5900MAIN-BOARD USER GUIDE

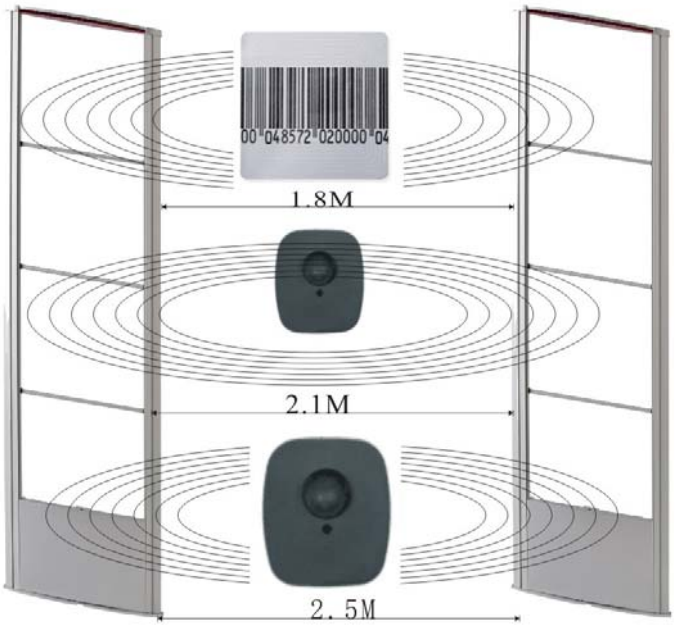
CATALOG

1 Product Overview----------2
2 Product structure----------2
2.1 5900Wire loop----------2
2.2 5900Board----------3
3 Installation Guide----------4
4 Multiple launch system online installation and debugging----------6
4.1 Series synchronous----------6
4.2 Parallel synchronous----------6
4.3Series and parallel hybrid synchronization----------7
5 Installation process and simple troubleshooting----------8
5.1 Don’t alarm----------8
5.2 Missing alarm&Low sensitivity----------8
5.3 Many online system installation process----------8
5.4 Many online system troubleshooting----------8
6 Install Tool----------8

1、Product Overview：

EAS RF system is consisted by three main parts:RF antenna sensors at the entrance/exit, RF tags/labels put on product, detacher or deactivator on the cashier's desk.Customers will pay for the goods at the cashier's desk in general, then the tags/labels will be removed or deactivated, so the antenna sensors will not alarm when customer passed it. If the tags/labels are not removed or deactivated, the antenna sensors will alarm when customers take goods out.

This RF security system detects tags/labels by digital technology. The anti-theft detection rate of the system is almost zero false positives, it also with strong anti-interference ability, wide detection range and other characteristics.And it is widely used in the retail stores, supermarkets, clothing boutiques and other places.



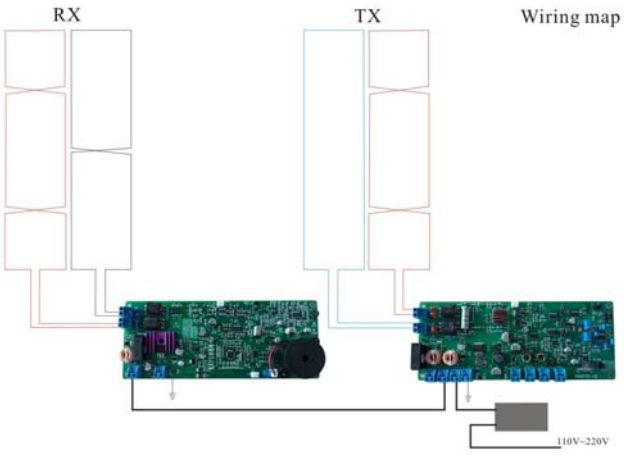
Standard environment 5900 system detection range

P.S : Different tags/labels,adjust the detection range depends on environment interference

2、Product Structure：

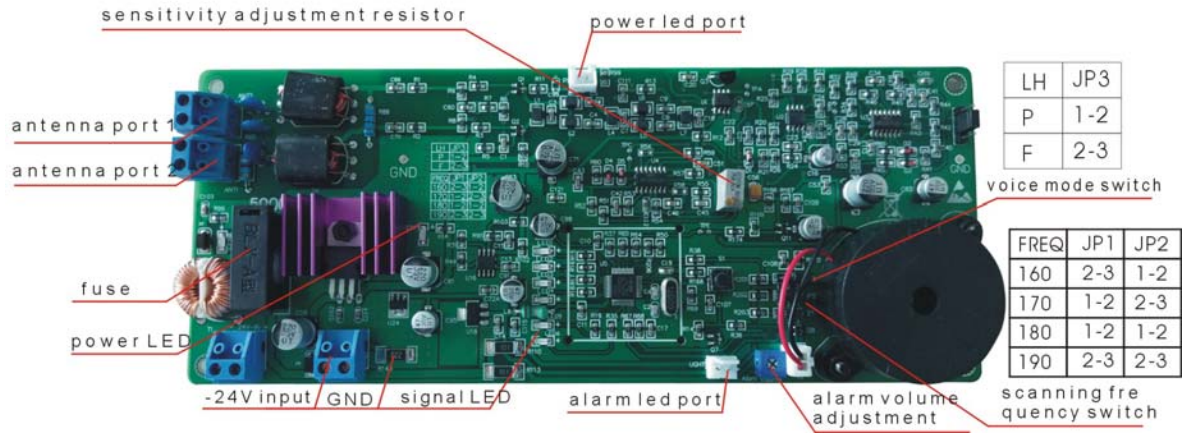
2.1、5900 wire loop

5900 series antenna,wire loop of antennas,mainly includes transmitter / receiver and power supply.

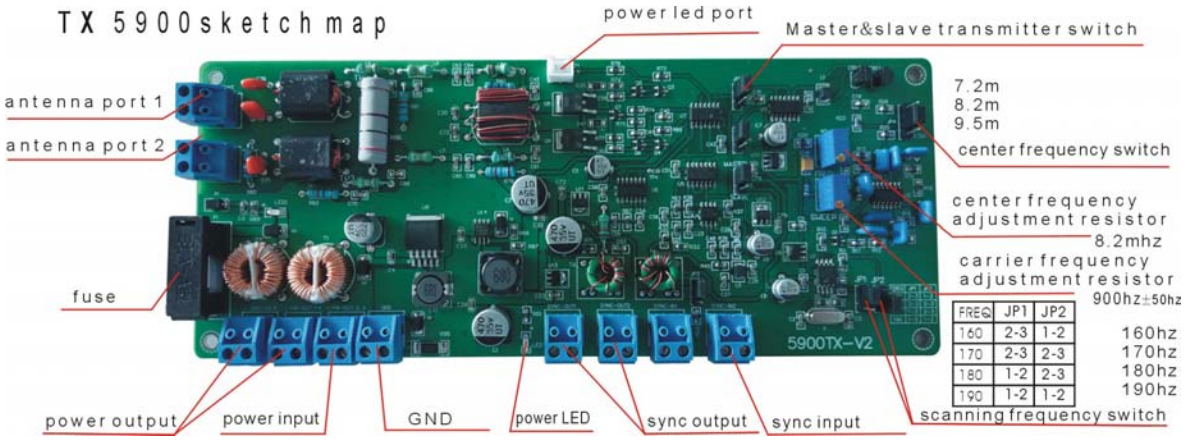


2.2、5900 board

RX 5900sketch map



TX 5900sketch map



2.2.1 Sensitivity adjustment

Clockwise to adjust（**sensitivity adjustment parts**）to increase the sensitivity，Counterclockwise to adjust to lower the sensitivity，Adjust（**Signal light**）LED 1 is shaking，the sensitivity is on the best state.

2.2.2 Alarming volume

Clockwise to adjust（**alarming adjustment parts**）alarming volume increases，Counterclockwise to adjust to lower the volume.

2.2.3 Switch voice

Switch JP3（**switch voice parts**）Set up two kinds of different pattern of alarm sound。

2.2.4 Sweep frequency switching

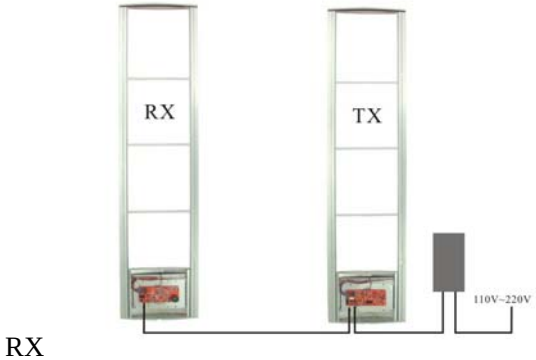
According to the main board schematic form switch, idea of transmitting and receiving must switch to the same frequency.

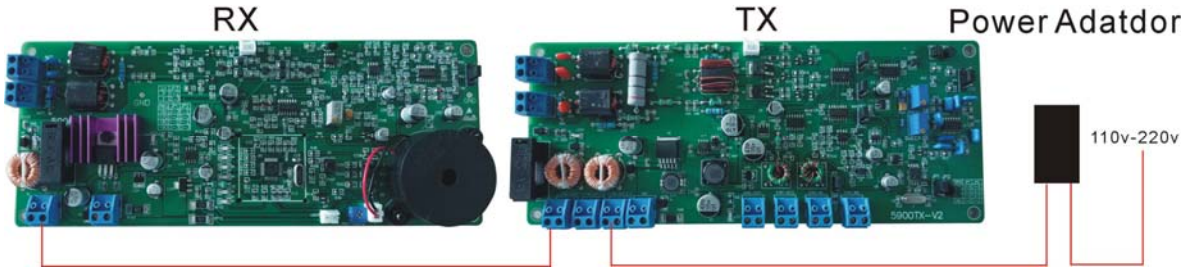
3、Installation Guide(Please read the instructions carefully before installation)

Don't fixed equipment on the floor until it had been tested well.

3.1.1 TX+RX（Single Channel）

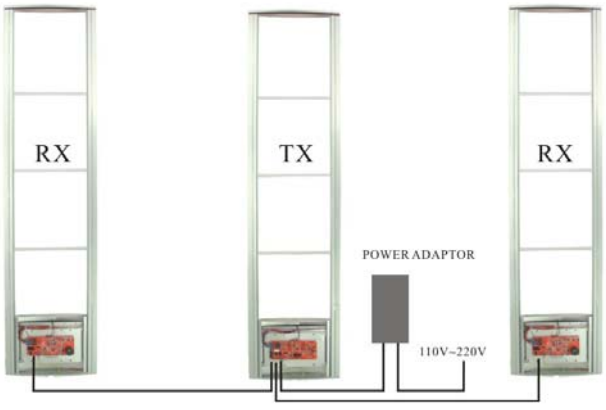
Single Channel has 1pcs Tx and 1pcs RX

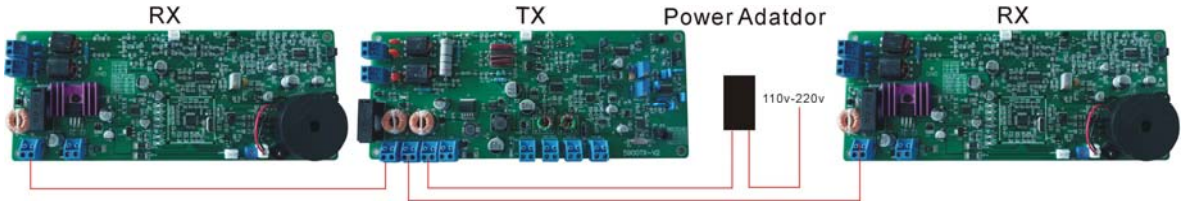




3.1.2 RX+TX+RX（Double Channel）

Double channel has 2pcs RX and 1pcs RX

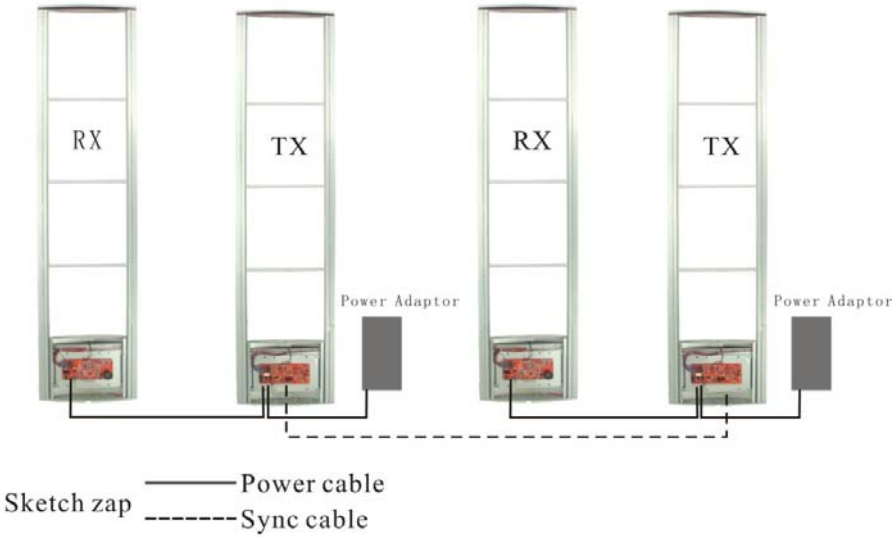


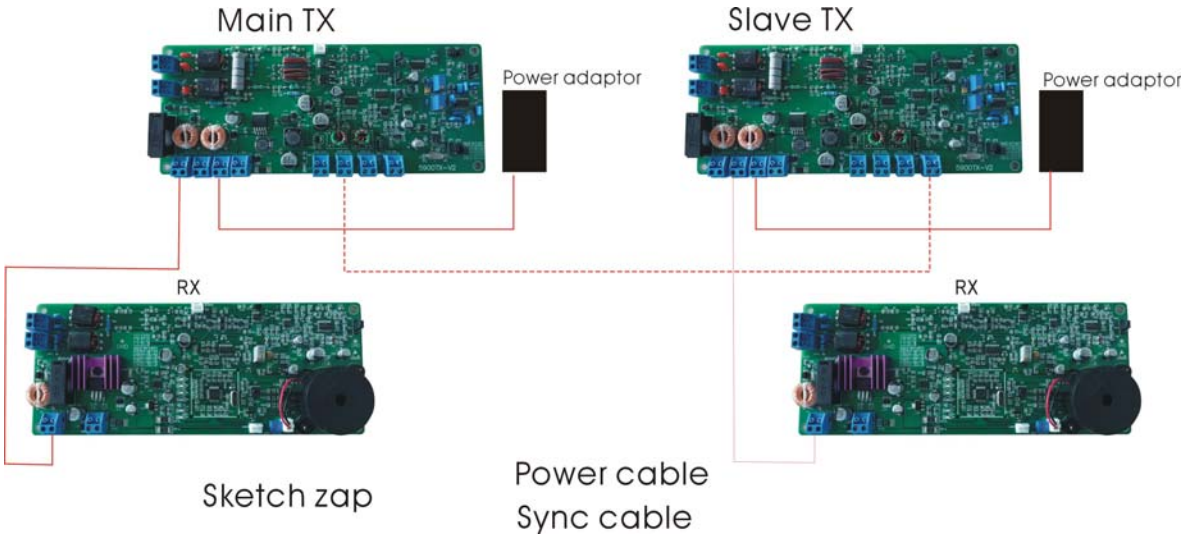


3.1.3 Above 2pcs TX system

The launch of the two above installed in the same place（Linear distance less than 10 meters）,Must

be synchronized online,Or you will signal interference, cause detection result is bad.(Synchronous line must be 0.5 * 2 75 shielded wire）

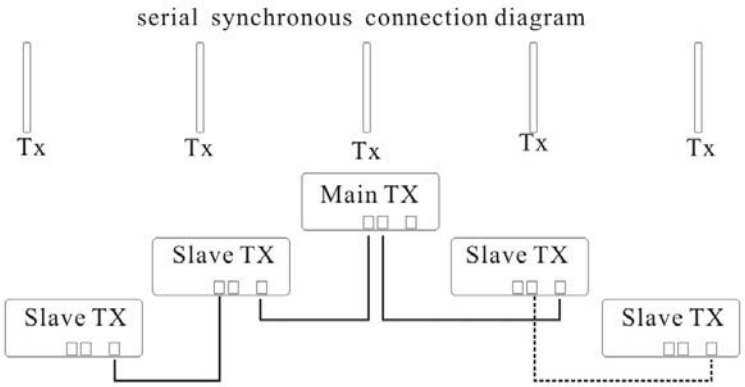




4、More than more launch system (launch online system)

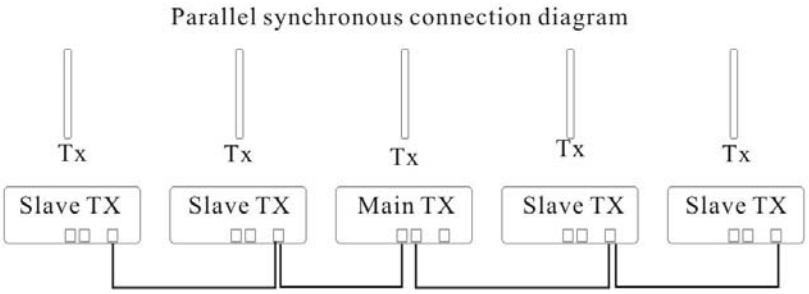
4.1Series synchronous

Series synchronously online, signals do not decay, but more than 10 pcs antennas, signal will be a delay, the main launch in the middle as far as possible, no matter how much the launch installed together, launch only one master, the others all vice.



4.2 Parallel synchronous

Parallel synchronously online, signal delay is small, but more than 10 pcs antennas, signal attenuation, the main launch in the middle as far as possible, no matter how much the launch installed together, launch only one master, the others all vice.

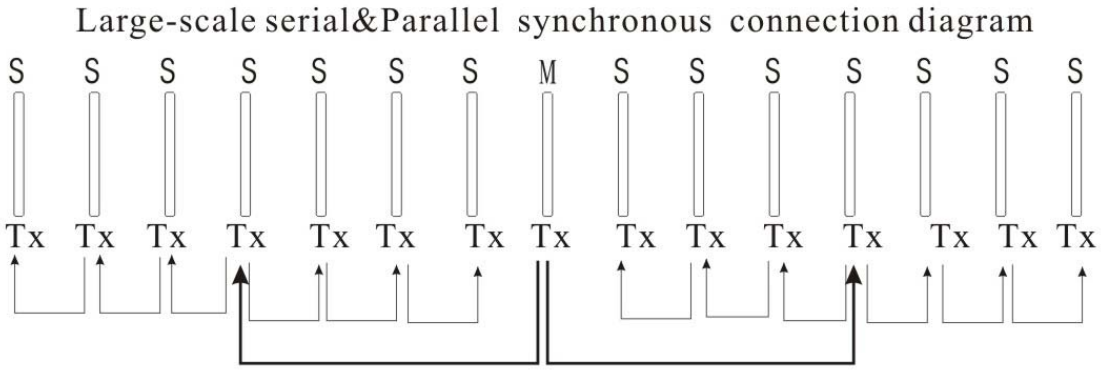


4.3 Series and parallel hybrid synchronization

Because of the signal attenuation and delay characteristics of series and parallel, in a very comprehensive system, can adopt the way of mixed online, to provide reference in the process of two way below

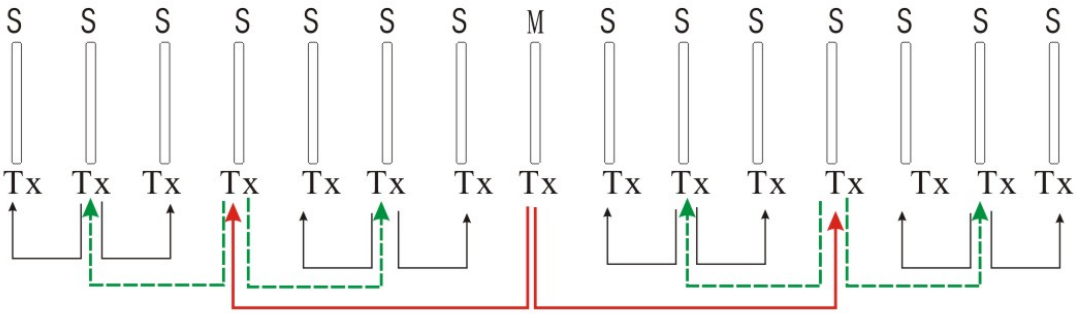
Features: reduced the class of signal transmission, shorten the signal transmission delay, attachment for signal input direction arrow direction.

Picture 1:



Picture 2:

Large-scale serial synchronous connection diagram



5、Installation process and simple troubleshooting

Make sure that the antenna had been tested well with power more than 30mins.Then install and fix it on the floor.

5.1、NOT Alarm

5.1.1、The power cord connection is correct（The power indicator light is normal light）

5.1.2、Transmit and receive the main-board connection is properly stable (unloaded reconnect)

5.1.3、Transmitting and receiving distance is too far (in close distance test)

5.1.4、Label/Tag is qualified or frequency is correct

5.1.5、Transmitting and receiving of carrier frequency are the same (check 160 hz, 170 hz, 180 hz, 190 hz jump line is correct)

5.1.6、Whether launch plate in the vice emission state (check JP5 JP6 JP7 correctly, solid)

5.1.7、Launch the main-board working is normal (EAS frequency detector check, the center frequency of 8200 KHZ, carrier frequency 180 hz, 900 hz bandwidth + 50 hz)

5.2、False alarm&Low sensitivity

5.2.1、Induction within the scope of any security label (remove)

5.2.2、In our security systems have the same equipment within a 10 m radius (take the synchronization, the transmitting antenna towards the direction of the interference sources and methods to solve the wrong frequency)

5.2.3、In the nearby presence of high-power electrical appliances (shutdown, removed)

5.2.4、Near the presence of a large area of metal (remove point distance)

5.2.5、Stores are LED light or LED billboard (closed power test, have an impact on alarm will replace the nearest part of the power adapter, must be in accordance with the CE standard) electromagnetic radiation

5.2.6、To guard against theft system power supply circuit for anti-theft tag piled up on the power line (move)

5.2.7、Near the guard against theft system there are too many cables (away)

5.2.8、Unknown disturbance (slightly adjust the installation position, shortening the distance between installation, reducing sensitivity and replace larger label)

5.3 Many online system installation process

5.3.1、prior to each single set of system testing, after passing in the online

5.3.2、on planning from middle to both sides gradually increase after the location of the installation method for on-line testing

5.3.3、after the success of the test, electricity 30 minutes to observe it is satisfied in the installation

5.3.4、refer to a single set of methods to solve

5.4 troubleshooting

5.4.1、Not alarm (synchronous signal wire connection is correct)

5.4.2、False positives

A. system in the multiple main emission (except the middle one is the main launch other vice launch)

B. signal synchronous line is qualified (0.5 * 2 copper, 75 braided shielding wire)

C. system of emission too much (reference series and parallel hybrid synchronization scheme)

D. refer to a single set of methods to solve

6、Installation tools

1、Electric hammer　2、Tile cutting machine　3、multimeter　4、the size of a flathead screwdriver　5、electrical tape　6、Wrenches　7、Glass Glue Gun　8、glass cement　9、Platooninsert　10、Hammer　11、Frequency detector