



Please read the following instruction carefully before using the cable continuity tester

Warning: The cable to be tested must be fully disconnected from any other equipment or electrical source. Failure to do so results in electrical shock and permanent damage to the Cable Continuity Tester, for which the manufacturer and supplier can accept no liability, The device must be operated with the original plug-in power supply unit.

Introduction

This Cable Continuity Tester supports the user to either identify a correctly made standard cable connection assembly (straight-through wired cables), or a non-standard cable connection assembly (Crossover Wired Cables). This continuity tester operates stand-alone or operates with the computer device.

Cables fitted with up to 64-pin test point connector sizes may be checked.

Optional connectors board set to choose for user requirement.

Power supply

AC Adaptor Input voltage range: 90 ÷ 264VAC
 Frequency range: 47 ÷ 63Hz
 Adaptor Output voltage: 12vdc/500ma
 Protection: Isolated

Technical Data

| | |
|-------------------------------------|-----------------------------------|
| Device Input voltage range | 12v – 24vDC / 0.5A |
| Functions | Cable assembly continuity test |
| Continuity test method | Stand alone & Computer interface |
| Continuity test types | Straight-through, Crossover Cable |
| Individual wire / pin test function | Available |
| LED Indications | Yes |
| Read & store wiring configuration | Yes |
| Test speed | <230ms for all the 64 connections |
| USB virtual serial port | Yes |
| Connector board replaceable | Yes |
| Number of test points connection | 64 |
| Beep sound indication | Yes |
| Inbuilt battery backup | Yes, Rechargeable |
| Enclosure protection | IP40 |
| Range of use | Indoor environments |
| Size | 215x150x71mm |
| Working temperature | 0-55 degCen |
| Colour | Black |
| Weight | Approx 225gm |

Equipment Safety & Protection

Isolated AC power adaptor.

Power Adaptor protects from Overload / Short circuit / Over Voltage.

1KV isolation between Low Voltage Device (LVD) power input and output.

Thermal shutdown and current limit protection with resettable fuse.

Transients voltage protection.

Battery reverse polarity protection.

Protection circuit to prevent the battery from high temperature, over charge & over current.

3750Vrms Isolation between USB data input and output.

Battery power backup

Battery backup support 2 to 3 hours. Inbuilt battery charger circuit automatically recharge the battery when the power in it gets low. And automatically disconnect a battery from the charging when the battery gets fully charged.

Operating Instruction

- Check that the AC power adapter supply matches the data on the input rating.
- Plug the AC adapter into a standard mains socket to power the device.
- The cable to be tested must be disconnected from any other equipment or electrical source.
- Keep the operating instructions in place for reference.

Device Setup



DC Jack – External input power source connected through DC plug connector. Maximum current ratings 12volt /500ma. DC plug contact size is 5.5/2.1mm

Power ON/OFF Switch – The power switch connects or disconnects the external input power and battery backup input power source.

Connector Board – Connector board placement is separated into two parts which are A-side and B-side. Cable one end is connected to A-side and the other end is connected to B-side. Up to 64 wire test pins are available to test. Four mounting holes were plugged with a board clip to hold the test setup. So the user can replace the connector board as per the test requirement.

Board Clip – Four board clips hold the connector board setup. So the user can replace the connector board as per the test requirement.

USB Socket – C type usb socket interface available for external communication.

Indication & Key Functions

Wire LED – There are sixty-four LEDs. Each wire is connected to the corresponding LEDs.

LED pwr – Led ON indicate device power up by external 12v adaptor input. Led flicker to indicate the device power-on by inbuilt battery backup. Led flicker every 10 seconds once indicates battery charging.

LED Test – Led ON indicates wire connectivity test condition PASS. Led Blink to indicate wire connectivity test condition FAIL.

LED pins – Led ON indicates individual wire connectivity testing is in progress.

LED usb – Led ON indicate external USB communication in progress.

Error Indication – Right row four LED blink indicates an error due to battery drain out or temperature high.

Key TEST – To start the test press and release the TEST Key

Key PIN> – To select individual wire continuity test. And forward to the next wire and so on.

Key <SCN – To select individual wire connections backward and so on.

Key CRL – To clear the test result. In some conditions this key acts as a control key.

(Key CRL & Key <SCN) – Both key combinations to SCAN new cable configuration.

Standard Test Setup



Standard Test Procedure

There are 64 wire LEDs, Each is connected to the pin of connectors. Checking the status of the wire continuity using the device TEST key.

- Plug one end of the cable(wire) to be tested into an appropriate socket of the tester on one side and another end of the cable to be tested into an appropriate socket on the opposite side of the tester.
- Switch on the power input rocker switch placed on the rear side of the device. LEDs turn ON for a couple of seconds and then turn OFF.
- To start the test press and release the TEST Key.
- Test LED ON indicates Test PASS (or) beep sound with Test LED blink indicating Test FAIL.

Standard Test (Pin to Pin)

Each wire is tested separately, Wire-LED indicates the wire connected (or) open circuit (or) short circuit. Checking the status of the wire continuity using the device "PIN>" key.

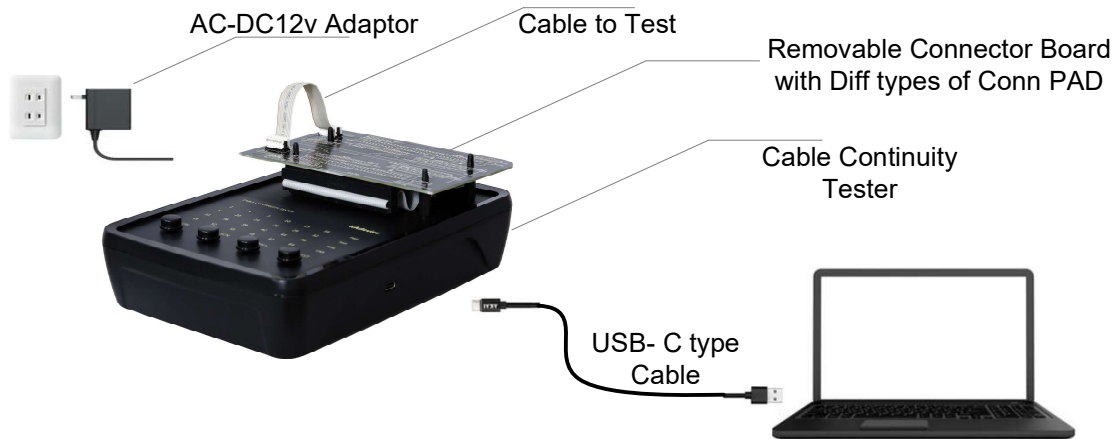
- Plug one end of the cable to be tested into an appropriate socket of the tester on one side and the other end of the cable to be tested into an appropriate socket on the opposite side of the tester.
- Switch on the power input rocker switch placed on the rear side of the device. LEDs turn ON for a couple of seconds and then turn OFF.
- Press and release the Key "PIN>" to select the wire number to test.
- Pins-LED ON indicates the device is ready for Standard Test (Pin to Pin).
- Select the wire number to test using Key "PIN>" and Key "<SCN".
- To start the test press and release the TEST Key.
- "Wire-LED" flicker & Test-LED ON identify the connection found (or) "Wire-LED" blink & Test-LED OFF indicates no connection found.
- To see the test result repeat, Press and hold the TEST Key for one second and release.

Standard Test (Scan & Save)

Scan and save option available to read the new cable configuration continuity. The device memory stores the new configuration data.

- Plug one end of the new cable configuration to be scanned into an appropriate socket of the tester on one side(A-side) and the other end of the new cable configuration to be scanned into an appropriate socket of the opposite side(B-side) of the tester.
- Switch ON the power input rocker switch placed on the rear side of the device. LEDs turn ON for a couple of seconds and then turn OFF.
- Press and release both Key "CRL" & Key "SCN" to scan the new cable configuration. Wire-LED all ON indicates the scan & save operation is completed and ready for new test.

Remote Test Setup



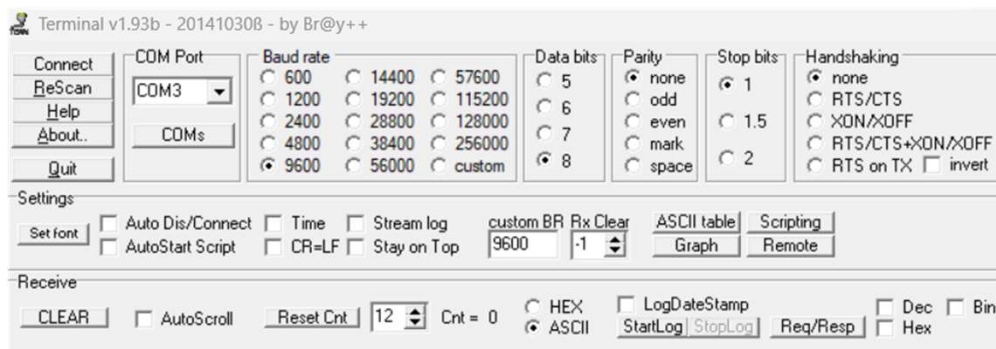
Remote Test Procedure

The device is equipped with a USB c-type connector on the right-hand side of the device. USB external communication port can be used to control the device externally by a computer and a suitable application software program.

Factory-tested free application software is available @ { <https://sites.google.com/site/terminalbpp/> } download the new version of the Terminal software - version 1.93b 20141030

Configuration of the serial interface:

9600 Bit/s; 8 Data bits; parity none; 1stop bit; Handshaking none. Select ASCII in the receive section and **do not select Dec, Hex, Bin**



- Plug one end of the cable to be tested into an appropriate socket of the tester on one side and the other end of the cable to be tested into an appropriate socket on the opposite side of the tester.
- Switch on the power input rocker switch placed on the rear side of the device. Wire LEDs all turn ON for a couple of seconds and then turn OFF.
- Connect the device and PC using a USB c-type cable.
- Open application software and verify the interface configuration.
- Select the available COM port and connect.

Overview of the Instructions

| Commands | | Device Response | Functions |
|----------|-----------------|---|---|
| 10 | Press Enter Key | Connected | Device and PC ready to communicate using USB port |
| 1 | Press Enter Key | Pin x → Pin x,y, Test Pass (or) Test FAIL | <u>A-side</u> Pin No x connected to <u>B-side</u> Pin No x, Pin y, .. Test Pass -> Identify wire connection correctly made. Test FAIL-> Wire connection not correctly made. |
| 14 | Press Enter Key | Cleared Test Result | Clear the test output and Reset the LED indication |
| 8 | Press Enter Key | New connector configuration scan completed | Device ready to test new configuration cable continuity |
| 15 | Press Enter Key | Exit | Device and PC communication disconnected |

Note:

This low-voltage product is not certified by any safety test. So the company (or) product designer (or) supplier is not responsible for any injury, death, illness, loss, or damages.