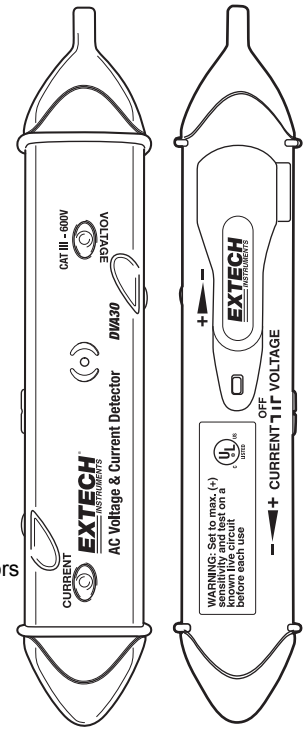
User's Guide

EXTECH INSTRUMENTS
A FLIR COMPANY

Model DVA30

AC Voltage and Current Detector



Non-Contact Voltage Detection

Non-Contact Current Detection

Identify "hot" conductors and terminals

Trace current carrying conductors behind walls and in conduit

Sensitivity adjust to "home" in on conductors

Locate hidden wires

International Safety Symbols

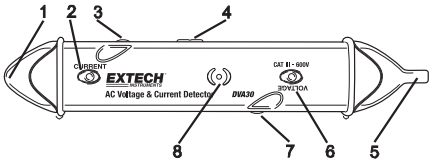
This symbol, adjacent to another symbol or terminal, indicates that the user must refer to the manual for further information.

This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present

Safety Precautions

1. Improper use of this meter can cause damage, shock, injury or death. Read and understand this manual before use.
2. Secure any covers or battery doors before use.
3. Inspect the condition of the meter for any damage before use.
4. Remove the batteries from the meter if the meter is to be stored for long periods.

Tester Description



1. Current Sensor and LED
2. Current Detector “ON” LED
3. Current Detector Sensitivity adjustment
4. Current/Voltage/OFF function selector switch
5. Voltage Sensor and LED
6. Voltage Detector “ON” LED
7. Voltage Detector Sensitivity adjustment
8. Audible beeper

Specifications

Voltage detection	12V to 600VAC
Current sensitivity	200mA (0.2A) AC at 0.2”
Audible indication	Beeper (Voltage & Current)
Visible indication	Flashing LED (Voltage & Current)
Frequency range	50 to 500Hz
Operating Temperature	14 to 122°F (-10°C to 50°C)
Operating Humidity	< 80% RH
Altitude	< 2000m
Power supply	(4) LR44 batteries or equivalent
Weight	2.1 oz. (60g)
Dimensions	7.6 x 1.2 x 0.9” (192x31x24mm)
IEC 1010	Category III 600V
Indoor use	

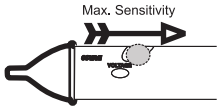
Operation

WARNING: Risk of Electrocution. Before use, always test the Detector on a known live circuit to verify proper operation

NOTE on RF Interference: In the voltage mode, RF signals in close proximity to the detector may cause the voltage light and beeper to latch into a constant tone and light indication. Wait until the RF signal has disappeared before proceeding with voltage detection.

VOLTAGE DETECTION

1. Slide the Function switch to the Voltage position.
2. The "VOLTAGE" LED will light. If the LED is dim or does not light, replace the batteries.
3. Set the Sensitivity adjustment to max.
4. If the detector begins to beep/flash, slowly turn the sensitivity down until the beep/flash stops.
5. Touch the detector voltage sensor to the hot conductor or insert into the hot side of the electrical outlet.

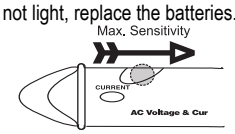


6. If AC voltage is present, the detector light will flash and the audible beeper will sound.
7. Adjust the sensitivity as needed to zero-in and identify the live conductor.

CURRENT DETECTION

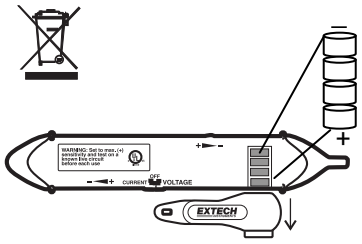
NOTE: There must be a load on the circuit (current flow) for the current detection function to work.

1. Slide the Function switch to the Current position.
2. The "CURRENT" LED will light. If the LED is dim or does not light, replace the batteries.
3. Set the Sensitivity adjustment to the max position
4. If detector begins to beep/flash, slowly turn the sensitivity down until the beep/flash stops.
5. Move the detector current sensor near the current carrying conductor until the current tip flashes and beeper sounds.
6. Slowly reduce the sensitivity and reduce the distance between the sensor and conductor to zero-in and identify the conductor.



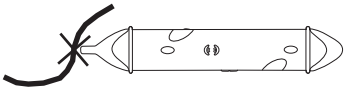
BATTERY REPLACEMENT

1. Turn power OFF
2. Slide the pocket clip off (as shown) to access batteries.
3. Replace the four LR44 batteries. The negative sides of the batteries face in the same direction, as shown. The positive sides of the batteries face in the opposite direction.

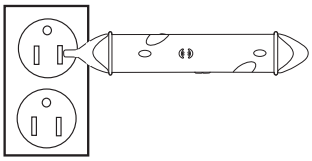


Typical Applications

VOLTAGE

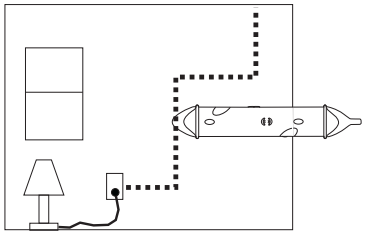


Locate breaks in wires

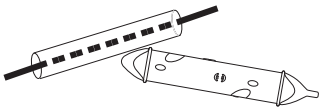


Identify hot terminal and polarity

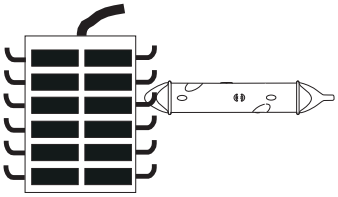
CURRENT



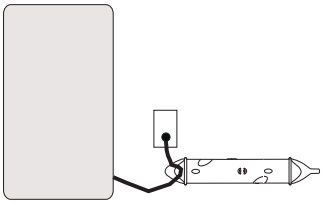
Trace current flow behind walls



Detect current flow through conduit or shielding



Compare current flow on branch circuits



Check/Monitor current flow to appliances