

TT-07

TAP TRAP

INSTRUCTION MANUAL

TT-07 GENERAL INFORMATION

Size: 5.5" x 2.75" x 1"
Weight: 9 oz.
Batteries: 9 volt transistor type.

The Tap Trap can detect both series and parallel wiretaps that are attached directly to the on-premises telephone line. It can also be used to detect hookswitch bypasses that may be installed inside the telephone.

It can detect series taps of 65 ohms or more and parallel taps with a resistance from 0 ohms to in excess of 60 megohms. Listed below are definitions for several terms used in this manual.

BUG - clandestine listening device.

HOOKEWITCH BYPASS – Modification to the telephone instrument so that the carbon microphone (transmitter) or dynamic earphone (receiver) will pick up room sounds and pass them down the phone line to a listening post even with the phone hung up. Turns the telephone into a bug.

PARALLEL TAP – Connected across both wires of a telephone line. DC resistance ranges from 10 to 35 megohms. Usually used to activate a tape recorder, but may also be a radio transmitter, in which case, a separate battery would be required for powering the transmitter.

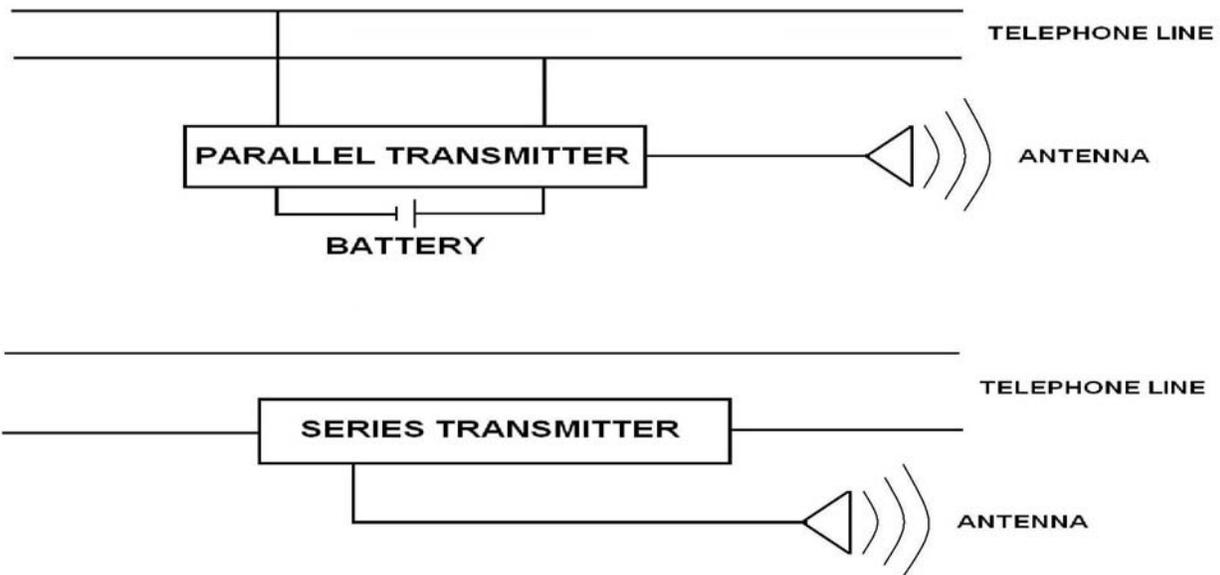
SERIES TAP – Usually a radio transmitter. Obtains power from the telephone line to which it is attached. It is installed in series (in line with one wire). Generally has a DC resistance of 70 to 300 ohms. Can also be used to activate a tape recorder (rare).

WIRETAP – Clandestine interception of a telephone conversation. Operates when the telephone is in use.

USING THE TAP TRAP

Install the battery (9 volt Eveready 216 or equal), if one has not already been installed. The battery compartment door is located on the end of the instrument.

***WARNING:** All inside wiring (wiring located within a building) tests are done with the inside wiring disconnected from the outside wiring at the protector block or interface. NEVER make any tests with the inside wiring "hot".*



PARALLEL TAP CHECK

1. Disconnect the inside wiring at the protector block or interface. The protector can be located inside or outside the building and is the point of demarcation between the inside wiring and the phone company line. Make a note of the wire colors and connections so you can reconnect them properly when you are finished testing.
2. Disconnect all telephones, answering machines, etc.
3. Position the top two switches on the Tap Trap so that left side of the switch's are down and connect the unit to the inside wiring at any convenient point. If your building does not use modular jacks, it will be necessary to connect the Tap Trap using the supplied coupler and cord with alligator clips (be sure to connect red to red and green to green).
4. Push and hold down the *PUSH TO TEST* (PTT) button for at least 5 seconds. The *PARALLEL CLEAR* (P CLEAR) LED should stay on. Release the *PTT* button.

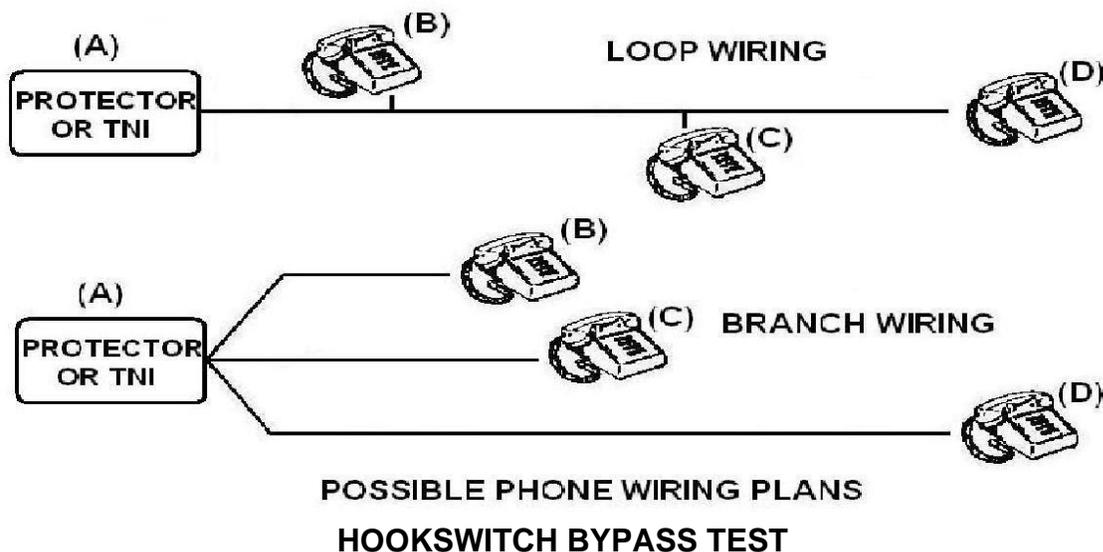
If the *P ALERT* LED flashed briefly, an additional test is necessary. Here's why – 100 feet of inside wiring has about .002 uF of stray capacitance between any two wires in the cable. This stray capacitance causes the *P ALERT* to flash.

To check for the presence of a capacitively coupled parallel wiretap, press the *PTT* switch again. Hold it down for about 5 seconds and release it for 10 seconds. Push it again for about 5 seconds. If the *P ALERT* flashes the second time that indicates a possible capacitively coupled parallel wiretap.

5. Do the same tests as #4 above with the *TEST* switch in the *TEST 2* position.

SERIES TAP CHECK

1. At the protector block location, short the red and green inside wires together using the jumper cord with alligator clips at each end.
2. Set the Tap Trap switches (*TEST* switch down on the left side and the *SERIES* switch down on the right side), connect the Tap Trap in turn to each inside connection point.
3. At each connection point, push and hold down the *PTT* switch for at least 5 seconds. The *S CLEAR* LED should stay on. (The *S ALERT* LED may flash briefly – this is of no consequence.) If the *S ALERT* LED stays on, this means the loop resistance is over 60 ohms and is an indication of a series tap.
4. Repeat #3 with *TEST* switch in *TEST 2* position.
5. Repeat #3 and 4 at each inside connection point.
6. Disconnect the Tap Trap and remove the shorting jumper that you connected to the inside wiring in Step 1.
7. Reconnect the inside wiring to the protection.



Telephones with modular plugs can be connected to the Tap Trap using the coupler provided. Phones without modular plugs can be connected using the coupler and cord with alligator clips. Connect red/red and green/green.

1. Remove the cover (housing) from the telephone by loosening the screws on the bottom plate.
2. Connect the Tap Trap to the free end of the telephone cord and position the TT-07 switches so that the left side of the switches are down.
3. Locate the wire connected to network terminal K in the telephone and temporarily remove it.
4. Be sure the hookswitch is held down (depressed) and push and hold down the Tap Trap *PTT* switch for at least 5 seconds. The *P CLEAR* LED should stay on. Release the *PTT* switch.

If the *P ALERT* LED flashed briefly, an additional test is necessary. To check for the presence of a capacitive hookswitch bypass, press the *PTT* switch again. Hold it down for 5 seconds and release for 10 seconds. Push it again for 5 seconds. If *P ALERT* LED flashes the second time, that indicates a possible capacitive hookswitch bypass.

5. Do the same tests as in #4 with the *TEST* switch in the *TEST 2* position.
6. Reconnect the lead to terminal K that you removed in step #3.
7. Perform the test in #4 again. Note that the *P ALERTED* LED stays on for 1 to 2 seconds before switching to *P CLEAR*. This is caused by the capacitor connected between terminals K and A of the network.
8. Disconnect the Tap Trap, reinstall the telephone housing and reconnect the phone to the inside wiring.
9. Check the remaining telephones in the same manner following steps 1-8.

LOCATING WIRETAPS and WHAT TO DO IF YOU FIND ONE

All of the wiretaps can be located by close physical inspection of the inside wiring. Remember, if someone installed it, you should be able to find it.

Note that series taps can be made very small. A favorite way to disguise one is to wrap it with tape so it looks like a wire splice or connection.

If you find a tap, then what? Your first impulse will probably be to rip it out – but stop and think before you do that. It may be worth while to try to determine who planted it and use the tap to feed them false information.

Also, wiretapping is a Federal crime as well as a violation in most states. Assuming you're a clean living person and the tap wasn't planted under court order, you may want to contact the proper authorities for possible prosecution.

LIMITATIONS

While the Tap Trap will detect the most common on-premises wiretaps and hookswitch bypasses, there are some it won't detect. These include drop-in transmitters, bypasses activated by high voltage and inductive taps that don't have a physical connection to the phone or line however; with the TD-53 and its probes you should be able to find all of these. Remember most phone taps can be located by close physical examinations of the telephone and/or inside wiring.

Of course, the Tap Trap does not detect off-premises wiretaps such as court ordered taps that are connected by the phone company