# Manual

## I. Safety Warning

- 1. This meter is a high-voltage test equipment. It is necessary to observe whether the meter is in good condition before use. If the following conditions occur, you must stop using it, and perform corresponding inspections and repairs to avoid electric shock and unsafe accidents.
- A: The appearance of the instrument is obviously damaged, such as crack or damage to the shell, broken test wire, etc.
- B: The meter was severely squeezed during transportation;
- C: The instrument has been put in an improper place for a long time, such as in the bathroom or damp place;
- 2. Never open the instrument when making measurements to avoid electric shock and unsafe accidents.
- 3. The meter will have large voltage input from the test lead during the measurement. Do not touch the bare wire or the metal part of the test lead directly with your hands to avoid electric shock.
- 4. Although all the light is off, it still has the return circle, pay attention to avoid the shock.
- 5. Never exceed the operational voltage specified as 600V during the measurement.
- 6. Make sure not to exceed the time limit for continuous operation, specified as 30 minutes at 220V and 4 minutes at 480V and 2 minutes at 600V.
- 7. Do not use meter in rainy outdoor and damp environment to avoid unsafe accidents.
- 8. Do not let the meter touch water or other corrosive Liquid and expose the instrument to the direct sun, extreme temperature or wet conditions to avoid affect its test performance.
- 9. Non-professionals are forbidden to open the casing of the meter to avoid affect its test performance.
- 10. The instrument should be used by person who has been trained and know the knowledge of strong current operation and measurement, and strictly follow the instructions to do the measurement.
- 11. Please place the manual in a place where it is easier to read, so that you can read it at any time.

#### II. Function

This instrument is designed and manufactured based on the secondary safety standard of "INTERNATIONAL ELECTROTECHNICAL COMMISSION" (IEC-348), which is convenient to carry, quick and accurate in testing, and it is very safe. It is used to detect the state of the open phase and phase sequence. The phase sequence is based on the light emitting diode (LED) and the buzzer.

#### **III. Product Instructions**

**Operation Voltage (AC Three Phase):200-600V** 

Sequence Use Time: 200V AC: 30minutes, 600V AC: 2 minutes

Frequency Range: 20Hz-400Hz Withstand Voltage: 4000V/min

Dimension: 80 Length \* 59 Width \* 23 Height (Excluding test leads)

Weight: Approx. 200g

Accessories: alligator clip, manual, bag.

### IV. Instrument Appearance

1. Open phase checking LED:

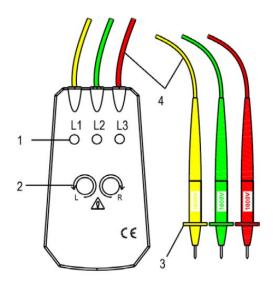
3 orange LED, Respectively indicate U phase, V phase, W phase.

2. Phase sequence checking LED:

One red LED and one green LED, Green as right phase, Red as reverse phase.

- 3. Test lead.
- 4. Test wizard:

Yellow corresponding U phase L1(R), Green corresponding V phase L2(S), Red corresponding W phase L3 (T).



## V. Operating Instruction

Connect the test lead of the meter to the measured wire (do not hold it by hand), it might be a thread end, a socket, or the middle part of a phase line. (When measuring the middle part of the phase line, the insulation layer of the wire should be peeled off to expose the core of the line for measurement. Pay special attention to safety at this time to prevent electric shock. For the convenience of users, the instrument accessories are equipped with special Test clip, insert the test clip on the metal probe of the test lead and tighten it, it can be conveniently clamped anywhere for measurement) At this point the meter will indicate the state of the open phase and the sequence of phases based on the light-emitting diode (LED) and the buzzer.

#### See the table below for details:

Test Results	Open Phase Checking LED	Phase Sequence Checking LED	Buzzer
Correct Phase (CW)	Three orange LED : ON	Green LED: ON	Interval fast Buzzer
Reverse Phase (CCW)	Three orange LED : ON	Red LED: ON	Interval slow Buzzer
<b>Open Phase</b>	Only single phase LED:	Green, Red LED:	Continuous Buzzer
(Single Phase)	OFF	OFF	