

***BI-ONIX***

***50-100***

***WATT***

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.

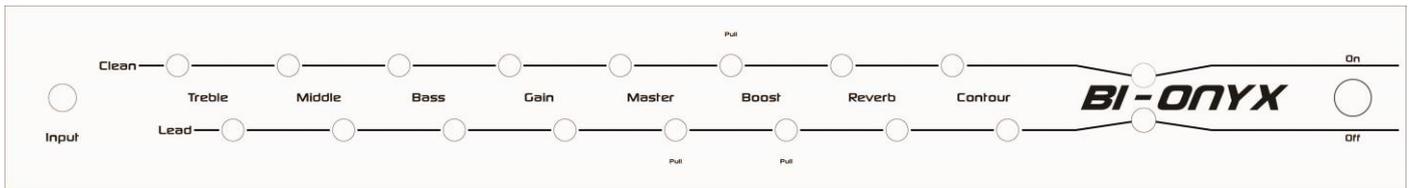
Please take the time to read this manual. We hope it will answer any questions that you may have.

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 (Clean & Lead)** - 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 next stage.
- 3. Middle Control (Clean & Lead)** - 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 gain stage.
- 4. Bass Control (Clean & Lead)** - 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 gain stage.
- 5. Input Gain (Clean & Lead)** - Adjusts the overall gain of the amplifier. Start with this control in the 12 o'clock position
- 6. Master Volume (Clean & Lead)** - Adjusts the output level of the clean and lead channels. **The Lead Channel can be activated by pulling the Lead Master control.**
- 7. Reverb (Clean & Lead)** - The front panel reverb control is the return, or mix, control. The reverb effect is defeated with this control in the full counter clockwise position.
- 8. Boost (Clean & Lead)** - Adjusts a “Solo” option, increasing the volume of each channel. It does not alter the gain or tone structure. These controls must be set to a level greater than the Master Volumes to be effective. **Both Clean and Lead Boosts are Foot-Switchable and can be activated by pulling the Boost Controls.**
- 9. Contour (Clean & Lead)** - The contour control is an active wide band sweep. In the 12 o'clock position, the amps' frequency response is flat. Counterclockwise rotation reduces high end response and increases low frequencies. Counterclockwise 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 (PRS Humbucker to Strat, 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.
- 10. Stand-by Switch**- Should be in the “down” or “stand-by” position when you apply power to the

unit. After a few seconds, place the switch in the “up” 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.

11. **Indicator LED’s-** Duel Multi-color LED’s are an indication the amplifier has power and what channel and option is turned on.

**Clean Channel (Upper Row of Controls)**

**Blue-** Clean Channel is activated

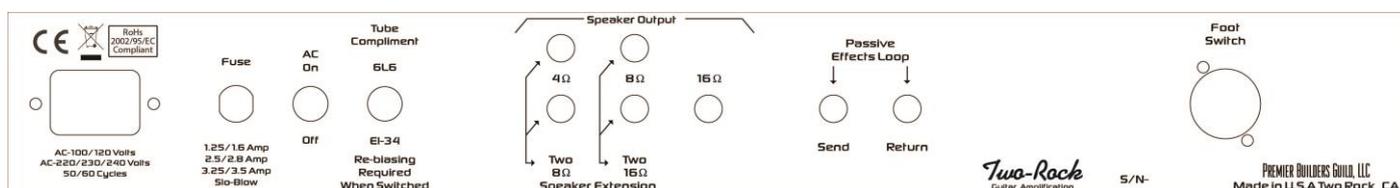
**Green-**Clean Boost is activated

**Lead Channel (Lower Row of Controls)**

**Red-** Lead Channel is activated

**Green-**Lead Boost is activated

## 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. **Tube Compliment** - The amplifier has the ability to run either EL-34 or 6L6 type tubes. A rebias of the output section will be needed if the tubes are changed to a new type (Refer to section on how to bias amplifier for correct values). The switch must be in the correct position for what tubes are installed in the amp. If the switch is in the incorrect position the amplifier will eventually blow the fuse (Refer to Fuse Chart for correct values).

5. **Speaker Output Jacks-** There are 5 speaker output jacks. Nominal impedance is 4-8-16 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.

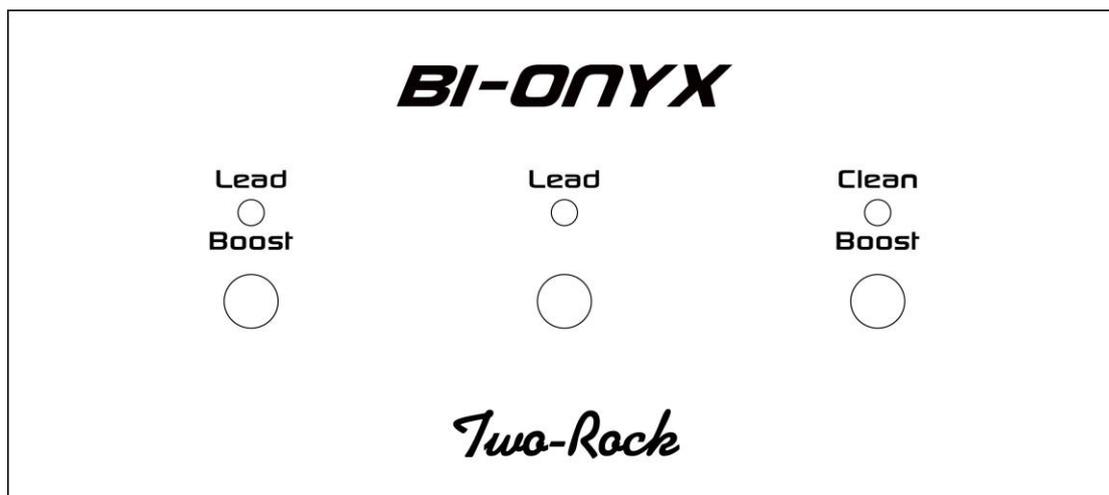
**Effects Send-** Use this jack to send the amplifiers signal to outboard effects

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

**7. Footswitch Jack-** The footswitch connects here. The Clean, Lead, and Boost channels can be activated from the footswitch.

A 4 pin XLR cable needs to be used with foot-switch, and is included in purchase.

## Foot-Switch



## Fuse Chart

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

**Export 100 Volt**

2.5 - 50 Watt

3.2 - 100 Watt

**Domestic Fuses:**

2.5 - 50 Watt

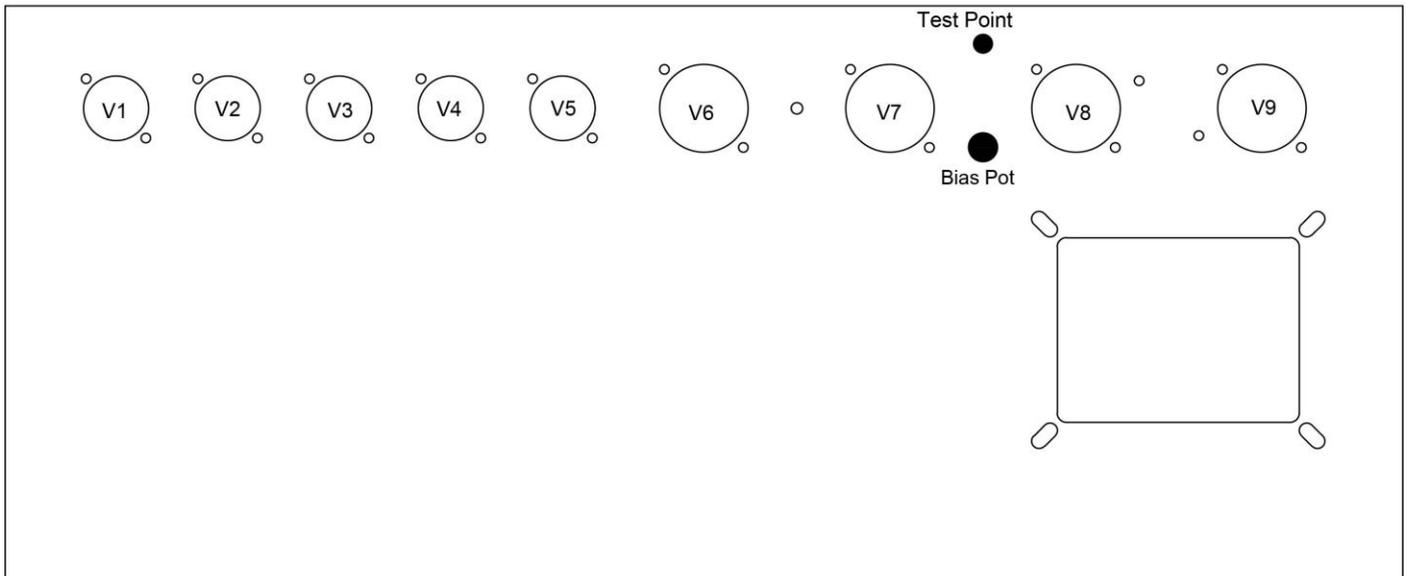
3.2 - 100 Watt

**Export 220, 230, 240 Fuses:**

1.6 - 50 Watt

2.5 - 100 Watt

## (Tube Complement)



- V1- 12AX7, Clean Channel
- V2- 12AX7, Reverb Send
- V3- 12AT7, Reverb Driver/Mixing amplifier
- V4- 12AX7, Lead Channel
- V5- 12AX7, Phase Inverter
- V6, V7- EL-34(6CA7)/6L6GC, 50 Watt Output
- V8, V9- EL-34(6CA7)/6L6GC, 100 Watt 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.

### **BIAS ADJUSTMENT PROCEDURE:**

- Power up unit and connect proper speaker load
- DO NOT have an instrument connected to the input during the biasing procedure!
- Take unit off standby and allow a few seconds for the circuit to stabilize.
- Set multi-meter to read DC Volts
- With meter grounded to chassis and + probe inserted into test point, measure voltage.
- Using a small flat head screwdriver, insert into Bias pot and turn slowly adjusting Bias level

It is recommended to only use exact replacement tubes similar to what is installed at the factory. Be careful when deciding to install other types of 6L6, 6V6, or EL-34 based tubes. Not all have the same specs and some can't handle the plate voltage of the amplifier.

Below is a limited list of comparable tube types:

6L6: 6L6GC, 7581, 5881

6V6: 6V6S, 6V6GT

EL-34: 6CA7

Bias Ranges: Are measured and set in Volts. But can be measured and set in milliamps.  
Numbers given are for 2 or 4 tubes combined.

6L6 and EL-34 type tubes: .060V to .070V for 35watt and 50watt      Factory Setting: .064V  
.1200V to .1400V for 100watt      Factory Setting: .1260V

6V6: Installed in the 22watt versions only: .044V to .058V      Factory Setting: .054V

6V6: Installed in 22watt versions with tremolo, bias must not be set higher then .044V as it will cause tube failure.

Do not set bias higher then recommend levels as it can lead to tube failure or failure within the amplifier!

*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!

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WEB:      [www.two-rock.com](http://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*

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

*Two-Rock*

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



**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:

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

Signature:

Name and Title: Mac Skinner / General Manager

February 12, 2007

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President  
CES LABORATORIES

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