

YAMAHA

PortaSound

PSS-401

Owner's Guide
Bedienungsanleitung
Manuel d'instructions

SINCE 1947



YAMAHA

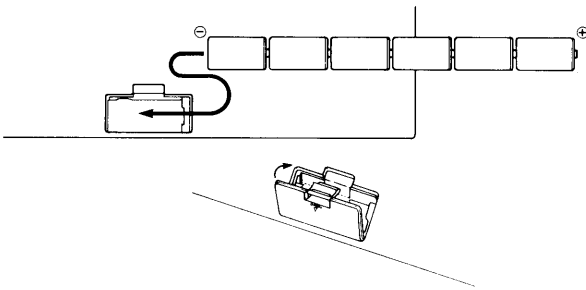
PortaSound

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

Battery Operation

- Use six 1.5V SUM-2, "C" size, R-14 or equivalent 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.



Optional Power Adaptors

- Household current: Power Adaptor PA-1 is available for household current.
- Car battery: Car Battery Adaptor CA-1 plugs into a car cigarette lighter socket.

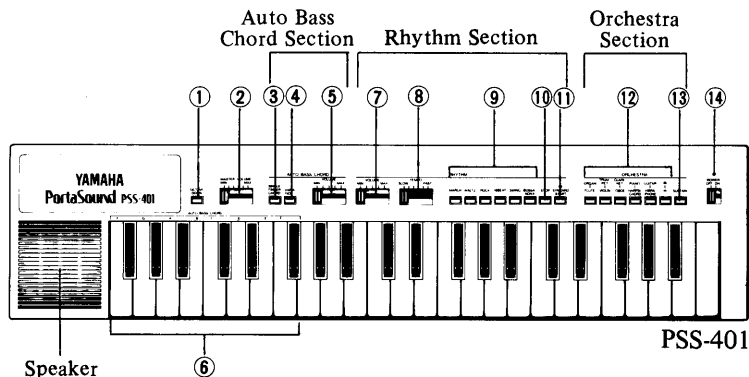
For An Even Bigger Sound

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 your stereo system (see page 6).

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Nomenclature



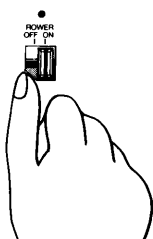
- ① **Octave Down**
- ② **Master Volume** Controls overall volume of instrument.
- ③ **Single Finger Chord** For automatic bass and chord accompaniment.
- ④ **Auto Bass Chord Variation** Changes bass line and rhythm accompaniment.
- ⑤ **Auto Bass Chord Volume** For adjusting Auto Bass Chord section's volume.
- ⑥ **Auto Bass Chord Key Section** Only keys in this section can obtain automatic bass and chord accompaniment.
- ⑦ **Rhythm Volume** For adjusting volume of rhythm section.
- ⑧ **Tempo Control** Adjusts speed of rhythm.
- ⑨ **Rhythm Selectors** Rhythms can be selected.
- ⑩ **Stop**
- ⑪ **Synchro Start** Causes rhythm to start simultaneously with first key pressed in Auto Bass Chord key section.
- ⑫ **Instrument Voice Selectors** For choosing instrument voice.
- ⑬ **Sustain** Causes notes to linger after you remove your finger(s) from keyboard.
- ⑭ **Power Switch** Slide to right to switch on; lamp lights up.

Starting 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. Switch On

Switch on by sliding the POWER switch ⑭ to the right. The Power-on light will light up.



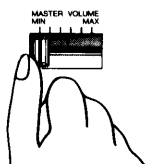
2. Choose The Voice You Want

Select one from among those available in the ORCHESTRA section ⑫ and press the selector.



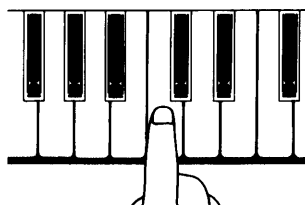
3. Adjust The Volume

Adjust the overall volume using the MASTER VOLUME control ②.



4. Press A Key

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



Note:

When the SINGLE FINGER CHORD selector ③ is depressed, you will not be able to use the Auto Bass Chord Section Keys ⑥ for playing the melody (see page 5 for details).

How to use all the features

A) Orchestra Section

1. Instrument Voice Selectors

Press the selector corresponding to the instrument voice you want to hear. If the selector with the red tab is up, you can select voices in the top row; if it is down, you can select voices in the bottom row. The volume can be adjusted by means of the MASTER VOLUME ②.

Note:

- 1) When two or more voice selectors are pressed simultaneously, the right hand selector always has priority.
- 2) Delayed vibrato is built-in for the Flute, Trumpet, Violin and Oboe voices.

2. Sustain

This effect works with all the instrument voices except for Vibraphone which has sustain built in. Press the SUSTAIN selector ⑬ and notes will linger after you take your fingers off the keys.

SUSTAIN



3. Octave Down Selector

When this selector is depressed, the entire tone range is shifted down by one octave and melodies in the low tone range can be played.

Note:

While the Single Finger Chord Selector ③ is depressed, the tone range of the Auto Bass Chord Key Section ⑥ will not be lowered even when the Octave Down Selector ① is depressed.



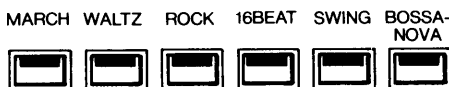
B) Rhythm Section

1. Choose A Rhythm

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

Note:

If two or more buttons are pressed the one on the right has priority.



2. Press SYNCHRO START

After selecting a rhythm, press the SYNCHRO START button ⑪.



3. Press A Key On The Left Part Of The Keyboard

The rhythm will start the moment you play a note in the Auto Bass Chord Key Section ⑥. To stop the rhythm, press the STOP button ⑩.

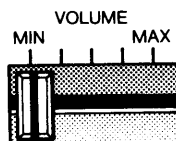
4. Adjustments

● **Tempo**

Use the TEMPO control ⑧ to adjust the speed of the rhythm.

● **Volume**

The RHYTHM VOLUME control ⑦ lets you adjust the rhythm volume in relation to the melody volume.

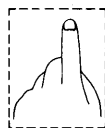


5. Making Use Of The Tempo Light

The Tempo Light functions as a visual metronome, making it simple for you to confirm the rhythm tempo when playing the melody. When the SYNCHRO START button ⑪ is engaged but you have not yet started the rhythm by pressing a key, the Tempo Light flashes at every quarter note.

C) Auto Bass Chord Section

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



1. Press The SINGLE FINGER CHORD Button ③

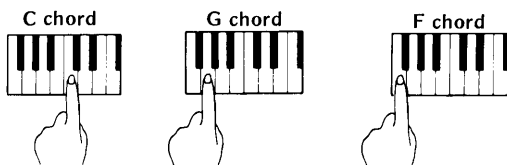
The 14 keys in the Auto Bass Chord key section ⑥ can then be used for playing chords with only one finger.

2. Select A Rhythm

Choose the rhythm you want then press the SYNCHRO START button ⑪. (Don't forget to do this whenever you use the Auto Bass Chord feature.)

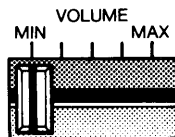
3. Press A Key

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", you'll obtain a C major chord that strums along with the bass and rhythm.



4. Set The Volume

Adjust the volume to suit the overall level using the Auto Bass Chord's independent VOLUME control ⑤.



5. Set The Tempo

Select the tempo you want using the rhythm section's TEMPO control ⑧.

6. Using VARIATION

Press the VARIATION selector ④ if you want a different bass line and rhythm accompaniment.

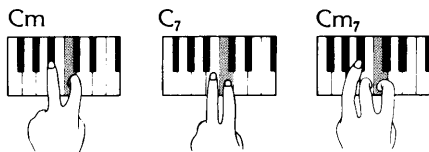


7. To Stop The Auto Bass Chord

Press the STOP button ⑩.

Obtaining Minor, Seventh And Minor Seventh Chords

- 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.

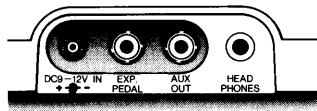


Notes:

- 1) You must completely lift your finger from the key for the chord to change. If you hold down the previous chord and move to the next one, PortaSound will not change to the correct chord.
- 2) If the Auto Bass Chord feature is used without SYNCHRO START ⑪, you will get a continuous chord with bass. The chord will stop when you take your finger from the key.

Making use of the jacks

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



DC9-12V In Jack

- **AC power**
Connect the optional AC Power Adaptor PA-1 to the DC9-12V IN jack.
- **Car battery**
The Car Battery Adaptor CA-1 plugs into the DC9-12V IN jack and a cigarette lighter socket.

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.

Aux Out Jack

- 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 connecting cord PC-2 or its equivalent is required.
- The output level of this jack is $2 \pm 2\text{dBm}$ (when seven notes are played simultaneously with ORGAN voice selected).

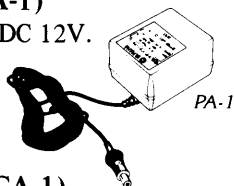
Headphone Jack

- Connect a set of headphones to this jack and you can practice without disturbing others. Headphones with a large input jack cannot be used.

Optional accessories

AC Power Adaptor (PA-1)

Transforms AC voltage to DC 12V.



Car Battery Adaptor (CA-1)

Enables you to provide power to the instrument from a car battery using the cigarette lighter socket.

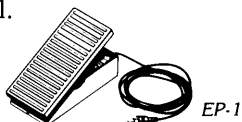


Headphones (YH-35)

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

Expression Pedal (EP-1)

Lets you add more feeling to music by enabling subtle control of the overall volume level.



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.



"PortaSound Playtime" Teach-Yourself Book

Shows you the basic techniques for playing the PortaSound portable keyboard. Available in English.



Some optional accessories and/or "PortaSound Playtime" may not be available in every region.

Taking care of your PortaSound

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

1. When you use AC power, be sure to use the optional PA-1 adaptor. Before use, read the adaptor instructions carefully.
2. The optional Car Battery Adaptor CA-1 is only for use with a negative ground 12V battery. Ensure that this is the case before connecting the adaptor.
3. Connections made between the PortaSound and any other device should be made with both units turned off.
4. Do not set the MASTER VOLUME at MAX when you connect the PortaSound to a stereo system. Use the stereo system's volume control to adjust the sound level.
5. Avoid placing the instrument in excessively humid areas.
6. Do not subject the unit to physical shock, and avoid placing anything heavy on it.
7. The PortaSound should not be placed in direct sunlight for a long time.
8. 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 (176°F). Temperatures in excess of 60°C (140°F) can cause physical and/or electrical damage not covered by warranty.
9. Use a dry or damp cloth for cleaning.

Specifications

PSS-401

Keyboard 44 keys (F₁–C₅)

Instrument Voices

Organ, Flute, Trumpet,
Violin, Clarinet, Oboe,
Piano, Harpsichord,
Guitar, Vibraphone

Effect Sustain, Delayed
Vibrato (Preset)

Rhythm Section

Selectors: March, Waltz,
Rock, 16 Beat, Swing,
Bossanova
Controls: Synchro Start,
Stop, Volume, Tempo,
Tempo Light

Auto Bass Chord Section

Single Finger Chord,
Variation, Volume

Other Controls And Indicators

Power Switch, Power-on
Light, Master Volume,
Octave Down

Auxiliary Jacks

Headphones, Aux Out,
Expression Pedal, DC
9V–12V Input

Main Amplifier 1.4W, 6Ω

Speaker 7.7 cm (3")

Rated Voltage

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

Dimensions

621 mm wide x 152 mm
deep x 43 mm high
(24½" x 6" x ¾")

Weight

1.6 kg (3.5 lbs.)
excluding batteries

*Specifications subject to change
without notice.*

Attention users in the U.S.A.

PortaSound PSS-401 prepared in accordance with FCC rules.

The PortaSound PSS-401 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-401 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-401 should be suspected of causing interference with other electronic devices, verification can be made by turning your PortaSound PSS-401 off and on. If the interference continues when your PortaSound PSS-401 is off, the PortaSound PSS-401 is not the source of the interference. If your PortaSound PSS-401 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-401 or the electronic device that is being affected by the interference.

Utilize power outlets for the PortaSound PSS-401 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 coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact your Authorized Yamaha Specialty Products dealer for suggestions and/or corrective measures. If you cannot locate an Authorized Yamaha Specialty Products dealer in your general area, contact the Specialty Products Service Center, Yamaha International, 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-401
Serial No. _____

Die Seriennummer befindet sich an der Unterseite des Instrumentes. Wir empfehlen, diese Nummer sicherheitshalber an der unten vorgesehenen Stelle einzutragen, um sie auch im Falle eines Diebstahls jederzeit zur Hand zu haben.

Modell-Nr. PSS-401
Serien-Nr. _____

Le numéro de série de ce produit figure au bas du bloc. Il conviendra de noter ce numéro de série dans l'espace réservé au-dessous et de conserver ce manuel: celui-ci constitue le document permanent de votre achat et permet l'identification en cas de vol.

Modèle No. PSS-401
No. de série: _____

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.

Hinweis zur Garantie

Dieses Produkt wird international vertrieben, und die Garantiebedingungen sind von Vertriebsland zu Vertriebsland verschieden. Ihr Händler gibt Ihnen gerne genauere Informationen zu den in Ihrem Land gültigen Garantie-und/oder Servicebedingungen.

Remarque relative à la garantie

Ce modèle est destiné à être distribué à l'échelle internationale. Etant donné que les conditions de garantie pour ce type de produit varient en fonction des zones de commercialisation, prière de prendre contact avec l'agence chargée des ventes pour tous renseignements relatifs aux conditions de garantie et de service après-vente.

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NIPPON GAKKI CO., LTD. HAMAMATSU, JAPAN