Two-Rock

Coral
22/40/50/100

OWNERS MANUAL

Dear Customer,

Thank you for your purchase of a **Two-Rock** amplifier from Premier Builders Guild.

As a discerning guitarist, you know the road to great tone begins with great components.

Our Classic Design, carefully selected parts and hand-built approach combine to make an extremely versatile instrument.

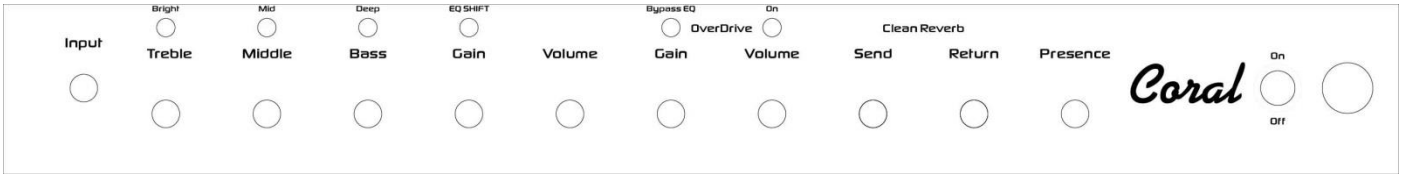
Please take the time to read this manual. We hope it will answer any questions that you may have.

We extend a warm welcome to you as a member of a select group of musicians who have chosen a **Two-Rock** amplifier.

Important Safety Instructions

1. Read these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water
6. Clean only with dry cloth
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
8. Do not install near any heat sources such as radiators, heat registers, plugs, and the point where they exit from the apparatus
9. Protect the power cord from being walked on or pinched particularly at plugs and the point where they exit from the apparatus
10. Only use attachments/accessories specified by the manufacturer
11. Unplug this apparatus during lightning storms or when unused for long periods of time
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped
13. CAUTION: To disconnect the unit completely from the MAINS, unplug the unit. Turning the power switch off does not disconnect the unit completely from the MAINS.

Front Panel Functions



1. **Input Jack**- High impedance input to the amplifier. Plug in your instrument here.

2. **Treble Control**- Adjusts the high frequency response. In the full counter-clockwise position, high frequencies are bypassed to ground. In the full clockwise position, high frequencies are allowed to pass to the input gain stage.

3. **Bright Switch-** Boosts the high frequency response. This is most effective when the input gain is set at 12 o'clock or lower. The effect is less dramatic as the input gain control is adjusted past the 12 o'clock position.

4. **Middle Control** – Adjusts the mid-range response. In the full counter-clockwise position, the tone will be somewhat "scooped" of mid-range response, emphasizing the highs and lows. In the full clockwise position, mid-range frequencies are allowed to pass to the input gain stage.

5. **Mid Switch- Boosts** the mid range frequency response.

6. **Bass Control**- Adjusts the bass response. In the full counter-clockwise position, low frequencies are cut. In addition, the response of the treble and mid-range controls is greatly reduced. In the full clockwise position, low frequencies are allowed to pass to the next gain stage.

7**. Deep Switch-** Boosts the low and low-mid frequencies. This is a low frequency contour switch, changing the low and low-mid response.

8. **Input Gain**- Adjusts the overall gain of the amplifier. Start with this control in the 12 o'clock position. Keep in mind that the amount of gain set here determines the signal level feeding the lead channel. Low gain settings of this control will require higher lead gain settings for the same amount of overdrive.

9. **EQ Shift -** , the EQ Shift switch is a traditional/modern switch which adjusts the way that the tone stack passes to the input gain stage. In the up position, the eq curve allows for more dynamic interaction between treble and bass. In the down position the amount of gain is doubled and some of the dynamics between the controls are minimized

10. **Master Volume-** Adjusts the output level of the amplifier. Both the clean and overdrive output is controlled by this level. This level will also control how much signal is passed to any pedal that is inserted into the effects loop.

11. **Bypass Switch**- This switch bypasses the tone controls, increasing both level and mid-range response. To enable footswitch control of this function, switch must be in the down position.

12. **OverDrive Gain**- Adjusts the input level (gain). The input gain cascades into this control. This level can be set to match the input gain or can be set higher for more saturated gain levels.

13. **OverDrive Switch**- Sends the instrument signal through the lead circuit, adding extra stages of gain to the signal and enabling the lead gain and lead master controls. To enable foot switch control of this function, switch must be in the down position.

14. **OverDrive Master**- Adjusts the output level.

15. **Clean Reverb Send**- The reverb drive control determines the amount of signal applied to the reverb tank. Low settings will create a very open, small room reverb effect with a short decay time. Advancing the control clockwise increases the signal applied to the driver and a very saturated effect with a sharp attack and a long decay can be obtained.

16. **Clean Reverb Return** - The reverb return control mixes the reverb effect signal with the dry signal. At full counterclockwise rotation, the reverb effect is defeated. Using the return control in conjunction with the reverb drive control, a wide range of natural reverb effects can be produced.

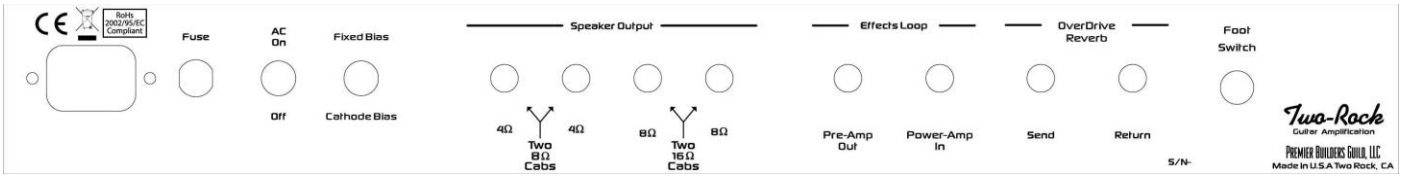
17. **Presence Control**- Adjusts the contour of high-frequency response. The high-frequency response will increase as you advance the control clockwise.

18. **Stand-by Switch**- Should be in the "**Off**" or "stand-by" position when you apply power to the unit. After a few seconds, place the switch in the "**On**" position to use the amplifier. You may leave the unit "powered up" and place this switch in the "stand-by" position to mute the output.

19. **Indicator Lamp**- This lamp will illuminate when the power switch is in the "up" position, indicating the unit is receiving A/C power.

NOTE: All switches are **ON** in the "up" position

Rear Panel Functions



1. **A/C Input**- Connects the amplifier to A/C power via the power cord supplied. Unless otherwise specified, your amplifier is designed to operate on 120 volts A/C, 60 cycles.

2. **Fuse**- See Fuse Chart

3. **Power Switch**- Turns power on.

4. **Fixed Bias/Cathode Bias Switch** – The fixed bias mode allows the output/tube section bias to be controlled by an adjustable bias pot located under the chassis. This adjustment can be used to set the tubes bias in a range of settings. This mode will allow the end user to maximize the amount of clean headroom available with the tubes that are installed. Or to push the tubes to a “hot” point allowing more output section breakup. Note: Caution must be observed when setting the bias and use of the suggested values stated in our bias section.
The Cathode bias mode allows the output/tube section to be biased by an internal hard wired circuit. This circuit allows the end user to be able to install a set of tubes and not need to adjust any values to set the bias on the tube section. This mode sets the tubes internal bias to a point where it more closely resembles Class A function. This will decrease the amount of clean headroom but will add more complex tonal harmonics to the signal path.
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5. **Speaker Output Jacks**- There are two sets of speaker output jacks. Nominal impedance is 4-8 ohms. The output section has the ability to run a set of speaker loads in parallel. Duel 4 ohm jacks can be used to take two 8ohm speaker loads and combine them to a 4 ohm load. Duel 8 ohm jacks can be used to take two 16ohm speaker loads and combine them to a 8 ohm load. NEVER OPERATE YOUR AMPLIFIER WITHOUT A PROPER SPEAKER LOAD CONNECTED. Be sure to match the impedance of your cabinet with the impedance (output) of the amplifier.

6.Effects Loop - The effects loop is a passive insertion point. Any effects inserted into loop will be run in series after the preamp and before the power section. Any effect should have buffers on the input and output section to correctly match the signal leaving and coming back. The Master volume controls how much signal is sent to the send.

Effects Send- Use this jack to send the amplifiers signal to outboard effects

Effects Return- Use this jack to connect the output of your effects to the amplifier.

7. **Overdrive Reverb Send**- The reverb drive control determines the amount of signal applied to the reverb tank. Low settings will create a very open, small room reverb effect with a short decay time. Advancing the control clockwise increases the signal applied to the driver and a very saturated effect with a sharp attack and a long decay can be obtained.

8. **Overdrive Reverb Return** - The reverb return control mixes the reverb effect signal with the dry signal. At full counterclockwise rotation, the reverb effect is defeated. Using the return control in conjunction with the reverb drive control, a wide range of natural reverb effects can be produced.

11. **S/N**- Your serial number is located here. We strongly suggest that you record this number and have it handy in case you need service, or in the event that your amp is lost, stolen, or damaged.

12**. Footswitch Jack**- The footswitch connects here. The clean/overdrive and tone bypass functions can only be activated via the footswitch.

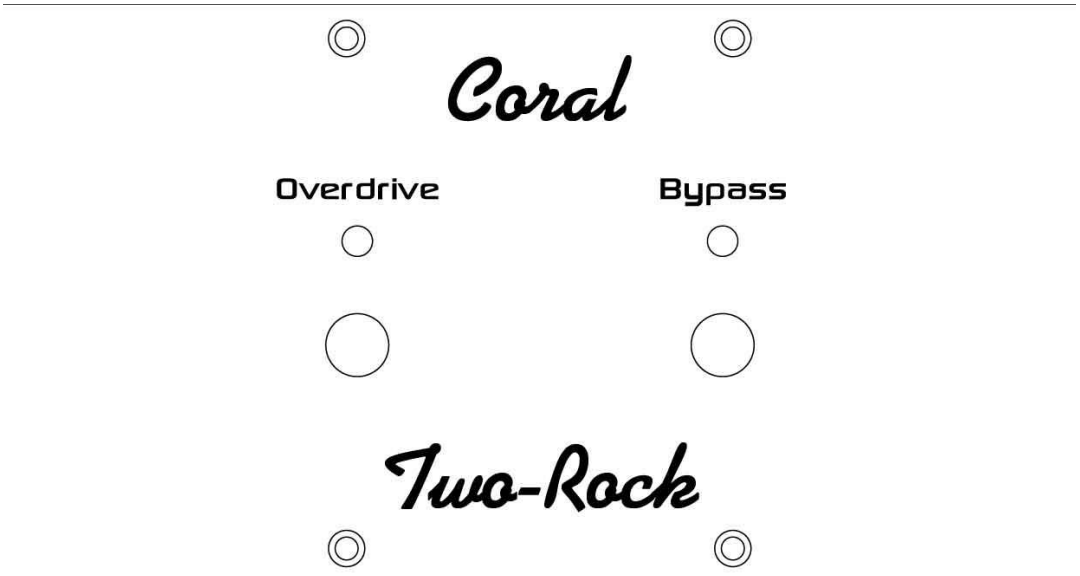
Fuse Chart

Fuse Chart: All Fuses are 3AG Type 250 Volt, SLO-BLO

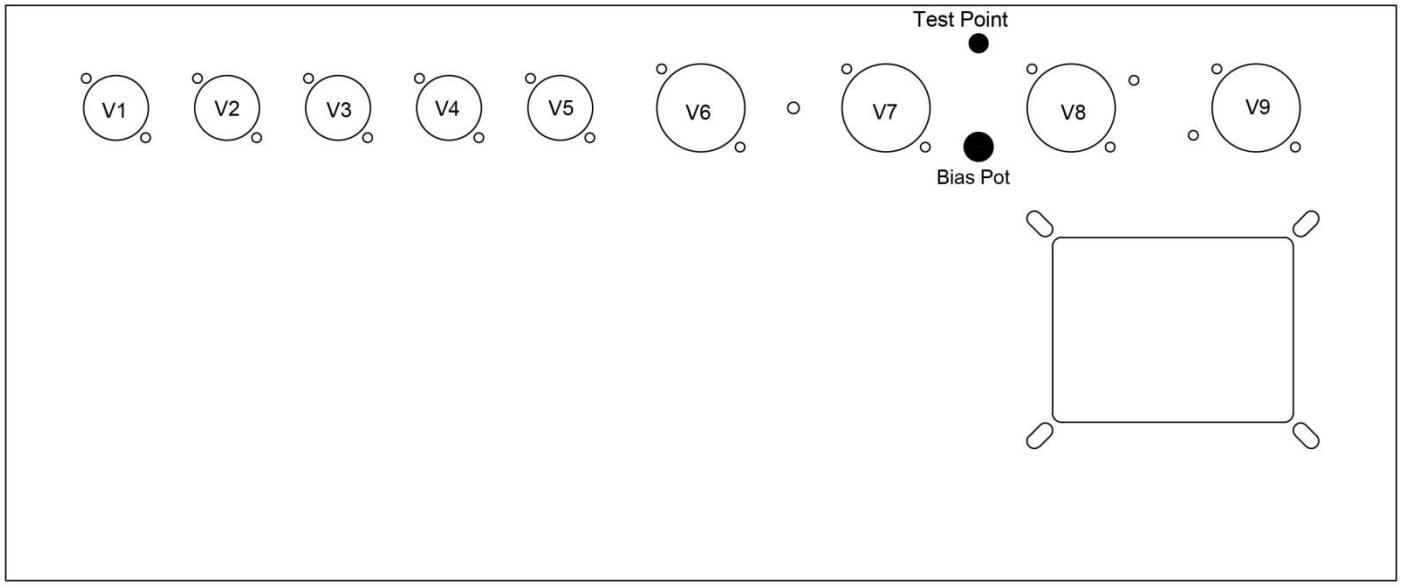
	100V	120V	220/230/240
22 Watt:	2amp	2amp	1amp
35 Watt:	2.5amp	2.5amp	1amp
40 Watt:	2.5amp	2.5amp	1.6amp
50 Watt:	2.5amp	2.5amp	1.6amp
100 Watt:	3.2amp	3.2amp	2.5amp

FOOTSWITCH

Overdrive - Switches amp into overdrive mode
Bypass - Switches amp into a tone stack bypass mode



(Tube Complement)



V1- 12AX7, Input stage & Gain
V2- 12AX7, Overdrive stage
V3- 12AX7, Reverb Driver
V4- 12AX7, Mixing amplifier
V5- 12AX7. Phase Inverter
V6, V7- 6L6WGC-STR, Output
V8, V9- 6L6WGC-STR, Output (100 Watt) **or**
12AR4, 50 Watt Dual Tube Rect

Each fine production tube is tested and matched to our exacting specifications. External bias adjustment and test points are located on the chassis near the output tube sockets. A digital voltmeter and small screwdriver are required for bias adjustment.

BIAS ADJUSTMENTS:
Power up unit and connect proper speaker load.
Set master volumes and effects return controls to zero.
DO NOT apply any signal to the input during the biasing procedure!
Take unit off standby and allow a few seconds for the circuit to stabilize.
Set voltmeter to Millivolt scale (or lowest volt scale 60 millivolts=.060 volts.)
With meter grounded to chassis and + probe at test point, measure voltage.
A reading of 0.064 to 0.070 volts is normal for 50 Watt amplifiers with (2) 6L6's. A reading of 0.12 to 0.13 volts is normal for 100 Watt amplifiers with (4) 6L6's. If not in this range, adjust by turning bias screw SLOWLY a small amount. **Do not set above .070,** doing so can cause tube failure in some brands.

Keep in mind that tubes vary in quality, and some tubes can handle upwards of 40 ma each (a reading at the test point of .080!) However, to be on the safe side, use the above as a guide.

WARNING! No user serviceable parts inside! Refer to qualified service person only.
LINE CORD- For your safety, connect to grounded A/C receptacle only.

Two-Rock amplifiers are brought to you by Premier Builders Guild.

We know your new **Two-Rock** amplifier will provide many hours of enjoyment and inspiration in the years to come. This manual is a resource for some of your questions. Please contact us with any other questions or comments that you may have. We look forward to hearing from you!

PHONE: 1(707)584-TONE (8663) (M-F 9am-5pm PST)
FAX: 1(707)584-8661

ADDRESS: Two-Rock
619 Martin Avenue, Suite 6
Rohnert Park, CA 94928

SERVICE: service@two-rock.com

WEB: www.two-rock.com

PRECAUTIONS:

DO NOT expose to rain or any other moisture.
DO NOT use cleaning solvents. Wipe exterior with a clean, dry cloth only.
Refer servicing to a qualified service technician.

This is a product of
Premier Builders Guild

Two-Rock

619 MARTIN AVENUE, SUITE 6
ROHNERT PARK, CA 94928
707-584-8663
www.two-rock.com

SERIAL NUMBER: _____

Two-Rock

Guitar Amplification
619 Martin Ave. Ste 6
Rohnert Park, CA 94928
(707)584-8663

CE

DECLARATION OF CONFORMITY
Report #R070212

We, Two-Rock Amplifiers, in coordination with CES Laboratories, declare, taking this declaration under our total responsibility, that the below models are in conformity with the provisions of the following EC Directive(s) when installed in accordance with the installation instructions contained in the product documentation:

2006/95/EEC	Low Voltage Directive
2004/108/EEC	EMC Directive
2011/65/EEC	RoHS-Directive

And that the standards and/or technical specifications have been applied to the following families of products:

Crystal	Coral
Custom Reverb	Jet
Studio Pro Plus	Sensor
Studio Pro	EXO-15
Eric Gales	Bi-Onyx
Classic Reverb	Classic Type Series
TS-1	Matt Schofield
Gain Master	

Signature:

Name and Title: Mac Skinner / General Manager

February 12, 2007

Approved By:
Chandra Garudachar
President
CES LABORATORIES

Prepard By:
Jyotsna Bedi
23361 Cypress Pt
Mission Viejo, CA 92692