

**TEST SPECIFICATION: TL Audio INDIGO**

**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 -74dBu.**

A2: Mute Output.

Equaliser: All EQ 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, checking 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 BAND 1 RESPONSE (Ch A) / BAND 4 RESPONSE (Ch B):**

Sweep at maximum cut, minimum frequency and minimum Q. Compare with test limits.

Repeat at maximum boost, maximum frequency and maximum Q. Compare with test limits.

Return all EQ controls to centre.

**5.11 BAND 2 RESPONSE (Ch A) / BAND 3 RESPONSE (Ch B):**

Sweep at maximum cut, minimum frequency and minimum Q. Compare with test limits.

Repeat at maximum boost, maximum frequency and maximum Q. Compare with test limits.

Repeat at /10 (x10) frequency range.

Return all EQ controls to centre.

**5.12. DISTORTION: Limit 2%**

A2: 22-22K Filter out, THD.

**6. MONO 4 BAND MODE: 0dBu.**

Equaliser: Input to channel A XLR, Output from channel B XLR,  
Mono 4 Band mode.

Return the Equaliser to Dual 2 Band mode.

7. **SOAK TEST.**

With top and bottom covers fitted.

8. **QA CHECK.**