

PROGRESSIVE ELECTRONICS INC.

325 S. El Dorado, Mesa, Arizona 85202

(480) 966-2931 or (800) 528-8224

FAX (480) 967-8602

- Description
- Operation
 - Identifying Tip & Ring (Polarity Test)
 - Indicating Line Condition
 - Verifying Lines
 - Supplying Talk Power
 - Sending Tone
 - Testing Continuity Using the CONT Position
- Maintenance

Description

The Model AT8 AdapToner Test Set is housed in a high impact plastic case measuring $4\frac{1}{8} \times 2 \times 1\frac{1}{8}$ ", weighs 6 ounces, and is powered by one 9 volt battery (not included). The tester is supplied with red and black rubber insulated test clips and a snag-proof 8-conductor modular cord and plug, as well as an 8-position jack with protective cover. The unique plug allows insertion into both 8 and 6 position modular jacks. A three-position toggle switch controls the modes of operation and a 2-colored Light Emitting Diodes (LED) provides polarity and continuity indication. A tone selector switch (see figure 2) located inside the battery compartment, may be used to select a fast or slow warble tone output. Full 8-conductor breakout of the modular test plug allows the AdapToner to be used as a traditional tone generator, a breakout adapter, or a combination of both. The AT8 is compatible with all common Central Office Switching Systems and the output tone is isolated from DC voltages.

Operation

All of the following tests can be performed by using the red and black test leads (as described) or the modular plug or jack.

NOTE: The modular plug, jack, and breakout tabs are independent of the test leads. When toning or testing using the plug or jack, the red and black test leads must be connected to the appropriate tabs.

Identifying Tip and Ring (Polarity Test)

CENTRAL OFFICE BATTERY MUST BE PRESENT TO PERFORM THIS TEST.

In the OFF position, connect the black test lead to ground and the red test lead to each side of the line to be tested.

- A green LED indicates correct polarity. (the red test lead is connected to the ring side of the circuit)
- A red LED indicates reversed polarity.
- A red and green flickering LED (appears yellow) indicates the presence of AC, or a ringing line.

Model AT8 Adaptorner Operating Instructions

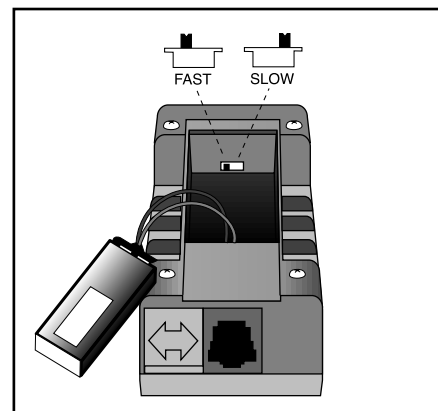
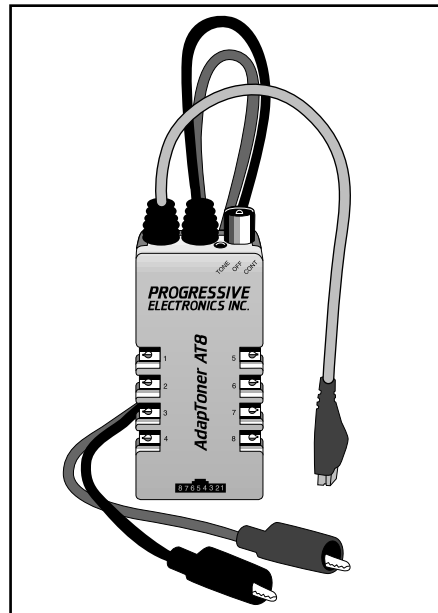


Figure 2, Tone Selector Switch

NOTE: If independent ground is not available, connect the test leads across the pair. The LED will be green when the red test lead is connected to the ring side of the circuit and the black lead is connected to the tip.

Indicating Line Condition

CENTRAL OFFICE BATTERY MUST BE PRESENT TO PERFORM THIS TEST.

In the OFF position, connect the red test lead to the ring side of the circuit and the black lead to the tip.

- A bright green LED indicates a clear working line with correct polarity.
- A bright red LED indicates a clear working line with reversed polarity.
- A dim green LED indicates a busy (off hook) line or faulted line condition (with correct polarity).
- A dim red LED indicates a busy (off hook) line or faulted line condition (with reversed polarity).
- A brightly flickering green and red LED indicates a ringing line.

Verifying Lines

To perform this test, the AdapToner must be in the OFF position. Dial the line to be verified. Connect the red lead to the ring side of the circuit and the black lead to tip. The LED will flicker red and green. To confirm identification, monitor the line and switch the tester to the CONT position. This will terminate the call.

Supplying Talk Power

Connect the test leads in series with a telephone test set (buttset) and the inactive wire pair. (see figure 3) Move the toggle switch to the CONT position to supply the “dead” line with talk power. Additional units may be added, in series, to increase talk power supply when needed.

Sending Tone

With the AdapToner in the TONE position, connect the red/black leads to the subject wire(s). An internal slide switch allows the selection of either a fast or slow warble tone output. (see figure 4) With multiple signal connection methods, experiment to find the methods that work best with your applications. Optional connections include:

- Connect the modular plug to a 6 or 8-position jack then connect the test leads to the appropriate breakout tabs.
- Connect the red and black leads to the tip and ring conductors of a twisted pair circuit. For high twist wires (i.e. category 5) connect the leads to conductors of two different pairs. Example: red to tip of pair 1, black to tip of pair 2.
- Connect the red lead to the subject wire and the black lead to an independent earth ground.
- Connect the red lead to the shield and the black lead to ground of a shielded or coaxial cable.
- Connect the red lead to the shield and black lead to center conductor of a coaxial cable.

Probe the wire(s) with any Progressive Electronics 200 series inductive amplifier (see figure 4). Reception of tone will be strongest on the subject wire(s). Shorting the leads of a tone carrying wire pair will cancel the tone signal and confirm that the pair has been identified. If you have ready access to bare conductors, a handset or headset may be used to locate the tone.

CAUTION: DO NOT CONNECT TO AN ACTIVE DC CIRCUIT EXCEEDING 52 VOLTS WHEN THE ADAPTONER IS IN THE TONE OR OFF POSITION. RINGING AC VOLTAGE WILL NOT AFFECT OPERATION.

Testing Continuity Using the CONT Position
Connect the test leads to the subject wire pair. Move the toggle switch to the CONT position and note the condition of the LED. A bright green LED indicates circuit continuity. The LED will not illuminate if the circuit resistance exceeds 10KΩ.

CAUTION: DO NOT CONNECT TO ANY ACTIVE AC OR DC CIRCUIT WHEN THE ADAPTONER IS IN THE CONT POSITION.

Maintenance

The only maintenance required is the periodic replacement of the internal 9 volt battery. To replace battery, remove battery cover on back of unit, replace 1 (one) standard 9 volt battery, and reassemble.

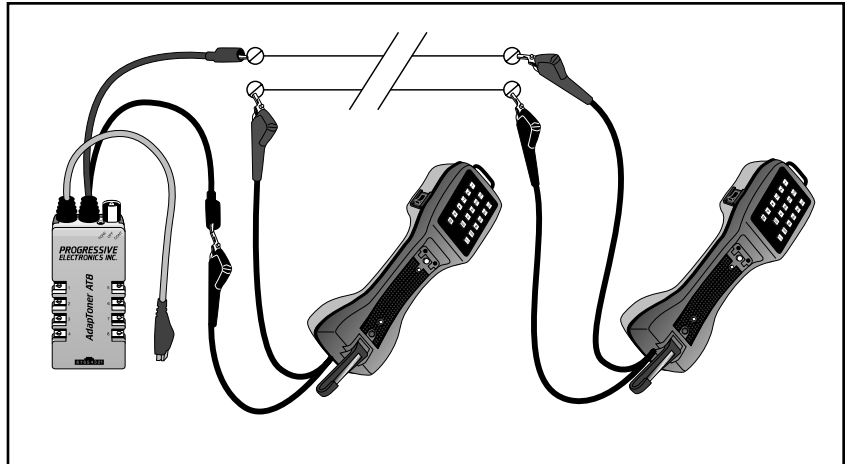


Figure 3, Supplying Talk Power

