

## LA100 Application Note 14 – Identifying the Cause of a Faulty LA101 Output

Noisy or intermittent output from an LA101 is usually due to a relay or DC-DC converter failure. Locating the fault and replacing the faulty component is usually straightforward and need not involve returning the unit for repair. All spare parts are available directly from Lindos Electronics and are usually despatched the same day, often free of charge. Remove the bottom cover from the LA101. Measuring conditions: LA101 set for +26dBu; 1kHz; L+R. OUTPUTS OPEN CIRCUIT. Refer to circuit diagram "LA101 BLOCK 4 - ATTENUATOR AND OUTPUT AMP" Appendix D, page 178 of the 5<sup>th</sup> Edition Manual.

1. Confirm presence of +5V and  $\pm 15$ V supplies, by measuring bottom board IC27 pin 14 (0V); pin 2 (+5V); pin 13 (+15V); pin 3 (-15V). If any are missing, the fault is probably on the top PCB, power supply. 15V failure is invariably due to a faulty DC-DC converter.

2. Measure the resistance of the 2 output fuses, F1 and F2 . both should be around 5W.

**Only replace with 250mA quick blow fuses.**

3. Relay failures are much more common than IC failures, but can be intermittent (due to relays sticking). Test the 5 relays by monitoring the output at the XLR sockets and proceed as follows:

Relay 1 operates when a level of -38dBu or less is selected. If the fault condition is present below -38dBu but not above -38dBu (or vice versa) then relay 1 is probably faulty.

Relays 2 & 3 mute the left & right channels respectively. If the fault is on one channel only, the relay associated with that channel is probably faulty (RL2 - Left; RL3 - Right). Relays 4 & 5 switch between 75W and 600W for the L (RL4) and R (RL5) front panel ¼" P.O. Jack outputs.