YAMAHA PortaSound PSS-100

OWNER'S MANUAL

Thank you for purchasing a Yamaha PortaSound PSS-100

This PortaSound is an ultra-modern keyboard with a design based on the latest digital technology,
which allows you to record and replay your music.
To be sure you get maximum satisfaction from your keyboard,
we suggest you follow the steps in this manual carefully while actually playing the instrument.

Precautions

Your PortaSound will give you years of playing pleasure if you follow the simple rules given below:

1. Use ONLY the optional Yamaha AC adaptors with your PortaSound. Read the adaptor instructions carefully before use.
2. Avoid placing the PortaSound in areas that are subject to excessive humidity or heat. Do not leave the instrument near heaters or in a car exposed to direct sunlight, for example.
3. Do not subject the instrument to strong physical shocks, and avoid placing heavy objects on it, or placing excessive stress on the keys and buttons.
4. Do not use the keyboard in the vicinity of a radio or TV set, as noise may be caused in the radio or TV set.
5. Be sure to turn OFF the power switch after use. It is recommended that the batteries be removed if the instrument is not going to be used for a long time, since the batteries may leak.
6. Use a soft cloth, dry or slightly damp, for cleaning. Never use chemicals such as benzine or thinner.

Before You Begin

<1> When using batteries:

Remove the battery compartment cover on the bottom of the instrument, and insert four 1.5V AA-size (SUM-3, R-6) batteries, making sure that the polarities are observed as directed beside the cover. Replace the cover, ensuring that it locks securely in place.
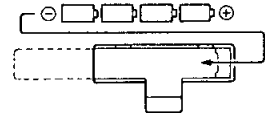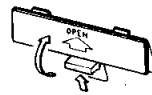
Caution:

* Replace all the batteries at the same time. Using old batteries with new ones might be dangerous.
* Be sure all the polarities are correct. Setting one of the batteries in the wrong direction might be dangerous.

<2> When using the AC adaptor

The Yamaha Power Adaptor PA-1, PA-1B or PA-3 is available for household current. No other adaptor is usable. Connect the adaptor to the terminal on the rear panel of the unit, and plug in the adaptor.

Specifications

Keyboard:	32 keys (F2-C5)
Voice:	16 voices
	Clarinet, Trumpet, Sax, Piano, Honky-tonk piano, Electronic organ, Accordion, Vibraphone, Guitar, Rock guitar, Tremolo guitar, Banjo, Mandolin, Violin, Fantasy, UFO
Rhythm style:	16 styles
	8 beat, Rock'n'roll, Hard rock, Slow rock, 16 beat, Funk, Rhythm & blues, Ballad, Swing, Country, Samba, Bossa nova, Tango, March 1, March 2, Waltz
Digital Recorder:	Reset, Rewind, Stop, Play, Fast Forward, Record
Voice Variator:	Bright, Mellow, Long, Short
Other Controls & Indicator:	
	Voice/Style Select, Tempo Controls, Volume Controls, Demo Start/Stop, Rhythm Start/Stop, Power OFF, NORMAL, AUTO ACCOMP, Measure/Voice/Style Indicator
Terminal:	DC(9-12V)IN
Main Amplifiers:	0.7W
Speakers:	7.7cm (4Ω)
Rated Voltage:	DC6V (4 x AA-size, SUM-3, R-6 batteries) AC Power Adaptor (PA-1, PA-1B, PA-3)
Power consumption:	
	3.0W (with AC adaptor PA-1) 0.4W (with battery cells)
Material:	Styrole resin
Dimensions:	59mm(H) x 502mm(W) x 177.5mm(D) (2-1/3"(H) x 19-5/6"(W) x 7"(D))
Weight:	1.2kg(2-1/2lb) without batteries

** Specifications are subject to change without notice.

• This applies only to products distributed by Yamaha Corporation of America.

Attention users in the U.S.A.
PortaSound PSS-100 prepared in accordance with FCC rules.

The PortaSound PSS-100 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-100 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. Theses 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-100 should be suspected of causing interference with other electronic devices, verification can be made by turning your PortaSound PSS-100 off and on. If the interference continues when your PortaSound PSS-100 is off, the PortaSound PSS-100 is not the source of the interference. If your PortaSound PSS-100 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-100 or the electronic device that is being affected by the interference.

Utilize power outlets for the PortaSound PSS-100 and the device being affected that are on different branch (circuit breaker or fuse) circuits, or install A/C 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, 6600 Orangethorpe 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-100____

Serial No. _____

Concerning 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.

YAMAHA
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan

Getting a Great Sound

1. Using the Voice Section

1. Turn the power switch to NORMAL.
2. Choose the voice you want to play from the voice list on the panel.
3. Press [VOICE] , one of [🎵] - [🎵] , and one of [1] - [4] .

   e.g. If you want a guitar voice, press [VOICE] then [c] and then [1] , and the LED indicator will display [c.1.] .

4. Play the keyboard, and the guitar sound will be produced.

* When the power is turned ON, the clarinet voice is automatically selected.
* You can play up to 6 notes at a time. If you press 7 keys, the first key that you pressed will no longer sound.
* A click sound confirms the operation of the switches.

3. Using the Rhythm Section

1. Pick a rhythm from the style list on the panel.

2. Press [STYLE] , one of [🎵] - [🎵] , and one of [1] - [4] .

   e.g. If you want a rock'n' roll rhythm, press [STYLE] , [🎵] and then [🎵] , and the LED indicator will display [🎵.🎵.] .

3. Press the pink [START/STOP] button to start the rhythm.

   Dots on the LED indicator shows the beat. Two dots at the same time means the first beat of the bar.

3. Press the pink [START/STOP] button again to stop the rhythm.

* When the power is turned on, the 8 beat rhythm is automatically selected.

POWER SWITCH

Auto Accompaniment Section
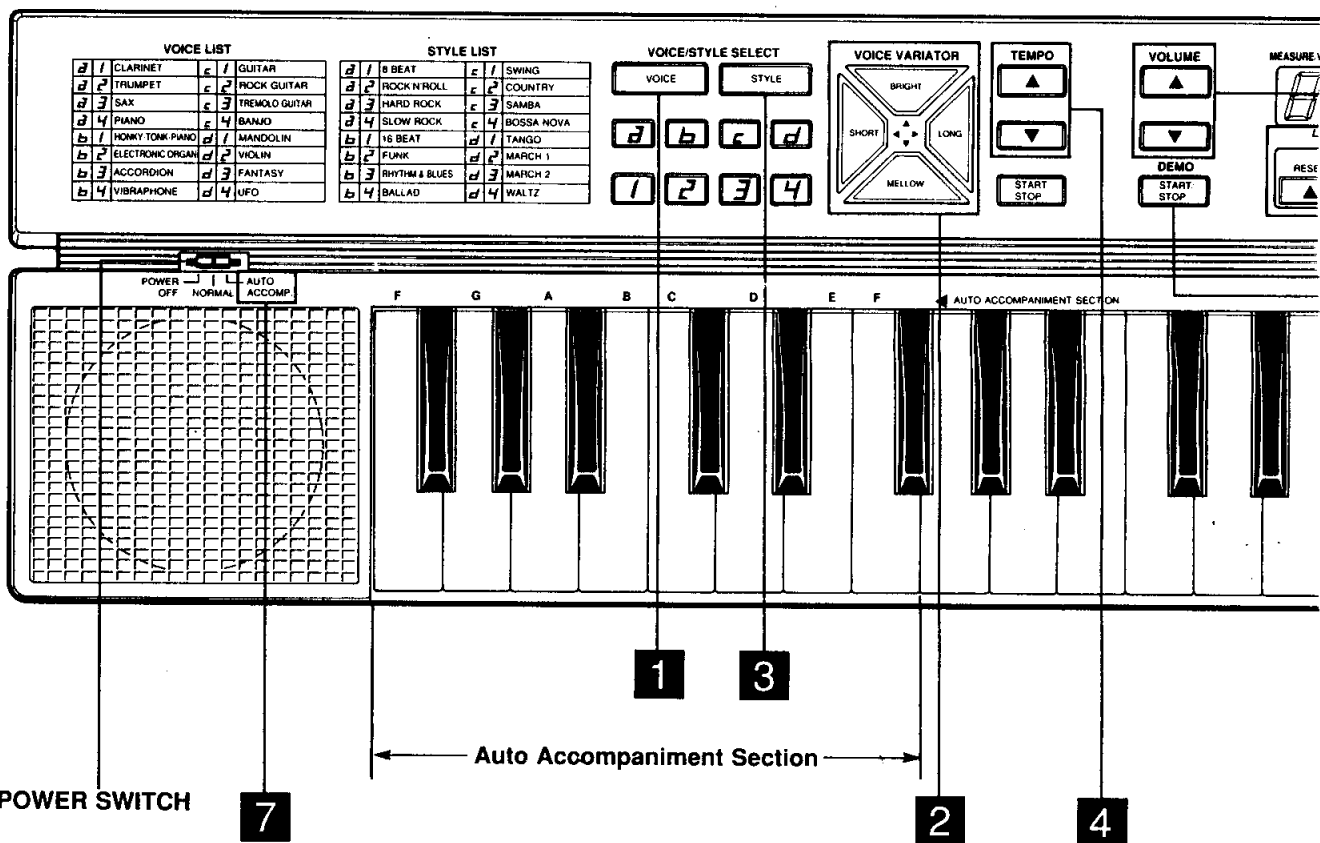
2. Using the Voice Variator Controls

You can change the tone of the voice through 4 variator controls.

* Voice brightness has 8 variations, and voice length has 5 variations.

  Pressing SHORT makes the voice length shorter.
  Pressing LONG makes the voice length longer.
  Pressing BRIGHT makes the voice bright.
  Pressing MELLOW makes the voice mellow.

* When you press the Voice Variator buttons, a click sound will be heard as long as the variation is effective.
* To return to the preset setting,
  Press the LONG and SHORT buttons at the same time.
  Press the BRIGHT and MELLOW buttons at the same time.
* For the honky-tonk piano, the voice brightness has 6 variations.

4. Using the Tempo Controls

Use the tempo controls to adjust the speed of the rhythm. The tempo can be changed in 16 steps.

Press [▲] to increase the tempo.

Press [▼] to decrease the tempo.

* To return the tempo to the preset setting, press the [▲] and [▼] buttons together.
* A tempo of ♩ = 124 will be set when the power is turned on.

5. Using the Volume Controls

Use the volume controls to adjust the level of the volume.
The level can be changed in 5 steps.
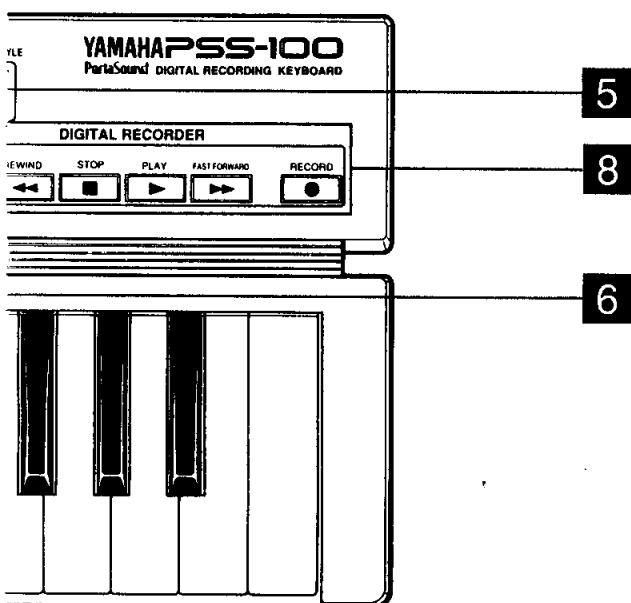
Press [▲] to increase the volume.

Press [▼] to decrease the volume.

* The volume is set to just below maximum when the power is turned on.
* To return the level of the volume to the preset setting, press the

[▲] and [▼] buttons together.

6. Playing Back the Demonstration Songs

Press the [DEMO START/STOP] button to play the demonstration songs.

* To stop the demonstration songs, press the [DEMO START/STOP] button again.

YAMAHA PSS-100
PortaSound DIGITAL RECORDING KEYBOARD

DIGITAL RECORDER

REWIND   STOP   PLAY   FAST FORWARD   RECORD

[5]

[8]

[6]

7. Using The Auto Accompaniment

The auto accompaniment feature makes it easy to produce an accompaniment by pressing a few keys in the Auto Accompaniment section of the keyboard.
1. Turn the power switch to AUTO ACCOMP.
2. Select the voice and rhythm.
3. Press any key in the range of the auto accompaniment section, and the auto accompaniment and rhythm will start automatically.
4. Play the melody with your right hand, accompanied by chords and rhythm produced from the auto accompaniment keys played by your left hand.

* You can play up to 3 melody notes in the auto accompaniment mode. If you press 4 keys, the first key that you pressed will no longer sound.

If you press a "C" key, for example, a C-major accompaniment will be played. Press another key in the auto accompaniment section to select a new chord. The highest key you press will always determine the "root" of the chord played (e.g. "C" for a C chord).
Playing Minor, Seventh, and Minor-seventh Chords
* For a minor chord, press the root key and any black key to its left.
* For a seventh chord, press the root key and any white key to its left.
* For a minor-seventh chord, press the root key and both any white and black keys to its left.

C   Cm   C7   Cm7
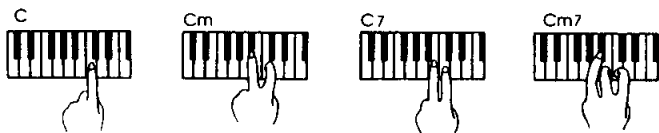
8. Using the Digital Recorder

You can record your performance, and then play a different melody in a different voice, accompanied by your recorded music.
e.g. Playing "Aura Lee"
1. Turn the power switch to AUTO ACCOMP.

2. Select the violin voice by pressing [VOICE] , then [d] , and then [J] .

3. Select the 8 beat rhythm by pressing [STYLE] , then [d] , and then [1] .

4. Press the [● RECORD] button, and the metronome will sound. This means that the unit is ready for recording.

5. When you press any key, recording will start. The LED indicator will display the number of measures (bars) you have recorded so far.

6. After performing, press the [■ STOP] to stop recording.

7. Press the [▲ RESET] button to return to the top bar.

8. Press the [► PLAY] button to play back.

9. Press the [■ STOP] button to stop.

e.g. Playing a harmony over the "Aura Lee" you have just recorded.
10. Select the electronic organ voice.

11. Press the [▲ RESET] to return to the top bar.

12. Press the [► PLAY] , and while listening to the recorded music, play the following harmony.

* You can record up to 100 bars.
* Do not turn the power off during recording, since the recorded data might be destroyed.
* The PSS-100 stores the recorded music until the batteries lose their power even after the power is turned off.

Recording your Performance without Auto Accompaniment

1. Turn the power switch to NORMAL.
2. Select a voice and rhythm.
3. Press the [●] RECORD button, and start playing by pressing any key or pressing the pink [START/STOP] button.

Recording your Performance without Rhythm Sound

1. Turn the power switch to NORMAL.
2. Select a voice.
3. Press the [●] RECORD button.
4. Press the [►] PLAY button and start playing. When playing, you can hear the rhythm, but only the music you played on the keyboard will be recorded.

Re-recording from the Middle of the Song

You can start re-recording in the middle of the song, if you want to change the music or if you make a mistake in playing.

1. Press the [◄◄] REWIND or [►►] FAST FORWARD button to search for the bar from which you want to start re-recording.
2. Press the [●] RECORD button and start recording again.
3. Press the [■] STOP button to stop.

* The [◄◄] REWIND or [►►] FAST FORWARD buttons step backwards or forwards respectively by one bar for each press of the button.
* Re-recording of the music always starts from the first beat of the bar.
* Recording is done for each bar. When recording, play up to the last beat of the bar. If you stop playing in the middle of the bar, the previous data in the remaining part of the bar will be erased.

Clearing all the Recorded Music at a Time

1. Turn the power switch OFF.
2. While pressing the [▲] RESET button, turn the power switch to NORMAL or AUTO ACCOMP. All the recorded data will be erased.

Troubleshooting

Symptoms	Remedies
* The volume decreases without pressing the volume control button. * The voices sound intermittently. * The LED indicator suddenly goes off and all the buttons and keys become ineffective, then the indicator illuminates again. The indicator goes off again when starting to play.	Replace the batteries with new ones.
* Only a few notes can be heard, even if you press many keys at a time.	* The PSS-100 can produce 6 notes at a time, including tones in DEMO songs and playback music, excluding the rhythm sound. Therefore, the first tone sounded will not sound any more when the seventh tone is produced by pressing a key, or when playing the DEMO songs or recorded music.
* Your performance is not played back as you recorded it.	<1> When recording in a sixteenth-note rhythm style, you cannot record triplets. When recording in a triplet-rhythm style, you cannot record sixteenth notes. <2> You cannot record notes shorter than a sixteenth note (semiquaver) in a sixteenth-note style. You cannot record notes shorter than eighth-note triplets (triplet quaver) in a triplets style.
* No click sound is heard when pressing the buttons.	A click sound is heard only when the buttons are effective. For example, no click sound will be heard when the volume is already set to the maximum.