

*Two-Rock*

*Studio  
Overdrive*

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 create an extremely versatile instrument.

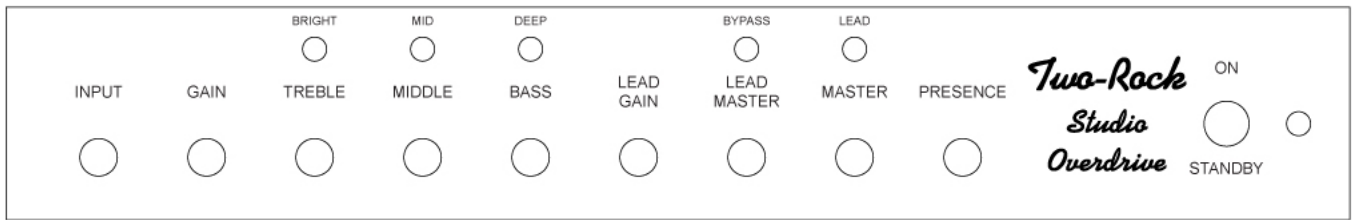
Please take the time to read this manual. We hope it will answer any questions that you may have.

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



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

**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. Keep in mind that the amount of gain set here also determines the signal level feeding the lead channel. Lower settings of this control will reduce the available signal level in the lead channel so higher settings of lead gain may be required to achieve the desired amount of overdrive when in the lead channel mode.

**BRIGHT Switch** - 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.

**TREBLE** - 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, Middle 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.

**MID Switch** - Boosts the midrange frequency response.

**MIDDLE** - Adjusts the midrange response. At low settings of this control the tone will be "scooped" of midrange response, emphasizing the deep 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 as well as when playing the amp outdoors. In the full clockwise position, mid-range frequencies are allowed to pass to the next gain stage.

**DEEP Switch** - Boosts the lower bass frequencies. This low frequency contour switch also shifts the emphasis from the upper bass frequencies to the lower bass frequencies which helps smooth out and clarify the midrange response.

**BASS** - Adjusts the bass response. In the full counter-clockwise position, low frequencies are cut and the response of the treble and mid-range controls is greatly reduced. As this control is turned up, the bass frequencies are increased and allowed to pass to the next gain stage.

**BYPASS Switch** - Referred to as Tone Stack Bypass, this switch reduces the the Bass, Middle, and Treble controls effectively turning them up all the way and increasing both the volume and perceived mid-range response. The Bright, Mid, and Deep switches remain active in the Bypass mode. This function is also foot switchable. To enable footswitch control of this function, the switch must be in the down position.

**LEAD GAIN** - Adjusts the input level (gain) of the lead channel. Although we refer to this as the “lead channel” it is actually an additional “cascading” gain stage in the amp’s circuit driven by the FET, EQ1/2, Gain, Bass, Middle, Treble, Bright, Mid, Deep, and Bypass controls. It has been meticulously designed to add a very dynamic and touch responsive overdrive capability to the amplifier. The setting of the amp’s controls has a direct effect on the gain, tone and feel of the lead channel. Experimentation is key to striking the desired balance between the clean and lead modes.

**LEAD Switch** - This switch engages the lead channel. This function is also foot switchable. To enable footswitch control of this function, the switch must be in the down position.

**LEAD MASTER** - Adjusts the output level of the lead channel. Use this control to set the desired volume of the lead mode in relation to the clean mode.

**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 raising 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.

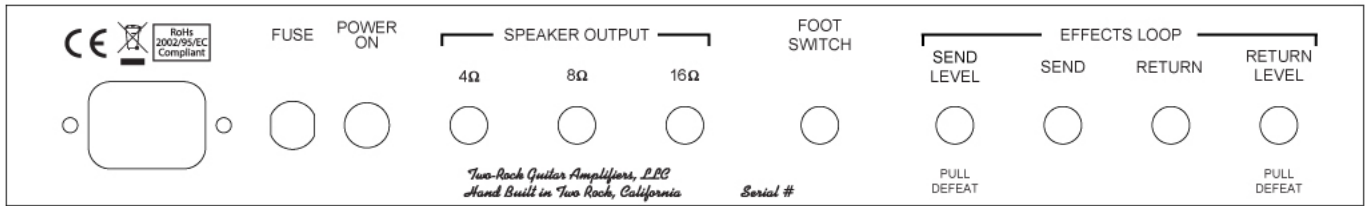
**PRESENCE** - Adjusts the contour of the high-frequency response. Turning this control up gradually increases the intensity of the upper frequencies. This is a subtle control which can be used to either emphasize sparkle and brightness when needed or smooth out your overall tone by turning the control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

**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.

**NOTE:** *All switches are ON when in the “up” position*

# Rear Panel Functions



**A/C Input** - Connects the amplifier to A/C power via the power cable 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 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.

**FOOT SWITCH** - The included footswitch connects here. The clean/lead and tone stack bypass functions can be activated via the footswitch as long as the corresponding front panel switches are in the down position.

## Fully Buffered Tube Driven Effects Loop:

**Send Level** - This control adjusts the signal level at the effects send jack, use this to dial in the appropriate input level for the connected effects.

**Pull Defeat** – Pulling the send level knob disengages engages the tube buffer circuit for the effects loop send.

**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.

**Return Level** - This control adjusts the signal level of the effects return, use this to dial in the appropriate output level from the connected effects. This will allow you to compensate for various effects that may have lower, or higher output levels and thus help you maintain consistent signal levels feeding back into the amplifier.

**Pull Defeat** - Pulling the return level knob disengages engages the tube buffer circuit for the effects loop send.

**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.

## FOOTSWITCH LED Indicators:

LEAD – BLUE LED  
BYPASS – RED LED

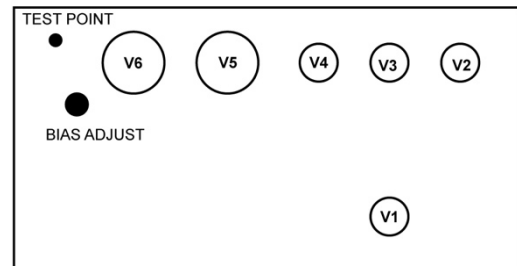
## Fuse Chart

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

Export 100 Volt	Domestic Fuses 120V	Export 220, 230, 240 Fuses
2A – 35 Watt	2A – 35 Watt	1A-35 Watt

## TUBE COMPLEMENT

V1 - 12AX7 - Clean Channel  
V2 - 12AX7 - Lead Channel  
V3 - 12AX7 - Buffered Loop Send and Return  
V4 - 12AX7 - Phase Inverter  
V5, V6- Output 6L6GC



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 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

The Studio Signature 35w amplifier is built to use 6L6GC power tubes.

*\*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!*

### **Factory Bias Setting: .030V**

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

**LINE CORD** - For your safety, connect to a 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 all basic operational information. 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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ROHNERT PARK, CA 94928

707-584-8663

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SERIAL NUMBER: \_\_\_\_\_



**DECLARATION OF CONFORMITY**  
According to EC Directive

Manufacturer: Two-Rock Amplifiers, LLC  
Address: 619 Martin Ave.  
STE 5  
Rohnert Park, CA 94928

Phone: 707-584-8663  
E-mail: info@two-rock.com

Product Name: Audio Power Amplifier

Brand Name: Two-Rock  
Model Numbers/Report Numbers:

Burnside:	R130829C, R130915
Cardiff:	R160425, SR160430
Classic Reverb(Signature):	R130829C, R130915
Coral:	R070212, R070213
Crystal:	R130829C, R130915
Sensor:	R070212, R070213
Studio Pro(PLUS):	R130829C, R130915
TS1:	R070212, R070213

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

Directive Device:

Low Voltage Equipment 2014/35/EU  
Electromagnetic Compatibility 2014/130/EU

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 products: 2007-2017

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

Name surname: Mac Skinner  
Title: Owner/COO  
Date: 1/1/2017