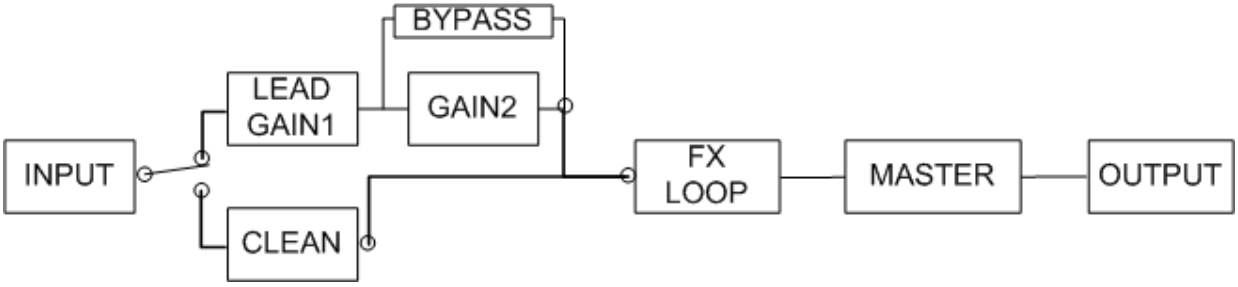
- Amps That Sing -

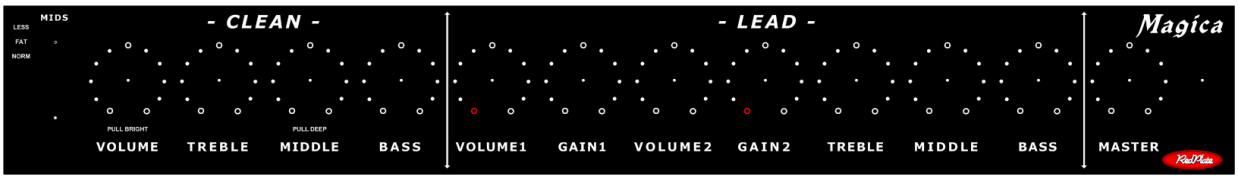
Magica
Operations Manual

Welcome to the RedPlate Family, thank you for your purchase of a RedPlate Magica 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 Magica models produced after 9/1/2014.

Signal Path Block Diagram:

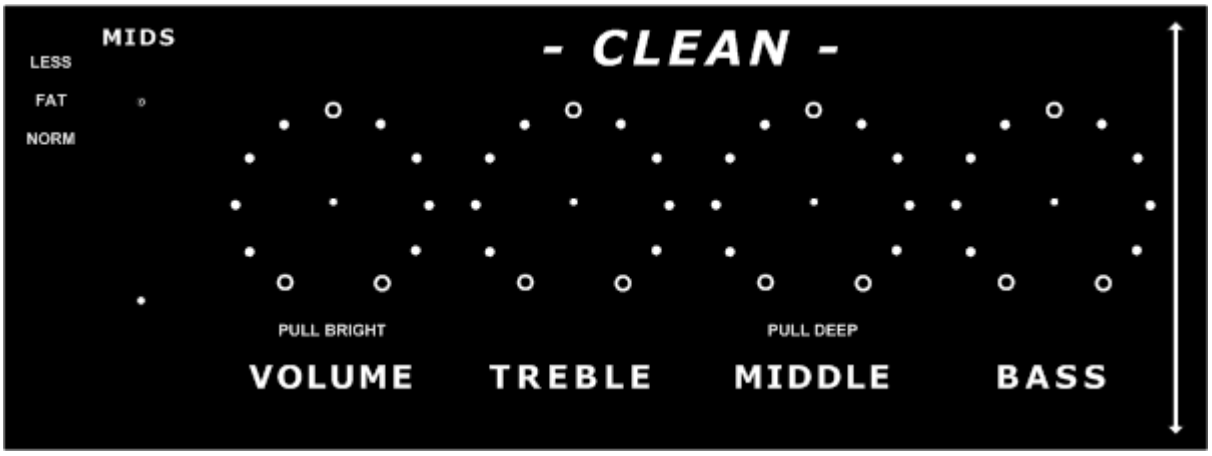


FRONT PANEL:



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.

Mids Selector – A three position switch for selecting 3 variations of the midrange center frequency, the fattest setting is in the center position.

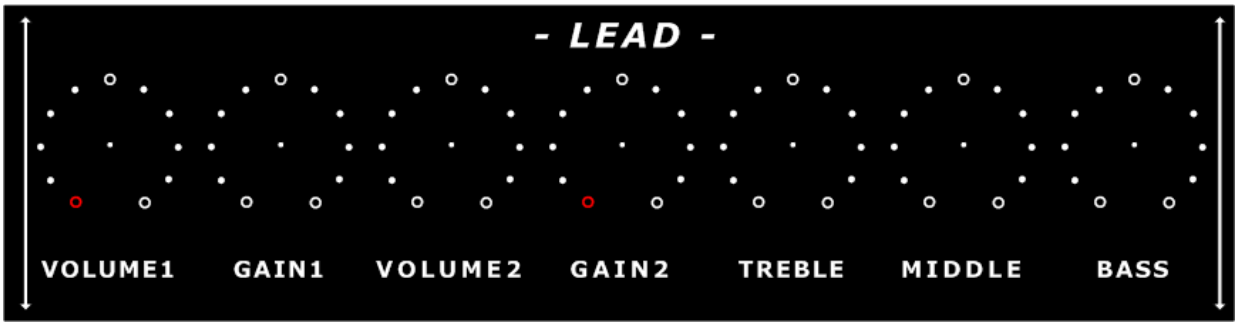
Volume – Typical setting is between 10 and 1 o'clock but experimentation is encouraged, engages a Bright function when pulled.

Treble Control - Adjusts highs.

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, somewhat interactive with the Middle Control.

LEAD PREAMP SECTION



The Lead Preamp Section is a custom variation of a popular British Style preamp with a classic to aggressive range of gain choices. The combination of Volume1 and Gain1 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. The second set of Volume and Gain controls adds another gain stage for even more "Girth" and endless sustain.

Volume1 – Sets the volume of the LEAD Gain1 channel. Rotate above zero to activate or it can be switched on or off with the LEAD button on the footswitch.

Gain1 –This control sets the amount of break up character you desire in your tone. Typical setting is around 12 o'clock for a hint of break up and above 3 o'clock for crunch tones but experimentation is encouraged.

Volume2 – Sets the volume of the LEAD Gain2 channel.

Gain2 – Like Gain1 (above) this control lets you set an alternate amount of break up character you desire in your tone. Rotate above zero to activate or it can be switched on or off with the Gain2 button on the footswitch. Volume2 and Gain2 will not function if Volume1 is rotated off.

Treble Control – Adjusts the balance of high and low frequencies.

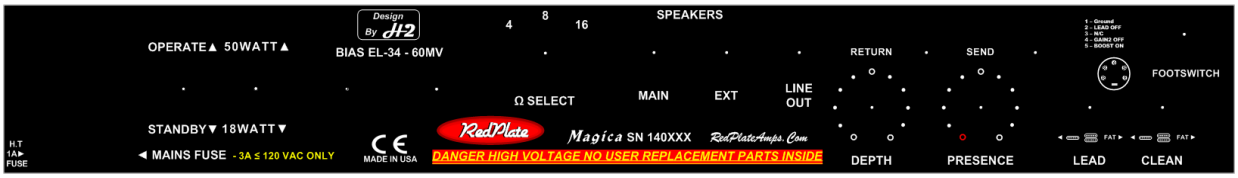
Middle Control – Controls the amount of Midrange frequencies, somewhat interactive with the Bass Control.

Bass Control – Sets the amount of low end, somewhat interactive with the Middle Control.

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.

REAR PANEL SECTION



IEC Module – contains the main power switch, power cord inlet connector and the fuse drawer which contains both the MAINS as well as the H.T. fuses. 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 Magica can accept both the larger (3AG footprint) or smaller European (5mm X 20mm) fuses. A time delay variety (SLO-BLO) is recommended for the MAINS fuse. Left side fuse is a 1 amp 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. The right side fuse is the MAINS fuse, *observe back panel recommended fuse value.*

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).

50 WATT / 18 WATT Switch – This switch does not really change the power output of the amplifier but makes the amp break up much sooner in 18 watt position.

Bias adjustment and bias test point – Allows external access for bias adjustment (see bias procedure in the **Maintenance** section).

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

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.

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

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.

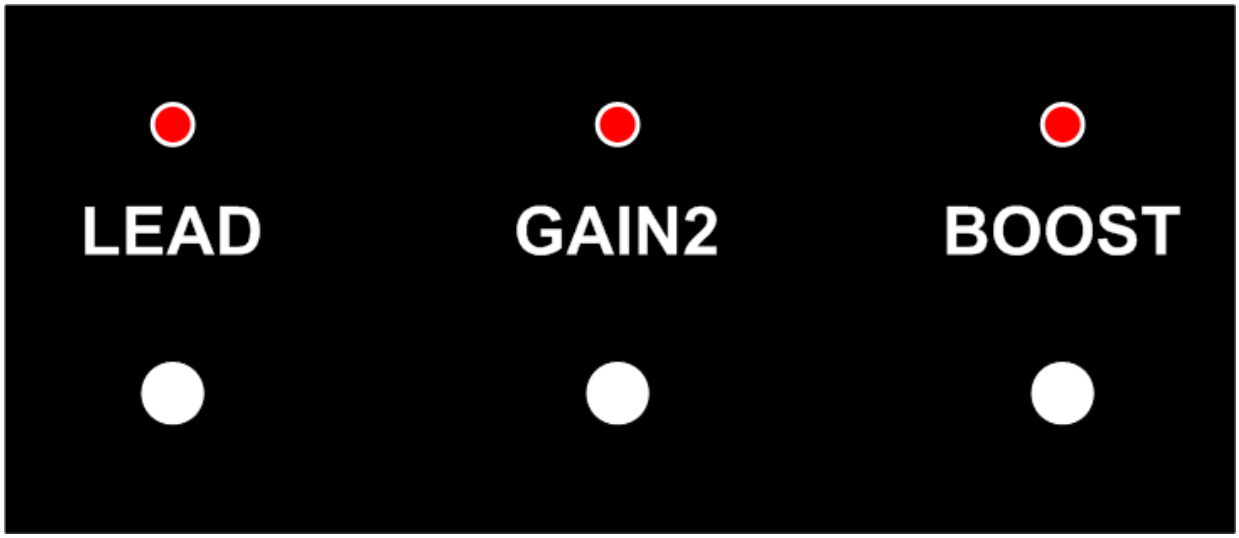
Footswitch Jack - This is a standard 180 degree 5 pin DIN jack for footswitch connection. If a replacement cable is needed, make sure all 5 wires are supported. The pinout is conveniently located on the rear panel for use with automated switcher conversion boxes.

Humbucker / Single coil/ Fat Switches – Sets the amount of bass gain in the input stage (separate switches for both Clean and Lead channels), useful for matching the amplifier to the guitar type.

OTHER FEATURES

The Magica comes complete with a 3 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



LEAD – Light on = Lead Channel, Light off = Clean Channel – the footswitch has no effect if the Volume1 control on the Lead channel is rotated to zero (duplicate function).

GAIN2 – (Lead Channel) Light on = engages the Volume2 and Gain2 controls. Lead channel footswitch MUST be on for Gain2 to operate.

Boost – (All Channels) Light on = Partial stack lift boost. See “Internal Trimpots” section to set boost levels.

POWER ON/OFF PROCEDURE

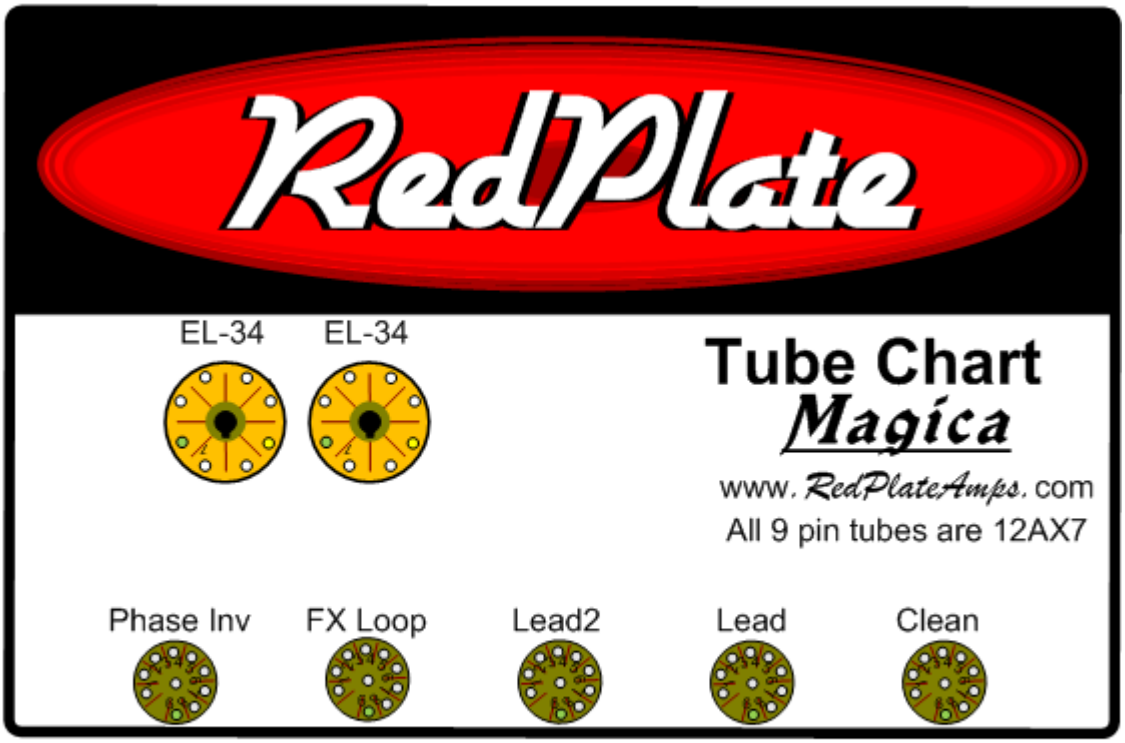
1. Check the Standby switch to make sure it is toggled downward for Standby operation.
2. Toggle the main power switch to the up position (this switch is located at the top of the IEC input module). The front panel pilot light should be lit.
3. Wait one minute and then toggle the Standby switch upwards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



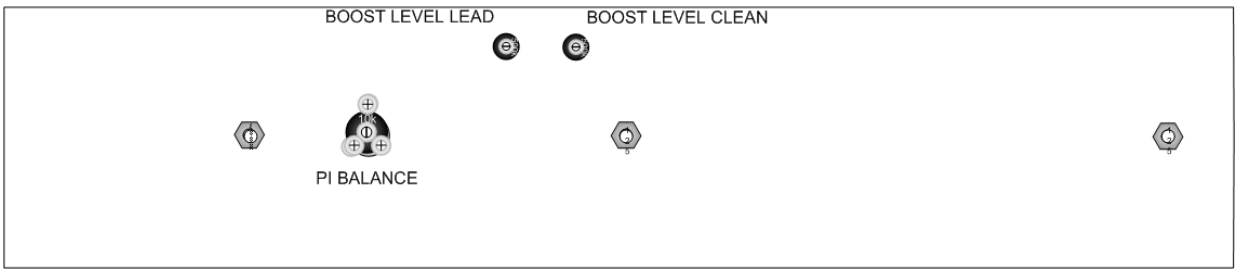
All tube brands are acceptable, a long plate is preferred in the V5 (Phase Inverter) position.

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 EL-34 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 50 WATT/ 18 WATT switch to the 50 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 both tubes.
8. Recheck the reading after 10 minutes of operation, and again after a week or two of operation.

INTERNAL TRIM POTS



The Magica has 3 internal trim pots:

1. PI Balance – Useful for working with unmatched 12AX7 tubes in the phase inverter position. Refer to qualified personnel for proper setting.
2. Clean Boost Level – sets amount of footswitch boost for the clean channel
3. Lead Boost Level – sets amount of footswitch boost for the lead channels.
   REMOVE THE POWER CORD AND PLACE THE STANDBY SWITCH IN OPERATE POSITION TO BLEED OFF HIGH VOLTAGES.

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.

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Thanks again for joining the RedPlate Family – Henry