

TENNESSEE BUREAU OF INVESTIGATION

Forensic Services Division

Violent Crime Response Team Standard Operating Procedures Metal Detector



10.30 Metal Detector

10.30.1 Purpose

A metal detector can be used at scenes to detect metal objects such as weapons, ammunition components, and other items of evidentiary value on the surface, underground, and underwater. This procedure provides general guidelines on the use of metal detectors at scenes.

10.30.2 Equipment and Reagents

Metal detector
Brass cartridge case
Ni-plated cartridge case
Aluminum cartridge case
Steel cartridge case
Copper/lead (9mm) bullet
Copper/lead (45 auto) bullet
Copper/mild steel/lead (9mm) bullet

10.30.3 Procedure

10.30.3.1 In a testing area separate from your search zone, use the provided intermediate check(s) to listen to the tone of the possible intended target(s), if applicable.

10.30.3.2 While keeping the search coil at a constant height (about 1-2 inches) and parallel to the ground, move forward and scan slowly in a straight line from side to side (about 1 foot/second). Make sure to overlap swings about half the length of the coil (about 4 inches) and continue until the entire area is searched.

10.30.3.3 If items of evidence are located, document and collect them in appropriate packaging material. Seal and label the evidence.

10.30.3.4 Refer to the applicable instruction manual for additional information.