



Labgear 76614PI 21 Piece Data Comms Tool Kit User Guide

[Home](#) » [Labgear](#) » Labgear 76614PI 21 Piece Data Comms Tool Kit User Guide 

Labgear 76614PI 21 Piece Data Comms Tool Kit



Contents

1 JAN

- 1.1 Cable Tracker Guide
- 1.2 Network Cable Tester Guide
- 1.3 Crimping Tool Guide
- 1.4 110 Punch Down Tool Guide
- 1.5 Customer Support
- 1.6 Documents / Resources
 - 1.6.1 References

Cable Tracker Guide

Introduction

This multifunction cable tracker is ideal for testing the continuity of circuits and for tracing and identifying remote cables. Before use, you will need to fit two 9V PP3 batteries (not supplied) one in each unit. Lift off the back of the housing of the Sender Unit after first removing the cross-headed screw. The battery compartment for the Receiver Unit is located on the back and marked battery; you will also need to first undo the cross-headed screw before opening it.

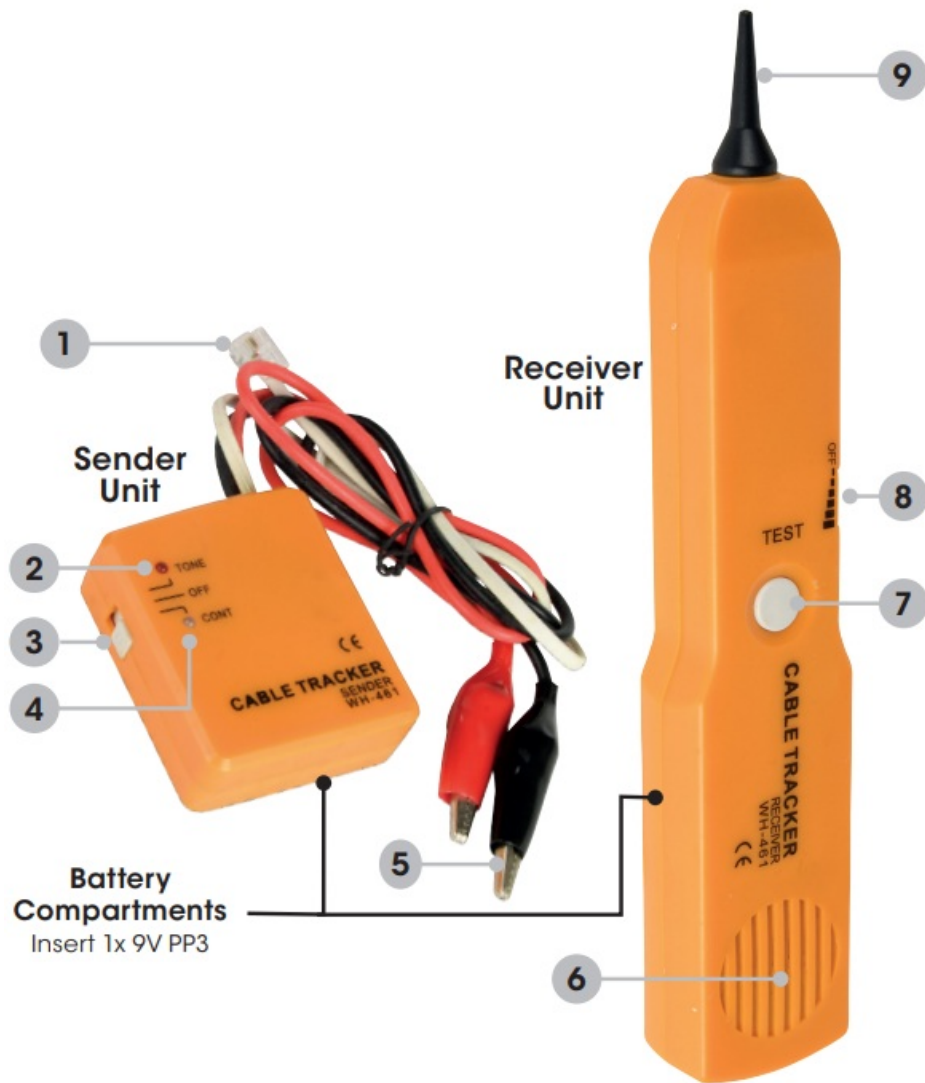
Controls and Connections

Sender Unit Features

1. RJ11 plug
2. Red TONE LED
3. Test mode switch: Tone (finder) / Off / Continuity
4. Green CONT (continuity) LED
5. Test leads with crocodile clip terminals

Receiver Unit Features

6. Finder speaker
7. Finder/Test button
8. Rotary finder Off / Volume control
9. Finder probe



Safety Warnings

- 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.
- Don't store in damp or excessively dusty environments or temperatures over 40oC.
- 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.

Testing Continuity

Set the Test Mode Switch (3) to "CONT".

Attach the crocodile clips to the circuit to be tested.

The Green CONT LED will light up if the circuit is unbroken/ continuous between the two test terminals.

Tracking Cables at a Remote Location

Attach the red test lead terminal to a bare part of the cable or an attached connector and connect the black terminal to Earth.

Set the Test Mode Switch (3) on the Sender to "Tone" the Red LED will light up.

Switch on the rotary finder volume control (8) and set the volume mid way.

To identify the remote cable which you have connected to the Sender Unit, point the probe of the Receiver Unit (9) at the remote cable/cables and hold down the Finder Test Button.

You will hear an intermittent tone as the probe is brought closer to a connected cable.

For further information or any queries please contact

Technical Support: www.labgear.co.uk/support

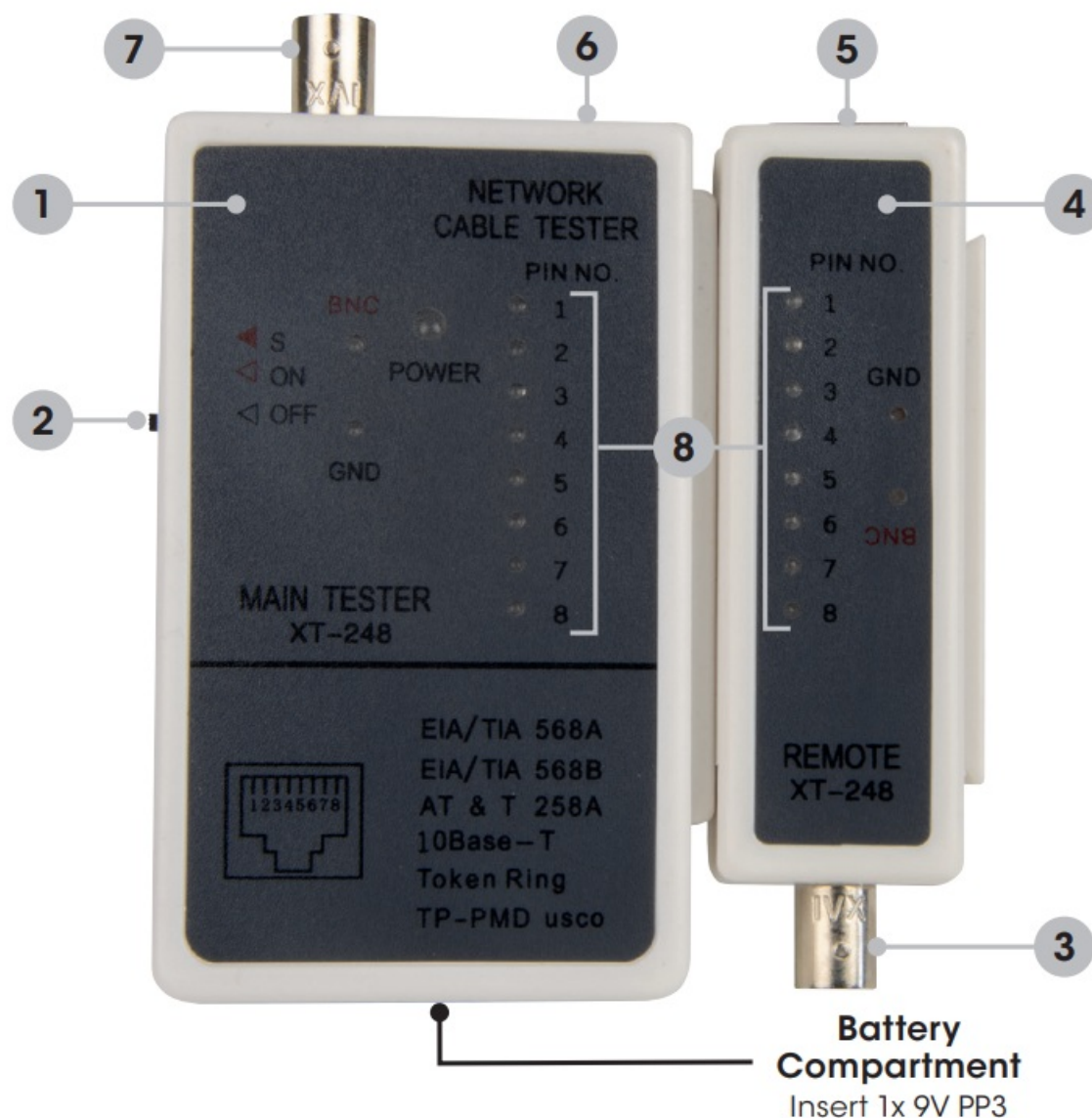
Network Cable Tester Guide

WARNING!

- This cable tester should NOT be used to test powered cables.
- If pin activity lights appear weak, replace the battery (1x PP3 9V battery, not included.).
- Testing cannot be verified if connector ends are not fully inserted into the units.
- Always ensure you use quality tools to crimp connections.
- This cable tester is for use with RJ45 and BNC connectors only.

Main Features

1. Main Unit
2. Test Switch: Off/Test/Slow Test
3. BNC Socket – In
4. Remote Unit
5. RJ45 Input Socket
6. RJ45 Output Socket
7. BNC Socket – Out
8. Pin Indicator LEDs



Introduction

The tester has two main functions:

1. Testing individual leads RJ45 or BNC:

Cables with both ends accessible can be quickly be tested without the need to separate the remote unit from the main unit.

2. Testing installed cables with RJ45 or BNC terminations:

To test cables installed in ceilings or walls or in applications that prevent the ends from being in the same location, the remote can be detached from the main unit. Once detached, the remote can be attached to one end of the cable run, and the main unit attached to the other end. For example the main unit can be attached with a lead to a patch panel and then the remote unit can be attached with a patch lead to an RJ45 wall outlet in another room.

Before Use

The tester requires 1x PP3 9V battery (not included), to power the main unit and send a test current to the remote unit.

Slide open the battery compartment on the back of the main unit, attach the terminal cap to the battery, insert the

battery and replace the cover.

To Operate

1. Connect one end of the cable to be tested to a socket on the main unit and the other end of the cable to the corresponding socket on the remote unit.
2. Slide the OFF/ON/S switch (2) to "ON" or "S" (for Slow) on the main tester.
3. For RJ45 cables, if correctly wired all lights from 1-8 will light up green on both units one after the other in sequence and the position of the lights will correspond on both units. For RJ12 lights 1-6 will light up green and for RJ11 lights 1-4 will light up.
4. If the cable is cross-wired or incorrectly wired lights from 1-8 will light up green on the main unit in sequence but the sequence will be different on the smaller unit; i.e., If the cable is cross-wired (T568B) the order on the main unit will be 1, 2, 3, 4, 5, 6, 7, 8 but on the smaller unit will be 3, 6, 1, 4, 5, 2, 7, 8.
5. If some lights don't activate there is a break in the cable.
6. If a single light is lit on the main unit and more than one light comes on the small unit this indicates a short circuit.
7. If the light sequence is too fast, slide the Test Switch (2) to the "S" position to slow the sequence down.
8. The G (Ground) light is for FTP shielded cable and will light up on both units if an FTP cable is properly shielded.
9. For BNC cables the BNC and GND LEDs will light up alternately on both units if the cable is correctly wired.

Crimping Tool Guide



How it works

The crimper pushes two plungers down on the RJ45/RJ11 plug. One forces a plastic wedge (part of the plug) onto the cable jacket and locks it into position.

The other pushes the “pins,” each with two teeth at its end, through the insulation and into the conductors of their respective wires.

1. Use the stripper blades positioning it to strip a suitable length of sheath from the cable. Squeeze the handles of the tool together gently but firmly to cut the outer sheath and rotate the tool repeatedly to cut the sheath all the way round. Now pull on the cable while maintaining pressure on the handles to strip the outer sheath. Inspect the stripped wires to ensure there are no cuts or exposed wire.
2. Untwist the pairs and arrange the wires as required. Flatten the wires between your thumb and forefinger. Trim the wires so that the ends are even with one another. It is very important that each individual wire is as close to the right length as possible (12.5 mm for RJ45) – any longer and performance may be compromised, any shorter and the individual wires will not be properly connected to the contacts when the plug is crimped. Flatten and align the wires to leave little or no space between them.
3. Hold the plug with the clip facing away from you. Push the wires firmly into the plug. Check that the wires are in the correct order and all reach the end of the plug. The plug is now ready for crimping.
4. Hold the wire near the plug with and firmly push the plug into the correct crimp slot (it will only go in one way, see above image).
Hold the wire in place and squeeze the crimper handles firmly.
5. Look at the bottom of the plug and see if all the wires are still in the right position and give the plug a firm tug to make sure it is crimped well. If crimping is not successful you will need to start again cutting off the old connector and using a new one.
6. Prepare the other end of the cable in the same way and crimp as before.
7. Use the cable tester to check your finished cable is correctly wired.

110 Punch Down Tool Guide

Introduction

This punch down tool is designed for making secure IDC connections (and trim the conductor wire at the same time) for CW1308 telephone cable and CAT3, CAT5e, CAT6 & CAT6e network cable types.

It is ideal for terminating IDC telephone sockets, RJ45 network sockets and IDC patch panels

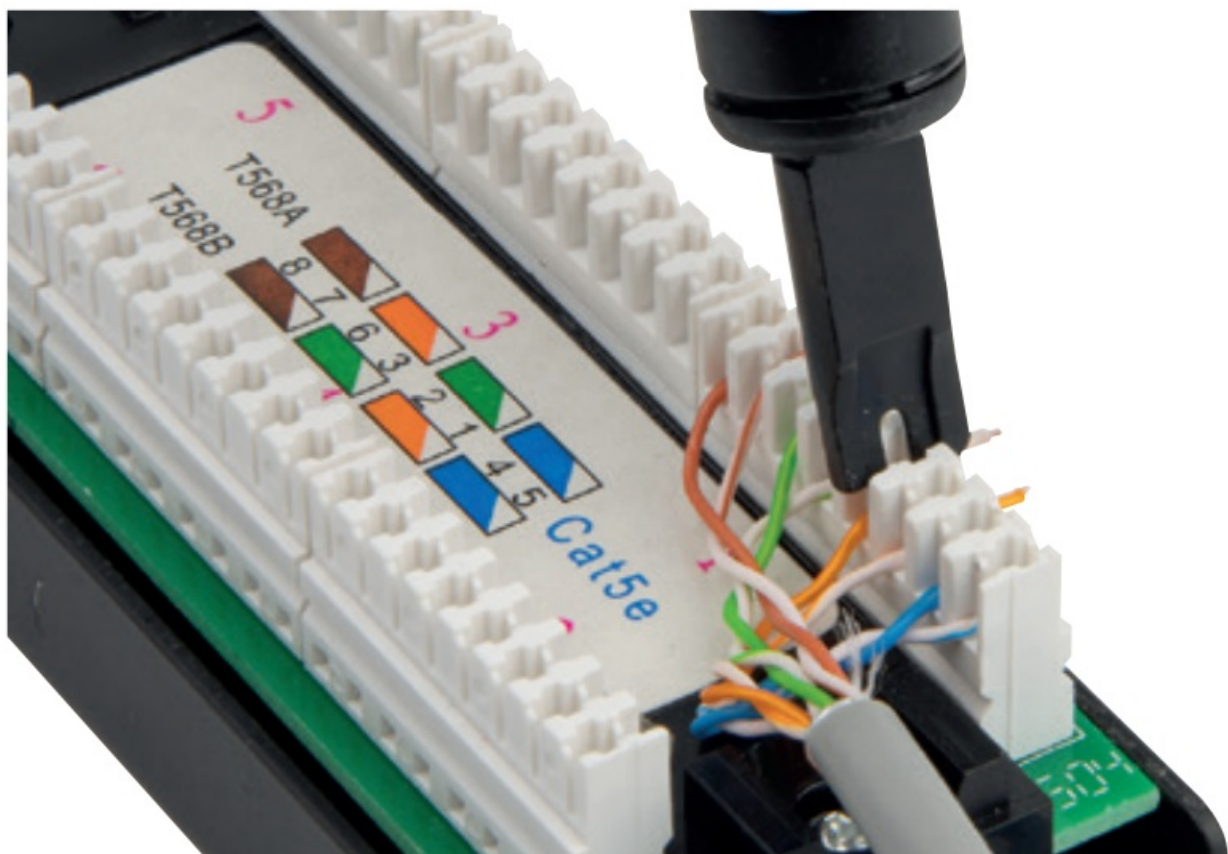
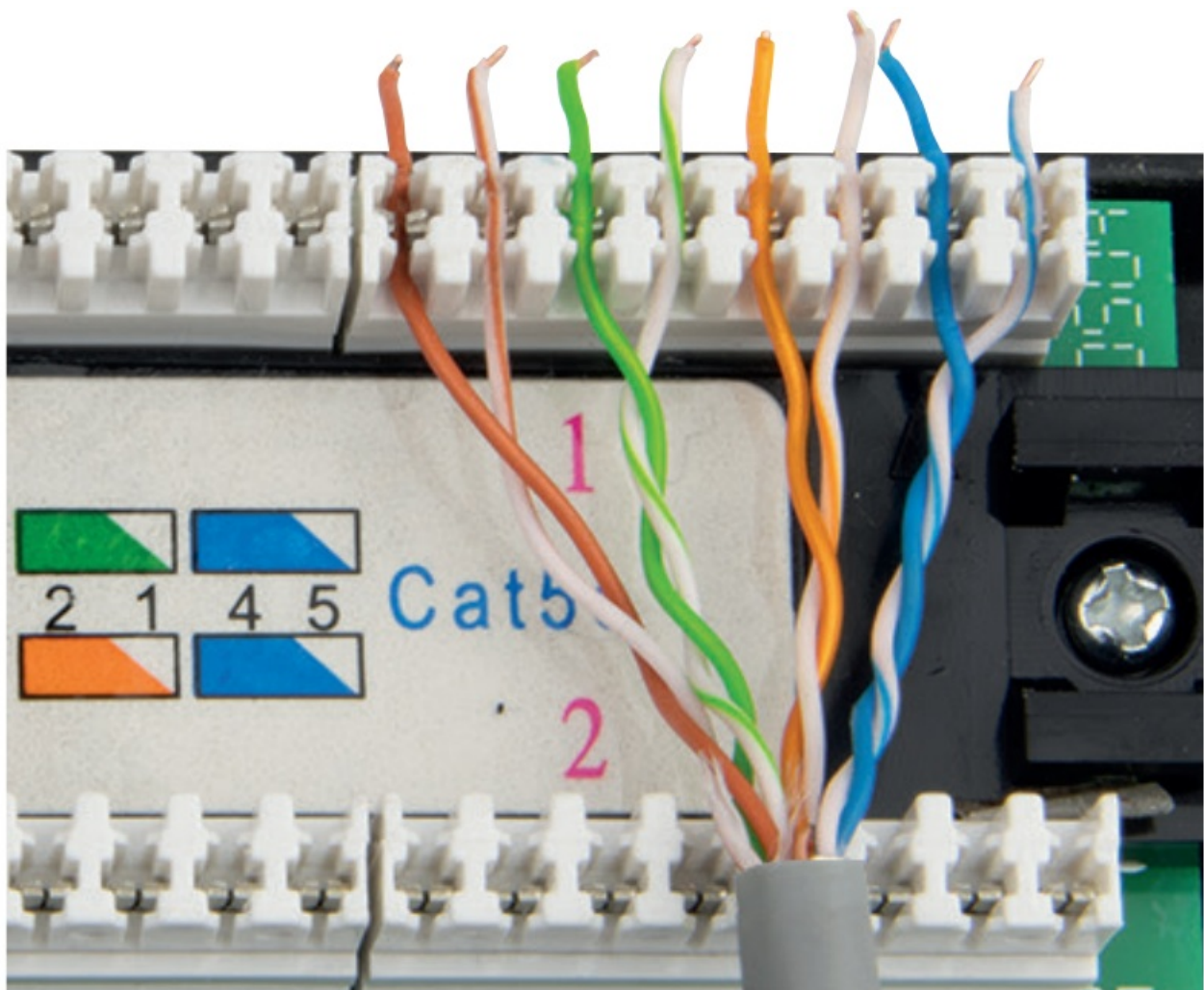
To prepare cables and make secure connections you will need the following tools from the kit: Cable Cutter, Cable Stripper and the 110 Punch Down Tool.

1. Strip a suitable length* of the outer cable jacket, trim back any plastic insulation and rip cord, and separate any twisted pairs.
2. Untwist each wire pair by about 12mm, keeping the remaining twists as tight as possible.
3. Slot the cable pairs into the IDC terminals
4. Then use the 110 punch down tool* to terminate the wires and trim them. Make sure the CUT side of the tool is positioned facing the outside of the IDC unit. Press the tool down on the conductor wires. Be sure to punch straight down and not at an angle. You should hear a loud click when you punch down. This means that you've terminated the wire correctly.

5. Adjust the HI and LO setting according to the wire gauge (thickness) that is being used Use LO for 24AWG (typically Cat5e) conductor wires Use HI for 23AWG (typically Cat6 or Cat6A) conductor wires

110 Punch Down Tool







- Check IDC socket/panel instructions for recommended lengths

Customer Support



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.



UK Distributor Philex Electronic Ltd., Kingfisher Wharf, London Road, Bedford, MK42 0NX, United Kingdom




EU distributor: Philex Electronic Ireland Ltd., Robwyn House, Corrintra, Castleblayney, Co. Monaghan, A75 YX76, Ireland

sales@labgear.co.uk
www.labgear.co.uk

Labgear

Documents / Resources

 <p>Labgear 76614PI 21 Piece Data Comms Tool Kit Cable Tracker/Cable Tester Crimping Tool/Punchdown Tool User Guide</p>	<p>Labgear 76614PI 21 Piece Data Comms Tool Kit [pdf] User Guide pa_3377415, 76614PI 21 Piece Data Comms Tool Kit, 76614PI, 21 Piece Data Comms Tool Kit, Data Comms Tool Kit, Comms Tool Kit, Tool Kit, Kit</p>
--	--

References

- [Labgear](#) labgear.co.uk
- [Labgear](#) [Labgear – Philex](#)
- [User Manual](#)

Manuals+, [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.