TEST SPECIFICATION: TL Audio

Issue 1: 11th March 1996.

Tolerance on inputs +/-0.3dB, outputs +/-1dB, unless stated otherwise.
Tests must be performed in sequence, with controls changed only as indicated.

1. **MAINS VOLTAGE:** **Set to 230V .**

2. **GROUND CONTINUITY:** **Limit 0.01 ohms.**

2.1 Measure the resistance between the ground pin of the IEC inlet to the chassis ground screw.

3. **VISUAL INSPECTION:** Inspect the unit, paying particular attention to the following:

3.1 - the orientation of power supply diodes and capacitors,

3.2 - the orientation of ICs,

3.3 - all mains wiring,

3.4 - check the solder side of the PCB for unsoldered joints and solder splashes,

3.5 - the quality of external paint and silk screening,

3.6 - check all knobs and switches operate freely and are uniformly spaced from the panel,

3.7 - all XLR connectors are locked,

3.8 - LED alignment with front panel,

3.9 - check all screws are fully tightened.

4. **SWITCH ON,** and check for any sign of component stress or over-heating.

4.1 **LED CHECK:**

Check the POWER and both EQ IN LEDs illuminate.

Perform tests 5.1 to 5.12 for both channels:

5. INPUTS:

5.1 LINE INPUT: **Output 0dBu.**

Equaliser: XLR Input, Gain 0dB, XLR O/P, EQ out, Dual 2 Band mode.
A2: 1KHz, Sine, 0dBu, 22-22k Filter, Meter.

Adjust RV3 (Ch A) /RV4 (Ch B) on PC133 for 0dBu output.

Adjust RV1 and RV4 on PC133 for A and B balance respectively.

5.2 INPUT GAIN:

A2: -20dBu.

Equaliser: Check input gain variation +/-20dB.

Return A2 level to 0dBu.

5.3 EQUALISER IN: **Output 0dBu.**

Adjust RV1 (channel A) and RV2 (channel B) on PC137.

5.4 HUM AND NOISE: **Limit -80dBu.**

A2: Mute Output.

Equaliser: Cut/Boost controls centered.

5.5 AUX INPUT, LO GAIN: **Output -14dBu.**

A2: -20dBu.

Equaliser: Input to Aux Jack, Gain 0dB, Lo Gain.

5.6 AUX INPUT, HI GAIN: **Output +3dBu.**

Equaliser: Hi Gain.

5.7 UNBALANCED INPUT AND OUTPUT: **Output -20dBu.**

Equaliser: Input to unbalanced jack, output from unbalanced jack.

5.8 PEAK LED:

A2: 0dBu.

Equaliser: Input and output via XLR.

Adjust the input gain, checkung that the PEAK LED begins to glow @ +6dBu output, and is fully illuminated @ +16dBu output.

5.9 FREQUENCY RESPONSE: 10Hz-40KHz +0, -1dB.

A2: 22Hz-22KHz filter off. Sweep.

5.10 EQ RESPONE:

A2: ALT waveform.

For each band, check flat at each switched frequency, and boost/cut response.

Return all boost/cut controls to centre.

5.12. DISTORTION: Limit 0.2%

A2: 22-22K Filter out, THD.

6. SOAK TEST.

With top and bottom covers fitted.

7. QA CHECK.