Two-Rock

Bloomfield Drive
100, 50, 40

OWNERS MANUAL
Dear Customer,

Thank you for your purchase of a Two-Rock amplifier.

As a discerning guitarist, you know the road to great tone begins with great components. Our classic design of 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** - Input to the amplifier. Plug in your instrument here.
2. **GAIN** - Adjusts the overall gain of the amplifier. Start with this control in the 12 o'clock position. The amount of gain set here determines the amount of gain feeding the lead channel.
3. **EQ1 / EQ2** - This switch allows you to choose between 2 completely different equalization settings. **EQ1** is a lower gain setting, with extended midrange and bass available when used in conjunction with the middle and bass controls as well as the deep switch. This setting is suitable for any style requiring a pure clean tone with a nice round bottom and plenty of headroom. **EQ2** is a higher gain setting. This setting is suitable for any style requiring a clean to slightly distorted tone in clean mode, and more gain in the lead mode.
4. **TREBLE** - Adjusts the high frequency response. In the full counter-clockwise position, high frequencies are bypassed. In the full clockwise position, high frequencies are allowed to pass to the input gain stage.
5. **BRIGHT** - Boosts the high frequency response.
6. **MIDDLE** – 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.
7. **MID** - Boosts the mid-range frequency response.
8. **BASS** - 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.
9. **DEEP** - Boosts the low frequencies. This is a low frequency contour switch, changing the low and low-mid response.
10. **LEAD GAIN** - Adjusts the input gain of the LEAD channel. The GAIN control cascades into this control. This level can be set to match the input gain or can be set higher for more overdriven levels.
11. **LEAD MASTER** - Adjusts the overall output level of the LEAD channel.
12. **LEAD** - This 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.
13. **BYPASS** - This switch bypasses the TREBLE, MIDDLE, BASS tone controls. To enable footswitch control of this function, switch must be in the down position. NOTE: Boost switches will still be enabled.
14. **REVERB** – This is a reverb return control. This is the amount of reverb signal returning from the spring tank. At full counter-clockwise rotation, the reverb effect is defeated. Using the return control (back panel) in conjunction with this reverb send control, a wide range of natural reverb effects can be produced.

15. **MASTER** - Adjusts the overall 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.

16. **PRESENCE** - Adjusts the contour of high-frequency response. The high-frequency response will increase as you advance the control clockwise.

17. **STANDBY** - Should be in the “STANDBY” 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 “STANDBY” position to mute the output.

18. **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 JACK** - 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. **AC ON/OFF** - Turns power on or off.

4. **POWER HIGH/LOW** –

   **100 Watt**: In the 100 watt versions, this switch will change your amplifier output from 100 (HIGH) to 50 (LOW) watts with no impedance mismatch.

   **50 Watt**: In the 50 Watt versions, the HIGH power mode is fixed-bias and the LOW power is cathode biased. While the Low setting may sound louder, you'll notice a significant headroom decrease.

   **40 Watt**: In the 40 watt versions, this switch will change your amplifier output from 40 to 20 watts with no impedance mismatch.

5. **SPEAKER OUTPUT** - There are three sets of speaker output jacks 4, 8, 16 ohms. Be sure to match the impedance of your cabinet with the impedance (output) of the amplifier. We do not recommend connecting more than one cab at a time. For multiple cabs, a splitter is the best option. NEVER OPERATE YOUR AMPLIFIER WITHOUT A PROPER SPEAKER LOAD CONNECTED.

6. **EFFECTS LOOP** - The effects loop is passive. Any effects inserted into loop will be run in series after the preamp and before the power section. Most effects 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.

   **SEND** - Use this jack to send the amplifiers signal to outboard effects
   **RETURN** - Use this jack to connect the output of your effects to the amplifier
7. **REVERB SEND** - The reverb send control determines the amount of signal applied to the reverb tank. Low settings will create short decay times. Advancing the control clockwise increases the signal applied to the tank for longer decay times. Use this control in conjunction with the **REVERB** (front panel) control.

8. **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.

9. **FOOT SWITCH** - The footswitch connects here with the included stereo TRS cable. The LEAD and BYPASS functions can be activated via the footswitch. Front panel switches must be in the down position for the foot switch to function.

### FUSE CHART

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

<table>
<thead>
<tr>
<th>Power</th>
<th>100V</th>
<th>120V</th>
<th>220/230/240</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 and 50 Watt</td>
<td>2.5amp</td>
<td>2.5amp</td>
<td>1.6amp</td>
</tr>
<tr>
<td>100 Watt</td>
<td>3.2amp</td>
<td>3.2amp</td>
<td>2.5amp</td>
</tr>
</tbody>
</table>

### FOOTSWITCH

**LEAD (BLUE)** - Switches amp into overdrive mode  
**BYPASS (RED)** - Switches amp into a tone stack bypass mode
V1- 12AX7, Clean
V2- 12AT7, Reverb Drive
V3- 12AX7, Mixing Stage
V4- 12AX7, Lead
V5- 12AX7, Phase Inverter
V6, V7- 100/50 6L6WGC-STR, 40 Watt 6V6 Output
V8, V9- 100 6L6WGC-STR, 40 Watt 6V6 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 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 30 millivolts=.030 volts.)
With meter grounded to chassis and + probe at test point, measure voltage.
A reading of 0.030 to 0.032 volts is normal for 50 and 100 Watt amplifiers with (2) or (4) 6L6’s respectively. A reading of 0.020 to 0.022 volts is normal for 40 watt amplifiers. If not in this range, adjust by turning bias screw SLOWLY a small amount. **Do not set above these ranges.**

A note about tubes: This is an analog tube device. Much like a lightbulb, tubes are made of glass and are fragile. Shipping, hauling, throwing, and overall wear and tear can damage tubes. This can happen quickly in some cases, or years in other cases. It is all relative to wear and use and is usually 90% of a problem if one is to arise. Much like changing the oil in your car, it’s always best to be prepared and know what to do should a problem present itself. **We do recommend having a backup set of tubes.**

**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)
FAX:     1(707)584-8661

ADDRESS: Two-Rock Amplifiers
          619 Martin Avenue, Suite 5
          Rohnert Park, CA 94928

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
Two-Rock Amplifiers, LLC

Two-Rock

619 MARTIN AVENUE, SUITE 5
ROHNERT PARK, CA 94928
707-584-8663
www.two-rock.com

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
- Traditional Clean: R130829C, R130915
- Bloomfield Drive: R070212, R070213
- 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 55103-2:2009
- EN61000-3-3:2013

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

Two-Rock Amplifiers
Mac Skinner

Name surname: Mac Skinner
Title: Owner/COO
Date: 1/1/2018