

# CXL-60T 100/70 V Transformer

## **Installation Guide**

### **Important Safety Notes**



It should be recognised that 100 V- or 70 V-line speaker systems have the potential to deliver an electric shock. Install the CXL-60T only in accordance with these instructions.

In all cases, the external wiring and associated speakers will need to comply with local electrical regulations for AC voltages up to  $100 V_{rms}$  (141  $V_{peak}$ ).

Do not expose the transformer to rain or moisture.

The transformer must be be installed in a safe manner. Cloud Electronics Ltd., accept no responsibility for hazardous installations.



#### Introduction

The CXL-60T is an optional transformer kit for the MA60/MA60MEDIA, to permit the MA60/MA60MEDIA to directly drive 100 V, 70 V or 50 V-line loudspeaker systems. The transformer is rated at 50 W output, and is mounted internally. The outputs are available on a 4-pin 5 mm-pitch screw-terminal connector which occupies the hole (shown below) in the rear panel normally covered by a blanking plate.



### Fitting the CXL-60T transformer kit

The transformer kit comprises the following items:

- CXL-60T toroidal transformer, terminated on PCB-mounted 4-pin connector
- M6 countersunk-head fixing bolt
- Safety cover
- 2 x M3 hex pillars
- 2 x M3 x 6 screws
- Mating 4-pin connector
- 2 x cable ties

Proceed as follows:

I. Disconnect the MA60/MA60MEDIA from AC mains.

2. Take the top panel off by removing the eight M3 screws (six on the top panel itself; two through the fornt panel) securing it.

3. Turn the unit upside down, and remove the plastic blanking plug from the M6 hole in the base of the unit. (The hole is in the centre of the chassis, about 8 mm behind the front panel.) Insert the M6 fixing bolt supplied with the kit through the hole.



4. Fit the transformer with the fixing screw through its central core. The top of the transformer has a threaded M6 insert; tighten the screw from underneath using a hex key.



5. The primary winding of the transformer is terminated in a two-pin Molex-type connector. This should be plugged into the header marked CNI5B on the main PCB. See diagram on page 4 for location.

6. On the rear panel, remove the plastic blanking plate covering the LINE OUTPUT connector hole.

7. Fit the 4-pin connector on the ends of the secondary winding leads from the transformer (the remaining four) into this hole, so that the threaded holes in the two PCB mounting brackets line up with the two holes alongside the connector. Use the male ends of the hex pillars (supplied) to secure the PCB and connector in place.

8. Use the two cable ties supplied to tidy up the transformer leads; ensure that they do not pass over the top of the main heat sink.

9. Replace the top cover, using the original screws.

10. Connect the speaker system to the line outputs using the mating connector. Note that only two of the pins will be used; one will always be pin 1 (0V).





11. After plugging the connector in, the safety cover should be fitted by securing it to the female ends of the hex pillars using the two M3 screws supplied.

**Important** - Note that the low-impedance output should not be used once the line output transformer is fitted.

Once the transformer is fitted, it is strongly recommended that the MA60/MA60MEDIA's 65 Hz high pass filter is set ON by moving internal jumper J13. This is to minimise distortion due to transformer saturation at low frequencies.



MA60 MAIN PCB VIEW FROM REAR NOT TO SCALE - Only primary components shown

Cloud Electronics Limited 140 Staniforth Road, Sheffield, S9 3HF. England. Telephone: +44 (0)114 244 7051 Fax: +44 (0)114 242 5462 Web: www.cloud.co.uk Email: info@cloud.co.uk