

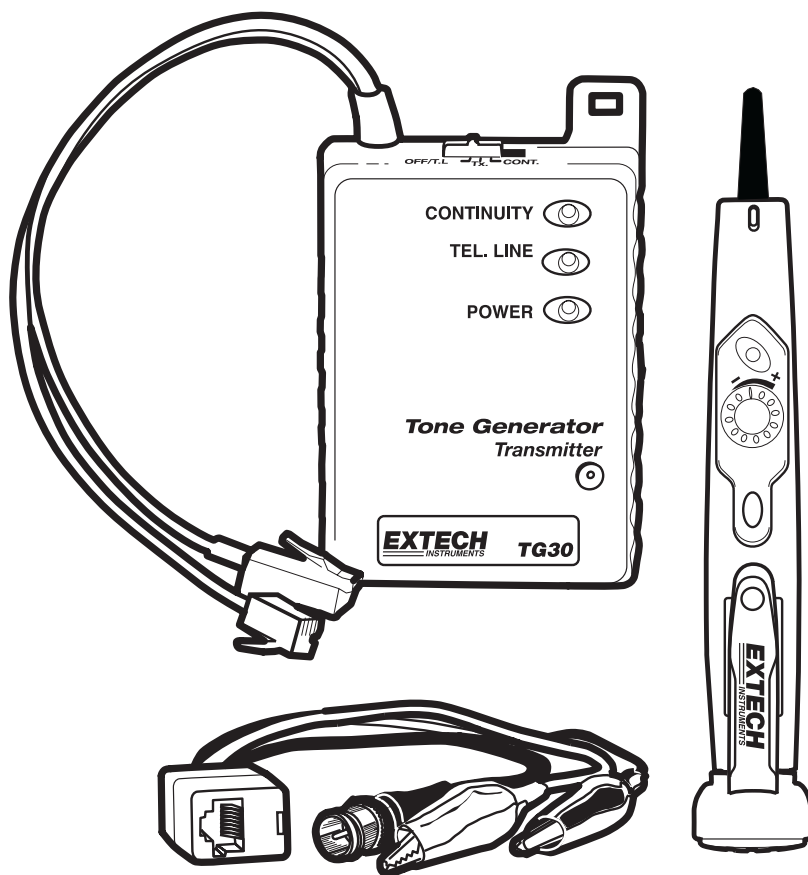
User's Guide

EXTECH[®]
INSTRUMENTS

A FLIR COMPANY

Wire Tracer Kit

Model TG30



CE

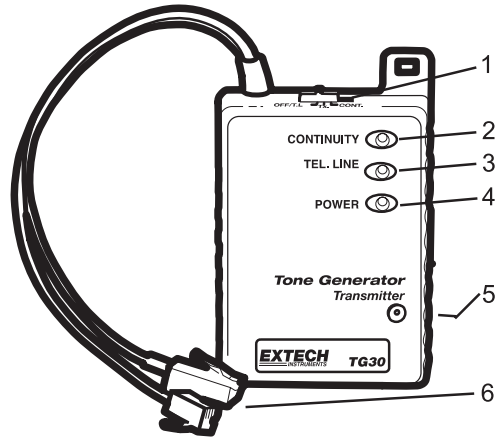
Introduction

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.

Meter Description

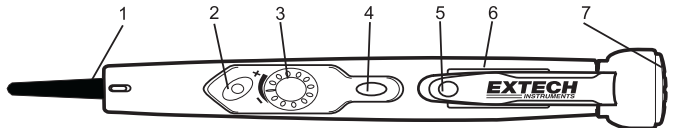
Transmitter

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



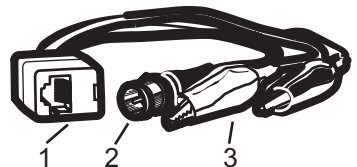
Probe

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



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

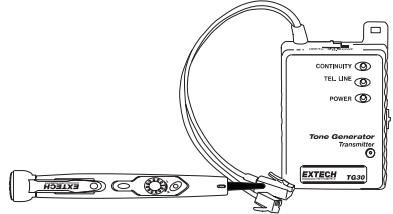


CAUTION: The transmitter is not designed for use on energized circuits. Connecting to any voltage source greater than 52VDC may damage the circuit.

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

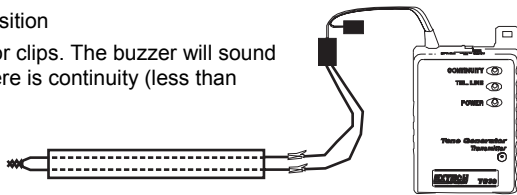
1. Select the transmitter termination required. Permanently attached are RJ11 and RJ45 connectors. Plug the RJ45 connector into the adaptor cable to obtain CATV type F connection or alligator connectors.
2. Connect the transmitter to the cable
 - a) For cables terminated at one end, connect the red alligator 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. **Bright Green:** Working line, not in use, correct polarity
 - b. **Dim Green or Red:** Working line, not in use, polarity undetermined
 - c. **Bright Red:** Working line, not in use, reverse polarity
 - d. **Bright Green/Red flashing:** Working, ringing line
 - e. **No light:** Open pair, no service

Continuity Test

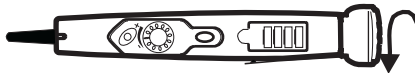
1. Switch the transmitter to the "CONT" position
2. Connect to the wire pair with the alligator clips. The buzzer will sound and the CONTINUITY led will light if there is continuity (less than approximately 1k Ω).



Battery replacement

Probe:

Install new batteries by turning the speaker and pocket clip $\frac{1}{4}$ 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.

You, as the end user, are legally bound (**Battery ordinance**) to return all used batteries and accumulators; **disposal in the household garbage is prohibited!** You can hand over your used batteries / accumulators at collection points in your community or wherever batteries / accumulators are sold!



Disposal: Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifecycle

Specifications

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

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