Two-Rock

Jet 50/100

OWNERS MANUAL

Dear Customer,

Thank you for your purchase of a **Two-Rock** amplifier from Two-Rock Amplifiers, LLC.

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.

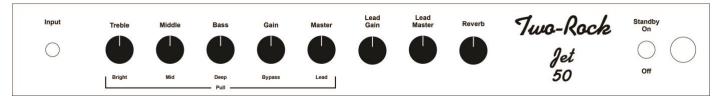
Important Safety Instructions

- 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. <u>Turning the power</u> switch off does not disconnect the unit completely from the MAINS.

Front Panel Functions



INPUT - High impedance input to the amplifier. Plug in your instrument here.

TREBLE + Push/Pull BRIGHT - Adjusts the high frequency response. At lower settings of this control the tone will be warmer and smoother. As you turn this control up the highs become more prominent and aggressive adding gain to the signal as well. 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 next gain stage. Pulling the knob to the "out" position: boosts the high frequency response. This is most effective when the Gain control is set at 12 o'clock or lower. This is great for adding sparkle to clean tones. The effect is less dramatic as the Gain control is adjusted past the 12 o'clock position.

MIDDLE + Push/Pull Mid - Adjusts the midrange response. At low settings of this control the tone will be "scooped" of midrange response, emphasizing the highs and lows. As this control is turned up, the midrange frequencies are increased. This creates the "body" of your guitar's tone and is very critical to both the tonality, feel and overall response of the amplifier. Higher settings of this control also help your tone to cut through the mix in both a live band situation and when playing the amp outdoors. In the full clockwise position, mid-range frequencies are allowed to pass to the next gain stage. **Pulling the knob to the "out" position:** Midrange is further boosted.

BASS + Push/Pull DEEP - 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. It's easiest to start with this control at noon, then adjust to taste. In the full clockwise position, low frequencies are allowed to pass to the next gain stage.

Pulling the knob to the "out" position: Boosts the lower bass frequencies. This low frequency contour switch also shifts the emphasis from the upper bass and low mid frequencies to the lower bass frequencies which helps smooth out and clarify the midrange response.

GAIN - Adjusts the overall gain of the amplifier. Start with this control in the 12 o'clock position then adjust to taste. This control determines the initial character of your tone, from cleaner/brighter tones at low settings to fatter/warmer tones at higher settings. As you turn this control up it also introduces more gain and bass into the signal path, and reduces the amount of available clean headroom especially when the master volume is set higher.

Pulling the knob to the "out" position: Treble, Middle, and Bass controls are passively bypassed boosting the natural high and mid frequencies of the guitar. It also increases the amount of input signal that drives the gain stage. This function is also foot switchable.

MASTER - Adjusts the overall output level of the amplifier. At lower settings on this control the amp will be much cleaner sounding as well as lower in volume. As this control is turned up the power section of the amp begins to work harder which increases sustain, fullness, and touch dynamics as well as increasing the volume of the amplifier. At higher settings on this control the power section will be pushed into natural overdrive especially if the Gain control is set higher. **Pull this knob "out" to activate the Lead channel.** This function is also foot switchable.

LEAD GAIN - Adjusts the input level (gain) of the lead channel.

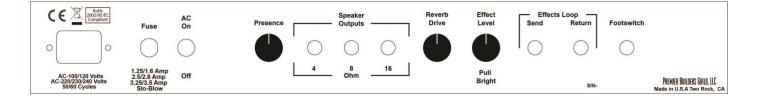
LEAD MASTER - Adjusts the output level of the lead channel.

REVERB - This is the reverb return control which mixes the reverb effect signal with the dry signal. At full counterclockwise rotation, the reverb effect is defeated. Using this return control in conjunction with the reverb drive control on the rear panel, a wide range of natural reverb effects can be produced.

STANDBY - This switch should be in the down/STANDBY position before you place the Power switch to the up/ON position. After 20 seconds or more, place the Standby switch in the "up" position to play the amplifier. When you are taking a break from playing the amp you can leave the amp "powered up" and simply switch to the "stand-by" position to mute the output of the amplifier and prolong power tube life.

INDICATOR LAMP - This lamp will illuminate when the rear panel power switch is in the "up" position, indicating the unit is receiving A/C power.

Rear Panel Functions



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.

Fuse - See Fuse Chart

Power Switch - Turns power on.

PRESENCE - Adjusts the contour of the high-frequency response. Turning this control up gradually increases the intensity of the upper frequencies. This is a subtle control which can be used to either emphasize sparkle and brightness when needed or smooth out your overall tone by turning the control down.

Speaker Output Jacks - There are 3 speaker output jacks; 4, 8, and 16 ohms. **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.

Reverb Drive - The reverb drive control adjusts the signal level applied to the reverb unit. Low settings will provide a smooth, short decay effect, simulating small to medium rooms. Higher settings will increase the decay time. At maximum clockwise rotation, an extremely wet reverb effect can be created. This control is used in conjunction with the front panel (return) control (see FRONT PANEL FUNCTIONS, previous page). The reverb effect is defeated with this control in the full counterclockwise position.

Effects Loop -

The effects loop on this amplifier is a "half active" type of loop, see FAQ on two-rock.com EFFECT LEVEL + Push/Pull BRIGHT – Adjusts the effects loop return level. The loop is active in the circuit even with no effects connected, so the level control also can be used as a additional master volume control. This function can be useful but also a bit confusing so as appoint of reference, set this control at 11:00 for unity gain when not using the effects loop. The pull-bright feature is useful when playing at a lower volume, or when connecting more than a few pedals into the loop, which sometimes causes high frequency insertion loss.

SEND - Use this jack to send the amplifier's signal to the effects that you want to use in the loop.

RETURN - Use this jack to connect the output from the effects in the loop back to the amplifier.

Footswitch Jack - The footswitch connects here.

Fuse Chart

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

Export 100V:

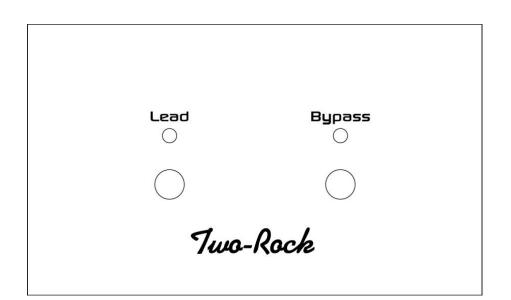
Domestic 120V:

Export 220V, 230V, 240V:

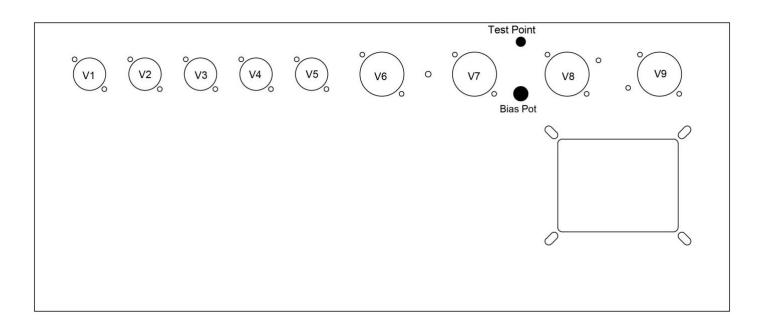
2.5 - 50 Watt 3.2 - 100 Watt

2.5 - 50 Watt 3.2 - 100 Watt 1.6 - 50 Watt 2.5 - 100 Watt

FOOTSWITCH



(Tube Complement)



V1- 12AX7, Rhythm channel
V2- 12AX7, Lead Channel
V3- 5751/12AT7, Reverb Driver
V4- 12AX7, Mixing/Effects loop
V5- 12AX7. Phase Inverter
V6, V7, V8, V9- Stock 6L6GC, Output

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.

When replacing power tubes, it is necessary to only use a similar tube type that your amp's power section is designed for. Below is a limited list of comparable tube types:

6L6: 6L6GC, 7581, 5881

BIAS ADJUSTMENT PROCEDURE:

- Power up amplifier and connect proper speaker load
- DO NOT have an instrument connected to the input during the biasing procedure!
- Switch the amp out of standby and allow a few seconds for the circuit to stabilize
- Set the voltmeter to read DC Volts
- With the meter grounded to the chassis and the meter's positive probe inserted into the test point, measure the voltage

- Using a small flat head screwdriver, insert into bias adjust pot and turn very slightly one way or the other to adjust the bias voltage

*Bias ranges are measured and set in volts *Do not set bias higher than recommended levels as it can lead to tube failure and possible damage to other components in the amplifier!

6L6 type tubes 50watt: .060V to .070V 6L6 type tubes 100watt: .120V to .140V Factory Setting: .064V Factory Setting: .126V

WARNING! No user serviceable parts inside! Refer to qualified service person only.

LINE CORD- For your safety, connect to grounded A/C receptacle only.

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 m

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)

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Two-Rock Amplifiers, LLC

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SERIAL NUMBER: _____

CE

DECLARATION OF CONFORMITY According to EC Directive

 Manufacturer:
 Premier Builders Guild LLC

 Address:
 201 S. Highland Ave., Suite 204

 Pittsburgh, PA
 15206
 USA

 Phone:
 412-362-0309

Product Name: Audio Power Amplifier Brand Name: Two-Rock Model No: Crystal Studio Pro Cardiff Sensor Coral

Has been designed and manufactured in accordance to the following technical regulation: Directive Device:

Low Voltage Equipment 2006/95/EC Electromagnetic Compatibility 2004/108/EC Conformity with the following standards: The measurements made in accordance with the procedures according to the European Council Directive and EN Standards.

Council Directive and EN Standards:

- EN 55103-1:2009+A1:2012
- EN 55103-2:2009
- EN61000-3-2:2006+A1:2009+A2:2009
- EN61000-3-3:2013
- EN60065:2002+A1:2006+A11:2008+A2:2010+A12:2011

CE mark was affixed on the product: 2007

The product(s) which are defined herein was (were) manufactured under the conditions of the European Union directive and standards. Also, this product(s) responsibility is under our firm's guarantee.

Manufacturer Stamp & Signature

NSTEIN Name surname EQ Title: Date: 8/14/2015