

BOSS

RPH-10

PHASER

INSTRUCTIONS

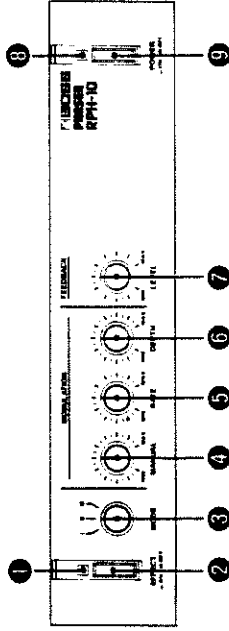
FEATURE

The BOSS Phaser RPH-10 features 12 stage phase-shift circuits, and 3 different effects of 6, 10 or 12 stages are selectable just by changing the positions of a knob. Also, stereo phasing effect can be obtained by setting up two RPH-10's using the Modulation Bus, which is useful for recording at home. Both standard phone and pin jacks are provided for wider variations of applications. The RPH-10 is one of the BOSS Micro Studio Series, and any two of the Micro Studio Series can be set up on the Standard 19' rack (EIA-1U) by using the optional rack mount adaptor RAD-10.

- Please read the instructions carefully.

PANEL DESCRIPTION

< FRONT PANEL >



1 EFFECT INDICATOR

This lights up when the effect is turned on. So you can easily see whether the unit is in the Normal or Effect mode.

2 EFFECT SWITCH

Each time this switch is pushed, the unit is alternately turned to the Effect and Normal mode.

3 MODE SELECTOR SWITCH

This selects any phase mode of 6, 10 or 12 stages.

MODE I : At this position, the 6 stage phasing effect is obtained. It is a light and natural sound.

MODE II : At this position, the 10 stage phasing effect is obtained.

MODE III: At this position, the 12 stage phasing effect is obtained. It is a deep and strong phasing sound.

4 MANUAL

Use this knob to select a center frequency of the phase-shift. As you rotate this clockwise, the frequency will become higher.

5 RATE

This knob controls the speed of the phasing effect. Rotating this clockwise quickens the effect.

6 DEPTH

This knob controls the depth of the phasing effect. Rotating this clockwise deepens the effect.

* With this knob rotated fully clockwise, the Manual Knob does not work at all.

7 FEEDBACK

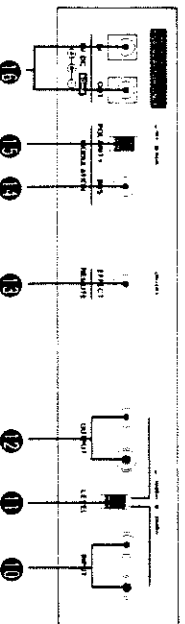
This controls the amount of the feedback signal. Rotating this clockwise makes stronger phasing effect.

8 POWER INDICATOR

This lights up when the unit is turned on.

9 POWER SWITCH

< REAR PANEL >



10 INPUT JACKS

Connect a musical instrument or audio equipment to this jack.

- The standard phone and pin jacks do not work at a time. If both are simultaneously used, the standard phone jack will have priority.

11 LEVEL SWITCH

Set this knob to an appropriate position depending on the output level of the connected device. “-20dBm” position may be selected for a usual electric musical instrument (such as an electric guitar), and “-10dBm” position for audio equipment.

12 OUTPUT JACKS

Connect a guitar amplifier or audio equipment, etc. Both pin and standard phone jacks can be simultaneously used.

13 EFFECT REMOTE JACK

Connect the footswitch FS-1 (optional) to this jack, and Effect/Normal mode can be selected without reaching out your hand.

- The above function cannot be obtained if the Effect Switch on the front panel is turned off. When two RPH-10's are setup, connect the Remote Jacks of the two units, and Effect/Normal of the two units can be controlled by either of them.

14 MODULATION BUS JACK

When you setup two RPH-10's to obtain stereo effect, use this jack to sync the modulations of the two RPH-10's. (See “MODULATION”)

15 POLARITY SWITCH

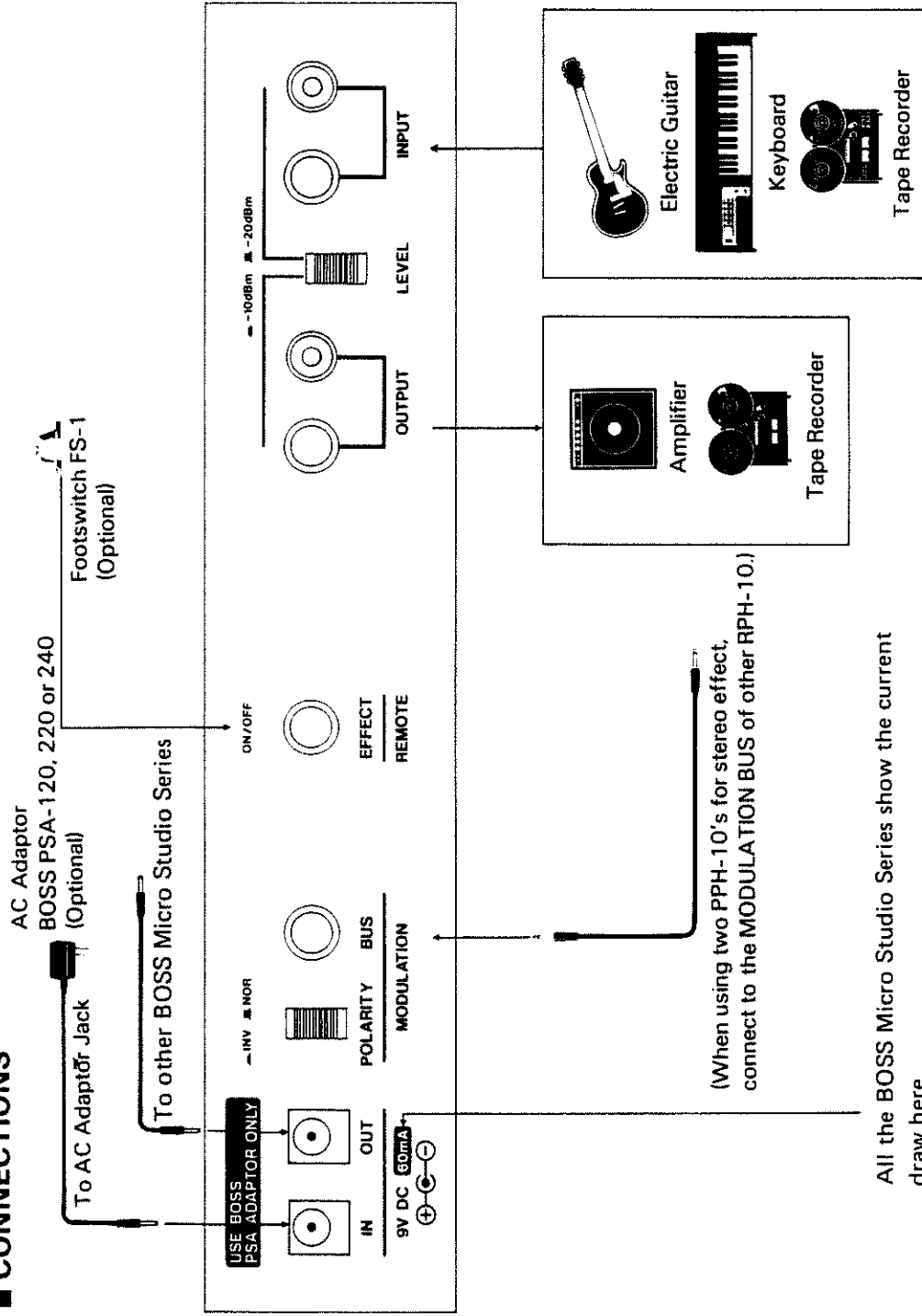
When using two RPH-10's, you may use this switch to invert the polarity of the modulation of an RPH-10.

16 AC ADAPTOR JACKS

This is to connect the AC Adaptor (BOSS PSA-120, 220 or 240). Connect the adaptor to IN. When using this unit to supply power to other BOSS Micro Studio Series, connect the supplied DC cord to OUT.

- When only one AC adaptor is used for supplying power to more than one unit, please be sure that the total amount of the current draw does not exceed 200mA. (The current draw is shown on the rear panel of each unit.)

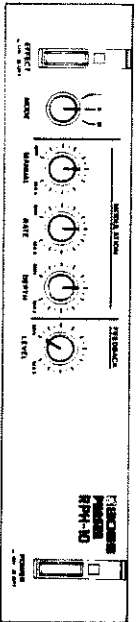
■ CONNECTIONS



All the BOSS Micro Studio Series show the current draw here.

■ OPERATION

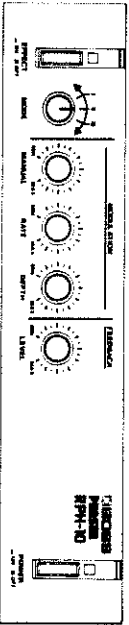
1 Set the knobs on the panel as shown below.



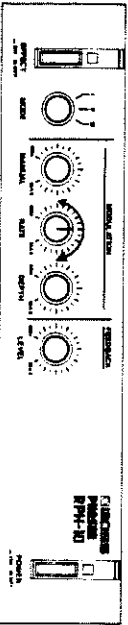
2 Set the Level Switch to the appropriate position depending on the output level of the connected unit.

* If it is the noise that you wish to avoid more than anything, set the switch to “-20dBm” position. Changing the position of the Level Switch will not affect the volume.

3 Set the Mode Selector Switch to your taste.

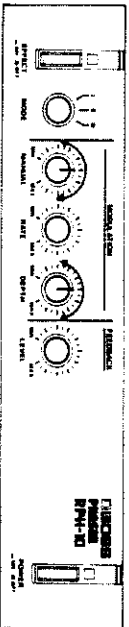


4 Rotate the Rate Knob to adjust the speed of the phase-shift effect.

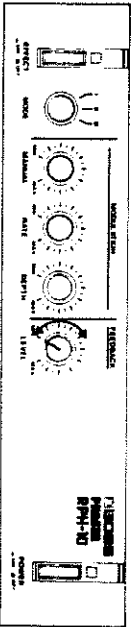


5 Rotate the Manual and the Depth Knobs to adjust the depth of the effect.

- When the Depth Knob is turned fully clockwise, the Manual Knob does not work at all.



6 To emphasize the phase-shift effect, rotate the Feedback Knob to an appropriate position.



7 By connecting a footswitch to the Effect Remote Jack, Normal/Effect can be changed without reaching out your hand.

- Make sure that the Effect Switch on the front panel is turned on.

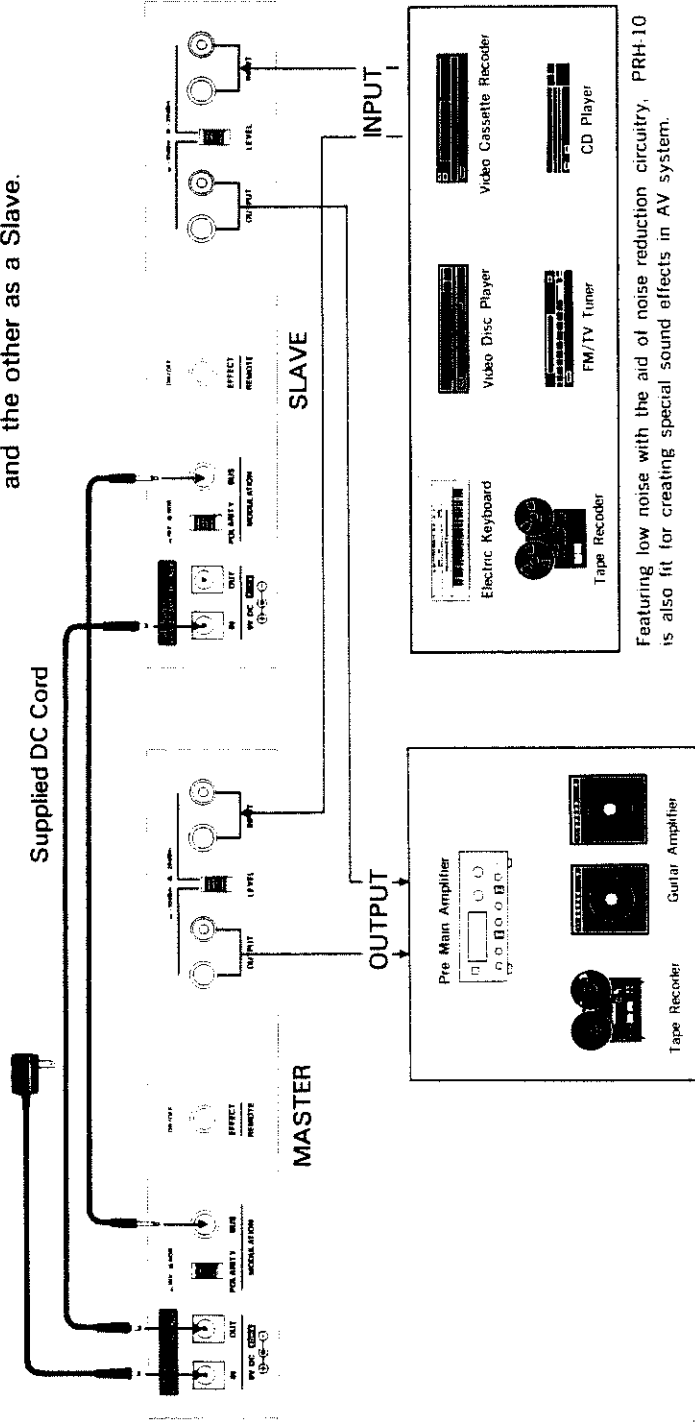
■ MODULATION BUS

By connecting two RPH-10's through their Modulation Buses, stereo phasing effect can be obtained.

1 Set up two RPH-10's as shown below.

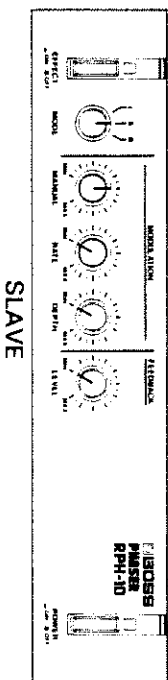
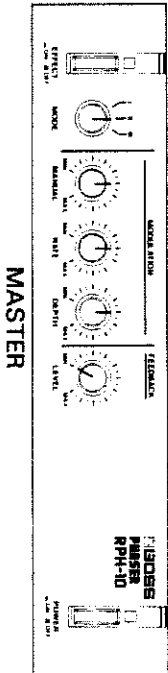
AC Adaptor BOSS PSA-120, 220 or 240

The left RPH-10 is used as a Master, and the other as a Slave.



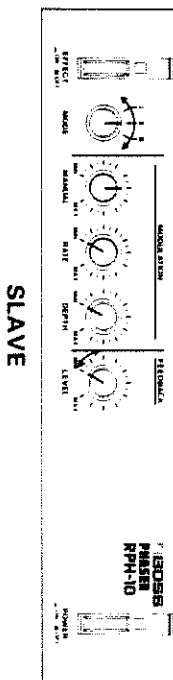
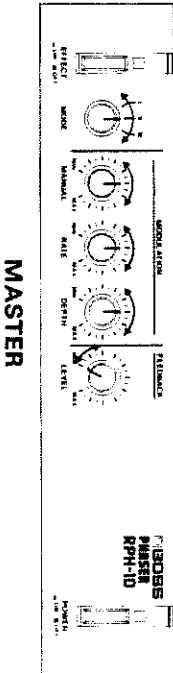
Featuring low noise with the aid of noise reduction circuitry, PRH-10 is also fit for creating special sound effects in AV system.

2 Set the knobs on the front panel as shown below.



* To avoid excessive amount of two mixed modulation, set the Manual Knob on the Slave unit to the center position, and the Depth Knob to the MIN position. With the Depth set to the MIN position, the Rate Knob has no effect.

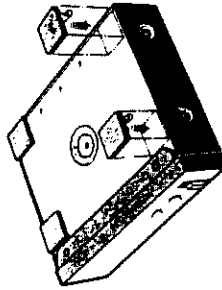
3 Adjust the Manual, Rate and Depth Knobs of the Master unit to your taste.



4 To obtain more effective stereo effect, invert the polarity of the modulation on either unit.

■ NOTES

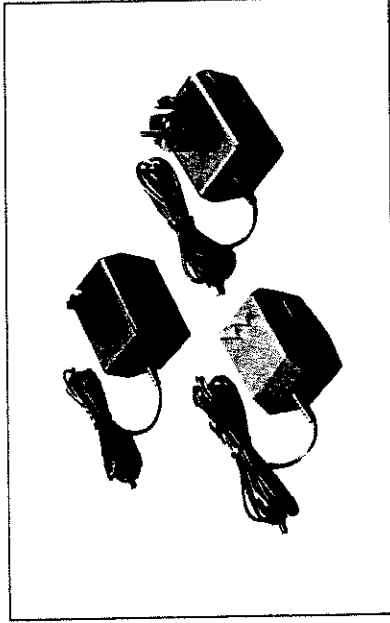
- Be sure to use the BOSS AC Adaptor PSA-120, 220 or 240 depending on the line voltage system in your country.
- When you are using only an AC adaptor for supplying power to more than one unit, please be sure that the total current draw does not exceed 200mA.
- Avoid operating this unit in excessive heat or humidity or where it may be affected by dust.
- Please never remove the cabinet from the unit.
- When you use only Micro Studio Series without optional Rack Mount Adaptor "RAD-10", please attach the rubber feet. Refer to figure.



■ AC ADAPTOR:

BOSS PSA-120, 220 or 240 (Optional)

Be sure to use the Adaptor BOSS PSA-Series. Using any other type of adaptor may cause trouble.



■ RACK MOUNTING

The RPH-10 is one of the BOSS Micro Studio Series, and any two of them can be mounted in a standard 19" rack (EIA-1U) by using the optional Rack Mount Adaptor RAD-10.

Remove the rubber feet on the bottom of the units, fix each of them on the Rack Mount Adaptor with the supplied screws, then place it on the rack.

SPECIFICATIONS

- Input Level/Input Impedance:**
— 20dBm/1M Ω , — 10dBm/47k Ω
- Output Level/Output Impedance:**
— 20dBm/2k Ω , — 10dBm/2k Ω
- Gain:**
UNITY (0dB)
- Output Load Impedance:**
Over 10k Ω
- Frequency Response:**
At Effect Off: 10Hz to 50kHz (± 3 dB)
At Effect On: — 100dBm
- Residual Noise:**
At Effect On: — 90dBm
(with the IHF-A, Level Switch set to — 20dBm)
- Phase Shift:**
MODE I : 1080°
MODE II : 1800°
MODE III : 2160°
- LFO Rate:**
100ms to 14s
- Controls:**
Manual Knob
Rate Knob
Depth Knob
Feedback Knob
- Switches:**
Power
Effect (Normal/Effect)
Level (— 20dBm/— 10dBm)
Mode (I/II/III)
Polarity (Normal/Invert)
Input (Standard, Pin)
Output (Standard, Pin)
Effect Remote (On/Off)
Modulation Bus
AC Adaptor (In, Out)
- Jacks:**

- Indicators:**
Power Indicator
Effect Indicator
- Power:**
9V DC (BOSS PSA-120, 220 or 240)
- Current Draw:**
60mA
- Dimensions:**
218(W) x 44(H) x 169(D) mm
(8.9/1.6" x 1.3/4" x 6.11/16")
- Weight:**
900g/2 lb
- Accessory:**
DC Cord (0.5m)
- OPTIONS**
- AC Adaptor:** BOSS PSA-120, 220 or 240
- Rack Mount Adaptor:** RAD-10
- Footswitch:** FS-1
- Micro System Rack:** BMR-5

Specifications are subject to change without notice.

BOSS Micro Studio Series	
RCL-10	Compressor/Limiter
RBF-10	Flanger
RGE-10	Graphic Equalizer
RPH-10	Phaser
RDD-10	Digital Delay

 Roland®

10432

UPC 10432



(899)

RPH-10

 BOSS

Products of Roland

Printed in Japan '85 Sep. C-3