

Fox Hunting

People have been asking me what is the best kind of equipment for radio fox hunting. Here are the most popular types of direction finding equipment.

- 1) Directional antenna
- 2) Handy Finder
- 3) Tinfoil tube
- 4) Paper clip

Directional Antenna

The directional antenna is the most useful piece of equipment. It can be any type of beam antenna. To use it you just point. A three or four element beam would be the best for direction finding. Anything bigger gets too hard to carry around. You connect it to your HT (hand held transceiver) and use the "S" meter to work out the direction of the incoming signal. By pointing in one direction then slowly turning the beam around, your "S" meter will move up and down. At the "S" meter's highest reading, the antenna will be pointing in the direction of the incoming signal. The biggest drawback you'll have when using a beam is that the closer you get to the transmitter the stronger the signal gets. At some point your "S" meter will max out. This is where you will have to use some kind of attenuation to reduce the signal strength so you can see it on your meter. I'll get into attenuators later. The beam antenna is a long to medium range piece of equipment. The closer you get to the transmitter, the harder it is to get a bearing.

Handy Finder

The Handy Finder is a good medium to close piece of equipment. It will work at a long range as long as the transmitter is sending a strong signal. It uses two antennas to receive the signal and adds a tone to the incoming signal. By rotating the antennas the tone comes and goes. The idea is to rotate the antennas until the tone is gone. At this point both antennas are at the same distance from the transmitter. You get your heading by looking perpendicular to a line from one antenna to the other. The biggest problem with this is that the transmitter can be in front or in back of you. You'll have to take readings from at least two places some distance apart. A good feature is that it gives off a tone. You don't have to have an "S" meter on your radio.

Tinfoil Tube

The tinfoil tube is a short range-tracking device. By lowering your HT (with a rubber

duck antenna) into it you block the signal. This is a form of attenuation. By moving the HT up and down inside of the tube, you can weaken the signal. Then you turn around in a circle. When the signal goes away, the transmitter is behind you. What you are doing is weakening the signal enough so that when you turn around, your body blocks the rest of the signal. This is a short to mid range tracking device and takes a lot of practice to make it work.

Paper Clip

You may wonder how a paper clip can be used to find a transmitter. Well, it's an antenna and attenuator at the same time. It works best a short range. By taking off your HT antenna and sticking a straightened out paper clip in its place you have an antenna that has no gain at all. Then you turn around in a circle. When the signal goes away, the transmitter is behind you. By bending the paper clip in odd ways, you can get a little directional antenna. Add this and body blocking and you'll get in closer than you may want to.

As I mention above, attenuation is most important thing in tracking the transmitter. If you are using a beam antenna, you may want to invest in a line attenuator. This is a box the goes into the line from your antenna to your HT. It has several switches on it. As you flip the switches you are shorting some of signal to ground. The more switches you turn on the weaker the signal gets.

There are other more elaborate pieces of equipment you can get. But the cost is high and they may or may not work in all the hunts you go out on. It has been my observation that the cheapest equipment works very well. And it only take a little more practice to make it work.

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