

SENTRIE[®] - PSD[™]
USERS MANUAL

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The Sentries - Personal Search Detector (PSD) is a highly sophisticated and sensitive electronic device with many advanced design features, yet has only an ON/OFF control and is easy to operate. The PSD is designed for ease of use with a quick turn-on feature and fast metal detection response.

The PSD's set up is completely automatic. There are no adjustments or controls for the operator to set. This prevents any accidental adjustments which might allow an operator to miss a weapon during screening. The ON/OFF is controlled by two simple momentary push-button switches clearly labeled ON and OFF. Simply press the ON button to initiate operation.

The unit will perform a number of self-test functions, including a battery check immediately upon power up. The Green BLINK OK light should be on, indicating that the unit's battery has sufficient charge and there is no malfunction. If the unit is set for continuous audible ok, it will have a very low level buzzing sound at all times, letting the operator know the unit is working. This does not indicate a problem with the PSD, so don't be alarmed. (The audible ok feature is added on request only, as many people find it unnecessary.) Standard units have only the BLINK OK indicator. If the green BLINK OK is not flashing, the unit has a dead battery or malfunction. This problem must be corrected before operating the unit.

If the system indicators show an operable status, it is ready for operation. We strongly recommend testing the unit before operation. Pass the PSD search coil over a known metallic object such as a watch, key chain, ring, etc. The PSD should alarm with a high pitched audible alarm when near the metallic object. The PSD must be moving to detect a metal object. Thus, continuous movement of the unit is necessary to detect weapons concealed on the person.

As you become more experienced with the operation of the PSD, you will find it very natural to make a smooth, rapid movement of the device across those screened. The active search area is the flat side of the search coil placed almost in contact with the clothing of those screened. We recommend operation within one inch of the surface where inspection is to take place. The flat side of the paddle-shaped PSD should be used for detection. Detection is possible using the side and forward ends of the search coil, but at reduced sensitivity. It is critical that the operator be very thorough in inspection of screened subjects. Neglecting any areas of the body represents a potential loophole in the security screening process. Only properly trained users should be allowed to perform screening with a hand-held metal detector.

The basic screening of a person starts with notification of the subject that you will be screening them. Often, they have produced an alarm on a walk-through metal detector and you must now determine the source of the alarm. Remember to be courteous, as this will limit any aggravation experienced by the person and expedite the process. The purpose of using a hand-held metal

detector is to limit the intrusive nature of searching their body for weapons and to speed the process. First, have the subject raise their arms and remove coats or other bulky items so you can screen these separately, away from the person. Approach them from an angle rather than directly face to face, so as to limit any potential for confrontation. Begin at the shoulder and follow the outline of the body along the arm, down the person's side all the way to the floor. Move the search coil quickly to the inside of the shoe and up the inside of the leg to the upper thigh, then over to the other leg and down to the other shoe, over the shoe and continue around the outline of the body. Do not forget to look under any headwear. Now, step to the side of the person and screen from the neck down across the chest past the beltline. Ask the person to turn around and make another pass from the back of the neck to below the buttock. Many items will cause an alarm including pocket change, watches, belt buckles, etc. These must be identified as non-weapons each time an alarm is encountered. When a hidden item is detected, do not reach into the area to identify it. Ask the person to remove the item so you can identify it, then re-screen the area to ensure the item was the source of alarm. If you have any questions regarding the use of the PSD, please refer to the manufacturer for advice. We are glad to assist.

The Sentries-PSD has an audio tone discrimination feature which changes the tone of the audio alarm, depending on the size of the target detected. Large, metallic objects will cause a higher-pitched alarm tone at a higher decibel level. This acts as an aid to the operator in determining the nature of hidden objects. The audio tone discrimination feature should not be relied upon as the sole criteria for object identification. Certain metals can give off deceptively large or small signals in a complicated process only explained through a lengthy physics lecture. The audio tone discrimination feature is very useful in some situations, such as determining whether you are alarming on a person's shoe or the steel beams in a floor.

The PSD's excellent electronic design gives the user a very rapid alarm response immediately as you pass over a metal object. This helps to pinpoint an object's exact location. The PSD still allows detection of large metallic objects at greater distances. This high dynamic range provides the user with the flexibility to screen persons carrying a wide range of metal objects.

If the PSD audio tone changes dramatically, this may indicate a rapid change in temperature. Simply press the ON button once and the unit will reset for operation.

When not in operation, the unit should be turned OFF to extend the life of the battery. The unit will emit a pulsed alarm when the battery reaches approximately a 10% charge level and indicates the need to replace the battery or recharge. When storing the PSD the battery should be removed. Batteries often leak when stored for long periods of time and will create a corrosive environment. Units damaged in this manner are not covered under any warranty.

SYSTEM DESCRIPTION**Detection Sensitivity:**

- 3/4" Ferrous Object 3.5" (8.9 cm)
- Steel Key Ring 5" (12.7 cm)
- Medium Pocket Knife 6" (15.2 cm)
- Small Ferrous Hand Gun 7-10" (17.8-25.4 cm)
- The recommended scanning distance is 1 inch or less from subject

Dimensions:

- Overall Length 17.3 in. (43.9 cm)
- Height 1.5 in. max (3.8 cm)
- Handle Width 1.9 in. (4.8 cm)
- Search Coil Width 2.7 in. (6.8 cm)
- Search Coil Length 8.75 in. (22.2 cm)
- Weight (with battery) 11 oz.

Temperature Range:

- Operating 0° - 50°C
- Storage -25° - 75°C

Power:

9-volt battery, NEDA 1604 or equivalent. Standard alkaline battery will provide in excess of 50 hours continuous operation.

Standards:

Meets applicable NILECJ 602.00 and FCC Part 15 requirements.

NILECJ 602.00 Classification

For use in Security Applications 2, 2NM and 3. Class II, Active device

Audio Output:

- Threshold Tone 200 HZ 60 db @ 1" (small target)
- Minimum Response 200 HZ, 60db @ 1" (small target)
- Maximum Response 700 HZ, 110db @ 1" (large target)

Note: The audio tone frequency increases for larger detected objects

Operating Frequency:

50kHz \pm 10% clear sine wave oscillation

Options Available:

- Ni-cad Rechargeable Battery
- Belt Holster
- Phone Jack with Ear Plug

Ordering Number: P/N 01-0220-01

Warranty: 24 Month Limited Warranty

Made in the U.S.A.

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Specifications subject to change without notice