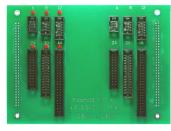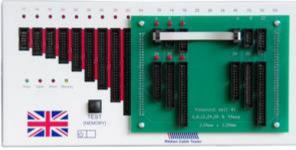## 11. Adaptor boards

Board #1 New 0.1" or 2.54mm x 2.54mm connector sizes 6, 8, 12, 24, 30 & 44 way

Fitting Instructions:

1. Plug into the 64 way connector slots ensuring alignment of fixing holes with mounting posts.

2. Secure the board with the four m3 screws.

RibbonJoG®mkII operations manual

Please read the following instructions carefully before using the RibbonJoG® mkII 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 RibbonJoG® mkII Cable Tester, for which the manufacturer and suppliers can accept no liability.

Introduction
The RibbonJoG® mkII Cable Tester is a versatile ribbon cable tester. It allows the user to either identify a correctly made standard ribbon cable, or carry out rapid comparison tests having stored known good cable details.

Cables fitted with any of the following standard 0.1" (2.54mm) pitch connectors may be checked:

● 10 way	● 34 way
● 14 way	● 40 way
● 16 way	● 50 way
● 20 way	● 60 way
● 26 way	● 64 way

The RibbonJoG® mkII Specifications:

- Continuity (end to end), less than 4.7K ohms
- Short Circuits (end to end and between connected pins), less than 4.7K ohms
- Open Circuits (end to end and between connected pins), greater than 10K ohms
- Less than 1 second test time
- Minimum distance between connectors of same size only 130mm
- Non-volatile memory feature

Getting started:

The RibbonJoG® mkII Cable Tester will require fitting of batteries (not supplied). Using a No 0 'Supadrive screwdriver remove the countersunk screw on the base plate to gain access to the battery compartment. Fit four AAA size alkaline or zinc chloride batteries with polarisation as indicated on the circuit board.

Batteries / Power Saving:

Under normal use the batteries should give at least a years use. However, to preserve battery life RibbonJoG® mkII has a 'Power Saving' feature. After 15 minutes of inactivity RibbonJoG® mkII will put the microprocessors into sleep mode. Switch OFF and then ON again to reset RibbonJoG® mkII. Cable details held in memory will not be lost.

Test Procedure

There are 10 Identifier Light Emitting Diodes (LED's) on the left (red) side of the unit, each is connected to the last pin of the connector below it. Checking the status of the ribbon cable is made using the TEST button.

1. Plug one end of the cable to be tested into an appropriate socket using the right hand (Blue) half of the RibbonJoG® mkII.

2. Plug the other end of the cable to be tested into an appropriate socket using the left hand (Red) half of the RibbonJoG® mkII.

3. Switch ON.

If no cable has been plugged in each of the LEDS will light in turn. After this the tester is ready. Should the MEMORY option have been used then the MEMORY LED will stay ON to indicate that the comparison test will be carried out against stored cable details. If this is not the case then please check and replace the batteries if required , otherwise return the RibbonJoG® mkII for repair.

4. To start the test press and release the TEST button.

5. Standard test (memory option not used)

Each wire is tested separately, as the wire corresponding to a identifier LED is tested the LED will light. The test stops at the first wire with no connection between the left and right hand connectors.

6. Standard test, results

a) PASS The Pass LED will be on as well as one of the connector identifier LED's. This shows the last good connection found, not necessarily the size of connector used. The Pass LED will only come on if the number of connections found corresponds to one of the 10 possible connector sizes (see page I).

6. Standard test, results

b) FAIL - OPEN circuit The Fail OPEN LED will be on as well as one of the connector identifier LED's. This shows the last good connection found, so the fault occurred somewhere between the last pin of the connector identified and the last pin of the next connector.

c) FAIL - SHORT circuit The Fail SHORT LED will be on, as well two connector identifier LED's showing that the short circuit is locate between them. If only the No. 10 identifier LED will be lit and the short is somewhere in the first 10 pins.

7. A non-standard cable assembly will fail the standard test. RibbonJoG® mkII can test non-standard cables by identifying and storing all the connections in that cable. These stored details can then be used to test against other cables.

Connect the non-standard cableand press the TEST button. On completion of the standard test press and hold the test button until the MEMORY LED come's on. Releasing the test button will cause RibbonJoG® to go through the test again, this time not stopping until the last pin (64). The connection details will be put into memory. After all 64 pins have been stored RibbonJoG® will be ready.

8. Memory Test

The MEMORY will stay on during the test.The test stops at the last wire (64). The memory can hold up to 128 differences from the normal pin 1 to pin 1, pin 2 to pin 2 etc. connections.

9. Memory Test Results
a) PASS - The Pass LED will turn on.
b) FAIL **- OPEN circuit**, the Fail OPEN LED will be on.
c) FAIL **- SHORT circuit,** the Fail SHORT LED will be on.

As in the standard test (section 6) the PASS and FAIL LED's work in conjunction with the identifier LED's to give as much information as possible about the cable under test. However because the connection details in memory may be very complicated the identifier LED's may not be able show the true fault location.

10. On completion of the test it is possible to reset the MEMORY option by pressing and holding the test button until the MEMORY LED goes off. Releasing the test button will cause the RibbonJoG® mkII to go through the standard test