FLUKE networks

CableIQ™

Qualification Tester

Getting Started Guide

PN 2113427
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4/15-CIQ

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CableIQ™ Qualification Tester

Accessing the Users Manual

This guide provides basic information to help you quickly get started using the tester. The *CableIQ Qualification Tester Users Manual* on the Fluke Networks website provides additional information.

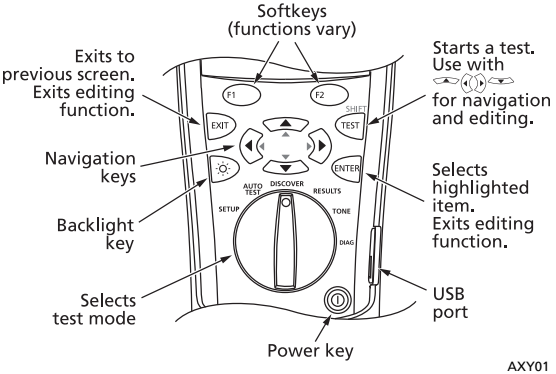
⚠Safety

⚠Warning⚠

To avoid possible fire, electric shock, or personal injury:

- **The tester is not intended to be connected to active telephone inputs, systems, or equipment, including ISDN devices. Exposure to the voltages applied by these interfaces may damage the tester and create a potential shock hazard. Disconnect the tester if the voltage alert symbol (⚡) appears.**
- **Read the safety information given in the Safety Information booklet before using the tester.**

Controls



Setting User Preferences

Turn the rotary switch to **SETUP**; then use ▲▼ and ENTER to select a setting.

- **User Information:** Three lines of text are stored with saved Autotests.
- **Language / ft·m:** Select a language for the display. Select feet or meters for length measurements.
- **Time / Date:** Timestamp saved Autotests.
- **Auto Shutoff:** The tester stays on indefinitely or turns off after 15 minutes of inactivity.

Editing Text

Use the keys to edit text on the **User Information** and **Enter ID** screens.

ENTER: Selects the highlighted field for editing.

◀ ▶: Moves the cursor. Moving the cursor beyond the last character inserts the first character from the last character's set.

▲ ▼: Changes the highlighted character.

F1 **Ins**: Inserts the first character from the set that includes the highlighted character.

F2 **Del**: Deletes the highlighted character.

SHIFT and ▼ or **SHIFT** and ▲: Changes the character set.

Character Sets Available

A B C D E F G H I J K L M N O P Q RS T U V W X Y Z

a b c d e f g h i j k l m n o p q r s t u v w x y z

0 1 2 3 4 5 6 7 8 9

" ! $ % & ' ( ) * + , - . / : ; < = > ? @ [\ ] ^ _ ` { | } space

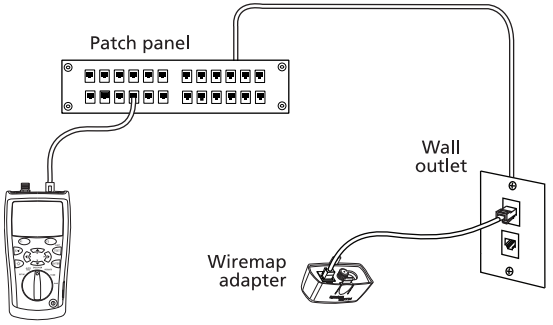
Connecting for Cabling Tests

Notes

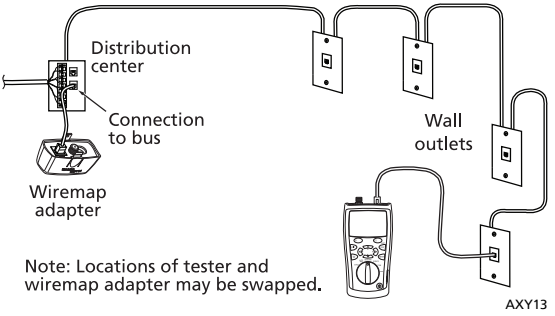
A wiremap adapter or remote ID locator must be connected to the end of the cabling for the wiremap to be completely verified.

If you use patch cords at the near or far end during an Autotest, Fluke Networks recommends patch cords at least 2 m long.

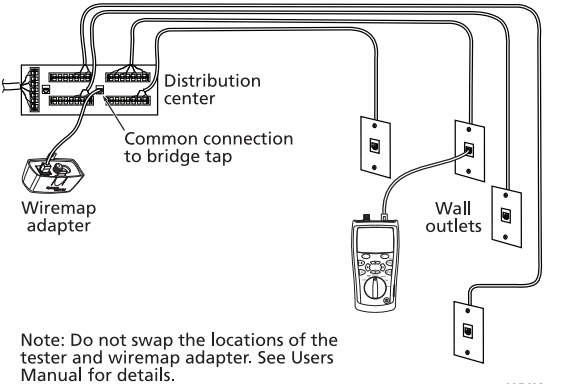
Connecting to a Data Link



Connecting to a Bus Topology



Connecting to a Star Topology



Note: Do not swap the locations of the tester and wiremap adapter. See Users Manual for details.

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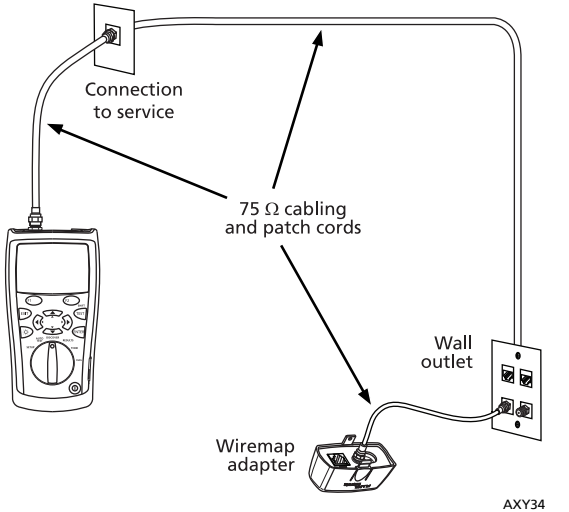
Connecting to Coaxial Cabling



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Results Icons

The icons below appear on Autotest and Discover screens.

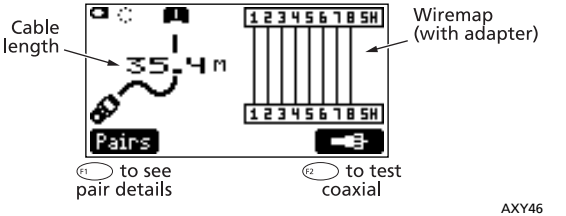
	The cabling qualifies for the application.
	The cabling does not qualify for the application.
	Results are for informational purposes only, not for qualification. The cabling cannot be completely qualified for the application because the wiremap results are incomplete (wiremap adapter not used).
	Pair is open.
	Pair is shorted.
	Wiremap adapter or remote ID locator at far end, with its number.
	Bridge tap detected.
	Hub, switch, or PC NIC card detected. Port speeds are 10, 100, 1000 Mb/s.
	Voltage detected. This may indicate an active telephone circuit, ISDN line, or Power over Ethernet (PoE) device.
	The tester is connected to an active telephone circuit.
	A signal is present on the pair.
	The tester cannot identify the termination.

Discovering Cabling Characteristics

Discover mode lets you quickly check wiremaps, measure length, and determine if cabling is connected to a network port, video device, or telephone.

Turn the rotary switch to **DISCOVER**, then connect to twisted pair or 75 Ω coaxial cabling with or without a wiremap adapter at the far end. Results from Discover mode cannot be saved.

Discover Mode on Twisted Pair Cabling



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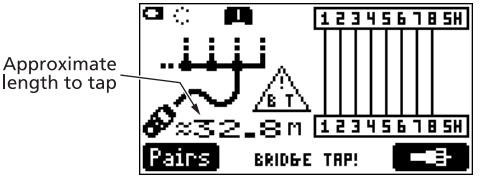
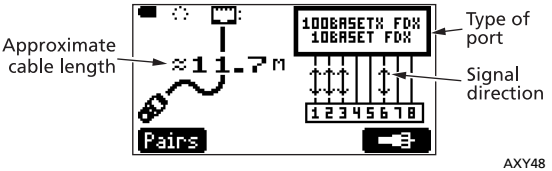
Discover Mode on a Bridge Tap



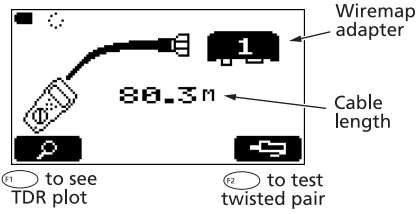
AXY49

Discover Mode on a Port



AXY48

Discover Mode on Coaxial Cabling with Adapter



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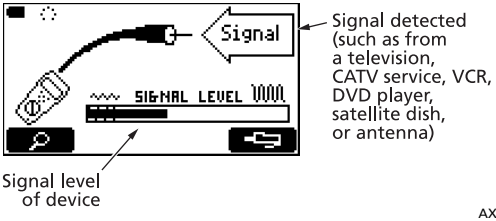
Discover Mode on Coaxial Cabling Connected to a Device



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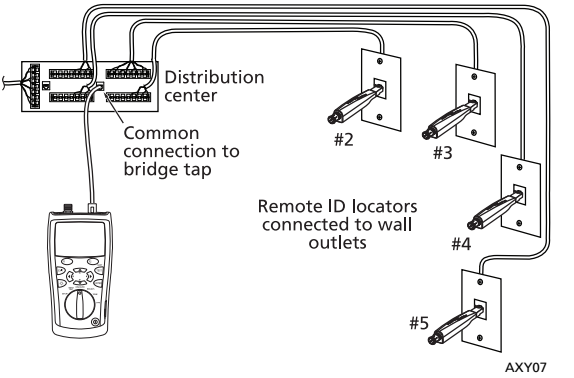
Discover Mode with MultiMap

Verifies wiremaps of multiple telephone outlets connected in a star or bus topology.



Qualifying Cabling with the Autotest

The Autotest tells you if cabling will support a selected application. You can save Autotest results to document an installation.

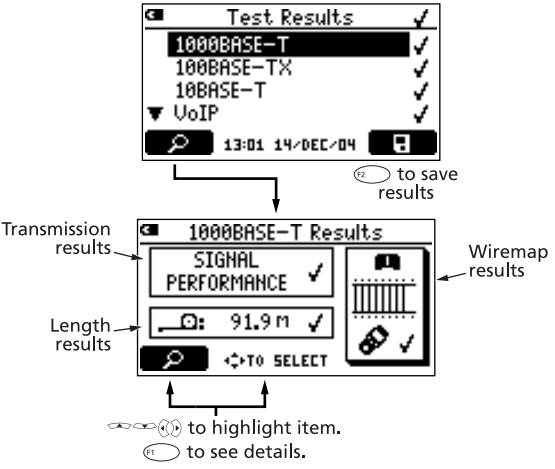
Connect to the cabling as shown on pages 3 and 4. Turn the rotary switch to **AUTOTEST**. To select tests and pairs to test, press F1 **Setup**. To start the test, press TEST.

Note

The Autotest does not support use of multiple remote ID locators (the MultiMap function).

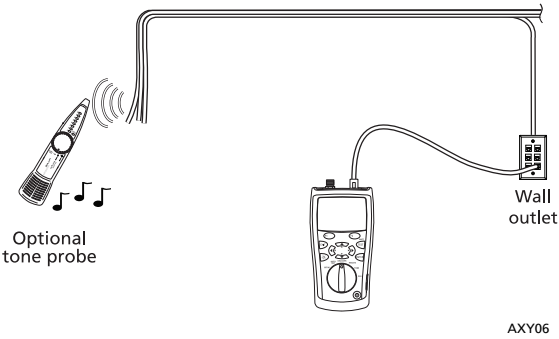
To save the test, press F2 . You can enter a **Site** name, **Location**, and **Outlet** to identify the results. The last character of the **Outlet** string increments each time you save an Autotest.

Autotest Results for Twisted Pair Cabling



Using the Toner

Turn the rotary switch to **TONE**; then select a tone function. The two IntelliTone™ functions work with a Fluke Networks IntelliTone probe. The other four analog tones can be detected by most tone probes.

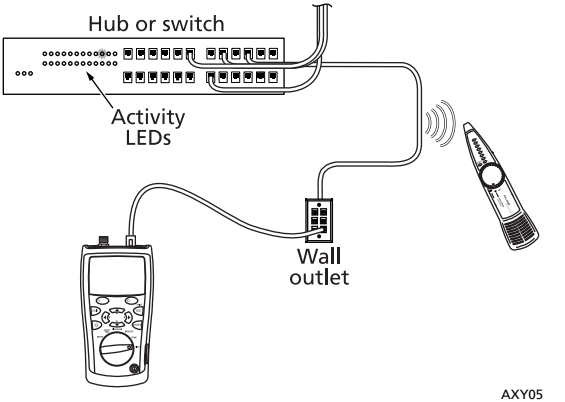


Blinking a Port Light

The **Blink Port Light** function helps you determine which cable is connected to which port on a network hub or switch.

The tester's analog toner is also active when the port light function is active.

Turn the rotary switch to **DIAG**; then select **Blink Port Light**. Look for the blinking activity LED on the hub or switch.

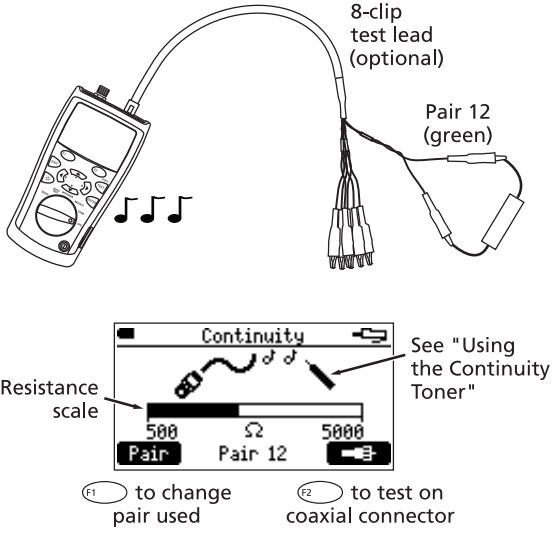


Testing for Continuity

The continuity function lets you test for opens and shorts on the 8-pin modular jack or the coaxial connector.

Turn the rotary switch to **DIAG**. Use ◄► to highlight **Continuity**; then press ENTER, F1, or TEST.

The tester's beeper is silent for resistances above about 5000 Ω. The beeper's tone and rhythm increase as resistance decreases.



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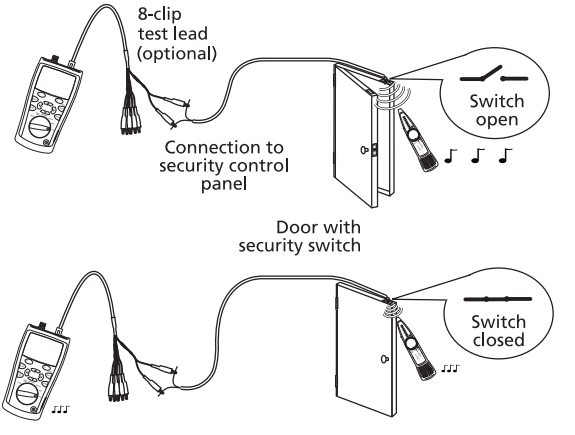
Using the Continuity Toner

Turn the rotary switch to **DIAG**; then select **Continuity**. The beeper's tone and rhythm increase as resistance decrease.



Locating Crosstalk and Impedance Faults

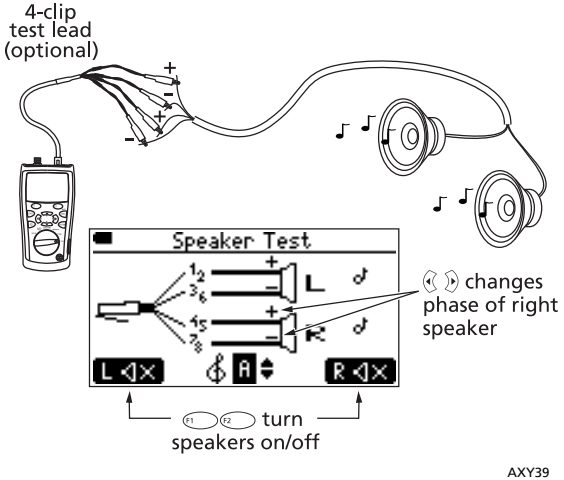
The **Find Crosstalk Fault** and **Find Impedance Fault** functions let you quickly check cable pairs for crosstalk and impedance faults on twisted pair cabling.

Turn the rotary switch to **DIAG**, select **Find Crosstalk Fault** or **Find Impedance Fault**; then press ENTER or F1. Select a transmission standard and pair or pairs to test; then press TEST. A wiremap adapter or ID locator is not required.

Testing Speaker Cabling

The **Speaker Test** generates audible tones for testing the wiring and phase of installed twisted pair speaker cabling.

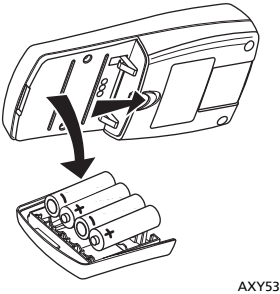
Turn the rotary switch to **Diag**; then select **Speaker Test**.



4-clip test lead wiring:

- **+** Pair 12: green
- **-** Pair 36: orange
- **+** Pair 45: blue
- **-** Pair 78: brown

Replacing the Batteries



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Remove the yellow boot to access battery door.
4 AA batteries (alkaline recommended)
20 hours typical battery life.

Contacting Fluke Networks

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