Randall

RGT100, RGT100ES, RGT100HT

OWNERS MANUAL
**High Gain + 6 db Input:**
This input can be used with most musical instruments. The gain characteristic of this input is 6 db higher than the low gain input.

**Low Gain – 0 db Input:**
This input is provided to accommodate those electric instruments whose output signal is so high as to cause an overload when plugged into the high gain input.

**Channel Gain Controls and Master Volume Controls:**

**Pull Mid Boost**
The pull mid boost on the master control of channel 1 when pulled adds middle frequency enhancement to both channels.

**Master Pull Switch — Channel 2**
Pulling the master knob out adds clipping-diodes to the circuit and acts somewhat like a compressor to the #2 channel only. The overall volume will drop which can partially be recovered by increasing the master. This mode of operation provides "infinite" sustain and is especially effective for lowered volume operation as in studio or home practice use.

**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.

**Red and Green LED Lights:**
Indicate channel in operation (operated by foot-switch).

**Treble Control Middle Control Bass Control**
Both channels are FET to the four tone controls, each allowing maximum control of the portion of the tone spectrum for which they are designed. Since no one can determine exactly what sound will be desired in any given situation, it is best to experiment with the tone controls until the desired response is achieved.

**Pull Brite**
The pull brite switch on the treble control adds hi frequency enhancement to both channels.

**Presence Control:**
This control operates in the audio spectrum higher than the treble control and adds the very sparkling, or tingling, touch to the sound that provides that extra dimension to the response. It is effective on either channel.

**Reverb Control:**
The reverb control allows total control of the amount of reverb introduced to the signal. Experimentation will produce the exact amount of reverb desired. Reverb can be turned on and off by means of a footswitch (see rear panel highlights). Reverb is effective on both channels.

**Pilot Light**
The pilot light is activated when the amplifier is turned on.
O. On, Off Standby Switch
This three position switch provides a means of turning on the AC power to the amplifier. In the "on standby" position, after a few minutes warm up, the amplifier is ready to operate. In this position AC power is supplied to the amplifier but the amplifier will not operate until the switch is flipped to the on position.

V. Speaker Output Jacks:
Use to connect the internal speaker of the amplifier or external speakers as required. Use jack V when using a total speaker load of 4 ohms. Use jack W when using a total speaker load of 8 ohms. Never use the amplifier without a speaker attached.

P. AC Line Cord
To be connected to any external power source capable of supplying 115-125 VAC at 50/60 Hz. The draw is approximately 250 watts at amplifier's full output.

Q. Circuit Breaker:
The circuit breaker is actually a mechanical fuse and protects the amplifier from extreme overload conditions. If amplifier turns off because of overload, pushing on the red circuit breaker button will reset. If circuit breaker cannot be reset, or continues to trip, it is indication of trouble and should be investigated by a qualified technician.

R. AC Convenience Outlet:
This can be used to supply an additional piece of equipment requiring 115-125 VAC at 50/60 Hz, 200 watts. This outlet is not switched from the on-off switch.

S. Effects Jacks
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 bus is prepower amplifier and post pre amplifier.

U. Signal Output Jack:
The signal output jack provides signal for driving additional amps, tape recorder, line or for recording directly from the amplifier, eliminating the need to mic the speakers. This jack is not a speaker output and should never be used as one.

X. Reverb Footswitch Jack:
This jack provides a connection for the reverb footswitch which is used to turn the reverb on or off after the amount of reverb is preset by the reverb control on the front panel. It is not necessary to use the footswitch unless it is desired to be able to turn the reverb on and off at will.

Y. Footswitch Jack:
Plug in footswitch to switch channels. No lock is provided for the plug in order that it can disconnect easily in case the cable is accidentally tripped over or pulled too tightly.

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

TUBE CHART

PCB
ACCESS

[3] 12AX7

12AT7

7025
LOW NOISE

[4] 6L6

A metal tube shield must be used in this position.
RGT100, RGT100ES, RGT100HT BLOCK DIAGRAM

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER OUTPUT</td>
<td>100 watts @ 5%</td>
</tr>
<tr>
<td></td>
<td>115 watts @ 10%</td>
</tr>
<tr>
<td>NUMBER OF CHANNELS</td>
<td>Two, each channel is driven from common input jacks.</td>
</tr>
<tr>
<td>MINIMUM INPUT SIGNAL</td>
<td>.9 mV @ 3K Hz #2 channel</td>
</tr>
<tr>
<td>FOR RATED OUTPUT</td>
<td>12 mV @ 3K Hz #1 channel</td>
</tr>
<tr>
<td>TONE CONTROLS</td>
<td>All tone controls set at 5</td>
</tr>
<tr>
<td></td>
<td>Bass Swing @ 50 Hz, 15 dB</td>
</tr>
<tr>
<td></td>
<td>Mid Swing @ 600 Hz, 10 dB</td>
</tr>
<tr>
<td></td>
<td>Treb Swing @ 10K Hz, 16 dB</td>
</tr>
<tr>
<td></td>
<td>Presence Swing @ 10K Hz 15 dB</td>
</tr>
<tr>
<td></td>
<td>Presence Swing @ 15K Hz 18 dB</td>
</tr>
<tr>
<td>HUM &amp; NOISE</td>
<td>All Controls @ 0 --70 dB</td>
</tr>
<tr>
<td>EFFECTS LOOP</td>
<td>Send 200 mV max. return 50K ohms</td>
</tr>
<tr>
<td>SIGNAL OUTPUT</td>
<td>0 dB @ 600 ohms</td>
</tr>
<tr>
<td>INPUT IMPEDENCE</td>
<td>1 MEG, Hi +6 dB. 130K ohm Lo 0 dB.</td>
</tr>
<tr>
<td>AC OUTLET</td>
<td>200 watts unswitched.</td>
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<tr>
<td>POWER AMPLIFIER</td>
<td>2-4 @ 8 ohms</td>
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<tr>
<td>DAMPING FACTOR</td>
<td></td>
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<tr>
<td>AC LINE VOLTAGE</td>
<td></td>
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<tr>
<td>FOR RATED OUTPUT</td>
<td>120 VAC</td>
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Randall
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