CTX200 RJ45/Coax Cable Tester

USER MANUAL

Introduction

Congratulations on your purchase the CTX200 RJ45/Coax Cable Tester. The system consists of a Main Tester and a Remote Terminator and Preforms the following tests: Continuity, Open & Short Circuits, Wire Crossed (Reverse and Split) Tests CAT3, 5, 5e, 6, 6A, & 7 Ethernet Cables to TIA568 Specs • Tests COAX Cables • Locates Cables*

WARNING!!!
DO NOT USE ON LIVE CIRCUITS!!
NOTE: <5V/20mA rating

Features

- Tests and tones both RJ45-CAT5/6 and coax cables.
- Ruggedized for field use. Small and easy to carry.
- PASS/FAIL results appear in one second.
- Each pair's status is highlighted.
- Complete TIA568 test performed. Continuity, opens / shorts, reversals and split pairs.
- Auto-off (12 seconds) to conserve battery life.
- Low battery indicator.
- (1) 9V Battery and Pouch included.

Quick Start: Cable Testing

1. Push terminator out.
2. Connect LAN cable one end to RJ45 modular jack, one end to terminator.
3. Press "ON/TEST" to turn on.
4. Check status "PASS" or "FAIL". Test is complete.
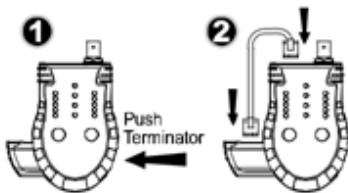
Ethernet cables have 4 pairs of wires ("twisted pairs"). It is important that the pairs correctly go to connector pins 1,2 ; 3,6 ; 4,5 ; and 7,8. The Pocket CAT tests for the proper pairing and if there is an error it will report it to you ("split pairs")

Connecting cables to the Tester
Installed cables: Connect the Main unit to the wall jack, then connect the Remote to the patch panel or far-end wall jack.
Patch cables: Attach the Main unit and Remote directly to the cable ends.

Power ON and Test
Press the ON button. Press again to begin test. When the PASS/FAIL LEDs light, press the FAULT CHECK button to isolate any problems to an individual pair.

Coax Testing Coax is displayed using the 4/5 LEDs. The coax remote is in the pouch.

- To press " (ON TEST) " for quickly test or press " (FAULT CHECK TONE) " for individual test are listed below:

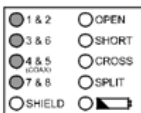Indicator light reference ● ON ○ OFF -☼- FLASHING.

EIA/TIA-568A
PR2
PR3 PR1 PR4
1 2 3 4 5 6 7 8
SH

4 PAIR TEST
PASS = YELLOW x 4 ○(ON)
FAIL = RED ●(ON)
Yellow ○(OFF) or
-☼-(FLASHING)

● 1 & 2   ○ OPEN
● 3 & 6   ○ SHORT
● 4 & 5 (COAX)   ○ CROSS
● 7 & 8   ○ SPLIT
○ SHIELD   ○ ▭

EIA/TIA-568B
(AT&T-258A)
PR3
PR2 PR1 PR4
1 2 3 4 5 6 7 8
SH

4 PAIR TEST
PASS = YELLOW x 4 ○(ON)
FAIL = RED ●(ON)
Yellow ○(OFF) or
-☼-(FLASHING)

● 1 & 2   ○ OPEN
● 3 & 6   ○ SHORT
● 4 & 5 (COAX)   ○ CROSS
● 7 & 8   ○ SPLIT
○ SHIELD   ○ ▭

EIA/TIA-568A
PR2
PR3 PR1 PR4
1 2 3 4 5 6 7 8
SH
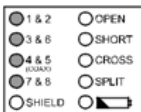
4 PAIR + SHIELD TEST
PASS = YELLOW x 5 ○(ON)
FAIL = RED ●(ON)
Yellow ○(OFF) or
-☼-(FLASHING)

● 1 & 2   ○ OPEN
● 3 & 6   ○ SHORT
● 4 & 5 (COAX)   ○ CROSS
● 7 & 8   ○ SPLIT
● SHIELD   ○ ▭
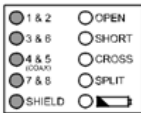
10BASE-T
PR2
PR1
1 2 3 4 5 6 7 8
SH

2 PAIR TEST (1-2 AND 3-6)
PASS = YELLOW x 2 ○(ON)
FAIL = RED ●(ON)
Yellow ○(OFF) or
-☼-(FLASHING)

● 1 & 2   ○ OPEN
● 3 & 6   ○ SHORT
○ 4 & 5 (COAX)   ○ CROSS
○ 7 & 8   ○ SPLIT
○ SHIELD   ○ ▭

Quick St
Purpose
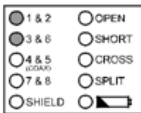
Tone is used to locate a cable's far end. A tone is placed on the cable's "near end" by the CTX200 Main unit. The probe locates the tone at the far end of the cable. NOTE: Requires

Connecting cables to the Tester
Plug the cable into the tester's Main unit.

Power ON and Tone:
Press the ON button. Hold the TONE button for 7 secs to turn ON the tone. Press the TONE button repeatedly to select the pair you wish to tone. The tone is loudest when you select the entire cable (including the shield).

Connecting the Cable Tester

Testing patch cables
Slide Remote Connector out from base of Pocket CAT, then connect one end of the cable to the Remote Connector, and the other end to the Pocket CAT.
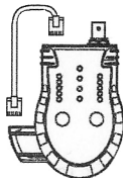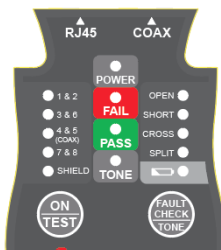
Testing installed cables
Slide Remote Connector out from base of Pocket CAT, then connect the far end of the cable to the Remote Connector, and the other end to the Pocket CAT. *NOTE: The Remote Connector for COAX testing is located in the pouch..*
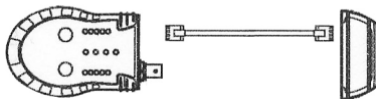
Faceplate

OPEN: A wire is disconnected.

SHORT: A wire makes contact with another wire.

CROSS (REVERSAL): a twisted pair gets flipped on one side of the cable

Pass/Fail
Indicator

FAIL

PASS

Pair/Shield
Tested
(Coax uses 4/5)

ON
TEST   Press to test all pairs
automatically.

FAULT
CHECK
TONE   Press to test pairs individually. Hold 7 second for Tone and Press again to select pair.
Remote Connector: Push or Slide to Remove.

Testing RJ45 and Coax Cables

Power ON and TEST: Press the ON button. Press again to commence the test. The bright, blue
PASS LED indicates the cable has passed. If the FAIL LED lights, press the FAULT CHECK button
to isolate problems to an individual pair. See back for more examples.

Power ON and TEST: Press the ON button. Press again to commence the test. The bright, blue
PASS LED indicates the cable has passed. If the FAIL LED lights, press the FAULT CHECK
button to isolate problems to an individual pair. See back for more examples.

EXAMPLE: CABLE PASSED
TEST. ALL 4 PAIRS AND
SHIELD ARE WIRED.
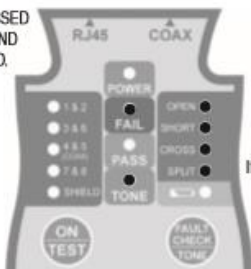
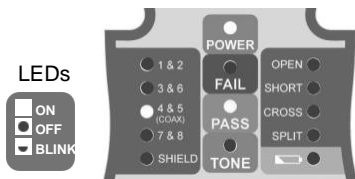Coax cable: LEDs 4/5
are used for testing.

LEDs

● ON
● OFF
- BLINK

If FAIL, press FAULT CHECK
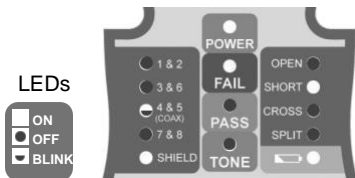to isolate problem to an
individual pair(s).

Testing Examples: Coax

The Pocket CAT uses LED 4&5 to display the status of a coax cable test.. Connect the near end of the cable to the BNC connector. Connect the far end to the coax terminator (pouch).
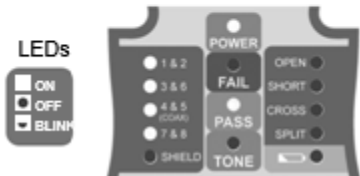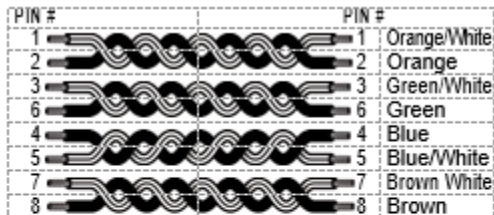
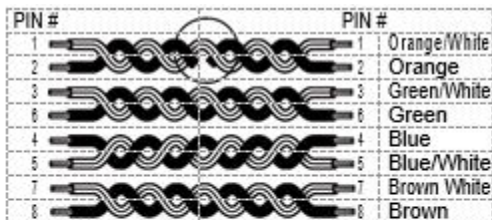## **Good Cable:**

Short in Cable:

Testing Examples: Ethernet

Ethernet cables have 4 pairs of wires ("twisted pairs"). It is important that the pairs correctly go to connector pins 1,2; 3,6; 4,5; and 7,8. The tester tests for the proper pairing and if there is an error it will report it to you. The follow-ing examples are based on EIA/TIA 568B (the most popular ethernet wiring standard).
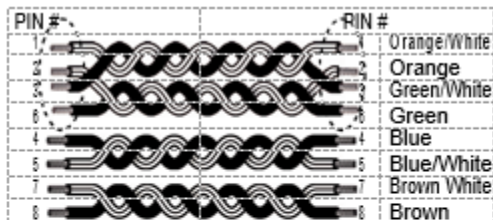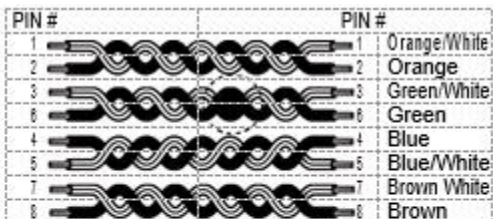
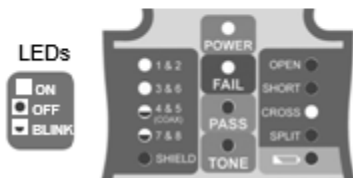**Good Cable:**

Open on Pair 1-2:

Split Pairs 1-2 &3-6:

PIN #		PIN #	
1		1	Orange/White
2		2	Orange
3		3	Green/White
6		6	Green
4		4	Blue
5		5	Blue/White
7		7	Brown White
8		8	Brown

LEDs

☐ ON
☐ OFF
☐ BLINK

POWER
FAIL
PASS
TONE

1 & 2
3 & 6
4 & 5 (COAX)
7 & 8
SHIELD

OPEN
SHORT
CROSS
SPLIT

Short on Pair 3-6:

PIN #		PIN #	
1		1	Orange/White
2		2	Orange
3		3	Green/White
6		6	Green
4		4	Blue
5		5	Blue/White
7		7	Brown White
8		8	Brown

LEDs

☐ ON
☐ OFF
☐ BLINK

POWER
FAIL
PASS
TONE

1 & 2
3 & 6
4 & 5 (COAX)
7 & 8
SHIELD

OPEN
SHORT
CROSS
SPLIT

Crossed Pairs 4-5 & 7-8:

PIN #		PIN #	
1			Orange/White
2			Orange
3			Green/White
6			Green
4			Blue
5			Blue/White
		7	Brown White
		8	Brown

LEDs

- ON
- OFF
- BLINK

- 1 & 2
- 3 & 6
- 4 & 5 (COAX)
- 7 & 8
- SHIELD

POWER
FAIL
PASS
TONE

OPEN
SHORT
CROSS
SPLIT