

## LF - 300 Loop Testing System



Model LF-300 The Model LF-300 Loop Finder simplifies the process of locating active loops and identifying loop wire locations. The Model LP-300 Loop Phasing Coils test phasing (electrical rotation) of two or more inductive loops connected to a single detector channel while the detector is operating.

Model LF-310 The Model LF-310 combines the features of the Model LF-300 loop finder probe with a marking wand to facilitate accurate location and marking of loops and loop wires.



### **Model LF - 300**

- LED bargraph provides visual indication of field strength
- Earphones provide an audible tone for field strength indication
- Front panel controls allow adjustment of sensitivity and volume
- Battery check LEDs (green and red) indicate battery voltage status
- Null feature identifies loop wire location
- LP-300 loop phasing coils are designed for use with the Loop Finder control unit
- Phasing coils are placed on the surface of the roadway with one phasing coil in each loop (see picture on front of sheet)

# The Model LF-300 includes the following items:

- <u>Control unit</u>
- Three foot loop probe with cable
- LP-300 loop phasing coils
- Earphones
- Nine volt battery

The control unit has two knobs; one knob controls volume to the earphones and the other knob controls sensitivity. Battery status is indicated by two LEDs. The loop probe is made of schedule 40 PVC pipe. A standard telephone handset cord is used to connect the probe to the control unit.

The LP-300 Loop Phasing Coils consist of two, one foot diameter loops connected together with 25 feet of cable. The loops connect to the control unit via a six foot cable terminated with a four pin telephone headset connector. The LP-300 is a diagnostic tool that is used to determine the phasing of series or parallel connected inductive loops. When the loop phasing coils are placed over two active loops and connected to the control unit, a null indication on the control unit bargraph display indicates loops are connected in opposite rotation. A large deflection indicates loops are connected in the same rotation.

### Model LF - 310

- Support wheel at the base of the marking wand controls the distance between the spray can nozzle and the roadway surface
- Paint spray is activated by an integral finger controlled trigger located in the handle of the marking wand

The Model LF-310 includes a loop finder probe mounted in the marking wand. The loop finder probe is located behind the marking wand's support wheel. When in use, this arrangement ensures an optimal location of the loop finder probe in relation to the roadway surface. A can of marking paint (not included) is located behind the probe. The paint spray marking feature is activated by a finger controlled trigger built into the handle of the marking wand.

#### **LOOP PHASING**

Loop phasing refers to the electrical rotation relationship of multiple loops that are connected together. Both detection characteristics and stability of detector operation can be significantly affected depending on the phasing of loops. Refer to Reno A&E application notes for complete information on proper loop phasing for various detector applications.



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