Welcome to the RedPlate Family, thank you for your purchase of a RedPlate RedStar amplifier. Please take a moment and review this manual for an understanding of all the available features (or just put all the knobs at noon and play).

This Manual applies to RedStar models produced after 08/01/2012.

**Signal Path Block Diagram:**

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| INPUT | HI GAIN | FX LOOP | OUTPUT |
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**FRONT PANEL:**

- **Input Jack** – Typical High impedance input to the amplifier. Designed to be “Pedal Friendly”.

**PREAMP SECTION**

The HI GAIN Preamp Section is a variation of the popular Hi Gain American Style preamp with even higher gain and sustain.

1. The combination of Volume and Gain lets you adjust the character of the channel at various volume levels for consistency of tone and character in both small and large venue sizes.
2. The BYPASS feature of the Bass control bypasses the tone controls for even more “Girth”.

**Volume** – Sets the overall volume of the HI GAIN channel.

**Gain** – This control sets the amount of break up character you desire in your tone. Typical setting is around noon but experimentation is encouraged.
Treble Control – Adjusts the balance of high and low frequencies.
Middle Control – Controls the amount of Midrange frequencies, somewhat interactive with the Bass Control.
Bass Control – Sets the amount of low end. Can be rotated to zero where it clicks off for a full tone stack lift (Tone Controls are Bypassed).

**MASTER SECTION**

Presence Control – The presence circuit uses global negative feedback to remove low frequencies which frees up bandwidth for more midrange and highs. The control clicks off when rotated to zero for no presence.
Master Volume – This is an active control and actually adds gain at the higher settings. The cleanest tones are achieved at settings below 2 o’clock.

**REAR PANEL SECTION**

IEC Module – contains the main power switch, power cord inlet connector and the fuse drawer which doubles as the voltage selector on export models. To access the fuse(s) use a small flat blade screwdriver in the notch at the bottom of the power cord inlet connector, the drawer snaps out in a rearward direction. The RedStar can accept both the larger (3AG footprint) or smaller European (5mm X 20mm) fuses. A time delay variety (SLO-BLO) is recommended. When the export version becomes available, the fuse drawer can be rotated for voltage selection, make sure the correct value fuse is located on the same side of the fuse drawer as the desired selection arrow. Line up the appropriate arrow on the fuse drawer with the arrow on the bottom right of the module for the proper VAC selection.

Standby Switch – This switch allows the tubes to warm up before operating the amplifier. Wait 1 minute after power on to move it up to the operate position. For improved tube life and performance do not leave the amplifier in Standby position for longer than 20 minutes (better to just leave it in operate mode during performance intermissions).

100 WATT / 50 WATT Switch – This switch changes the output tube by lifting the center pair of output tubes (V8 & V9) enough to be irrelevant. The impedance selector does not have to be changed in 50 watt mode.
Bias adjustment and bias test point – Allows external access for bias adjustment (see bias procedure in the Maintenance section).

LINE OUT – A line level signal jack derived from the speaker output which contains the whole tone of the amplifier.

Speaker Jacks – The MAIN and EXT jacks are wired in parallel. The MAIN jack must be used first because it has a protection device. ALWAYS HAVE A SPEAKER CONNECTED TO AVOID PERMANENT AMPLIFIER AND OUTPUT TUBE DAMAGE.

Impedance Selector Ω - Set this to the total impedance of all attached speakers.

SEND and RETURN Jacks – The send jack connects to the input of an external effects device and the return jack connects to the output of an external effects device. The return jack interrupts the signal path so the external effects unit must mix the wet and dry signals.

**POWER ON/OFF PROCEDURE**

1. Check the Standby switch to make sure it is toggled downward for Standby operation.
2. Toggle the main power switch to the up position (this switch is located at the top of the IEC input module). The front panel pilot light should be lit.
3. Wait one minute and then toggle the Standby switch upwards to the Operate position.
4. POWER OFF – Toggle the main power switch downward, there is no need to go into standby first although it will not hurt anything.

**MAINTENANCE SECTION**

Your RedStar amp has been designed for years of trouble free operation. The vacuum tubes will need to be replaced over time. We recommend new output tubes every 160 - 240 hours and new preamp tubes every 320 - 480 hours.

The front and rear panels have a protective finish that can be easily scratched with abrasives so always use a damp soft cloth to clean them (never use paper towels). The cabinetry can be cleaned with our super secret tolex cleaner (on a paper towel - 2 squirts of WD-40 and 4 squirts window cleaner).

**TUBE LAYOUT**

All tube brands are acceptable, a long plate is preferred in the V6 (Phase Inverter) position.
Warning – No user serviceable parts inside so unless you know what you’re doing please refer to a qualified service person only.

BIAS PROCEDURE

1. When new 6L6 GC output tubes are installed it is important to re-bias the amp for optimal performance.
2. ALWAYS HAVE A SPEAKER CONNECTED.
3. Use a digital volt meter set to DC volts at lowest scale (MV). Makes sure the black lead is the common terminal of the meter and the red lead is the DC voltage terminal of the meter.
4. Place the Amplifier in operate mode with the Master Volume set to zero.
5. Set the 100 WATT/ 50 WATT switch to the 100 WATT position.
6. Place the red meter lead in the test point hole (red tip jack) and touch (or clip) the black meter lead on one of the metal output tube retainer clips.
7. Use a small flat blade screwdriver to adjust the bias pot for the bias number as stated on the rear panel (± 5 MV). The reading is the sum of the idle current for all 4 tubes.
8. Recheck the reading after 10 minutes of operation, and again after a week or two of operation.

INTERNAL TRIM POTS

The RedStar has 1 internal trim pot:
1. PI Balance – Useful for working with unmatched 12AX7 tubes in the phase inverter position. Refer to qualified personnel for proper setting.

RedPlateAmps Warranty

At RedPlateAmps we pride ourselves making products that are built to last. The workmanship in your RedPlate amplifier is warranted to be problem free for the lifetime of the original owner, or in the event of resale a onetime transfer to a new owner for coverage for 3 years from the original manufacture date (please inform us of an ownership change to insure coverage). The actual electrical components in your amplifier are warranted for a period of 3 years. Exclusions are vacuum tubes, reverb tanks, cables, speakers and cosmetics which are warranted for 30 days. Improper handling or product misuse or product abuse or unauthorized repair work or unauthorized modifications may nullify your warranty. Eligibility for coverage and covered items are at the sole discretion of RedPlateAmps.

RedPlateAmps
1812 W Cinnabar AVE
Phoenix AZ 85021
www.RedPlateAmps.com
email: info@RedPlateAmps.com

Thanks again for joining the RedPlate Family – Henry