

# Metal Defender FAQ's:

## ***What is does the signal strength indicator mean?***

This is how the unit detects metal. This indicates the density and presence of metal. Sometimes if there are any overhead pipes, hvac vents, metal doors, metal cabinets or florescent light fixtures this may trigger this indicator to light up. Ideally you would want to keep 2-3 feet from these items and find a location where this indicator is not light up continuously.

## ***What if I cannot put in a location where the signal strength indicator will not go off?***

If you cannot find a fitting location where the signal strength indicator will not turn off, that is ok, it will just make the unit less sensitive. It will still pick up metal from passer bys, but the sensitivity levels will have to be adjusted higher. A good indication is to adjust your sensitivity 2 points higher for every LED that remains lighted on the signal strength indicator. If your desired sensitivity setting is 70, and if your units signal strength indicator continuously has 2 LED's lit at all times, adjust your sensitivity to 74 to accommodate for the surrounding metal around the unit. Sometimes, even moving the unit a few inches or even 90 degrees can help decrease the LED indicator.

## ***What is the right sensitivity setting for me?***

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 70 sensitivity). We also can preprogram the walk through units to fit a specific profile that you are needing. This is done at time of purchase and does not cost anything.

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

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

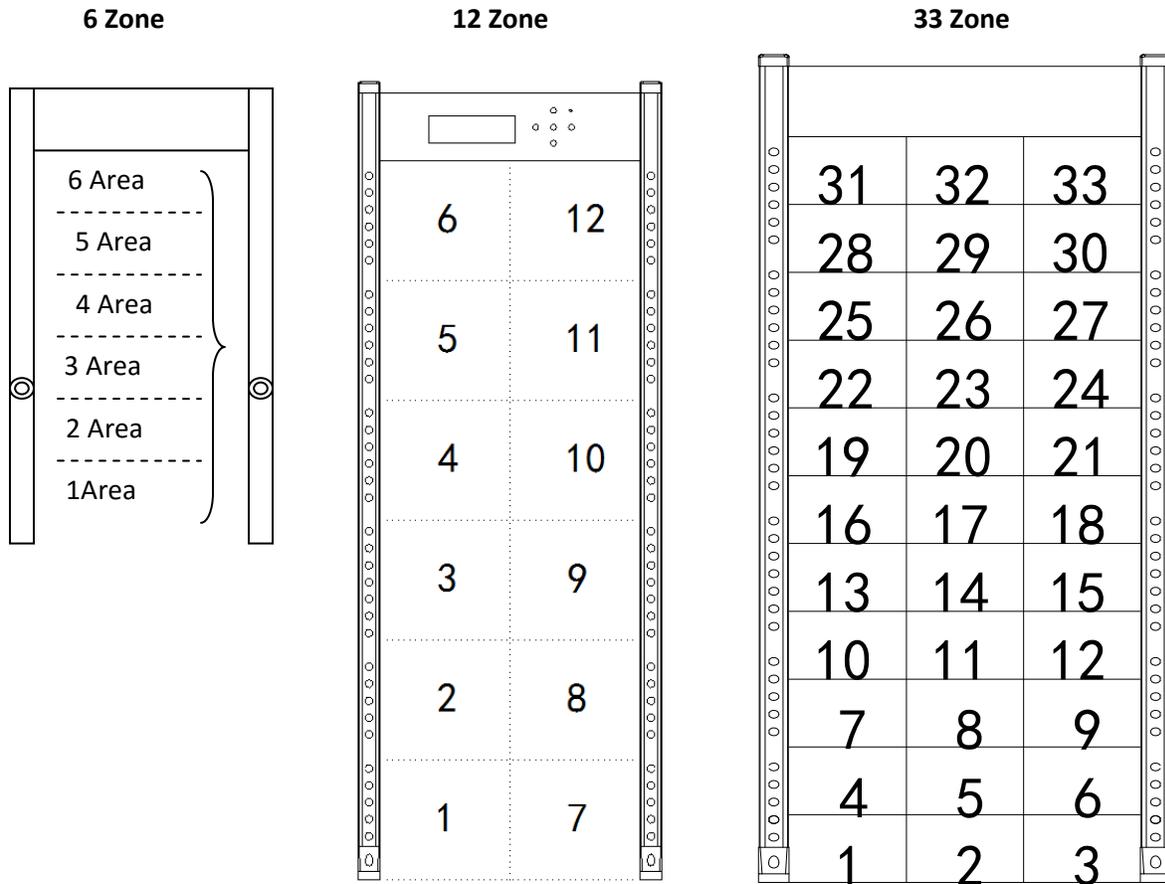
**75 – Box cutter, 70 – Gun / Knife, 65 – Cell Phone, 60 – Belt Buckles, Set of Keys**

***I set up my unit, but it will not sound when I walk through with metal?***

Always remember that the control panel with the buttons and LED should always be facing away from the people walking through. Continue with the flowchart and make sure that your alarm time length is not set at y-00. If set at y-00, the unit is on mute mode and will not give an audio alarm when metal is detected. Secondly, please make sure that the internal AC plug is plugged into the panel where the internal power source is plugged in. Also, please make sure that the correct serial ports inside the head unit are securely fastened in the proper locations.

***Where does each of the 6 zones start?***

The zones range about every 12 inches, starting from the bottom of the unit to the top. Zone 1 starts at the bottom and goes up about 12 inches, zone 2 starts 12 inches to 24 inches from the bottom, zone 3 is 25 inches to 36 inches, etc...



***There seems to be a lot of alarms detections occurring, more than we want or expected. Why is this?***

Before implementing a metal detector into your security, one must have a plan as to how is this equipment going to best work for them. The best way is to consult who is going to be monitoring the unit and what is the purpose of the unit. For example, if you are looking to catch people stealing small computer IC chips in their pockets, you are going to need a high sensitivity to detect them. False alarms can be sensed if larger items like belt buckles and purses are not worn when passing through. One must have a plan as to which items are needed to be put aside before walking through. If you are not sure, or would like a product specialist to assist creating a plan, feel free to contact us at 888-30-POWER.

***Do you set up and install units?***

We are located in Chicago and can set up and install units for an additional fee. For a quote for installation and setup in areas outside of Chicago, please call 888-30-POWER for a quote.

***The passerby units are not adjusting or are continuously increasing. What should I do?***

The black circular discs on the inside of the panels are the infrared sensors. These pick up when a person walks through the unit. If the unit is not picking up the passerby's, the sensors can have fingerprints or dirt on them. With a cloth towel with rubbing alcohol or window cleaner, rub around the sensor to clean. Also, please check and make sure that the serial ports are securely fastened to the metal detector leg panels and PC board. If this connection is loose, the unit may not work.

***The unit is not detecting anyone walking through, or not detecting any metal on even the highest setting?***

Please make sure that the unit is powered up and plugged into a working AC socket. Check inside the head unit to see that the power supply power plug is secure to the leg panels. Please use a cloth to wipe down the black circular infrared sensors and make sure that the serial ports are fastened to the leg panels and PC board. (For 12 zone models: please hold down right arrow for 5 seconds to access the infrared sensors, make sure the sensor number is set to 01. Hit enter to complete)

***What if I cannot plug the unit directly into an AC power socket?***

If you are needing to use an extension cord, we suggest using a medium or heavy duty, grounded, 16 gauge or lower extension cord.

**How do you adjust the Frequency of the unit?**

If you have several units within a close range, you have to make sure that each unit is set to a different frequency to avoid any units setting each other off. To do this (6 zone) please hold down the “Setup” button for 3-5 seconds. You will see something like: A-XX . (The XX will represent a number) Each number would represent a corresponding frequency. Please see the chart below for a conversion for each number and the corresponding frequency:

Frequency serial	Real Frequency
49 37 25 13 1	4. 80K
50 38 26 14 2	5. 12K
39 27 15 3	5. 56K
40 28 16 4	5. 92K
41 29 17 5	6. 38K
42 30 18 6	6. 53K
43 31 19 7	6. 82K
44 32 20 8	7. 04K
45 33 21 9	7. 36K
46 34 22 10	7. 62K
47 35 23 11	7. 81K
48 36 24 12	8. 03K

As for the MD-12 and MD-33, there is a section on the menu options to adjust the frequency. The frequency is clearly identified. Please make sure that each unit is set at a different frequency and try to avoid putting units together that may be close in frequency. For example, if you have 3 units together, try putting one unit at a 4.80K freq, another at 6.38K freq and the last at 7.81K freq. The further spaced out, the less chance of interference between the units. Also, sometimes environmental objects may omit a frequency and can avoid interference. By adjusting the units to a different frequency from any environmental “noise”, this can prevent any further interference or false alarms.

**Is the Metal Defender brand metal detectors safe for pregnant woman and people with pace makers?**

Yes, all of our metal detecting products are safe for pregnant woman or patrons with pacemakers. Our units pass radiation tests performed by FCC test standard EN55022 and magnetic field susceptibility tests performed by CE standard EN55024:2010 .

**What does ADA mean?**

Metal Defender has units that pass the American Disability Act (ADA) requirements. These units would have a channel passageway that is wide enough to have a wheelchair go through.