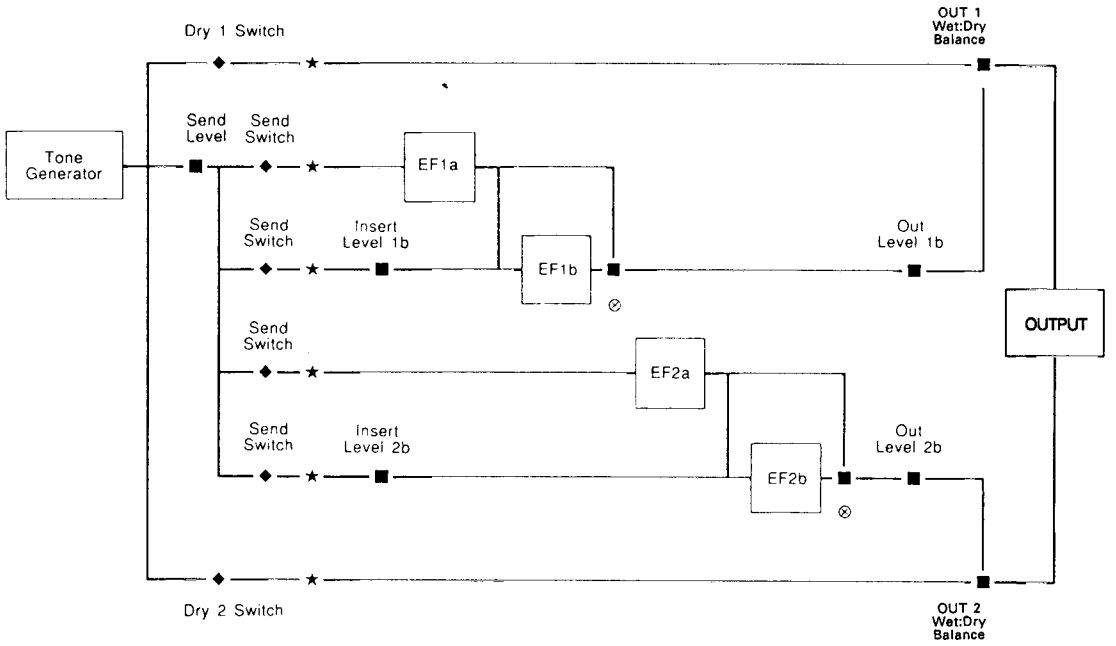
● **EFFECT MODE = parallel. EFFECT 1 = cascade. EFFECT 2 = single.**
(⊗ = effect parameter number 8)



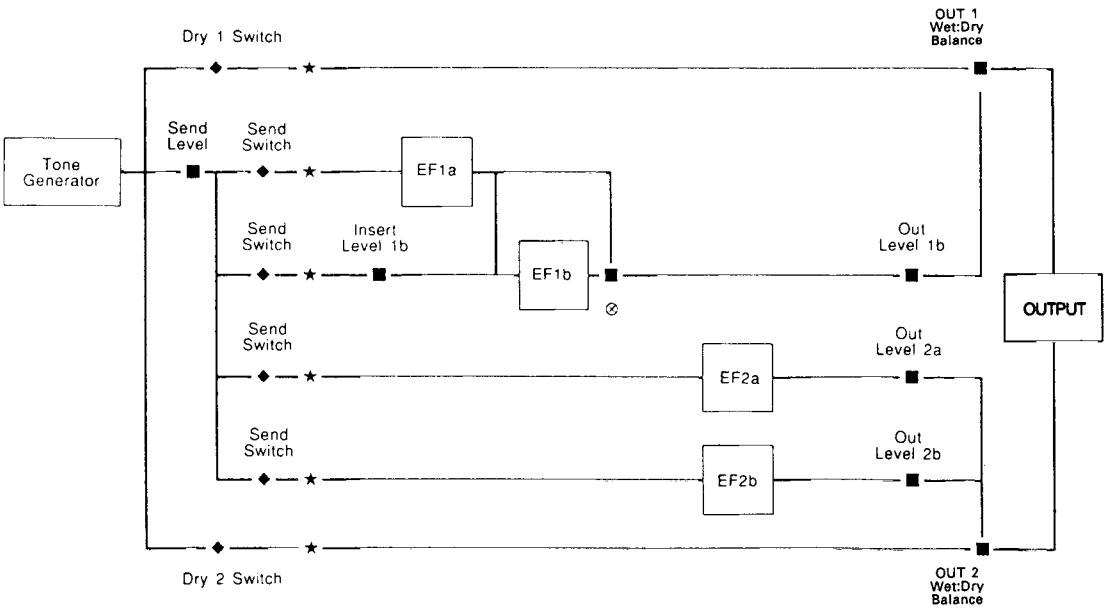
● **EFFECT MODE = parallel. EFFECT 1 = dual. EFFECT 2 = single.**



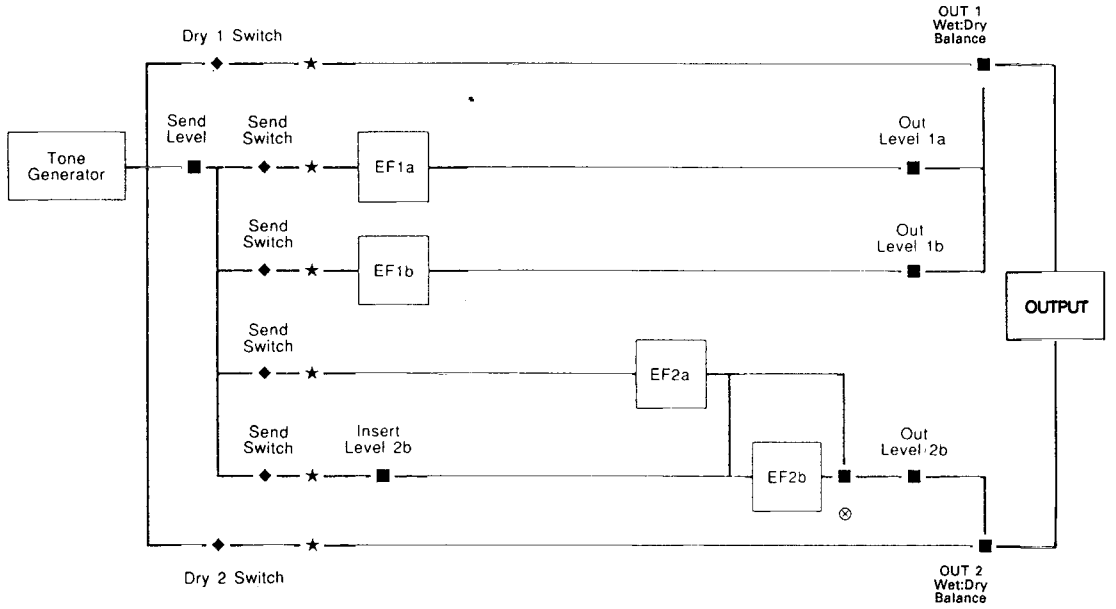
● **EFFECT MODE = parallel. EFFECT 1 = cascade. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



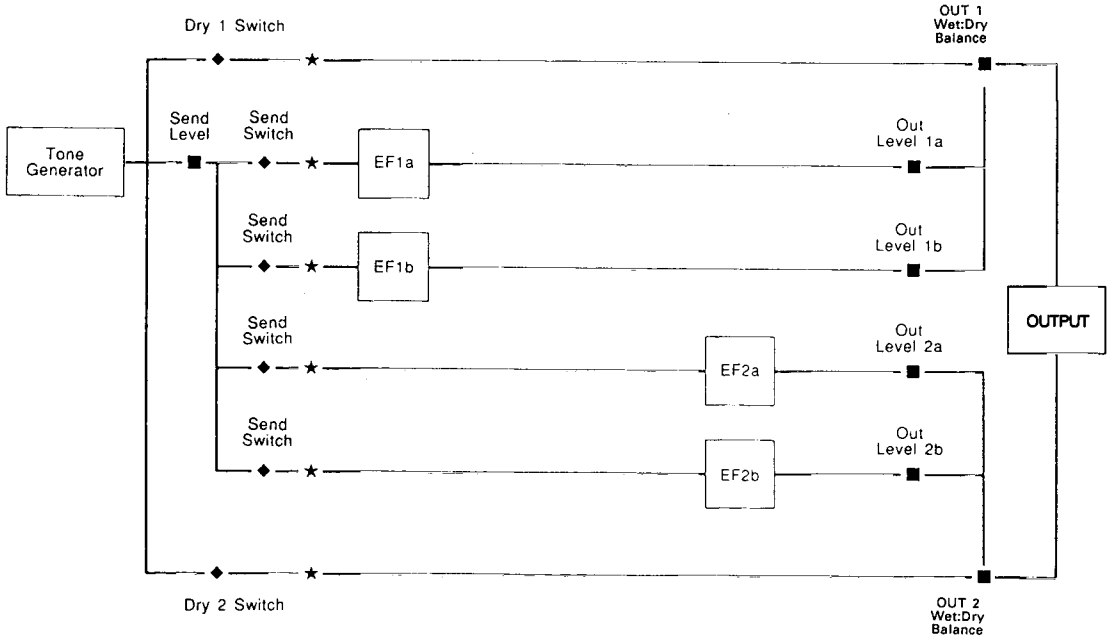
● **EFFECT MODE = parallel. EFFECT 1 = cascade. EFFECT 2 = dual.**
(⊗ = effect parameter number 8)



● **EFFECT MODE = parallel. EFFECT 1 = dual. EFFECT 2 = cascade.**
(⊗ = effect parameter number 8)



● **EFFECT MODE = parallel. EFFECT 1 = dual. EFFECT 2 = dual.**



■ The Effects & Their Parameters

☆ Parameters with "○" in the QE column are editable in the Quick Edit modes.

"Single" Effects

• 00 : Through

No.	PARAMETER	RANGE	QE
1~8	—	—	

• 01 : Rev. Hall1

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	○
3	Dffusion	0 ~ 10	
4	Density	0 ~ 4	
5	ER/Rev [%]	0 ~ 100%	
6	Low Gain [dB]	-12 ~ +12dB	
7	Hi Gain [dB]	-12 ~ +12dB	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 02 : Rev. Hall2

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	○
3	Dffusion	0 ~ 10	
4	Init Dly [ms]	0 ~ 150ms	
5	Rev. Dly [ms]	0 ~ 100ms	
6	Density	0 ~ 4	
7	ER/Rev [%]	0 ~ 100%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 03 : Rev. Room1, 04 : Rev. Room2, 05 : Rev. Room3

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	○
3	Dffusion	0 ~ 10	
4	Init Dly [ms]	0 ~ 200ms	
5	Rev. Dly [ms]	0 ~ 130ms	
6	Density	0 ~ 4	
7	ER/Rev [%]	0 ~ 100%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 06 : Rev. Stage1, 07 : Rev. Stage2

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	○
3	Dffusion	0 ~ 10	
4	Init Dly [ms]	0 ~ 60ms	
5	Rev. Dly [ms]	0 ~ 30ms	
6	Density	0 ~ 4	
7	ER/Rev [%]	0 ~ 100%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 08 : Rev. Plate

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	○
3	Dffusion	0 ~ 10	
4	Init Dly [ms]	0 ~ 200ms	
5	Rev. Dly [ms]	0 ~ 200ms	
6	Density	0 ~ 4	
7	ER/Rev [%]	0 ~ 100%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 09 : Rev. WhRoom, 10 : Rev. Tunnel, 11 : Rev. Canyon, 12 : Rev. Basmnt

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	○
3	Dffusion	0 ~ 10	
4	Width [m]	0.5 ~ 23.6m	
5	Height [m]	0.5 ~ 23.6m	
6	Depth [m]	0.5 ~ 23.6m	
7	WallVary	0 ~ 30	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 13 : Early Ref1, 14 : Early Ref2

No.	PARAMETER	RANGE	QE
1	Type	Smll, Lrge, Rnd, Rvrs, Plte, Sprg	○
2	RoomSize	0.1 ~ 20.0	○
3	Liveness	0 ~ 10	
4	Dffusion	0 ~ 10	
5	Init Dly [ms]	0 ~ 150ms	
6	FB Dly [ms]	0 ~ 400ms	
7	FB Gain [%]	-99 ~ +99%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 15 : Gate Rev., 16 : Revrs Gate

No.	PARAMETER	RANGE	QE
1	Type	A, B	○
2	RoomSize	0.1 ~ 20.0	○
3	Liveness	0 ~ 10	
4	Dffusion	0 ~ 10	
5	Init Dly [ms]	0 ~ 150ms	
6	FB Dly [ms]	0 ~ 400ms	
7	FB Gain [%]	-99 ~ +99%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 17 : Dly L, R

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 680ms	○
2	R Dly [ms]	0 ~ 680ms	○
3	FB1 Dly [ms]	0 ~ 680ms	
4	FB1 Gain [%]	-99 ~ +99%	○
5	FB2 Dly [ms]	0 ~ 680ms	
6	FB2 Gain [%]	-99 ~ +99%	
7	FB High	0.1 ~ 1.0	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 18 : Dly L, C, R

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 680ms	○
2	R Dly [ms]	0 ~ 680ms	○
3	Cntr Dly [ms]	0 ~ 680ms	○
4	FB Sync	Lch, Rch, Cntr, L, R	
5	FB Gain [%]	-99 ~ +99%	
6	FB High	0.1 ~ 1.0	
7	HPF [Hz]	thru, 32 ~ 1000Hz	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 19 : St. Echo

No.	PARAMETER	RANGE	QE
1	L IntDly [ms]	0 ~ 340ms	○
2	L FB Dly [ms]	0 ~ 340ms	
3	L FBGain [%]	-99 ~ +99%	
4	R IntDly [ms]	0 ~ 340ms	○
5	R FB Dly [ms]	0 ~ 340ms	
6	R FBGain [%]	-99 ~ +99%	
7	FB High	0.1 ~ 1.0	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	○

• 20 : Pit Chnge1

No.	PARAMETER	RANGE	QE
1	1 Pitch	-24 ~ +24	○
2	1 Fine	-100 ~ +100	
3	1 Dly [ms]	0 ~ 300ms	
4	2 Pitch	-24 ~ +24	○
5	2 Fine	-100 ~ +100	
6	2 Dly [ms]	0 ~ 300ms	
7	FB Gain [%]	-99 ~ +99%	
8	1/2 Bal. [%]	0 ~ 100%	○

• 21 : Pit Chnge2

No.	PARAMETER	RANGE	QE
1	L Pitch	-24 ~ +24	
2	L Fine	-100 ~ +100	○
3	L Dly [ms]	0 ~ 300ms	
4	L FBGain [%]	-99 ~ +99%	
5	R Pitch	-24 ~ +24	
6	R Fine	-100 ~ +100	○
7	R Dly [ms]	0 ~ 300ms	
8	R FBGain [%]	-99 ~ +99%	

• 22 : Pit Chnge3

No.	PARAMETER	RANGE	QE
1	1 Pitch	-24 ~ +24	○
2	1 Fine	-100 ~ +100	
3	2 Pitch	-24 ~ +24	○
4	2 Fine	-100 ~ +100	
5	3 Pitch	-24 ~ +24	○
6	3 Fine	-100 ~ +100	
7	Dly Time [ms]	0 ~ 600ms	
8	FB Gain [%]	-99 ~ +99%	

• 23 : Aural Exc. (Aural Exciter®*)

No.	PARAMETER	RANGE	QE
1	HPF [kHz]	500Hz ~ 16.0kHz	○
2	Enhance [%]	0 ~ 100%	○
3	Exc. Lvl [%]	0 ~ 100%	○
4	Init Dly [ms]	0.0 ~ 99.9ms	
5	—		
6	—		
7	—		
8	—		

** Aural Exciter® is a registered trademark and is manufactured under license from APHEX Systems Ltd.*

• 24 : EG Flanger

No.	PARAMETER	RANGE	QE
1	Atk Time [ms]	2.0ms ~ 22.0s	
2	Atk Lvl [%]	0 ~ 100%	
3	Rls Time [ms]	2.0ms ~ 22.0s	
4	EG Targt	Freq, Dpth	○
5	Mod. Freq [Hz]	0.1 ~ 40.0Hz	○
6	Mod. Dpth [%]	0 ~ 100%	○
7	Mod. Dly [ms]	0.1 ~ 99.9ms	
8	Mod. FBG [%]	0 ~ 99%	

• 25: EG Chorus

No.	PARAMETER	RANGE	QE
1	Atk Time [ms]	2.0ms ~ 22.0s	
2	Atk Lvl [%]	0 ~ 100%	
3	Rls Time [ms]	2.0ms ~ 22.0s	
4	EG Targt	Freq, Dpth	○
5	Mod. Freq [Hz]	0.1 ~ 40.0Hz	○
6	PM Depth [%]	0 ~ 100%	○
7	AM Depth [%]	0 ~ 100%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 26 : EG Sympho

No.	PARAMETER	RANGE	QE
1	Atk Time [ms]	2.0ms ~ 22.0s	
2	Atk Lvl [%]	0 ~ 100%	
3	Rls Time [ms]	2.0ms ~ 22.0s	
4	EG Targt	Freq, Dpth	○
5	Mod. Freq [Hz]	0.1 ~ 40.0Hz	○
6	Mod. Dpth [%]	0 ~ 100%	○
7	Init Dly [ms]	0 ~ 300ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 27 : EG Phaser

No.	PARAMETER	RANGE	QE
1	Atk Time [ms]	2.0ms ~ 22.0s	
2	Atk Lvl [%]	0 ~ 100%	
3	Rls Time [ms]	2.0ms ~ 22.0s	
4	EG Targt	Freq, Dpth	○
5	Mod. Freq [Hz]	0.1 ~ 40.0Hz	○
6	Mod. Dpth [%]	0 ~ 100%	○
7	Mod. Dly [ms]	0.1 ~ 5.0ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 28 : Rotary SP.

No.	PARAMETER	RANGE	QE
1	Mid. Spd [Hz]	0.1 ~ 40.0Hz	
2	Depth [%]	0 ~ 100%	○
3	TrnsTime [ms]	2.0ms ~ 22.0s	○
4	Spd Diff [Hz]	0.05 ~ 5.80Hz	
5	L/M/H Sw	Low, Mid, High	○
6	Low Gain [dB]	-12 ~ +12dB	
7	Hi Gain [dB]	-12 ~ +12dB	
8	—		

• 29 : Ring Mod.

No.	PARAMETER	RANGE	QE
1	WaveType	tri, dwn, up, squ, sin	○
2	WaveFreq [Hz]	1 ~ 180Hz	
3	PM Freq [Hz]	0.1 ~ 40.0Hz	
4	PM Depth [%]	0 ~ 100%	○
5	AM Freq [Hz]	0.1 ~ 40.0Hz	
6	AM Depth [%]	0 ~ 100%	○
7	Low Gain [dB]	-12 ~ +12dB	
8	Hi Gain [dB]	-12 ~ +12dB	

• 30 : D.Flt (Wah)

No.	PARAMETER	RANGE	QE
1	Flt Freq [kHz]	315Hz ~ 14.0kHz	○
2	Flt1 Q	1.0 ~ 5.0	○
3	Flt1Gain [dB]	0 ~ +12dB	○
4	Flt2 Q	0.1 ~ 0.7	
5	Wah Dly [ms]	0 ~ 680ms	
6	FB Dly [ms]	0 ~ 680ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	

"Cascade" Effects

• 31 : Dly → Rev

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 400ms	○
2	R Dly [ms]	0 ~ 400ms	○
3	FB Gain [%]	-99 ~ +99%	
4	Rev.Time [s]	0.3 ~ 30.0s	
5	High	0.1 ~ 1.5	
6	ER/Rev [%]	0 ~ 100%	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 32 : Echo → Rev

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 200ms	○
2	L FB Gain [%]	-99 ~ +99%	
3	R Dly [ms]	0 ~ 200ms	○
4	R FB Gain [%]	-99 ~ +99%	
5	Rev.Time [s]	0.3 ~ 30.0s	
6	High	0.1 ~ 1.5	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 33 : Flg → Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 30.0ms	
4	Mod.FBG [%]	0 ~ 99%	
5	Rev.Time [s]	0.3 ~ 30.0s	
6	High	0.1 ~ 1.5	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 34 : Cho → Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	
4	Rev.Time [s]	0.3 ~ 30.0s	
5	High	0.1 ~ 1.5	
6	Init Dly [ms]	0 ~ 200ms	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 35 : Sym → Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	Hi Gain [dB]	-12 ~ +12dB	
4	Rev.Time [s]	0.3 ~ 30.0s	
5	High	0.1 ~ 1.5	
6	Init Dly [ms]	0 ~ 200ms	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 36 : Pha → Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 5.0ms	
4	Rev.Time [s]	0.3 ~ 30.0s	
5	High	0.1 ~ 1.5	
6	Init Dly [ms]	0 ~ 200ms	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 37 : Pit → Rev

No.	PARAMETER	RANGE	QE
1	L Pitch	-24 ~ +24	
2	L Fine	-100 ~ +100	○
3	R Pitch	-24 ~ +24	
4	R Fine	-100 ~ +100	○
5	Rev.Time [s]	0.3 ~ 30.0s	
6	High	0.1~ 1.5	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 38 : Exc → Rev (Aural Exciter®*)

No.	PARAMETER	RANGE	QE
1	HPF [kHz]	500Hz ~ 16.0kHz	○
2	Enhance [%]	0 ~ 100%	○
3	Exc.Lvl [%]	0 ~ 100%	
4	Rev.Time [s]	0.3 ~ 30.0s	
5	High	0 .1~ 1.5	
6	Init Dly [ms]	0 ~ 200ms	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

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• 39 : Dist → Rev

No.	PARAMETER	RANGE	QE
1	Dist.Level [%]	0 ~ 100%	○
2	Mid.Freq [kHz]	315Hz ~ 6.3kHz	
3	Mid.Gain [dB]	-12 ~ +12dB	
4	Tre.Gain [dB]	-12 ~ +12dB	○
5	Rev.Time [s]	0.3~ 30.0s	
6	High	0.1 ~ 1.5	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 40 : Pan → Rev

No.	PARAMETER	RANGE	QE
1	Type	L→R, R→L, L<>R	○
2	Speed	1 ~ 52	○
3	Fade In [%]	-100 ~ +100%	
4	L/R Dpth [%]	0 ~ 100%	
5	Rev.Time [s]	0 .3~ 30.0s	
6	High	0.1 ~ 1.5	
7	LPF [kHz]	1.0 ~ 16.0kHz, thru	
8	Rev Lvl [%]	0 ~ 100%	○

• 41 : Flg → Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 30.0ms	
4	Mod.FBG [%]	0 ~ 99%	
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 42 : Cho → Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	
4	Hi Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 43 : Sym → Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	—	—	
4	Hi Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 44 : Pha → Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Depth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 5.0ms	
4	Hi Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 45 : Pit → Dly

No.	PARAMETER	RANGE	QE
1	L Pitch	-24 ~ +24	
2	L Fine	-100 ~ +100	○
3	R Pitch	-24 ~ +24	
4	R Fine	-100 ~ +100	○
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 46 : Exc → Dly (Aural Exciter®*)

No.	PARAMETER	RANGE	QE
1	HPF [kHz]	500Hz ~ 16.0kHz	○
2	Enhance [%]	0 ~ 100%	○
3	Exc.Lvl [%]	0 ~ 100%	
4	Init Dly [ms]	0.0 ~ 80.0ms	
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

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• 47 : Dist → Dly

No.	PARAMETER	RANGE	QE
1	Dist.Lvl [%]	0 ~ 100%	○
2	Mid.Freq [kHz]	315Hz ~ 6.3kHz	
3	Mid.Gain [dB]	-12 ~ +12dB	
4	Tre.Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 680ms	○
6	R Dly [ms]	0 ~ 680ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	

• 48 : Pan → Dly

No.	PARAMETER	RANGE	QE
1	Type	L→R, R→L, L<>R	○
2	Speed	1 ~ 52	○
3	Fade In [%]	-100 ~ +100%	
4	L/R Dpth [%]	0 ~ 100%	
5	L Dly [ms]	0~ 680ms	
6	R Dly [ms]	0~ 680ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 49 : Dist → Echo

No.	PARAMETER	RANGE	QE
1	Dist.Lvl [%]	0 ~ 100%	○
2	Mid.Freq [kHz]	315Hz ~ 6.3kHz	
3	Mid.Gain [dB]	-12 ~ +12dB	
4	Tre.Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 340ms	○
6	R Dly [ms]	0 ~ 340ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Echo Lvl [%]	0 ~ 100%	

• 50 : EQ → Rev1

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Rev.Time [s]	0.3 ~ 30.0s	
6	High	0.1 ~ 1.5	
7	ER/Rev [%]	0 ~ 100%	
8	Rev Lvl [%]	0 ~ 100%	○

• 51 : EQ → Rev2

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Rev.Time [s]	0.3 ~ 30.0s	
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 250ms	
8	Rev Lvl [%]	0 ~ 100%	○

• 52 : EQ → ER

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Type	Smll, Lrge, Rnd, Rvrs, Plte, Sprg	
6	Dffusion	0 ~ 10	
7	Init Dly [ms]	0 ~ 200ms	
8	ER Lvl [%]	0 ~ 100%	○

• 53 : EQ → Dly

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	L Dly [ms]	0 ~ 680ms	
6	R Dly [ms]	0 ~ 680ms	
7	FB Gain [%]	-99 ~ +99%	
8	Dly Lvl [%]	0 ~ 100%	○

• 54 : EQ → Echo

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	L Dly [ms]	0 ~ 340ms	
6	R Dly [ms]	0 ~ 340ms	
7	FB Gain [%]	-99 ~ +99%	
8	Echo Lvl [%]	0 ~ 100%	○

• 55 : EQ → Flg

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
6	Mod. Dpth [%]	0 ~ 100%	
7	Mod.FBG [%]	0 ~ 99%	
8	Flg Lvl [%]	0 ~ 100%	○

• 56 : EQ → Cho

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
6	PM Depth [%]	0 ~ 100%	
7	AM Depth [%]	0 ~ 100%	
8	Cho Lvl [%]	0 ~ 100%	○

• 57 : EQ → Sym

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	
7	Init Dly [ms]	0 ~ 300ms	
8	Sym Lvl [%]	0 ~ 100%	○

• 58 : EQ → Pha

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	
7	Mod.Dly [ms]	0.1 ~ 5.0ms	
8	Pha Lvl [%]	0 ~ 100%	○

• 59 : EQ → Pit

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	L Fine	-999 ~ +999	
6	R Fine	-999 ~ +999	
7	Init Dly [ms]	0 ~ 300ms	
8	Pit Lvl [%]	0 ~ 100%	○

• 60 : EQ → Pan

No.	PARAMETER	RANGE	QE
1	Low Freq [kHz]	32Hz ~ 2.0kHz	
2	Low Gain [dB]	-12 ~ +12dB	○
3	Hi Freq [kHz]	500Hz ~ 16.0kHz	
4	Hi Gain [dB]	-12 ~ +12dB	○
5	Type	L→R, R→L, L<>R	○
6	Speed	1 ~ 52	
7	Fade In [%]	-100 ~ +100%	
8	L/R Dpth [%]	0 ~ 100%	

"Dual" Effects

• 61 : Hall & Plate

No.	PARAMETER	RANGE	QE
1	Rev.Time [s]	0.3 ~ 30.0s	○
2	High	0.1 ~ 1.5	
3	Dffusion	0 ~ 10	
4	LPF [kHz]	1.0 ~ 16.0kHz, thru	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Dffusion	0 ~ 10	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 62 : Echo & Rev

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 200ms	○
2	L FB Gain [%]	-99 ~ +99%	
3	R Dly [ms]	0 ~ 200ms	○
4	R FB Gain [%]	-99 ~ +99%	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	ER/Rev [%]	0 ~ 100%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 63 : Flg & Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 30.0ms	
4	Mod.FBG [%]	0 ~ 99%	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 64 : Cho & Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	
4	Hi Gain [dB]	-12 ~ +12dB	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 65 : Sym & Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	—		
4	Hi Gain [dB]	-12 ~ +12dB	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 66 : Pha & Rev

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	○
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 5.0ms	
4	Hi Gain [dB]	-12 ~ +12dB	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 67 : Pit & Rev

No.	PARAMETER	RANGE	QE
1	L Pitch	-24 ~ +24	
2	L Fine	-100 ~ +100	○
3	R Pitch	-24 ~ +24	
4	R Fine	-100 ~ +100	○
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 68 : Exc & Rev (Aural Exciter®*)

No.	PARAMETER	RANGE	QE
1	HPF [kHz]	500Hz ~ 16.0kHz	○
2	Enhance [%]	0 ~ 100%	○
3	Exc Lvl [%]	0 ~ 100%	
4	Init Dly [ms]	0.0 ~ 50.0ms	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

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• 69 : Dist & Rev

No.	PARAMETER	RANGE	QE
1	Dist.Lvl [%]	0 ~ 100%	○
2	Mid.Freq [kHz]	315Hz ~ 6.3kHz	
3	Mid.Gain [dB]	-12 ~ +12dB	
4	Tre.Gain [dB]	-12 ~ +12dB	○
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 200ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 70 : Pan & Rev

No.	PARAMETER	RANGE	QE
1	Type	L→R, R→L, L<>R	○
2	Speed	1 ~ 52	○
3	Fade In [%]	-100 ~ +100%	
4	L/R Dpth [%]	0 ~ 100%	
5	Rev.Time [s]	0.3 ~ 30.0s	○
6	High	0.1 ~ 1.5	
7	Init Dly [ms]	0 ~ 150ms	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 71 : Dly & Rev

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 400ms	○
2	R Dly [ms]	0 ~ 400ms	○
3	FB Gain [%]	-99 ~ +99%	
4	Rev.Time [s]	0.3 ~ 30.0s	○
5	High	0.1 ~ 1.5	
6	Dffusion	0 ~ 10	
7	ER/Rev [%]	0 ~ 100%	
8	LPF [kHz]	1.0 ~ 16.0kHz, thru	

• 72 : Dly & Dly

No.	PARAMETER	RANGE	QE
1	L Dly [ms]	0 ~ 340ms	○
2	R Dly [ms]	0 ~ 340ms	
3	FB Gain [%]	-99 ~ +99%	
4	Hi Gain [%]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 340ms	○
6	R Dly [ms]	0 ~ 340ms	
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 73 : Flg & Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [ms]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 30.0ms	
4	Mod.FBG [%]	0 ~ 99%	
5	L Dly [ms]	0 ~ 600ms	○
6	R Dly [ms]	0 ~ 600ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 74 : Cho & Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	
4	Hi Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 600ms	○
6	R Dly [ms]	0 ~ 600ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 75 : Sym & Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	—	—	
4	Hi Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 600ms	○
6	R Dly [ms]	0 ~ 600ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 76 : Pha & Dly

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 5.0ms	
4	Hi Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 600ms	○
6	R Dly [ms]	0 ~ 600ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 77 : Pit & Dly

No.	PARAMETER	RANGE	QE
1	L Pitch	-24 ~ +24	
2	L Fine	-100 ~ +100	○
3	R Pitch	-24 ~ +24	
4	R Fine	-100 ~ +100	○
5	L Dly [ms]	0 ~ 600ms	
6	R Dly [ms]	0 ~ 600ms	
7	FB Gain [%]	-99 ~ +99%	○
8	Hi Gain [dB]	-12 ~ +12dB	

• 78 : Exc & Dly (Aural Exciter®*)

No.	PARAMETER	RANGE	QE
1	HPF [kHz]	500Hz ~ 16.0kHz	
2	Enhance [%]	0 ~ 100%	○
3	Exc.Lvl [%]	0 ~ 100%	
4	Init Dly [ms]	0.0 ~ 80.0ms	
5	L Dly [ms]	0 ~ 600ms	○
6	R Dly [ms]	0 ~ 600ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

** Aural Exciter® is a registered trademark and is manufactured under license from APHEX Systems Ltd.*

• 79 : Dist & Dly

No.	PARAMETER	RANGE	QE
1	Dist.Lvl [%]	0 ~ 100%	○
2	Mid.Freq [kHz]	315Hz ~ 6.3kHz	
3	Mid.Gain [dB]	-12 ~ +12dB	
4	Tre.Gain [dB]	-12 ~ +12dB	
5	L Dly [ms]	0 ~ 680ms	○
6	R Dly [ms]	0 ~ 680ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 80 : Pan & Dly

No.	PARAMETER	RANGE	QE
1	Type	L→R, R→L, L<>R	○
2	Speed	1 ~ 52	
3	Fade In [%]	-100 ~ +100%	
4	L/R Dpth [%]	0 ~ 100%	
5	L Dly [ms]	0 ~ 680ms	○
6	R Dly [ms]	0 ~ 680ms	○
7	FB Gain [%]	-99 ~ +99%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 81 : Flg & Flg

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 99.9ms	
4	Mod.FBG [%]	0 ~ 99%	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Mod.Dly [ms]	0.1 ~ 99.9ms	
8	Mod.FBG [%]	0 ~ 99%	

• 82 : Flg & Cho

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 99.9ms	
4	Mod.FBG [%]	0 ~ 99%	○
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	PM Depth [%]	0 ~ 100%	○
7	AM Depth [%]	0 ~ 100%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 83 : Flg & Sym

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 99.9ms	
4	Mod.FBG [%]	0 ~ 99%	○
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Init Dly [ms]	0 ~ 300ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 84 : Flg & Pha

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 99.9ms	
4	Mod.FBG [%]	0 ~ 99%	○
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Mod.Dly [ms]	0.1 ~ 5.0ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 85 : Cho & Cho

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	
4	Hi Gain [dB]	-12 ~ +12dB	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	PM Depth [%]	0 ~ 100%	○
7	AM Depth [%]	0 ~ 100%	
8	Hi Gain [dB]	-12 ~ +12dB	

• 86 : Cho & Sym

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	○
4	Hi Gain [dB]	-12 ~ +12dB	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Init Dly [ms]	0 ~ 300ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 87 : Cho & Pha

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	PM Depth [%]	0 ~ 100%	○
3	AM Depth [%]	0 ~ 100%	○
4	Hi Gain [dB]	-12 ~ +12dB	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Mod.Dly [ms]	0.1 ~ 5.0ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 88 : Sym & Sym

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Init Dly [ms]	0 ~ 300ms	
4	Hi Gain [dB]	-12 ~ +12dB	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Init Dly [ms]	0 ~ 300ms	
8	Hi Gain [dB]	-12 ~ +12dB	

• 89 : Sym & Pha

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Init Dly [ms]	0 ~ 300ms	
4	Hi Gain [dB]	-12 ~ +12dB	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Mod.Dly [ms]	0.1 ~ 5.0ms	○
8	Hi Gain [dB]	-12 ~ +12dB	

• 90 : Pha & Pha

No.	PARAMETER	RANGE	QE
1	Mod.Freq [Hz]	0.1 ~ 40.0Hz	
2	Mod.Dpth [%]	0 ~ 100%	○
3	Mod.Dly [ms]	0.1 ~ 5.0ms	
4	Hi Gain [dB]	-12 ~ +12dB	
5	Mod.Freq [Hz]	0.1 ~40.0Hz	
6	Mod.Dpth [%]	0 ~ 100%	○
7	Mod.Dly [ms]	0.1 ~ 5.0ms	
8	Hi Gain [dB]	-12 ~ +12dB	

Installation of the SYEMB06 Expansion Memory Board

1

Turn the TG500 power switch off and disconnect the AC power cord from the main outlet.

2

Locate the small cover on the top of the TG500 and remove the two screws that hold it in place (Figure 1).

3

Below the cover you will see a recessed panel (Figure 2). When installing a single SYEMB06 use slot number 1. Install a second SYEMB06 in slot number 2.

4

Replace the cover and secure it with the screws you removed in step 2.

SYEMB06

Cover

Figure 1

Figure 2

The wave memory must be initialized after installation of the SYEMB06.

WARNING: Installation of a SYEMB06 may cause the internal data to be damaged. Backup the internal data before installation.

INITIAL DATA

● INITIAL PERFORMANCE "InitPerf."

PERFORMANCE	Performance Name		InitPerf	
Voice Number	A	P100	B	P100
	C	P100	D	P100
Layer	A	B	C	D
Volume	127	127	127	127
Pan	0	0	0	0
Note Shift	0	0	0	0
Fine Tune	0	0	0	0
Note Limit	C-2 ~ G8	C-2 ~ G8	C-2 ~ G8	C-2 ~ G8
Vel. Limit	1 ~ 127	1 ~ 127	1 ~ 127	1 ~ 127
MC3 Enable	off	off	off	off
MC4 Enable	off	off	off	off
Effect Send	A	B	C	D
Level	127	127	127	127
Switch	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)
Vel. Sense	0	0	0	0
Key. Scale	0	0	0	0
Output Select	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)

Total Level		80			
Quick Edit		A	B	C	D
AEG	R1	0	0	0	0
	R2, R3	0	0	0	0
	R4	0	0	0	0
	RR	0	0	0	0
	Vel. Sense	0	0	0	0
Filter	Cutoff	0	0	0	0
	Resonance	0	0	0	0
	Vel. Sense	0	0	0	0
LFO	Depth	0	0	0	0
	Speed	0	0	0	0
Con-trol	AT	LyrA	LyrA	LyrA	LyrA
	MC1	LyrA	LyrA	LyrA	LyrA
	MC2	LyrA	LyrA	LyrA	LyrA
	—	–	–	–	–
	—	–	–	–	–
	Sustain	on	on	on	on
	Pitch EG	on	on	on	on
	Fixed Note	off	off	off	off

Effect	Mode				off / serial (parallel)			
Effect 1	Type :				06 : Rev. Stage 1			
	Output Level a				100			
	Output Level b				—			
	Wet : Dry				50 : 50			
Param.	P1	2.2	P2	0.7	P3	8	P4	8
	P5	0	P6	4	P7	65	P8	Thru
Effect 2	Type :				57 : EQ → Sym			
	Output Level a				—			
	Output Level b				100			
	Wet : Dry				50 : 50			
Param.	P1	500	P2	0	P3	3.2	P4	0
	P5	0.8	P6	60	P7	0	P8	100
Mix. Level	EF2	—			Insert 1b	—		
	Insert 2a	—			Insert 2b	0		
Control 1	Device	off			Parameter	off		
	Min.	0			Max.	100		
Control 2	Device	off			Parameter	off		
	Min.	0			Max.	100		
Control LFO	Waveform	tri	Speed	0	Delay	0		

● INITIAL NORMAL VOICE "Init Vce"

NORMAL VOICE	Voice name	Init Vce	Total Level	127	Vol Low Limit	0							
Oscillator	Mode	(normal) / fixed	LFO	Delay	0	Phase	0°						
	Wave Form	P1244, Sin		Wave Form	tri								
	Fine Tune	0		Speed	64								
	Note/NtSft	0		Depth	Pmod	0	Amod	0	Fmod	0			
	Random pitch	0		Speed Sens.	Random	0	Vel.	0					
	Reverse	off			Key Scale	0							
Amplitude EG	Mode	(atk) / hold	L2	63	L3	63							
	(R1) / HT	63	R2	63	R3	63	R4	0	RR	50			
	Scaling	BP1	BP2	BP3	BP4	Rate Scaling	0						
	Note	C1	G2	E4	C6	Sencitivity	Velocity	0					
	Offset	0	0	0	0		Atk Rate Vel.	0					
Filter	Type	THRU	Cutoff Freq	—	Res	—	Band	—	CTRL	LFO			
	EG	L0	0	L1	0	L2	0	L3	0	L4	0	RL1	0
		RL2	0										
	Shape:	RS	0	R1	0	R2	0	R3	0	R4	0	RR1	0
		RR2	0										
	Scaling	BP1	BP2	BP3	BP4	Sensitivity	Type	EG-shift					
	Note	C1	G2	E4	C6		Velocity	0					
	Offset	0	0	0	0		Attack Rate Vel.	0					
Pitch	Range	1 oct	Velocity	0	Rate Velocity	0							
	EG	L0	0	L1	0	L2	0	L3	0	RL	0		
		RS	0	R1	63	R2	63	R3	63	RR	63	Loop	on / (off)

Controller		PB Range	2								
		Aftertouch mode	(ch's) / key's								
	AT	Amod	0	Pmod	0	Fmod	0	EG Bias	0	Cutoff	0
		Pitch Bias	0								
	MC1	Amod	0	Pmod	0	Fmod	0	EG Bias	0	Cutoff	0
	MC2	Amod	0	Pmod	0	Fmod	0	EG Bias	0	Cutoff	0
	MC3	Parameter	No Assign	Min.	0	Max.	100				
	MC4	Parameter	No Assign	Min.	0	Max.	100				
Effect		Mode	off / serial / (parallel)								
		Send	127	EF2 Mix	—						
	Effect 1	Type :	06 : Rev. Stage 1								
		Output Level a	100	Output level b	—						
		Wet : Dry	50 : 50								
	Param.	P1	2.2	P2	0.7	P3	8	P4	8		
		P5	0	P6	4	P7	65	P8	Thru		
	Effect 2	Type :	57 : EQ → Sym.								
		Output Level a	—	Output level b	100						
	Param.	P1	500	P2	0	P3	3.2	P4	0		
		P5	0.8	P6	60	P7	0	P8	100		
	Control 1	Device	off	Parameter	off						
		Min.	0	Max.	100						
	Control 2	Device	off	Parameter	off						
		Min.	0	Max.	100						
	Control LFO	Wave form	tri	Speed	0	Delay	0				

● INITIAL DRUM VOICE "DR Kit"

DRUM VOICE	Voice Name	DR Kit	Total Level	127	Vol Lo Limit	0

Note	Key Parameters								Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
C 1	P1-156 BD6	120	0	0	0	off	normal	off	off	a b	ⓐⓑ	127	0	①②
C#1	P1-155 BD5	120	0	0	0	off	normal	off	off	a b	ⓐⓑ	127	0	①②
D 1	P1-154 BD4	121	0	0	0	off	normal	off	off	a b	ⓐⓑ	127	0	①②
D#1	P1-153 BD3	127	0	0	0	off	normal	off	off	a b	ⓐⓑ	127	0	①②
E 1	P1-170 Tom2	103	–6	0	–24	off	long	off	off	ⓐⓑ	ⓐⓑ	97	0	①②
F 1	P1-170 Tom2	105	–1	0	–8	off	long	off	off	ⓐⓑ	ⓐⓑ	90	0	①②
F#1	P1-170 Tom2	112	+3	0	+8	off	normal	off	off	ⓐⓑ	ⓐⓑ	95	0	①②
G 1	P1-170 Tom2	119	+8	0	+21	off	normal	off	off	ⓐⓑ	ⓐⓑ	98	0	①②
G#1	P1-152 BD2	115	–3	0	0	off	normal	off	off	a b	ⓐⓑ	127	0	①②
A 1	P1-151 BD1	119	–5	0	0	off	normal	off	off	a b	ⓐⓑ	127	0	①②
A#1	P1-162 SD4	119	0	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	109	0	①②
B 1	P1-169 Tom1	127	–4	0	–29	off	very long	off	off	ⓐⓑ	ⓐⓑ	94	0	①②
C 2	P1-169 Tom1	127	0	0	–10	off	long	off	off	ⓐⓑ	ⓐⓑ	98	0	①②
C#2	P1-160 SD2	127	–1	–21	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	123	+2	①②
D 2	P1-169 Tom1	127	+6	0	+9	off	long	off	off	ⓐⓑ	ⓐⓑ	89	0	①②
D#2	P1-168 SD Side	127	0	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	124	+3	①②
E 2	P1-161 SD3	127	–2	0	0	off	long	off	off	ⓐⓑ	ⓐⓑ	113	+3	①②
F 2	P1-169 Tom1	127	+12	0	+20	off	long	off	off	ⓐⓑ	ⓐⓑ	92	0	①②
F#2	P1-193 Clap	127	0	0	+8	off	short	off	off	ⓐⓑ	ⓐⓑ	99	0	①②
G 2	P1-196 Cowbell	127	0	0	+13	off	short	off	off	ⓐⓑ	ⓐⓑ	104	0	①②
G#2	P1-188 Cabasa	127	–5	0	–26	off	short	off	off	ⓐⓑ	ⓐⓑ	90	0	①②
A 2	P1-173 HH light	127	0	0	+12	1	short	off	off	a ⓑ	ⓐⓑ	111	0	①②
A#2	P1-174 HH mid	127	0	0	+12	1	normal	off	off	a ⓑ	ⓐⓑ	94	0	①②
B 2	P1-171 HH Open	127	0	0	+12	1	long	off	off	a ⓑ	ⓐⓑ	87	0	①②
C 3	P1-176 Crash	127	0	0	–11	off	very long	off	off	a ⓑ	ⓐⓑ	102	0	①②
C#3	P1-176 Crash	127	+3	+1	–5	off	very long	off	off	a ⓑ	ⓐⓑ	109	0	①②
D 3	P1-177 Ride	127	0	0	+8	off	very long	off	off	a ⓑ	ⓐⓑ	107	0	①②
D#3	P1-178 Ride Bell	127	0	0	+17	off	very long	off	off	a ⓑ	ⓐⓑ	107	0	①②
E 3	P1-189 Conga Lo	97	+2	0	–17	off	normal	off	off	a ⓑ	ⓐⓑ	100	0	①②

● INITIAL DRUM VOICE "DR Kit"

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
F 3	Pı-190 Conga Mt	116	0	0	+8	off	normal	off	off	ⓐⓑ	ⓐⓑ	100	0	①②
F#3	Pı-191 Conga Slp	117	0	0	+19	off	normal	off	off	ⓐⓑ	ⓐⓑ	100	0	①②
G 3	Pı-187 Bongo	127	0	0	–15	off	short	off	off	ⓐⓑ	ⓐⓑ	98	0	①②
G#3	Pı-187 Bongo	127	+3	0	+15	off	normal	off	off	ⓐⓑ	ⓐⓑ	99	0	①②
A 3	Pı-201 Timbale	100	–4	0	–2	off	normal	off	off	ⓐⓑ	ⓐⓑ	99	0	①②
A#3	Pı-201 Timbale	108	–1	0	+22	off	normal	off	off	ⓐⓑ	ⓐⓑ	99	_0	①②
B 3	Pı-198 Tmbrine	127	0	0	–12	off	normal	off	off	ⓐⓑ	ⓐⓑ	101	0	①②
C 4	Pı-194 Clave	127	0	0	–25	off	short	off	off	ⓐⓑ	ⓐⓑ	108	0	①②
C#4	Pı-200 Templ Blk	127	0	0	+30	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D 4	Pı-186 Agogo Hi	98	–3	0	–21	off	long	off	off	ⓐⓑ	ⓐⓑ	102	0	①②
D#4	Pı-186 Agogo Hi	102	+2	0	–7	off	long	off	off	ⓐⓑ	ⓐⓑ	104	0	①②
E 4	Pı-204 Whistle	127	–2	0	+13	off	normal	off	off	ⓐⓑ	ⓐⓑ	97	0	①②
F 4	Pı-157 BD7	104	–3	0	0	off	long	off	off	a b	ⓐⓑ	127	0	①②
F#4	Pı-195 Ana Cwbl	127	0	0	–24	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 4	Pı-158 BD8	104	–4	0	0	off	long	off	off	a b	ⓐⓑ	127	0	①②
G#4	Pı-181 HH cl Anlg	127	+3	+37	0	1	normal	off	off	a ⓑ	ⓐⓑ	113	0	①②
A 4	Pı-166 SD8	127	–2	–23	0	off	normal	off	off	a ⓑ	ⓐ b	127	0	①②
A#4	Pı-180 HH op Anlg	127	0	0	0	1	short	off	off	a ⓑ	ⓐⓑ	111	0	①②
B 4	Pı-167 SD9	127	–6	0	0	off	normal	off	off	a ⓑ	ⓐⓑ	127	0	①②
C 5	Pı-116 Syn BS6	127	–12	0	0	off	short	off	off	a b	ⓐⓑ	127	0	①②

Effect															
	Mode								off / serial / (parallel)						
Effect 1	Type :	50 : EQ → Rev. 1			Output Level a		—		Output Level b		100		Wet : Dry		100 : 0
param.	P1	2.0	P2	+12	P3	500	P4	+12	P5	1.4	P6	0.9	P7	86	P8	36
Effect 2	Type :	52 : EQ → ER			Output Level a		—		Output Level b		100		Wet : Dry		100 : 0
param.	P1	2.0	P2	+12	P3	500	P4	+12	P5	smll	P6	10	P7	0	P8	9
Mix Level	EF2		—		Insert 1b		100		Insert 2a		—		Insert 2b		100	
Control 1	Device		off		Min.	0	Max.	98	Parameter		Ef1 prm8		—			
Control 2	Device		off		Min.	0	Max.	42	Parameter		Ef2 prm8		—			
Effect LFO	Waveform		tri		Speed		0		Delay		0					

● INITIAL DRUM VOICE "DR Zones"

DRUM VOICE	Voice Name		DR Zones		Total Level	127	Vol Lo Limit		0				
Note	Key Parameters									Effect Send			
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
C 1	P1-151 BD1	127	0	+3	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
C#1	P1-152 BD2	127	0	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
D 1	P1-153 BD3	127	0	0	0	off	long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
D#1	P1-154 BD4	127	−1	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
E 1	P1-155 BD5	127	0	0	0	off	long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
F 1	P1-156 BD6	127	0	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
F#1	P1-157 BD7	127	0	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
G 1	P1-158 BD8	127	−2	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
G#1	P1-159 SD1	127	0	0	0	off	long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
A 1	P1-160 SD2	127	0	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
A#1	P1-161 SD3	127	0	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
B 1	P1-162 SD4	127	+2	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
C 2	P1-163 SD5	127	0	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
C#2	P1-164 SD6	127	0	0	0	off	long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
D 2	P1-165 SD7	127	0	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
D#2	P1-166 SD8	127	0	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
E 2	P1-167 SD9	127	0	0	0	off	long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
F 2	P1-168 SD side	127	0	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
F#2	P1-169 Tom1	127	−5	0	+20	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
G 2	P1-169 Tom1	127	0	0	+10	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
G#2	P1-169 Tom1	127	+3	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
A 2	P1-169 Tom1	127	+6	0	−10	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
A#2	P1-170 Tom2	127	−6	0	+20	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
B 2	P1-170 Tom2	127	−3	−14	+10	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
C 3	P1-170 Tom2	127	0	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
C#3	P1-170 Tom2	127	+4	0	−10	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
D 3	P1-171 HH Open	127	0	0	0	1	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
D#3	P1-172 HH Pedal	127	0	0	0	1	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②
E 3	P1-173 HH light	127	0	0	0	1	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	0	① ②

● INITIAL DRUM VOICE "DR Zones"

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
F 3	PI-174 HH mid	127	0	0	0	1	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F#3	PI-175 HH heavy	127	0	0	0	1	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 3	PI-180 HH op Anlg	127	0	0	0	2	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G#3	PI-181 HH cl Anlg	127	0	0	0	2	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A 3	PI-176 Crash	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A#3	PI-177 Ride	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
B 3	PI-178 Ride Bell	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C 4	PI-179 Anlg Tom	127	–7	0	–20	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C#4	PI-179 Anlg Tom	127	–5	0	–10	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D 4	PI-179 Anlg Tom	127	–1	0	0	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D#4	PI-179 Anlg Tom	127	+1	0	+10	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
E 4	PI-179 Anlg Tom	127	+4	0	+20	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F 4	PI-192 Ana Conga	127	0	0	–10	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F#4	PI-192 Ana Conga	127	–3	0	+10	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 4	PI-193 Clap	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G#4	PI-195 Ana Cwbl	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A 4	PI-194 Clave	127	–3	0	0	5	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A#4	PI-183 Rez Click	127	0	0	–15	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
B 4	PI-198 Tmbrine	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C 5	PI-122 Syn Bs9	127	–24	0	0	off	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②

Effect	Mode															
										off / serial / (parallel)					
Effect 1	Type :	47 : Dist→ Dly			Output Level a	—				Output Level b	100%		Wet : Dry	70 : 30		
param.	P1	25	P2	2.5	P3	+8	P4	+2		P5	500	P6	250	P7	+30	P8	0
Effect 2	Type :	50 : EQ → Rev. 1			Output Level a	—				Output Level b	100%		Wet : Dry	40 : 60		
param.	P1	200	P2	+12	P3	800	P4	+6		P5	1.3	P6	0.8	P7	13	P8	18
Mix Level	EF2		—		Insert 1b		100%			Insert 2a		—		Insert 2b		100%	
Control 1	Device		off		Min.	0	Max.	100		Parameter		Out 2 Wet		—			
Control 2	Device		off		Min.	0	Max.	35		Parameter		Ef1 prm8		—			
Effect LFO	Waveform		tri		Speed		0			Delay		0					

● INITIAL DRUM VOICE "DR GMIDI"

DRUM VOICE	Voice Name	DR GMIDI	Total Level	127	Vol Lo Limit	0

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
C 1	P1-151 BD1	127	0	+3	0	off	ver long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C#1	P1-168 SD side	127	+2	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D 1	P1-160 SD2	127	0	0	0	off	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D#1	P1-193 Clap	127	+1	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
E 1	P1-166 SD8	127	+1	0	0	off	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F 1	P1-169 Tom1	127	–8	0	–18	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F#1	P1-174 HH mid	127	+1	0	0	1	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 1	P1-169 Tom1	127	–6	0	–16	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G#1	P1-192 HH Pedal	127	0	0	0	1	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A 1	P1-169 Tom1	127	–3	0	–12	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A#1	P1-171 HH Open	127	+2	0	0	1	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
B 1	P1-169 Tom1	127	+2	0	–6	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C 2	P1-169 Tom1	127	+7	0	+3	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C#2	P1-169 Crash	127	0	0	–10	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D 2	P1-169 Tom1	127	+12	0	+10	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D#2	P1-177 Ride	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
E 2	P1-176 Crash	127	–4	0	+15	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F 2	P1-178 Ride Bell	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F#2	P1-198 Tmbrine	127	–2	0	0	off	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 2	P1-176 Crash	127	+8	0	+15	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G#2	P1-196 Cowbell	127	0	0	+15	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A 2	P1-176 Crash	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A#2	P1-191 Conga Slp	127	0	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
B 2	P1-197 Ride	127	–2	–14	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C 3	P1-187 Bongo	127	+3	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C#3	P1-187 Bongo	127	–2	–2	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D 3	P1-190 Conga Mt	127	0	–14	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D#3	P1-189 Conga Lo	127	+5	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
E 3	P1-189 Conga Lo	127	0	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②

● INITIAL DRUM VOICE "DR GMIDI"

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	Out S	EF1	EF2	Levl	VelS	Dry Out
F 3	P1-201 Timbale	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F#3	P1-201 Timbale	127	–5	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 3	P1-186 Agogo Hi	127	0	0	+25	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G#3	P1-186 Agogo Hi	127	–5	0	+19	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A 3	P1-188 Cabasa	127	0	0	–20	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A#3	P1-197 Maracas	127	0	0	–18	off	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
B 3	P1-204 Whistle	127	–2	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C 4	P1-204 Whistle	127	–4	0	0	off	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C#4	P1-195 Ana Cwbl	127	0	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D 4	P1-179 Anlg Tom	127	0	0	0	off	long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
D#4	P1-194 Clave	127	–4	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
E 4	P1-192 Ana Conga	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F 4	P1-194 Clave	127	–10	0	+25	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
F#4	P1-184 Vc Drm BD	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G 4	P1-185 Vc Drm SD	127	0	0	0	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
G#4	P1-203 Triangle	127	0	0	0	5	short	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A 4	P1-203 Triangle	127	0	0	0	5	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
A#4	P1-183 Rez Click	127	0	0	–15	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
B 4	P1-183 Rez click	127	4	0	+15	off	very long	off	off	ⓐⓑ	ⓐⓑ	127	0	①②
C 5	P1-218 Orch Hit2	127	0	0	0	off	normal	off	off	ⓐⓑ	ⓐⓑ	127	0	①②

Effect															
	Mode								off / serial / (parallel)						
Effect 1	Type :	47 : Dist→ Dly			Output Level a	—			Output Level b	100%		Wet : Dry	70 : 30		
param.	P1	25	P2	2.5	P3	+8	P4	+2	P5	500	P6	250	P7	+30	P8	0
Effect 2	Type :	50 : EQ → Rev. 1			Output Level a	—			Output Level b	100%		Wet : Dry	36 : 64		
param.	P1	200	P2	+12	P3	800	P4	+6	P5	1.3	P6	0.8	P7	13	P8	18
Mix Level	EF2		—		Insert 1b		100		Insert 2a		—		Insert 2b		100	
Control 1	Device		off		Min.	0	Max.	100	Parameter		Out 2 Wet		—			
Control 2	Device		off		Min.	0	Max.	35	Parameter		Ef1 prm8		—			
Effect LFO	Waveform		tri		Speed				0				Delay		0	

● INITIAL DRUM VOICE "DR Efect"

DRUM VOICE	Voice Name	DR Efect	Total Level	127	Vol Lo Limit	0

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
C 1	P1-145 Marimba	127	–20	0	0	off	very long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
C#1	P1-152 BD2	127	–9	0	0	off	normal	off	off	ⓐ b	a ⓑ	127	+5	① ②
D 1	P1-150 Xylophon	127	–1	0	0	off	normal	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
D#1	P1-159 SD1	127	–9	0	0	off	long	off	off	ⓐ b	ⓐ ⓑ	127	+7	① ②
E 1	P1-160 SD2	127	–10	+14	0	off	normal	off	off	ⓐ b	a ⓑ	127	+5	① ②
F 1	P1-161 SD3	127	–6	–57	0	off	normal	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
F#1	P1-162 SD4	127	+2	0	0	off	normal	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
G 1	P1-163 SD5	127	–2	0	0	off	normal	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
G#1	P1-169 Tom1	127	–6	0	0	off	long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
A 1	P1-169 Tom1	127	0	0	0	off	long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
A#1	P1-169 Tom1	127	–9	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	+5	① ②
B 1	P1-018 Prc Org1	127	–20	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	+5	① ②
C 2	P1-170 Tom2	127	–17	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ b	127	+7	① ②
C#2	P1-170 Tom2	127	–5	0	0	off	very long	off	off	ⓐ b	ⓐ b	127	+7	① ②
D 2	P1-170 Tom2	127	+7	0	0	off	normal	off	off	ⓐ b	ⓐ b	127	+7	① ②
D#2	P1-164 SD6	127	–8	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	+5	① ②
E 2	P1-172 HH Pedal	127	–10	0	0	1	very long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
F 2	P1-171 HH Open	127	+26	0	0	1	long	off	off	ⓐ b	a ⓑ	127	+2	① ②
F#2	P1-178 Ride Bell	127	+25	0	0	off	very long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
G 2	P1-177 Ride	127	+5	0	0	off	short	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
G#2	P1-176 Crash	127	+24	0	0	off	very long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
A 2	P1-176 Crash	127	+31	0	0	off	very long	off	off	ⓐ b	ⓐ ⓑ	127	+5	① ②
A#2	P1-176 Crash	127	+11	0	0	off	very long	off	off	ⓐ b	ⓐ b	127	+5	① ②
B 2	P1-168 SD side	127	–14	0	0	off	normal	off	off	ⓐ ⓑ	ⓐ ⓑ	127	+7	① ②
C 3	P1-203 Triangle	127	+8	0	0	2	very long	off	off	ⓐ ⓑ	a b	127	+7	① ②
C#3	P1-203 Triangle	127	+21	–1	0	2	long	off	off	ⓐ ⓑ	a b	127	+7	① ②
D 3	P1-199 Timpani	127	0	0	0	off	very long	off	off	ⓐ ⓑ	ⓐ ⓑ	127	+3	① ②
D#3	P1-196 Cowbell	127	–25	–9	0	off	normal	off	off	ⓐ b	a ⓑ	127	+7	① ②
E 3	P1-196 Cowbell	127	–15	0	0	off	normal	off	off	ⓐ b	a ⓑ	127	+7	① ②

● INITIAL DRUM VOICE "DR Efect"

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
F 3	P1-197 Maracas	127	–11	0	0	off	short	off	off	(a) b	(a)(b)	90	+7	(1)(2)
F#3	P1-189 Conga Lo	127	–16	0	0	off	very long	off	off	(a)(b)	a (b)	100	+5	(1)(2)
G 3	P1-191 Conga Slp	127	–13	0	0	off	long	off	off	(a)(b)	(a) b	127	+5	(1)(2)
G#3	P1-190 Conga Mt	127	+7	0	0	off	normal	off	off	(a) b	a (b)	127	+6	(1)(2)
A 3	P1-213 Mellow	127	–34	–20	0	off	normal	off	off	(a)(b)	a (b)	127	+3	(1)(2)
A#3	P1-216 Seq2	127	–32	–20	0	off	very long	off	off	(a) b	a (b)	127	+3	(1)(2)
B 3	P1-201 Timbale	127	+6	0	0	off	normal	off	off	(a) b	a (b)	127	+3	(1)(2)
C 4	P1-206 E.P. Np	127	+12	0	0	off	normal	off	off	(a) b	(a)(b)	127	+5	(1)(2)
C#4	P1-136 Dist Wv Lp	127	–15	0	0	off	very long	off	off	(a)(b)	(a)(b)	127	+5	(1)(2)
D 4	P1-200 Templ Blk	127	–48	+15	0	off	normal	off	off	(a)(b)	a (b)	127	+3	(1)(2)
D#4	P1-194 Clave	127	–47	–41	0	off	normal	off	off	(a)(b)	a (b)	127	+5	(1)(2)
E 4	P1-186 Agogo Hi	127	–19	–26	0	off	very long	off	off	(a)(b)	a (b)	127	+5	(1)(2)
F 4	P1-184 Vc Drm BD	127	0	0	0	off	very long	off	off	(a) b	(a)(b)	127	+5	(1)(2)
F#4	P1-217 Orch Hitl	127	+36	0	0	off	very long	off	off	(a) b	(a)(b)	127	+5	(1)(2)
G 4	P1-178 Ride Bell	127	–14	0	0	off	very long	off	off	(a) b	(a)(b)	127	+5	(1)(2)
G#4	P1-185 Vc Drm SD	127	–6	0	0	off	very long	off	off	(a) b	(a)(b)	90	+5	(1)(2)
A 4	P1-094 Kalimba	110	–8	0	0	off	long	off	off	(a) b	(a)(b)	93	+5	(1)(2)
A#4	P1-207 Bamboo	127	–17	+19	0	off	normal	off	off	(a) b	a (b)	127	+5	(1)(2)
B 4	P1-205 Bottle	127	–31	+20	0	off	long	off	off	(a) b	a (b)	127	+5	(1)(2)
C 5	P1-208 Temp Ra	93	–3	0	0	off	very long	off	off	(a)(b)	a (b)	127	+5	(1)(2)

Effect	Mode															
	off / (serial) / parallel															
Effect 1	Type :	Dist & Rev.			Output Level a		100%		Output Level b		100%		Wet : Dry		50 : 50	
param.	P1	25	P2	2.0	P3	+6	P4	+12	P5	2.7	P6	1.0	P7	50	P8	12.0
Effect 2	Type :	67 : Pit & Rev.			Output Level a		100%		Output Level b		100%		Wet : Dry		100 : 0	
param.	P1	–7	P2	0	P3	+5	P4	0	P5	0.8	P6	1.5	P7	50	P8	9.0
Mix Level	EF2		100		Insert 1b		—		Insert 2a		100		Insert 2b		—	
Control 1	Device		off		Min.	0	Max.	100	Parameter		Out 1 Wet		—			
Control 2	Device		off		Min.	0	Max.	50	Parameter		Efl prm5		—			
Effect LFO	Waveform		tri		Speed				0				Delay		0	

● INITIAL MULTI "Init Mlt"

MULTI		Multi Name				Init Mlt											
Inst Number		1: VPi00				2: VPi00				3: VPi00				4: VPi00			
		5: VPi00				6: VPi00				7: VPi00				8: VPi00			
		9: VPi00				10: VPi00				11: VPi00				12: VPi00			
		13: VPi00				14: VPi00				15: VPi00				16: VPi63			
Inst		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Volume	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
	Pan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	VCE
	Note Shift	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
	Tune	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—
	Output Select	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off	off
Effect Send		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	Source	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	MLT	VCE
	Level	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	—
	Switch	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	(1a) 1b (2a) (2b)	— — — —
	Output Select	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	(D1) (D2)	— —

Effect									
	Mode				off / serial (parallel)				
Effect 1	Type :				06 : Rev. Stage 1				
	Output Level a				100				
	Output Level b				—				
	Wet : Dry				50 : 50				
Param.	P1	2.2	P2	0.7	P3	8	P4	8	
	P5	0	P6	4	P7	65	P8	thru	
Effect 2	Type :				57 : EQ → Sym				
	Output Level a				—				
	Output Level b				100				
	Wet : Dry				50 : 50				
Param.	P1	500	P2	0	P3	3.2	P4	0	
	P5	0.8	P6	60	P7	0	P8	100	
Mix. Level	EF2		—		Insert 1b		100		
	Insert 2a		—		Insert 2b		0		
Control 1	Device		off		Min.	0	Max.	100	
	Parameter		off						
Control 2	Device		off		Min.	0	Max.	100	
	Parameter		off						
Control LFO	Waveform		tri		Speed	0	Delay	0	

● SYSTEM SETUP

SYSTEM SETUP																			
										Effect Bypass				on /(off)					
Setup			Note Shift	0		Tune	0			Ctrl Reset	on			Output	norm				
Controller			MC1	001 (Mod. Whl.)		MC2	004 (Foot Cut)			MC3	018			MC4	019				
MIDI	Parameter		R.ch			omni			Device No			all			Volume Ctrl			007 (Main Vol)	
	Filter		Bulk Protect			on			Ctrl Ch			off			Poly AT			on	
Program Change			off / normal /(direct)/ table																
000	VCE : I100	016	VCE : I116	032	VCE : I132	048	VCE : I148	064	VCE : I200	080	VCE : I216	096	VCE : I232	112	VCE : I248				
001	VCE : I101	017	VCE : I117	033	VCE : I133	049	VCE : I149	065	VCE : I201	081	VCE : I217	097	VCE : I233	113	VCE : I249				
002	VCE : I102	018	VCE : I118	034	VCE : I134	050	VCE : I150	066	VCE : I202	082	VCE : I218	098	VCE : I234	114	VCE : I250				
003	VCE : I103	019	VCE : I119	035	VCE : I135	051	VCE : I151	067	VCE : I203	083	VCE : I219	099	VCE : I235	115	VCE : I251				
004	VCE : I104	020	VCE : I120	036	VCE : I136	052	VCE : I152	068	VCE : I204	084	VCE : I220	100	VCE : I236	116	VCE : I252				
005	VCE : I105	021	VCE : I121	037	VCE : I137	053	VCE : I153	069	VCE : I205	085	VCE : I221	101	VCE : I237	117	VCE : I253				
006	VCE : I106	022	VCE : I122	038	VCE : I138	054	VCE : I154	070	VCE : I206	086	VCE : I222	102	VCE : I238	118	VCE : I254				
007	VCE : I107	023	VCE : I123	039	VCE : I139	055	VCE : I155	071	VCE : I207	087	VCE : I223	103	VCE : I239	119	VCE : I255				
008	VCE : I108	024	VCE : I124	040	VCE : I140	056	VCE : I156	072	VCE : I208	088	VCE : I224	104	VCE : I240	120	VCE : I256				
009	VCE : I109	025	VCE : I125	041	VCE : I141	057	VCE : I157	073	VCE : I209	089	VCE : I225	105	VCE : I241	121	VCE : I257				
010	VCE : I110	026	VCE : I126	042	VCE : I142	058	VCE : I158	074	VCE : I210	090	VCE : I226	106	VCE : I242	122	VCE : I258				
011	VCE : I111	027	VCE : I127	043	VCE : I143	059	VCE : I159	075	VCE : I211	091	VCE : I227	107	VCE : I243	123	VCE : I259				
012	VCE : I112	028	VCE : I128	044	VCE : I144	060	VCE : I160	076	VCE : I212	092	VCE : I228	108	VCE : I244	124	VCE : I260				
013	VCE : I113	029	VCE : I129	045	VCE : I145	061	VCE : I161	077	VCE : I213	093	VCE : I229	109	VCE : I245	125	VCE : I261				
014	VCE : I114	030	VCE : I130	046	VCE : I146	062	VCE : I162	078	VCE : I214	094	VCE : I230	110	VCE : I246	126	VCE : I262				
015	VCE : I115	031	VCE : I131	047	VCE : I147	063	VCE : I163	079	VCE : I215	095	VCE : I231	111	VCE : I247	127	VCE : I263				

● PERFORMANCE BLANK CHART

PERFORMANCE	Performance Name				Total Level						Effect	Mode			off / serial / parallel			
Voice Number	A		B		Quick Edit		A	B	C	D	Effect 1	Type :						
	C		D		AEG	R1						Output Level a						
Layer	A	B	C	D		R2, R3						Output Level b						
Volume						R4						Wet : Dry						
Pan						RR					Param.	P1		P2		P3		P4
Note Shift						Vel. Sense						P5		P6		P7		P8
Fine Tune					Filter	Cutoff					Effect 2	Type :						
Note Limit						Resonance						Output Level a						
Vel. Limit						Vel. Sense						Output Level b						
MC3 Enable					LFO	Depth						Wet : Dry						
MC4 Enable						Speed					Param.	P1		P2		P3		P4
Effect Send	A	B	C	D	Con-	AT						P5		P6		P7		P8
Level					trol	MC1					Mix. Level	EF2				Insert 1b		
Switch	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b		MC2						Insert 2a				Insert 2b		
						—					Control 1	Device				Parameter		
Vel. Sense						—						Min.				Max.		
Key. Scale						Sustain					Control 2	Device				Parameter		
Output Select	D1 D2	D1 D2	D1 D2	D1 D2		Pitch EG						Min.				Max.		
						Fixed Note					Control LFO	Waveform		Speed		Delay		

● NORMAL VOICE BLANK CHART

NORMAL VOICE	Voice name		Total Level		Vol Low Limit	
Oscillator	Mode	normal / fixed	LFO	Delay		Phase
Wave Form			Wave Form			
Fine Tune			Speed			
Note/NtSft			Depth	Pmod	Amod	Fmod
Random pitch			Speed Sens.	Random		Vel.
Reverse				Key Scale		

Amplitude EG	Mode	atk / hold	L2		L3					
	R1 / HT		R2		R3		R4		RR	
Scaling	BP1	BP2	BP3	BP4	Rate Scaling					
Note					Sensitivity	Velocity				
Offset						Atk Rate Vel.				

Filter	Type		Cutoff Freq		Res		Band		CTRL	
EG	L0		L1		L2		L3		L4	
Shape:	RS		R1		R2		R3		R4	
Scaling	BP1	BP2	BP3	BP4	Sensitivity	Type				
Note						Velocity				
Offset						Attack Rate Vel.				

Pitch	Range		Velocity		Rate Velocity	
EG	L0	L1	L2	L3	RL	
	RS	R1	R2	R3	RR	Loop on / off

Controller	PB Range					
	After touch mode			ch's / key's		
AT	Amod	Pmod	Fmod	EG Bias	Cutoff	
	Pitch Bias					
MC1	Amod	Pmod	Fmod	EG Bias	Cutoff	
MC2	Amod	Pmod	Fmod	EG Bias	Cutoff	
MC3	Parameter			Min.	Max.	
MC4	Parameter			Min.	Max.	

Effect	Mode	off / serial / parallel		
	Send		EF2 Mix	
Effect 1	Type :			
	Output Level a		Output level b	
	Wet : Dry			
Param.	P1	P2	P3	P4
	P5	P6	P7	P8
Effect 2	Type :			
	Output Level a		Output level b	
Param.	P1	P2	P3	P4
	P5	P6	P7	P8
Control 1	Device		Parameter	
	Min.		Max.	
Control 2	Device		Parameter	
	Min.		Max.	
Control LFO	Wave form		Speed	Delay

● DRUM VOICE BLANK CHART

DRUM VOICE	Voice Name		Total Level		Vol Lo Limit	

Note	Key Parameters									Effect Send				
	Waveform	Vol.	Nsft	Tune	Pan	AltG	Gate	Rvs	OutS	EF1	EF2	Levl	VelS	Dry Out
C 1										a b	a b			1 2
C#1										a b	a b			1 2
D 1										a b	a b			1 2
D#1										a b	a b			1 2
E 1										a b	a b			1 2
F 1										a b	a b			1 2
F#1										a b	a b			1 2
G 1										a b	a b			1 2
G#1										a b	a b			1 2
A 1										a b	a b			1 2
A#1										a b	a b			1 2
B 1										a b	a b			1 2
C 2										a b	a b			1 2
C#2										a b	a b			1 2
D 2										a b	a b			1 2
D#2										a b	a b			1 2
E 2										a b	a b			1 2
F 2										a b	a b			1 2
F#2										a b	a b			1 2
G 2										a b	a b			1 2
G#2										a b	a b			1 2
A 2										a b	a b			1 2
A#2										a b	a b			1 2
B 2										a b	a b			1 2
C 3										a b	a b			1 2
C#3										a b	a b			1 2
D 3										a b	a b			1 2
D#3										a b	a b			1 2
E 3										a b	a b			1 2

● MULTI BLANK CHART

MULTI	Multi Name															
Inst Number	1:				2:				3:				4:			
	5:				6:				7:				8:			
	9:				10:				11:				12:			
	13:				14:				15:				16:			
Inst	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Volume																
Pan																
Note Shift																
Tune																
Output Select																
Effect Send	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Source																
Switch	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b	1a 1b 2a 2b
Level																
Output Select	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2	D1 D2

Effect								
	Mode				off / serial / parallel			
Effect 1	Type :							
	Output Level a							
	Output Level b							
	Wet : Dry							
Param.	P1		P2		P3		P4	
	P5		P6		P7		P8	
Effect 2	Type :							
	Output Level a							
	Output Level b							
	Wet : Dry							
Param.	P1		P2		P3		P4	
	P5		P6		P7		P8	
Mix. Level	EF2				Insert 1b			
	Insert 2a				Insert 2b			
Control 1	Device				Min.		Max.	
	Parameter				Max.			
Control 2	Device				Min.		Max.	
	Parameter				Max.			
Control LFO	Waveform				Speed		Delay	

● SYSTEM SETUP BLANK CHART

SYSTEM SETUP					Effect Bypass		on / off	
Setup	Note Shift		Tune		Ctrl Reset		Output	
Controller	MC1		MC2		MC3		MC4	
MIDI Parameter	R.ch		Device No		Volume Ctrl			
Filter	Bulk Protect		Ctrl Ch		Poly AT			
Program Change	off / normal / direct / table							

000	:	016	:	032	:	048	:	064	:	080	:	096	:	112	:
001	:	017	:	033	:	049	:	065	:	081	:	097	:	113	:
002	:	018	:	034	:	050	:	066	:	082	:	098	:	114	:
003	:	019	:	035	:	051	:	067	:	083	:	099	:	115	:
004	:	020	:	036	:	052	:	068	:	084	:	100	:	116	:
005	:	021	:	037	:	053	:	069	:	085	:	101	:	117	:
006	:	022	:	038	:	054	:	070	:	086	:	102	:	118	:
007	:	023	:	039	:	055	:	071	:	087	:	103	:	119	:
008	:	024	:	040	:	056	:	072	:	088	:	104	:	120	:
009	:	025	:	041	:	057	:	073	:	089	:	105	:	121	:
010	:	026	:	042	:	058	:	074	:	090	:	106	:	122	:
011	:	027	:	043	:	059	:	075	:	091	:	107	:	123	:
012	:	028	:	044	:	060	:	076	:	092	:	108	:	124	:
013	:	029	:	045	:	061	:	077	:	093	:	109	:	125	:
014	:	030	:	046	:	062	:	078	:	094	:	110	:	126	:
015	:	031	:	047	:	063	:	079	:	095	:	111	:	127	:

● INITIAL PERFORMANCE LIST

Preset 1

Performance		Layer								Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	A		B		C		D		Mode	#	EF1 Type	#	EF2 Type	Device	Parameter	Device	Parameter	MC3	MC4
000	CO Dream	P1-00	AP Grand	P4-06	SP Space	---		---		P	50	EQ -> Rev1	64	Cho & Rev		Ef2_Mod.Freq		Ef1_Rev Level	A_--	_B--
001	KY Piano	P1-00	AP Grand	P1-04	AP Tack	---		---		P	59	EQ -> Pit	01	Rev.Hall1	LFO	Ef1_Pit Level		Ef Out2a	AB--	AB--
002	SP Aztec	P2-34	KY Call1	P1-48	CH Aah	P1-52	CH Ghost	P3-60	SP Movie	P	50	EQ -> Rev1	46	Exc -> Dly		Ef2_Exc Level		Ef1_Rev Level	_BCD	ABC_
003	SC Wyrz	P4-07	SP Sqare	P2-26	KY EP 9	P4-07	SP Sqare	P3-62	SP Nehan	S	56	EQ -> Cho	53	EQ -> Dly		Ef1_Mod.Freq		Ef2_Dly Level	ABC_	ABC_
004	CH Choir	P1-51	CH Breth	P1-50	CH Pure	---		---		P	50	EQ -> Rev1	46	Exc -> Dly		Ef2_Exc Level		Ef1_Rev Level	AB--	AB--
005	BA Pick1	P3-21	SE BDup	P1-13	BA Thump	P1-11	BA Pick2	P1-11	BA Pick2	P	55	EQ -> Flg	53	EQ -> Dly		Ef1_Flg Level		Ef2_Dly Level	__CD	_B__
006	ST Rosin	P3-60	SP Movie	P4-18	ST Brite	---		---		P	01	Rev.Hall1	00	Through		Ef Out1a		Ef1_High Gain	AB--	_B--
007	BR Stab	P1-37	BR Syn 1	P4-00	SP Paddy	P1-41	BR Saw	---		P	01	Rev.Hall1	59	EQ -> Pit		Out1 Wet		Ef2_Pit Level	ABC-	ABC-
008	CO Soire	P2-19	KY EP 2	P4-23	ST Anlog	P2-18	KY EP 1	P2-21	KY EP 4	P	43	Sym -> Dly	39	Dist-> Rev		Ef1_Mod.Freq		Ef2_Mod.Depth	ABCD	____
009	OR Bee	P2-50	OR Jaz B	P2-51	OR Smoke	P4-33	TP Siam	P4-61	MW EGBia	P	34	Cho -> Rev	28	Rotary SP.		Ef2_L/M/H Sw		Ef1_Mod.Freq	__C_	__C_
010	SP Lush	P3-58	SP Makro	P3-58	SP Makro	P3-52	SP Big	---		P	17	Dly L,R	34	Cho -> Rev		Out1 Wet		Ef2_Rev Level	AB_-	ABC-
011	SC Rude	P2-59	SC Bari	P3-10	SC Rezz	---		---		S	55	EQ -> Flg	39	Dist-> Rev		Ef1_Flg Level		Ef2_Rev.Time	AB--	_B--
012	CH Breth	P1-48	CH Aah	P1-48	CH Aah	---		---		P	80	Pan & Dly	01	Rev.Hall1		Ef1_Speed		Out2 Wet	AB--	AB--
013	BA Swap	P1-13	BA Thump	P1-12	BA Slap	---		---		P	55	EQ -> Flg	51	EQ -> Rev2		Ef1_Flg Level		Ef2_Rev Level	_B--	A_--
014	ST Octvs	P4-19	ST Arco	P4-14	ST Sectn	P4-19	ST Arco	P4-24	ST Sizzl	P	39	Dist-> Rev	01	Rev.Hall1		Ef2_Rev.Time		Out2 Wet	ABCD	ABCD
015	BR Pro5	P1-39	BR Syn 3	P1-39	BR Syn 3	---		---		S	01	Rev.Hall1	57	EQ -> Sym		Ef2_Sym Level		Ef Out1a	AB--	AB--
016	CO Orch	P1-29	BR Tromb	P4-38	TP Timp	P1-28	BR Horn	P4-14	ST Sectn	P	01	Rev.Hall1	59	EQ -> Pit		Ef2_Pit Level		Out1 Wet	ABCD	_BCD
017	KY Digi1	P2-25	KY EP 8	P2-19	KY EP 2	---		---		S	52	EQ -> ER	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	AB--	AB--
018	SP Faery	P3-55	SP Glass	P4-18	ST Brite	P4-18	ST Brite	---		S	53	EQ -> Dly	37	Pit -> Rev		Ef1_Dly Level		Ef2 Mix	ABC-	ABC-
019	SC Talk	P3-16	SC Vox	P3-14	SC Topia	P3-16	SC Vox	---		S	56	EQ -> Cho	04	Rev.Room2		Ef1_Mod.Freq		Ef2 Mix	ABC-	ABC-
020	CH OohAh	P1-48	CH Aah	P1-49	CH Ooh	---		---		P	21	Pit Chnge2	01	Rev.Hall1		Out1 Wet		Out2 Wet	AB--	AB--
021	BA Pick2	P1-10	BA Pick1	P2-08	GT Strt2	---		---		P	53	EQ -> Dly	51	EQ -> Rev2		Ef1_Dly Level		Ef2_High Gain	AB--	AB--
022	ST Pitz	P3-60	SP Movie	P2-59	SC Bari	P4-21	ST Pizz	---		P	01	Rev.Hall1	59	EQ -> Pit		Out1 Wet		Ef2_Pit Level	A_C-	_BC-
023	BR Sfz	P1-42	BR SawSF	P4-48	WN SaxSF	P1-33	BR TpSfz	---		S	59	EQ -> Pit	01	Rev.Hall1		Ef1_Pit Level		Ef2 Mix	_B_-	ABC-
024	CO Sable	P4-18	ST Brite	P4-28	TP Glock	P4-18	ST Brite	---		S	34	Cho -> Rev	23	Aural Exc.		Ef2_Exc Level		Ef1_Rev Level	ABC-	_BC-
025	KY Ready	P2-19	KY EP 2	P2-18	KY EP 1	---		---		P	36	Pha -> Rev	60	EQ -> Pan		Ef2_Speed		Ef2_L/R Depth	AB--	AB--
026	SP Slide	P3-52	SP Big	P4-02	SP Poly	---		---		P	25	EG Chorus	50	EQ -> Rev1		Ef1_PM Depth		Ef2_Rev Level	AB--	AB--
027	SC Klav	P2-30	KY Clav1	P1-38	BR Syn 2	P2-31	KY Clav2	---		P	36	Pha -> Rev	67	Pit & Rev		Ef1_Mod.Freq		Ef2_Out2b	ABC-	A_C-
028	CH Vespa	P1-49	CH Ooh	P1-49	CH Ooh	---		---		P	53	EQ -> Dly	38	Exc -> Rev		Ef1_Dly Level		Out2 Wet	AB--	_B--
029	BA -Fret	P1-08	BA Fingr	P109	BA Frtls	---		---		P	34	Cho -> Rev	59	EQ -> Pit		Ef1_Rev Level		Ef2_Pit Level	AB--	AB--
030	ST Rings	P4-18	ST Brite	P3-52	SP Big	P4-18	ST Brite	---		S	53	EQ -> Dly	01	Rev.Hall1		Ef2_ER/Rev Bal		Ef2_High Gain	A_C-	A_C-
031	BR Forte	P1-39	BR Syn 3	P1-36	BR East	P1-29	BR Tromb	P1-31	BR TpEns	S	50	EQ -> Rev1	53	EQ -> Dly		Ef2_Dly Level		Ef1_Rev Level	_BCD	AB_D
032	CO Jazzr	P1-06	BA Wood	P1-00	AP Grand	P4-60	MI Ride	P4-57	MI Crash	P	39	Dist-> Rev	52	EQ -> ER		Ef1_Rev.Time		Ef1_High	_B__	__C_
033	OR Gimme	P2-53	OR Dist	P2-51	OR Smoke	---		---		S	39	Dist-> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw		Ef1_Dist.Level	_B--	_B--
034	SP Lite	P3-56	SP Goner	P3-51	SP Abyss	---		---		P	48	Pan -> Dly	65	Sym & Rev		Ef1_Speed		Out2 Wet	AB--	A_--
035	SC Buzz	P1-44	BR Tooth	P3-02	SC Ecko	P3-34	SE Rezo	---		P	57	EQ -> Sym	34	Cho -> Rev		Ef1_Sym Level		Ef2_Rev Level	AB_-	_B_-
036	CH Munch	P4-59	MI Hiss	P1-55	CH Vocod	P1-50	CH Pure	P1-53	CH Quire	P	57	EQ -> Sym	47	Dist-> Dly		Ef1_Sym Level		Ef2_Dly Level	ABCD	ABCD
037	BA Rezzo	P1-17	BA Syn 4	P1-17	BA Syn 4	---		---		S	38	Exc -> Rev	57	EQ -> Sym		Ef1_Exc Level		Ef2_Mod.Depth	A_--	AB--
038	ST Dark	P4-15	ST Power	P4-15	ST Power	P4-14	ST Sectn	---		P	50	EQ -> Rev1	01	Rev.Hall1		Ef1_Rev.Time		Out1 Wet	AB_-	ABC-
039	BR Saw	P1-41	BR Saw	P3-47	SL Saw 2	---		---		P	56	EQ -> Cho	01	Rev.Hall1		Ef1_Cho Level		Out2 Wet	AB--	AB--
040	CO E.S.P	P4-09	SP Sweet	P2-15	GT Warm	P1-48	CH Aah	---		P	01	Rev.Hall1	49	Dist->Echo		Ef2_Echo Level		Out2 Wet	_B_-	AB_-
041	KY Elek	P1-02	AP Dance	P2-21	KY EP 4	---		---		P	50	EQ -> Rev1	56	EQ -> Cho		Ef2_Cho Level		Ef1_Rev Level	AB--	AB--
042	SP Stars	P3-55	SP Glass	P1-52	CH Ghost	P1-52	CH Ghost	---		S	53	EQ -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_Mod.Freq	ABC-	ABC-
043	SC Snaps	P3-06	SC Metal	P3-18	SC Wondr	---		---		P	56	EQ -> Cho	71	Dly & Rev	VEL	Ef1_Mod.Freq		Ef2_ER/Rev Bal	AB--	AB--
044	CH Abyss	P1-52	CH Ghost	P1-52	CH Ghost	P1-53	CH Quire	P3-58	SP Makro	S	82	Flg & Cho	02	Rev.Hall2		Ef1_Mod.Depth		Out2 Wet	ABC_	ABCD
045	BA Mini	P1-19	BA Syn 6	P1-16	BA Syn 3	---		---		S	55	EQ -> Flg	52	EQ -> ER		Ef1_Flg Level		Ef2_ER Level	AB--	AB--
046	ST 2002	P4-14	ST Sectn	P1-26	BR Trump	P1-29	BR Tromb	P4-38	TP Timp	P	59	EQ -> Pit	50	EQ -> Rev1		Ef1_Pit Level		Ef2_Rev Level	AB__	A___
047	BR Obie	P3-08	SC Pan	P3-05	SC Jrney	P3-10	SC Rezz	P1-37	BR Syn 1	P	50	EQ -> Rev1	21	Pit Chnge2		Ef1_Rev Level		Ef1_ER/Rev Bal	ABCD	ABCD
048	CO Pnooh	P1-00	AP Grand	P1-49	CH Ooh	---		---		S	59	EQ -> Pit	34	Cho -> Rev	LFO	Ef1_Pit Level		Ef2 Mix	AB--	AB--
049	OR Nave	P2-55	OR Pipes	P4-53	WN Oboe	P2-55	OR Pipes	P2-55	OR Pipes	P	87	Cho & Pha	01	Rev.Hall1		Out1 Wet		Out2 Wet	A_CD	ABCD
050	SP Ace	P3-55	SP Glass	P3-51	SP Abyss	P3-36	SE Star	---		P	60	EQ -> Pan	65	Sym & Rev		Ef1_Speed		Ef2_Mod.Depth	A__-	AB_-
051	SC Point	P2-26	KY EP 9	P2-47	ME Tink	P3-01	SC Digi3	P1-02	AP Dance	P	56	EQ -> Cho	23	Aural Exc.		Ef1_Cho Level		Ef2_Exc Level	ABCD	ABCD
052	CH Comet	P3-57	SP Hyper	P1-49	CH Ooh	P3-57	SP Hyper	P3-36	SE Star	P	37	Pit -> Rev	57	EQ -> Sym		Ef1_Rev Level		Ef2_Sym Level	A_C_	A_C_
053	BA Guppy	P1-22	BA Syn 9	P1-10	BA Pick1	P3-48	SL Squar	P2-32	KY Hrpsi	P	50	EQ -> Rev1	23	Aural Exc.		Ef1_Rev Level		Ef2_Exc Level	A_C_	___D
054	ST Big	P3-60	SP Movie	P4-16	ST Deep	P4-24	ST Sizzl	---		P	00	Through	50	EQ -> Rev1		Ef2_High Gain		Ef Out2b	ABC-	_BC-
055	BR Fatti	P1-46	BR Toto	P1-46	BR Toto	P1-41	BR Saw	P1-41	BR Saw	P	53	EQ -> Dly	50	EQ -> Rev1		Ef1_Dly Level		Ef2_ER/Rev Bal	ABCD	__CD
056	CO Inca	P4-09	SP Sweet	P4-51	WN Pan	P3-51	SP Abyss	---		P	01	Rev.Hall1	54	EQ -> Echo		Ef2_Echo Level		Out1 Wet	_BC-	A__-
057	KY Funky	P2-30	KY Clav1	P2-61	SC Clav	P1-41	BR Saw	P1-41	BR Saw	P	36	Pha -> Rev	56	EQ -> Cho		Ef1_Rev Level		Ef2_Cho Level	AB__	AB__
058	SP Vekta	P3-56	SP Goner	P1-33	BR TpSfz	P4-29	TP Xylo	P4-19	ST Arco	P	56	EQ -> Cho	02	Rev.Hall2		Ef1_Cho Level		Out2 Wet	AB__	ABC_
059	SC Pizza	P4-08	SP Sweep	P1-40	BR Syn 4	P3-12	SC Sqiff	P3-14	SC Topia	P	25	EG Chorus	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	_B_D	_B_D
060	CH Oral	P3-28	SE Hyena	P3-28	SE Hyena	---		---		P	53	EQ -> Dly	37	Pit -> Rev		Ef1_Dly Level		Ef2_Rev Level	AB--	AB--
061	BA Doom	P1-14	BA Syn 1	P1-21	BA Syn 8	---		---		P	34	Cho -> Rev	59	EQ -> Pit		Ef1_Rev Level		Ef2_Pit Level	AB--	AB--
062	ST Tron	P4-22	ST Tron	P4-22	ST Tron	---		---		P	47	Dist-> Dly	01	Rev.Hall1		Out2 Wet		Ef1_Dly Level	_B--	A_--
063	BR Swell	P1-38	BR Syn 2	P1-38	BR Syn 2	---		---		P	50	EQ -> Rev1	23	Aural Exc.		Ef1_ER/Rev Bal		Ef2_Exc Level	AB--	AB--

● INITIAL PERFORMANCE LIST

Preset 2

Performance		Layer						Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	A	B	C	D	Mode	#	EF1 Type	#	EF2 Type	Device	Parameter	Device	Parameter	MC3	MC4
000	C O N c e r t	P3-60 SP Movie	P4-14 ST Sectn	P1-00 AP Grand	——	S	06	Rev.Stage1	59	EQ -> Pit		Ef2 Mix		Out1 Wet	AB_-	_B_-
001	K Y L o u d	P2-60 SC Bell	P1-04 AP Tack	——	——	P	59	EQ -> Pit	51	EQ -> Rev2		Ef1_Pit Level		Ef2_Rev Level	A_—	A_—
002	S P C a r o l	P3-60 SP Movie	P2-39 ME Hand	P1-50 CH Pure	P1-51 CH Breth	P	01	Rev.Hall1	54	EQ -> Echo		Ef Out1a		Ef2_Echo Level	ABCD	ABCD
003	S L M i t e y	P3-47 SL Saw 2	P3-47 SL Saw 2	P3-47 SL Saw 2	P3-47 SL Saw 2	S	56	EQ -> Cho	54	EQ -> Echo		Ef1_Cho Level		Ef2_Echo Level	ABC_	ABC_
004	M E O r i o n	P3-23 SE Demon	P4-59 MI Hiss	P2-41 ME Mello	——	P	21	Pit Chnge2	65	Sym & Rev		Ef2_Mod.Depth		Ef Out2b	ABC-	A_—
005	G T A m p e d	P2-07 GT Strt1	P2-17 GT Feed	P2-13 GT Comp2	——	S	47	Dist-> Dly	30	D.Flt(Wah)		Ef2 Mix		Ef1_Dist.Level	AB_-	ABC-
006	S E R o l l s	P3-27 SE Hell	P3-27 SE Hell	——	——	P	60	EQ -> Pan	59	EQ -> Pit		Ef1_Speed		Ef2_Pit Level	AB—	AB—
007	W N T e n o r	P4-46 WN Tenor	P3-08 SC Pan	——	——	P	01	Rev.Hall1	54	EQ -> Echo		Ef2_Echo Level		Out1 Wet	AB—	A_—
008	C O D X S t r	P3-60 SP Movie	P4-18 ST Brite	P2-21 KY EP 4	P2-22 KY EP 5	P	01	Rev.Hall1	56	EQ -> Cho	MW	Ef2_PM Depth	MW	Ef2_AM Depth	ABCD	__CD
009	O R S i n e	P4-33 TP Siam	P4-33 TP Siam	P4-33 TP Siam	P4-33 TP Siam	S	38	Exc -> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw		Ef1_Rev Level	___D	_B_D
010	S P V e n u s	P3-54 SP Freqs	P3-58 SP Makro	P4-14 ST Sectn	P4-00 SP Paddy	P	17	Dly L,R	65	Sym & Rev		Out1 Wet		Ef Out2b	ABCD	ABCD
011	S L C h i c k	P3-47 SL Saw 2	P3-47 SL Saw 2	——	——	S	53	EQ -> Dly	01	Rev.Hall1		Ef1_Dly Level		Ef2_ER/Rev Bal	A_—	AB—
012	M E G l i t z	P3-13 SC Synnr	P3-17 SC Wires	P2-48 ME Tomi	——	P	65	Sym & Rev	45	Pit -> Dly		Ef1_Mod.Freq		Ef Out1b	AB_-	A_C-
013	G T S t r a t	P2-09 GT Strt3	P2-09 GT Strt3	P2-07 GT Strt1	P2-07 GT Strt1	P	56	EQ -> Cho	71	Dly & Rev		Ef1_Cho Level		Out2 Wet	ABCD	ABCD
014	S E C - t a r	P4-36 TP Bambu	P2-04 GT Steel	P2-01 FI Sitar	P2-01 FI Sitar	P	49	Dist->Echo	11	Rev.Canyon		Ef1_Echo Level		Ef2_Rev.Time	AB_D	ABCD
015	W N S a c k s	P4-46 WN Tenor	P4-45 WN Alto	P4-47 WN Bari	P4-44 WN Sopr	S	53	EQ -> Dly	50	EQ -> Rev1		Ef1_Dly Level		Ef2_ER/Rev Bal	ABCD	ABCD
016	C O S t a s s	P1-32 BR Tpts	P4-14 ST Sectn	——	——	P	52	EQ -> ER	35	Sym -> Rev		Ef1_ER Level		Ef2_Rev Level	AB—	_B—
017	K Y D i g i 2	P2-21 KY EP 4	P2-22 KY EP 5	——	——	P	01	Rev.Hall1	56	EQ -> Cho	MW	Ef2_PM Depth		Ef2_AM Depth	AB—	AB—
018	S P W h i n o	P2-39 ME Hand	P3-62 SP Nehan	——	——	P	85	Cho & Cho	35	Sym -> Rev		Ef1_Mod.Freq		Ef Out1b	AB—	AB—
019	S L L 7	P3-48 SL Squar	P3-48 SL Squar	P3-48 SL Squar	——	S	41	Flg -> Dly	01	Rev.Hall1		Ef1_Mod.Freq		Ef1_Mod.FBGain	A_—	ABC-
020	M E H o n t o	P3-28 SE Hyena	P3-27 SE Hell	P4-55 WN Recor	——	P	46	Exc -> Dly	35	Sym -> Rev		Out1 Wet		Ef2_Rev Level	_B_-	ABC-
021	G T P h u n k	P3-07 SC Mute	P2-08 GT Strt2	——	——	S	49	Dist->Echo	33	Flg -> Rev		Ef2_Mod.Depth		Ef1_Mid.Freq	AB—	AB—
022	S E X e n o	P1-30 BR Tuba	P2-47 ME Tink	P3-28 SE Hyena	——	S	10	Rev.Tunnel	80	Pan & Dly		Ef1_Rev.Time		Ef2_Fade In	_BC-	_BC-
023	W N A l t o	P4-45 WN Alto	P3-31 SE Noize	——	——	P	50	EQ -> Rev1	19	St.Echo		Ef_Out2a		Ef1_ER/Rev Bal	AB—	AB—
024	C O M e g i n	P2-60 SC Bell	P3-62 SP Nehan	P4-01 SP Phaze	——	P	06	Rev.Stage1	57	EQ -> Sym		Out1 Wet	MW	Out2 Wet	ABC-	A_—
025	K Y J e r r y	P2-18 KY EP 1	P2-19 KY EP 2	P2-22 KY EP 5	——	P	28	Rotary SP.	50	EQ -> Rev1		Ef1_L/M/H Sw		Ef2_Rev Level	ABC-	ABC-
026	S P H i n x	P3-52 SP Big	P3-59 SP Mello	P1-03 AP Rock	P3-08 SC Pan	P	27	EG Phaser	01	Rev.Hall1		Ef1_Atck Level		Out1 Wet	AB_	ABC_
027	S L E a z y	P2-34 KY Cali1	P3-44 SL Lyle	P3-44 SL Lyle	P3-47 SL Saw 2	S	39	Dist-> Rev	43	Sym -> Dly		Ef1_Rev Level		Ef2_Mod.Depth	A_C_	ABC_
028	M E M a r s	P3-36 SE Star	P3-38 SE Wind	P3-04 SC Housy	——	S	38	Exc -> Rev	77	Pit & Dly		Ef1_Enhance		Ef1_Rev Level	AB_-	AB_-
029	G T R o c k	P2-14 GT Dist	P2-13 GT Comp2	P2-00 FI Lip	P4-62 AT EGBia	S	49	Dist->Echo	50	EQ -> Rev1		Ef1_Echo Level		Ef2_High Gain	__C_	AB_
030	S E S t o r m	P3-31 SE Noize	P3-33 SE Rain	——	——	P	39	Dist-> Rev	54	EQ -> Echo		Ef1_Trbl Gain		Ef1_Rev Level	_B—	_B—
031	W N P a n i c	P4-50 WN Flute	P2-36 ME Bottl	——	——	S	59	EQ -> Pit	06	Rev.Stage1	LFO	Ef1_Pit Level		Ef2 Mix	AB—	A_—
032	C O G o s p l	P2-50 OR Jaz B	P1-49 CH Ooh	P1-00 AP Grand	P4-61 MW EGBia	P	28	Rotary SP.	39	Dist-> Rev		Ef1_L/M/H Sw		Ef2_Rev.Time	ABC_	__C_
033	O R C h e a p	P2-54 OR Cheap	P3-42 SL Hamma	——	——	S	53	EQ -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_Rev Level	_B—	_B—
034	S P P l u t o	P4-08 SP Sweep	P3-53 SP Exita	——	——	P	34	Cho -> Rev	53	EQ -> Dly		Ef1_Rev Level		Ef2_Dly Level	AB—	_B—
035	S C C l a n k	P2-60 SC Bell	P3-58 SP Makro	P2-01 FI Sitar	——	P	59	EQ -> Pit	35	Sym -> Rev		Ef1_Pit Level		Ef2_Rev Level	_BC-	_B_-
036	M E E c k o	P3-61 SP Nasty	P2-08 GT Strt2	P2-60 SC Bell	P2-47 ME Tink	P	06	Rev.Stage1	43	Sym -> Dly		Out1 Wet		Ef2_Dly Level	AB__	AB__
037	G T H a r m	P2-07 GT Strt1	P2-11 GT Harm	P2-08 GT Strt2	P2-08 GT Strt2	P	56	EQ -> Cho	47	Dist-> Dly		Ef1_Cho Level		Ef2_Dly Level	AB__	A_CD
038	S E Z o o m	P3-51 SP Abyss	P3-25 SE GobIn	P3-23 SE Demon	——	P	60	EQ -> Pan	34	Cho -> Rev		Ef1_Speed		Out2 Wet	AB_-	ABC-
039	B R R e e d s	P1-32 BR Tpts	P1-29 BR Tromb	P4-45 WN Alto	P4-47 WN Bari	P	51	EQ -> Rev2	50	EQ -> Rev1		Ef1_Rev.Time		Ef2_Rev.Time	ABCD	AB_
040	C O E t h o s	P4-08 SP Sweep	P2-15 GT Warm	P2-08 GT Strt2	——	P	66	Pha & Rev	49	Dist->Echo		Ef1_Mod.Depth		Ef2_Echo Level	ABC-	ABC-
041	K Y P n o M W	P1-02 AP Dance	P2-18 KY EP 1	P4-17 ST Dark	P4-61 MW EGBia	P	50	EQ -> Rev1	64	Cho & Rev		Ef2_PM Depth		Ef1_Rev Level	AB__	AB__
042	S P S y n t h	P4-23 ST Anlog	P4-23 ST Anlog	P4-03 SP SawSt	——	P	59	EQ -> Pit	50	EQ -> Rev1		Ef1_Pit Level		Ef2_ER/Rev Bal	AB_-	A_—
043	F I S a n t o	P1-59 FI DulcD	P1-60 FI DulcM	P3-21 SE BDup	P1-04 AP Tack	P	39	Dist-> Rev	37	Pit -> Rev		Ef1_Rev Level		Ef Out2b	AB_D	_B_D
044	M E A l i e n	P2-41 ME Mello	P2-47 ME Tink	——	——	P	20	Pit Chnge1	38	Exc -> Rev		Ef Out2b		EF1_2 Pitch	AB—	AB—
045	G T E l l 2	P2-09 GT Strt3	P2-09 GT Strt3	P2-09 GT Strt3	——	P	53	EQ -> Dly	01	Rev.Hall1		Ef1_Dly Level		Ef2_ER/Rev Bal	ABC-	ABC-
046	S E D e l a y	P4-17 ST Dark	P3-32 SE Pops	P2-11 GT Harm	P3-39 SL Cutty	P	22	Pit Chnge3	01	Rev.Hall1		Ef1_FB Gain		Out2 Wet	AB__	ABC_
047	B R L i p s	P1-26 BR Trump	P1-26 BR Trump	P1-46 BR Toto	——	P	53	EQ -> Dly	37	Pit -> Rev		Ef1_Dly Level		Ef2_Rev Level	ABC-	A_C-
048	C O K i n g s	P4-18 ST Brite	P1-48 CH Aah	P4-18 ST Brite	P1-48 CH Aah	S	53	EQ -> Dly	01	Rev.Hall1		Ef2_ER/Rev Bal		Ef2_High Gain	_B_D	ABCD
049	K Y C a l i o	P2-35 KY Cali2	P2-34 KY Cali1	——	——	S	59	EQ -> Pit	01	Rev.Hall1		Ef1_Pit Level		Ef2 Mix	AB—	AB—
050	S P A n l o g	P3-46 SL Saw 1	P3-46 SL Saw 1	——	——	P	37	Pit -> Rev	43	Sym -> Dly		Ef1_Rev Level		Ef2_Mod.Depth	AB—	AB—
051	S C W i n d	P2-47 ME Tink	P4-37 TP Mrmba	P3-08 SC Pan	——	S	11	Rev.Canyon	57	EQ -> Sym		Ef Out1a		Ef2 Mix	_BC-	_BC-
052	M E S p a r k	P2-40 ME Kali	P3-22 SE Chou	P4-04 SP Slow	——	P	06	Rev.Stage1	57	EQ -> Sym		Ef Out1a		Ef2_Mod.Freq	ABC-	ABC-
053	G T 1 2 S t r	P2-04 GT Steel	P2-05 GT 12Str	P2-03 GT Dark	——	S	53	EQ -> Dly	51	EQ -> Rev2		Ef1_Dly Level		Ef2_Rev Level	ABC-	_BC-
054	S E F l i e s	P3-35 SE S&H	P3-35 SE S&H	——	——	P	59	EQ -> Pit	48	Pan -> Dly		Ef1_Pit Level		Ef2_Dly Level	_B—	AB—
055	B R M i l e s	P1-36 BR East	P1-40 BR Syn 4	P1-27 BR Mute	——	P	06	Rev.Stage1	57	EQ -> Sym		Ef Out1a		Out2 Wet	__C-	ABC-
056	C O H a p p i	P4-51 WN Pan	P4-55 WN Recor	P4-35 TP Loggy	P4-35 TP Loggy	S	55	EQ -> Flg	39	Dist-> Rev		Ef1_Mod.FBGain	VEL	Ef1_Mod.Depth	ABCD	AB_D
057	K Y D i g i 3	P2-23 KY EP 6	P2-27 KY EP 10	——	——	P	82	Flg & Cho	76	Pha & Dly		Ef1_Mod.FBGain		Ef1_Mod.Freq	_B—	AB—
058	S P A r p e g	P1-44 BR Tooth	P1-44 BR Tooth	P1-44 BR Tooth	P1-44 BR Tooth	P	01	Rev.Hall1	57	EQ -> Sym		Out1 Wet		Ef2_Mod.Depth	ABCD	ABCD
059	T P B e l l s	P1-61 FI Harp	P4-42 TP Agone	——	——	S	64	Cho & Rev	57	EQ -> Sym		Ef1_High		Ef Out1b	AB—	A_—
060	M E H i t	P1-17 BA Syn 4	P2-42 ME Orch1	P3-21 SE BDup	P2-42 ME Orch1	P	56	EQ -> Cho	37	Pit -> Rev		Ef1_Cho Level		Ef2_Rev Level	ABCD	ABCD
061	G T A c s t c	P2-04 GT Steel	P1-11 BA Pick2	P2-02 GT Nylon	P2-11 GT Harm	P	06	Rev.Stage1	58	EQ -> Pha		Out1 Wet		Ef2_Pha Level	ABC_	A_C_
062	S E H e r o	P3-31 SE Noize	P3-33 SE Rain	P3-26 SE Heli	P3-29 SE Indus	S	39	Dist-> Rev	60	EQ -> Pan		Ef2_Speed		Ef1_Rev Level	_BC_	A_C_
063	B R F a n f r	P1-31 BR TpEns	P1-46 BR Toto	P1-29 BR Tromb	——	P	50	EQ -> Rev1	50	EQ -> Rev1		Ef1_Rev Level		Ef2_Rev Level	ABC-	ABC-

● INITIAL PERFORMANCE LIST

Internal

Performance		Layer								Effect						Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	A		B		C		D		Mode	#	EF1 Type	#	EF2 Type		Device	Parameter	Device	Parameter	MC3	MC4
000	CO Aster	I2-61	WN Flut1	P2-41	ME Mello	P3-18	SC Wondr	I1-07	BA Head	P	67	Pit & Rev	57	EQ -> Sym			Ef2_Sym Level		Ef Out1b	A__D	A__D
001	AP Piano	I1-00	AP Brite	I1-01	AP Dark		---		---	P	50	EQ -> Rev1	01	Rev.Hall1			Ef2_Rev.Time		Ef Out2a	AB---	AB---
002	SP Mtrix	I1-11	BR Movin	P4-02	SP Poly		---		---	P	52	EQ -> ER	37	Pit -> Rev			Ef1_ER Level		Out2 Wet	AB---	AB---
003	SC Skank	I2-09	SC Uzzy	P2-61	SC Clav	P2-18	KY EP 1	I2-06	SC Reflx	P	23	Aural Exc.	65	Sym & Rev			Out2 Wet		Ef Out2b	ABCD	_BCD
004	ME Sprk2	I2-15	SE Clox	P4-09	SP Sweet	I2-42	SP Latt	I2-23	SE Mono	P	34	Cho -> Rev	28	Rotary SP.			Ef1_Rev.Time		Ef1_Rev Level	ABCD	ABCD
005	BA Drive	I1-06	BA Low	P1-21	BA Syn 8	P1-24	BA Syn11		---	S	55	EQ -> Flg	52	EQ -> ER			Ef1_Flg Level		Ef2_ER Level	ABC-	ABC-
006	BR Fnfr2	I1-09	BR Punch	P1-26	BR Trump	P1-29	BR Tromb	P1-31	BR TpEns	P	50	EQ -> Rev1	50	EQ -> Rev1			Ef1_Rev Level		Ef2_Rev Level	ABCD	A__D
007	SE Devil	I2-19	SE Fear	P3-22	SE Chou	P3-24	SE Dropr		---	P	21	Pit Chnge2	31	Dly -> Rev			Out1 Wet		Out2 Wet	ABC-	ABC-
008	ST Moin	P3-60	SP Movie	P4-24	ST Sizzl		---		---	P	50	EQ -> Rev1	50	EQ -> Rev1			Out1 Wet		Ef2_Low Gain	AB---	_B---
009	FI DulcM	P1-60	FI DulcM	P1-59	FI DulcD	I2-03	SC Wire		---	P	53	EQ -> Dly	34	Cho -> Rev			Ef1_Dly Level		Ef2_Rev Level	__C-	_B_-
010	CO Bells	P3-60	SP Movie	P4-42	TP Agone	P4-43	TP Angle	I1-41	ME Bnshe	P	53	EQ -> Dly	34	Cho -> Rev			Ef1_Dly Level		Ef2_Rev Level	ABC_	_BCD
011	KY Knock	P2-25	KY EP 8	P2-18	KY EP 1	I1-35	KY EP 15	P4-58	MI EPNP	P	86	Cho & Sym	12	Rev.Basmnt			Ef1_PM Depth		Out2 Wet	__CD	__CD
012	SP Fanta	I1-18	CH Kwire	I1-18	CH Kwire	P2-39	ME Hand	P1-48	CH Aah	P	35	Sym -> Rev	46	Exc -> Dly			Ef1_Mod.Depth		Ef2_Dly Level	AB_D	AB__
013	SC Elec1	P2-08	GT Strt2	I1-62	SC Klav	P2-04	GT Steel	I2-03	SC Wire	P	86	Cho & Sym	06	Rev.Stagel			Ef2_Rev.Time		Ef Out2a	ABCD	ABCD
014	ME Gokrk	I1-20	CH Analg	P3-33	SE Rain	P3-53	SP Exita	I1-41	ME Bnshe	P	57	EQ -> Sym	40	Pan -> Rev			Ef1_Sym Level		Ef2_Speed	A__D	_BC_
015	BA Susud	I2-22	SE Laze	I2-40	SP It	P1-17	BA Syn 4		---	P	55	EQ -> Flg	52	EQ -> ER			Ef1_Flg Level		Ef2_ER Level	AB_-	ABC-
016	BR Forth	I2-36	SP 1980	P1-37	BR Syn 1	P1-37	BR Syn 1	I2-36	SP 1980	S	52	EQ -> ER	37	Pit -> Rev			Ef2 Mix		Ef2_Rev Level	A_C_	A__D
017	SE Swmp	I2-28	SE Zip	I2-28	SE Zip	I2-25	SE Swmp	I2-16	SE Crck	P	56	EQ -> Cho	01	Rev.Hall1			Ef1_Cho Level		Out2 Wet	ABCD	ABCD
018	ST Legat	P4-16	ST Deep	P4-18	ST Brite	I2-52	ST Chamb	P4-19	ST Arco	P	50	EQ -> Rev1	50	EQ -> Rev1			Out1 Wet		Out2 Wet	ABCD	_B__
019	GT Pedal	I1-30	GT Pedal	P2-07	GT Strt1		---		---	S	53	EQ -> Dly	39	Dist-> Rev			Ef1_Dly Level		Ef2_Rev Level	AB---	AB---
020	CO Gloom	P1-01	AP Chors	P2-07	GT Strt1	I1-17	CH Quiet	P2-07	GT Strt1	S	52	EQ -> ER	37	Pit -> Rev			Ef2 Mix		Ef1_ER Level	ABCD	__C_
021	OR Cool	I1-56	OR Smoth	I1-56	OR Smoth	P2-56	OR Click		---	S	50	EQ -> Rev1	28	Rotary SP.		MW	Ef2_L/M/H Sw		Ef1_Rev Level	ABC-	__C-
022	SP Flash	I1-59	SC Bhind	P3-53	SP Exita		---		---	S	56	EQ -> Cho	36	Pha -> Rev			Ef1_Cho Level		Ef2_Rev Level	A___	_B___
023	SC Gob	I2-00	SC Hool	I2-12	SC Wits	P3-06	SC Metal	P2-62	SC Digil	P	27	EG Phaser	33	Flg -> Rev			Out1 Wet		Ef2_Rev Level	ABC_	AB_D
024	ME Max	I2-14	SE Alien	I2-18	SE Duel	I2-55	ST Anlg2	P3-58	SP Makro	S	56	EQ -> Cho	53	EQ -> Dly			Ef1_Mod.Freq		Ef2_Dly Level	ABC_	ABC_
025	BA Sldge	I1-05	BA Stick	P1-13	BA Thump	P1-06	BA Wood		---	S	52	EQ -> ER	33	Flg -> Rev			Ef1_Low Gain		Ef2_Rev Level	ABC-	_BC-
026	BR Synth	I1-11	BR Movin	I1-11	BR Movin	I1-16	BR TpSf2	P3-60	SP Movie	P	53	EQ -> Dly	21	Pit Chnge2			Out2 Wet		Ef1_Dly Level	ABCD	ABC_
027	SE Wall	I2-26	SE Vaqum	I2-26	SE Vaqum	P3-38	SE Wind	P3-29	SE Indus	P	39	Dist-> Rev	60	EQ -> Pan			Ef2_Speed		Ef1_Rev Level	ABCD	ABCD
028	ST Accat	P3-60	SP Movie	P4-14	ST Sectn	I2-52	ST Chamb		---	P	00	Through	50	EQ -> Rev1			Ef2_High Gain		Ef2_Rev Level	AB_-	_B_-
029	GT Steel	I1-27	GT Fingr	P2-03	GT Dark		---		---	P	56	EQ -> Cho	38	Exc -> Rev		KEY	Ef2_Enhance		Ef2_Rev Level	A___	_B___
030	CO India	I2-59	TP Tabla	I1-48	ME Tabla	I1-26	FI Tamba	I1-25	FI Sitr2	P	39	Dist-> Rev	67	Pit & Rev			Ef Out2a		Ef1_Rev Level	ABCD	ABCD
031	OR Rock	I1-55	OR Rock	P2-51	OR Smoke	P2-53	OR Dist	P4-61	MW EGBia	P	34	Cho -> Rev	28	Rotary SP.			Ef2_L/M/H Sw		Ef1_Rev Level	A_C_	__C_
032	SP Atrio	I2-49	SP SloMo	I2-47	SP Oscil	I2-37	SP Decay	P3-60	SP Movie	S	53	EQ -> Dly	37	Pit -> Rev			Ef1_Dly Level		Ef2 Mix	AB__	ABC_
033	SC Woody	I2-26	SE Vaqum	I2-37	SP Decay	P3-39	SL Cutty		---	P	43	Sym -> Dly	34	Cho -> Rev			Ef1_Dly Level		Ef2_Rev Level	AB_-	AB_-
034	ME Chorl	I1-44	ME Marin	I1-47	ME Sweep		---		---	S	53	EQ -> Dly	35	Sym -> Rev			Ef1_Dly Level		Ef2_Rev Level	_B___	AB___
035	GT Round	P2-11	GT Harm	I1-27	GT Fingr	P2-04	GT Steel	P2-02	GT Nylon	P	57	EQ -> Sym	34	Cho -> Rev			Ef1_Sym Level		Ef2_Rev Level	_B_D	_B__
036	BR Sfz2	P1-45	BR Rezz	I1-16	BR TpSf2	P1-42	BR SawSF	I1-10	BR TpSf1	S	59	EQ -> Pit	01	Rev.Hall1			Ef1_Pit Level		Ef2 Mix	AB_D	_B_D
037	SE Rado	I1-51	ME Whisl	I2-21	SE Lava	I2-27	SE Vektr		---	P	01	Rev.Hall1	59	EQ -> Pit			Out1 Wet		Ef2_Pit Level	ABC-	ABC-
038	ST LgSm	P4-12	ST Violn	I2-52	ST Chamb	I2-50	ST Cello	P4-18	ST Brite	P	50	EQ -> Rev1	50	EQ -> Rev1			Out1 Wet		Out2 Wet	ABCD	A__D
039	SL Meteo	I2-34	SL Sqsaw	I2-32	SL Glnt	I2-34	SL Sqsaw		---	S	59	EQ -> Pit	71	Dly & Rev			Ef1_Pit Level		Ef2 Mix	ABC-	A_C-
040	CO Clock	I2-15	SE Clox	P4-31	TP Tubal	I1-48	ME Tabla	I2-42	SP Latt	P	39	Dist-> Rev	53	EQ -> Dly			Ef2_Dly Level		Ef1_Rev Level	_B_D	_B__
041	OR Mite	I1-54	OR Pipe	P2-51	OR Smoke	P2-56	OR Click		---	S	56	EQ -> Cho	28	Rotary SP.		MW	Ef2_L/M/H Sw		Ef1_Low Gain	ABC-	__C-
042	SP Wind	P3-60	SP Movie	P4-09	SP Sweet	P3-38	SE Wind		---	P	35	Sym -> Rev	46	Exc -> Dly			Out1 Wet		Out2 Wet	__C-	ABC-
043	SC Arred	I2-01	SC Hand	I2-02	SC WooDX	I2-01	SC Hand		---	P	55	EQ -> Flg	01	Rev.Hall1			Ef1_Mod.Freq		Out2 Wet	ABC-	A_C-
044	ME Chom	P1-54	CH Vespa	I2-17	SE Crsh		---		---	P	53	EQ -> Dly	68	Exc & Rev			Ef1_Dly Level		Ef Out2a	_B___	A___
045	CO FMpad	I2-32	SL Glnt	I2-33	SL Oth	P4-09	SP Sweet	P1-00	AP Grand	P	23	Aural Exc.	65	Sym & Rev			Ef Out2a		Ef Out2b	A__D	ABC_
046	BR Tpts	I1-12	BR Ruber	I1-09	BR Punch	P1-31	BR TpEns		---	P	59	EQ -> Pit	01	Rev.Hall1			Ef1_Pit Level		Ef Out2a	ABC-	ABC-
047	SE Indst	I2-17	SE Crsh	I2-24	SE Saw	I2-24	SE Saw		---	P	80	Pan & Dly	01	Rev.Hall1			Ef1_Speed		Out2 Wet	ABC-	ABC-
048	CO Nuage	I1-46	ME Poot	I1-19	CH Spirt	P3-04	SC Housy		---	P	64	Cho & Rev	23	Aural Exc.			Ef Out1a		Ef Out1b	A__-	__C-
049	SP Lodge	I2-48	SP Ray	P4-02	SP Poly	I2-48	SP Ray		---	P	90	Pha & Pha	51	EQ -> Rev2			Out1 Wet		Ef2_Rev Level	ABC-	ABC-
050	SC Oz	I1-04	BA Soul	P1-16	BA Syn 3	P3-58	SP Makro	P3-04	SC Housy	P	68	Exc & Rev	57	EQ -> Sym			Ef Out1a		Ef Out1b	ABCD	AB_D
051	CO Japan	I1-24	FI Koto	I2-15	SE Clox	P4-50	WN Flute	P4-09	SP Sweet	P	34	Cho -> Rev	77	Pit & Dly			Ef1_Rev Level		Ef Out2b	A_CD	ABCD
052	KY Hrpzi	P2-32	KY Hrpsi	I1-32	KY Hrpzi	I1-32	KY Hrpzi		---	S	47	Dist-> Dly	37	Pit -> Rev			Ef1_Dly Level		Ef2_Rev Level	ABC-	_BC-
053	SL Sqsaw	I2-34	SL Sqsaw	P3-47	SL Saw 2	I2-34	SL Sqsaw		---	S	56	EQ -> Cho	71	Dly & Rev			Ef1_Cho Level		Ef2 Mix	ABC-	ABC-
054	BR CShrn	I1-13	BR CS80	I2-55	ST Anlg2	P1-41	BR Saw		---	P	52	EQ -> ER	37	Pit -> Rev			Ef1_ER Level		Ef2_Rev Level	A__-	AB_-
055	CO Laura	I1-28	GT Amod	P2-19	KY EP 2	P1-28	BR Horn	I2-54	ST High	P	50	EQ -> Rev1	67	Pit & Rev			Ef1_Rev Level		Ef Out2b	A_CD	ABCD
056	CO Orch2	P4-14	ST Sectn	P1-36	BR East	I1-11	BR Movin	I1-43	ME Hit	P	06	Rev.Stagel	54	EQ -> Echo			Ef2_Echo Level		Ef Out1a	A___	ABC_
057	ME Hits	P2-42	ME Orch1	P2-43	ME Orch2	I1-43	ME Hit	P2-44	ME OrchR	S	50	EQ -> Rev1	17	Dly L,R			Ef1_Rev Level		Ef2 Mix	ABCD	ABCD
058	ST Solo	I2-51	ST Cntra	I2-50	ST Cello	P4-12	ST Violn	P4-12	ST Violn	S	50	EQ -> Rev1	01	Rev.Hall1			Ef1_High Gain		Ef2_ER/Rev Bal	ABCD	AB__
059	CO Soul	I1-04	BA Soul	P4-15	ST Power	P1-00	AP Grand	P4-09	SP Sweet	P	50	EQ -> Rev1	46	Exc -> Dly			Ef Out1b		Ef1_Rev Level	A_C_	A__D
060	GT Wires	I1-30	GT Pedal	I1-29	GT Strat	P2-07	GT Strt1	P2-08	GT Strt2	S	45	Pit -> Dly	39	Dist-> Rev		VEL	Ef1_Dly Level	VEL	Ef2_Rev Level	ABCD	A_CD
061	OR Pan	P2-50	OR Jaz B	I1-56	OR Smoth	P3-08	SC Pan		---	P	34	Cho -> Rev	28	Rotary SP.		MW	Ef2_L/M/H Sw		Ef1_Mod.Freq	_BC-	__C-
062	BR 3 Osc	P1-43	BR Swell	P1-43	BR Swell	P4-27	ST Combo		---	P	52	EQ -> ER	37	Pit -> Rev			Ef Out2b		Ef2_Rev Level	ABC-	ABC-
063	CO Fire	I1-50	ME Angel	I1-02	AP Chrs2	I2-52	ST Chamb	P1-28	BR Horn	P	77	Pit & Dly	50	EQ -> Rev1			Ef Out1b		Ef2_Rev Level	ABC_	A___

● INITIAL VOICE LIST

Preset 1

Voice		Wave			Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	#	Name	Unit	Mode	#	EF1 Type	#	EF2 Type	Device	EF Parameter	Device	EF Parameter	MC3	MC4
000	A P Grand	P1-001	Piano	A	P	52	EQ -> ER	03	Rev.Room1		Ef Out2a		Ef2_Rev.Time	FLT_Level1	OS_NoteSft
001	A P Chors	P1-001	Piano	A	S	52	EQ -> ER	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	AEG_Rate3	OS_NoteSft
002	A P Dance	P1-001	Piano	A	P	50	EQ -> Rev1	21	Pit Chnge2		Ef Out2a		Ef1_Rev Level	FLT_Level0	OS_NoteSft
003	A P Rock	P1-001	Piano	A	P	59	EQ -> Pit	50	EQ -> Rev1	LFO	Ef1_Pit Level		Ef2_Rev Level	FLT_Rate2	OS_NoteSft
004	A P Tack	P1-001	Piano	A	P	23	Aural Exc.	50	EQ -> Rev1		Ef1_HPF		Ef2_Rev Level	AEG_Rate2	LFO_Amod
005	A P Touch	P1-001	Piano	A	P	56	EQ -> Cho	45	Pit -> Dly	VEL	Ef1_Cho Level		Ef2_Dly Level	FLT_Rate1	FLT_Rate2
006	B A Wood	P1-078	WoodBass	A	P	23	Aural Exc.	50	EQ -> Rev1		Ef2_Rev Level	LFO	Ef1_Enhance	AEG_Rate3	PEG_Rate1
007	B A Pitz	P1-078	WoodBass	A	S	53	EQ -> Dly	50	EQ -> Rev1		Ef2_Rev Level		Ef1_Dly Level	FLT_Level3	PEG_Level0
008	B A Fingr	P1-079	FingBs	B	P	52	EQ -> ER	47	Dist-> Dly		Ef1_ER Level		Ef2_Dist.Level	AEG_Rate3	FLT_Rate1
009	B A Frtls	P1-085	FretLess	B	S	56	EQ -> Cho	06	Rev.Stage1		Ef1_Cho Level		Ef2_ER/Rev Bal	AEG_Rate2	FLT_CofFrq
010	B A Pick 1	P1-081	PickBs1	B	P	56	EQ -> Cho	31	Dly -> Rev	LFO	Ef1_Cho Level		Ef2_Rev Level	FLT_Level0	FLT_CofFrq
011	B A Pick 2	P1-083	PickBs2	B	P	05	Rev.Room3	56	EQ -> Cho		Ef2_Cho Level		Ef2_Low Gain	FLT_Rate1	FLT_Level0
012	B A Slap	P1-089	SlapBs	B	S	55	EQ -> Flg	52	EQ -> ER		Ef2_ER Level	LFO	Ef1_Flg Level	AEG_Rate3	FLT_Level0
013	B A Thump	P1-087	ThumpBs	B	P	56	EQ -> Cho	23	Aural Exc.		Ef1_Low Freq		Ef2_HPF	FLT_CofVel	FLT_Rate2
014	B A Syn 1	P1-228	Digital4	A	S	20	Pit Chnge1	51	EQ -> Rev2		Ef2_High Frq		Ef2_Rev Level	FLT_Level2	AEG_Rate4
015	B A Syn 2	P1-106	SynBs1	B	S	55	EQ -> Flg	15	Gate Rev.		Ef1_Flg Level		Ef2 Mix	FLT_Rate1	AEG_Rate4
016	B A Syn 3	P1-106	SynBs1	B	S	56	EQ -> Cho	50	EQ -> Rev1		Ef1_Cho Level		Ef2_Rev Level	FLT_Level0	FLT_Level1
017	B A Syn 4	P1-108	SynBs2	B	P	46	Exc -> Dly	57	EQ -> Sym		Ef1_Dly Level		Ef2_Sym Level	FLT_Rate1	FLT_CofFrq
018	B A Syn 5	P1-110	SynBs3	B	P	55	EQ -> Flg	35	Sym -> Rev		Ef1_Flg Level		Ef1_Low Gain	FLT_Level1	FLT_Rate2
019	B A Syn 6	P1-112	SynBs4	B	P	55	EQ -> Flg	57	EQ -> Sym		Ef2_Sym Level		Out1 Wet	FLT_Level1	FLT_Rate2
020	B A Syn 7	P1-114	SynBs5	B	S	55	EQ -> Flg	51	EQ -> Rev2		EF1_Flg Level		Ef2_Rev Level	FLT_Rate1	FLT_Level1
021	B A Syn 8	P1-113	SynBs4Lp	B	P	57	EQ -> Sym	50	EQ -> Rev1		Ef1_Sym Level		Ef1_Low Gain	AEG_Rate3	AEG_Level3
022	B A Syn 9	P1-116	SynBs6	B	P	20	Pit Chnge1	55	EQ -> Flg		Ef2_High Gain		Ef2_Flg Level	AEG_Rate3	FLT_Level0
023	B A Syn 10	P1-118	SynBs7	B	P	55	EQ -> Flg	51	EQ -> Rev2		Ef1_Flg Level		Ef2_Rev Level	AEG_Rate3	PEG_Rate1
024	B A Syn 11	P1-121	SynBs8Lp	B	P	58	EQ -> Pha	85	Cho & Cho		Ef1_Low Freq		Ef1_Low Gain	AEG_LvlVel	FLT_CofVel
025	B A Syn 12	P1-122	SynBs9	B	P	54	EQ -> Echo	53	EQ -> Dly		Ef2_Low Gain		Ef1_Echo Level	FLT_CofFrq	AEG Rate4
026	B R Trump	P1-025	Trumpet	A	P	30	D.Flt(Wah)	51	EQ -> Rev2	KEY	Ef1_Flt Freq		Ef2_Rev Level	FLT_CofFrq	PEG_Rate1
027	B R Mute	P1-027	MuteTp	A	P	06	Rev.Stage1	54	EQ -> Echo		Ef2_Echo Level		Ef2_High Gain	FLT_CofFrq	FLT_CofVel
028	B R Horn	P1-031	Horn	A	S	56	EQ -> Cho	01	Rev.Hall1		Ef2_Rev.Time		Ef2 Mix	LFO_Speed	LFO_Amod
029	B R Trombo	P1-029	Trombone	B	P	53	EQ -> Dly	38	Exc -> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	PEG_Rate1
030	B R Tuba	P1-032	Tuba	A	P	56	EQ -> Cho	01	Rev.Hall1		Ef2_ER/Rev Bal		Ef1_Cho Level	LFO_Speed	FLT_Level0
031	B R TpEns	P1-033	TpEns	A	S	59	EQ -> Pit	15	Gate Rev.		Ef1_Pit Level		Ef2_FB Gain	FLT_Level0	FLT_Rate1
032	B R Tpts	P1-033	TpEns	A	P	53	EQ -> Dly	37	Pit -> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	PEG_Level0
033	B R TpSfz	P1-033	TpEns	A	P	59	EQ -> Pit	01	Rev.Hall1		Ef1_Pit Level		Ef Out2a	PEG_Level0	FLT_Rate2
034	B R Stab	P1-035	BrsEns	A	S	52	EQ -> ER	37	Pit -> Rev		Ef2 Mix		Ef1_ER Level	FLT_Rate1	FLT_Rate2
035	B R EnsSF	P1-035	BrsEns	A	S	55	EQ -> Flg	51	EQ -> Rev2		Ef2_Rev Level		Ef1_Flg Level	AEG_Rate3	FLT_Rate2
036	B R East	P1-099	SynBrs2	A	P	67	Pit & Rev	23	Aural Exc.		Ef2_Enhance		Ef Out1b	FLT_CofFrq	FLT_Level1
037	B R Syn 1	P1-099	SynBrs2	A	S	39	Dist-> Rev	59	EQ -> Pit		Ef2_Pit Level		Ef1_Rev Level	FLT_Band	OS_NoteSft
038	B R Syn 2	P1-220	AnlgSaw1	A	P	67	Pit & Rev	23	Aural Exc.		Ef2_Enhance		Ef Out1b	FLT_Rate2	FLT_Level0
039	B R Syn 3	P1-220	AnlgSaw1	A	P	35	Sym -> Rev	23	Aural Exc.		Ef Out2a		Ef Out1b	FLT_Level1	FLT_Rate1
040	B R Syn 4	P1-222	Pulse 10	A	S	57	EQ -> Sym	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	FLT_Rate1	FLT_Rate2
041	B R Saw	P1-220	AnlgSaw1	A	P	67	Pit & Rev	23	Aural Exc.		Ef2_Enhance		Ef Out1b	FLT_Level1	FLT_Level0
042	B R SawSF	P1-221	AnlgSaw2	A	P	59	EQ -> Pit	01	Rev.Hall1		Ef1_Pit Level		Ef Out2a	PEG_Level0	FLT_Rate2
043	B R Swell	P1-220	AnlgSaw1	A	P	67	Pit & Rev	23	Aural Exc.		Ef2_Exc Level		Ef Out1a	FLT_Level1	FLT_Level0
044	B R Tooth	P1-220	AnlgSaw1	A	P	85	Cho & Cho	35	Sym -> Rev		Out1 Wet		Ef Out1b	FLT_Level1	FLT_Rate1
045	B R Rezz	P1-097	SynBrs1	A	S	56	EQ -> Cho	53	EQ -> Dly		Ef1_Cho Level		Ef2_Dly Level	FLT_Rate1	PEG_Rate1
046	B R Toto	P1-097	SynBrs1	A	S	39	Dist-> Rev	37	Pit -> Rev		Ef1 Mid.Gain		Ef2_Rev Level	FLT_Level1	FLT_Rate2
047	B R Wow	P1-220	AnlgSaw1	A	S	55	EQ -> Flg	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	FLT_Rate1	FLT_Rate2
048	C H Aah	P1-138	ChoirAaLp	A	P	21	Pit Chnge2	34	Cho -> Rev		Ef Out1a		Ef2_Rev Level	FLT_CofFrq	PEG_Level0
049	C H Ooh	P1-140	ChoirOoLp	A	P	21	Pit Chnge2	50	EQ -> Rev1		Ef2_High Frq		Ef2_Rev Level	FLT_CofFrq	PEG_Level0
050	C H Pure	P1-139	ChoirOo	A	S	59	EQ -> Pit	07	Rev.Stage2		Ef1_Pit Level		Ef2_ER/Rev Bal	FLT_CofFrq	PEG_Level0
051	C H Breth	P1-141	Itopia	A	P	35	Sym -> Rev	19	St.Echo		Ef1_Mod.Depth		Ef1_Rev Level	FLT_CofFrq	PEG_Level0
052	C H Ghost	P1-141	Itopia	A	S	21	Pit Chnge2	01	Rev.Hall1		Ef2 Mix		Out1 Wet	FLT_CofFrq	PEG_Level0
053	C H Quire	P1-140	ChoirOoLp	A	P	59	EQ -> Pit	78	Exc & Dly		Ef1_Pit Level		Ef Out2b	FLT_Rate3	PEG_Level0
054	C H Vespa	P1-137	ChoirAa	A	S	57	EQ -> Sym	01	Rev.Hall1		Ef1_Sym Level		Ef2_Rev.Time	FLT_CofFrq	PEG_Level0
055	C H Vocod	P1-238	DigiVox2	B	P	37	Pit -> Rev	26	EG Sympho.		Ef1_Rev Level		Ef2_Mod.Depth	FLT_Band	PEG_Level0
056	F I Blue1	P1-015	AcrdionLp	A	S	47	Dist-> Dly	51	EQ -> Rev2		Ef1_Dly Level	VEL	Ef1_Mid.Freq	FLT_Level1	FLT_Rate1
057	F I Blue2	P1-015	AcrdionLp	A	S	47	Dist-> Dly	01	Rev.Hall1		Ef1_Dly Level		Ef1_Dist.Level	PEG_Level0	FLT_Rate2
058	F I Dudel	P1-011	Clavi 2Lp	A	P	59	EQ -> Pit	34	Cho -> Rev		Ef1_Pit Level		Ef2_Rev Level	PEG_Level0	FLT_Rate2
059	F I DulcD	P1-092	DulcimrD	A	P	59	EQ -> Pit	01	Rev.Hall1	LFO	Ef1_Pit Level		Ef Out2a	LFO_Pmod	OS_NoteSft
060	F I DulcM	P1-091	Dulcimer	A	P	59	EQ -> Pit	01	Rev.Hall1	LFO	Ef1_Pit Level		Ef Out2a	LFO_Pmod	OS_FrqFine
061	F I Harp	P1-096	Harp	A	P	23	Aural Exc.	51	EQ -> Rev2		Ef1_Enhance		Ef2_Rev Level	AEG_Rate3	FLT_Level0
062	F I Kalim	P1-094	Kalimba	A	P	06	Rev.Stage1	54	EQ -> Echo		Ef2_Echo Level		Ef Out1a	FLT_Level1	AEG_Rate3
063	D R Kit	-	-	-	P	50	EQ -> Rev1	52	EQ -> ER		Ef1_Rev Level		Ef2_ER Level	-	-

● INITIAL VOICE LIST

Preset 2

Voice		Wave			Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	#	Name	Unit	Mode	#	EF1 Type	#	EF2 Type	Device	EF Parameter	Device	EF Parameter	MC3	MC4
000	F I L i p	P1-244	Sin	B	S	47	Dist-> Dly	01	Rev.Hall		Ef1_Dly Level		Ef2 Mix	OS_NoteSft	FLT_Rate1
001	F I S i t a r	P1-095	Sitar	A	P	54	EQ -> Echo	68	Exc & Rev		Ef1_Echo Level		Ef Out2b	AEG_Rate3	FLT_Level0
002	G T N y l o n	P1-062	GtrNyln	A	S	56	EQ -> Cho	38	Exc -> Rev	KEY	Ef2_Enhance		Ef2_Rev Level	FLT_Rate1	FLT_Level1
003	G T D a r k	P1-060	GtrSteel	A	P	06	Rev.Stage1	58	EQ -> Pha		Ef Out1a		Ef2_Pha Level	FLT_Rate2	FLT_Level1
004	G T S t e e l	P1-060	GtrSteel	A	P	06	Rev.Stage1	58	EQ -> Pha		Ef Out1a		Ef2_High Gain	FLT_Rate2	FLT_CofFrq
005	G T 1 2 S t r	P1-064	12String	A	P	52	EQ -> ER	51	EQ -> Rev2		Ef2_Rev Level		Ef1_High Gain	AEG_Rate3	FLT_Level1
006	G T J a z z	P1-134	SynStWv	B	S	56	EQ -> Cho	50	EQ -> Rev1		Ef1_Cho Level		Ef2_Rev Level	AEG_Rate3	FLT_Rate3
007	G T S t r t 1	P1-066	EgSngl1	A	S	45	Pit -> Dly	39	Dist-> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_Level0	FLT_Rate1
008	G T S t r t 2	P1-068	EgSngl2	B	S	53	EQ -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_PM Depth	AEG_Rate3	FLT_Rate2
009	G T S t r t 3	P1-066	EgSngl1	A	P	34	Cho -> Rev	17	Dly L,R		Out1 Wet		Ef Out2a	CT_PBRange	LFO_Amod
010	G T M u t e	P1-070	EgMute1	A	S	58	EQ -> Pha	51	EQ -> Rev2		Ef2_Rev Level		Ef1_High Gain	AEG_Rate4	FLT_Level1
011	G T H a r m	P1-076	EgHarm2	A	S	56	EQ -> Cho	65	Sym & Rev		Ef2_Mod.Depth		Ef Out2b	AEG_Rate4	PEG_Rate1
012	G T C o m p 1	P1-072	EgComp	A	S	39	Dist-> Rev	56	EQ -> Cho		Ef2_Cho Level		Ef1_Dist.Level	FLT_Level0	FLT_Rate1
013	G T C o m p 2	P1-072	EgComp	A	S	56	EQ -> Cho	47	Dist-> Dly		Ef2_Dist.Level		Ef2_Dly Level	AEG_Level3	AEG_Rate3
014	G T D i s t	P1-066	EgSngl1	A	S	20	Pit Chnge1	47	Dist-> Dly		Ef1_1/2 Bal.		Ef2_Dly Level	AEG_Rate3	PEG_Level1
015	G T W a r m	P1-074	EgHarm1	A	P	06	Rev.Stage1	49	Dist->Echo		Ef2_Echo Level		Ef2_Dist.Level	AEG_Rate1	FLT_Level1
016	G T W a h	P1-072	EgComp	A	S	30	D.Flt(Wah)	39	Dist-> Rev		Ef1_Dly Level		Ef2_Dist.Level	CT_AT_PtBs	TotalLevel
017	G T F e e d	P1-071	EgMute2	B	S	30	D.Flt(Wah)	39	Dist-> Rev		Ef1_Dly Level		Ef2_Dist.Level	CT_AT_PtBs	TotalLevel
018	K Y E P 1	P1-002	HardEp	A	P	59	EQ -> Pit	68	Exc & Rev		Ef1_Pit Level		Ef Out2b	AEG_Rate3	LFO_Speed
019	K Y E P 2	P1-004	SoftEp	A	P	58	EQ -> Pha	68	Exc & Rev		Ef1_Mod.Freq		Ef2_Enhance	AEG_Rate3	LFO_Speed
020	K Y E P 3	P1-006	SynthEp	A	P	68	Exc & Rev	57	EQ -> Sym		Ef2_Mod.Freq	MW	Ef2_Low Freq	FLT_Level1	FLT_Rate2
021	K Y E P 4	P1-232	Digital8	A	S	50	EQ -> Rev1	57	EQ -> Sym		Ef1_Rev Level	MW	Ef2 Mix	FLT_Level1	FLT_Reso
022	K Y E P 5	P1-235	Digitl11	A	P	55	EQ -> Flg	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	FLT_Rate1	FLT_RlsLvl
023	K Y E P 6	P1-234	Digitl10	A	P	34	Cho -> Rev	43	Sym -> Dly		Ef1_Mod.Freq		Ef2_Dly Level	FLT_Level1	FLT_Rate1
024	K Y E P 7	P1-015	AcrdionLp	A	P	21	Pit Chnge2	64	Cho & Rev		Ef2_Mod.Freq		Ef Out2b	AEG_Rate3	FLT_CofVel
025	K Y E P 8	P1-232	Digital8	A	P	56	EQ -> Cho	34	Cho -> Rev		Ef1_PM Depth		Ef2_Rev Level	AEG_Rate3	FLT_Rate2
026	K Y E P 9	P1-228	Digital4	A	P	55	EQ -> Flg	34	Cho -> Rev		Ef1_Mod.Freq		Ef2_Rev Level	AEG_Rate2	FLT_CofFrq
027	K Y E P 1 0	P1-131	Pad 5	B	S	39	Dist-> Rev	59	EQ -> Pit		Ef2_Pit Level		Ef1_Rev Level	FLT_Level2	FLT_Rate3
028	K Y E P 1 1	P1-090	SlapBsLp	B	P	06	Rev.Stage1	59	EQ -> Pit		Ef2_Pit Level		Ef Out1a	FLT_Level2	FLT_Rate3
029	K Y E P 1 2	P1-037	Baritone	A	S	57	EQ -> Sym	47	Dist-> Dly		Ef1_Sym Level		Ef2_Dly Level	FLT_Level1	FLT_Rate2
030	K Y C l a v 1	P1-008	Clavi 1	A	P	56	EQ -> Cho	17	Dly L,R		Ef1_Cho Level		Ef Out2a	FLT_Level1	FLT_Rate2
031	K Y C l a v 2	P1-008	Clavi 1	A	P	30	D.Flt(Wah)	56	EQ -> Cho	FC	Ef1_Flt Freq		Ef2_Cho Level	FLT_Level0	FLT_Rate2
032	K Y H r p s i	P1-012	Harpsi	A	S	21	Pit Chnge2	04	Rev.Room2		Ef2_Rev.Time		Ef2 Mix	FLT_Rate2	FLT_Band
033	K Y A c r d n	P1-014	Acrdion	A	P	02	Rev.Hall2	21	Pit Chnge2		Ef Out1a		Ef1_LPF	FLT_CofFrq	FLT_Reso
034	K Y C a l i 1	P1-053	PnFluteLP	A	P	51	EQ -> Rev2	25	EG Chorus		Ef1_Rev Level		Ef2_PM Depth	FLT_Rate1	FLT_Rate2
035	K Y C a l i 2	P1-050	Recorder	A	P	51	EQ -> Rev2	25	EG Chorus		Ef1_Rev Level		Ef2_PM Depth	PEG_Level1	AEG_Rate4
036	M E B o t t l	P1-205	Bottle	B	P	18	Dly L,C,R	06	Rev.Stage1		Ef Out1a		Ef Out2a	FLT_Band	OS_NoteSft
037	M E G i z m o	P1-237	DigiVox1	B	S	52	EQ -> ER	21	Pit Chnge2		Ef1_ER Level		Ef2 Mix	PEG_Level0	FLT_Rate1
038	M E G r i n d	P1-214	Bell Mix	B	S	58	EQ -> Pha	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	AEG_Rate4	PEG_Level0
039	M E H a n d	P1-143	HandBell	A	S	55	EQ -> Flg	11	Rev.Canyon	LFO	Ef1_Mod.Freq		Ef2 Mix	FLT_Level0	FLT_Rate1
040	M E K a l i	P1-094	Kalimba	A	P	27	EG Phaser	34	Cho -> Rev		Ef1_Mod.Freq		Out1 Wet	LFO_Speed	LFO_Wave
041	M E M e l l o	P1-213	Mellow	B	P	43	Sym -> Dly	34	Cho -> Rev		Ef1_Dly Level		Out1 Wet	PEG_Level0	FLT_Rate1
042	M E O r c h 1	P1-217	OrchHit1	B	P	06	Rev.Stage1	57	EQ -> Sym		Ef2_Sym Level		Ef Out1a	AEG_Rate2	AEG_RlsRt
043	M E O r c h 2	P1-218	OrchHit2	B	P	59	EQ -> Pit	50	EQ -> Rev1		Ef1_Pit Level		Ef2_Rev Level	AEG_Rate2	PEG_Rate1
044	M E O r c h R	P1-217	OrchHit1	B	S	11	Rev.Canyon	21	Pit Chnge2		Ef2 Mix		Ef1_Rev.Time	LFO_Speed	LFO_Pmod
045	M E S o r o	P1-226	Digital2	A	P	65	Sym & Rev	78	Exc & Dly		Ef Out1b	VEL	Ef Out2b	AEG_Level2	PEG_Rate1
046	M E T e m p l	P1-208	Temp Ra	B	P	42	Cho -> Dly	35	Sym -> Rev		Out1 Wet		EF1_FB Gain	PEG_Level0	PEG_Rate1
047	M E T i n k	P1-143	HandBell	A	P	20	Pit Chnge1	38	Exc -> Rev		Ef Out1a		Ef2_Exc Level	LFO_Speed	LFO_Pmod
048	M E T o m i	P1-225	Digital1	A	P	42	Cho -> Dly	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	LFO_Speed	LFO_Wave
049	M E V o i c s	P1-210	VoiceAtk	A	P	20	Pit Chnge1	38	Exc -> Rev		Ef Out1a		Ef2_Exc Level	LFO_Speed	LFO_Fmod
050	O R J a z B	P1-016	Organ 1	A	P	34	Cho -> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw	MW	Ef1_Mod.Freq	FLT_Level0	AEG_Rate3
051	O R S m o k e	P1-020	PrcOrg2	A	P	34	Cho -> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw		Ef1_PM Depth	FLT_Level0	AEG_Rate3
052	O R A i r y	P1-131	Pad 5	B	S	28	Rotary SP.	38	Exc -> Rev	MW	Ef1_L/M/H Sw		Ef2_Rev Level	AEG_Rate4	FLT_Rate2
053	O R D i s t	P1-016	Organ 1	A	S	39	Dist-> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw		Ef1_Dist.Level	PEG_Level0	AEG_Rate4
054	O R C h e a p	P1-129	Pad 3	B	S	51	EQ -> Rev2	28	Rotary SP.		Ef2_L/M/H Sw		Ef1_Rev Level	FLT_Rate1	LFO_Speed
055	O R P i p e s	P1-023	Pipe Wv	A	S	56	EQ -> Cho	06	Rev.Stage1		Ef1_Cho Level		Ef2 Mix	FLT_CofFrq	OS_NoteSft
056	O R C l i c k	P1-016	Organ 1	A	P	23	Aural Exc.	14	Early Ref2		Ef1_HPF		Ef2_Room Size	AEG_Rate3	OS_NoteSft
057	O R P e r c	P1-018	PrcOrg1	B	P	34	Cho -> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw	MW	Ef1_Mod.Freq	AEG_Rate2	FLT_CofFrq
058	S C A h a !	P1-138	ChoirAaLp	A	P	45	Pit -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_Level2	FLT_Rate3
059	S C B a r i	P1-038	BaritneLp	A	P	23	Aural Exc.	35	Sym -> Rev		Ef1_Enhance		Ef2_Rev Level	FLT_Rate1	FLT_Rate4
060	S C B e l l	P1-234	Digitl10	A	P	21	Pit Chnge2	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	AEG_Level3	AEG_Rate3
061	S C C l a v	P1-010	Clavi 2	A	S	57	EQ -> Sym	47	Dist-> Dly		Ef1_Sym Level		Ef2_Dly Level	FLT_Level1	FLT_Rate2
062	S C D i g i 1	P1-226	Digital2	A	P	55	EQ -> Flg	34	Cho -> Rev		Ef1_Mod.Depth		Ef2_Rev Level	AEG_Rate2	AEG_Rate3
063	D R Z o n e s	-	-	-	P	47	Dist-> Dly	50	EQ -> Rev1		Out2 Wet		Ef1_Dly Level	-	-

● INITIAL VOICE LIST

Preset 3

Voice		Wave			Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	#	Name	Unit	Mode	#	EF1 Type	#	EF2 Type	Device	EF Parameter	Device	EF Parameter	MC3	MC4
000	SC Digi 2	P1-226	Digital2	A	P	46	Exc -> Dly	57	EQ -> Sym		Ef1_Dly Level		Ef2_Mod. Freq	FLT_Level0	FLT_Rate2
001	SC Digi 3	P1-225	Digital1	A	S	42	Cho -> Dly	35	Sym -> Rev		Ef2_Mod. Freq		Out1 Wet	FLT_CofFrq	OS_NoteSft
002	SC Ecko	P1-105	SynBrsWv	A	P	86	Cho & Sym	73	Flg & Dly		Ef1_Mod. Freq		Ef Out2b	AEG_LvlVel	FLT_Rate2
003	SC Fingr	P1-079	FingBs	B	S	38	Exc -> Rev	56	EQ -> Cho		Ef2_Cho Level	KEY	Ef1_Exc Level	FLT_Level0	FLT_Rate1
004	SC Housy	P1-127	Pad 1Lp	B	P	43	Sym -> Dly	10	Rev. Tunnel		EF1_FB Gain		Ef1_Dly Level	FLT_CofVel	FLT_Band
005	SC Jrney	P1-221	AnlgSaw2	A	S	56	EQ -> Cho	06	Rev. Stage1		Ef1_Mod. Freq		Ef2 Mix	AEG_Rate3	PEG_Rate1
006	SC Metal	P1-112	SynBs4	B	P	56	EQ -> Cho	71	Dly & Rev	VEL	Ef1_Mod. Freq		Ef2_ER/Rev Bal	AEG_Rate2	AEG_Level2
007	SC Mute	P1-071	EgMute2	B	S	57	EQ -> Sym	51	EQ -> Rev2		Ef1_Mod. Depth		Ef2_Rev Level	AEG_Rate4	OS_NoteSft
008	SC Pan	P1-051	Flute	A	S	50	EQ -> Rev1	57	EQ -> Sym		Ef2_Sym Level		Ef1_Rev Level	FLT_Band	AEG_Rate3
009	SC Perc	P1-084	PickBs2Lp	B	P	06	Rev. Stage1	59	EQ -> Pit		Ef2_Pit Level		Ef Out1a	FLT_Level3	FLT_CofFrq
010	SC Rezz	P1-220	AnlgSaw1	A	P	46	Exc -> Dly	57	EQ -> Sym		Ef1_Dly Level		Ef2_Mod. Freq	FLT_Level0	FLT_Rate2
011	SC Spike	P1-088	ThumpBsLp	B	P	06	Rev. Stage1	59	EQ -> Pit		Ef2_Pit Level		Ef Out1a	FLT_Level2	FLT_Rate3
012	SC Sqiff	P1-128	Pad 2	B	P	59	EQ -> Pit	34	Cho -> Rev		Ef1_High Gain		Ef2_Rev Level	FLT_Rate1	FLT_Rate4
013	SC Synnr	P1-134	SynStWv	B	S	20	Pit Chnge1	35	Sym -> Rev		Ef2_Rev. Time		Ef2 Mix	AEG_Rate3	PEG_Level0
014	SC Topia	P1-141	Itopia	A	S	56	EQ -> Cho	04	Rev. Room2		Ef1_Cho Level		Ef2 Mix	FLT_Rate2	PEG_Rate1
015	SC Vocal	P1-137	ChoirAa	A	S	23	Aural Exc.	59	EQ -> Pit		Ef1_Enhance		Ef2_High Frq	FLT_Rate1	FLT_Rate3
016	SC Vox	P1-237	DigiVox1	B	S	57	EQ -> Sym	46	Exc -> Dly		Ef1_Mod. Freq		Ef2_Dly Level	FLT_Rate2	FLT_Rate3
017	SC Wires	P1-132	SynLead1	A	P	21	Pit Chnge2	35	Sym -> Rev		Out1 Wet		Ef2_Rev Level	AEG_Rate3	PEG_Level0
018	SC Wondr	P1-126	Pad 1	B	P	59	EQ -> Pit	35	Sym -> Rev		Out1 Wet		Ef2_Rev Level	AEG_Rate3	PEG_Level0
019	SE Alert	P1-242	DigiWild	B	S	47	Dist-> Dly	11	Rev. Canyon		Ef1_Dist. Level		Ef2 Mix	PEG Level3	OS_NoteSft
020	SE Templ	P1-200	TemplBlk	A	P	23	Aural Exc.	50	EQ -> Rev1		Ef1_Exc Level		Ef2_Rev Level	FLT_CofFrq	OS_NoteSft
021	SE BDup	P1-155	BD5	B	S	22	Pit Chnge3	51	EQ -> Rev2		Ef1_FB Gain		Ef2_Rev Level	AEG_Rate4	PEG_Level0
022	SE Chou	P1-211	ChouCho	B	P	20	Pit Chnge1	63	Flg & Rev		Ef2_Mod. Freq		Ef Out2b	FLT_Level0	FLT_Level4
023	SE Demon	P1-212	Vox Bell	B	S	24	EG Flanger	50	EQ -> Rev1		Ef1_Mod. Depth		Ef2_Rev Level	AEG_Rate4	LFO_Fmod
024	SE Dropr	P1-216	Seq2	B	P	21	Pit Chnge2	31	Dly -> Rev		Ef Out1a		Out1 Wet	PEG_Level0	PEG_Rate1
025	SE Gobln	P1-215	Seq1	B	S	22	Pit Chnge3	63	Flg & Rev		Ef Out2a		Ef Out2b	LFO_Amod	LFO_Fmod
026	SE Heli	P1-219	Noise	B	P	60	EQ -> Pan	33	Flg -> Rev		Ef1_Fade In		Ef1_Speed	LFO_Speed	LFO_Pmod
027	SE Hell	P1-202	Timbale2	A	P	20	Pit Chnge1	41	Flg -> Dly		Ef2_Dly Level		Ef1_2 Pitch	OS_NoteSft	PEG_Rate1
028	SE Hyena	P1-140	ChoirOoLp	A	P	77	Pit & Dly	50	EQ -> Rev1		Ef1_FB Gain		Ef2_Rev Level	LFO_Wave	LFO_Pmod
029	SE Indus	P1-209	Typist	B	S	14	Early Ref2	81	Flg & Flg		Ef1_Room Size		Out1 Wet	LFO_Wave	LFO_Speed
030	SE It	P1-212	Vox Bell	B	P	59	EQ -> Pit	13	Early Ref1		Ef1_Pit Level		Ef Out2a	FLT_Rate1	FLT_Rate2
031	SE Noize	P1-219	Noise	B	S	47	Dist-> Dly	11	Rev. Canyon		Ef1_Dist. Level		Ef2 Mix	AEG_Rate4	OS_NoteSft
032	SE Pops	P1-201	Timbale	A	P	09	Rev. WhRoom	73	Flg & Dly		Ef Out2b		Ef1_Rev. Time	AEG_LvlVel	FLT_CofVel
033	SE Rain	P1-219	Noise	B	P	21	Pit Chnge2	50	EQ -> Rev1		Ef2_High Gain		Ef2_Rev Level	AEG_Rate4	FLT_Band
034	SE Rezo	P1-219	Noise	B	P	52	EQ -> ER	47	Dist-> Dly		Ef2_Dist. Level		Ef1_ER Level	AEG_Rate4	FLT_Rate3
035	SE S&H	P1-242	DigiWild	B	S	24	EG Flanger	19	St. Echo		Ef2 Mix		Ef1_Mod. Freq	AEG_Rate4	LFO_Speed
036	SE Star	P1-227	Digital3	A	P	19	St. Echo	59	EQ -> Pit		Ef Out1a		Ef2_Pit Level	PEG_Level1	PEG_Rate1
037	SE Up&Up	P1-213	Mellow	B	S	20	Pit Chnge1	47	Dist-> Dly		Ef2_Dist. Level		Ef2_Mid. Freq	PEG_Rate1	PEG_Level3
038	SE Wind	P1-219	Noise	B	P	33	Flg -> Rev	21	Pit Chnge2	MW	Ef Out1b	MW	Ef1_Mod. FBGain	LFO_Speed	EF_SendLvl
039	SL Cutty	P1-124	SynBs10	B	S	56	EQ -> Cho	31	Dly -> Rev		Ef1_Mod. Freq		Ef2 Mix	AEG_Rate4	PEG_Rate1
040	SL Digi	P1-228	Digital4	A	S	46	Exc -> Dly	51	EQ -> Rev2		Ef1_Dly Level		Ef2_Rev Level	FLT_Level1	PEG_Rate1
041	SL Dist	P1-066	EgSngl1	A	S	55	EQ -> Flg	39	Dist-> Rev		Ef1_Mod. Freq		Ef2_Rev Level	AEG_Rate4	CT_PBRange
042	SL Hamma	P1-117	SynBs6Lp	B	S	56	EQ -> Cho	31	Dly -> Rev		Ef1_Mod. Freq		Ef2 Mix	AEG_Rate4	PEG_Rate1
043	SL Lead	P1-132	SynLead1	A	S	57	EQ -> Sym	47	Dist-> Dly		Ef1_Sym Level		Ef2_Dist. Level	FLT_Level1	FLT_Rate2
044	SL Lyle	P1-050	Recorder	A	P	37	Pit -> Rev	57	EQ -> Sym		Ef2_Low Freq		Ef2_High Frq	FLT_Level0	FLT_Rate1
045	SL Pulse	P1-222	Pulse 10	A	S	53	EQ -> Dly	33	Flg -> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_Rate1	PEG_Rate1
046	SL Saw 1	P1-220	AnlgSaw1	A	S	18	Dly L,C,R	64	Cho & Rev		Ef1_FB Gain		Ef Out2a	FLT_Rate2	FLT_CofVel
047	SL Saw 2	P1-220	AnlgSaw1	A	S	53	EQ -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_Rev Level	PEG_Rate1	FLT_Level3
048	SL Squar	P1-224	Pulse 50	A	P	18	Dly L,C,R	07	Rev. Stage2		Ef Out1a		Ef Out2a	PEG_Level0	FLT_Level0
049	SL Sync	P1-230	Digital6	A	P	06	Rev. Stage1	58	EQ -> Pha		Ef2_Mod. Dly		Ef2_Pha Level	FLT_CofFrq	PEG_Rate1
050	SL Whisl	P1-050	Recorder	A	S	23	Aural Exc.	43	Sym -> Dly		Ef2_Dly Level		Ef2_Mod. Freq	PEG_Level0	LFO_Speed
051	SP Abyss	P1-129	Pad 3	B	P	56	EQ -> Cho	64	Cho & Rev		Ef Out1b		Ef Out2b	AEG_Rate4	LFO_Speed
052	SP Big	P1-055	Strngs1Lp	A	P	21	Pit Chnge2	34	Cho -> Rev		Ef Out1a		Ef2_Rev Level	LFO_Fmod	PEG_Level0
053	SP Exita	P1-127	Pad 1Lp	B	P	23	Aural Exc.	35	Sym -> Rev		Ef1_Enhance		Ef2_Rev Level	PEG_Level0	FLT_Rate1
054	SP Freqs	P1-128	Pad 2	B	S	23	Aural Exc.	43	Sym -> Dly		Ef1_Enhance		Ef2_Dly Level	PEG_Rate1	FLT_Level0
055	SP Glass	P1-130	Pad 4	B	S	43	Sym -> Dly	01	Rev. Hall1		Ef1_Mod. Freq		Ef1_Dly Level	PEG_Level0	FLT_Band
056	SP Goner	P1-126	Pad 1	B	P	06	Rev. Stage1	57	EQ -> Sym		Ef1_Rev. Time		Ef Out2b	LFO_Phase	OS_NoteSft
057	SP Hyper	P1-094	Kalimba	A	P	88	Sym & Sym	34	Cho -> Rev		Ef1_Mod. Depth		Ef2_Rev Level	PEG_Rate1	PEG_Level0
058	SP Makro	P1-128	Pad 2	B	S	25	EG Chorus	01	Rev. Hall1		Ef2 Mix		Ef1_High Gain	FLT_Level0	PEG_Level0
059	SP Mello	P1-103	SynBrs4	A	P	45	Pit -> Dly	35	Sym -> Rev		Ef Out1b		Ef Out 2b	FLT_Level0	PEG_Level0
060	SP Movie	P1-126	Pad 1	B	P	21	Pit Chnge2	01	Rev. Hall1		Ef Out1a		Ef Out2a	FLT_CofFrq	PEG_Rate1
061	SP Nasty	P1-135	DistWv	B	P	55	EQ -> Flg	39	Dist-> Rev	LFO	Ef1_Flg Level		Ef2_Rev Level	FLT_Level1	FLT_Rate2
062	SP Nehan	P1-133	SynLead2	B	P	85	Cho & Cho	35	Sym -> Rev		Out1 Wet		Ef Out1b	PEG_Rate1	PEG_Level0
063	DR GM1 Dl	-	-	-	P	47	Dist-> Dly	50	EQ -> Rev1		Out2 Wet		Ef1_Dly Level	-	-

● INITIAL VOICE LIST

Preset 4

Voice		Wave			Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	#	Name	Unit	Mode	#	EF1 Type	#	EF2 Type	Device	EF Parameter	Device	EF Parameter	MC3	MC4
000	SP Paddy	P1-127	Pad 1Lp	B	P	01	Rev.Hall1	54	EQ -> Echo		Ef2_Echo Level		Ef2_High Gain	FLT_CofFrq	FLT_Band
001	SP Phaze	P1-129	Pad 3	B	P	59	EQ -> Pit	34	Cho -> Rev		Ef1_Pit Level		Ef2_Rev Level	AEG_Rate4	PEG_Rate1
002	SP Poly	P1-126	Pad 1	B	P	59	EQ -> Pit	42	Cho -> Dly	LFO	Ef1_Pit Level	LFO	Ef2_Mod.Freq	PEG_Level0	PEG_Rate1
003	SP SawSt	P1-221	AnlgSaw2	A	S	42	Cho -> Dly	35	Sym -> Rev		Ef2 Mix		Ef1_Dly Level	FLT_CofFrq	OS_NoteSft
004	SP Slow	P1-128	Pad 2	B	P	01	Rev.Hall1	57	EQ -> Sym		Ef Out1a		Ef2_Sym Level	PEG_Rate1	FLT_Rate1
005	SP Smoky	P1-051	Flute	A	S	57	EQ -> Sym	01	Rev.Hall1	MW	Ef1_Sym Level		Ef2 Mix	PEG_Level0	PEG_Rate1
006	SP Space	P1-131	Pad 5	B	P	43	Sym -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_Rev Level	PEG_Level0	FLT_Band
007	SP Sqare	P1-223	Pulse 25	A	P	42	Cho -> Dly	35	Sym -> Rev		Ef1_Dly Level		Ef2_Mod.Freq	AEG_Level3	FLT_CofVel
008	SP Sweep	P1-130	Pad 4	B	S	83	Flg & Sym	38	Exc -> Rev		Ef1_Mod.Freq		Ef2_Rev Level	PEG_Level0	PEG_RlsLvl
009	SP Sweet	P1-128	Pad 2	B	P	01	Rev.Hall1	54	EQ -> Echo		Ef2_Low Gain	MW	Ef2_High Gain	PEG_Rate1	FLT_Rate1
010	SP Vizon	P1-234	Digitl10	A	S	46	Exc -> Dly	56	EQ -> Cho	LFO	Ef2_Mod.Freq		Ef1_Dly Level	FLT_Band	AEG_Rate2
011	SP Wine	P1-227	Digital3	A	S	88	Sym & Sym	51	EQ -> Rev2		Ef1_Mod.Depth		Ef2_Rev Level	PEG_Rate1	FLT_Rate1
012	ST Violn	P1-057	Violin	A	S	57	EQ -> Sym	01	Rev.Hall1		Ef1_Sym Level		Ef2 Mix	FLT_Band	LFO_Delay
013	ST JeanL	P1-058	Viola	A	S	49	Dist->Echo	01	Rev.Hall1	FC	Ef1_Mid.Freq		Ef2 Mix	CT_AT_Pmod	LFO_Speed
014	ST Sectn	P1-056	Strings2	A	S	56	EQ -> Cho	06	Rev.Stage1		Ef1_Cho Level		Ef2_ER/Rev Bal	FLT_CofFrq	OS_NoteSft
015	ST Power	P1-129	Pad 3	B	P	01	Rev.Hall1	17	Dly L,R		Ef Out1a		Ef Out2a	FLT_Band	OS_NoteSft
016	ST Deep	P1-055	Strngs1Lp	A	P	39	Dist-> Rev	51	EQ -> Rev2		Ef2_High Gain		Ef2_Rev Level	FLT_Band	OS_NoteSft
017	ST Dark	P1-056	Strings2	A	S	56	EQ -> Cho	06	Rev.Stage1		Ef1_Cho Level		Ef2_ER/Rev Bal	FLT_CofFrq	OS_NoteSft
018	ST Brite	P1-056	Strings2	A	P	01	Rev.Hall1	55	EQ -> Flg		Ef Out1a		Ef2_Flg Level	FLT_CofFrq	OS_NoteSft
019	ST Arco	P1-054	Strings1	A	P	39	Dist-> Rev	51	EQ -> Rev2		Ef2_High Gain		Ef2_Rev Level	FLT_CofFrq	OS_NoteSft
020	ST Sfz	P1-054	Strings1	A	P	39	Dist-> Rev	51	EQ -> Rev2		Ef2_High Gain		Ef2_Rev Level	LFO_Speed	OS_NoteSft
021	ST Pizz	P1-059	Pizz	A	P	21	Pit Chnge2	51	EQ -> Rev2	VEL	Ef Out1a		Ef2_Rev Level	FLT_Level0	FLT_Rate1
022	ST Tron	P1-129	Pad 3	B	P	51	EQ -> Rev2	42	Cho -> Dly		Ef1_Rev Level		Ef2 Dly Level	FLT_CofFrq	OS_NoteSft
023	ST Anlog	P1-221	AnlgSaw2	A	P	22	Pit Chnge3	56	EQ -> Cho		Ef2_Mod.Freq		Ef2_Cho Level	FLT_CofFrq	OS_NoteSft
024	ST Sizzl	P1-056	Strings2	A	P	68	Exc & Rev	57	EQ -> Sym		Ef1_Enhance	KEY	Ef1_Rev.Time	FLT_Level1	FLT_Rate2
025	ST Synth	P1-126	Pad 1	B	S	85	Cho & Cho	01	Rev.Hall1		Ef2_Rev.Time		Ef2 Mix	FLT_CofFrq	OS_NoteSft
026	ST Thin	P1-220	AnlgSaw1	A	S	85	Cho & Cho	35	Sym -> Rev		Out1 Wet	MW	Ef Out1b	FLT_CofFrq	OS_NoteSft
027	ST Combo	P1-221	AnlgSaw2	A	S	22	Pit Chnge3	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	FLT_Band
028	TP Glock	P1-142	Glocken	A	S	59	EQ -> Pit	50	EQ -> Rev1		Ef1_Pit Level		Ef1_High Gain	FLT_Level0	FLT_Rate1
029	TP Xylo	P1-150	Xylophon	A	S	37	Pit -> Rev	47	Dist-> Dly		Ef2_Trbl Gain		Ef2_Dly Level	FLT_Rate2	FLT_Band
030	TP Vibes	P1-149	Vibes	A	S	59	EQ -> Pit	50	EQ -> Rev1		Ef1_Pit Level	VEL	Ef1_High Gain	LFO_Speed	LFO_Amod
031	TP Tubal	P1-147	Tubular	A	P	53	EQ -> Dly	50	EQ -> Rev1		Ef1_Dly Level		Ef2_Rev Level	AEG_Rate4	PEG_RlsLvl
032	TP Hands	P1-143	HandBell	A	P	01	Rev.Hall1	57	EQ -> Sym		Ef Out1a		Ef2_Sym Level	FLT_Rate2	AEG_Level3
033	TP Siam	P1-244	Sin	B	P	21	Pit Chnge2	51	EQ -> Rev2		Ef2_Low Freq		Ef2_Rev Level	AEG_Rate4	OS_NoteSft
034	TP Steel	P1-146	SteelDrm	A	S	56	EQ -> Cho	08	Rev.Plate		Ef1_Cho Level		Ef2 Mix	PEG_Level0	LFO_Speed
035	TP Loggy	P1-094	Kalimba	A	S	23	Aural Exc.	12	Rev.Basmnt		Ef1_Exc Level		Ef2 Mix	FLT_CofFrq	FLT_Reso
036	TP Bambu	P1-207	Bamboo	B	P	59	EQ -> Pit	64	Cho & Rev		Ef2_Rev.Time		Ef Out2b	OS_NoteSft	PEG_Level1
037	TP Mrmba	P1-145	Marimba	A	P	23	Aural Exc.	50	EQ -> Rev1		Ef1_Exc Level		Ef2_Rev Level	AEG_Rate2	PEG_Rate1
038	TP Timp	P1-199	Timapni	A	P	06	Rev.Stage1	57	EQ -> Sym		Ef2_Sym Level		Ef Out1a	AEG_Rate2	PEG_RlsLvl
039	TP Syn	P1-225	Digital1	A	S	42	Cho -> Dly	35	Sym -> Rev		Ef2_Mod.Freq		Out1 Wet	PEG_Rate1	PEG_Level0
040	TP SynDr	P1-224	Pulse 50	A	S	23	Aural Exc.	12	Rev.Basmnt		Ef1_HPF		Ef2 Mix	FLT_Rate1	OS_NoteSft
041	TP Tinkl	P1-231	Digital7	A	P	57	EQ -> Sym	43	Sym -> Dly		Ef1_Sym Level		Ef2_Dly Level	AEG_Rate3	PEG_Rate1
042	TP Agone	P1-186	AgogoHi	A	P	53	EQ -> Dly	35	Sym -> Rev		Ef1_Dly Level		Ef2_Rev Level	AEG_Rate4	PEG_Level0
043	TP Angle	P1-203	Triangle	A	P	59	EQ -> Pit	64	Cho & Rev		Ef Out2b		Ef1_Pit Level	PEG_Level0	FLT_Rate1
044	WN Sopr	P1-043	Soprano	A	P	19	St.Echo	51	EQ -> Rev2		Ef Out1a		Ef2_Rev Level	FLT_CofFrq	FLT_Level1
045	WN Alto	P1-041	AltoSax	A	P	19	St.Echo	51	EQ -> Rev2		Ef Out1a		Ef2_Rev Level	FLT_CofFrq	FLT_Level0
046	WN Tenor	P1-039	Tenor	A	P	19	St.Echo	51	EQ -> Rev2		Ef Out1a		Ef2_Rev Level	FLT_CofFrq	FLT_Level0
047	WN Bari	P1-037	Baritone	A	P	55	EQ -> Flg	01	Rev.Hall1		Ef1_Flg Level		Ef Out2a	FLT_CofFrq	FLT_Level0
048	WN SaxSF	P1-039	Tenor	A	P	59	EQ -> Pit	01	Rev.Hall1		Ef1_High Gain		Ef Out2a	OS_NoteSft	FLT_Rate2
049	WN Picc	P1-049	Piccolo	A	P	06	Rev.Stage1	54	EQ -> Echo		Ef2_Echo Level		Ef2_High Gain	FLT_Level1	FLT_Level2
050	WN Flute	P1-051	Flute	A	P	39	Dist-> Rev	51	EQ -> Rev2		Ef1_Dist.Level		Ef2_Rev Level	FLT_CofFrq	CT_AT_Amod
051	WN Pan	P1-052	Panflute	A	P	06	Rev.Stage1	54	EQ -> Echo		Ef2_Echo Level		Ef2_High Gain	AEG_Rate3	FLT_CofFrq
052	WN Clari	P1-045	Clarinet	A	P	53	EQ -> Dly	51	EQ -> Rev2		Ef1_Dly Level		Ef2_Rev Level	AEG_Rate4	PEG_Rate1
053	WN Oboe	P1-047	Oboe	A	P	19	St.Echo	51	EQ -> Rev2		Ef Out1a		Ef2_Rev Level	PEG_Level0	FLT_Level1
054	WN Basso	P1-046	Bassoon	A	P	02	Rev.Hall2	54	EQ -> Echo		Ef2_Echo Level		Ef1_Rev.Time	FLT_CofVel	FLT_Band
055	WN Recor	P1-050	Recorder	A	P	23	Aural Exc.	71	Dly & Rev		Ef Out2a		Ef2_Rev.Time	AEG_Rate3	LFO_Speed
056	WN Breth	P1-052	Panflute	A	S	38	Exc -> Rev	11	Rev.Canyon		Ef1_Enhance		Ef2 Mix	AEG_Level3	LFO_Speed
057	MI Crash	P1-176	Crash	B	S	23	Aural Exc.	01	Rev.Hall1		Ef1_Exc Level		Ef2 Mix	PEG_Level0	PEG_Level1
058	MI EPNP	P1-206	E.P. Np	B	P	21	Pit Chnge2	04	Rev.Room2		Ef2_Rev.Time		Ef2_LPF	FLT_CofVel	FLT_Band
059	MI Hiss	P1-141	Itopia	A	P	35	Sym -> Rev	19	St.Echo		Ef1_Mod.Depth		Ef1_Rev Level	CT_MW_Amod	CT_MW_Fmod
060	MI Ride	P1-177	Ride	B	P	01	Rev.Hall1	23	Aural Exc.		Ef Out1a		Ef2_Enhance	AEG Rate4	FLT_CofFrq
061	MW EGBia	P1-244	Sin	B	P	06	Rev.Stage1	57	EQ -> Sym		off		off	No_Assign	No_Assign
062	AT EGBia	P1-244	Sin	B	P	06	Rev.Stage1	57	EQ -> Sym		off		off	No_Assign	No_Assign
063	DR Efect	-	-	-	S	69	Dist & Rev	67	Pit & Rev		Out1 Wet		Ef1_Rev.Time	-	-

● INITIAL VOICE LIST

Internal 1

Voice		Wave			Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	#	Name	Unit	Mode	#	EF1 Type	#	EF2 Type	Device	EF Parameter	Device	EF Parameter	MC3	MC4
000	AP Brite	P1-001	Piano	A	S	59	EQ -> Pit	50	EQ -> Rev1	LFO	Ef1_Pit Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
001	AP Dark	P2-001	Piano2	B	S	59	EQ -> Pit	50	EQ -> Rev1	LFO	Ef1_Pit Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
002	AP Chrs2	P2-001	Piano2	B	S	52	EQ -> ER	37	Pit -> Rev		Ef1_ER Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
003	BA Pluck	P1-083	PickBs2	B	S	25	EG Chorus	53	EQ -> Dly		Ef2_Low Gain		Ef2_High Gain	FLT_CofFrq	FLT_Ratel
004	BA Soul	P1-118	SynBs7	B	S	53	EQ -> Dly	52	EQ -> ER		Ef2_ER Level		Ef2_Low Freq	FLT_CofFrq	AEG_RlsRt
005	BA Stick	P1-081	PickBs1	B	S	52	EQ -> ER	33	Flg -> Rev		Ef2_Mod.Depth		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
006	BA Low	P1-228	Digital4	A	P	23	Aural Exc.	28	Rotary SP.		Ef1_Enhance		Ef2_Low Gain	FLT_CofFrq	FLT_RlsRt1
007	BA Head	P1-220	AnlgSaw1	A	P	47	Dist-> Dly	52	EQ -> ER		Ef1_Mid.Gain		Ef2_ER Level	FLT_CofFrq	AEG_RlsRt
008	BA Tri	P1-243	Tri	B	P	23	Aural Exc.	28	Rotary SP.		Ef1_Enhance		Ef2_Low Gain	No Assign	No Assign
009	BR Punch	P2-003	Trumpet2	B	P	47	Dist-> Dly	50	EQ -> Rev1		Ef1_Mid.Gain		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
010	BR TpSf1	P1-033	TpEns	A	P	59	EQ -> Pit	01	Rev.Hall1		Ef1_Pit Level		Ef Out2a	FLT_CofFrq	OS_NoteSft
011	BR Movin	P2-035	LongSaw	B	P	35	Sym -> Rev	21	Pit Chnge2		Ef1_Mod.Depth		Ef1_Rev Level	FLT_CofFrq	OS_NoteSft
012	BR Ruber	P2-004	TrmPet2LP	B	S	39	Dist-> Rev	56	EQ -> Cho		Ef1_Rev Level		Ef2_Cho Level	FLT_CofFrq	AEG_RlsRt
013	BR CS80	P1-097	SynBrs1	A	S	52	EQ -> ER	37	Pit -> Rev		Ef1_ER Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
014	BR Strai	P1-220	AnlgSaw1	A	P	35	Sym -> Rev	23	Aural Exc.		Ef1_Mod.Depth		Ef1_Rev Level	FLT_CofFrq	OS_NoteSft
015	BR Lush	P2-035	LongSaw	B	P	59	EQ -> Pit	34	Cho -> Rev		Ef1_Pit Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
016	BR TpSf2	P2-035	LongSaw	B	P	59	EQ -> Pit	01	Rev.Hall1		Ef1_Low Gain		Ef Out2a	FLT_CofFrq	OS_NoteSft
017	CH Quiet	P1-141	Itopia	A	S	59	EQ -> Pit	06	Rev.Stage1		Ef1_Pit Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
018	CH Kwire	P2-047	VoxE3Wv	B	P	35	Sym -> Rev	46	Exc -> Dly		Ef1_Mod.Depth		Ef2_Enhance	FLT_CofFrq	AEG_RlsRt
019	CH Spirt	P2-046	VoxG2Wv	B	S	89	Sym & Pha	06	Rev.Stage1		Ef1_Mod.Freq		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
020	CH Analg	P2-036	SawSqu	B	S	58	EQ -> Pha	01	Rev.Hall1		Ef1_Pha Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
021	CH VoxPc	P1-210	VoiceAtk	A	P	15	Gate Rev.	57	EQ -> Sym		Ef2_Sym Level	MW	Ef Out1a	FLT_CofFrq	AEG_RlsRt
022	DR Tom	P1-157	BD7	B	P	23	Aural Exc.	28	Rotary SP.		Ef1_Enhance		Ef2_Low Gain	FLT_CofVel	FLT_Reso
023	FI Banjo	P2-011	GtrFngr	B	S	47	Dist-> Dly	37	Pit -> Rev		Ef1_Mid.Gain		Ef2_Rev Level	FLT_Band	AEG_RlsRt
024	FI Koto	P1-092	DulcimrD	A	S	47	Dist-> Dly	03	Rev.Room1		Ef1_Dly Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
025	FI Sitr2	P1-088	ThumpBsLp	B	P	47	Dist-> Dly	39	Dist-> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
026	FI Tamba	P1-132	SynLead1	A	P	56	EQ -> Cho	39	Dist-> Rev		Ef1_Cho Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
027	GT Fingr	P2-011	GtrFngr	B	P	06	Rev.Stage1	58	EQ -> Pha		Ef Out1a		Ef2_High Gain	FLT_CofFrq	AEG_RlsRt
028	GT Amod	P1-066	EgSngl1	A	S	58	EQ -> Pha	01	Rev.Hall1		Ef1_Mod.Freq		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
029	GT Strat	P2-013	EgHumBk	B	S	78	Exc & Dly	82	Flg & Cho		Ef Out1b		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
030	GT Pedal	P1-069	EgSngl2Lp	B	S	53	EQ -> Dly	39	Dist-> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
031	GT Dist2	P1-066	EgSngl1	A	S	39	Dist-> Rev	28	Rotary SP.		Ef2_Mid.Speed		Ef1_Dist.Level	FLT_CofFrq	AEG_RlsRt
032	KY Hrpzi	P2-004	TrmPet2LP	B	S	47	Dist-> Dly	37	Pit -> Rev		Ef2_Rev.Time		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
033	KY EP 13	P2-044	EpWv5	B	S	56	EQ -> Cho	36	Pha -> Rev		Ef1_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
034	KY EP 14	P2-042	EpWv3	B	P	55	EQ -> Flg	34	Cho -> Rev		Ef1_Flg Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
035	KY EP 15	P2-044	EpWv5	B	P	56	EQ -> Cho	33	Flg -> Rev		Ef1_Cho Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
036	KY EP 16	P2-045	EpWv6	B	P	59	EQ -> Pit	64	Cho & Rev		Ef2_Mod.Freq		Ef Out2b	FLT_CofFrq	AEG_RlsRt
037	KY EP 17	P2-045	EpWv6	B	P	88	Sym & Sym	07	Rev.Stage2		Ef1_Mod.Depth		Ef Out2a	FLT_CofFrq	AEG_RlsRt
038	KY EP 18	P2-040	EpWv1	B	P	55	EQ -> Flg	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
039	KY Harm	P2-014	EgHumBkLp	B	P	59	EQ -> Pit	39	Dist-> Rev		Ef1_Pit Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
040	KY SyClv	P2-002	SynClavi	B	S	50	EQ -> Rev1	25	EG Chorus		Ef2 Mix		Ef1_Rev Level	FLT_CofFrq	AEG_RlsRt
041	ME Bnshe	P2-005	Flute2	B	S	57	EQ -> Sym	71	Dly & Rev		Ef2 Mix		Ef2_FB Gain	FLT_Band	AEG_RlsRt
042	ME Bubbl	P1-192	AnaConga	A	S	86	Cho & Sym	01	Rev.Hall1		Ef2_Rev.Time		Ef2 Mix	FLT_Band	AEG_RlsRt
043	ME Hit	P2-032	OrchHit3	B	P	59	EQ -> Pit	52	EQ -> ER		Ef1_Pit Level		Ef2_ER Level	FLT_CofFrq	AEG_RlsRt
044	ME Marin	P1-145	Marimba	A	S	53	EQ -> Dly	37	Pit -> Rev		Ef2_Rev.Time		Ef2_Rev Level	FLT_Band	AEG_RlsRt
045	ME Mojo	P1-213	Mellow	B	P	57	EQ -> Sym	64	Cho & Rev		Ef1_Mod.Freq		Ef Out2b	FLT_Reso	AEG_RlsRt
046	ME Poot	P1-022	RockOrg	A	P	45	Pit -> Dly	50	EQ -> Rev1		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
047	ME Sweep	P2-041	EpWv2	B	S	53	EQ -> Dly	35	Sym -> Rev		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
048	ME Tabla	P2-027	Tabla	B	P	47	Dist-> Dly	47	Dist-> Dly		Ef1_Dly Level		Ef2_Dly Level	FLT_CofFrq	AEG_RlsRt
049	ME Treml	P2-034	Seq3	B	P	06	Rev.Stage1	57	EQ -> Sym		Ef2_Sym Level		Ef Out1a	FLT_CofFrq	AEG_RlsRt
050	ME Angel	P2-035	LongSaw	B	S	56	EQ -> Cho	37	Pit -> Rev		Ef1_Cho Level		Ef2_Rev Level	FLT_CofFrq	LFO_Speed
051	ME Whisl	P2-045	EpWv6	B	P	01	Rev.Hall1	21	Pit Chnge2		Ef1_Rev.Time		Ef Out1a	FLT_Reso	AEG_RlsRt
052	OR Door0	P2-050	OrgWv3	B	S	51	EQ -> Rev2	01	Rev.Hall1		Ef1_Rev.Time		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
053	OR Jazz	P2-050	OrgWv3	B	P	34	Cho -> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw	MW	Ef1_Mod.Freq	FLT_CofFrq	AEG_RlsRt
054	OR Pipe	P2-050	OrgWv3	B	S	51	EQ -> Rev2	01	Rev.Hall1		Ef2_Rev.Time		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
055	OR Rock	P1-022	RockOrg	A	P	34	Cho -> Rev	28	Rotary SP.	MW	Ef1_PM Depth		Ef1_Rev Level	FLT_CofFrq	AEG_RlsRt
056	OR Smoth	P2-048	OrgWv1	B	P	34	Cho -> Rev	28	Rotary SP.	MW	Ef2_L/M/H Sw		Ef1_Rev Level	FLT_CofFrq	AEG_RlsRt
057	SC Anti	P1-105	SynBrsWv	A	P	26	EG Sympho.	67	Pit & Rev		Ef1_Atck Level		Ef Out2b	FLT_CofFrq	AEG_RlsRt
058	SC Bell2	P2-038	BellWv	B	P	86	Cho & Sym	73	Flg & Dly		Ef1_Mod.Freq		Ef Out2b	FLT_CofFrq	AEG_RlsRt
059	SC Bhind	P2-035	LongSaw	B	S	56	EQ -> Cho	17	Dly L,R		Ef1_Cho Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
060	SC Blot	P1-112	SynBs4	B	P	59	EQ -> Pit	02	Rev.Hall2		Ef2_Rev.Time		Ef Out2a	FLT_CofFrq	OS_NoteSft
061	SC Chop	P2-002	SynClavi	B	S	52	EQ -> ER	43	Sym -> Dly		Ef1_ER Level		Ef2_Dly Level	FLT_CofFrq	OS_NoteSft
062	SC Klav	P1-118	SynBs7	B	S	52	EQ -> ER	24	EG Flanger		Ef1_ER Level		Ef2_Atck Time	FLT_CofFrq	AEG_RlsRt
063	DR Revrs	-	-	-	P	39	Dist-> Rev	45	Pit -> Dly	KEY	Ef2_R Pitch	VEL	Ef2_FB Gain	-	-

● INITIAL VOICE LIST

Internal 2

Voice		Wave			Effect					Effect Control 1		Effect Control 2		MIDI Control	
Pgm#	Name	#	Name	Unit	Mode	#	EF1 Type	#	EF2 Type	Device	EF Parameter	Device	EF Parameter	MC3	MC4
000	SC Hcol	P2-010	CntraBsLp	B	S	56	EQ -> Cho	71	Dly & Rev		Ef1_Cho Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
001	SC Hand	P1-053	PnFluteLp	A	P	68	Exc & Rev	56	EQ -> Cho		Ef Out1b		Ef2_Cho Level	FLT_CofFrq	OS_NoteSft
002	SC WooDX	P2-036	SawSqu	B	P	68	Exc & Rev	56	EQ -> Cho		Ef Out1b		Ef2_Cho Level	FLT_CofFrq	AEG_RlsRt
003	SC Wire	P1-228	Digital4	A	P	57	EQ -> Sym	34	Cho -> Rev		Ef1_Sym Level	MW	Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
004	SC Pain	P2-047	VoxE3Wv	B	P	47	Dist-> Dly	39	Dist-> Rev		Ef2_Rev Level		Ef2_Mid.Gain	FLT_CofFrq	AEG_RlsRt
005	SC Pluck	P1-083	PickBs2	B	S	25	EG Chorus	53	EQ -> Dly		Ef1_Atck Time		Ef2_Dly Level	FLT_CofFrq	AEG_RlsRt
006	SC Reflx	P2-002	SynClavi	B	P	23	Aural Exc.	65	Sym & Rev		Ef1_Exc Level		Ef Out2b	FLT_CofFrq	AEG_RlsRt
007	SC Sprkl	P2-044	EpWv5	B	P	50	EQ -> Rev1	59	EQ -> Pit		Ef1_Rev Level		Ef2_Pit Level	FLT_Band	AEG_RlsRt
008	SC Thumb	P1-087	ThumpBs	B	P	56	EQ -> Cho	71	Dly & Rev	VEL	Ef1_Mod.Freq		Ef2_ER/Rev Bal	AEG_Rate1	AEG_Rate3
009	SC Uzzy	P2-004	TrmPet2LP	B	S	26	EG Sympho.	39	Dist-> Rev		Ef1_Atck Time		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
010	SC Vxcla	P2-046	VoxG2Wv	B	P	06	Rev.Stage1	59	EQ -> Pit		Ef2_Pit Level		Ef Out1a	FLT_CofFrq	AEG_RlsRt
011	SC Walk	P2-047	VoxE3Wv	B	P	56	EQ -> Cho	39	Dist-> Rev		Ef1_Cho Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
012	SC Wits	P2-008	CelloLp	B	P	50	EQ -> Rev1	57	EQ -> Sym		Ef1_Rev Level		Ef2_Sym Level	FLT_CofFrq	AEG_RlsRt
013	SC Wow	P1-085	FretLess	B	S	56	EQ -> Cho	46	Exc -> Dly		Ef1_Cho Level		Ef2_Dly Level	FLT_CofFrq	AEG_RlsRt
014	SE Alien	P2-034	Seq3	B	P	24	EG Flanger	49	Dist->Echo		Ef2_Dist.Level		Ef2_Echo Level	OS_NoteSft	PEG_Level0
015	SE Clox	P2-034	Seq3	B	P	22	Pit Chnge3	38	Exc -> Rev		Ef Out1a		Ef2_Exc Level	FLT_CofFrq	AEG_RlsRt
016	SE Crck	P2-031	VibraSlp	B	P	21	Pit Chnge2	01	Rev.Hall1		Ef Out1a		Ef Out2a	FLT_Reso	AEG_RlsRt
017	SE Crsh	P2-033	BellRing	B	P	53	EQ -> Dly	50	EQ -> Rev1		Ef2_Low Gain		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
018	SE Duel	P2-032	OrchHit3	B	S	58	EQ -> Pha	34	Cho -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
019	SE Fear	P2-033	BellRing	B	S	60	EQ -> Pan	51	EQ -> Rev2		Ef1_High Gain		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
020	SE Roll	P2-031	VibraSlp	B	P	20	Pit Chnge1	03	Rev.Room1		Ef2_ER/Rev Bal		Ef2_Rev.Time	FLT_CofFrq	AEG_RlsRt
021	SE Lava	P2-035	LongSaw	B	P	47	Dist-> Dly	50	EQ -> Rev1		Ef1_Dly Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
022	SE Laze	P1-183	RezClick	B	S	47	Dist-> Dly	20	Pit Chnge1		Ef2_1 Pitch		Ef2_2 Pitch	FLT_CofFrq	FLT_Reso
023	SE Mono	P2-024	Chaina	B	P	24	EG Flanger	50	EQ -> Rev1		Ef Out1a		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
024	SE Saw	P2-033	BellRing	B	P	11	Rev.Canyon	59	EQ -> Pit		Ef2_Low Gain		Ef2_Pit Level	FLT_Band	AEG_RlsRt
025	SE Swmp	P2-025	Guiro	B	P	22	Pit Chnge3	51	EQ -> Rev2		Ef2_Rev Level		Ef1_FB Gain	FLT_CofFrq	AEG_RlsRt
026	SE Vaqum	P2-017	Brush	B	P	55	EQ -> Flg	67	Pit & Rev		Ef1_Mod.FBGain		Ef Out2b	FLT_CofFrq	AEG_RlsRt
027	SE Vektr	P2-034	Seq3	B	P	33	Flg -> Rev	21	Pit Chnge2	MW	Ef1_Mod.FBGain	MW	Ef1_Rev Level	FLT_Band	AEG_RlsRt
028	SE Zip	P2-022	VcDrmHHc	B	P	85	Cho & Cho	35	Sym -> Rev		Ef2_High Gain		Ef2_Rev Level	FLT_Band	AEG_RlsRt
029	SL Ick	P2-050	OrgWv3	B	P	78	Exc & Dly	50	EQ -> Rev1		Ef Out1b		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
030	SL 2VCO1	P1-225	Digital1	A	S	53	EQ -> Dly	34	Cho -> Rev		Ef1_Dly Level		Ef2_Mod.Freq	FLT_CofFrq	AEG_RlsRt
031	SL Ash	P2-014	EgHumBkLp	B	S	39	Dist-> Rev	42	Cho -> Dly		Ef2_Mod.Freq		Ef2_Dly Level	FLT_CofFrq	AEG_RlsRt
032	SL Glnt	P2-039	BellWv2	B	S	56	EQ -> Cho	71	Dly & Rev		Ef1_Mod.Freq		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
033	SL Oth	P2-008	CelloLp	B	P	38	Exc -> Rev	58	EQ -> Pha		Ef2_Mod.Freq		Ef1_Rev Level	FLT_CofFrq	AEG_RlsRt
034	SL Sqsaw	P2-037	SquSaw	B	S	56	EQ -> Cho	71	Dly & Rev		Ef1_Mod.Freq		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
035	SL Ut	P2-036	SawSqu	B	P	39	Dist-> Rev	53	EQ -> Dly		Ef2_Dly Level	LFO	Ef1_Dist.Level	FLT_CofFrq	AEG_RlsRt
036	SP 1980	P2-035	LongSaw	B	S	22	Pit Chnge3	50	EQ -> Rev1		Ef2_Rev.Time		Ef2_Rev Level	FLT_CofFrq	OS_NoteSft
037	SP Decay	P2-035	LongSaw	B	P	01	Rev.Hall1	57	EQ -> Sym		Ef Out1a		Ef2_Sym Level	FLT_CofFrq	AEG_RlsRt
038	SP Ear	P2-046	VoxG2Wv	B	P	56	EQ -> Cho	43	Sym -> Dly		Ef1_Mod.Freq		Ef2_Dly Level	FLT_CofFrq	AEG_RlsRt
039	SP Glas2	P2-015	Celesta	B	P	38	Exc -> Rev	46	Exc -> Dly		Ef2_Dly Level		Ef1_Rev Level	FLT_CofFrq	AEG_RlsRt
040	SP It	P2-035	LongSaw	B	P	56	EQ -> Cho	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
041	SP Lash	P2-035	LongSaw	B	S	86	Cho & Sym	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
042	SP Latt	P2-038	BellWv	B	P	50	EQ -> Rev1	57	EQ -> Sym		Ef Out1b		Ef2_Mod.Freq	FLT_CofFrq	AEG_RlsRt
043	SP Lonly	P1-221	AnlgSaw2	A	S	39	Dist-> Rev	56	EQ -> Cho		Ef2_Cho Level		Ef1_Rev Level	FLT_CofFrq	AEG_RlsRt
044	SP Lyie	P2-037	SquSaw	B	S	86	Cho & Sym	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
045	SP Melo	P2-043	EpWv4	B	S	86	Cho & Sym	50	EQ -> Rev1		Ef1_Mod.Freq		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
046	SP Nsty2	P2-044	EpWv5	B	P	37	Pit -> Rev	52	EQ -> ER		Ef1_Rev Level		Ef2_ER Level	FLT_CofFrq	AEG_RlsRt
047	SP Oscil	P2-035	LongSaw	B	P	21	Pit Chnge2	01	Rev.Hall1		Ef Out1a		Ef Out2a	FLT_CofFrq	AEG_RlsRt
048	SP Ray	P2-035	LongSaw	B	S	47	Dist-> Dly	63	Flg & Rev		Ef1_Dly Level		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
049	SP SloMo	P1-129	Pad 3	B	P	06	Rev.Stage1	57	EQ -> Sym		Ef2_Mod.Freq		Ef Out1a	FLT_CofFrq	AEG_RlsRt
050	ST Cello	P2-007	Cello	B	S	57	EQ -> Sym	01	Rev.Hall1		Ef1_Sym Level		Ef2 Mix	FLT_CofFrq	OS_NoteSft
051	ST Cntra	P2-009	CntraBs	B	S	57	EQ -> Sym	01	Rev.Hall1		Ef1_Sym Level		Ef2 Mix	FLT_CofFrq	OS_NoteSft
052	ST Chamb	P2-006	Chamber	B	S	56	EQ -> Cho	06	Rev.Stage1		Ef1_Cho Level		Ef2_ER/Rev Bal	FLT_CofFrq	OS_NoteSft
053	ST Arco2	P1-056	Strings2	A	P	39	Dist-> Rev	51	EQ -> Rev2		Ef2_High Gain		Ef2_Rev Level	FLT_CofFrq	OS_NoteSft
054	ST High	P2-006	Chamber	B	S	51	EQ -> Rev2	01	Rev.Hall1		Ef1_High Gain		Ef2 Mix	FLT_CofFrq	AEG_RlsRt
055	ST Anlg2	P2-035	LongSaw	B	P	21	Pit Chnge2	50	EQ -> Rev1		Ef Out1a		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
056	TP Bell	P1-143	HandBell	A	P	86	Cho & Sym	73	Flg & Dly		Ef1_Mod.Freq		Ef Out2b	AEG_Rate1	FLT_Rate2
057	TP Clock	P2-039	BellWv2	B	P	47	Dist-> Dly	50	EQ -> Rev1		Ef2_ER/Rev Bal		Ef1_Dly Level	FLT_CofFrq	AEG_RlsRt
058	TP GSvib	P1-236	Digitl12	A	S	59	EQ -> Pit	35	Sym -> Rev		Ef2_Mod.Freq		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
059	TP Tabla	P2-028	Tabla2	B	P	59	EQ -> Pit	50	EQ -> Rev1	LFO	Ef1_Pit Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
060	TP Boink	P2-038	BellWv	B	P	55	EQ -> Flg	21	Pit Chnge2		Ef1_Mod.Freq		Ef Out2a	FLT_CofFrq	AEG_RlsRt
061	WN Flut1	P2-005	Flute2	B	S	68	Exc & Rev	07	Rev.Stage2		Ef1_Enhance		Ef Out2a	FLT_CofFrq	AEG_RlsRt
062	WN Flut2	P2-005	Flute2	B	P	39	Dist-> Rev	51	EQ -> Rev2		Ef1_Dist.Level		Ef2_Rev Level	FLT_CofFrq	AEG_RlsRt
063	DR Voice	-	-	-	P	52	EQ -> ER	61	Hall&Plate		Ef1_ER Level		Ef Out2b	-	-

● WAVE LIST

Preset 1

Wave No.	Group	Wave Name	A/B
1	Piano	Piano	A
2	Key	HardEp	A
3		HardEpLp	A
4		SoftEp	A
5		SoftEpLp	A
6		SynthEp	A
7		SynthEpLp	A
8		Clavi 1	A
9		Clavi 1Lp	A
10		Clavi 2	A
11		Clavi 2Lp	A
12		Harpsi	A
13		HarpsiLp	A
14		Acrdion	A
15		AcrdionLp	A
16		Organ 1	A
17		Organ 1Lp	A
18		PrcOrg1	B
19		PrcOrg1Lp	B
20		PrcOrg2	A
21		PrcOrg2Lp	A
22		RockOrg	A
23		Pipe Wv	A
24		Pipe WvLp	A
25	Brass	Trumpet	A
26		TrumpetLp	A
27		MuteTp	A
28		MuteTpLp	A
29		Trombone	B
30		TromBneLp	B
31		Horn	A
32		Tuba	A
33		TpEns	A
34		TpEnsLp	A
35		BrsEns	A
36		BrsEnsLp	A
37	Wind	Baritone	A
38		BaritneLp	A
39		Tenor	A
40		TenorLp	A
41		AltoSax	A
42		AltoSaxLp	A
43		Soprano	A
44		SopranoLp	A
45		Clarinet	A
46		Bassoon	A
47		Oboe	A
48		EngHorn	A
49		Piccolo	A
50		Recorder	A
51		Flute	A
52		Panflute	A
53		PnFluteLp	A
54	Str.	Strings1	A
55		Strngs1Lp	A
56		Strings2	A
57		Violin	A
58		Viola	A
59		Pizz	A
60	A.Gtr	GtrSteel	A
61		GtrStelLp	A
62		GtrNyln	A
63		GtrNylnLp	A
64		12String	A
65		12StrngLp	A
66	E.Gtr	EgSngl1	A
67		EgSngl1Lp	A
68		EgSngl2	B
69		EgSngl2Lp	B
70		EgMute1	A
71		EgMute2	B
72		EgComp	A
73		EgCompLp	A
74		EgHarm1	A
75		EgHarm1Lp	A
76		EgHarm2	A
77		EgHarm2Lp	A
78	Bass	WoodBass	A
79		FingBs	B
80		FingBsLp	B
81		PickBs1	B
82		PickBs1Lp	B
83		PickBs2	B
84		PickBs2Lp	B
85		FretLess	B
86		FretLs Lp	B
87		ThumpBs	B
88		ThumpBsLp	B
89		SlapBs	B
90		SlapBsLp	B
91	Folk	Dulcimer	A
92		DulcimrD	A
93		DlcmSplt	A
94		Kalimba	A
95		Sitar	A
96		Harp	A
97	Synth	SynBrs1	A
98		SynBrs1Lp	A
99		SynBrs2	A
100		SynBrs2Lp	A
101		SynBrs3	A
102		SynBrs3Lp	A
103		SynBrs4	A
104		SynBrs4Lp	A
105		SynBrsWv	A
106		SynBs1	B
107		SynBs1Lp	B
108		SynBs2	B
109		SynBs2Lp	B
110		SynBs3	B
111		SynBs3Lp	B
112		SynBs4	B
113		SynBs4Lp	B
114		SynBs5	B
115		SynBs5Lp	B
116		SynBs6	B
117		SynBs6Lp	B
118		SynBs7	B
119		SynBs7Lp	B
120		SynBs8	B
121		SynBs8Lp	B
122		SynBs9	B
123		SynBs9Lp	B
124		SynBs10	B
125		SynBs10Lp	B
126		Pad 1	B
127		Pad 1Lp	B
128		Pad 2	B
129		Pad 3	B
130		Pad 4	B
131		Pad 5	B
132		SynLead1	A
133		SynLead2	B
134		SynStWv	B
135		DistWv	B
136		DistWvLp	B
137	Choir	ChoirAa	A
138		ChoirAaLp	A
139		ChoirOo	A
140		ChoirOoLp	A
141		Itopia	A
142	Tprc	Glocken	A
143		HandBell	A
144		HndBellLp	A
145		Marimba	A
146		SteelDrm	A
147		Tubular	A
148		TubularLp	A
149		Vibes	A
150		Xylophon	A

Preset 2

Wave No.	Group	Wave Name	A/B
151	Drum	BD1	B
152		BD2	B
153		BD3	B
154		BD4	B
155		BD5	B
156		BD6	B
157		BD7	B
158		BD8	B
159		SD1	B
160		SD2	B
161		SD3	B
162		SD4	B
163		SD5	B
164		SD6	B
165		SD7	B
166		SD8	B
167		SD9	B
168		SD side	B
169		Tom1	B
170		Tom2	B
171		HH Open	B
172		HH Pedal	B
173		HH light	B
174		HH mid	B
175		HH heavy	B
176		Crash	B
177		Ride	B
178		RideBell	B
179		AnlgTom	B
180		HHopAnlg	B
181		HHclAnlg	B
182		Scratch	B
183		RezClick	B
184		VcDrmBD	B
185		VcDrmSD	B
186	Perc.	AgogoHi	A
187		Bongo	A
188		Cabasa	A
189		CongaLo	A
190		CongaMt	A
191		CongaSlp	A
192		AnaConga	A
193		Clap	A
194		Clave	A
195		AnaCwbl	A
196		Cowbell	A
197		Maracas	A
198		Tmbrine	A
199		Timpani	A
200		TemplBlk	A

Wave No.	Group	Wave Name	A/B
201		Timbale	A
202		Timbale2	A
203		Triangle	A
204		Whistle	B
205	SE	Bottle	B
206		E.P. Np	B
207		Bamboo	B
208		Temp Ra	B
209		Typist	B
210		VoiceAtk	A
211		ChouCho	B
212		Vox Bell	B
213		Mellow	B
214		Bell Mix	B
215		Seq1	B
216		Seq2	B
217		OrchHit1	B
218		OrchHit2	B
219		Noise	B
220	OSC	AnlgSaw1	A
221		AnlgSaw2	A
222		Pulse 10	A
223		Pulse 25	A
224		Pulse 50	A
225		Digital1	A
226		Digital2	A
227		Digital3	A
228		Digital4	A
229		Digital5	A
230		Digital6	A
231		Digital7	A
232		Digital8	A
233		Digital9	A
234		DigitI10	A
235		DigitI11	A
236		DigitI12	A
237		DigiVox1	B
238		DigiVox2	B
239		DigiVox3	B
240		DigiVox4	B
241		DigiVox5	B
242		DigiWild	B
243		Tri	B
244		Sin	B

Wave No.	Group	Wave Name	A/B
1	Piano	Piano2	B
2	Key	SynClavi	B
3	Brass	Trumpet2	B
4		TrmPet2LP	B
5	Wind	Flute2	B
6	Str.	Chamber	B
7		Cello	B
8		CelloLp	B
9		CntraBs	B
10		CntraBsLp	B
11	A.Gtr	GtrFngr	B
12		GtrFngrLp	B
13	E.Gtr	EgHumBk	B
14		EgHumBkLp	B
15	Tprc	Celesta	B
16	Drum	BD9	B
17		Brush	B
18		SD10	B
19		Tom3	B
20		Tom4	B
21		Tom5	B
22		VcDrmHHc	B
23		VcDrmHHo	B
24		Chaina	B
25	Perc.	Guiro	B
26		Guiro2	B
27		Tabla	B
28		Tabla2	B
29		Cuica H	B
30		Cuica L	B
31		VibraSlp	B
32	SE	OrchHit3	B
33		BellRing	B
34		Seq3	B
35	OSC	LongSaw	B
36		SawSqu	B
37		SquSaw	B
38		BellWv	B
39		BellWv2	B
40		EpWv1	B
41		EpWv2	B
42		EpWv3	B
43		EpWv4	B
44		EpWv5	B
45		EpWv6	B
46		VoxG2Wv	B
47		VoxE3Wv	B
48		OrgWv1	B
49		OrgWv2	B
50		OrgWv3	B

SPECIFICATIONS

Tone Generator Systems	AWM2 (2nd-generation Advanced Wave Memory), 64-note polyphony
Internal Memory	Wave ROM: 8 megabytes Wave RAM: Expandable to 1 megabyte (optional SYEMB06 × 2) Preset ROM: 256 voices, 128 Performance combinations Internal RAM: 128 voices, 64 performance combinations, 16 multis
External Memory	Data slot × 2, Wave slot × 2 (optional MCD64 memory card for voice data)
Effects	90 types (dual DSP units)
Displays	Backlit 24-character × 2-line LCD, 2 LEDs
Controllers	Volume control
Panel Switches	12: play mode, edit/compare, data entry × 2, cursor × 2, page, enter, exit, store/copy, utility/select, memory
Connectors	Headphones, Audio output (Output L/Mono&R + 4 individual), MIDI in, MIDI out, MIDI thru
Power Requirements	US & Canadian models: 120 V, 18W General model: 220 ... 240 V, 18W
Dimensions (W × D × H)	440 × 350 × 45 mm (17-3/8" × 13-3/4" × 1-3/4")
Weight	4.4 kg (9 lbs 11 oz)
Optional Accessories	MCD64 memory card SYEMB06 0.5 megabyte expansion memory board

**Specifications and appearance subject to change without notice.*

ERROR MESSAGES

● MIDI

DISPLAY	COMMENTS
MIDI buffer full !	When the TG500 attempted to receive or transmit a large amount of MIDI data, its handling capacity was exceeded.
MIDI data error !	An error occurred when receiving MIDI data.
MIDI checksum err !	An error occurred when receiving bulk data.
Bulk protected !	Since the “Bulk Protect” parameter is on, the bulk data was not received.
Device No. is off !	Since the device number is off, bulk data cannot be transmitted or received.
Device No. mismatch !	Since the device numbers did not match, the bulk data was not received.

● **Data card**

DISPLAY	COMMENTS
Data Card not ready !	The data card is not correctly inserted into the slot.
Card protected !	Since the memory protect switch of the card is on, data cannot be saved to the card.
Illegal format !	The card is the wrong format.
Verify NG !	The data was not correctly saved.

● **Wave card**

DISPLAY	COMMENTS
Wave card not ready !	The wave card is not correctly inserted into the slot.

● **Battery**

DISPLAY	COMMENTS
Change battery !	The internal backup battery needs to be replaced.
Change card battery !	The card backup battery needs to be replaced.

● **Sample**

DISPLAY	COMMENTS
Sample memory full !	Since the sample memory is full, further loading of sample data is not possible.
Sample data not exists !	Since no sample exists in the specified sample number, bulk transmission is not possible.
Sample data protected !	Since the waveform card is write protected, data save and bulk transmission are not possible.
Over waveform number !	The maximum allowable number of waves was exceeded.
Over Sample number !	The maximum allowable number of samples was exceeded.

TROUBLE SHOOTING

The TG500 is a very versatile instrument with many features and functions that affect operation. In many cases, what appears to be a fault with the TG500 can actually be traced to an improperly set parameter or, at the most fundamental level, to something as simple as a bad connection.

Here's how to determine if the problem is internal (e.g. parameter settings) or external (e.g. connections, amplifier, etc.):

● Listen Via Headphones.

Plug a pair of headphones into the TG500 and play. If the headphone sound is OK, then the problem is most likely in the amplifier or mixer you are using, or the audio connection cables.

● Check the Sound In the Voice, Performance, and Multi Modes.

If the problem only occurs in one mode or one voice/performance/multi, then the cause is most likely a parameter setting related to that mode or voice/performance/multi. If the problem occurs in all modes, then the cause may be a utility parameter or other parameter that affects all modes.

The following are some common problems and probable causes:

● Amplifier, Mixer, Connection Problems

Symptom	Possible Cause
No Sound	• Is the amplifier/mixer power turned on? • Is the amplifier/mixer volume set to an appropriate level? • Are the TG500 outputs properly connected to the amplifier/mixer inputs? • Are the connection cables shorted, open, or otherwise faulty?
Distorted sound	• Is the TG500 connected to a high-sensitivity microphone or instrument input on your amplifier or mixer? Try turning the TG500 OUTPUT controls down to avoid overloading the amplifier/mixer inputs.

● Performance Mode Problems

Symptom	Possible Cause
No Sound	• Are voices properly assigned to the performance layers (page 62)? • Are the voice volume parameters set high enough (page 63)? • Is the total performance level set high enough (page 60)? • Are the voice note and velocity parameters set to appropriate values (page 67 through 70)? • If a controller is assigned to volume control, is the controller set to produce a high enough volume level (page 56)?
Wrong pitch.	• Are the note shift parameters for each voice set to appropriate values (page 66)?.

● Voice Mode Problems

Symptom	Possible Cause
No Sound	• Is the pitch envelope generator set properly? If the L0 through L3 parameters are set too low, the resultant pitch may be below the audible range (page 131). • Is the filter set in such a way that most of the sound is filtered out (page 100 and 122)? • Is the total voice level set high enough (page 105)? • Is the amplitude envelope generator attack time set to an excessively long value (page 111)? • Is an appropriate wave assigned to the voice (page 107)?
Wrong pitch.	• Is the tuning set properly (page 109)?. • Is the note shift parameter set properly (page 110)?.
Unstable/indefinite pitch.	• Is the random pitch parameter set properly (page 110)?. • Is the aftertouch pitch bias parameter set properly (page 143)?. • Is the LFO pitch modulation parameter set to an excessively high value (page 138)?. • Is the pitch envelope generator set properly (page 131)?.

● Multi Mode Problems

Symptom	Possible Cause
No Sound	• Are voices/performance combinations properly assigned to the multi instruments (page 199). • Are the volume levels of the multi instruments set high enough (page 200)?
Wrong pitch.	• Are the note shift parameters for each multi instrument set properly (page 201)?. • Are the detune parameters for each multi instrument set properly (page 201)?.

● Other Problems

Symptom	Possible Cause
Wrong pitch.	• Is the master tune parameter set properly (page 220)?.

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