

YAMAHA

PortaSound

PSS-20

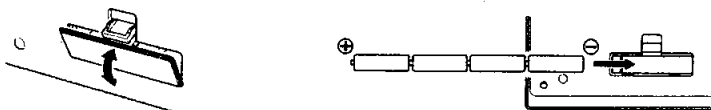
Owner's Guide

Thank you for choosing a Yamaha PortaSound PSS-20. Your PSS-20 is a high-performance electronic keyboard that features the most advanced Yamaha technology for superior sound and features. To ensure that you fully understand the many fine features provided, we urge you to follow the steps outlined in this manual while actually trying out the instrument's features.

1 Preparation

Installing Batteries

Remove the battery compartment cover on the bottom of the instrument and insert four 1.5V AA-size (R-6 or SUM-3) or equivalent batteries (sold separately), making sure that they are oriented as directed by the polarity markings. Replace the battery compartment cover, ensuring that it locks firmly in place.



Caution

- When the batteries run down, replace them with a complete set of four new batteries. Never mix old and new batteries.
- To prevent possible damage due to battery leakage, remove the batteries from the instrument if it is not to be used for an extended period of time.

3 Playing the PSS-20

★ Playing Back the Demo Tunes

6 different demo tunes are provided — try listening to them all.

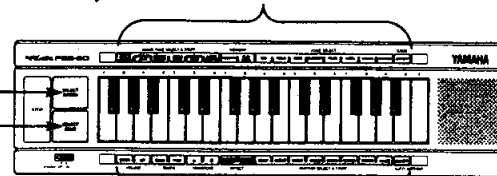
Slide the power switch to the ON position.

To play JINGLE BELLS, for example, hold the SELECT GREEN key and press the white key immediately below the green JINGLE BELLS label printed above the keyboard. JINGLE BELLS will begin playing immediately.

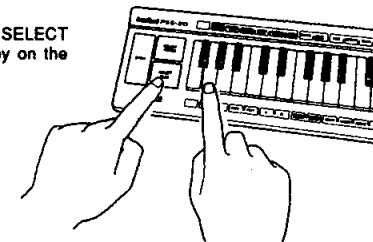
- The selected demo tune will continue playing until you press the STOP button or select a different demo tune.
- Tempo and transpose pitch can be varied while a demo tune is playing.
- Different voices and rhythm patterns can be selected while a demo tune is playing.

2 Learn This First!

To use a function printed in green, press and hold the SELECT GREEN button while pressing the corresponding white key on the PSS-20 keyboard.



To use a function printed in blue, press and hold the SELECT BLUE button while pressing the corresponding white key on the PSS-20 keyboard.



To reduce the volume level, for example . . . Press the VOLUME DOWN key while holding the SELECT BLUE button.

★ Using the Melody Memory

Recording

The Melody Memory can be used to record the melody you play on the keyboard.

1. Select a rhythm pattern.
2. Hold the SELECT GREEN button and press the RECORD key. The rhythm will start playing and the PSS-20 will be in the "record ready" mode.
3. Recording begins automatically as soon as you play the first note on the keyboard.
4. When you finish playing, press the STOP button to the left of the panel.

Playback

1. Begin playback by holding the SELECT GREEN button and pressing the PLAYBACK key.
2. Playback will end automatically as soon as the end of the recording is reached. Playback can be stopped at any time by pressing the STOP button.

- The Melody Memory will record a maximum of 50 notes.
- Notes shorter than 1/16th notes cannot be recorded.
- Each time you make a new recording, any previously recorded material will be erased. Recorded material is also erased if the power switch is turned OFF.

★ Selecting Voices

The PSS-20 offers 8 different voices. Try to become familiar with all the voices, so you can select the right one whenever it is needed.

To select the VIOLIN voice, for example, hold the SELECT GREEN button while pressing the VIOLIN key.

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★ Adjusting the Volume

The volume can be adjusted in 4 steps. The volume is automatically set to the loudest level when the POWER switch is turned ON.

While holding the SELECT BLUE button, press the DOWN key to lower the volume, or the UP key to raise the volume.

★ Adjusting the Tempo (speed) of the Rhythm Pattern

The tempo of the selected rhythm pattern can be adjusted in 8 steps.

While holding the SELECT BLUE button, press the SLOW key to reduce the tempo, or the FAST key to increase the tempo.

★ Changing the Keyboard's Pitch

The pitch can be changed in 12 semitone steps.

While holding the SELECT BLUE button, press the ♭ key to lower the pitch by a semitone, or the # key to raise the pitch by a semitone.

• The PSS-20 is automatically set to "standard" pitch when the POWER switch is turned ON.

★ Playing a Rhythm Pattern

The PSS-20 has 8 different rhythm patterns that can be selected and played as required. Choose the rhythm pattern that best suits the type of music you intend to play.

To play the SAMBA rhythm, for example, hold the SELECT BLUE key and press the SAMBA key. The SAMBA rhythm will begin playing immediately.

★ Using Effects

• Adding Sustain

While holding the SELECT BLUE key, press the SUSTAIN ON/OFF key. Notes played will decay gradually after you lift your fingers from the key. Hold the SELECT BLUE button and press the SUSTAIN ON/OFF key again to turn the sustain effect OFF.

• Sustain is automatically turned OFF whenever a new voice is selected — except when the VIBES voice is selected (sustain is automatically turned ON).

• Adding Vibrato

While holding the SELECT BLUE key, press the VIBRATO ON/OFF key. Notes played will now have a gentle "wavering" effect. Hold the SELECT BLUE button and press the VIBRATO ON/OFF key again to turn the vibrato effect OFF.

• Vibrato is automatically turned OFF whenever a new voice is selected — except when the VIOLIN voice is selected (vibrato is automatically turned ON).

★ Automatic Arpeggios

The PSS-20's automatic arpeggio feature creates chordal arpeggios for you — all you have to do is press a single key.

1. Select a voice.
2. Select a rhythm pattern.
3. Hold the SELECT BLUE button and press the AUTO ARPEGGIO ON/OFF key. The selected rhythm pattern will begin playing.
4. Play the key that is the "root" of the chord you wish to play (e.g. for a C-chord arpeggio, press a C key). The arpeggio will begin playing.

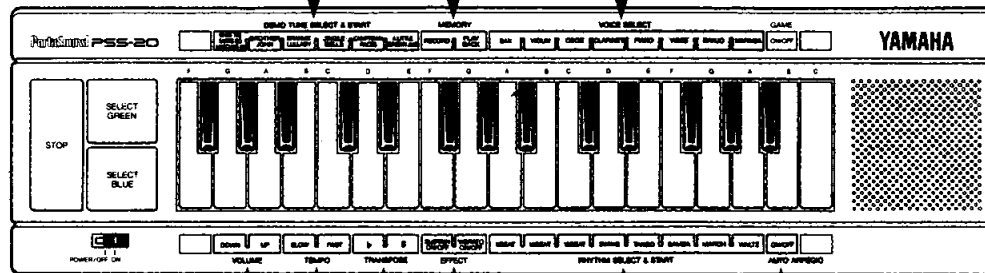


For a minor chord, press the "root" key and any key to its left. For example, a Cm chord can be played by pressing the C key and any key to its left.



Pressing any of the three available C keys will produce a C-chord arpeggio, but a higher-pitched arpeggio will be produced if you press a C key towards the right of the keyboard. The same applies to minor chords.

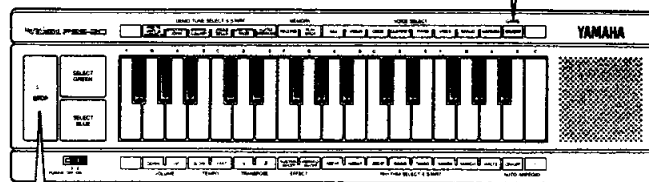
5. When you've finished playing, press the STOP button to stop rhythm pattern and arpeggio playback.



4 Challenge Yourself with the PSS-20 Game

This musical game is fun to play — and will help sharpen your ear and musical skills! When the game is started, a short "beginning of game" sequence will play, then the notes of the keyboard will begin to sound in a random sequence, going up or down in semitone steps. The goal is to quickly play the key corresponding to the note that is sounding.

To start the game, press the GAME ON/OFF key while holding the SELECT GREEN button.



To stop the game, press the STOP button.

- Notes will sometimes be played that do not have corresponding keys.
- When you "hit" the right key, a "hit" tone will be heard and you receive one point.
- When you accumulate three points, the game voice will change and the game will proceed to the next level of difficulty.
- The voices (and levels) change in the following sequence: SAX -> VIOLIN -> OBOE -> CLARINET -> PIANO -> VIBES -> BANJO -> MARIMBA. If you go all the way to the MARIMBA level, the "win" sequence will sound and the game will start again from the beginning.
- If you don't make three points, the "end of game" sequence will sound and the game will end, but will then start again from the first level.

5 Try Playing the Demonstration Tunes

When The Saints Go Marching In

Brother John

Brahms' Lullaby

Chords: C, G, Dm, G, C, F, C, F, C, F, C, G, C

Camptown Races

Chords: C, G, C, G, C, F, G, C

6 Taking Care of Your Portasound

Your PortaSound will stay in excellent condition for many years if you follow these simple rules:

1. Avoid placing the instrument in excessively humid locations.
2. Do not place the instrument in areas exposed to excessive heat — such as in direct sunlight, near a heating appliance, or in a car exposed to direct sunlight.
3. Do not drop the instrument or subject it to strong shocks. Also avoid placing heavy objects on top of it.
4. Do not use excessive force when operating any of the controls.
5. Do not use solvents or other chemicals to clean the instrument. It should be cleaned gently with a soft dry (or slightly damp) cloth.

7 Specifications

Keyboard	32 keys (F1 — C4)
Functions switches	SELECT GREEN, SELECT BLUE, STOP
Functions	
VOICE	SAX, VIOLIN, OBOE, CLARINET, PIANO, VIBES, BANJO, MARIMBA
PHYTHM	8BEAT, 16BEAT, 12BEAT, SWING, TANGO, SAMBA, MARCH, WALTZ
VOLUME	UP, DOWN
TEMPO	SLOW, FAST
TRANSPOSE	♭, #
EFFECT	SUSTAIN ON/OFF, VIBRATO ON/OFF
AUTO ARPEGGIO	ON/OFF
MELODY MEMORY	RECORD, PLAY BACK
GAME	ON/OFF

DEMO TUNES

WHEN THE SAINTS GO MARCHING IN,
BROTHER JOHN, BRAHMS' LULLABY,
JINGLE BELLS, CAMPTOWN RACES,
LITTLE BROWN JUG

POWER Switch	ON, OFF
Main Amplifier	0.3W
Speaker	5.7 cm (2-1/4")
Power Supply	DC 6V (provided by four AA-size, R-6, SUM-3 or equivalent batteries)
Dimensions (W x D x H)	430mm x 113mm x 43.5 mm (16-9/10" x 4-4/9" x 1-5/7")
Weight	0.48 kg (1.1 lbs), excluding batteries

* Specifications are subject to change without notice.

Jingle Bells

Chords: G, C, G, A, D, G, C, G, D, G

A Little Brown Jug

Chords: C, F, G, C, C, F, G, C, C, F, G, C

*This applies only to products distributed by Yamaha Corporation of America.
*Dies bezieht sich nur auf die von der Yamaha Corporation of America vertriebenen Produkte.

*Ceci ne s'applique qu'aux produits distribués par Yamaha Corporation of America.
*Eso se aplica solamente a productos distribuidos por Yamaha Corporation of America.

Attention users in the U. S. A. PortaSound PSS-20 prepared in accordance with FCC rules.

The PortaSound PSS-20 uses frequencies that appear in the radio frequency range, and if installed in the immediate proximity (within three meters) of some types of audio or video devices interference may occur.

The PortaSound PSS-20 has been type tested and found to comply with the specifications set for a Class B computing device in accordance with those specifications listed in Subpart J of Part 15 of the FCC rules. These rules are designed to provide a reasonable measure of protection against such interference. However, this does not guarantee that interference will not occur.

If your PortaSound PSS-20 should be suspected of causing interference with other

electronic devices, verification can be made by turning your PortaSound PSS-20 off and on.

If the interference continues when your PortaSound PSS-20 is off, the PortaSound PSS-20 is not the source of the interference. If your PortaSound PSS-20 does appear to be the source of the interference, you should try to correct the situation by using one or more of the following measures.

Relocate either the PortaSound PSS-20 the electronic device that is being affected by the interference.

Unlike power outlets for the PortaSound PSS-20 and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install AC line filters.

In the case of radio-TV interference, relocate the antenna or, if the antenna lead-in is a 300 ohm ribbon lead, change the lead-in to a co-axial type

cable. If these corrective measures do not produce satisfactory results, please contact your Authorized Yamaha Consumer Products dealer for suggestions and/or corrective measures.

If you cannot locate an Authorized Yamaha Consumer Products dealer in your general area, contact the Consumer Products Service Center, Yamaha Corporation of America, 6800 Orangeforpe Ave, Buena Park, CA 90620.

If for any reason you should need additional information relating to radio or TV interference, you may find a booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402.

Stock 004-000-345-4.

The serial number of this product may be found on the bottom of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No. PSS-20
Serial No. _____

Concerning the Warranty this product was made for international distribution, and since the warranty for this type of product varies from marketing area to marketing area, please contact the selling agency for information concerning the applicable warranty and/or service policies.

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