

LAYING GUIDE / TIPS ZUM KENNENLERNEN / METHODE / GUIA PARA TOCAR

YAMAHA

PortaSound

PS-1/2/3

SINCE 1887



YAMAHA

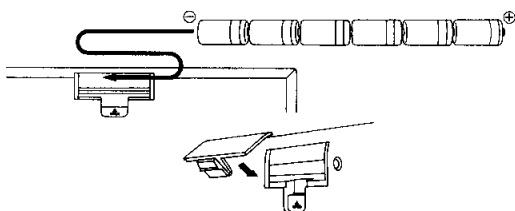
# YAMAHA PortaSound

## PS-1/2/3

*Before playing your PortaSound, please read through this Playing Guide—it will help you get full enjoyment out of your instrument.*

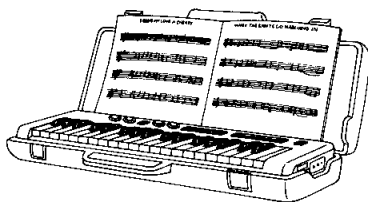
### Battery Operation

- Use six 1.5V SUM-2, "C" size batteries (sold separately). When the batteries lose power, it is more economical to replace them all at the same time.
- Inserting batteries: Remove the battery compartment lid on the bottom of the unit and insert six 1.5V batteries, making sure that the polarities are correct as indicated on the base of the instrument. Replace the lid.



### Convenient Music Rest

You can use the case as a music rest if you leave the instrument in the case while playing.



### For An Even Bigger Sound

Although you'll be happy with the sound from the built-in speaker, you can get an even more satisfying sound if you connect the PortaSound to a bigger speaker. Try using the optional tone cabinet or your stereo system (see page 9).

### Contents

1. Yamaha PortaSound's seven big features
2. Nomenclature
3. Starting to play
4. How to use all the features
5. Making use of the jacks
6. Optional accessories
7. Taking care of your PortaSound
8. Specifications

# Yamaha PortaSound's **1** seven big features

## 1) Very Compact

Yamaha's advanced electronics technology and extensive experience in the manufacture of electronic musical instruments have made possible the extreme compactness of your PortaSound. Since the instrument is portable, you can take it wherever you want. And, thanks to the built-in speaker, you can play it anywhere.

## 2) 3-Way Power System

The Yamaha PortaSound operates on either its own internal batteries, household current or a car battery. In the latter two cases, optional adaptors are necessary.

## 3) Realistic Orchestra Tones

You have a choice of various preset instrument voices. PS-1 has four, PS-2 has five, and PS-3 has nine different voices. To obtain any of these instruments, all you have to do is press a selector.

## 4) 8-Note Polyphonic System

This system lets you play up to eight notes simultaneously, so you can obtain polyphonic chords with any instrument voice you select.

## 5) Sustain Effect

Sustain heightens the realism of certain instrument voices by allowing notes to linger even after you have removed your hand from the keyboard.

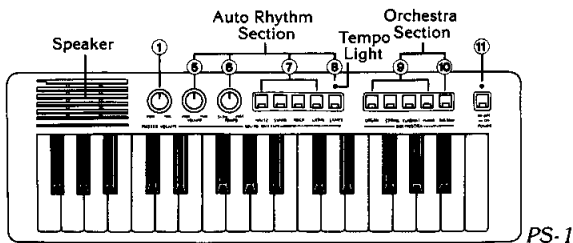
## 6) Lively Rhythm Section

Four percussive accompaniments—Waltz, Swing, Rock and Latin—are built into your PortaSound. You can choose the rhythm that best suits the music.

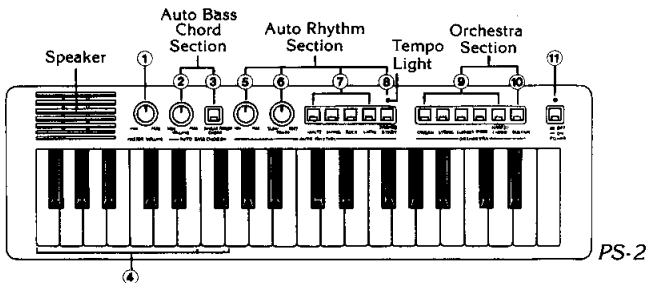
## 7) Yamaha's Exclusive Auto Bass Chord System (PS-2, PS-3)

The Auto Bass Chord system enables you to obtain a chord and bass pattern by using just one finger. It lets beginners sound great from the first day, and it's also a playing aid appreciated by accomplished players.

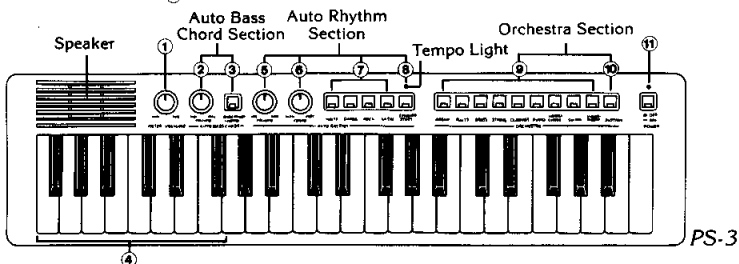
# Nomepature 2



PS-1



PS-2



PS-3

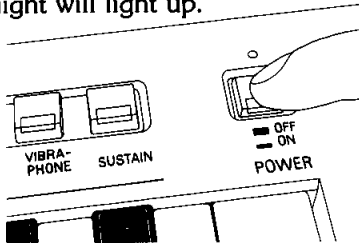
- ① **Master Volume**  
Controls overall volume of instrument.
- ② **Volume For Auto Bass Chord Section**  
For adjusting Auto Bass Chord section's volume.
- ③ **Single Finger Chord**  
Press this button for automatic bass and chord accompaniment.
- ④ **Auto Bass Chord Key Section**  
Only keys in this section can obtain automatic bass and chord accompaniment.
- ⑤ **Auto Rhythm Volume**  
For adjusting volume of rhythm sections.
- ⑥ **Tempo Control**  
Controls rhythm tempo.
- ⑦ **Rhythm Selectors**  
Four rhythms can be selected.
- ⑧ **Synchro Start (PS-1 Has Normal Start Instead)**  
This selector causes the rhythm to start simultaneously with the first key pressed in the Auto Bass Chord section.
- ⑨ **Instrument Voice Selectors**  
Select the desired voice using one of these selectors.
- ⑩ **Sustain**  
Causes notes to linger after you remove your finger(s) from the keyboard.
- ⑪ **Power Switch**  
Press to switch on, press again to switch off.

# Starting **3** to play

If you are going to use battery power, first insert the batteries in the compartment (see page 1). Before using with household current or a car battery, ensure that the optional adaptor is safely connected.

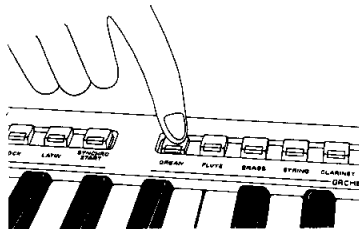
## 1) Press The Power-On Switch

The Power-on light will light up.



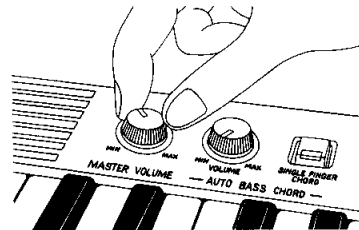
## 2) Choose The Voice You Want

Select one from among those available in the Orchestra section, and press the selector.



## 3) Adjust The Volume

Adjust the overall volume using the control on the extreme left.



## 4) Press A Key

You'll hear the instrument voice you selected. Try playing a simple melody that suits the voice.



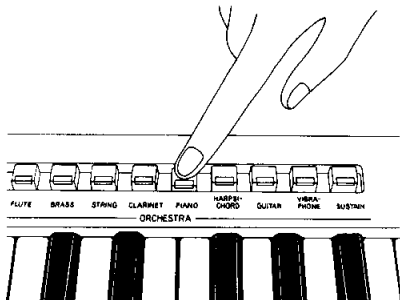
When the Single Finger Chord selector (PS-2, PS-3) is depressed, you will not be able to use the Auto Bass Chord section keys for playing the melody (see page 7 for details).

# How to use **4** the features

## A) Orchestra Section

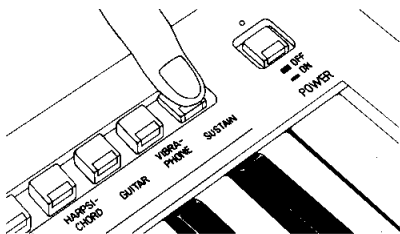
### (1) Instrument Voice Selectors

- Simply press the selector corresponding to the instrument voice you want to hear. The volume can be adjusted by means of the control on the far left of the unit.
- When two or more voice selectors are pressed simultaneously, the right hand selector always has priority.
- If no selector is depressed, no voice will be heard when a key is pressed.



### (2) Sustain

This effect works with all the instrument voices except for Vibraphone, which has sustain built in. Press this selector, and notes will linger after you take your fingers off the keys.

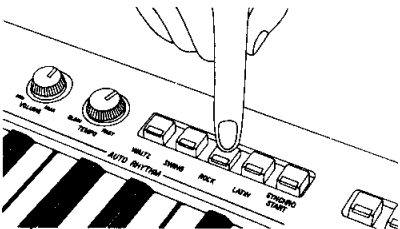


## B) Auto Rhythm Section

### (1) Choose A Rhythm

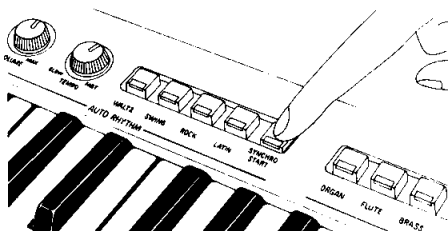
Pick the rhythm that best suits the music you're going to play and press the selector.

- If two or more selectors are pressed, the one on the right has priority.
- A rhythm will not yet be heard: the following steps also have to be made.



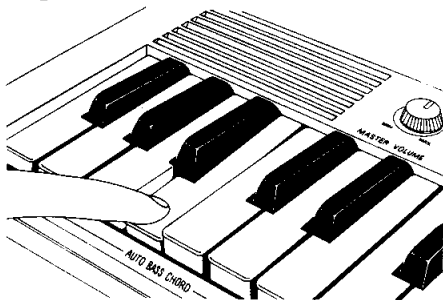
## (2) Press Synchro Start

With the PS-2 or PS-3, after selecting a rhythm press the Synchro Start selector. With the PS-1 press the Start selector (in this case the rhythm will start immediately; to stop it, press the Start selector again).



## (3) Press A Key On The Left Part Of The Keyboard (PS-2, PS-3 only)

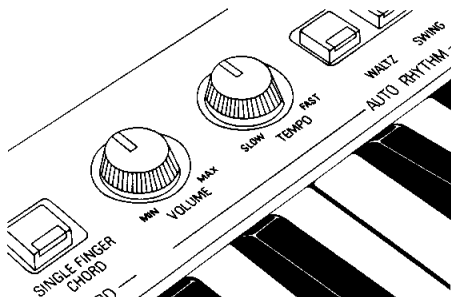
The rhythm will start the moment you play a note in the Auto Bass Chord key section. To stop the rhythm, press the Synchro Start selector again.



## (4) Adjustments

### • Tempo

Use the Tempo control to adjust the speed of the rhythm.



### • Volume

The Volume control lets you adjust the rhythm volume in relation to the melody volume.

### (5) Making Use Of The Tempo Light

The Tempo Light functions as a visual metronome, making it easy for you to confirm the rhythm tempo when playing the melody. When the rhythm is playing, the light flashes at the first beat to every bar. When the Synchro Start selector is engaged but you have not yet started the rhythm by pressing a key (PS-2, PS-3), the Tempo Light flashes at every quarter note.

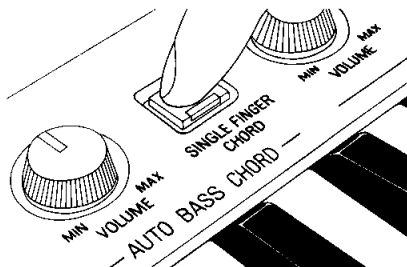
## C) Auto Bass Chord Section (PS-2, PS-3)

This feature lets you obtain a chord, bass and rhythm accompaniment simply by pressing a single key.

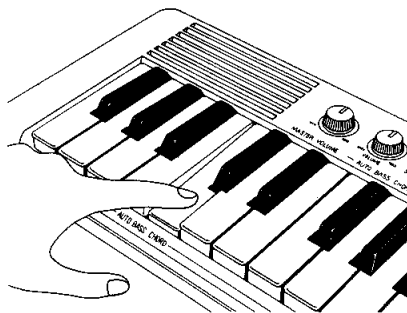
### (1) Select A Rhythm

Choose the rhythm you want then press the Synchro Start selector. (Don't forget to do this whenever you use the ABC feature.)

### (2) Press The Single Finger Chord Selector

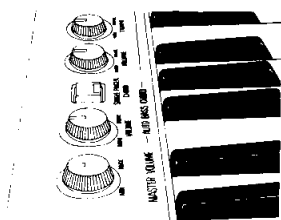


(3) Press one of the 14 keys on the left side of the keyboard. You will hear the corresponding chord with bass and rhythm accompaniment. For instance, when you press "C" ("Do"), you'll obtain a C major chord that strums along with the bass and rhythm.

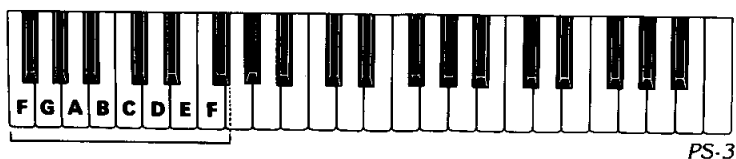
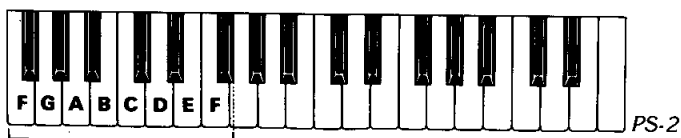




(4) Adjust the volume to suit the overall level using the Auto Bass Chord's independent Volume control.

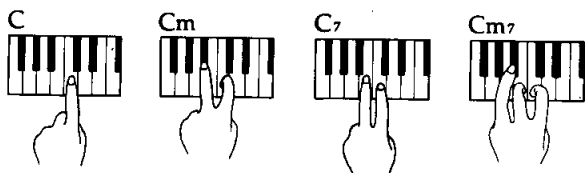


• Auto Bass Chord key section



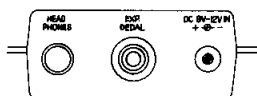
**Obtaining Minor, Seventh And Minor Seventh Chords**

- To get a C major chord, push C key. The bass accompaniment will always conform to the strumming chord.
- To get a C minor chord depress the C key together with the next black key to the left.
- To get a C seventh chord depress the C key together with the next white key to the left.
- To get a C minor seventh chord, simply press the C key together with the next black key and white key to the left.
- If the Auto Bass Chord feature is used without a rhythm being selected but with Synchro Start depressed, you will get a continuous chord with bass when you lift your finger from the key. Without Synchro Start depressed, the chord will stop when you take your finger from the key.
- To cancel the Auto Bass Chord function, press the Single Finger Chord again. The Auto Rhythm will also stop, but will start again when a note is pressed in the Auto Bass Chord key section.



# Making use **5** the jacks

You'll find three jacks on the right side of the instrument. These jacks are for connecting the optional accessories and other equipment.



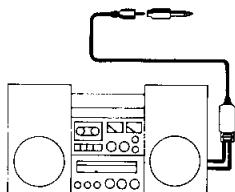
## Headphone Jack

### Headphones

Connect a set of headphones to this jack and you can practice in private or play by yourself at night without disturbing a soul.

### Tone Cabinet (TO-1)

The Tone Cabinet is connected to your PortaSound via the headphone jack; however, the jack adaptor is necessary (see figure).



### Stereo System

You can channel sound through your stereo system's speakers using this jack. Also, you can connect directly with a cassette deck for recording. In either case, the jack adaptor and the connecting cord PC-2 or an ordinary extension cord are required.

## Expression Pedal Jack

The EXP. PEDAL jack is for connecting the Expression Pedal (EP-1), which lets you control the overall volume level using your foot.

## External Power Source Jack

### AC Power

Connect the optional AC Adaptor PA-1 to the DC 9V-12V IN jack.

### Car Battery

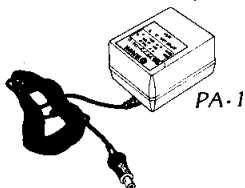
The Car Battery Adaptor CA-1 or CA-2 plugs into the DC 9V-12V IN jack and a cigarette lighter socket.

# Optional Accessories

## AC Power Adaptor (PA-1)

This adaptor transforms AC voltage to DC 12V (in your area the plug may differ from that shown in the illustration).

Warning: Power Adaptor for INDOOR use only.

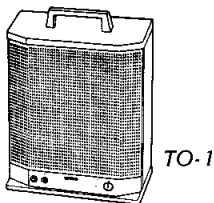


## Headphones (YH-series)

Specially designed lightweight dynamic headphones with extra-soft ear pads.

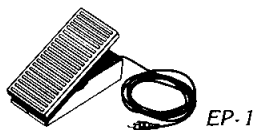
## Tone Cabinet (TO-1)

An auxiliary speaker with a built-in amplifier. Provides a fuller, more dynamic sound.



## Expression Pedal (EP-1)

The expression pedal lets you add more feeling to music by enabling subtle control of the overall volume level.

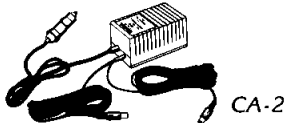
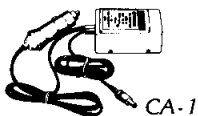


## Car Battery Adaptor (CA-1)

To enable you to provide power to the instrument from a car battery using the cigarette lighter socket. The adaptor contains a circuit for protecting the PortaSound against high voltages.

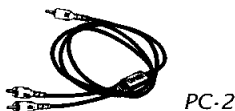
## Car Battery Adaptor (CA-2)

A twin-output adaptor for simultaneously supplying power to a PortaSound and a tone cabinet, or to two PortaSounds. Otherwise, identical to CA-1.



## Connecting Cord (PC-2)

For hooking the instrument up with a stereo system so you can channel sound through the stereo's speakers or make a direct recording.



## Taking care of **7** your PortaSound

Your PortaSound will remain in excellent playing condition if care is taken concerning the following.

- 1) When you use AC power or a car battery, be sure to use the optional PortaSound adaptor. Before use, read the adaptor instructions carefully. As the AC Power Adaptor differs according to the area, be sure not to use an adaptor bought in another area.
- 2) The optional car battery adaptor is only for use with a negative earth 12V battery. Ensure that this is the case before connecting the adaptor.
- 3) Avoid placing the instrument in excessively humid areas.
- 4) Do not subject the unit to strong physical shock, and avoid placing anything heavy on it.
- 5) The PortaSound should not be placed in direct sunlight for a long time.
- 6) Do not place the instrument near any heating appliance, or leave it inside a car in direct sunlight for any length of time. Direct sunshine can raise the interior temperature of a car with closed doors and windows to as high as 80°C. In extremely high temperatures (60°C or higher) the instrument may be damaged, possibly resulting in malfunction.
- 7) Use a dry cloth or a cloth slightly dampened with water for cleaning.
- 8) When you aren't using the PortaSound, keep it in the case to protect it from dust and physical shock.
- 9) When connecting your PortaSound to a stereo system, make sure that both units are turned "off".
- 10) When connecting your PortaSound to a stereo system, leave the Master Volume of the PortaSound at medium volume, and adjust the volume by using the volume knob of the stereo system.

# Specifications

## PS-1

**Keyboard** 32 keys ( $F_2 \sim C_5$ )

### Instrument Voices

Organ, String, Clarinet, Piano

### Effect Sustain

### Auto Rhythm Section

Selectors: Waltz, Swing,

Rock, Latin

Controls: Rhythm Start,  
Tempo, Volume, Tempo Light

### Other Controls And Indicators

Power switch, Power-on  
light, Master Volume

### Auxiliary Jacks

Headphones, Expression  
Pedal, DC 9V—12V input

### Main Amplifier 2 W (RMS)

### Speaker

9 cm  $\times$  5 cm ( $3\frac{1}{2}'' \times 2''$ ), 3.2  $\Omega$

### Rated Voltage

DC 9V using six SUM-2,  
"C" size, R-14 or equivalent  
batteries, AC power adaptor  
or car battery adaptor

### Power Consumption 6 W

### Body Construction ABS resin

### Dimensions

43 cm wide  $\times$  14 cm deep  $\times$   
6 cm high ( $17'' \times 5\frac{1}{2}'' \times 2\frac{1}{4}''$ )

### Weight

1.2 kg (2.6 lbs.)  
excluding batteries

### Accessory Carrying case

## PS-2

**Keyboard** 37 keys ( $F_1 \sim F_4$ )

### Instrument Voices

Organ, String, Clarinet,  
Piano, Harpsichord

### Effect Sustain

### Auto Rhythm Section

Selectors: Waltz, Swing,  
Rock, Latin

Controls: Rhythm Synchro  
Start, Tempo, Volume,  
Tempo Light

### Auto Bass Chord Section

Single Finger Chord, Volume

### Other Controls And Indicators

Power switch, Power-on  
light, Master Volume

### Auxiliary Jacks

Headphones, Expression  
Pedal, DC 9V—12V input

### Main Amplifier 2 W (RMS)

### Speaker

9 cm  $\times$  5 cm ( $3\frac{1}{2}'' \times 2''$ ), 3.2  $\Omega$

### Rated Voltage

DC 9V using six SUM-2,  
"C" size, R-14 or equivalent  
batteries, AC power adaptor  
or car battery adaptor

### Power Consumption 6 W

### Body Construction ABS resin

### Dimensions

48 cm wide  $\times$  14 cm deep  $\times$   
6 cm high ( $19'' \times 5\frac{1}{2}'' \times 2\frac{1}{4}''$ )

### Weight

1.4 kg (3.1 lbs.)  
excluding batteries

### Accessory Carrying case

## PS-3

**Keyboard** 44 keys ( $F_1 \sim C_5$ )

### Orchestra Tones

Organ, Flute, Brass, String,  
Clarinet, Piano, Guitar,  
Harpsichord, Vibraphone

### Effect Sustain

### Auto Rhythm Section

Selectors: Waltz, Swing,  
Rock, Latin

Controls: Rhythm Synchro  
Start, Tempo, Volume,  
Tempo Light

### Auto Bass Chord Section

Single Finger Chord, Volume

### Other Controls And Indicators

Power switch, Power-on  
light, Master Volume

### Auxiliary Jacks

Headphones, Expression  
Pedal, DC 9V—12V input

### Main Amplifier 2 W (RMS)

### Speaker

9 cm  $\times$  5 cm ( $3\frac{1}{2}'' \times 2''$ ), 3.2  $\Omega$

### Rated Voltage

DC 9V using six SUM-2,  
"C" size, R-14 or equivalent  
batteries, AC power adaptor  
or car battery adaptor

### Power Consumption 6 W

### Body Construction ABS resin

### Dimensions

56 cm wide  $\times$  14 cm deep  $\times$   
6 cm high ( $22'' \times 5\frac{1}{2}'' \times 2\frac{1}{4}''$ )

### Weight

1.5 kg (3.3 lbs.)  
excluding batteries

### Accessory Carrying case

*Specifications subject to change without notice.*

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**YAMAHA**

NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN