

User Manual



ET400

Non-Contact AC Voltage Detector and Phase
Sequence Indicator

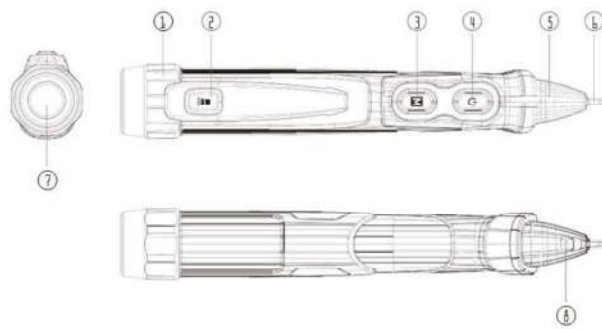


Introduction

Congratulations on your purchase of the Triplett ET400 Non-Contact AC Voltage Detector and Phase Sequence Indicator. This meter is used to quickly determine the presence of AC Voltage and ensure the correct phase wiring sequence. It features high and low sensitivity ranges, audible and visual indicators, and built-in flashlight.

Meter Description

1. Battery Cover (Screw On)
2. Flashlight Button
3. MODE Select Button
4. Power ON/OFF Button
5. LED Indicators
6. Detector Tip (Sensor)
7. Zoom In/Out Button
8. Flashlight



Safety Information



Caution! Refer to the explanation in this Manual



Double Insulation or Reinforced insulation



CE Compliance

This device must not be handled by children. It contains hazardous objects as well as small parts that can be swallowed. Do not leave batteries and packing material unattended; they can be dangerous for children. If unused for an extended period of time, remove the batteries from this device. Expired or damaged batteries can cause cauterization on contact with the skin; use suitable hand gloves in such cases. Ensure that the batteries are not short-circuited. Do not throw batteries into the fire.



WARNINGS

- Read understand and follow safety rules and operating instructions in the manual before using this tester.
- The tester's safety features may not protect the user if not used in accordance with the manufacturer's instructions.
- Check on a known live source within the rated AC voltage range of the tester before use to ensure it is in working order.
- Insulation type and thickness, distance from the voltage source, shielded wires, and other factors may affect reliable operation. Use other methods to verify live voltage, if there is any uncertainty.

- Do not use if the tester appears damaged or if it is not operating properly. If in doubt, replace the tester.
- Do not use on voltages that are higher than as marked on the tester.
- Use caution with voltages above 30 volts AC as a shock hazard may exist.
- Comply with all applicable safety codes. Use approved personal protective equipment when working near live electrical circuits

Operation

Power ON/OFF Button

- Press the tester ON/OFF Button, the tester will beep once, and the green LED and work light will illuminate to indicate that the tester is working on high voltage mode and ready for use.
- Press the ON/OFF Button one more time, the tester will beep twice, and range LED will turn off.

Mode Select Function

- When the tester is on with NCV function, short press the M Button once, the green LED off and the yellow LED illuminate to indicate that the tester is working on low voltage mode.
- Short press M Button again, the green and yellow LED flash slowly alternately to indicate that the tester is working on phase sequence test mode.
- Short press M Button again, the yellow led off and the green LED illuminate, the tester returns to high voltage mode.
- The tester will beep once every M Button operation.
- The M Button operation is valid only when the NCV function is turned on.

Verify Operation

- Before using tester, (1) Make sure the green LED is glowing, (2) Check tester on a known live AC voltage that is within the defined detection range of the tester.

High Voltage Mode (100 to 1000V AC)

- Place the tip of the tester near an AC voltage.
- If the tester detects voltage within the defined detection range, the green LED will turn off, the red LED will turn on, the beeper will beep rapidly.

Low Voltage Mode (12 to 1000V AC)

- Place the tip of the tester near an AC voltage. When AC voltage is detected, the yellow LED will turn off, the red LED will flash and the beeper will beep.
- The flash rate and beeping rate will increase as the tester gets closer to the voltage source.
- If the tester detects high voltage, it will automatically change over to the high voltage mode: The red LED will change to a steady glow and the beeper will beep rapidly.
- Note: An indication occurs when the tester is used to detect AC to DC power supply, for example, the phone USB
- cable/line is being charged with a socket.
- Note: The tester cannot determine the actual voltage. The voltage level where the tester switches from the low to high voltage mode is affected by insulation type and thickness, distance from the voltage source, and other factors.

Phase Sequence Test Mode

- Place the tip of the tester close to the L1 phase wire, the tester will beep once, the green and yellow LED flash rapidly alternately to indicate that the measurement of the first phase sequence is complete.
- Move the tip of the tester close to the L2 phase wire, when the measurement is complete there will be two results:

1. The tester beep and green LED on about 5 seconds to indicate that is Correct phase conformity (L2 is ahead of L1 120 degrees).

2. The tester beep and yellow LED on about 5 seconds to indicate that is Incorrect phase conformity (L2 is lag of L1 120 degrees).

- Test L1 and L3, L2 and L3 in the same way.

Note: To improve test accuracy, do not place the tester tip in the middle of the two-phase lines

Auto Power Off

- To conserve battery life, the tester will automatically turn off after approximately 5 minutes of inactivity.
- When powering down, the tester will beep twice and the mode indication LED will turn off.

Flashlight

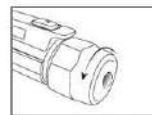
- Momentarily press the Flashlight button to turn the flashlight on or off.
- To conserve battery life, the flashlight will automatically turn off after approximately 5 minutes when the NCV

function is off.

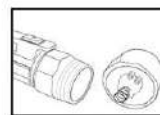
- The tester will beep twice as the flashlight auto power off.

Changing Batteries

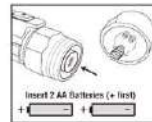
1. Carefully unscrew battery cap at the rear (flashlight end) of the tester.
2. Replace batteries with two AAA 1.5V batteries. Observe polarity. Carefully align cover with tester as shown below.



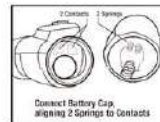
End of the Tester



Cap with springs to align



Observe correct polarity when installing batteries.



Push IN and Rotate Cap back onto Tester Body

3. Screw cover onto tester until it feels tight. Do not use excessive force.
4. Verify operation by using the tester on a known live AC voltage within the defined detection range of the tester.

****Note:** When batteries are loaded for the first time, please remove the white, rectangular security strip before installing batteries.

****Note:** When replacing the batteries, be sure to secure the cap firmly to maintain IP67 water and dust protection. A loose or overtightened battery cap may compromise water and dust protection.

Specifications

AC Voltage Range	12 to 1000VAC
	100 to 1000VAC
Phase Voltage Range	100 to 1000VAC
Frequency Range	50/60Hz
NCV Alarm Mode	Audible and Visual
Phase Sequence Indicator	Verifies correct L1, L2, L3
Phase Sequence Alarm Mode	Audible with Green/Yellow Lights
Waterproof	IP67
Power	(2) AAA batteries
Safety Category	CAT IV 1000V
Dimensions	6.3 x 0.9 x 1" (160 x 23 x 25mm)
Weight	2.6oz (72.8g)

Warranty

Triplett / Jewell Instruments extends the following warranty to the original purchaser of these goods for use. Triplett warrants to the original purchaser for use that the products sold by it will be free from defects in workmanship and material for a period of (1) one year from the date of purchase. This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way or purchased from unauthorized distributors so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries are not covered by this warranty

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