RS5005 Mono Board Installation Instructions

Contents

1. Performance and features..... 2

2. Installation steps..... 3

3. Function introduction..... 4

4. Simple troubleshooting..... 4



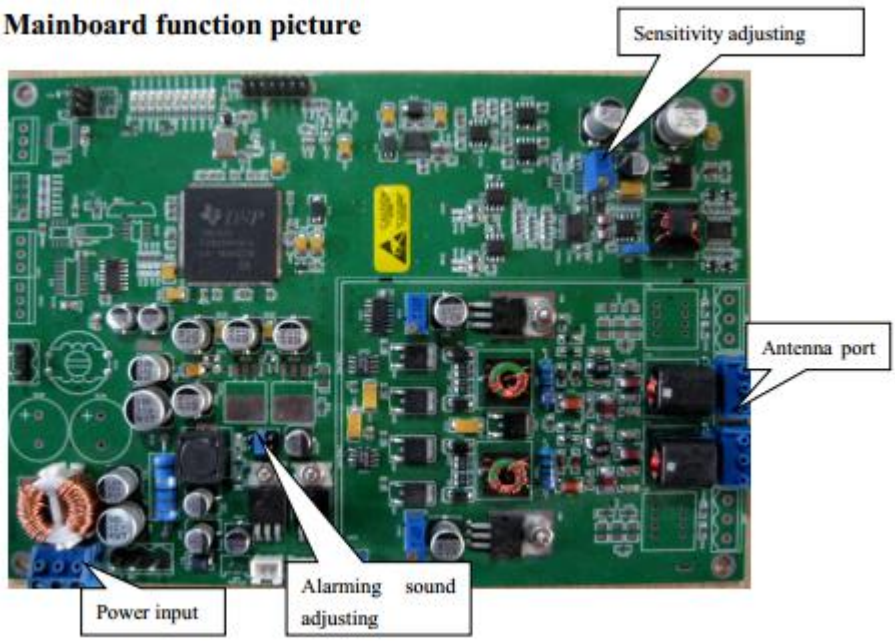
1. **Performance and features**

(1) Several antennas can work in a line at the same time without affecting each other, and synchronous connection is not needed. Due to the simple installation and operation, it's fit for independent multi-channel and super-wide installation. This mainboard does not need adjustment; generally it can work after powered. And it can automatically adjust work state according to the environment. (If antenna is moved to a new place, open the antenna again to reach good work state. If the antenna is moved to a new place, restart the antenna to reach good work state)
(2) Standard detection and maximum detection

Labels	Detection width
4*4cm soft labels	1.2m—1.6m
Large hard tag	1.4m—1.8m

Limitations：
Due to anti-jamming, the sensitivity of the antenna should be set at a lower level. But its detection distance probably will shorten by 20% ~ 30% depending on specific site.

2. Mainboard function picture



3. Installation steps

Before installation, use shall test installation location field environment.

(1) After connecting to the power, place the antenna in the location that needed. At the same time, four green indicator lights DS78-DS81 are blinking. If three of them are blinking, then you can make sure that the antenna is working all right.
(2) Check the disturbing indicator light LED1-LED10. Fewer red indicator lights glittering means the environment is better, and more red indicator lights glittering means worse environment, then you need to adjust system before installation. (Normally, no more than 5 red indicator lights glittering shows good environment.)

The adjustment methods are as follows:
(A) Change the installation position, avoid interference sources
(B) Eliminate interference sources

The sources of interference includes:
(1) Wire and large metal wall.
(2) Coiled wire, computer network line.
(3) Power distribution cabinets, high-voltage lighting and other electrical equipment

4. **Function introduction**

Sensitivity adjusting

The 2VR1 potentiometer on the board can raise or lower sensitivity. Clockwise adjusting raise the sensitivity and counterclockwise adjusting lower the sensitivity.
Adjusting principle: lower the sensitivity as much as possible before meeting the detection rate. When several antennas are installed, first adjusting each antenna well, then all the antennas can connect the power and work.

5. **Simple troubleshooting**

As usual, the antenna can work normally for a very long time; it rarely happens that working abnormally is due to the components. Generally speaking, most of the stoppage are caused by the following situations, such as improper using, bad power socket connection, large ac voltage fluctuation, disturbance and so on. It’s unwise to change the system before you find the real reason.
If the system doesn’t work properly, such as the detection sensitivity are lower, not alarm or frequent error alarm and so on, should be check up generally according to the following steps:
(1) Check the power supply first and to see
If the power indicator is glittering;
If the PCB fuse (5F1) is in good condition;
If the input power supply voltage is correct;

Power supply connection is open or short circuit;
External power adapter is functioning properly or not.
Power socket contact is firm or not.
Whether the input voltage fluctuations are too large

(2) Low sensitivity

It's rare that the lower sensitivity is caused by the components. Generally it's due to the disturbing. So when the sensitivity has been lower, remove the metal objects, electrical equipment and so on away from the antenna as far as you can.

(3) Not alarming

If it's not alarming, check if the connection cords of alarm lamp and buzzer are in good condition.

If the alarm light is on and the antenna is still not alarming, then there may be some problems with the circuits.

(4) False alarming

For RF system, the false alarming caused by some radio waves or electric switch sparks, the broadband sources interference is allowed, that is not belong to the system fault coverage.

But frequent false alarming such as continuous sound should be a serious fault. In this situation, strong interference sources should be found and removed, and check the system to find the reasons.

Note: Usually the false alarming is caused by the labels near the power supply. Be sure that there are no labels in the 1.5m region of antenna, especially to make sure there are no labels near antenna power wire.