

Two-Rock

*Jet
Signature*

OWNERS MANUAL

Thank you for your purchase of a *Two-Rock* amplifier from *K&M Analog Designs, 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.

Front Panel Functions



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

Push/Pull Treble Control- 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 gain stage. When the knob is in the “out” position, the high frequency response is boosted. This is most effective when the input gain is set at 12 o’clock or lower. The effect is less dramatic as the input gain control is adjusted past the 12 o’clock position.

Push/Pull Mid Control- 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 next gain stage. When the knob is in the “out” position, the mid range frequency response is boosted.

Push/Pull Bass Control- 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. When the knob is in the “out” position, the low and low-mid frequencies are boosted. This is a low frequency contour switch, changing the low and low-mid response.

Input Gain- Adjusts the overall gain of the amplifier. Start with this control in the 12 o’clock position. Keep in mind that the amount of gain set here determines the signal level feeding the lead channel. Low gain settings of this control will require higher lead gain settings for the same amount of overdrive.

Master Volume- Adjusts the output level of the clean and lead channels.

Lead Gain- Adjusts the input level (gain) of the lead channel.

Lead master- Adjusts the output level of the lead channel.

Reverb- 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. Use in conjunction with the reverb drive control (see REAR PANEL FUNCTIONS, next page).

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.

Indicator Lamp- This lamp will illuminate when the 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, ONLY!

Fuse- See Fuse Chart

Power Switch- Turns power on.

Speaker Output Jacks- There are 2 speaker output jacks. Nominal impedance is 4-8 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 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.

Footswitch Jack- The footswitch connects here. The clean/lead and tone bypass functions can only be activated via the footswitch.

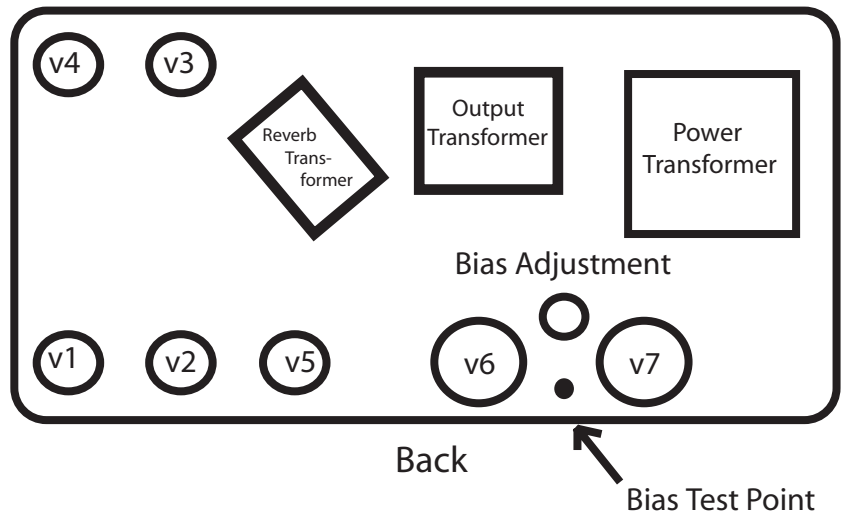
FOOT SWITCH



Tube Complement

Front

- V1- 12AX7, Rhythm channel
- V2- 12AX7, Lead Channel
- V3- 5751/12AT7, Reverb Driver
- V4- 12AX7, Reverb/effects
- V5- 12AX7, Phase Inverter
- V6,V7- 6V6GC/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.

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 60 millivolts=.060 volts.)

With meter grounded to chassis and + probe at test point, measure voltage.

A reading of 0.055 to 0.060 volts is normal for 50 Watt amplifiers with (2) 6L6's. A reading of 0.115 to 0.120 volts is normal for 100 Watt amplifiers with (4) 6L6's. If not in this range, adjust by turning bias screw SLOWLY a small amount. **Do not set above .070!**

For other tube types (5881, 6550, EL34) check with the manufacturer or contact us for recommendations.

Settings higher than .065 with 6L6 tubes may cause premature tube wear and possibly damage the amplifier.

Keep in mind that tubes vary in quality, and some tubes can handle upwards of 40 ma each (a reading at the test point of .080!) However, to be on the safe side, use the above as a guide.

NOTE: Some amps are equipped with 2 bias pots, one for low power, the other for high power. Adjust bias in both hi and low power settings!

NOTE: Some amps are Class A/AB. In LOW POWER MODE(CLASS A), you will not get a proper reading- adjust bias in high power mode only.

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

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

Fuse Chart

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

Export 100 Volt/Domestic

Export 220, 230, 240 Fuses:

2- Jet and Jet Signature

1- Jet and Jet Signature

K&M Analog Designs amplifiers are brought to you by Bill Krinard and Joe Mloganoski.

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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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

K&M Analog Designs, LLC

619 MARTIN AVENUE, SUITE 6
ROHNERT PARK, CA 94928

SERIAL NUMBER: _____