

User Manual

Walk Through Metal Detector: ZK-D1010S

Version: 1.0

Date: Dec. 2016

Contents

Notes	1
Product Specification	2
Installation Environment	3
Performance and Features	5
Application	7
Parts	8
Installation	9
Control Panel	11
Detection Zones	12
Operation	13
Detection Adjustment	15
Brief Maintenance	17
Technical Parameters	18
Packing List	19
Warranty Card	20

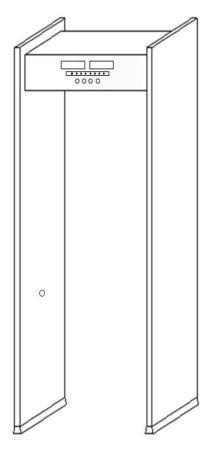
Notes

PLEASE READ THE FOLLOWING INSTRUCTION CAREFULLY BEFORE OPERATION:



- 1. It's available for indoor use, if need use outdoor, please use canopy to protect it against rain.
- 2. Choose the smooth and stable installation place, don't touch the detector during security checking to avoid false alarm.
- 3. Make sure there's no big metal object or strong magnetic field around the detector within 2 meters.
- 4. Detector probe mustn't install in high temperature or wet circumstance.
- 5. Please wait 1 minute for its self-diagnosing when machine starts.
- 6. Do not disassemble the control units except the professional technician.
- 7. Follow the user manual and make sure the right wire connection when the device starts.

Product Specification



Walk Through Metal Detector is mainly used to check the metal items hidden on the body. When the passengers pass through the device, if they carried metals more than preset parameters value, the device would immediately alarms, let the security guard find the people with the prohibited metal articles timely.

Installation Environment

1. Stationary Metallic Items

When installing walk through metal detector, it should stay away from the stationary or fixed bulk metal items 2 meters; otherwise it will affect the sensitivity, causing false alarm. Metal items such as: aluminum alloy / stainless steel doors and windows, with reinforced wall, etc.

2. Movable Metallic Items

The big metal items can be moved, should stay away from the device about 5 meters to avoid false alarm. Especially install the detector at factory gate or ground floor, need to pay attention to the effect of rolling gate, iron security doors, elevators and cars on the detector.

3. Floor Vibration

The floor should be flat and fixed, to avoid false alarm after installation by the movement of people walking or moving and shaking of metal objects.

4. Electromagnetic Radiation And Electromagnetic Interference

Because the device uses bilateral transceiver technology, therefore, any electromagnetic interference sources and electromagnetic radiation

source is not allowed to close the device, the recommended distance is 1~2 meters. The parameters of the distance are determined by the installation environment, and different installation environments with different parameters.

The electromagnetic interference sources and electromagnetic radiation sources as following:

Electrical Control Box, Radio Equipment, Interphone, Electronic
Computer And Peripheral Equipment, Video Monitor, High Power Motor,
Power Transformer, Ac Power Lines, Thyristor Control Circuit (High Power
Switching Power Supply, Inverter Welder), Engine, Motor etc.

5. Side-By-Side Using

When installing the devices side by side, the distance between two walk through metal detectors cannot be less than 50cm. Specific distance parameters according to the actual environment and the selection of the work frequency to adjust.

6. Cannot install the device in windy place

It would cause of false alarm if the device would slight swing in the wind.

Performance and Features

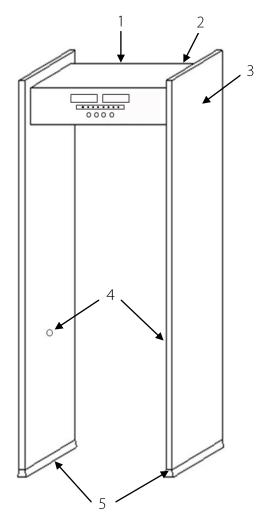
- Detection zone: integral detection, stability without blind spots.
- Micro Processor Technology: the scanning electromagnetic wave generated by the microcomputer control circuit, the scanning rate can be precisely controlled.
- Sensitivity Adjustable: detection zone has 100 sensitivity levels (0 ~ 99). Preset metal size, you can exclude the coins, keys, jewelry, belt buckle etc.
- Digital Pulse Technology: digital signal processing and filtering system, has excellent anti-interference ability.
- Password Protection: only the correct password can change the sensitivity and other parameters. Password with four digital, can be set by the user.
- Count Statistics: pass count and alarm count.
- Harmless to human body: harmless to heart pacemaker, pregnant women, magnetic floppy disk, recording tapes etc.
- Power Supply Security: the power supply on the top of the control box, waterproof.
- Waterproof Foot Cover: not only can fixed the device, but also waterproof.

- Waterproof: using PVC synthetic material, special technology, waterproof, fireproof, shockproof.
- **Easy to install:** the system is integrated design, just 5 minutes to complete the installation or disassemble.

Application

- 1. Cybercafe, entertainment, bars, KTV and other places for.
- 2. Security inspection of prohibited metal items in court, public security, prison and detention center.
- 3. Entrance inspection for important places, exhibition hall, exhibition, business event, celebration, stadium and other important public places.
- 4. Important industrial and mining enterprises such as hardware, electronics, jewelry, mint to prevent the loss of precious metal goods.
- 5. Nightclubs, theaters, dance hall, hotel and other entertainments where to prevent carrying dangerous metal objects.
- 6. Store, postal, hospitals, public buildings, schools, private houses and other places to prevent carrying dangerous metals.

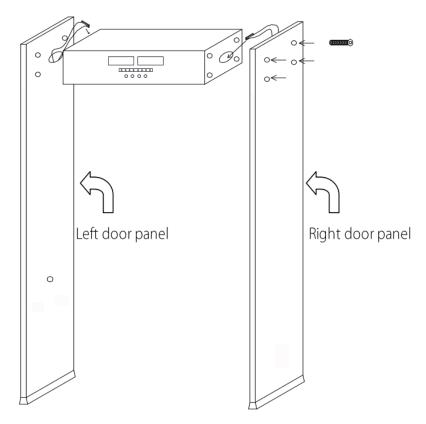
Parts



- 1. Control Unit Case
- 3. Built-in Probe
- 5. Waterproof Foot Cover

- 2. Power Line Interface
- 4. Infrared Sensors

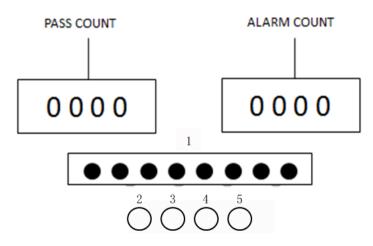
Installation



- 1. Remove the package of control unit and door panel.
- 2. Put the control unit case and door panels as above picture shown, and then connect the left and right door panel with the control unit case by bolts and nuts. Tightening screws.
- 3. Probe line of the left and right door panel tight inserted into the motherboard corresponding socket respectively.

- 4. Install the screws on the control unit case cover.
- 5. Lift the walk through metal detector to the vertical position and move to the assigned position.
- 6. Plug power cable.

Control Panel



- 1. Signal interference indicator:Indicating the current environment Interference.
- 2. **ENTER:** confirm the data after adjusting, and change the single digit when setting the zone sensitivity level.
- 3. **SETUP**: Switch to various data, and change the tens digit when setting the zone sensitivity level. If press "SETUP" for 3 seconds, you can adjust the frequency. From frequency 1 to frequency 12 is optional.
- 4. **SELECT:** choose each program and increase the numerical value when input password.
- 5. **RESET:** reset PASS CNT and ALARM CNT. After adjusted the zone sensitivity, press RESET to confirm directly

Detection Zones

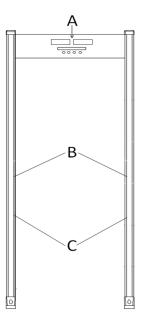
A. LED counter: Indicate pass count and alarm count

B. Alarm display

f the metal reaches or exceeds preset value, the buzzer alarm.

C. Infrared sensor

After connected power supply, the metal detector starts to work. When there is no person or object passes the device, the infrared sensors can effectively stop alarming to avoid false alarm. And accurate count passengers and alarm times.



Operation

- 1. Press "SELECT", panel displays "1234". This is the initial password, if you have changed the password, please enter a password.
- 2. Then press "ENTER", if it shows "0000" (If displayed "0000", it means input the correct password, you can enter the next debugging program; if shown "E000", means input the wrong password, need to input the correct password again).
- 3. Once again press "ENTER", it displays "d-01", (meaning: the alarm delay time is 1 second. 1-3 seconds for option).
- 4. Press "SELECT", it shows "1 ☐ XX" ("1" on behalf of the zone, "XX" means the sensitivity value). You can press "SETUP" to change the tens digit and press "ENTER" to change the single digit. XX numerical is bigger, the sensitivity is higher.
- 5. After adjusted the sensitivity, press "SELECT", it displays "d-01". You can press "SETUP" to change the alarm delay time. Default is one second.
- 6. After adjusted alarm delay time, press "ENTER". Then all the debugging programs have been completed. The device can work normally.
- 7. The device can automatically count the number of passengers and

alarm times. Memory is 9999, press "RESET" to recount.

Password input:

- 1. Press "SELECT", panel displays "1234".
- 2. Press "SETUP", panel displays "1-34". "-" is for adjustable digit.

 Continue press "SETUP" to shift "-".
- 3. Press "SELECT" can increase the number of "-".
- 4. After input the correct password, press "ENTER", it shows "0000". If shown "E000", means input the wrong password, need to input the correct password again.
- 5. Press "ENTER" again, it displays "d-01". Then press "SELECT" to enter the next step.

Change password:

- 1. Press "SELECT", panel displays "1234". if you have changed the password, please enter a password.
- 2. If you have forgot the password, you can press "SETUP" and "SELECT" to change ""E000" into "8888", then press "ENTER". Panel displays "0000", press "SELECT' to input the number, then press "SETUP" to shift the digit.
- 3. After input the password you set, press "ENTER", displays "d-01", press "ENTER" again, the password change is completed.

Detection Adjustment

- The device must be in a stable status to achieve the best detection. 1. effect (refer to the "Installation Environment"), to check whether the device in a stable status, the steps as follows:
 - The device is not shaking after power ON for 1 minute.
 - b. The device would not alarm when the tester did not carry any metal items walk through the detector.
- Excluding small portable metal objects such as rings, key, belt 2. buckle, shoes and so on, according to the following steps to adjust:
 - a. Choose a small metal as the sample, such as keys.
 - b. Increasing the sensitivity, so that when the tester carry the sample and pass through the device, the detector would alarms.
 - c. Decreasing the sensitivity a little, carry the sample pass through the device again, if it still alarms, once again to reduce the sensitivity, until the device not alarm when the sample passed through.

Note: After finished the above adjustment, the metal which smaller than the sample will not alarm, but the metal objects bigger than the sample can be detected accurately.

3. Traffic regulations:

- a. Draw a waiting line for 50cm away from the device, so that the passengers can line up and pass one by one.
- b. Before the passengers walk through the device, they should remove all the carried metal objects (such as keys, mobile phone, watch, coins, etc.), place on the side of security chute or a table, and pick it up after security checking.
- c. Passengers should line up one by one to pass the device, do not crowd, walk through with normal speed, cannot intentionally rush or postponed, and do not crash the door panel.
- d. If the devices alarms when someone pass through, that means there are some metal objects were hidden in his body. The security guard can use a hand-held metal detector accurately detect the hidden position.

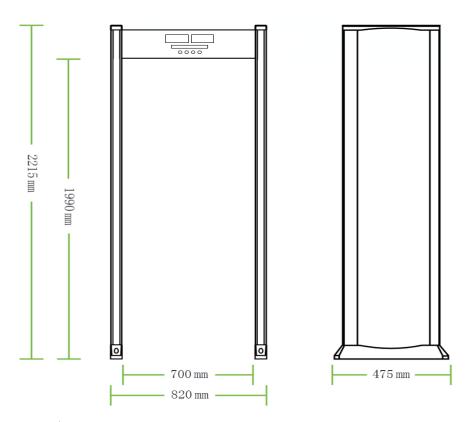
Brief Maintenance

- 1. Infrared sensor cannot count:
 - a. Check the probe cables were well connected with the door panels.
 - b. Check whether there are some infrared interferences beside the device, such as: infrared surveillance system, infrared remote control (when press button), outdoor sunlight, etc.
 - c. If both a and b are OK, please replace the Infrared sensor.

2. False alarm

- a. After installation, if the device gives false alarms frequently, firstly, check the installation environment. Make sure there is no movable or stationary large metal objects around in 1.5 meters. if any, try to make the device away from the large metal objects. In addition, make sure the installation location no wind cause shaking.
- b. If the false alarm not caused by the environment, please reduce the sensitivity.
- c. Change the frequency
- d. Change the installation location

Technical Parameters



Input voltage: 100-240V, 50/60Hz Power: 12W

Gross weight: 55KG

Working temperature: -20°C ~ 50°C

Sensitivity: 100 steps adjustable

Alarm: Sound alarm

Inner Dimensions: 1990mm (High) x 700mm (Wide) x 400mm (Deep)

External Dimensions: 2215mm (High) x 820mm (Wide) x 475mm (Deep)

Packing List

Package should contain the following items:

(1) L side panel 1set

(2) R side panel 1set

(3) Control Unit 1pc

(4) User manual 1pc

(5) Power cord 1pc

(6) Threaded bolt 8pcs

Warranty Card

- Please keep this card with reasonableness, and show it when maintaining it.
- 2. This card will be invalid if without the signature or stamp of the designated dealer.
- 3. This card will be regarded as invalid if it has not been filled in details three guarantees and acknowledgment of receipt. Please confirm whether the data filled in the three guarantees and acknowledgement of receipt is correct or not when purchasing it, and then hand it over to the dealer.
- 4. This card will not be supplied again if losing it.

Model Number	
ID	
Date Acquisition	
User	
Post Code	
Address	
User's Phone Number	
Fax	

Date of Maintenance	Record of Maintenance	Maintainer

ZKTeco Dongguan Industrial Park, No. 26, Pingshan 188, Tangxia, Dongguan, China

Tel: +86 769-8210991 / 8210992 / 8210993

www.zkteco.com



© Copyright 2014. ZKTeco Inc. ZKTeco Logo is a registered trademark of ZKTeco or a related company. All other product and company names mentioned are used for.