



**DIGITAL VOLTAGE &
CONTINUITY TESTER MODEL
VPC-20N
Instruction Manual**

⚠ Safety Information

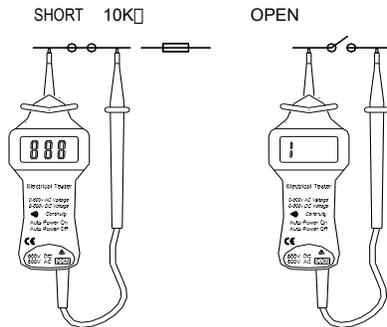
- Never use the tester if it or its test leads appear damaged.
- Never apply more than 600V DC or 600V AC rms. between any terminal and earth ground
- When using the probes, keep your fingers behind the finger guards on the probes.
- Turn off power to the circuit under test before cutting, unsoldering, or breaking the circuit. Small amounts of current can be dangerous.
- Use caution when working with voltages above 60V DC or 30V AC rms. Such voltages pose a shock hazard.

Automatic Operation

The tester automatically turns on when you short the two test probes or place the probes across a complete circuit. When turned on, the tester powers up in continuity mode. If a DC or AC voltage greater than about 4.0V is present across the inputs, the tester switches to DC or AC voltage mode. The tester automatically shuts down after approx. 4 minutes of inactivity.

Continuity testing

Turn off circuit power before testing.
Beeper indicates shorts lasting 1 ms or longer.

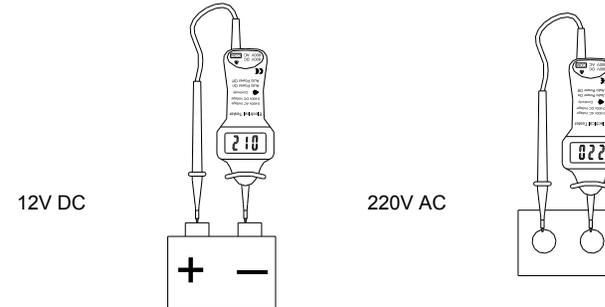


Measuring Voltage

Refer to Automatic Selection

DC Voltage (Volts DC > 4.0V)
600V DC maximum

AC Voltage (Volts DC > 4.0V)
600VAC maximum
50Hz to 400Hz



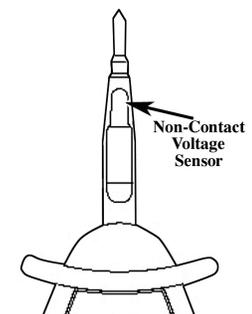
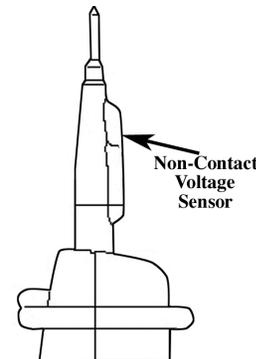
Non-contact AC Voltage (NCV) detection operating instructions

WARNING: Risk of Electrocutation. High-voltage circuit, both AC and DC, are very dangerous and should be measured with great care.

WARNING: Risk of Electrocutation. Before using to check for voltage in an outlet, always test the Voltage Tester on a known live circuit to verify that the Voltage Tester is working properly.

WARNING: Risk of Electrocutation. Keep hands and fingers on the body of the probe and away from the probe tip. Don't touch conductor.

1. To check for AC voltage, assure the bottle shaped protrusion of the fixed probe, see figure below, is in close proximity to the hot conductor. The LED in the fixed probe will illuminate.
2. To check for the presence of AC voltage at an outlet, using the NCV LED, insert either probe tip into the outlet's hot side. If the black probe is used only the NCV LED will illuminate. If the fixed probe is inserted not only will the NCV LED illuminate but some of the LEDs on the front of the instrument will illuminate also. In this application these LEDs won't indicate the correct voltage and should be ignored.



To check for the presence of AC electrical voltage in a conductor or outlet:

1. Touch the bottle shaped protrusion of the probe tip to the hot conductor, or insert the probe tip into all the outlet holes. The probe will distinguish between hot and neutral.
2. If AC electrical voltage is present and this is the hot side, the non-contact probe LED will illuminate.

Specifications

Function	Range	Accuracy (%rdg. + digits)
V AC (50Hz~400Hz)	600V	$\pm(2.9\%+8)$
V DC	600V	$\pm(1.5\%+2)$
Continuity test: Audible threshold 0~10K Ω , Continuity beeper 2KHz.		
Overload protection: AC/DC 600V		
Dimension/wt.: 215x96.3x37.5mm/312g		

Display: Large 1999 count LCD display with function and high voltage warning indication.

Maximum Voltage Between any Terminal and Earth Ground: 600V DC; 600V AC RMS, Over-voltage Category III

Safety: UL Listed; 61010B-1: For use in Over-Voltage CAT III, 600V environments

EMC Regulations: EN50081-1, EN50082-1

Pollution Degree: 2

For indoor use only.

Polarity: Automatic, (-) negative polarity indication.

Over-range: "1" mark indication

Low battery indication: The "BAT" is displayed when the battery voltage drops below the operating level.

Measurement rate: 2 times per second, nominal

Continuity test: Audible threshold 0 -10K Ω , Continuity beeper 2KHz

Input Impedance: 400K Ω

Non-contact AC Voltage Sensitivity: 100 to 600V (50/60 Hz)

Non-contact AC Voltage detection distance: <0.5" of NCV sensor

Temperature: Operating: 5°C (41°F) to 40°C (104°F)

Storage:-30°C to +60°C

Altitude: Operating: 2,000m; Storage: 10,000m

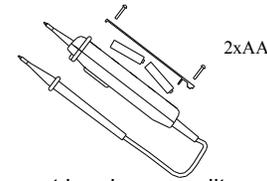
Relative Humidity: 80% for Temperature up to 31°C decreasing linearly to 50% RH at 40°C

Battery Type: AA (2); NEDA 15F or IEC R6

Replacing the Batteries

If the sign "BAT" appears on the LCD, it indicates that the batteries should be replaced. Remove screws on the back cover and open the case. Replace the exhausted batteries with new batteries. (AA (2); NEDA 15F or IEC R6)

Disconnect probes from Voltage
Do Not over-tighten screws



WARRANTY

Congratulations! Your new instrument has been quality crafted according to quality standards and contains quality components and workmanship. It has been inspected for proper operation of all of its functions and tested by qualified factory technicians according to the long-established standards of our company.

Your instrument has a limited warranty against defective materials and/or workmanship for one-year from the date of purchase provided that, in the opinion of the factory, the instrument has not been tampered with or taken apart.

Should your instrument fail due to defective materials, and/or workmanship during this one-year period, a no charge repair or replacement will be made to the original purchaser. Please have your dated bill of sale, which must identify the instrument model number and serial number and call the number listed below:

Repair Department

ATP – Amprobe, TIF, Promax

Miramar, FL

Phone: 954-499-5400

800-327-5060

Fax : 954-499-5454

Website: www.amprobe.com

Please obtain an RMA number before returning product for repair.

Outside the U.S.A. the local representative will assist you. Above limited warranty covers repair and replacement of instrument only and no other obligation is stated or implied.



Miramar, FL

Tel: 954-499-5400 • Fax: 954-499-5418

www.Amprobe.com