AudioCheck (TM)
Operations Manual

Introduction

The AudioCheck(TM) Cable Tester is a versatile unit that allows the user to either identify the connections within a variety of Professional/Home Audio cables, Or carry out rapid comparison tests having stored known good cable details.

Cables fitted with any of the following connectors may be checked:

- 3 Pole XLR Male or Female

- 1/4" Jack, stereo or mono

- 3.5mm Jack, stereo or mono

- 4 Pole Speakon (TM)

- DIN 180 3,5 & 7 Pole

- DIN 240 5 & 6 Pole

- Phono

The AudioCheck(TM) Cable Tester allows you to visually test for the following conditions:

- Continuity

- Short Circuits (end to end & between unconnected pins)

- Open Circuits (end to end & between unconnected pins)

- Crossed Wires

- Leakage between wires (up to 47K)

- Loose Connections

Using the AudioCheck(TM) Cable Testers MEMORY ** option allows you to automatically test the cables for the following conditions:

- Continuity (less than 100R)

- Short Circuits (as in visual test, less than 100R = FAILED)

- Open Circuits (as in visual test, greater than 100R = FAILED)

- Crossed Wires (less than 100R = FAILED)

- Less than 2 seconds test time

Please read the following instructions carefully before using the AudioCheck (TM) Cable Tester.
Warning:

> The Cables to be tested must be fully disconnected from any other equipment or electrical source. Failure to do so could result in electrical shock and permanent damage to the AudioCheck (TM) Cable Tester, for which the manufacturer and suppliers can accept no liability.

Getting started:

The AudioCheck (TM) Cable Tester will require fitting of batteries (not supplied). Using a No 0 'Supadrive screwdriver remove the two countersunk screws to gain access to the battery compartment. Fit four 'AAA' or MN2400 batteries as indicated on the circuit board and rear case label.

Batteries / Power Down:

Under normal use the batteries should give at least a years use. However, to preserve battery life AudioCheck (TM) has a Power Down feature. After 15 minutes of inactivity AudioCheck (TM) will indicate that Power Down is about to occur by flashing the PASSED,FAILED & MEMORY LED's. Press the TEST button to continue, or switch OFF and then ON again to reset AudioCheck (TM).

Test Procedure

There are 2 rows of 8 Light Emitting Diodes (LED's) corresponding to each of the 7 possible connector pins and one for the screen (or ground) connection. Checking the status of connections is made using the TEST button. Until you become familiar with the connectors pin wiring you may wish to refer to the LED/Connector Identification table 1.

Table 1.

CONNECTOR	PIN No.	LED No.
XLR	1	1
	2	2
	3	3
	SCREEN	SCREEN
STEREO JACK	TIP	1
	MIDDLE	2
	BODY	SCREEN
MONO JACK	TIP	
	BODY	SCREEN
SPEAKON	1+	1
	1-	2
	2+	3
	2-	4
DIN 3 POLE	1	1
	2	2
	3	3
DIN 5 POLE	4	4
	5	5
DIN 6 POLE	6	6
DIN 7 POLE	7	7
ALL DIN'S	SCREEN	SCREEN

1. Plug one end of the cable to be tested into an appropriate socket using the lower half of the AudioCheck (TM).

2. Plug the other end of the cable into an appropriate connector using the upper half of the AudioCheck (TM).

3. Switch ON.

After a brief random display, ALL the LED's should turn ON for a couple of seconds and then turn OFF. If this is not the case then please check and replace the batteries if required , otherwise return the AudioCheck (TM) for repair.

4. To start the test press and release the TEST button. On the lower row of LED's the No1 LED will turn ON,

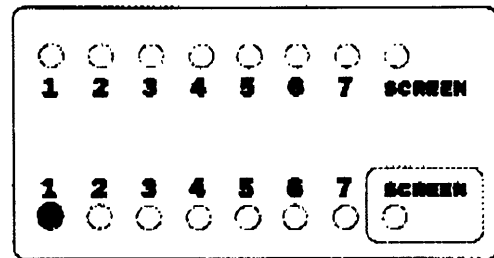A single LED ON indicates that there are no connections to that pin (Fig1).

Fig1. NO CONNECTION TO Pin1.

Two or more LED's ON (either row) indicate the connection from the PIN 1 of the connector plugged into the lower half of the AudioCheck(TM) (Fig2).
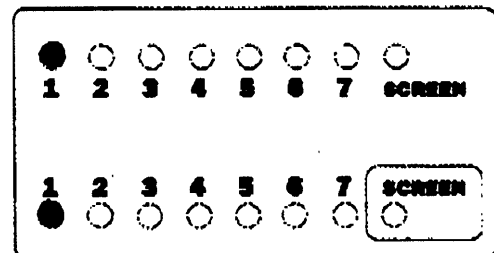

Fig2. CONNECTION BETWEEN Pin1's

5. Press and release the TEST button again, the current LED's will go out.

If there were no connections in previous step then the upper LED No1 will turn ON (Fig3).
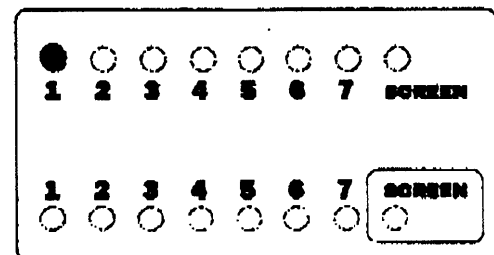

Fig3. NO CONNECTION AT Pin1 (upper).

Or if there were connections in the previous step then the lower No2 LED will turn ON (Fig4).

As before if there are any other LED's ON (either row) then they indicate the connection from the PIN 2 of the connector plugged into the lower half of the AudioCheck (TM).

Fig4. NO CONNECTION TO PIN 2.

Repeat step 5 until the SCREEN LED turns ON (Fig5).
This is the end point for the visual test procedure, Audio-Check (TM) can not decide for you whether the results are correct or not.

Then either:-
Press and release the TEST button to clear the display and take you back to step 4.

Or:-
Press and hold the TEST button until the MEMORY LED comes ON.
Once the TEST button is released, Audiocheck (TM) will check that the connections found during steps 4 & 5 are still valid and if so will turn the PASSED LED ON. AudioCheck (TM) is now ready to automatically test further cables.
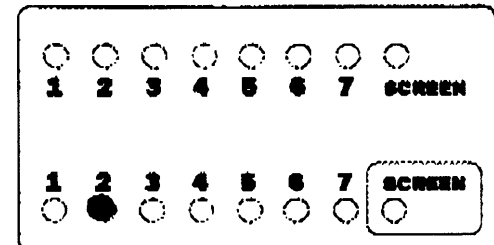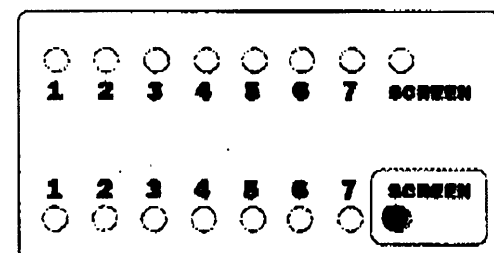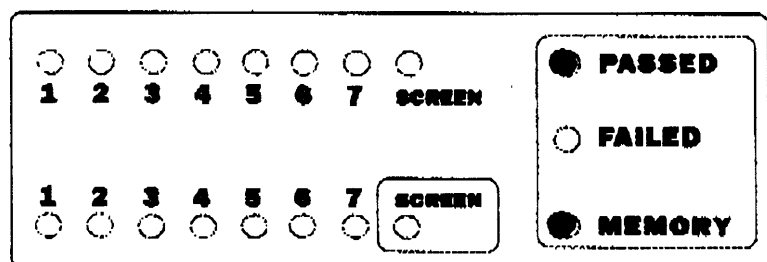

Fig5. TEST COMPLETE. READY FOR MEMORY.

Fig6. CABLE IN MEMORY, READY FOR NEXT ONE TO TEST.

6. Plug in the cable to be tested using the same connector(s) and locations as for the cable in memory.

7. Press and release the TEST button.

If all is well the PASSED LED will turn ON, remove the cable. To test another cable repeat steps 6 & 7. To clear the MEMORY option either, switch OFF and then ON again or, press and hold the test button until the MEMORY LED goes OFF.

If the FAILED LED turns ON, then the AudioCheck (TM) has found a difference between the cable details in memory and the current cable. The numbered and screen LED's will stop at the error stage. Examples of failures follow:-

a) A short was found, on the lower connector, where no connection existed before (Fig7.)
b) An open connection was found, usually indicated by a single LED (Fig8).
c) A short to SCREEN, this may be indicated by one, or both the screen LED's being ON in conjunction with another pair of LED's (Fig9).
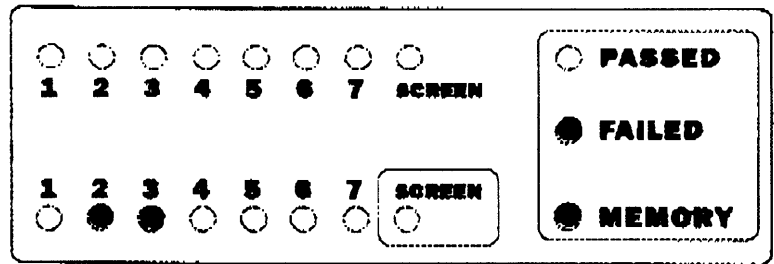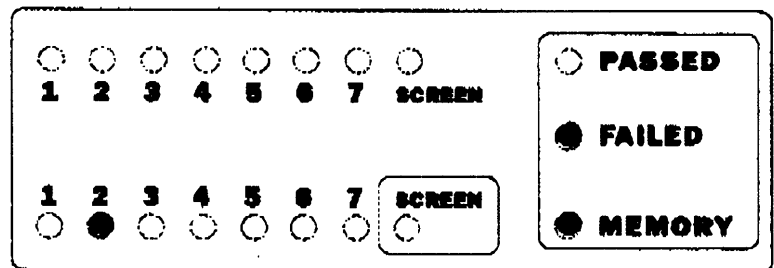
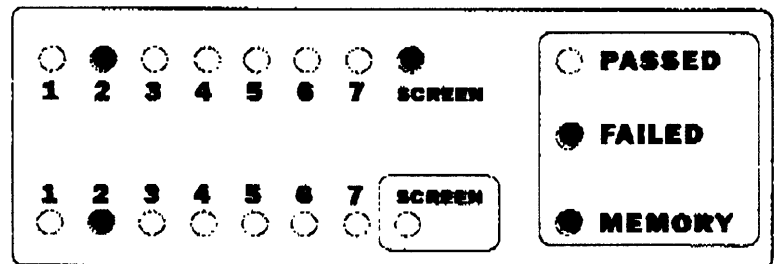Fig7. SHORT TO AN ADJACENT PIN.

Fig8. OPEN CIRCUIT BETWEEN Pin2.

Fig9. SHORT TO SCREEN.

8. Press the TEST button to proceed, if there are more failures the test will stop at each and everyone of them, finally only the FAILED and MEMORY LED's will be ON.To test another cable repeat steps 6 & 7. To clear the MEMORY option either, switch OFF and then ON again or, press and hold the test button until the MEMORY LED goes OFF.

DECLARATION OF CONFORMITY

Manufacturers Name: CableMan Ltd.
Address: 630 Europa Boulevard,
                            Westbrook, Warrington. WA5 5YG.
Declare that;

CE

      Product: Audiocheck

conforms to the following Product Specification:

BS EN 50081-1 for Radiated Emissions

BS EN 80082-1 for Immunity to Radiated Electromagnetic Fields

                Immunity to Conducted Field - AC Power Lines

                Immunity to Electrostatic Discharge (criteria B).

The product herewith complies with the requirement of the EMC Directive 89/336/EC.