LF-300 Loop Testing System

Overview

Model LF-300

The Reno A&E Loop Finder is a useful tool for locating active loops and identifying loop wire locations.

LP-300 Loop Phasing Coils are used to test phasing (electrical rotation) of two or more loops connected to the same detector channel while the detector is operating.

Model LF-310

The LF-310 combines a loop finder probe with a marking wand for locating and marking loop wire locations.

LF-300 Includes:
1) Control Unit
2) 3-ft Probe with Cable
3) LP-300 Phasing Coils
4) Earphones

LF-310

1) Control Unit
2) 3-ft Probe with Cable
3) LP-300 Phasing Coils
4) Earphones

Spray Paint
Model LF-300

- An LED bar graph provides field strength indication.
- Ear phones 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.
- The LP-300 loop phasing coils are designed for use with the Loop Finder control unit.
- The phasing coils are placed on the surface of the roadway with a phasing coil in each loop (see picture).

The LF-300 includes the following items:
- Control unit
- 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 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 with a 6-foot cable terminated with a 4-pin telephone headset connector. The LP-300 is a diagnostic tool 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 indicates loops are connected in opposite rotation and a large deflection indicates loops are connected in the same rotation.

Model LF-310

- The wheel at the base of the probe controls the distance between the spray paint nozzle and the roadway.
- The paint spray is activated by a finger controlled trigger built into the handle.

The LF-310 includes a loop probe mounted to the Marking Wand. The loop finder probe is located behind the Marking Wand’s support wheel inches above the roadway. A can of marking paint (not included) is located behind the probe, which is activated by a trigger built into the handle.

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.

See Reno A & E application notes for complete information on proper loop phasing for different detector applications.