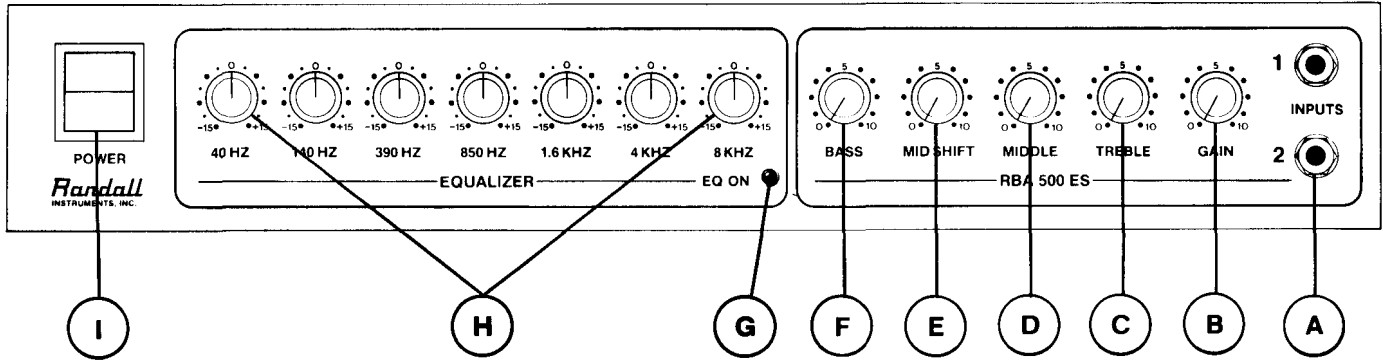


Randall

RBA 500 ES OWNER'S MANUAL



FRONT PANEL



A Input Jack 1

This input will be used with most musical instruments. Use good quality shielded guitar cords with 1/4" phone plugs. This input can accept up to 7.5 volts RMS.

Input Jack 2

This input will be used with very hi output instruments, it will accept up to 15 volts RMS.

B Gain

The Gain Control is active and very linear in its output level. A setting of 2 to 4 is a good start setting.

C **F** Treble Control and Bass Control

The Treble Control allows the high frequency response to be increased or decreased as desired. The Bass Control allows the low frequency response to be increased or decreased as desired. A setting of 5 is a good starting point for both the Treble Control and the Bass Control. Rotating the control towards 10 will increase the frequency response and rotating the control towards 0 will decrease the frequency response.

D **E** Middle, Middle Freq Shift

The Middle Control boosts and cuts the middle frequencies between 300 Hz and 1 kHz depending on where the Middle Freq Shift Control is set. A setting of 0 on the Middle Control is maximum cut. A setting of 5 on the Middle Control is flat and the Middle Freq Shift Control has no effect at this setting.

A setting of 10 on the Middle Control is maximum boost. See Middle Control graph for visual representation.

The Middle Freq Shift Control selects the frequency at which the Middle Control will boost or cut. A setting of 2 is 300 Hz, a setting of 5 is 500 Hz, a setting of 8 is 800 Hz.

G Led-Indicator Light

This light indicates the equalizer in use.

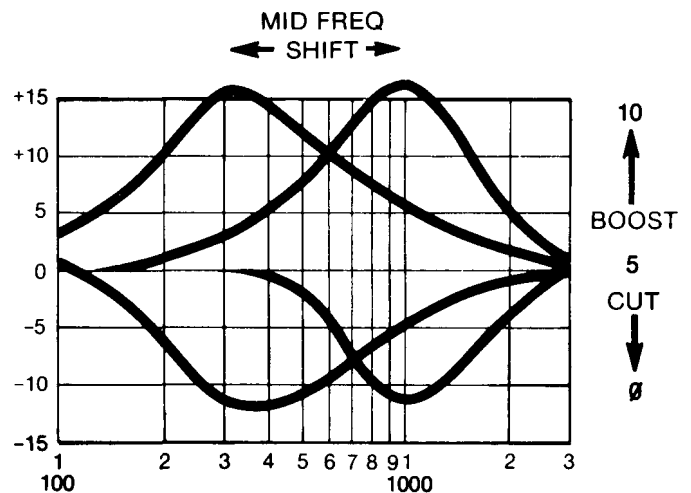
H Equalizer

The equalizer is a peaking type with the frequency listed below each knob. Be careful when using these, or any, equalizer. Extreme boost or cut can alter the tone very drastically. Each control is capable of boosting or cutting the frequency in its range by up to 15 dB. The frequency range of these equalizers is from 40 Hz to 8 kHz.

I

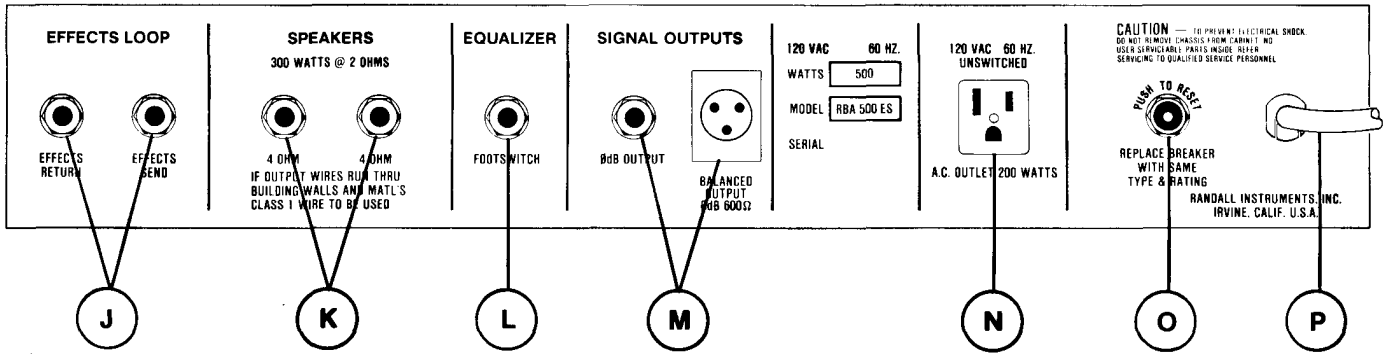
The power switch provides a means of turning the amplifier on.

MID FREQ CONTROLS



WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

BACK PANEL



J Effects Loop

The jack labeled "Effects Send" should be connected to the input of the effects unit. The jack labeled "Effects Return" should be connected to the output of the effects unit. The effects loop is pre power amplifier and post pre amplifier.

K Speaker Jacks

Used to connect external speaker cabinets of not less than 4 ohms each. Less than 2 ohms not recommended.

L Equalizer Footswitch

A footswitch may be plugged in this jack to switch the equalizer in and out of the circuit. This enables the player to have two different sounds that are footswitchable.

M Signal Outputs

The signal output jacks provide an output signal for driving additional amplifiers, or for driving a tape recorder for recording directly from the amplifier and eliminating the need to mike the speakers. These are not a speaker output and should never be used as one.

Any amplifier or tape recorder can be connected to the pre-amp output jack, as long as it will accept a 500 mV RMS signal and has an input impedance of at least 600 ohms. The XLR connector is transformer balanced.

N AC Convenience Outlet

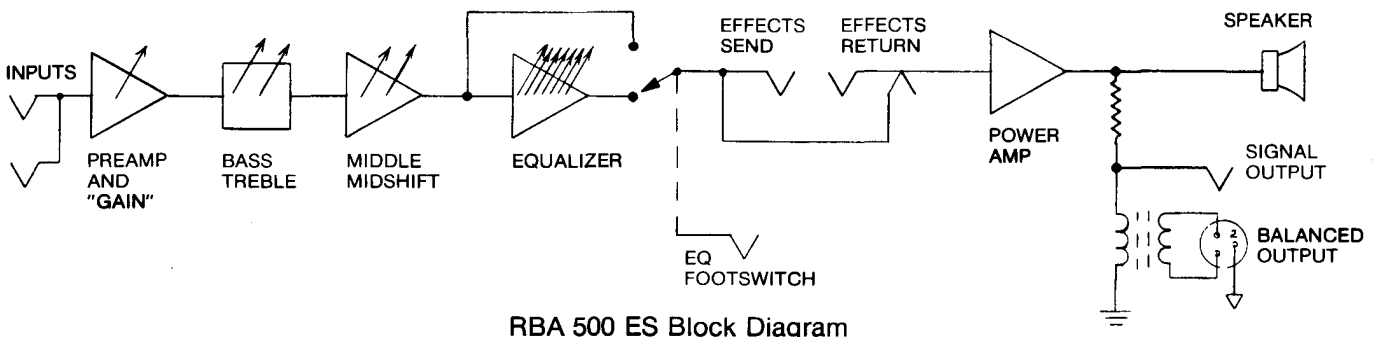
Can be used as an external power source to supply any piece of equipment requiring 115-125 VAC at 50/60 Hz, 200 watts. This outlet is not switched from the on/off switch.

O Circuit Breaker

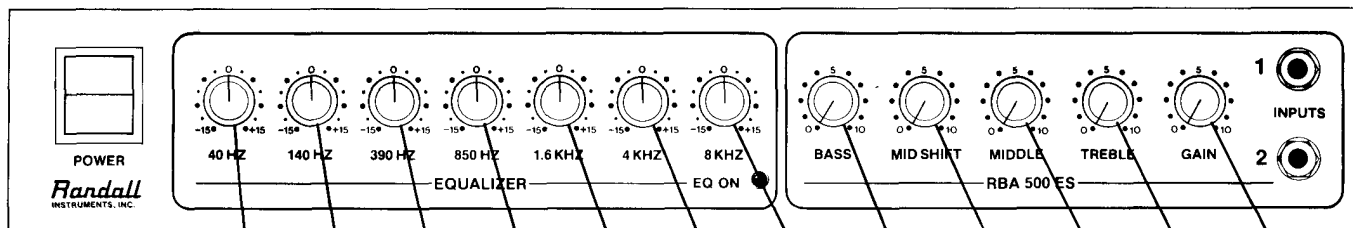
The circuit breaker is actually a mechanical fuse and protects the amplifier from extreme overload conditions. Pushing in on the red circuit breaker button will set it, and it need not be reset unless caused to trip by an extreme overload. If the circuit breaker does trip and cannot be reset, it indicates trouble that should be investigated by a qualified technician.

P AC Line Cord

To be connected to any external power source capable of supplying 115-125 VAC at 50/60 Hz, 500 watts.



RBA 500 ES Block Diagram



Control (Hz)	40	140	390	850	1.6K	4K	8K	Bass	Mid Shift	Middle	Treb	Gain
Jazz												
String Bass	-12	-12	0	0	0	-12	-12	3	5	4	2	2-5
Funk Slap	+15	+6	0	-15	+3	+15	+15	6	3	1	10	1-4
Rock	-6	+12	-5	-5	0	0	0	10	3	0	6	1-4
Pop	0	0	0	-6	-6	0	0	6	5	1	7	1-4
C&W	0	0	+8	-6	-6	-3	0	2	0	0	5	2-5
Lead Bass	0	+2	-12	0	+12	+12	+12	3	9	0	5	2-5

NOTE: These settings may vary with brand of bass guitar and type and size of speakers used.

SPECIFICATIONS

POWER OUTPUT	2 ohms 312 watts @ 2% THD 1 kHz 2 ohms 330 watts @ 5% THD 1 kHz 4 ohms 193 watts @ 2% THD 1 kHz 4 ohms 212 watts @ 5% THD 1 kHz
MINIMUM INPUT SIGNAL FOR RATED OUTPUT	All controls @ 5, Equalizer @ 0 60 mV input 1 kHz All controls @ 5, Gain @ 10, Equalizer @ 0 7 mV input 1 kHz
TONE CONTROLS	Bass Swing @ 40-Hz 14 dB Middle Swing, see Graphics Middle Shift, 3 Octaves, 300 Hz to 1 kHz Treble Swing @ 5 kHz, 18 dB Treble Swing @ 10 kHz, 18 dB
NOISE	All Tone Controls @ 5 Equalizer @ 0 Gain @ 0, -72 dB, 6 mV All Tone Controls @ 5, Graphic @ 0 Gain @ 10, -50 dB, 80 mV
EFFECTS LOOP	Send 450 mV Max. return 10K ohms
SIGNAL OUTPUT	0 dB @ 600 ohms Balanced
INPUT IMPEDANCE	1 Meg ohm @ input Jack 1, 130K ohm input Jack 2
INPUT HEADROOM	7.5 volts RMS @ input Jack 1, 15 volts RMS @ input Jack 2
AC OUTLET	200 watts unswitched
POWER AMPLIFIER DAMPING FACTOR	200 @ 4 ohms
AC LINE VOLTAGE FOR RATED OUTPUT	120 VAC
WEIGHT	45 Lb.
SIZE	11" H x 29½" W x 9¾" D

Randall

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