Two-Rock

Studio 50-15

OWNER'S MANUAL

Dear Customer,

Thank you for your purchase of a **Two-Rock!**

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	TREBLE	MIDDLE	BASS	GAIN	MASTER	CONTOUR		нісн
\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc	<i>Studio</i> 50/15	
	Bright	Mid Boost Pull	Пеер					Low

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. This control is very interactive with the BRIGHT switch, MID control, and DEEP switch. 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.

MID + Push/Pull BOOST - 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: EQ section is 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.

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.

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.

CONTOUR - The contour control is an active wide band sweep. In the 12 o'clock position, the amp's frequency response is flat. Counterclockwise rotation reduces high end response and increases low frequencies. Clockwise rotation decreases low end and increases the high frequency response. This control is very useful for maintaining preamp tone control settings, while allowing a global adjustment to compensate for differences in room acoustics, speaker cabinets, or bright to dark guitars (single coils to humbuckers, for example). This control also actively reduces the articulation available, allowing a softer setting, or extremely open and revealing, depending on your individual style and requirements.

STANDBY – This switch has 3 positions, High-Standby-Low, and should switched to the middle/STANDBY position when powering up the amp. After 20 seconds or more, place the Standby switch to either the up/ON High power (50w) or down/ON Low power (15w) position. When you are taking a break from playing the amp you can leave the amp "powered up" and simply switch to the "stand-by" middle 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.

Speaker Output Jacks - There are 4 speaker output jacks; Dual 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. Duel 4 ohm jacks can be used to simultaneously connect two 8 ohm speaker cabs and combining them to a single 4 ohm load.

Effects Loop - The loop is a multi-function active/passive circuit with switchable tube driven buffers on both the **Send** and **Return** sides of the loop. When both of these buffers are switched off, it becomes a standard passive series effects loop.

The Send and **Return** buffers can be switched on or off independently from one another and the send and return levels can also be independently adjusted. When engaged, the buffers can eliminate line level loss, signal clipping and impedance mismatches with most effects devices.

Preamp Out - Sends signal to effects. (1/4" Mono Jack)

Send Control + Pull Buffer On - To engage the send effect buffer this pot must be pulled out. Once engaged the control will adjust the amount of signal that passes from the preamp stage to the effects connected to the loop. Adjust this control to prevent unwanted clipping within the effect signal chain. A "unity gain" setting with nothing inserted into the loop is 3:00

Power Amp In – Returns signal from effects. (1/4" Mono Jack)

Return Control + Pull Buffer On - To engage the return effect buffer this pot must be pulled out. Once engaged the control will adjust the amount of signal that passes from the effects devices connected to the loop back into to the power stage of the amplifier. Adjust this control to prevent unwanted clipping within the power stage of the amp. A unity setting with nothing inserted into loop is around 10:00.

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.



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



V1- 12AX7, Input and Gain V2- 12AX7, Effect Send and Return Buffer V3- 12AX7, Phase Inverter V4-V5 – 6L6GC, Output

Each fine production tube is tested and matched to our exacting specifications. When the time comes that the power tubes need replacing, it's very important to use high quality, matched sets of power tubes. It's also critical that the bias of the amp be reset after installing new, or NOS power tubes. External bias adjustment and test points are located on the bottom of the chassis near the output tube sockets. A digital voltmeter and small screwdriver are required for bias adjustment.

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

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 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!

To bias this amp properly make sure the amp is in the correct power setting. High Power and Low Power bias pots are tied to the Standby switch and the 2 Power selections.

Bias Setting Range for 6L6 type tubes: .060V to .064V

Factory Bias Setting High Power: .060V -- Low Power: .060V

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 may have. We look forward to hearing from you!

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

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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

ISTEIN Name surname:

Name surname: f_{E} Title: f_{E} Date: 8/14/2015