EMO CABLE TESTER E447
INSTRUCTIONS FOR USE

CAUTION: UNDER NO CIRCUMSTANCES SHOULD THE UNIT BE CONNECTED TO ANY EQUIPMENT WHICH IS IN OPERATION OR CONNECTED TO MAINS POWER.

Models

- EMO Remote Cable Tester E447 (25-447)

Description

The Remote Cable Tester is a compact test set allowing the user to locate most continuity fault conditions within professional audio equipment.

Contents

- E447 Remote Cable Tester
- Dummy Plug
- Test leads

Power

The CABLE TESTER is powered by a 9V battery, type 4022, MN1604, 6LR61 or equivalent. (Old PP3 style.) The battery can be changed by removing the lid of the unit. When replacing the lid ensure that the battery lead is not trapped. Correct operation of the battery can be established by placing a short-circuit across the Fuse Test terminals and observing the LED in Button 3. If the LED is dull or fails to light then the battery should be replaced. This should be done at least annually to prevent any possible leakage.

Cable Testing

The remote end of the cable to be tested should be located and the dummy plug inserted. The near end should then be connected to the tester and each of the three buttons pressed in sequence. The results can be interpreted by consulting the table overleaf.

Fuse Testing

The unit will test most commonly used fuse links. Place the fuse across the Fuse Test terminals ensuring that the fuse end caps make good contact. If intact, the red 'FUSE TEST' LED will light. Correct operation of this section may be confirmed by placing a screwdriver across the terminals. Other items, such as theatre lamps, etc., may be tested in this way if their connections have suitable spacing, e.g. Par 64 lamps, 15A round pin theatre lamps, etc.

Continutity

By use of the Test Leads, continuity of external circuits may be checked and the result observed on the red 'CONTINUITY' LED. Please note that the LED will illuminate (with reduced brightness) even when considerable resistance is in circuit. This section also gives an audible indication.

Note
When testing cables the CABLE TESTER cannot determine where the faults actually lie, only if the fault exists. For example:

> In the case of a cable shown to have an open circuit, the fault could lie in either of the connectors or in the cable itself. In these circumstances use of the continuity section of the CABLE TESTER can be invaluable. In the case of screened cables, connection of the screen to the correct pins can only be determined by a visual inspection.

Table

● ○ ○ 1 2 3 CONTINUITY 1	○ ● ○ 1 2 3 CONTINUITY 2	○ ○ ● 1 2 3 CONTINUITY 3
○ ● ○ 1 2 3 CROSS-WIRE 1-2	● ○ ○ 1 2 3 CROSS-WIRE 2-1	● ○ ○ 1 2 3 CROSS-WIRE 3-1
○ ○ ● 1 2 3 CROSS-WIRE 1-3	○ ○ ● 1 2 3 CROSS-WIRE 2-3	○ ● ○ 1 2 3 CROSS-WIRE 3-2
● ● ○ 1 2 3 SHORT 1-2	● ● ○ 1 2 3 SHORT 1-2	○ ● ● 1 2 3 SHORT 2-3
● ○ ● 1 2 3 SHORT 1-3	○ ● ● 1 2 3 SHORT 2-3	● ○ ● 1 2 3 SHORT 1-3
● ● ● 1 2 3 SHORT 1-2-3	● ● ● 1 2 3 SHORT 1-2-3	● ● ● 1 2 3 SHORT 1-2-3
○ ○ ○ 1 2 3 OPEN-CIRCUIT 1	○ ○ ○ 1 2 3 OPEN-CIRCUIT 2	○ ○ ○ 1 2 3 OPEN-CIRCUIT 3

← This line shows a correctly wired cable.

Note: On cables which show continuity faults it is possible for the cable also to be cross-wired, a condition which the CABLE TESTER will only show after the short has been corrected. It is therefore recommended that cables are checked after repair to ensure that all faults have been corrected.

Although the table may appear a little complicated, a short time spent experimenting with the CABLE TESTER should allow the user to identify faults in cables without needing to refer to the table.

● = LED 'lit.'