



# TS1200

## WALK-THROUGH METAL DETECTOR

USERS MANUAL

read this manual thoroughly before use

TS1200 WALK-THROUGH METAL DETECTOR is an advanced device which can detect metallic being object carried on body by the technology of electromagnetic field. If the detected metallic object exceeds a certain size, this device will give a audio alarm. This device consists of a receiving mast, a emitting mast and a control box.

### use

It can be used in airport, port, bank, hospital, jail, factory, museum, restaurant, dance hall, etc.

### SPECIFICATIONS

Working temperature:  $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$  ; relative humidity:  $< 90\%$

Water-proof degree: IP40

Power supply: 100V  $\sim$  240V ( 50Hz or 60Hz)

Power consumption: 5W

Alarm mode: Red LED and adjustable audible alarm

Path size: Width-0.7m, Height-2m, Length-0.6m

### FEATURE

1. Easy to carry and install.

TS-1200 walk-through metal detector was designed in modularization.

According to the manual, user can install and disassemble it quickly.

2. Modularization design greatly reduce the possibility of malfunction.

Because of easy disassembly, it is easier for the TS-1200 walk-through metal detector to be repaired.

3. Its detecting circuit can work continuously, so any person can't shun being detected. Its switch and plugs are built-in, so it can avoid disturbance and can work continuously.

4. It can detect all kinds of metal, including stainless steel, iron, manganese, alloy zinc, etc.

5. It uses wide rang of voltage as power supply: 100V  $\sim$  240V.

6. Low magnetic field design reduces the possibility of false alarm caused by nearby moving metallic object which is in ambient.
7. User can adjust sensitivity continuously to get desired sensitivity.
8. Composite circuit design. It uses infrared and has strong immunity against disturbance.
9. Using infrared, it has the function of counting.

function board



figure 1

Knob "S-Y ADJUSTMENT" can be adjusted for desired sensitivity.

control box



figure 2

receiving mast

emitting mast

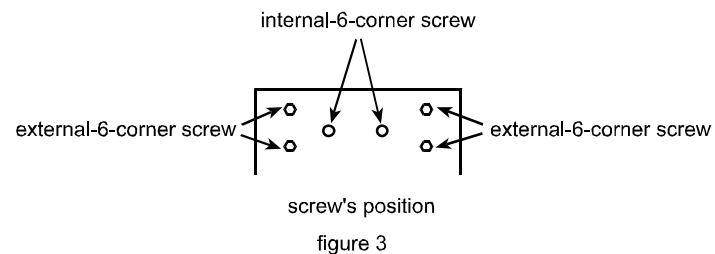


figure 3

## HOW TO INSTALL THIS UNIT

1. Clean the ground where you want to install the unit, then place a carpet or pasteboard or any other material which is soft and plain on the ground to avoid damage to the unit during installation.
2. The ground where you want to install this unit should be plain. To avoid disturbance, make sure that there are no biggish metallic object and high-power cable nearby.
3. Referring to figure 4 and figure 5, place the control box and the two masts in correct positions. Make sure that "a" closes to "a", "b" closes to "b", "c" closes to "c", "d" closes to "d".

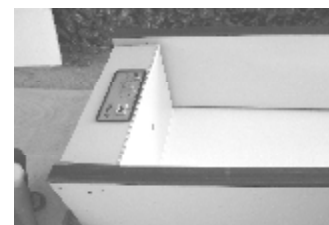


figure 4

figure 5



4. Use eight external-6-corner screws of M8 X120 to link the control box and the two masts together loosely. Don't fasten these screws. See figure 3, 6, 7, 8.

figure 6



figure 7

external-6-corner screw

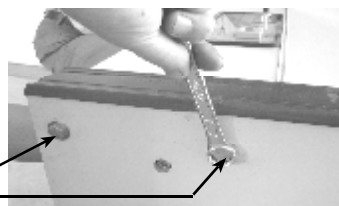
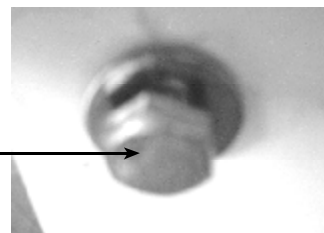


figure 8

external-6-corner screw



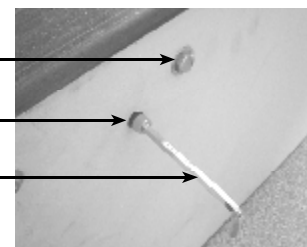
5. Use four internal-6-corner screws of M8 X75 to join the control box and the two masts together tightly. Make sure that these four screws are fastened fully. It is very important for this metal-detector to function correctly. See figure 3, 9.

external-6-corner screw

internal-6-corner screw

L-shape screwdriver

figure 9



6. Fasten the eight external-6-corner screws mentioned in step 4. See figure 10,11.

figure10

external-6-corner screw

internal-6-corner screw

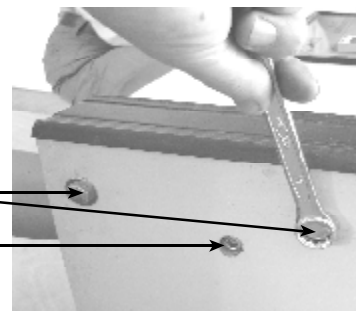
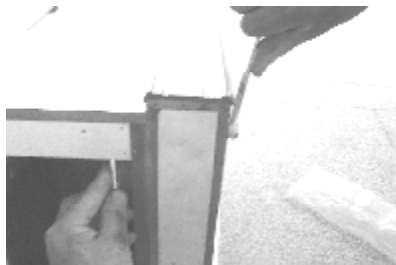


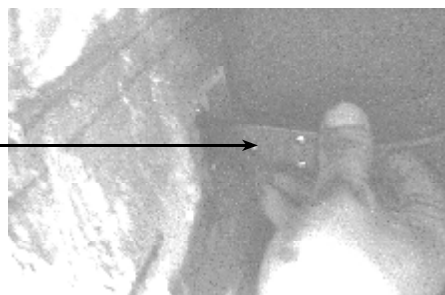
figure 11



7. Seek the three-hole-plug in the control box, then connect this plug to the near socket on the enclosure of the control box. See figure 12.

figure 12

three-hole-plug



8. Make the metal-detector stand up. Place the dust-proof cover on the control box. Fix this cover with four screws of ST4X20. Connect the power cable to the socket. Turn on the power switch. Wait 3 minutes, then you can adjust the knob "S-Y ADJUSTMENT" for desired sensitivity, and then try to use this metal-detector. See figure 13.

power switch

power cable

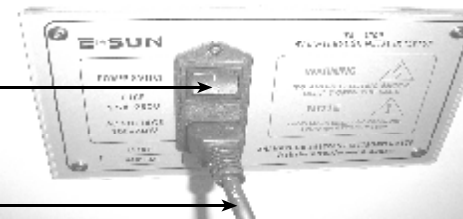


figure 13

9. After this unit passes the your check, turn off the power switch, move this unit to the right place where it will be used. Use the foot-screws to fix the unit to avoid any movement. See figure 14.

foot-screw

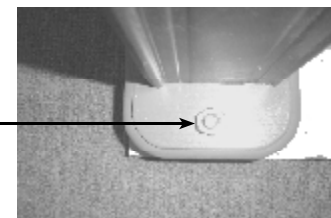


figure 14

10. If the unit fails when you try to use it, recheck "HOW TO INSTALL THIS UNIT".

## HOW TO ADJUST

1. Turn on the power switch, the power lamp on the function board will light, meanwhile, the unit changes to the state of auto adjustment. 5 minutes later, the unit changes to working state.
2. Adjust the knob "S-Y ADJUSTMENT" for the desired sensitivity. When you turn this knob clockwise, the sensitivity will increase. When you turn this knob anticlockwise, the sensitivity will decrease. User can carry a metallic ball or other metallic object and walk through this unit to test the sensitivity, and adjust the knob "S-Y ADJUSTMENT" for the desired sensitivity.
3. When the sensitivity lamp on the function board just goes off, the unit has the highest sensitivity.
4. If the sensitivity lamp keeps flashing or lighting, it shows that the sensitivity is too high. You should readjust the sensitivity. If the sensitivity lamp keeps flashing when the unit has the lowest sensitivity, it shows that maybe there is a strong electromagnetic disturbance-source nearby, you should find the disturbance-source and exclude it. If there is no any disturbance source nearby, it means the unit may not be installed correctly, check the "HOW TO INSTALL THIS UNIT".
5. When you use the unit, to avoid disturbance to the sensitivity, make sure there is no moving metallic object and person nearby except the person to be tested.
6. To get the desired volume of alarm, just turn the volume-knob on the function board.

## HOW TO USE

1. At first, you should ask the person to be detected to remove the metallic objects from himself (herself), then walk through the detector at the normal walking speed.
2. If the unit gives alarm, it means the person carries metallic object. You

can use a hand-held metal detector to locate the position of the metallic object.

3. When people walk through the door, the interval between every two persons must exceed 3 seconds. Because it takes 3 seconds for the alarm to disappear. Only after the previous person is more than one meter away from the metal-detector, can the next one walk through the metal-detector.
4. There is a infrared sensor on the bottom of the control box, it can be used to count the number of the passed persons. You can read the number on the function board. To restore the reading to zero, just press the button of RESET.

## MAINTENANCE

1. This unit is designed to be indoor use.  
Avoid dust, moisture, water and direct sunshine.
2. After you finish using this unit, turn off the power switch. Clean it with a soft cloth.

## SPECIFICATION

The highest sensitivity:  $\phi$  30mm metallic ball

Sensitivity setting: continuous

Mode of passing : walk through walk-through metal detector

Weight: 80kg

Using condition: indoor

Size: 224cm X 85cm X 65cm

## WARNING

1. To ensure the unit's performance and safe use, the power socket for the power cable must be connected with ground line.

2. Never change the circuit to avoid damage to the unit.
3. When using this device, always adhere to this using instruction.
4. Before maintaining or servicing the device, disconnect the power to the device.
5. Only use the fuse with the specified rating.

## HOW TO REPLACE FUSE

There is a fuse carrier between the power switch and power socket.

When you want to replace blown fuse, just pull out the fuse carrier, replace the blown fuse with a new one with the same rating.

When you want to rejoin the fuse carrier, just push it lightly. If you find it is hard to be rejoined, just shake it horizontally, then you will succeed. (see figure 15 and 16)

To pull out the fuse carrier, you can use a thin-tip tool or nail.

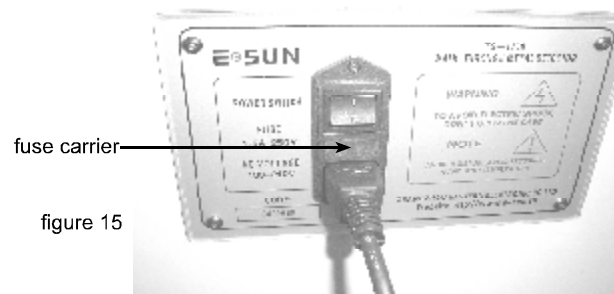


figure 15

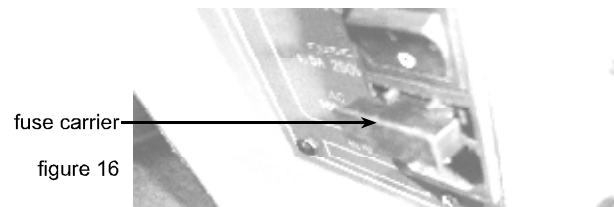


figure 16