

MD-6 METAL DEFENDER MANUAL, TECHNICAL SPECIFICATIONS



Parts on the detector:

Main Board (1) , Left Probe (1), Right Probe (1), Bolts and Nuts (8), AC Power Cord (1), Serial Port Plug (2) , Allyn Wrench (1), Instruction Manual (1), Keys (2)



Traffic and Alarm Counter →
Be able to monitor and track frequency of alarms and traffic.

Sensitivity →
100 programmable sensitivities per zone.

Tamper Proof →
Changeable password protection.

6 Zone Detection →
Each zone capable of precisely identifying target locations from head to toe.

Mobility →
Increase mobility with use of optional wheels.



← **MD-6 Control Panel**
Top LED display indicates density of metallic objects passing through unit.

← **Remote Capable**
Remote available for easier programming and managing of unit.

← **Anti-Interference**
Adjustable frequencies and superior filtering help to nullify and prevent outside interference.

← **Dual LED Probe Sensor**
Zone specific LED sensors indicating area of metallic detection.

← **Water Resistant**
Meets IP31 standards.

Why Metal Defender?

- 6 zone detection compared to similar models with 1-2 zones.
- Easy Assembly. Average set-up time 15 minutes.
- 100 range sensitivity. Detect the metals you need to whether for security or loss prevention.
- An easy to use 4 button click touchpad.



FREE METAL DEFENDER WAND INCLUDED IN EVERY PURCHASE OF A METAL DEFENDER WALK THROUGH METAL DETECTOR.

2 YEAR WARRANTY
FREE LIFETIME SUPPORT
FREE DELIVERY

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Make sure the legs are aligned and attached as per the above image, so the Power Socket is positioned on the Front Right hand side when facing the Front.

- 1. Type: 6 Zone Stand up metal detector**
- 2. Application: For use in commercial or industrial use. It detects both ferromagnetic and non-ferromagnetic items. Detection in size as small as paperclip.**

Due to the devices smaller and lighter size as well as roller wheel attachments (sold separately) the unit can be mobile.

Components: items comes with 2 side panels/probes, 1 main monitor panel/board.

Technical specifications

Power Supply: AC90V-250V 50HZ-60HZ

Power: <20 W

Dimensions: 86.6 inches (H)

31.5 inches (W)

19.7 inches (Depth)

Channel dimensions: 79.2 inches (H)

27.5 inches (W)

19.7 inches (D)

Color: Black, charcoal gray

Weight: approximately 155 lbs

Operating environment: -5 – 115 degrees F

Metal detector has met all national standards through 2003

Product details

- **Alarm Display, LED lights determine metal objects on both sides**
- **Built in power supply**
- **Waterproof for mild outdoor usage**
- **Computer networking and ability to adjust security settings**

General information

Regional Sensitivity:

The maximum sensitivity can detect the metal content as small as a paper clip, in self-regulation between 0-99 sensitivity detection requirements may need to be adjusted. Be sure to determine items looking for beforehand and remove keys, jewelry, belt buckles, and steel toe boots to prevent false alarms. Also make sure that the unit is at least 4 feet from any metal frame door or revolving door

Product Process:

Made of PVC synthetic materials, the unit is waterproof for mild outdoor usage. Its appearance is very aesthetic is suitable for many different types of users.

Smart Statistics:

Intelligent traffic and alarm counting function; can automatically detect the number of passing individuals and the number of detections that have gone off.

Anti-interference ability:

Digital, analog, and left and right balanced technology, help in preventing false alarms and false negatives, and greatly improve the anti-jamming capability.

Safety protection:

Double password protected, allowing only authorized personnel operation and access. Multiple passwords allow for better security parameters. Parameter settings are automatically stored without interrupting power supply protection, both safe and convenient.

Electromagnetic radiation:

EMC electromagnetic radiation standards; use of weak magnetic field technology, safe for pregnant women, cell phones, film, video tapes and other sound equipment.

Installation:

This series metal detector has an integrated design, which allows for easy installation or removal within 20 minutes.

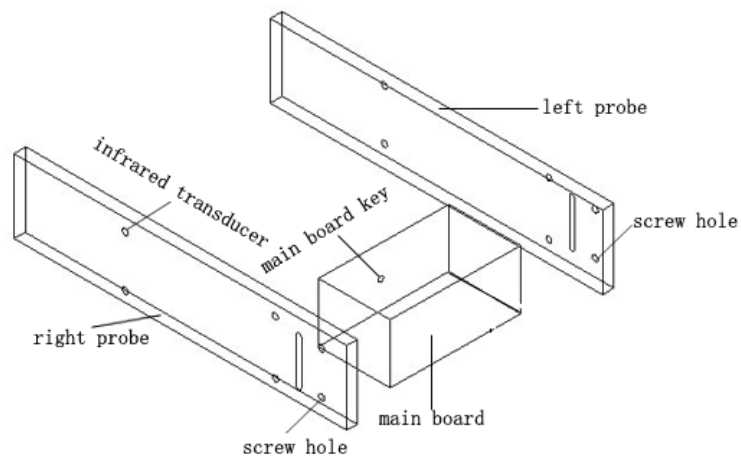
Field of use:

Airport, schools, concert venues, events, railway stations, docks, entertainment facilities, prisons, courts, government departments, factories, examination room, shopping malls, community channels, security check and prohibited items inspection areas.

Installation Instructions

Please read through the following instructions to properly install and program and Adjust the sensitivity of the Metal Defender walk-through metal detector

1. Open the boxes and take out the 3 main pieces – Left probe, Right probe, and main board. Place all on the Styrofoam in the position below to properly secure the 3 pieces to form the frame of the unit (see diagram below). The LED display on the main board should be in the upright position facing you. Each probe is identified with an “L” or “R”. Make sure the “L” or “R” inside the main board matches the corresponding probe.

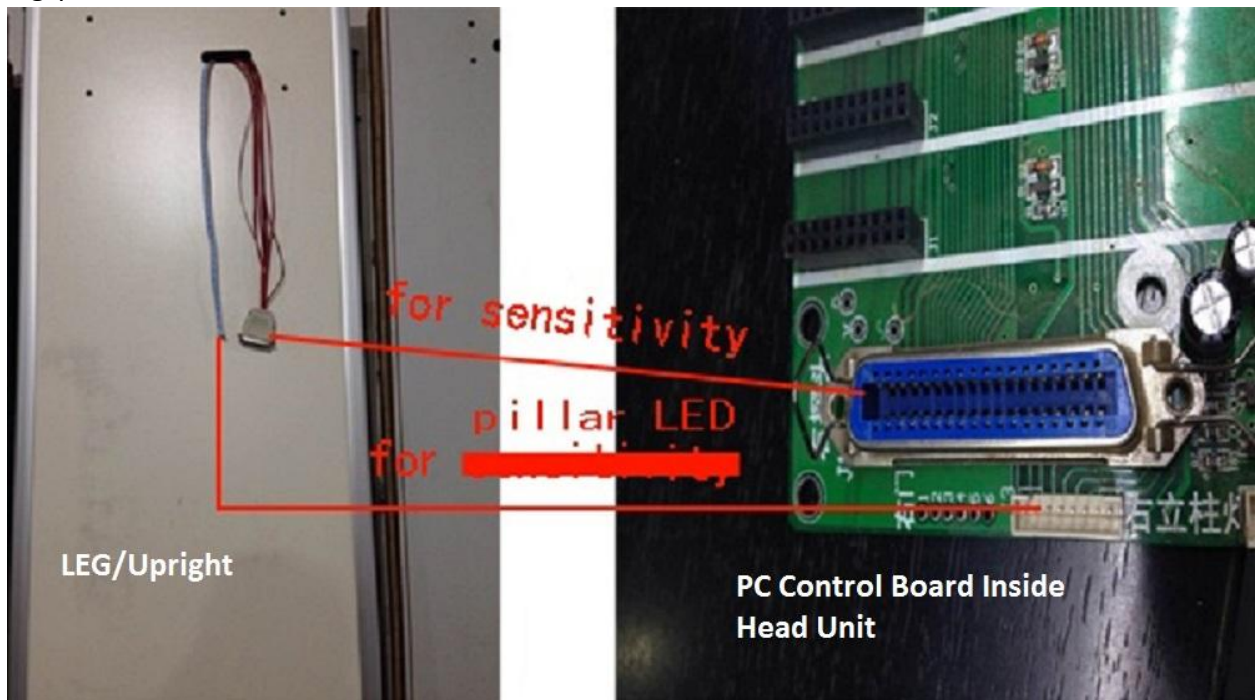


2. Take the 8 bolts and nuts in the bag and make sure that they are pushed through each screw hole on the probes and then through the holes in the main board.
3. Using the keys provided with your detector, open the main board using the key hole slot to access the main board.
4. Once you have the 8 bolts securely in place with the probes and main board, take the 8 nuts and tighten securely with the included Allan Wrench (you may need a wrench to hold nut in place when tightening).



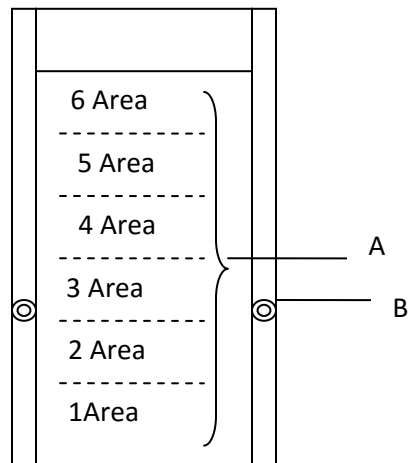
3. Each leg has 2 sets of plugs, an 8 pin ribbon connector and a computer style SCSI connector which has several Black and Red wires attached. These 2 plugs connect directly to the control board inside the head unit in to the corresponding port, see the image below. The Connectors and the Ports are keyed by shape, so they will only go in one way. Carefully lock them into place. This is the Power and communication supply from the CPU to each of the probes/legs. Take care, but be sure to insert fully. (If not inserted properly the LED's will not work). Finally, Plug the DC connector inside the main board to the corresponding leg/probe where the AC plug is attached from outside the

leg/probe.



6. Shut the main board door and lock the main board with the key to prevent opening while transporting.
7. Please have 2 people lift the detector vertically so it is secure and standing upright on the bottom feet. Move the detector to where you will want to have it
8. Connect the included AC plug to the power socket on the outside probe where the AC plug was attached inside the main board (during step 5). Plug the AC plug into an electric outlet. Turn the orange power button on. Your unit should light up and sound off one time. If it does, your unit is up and running. You can adjust sensitivity for the entire unit or for each of the individual zones (see below)

Understanding the Zones



A: Alarm Zone locations – there are 6 unique and precise zones that will monitor and attempt to detect for metal each time somebody walks through. Each zone can be individually programmed for a specific sensitivity. Each individual zone will light up when metal is detected and a beep will sound to alert security as to where the metal is located.

B: Infrared sensor – records each person that passes by

Understanding the Panel



Passer Number: Will count the number of people that pass through the detector

Warning Times: Will count the number of times the detector found metal

Signal Strong or Weak Indicator: The signal strength of the board. (For best results, have the unit in a location where the signal strength is at zero dots or 1). Many times, the board will detect surrounding metal (door frames, HVAC vents, banisters or metal doors). Please keep the unit about 3 feet away from these types of items, or until the Signal indicator is empty or at 1 dot.

Reset: Push when done programming or to put in standby mode. Will reset all passer number and warning times too

Enter: Push to confirm new password, input signal digits when adjusting sensitivity

Setup: Push to change the place cursor when adjusting the password, input the 10's digits when adjusting the sensitivity, inputs the length of the alarm

Select: Push to enter the debugging procedure, change password and area when adjusting the sensitivity

Adjusting the Unit Sensitivity and Debugging

1. Please push the **RESET** button to reach the standby screen on the panel.

The passer number should read : 0000

The warning time should read: 0000

2. Next push the **SELECT** button to get to the password screen.

The warning time should read: 1234

- 1234 is the initial password, 8888 is the universal password
- 8888 can be used to bypass the password section

		1234
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3. If the password is correct:

The warning time should read: C000

If the password is incorrect:

The Warning time would read: E000

(After this section, we will explain how to change your password)

If the password is correct, push the ENTER button to get to the next step

If password is incorrect, please enter the 8888 password to bypass and change

4. This is the alarm time length adjustment. You will see the following:

The warning time should read: D00X (the X will have a number 0-3)

- The number represents the time in seconds the alarm will sound. The default is 1, but you can use the setup button to adjust.

When finished making your alarm time adjustments, please push ENTER

5. This is the alarm volume setting. You will see the following:

The warning time should read: y-00

Alarm volume setting: y-00 indicates no sound; y-01 represents bass; y-02 represents the treble, press the [adjust] buttons to adjust the value, press the [ENTER] button to enter the sensitivity setting



6. Setting sensitivity of the zones. Such as change the first zone sensitivity from 85 to 90, press [adjust] button can change the value.



7. Press [SELECT] button to enter the next zone sensitivity settings, such as change the sensitivity of the second zone from 80 to 90, press [adjust] can change do it. And using the same method to adjust the remaining 3 to 6 zone sensitivity.

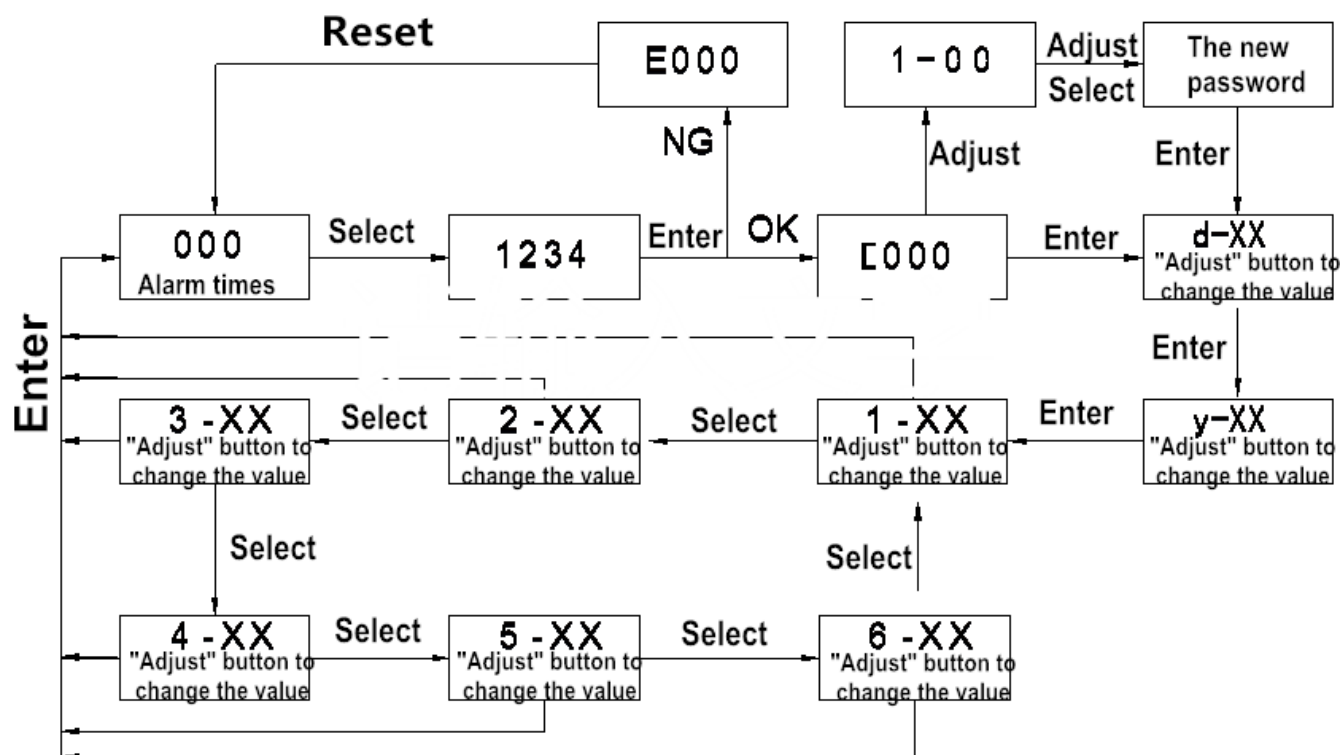


8. Set up the sensitivity of all zones, and then press the [ENTER] button, you can save the previous settings and return to the detection state (shown by the number of alarm times).

The diagram shows a rectangular box representing the detection state. Inside the box is a horizontal rectangle divided into three sections. The first two sections are empty, and the third section contains the text '0000 000', indicating the number of alarm times.

A visual flowchart to help guide with instructions above

[Procedure]



The best way to determine what sensitivity setting would work best for you, is to start on the lowest sensitivity setting – 01 and find an article of metal that you wish to pick up. Walk through with the object and increase gradually until the detector picks up the metal. Start with a smaller piece of metal you wish to detect and work from there. If set for smaller traces of metal, the unit will alarm for larger pieces too. (The unit is defaulted at a 65 sensitivity)

Examples of minimum sensitivities settings and what will set unit off:

99 – Paper clip, 90 – Coin cell batteries, 80 – Ring, Zippers, Buttons

75 – Box cutter, 65 – Cell Phone, 60 – Belt Buckles, Set of Keys, 45 - Gun

How to change your password

You may want to change your password from the standard 1234 or may find yourself with an error code of E000 when debugging. No worries, the instructions below will show you how to change the password

Changing without E000 code –

The unit comes with the standard 1234 as a password. During the debugging process, that will popup automatically, but if you like to change hit the enter button.

You will notice that the warning times will read: 0000. This means that the password was correct. To change this password, use the SELECT button to adjust the number for each of the places, and use the SETUP button to switch each place. Say if you want your password to be 4765 – use the select button until you reached 4, and the setup button will switch to the next position. Use the select button until you reached 7 and continue the process

When you have the password you want, hit the ENTER button until it cycles through past the zone sensitivities. When this is done, the control panel will reset and that would be the new password that must be entered from now on

Changing with the E000 code –

When you get the E000 code when debugging, that means that you entered in the wrong password. To bypass this code and change the password, use the SELECT button to adjust the number for each of the places, and use the SETUP button to switch each place so that you have 8888. When finished press ENTER

8888 is the bypass password that will allow you to change the password to whatever you wish. Once you insert 8888 into the password and press ENTER, and the warning times will read: 0000. To change this password, use the SELECT button to adjust the number for each of the places, and use the SETUP button to switch each place. Say if you want your password to be 4765 – use

the select button until you reached 4, and the setup button will switch to the next position. Use the select button until you reached 7, and continue the process

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