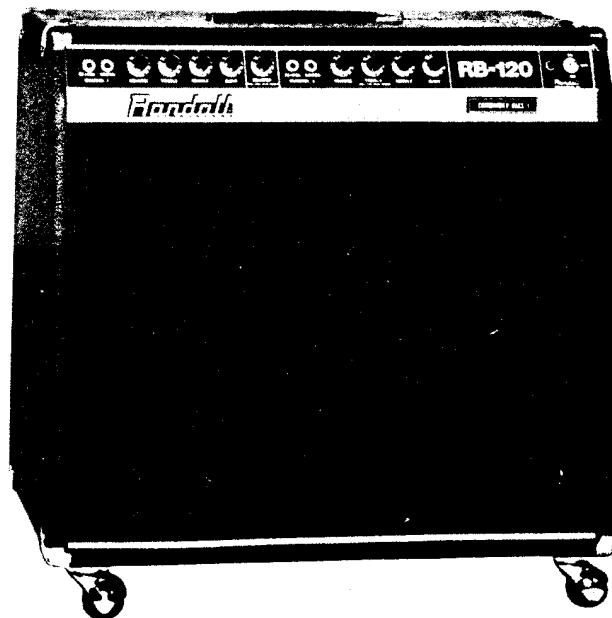
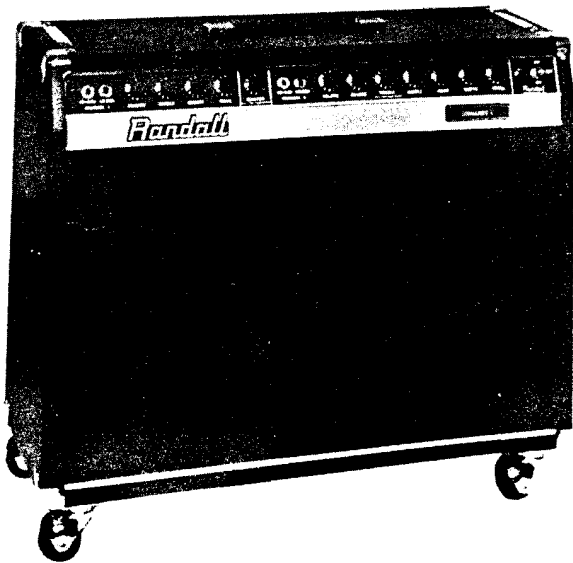
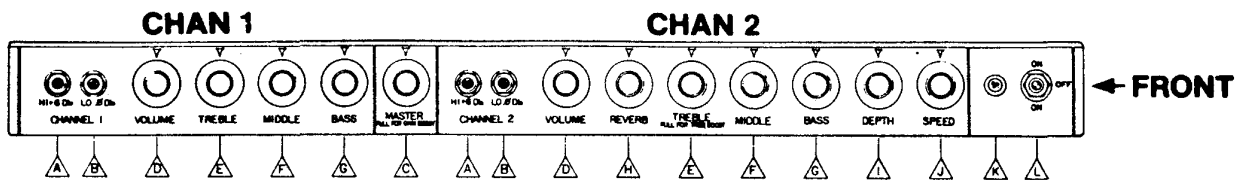


Randall

COMMANDER GUITAR AND BASS AMPLIFIERS OWNER'S MANUAL





All RB and RG Series 120 and 300 Watt Amplifiers come equipped with two separate channels. Slight differences in these two channels are mentioned below:

Channel 1 .Employs circuitry which produces full range but mellow tones for those popular jazz sounds.

Channel 2. Employs circuitry which extends the high range for clean powerful protection of even the most demanding solo passages.

A Hi Gain +6dB Input

This input will be used with most musical instruments. The gain characteristic of this input is 6dB higher than the lo gain input.

B Lo Gain 0dB Input

This input is provided to accommodate those electric instruments whose input signal is so high as to cause an overload (front end distortion) when plugged into the hi gain input.

C Master Volume and Gain Boost Control and

D Channel Volume Controls

All 120 Watt, 300 Watt Series Amplifiers have a total of 3 volume controls, one master volume control and two channel volume controls, one on each channel.

Clean Sound

To achieve a clean, nondistorted sound, the master volume control should be set at *the full on position*, or at 10 on the dial. The volume level of the amplifier is then controlled by the channel volume control on the channel in use. To eliminate unwanted background noise, one should always set the channel volume control at the full off position, "0" on the dial, *on the channel not in use*.

Distortion and Sustain

To achieve a distortion sound, the following volume control settings should be used: Select the channel to be used and set its channel volume control at the *full on position, 10 on the dial*. The volume level of the amplifier is now controlled by the master volume control. Once again, the channel volume control of the channel not in use should be set at the full off position, "0" on the dial. By setting the channel volume control at full on and adjusting the volume level of the amplifier by using the master volume control, a built-in clipping distortion and sustain circuit is activated, thus creating a rock distortion sound even at low volume levels.

Different levels of distortion can be attained by experimenting with the blend between the master volume control and the channel volume control. As an example, a setting of 2 on the master volume control and 10 on the channel volume control will produce more distortion than a setting of 4 on the master volume control and 6 on the channel volume control.

The master volume control also incorporates a pull switch; when the knob is pulled out, it increases the overall gain 15dB.

E Treble Control

F Middle Control

G Bass Control

Both channels are equipped with three tone controls, each to allow maximum control over the tonal response of the amplifier. Since no one can determine exactly what sound will be desired in all instances, it is best to experiment with the tone controls to produce the desired response. The treble control on Channel 2 incorporates a pull switch, which when pulled out increases the treble boost. *If all tone controls are set at "0", there will be no sound.*

H Reverb Control

All RG Series Amplifiers have reverb built into Channel 2. The reverb control allows total control of the amount of reverb introduced to the signal. Once again, experimentation will produce the exact amount of reverb desired. The reverb can be turned on and off by means of a footswitch. (See Rear Panel Highlights.) Be certain that the footswitch plug is *pushed all the way in.*

I Tremolo Depth Control and

J Tremolo Speed Control

All RG Series Amplifiers have Channel 2 equipped with beautiful full range tremolo. The depth and speed of the tremolo is established by the controls so marked. The tremolo may be turned on and off by means of a footswitch (see Rear Panel Highlights); however, the tremolo will work without a footswitch, if so desired.

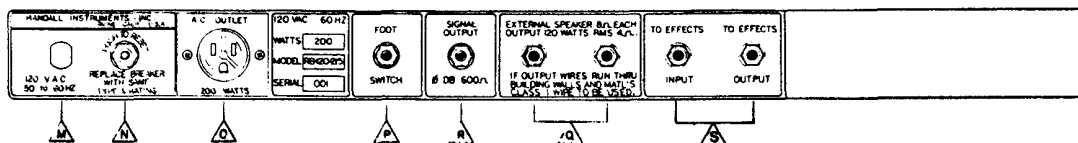
K Pilot Light

The pilot light is activated when the amplifier is turned on.

L Power and Polarity Switch

This three position switch provides a means of turning the amplifier on and also reversing the polarity of the power source so that the amplifier will not reproduce a constant hum or sizzle. Select the on position which best grounds the amplifier at each different set up.

BACK →



M AC Line Cord

To be connected to any external power source capable of supplying 115-125 VAC at 30/60 HZ, 200 watts.

N 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.

O 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.

P Footswitch Jack

This jack is provided as a connection for a combination reverb and tremolo footswitch. The reverb and tremolo functions of the amplifier can be turned on and off by means of the footswitch; however, the reverb and tremolo can be used without a footswitch. If a footswitch is desired to turn the reverb and/or tremolo on and off, simply present the reverb and/or tremolo to the required levels, then plug the footswitch plug all the way in and use the footswitch as an on/off switch for either reverb or tremolo.

Q Speaker Jack

Used to connect an external speaker cabinet of *not less than 8 ohms. Less than 8 ohms not recommended.*

R Pre-Amp Output Jack

The pre-amp output jack provides 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. This jack is 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 10,000 ohms.

S Effects Jacks

The jack labeled "to effects input" should be connected to the input of the effects unit. The jack labeled "to effects output" should be connected to the output of the effects unit. The effects buss is prepower amplifier and post pre amplifier.

SHOCKS

Shocks are caused by a difference in the electrical potential between two pieces of equipment or between a piece of equipment and some grounded object. Having the ground or polarity switch in the proper position not only eliminates noise, hum, etc., but also should eliminate electrical shocks. If shocks should continue to be felt after adjustment, it is suggested that a competent technician examine the equipment. Shocks can be dangerous. Do not use equipment if shocks persist.

CAUTION

Never allow articles to accumulate in the back of your amplifier and by all means do not operate the amplifier with the back sealed off or sitting close against the wall. Proper cooling of solid state devices is extremely important to their operation and even to their life, so be certain that air can circulate freely around your amplifier.

CARE OF EQUIPMENT

Your amplifier is designed for rugged service, but to insure long and trouble free life, treat the equipment as you would any other electronic device. Do not handle it roughly or try to make it perform beyond its design specifications. Use a damp cloth to keep the cover bright and clean. Occasionally vacuum the dirt from the grille cloth, and speakers.

You have purchased the finest quality amplifier it is possible to buy. Treat it well, and it will perform far beyond your expectations.

NOTE: Be sure to send in your warranty card.

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

SPECIFICATIONS RB-120, R-300

CONTROLS Channel 1. 4) volume, bass, middle, treble
 Channel 2. 4) volume, bass, middle, treble with pull treble boost switch

NOTE: Specifications for the RB-120 and the R-300 vary only in R.M.S. wattage.

GENERAL SPECIFICATIONS

CIRCUITRY	Latest state-of-the-art solid state circuitry utilizing heavy duty high voltage output transistors — virtually immune to short circuit, open circuit or overload conditions.
NUMBER OF CHANNELS	2 — each with 2 inputs: #1 input (high gain) +6dB, input impedance 1 meg ohm #2 input (normal) 0db, input impedance 100K ohm
MINIMUM INPUT SIGNAL FOR RATED OUTPUT	Channel 1. +6dB input jack 2.8mV Channel 2. +6dB input jack 1.8 mV Master volume pull switch pulled with channel volume and tone controls on 10.
SIGNAL TO NOISE RATIO	RB-120, RG-120 68dB below rated output R-300, RG-300 86dB below rated output
PRESENCE CONTROL	Presence control is a function of the treble control — as the treble control is rotated clockwise it automatically increases the amount of presence by means of unique circuit design.
PRE-AMP OUTPUT	A signal output jack is provided on some models for driving another amplifier, feeding a line or for direct connection when recording. Output impedance of pre-amp output is 2K ohms; approximate output 2 volts with amplifier at full output.
A.C. OUTLET	200 watts rating — mounted on rear of chassis
A.C. LINE VOLTAGE FOR RATED OUTPUT	120 V.A.C.
CHASSIS CONSTRUCTION	.090 aluminum chassis. Black anodize finish for maximum heat dissipation.
CABINET	Solid uni-cabinet construction.
COVERING MATERIAL	Heavy (23 oz.) embossed, black vinyl with high gloss finish. Always looks new.

SPECIFICATIONS RG-120, RG-300

CONTROLS Channel 1. 4) volume, bass, middle, treble
 Channel 2. 7) volume, bass, middle, treble with pull treble boost switch, reverb, tremolo speed and intensity.

NOTE: Specifications for the RG-120 and the RG-300 vary only in R.M.S. wattage.

RANDALL RMS POWER RATINGS

AMP Model	No Load	8 Ohm		4 Ohm		2 Ohm	
	RMS Volts	Volts	Watts	Volts	Watts	Volts	Watts
RG-120 & RG-120	29	24.5	75	22	121	19	180.5
R-300 & RG-300	35	31.5	120	28.5	200	26	338

☐ Ratings shown in boxes are recommended — others are shown for comparison only.

TEST PROCEDURES

A constant 120 VAC 60 Hz was maintained at the line cord through all power tests. The open "no load test" shows the ability of Randall amplifiers to function properly into varying impedances. This is important, as any speaker varies in impedance throughout the audio spectrum. The RMS wattage was determined at less than 2 percent distortion.

EQUIPMENT USED FOR ABOVE TESTS

- B&K sine-random generator type 1024
- Load resistors, Dale 8 ohm, 4 ohm, 2 ohm, 1 ohm, 1%
- AC line autotransformer with AC volt meter and AC amper meter (General Electric)
- B&K frequency response tracer type 4712
- Hewlett-Packard 400L audio volt meter
- General Radio distortion and noise meter
- Tektronix type 531A oscilloscope with type B plug-in unit
- Data Technology model 40 digital volt meter