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Extech CB10 Tests Receptacles and GFCI Circuits User Guide

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Extech CB10 Tests Receptacles and GFCI Circuits

Introduction

Congratulations on your purchase of the Extech Model CB10 Circuit Breaker Finder and Receptacle Tester. This instrument is shipped fully tested and calibrated and, with proper use, will provide years of reliable service.

Meter Description

Receiver

- 1. Indicating LED and Beeper
- 2. ON/OFF and Sensitivity adjust
- 3. Transmitter storage plug

Note that the battery compartment is located on the rear of the receiver.

Transmitter

- 4. Receptacle LED coding scheme
- 5. GFCI test button
- 6. Receptacle LED's

Safety

This symbol adjacent to another symbol, terminal or operating device indicates that the operator must refer to an explanation in the Operating Instructions to avoid personal injury or damage to the meter.

This WARNING symbol indicates a potentially hazardous situation, which if not avoided, could result in death or



serious injury.

This CAUTION symbol indicates a potentially hazardous situation, which if not avoided, may result in damage to the product. This symbol indicates that a device is protected throughout by double insulation or reinforced insulation.

Specifications

Operating Voltage: 90 to 120V
Operating Frequency: 47 to 63Hz
Power supply: 9V battery (receiver)

Operating Temperature: 41°F to 104°F (5°C to 40°C)
 Storage Temperature: -4°F to 140°F (-20°C to 60°C)

• Operating Humidity: Max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F (40°C)

• Storage Humidity: <80%

• Operating Altitude: 7000ft, (2000 meters) maximum.

• Weight: 5.9 oz (167g)

• **Dimensions:** 8.5" x 2.2" x 1.5" (215 x 56 x 38mm)

• Approvals: UL CE

• UL Listed: The UL mark does not indicate that this product has been evaluated for the accuracy of its readings.

Operation

WARNING: Always test on a known good circuit before use.

WARNING: Refer all indicated problems to a qualified electrician.

Locating a Circuit Breaker or Fuse

The transmitter injects a signal onto the circuit which can be detected by the receiver. The receiver will beep when the signal is detected. The sensitivity adjustment allows for tracing and pinpointing the exact circuit breaker or fuse protecting the selected circuit.

- 1. Plug the Transmitter / Receptacle Tester into a powered outlet. The two green LEDs should illuminate.
- 2. Rotate the Receiver's Sensitivity adjustment from the OFF position to the HI position. The red LED should turn on. If the LED does not turn on, replace the battery.
- 3. Test the operation of the Receiver by placing it in close proximity to the transmitter. The receiver should beep and the LED should flash.
- 4. At the breaker panel, set the sensitivity to the HI position and hold the receiver as indicated by the "UP DOWN" label.
- 5. Move the receiver along the row of breakers until the selected circuit is identified by the beep and flashing light.
- 6. Reduce the sensitivity as needed to pinpoint the exact circuit breaker controlling the circuit.

Receptacle Wiring Test

CORRECT WIRING

- GFCI TESTING IN PROGRESS
- HOT ON NEUTRAL WITH HOT OPEN
- HOT AND GROUND REVERSED
- HOT AND NEUTRAL REVERSED
- OPEN HOT
- OPEN NEUTRAL
- OPEN GROUND
- OFF ON
- 1. Plug the Transmitter / Receptacle tester into the outlet.
- 2. The three LEDs will indicate the circuit condition. The diagram lists all of the conditions that the CB10 can detect. The LEDs in this diagram represent the view from the GFCI button side of the transmitter. When viewing the other side of the transmitter the LEDs will be a mirror image of those shown here.
- 3. The tester will not indicate the quality of the ground connection, 2 hot wires in a circuit, a combination of defects, or reversal of ground and neutral conductors.

Receptacle GFCI Test

- 1. Before using the tester, press the TEST button on the installed GFCI receptacle; the GFCI should trip. If it does not trip, do not use the circuit and call a qualified electrician. If it does trip, press the RESET button on the receptacle.
- 2. Plug the Transmitter / Receptacle tester into the outlet. Verify that the wiring is correct as described above.
- 3. Press and hold the test button on the tester for at least 8 seconds; the indicator lights on the tester will shut off when the GFCI trips.
- 4. If the circuit does not trip, either the GFCI is operable but the wiring is incorrect, or the wiring is correct and the GFCI is inoperable.

Replacing the Battery

- 1. When the battery drops below the operating voltage the receiver's LED will not light. The battery should be replaced.
- 2. Remove the receiver battery cover by removing the screw using a Philips head screwdriver. (The Transmitter is line powered.)
- 3. Install 9 volt battery observing the correct polarity. Re-install the battery cover.
- 4. Dispose of the old battery properly.

Warranty

FLIR Systems, Inc. warrants this Extech Instruments brand device to be free of defects in parts and workmanship for one year from the date of shipment (a six-month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department for authorization. Visit the website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned. The sender is responsible for shipping charges, freight, insurance, and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from actions of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. FLIR Systems, Inc. specifically disclaims any

implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental, or consequential damages. FLIR's total liability is limited to the repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Support Lines: U.S. <u>877-439-8324</u>; International: +1 <u>603-324-7800</u>

• Technical Support: Option 3;

• E-mail: support@extech.com

• Repair & Returns: Option 4;

• E-mail: repair@extech.com

Product specifications are subject to change without notice.

Please visit our website for the most up-to-date information. www.extech.com

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FREQUENTLY ASKED QUESTIONS

What is the primary function of the Extech CB10?

The primary function of the Extech CB10 is to test receptacles and GFCI circuits, ensuring they are wired correctly and functioning properly.

How does the Extech CB10 indicate correct wiring?

The Extech CB10 uses bright LED indicators to show correct wiring, lighting up specific patterns based on the outlet's condition.

What should I do if the Extech CB10 does not power on when plugged into an outlet?

If the Extech CB10 does not power on, check that the outlet is functional and that the circuit breaker has not tripped.

Why does my Extech CB10 indicate a reversed hot and neutral condition?

A reversed hot and neutral condition indicated by the Extech CB10 suggests that the hot and neutral wires are swapped, which should be corrected by a qualified electrician.

Can I use the Extech CB10 to test GFCI outlets?

You can use the Extech CB10 to test GFCI outlets by pressing the integrated GFCI test button to verify proper operation.

What does it mean if all LEDs on my Extech CB10 are off?

If all LEDs on your Extech CB10 are off, it indicates an open hot condition, meaning there is no power to the outlet being tested.

How many wiring conditions can the Extech CB10 identify?

The Extech CB10 can identify six common wiring conditions, including open ground and reversed phase.

What should I check if my Extech CB10 shows a fault condition when testing a GFCI outlet?

If your Extech CB10 shows a fault condition, inspect the wiring of the GFCI outlet or consider replacing it if it appears faulty.

What steps should I take if I suspect incorrect wiring after testing with my Extech CB10?

If you suspect incorrect wiring after testing with your Extech CB10, turn off power to the outlet immediately and consult a qualified electrician for further inspection.

How can I ensure that my Extech CB10 is functioning correctly before use?

To ensure proper functionality, test your Extech CB10 on a known working outlet before using it on other

outlets.

What should I do if my Extech CB10 beeper does not activate when voltage is present?

If the beeper on your Extech CB10 does not activate when voltage is present, check if the beeper switch is turned on; if not, consider replacing the tester as it may be faulty.

Does the Extech CB10 require batteries for operation?

The receiver of the Extech CB10 requires a 9V battery for operation, which should be replaced if it no longer powers on.

How can I confirm that a GFCI outlet is functioning properly using the Extech CB10?

To confirm proper functioning, plug in the transmitter of the Extech CB10 into the GFCI outlet and press its test button; it should trip correctly if functioning properly.

What does it mean if my Extech CB10 indicates an open ground condition?

An open ground condition indicated by your Extech CB10 suggests that there is no ground connection present at that outlet, which should be inspected by an electrician.

What should I do if the Extech CB10 does not power on when plugged into an outlet?

If the Extech CB10 does not power on, ensure that the outlet is functional and that the circuit breaker has not tripped. Also, check that the battery in the receiver is installed correctly.

VIDEO – PRODUCT OVERVIEW

DOWNLOAD THE PDF LINK:

REFERENCE: Extech CB10 Tests Receptacles and GFCI Circuits User Guide-Device.Report

References

• User Manual

Manuals+, Privacy Policy

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