

### Checking Continuity:

The **FOX** can be used as a visual continuity indicator. Set the **FOX's** Function Switch to CONTINUITY/TALK. When the **FOX's** red and green alligator clips are touched together, the LED will light, indicating continuity. To check continuity, connect the red and green alligator clips to the circuit under test and observe the LED. Continuity from zero to 10K ohms will be indicated by the brightness of the LED. The LED will be bright at low resistances and dim at high resistances.

**NOTE:** Do not attempt to measure continuity on a powered line. Prolonged connection to a short circuit (zero Ohms) may damage the **FOX**.

### Supplying Talk Power:

The **FOX** will supply power to operate handsets. This feature is particularly useful when two installers are working at terminal panels that have at least one identified pair connected between them, but are not yet connected to the CO battery. The **FOX** allows the installers to communicate using their handsets. Set the **FOX's** Function Switch to CONTINUITY/TALK and connect the handsets as shown in Figure 2. The **FOX's** LED will light when supplying Talk Power.

**NOTE:** Some handsets may not operate properly at the power level supplied by the **FOX**.

### Using a Nicad Battery:

The **FOX** can recharge a 9 volt Nicad battery by using CO power. To use this feature, simply replace the standard 9 volt battery with a 9 volt Nicad battery. To charge the Nicad, set the **FOX** to OFF/LINE POLARITY, and connect the alligator clips to the line in Reversed Polarity (Red to positive and Green to negative). Connecting to the line in Normal Polarity WILL NOT CHARGE the battery. Approximately 16 hours is required to fully charge a typical Nicad battery (refer to battery manufacturer specs).

### Emergency Fast Charge:

The **FOX's** circuitry incorporates a fast charge mode. This mode is not recommended for casual use because it exceeds the battery's nominal charge current and will shorten the battery's life. Charging current could be as high as 90 mA.

To use this feature, set the **FOX** to CONTINUITY/TALK and connect the alligator clips to a powered line in Reversed Polarity (Red to positive and Green to negative). DO NOT charge the battery for more than 30 minutes. Irreversible shortening of the battery's life may result. DO NOT connect to the line in Normal Polarity. Damage to the battery may result.

### Ringin Current:

The **FOX** will signal the presence of ringing current by flashing its LED. This indication is obtainable in either the OFF/LINE POLARITY or TONE mode. Depending on the phone system, the LED may indicate ringing current in either Normal or Reversed Polarity. To perform this test, simply connect the alligator clips or the modular plug to the line to be tested. The **FOX** will not seize the line on most phone systems.

### BATTERY REPLACEMENT:

Remove the screw on the back of the case. Remove the case front. Replace the battery. Reassemble the case.

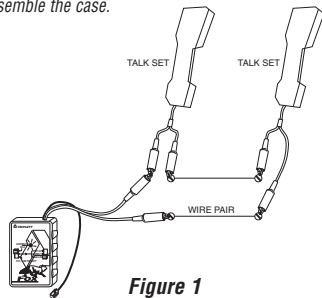


Figure 1

### ONE YEAR LIMITED WARRANTY

The Triplett Corporation warrants instruments and test equipment manufactured by it to be free from defective material or workmanship and agrees to repair or replace such products which, under normal use and service, disclose the defect to be the fault of our manufacturing, with no charge within one year of the date of original purchase for parts and labor. If we are unable to repair or replace the product, we will make a refund of the purchase price. Consult the Instruction Manual for instructions regarding the proper use and servicing of instruments and test equipment. Our obligation under this warranty is limited to repairing, replacing, or making refund on any instrument or test equipment which proves to be defective within one year from the date of original purchase.

This warranty does not apply to any of our products which have been repaired or altered by unauthorized persons in any way so as, in our sole judgment, to injure their stability or reliability, or which have been subject to misuse, abuse, misapplication, negligence, accident or which have had the serial numbers altered, defaced, or removed. Accessories, including batteries and fuses, not of our manufacture used with this product are not covered by this warranty.

To register a claim under the provisions of this warranty, return the instrument or test equipment to Triplett Corporation, Service Department, One Triplett Drive, Bluffton, Ohio 45817, transportation prepaid. Upon our inspection of the product, we will advise you as to the disposition of your claim.

ALL WARRANTIES IMPLIED BY LAW ARE HEREBY LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE, AND THE PROVISIONS OF THE WARRANTY ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES EXPRESSED OR IMPLIED.

The purchaser agrees to assume all liability for any damages and bodily injury which may result from the use or misuse of the product by the purchaser, his employees, or others, and the remedies provided for in this warranty are expressly in lieu of any other liability Triplett Corporation may have, including incidental or consequential damages.

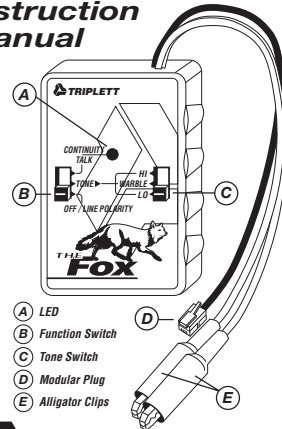
Some states (USA ONLY) do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. No representative of Triplett Corporation or any other person is authorized to extend the liability of Triplett Corporation in connection with the sale of its products beyond the terms hereof.

Triplett Corporation reserves the right to discontinue models at any time, or change specifications, price or design, without notice and without incurring any obligation.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

84-616 Rev B 9/01

## The **FOX** Instruction Manual



# TRIPLETT

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## DESCRIPTION:

The **FOX** (PN 3380) is a small, multi-function, hand-held instrument for testing telephone lines. In addition, when used in conjunction with an Inductive Amplifier, like the **Triplett HOUND** or **HOUND 2**, the **FOX** can be used for identifying, locating, or tracing wires inside of or behind surfaces that are electrically non-conductive (like dry-wall).

When used for tracing wires, the **FOX** can be used with non-energized electrical power wiring, alarm wiring, speaker wiring, coax, cable harnesses, and numerous other wires and cables. For more complete information, see the **HOUND** or **HOUND 2** Instruction Manuals.

To facilitate testing, the **FOX** uses two alligator clips and a modular plug. These allow the **FOX** to be quickly connected to stripped wires, terminal panels, or a standard RJ-11 modular jack (single line). Two selector switches set the test function of the **FOX**, while an LED acts as a visual indicator. By setting the selector switches appropriately, the **FOX** generates three distinct tracer tones, which, as previously mentioned, can be used for locating wires or cables with an inductive amplifier such as the **Triplett HOUND** or **HOUND 2**.

## FOX FEATURES:

- 1) Line powered in the TONE Generator mode
- 2) Generates 3 distinct tones for wire tracing
- 3) Indicates Line Polarity, Continuity, and Ringing Current via the LED
- 4) Supplies "Talk Power" to allow communicating between handsets (aka: talksets or "buttsets").
- 5) Provides recharge current for a Nicad battery

## SPECIFICATIONS:

**Output TONE Level:** Approx. +3 dBm, 600 ohms, with fresh battery

**Output TONE Frequency:**

**LO:** approx. 800Hz square wave

**HI:** approx. 1000Hz square wave

**WARBLE:** alternates between HI and LO

**Output Protection:** Will withstand 56V with 400 ohms series resistance applied across the outputs. Will withstand 175V peak with 100 ohms series impedance superimposed onto 56 VDC for 100 mS (Standard Telco Signals).

**DO NOT CONNECT ACROSS AC POWER LINES**

**Nicad Charging Power:** Approx. 9mA

**Max. CONT/TALK Current:** 35mA (leads shorted)

**Battery:** 9 volt alkaline, NEDA 1604A, such as Eveready 522

**Size:** 3.7" x 2.4" x 1.1" (93mm x 61mm x 28mm)

**Weight:** Less than 7 ounces with battery

## OPERATING INSTRUCTIONS:

### Checking Line Polarity:

The **FOX** indicates proper line polarity by lighting its LED. To perform this test, set the **FOX's** Function Switch to OFF/LINE POLARITY. Attach either the alligator clips or the modular plug to the connection to be tested. The **FOX's** LED will light when the Red alligator clip is connected to the Ring wire (negative) and the Green alligator clip is connected to the Tip wire (positive), or, when the modular plug is inserted into a properly polarized single line modular jack. Although the LED will light on a BUSY (off-hook) line when performing the test, the LED will light much more brightly if the line is CLEAR (on-hook). The **FOX** also indicates line polarity, when the line is CLEAR, in the TONE Mode. However, the line polarity LED may or may not light in the TONE Mode, on a BUSY line.

**NOTE:** LINE POLARITY can only be measured on lines powered by the Central Office (CO) battery.

### Wire Tracing / TONE Generation

The **FOX** can generate one of three distinct tones; LO, HI, or WARBLE. This feature allows 3 **FOXes** to be used on the same installation site to trace 3 cables at the same time, without creating confusion. To "send" a tone, set the **FOX's** Function Switch to TONE, and select LO, HI, or WARBLE

with the other switch. Connect the pair of wires to be traced to the **FOX's** alligator clips or modular plug. The **FOX** can be connected to powered (CO battery) or unpowered phone lines. The far end of the cable being traced can be located by using a handset, when metallic connections are possible, or with an inductive amplifier such as the **Triplett HOUND** or **HOUND 2**. For alternate wire tracing methods, refer to the **HOUND** or **HOUND 2** Instruction Manuals.

### Line Powering:

In the TONE Mode, the **FOX** can be powered from CO current. The **FOX's** internal 9 volt battery is not needed. To use this feature, simply connect the **FOX's** Tip and Ring wires (either clips or modular), in either polarity, to the powered line on which the tone is to be sent. The **FOX** will not "seize" or "capture" the line of most phone systems.

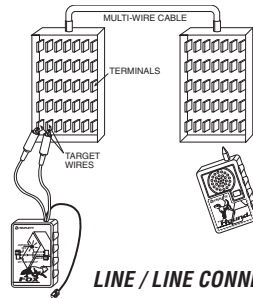
**NOTE:** Although the **FOX** does not require a battery when generating a tone with line power, if a battery is in the **FOX**, it will be used as part of the **FOX's** power source. Due to the **FOX's** internal circuitry, less battery power is used if the **FOX** is connected to the line in Reverse Polarity, i.e. Tip to Negative, Ring to Positive. Therefore, for greatest battery life, connect to a powered line in Reverse Polarity.

## \*\*\*WARNING\*\*\*

The **FOX** is designed to work on non-energized (except telephone lines) wires or cables. Attempting to test energized wires may damage the **FOX**, cause user injury, or both.

## THE FOX AND ACCESSORIES:

The Fox	3380
The Hound	3390
The Hound 2 Probe	3236
Fox & Hound Kit (includes case)	3385-K
Fox & Hound 2 Kit (includes case)	3245-K
LAN Fox & Hound Kit (includes case)	3249-K
LAN Fox & Hound 2 Kit (includes case)	3248-K
F&H Carrying Case	10-3983



LINE / LINE CONNECTION