

EZ Check Cable Tester

Find problems in copper cables.

Identify breaks, shorts, splits, and cross-circuits at a glance in UTP and coax cables.



**Customer
Support
Information**

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax
724-746-0746 • Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence,
PA 15055-1018 • Web site: www.blackbox.com • E-mail: info@blackbox.com

FEDERAL COMMUNICATIONS COMMISSION AND
INDUSTRY CANADA RADIO FREQUENCY INTERFERENCE STATEMENTS

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

Normas Oficiales Mexicanas (NOM)
Electrical Safety Statement
INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.

5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc.
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.

17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

TRADEMARKS USED IN THIS MANUAL

Black Box and the Double Diamond logo are registered trademarks of BB Technologies, Inc.

Any other trademarks mentioned in this manual are acknowledged to be the property of the trademark owners.

1. Features

- Tests both RJ-45-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; split pairs.
- Tone mode for tracing cables and troubleshooting.
- Auto-off (12 seconds) to conserve battery life.
- Low battery indicator.
- Belt clip, battery (9V), and pouch included.

2. What's included

- Test unit with built in remote
- 12" RJ-45 cable
- 4.5" BNC Male to BNC Male patch cable
- Coax terminator
- Belt clip (removable)
- Nylon zipper storage pouch
- 9-volt battery
- This user's manual

3. Connecting Cables to the Tester

3.1 Introduction

Ethernet cables have 4 pairs of wires ("pairs" or "twisted pairs"). It is important that the pairs correctly go to connector pins 1–2; 3–6; 4–5; and 7–8. The EZ Check Cable Tester tests for the proper pairing; if there is an error it will report it to you ("split pairs") via LED signals on the easy-to-understand faceplate.

3.2 Connecting cables to the tester

To test installed cables: Connect the Main unit to the wall jack and the remote to the patch panel or far-end wall jack, as shown in Figure 1.

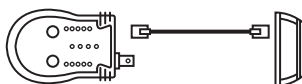


Figure 1: Testing installed cables. Remove the remote and connect it to the far end of the cable.

To test patch cables: Attach the Main unit and remote directly to the cable ends, as shown in Figure 2.

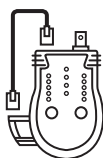


Figure 2. Testing patch cables: Slide the remote to the side to expose the RJ-45 port and connect the cable to the connector.

To test coax cables: Coax is displayed using the 4&5 LEDs. The coax remote is in the nylon zipper storage pouch.

4. Using the EZCT and Understanding the Faceplate

The graphical faceplate of the EZCT will provide you with the means to begin a test, as well as the results to a number of tests.

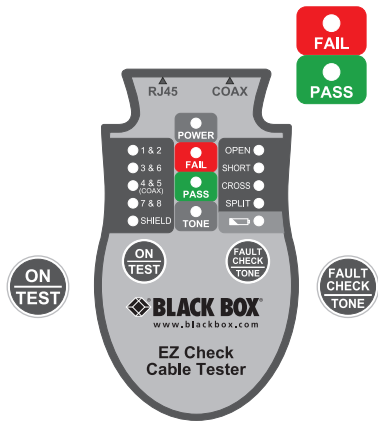


Figure 4-1. The graphical faceplate of the EZCT

Power ON and test:

- STEP 1: Press the ON button to turn the unit on. Press it again to begin a test.
- STEP 2: When the PASS/FAIL LEDs light, press the FAULT CHECK button to isolate any problems to an individual pair.

Key to Failure Descriptions:

- OPEN:** A wire is disconnected.
- SHORT:** A wire makes contact with another wire.
- CROSS (REVERSAL):** A twisted pair is not properly connected on one end of the cable.
- SPLIT:** One wire from each of the two different pairs is not properly connected on both ends of the cable.

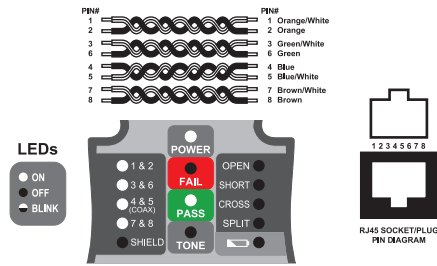


Figure 4-2. This interface indicates no failure on a good cable. Everything is normal.

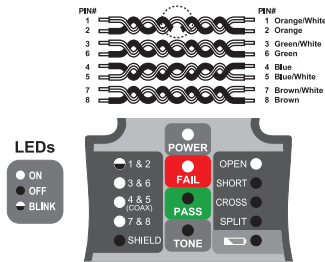


Figure 4-3. There is an opening, or a broken cable, on pair 1–2.

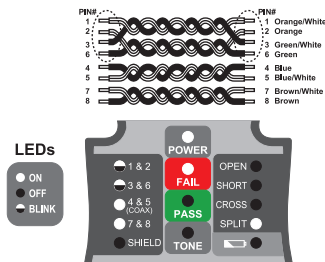


Figure 4-4. There is a split, or improper connections, on pairs 1–2 and 3–6.

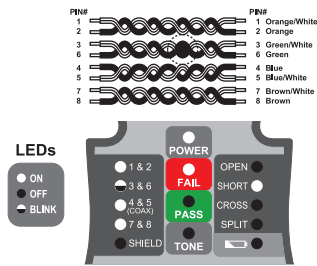


Figure 4-5. There is a short on pair 3–6.

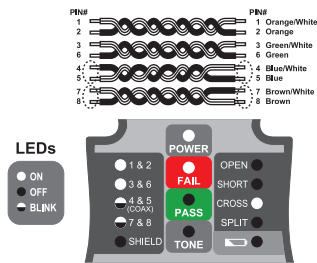


Figure 4-6. There are crossed wires on both pairs 4–5 and 7–8.

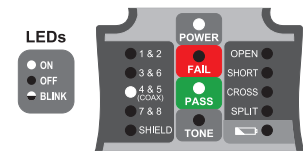


Figure 4-7. The EZCT uses LED 4&5 to display the status of a coax cable test. Connect the near end of the cable to the BNC connector. Connect the far end to the coax terminator (found in the nylon zipper storage pouch). The illustration above indicates indicates a good cable connection.

5. Using Tone to indicate a cable end

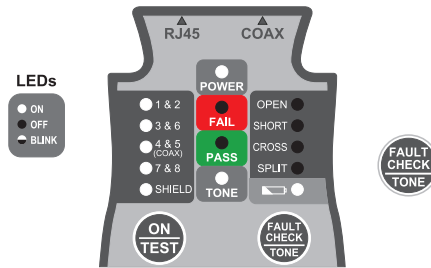


Figure 5-1.

Tone is used to locate the far end of a cable.

A tone is placed on the cable by the EZ Check Cable Tester main unit. A separate probe locates the tone at the far end of the cable.

Connect the cable: Plug the cable into the tester's Main unit.

Power ON and tone: Press the ON button. Hold the TONE button for 7 seconds to turn on the tone. Press the TONE button repeatedly to select the pair you wish to tone. Select the setting that provides the loudest tone.

The tone is loudest when you select the entire cable (including the shield).

4. Warranty and Return Shipping Information

If you determine that your EZCT is malfunctioning, do not attempt to alter or repair the unit. It contains no user-serviceable parts. Contact Black Box Technical Support at 724-746-5500 or info@blackbox.com.

Before you do, make a record of the history of the problem. We will be able to provide more efficient and accurate assistance if you have a complete description, including the nature and duration of the problem, when the problem occurs, and any particular application that, when used, appears to create the problem or make it worse.

If you need to transport or ship your EZCT, package it carefully. We recommend that you use the original container. If you are returning the unit, make sure you include everything you received with it. Before you ship for return or repair, contact Black Box to get a Return Authorization (RA) number.

Black Box Tech Support: FREE! Live. 24/7.

Tech support the
way it should be.



Great tech support is just 30 seconds away at
724-746-5500 or blackbox.com.



About Black Box

Black Box Network Services is your source for an extensive range of networking and infrastructure products. You'll find everything from cabinets and racks and power and surge protection products to media converters and Ethernet switches all supported by free, live 24/7 Tech support available in 30 seconds or less.

© Copyright 2011. Black Box Corporation. All rights reserved.

EZCT, rev. 1

724-746-5500 | blackbox.com