**Find Quality** EC INSTRUMENTS uity Tester Pro **CT20** Products :tion

ions on your purchase of the Extech CT20 Continuity Tester Pro. allows a single user to quickly identify and label two wires even ire ends are located in different rooms. This tester is shipped fully vith proper use will provide years of reliable service.

User's Guide

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#### JTION: DO NOT CONNECT TO A LIVE CIRCUIT

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- per use of this tester can cause damage, shock, injury or death. and understand this user's quide before use.
- e that the battery door is properly closed and secured before use.
- MMM. t the condition of the test leads and the tester itself for any damage : use 9
  - ve the battery from the tester if it is to be stored for a long period.

#### C tion

- 1. 9 Continuity Tester (main pulsing unit) 2. Continuity Indicator (flashing :D) On/Off (mini-slide switch) 3. D 8 "On" Indicator (steady green 4. 5 Continuity Beeper (with air 5. ഹ on rear of case) 6. te Probe Continuity Indicator reen bi-color LED) te Probe Holder (side 7. 0 ed plastic piece) nd Black Remote Probe Leads 8.
  - ator clips Ċ
  - nd Black Tester Leads w/alligator

## Battery Compartment (removable cover on rear)

### ations

) }		ly	9 Volt Battery 85dB beeper
ľ	sal	onfirmation	Approx. 12 months with normal use. Equal to or less than 2.0 K Ohms
)	Ð	rive current:	Pulsed (2.0 Hz) 20 - 50mA at 10 Ohms and 2.0mA -
	ල ව	ation Distance	8.0mA at 1000 Ohms.
		ation Distance	10,000 ft., 3,000 m (26 Gage min.) 250V 0.5A fast blow
ן	Glob	emperature	-12 to 45°C (10°F to 113°F)
5	bal	nperature lumidity	-20 to 80°C (-4 to 176°F) 10 to 90% RH (non-condensing)
r	Ħ	unititity	90 x 57 x 29mm (3.6 x 2.2 x 1.14")
E	ITestS		260g (9.2oz)
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# Operation

#### CAUTION: DO NOT CONNECT TO LIVE WIRES. Use only on non-energized circuits

### **Remote Continuity**

Remote continuity is a different mode of usage for the Tester and requires the Remote Probe. This mode is primarily used for: A. remote verification of continuity for cable/wires, or

**B.** individual cable/wires for identification and labeling. Properly used, the Tester with Remote Probe will eliminate numerous trips when testing cable TV, electrical cables, and speaker/telephone wiring in multi-room/multi-floor installations.

- 1. Turn power on. The green power LED will glow. If green LED fails to light replace 9V battery.
- 2 Attach red and black alligator clips of Tester to one end of cable/wires under test.
- Proceed to the other end of the 3. cable/wires and connect them to Remote Probe test leads.
- If continuity exists, the LED on the 4 probe will flash either green or red depending on the Probe leads orientation. Note: At this point, Tester hanging on cable/wires at origination end will beep and flash red while remote probe (with user) at destination end is verifying continuity.
- When Tester (red lead) is connected through wire under test 5 to Remote Probe (red lead) and Tester (black lead) is connected through wire under test to Remote Probe (black lead), then Probe LED flashes green indicating correct connection orientation. If Probe LED flashes red, this indicates Probe Leads are not correctly connected. Reverse probe leads to produce green light.
- Once correct orientation has been achieved (flashing 6. green LED), then wires under test can be labeled consistent with the colors on tester and probe leads.

#### **Advanced Remote Continuity and Wire** Identification

The Remote Continuity mode can be used to check continuity and to identify two. three or more cables/wires simultaneously by applying simple logic and a testing strategy. To facilitate cable/wire identification, the leads of the tester and probe use matching color

### Local Continuity

Using just the tester (without probe) you can easily test any in-wall wiring from point to point locations in the same room. Other handy uses are to quickly test light bulbs. fuses, switches, relay contacts, diodes, low ohm power resistors, circuit breakers, etc. for electrical continuity.



- 1. Turn power switch on. The green power LED will alow. If areen LED does not light, replace 9V battery.
- 2. To check same room wiring runs, attach both red and black alligator clips of Tester to both wires on one end of multi-wire cable under test and let Tester hang from wires.
- 3. Go to other end of same cable and momentarily connect wires in cable together. The Tester will beep and red LED will flash indicating continuity.
- When continuity is found, label both ends of cable with the same number or 4. name.
- To test other devices (listed above) connect Tester leads to device terminals in 5. any\* lead orientation (red or black). If device makes internal electrical connection then Tester will beep and its red LED will flash indicating continuity.

\*Exception: When testing a diode, the red Tester lead is positive and will show continuity when connected to the anode (positive (+) side) with black Tester lead to cathode (negative (-) side).

# Battery replacement

- Loosen Phillips head screw of battery compartment and remove cover 1. (rear) 2.
  - Replace 9 volt battery and compartment cover and then tighten screw.



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Never dispose of used batteries or rechargeable batteries in household waste. As consumers, users are legally required to take used batteries to appropriate collection sites, the retail store

where the batteries were purchased, or wherever batteries are sold.

Disposal: Do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

#### **Other Battery Safety Reminders**

 Never dispose of batteries in a fire. Batteries may explode or leak

Never mix battery types. Always install new batteries of the same 0 type.

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