BOSS

RPQ-10

PREAMP/ PARAMETRIC EQ

INSTRUCTIONS

- Please read the instructions carefully.

FEATURES

The BOSS RPQ-10 is a 2 band parametric equalizer with the built-in preamplifier. Each band has separate Frequency, Q and Level controls allowing extremely active sound creation. Also, it features the Total Level Control that serves to minimize the volume difference between the normal and the effect sounds. Moreover, it provides three input jacks: two standard phone jacks (MIC, INST) and a pin jack (LINE), and two output jacks a standard phone and a pin, which enables various setups such as with audio and visual equipment and recording equipment as well as an electronic musical instrument. The RPQ-10 is one of the BOSS Micro Studio Series, and by using a rack mount adaptor RAD-10, any two of the Series can be mounted on a standard 19" rack (EIA-1U).

■OUTLINE

The RPQ-10 is a 2 band parametric equalizer, and each band features individual controls; Frequency Controls, Q Controls and Level Controls. These allow you to adjust the frequency response of the input signal in extreme subtleness.

※The Low and High bands have different frequency ranges but otherwise work exactly the same.

Frequency Controls

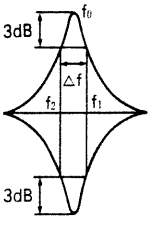
These select the frequency to be boosted or cut in the range shown below. (Refer to Fig. 1)

Low Band: 40Hz to 1kHz (4.6 Octave)
High Band: 600Hz to 15kHz (4.6 Octave)

Q Controls

These set the curve for boosting or cutting. Increasing the Q level will make sharper slope. (Refer to Fig. 2)

Q (=Intensity of Peak and Dip) can be figured out as shown right.



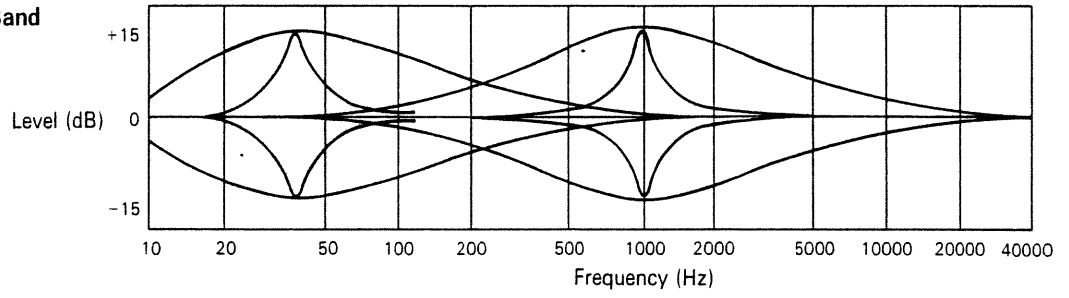
$$Q = \frac{f_0 \text{ (Center Frequency)}}{\Delta f\ (=f_1 - f_2)}$$

Level Controls

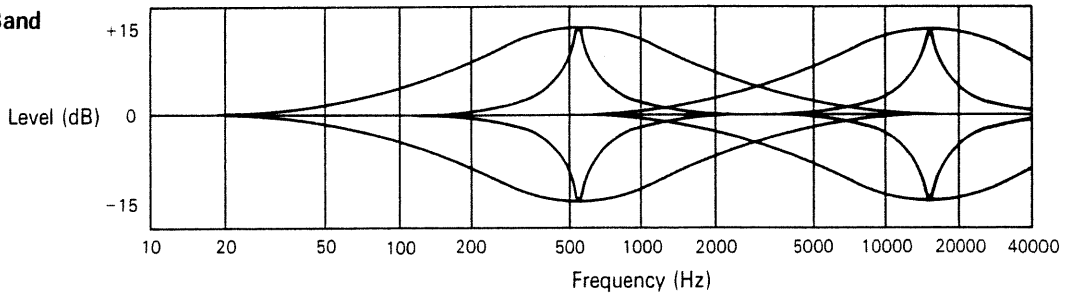
These set the amount of the boosting or cutting within the range from −15dB to +15dB. (Refer to Fig. 3)

〈Fig. 1〉Frequency Response Changed by Frequency Control

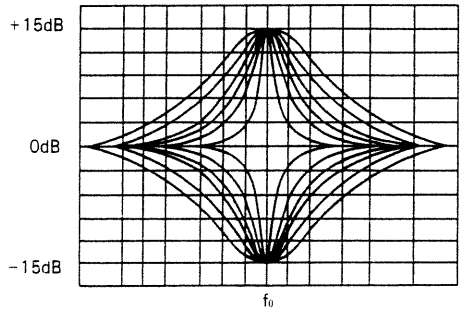
● Low Band



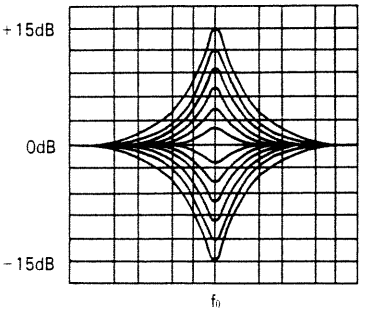
● High Band



〈Fig. 2〉Frequency Response Changed by Q Control

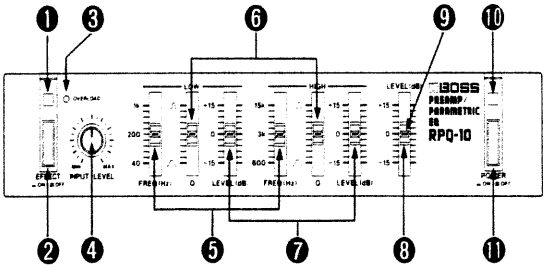


〈Fig. 3〉Frequency Response Changed by Level Control



■PANEL DESCRIPTIONS

〈FRONT PANEL〉



❶ EFFECT INDICATOR

This lights up when the unit is in the equalizer mode. So you can easily see whether it is in the normal or equalizer mode.

❷ EFFECT SWITCH

Each time you push this switch, the unit turns to the equalizer or normal mode.

❸ OVERLOAD INDICATOR

When the level of the input signal is too high, this indicator lights up.

❹ INPUT LEVEL KNOB

This adjusts the level of the input signal. As you actually play the instrument, rotate this knob. Usually, this should be set to the highest possible level at which the Overload Indicator ❸ does not light up.

❺ FREQUENCY CONTROLS

These select the frequency to be boosted or cut within the range as shown below.

Low Band: 40Hz to 1kHz

High Band: 600Hz to 15kHz

❻ Q CONTROLS

These set the curve for boosting or cutting. Raising this slider will make sharper slope.

❼ LEVEL CONTROLS

These set the amount of the boosting or cutting within the range from −15dB to +15dB.

❽ TOTAL LEVEL CONTROL

This can set the volume of the effect sound in the range of ±15dB, therefore serves to minimize the volume difference between the normal and the effect sounds.

❾ OVERLOAD INDICATOR

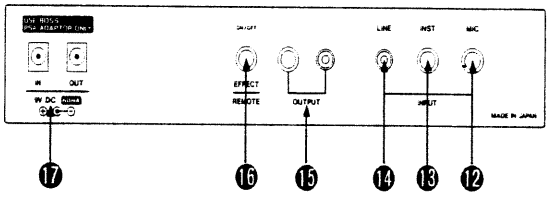
This indicator is usually lighted, but when the level of the output signal is too high in the Equalizer mode, this flashes. If this flashes, lower the Input Level Knob ❹ or the Total Level Control ❽.

❿ POWER INDICATOR

This indicator lights up when the unit is switched on.

⓫ POWER SWITCH

‹REAR PANEL›



⑫ INPUT JACK (MIC)

This is where a microphone is connected.

⑬ INPUT JACK (INST)

This is where an electric musical instrument such as an electric guitar is connected.

⑭ INPUT JACK (LINE)

This is where a tape recorder or audio equipment is connected.

※These three input jacks ⑫, ⑬ and ⑭ cannot be used at once. If you do, the sounds of all the connected devices are mixed, but noise of each device will be emphasized. Please disconnect unused devices.

⑮ OUTPUT JACKS

Connect this to a guitar amplifier, tape recorder etc. Both standard phone and pin jacks can be used simultaneously.

⑯ EFFECT REMOTE JACK

By connecting an optional footswitch FS-1 to this jack, you can turn the unit to the equlizer mode (Effect On) or the normal mode (Effect Off) without reaching out your hand.

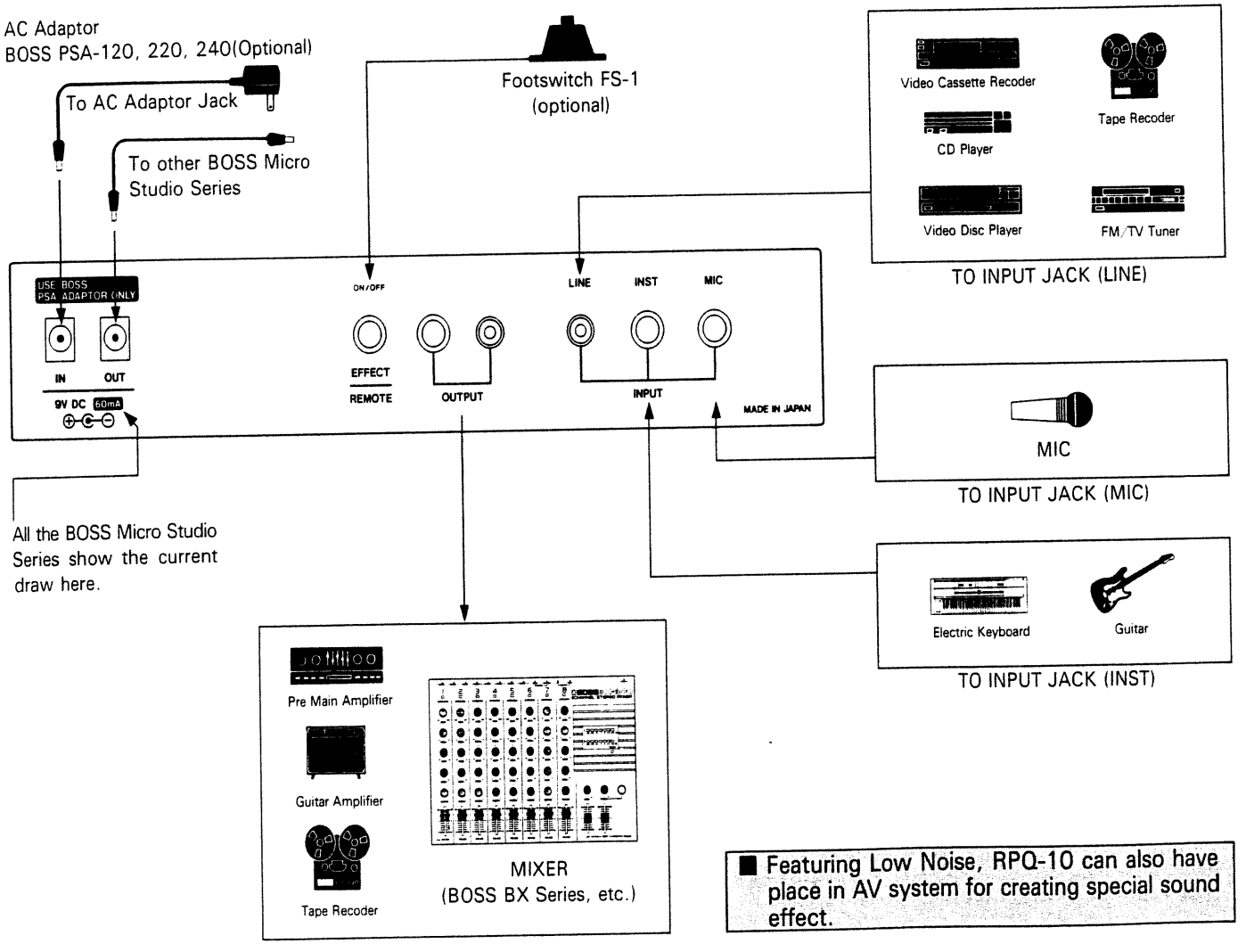
※The above function cannot be obtained if the Effect Switch on the front panel is turned off. When two RPQ-10's are setup, connect the Remote Jacks of the two units, and Normal/Effect of the two units can be controlled by either of them.

⑰ AC ADAPTOR JACKS

Usually, connect the AC adaptor (BOSS PSA Series: optional) to "IN". However, for supplying power to other BOSS Micro Studio Series, connect the supplied DC cord to "OUT".

※When 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. (The current draw of each unit is shown on its rear panel.)

■CONNECTIONS



■ Featuring Low Noise, RPQ-10 can also have place in AV system for creating special sound effect.

■OPERATION

1. Turn the Effect Switch ❷ off, set the Level Controls ❼ and the Total Level Control ❽ to 0dB.

2. Switch the RPQ-10 on. (Make sure that the Power Indicator ❿ lights up.)

3. By using the Input Level Knob ❹, set the appropriate level which is just before the Overload Indicator ❸ lights up.

4. Turn the Effect Switch ❷ on. Now the RPQ-10 is in the Equalizer mode.

※ Make sure that the indicator of the Total Level Control is not flashing. If it flashes, lower the Input Level Knob ❹ or the Total Level Control ❽.

※ When the Level Controls ❼ are set to the 0dB position, moving the Frequency and the Q Controls will have no effect on the sound.

5. By using the Total Level Control ❽, reduce the volume difference between the effect and normal sounds.

6. Connect a footswitch to the Effect Remote Jack. Now, you can turn the unit to the equalizer or normal mode just by depressing the pedal.

※ If the Effect Switch on the front panel has been turned off, above remote control function cannot be obtained.

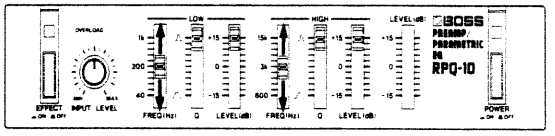
7. Refer to SETTING EXAMPLES, and see how the RPQ-10 works.

NOTES

The RPQ-10 is a low-noise equalizer itself, but note that raising the Level Controls will emphasize the noise generated by the connected device.

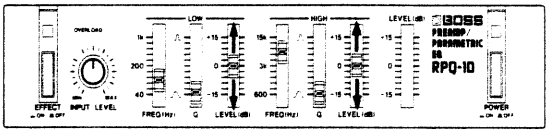
■BASIC SETTING EXAMPLES

1. Unusual Sound



When a certain frequency is boosted by raising the Q Controls and the Level Controls, a kind of unusual sound can be obtained. This can be used as an efficient effect on the musical instruments.

2. As a Tone Control

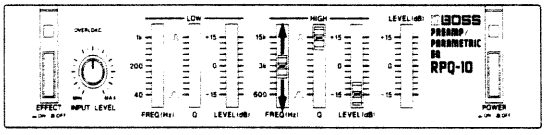


When the Q Controls are lowered, the RPQ-10 works as a usual tone control.

3. As a Notch Filter

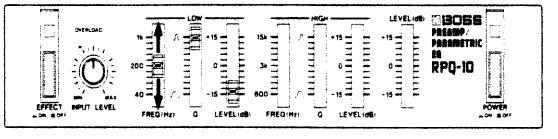
A certain frequency can be cut by raising the Q Controls and lower the Level Controls to −15dB.

How to stop howling of the microphone



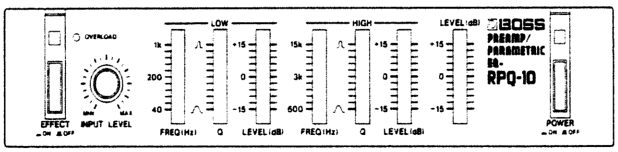
Set the High Band as shown in the picture, then set the Frequency Control to the level that is most likely to cause howling.

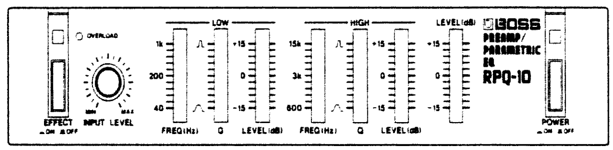
How to stop resonanse of the middle and low frequency range

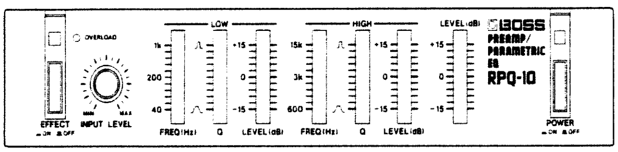


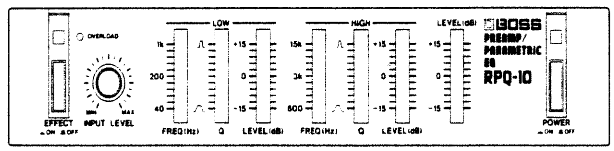
Set the Low Band as shown in the picture, then set the Frequency Control to the level that makes resonanse.

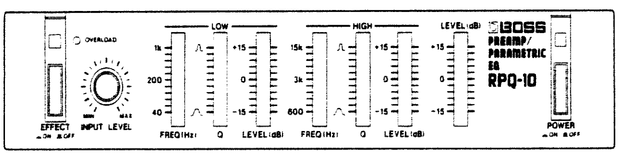
SETTING MEMO

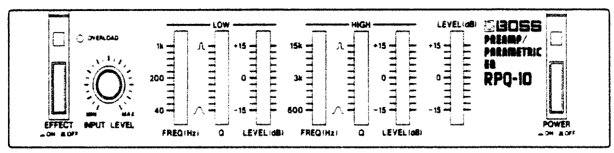


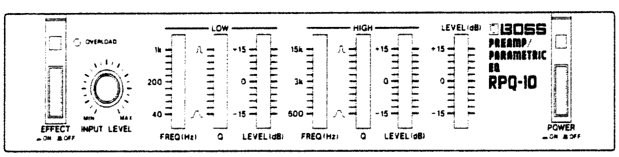


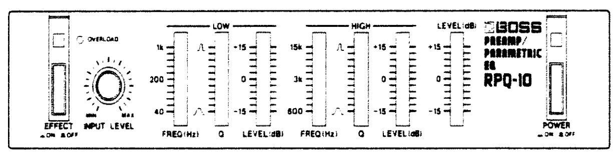


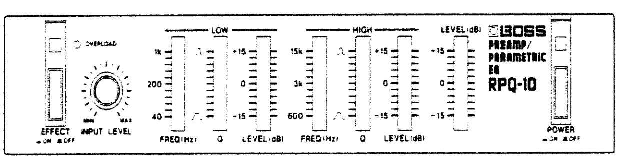


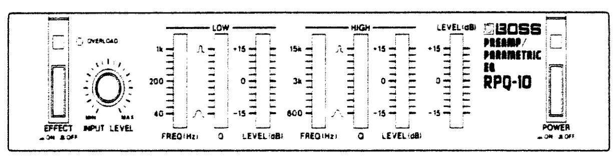






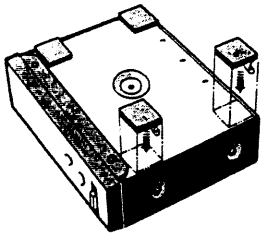






■NOTES

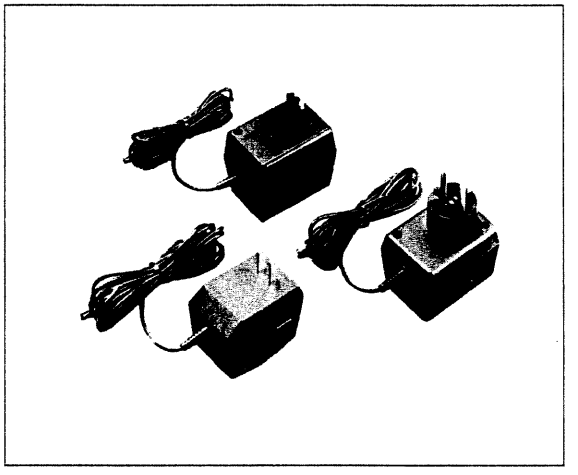
- Be sure to use the BOSS AC Adaptor PSA-120, 220 or 240 depending on the line voltage system in your country.
- When you are using only one AC adaptor for supplying power to more than one unit, please be sure that the total current draw does not exceed 200mA.
- Avoid operating this unit in excessive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



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

Remove the rubber feet from the bottom of the units, fix the units on the Rack Mount Adaptor with the supplied screws, then place the whole set on the rack.

■SPECIFICATIONS

Input Level (Rated)/Input Impedance:
MIC: −50dBm/1kΩ
INST: −20dBm/1MΩ
LINE: −10dBm/50kΩ
Output Level (Rated)/Output Impedance:
Standard Phone: −20dBm/2kΩ
Pin: −10dBm/2kΩ
Output Load Impedance: More than 10kΩ
Frequency Response (Line Input):
10Hz to 40kHz ($\pm^{0}_{3}$dB at flat)
Residual Noise: −95dBm (IHF-A at flat)
(No Input Connection, Standard Jack Output)
Center Frequency:
Low Band 40Hz to 1kHz (4.6 oct)
High Band 600Hz to 15kHz (4.6 oct)
Q: 0.7 to 7
Variable Level Range: ±15dB
Controls: Input Level 1
Frequency
(Slider Volume with LED) 2
Q (Slider Volume with LED) 2
Level (Center Click,
Slider Volume with LED) 3
Switches: Power
Effect (Normal/Equalizer)
Jacks: Input Jacks (Standard Phone: MIC,
INST/Pin: LINE)
Output Jacks(Standard Phone, Pin)
Effect Remote Jack (On/Off)
AC Adaptor Jack (IN, OUT)

Indicators: Power
Effect
Overload (Input)
Overload
(Total Level, LED flashing system)
Power: 9V DC (BOSS PSA-120, 220 or 240)
Current Draw: 60mA
Dimensions: 218(W)×167(D)×44(H)mm
8-9/16" ×6-9/16" × 1-3/4"
Weight: 900g/2 lb
Accessories: 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
RPQ-10	Preamplifier/ Parametric Equalizer
RPH-10	Phaser
RDD-10	Digital Delay

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RPQ-10

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