



Operating Instructions
VIAV300
0 – to – 300kV Audible-Visual

CAUTION

The equipment covered in these operating instructions should be used by qualified employees, trained in and familiar with the safety-related work practices, safety rules and other safety requirements associated with the use of this type of equipment. These instructions are not intended as a substitute for adequate training, nor do they cover all details or situations which could be encountered in relation to the operation of this type of equipment.

WARNING

Use appropriate length live line tool for the voltages being worked and maintain minimum approach distances as outlined in OSHA 1910.269, Table R-6. Do not let live line tool fittings become grounded in any way. This will damage meter and may cause personal injury.

NOTICE

Before operating this equipment, read, understand and follow all instructions contained in this manual. Keep instructions with equipment.

Design and Function

The VIAV300 is a combination proximity-direct contact voltage indicator with an audible and visual alarm to indicate the presence of voltage, with an operating range from 240V to 300kV (Line to Ground). Activation thresholds are 30% to 80% of voltage rating on selector switch, dependent on height above ground.

Example: 30kV position activation threshold is 9kV to 24kV.

A 12 position switch is used to select various functions and voltage levels as follows:

Position	kV / L to G
Off	NA
Prox	Proximity
240	240 volts
2.5	2.5kV
7.5	7.5kV
15	15kV
30	30kV
40	40kV
70	70kV
140	140kV
300	300kV
T	Test

Note: In the test position the voltage indicator should give an audible and visual alarm. If not, replace the 9 volt battery behind the live line tool attachment threaded into the meter housing.

Alarms and results will vary due to field condition including, but not limited to, conductor proximity, size and orientation of system components in the area, both energized and grounded. A false zero can occur when both voltage indicator electrodes (probe tip and live line tool attachment) are at the same potential. The VIAV300 should be used as a secondary means to confirm the status of a circuit after standard operating procedures such as visual open gaps, hold orders and tag outs render the circuit de-energized. If there is any doubt about the audible-visual alarm under any circumstances, the line or equipment shall be considered energized and proper safety precautions shall be taken.

Voltage Indication in the “Prox” Position

Designed for use (from the ground) as a hand held **non-contact** voltage indicator for bare overhead distribution and transmission conductors. It may also be used as a hand held contact voltage indicator on insulated secondary voltages below 600 volts. It will indicate the presence of secondary voltages between 120 volts and 600 volts.

1. Turn selector switch to the **T** position to test voltage indicator for proper operation. See Note, page 2.
2. Turn the selector switch to the **Prox** position.
3. Standing on the ground, hold the unit by the live line tool fitting and point unit toward energized line. Any audible and visual alarm indicates presence of voltage.
4. Turn selector switch to the **T** position to re-test voltage indicator.

WARNING

Unit shall be tested before and after each use on a known voltage source. Failure to do so could result in false negative indications.

Caution: In the **Prox** position the audible-visual alarm only indicates the presence of voltage and is no way related to the actual voltage present. To confirm the presence of nominal voltage or induced voltage prior to installing rounds, re-test the line or equipment utilizing one of the **direct contact** positions, 240V – to – 300kV, for the voltage level being tested.

If there is any doubt about the voltage indicator alarms in the **Prox** position, the line or equipment shall be considered energized and appropriate safety precautions taken, i.e. confirm visual open gaps, tag outs, hold orders and sources of induced voltage.

Direct Contact Voltage Indication (240V - to - 300kV)

1. Turn selector switch to **T** position to test voltage indicator for proper operation, See Note, page 2.
2. Thread appropriate adapter, hook or straight probe for overhead or bushing adapter for URD systems.
3. Attach voltage indicator to appropriate length live line tool for voltage being tested.
4. Turn selector switch to appropriate **Line-to-Ground** voltage range.
5. Make direct contact with the line or equipment to be tested. Audible-visual alarm indicates presence of voltage within the activation threshold and voltage range selected, See Chart, page 2.
6. No audible-visual alarm indicates the voltage is below the threshold values for the selected position, See Chart, page 2.
7. Turn the selector switch to the **T** position to re-test the voltage indicator.

WARNING

Unit shall be tested before and after each use on a known voltage source. Failure to do so could result in false negative indications.

Note: Scaling up or down on the selector switch, using the activation threshold values in the chart on page 2, will assist in identifying the approximate voltage present, i.e. nominal or induced.

If there is any doubt about the audible-visual alarm, the line or equipment shall be considered energized and appropriate safety precautions taken, i.e. confirm visual open gaps, tag outs, hold orders and sources of induced voltage.

Technical & Service

Bierer & Associates Inc.
Manufacturing & Repair
10730 Farrow Rd.
Blythewood, SC 29016
Tel: (803) 786-4839
Fax: (803) 786-5457
www.BiererMeters.com

