



Theory of Operation:

A majority of telephone tap detectors sense the voltage level on the telephone line when the phone is in use. If the voltage falls below the *normal* level the detector alarms; usually a visual indication. The detector's *normal* level threshold is set, by the user, at a point in time when it is *believed* the line is not under surveillance.

Voltage drops can be caused by someone picking up an extension phone, improper use of a telephone lineperson's handset, or by attaching a very crude listening device to the line. Drops can also be caused by minor variations in voltage which occur normally throughout the day.

Some models include an additional defensive measure; they defeat tape recorders hooked to the phone line. This is done by raising the line voltage just to a point where the tape recorder thinks the phone is not in use, even when it is. Of course, not all tape recorders with telephone auto-start units are fooled so easily, and many operate on a voice-activation principle instead. Even if this technique does work, a surveillance operator will quickly notice that the recorder is not working and will switch to an alternate piece of equipment.

Do-it-yourself telephone tap detectors come in a variety of packages: mouth-piece screw-ons, line cord plug-ins, under-the-phone computerized models with key locks... The list goes on and on.

Pros:

- Inexpensive.
- Simple to operate.
- Useful on residential phone systems to detect eavesdropping from an extension.

Cons:

- Calibrated by the user under uncertain conditions.
- Cannot be used on business / electronic phone systems.
- Cannot detect all types of bugs and taps as claimed in the advertising.
- False positive readings from normal voltage fluctuations.

Cost: \$30 - \$800

Recommendation:

Use these devices to combat only the most amateur of eavesdropping attempts, eg. children picking up an extension telephone at home. Remember, not every alarm indication will mean eavesdropping is taking place. Better approach: Add-on electronic modules are available to make regular telephones inoperative when the line is in use by another extension.

In a business environment, these devices are worthless. Your conversations are important enough to warrant professional periodic inspections of your offices and communications systems.

