

Labgear

76613PI

Multifunction Cable Tester and Scanner



Introduction

This multifunction cable tester and scanner kit is designed to test a range of RJ45 cables and patch leads as well as cables used in 10Base-T/100Base-T networks and telephone systems. It also features a cable finder function which is particularly useful for installers and IT workers, allowing them to identify and trace with ease, individual cables connected to the transmitter as far as 3km away. This function is highly sensitive allowing you to pick out a single cable from a bundle in roof spaces for instance. This function is also good for identifying unmarked wall outlets. As well as testing individual cables the remote receiver unit can be used to test long runs of cable from patch panel to wall plate. It is easy to verify cable continuity, open, short and cross connections.

Features:

- Test the correct pin configuration of 10Base-T/100Base-T, 258A, TIA-568A/568B and Token Ring cables.
- Easy to read cable status indication for the verification of cable continuity, open, short circuited and miswired connections.
- Remote terminator allows testing long cable runs and is ideal for identifying and troubleshooting patch pane to wall plate connections.
- Option of standard and fast test scanning.
- Two tone audio finder indication via the built-in speaker in the receiver unit or via the earphones provided.

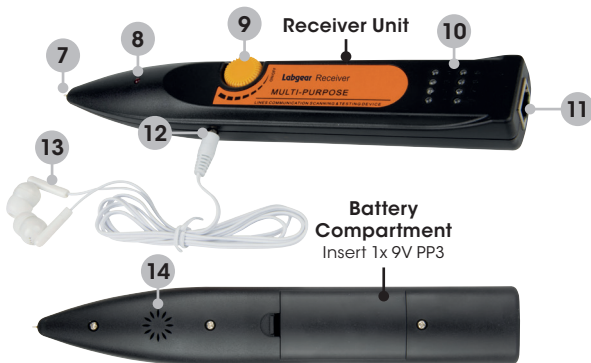
Controls and Connections

Transmitter Unit Features

1. RJ11 socket
2. RJ45 socket
3. Test mode switch
4. Power LED
5. Finder power LED
6. Finder button

Receiver Unit Features

7. Finder probe
8. Power LED
9. Finder volume control
10. Pin status LEDs
11. RJ45 socket
12. Headphone socket
13. Earphones
14. Speaker



Safety Rules and Warnings

WARNING: These units must not be used to test powered circuits. As there is a risk of shock and damage to the equipment.

Don't store or leave the unit in direct sunlight, especially under glass.

Don't store in damp or excessively dusty environments or temperatures over 40°C.

Use only 9V alkaline battery of good quality.

Remove the battery if the meter is not to be used for an extended period.

Do not disassemble, there are no user serviceable parts inside.

Do not use on mains voltage cables this will damage the meter.

Product Specifications

Power supply	9V PP3 battery	
The max. working current	Transmitter	≤20mA
	Receiver	≤150mA
Signal transmission format	Multi-frequency impulse	
Signal output electric status	8Vp-p	
Distance of signal transmission	3km	

Box Contents

- Transmitter
- Receiver
- Earphones
- RJ11 Telephone Cable
- RJ11 Cable with Crocodile Clips
- RJ45 Connector Cable
- User Guide
- Zip-up Carry Case

1. Before You Start

You will need 2x 9V PP3 batteries to power the transmitter and receiver units. Remove the covers from the battery compartments, insert fresh batteries making sure you align the wider battery terminal with the wider contact and replace the covers.

2. RJ45 Local Cable Testing

This function tests individual RJ45 cables.

2.1. Connect one end of the cable to be tested into the source RJ45 socket (2) on the transmitter unit and the other end into the RJ45 socket (11) of the remote receiver unit. Slide the test mode switch (3) on the side of the transmitter unit up one click for standard speed testing. Slide the test mode switch (3) up another click for fast testing.

2.2. Read the test result from the LED display on the remote unit.

Note:

The LED display on the remote unit will scan in sequence: 1, 2, 3, 4, 5, 6, 7, 8. If the cable run is not correctly wired one or more lights will not light up or they will light up out of sequence.

3. RJ45 Remote Cable Testing

This function is ideal for testing network cable runs. It is also useful for testing connections between wall outlets and patch panels.

3.1. Connect the wall plate to the source RJ45 socket (2) on the transmitter unit using the RJ45 adaptor provided (see Fig. A) and use an RJ45 patch lead to connect the patch panel to the RJ45 socket (11) of the remote receiver unit (see Fig. B).

3.2. Slide the test mode switch (3) on the side of the transmitter unit up one click for standard speed testing. Slide the test mode switch (3) up another click for fast testing.

3.3. Read the test result from the LED display on the remote unit.

Fig. A



Fig. B



4. RJ45 Local & Remote Cable Testing Results

The LED display on the remote unit will scan in sequence: 1, 2, 3, 4, 5, 6, 7, 8. If the cable run is not correctly wired one or more lights will not light up or they will light up out of sequence.

Cable Type		Indicator Light Status							
		1	2	3	4	5	6	7	8
Computer Network Cables	IEEE 10Base-T	●	●	●	○	○	●	○	○
	EIA/TIA 568A	●	●	●	●	●	●	●	●
	EIA/TIA 568B	●	●	●	●	●	●	●	●
	AT&T 258A	●	●	●	●	●	●	●	●
	TokenRing	○	○	●	●	●	●	○	○
Telephone Cables	2 Pin	○	○	○	●	●	○	○	○
	4 Pin	○	○	●	●	●	●	○	○
Other Metal Connection Cables		Decided by its detail situation.							

5. Using the Cable Finder Function

This function is ideal for identifying cables and tracing network and other cable runs.

WARNING: Do not connect to powered circuits.

5.1. Attach the cable or circuit you want to trace to the RJ11 or RJ45 socket on the transmitter unit, see Fig. C. For computer networks and telephone circuits you can use the RJ45 or RJ11 adaptors to connect (16 or 17, shown below). For other circuits you can use the crocodile clip (15).

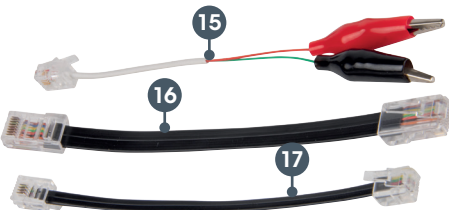
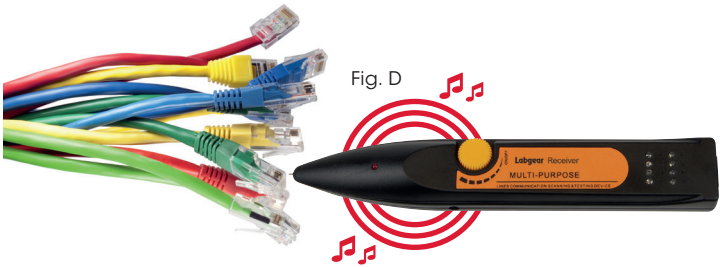
5.2. On the transmitter unit slide the test mode switch (3) to ON and press the finder button (6) the finder power LED (5) will flash red.

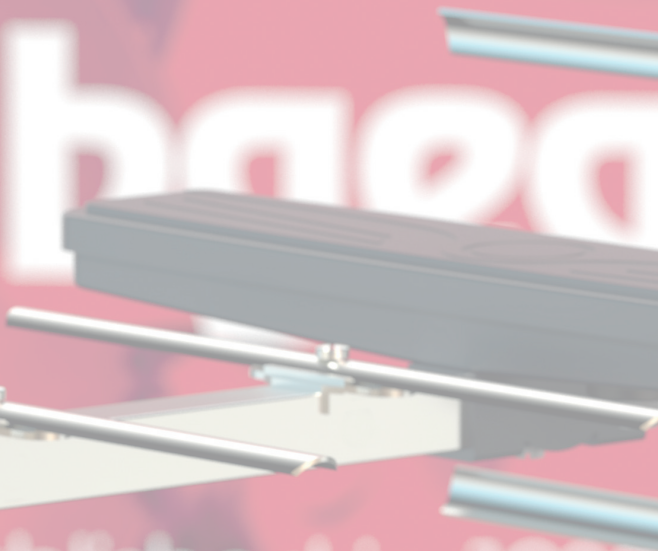
5.3. On the receiver unit twist the finder volume control (9) clockwise halfway. Point the finder probe (7) on the tip of the receiver unit towards the cable you suspect is connected to the circuit that the transmitter is connected to, see Fig. D. As the probe gets near to a connected cable you will hear a two-tone alarm which will increase in volume the closer the probe gets to the cable.

You can use the finder volume control (9) to adjust the sound. Attach the earphones provided to the headphone socket (12) for noisy environments or if you don't want to disturb those around you.

Once you have identified your circuit switch off the power on both transmitter and receiver to conserve the batteries.

Fig. C





Waste electrical and electronic products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.



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