

LA100 Application Note 32: Fitting the LA100 Silver Upgrade (Linear PSU)

Note: Only fit this modification to LA101 or LA102 with a transformer (NOT a black switch-mode power supply). These instructions apply to issue 4 and 5 LA100 top boards.

This kit is to be fitted by competent engineering personnel. If you have any queries, contact Lindos for advice.

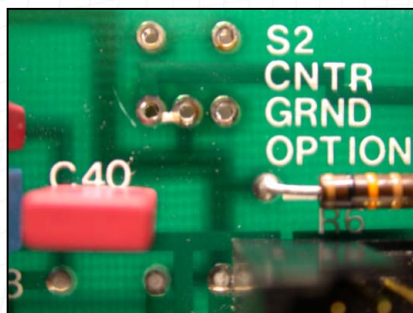
While fitting the kit, static electricity precautions should be observed.

Check kit contents:-

- 2 x Chassis
- 2 x Sets of single covers
- 2 x Rear panels
- 2 x Front panels
- 1 x Set of LA101 front and rear labels
- 1 x Set of LA102 front and rear labels
- 2 x Fuse holders
- 2 x Fuse holder boots
- 2 x 1A fuses
- 2 x 150mm length of brown cable
- 1 x Switch
- 2 x D-type sub PCB connectors
- 2 x RS232 leads
- 2 x Cable ties

Fitting the upgrade:-

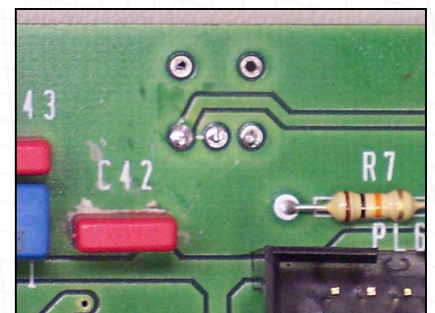
- Remove covers and place to one side.
- Unplug the cable forms and unscrew the circuit boards and place in a rack.
- Fit the switch to the LA101 bottom board, this is found on Iss.2 boards or above only. This is marked S2 on some boards or with a centre ground/floating diagram on others. Refer to photo below. Issue 3 and Issue 4 V2 require modifying.



LA101 Issue 3



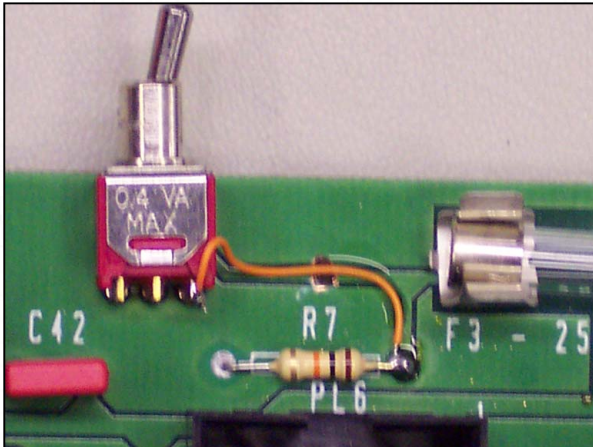
LA101 Issue 4 – V1



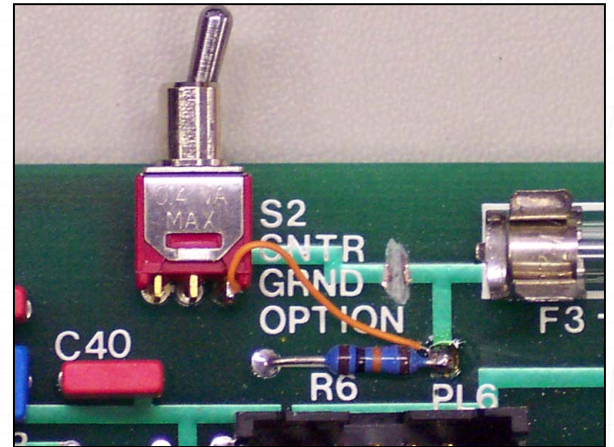
LA101 Issue 4 – V2

DO NOT MODIFY

1. Using a scalpel, cut the track that links the toggle switch S2 to the left fuse bracket of F3. Refer to the diagram below as necessary.
2. Link the right leg of the switch to the right side of resistor (R6 or R7) below it using kynar wire (or a suitable alternative) as shown below.
3. Using a multimeter set to ohms, place one probe on the grounding point for the chassis (found on the right hand edge of the board after the inductor L1) and the other probe on the centre pin of the switch S2. With the switch to the right (as shown below – ‘floating’ setting) you should measure 10k Ω ; with the switch to the left ~5 Ω should be measured.

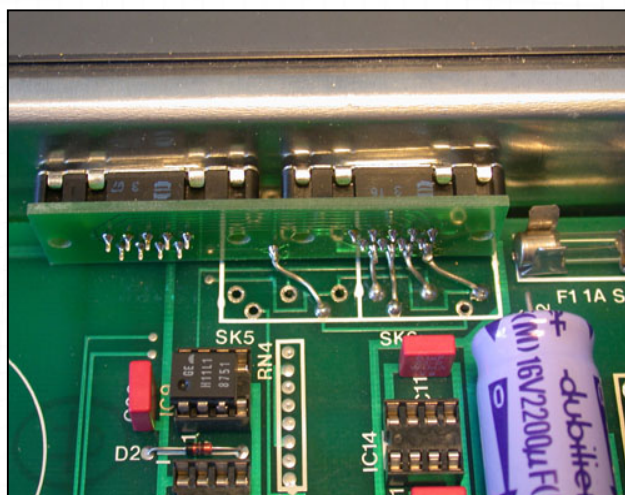


LA101 Issue 4 V2 after modification



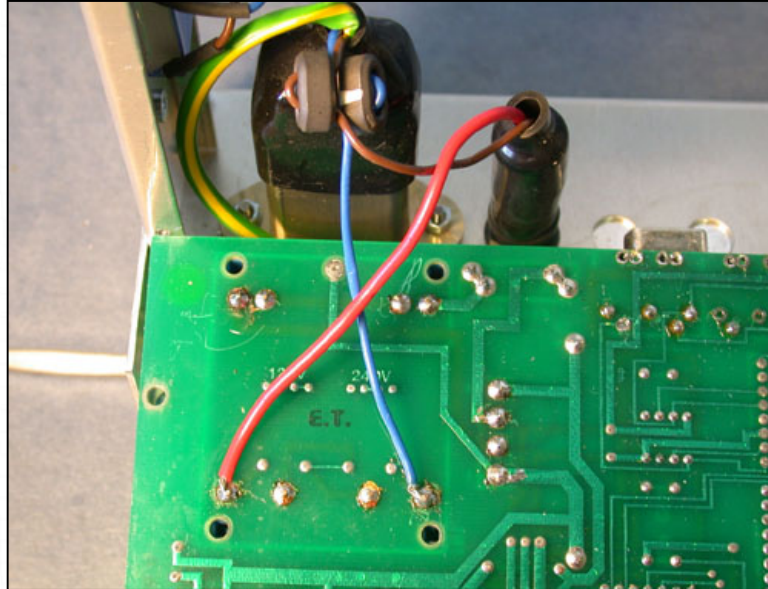
LA101 Issue 3 after modification

- Carry out the lithium-ion upgrade (Application Note 23) until the instruction ‘Check the number on the diode...’, returning to it later when specified in these instructions.
- Remove the DIN connectors from the top boards and replace with the D-type sub PCB connectors. Use the diagram below for the pin placement of the D-type sub PCB connectors.



- Do the following procedures for each unit separately. Remove the front panel from the chassis and place to one side. Remove the rear panel and discard. Remove the XLR sockets, mains filter, fuse holder (if present) and the BNC sockets (LA102 only) and retain.

- Take the new chassis and check that the mains filter fits; the hole may need to be filed. This is best achieved by gradually filing all four sides of the hole to ensure that the bolt holes remain aligned. Clean burrs from the edges and clean off filings. Place the relevant LA101 or LA102 back label on the chassis. Fit the BNCs (102 only) and XLRs and screw in the mains filter, fit the fuse holder or add a new one.



Fix the fuse holder to the chassis using the nut provided, solder the brown wire, after placing through fuse holder boot first, from the mains filter and solder to one tag on the fuse holder. Take the length of brown wire and solder to the other fuse holder tag and slot through the fuse holder boot also. This will be soldered to the board – see section 9. Slot the fuse holder boot onto the fuse holder and tighten in place with the cable tie. Take the 1A fuse and place into the fuse holder slot and screw this into the fuse holder attached to the chassis. Finally screw in the new rear panel.

- From the old front panel remove the LCD display, glass, keypad assembly and jacks. The jacks are removed by peeling away the label to allow the unscrewing of the jack nuts. These items are retained except the brown front panel and buttons. Take the new front panel and remove and discard the grey button support and screw in the retained keypad assembly – key mat and keypad PCB. Fit the retained jacks with the washer and nut – looking from the rear, the red and white ground wires should be in the top left corner. Place a front label on the panel and check that the buttons do not stick – change any that do. Clean the glass and place into the panel. Clean the LCD and screw into the panel. The assembled front panel can now be screwed onto the chassis.
- Solder the live (brown) and neutral (blue) wires to the transformer connections on the bottom of the top board (see photo above) and then screw the board to the chassis, connect the front panel cables to the top board. Screw on the bottom board and connect the top and bottom boards with the cable form. Go back to Application Note 23 to finish the upgrade procedure.
- Test the units by running a self-test.

GG 07.03.2007