

# PM-1

## PERSONAL MONITOR AMPLIFIER

### Owner's Manual

Thank you, and congratulations on your choice of the Roland PM-1 Personal Monitor Amplifier.

Before using this unit, carefully read the sections entitled

- IMPORTANT SAFETY INSTRUCTIONS (p. 2)
- USING THE UNIT SAFELY (p. 3–4)
- IMPORTANT NOTES (p. 5).

These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

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### Features



- Two-way monitor features 30 cm (12") speaker and a tweeter, delivering a full 60 watts of output.
- The PM-1 features an integrated stand, which provides you with a convenient way of setting up and playing your digital percussion.
- Provides high-quality sound for percussion sound modules and digital percussion.
- The input section features a four-channel mixer. Channel 1 provides an XLR connector in addition to a mic input, and a monitor function is also included on Channel 4.
- The cabinet shape is designed so that the unit can function as a monitor for the performer.
- Superior portability and numerous functions make this suitable for a wide variety of applications, from personal monitoring to stage monitoring.

\* *Use of this device with the digital percussion stand attached requires the optional APC-33 all purpose clamp set.*

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 <div style="display: inline-block; border: 1px solid black; padding: 2px; text-align: center; font-weight: bold; font-size: small;"> <b>CAUTION</b>  RISK OF ELECTRIC SHOCK  DO NOT OPEN </div> 
<b>ATTENTION:</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR
<b>CAUTION:</b> TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an 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 electric shock to persons.



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

**INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.**

## IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

**WARNING** - When using electric products, basic precautions should always be followed, including the following:


- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Read these instructions.</li> <li>2. Keep these instructions.</li> <li>3. Heed all warnings.</li> <li>4. Follow all instructions.</li> <li>5. Do not use this apparatus near water.</li> <li>6. Clean only with a dry cloth.</li> <li>7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.</li> <li>8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.</li> <li>9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.</li> </ol> | <ol style="list-style-type: none"> <li>10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.</li> <li>11. Only use attachments/accessories specified by the manufacturer.</li> <li>12. Never use with a cart, stand, tripod, bracket, or table except as specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.</li> <li>13. Unplug this apparatus during lightning storms or when unused for long periods of time.</li> <li>14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.</li> </ol> |
|---|--|



**For the U.K.**

**WARNING:** THIS APPARATUS MUST BE EARTHED  
**IMPORTANT:** THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.  
GREEN-AND-YELLOW: EARTH, 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 GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured GREEN or GREEN-AND-YELLOW.

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.

# USING THE UNIT SAFELY

## INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

### About ⚠ WARNING and ⚠ CAUTION Notices

<b>⚠ WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b>⚠ CAUTION</b>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

### About the Symbols

	The ⚠ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⚡ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

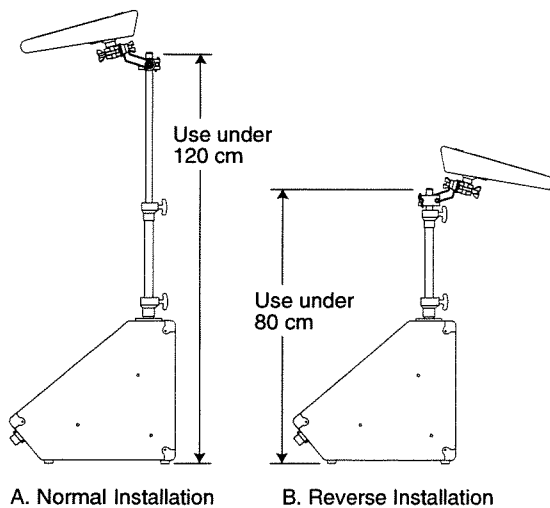
### ALWAYS OBSERVE THE FOLLOWING

#### ⚠ WARNING

- The Pipe Stand of Model PM-1 is to be used with Roland's Models SPD-20 or HPD-15 only. Use with other Models or use without proper installation may result in instability causing possible severe injury and/or property damage.

For proper installation:

- Setup the SPD-20 or HPD-15 as per diagram A for normal use.
- In case of setting the SPD-20 or HPD-15 at the back of the PM-1, keep the height of the stand to under 80 cm.









#### ⚠ WARNING

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.
- The unit should be connected to a power supply only of the type described in the operating instructions, or as marked on the unit.
- Use only the attached power-supply cord.
- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!





- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- Do not open or perform any internal modifications on the unit.


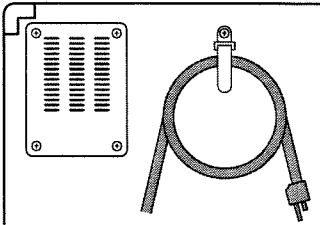
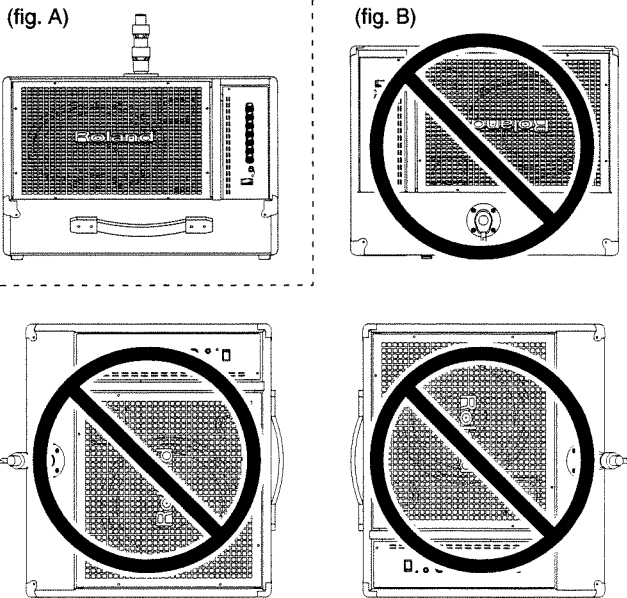
**! WARNING**

- This unit, either alone or in combination with an amplifier and headphones or speakers, 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 ears, you should immediately stop using the unit, and consult an audiologist. 
- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.   

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 
- Protect the unit from strong impact. (Do not drop it!) 
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through. 






**! CAUTION**

- The unit should be located so that its location or position does not interfere with its proper ventilation. 
- Always grasp only the plug on the power-supply cord when plugging into, or unplugging from an outlet. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 

**! WARNING**

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page. 
- When transporting and storing the PM-1, be sure to secure the AC cord to the cord hook on the rear of the main unit. 
- When using the PM-1, set the unit up as shown in Figure A. Do not use the unit with the arrangement in Figure B. 

**! CAUTION**

- Never handle the power cord or its plug with wet hands when plugging into, or unplugging from, an outlet. 
- Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices. 
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet. 
- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet. 
- The rear panel of the main unit may become hot, so take care to avoid burns. 

# IMPORTANT NOTES

In addition to the items listed under “IMPORTANT SAFETY INSTRUCTIONS” and “USING THE UNIT SAFELY” on pages 2 and 3–4, please read and observe the following:

## Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

## Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.
- Do not allow rubber, vinyl, or similar materials to remain on the unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not put anything that contains water (e.g., flower vases) on the unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.
- Do not paste stickers, decals, or the like to this instrument. Peeling such matter off the instrument may damage the exterior finish.

## Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth. Rubbing too hard in the same area can damage the finish.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.
- For routine care of the carpeted surfaces, use a brush with stiff bristles.

## Additional Precautions

- Use a reasonable amount of care when using the unit’s buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable’s internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit’s volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

# Panel Descriptions

## Front Panel

### 1. Volume Knob

These adjust the individual channel volume levels. The volume increases as the knobs are turned further to the right (clockwise).

#### CH1

This accepts input levels ranging from mic input (-50 dBu) to line level from sound modules and other equipment (-20 dBu).

#### CH2, CH3

These accept line level input from sound modules and other equipment (-20 dBu).

#### CH4 (Monitor Function)

This accepts line level input from sound modules and other equipment (-20 dBu).

Signals input to CH4 are output not to the LINE OUT jack (9), but directly to the PM-1's speakers or to headphones.

This is used for talkback from the main PA, or for other applications, such as when one performer wants to monitor the click track while synchronizing the performance with a sequencer.

### 2. EQUALIZER Controls

The PM-1 is equipped with a two-band equalizer, making it possible for you to create a variety of sounds.

#### BASS knob

This adjusts the volume of the bass.

#### TREBLE knob

This adjusts the volume of the treble.

### 3. MASTER Controls

These controls control the output of the built-in speaker and the PHONES jack.

#### VOLUME knob

This adjusts the volume.

#### PHONES (headphones) jack

Connect the headphones. No sound is output from the PM-1's speakers when headphones are connected.

\* Always be sure to lower the MASTER VOLUME to zero whenever connecting and disconnecting headphones.

\* Although the PHONES jack accepts stereo plugs, the audio output is mono.

### 4. POWER Indicator

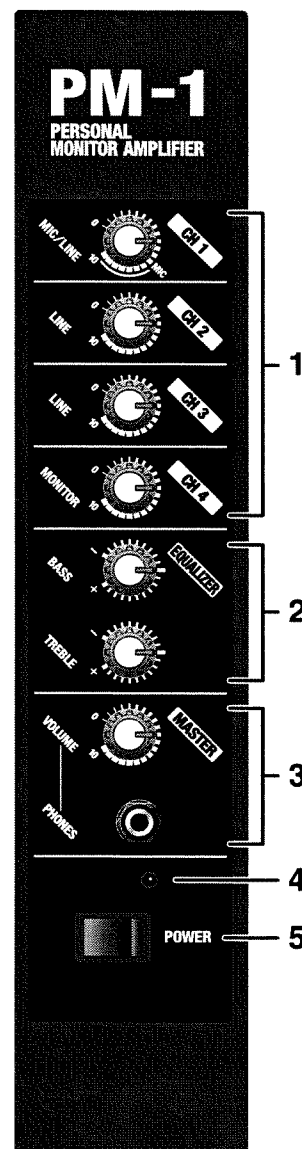
When the power is on, the pilot light will be lit.

### 5. POWER Switch

This switch turns the power on/off.

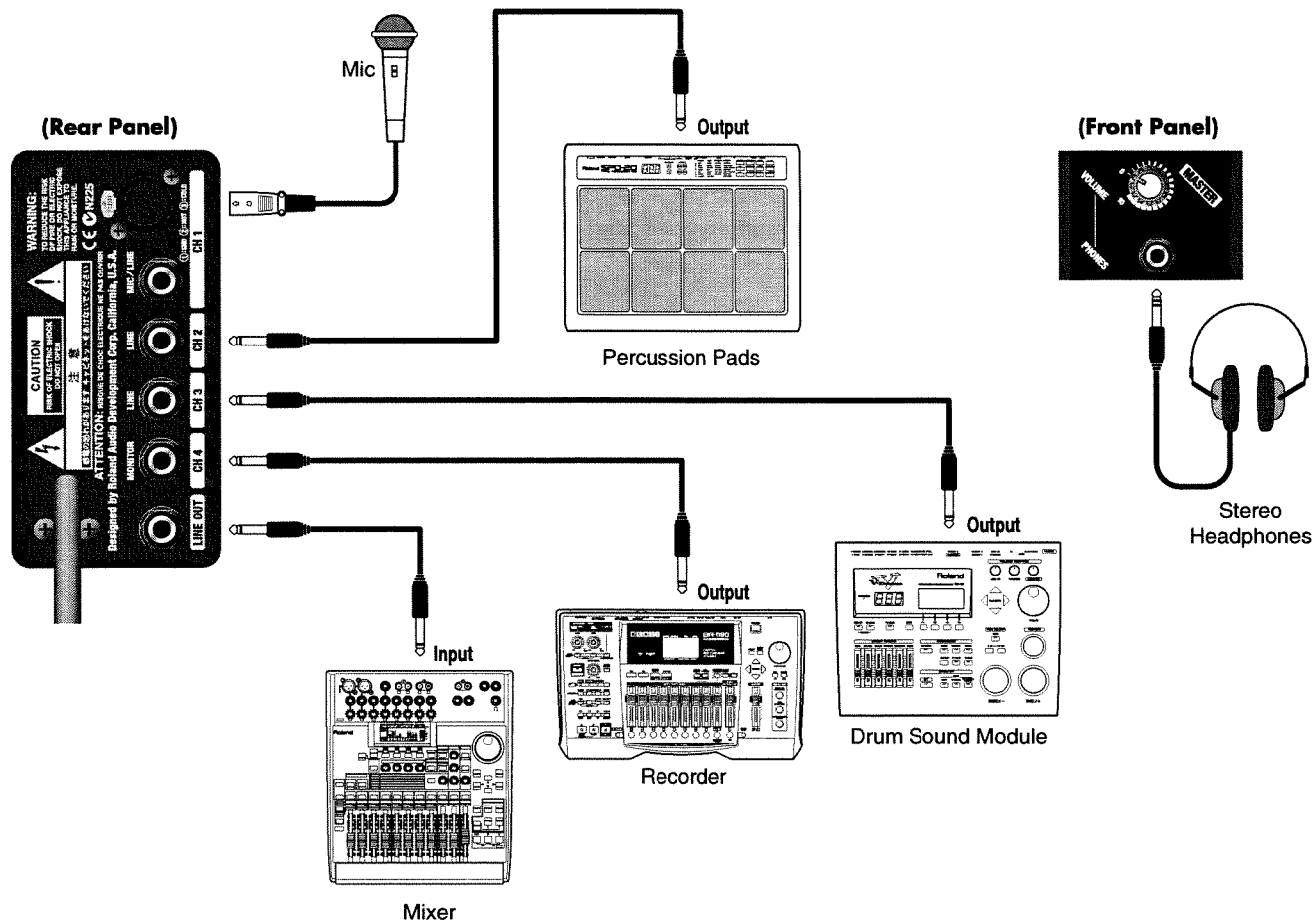
\* Always be sure to lower the volume on the PM-1 and any connected equipment to zero whenever turning the power on or off.

\* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally. Even with the volume all the way down, you may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.

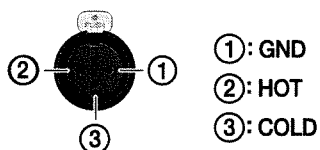




# Making Connections



- \* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections. Set all of the PM-1's channel volume knobs as well as the MASTER VOLUME knob to zero.
- \* The pin assignment for the XLR type connectors is as shown below. Before making any connections, make sure that this pin assignment is compatible with that of all your other devices.



- \* Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:
  1. Changing the orientation of the microphone(s).
  2. Relocating microphone(s) at a greater distance from speakers.
  3. Lowering volume levels.

Q: The volume level of the instrument connected to CH 1 – CH 4 are too low.  
 A: Could you be using a connection cable that contains a resistor?  
 Use a connection cable that does not contain a resistor.



## Turning On and Off the Power

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

\* Before switching off the power, lower the volume on each of the devices in your system and then TURN OFF the devices in the reverse order to which they were switched on.

1. Make sure that all volume controls on the PM-1 and connected devices are set to 0.
2. Turn on the all connected device(s).

3. Turn on the PM-1.
4. If a mixer is connected to the LINE OUT jack on the PM-1, turn on the mixer.
5. Adjust the volume levels for the devices.

\* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally. For protect from sudden big sound, always make sure to have the volume level turned down before switching on power. Even with the volume all the way down, you may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.

## Connection Example with Volume Settings

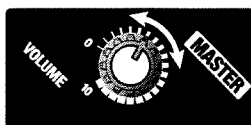
Here is an example showing how the PM-1 is connected as a stage monitor, making full use of the PM-1's mixer and monitor functions.

A mic is input to CH1, which accepts mic level input. Connect an SPD-20 and drum sound module or other sound-generating device to the CH2 and CH3 inputs. Input to CH4 is the talkback from a mixer or other input, disabling the output to LINE OUT.

Connecting as shown above results in a system that lets you perform using multiple sound sources simultaneously, while also allowing the talkback from the PA to be heard only through the PM-1.

In order to get optimum sound from the PM-1 when performing, set the volume as described below.

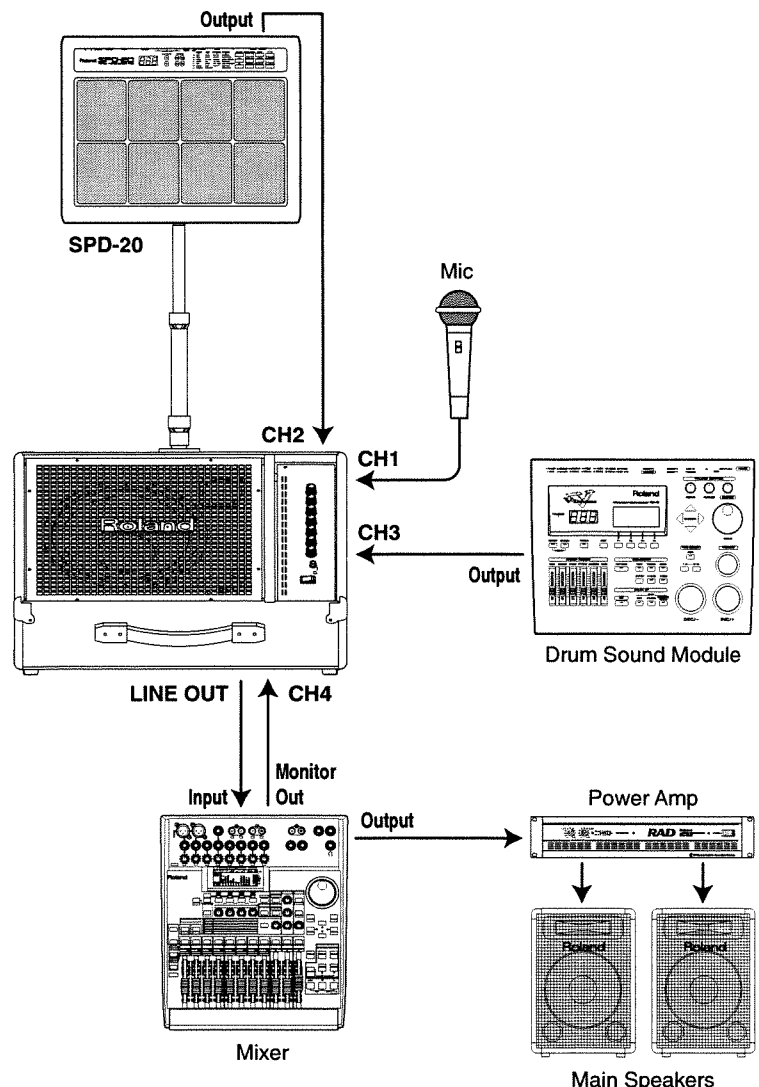
1. Adjust the MASTER VOLUME knob until the sound in each of the channels is clearly audible, thereby allowing you to adjust the volume balance.



2. Adjust the individual channel volume knobs until you obtain the proper volume balance throughout the channels.
3. Use the EQUALIZER to adjust the tone to your liking.

\* If the sound at this point is distorted, lower the individual channel volume knobs and/or the volume knobs for devices connected to the input jacks.

4. Adjust the MASTER VOLUME knob until the volume is at the right level.



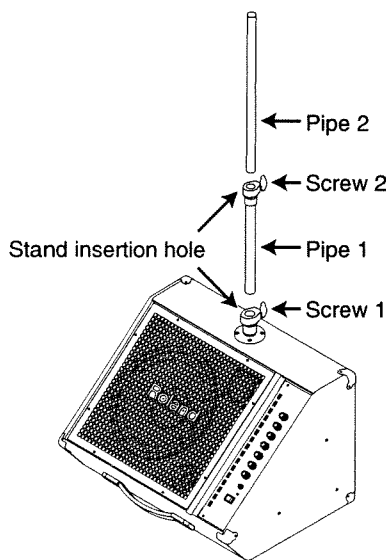
# Proper use of the internal stand

## ⚠ WARNING

- To avoid the risk of the unit overturning, never use the internal stand for attaching anything other than the SPD-20 or the HPD-15.
- When attaching the SPD-20 or the HPD-15 to the internal stand, you must use the APC-33 (an all purpose clamp set: sold separately).

## Attaching the Stand and Adjusting the Stand Height

When shipped, the stand is detached from the main unit. To prepare the stand for use, follow the procedure below to attach the stand to the main unit.



1. Loosen attachment screw 1.
2. Insert stand pipe 1 into the PM-1's stand insertion hole, then tighten attachment screw 1.
3. Loosen attachment screw 2.
4. Insert stand pipe 2 into the insertion hole in stand pipe 1, then tighten attachment screw 2.

This completes setup of the stand.

Adjust the height of the internal stand in the following way.

\* Remove the SPD-20 or the HPD-15 from the stand before adjusting if it is already attached.

1. Loosen screw 1, and adjust the height of pipe 1.
2. After deciding the height of pipe 1, fasten screw 1.
3. While holding pipe 2 with your hand, loosen screw 2 and adjust the height of pipe 2.
4. After deciding the height of pipe 2, fasten screw 2.
5. After deciding the total height of the internal stand, attach the SPD-20 or the HPD-15 with the APC-33 already attached.

## NOTE

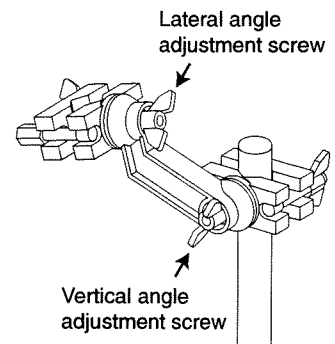
To prevent the SPD-20 or the HPD-15 from falling while in performance, make sure screw 1 and screw 2 are fastened tightly.

With the APC-33, adjust the angle at which the SPD-20 or HPD-15 is attached.

Loosen each screw and adjust the angle. When you have determined the proper angles, tighten the screws.

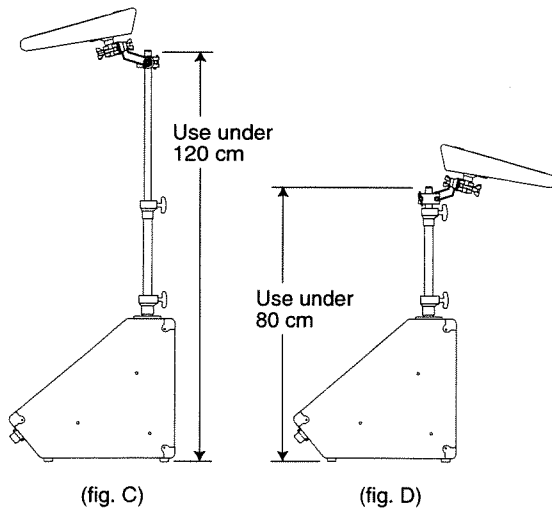
Before tightening the screws, make sure that the hardware portions that get tightened firmly grip the arm section, and are prevented from slipping.

If the ridges and valleys are not properly meshed, the angle may change during the performance, possibly resulting in injury or damage to your equipment.



**⚠ WARNING**

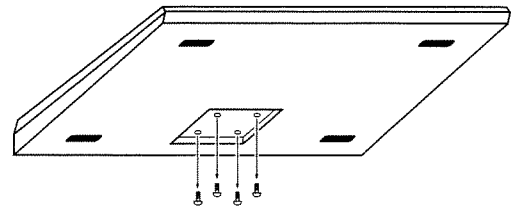
- If the SPD-20 or the HPD-15 is installed facing the front side (fig. C), the height of the internal stand can be as high as 120cm (maximum).
- If the SPD-20 or the HPD-15 is installed other than the front side (fig. D), the height of the internal stand must be under 80cm.
- When the PM-1 is moved or stored, please set the internal stand shortest for safety purpose.
- Use without proper installation may result in instability causing possible severe injury and/or property damage.

**When Attaching the SPD-20 or HPD-15 to the Stand**

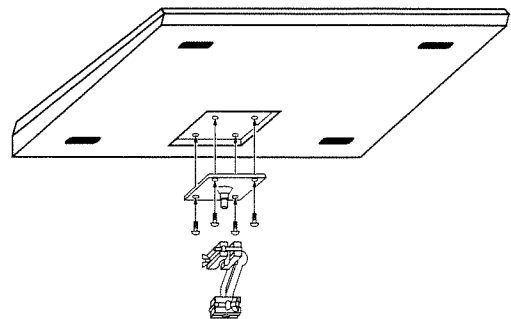
When attaching the SPD-20 or HPD-15 to the stand, use the APC-33 to secure these pads to the stand.

**Attaching APC-33 to SPD-20**

1. Using a 4 mm wrench, remove the four screws from the bottom of the SPD-20.



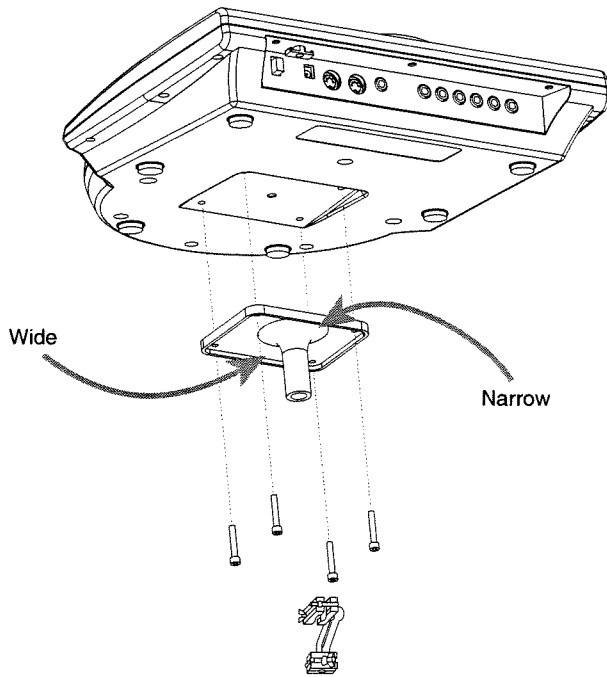
2. Use the four screws you removed in step 1 to attach the stand holder to the bottom of the SPD-20.

**NOTE**

The screws included with the APC-33 cannot be used.

## Attaching APC-33 to HPD-15

When attaching the APC-33 to the HPD-15, make sure to use 35mm screw supplied with the APC-33. Using other screws may damage the unit.

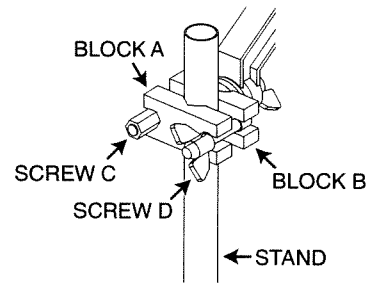


## Attaching the APC-33 to the internal stand of PM-1

Attach the APC-33 to the internal stand in the following way.

1. Clamp the bar of the stand with BLOCK A and BLOCK B.
2. Fasten SCREW C slightly loose. The bar should be clamped at the V-shape of BLOCK A and BLOCK B.
3. Fasten SCREW D tightly. Adjust SCREW C and SCREW D so that BLOCK A and BLOCK B are in parallel.
4. After attaching to the stand, slightly shake the APC-20 or HPD-15 to make sure it doesn't loosen.

To prevent the unit from falling during performance, make sure the bar of the stand is clamped at the V-shape of BLOCK A and BLOCK B, and fasten SCREW C and SCREW D tightly.



Make sure the point on the stand where the APC-33 is attached is sufficiently clear of the end of the stand.

# Specifications

## PM-1: PERSONAL MONITOR AMPLIFIER

### Rated Power Output

60 W

### Nominal Input Level (@1 kHz)

INPUT

Channel 1 (MIC/LINE) -50 dBu to -20 dBu

Channel 2,3 (LINE) -20 dBu

Channel 4 (MONITOR) -20 dBu

### Nominal Output Level (@1 kHz)

LINE OUT +4 dBu

\*  $0 \text{ dBu} = 0.775 \text{ Vrms}$

### Speakers

30 cm (12 inches) x1

Tweeter x1

### Controls

Channel 1 (MIC/LINE) Volume Knob

Channel 2 (LINE) Volume Knob

Channel 3 (LINE) Volume Knob

Channel 4 (MONITOR) Volume Knob

Equalizer

BASS Knob

TREBLE Knob

MASTER VOLUME Knob

POWER Switch

### Indicator

POWER

### Connectors

Channel 1 Input Jack (XLR Type Balanced, 1/4" Phone Type)

Channel 2 Input Jack (1/4" Phone Type)

Channel 3 Input Jack (1/4" Phone Type)

Channel 4 Input Jack (1/4" Phone Type)

LINE OUT Jack (1/4" Phone Type)

PHONES Jack (Stereo 1/4" Phone Type, Mono signal output)

### Power Supply

AC 117 V, AC 230 V, AC 240 V

### Power Consumption

52 W

### Dimensions

630 (W) x 490 (D) x 565 (H) mm

24-13/16 (W) x 19-5/16 (D) x 22-1/4 (H) inches

(case of internal stand set minimum)

630 (W) x 490 (D) x 1200 (H) mm

24-13/16 (W) x 19-5/16 (D) x 47-1/4 (H) inches

(case of internal stand set maximum)

### Weight

22 kg

48 lbs 9 oz

### Accessory

Owner's Manual

### Option

All Purpose Clamp Set: APC-33

\* When performing on digital percussion attached to the PM-1's integrated stand, be sure to use only the APC-33 all purpose clamp set to attach the device to the stand.

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

Memo...

Memo...



This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For EU Countries

 Roland®

17055320

UPC 17055320



18981

PM-1