

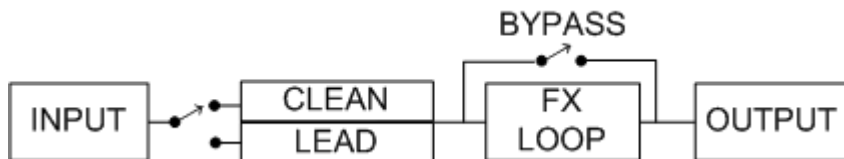


- Amps That Sing -

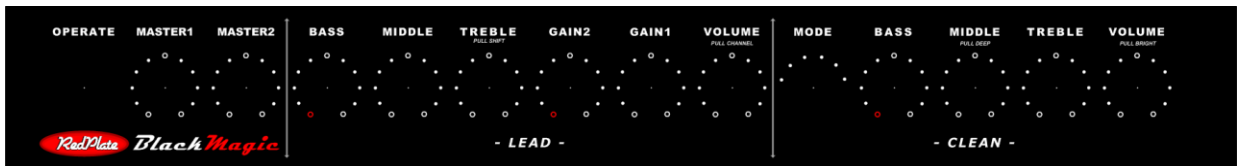
BlackMagic Operations Manual

Welcome to the RedPlate Family, thank you for your purchase of a RedPlate BlackMagic 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 BlackMagic models produced after 12/01/2013.

Signal Path Block Diagram:

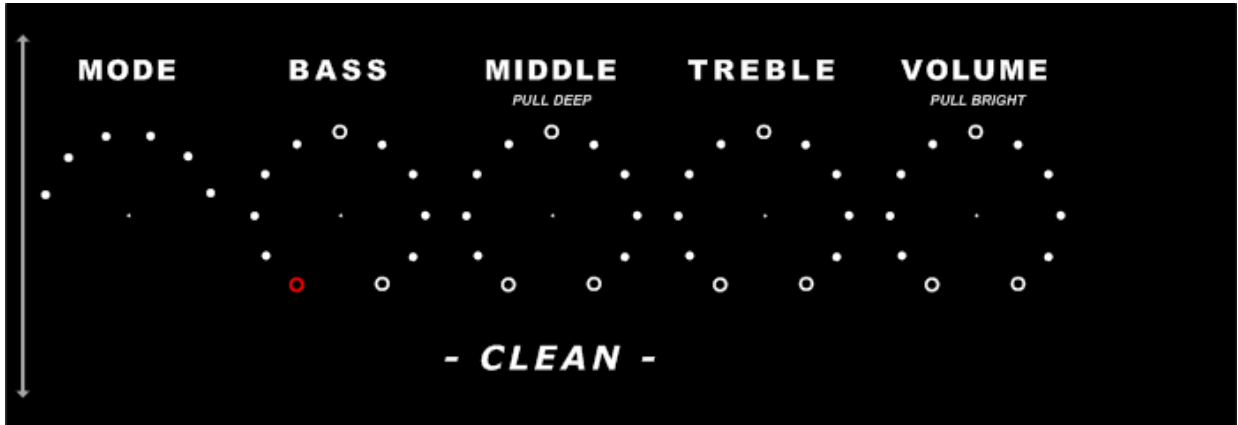


FRONT PANEL:



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

CLEAN PREAMP SECTION



The Clean Preamp is designed to imitate (and surpass) all of the “classic” guitar amp preamps by providing a full range clean tone with plenty of clear overtones and absolute control of the midrange frequencies.

Volume – Typical setting is between 10 and 1 o’clock but experimentation is encouraged, engages a Bright function when pulled.

Treble Control - Adjusts highs (also upper midrange when in Mode position 6).

Middle Control – Controls the amount of Midrange frequencies, somewhat interactive with the Bass Control. Pulls to enable “Deep” which scoops some midrange frequencies and emphasizes Bass (makes your electric sound more like an acoustic).

Bass Control – Sets the amount of low end. Can be rotated to zero where it clicks off for a full tone stack lift

Mode Selector – A six position rotary switch, it steps through 5 progressively fatter positions of the midrange center frequency and achieves maximum fat midrange by engaging a midrange boost in position 6.

LEAD PREAMP SECTION



The Lead Preamp Section is a custom variation of a popular HI GAIN Style preamp with a smooth to aggressive range of gain choices and endless 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 – Pulls for channel selection and sets the overall volume of the LEAD channel.

Gain –This control sets the amount of break up character you desire in your tone. Typical setting is around 7 o'clock for lower gain tones and around 3 o'clock for high gain tones but experimentation is encouraged.

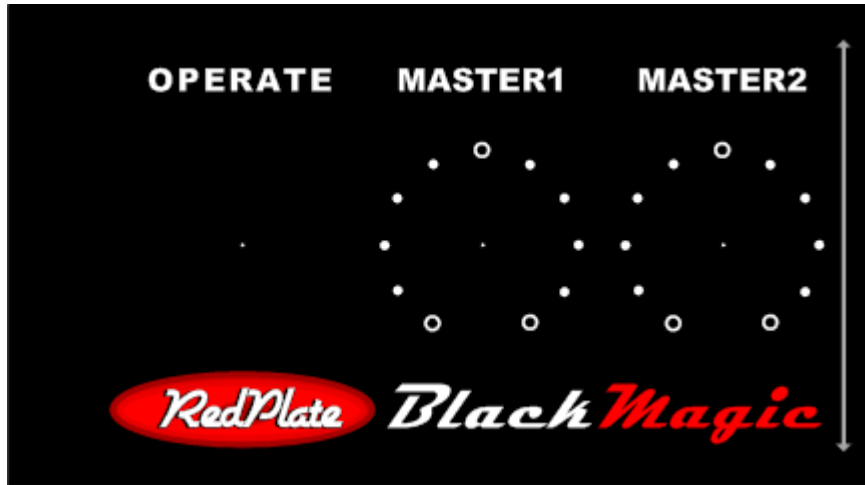
Gain2 – Like Gain (above) This control lets you set an alternate amount of break up character you desire in your tone. This control is deactivated when rotated all the way counter clockwise. Active at all other settings, it can be switched on or off with the Gain2 button on the footswitch.

Treble Control – Adjusts the balance of high and low frequencies, fatter treble when pulled.

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

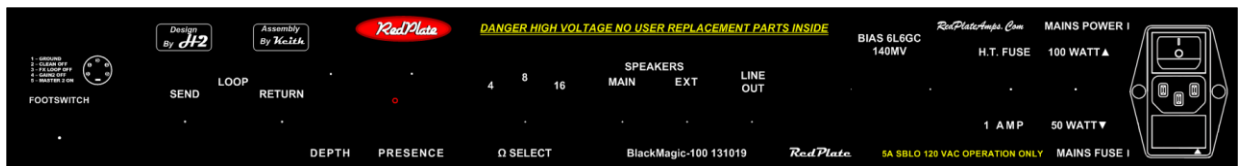


Master1 Volume – This is an active control and actually adds gain at the higher settings. The cleanest tones are achieved at settings below 2 o'clock.

Master2 Control – When engaged with the footswitch it is identical to Master1 Control. Useful for setting a solo volume.

Standby/Operate 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).

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 BlackMagic can accept both the larger (3AG footprint) or smaller European (5mm X 20mm) fuses. A time delay variety (SLO-BLO) is recommended. *Export version is identical, observe back panel recommended fuse value.*

100 WATT / 50 WATT Switch – This switch changes the output tube by lifting the center pair of output tubes (V7 & V8) enough to be irrelevant. The impedance selector does not have to be changed in 50 watt mode.

H.T.Fuse – This fuse is an extra layer of protection for the output transformer and power transformer. If this fuse blows it generally indicates an output tube failure. Always replace with same type and rating 3AG 1 amp fuse.

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.

Presence Control – The presence circuit uses global negative feedback to remove low frequencies which frees up bandwidth for more midrange and highs. The effect of this control is altered by the setting of the DEPTH control (See below for details). The control clicks off when rotated to zero for no presence.

Depth Control – Works within the presence circuit to adjust the contour of negative feedback, higher settings allow more low bass to come through. The control has no effect when the Presence control is rotated to the bypass position.

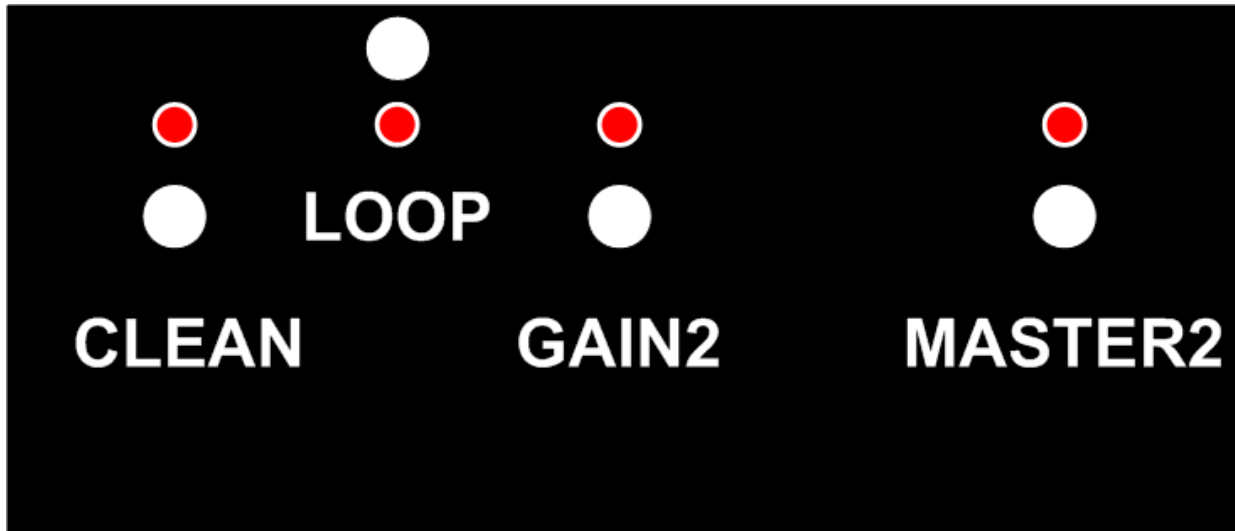
SEND and RETURN Jacks – The send jack connects to the input of an external effects device and the return jack connects to the output of an external effects device. The return jack interrupts the signal path so the external effects unit must mix the wet and dry signals.

Footswitch Jack - This is a standard 180 degree 5 pin DIN jack for footswitch connection. If a replacement cable is needed, make sure all 5 wires are supported. The pinout is conveniently located on the rear panel for use with automated switcher conversion boxes.

OTHER FEATURES

The BlackMagic comes complete with a 4 button footswitch and a footswitch cable. The cable used is a regular MIDI cable and is readily available in any length at most music stores.

FOOTSWITCH



CLEAN – Light on = Clean Channel, Light off = Lead Channel – the footswitch has no effect if the Volume control on the Lead channel is pulled out (duplicate function).

LOOP – (All Channels) Light on = normal operation, Light off = Loop jacks are bypassed, bypassing all effects in the Loop.

Gain2 – (Lead Channel) Light on = engages the Gain2 control. Light off= Gain2 is deactivated.

MASTER2 – (All Channels) Light on = Master2 Control, Light off = Master1.

POWER ON/OFF PROCEDURE

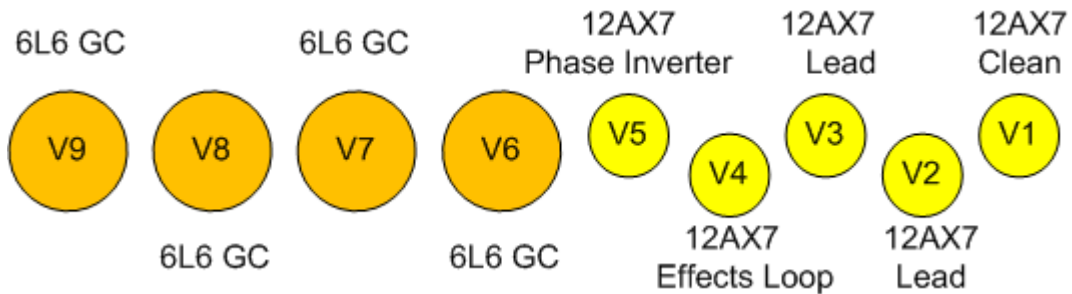
1. Check the Standby switch to make sure it is toggled downward for Standby operation.
2. Toggle the main power switch to the up position (this switch is located at the top of the IEC input module). The front panel pilot light should be lit.
3. Wait one minute and then toggle the Standby switch upwards 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 BlackMagic 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).

TUBE LAYOUT



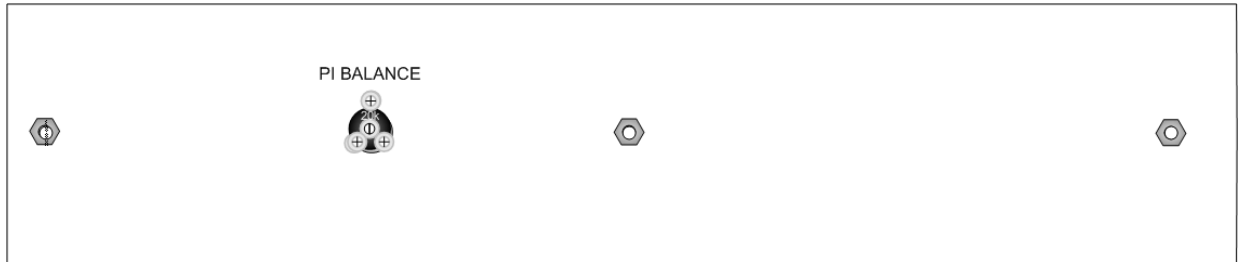
All tube brands are acceptable, a long plate is preferred in the V5 (Phase Inverter) position.

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 6L6GC 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). Make 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 BlackMagic 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

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Thanks again for joining the RedPlate Family – Henry