

# MIG-LRS Tube Preamp Addendum

## For Use With Electronic Leslie Simulators

By Carsten Meyer & Tonewheel Tubeworks, [info@keyboardpartner.de](mailto:info@keyboardpartner.de)

The MIG-LRS Leslie Tube Overdrive works with a real miniature tube, designed for stand-alone use or to build into a Leslie Simulator. It even has a remote control input for switching between tube limiter and bypass mode.



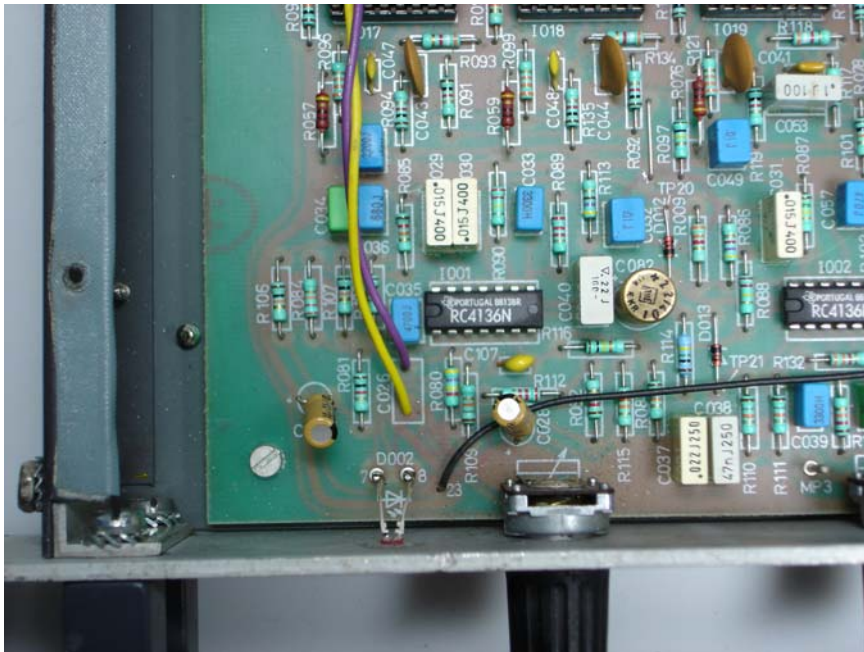
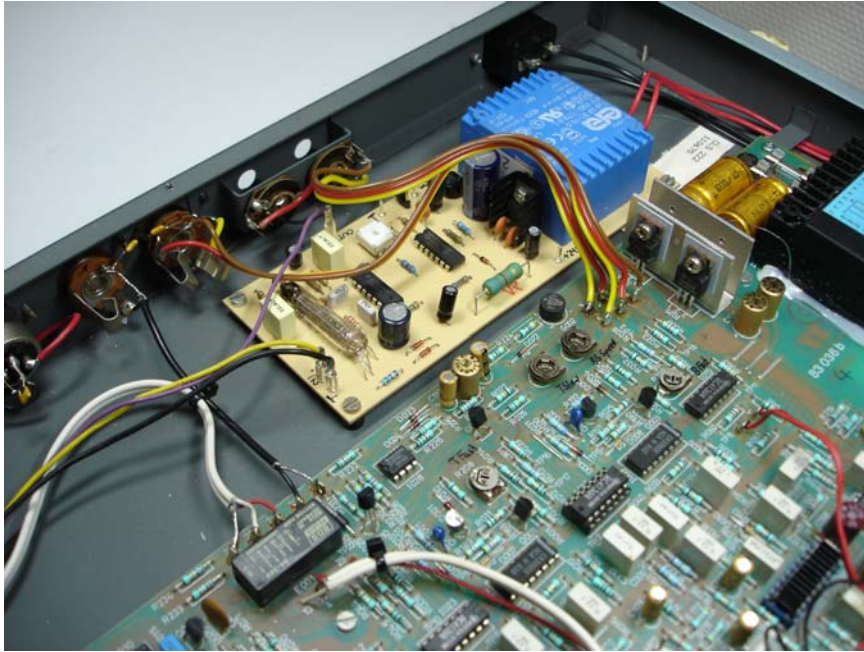
### Installation

Please read the MIG-L manual carefully, this is an addendum for the MIG-LRS only. Addendum covers installation in a Leslie simulator like the CLS-222 from Dynacord. Installation in other devices is similar.

The MIG-LRS has to be inserted in the Leslies simulators's signal path right behind the input gain pot. It has it's own power supply wired für 230V AC.

Remove plugs from power supply. Remove top and bottom of your CLS-222. Affix MIG-LRS board to the bottom as shown in next picture. 4 holes 3.5 mm have to be drilled. Use M3 screws and plastic spacers to hold the board in place. The board-to-bottom-clearance must be 5 mm or greater to ensure insulation of 230V mains voltage. Please refer to VDE regulations.

Attach 230V wires to Power input pins, coming from CLS mains switch. Use heavy wires appropriate for main voltage. Locate capacitor C026 on the CLS main board, it's near the input gain pot Refer to picture next page. Remove C026 and solder two wires into the pin holes. The wire towards the CLS front routes to the MIG-LRS input (yellow in picture), the wire towards the IC I001 (violet) routes to the MIG-LRS Output. MIG-LRS ground has to be connected with the shield pin of the CLS input wire, coming from input jack



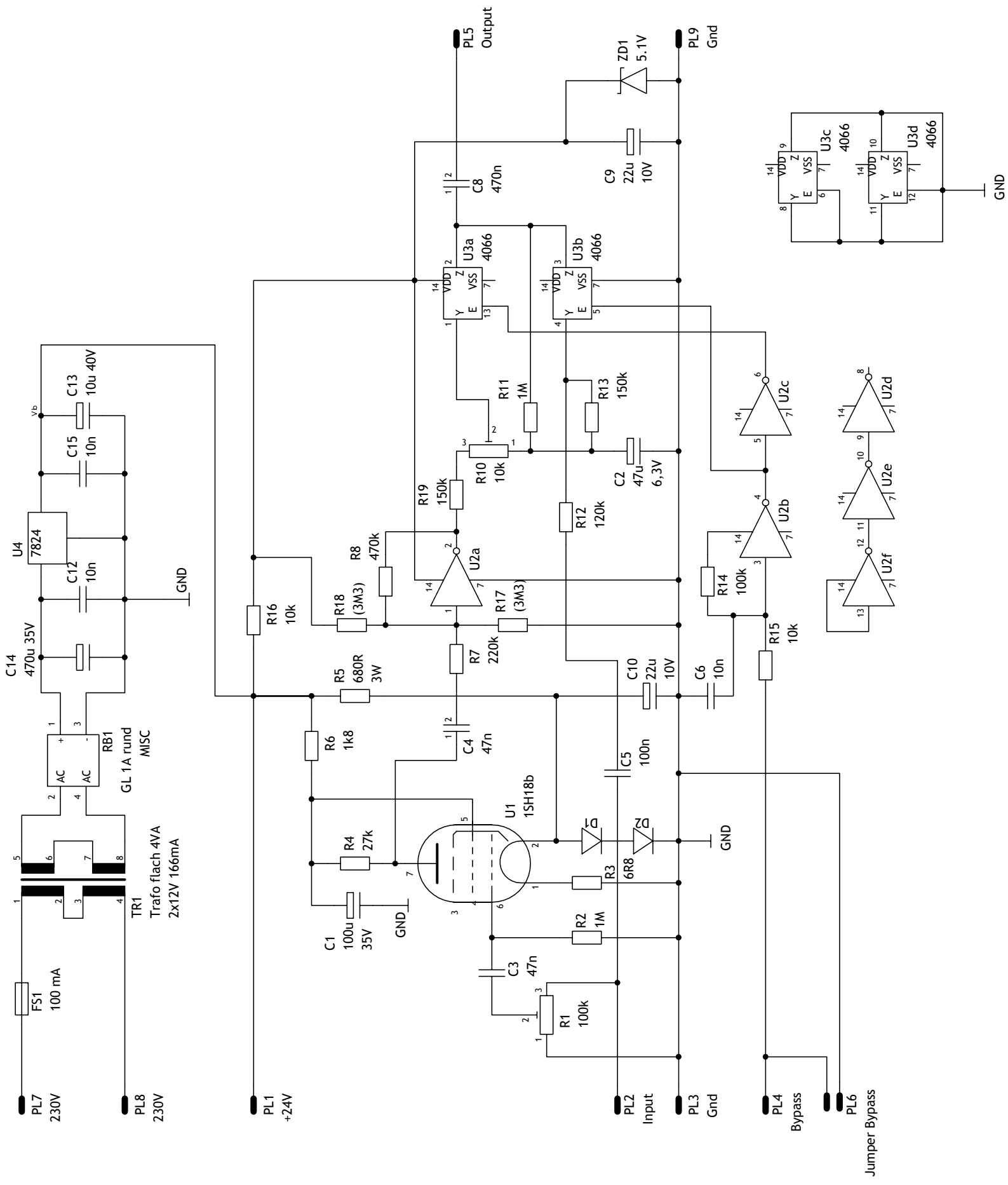
## Adjustment

The MIG-LRS has an input sensitivity of 100 mV RMS. Adjust MIG-LRS output level with trimpot that at full tube distortion the “Peak” LED on CLS-222 just lits up (50 mV output to CLS-222). When properly adjusted, distortion will occur only in the MIG-LRS, not in the CLS-222. The MIG-LRS will limit the level before transistor clipping occurs in the Leslie simulator.

Bypass mode (effect off) can be activated by grounding “Bypass” Pin or by installing jumper PL6 (normally open).

Additional information and this PDF can be found at

<http://www.keyboardpartner.de/hammond/lesliemods.htm>



MIG-LRS Tube Preamp (C) C. Meyer 2005

