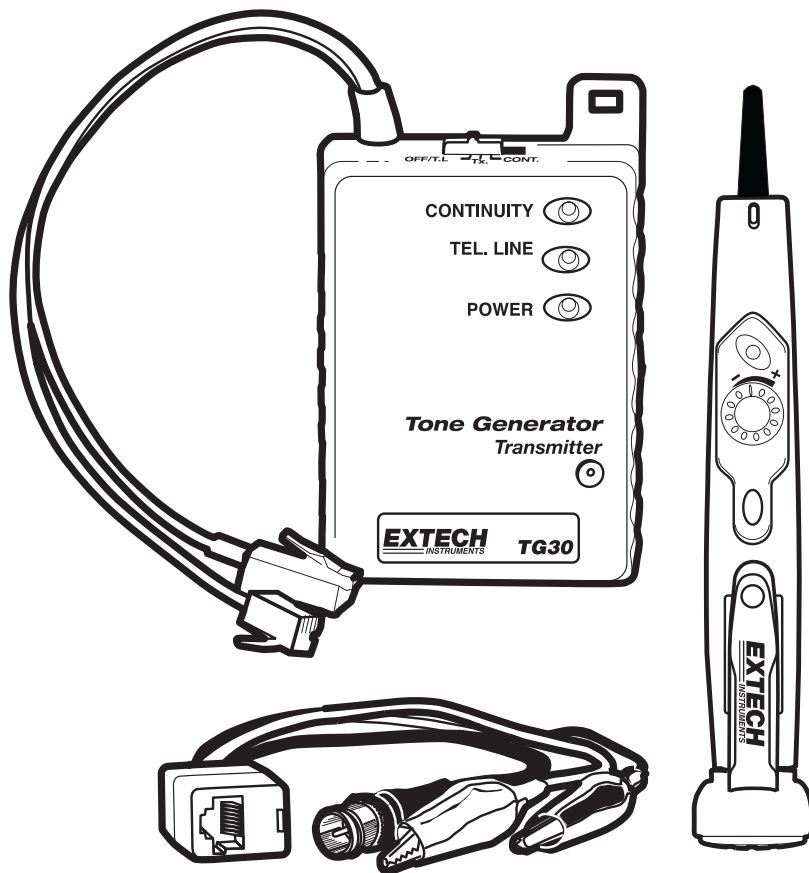


## User's Guide



# Wire Tracer Kit

Model TG30



## Introduction

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Congratulations on your purchase of Extech's Model TG30. This transmitter and probe kit is used to quickly trace and identify cables or wires within a group and also check the operation of phone lines. With proper use and care, this meter will provide many years of reliable service.

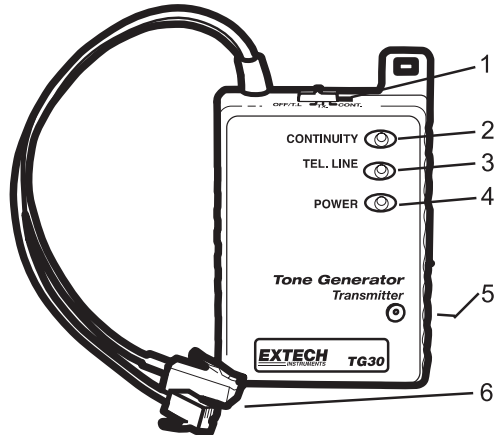
## Specifications

Power	Transmitter; 9V NEDA 1604/1604AL
Operating Temperature	Probe; (4) LR44, 157, AG13, A76 or equivalent
Operating Humidity	14 to 122°F (-100 to 50°C)
Altitude	<80% RH
Dimensions	2000 meters
	Probe: 5.8x1.1x1.1(147x28x28mm),
	Transmitter: 2.6x4.1x0.9"(67x103x23mm)
Weight	Probe 1.1oz(30g); Transmitter 4.2oz(120g)

## Meter Description

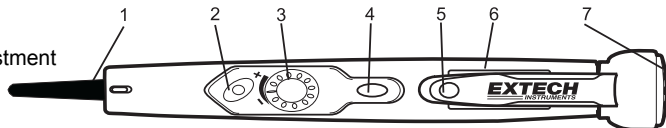
### Transmitter

1. Function switch (OFF/T.L., Tx, CONT)
2. Continuity led
3. Telephone Line led
4. Power led
5. Battery compartment (rear)
6. Modular connectors



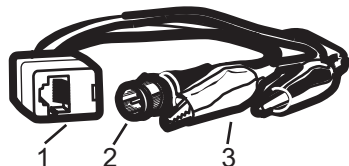
### Probe

1. Signal receiver
2. Power LED
3. Sensitivity adjustment
4. Power button
5. Pocket clip
6. Battery compartment
7. Speaker



### Adaptor

1. RJ11 socket (connect to transmitter modular connector)
2. CATV Type F connector
3. Alligator clips



## Operating Instructions

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**CAUTION:** Always test the probe and transmitter for proper operation before use.

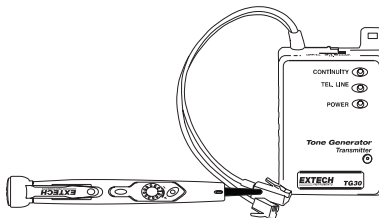


**CAUTION:** The transmitter is not designed for use on energized circuits. Connecting to any voltage source greater than 52VDC may damage the circuit.

**Note:** The transmitter will not generate a signal into a short circuit.

### Self Test

1. Set the transmitter power switch to the Tx position.
2. Adjust the probe sensitivity to MAX (+) clockwise position.
3. Press and hold the probe power button. The red LED will light.
4. Move the probe close to the transmitter cable and note that the audible trace tone and sensitivity adjustment perform normally.



### Cable/Wire tracing

1. Select the transmitter termination required. Permanently attached are RJ11 and RJ45 connectors. Plug the RJ45 connector into the adaptor cable to obtain CATV type F connection or alligator connectors.
2. Connect the transmitter to the cable
  - a) For cables terminated at one end, connect the red alligator clip to a wire and the black alligator clip to equipment ground
  - b) For unterminated cables, connect the red alligator clip to one wire and the black alligator clip to another wire.
  - c) For cables with modular connectors, plug the RJ11, RJ45 or type F connectors directly into the mating cable connectors.
3. Set the transmitter power switch to the Tx position.
4. Adjust the probe sensitivity to MAX (+) clockwise position.
5. Press and hold the probe power button. The red LED will light.
6. Hold the insulated probe tip against the wire in question to pick up the signal generated by the transmitter.
7. Rotate the volume/sensitivity control on the top of the probe for the appropriate level and sensitivity to identify and trace the wire.
8. The tone will be the loudest on the wires directly connected to the transmitter.

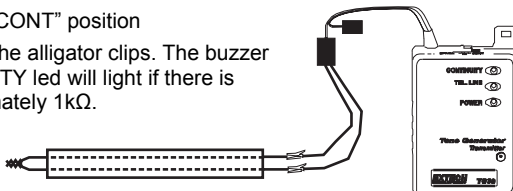
### Telephone Line Test

1. Switch the transmitter to the OFF position
2. Insert the modular plug into the phone line.
3. Observe the "TEL. LINE" LED for the following conditions;

a. <b>Bright Green:</b>	Working line, not in use, correct polarity
b. <b>Dim Green or Red:</b>	Working line, not in use, polarity undetermined
c. <b>Bright Red:</b>	Working line, not in use, reverse polarity
d. <b>Bright Green/Red flashing:</b>	Working, ringing line
e. <b>No light:</b>	Open pair, no service

## Continuity Test

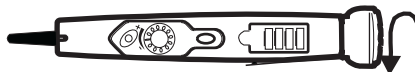
1. Switch the transmitter to the "CONT" position
2. Connect to the wire pair with the alligator clips. The buzzer will sound and the CONTINUITY led will light if there is continuity (less than approximately 1k $\Omega$ ).



## Battery replacement

Probe:

Install new batteries by turning the speaker and pocket clip ¼ turn to the left, remove the battery door and replace the four LR44 batteries. Observe battery polarity.



Transmitter:

Remove the rear battery compartment door and replace the 9V battery.

## Warranty

EXTECH INSTRUMENTS CORPORATION warrants this instrument to be free of defects in parts and workmanship for one year from date of shipment (a six month limited warranty applies on sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

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