

P-04

CARRIER CURRENT/VIDEO CAMERA PROBE INSTRUCTION MANUAL

ABOUT THE P-04

Size: 7.3" x 2.25" x 1.3"

Weight: 8 oz.

Power: Supplied by TD-53 and by internal 9 volt battery – replace with alkaline type – Eveready 522 or equal. Current drain is 9 mA.

Frequency Range: 10 KHz and 50 KHz to 600 KHz in two ranges.

Antenna: Permanently attached Very Low Frequency (VLF). Indicators: Red LED – Lights only when probe is plugged into TD-53 and Range switch is in the 10-130 position or 50-600 position.

Controls:

Range – 3 position switch – selects either 10-130 KHz, OFF or 50-600 KHz.

Tune – Tunes through both of the above ranges from low to high.

THEORY

Carrier Current Transmitters, marketed as “wireless intercoms” and “wireless room monitors”, consist of a transmitter and sensitive microphone which intercepts room conversations and sends them along the power lines to a receiver. Very little signal radiates away from the power line. That is why a countermeasures sweep should include an examination of power lines in the target room with a tune-able carrier current detector.

Most carrier current devices fall in the frequency range of 30 KHz to 500 KHz. The popular wireless intercoms sold in electronics stores are usually set to operate between 150 KHz and 300 KHz. The P-04 covers a wider frequency range than this to catch devices whose operating frequency has been modified by the eavesdropper.

The P-04 can also be used to detect video cameras. These cameras have a horizontal oscillator – most operate at 15.75 KHz- that radiates a signal that can be picked up and detected by the P-04.

GETTING STARTED

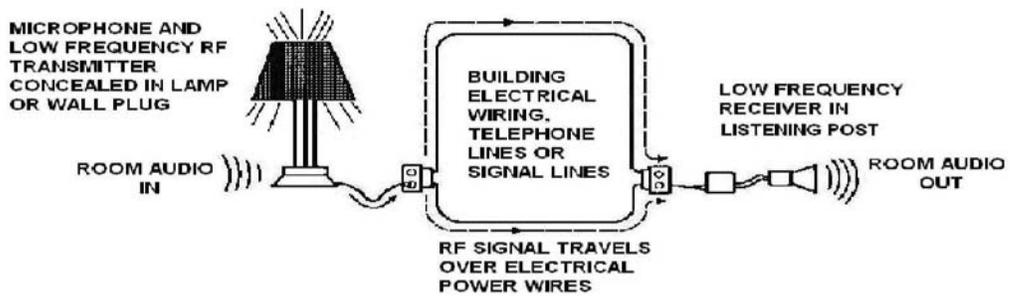
If a battery has not already been installed, go ahead and install one now. Use Eveready 522 (alkaline) or equal. The battery compartment is accessed by using a flat blade screwdriver and separating the top cover from the bottom cover. Connect the battery to the battery snap and place in the holder. Reinstall the cover.

The P-04 *Range* switch should be “OFF”. Plug the P-04 cable into the probe jack on the top end of the TD-53. If you plan to use the headphones, go ahead and plug them into the TD-53 headphone jack.

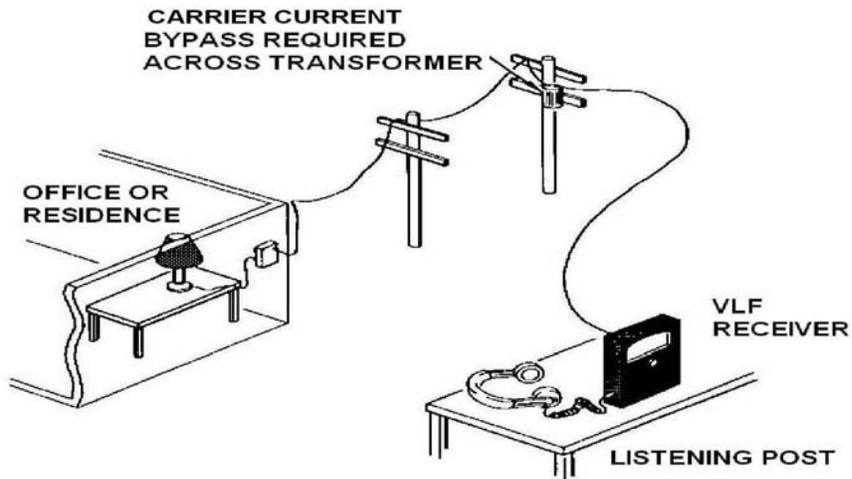
FINDING CARRIER CURRENT DEVICES

Use the following procedures to check for carrier current devices on AC power lines:

1. Turn on a sound source in the target room such as a radio. Next turn on the TD-53 and set the *MODE* switch to “*verify*” and the *SENSITIVITY* switch to “*high*”.
2. Ignore any reading on the TD-53 LED meter. Set the P-04 *RANGE* switch to “10-130” and the *TUNE* control to “*Min*”. The power on LED on the P-04 should be on.
3. Turn on all appliances, lights, etc. that normally operate in the target room. Position the P-04 antenna next to the line cord for all of the above appliances or lamps. Remember that you are trying to pick up a low level signal that may be traveling along the AC power lines. If the signal is there, it will also be present on any line cords that are plugged in.
4. Slowly tune *Range* control from “*Min*” to “*Max*” and back again while listening for the sound source.
5. Switch *Range* switch to “50-600” and repeat step 4.
6. If you hear the sound source through the TD-53 in either of the above steps, there is a carrier current device operating on the line and you should try to locate it. To do so, try unplugging appliances and lamps one at a time. If the sound goes away once the cord is pulled on an item, you have located the transmitter. It could also be concealed behind a switch plate or wall outlet. If so, you will have to search with the P-04 probe. As you get closer to the device, the sound will become louder.
7. Carrier current transmitters are associated with power line attacks. You should be aware, however, that telephone lines and other wire pairs can also be used. To check these other wire pairs, simply place the P-04 antenna next to the pairs you want to check and repeat steps 4 and 5 above.
8. For a complete check of the target room, repeat the above steps at several different locations in the room. This will cover the possibility of two different power line feeds to the same room.

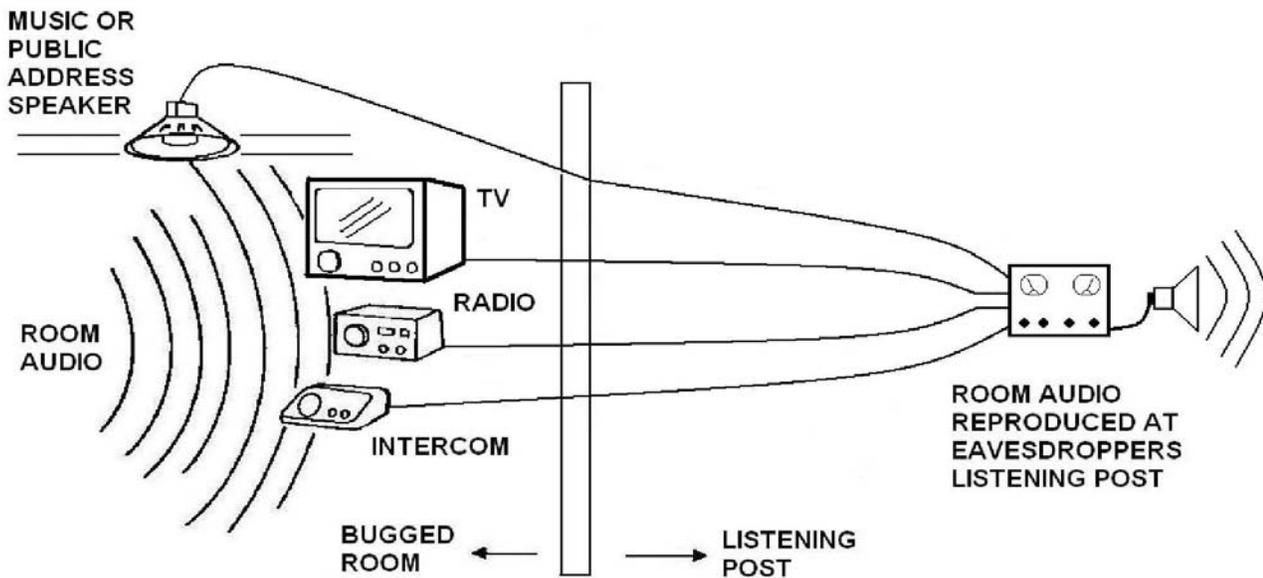


CARRIER CURRENT BUG WITH THE LISTENING POST IN THE SAME BUILDING



CARRIER CURRENT BUG WITH THE LISTENING POST OFF PREMISES

NORMAL SPEAKER LEADS CONNECTED TO AN AMPLIFIER AT THE LISTENING POST



MAGNETIC SPEAKERS USED AS EAVESDROPPING MICROPHONES

FINDING VIDEO CAMERAS

To locate hidden video cameras with the P-04 use the following steps:

1. Turn on the TD-53, set the *MODE* switch to "Verify" and the *SENSITIVITY* switch to "High". Ignore any readings on the TD-53 LED meter. Set the P-04 *RANGE* switch to "10-130" and the *TUNE* control to "V". The power on LED on the P-04 should be on. For best results, we recommend the use of headphones with the TD-53.
2. Because they use the same horizontal frequency as video cameras, any televisions in the area should be turned off. Otherwise, you will get false indications from the TV.
3. Walk slowly around the room while sweeping the P-04 slowly up and down from ceiling to floor.
4. If there is an operating video camera in the room, you will hear a low pitched tone. As you get nearer the camera, the tone will get louder. When you are very close to the camera (1 to 2 ft.), the pitch of the tone will change to a higher frequency.

The VLF antenna on the P-04 is directional with maximum signal pick up off the end of the antenna. This directional characteristic can help you pinpoint the location of the video camera. When you are receiving the tone, simply turn the P-04 so that the antenna faces different directions. The direction of strongest pickup indicates the camera direction which will either be from the front or the back. If the signal gets stronger as you move forward, then the camera is to the front. Otherwise, it's behind you.

Video cameras can be concealed in any number of places by using a pinhole lens. These cameras are very small and can be hidden almost anywhere and in almost anything.