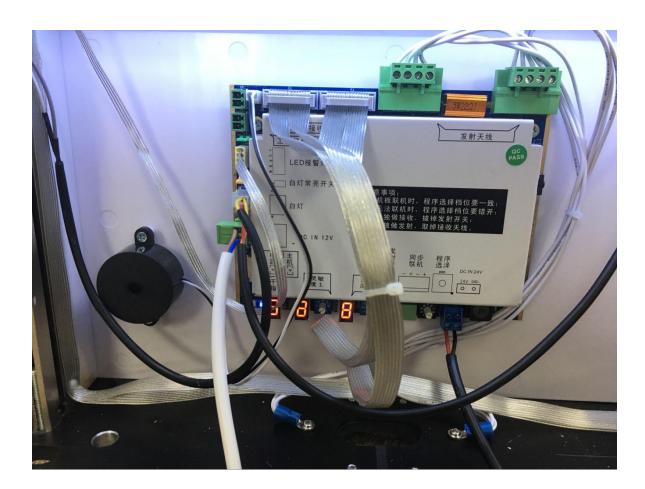
# **CG6 Blue Board Function Introduction**

# 1. Installation Instructions

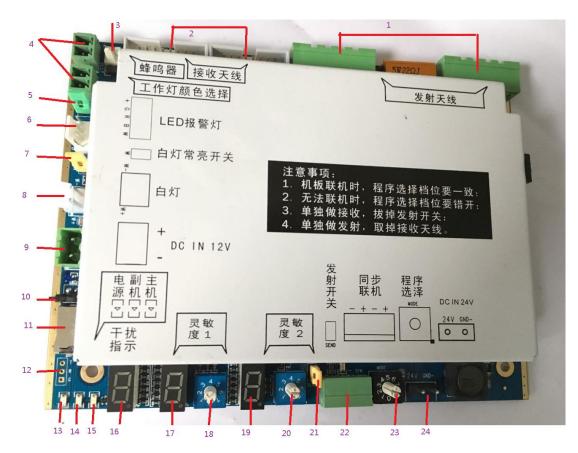
Please check the fowling picture:

Electric source input 220vAC and output 24vDC by black wire and 12vDC by white wire. All wires are electrified after insert into board



# 2. Board interface and instructions

Board interface as the following picture show



#### Board interfaces and instructions as following chart:

Number	Name	Function Description
1	Transmitting antenna	Transmitting antenna interface
2	Receiving antenna	Receiving antenna interface
3	Buzzer	Buzzer Interface
4	2pininterfaces connecting main and vice board	to connect main and vice board
5	Lights Color	G/B,G is Green, B is Blue
6	Working / Alarm Lights	Connect main board antenna LEDlight, +Power source of light, G is green, Ralarm light, Bis blue
7	White light on switch	when alarm, the alarm light sparkling and the white light will be off otherwise it's always on.
8	White Light	2pininterfaces, to connect white light of light boxby positive and negative wire
9	12V DC Electronic Source	To supply power for the lightof light box
10	Automatic Learning	When connected, the automatic learning function works or
	Function	the program starts, please check 2.5.1
11	TF Card Slot	For Program Upgrade
12	ScenePrint interface	From top to bottom TXD / RXD / GND

13	Power Light	It's red when electrified
14	Vice Board indicator light	When Vice Board working, the light is green
15	Main Board indicator light	Only one blue light on the same online wire otherwise needs to check whether the online wire is right
16	Interference instruction	Please check 2.1
17	Sensitivity1instruction	Please check 2.2
18	Sensitivity1standard	Please check 2.2
19	Sensitivity1instruction	Please check 2.2
20	Sensitivity2 standard	Please check 2.2
21	Transmit switch	Only connected, the board can transmit
22	Online wire interface and instruction	Connect as the instruction . If the interface instruct light is green which means the online is ok when the main machine is working and the vice machine isn't electrified.
23	Program choice	Please check 2.3
24	24V DC Electric source	To supply power to Board

# 3. Function Description

# 3.1. Electromagnetic wave Interference Instruction

The system recounts the Electromagnetic wave Interference into two levels which indicates respectively by 0-8 and b,c,d,e,f. The number and character will be shown on the same Digital Tube.

The greater number indicates bigger interference

The backward character indicates bigger interference

For example:

Number 0,1,2 or character b, c indicates light interference

Number 3,4,5 or character d indicates heavy interference

Number 6,7,8 or character e, f indicates heavier interference

#### 3.2. Threshold Standards and Instruction

The system judges the tag signal by 2 standards which called standard A and standard B which indicates by number 0-8 and showed on the two different digital tubes separately.

Under the normal working, it will alarm if the threshold of standard A and standard B are

over the exact threshold at the same time when the tag is close to the EAS.

### 3.2.1. Threshold Standards Setting

After the board powered on, please ensure there is no tags around and then wait 15-20minutes and watch what the number of standard A and standard B shows out and then revolve the button of the standard to the exact station and powered on again.

# 3.3. Program choice

There're 10 programs of the board which named by 0-9 which divided into 3 groups.

- 0-2 represents first program which is for the scene using hard tags
- 3-7 represents Second program
- 8-9 represents Third program

The arithmetic of every program is different which aims to deal with different environment interferences.

And every program contains different crossover frequency function which is explained in the Synchronous Online part.

#### 3.3.1. First Group Program

First group program can be installed in the great environment and the description as following:

Program Number	Program Characters
0	Deal with same frequency interference
1	Deal with same frequency interference +different frequency interference with superpower
2	Deal withdifferent frequency interference with superpower

### 3.3.2. Second Group Program

Second group program can be installed in the general environment and the description as following:

Program Number	Program Characters
3	Deal with same frequency interference
4	Deal with same frequency interference+ different frequency interference with superpower. Arithmetic 1
5	Deal with same frequency interference + different frequency interference with

	superpower,Arithmetic 2
6	Deal with same frequency interference + different frequency interference with
6	superpower,Arithmetic 3
7	Deal withdifferent frequency interference with superpower

### 3.3.3. Third Group Program

Third group program can be installed in bad environment which requires all the boards are on line and the description as following:

Program Number	Program Characters
8	Deal with same frequency interference
9	Deal withdifferentfrequency interference with superpower

# 3.4. Synchronous Online and crossover frequency

Synchronous Online which means that there is same program of the boards in one working group which connected by one wire.

crossover frequency which means the program is different between two working groups when the distance is relatively close. (More than 5m, it requires online when the distance is within 5m)

The working time order is decided by the main board in every working group

The program among same program group can be online which means the program 0-2 can be online and 3-7 can be online and 8-9 can be online. Every program includes different crossover frequency function and arithmetic which make the use more flexible and needs the user to find the skills.

#### 3.5. Other Functions

## 3.5.1. Automatic Learning

If there're much interferences around which cause the detection distance short, we can use the automatic learning function.

#### Steps:

- $\mathbf{1}_{\times}$  After the connection, switch on the automatic learning function.
- 2 \ Please put the tag in the ideal distance and keep it still, the board will learn it automatically. For example, if we want the detection distance reaches 1.2m,put the tag in the distance of 1.2m

- 3. Keep the tag in the exact distance still
- (1) If the board alarms 2 times continually, the automatic learning finished and the board switch into working mode by itself
- (2) Within 1 minute, if the board doesn't alarm for 2 times continually ,please move the tag closer to the board and wait for the board to finish the automatic learning and try as this till it's ok.

Ps:

- 1. Once the automatic learning function starts, it will not stop until it detect the signal 2 times continually, otherwise, it will go on.
- 2. Once the automatic learning function off, the board starts program mode at once and won't use the learning results.
- 3. When automatic learning function electricized before the board powered on, the board starts leaning mode and it will use the results last time

## 3.5.2. Function only as the transmitter

The board only acts as transmitter after pluckingout the receiving antenna which won't receipt signal or alarm and enhances the detection ability of the other antenna

## 3.5.3. Function only as the receiver

If the shelf is very close to the EAS, we can set the board into receiver mode by taking the transmit switch