

# RC-1324 V2



## 13 TO 24 PIN BUS CONVERTER OWNER'S MANUAL

---

### DESCRIPTION

The RC-1324 V2 is a unique processor designed to convert modern, 13-pin Roland guitar synthesizer signals to the 24-pin format used by vintage Roland and Roland-compatible guitar synthesizers.

Because the vintage Roland guitars featured more controls than modern systems, the RC-1324 V2's control panel recreates all the vital controls for a vintage system.

In addition, the RC-1324 V2 has its own built-in hex fuzz generator, with a separate hex fuzz output.

To replace the LFO touch pads on a vintage guitar controller, the RC-1324 V2 has a CV pedal input on the back for hands-free control over vibrato/LFO depth.

Please read this owner's manual carefully before using the RC-1324 V2.

The RC-1324 V2 incorporates circuitry and concepts designed by Mark Smart.

---

### IMPORTANT NOTES

- When connecting a guitar and synthesizer to the RC-1324 V2, be sure that power to the synthesizer(s) is switched off.
- The 13-pin connector used with the RC-1324 V2 is a locking style connector, and

therefore cables cannot be disconnected unless the locking pin is released.

- Using the 1/4" output on the guitar while at the same time using the 13-pin output may create a ground loop or signal hum.

# FRONT PANEL

---

- 1. Guitar Synth Input:** Input for 13-pin style GK-Series guitar cable.
- 2. Bright Switch:** This filter switch is for the built-in hex fuzz. With the switch in the down position, the RC-1324 V2 outputs a hex fuzz tone similar to that found on the Roland G-303/G-808 guitar. With the switch in the up position, a brighter, more aggressive tone is produced.
- 3. FUZZ Knob:** This knob adjusts the output of the hex fuzz circuit
- 4. FILTER Knob:** Generally, this knob controls the filter cutoff on the Roland GR-100, GR-300, and GR-700. With the Roland GM-70 and Ibanez MC-1, this knob can be assigned various functions.
- 5. RESONANCE Knob:** This knob controls the filter resonance, or emphasis, on the Roland GR-100 and GR-300. On the Roland GR-700, this is the EDIT knob.
- 6. LFO Knob:** This knob controls the LFO or vibrato depth on the Roland GR-100, GR-300, and GR-700. With the Roland GM-70 and Ibanez MC-1, this knob can be assigned various functions, though the default value is modulation depth. With a CV pedal plugged into the **LFO Pedal** jack on the back of the RC-1324 V2, the **LFO Knob** works together with the pedal. The front panel **LFO Knob** always controls the maximum amount of LFO depth. For example, with the front panel control at 50%, or in the 12 o'clock position, the maximum LFO depth will be 50%. Plugging a pedal into the rear LFO jack and pressing the pedal all the way to the floor will still only result in a maximum LFO depth of 50%.
- 7. Balance Knob:** This knob controls the balance between the Synthesizer output and the Guitar output. By turning the knob in a clockwise direction, the output will blend from 100% guitar to 100% synthesizer. The 12 o'clock position will result in an approximate 50/50 blend of guitar and synthesizer. The knob in a fully clockwise position results in a synthesizer only output. To use this feature, it is important to turn the guitar volume knob to maximum. If you are using a GK-1, GK-2 or GK-3 equipped guitar, be sure to have the guitar plugged into the GK controller module, and turn the regular guitar volume to maximum. If no guitar is plugged into the GK module, or if the volume is turned down on the guitar, the **Balance Knob** will simply work like a regular volume knob. ***IF YOUR GUITAR HAS A GTR/GTR+SYNTH/SYNTH SWITCH, SET THE POSITION TO "GTR+SYNTH"***
- 8. MODE Switch:** This switch reproduces the function of the **MODE Switch**. Like the **MODE Switch** on a vintage guitar, **Mode I** is selected when the switch is in the down position. **Mode II** is selected when the switch is in the middle position, and **Mode III** is selected when the switch is in the up position.
- 9. Blue Power LED:** LED indicates power is present from the guitar synthesizer.
- 10. String Level Adjustment Knob:** Use these knobs to adjust the output level of each string. Start with the red knobs in the 50%, or 12-o'clock position, and play each string and adjust for sensitivity. Each Roland synthesizer responds differently to string level. Some synthesizers will have trouble tracking a string with the output turned up too high.

# REAR PANEL

---

- 1. Hex Fuzz Output:** This is a line-level, unbalanced high output signal for the hex fuzz distortion circuit.
  - 2. LFO Pedal:** This is the input for a Korg/Yamaha style CV pedal to control LFO depth. A Roland or EV-5 style pedal will not work. The maximum depth of the LFO pedal is set by the Front Panel **LFO Knob**. To get maximum control from the **LFO Pedal**, set the front panel **LFO Knob** to 100% (fully clockwise).
  - 3. 24-Pin Output:** This is the guitar synthesizer output. Connect a Roland C-24D or similar 24-pin cable from this connector to a vintage Roland, or Roland compatible guitar synthesizer.
- 

## ADDITIONAL NOTES

The RC-1324 V2 Bus Converter is powered by the connected 24-pin synthesizer. The unit will not work unless the attached guitar synthesizer is turned on.

The RC-1324 V2 uses special circuitry to adapt the volume knob on the 13-pin guitar to control the vintage, 24-pin synthesizer. The RC-1324 V2 has been tested with the Roland US-20 Unit Selector. In this case the volume knob on the guitar will control the volume of both the vintage, 24-pin synthesizer and the modern, 13-pin synthesizer.

The hex fuzz circuit in the RC-1324 V2 is unique. While the filtering stages are designed to copy the sound of the Roland G-303/G-808 hex fuzz, an additional gain stage has been added for a harder edged fuzz circuit with more sustain. The front panel bright switch is designed to reproduce the effects of removing the filter capacitor from a G-303/G-808 guitar to produce a brighter fuzz tone. With the original Roland systems, the hex fuzz sound was only available when using a Roland G-202/303/505/808 guitar with a Roland GR-300 synthesizer. The RC-1324 V2 always outputs the hex fuzz sound from its rear panel output jack, regardless of what synthesizer is used, and independent of the volume or balance controls knobs.

---

## SPECIFICATIONS

### RC-1324 V2 Bus Converter:

- **Connectors:** One 24-pin output connector, one 13-pin input connector, and one 1/4" standard guitar jack for line-level hex fuzz output.

- **Dimensions:** 19 (W) x 8(D) x 3.5(H) inches

- **Weight:** 4 lbs 15 oz

v2.0 09.16.2006  
© copyright September 2006  
www.gr300.com