

LA100 Application Note 21: Replacing the LA100 Mains Transformer

The mains transformer used in the LA100 is normally quite reliable, but does occasionally fail, usually by going open circuit. Section 10.7 of the LA100 Manual (edition 4 onwards) explains how to test for a faulty transformer.

We have used two different types of transformer in the LA100, and it is very important that the correct transformer is fitted when replacing a faulty one:

LA100 units with a green backlit LCD:	use Block Type FL6/5
LA100 units with a grey, non-backlit LCD:	use Block Type FL6/6

DO NOT ATTEMPT TO USE THE WRONG TRANSFORMER IN AN LA100.

Both types are available from Lindos, and you should specify at the time of ordering which type you require.

Fitting the New Transformer

1. Disconnect the mains power and remove the top and bottom covers.
2. Remove the battery (if fitted).
3. Disconnect the ribbon cables connected to the top board and remove the top board screws.
4. Carefully turn the unit over (the top board is no longer fixed to the chassis).
5. Disconnect the ribbon cables connected to the bottom board. Remove the 4 screws and set the bottom board to one side.
6. Slide the top board towards the front of the chassis to provide clear access to the transformer area then unscrew and remove the protective plate covering the brown and blue mains wires.
7. Unsolder the brown and blue wires (noting their position) and set the chassis to one side.
8. Unsolder and remove the transformer.
9. Replace the transformer and solder the new transformer in place.
10. Solder the brown and blue wires to the transformer connections and replace the protective cover.
11. Turn the unit over carefully and screw the top board into place. Reconnect the three ribbon cables at the front of the top board.
12. At this point it is perfectly permissible (so long as the protective plate is fitted) to connect the unit to mains and confirm that it is now powering up, LA101s display a key test routine when the bottom board is not connected. LA102s display a static level screen. If the unit does not power up refer to the top board circuit in the manual for further fault finding. Things to consider include the bridge rectifier D4 and the fuse F1. Remember to disconnect mains before proceeding to the next step.
13. Refit the bottom board and re-test.
14. Refit the covers.

PMS 02.02.1994 (updated CMS 4.1.2022)