



Metrasens Ultra[®] Screening Guide

V.2.0 | 2023

Contents

1. Technology Overview	3
2. The Four Steps To Effective Screening.....	3
3. Screening People	4
3.1 OPERATIONAL CONSIDERATIONS.....	4
3.2 WALK-BY.....	4
3.3 360° TURN.....	5
4. Screening Personal belongings.....	6
4.1 WALK-BY WITH PERSONAL BELONGINGS.....	6
4.2 SCREENING PERSONAL BELONGINGS HORIZONTALLY.....	6
4.3 OPERATIONAL CONSIDERATIONS	7

1. Technology Overview

The Metrasens Ultra system screens the area immediately around the system, with the greatest sensitivity within a range of about 90 cm/3ft.

The system can detect objects with large magnetic signatures, such as mobile phones, further away than 90 cm. However, objects with very small magnetic signatures, such as tattoo needles, need to be closer than 90 cm for the system to detect them.

It is important to understand that the signal strength of an object's magnetic signature reduces rapidly in relation to the object range from the system. For example, the same object positioned at twice the original distance from the system gives a signal strength of about 12% of the original position's level. Therefore, screening must occur as close to the system as possible.

For this reason, although the system detects most objects if a subject just walks past the system, the optimum screening procedure to detect small objects is for the subject to rotate 360° just in front of the system.

2. The Four Steps To Effective Screening

To screen a subject properly and effectively, follow these four steps:

1. Position and assemble the Metrasens Ultra system in a suitable location.
2. Switch on the system and set the sensor sensitivity, alert alarm volume, alert indicator brightness, and screen brightness levels to match the screening operation and environment.
3. Arrange the location and follow the defined screening procedures.
4. Follow the guidelines about the alert indication and object location.

A series of CONOPS documents are available to cover the deployment and operation of the system in a variety of differing screening situations, please request copies directly from Metrasens.

3. Screening People

3.1 OPERATIONAL CONSIDERATIONS

When performing either of the screening methods detailed below, consider the following:

- Ensure any screening personnel stands at least 2m/6ft from the system to avoid causing unwanted alerts.
- Screening must only happen when the alert indicator beacon is green to show the system is ready. Therefore, if the beacon is **RED** wait until it turns **GREEN** to continue further screening operations.
- The system triggers an alert if it has detected the person passing the system is carrying one or more ferrous objects.

3.2 WALK-BY

This method is designed to screen people walking past the system at a normal walking pace.

Where possible, set up the system in a narrow area, such as a doorway or corridor, so the person subject to screening must walk past the system in a single file. Alternatively, artificially create a narrow channel by placing a suitable object, such as a chair, in front of the system to form the channel.

- When performing the screening:
- Maintain at least a 1.2m (4 foot) separation between each person being screened.
- Invite the person to walk past the system at a normal walking pace.



- Ensure the person passes within a channel no wider than 30inches.
- If the alert sounds a **BLUE** zonal indicator lights up and the indicator beacon shows **RED**:
 - 1) Invite the person to remove any metallic objects.
 - 2) Wait for the indicator beacon to show **GREEN**.

- 3) Invite the person to walk past the system again.
- 4) Repeat this step until the system does not alert.

3.3 360° TURN

The 360° turn is recommended when there is the need to detect even the smallest threat objects as it guarantees that all sides of a person's body remain at a close distance from the system.



When performing the screening:

- Invite the person to stand directly in front of the system and perform a 360° turn on the spot.
- Make sure the person does not touch the system as that may cause an alert.

If the alert sounds and the indicator beacon shows **RED**:

- Invite the person to remove all metallic objects.
- Wait for the indicator beacon to show **GREEN**.
- Invite the person to stand and turn in front of the system again.
- Repeat this step until the system does not alert.

4. Screening Personal belongings

4.1 WALK-BY WITH PERSONAL BELONGINGS

Follow these further steps to screen a person's belongings during a walk-by:

- 1) Ask the person to carry any personal items requiring screening.
- 2) Perform the standard walk-by screening procedure.
- 3) If the alert sounds and the indicator beacon shows **RED**:
 - Find and remove all metallic objects in accordance with your company's policies and procedures.
 - Wait for the indicator beacon to show **GREEN**.
 - Invite the person to walk past the system again.
 - Repeat this step until the system does not alert.

4.2 SCREENING PERSONAL BELONGINGS HORIZONTALLY

This mode is typically used in corrections settings.

Follow these steps to screen a person's belongings in a horizontal mode:

- 1) Remove the system from the base unit and mount the system horizontally above the floor, using suitable items to securely support each end of the system.
- 2) Set the height of the system so that people can pass the personal items to be screened below the system, but without touching the system.
- 3) Invite the person to carefully slide their personal belongings below the system.
- 4) If the alert sounds and the indicator beacon show **RED**:
 - Find and remove all metallic objects (in accordance with your company's security policy)
 - Wait for the indicator beacon to show **GREEN**.
 - Invite the person to slide their personal belongings below the system again.
 - Repeat this step until the system does not alert.

4.3 OPERATIONAL CONSIDERATIONS

When performing either of the personal belonging screening methods detailed above:

- Ensure any screening personnel stand at least 2m (6 feet) away from the system, to avoid causing unwanted alerts.
- The system sounds an alert if the person passing the system is carrying any ferrous objects.
- Screening must only happen when the indicator beacon is **GREEN** to show the system is ready. Therefore, if the indicator beacon is **RED**, wait until it turns green to continue further screening operations.

