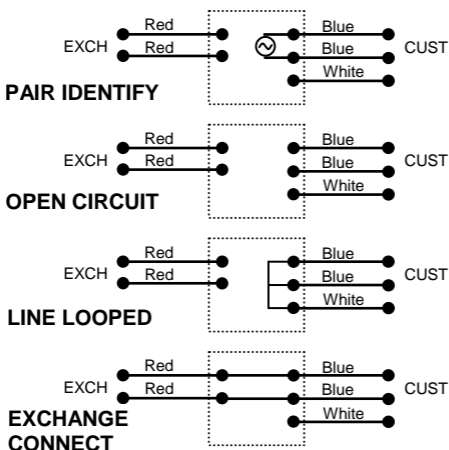


# TX915 LOOP-a-LINE

Loop-a-Line comprises two components:

- (a) **Probe** – used for tone search, cable pair identification and to control the mode of the Oscillator unit.
- (b) **Oscillator** – provides 'pair identify' signal to line. Also, on receiving signals sent from the probe, the oscillator will switch directly to the mode selected, **Pair Identify, Open Circuit, Short Circuit** or **Exchange Connect**. The Red LED indicates power is on and the battery is OK. At switch-on the LED should light continuously for 2 seconds, then flash once per second indicating that it is ON. If the LED flashes rapidly at switch-on then the battery needs replacing.



Note: Switch on always selects Pair Identify Mode.

## PAIR IDENTIFICATION

(1) Switch on by inserting the Oscillator lead set into the Oscillator. Connect the Blue and Red Oscillator leads to the line (Red to Exchange and Blue to Customer – White Not Used). The TONE can be changed by connecting the Probe leads to the Oscillator Blue leads and repeatedly pressing the TONE button.

(2) Move to far end of the line and use Probe tip to identify cable pair carrying the Oscillator Signal. The Probe sensitivity can be selected by pressing the TONE button. The pair can be verified by checking for a null (minimum signal) between the wires carrying the tone. No null will be found if the pair is unbalanced.

## LINE TESTING

- (1) Identify the pair at the customer end.
- (2) Insert Probe leads and connect to the identified pair. Press a Probe button to change the Oscillator to the selected mode.
- (3) **Open Circuit.** Oscillator tone is disconnected and line is left open circuit. After disconnecting Probe leads from line, insulation resistance tests may be done on the open line.
- (4) **Short Circuit.** Oscillator tone is disconnected and line is looped. White wire is also shorted to line. After disconnecting Probe leads from line, loop resistance may be measured.
- (5) **Exchange Connect.** Oscillator tone is disconnected and line is connected through to exchange. Green/Red LED on Probe indicates that 48Vdc is connected to line. Green indicates Red clip is +ve. Red indicates Black clip is +ve.

## FAULT LOCATION

### Two Wire Test

Used with a single pair containing one good wire and the faulty wire.

- (1) Disconnect the pair under test from the exchange.
- (2) Connect the Blue Oscillator leads to the pair under test (white lead not used).
- (3) At the customer end identify the pair and press OPEN to disconnect the oscillator from line.
- (4) Disconnect Probe Leads and test the line to identify the faulty wire.
- (5) Press SHORT to loop line then carry out fault location.

### Three Wire Test

(1) As for Two-Wire Test but connect the Blue leads to a good pair and the White lead to the faulty wire. Note that in Short Circuit Mode, all three wires are looped at the Oscillator.

### Pulse Echo Test (PET)

The loop / open facility can be used to calibrate a PET for length of line to Oscillator.

The logo for Teletech, featuring the word "Teletech" in a stylized, blue, cursive font.

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