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Cable Inspector Cable Tester (CICT)

Overview

The Cable Inspector Cable Tester (CICT) combines the functions of a high-end cable tester and length measurement device. It identifies link status and link capability, and detects PoE. All of this is done in full color with internal memory to save your results.

Basic Features

- Displays length measurement for each pair in feet or meters using TDR technology.

- Detects presence of PoE and class of PoE per IEEE 802.3af/at with load test for voltage drop.

- Detects and reports current link speed and link capabilities for active Ethernet drops up to 1 Gbps.

- Link light identifes location on a hub/switch/router port.

- Tests Ethernet cable configuration and verifies connectivity while conducting tests for opens, shorts, miswires, split pairs, and reverses.

Basic Features (continued)

- Generates selectable tones on selected pins for use with tone tracers.

- Supports up to eight testing and ID remotes for network and telephone cables.

- Supports up to 20 network and coax ID-only mapping remotes.

- Displays saved cable tests.

- Has full-color graphical wire-mapping.

- Provides the ability to define cable name, save cable tests, and print ALL results (cable testing and network testing).

- Multilingual (English, French, Spanish).

Cable Testing

The CICT provides full cable testing on any category network, coax, or telephone cable. It will display wire map, numbered ID remotes, and any faults, including shorts, opens, miswires, split pairs, and reverses. The CICT measures cable length (using TDR technology) and generates tone levels for signal tracing and cable identification on all pairs, a selected pair, or a selected pin. All of this is displayed in a full color graphical display for easy viewing in any environment. The CICT also has the ability to name each cable and save all test results. Cable results can be exported to a computer via micro USB cable for recordkeeping and printing.

Physical Features

- High resolution full-color graphical display.

- Displays wire map in color per TIA-568A/B color codes, in pin or pair order (configurable).

- Protective silicone case.

- Micro USB connector (to export cable reports), RJ-45 connector, and coax connector.

Cable Inspector Cable Tester (CICT) Data Sheet

Applications

- Measure cable length and length to faults using TDR technology.

- Network testing of link capability, link status, and link light.

- Test PoE to ensure adequate power for powered devices, such as VoIP phones.

- Conduct single-ended and remote cable tests with display of PASS, wire map, ID, and faults for network and coax cables.

- Tone and trace cables.

- Locate unlabeled network and coax cables with up to 20 remote identifiers.

- Test multiple (up to eight) network and telephone drops with testing and identifier remotes.

- Define a cable name for your cable test, save every cable test, export to your computer for recordkeeping and printing.

Network—PoE Testing

The CICT enables quick identification of a network drop's link capability and current link status. The CICT also detects the presence of PoE on the network drop and what class of PoE per IEEE 802.3 af/at with load test for voltage drop. These network tests can also be saved for record keeping and printing.

Network/Power over Ethernet (PoE) Testing

Power over Ethernet or PoE describes a specification that allows passing of electrical power along with data on Ethernet cabling.

There are two standardized specifications: the IEEE 802.3af, known as PoE, and IEEE 802.3at, known as PoE+. The first provides a maximum 12.95 Watts, and the second provides a maximum of 25.5 W.

PoE also has two modes: A and B. Mode A uses pins 1 and 2 for the positive voltage and pins 3 and 6 for the negative voltage. Mode B uses pins 4 and 5 for the positive voltage and pins 7 and 8 for the negative voltage.

The CICT tests to see if either PoE or PoE+ is present. If it is detected, it then activates it and tests the voltage under minimum and maximum current load, and displays the result. The CICT will also display which PoE mode is found.

While PoE is activated, the CICT also communicates and displays the Link Status and Link Capability status. The CICT's PoE testing screen is shown at right.

PASS

Pair 1-2	Length = 46.1 ft
Pair 3-6	Length = 46.6 ft
Pair 4-5	Length = 46.6 ft
Pair 7-8	Length = 46.6 ft

FAIL

Pair 1-2	Length = 5.5 ft
Pair 3-6	Length = 5.7 ft
Pair 4-5	Length = 5.8 ft
Pair 7-8	Length = 5.5 ft

Network—PoE Testing

Link Capability	Link Flow Control
10Base-T	Full / Half Duplex
100Base-TX	Full / Half Duplex
1000Base-T	Full / Half Duplex

Connected at	PoE + A 25.5W Max
100 Base-TX	57.9 V Min Load
MDI FDX	56.1 V Max Load
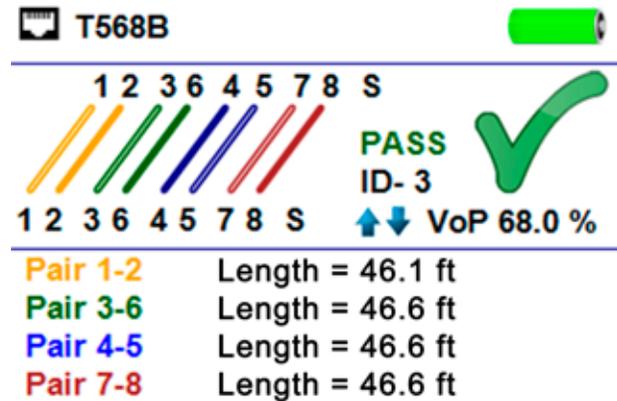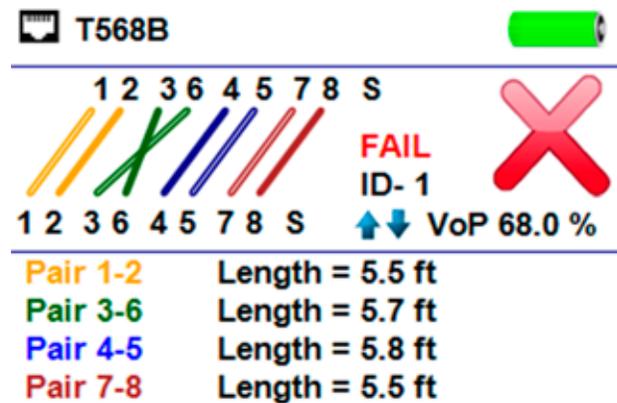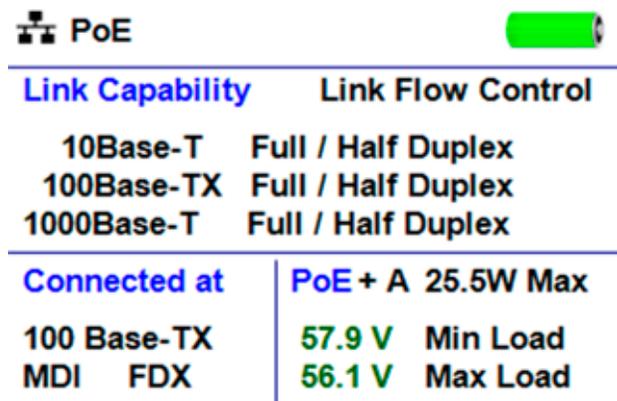
CICT Features/Functions

Feature	Function
TDR Technology	▪ Measures cable length and distance to faults.
High-Resolution Color Display	▪ Easy viewing in any environment.
Color Wire Map per TIA568A/B Codes	▪ Full-color graphical wiremapping.
Tone Generation	▪ Generates selectable tones on selected pins.
Remotes	▪ Verifies connectivity at the opposite end of a cable and provides identification.
Active Network Tests	▪ Detects and reports current link speed and link capabilities for active Ethernet drops, up to 1 Gbps.
PoE Detection	▪ Detects presence of PoE and class of PoE per IEEE 802.3af/at with load test for voltage drop.
Save and View Test Results	▪ Test results can be named, saved, and viewed on the unit.
CICT PC Application	▪ Provides the ability to upload or download test results for saving, viewing, or printing. ▪ Makes it easy to update CICT firmware.

Setup Screen

From the main screen, press the blue button on the far right below the "setup" symbol. Use the up and down arrow buttons to scroll through the Setup menu and to select an option.

• Use the up and down buttons to navigate through the settings.

• Use the right-arrow buttons to select setting.

• Use the up and down arrow buttons to change the selected setting.

• Press the enter button to accept your changes.

• Press the left-arrow button to unselect a setting.
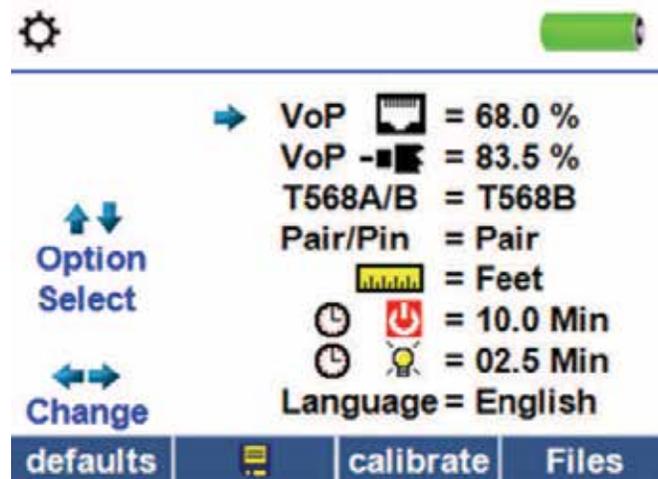
Cable Inspector Cable Tester (CICT) Data Sheet

Specifications

Active Ethernet	Indicates advertised speeds of 10/100/1000BASE-T half- or full-duplex; Can Link to network at 10/100BASE-T
Altitude	10,000 ft. (3048 m) operating
Battery Life	For 6 AA, 9 VDC, 2,200 mA-hr (typical) alkaline battery: Operating: 20 hours typical; Standby: 1.5 years typical; (200 mA max standby current); Batteries are included
Cable Measurements	Cable Testing and ID: Up to 1000 ft. (305 m); Split Pair Detection: 3 ft. (1 m) to 1000 ft. (305 m); Length Measurement: 0 to 1500 ft. (457 m), ±(5% +1 ft.); Supports 8 continuity and ID number remotes (RJ-45); Supports 20 RJ-45 and 20 F-Connector ID only remotes
Enclosure	High-strength PC/ABS plastic with V0 rating with boot; Withstands 4-foot drop onto concrete
Languages	English, French, Spanish
Maximum Voltage	Parameters refer to the maximum voltage that can be applied to any two connector pins without causing damage to the tester. • RJ Jack: 66 VDC or 55 VAC; • F-connector: 50 VDC or VAC
Measurement Technology	Time Domain Reflectometry (TDR)
Power over Ethernet	Tests for IEEE 802.3af and IEEE 802.3at (PoE Plus) compliant PoE; Tests for classes and loads cable up to 25.5 watts; (At class 4) Identifies Mode A or B (pairs with PoE)
Save Test Results	Stores up to 256 Cable or network tests with user defined names
Tone Generation	Tone Frequencies: 730 Hz and 1440 Hz
Connectors	(1) RJ-45, (1) coax, (1) micro USB
Display	1.75" x 2.25" full-color LCD
Temperature	Operating: 32 to 122°F (0 to 50°C) Storage: -22 to +140°F (-30 to 60°C)
Humidity	10 to 90% non-condensing
Size	6.8"H x 3.6"W x 1.85"D (17.3 x 9.15 x 4.7 cm)
Weight	With batteries: 1 lb. 2 oz. (510 g)
Safety Compliances	CE

Dimensional diagram of the CICT.

3.6"W (9.15 cm)

6.8"H
(17.3 cm)

Full-color LCD display

Soft keys perform the
function on the display
above each button.

Back

Test

Direction cursors
to move in LCD display

Enter key

On/Off

1.85"D
(4.7 cm)

RJ-45 jack

F-connector jack   Micro USB port

About the Accessories

When used with the Cable Inspector Cable Tester, RJ-45, Coax, and Mapping Remotes verify connectivity at the opposite end of a cable and provide identification.

Mapping Remotes also provide ID and complete wiremap.

NOTE: See below for ordering information.

Item	Code
Cable Inspector Cable Tester	**CICT**
You might also need…	
Cable Inspector	
RJ-45 Remote Set 1–20	**CICT-RJ45-REMOTES**
Coax Remote Set 1–20	**CICT-COAX-REMOTES**
Mapping Remeotes 1–8	**CICT-MAPPING REMOTES**

Disclaimer:

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