CHAPTER 1- SUMMARY of USER'S COMMANDS

The Summary of User's Commands offers installers and users a quick and convenient way to operate control panel. All can be done under the state of disarm and so it doesn't need to entry programming statue. For detailed information, please go chapter 2 and chapter 3.

No	Function	Procedure
1	Quick arm	[ARM]
2	Arm by code	[master code] + [ARM]
3	Arm Stay zones	[STAY]
4	Arm Stay zones by code	[master code] + [STAY]
5	System disarm	[user code]+[#]
6	Duress disarm	[duress code]+[#]
7	Free from siren	[user code]+[#]
8	Bypass zone	[*]+[1] [1]+[user code] +[#]+[zone number]
9	Un-bypass zone	[*]+[1] [2]+[user code] +[#]+[zone number]
10	Utility output	[*]+[2][1]
11	Set follow-me phone No.	[*]+[2][7]+[user code] +[#]+ (1-8)+[phone No.] +[#]
12	Display trouble	[*]+[3][1] +[user code] +[#]
13	Display triggered record	[*]+[3][2] +[user code] +[#]
14	Display unready zone	[*]+[3][3] +[user code] +[#]
15	Display zone state	[*]+[3][4] +[user code] +[#]
16	Display memory	[*]+[3][5] +[user code] +[#]
17	Test keypad	[*]+[4][1] +[user code] +[#]
18	Test Stand-by battery	[*]+[4][2] +[user code] +[#]
19	Off door chime	[*]+[4][3] +[user code] +[#]
20	On door chime	[*]+[4][4] +[user code] +[#]
21	Off partition door chime	[*]+[4][5] +[user code] +[#]
22	On partition door chime	[*]+[4][6] +[user code] +[#]
23	Off buzzer	[*]+[4][7] +[user code] +[#]
24	On buzzer	[*]+[4][8] +[user code] +[#]
25	Walk test	[*]+[4][0]
26	Set/change users code	[*]+[5] +[user code] +[#]
27	Set time	[*]+[6]+[1] +[user code] +[#]
28	Set date	[*]+[6]+[2] +[user code] +[#]
29	Next Auto arm time	[*]+[6]+[3] +[user code] +[#]
30	Next Auto disarm time	[*]+[6]+[4] +[user code] +[#]
31	Auto arm	[*]+[6]+[5] +[user code] +[#]
32	Auto disarm	[*]+[6]+[6]
33	Auto stay arm	[*]+[6]+[7]
34	keypad panic alarm	[1]+[2] at least 2 seconds
35	keypad fire alarm	[4]+[5] at least 2 seconds
36	keypad special emergency	[7]+[8] at least 2 seconds
37	Escape	[ESC]

Trouble List

| LCD Display	Trouble
MAIN：LOW BATT	Battery Power low
MAIN：AC TROUBLE	AC lost
MAIN：BELL LOOP	Siren trouble
FALSE CODE P=1	Code error
KITCHEN：FIR	Fire Loop in trouble
KP=03 COMM TRBL	The bus in trouble, such as No.3 keypad is in trouble
SYSTEM CLCOK	Clock not set
PS= 1 LOW BAT	Power Module Battery low. Such as No.1 power Expansion Module is in trouble
PS=1 AC TRBL	Power Module in AC Trouble. Such as No.1 power Expansion Module is in trouble
PS=1 BELL TRBL	Power Module Siren in Trouble. Such as No.1 power Expansion Module is in trouble
PS=1 AUX TRBL	Power Module Stand-by Power is low. Such as No.1 power Expansion Module is in trouble
PHONE LINE	Phone line in trouble
FIRE DOOR：DAY	Day time zone in trouble.

CHAPTER 2 – ABOUT THE KEYPAD

RP248KCL (LCD Keypad)

The control panel RP248CN supports LCD Keypad. Each main board can work with 16 LCD Keypads at most.

The keypads display system status by its LED indicators and LCD display. Through its keys,

    1－Power LED

    2－LCD Display

    3－Arm LED
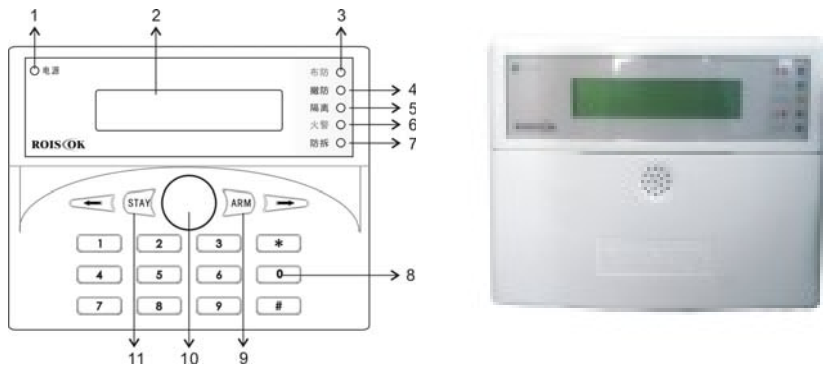
Keys and LED indicators

The Keys functions:

1. For Arming, Disarming, Panic Alarm, Programming system etc.
2. Entry user's function mode.
3. Key **[ARM]** is for quick arming and code arming. When arm by **[ARM]**, the system will be fully armed.
4. Key **[STAY]** is for quick stay arming and code stay arming. Any zone or zones can be set as interior zone(s) or external zone(s). When arming by **[STAY]**, the external zone(s) will be armed while leaves the interior zone(s) disarmed.
5. Under the disarmed status, depress [*] to entry user's function mode for setting code, clock, on/off the buzzer and so on. For detail, go to CHAPTER 1- SUMMARY of USER'S COMMANDS

can arm and disarm the system, bypass intrusion zones, report emergencies, stop the siren, stop calling follow-me number, checking the trouble, program the system etc.

Fig.1 Layout of the RP248KCL

Keys Instruction

    4－Disarm LED

    5－Bypass LED

    6－Fire LED

 7- Tamper LED

 8－Digit and Function key-press

 9－Arm key-press

10－Buzzer

11－Stay Arm key-press

1. Power LED

● On--the system AC power supply is in normal and the stand-by battery is in good condition.

● Off—no AC power supply and stand-by battery is in power lack.

● Fast flicker—system in trouble.

● Slow flicker—system is in users function.

2. LCD Display

The LCD Display on RP248KCL indicates the system status, including zones triggered, armed/disarmed system, system trouble, time and other programmed information.

Normally the LCD Display indicates partition No., clock, date and weekday as following:

    PARTITION 1

    10.18 JAN 10 THU

3. ARM LED

● On-- system is armed.

● Off-- system is disarmed or under the programming state.

● Flicker-- The system is under the delay period state.

4. READY LED

The Ready LED indicates whether the system is under ready or not, and also whether system can be armed or not.

On-- The system is ready to be armed now.

Off-- The system is not ready to be armed now.

Flicker-- The system is ready for arming, and at the same time some especial zone(s) with entry /exit delay is triggered.

5. BYPASS LED

When BYPASS LED on, one or more zone(s) has/have been bypassed or under stay statue.

6. FIRE LED

The LED flicker rapidly when lighting.

7. TEMPER LED

When the detector(s), the keypad or the Expansion Module is /are tempered or destroyed, a Tamper Code report will be sent and the LED will be lighting.

8. Digit Keys

● When programming, key in 0-9 digits.

● Under the state of users function, quick go to the menu.

9. System Arming [ARM]

When depress [ARM] key, all the zones are armed. The LED Display delay time.

Under the user functional state, the key [ARM] is used to set data. For example, when setting the clock, [ARM] can be used to choice the month, weekday and partition.

10. Keypad Buzzer

The buzzer is used for indicating the entry/exit delay, alarm, door chime and so on.

11. Stay Home Arming [STAY]

● When depress [STAY] key, the interior zones will not be armed. During stay arming, the LCD display the delay time.

● Under user function, the [STAY] key is used to set data. For example, when setting the clock, [STAY] is used to choice month, weekday and partition.

12. Function Key [*]

● Depress [*] Key into the function set ting state.

● Back t o the anterior menu or return to the normal state.

13. Confirm Key [#]

The Key [#] used for confirm and save input data.

14. Moving Key [←][→]

Key [←] is used to choice the anterior command, or moving the cursor to left.

Key [→] is used to choice the next command, or moving the cursor to right.

15. Panic Alarm Key [1]＋[2]

Depress [1]+[2] at least 2 seconds, the system will send a panic alarm message to CMS or following-me numbers.

16. Fire Alarm Key [4]＋[5]

Depress [4]+[5] at least 2 seconds, the system will send a fire alarm message to CMS or following-me numbers.

17. Special Emergency Key[7]＋[8]

Depress [7]+[8] at least 2 seconds, the system will send a special emergency message to CMS or following-me numbers.

CHAPTER 3 – SYSTEM FUNCTION AND OPERATION

3.1 Depress Keys Audible

● When depress any keys, keypad will emit a brief deep.

● After any successful operation the keypad will emit a long beep to confirm. And after error operation, the keypad will emit three brief beep warn.

● When arming, the keypad(s) will beep until the end of the exit delay time.

● When trigger an armed zone, the keypad will beep until end the entry delay time. The system must be disarmed, if not, it will be triggered.

● If zone(s) programmed as door chime function, when triggered the zone(s), keypad will emit three short beeps.

● When use keypad for panic alarm, fire alarm and special emergency, there will be a brief beep.

● When triggered alarm, keypad will emit a beep for confirming.

● It will not change the setting for siren/bell after change the buzzer setting on the keypad.

3.2 Door Chime

Each keypad can emit a continuous brief sound, called as **DOOR CHIME**. If you set the door chime function, the keypad will emit a door chime sound when the door or window is opened. Turn on/off the door chime by operation [*]+[4]+[master]+[5] or [6].

3.3 The numeric keys and character relative form

Keys													
1	A	B	C	D	E	F	G	H	I	J	K	L	M
2	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
3	!	"	&	'	:	-	?	.	/	(	)	[	]
4	a	b	c	d	e	f	g	h	i	j	k	l	m
5	n	o	p	q	r	s	t	u	v	w	x	y	z
6													
7													
8													
9													
0													

Program as the following:

1. The Key [←] and [→] are used move the cursor to the left or to the right.

2. Key in the character as the above form, such as depress [1] twice to entry the "A" and depress [2] four times to entry the "P".

3. After entry one character, move the cursor to entry other one by Key [←][→].

4. After program, depress [#] to confirm, or depress [*] to cancel.

3.4 Digit Keys and Functions Keys

The Keys can support the following functions:

1. Entry digit(s) for arming, disarming, panic alarm, programming system etc.

2. Entry user's function mode.

3. Key [ARM] is for quick arming and code Arming.

4. Key [STAY] is for quick stay arming and code stay arming. Each zone can be set as interior zone or external zone. When use **[STAY]** for arming, the external zone is armed while leaves the interior zone disarmed.

5. Under the disarmed status, depress [*] to entry user's function mode. **Reference to** CHAPTER 1- SUMMARY of USER'S COMMANDS

3.5 Modifying/ Setting and Deleting Code

The Master Code of RP248CN could be set as four or six digit code. The default master code is 1-2-3-4. Unless your alarm company has already changed it to suit your preference, it's best to modify this code to one which is unique and personalized. RP248CN can set a great deal of codes, one is master code and others are users' code. The system code can be set under the disarm state.

Functions of the Master Code:

● Change the master code

● Distribute, delete and change the system user's code.

● Access to all zones.

● Bypass zone(s).

● Operation and testing.

● Setting the follow-me numbers

● Turn on the buzzer.

● Turn off the buzzer.

- Check the system.
- Display and delete memory.
- Display troubles.
- Setting the system clock time and date.
- Setting auto arm time and auto disarm time.

Function of the Users code:
- Arm or disarm the system.
- Bypass zone(s).
- Access one or more zones.
- Check the system.

Setting the Users Codes

Through the LCD keypad to set codes, according to the following steps:

1. Depress [*][5] into access function Mode, then depress [*] to find the menu " ACCESS CODE " by [←][→], depress [#] to confirm and into the menu.
2. Key in the master code (default: 1234), then depress [#] to confirm.
3. To choice a menu by [←][→].
   a) Changing the master codes when display "00 1234 GRANG".
   b) Changing the User No.1 code when display "01 0 USER".
   c)   …
4. Key in a new code and confirm by depress [#]. Finish the change when LCD display "ACCEPTED"
5. Depress [*] to back to anterior menu Back t o the menu or
6. Depress [*] twice, the system will return to the normal state. Then the power LED is on, LCD display partition, clock, date, etc..

Modifying/Setting the master Code

step	Operation
1	In disarm state, depress[*][5] to entry into function state
2	Input 4 digit master code then depress [#] to confirm, such as [1][2][3][4][#]
3	Input new 4 digit code then depress [#] to confirm, such as [5][6][7][8][#]
4	If successful, the keypad will emit a confirming tone "Beep－". The selected User Code is now in effect.
5	Exit by depress [*][*]
6	If operate incorrectly, depress [*] to back to the step 2

Modifying/Setting User's Codes

Step	Operation
1	In disarm state, depress [*][5] to entry into function state
2	Entry Master Code: such as [5][6][7][8]
3	Modify/set user 1 code, depress[0] [1] or Modify/set user 2 code, depress[0] [2] or … The other user codes can be modify/set in the same way.
4	Entry the new user code: **For example, [3][3][5][5]**
5	If successful, the keypad will emit a confirming tone "Beep－".

Deleting User's Codes

At times, it may be desirable to completely delete a user code. Note that it is impossible to delete the master code (although it can be changed).

Step	Operation
1	In disarm state, depress [*][5] to entry into user function state
2	Entry the master code: [5][6][7][8]
3	To delete the user code 1, depress **[1]** To delete the user code 2, depress **[2]** To delete the user code 3, depress **[3]** … The other user s can be deleted in the same way.
4	Entry the **[0] [#] to** delete this User Code
5	If successful, the keypad will emit a short confirming beep.

3.6 Set date and time

Set date: [*]+[6]+[2]+[MASTER CODE]+[MM][DD][YY]

Steps	Description
1	Check the disarm LED indicator. If on, the system can be armed; if off, system can't be armed, check whether every partition is ready or there is any trouble.
2	Quick arm: ● Quick arm: depress [ARM] ● Quick stay arm: depress [STAY]
3	If operate incorrectly, the keypad will emit three short beeps, try it again please
4	When arming, the keypad will beep until the end of exit delay time. Please leave before end of exit delay. Default exit delay time is 30s.

Set time: [*]+[6]+[1]+[MASTER CODE]+[HH][MM]

Use a 24-Hour format. Hour and Minute should be two digits.

For example, if you want to entry 16:28, August 18, 2006, operate as:

  [*]+[6]+[2]+[MASTER CODE]+[AUG][18][2006]

  [*]+[6]+[1]+[MASTER CODE]+[16] [28]

3.7 Set follow-me numbers

Steps	Description
1	When entry into an armed zone, the keypad will emit beep to warn the system exit delay is begin. The default delay time is 30s.
2	**disarm** ● Before end of entry delay, please input a code and [#] to disarm, or else the system will alarm ● If code incorrectly, the keypad will emit three short beep. depress [*] and input code again.
3	Check keypad LCD display status: ● "XXXXXX DISARMED"-- no alarm when armed; ● "XXXX：ALARM/ NOV 01,07 18:15 →"-- alarmed and the alarm time.
4	Key [←][→] use to check other alarmed events

(Refer to the chapter 6, section 6.5.6 for detail operation)

When alarm, RP248CN control panel can report the alarm events (burglar alarm, fire alarm, rob alarm, emergency alarm) to one or several follow-me number(s) which has been set, and distinguish different alarm events with different sound.

RP248CN has menu function for convenient operation. In normal state, depress

[*][2][7][master code][#] can entry into setting follow-me number and modify state. Up to 8 of follow-me numbers can be set in the system. Depress [←][→] to move cursor left and right. When setting follow-me number(s), should select the partition number first and then input telephone number(s), and depress [#] to confirm.

3.8 Arm and arm sound

Quick arm

Any partition of RP248CN can be programmed or distinguished as stay partition and exterior partition.

Key **[ARM]** for quick arm all zones/partitions of the system. Please leave away from all the partitions during the delay time.

Key **[STAY]** for quick stay arm all of the exterior partitions/zones, and stay partitions/zones would not be triggered. Please leave away from all the stay partitions / zones immediately.

Arm with code

There are two ways to arm RP248CN, quick arm and code arm. Default is quick arm. If users need to code arm, please program the system as code arm function in advance. The system should be armed by [master code] + [ARM], and be partitions armed by [master code] + [STAY].

Arm sound

According to the default, after exit delay time, the system will make a sound to confirm the system has entered into arm state. Cancel arm sound, please refer to chapter 6 section 6.5.2

3.9 Disarm and disarm sound

Disarm system

RP248CN can set several groups of 4 digits or 6 digits code in advance, one of them is master code, and others for users. All of the code can disarm system.

Disarm sound

As the default, RP248CN will emit a long beep to confirm disarm successfully. Input [*]+[4]+

[7] or [8] + [master code] can turn on or off the disarm sound

3.10 Duress code disarm
When be forced, suggest user using duress code to disarm the system. Disarm system through duress code it will report a duress message to the alarm centry to for help without any siren or buzzer on.

Any disarm code (master code and users code) add 1 to the last digit is to be duress code. Such as: if the disarm code is 1234, then the duress code will to be 1235. if code is 7890, then the forced code is 7891.

3.11 Stop siren/bell and stop dialing a number
When entry, the below display on the keypad means alarmed event:
- Arm LED indicator is flickering
- LCD display ZONE XX   ALARM

In any situation, input disarm code the system will stop siren/bell   stop dialing follow-me numbers.

3.12 Bypass and un-bypass zone(s)
Check the zone status
In normal, input [*][3][4] and user/master code and depress [#] to confirm. LCD will display as follows, the character of second line means zone number, zone description and zone status:

　　ZONE STATE（0：01）

　　01）ZONE　01：G↓

For armed system: G-means zone is in good arm status, B-means zone is in bypass status;
For disarmed system: R-means zone is in ready status, B-means zone is in bypass status, N-means zone is in unready status
Key [←] [→] are used to check each zone status. Depress [*] or wait few seconds, the system will auto return to normal status.

Bypass zone(s)

In normal, input a correct user code and depress [→]. If quick bypass is allowed, depress [→] to bypass this zone directly. LCD displaying as follows:

　　BYPASS ZONE：　(CL)

　　 01 ZONE　01　　N↓

The first line means the zone status, second line means whether the zone is bypassed or not. Use key [→] to choice other zone(s), use key [STAY] to exchange [Y] and [N], and depress [#] to confirm.

For disarmed system: CL-means zone(s) is closed, OP-means zone(s) is triggered.

For armed system: AR- means zone(s) is armed, CL-means zone(s) is not triggered but bypassed, OP- means zone(s) is triggered but bypassed, AA- means zone(s) armed.

Cancel bypass
Choose a zone number, use [STAY] exchange "Y" to "N", and depress [#]

Bypass reset
Under user function state, use key [←][→] to choose 2)BYPASS RECALL, and depress [#] to confirm. Input a correct user/master code and [#] If quick arm is allowed, need not input code). LCD will display as follows, depress [#] to confirm bypass reset:

　　BYPASS RECALL

　　HIT [#] TO CONFIRM

Exit user function state
Depress [*] two times, exit user function state. In normal, the power LED indicator will turn on.

3.13 Exit a error operation
When operate incorrectly, depress [*] to cancel and then operate again.

3.14 Keypad alarm
RP248CN's keypad (RP248KCL) has 3 groups of emergency buttons for reporting intrude

alarm, fire alarm or medical alarm. All of the emergency alarm is silence alarm in default.

Depress [1] and [2] together at least 2 seconds for intrude alarm.

Depress [5] and [6] together at least 2 seconds for fire alarm.

Depress [7] and [8] together at least 2 seconds for medical alarm.

3.15 Entry delay and exit delay

Your security system must incorporate in and from the premises without causing inadvertent alarms. A delay period was chosen during your system's installation to provide suitable time to allow for your entry and exit. Entry/Exit Delays can be set by programming, and it's defaulted as 30 seconds. To change the delay time, refer to location 6.5.3 of Chapter 6.

3.16 Trouble and display

When keypad emits regular beeps, the system has some trouble. After remove trouble, the system will return to normal. System trouble includes low battery, loss of AC power, clock not set, communication trouble and bell loop trouble. Depress [*]+[3] +[1] to check the event detail on the LCD. Depress [←][→] to check last or next event.

Trouble list is as follows:

LCD Display	Trouble
MAIN：LOW BATT	Battery Power low
MAIN：AC TROUBLE	AC lost
MAIN：BELL LOOP	Siren trouble
FALSE CODE P=1	Code error
KITCHEN：FIR	Fire Loop in trouble
KP=03 COMM TRBL	The bus in trouble, such as No.3 keypad is in trouble
SYSTEM CLCOK	Clock not set
MAIN：AUX TRBL	Stand-by Power is low
PS= 1 LOW BAT	Power Module Battery low. Such as No.1 power Expansion Module is in trouble
PS=1 AC TRBL	Power Module in AC Trouble. Such as No.1 power Expansion Module is in trouble
PS=1 BELL TRBL	Power Module Siren in Trouble. Such as No.1 power Expansion Module is in trouble
PS=1 AUX TRBL	Power Module Stand-by Power is low. Such as No.1 power Expansion Module is in trouble
PHONE LINE	Phone line in trouble
FIRE DOOR：DAY	Day time zone in trouble.

3.17 Zones characters

Every zone of RP248CN can be appoint its character, such as delay zone, instant zone, emergency zone, firm zone, tamper zone, remote zone, utility output zone and so on. 24 hours character will be always armed, no matter the system armed or not. As long as it is triggered, it will be alarm. Such as emergency zone, tamper zone, emergency button, fire zone and so on.

Delay zone: which has character of entry delay or/and exit delay. Exit delay is the period from the time depress [ARM]/[STAY] to the system armed. Entry delay is the max time from entry to disarm the system. Beyond delay time, will occur the system alarm.

Instant zone: system alarm as soon as the zone triggered.

Emergency zone： be used to connect emergency button, 24-hours armed.

Fire zone： be used to connect smoke and gas detectors, 24- hours armed.

Tamper zone: be used to connect detector's tamper connector, 24- hours armed.

Remote zone: be used to connect remote control receiver zone, 24- hours armed.

3.19 System Partition and Control

RP248CN has 8 zones which can be operated separately.

Keypad and partition

Keypad can be appointed to any one or more partitions. Each partition can be set individual user code. Master code can be use through any one of the keypads.

Public zone

This zone can divide to one or more partitions at the same time, disarm or/and arm public zone:

1. Disarm public zone: any partition is disarmed, public zone will be disarmed;
2. Arm public zone: all of the partitions are armed, public zone will be armed.

Arm partitioned system

When quick arm system, the partition will be armed by the appointed keypad. When arm the system through the master code, should select the partition to be armed by key [→][←] as follows:

1. Input master code through keypad;
2. Depress [ARM];
3. Select the partition to be armed by [→][←];
4. Depress [ARM] or [STAY]. If there is exit delay, the partition will entry into exit delay countdown;
5. Repeat steps 1-4 to arm other partitions

Disarm partitioned system

User with multi-admin right code can disarm several partitions at the same time, steps is as follows:

1. Input the user code;
2. Depress [#];
3. Select the partition(s) to be disarmed by [→][←] ;
4. Depress [#] to confirm;
5. Repeat steps 1-4 to disarm other partitions

Disarm partitions system

Own multi admin right user code can disarm several partitions at the same time, detail steps is as follows:

1. input a valid user code;
2. press [#];
3. use [→][←] to select the partitions which need to be disarmed;
4. press [#] to confirm;
5. repeat steps 1-4, disarm other partitions

Chapter 4 System Install Explain

The RP248CN control pane which is Designed and Produced by ROISCOK Integrate Perfect Function and Advanced Technology. ROISCOK's Control Panels Use the Separated Control Keypads and Has Strong Ability to Prevent Destroy. All Zones Are Programmable, Have Built-in Digital Communicator, Flexible Connecting to Alarm Centre, Compatible to All Popular Communication Format, Attached Duress Code, Consecutive Output. With Easier Programming and More Elegant Shape, Everywhere Shows the Products' Luxury.

RP248CN adopts the latest technology, LSI application, SMT jointing technology, and digital program design to ensure the reliability and stability of the system. Its appearance is compact and elegant with reasonable layout.

RP248CN match with ROISCOK detectors, CMS and so on, it can buildup a complete security system. These security systems can be used to resident and any business users

4.1 preparation before installation

Read this manual carefully and completely to avoid unnecessary damage to the products
Please use the tool correctly, you should install the system first, then power the systems.
Please make sure the systems are not powered when you handle the connection. Otherwise this can make the system self-protection, the components burning or other problems!

4.2 FQA of installation and solution

RP248CN has self-protection system and self-check function. The Keypad will make a sound to prompt the user to check up and Correction when systems are installed or set in error.

1. Please check if the tamper button on the back of the keypad installed in the correct and under working conditions when keypad emit the continuous "beep-" after system installation is complete and be powered.

2. Please review the chapter 3 No.17 Trouble Display, when keypad notified a rhythmic "beep, beep, beep". In that case may including the following situation: battery power shortages, AC power off, no set clock (time and date), the phone lines for communications or the line for alarm has a fault.

3. Keypad will emit three sound " beep, beep, beep" when input the wrong operation.

4. Please check whether the connect between the port "ALARM" on the detector and control panel is connected firm and connected the 2.2k ohm resistor correctly when the Siren alarmed under armed state.

5. Please check whether the shell of detectors is installed correctly , the tamper switch of detector is ready, The connect between the port "TAMPER" on detector and control panel is connected firm and connected the 2.2k ohm resistor correctly when the Siren alarmed under disarmed state.

6. Under disarmed state, when the keypad display "Z1 NOT READY"，it means the zone 1 is not ready

4.3 Main broad layout and port function description：

As Figure 2, the function of connection port as following:

1－"RED" is a port to connect keypad and other extend module, the port should connect to the red line on the keypad.

2－"BLK" is a port to connect keypad and other extend module, the port should connect to the black line on the keypad.

3－"YRL" is a port to connect keypad and other extend module, the port should connect to the yellow line on the keypad.

4－"GRN" is a port to connect keypad and other extend module, the port should connect to the green line on the keypad.

6/9/12/15－"COM" the communal port. In general, the port "COM" should connect to one port of "ALARM" and "TAMPER"

5－"Z1" the port for zone 1, defaults as Entry/Exit Delay Zone. Connect to one port of "ALARM" on the detector.

7/8－"Z2" for zone 2 and "Z3" for zone 3. Defaults as Instant (Intrusion) Zone. Zone 3 use in un-passageway area. Connect to one port of "ALARM" on the detector.

10－"Z4" the port for zone 4 defaults as Panic Zone. Suit for connect with a panic button

11－"Z5" the port for zone 5 defaults as fire zone. Suit for connect with a Gas Detector or a Smoke Detector

13－"Z6" the port for zone 6 defaults as tamper zone. The user should connect it with one of the port "TAMPER" on detector. To make sure to alarm in any situation

whenever loop has trouble/ tampered

14/16－"Z7" the port for zone 7 and "Z8" zone 8. Suit for connect with one port of "ALARM" on the detector.

17/20－"AUX" connect to the anode of detector "DC12V+"

18－"COM" connect to cathode of detector "DC12V-"

19－"SAUX"can be used to turn on/off "DC12V-" to detectors

21－"UO" Utility Outputs

22/23－"BELL+"connect to the anode,"BELL-" connect to cathode

24－port of main board connect to the ground

25/26－"AC" low-tension entry port for AC power（AC16.5V）

27－connect to the anode of standby power supply
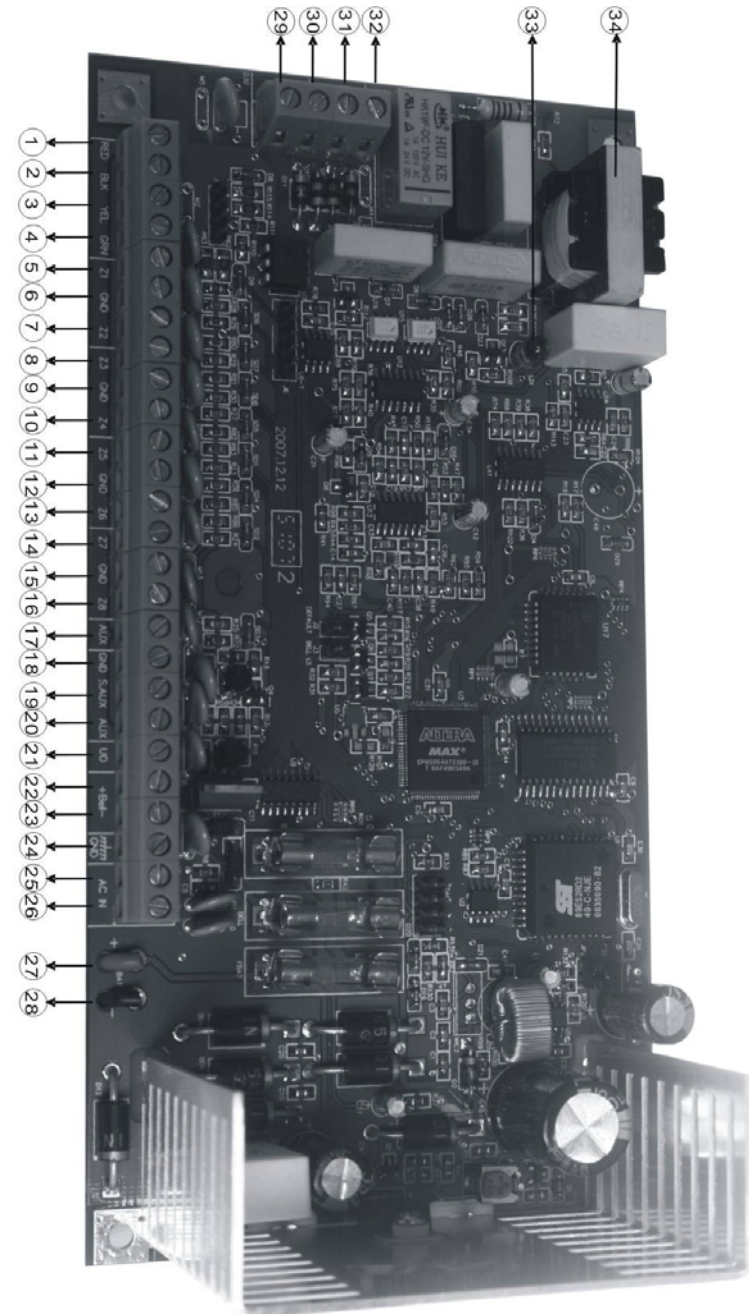
28－connect to cathode of standby power supply

29/30－"LINE" port of phone line entrance

31/32－"SET"port of user phone

33－alarm dial indicator lamp

34－alarm panel audio transformer

Fig.2 RP248CN main board

4.4 Install Control Panel and Keypad

The RP208CN control panel should install in the aridity, near by AC power supply which can't be power off and connect the ground well and be easy to connect the phone line. Use tool correctly, avoiding the damage toward the equipments.

The keypad is generally installed in the open side of the entry, and the height should be easy to user. The Tamper Button on the back cover of the keypad can prevent the keypad from being broken or tore down, turn on it and depress it tightly to the wall while installing.

Please connect the 4 lines of the keypad with the main board respectively according to the red, black, yellow and green sequence. Such as Fig.2 shows.

When more than one Keypad is to be connected, please make all the keypads as parallel connection. Set a individual code for each Keypad by the dial switch on it and programming the control panel.

4.5 Connect the Telephone Line

There are two group ports of telephone lines on the main board. The ports which mark SET used for input, SET for telephone. Such as Fig.2 shows.

4.6 Connect the Standby Battery

Please provide a standby battery (DC12V) inside to panel in case of the AC power is cut off. Two lines marked BAT link the battery with anode+ (red) and the cathode - (black) respectively. Such as Fig.2 shows.

Don't conjunction any power before connected all the lines well.

4.7Connect Transformer

The output of transformer should be AC16.5V, connecting into the AC two ports on the main board. Please carefully choose a correct transformer to be applicable to AC220V or perhaps AC110V. **Remember: The red lines for the high -voltage, do not mix with blue which is the low-voltage.**

Don't power the system before the installation finished well.

4.8 Connect Siren/Bell

The port BELL is used for connect siren or bell. Please watch for cathode and anode when connecting.

4.9 Connect Detector(s)

As the Fig.2 shows, the wiring work must be done without power.

1. Used and unused zone should connect with 2.2k Ω termination resistors. When connecting detector, please install termination resistors in the detector, to ensure the system of self-protection function.
2. The two ports of ALARM, one for COM port and another for alarm zone ports respectively on the main board.
3. TAMPER ports of detector, connected to tamper zone and COM. When there are many detectors, TAMPER port in series to access tamper zone and COM port.
4. "+ DC12V -" in the detector connect AUX and COM respectively. Do not mix anode and cathode.
5. Please connect the port of UO when need.
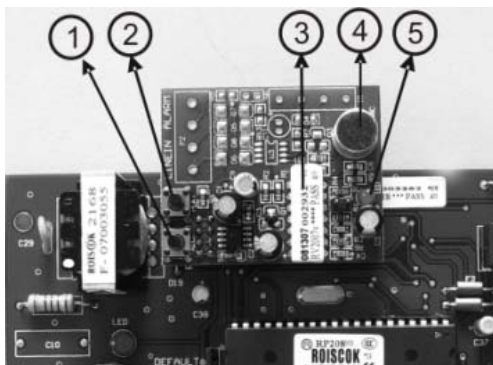
4.10 Connect Voice Module

As Fig.2, connecting voice module, only need to insert it into the connector on the control panel.

1(record)－recording button

2(play)－test record button

3－the eligible label including production serial number, tester number, production type and version number.

4－recording microphone

Fig.3 Voice Module

4.11 Connect Remote Receiver

When arm or disarm by a remote controller, please programming a zone as switch lock zone.

And connect the remote receiver as following:

12V(+)---- Connect to the "AUX" of the Mainboard RP248MB

12V(-)-----Connect to the "COM" of the Mainboard RP248MB

ALARM(K1)----Connect to the Emergency Zone of the Mainboard RP248MB

ALARM(C)----Connect to the "COM" of the Mainboard RP248MB

ALARM(K2)----Set aside

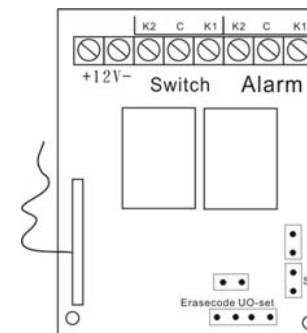Switch(K1)----Connect to the Remote Zone of the RP248MB

Switch(C)----Connect to the "COM" of the Mainboard RP248MB

Switch(K2) ----Set aside

S1---- Connect red wire to "UO" port of the RP248MB

   Connect black wire to "COM" of the RP248MB

The port beside the S1----Connect to Buzzer of the RP248MB. Anode(Red wire), Cathode (Black wire).

R emote Receiver

Fig.4

You can communicate your RP248CN (8-72 zones control panel) through LCD Keypads (RP248KCL). Each RP248CN can match with 16 LCD keypads at most. With the LCD Keypad(s), you can operate your system by arm/disarm, bypass, emergency, closing the siren, inspecting trouble, programming the system and so on. The system status can be displayed by the LCD or/and indicator light.

All of your system's detectors are wired to the control panel. As such, your system always knows the status of any protected door, window, hallway, room, or area.

RP248CN

5.1 Features of RP248KCL

- LCD can display the functions of system
- 3 Keypad Emergency Zones: Panic[1]+[2], Fire[4]+[5], Medical[7]+[8]
- Key-depress with Audible Feedback
- LCD and key with backlight
- System status display
- LED Indication: Alarm, Power, Armed, Bypass, Ready, Tamper
- Tamper is supervised

- Disarm by code and disarm by remote controller
- Disarm by duress code
- LCD display bypassing and not-ready zones
- Quick arm
- Quick arm by code
- Quick stay arm
- Stay arm by code
- Bypass zone quickly
- Bypass zone by code

5.2 Features of RP248MB and Expansion Modules

Zones

- 8 programmable zones on the Main Board, and it can be expanded into 72 zones at most
- Special zones: Zone 5 - Fire Zone (default)
  Zone 6 -tamper Zone (default)
- 18 types of Programmable Zones, 5 types of Voice Formats
- Zone Terminal: NC, NO, dual and single end with resistor 2.2KΩ
- End calling function
- Disarm/arm report can be set

Expansion Modules

There are four expansion modules can match with RP248CN: 8 Zones Expansion Module (RP248EZ8), 8 Zones Wireless Expansion Module (RP248EW8), 16 Zones Expansion Module (RP248EZ16) and 16 Zones Wireless Expansion Module (RP248EW16).
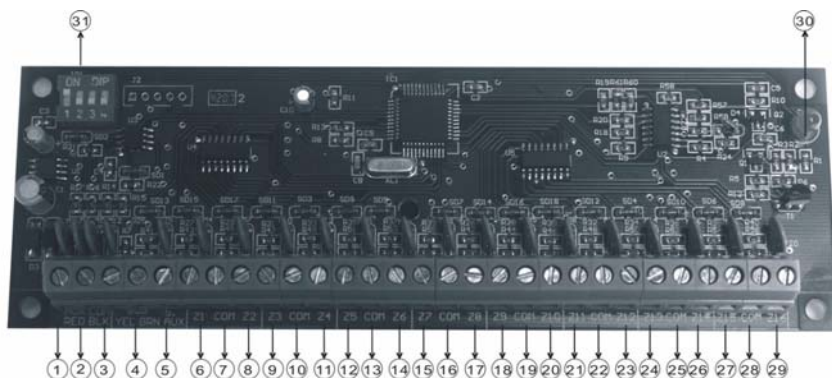
Fig.6 RP248EZ16-16 Zones Expansion Module
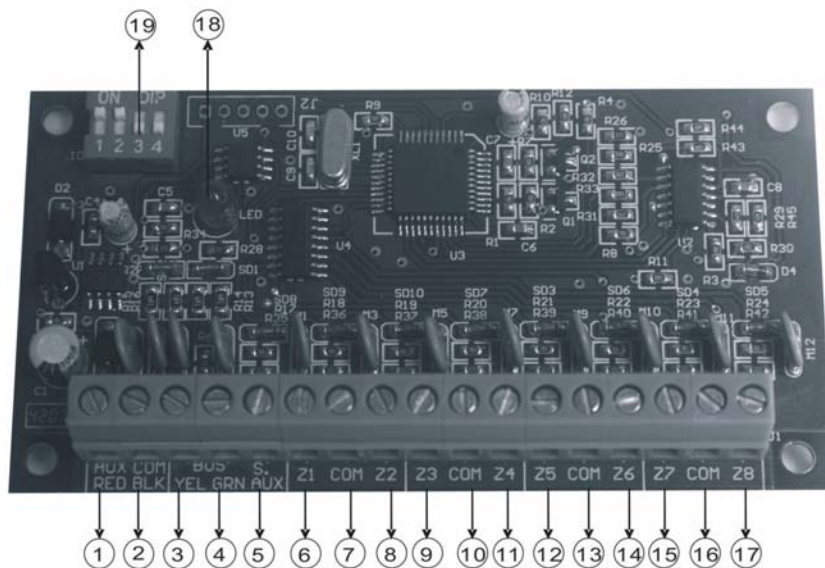
Fig.5 RP248EZ8-8 Zones Expansion Module

1—"RED" connect to RED on the main board

2—"BLK" connect to BLK on the main board

3—"YEL" connect to YEL on the main board

4—"GRN" connect to GRN on the main board

5—"S.AUX" connect to the DC12V switch power port (S.AUX) on the main board.

7/10/13/16/19/22/25/28－"COM" the port of common earth, which should be connected to one port of ALARM or TEMPER on the detector(s).

6/8/9/11/12/14/15/17/18/20/21/23/24/26/27/29--"Z" should be connected to one port of ALARM on the detector(s).

Power Supply Module (RP248EPS)

It is used for power DC12V to detectors modules and sirens and with built-in siren driver (750mA)

1- Connect to the anode of standby battery

2- Connect to the cathode of standby battery

3- "RED" connect to RED on the main board

4- "BLK" connect to BLK on the main board

5- "YEL" connect to YEL on the main board

6- "GRN" connect to GRN on the main board

7- Tamper port of the module, which can make up a loop with the port of "BLK"

8/9- "BELL+" is to be connected with anode of the siren, "BELL-" is to be connected with the cathode of the siren.

10- Connect to earth

11/12- AC supply input (AC16.5V)

13- Power LED indicator

14- Dial switch
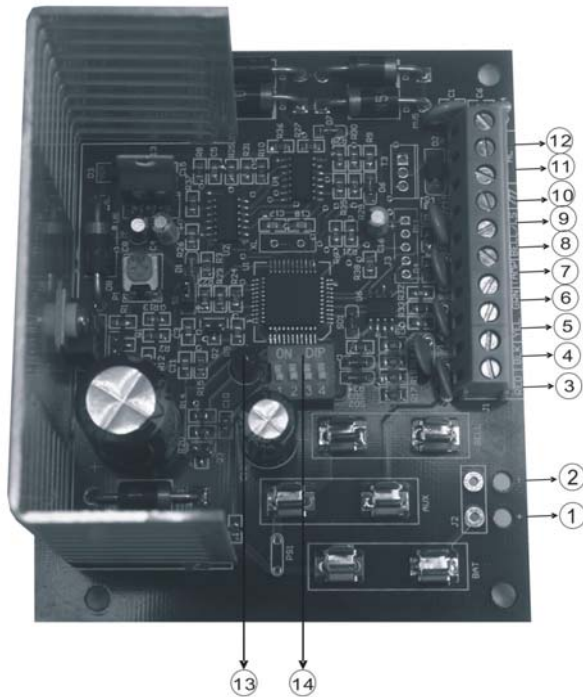
Fig.7 RP248EPS-Power Expansion Module

Clock

● Built-in Digital Clock

Siren Voice Output

● Siren Voice type is Programmable. Current output：750mA (max)

Built-in Digital Communicator

● Build-in digital communicator and compatible with Contact ID，4+2

● 8 follow-me phone numbers

● 3 central station numbers

Code

● 2 Installer code

● 1 master code, can create duress code automatically

● 9 user codes, each code can create duress code automatically

Periodic Test

● Offer testing report to center station automatically every day

Peripheral Equipment

● Voice module

● Remote controller for disarm/arm and emergency

● Wireless receiver

Events Record

● 128 events record can be saved

Timing Function

● Auto daily arm

● Auto daily testing report

● Keypads Disarm/Arm Report

Monitor Function

● Trouble data can be displayed on LCD Keypad, and also can be transmitted to central station

● Battery in low power

● Siren loop in trouble

● AC supply in trouble

● System clock is not set

● Tamper prevention

● Fire alarm loop trouble

Fig. 8. Instruction of the RP248EO4

RP248EO4 4 open-collector outputs module

The UO port will be triggered when an alarm occurs, or the system is armed/ disarmed. The RP248CN can expand to 32 open collector utility output. About the details, please refer to the location 22 of chapter 5.

   1-- "RED" connect to RED on the main board

   2-- "BLK" connect to BLK on the main board

   3-- "YEL" connect to YEL on the main board

   4-- "GRN" connect to GRN on the main board

   5－Tamper port of the module, which can make up a loop with the port of "BLK".
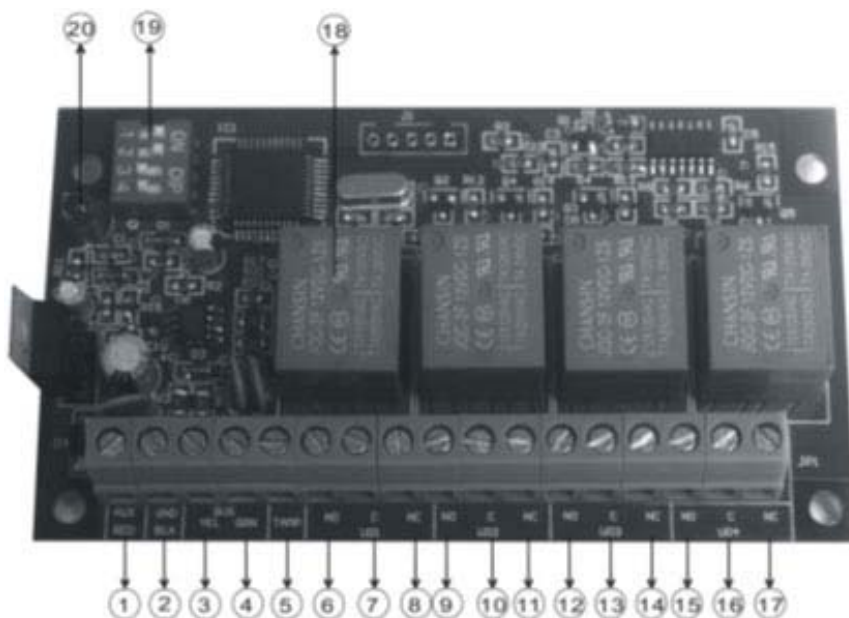
   6/9/12/15- "NO" is the normal open utility output

   7/10/13/16-"C" is the common earth of the module

   8/11/14/17-"NC" the normal close port utility output

   18- utility relay of UO Expansion Module

   19- the dialer switch of several UO Expansion Modules

   20- Power Indicator of the UO Expansion Modules

Charge the Standby Battery

Please provide a standby battery (DC12V) inside to panel in case of the AC power is cut off. The Mainbord comes with charging circuitry, connect the two wires which marked BAT to anode+ (red wire) and cathode –(black wire) of the standby battery respectively.

Don't conjunction any power before connected all the lines well.

5.3 Technical Data

Main Board RP248MB

Input power: 16.5VAC 25VA (via transformer)

Standby battery: DC12V4Ah, or DC12V7AH

Auxiliary power: 12VDC, 400mA max.

Bell output: 12VDC, 750mA max.

Utility output: 70mA max

Switch zone output: 250mA

Loop response time: 500mS

Fuse for AUX: auxiliary power 1A

Fuse for BELL: Bell/LS power 1A

Fuse for BAT: battery power 2A

Dimension/weight: 201x100x65mm/258g

Keypad RP248KCL

Current consumption: 90mA typical, 130mA max

Control panel connections: 4-line up to 300M from panel

Dimensions/ Weight: 110x123x95mm/225g

8 zones Expansion Module RP248EZ8

Current consumption: 25mA, (the max Current Consumption is 30mA)

Control panel connections: 4-line up to 300M from panel

Dimensions: 105x55x18mm

16 zones Expansion Module RP248EZ16

Current consumption: 27 mA, (the max Current Consumption is 34 mA)

Control panel connections: 4-line up to 300M from panel

Dimensions: 166x57x16mm

Wireless Expansion Module RP248EW40

40 wireless zones expansion module with 433MHz

Current consumption: 27 mA, (the max Current Consumption is 34 mA)

Control panel connections: 4-line up to 300M from panel

Dimensions: 125x68x16mm

4 Zone Utility Output ModuleRP248EO4

Current consumption: 25mA, (the max Current Consumption is 140 mA)

Contact: 4-zone NC (SPDT) relay;

Contact power: 5A, 24VDC

Connection with control panel: 4-line up to 300M from maiboard

Dimensions: 105x59x16mm

CHAPTER 6 PROGRAMMING DIRECTION

6.1 Programmable Items

RP248CN's menu indicates the user functions and programming via LCD keypad. There are eight programmable items:

1. System program: set system data

2. Zones program: including the zone's type, zone partition, sound, terminal features, loop respond time, etc.

3. Utility output program: program the output and method etc.

4. Code maintenance: set the users code, code grade and partition etc.

5. Alarm output: set the parameter report to the CMS.

6. Report code: set the event code which report to CMS

7. Add annex: is use to add, delete or test the keypad and expansion module.

6.2 Restore Factory Defaults

Restore the default of the control panel before program:

1. Connect the keypad and the main board

2. Check all of connection in correctly

3. Turn off all the power

4. Short the default jumper on the main board (refer to the Fig.2 on page 20)

5. Power the system (AC or/and standby battery)

6. After a brief "beep", the default has been restored and then cut the JUMPER "J2". After a

7. After about 20 seconds the LCD display "To Install Press ", Check the LED indicators. When inter program mode, the ready LED will be flickering.

6.5.1 SPECIAL EXPLAIN

If it is the first times to program the system, you must increase or delete the peripheral equipment, such as keypad and expansion module etc. as chapter 6 section 6.5.8. Otherwise, operate as following.

RP248CN will indicate the operation with the menu on the LCD keypad. If the screen indicate "To Install depress *", please depress [*]. Then, the keypad will indicate you to input the installer code, depress key [#] enter the program state. If the LCD displays the zone's name, time and date, please depress [*]+[7]+[#] and installer code enter the program state. Select the items by depressing the key [→][←], such as system program, zone program, utility output, code maintenance, alarm output, set report code and add annex , etc.

6.5.2 SYSTEM PROGRAM

Enter the main menu by depress [#] to start the system programming when the screen display the following. Then, enter into the sub-menu by hot Key. The data in the following table are suitable for the system:

INSTALLER PROG：

1) SYSTEM →

Hot Key	Display	Default	Explanation
[1]	TIME DEFINE		Set delay time
[1][1]	EX/EN Delay 1		Exit/Entry delay 1
[1][1][1]	Entry Delay 1	30 seconds	Entry delay 1, range: 0-225s
[1][1][2]	Exit Delay 1	45 seconds	Exit Delay 1, range: 0-225s
[1][2]	EX/EN Delay 2		Exit/Entry delay 2
[1][2][1]	Entry Delay 2	45 seconds	Entry delay 2, range: 0-225 s
[1][2][2]	Exit Delay 2	60 seconds	Exit delay 2, range: 0-225 s
[1][3]	Bell Timeout	4 minutes	Bell time out, range: 01-90 minutes
[1][4]	Bell Delay		Bell delay time , range: 00-90 Minutes
[1][5]	S.AUX Break	10 seconds	The interval time between turn on and turn off the power, range: 01-90 seconds
[1][6]	WL MOD. TIMES	…	The time interval for the operation of wireless module
[1][6] [1]	JAMMING TIME	none	Specify wireless module can withstand wireless power frequency , the time of signal send by interference system emitter. If set, main board will send a report code to alarm center once reach the set time. If hear the interference = yes, main board also will start-up the sound box which set at outside. NONE means system not only do not inspect , but also will not send any signal for the interference signal which have inspected
[1][6] [2]	S.V. TIME	0 hour	Set inspection, distinguish signal sent by every emitter (for example monitor, alarm ,tamper or trouble) During the interval time , if there confirm which zone can not receive any signal send by emitter, main board will sent a local trouble signal. If set, main board will sent the monitor report code to alarm centre. "0 hour" have no monitor function.
[1][7]	Z.TEST TIMES		Test for zone, set start time and zone test cycle
[1][7][1]	Start test at	HOUR:00 NIN:00	
[1][7][2]	Z.TEST.PERIOD	00	
[2]	SYSTEM CONTROL		Program system date
[2][0][1]	Quick Arm	YES	Allowed to quick arm or not: YES: arm the system by [ARM] NO: Arm the system by Code
[2][0][2]	Quick UO	YES	Quick UO output: YES: UO can be triggered without code NO: UO should be triggered by code
[2][0][3]	Allow BYPS	YES	Bypass zones: YES: Bypass the zone is allowed NO: Bypass the zone is not allowed
[2][0][4]	Quick BYPS	NO	Quick Bypass: YES: Bypass the zone without code NO: should enter a code to bypass a zone
[2][0][5]	FLS CD TRB	YES	False code trouble: YES: report to the central station after enter false code

			thrice; NO: the alarm will be activated after enter false code thrice.
[2][0][6]	Bell SQK	YES	Bell squawk: YES: the bell will emit a brief beep after the exit delay NO: the bell will keep silent after the exit delay
[2][0][7]	Bell 30/10	NO	Bell alarm function: YES: the sound will pause 10 seconds after the bell sounds 30 seconds NO: no pause when the bell is sounding
[2][0][8]	Alarm PH Cut	NO	Alarm phone cut: YES: the bell will alarm when the phone line is cut off NO: the bell will keep silent when the phone line is cut off
[2][0][9]	3-MIN BYPAS	YES	3- minutes bypass: YES: the zone will be bypassed for 3-minutes automatically after power the system NO: hasn't this function
[2][1][0]	D. VER FIRE	NO	Conform fire alarms: YES: for smoke Detectors: 1.Smoke detectors have been triggered 2.The power of the detectors have been cut off with 15 seconds 3.Power the detectors 4.The system will alarm when the detectors are triggered again in 1 minute NO: No confirm fire alarms
[2][1][1]	Audible AUD	NO	Audible panic: YES: the emergency Keys will drive the exterior siren or bell NO: silence
[2][1][2]	AC REP DLY	NO	AC trouble report delay: YES: a report will be sent to the central station after the AC in trouble for 30 minutes NO: a report will be sent to the central station as soon as the AC in trouble
[2][1][3]	BUZZ→Bell	NO	Buzzer/bell: YES: stay armed system, the buzzer will sound 15 seconds firstly before the bell sound when the system alarm. NO: stay armed system, the buzzer and bell will sound at the same time when the system alarm.
[2][1][4]	ALE ZE Cut	NO	Alarm zone expansion module cut: YES: the system will be triggered when the communication between zone expansion module and mainboard has been cut NO: the system will have trouble when the communication between zone expansion module and mainboard has been cut
[2][1][5]	FIRE TMP	NO	Fire Temporal Pattern: YES: when fire alarm, the bell will has a pause after sounding three times; NO: When fire alarm, the bell will pause 2 seconds after sounding 2 seconds.
[2][1][6]	CODE GM	NO	Code Grand Master: YES: Change the users' code by only master code; NO: Except the master code, users can change code in same or lower grade code
[2][1][7]	AUDI JAMM	NO	the parameter about the interference time ,please see shortcut key (1) (1) (6) (1) YES: once reach the set time ,main board will start up the outside sound box ,and send report code to alarm center. NO: except the outside sound box do not ring ,others will same as above.
[2][1][8]	TECH TAMPR	NO	YES: After tamper alarm (Tamper LED display by keypad) , must recovery by

Code	Name	Default	Description
			input the installation code .So , recovery of tamper alarm (and tamper LED),will need the installation person to deal with. NO: Tamper alarm (and Tamper LED) will recovery after resolved the trouble, do not need the installation person .
[2][1][9]	TECH RESET	NO	YES: After recovery of the alarm zone , come to the "READY" (ready state) must input the installation code . So need the installation person come to deal with it NOT READY- TECH REST correspond LED indication will shown on the keypad. NOTE: before light READY LED, all the zones must be safe. NO: once the alarm zone recovery, when all the zones are safe, READY LED will light.
[2][2][0]	ABORT ALARM	NO	YES: Alarm centre perhaps receive a " stop alarm" code when alarm sent by false. If input the right code in 90 seconds, and recovery the alarm ,will send the original alarm code. NO: Once touch the alarm , will not send "stop alarm" code
[2][2][1]	SUMM/WINT	NO	YES: In spring ,(first Sunday in April), system will adjust inside clock by automatically, will move up one hour every day, and according to the American daytime. In autumn, (last Sunday in October), stand back one hour according to the Amercian standard time. NO : no any flexibility time could adjust.
[2][2][2]	FORCED KSW	YES	YES: In any parts, use key switch to arm , interference zone(NOT READY) will bypass automatically, parts will show "force armed" NO: parts could not arm by key switch, until all the interference(not ready)zone recovery.
[2][2][3]	PAGER	NO	When the specify event happed in parts, user could receive inform signal parameter via letter and number mini BP machine. First , on the user operation function , as a "Follow-Me" (follow telephone) setting, must programme number of the BP machine. YES: allow via number or letter number BP machine, provide increased event information ,once the call will through ,will send and show. NO: only during the parts alarm station ,call the BP machine. Need as "Follow-me" programme, can not increase the standard information by send
[2][2][4]	ARM PREWRN	NO	YES: when any parts set as arm automatically, 225seconds before arm automatically, will hear exit delay (pre-alarm) counter backwards second. During this period, the parts as programmed as above, distributed keypad ,will hear the exit delay DIDI sound. During the any time of the counter backwards second, if input the efficiency user code, automatically arm of the parts will delay 45 minutes. If parts have already" arm automatically", will disarmed after input the efficiency user code. Will can not arm

Hot Key	LCD Display	Default	Explanation
			automatically that day. Arm delay 225 second ,do not adapt arm automatically. NO: Any parts , arm automatically will happen on the set time Programme exit delay time and all hearable pre-alarm
[2][2][5]	L.BATT.ARM	YES	YES: allow system arm when spare battery have low pressure NO: not allow system arm when spare battery have low preesure.
[2][2][6]	ENG.TAMPER	NO	YES: after tamper alarmed, system will not ready arm ,and TAMPER LED can not recovery. NO: after tamper alarmed, system will stay ready state.
[2][2][7]	BLANK DISP	NO	YES: Display will show information: "Enter code". After enter the code , recovery display, and content shown on the display will disappear after 1 minute, will recovery to "BLANK". NO: Display normally.
[2][2][8]	24H BYPASS	NO	YES: allow 24 hours zone bypass NO: not allow 24 hours zone bypass.
[3]	SET CLOCK		Set Clock: Set the system's date and time
[3][1]	System D ATE	JAN 01 2000	Set system date
[3][2]	System Time	00:00	Input 24-hour time
[4]	WINDOWING		The system will not send the arm/disarm information to central station, only display on the keypad
[4][1]	Window Start	H:00 M:00	Set the start time
[4][2]	Window Stop	H:00 M:00	Set the stop time
[4][3]	Window Days	ALL	Set the start weekday(s)
[5]	SYSTEM LABEL		Set the system mark or partitions mark
[5][0]	Global	ROISCOK	System mark
[5][1]-[5][8]	Partitions 1 thru 8	PARTITION 1-8	Partitions 1-8 mark
[6]	TAMPER SOUND	BELL/ABUZ/D	Set temper sound: 1. Silence 2. Bell 3. Keypad buzzer 4. Bell and buzzer 5. When arm start bell, when disarm start buzzer
[7]	DFLT EN/DIS	ENABLE	ENABLE: all the system parameters could be restored to the default; DISABLE: could not restore the system parameters to the default
[8]	SERVICE INFO		
[8] [1]	SERV. NAME	ORBIT SECURITY	
[8] [2]	SERV. PHONE	SYSTEM	

6.5.3 Set Zones

Depress [#] to zones, when the LCD displays as following. The data in the following table are used for programming zones.

INSTALLER PROG：

2)ZONE →

Hot Key	LCD Display	Default	Explanation

[1]	ONE-BY-ONE	---	First, program set all the data to the zone 1: zone type, sound, terminal features, loop response, labels, and so on. Then program other zones one by one. Note: after you finish all zones, depress [#]. The keypad will emits a long "beep--", the data will be saved.
[2]	PARTITIONS	All the Zones belong to one Partition	Appoint the zone to partition(s) 1. Without partition, the system will appoints all the zone to partition 1 acquiescently; 2. Each zone can be appointed to several partitions.
[3]	ZONE TYPE		Choice the correct zone type, depress [#] to confirm
[3][0][0]	NOT USED		Unused zone's type. Which can be used to close the zones
[3][0][1]	EX/EN 1	Zone 1	Exit/Entry delay 1
[3][0][2]	EX/EN 2		Exit/Entry delay 2
[3][0][3]	EX(OP)/EN		If the zone is bypass during the exit delays, even if the zone is opened, the system still can be armed
[3][0][4]	EN FOLLOW	Zone 2	There are two zones have Exit Delay, Exit Delay 1 and Exit Delay 2. If zone with Exit Delay 2 has been triggered before zone with Exit Delay 1. The zone with Exit Delay 1 must have entry delay. Otherwise, the system will alarm immediately.
[3][0][5]	Instant	The zones except zone1 and zone2	No entry delay, it will be triggered and alarm immediately.

[3][0][6]	I+ EX/EN 1		Stay arm, zone will be bypass automatically; Arm, zone has entry/exit delay 1
[3][0][7]	I+ EX/EN 2		Stay arm, zone will be bypass automatically; Arm, zone has entry/exit delay 2
[3][0][8]	I+ EX(OP)/EN		Stay arm, zone will be bypass automatically; Arm, zone has exit/entry (OP) delay
[3][0][9]	I+EN FOLLOW		Stay arm, zone will be bypass automatically; Arm, zone has entry follower
[3][1][0]	I+INSTANT		Stay arm, zone will be bypass automatically; Arm, it is Instant zone
[3][1][1]	UO Trigger		No alarm and code report, but trigger the programmed output
[3][1][2]	Day		When the system is triggered, It will alarm at the armed state and report trouble at the disarmed state
[3][1][3]	24 Hours		The zone will be triggered, whatever the system is armed or disarmed
[3][1][4]	Fire		Armed, It will alarm when the short the port; Disarmed, it will report trouble when open the port
[3][1][5]	Panic		There will be panic alarm when it is triggered
[3][1][6]	Medical zone		There will be medical emergency alarm when it is triggered
[3][1][7]	Key Switch		Zones can be used as switch
[3][1][8]	EXIT TERM		Usually avoid the wrong alarm for exit form room which user exit after end of extend time close
[3][1][9]	LATCH KSW		If want to arm or disarm to

Code	Name	Default	Description
			system, connect a outer SPST locked(not instantaneous) key switch, to any zone's port, will specify this type.
[3][2][0]	EN.FOLL+STAY		When system keep STAY arm , zone will same as enter/exit extend time zone, extended time for enter and exit , will specify by enter/ exit extend 1. When system keep AWAY arm , zone will same as: enter into linkage ,will produce instant in break alarm when there is in break in zone. If there have already have one exit/enter extend time zone was inbreak, enter into linkage+ stay arm zone, will keep bypass ,until into extend time close.
[3][2][1]	KEY SW DLY		The same as zone type 17, but have the specify time for exit/enter extend time 1.
[3][2][2]	LTCH KSW DLY		The same as zone type 19, but have the specify time for exit/enter extend time 1.
[4]	Zone Sound		Each zone can set different alarm sound
[4][1]	Silent Alarm		When triggered, System will report to CMS with silent.
[4][2]	Bell Only	All Zones	Bell sound until the time is over or enter the code to disarm
[4][3]	Buzzer Only		Only the Buzzer will be triggered
[4][4]	Bell+Buzzer		The bell and buzzer will be triggered at the same time
[4][5]	Door Chime		When disarmed, the buzzer sound slowly as soon as the zone is triggered
[5]	TERMINATION		Each zone can be defined its terminal in difference, NO/NC
[5][1]	N/C		Normal closed
[5][2]	EOL	All Zones	Single terminal resistor (2200Ω)
[5][3]	DEOL		Double terminal resistors. Used to distinguish the different alarm type, such as the detectors' tamper)
[5][4]	N/O		Normal opened
[6]	LOOP RESPONSE		Loop response time
[6][1]	Normal	YES	500 ms
[6][2]	Long		1 sec
[6][3]	Fast		10 ms
[7]	Cross zones		When two zones are defined as cross zone, they must be triggered at certain interval time the alarm will be happen. If choice "Ordered", the first zone must be triggered in advance; If choice "not Ordered", no triggered order need
[7][1]	NONE	YES	No cross zone
[7][2]	ORDERED		Trigger zones in order
[7][3]	NOT ORDERED		Trigger zones in no order
	Time Slot	1 second	Time range: 1-9 seconds
[8]	Labels	ZONE01 ZONE02 Etc.	Edit the zone labels
[9]	MAINTENANCE		Maintenance
[9][1]	Copy a Zone		Copy the zone's data, including type, terminal, loop response, partition and alarm sound
[9][2]	Delete a Zone		Delete a zone and restore it to default, then the zone

			type is unused
[9][3]	Add/Copy Partition		Add a new partition or copy the partition's data to a new one
[9][4]	Delete Partition		Delete a partition, restore the partition to default
[9][5]	WL ZONE ALLOC		It is allowed to… ; please refer to the user guide of each transmitter If it shows as following, ZONE MAINTENANCE 5) WL ZONE ALLOC press [ENTER]
[9][5]	XX+ENTER		Use [STAT] and [BYP] to move cursor and select zone number, Note: Zone 1 to Zone 8 are reserved for the wired zones ZONE ALLOCAT: ZONE#=09 (1:01) Press [ENTER]
			If the following is displayed on screen, ZONE=09 (ALLOC):1) SKIP Then press [ENTER] to skip it and come to the allocation of next transmitter
			Write in the information or cover the old information at the selected position, ZONE=09 (ALLOC): 2) (RE) WRITE then press [ENTER]
			Delete the information at the selected position, ZONE= 09 (ALLOC): 3) ERASE then press [ENTER]
			Press [STAY] and [ENTER] to confirm your selection. ERASE LOCATION ARE YOU SURE? N
		YES: monitor, NO: un-monitor	ZONE=09 (ALLOC): 4) SUPERVISION Choose YES/NO, then press [ENTER]
[9][6]	WL COMM TEST	Wireless … > 0.37%, the referring date is >12%	It is allowed to have communication test between transmitter and receiver ZONE MAINTENANCE 06) WL COMM TEST Press [ENTER] to begin testing A wireless zone will be displayed, then start the transmitter in this zone, several seconds later, and the receiver will receive the signal of the communication, and it will be displayed in percentage. If necessary, use [STAT] or [BYP] to choose the testing zone number of the next wireless transmitter.
[9][7]	SELFTEST ZONES		• This is auto-self-checking function. Choose a partial intrusion sensor (ex: Broken Glass Detector, Voice Tone Recognizer, Shock Sensor and so on), and it can detect those which are supposed to be noises or shocks. • Zone Auto-Self-Checking function is very helpful, especially when the sensor is to be installed at very important places. • Set a standard for this kind of checking, at most 16 zones detector groups are availed. • Be sure that the noises or the shocks should be from equipment that can be put at the right place nearing the sensor; then once the noises source is started,

ZONE ALLOCAT:
ZONE#=09 (1:01)

			the sensor can detector be trigged. ● Set a universal output port as the power on/off switch to supply power for the noises (or shocks) equipment. The following is a relevant time table. ● The starting time of the first checking of that day should be set. From that time on, the system will do re-checking in every 1-24 hrs interval by turns. ● During the checking, if all the relevant sensors are trigged, the relevant information will be set to the Alarm Center (make sure a report code of this event has been set in the alarm center), which means Auto-Self-Checking has been fulfilled successfully; and about the time of this event, it will be saved at the Time Record of the system ● During the checking, in case one or more relevant sensors are not trigged, a "Auto-Self-Checking Trouble" will be sent to the Alarm Center; and the trouble event will be recorded in the time table. ● The detailed Auto-Self-Checking is as follows : Select Zones ZONES FOR TEST 01) NONE ● According to the display, press[ENTER], then select 16 most likely

			zones which are needed be checked LOCATION 01: ZONE: 00 (00-96) ● Input the first two digits zone number; if necessary, use the [BPY]or [STAT] to move the cursor, then press[ENTER]; press [ENTER] again to repeat the above operations and select the next zone; keep on this operation until all the zones are selected and make sure all the zones number are inputted correctly; then press[*] to end the operation. ● Time setting is in : 1) SYSTEM then /1) Time Setting then /7) Zone time testing TIME DEFINES: 7) Z. TEST TIMES 1) When you are at /7)Zone time testing, just press [ENTER] to keep on ZONE TEST TIMES 1) START TEST AT: 2) Press [ENTER] again START TEST AT: HOUR: 00 MIN: 00 3) Set the first testing time (24 hours form) at this step;

then use[BPY] or [STAT] to move the cursor properly
4) Press [ENTER] to keep on
5) Press [SYP] one time to keep on

```
ZONE TEST TIMES
2) Z. TEST PERIOD
```

6) Press [ENTER]

```
ZONE TEST PERIOD
PERIOD: 00 (00-24)
```

7) Set the interval time(01-24 hours) for testing, and then press [ENTER]
8) Press [*] to exit

Set Universal Output to trigger the noises source
● The background information of the Universal Output
● For the most skillful installer, please refer to 3) Universal Output
1) From this

```
INSTALLER PROG
3) UTIL OURPUT
```

2) Press [ENTER]

```
SELECT UO NUMBER
UO=01        (0:1)
```

3) Select a idle UO number (ex: UO2) as the Usual Output noises source; then press [ENTER]

```
UO=02    FOLLOWS:
0) NOTHING
```

4) At this display, press [1] to select the system

```
UO=02    FOLLOWS:
1) SYSTEM
```

i. Press [ENTER]

```
SYS.EVENT: UO=02
1) BELL    FOLLOW
```

i. At this display, press [8]

```
SYS.EVENT: UO=02
8) SENSORS TEST
```

i. Press [ENTER]

```
PATTERN UO=01:
2) PULSE    N/O
```

v. At this display, select the UO operate way; a typical way: select PULSE N/O; UO port is like a N/O switch, it can be closed at the preset time and the loop current will start the noises source; press [ENTER]

v. At this display, you can verify or change your selected output, press [ENTER];

```
LABEL FOR UO=02:
OUTPUT    02
```

Then press [ENTER]; if necessary, please press [*]

6.5.4 Programmable Utility Output

Hot Key	Output	Default	Instruction
[0]	Nothing	Yes	
[1]	System		Response system events
[1][1]	Event		

Code	Name		Description
[1][1][1]	BELL FOLLOW		Activated with the bell
[1][1][2]	NO TEL. LINE		Activated with phone line trouble
[1][1][3]	COMM. FAIL		Activated with centre station communication trouble
[1][1][4]	TROUBLE FOLL		Activated with system trouble
[1][1][5]	GND PULSE		Connect ground before dial-up in 2-3 seconds advance
[1][1][6]	LOW BAT.FOLL		Low power follow: it will start once the power of the system standby battery is low.
[1][1][7]	AC LOSS FOLL		AC power loss follow: it will start once the AC power of the main board is off.
[1][1][8]	SENSORS TEST		Sensor testing: please refer to "Auto-self checking" in the manual
[1][1][9]	VOICE MODULE		Voice module follow: it will start once the voice module starts playing the recorded information
[1][1][0]	BATTERY TEST		Battery testing follow: it will start once checking the battery
[1][2]	PARTITION		Response mode
[1][2][1]	Pulse N/C		Pulse and normal closed output , 1-90 seconds
[1][2][2]	Latch N/C		Latch-normal closed output
[1][2][3]	Pulse N/O		Pulse and normal opened output, 1-90 seconds
[1][2][4]	Latch N/O		Latch and normal opened output
[2]	PARTITION		Response partition and the partition events
[2][1]	Event		
[2][1][0][1]	READY Follow(Latched)		UO will be activated when partition is ready
[2][1][0][2]	ALARM Follow		UO will be activated when partition alarm
[2][1][0][3]	Arm Follow (Latched)		UO will be activated when arm partition until disarm it
[2][1][0][4]	BURGLARY FOL (Latched)		UO is activated with alarm until the system is disarmed.
[2][1][0][5]	Fire Follow (Latched)		UO is activated when fire alarm until the systems is disarmed.
[2][1][0][6]	Panic Follow (Latched)		UO is activated when panic alarm until the system is disarmed.
[2][1][0][7]	Special Emergency		UO is activated when medical alarm until the system is armed
	Follow (Latched)		again
[2][1][0][8]	Duress Code Follow(Latched)		UO is activated when any duress code is entered
[2][1][0][9]	Buzzer Follow		UO is activate when buzzer rings during entry delay, auto arm and alarm period
[2][1][1][0]	CHIME FOLLOW		UO is activated when bell rings till it stops
[2][1][1][1]	Entry/Exit Follow		UO is activated from entry/exit delay beginning to the end
[2][1][1][2]	Fire Loop Trouble		UO is activated when fire loop trouble until no trouble
[2][1][1][3]	Daytime Zone Trouble		UO is activated when zone trouble at daytime
[2][1][1][4]	Trouble Follow		UO is activated when partition trouble until no trouble
[2][1][15]	STAY FOLLOW		STAY follow: the designated universal output will start once the selected zone is in STAY ARM status
[2][1][16]	TAMPER FOLLOW		Tamper follow: the designated universal output will start once there is a tamper alarm in the selected zone
[2][2]	Mode		
[2][2][1]	Pulse N/C		Pulse normal closed output，time range 1-90 seconds
[2][2][2]	Latched N/C		Latched normal closed output
[2][2][3]	Pulse N/O		Pulse normal opened output, time range 1-90 seconds
[2][2][4]	Latched N/O		Latched normal opened output
[3]	Zone		Utility output response zone events
[3][1]	Zone Follow		Output follow zone
[3][1][1]	Pulse N/C		Pulse normal closed output, output1-90 seconds
[3][1][2]	Latched N/C		Latched normal closed output
[3][1][3]	Pulse N/O		Pulse normal opened output，output 1-90 seconds
[3][1][4]	Latched N/O		Latched normal opened output
[3][2]	Alarm Follow		
[3][3]	Arm Follow		
[4]	Code		Choose user code

[4][0][0]	Master Code		Response master code
[4][X][x]	User Code		User code：01-30
			User code trigger

6.5.5 Code Maintenance

Hot Key	Code Maintenance	Default	Instruction
[1]	Administer		For appoint 98 user codes grades: basic user, one-time codes
[2]	PARTITION		Appoint code to its partition
[3]	GRAND CODE	1234	Master code is the highest grade
[4]	INSTALLER	0248	Master installer code is used for modification to all data
[5]	SUB INSTALLER	0299	Deputy installation code can be amended only specific parameters*
[6]	CODE LENGTH		Setup code digit, 4 digit or 6 digit
[6][1]	4 Digit	Yes	
[6][2]	6 Digit		

Set deputy installer code programming competence:

1. Return to the normal state;

2. Depress [*] [7] [3] to enter "CUSTOMIZE" mode;

3. Input master Installer code, depress [#];

4. Choose the item, depress [#];

5. Use key [→][←] to select the item should be restricted. Depress [←] button, if this data turn to "X", the item has been restricted and could not be change by deputy installer code. Depress [←] again turn "X" to a data. Restrictions are cancelled;

6. If there are three brief beeps when depress [←], there will be some sub-data. Depress [#] to entry the sub menu. Depress [→][←] and [#] to choose the item and depress [←] to restrict.

7. Depress [*] return to the "CUSTOMIZE" state, Depress [STAY] turn N to Y and confirm with [#] when LCD displays:

    I. DO YOU WANT

    Ii. TO EXIT? N

8. Depress [STAY] turn N to Y, and depress [#] to save when LCD displays:

    DO YOU WANT

    TO SAVE MENU? Y

9. Depress [*] twice return to the normal state;

10. Program system through deputy installer code:

In normal state, depress [*] [7] [2] and deputy installer code. All items without restricted can be set when the LCD will display as following:

    SUB-INST. CODE:

6.5.6 Dialer

Depress [#] to set communication format with centre station, phone number of remote controller station and dialer parameters, etc according to below table.

    INSTALLER PROG

    5) DILALER →

Hot Key	Dial	Default	Instruction
[1]	Phone Number		Set phone number of center station and remote controller station
[1][1]	Monitor Station Phone Number 1		The first center station phone number
[1][2]	Monitor Station Phone Number 2		The second center station phone number
[1][3]	Monitor Station Phone Number 3		The third center station phone number
[1][4]	Remote Control Station Phone Number		Remote controller station phone number
[2]	User Accounts		Set user number use for reporting to center stations
[2][X]	Division Number Number		Input 1-8 to set up partition number
[3]	Communication Format		Set communication format with center station
[3][1]	Monitoring Station 1	0000	communication format to center station 1 (4code)
[3][2]	Monitoring Station 2	0000	Communication format to center station 2 (4 code)
[3][3]	Monitoring Station 3	0000	Communication format to center station 3 (4 code)
[4]	Access and Identify Code		Remote control computer communication

[4][1]	Access Code	5678	Entry remote control function
[4][2]	Identify Code	0001	Remote control station computer to identify control panel
[4][3]	MS.LOCK	000000	
[5]	Control		Dial control
[5][0][1]	MS ENABLE	Yes	Yes: allow report to center station No: not allow report to center station
[5][0][2]	FM ENABLE	Yes	Yes: allow report to follow-me number No: not allow report to follow-me number
[5][0][3]	U/D ENABLE	Yes	Yes: allow computer to control the panel No: not allow remote control
[5][0][4]	Call Delay	Yes	Yes: delay 15 seconds to report to center station after alarm No: report immediately
[5][0][5]	DIAL TONE	Yes	Yes: check dialing tone before dial No: dial directly
[5][0][6]	Call Save	No	Yes: system save un-emergency events and report in whole after 12 hours late No: report immediately
[5][0][7]	USER INIT	Yes	Remote control program
[5][0][8]	CALLBK U/D	Yes	Remote control program
[5][0][9]	AUTO BATCH	No	Remote control program
[5][1][0]	ANS MACHIN	Yes	Remote control program
[5][1][1]	UL INSTAL	No	Yes: make control panel comply to UL requirement
[5][1][2]	SHOW KISOF	No	
[5][1][3]	SHOW HNDSH	No	
[5][1][4]	AUDIBLE KO	NO	
[6]	ParameterS		Dial parameter
[6][1]	MS RETRIES		Re-dial times of center station communication failure（01-15）
[6][1][1]	01-15	8	Default 8 times
[6][2]	Fm RETRIES		Re-dial times when follow-me numbers communication failure（01-15）

[6][2][1]	01-15	3	Default 3 times
[6][3]	RINGS TO U/D		Set bell times from remote station（01-15）,
[6][3][1]	01-15	12	default 12 times
[6][4]	DIALTON TIME		Time of control box waiting for dialing tone
[6][4][1]	WAIT 6 SEC	Yes	Default 6 seconds
[6][4][2]	WAIT 9 SEC		
[6][5]	REDIAL WAIT		Time of control box waiting for re-dialing
[6][5][1]	Wait 30 seconds	Yes	Default 30 seconds
[6][5][2]	Wait 60seconds		
[6][6]	DIAL METHOD		Choose ways of dialing
[6][6][1]	DTMF	Yes	Default is DTMF
[6][6][2]	Impulse, 20BPS		
[6][6][3]	Impulse, 10BPS		
[6][7]	PULS DTY CYC		
[6][7][1]	67%/33%		Europe
[6][7][2]	61%/39%	Yes	USA- default
[7]	REPORT SPLIT		
[7][1]	MS Arm/Disarm		Report arm/disarm to center station
[7][1][1]	DO NOT CALL		
[7][1][2]	CALL 1ST		Report to Monitoring Station 1
[7][1][3]	CALL 2ND		Report to Monitoring Station 2
[7][1][4]	CALL 3RD		Report to Monitoring Station 3
[7][1][5]	CALL ALL		Report to All Monitoring Stations
[7][1][6]	1ST BKUP 2ND	Yes	Report to center station 1, if can't, turn to report to center station 2
[7][2]	MS URGENT		Report emergency events to center station
	Option 1-6		Same as [7][1]arm/disarm
[7][3]	MS NON URGENT		Report non-emergency events to center station
	Option 1-6		Same as [7][1]arm/disarm
[7][4]	FOLLOW ME		
[7][4][1]	DO NOT CALL		Do not call any follow-me NO.
[7][4][2]	BY PARTITION	Yes	Only call the alarm partition correlative follow-me NO.
[7][4][3]	CALL ALL		Call all the follow-me NO.
[8]	Alarm Restore		

[8][1]	Bell Ending Report	Yes	
[8][2]	Follow Zone		
[8][3]	Disarm Report		
[9]	Test		Set test information and interval of center station and remote control station
[9][1]	MS Test		Set test time and date interval of center station
[9][2]	UD Test		Set test time and date interval of remote control station

6.5.7 Report Code

The following table is to set up event codes from control box to center station. When default values is 00, It doesn't report to the center station.

Hot Key	Report Code	Hot Key	Report Code
[1]	EMERGENCY Key	[4][2]	Trouble restore
[1][1]	Alarm	[4][2][1]	Low battery
[1][1][1]	SPECIAL	[4][3][2]	Bell
[1][1][2]	PANIC	[4][3][3]	phone
[1][1][3]	Fire	[4][3][4]	AC
[1][1][4]	DURESS	[4][3][5]	Aux
[1][2]	Restore	[4][3][6]	Clock IS set
[1][2][1]	SPECIAL	[4][3][7]	Bus COM
[1][2][2]	PANIC	[4][3][8]	FALSE code
[1][2][3]	Fire	[5]	PS ACCS trbl
[1][2][4]	DURESS	[5][1]	Trouble
[2]	Zone	[5][1][1]	Low battery
[2][1][X]	Alarm	[5][1][2]	Bell
[2][2][X]	Restore	[5][1][3]	AC LOSS
[2][3][X]	Trouble	[5][1][4]	Auxi fail
[2][4][X]	Trbl Restore	[5][2]	restore
[2][5][X]	Bypass	[5][2][1]	Low battery
[2][6][X]	TAMPER	[5][2][2]	Bell
[2][7][X]	TAMPER REST	[5][2][3]	AC
[2][8][X]	LOW BATTERY	[5][2][4]	Aux
[2][9][X]	LOW BAT RST	[6]	Arm
[3]	ACCS Tamper	[6][1]	User arm
[3][1]	Keypad	[6][2]	KEYsw arm
[3][1][1]	Tamper	[6][3]	Anto arm
[3][1][2]	Tamper Restore	[6][4]	Remote arm
[3][2]	UTIL OUTPUT	[6][5]	Quick arm
[3][2][1]	Tamper	[6][6]	Force arm
[3][2][2]	Tamper Restr	[6][7]	WL BUTTON ARM

Hot Key	Report Code	Hot Key	Report Code
[3][3]	Power Supply	[7]	Disarm
[3][3][1]	Tamper	[7][1]	User disarm
[3][3][2]	Tamper Restore	[7][2]	KEYSW disarm
		[7][3]	Auto disarm
[3][4]	EVENT LOGGER	[7][4]	Rmt disarm
[3][4][1]	Tamper	[7][5]	WL BUTT ARM
[3][4][2]	Tamper Restore	[8]	MISCELLANEOUS
[3][5]	WL BUTTON ACC	[8][1]	Entry progr
		[8][2]	Exit prgram
[3][5][1]	Tamper	[8][3]	Period MS test
[3][5][2]	Tamper Restore	[8][4]	Period UD test
[3][6]	ZONE EXPANDER	[8][5]	CALL BACK
		[8][6]	SYSTEM RESET
[3][6][1]	Tamper	[8][7]	Abort alarm
[3][6][2]	Tamper Restore	[8][8]	Self test ok
[4]	MAIN TRBL	[8][9]	Self tst fail
[4][1]	Trouble	[8][0]	Cancel report
		[9]	Special
[4][1][1]	Low Battery	[0]	Accessor code
[4][1][2]	Bell	[0][1]	Wireless ze
[4][1][3]	phone	[0][1][1]	Jamming trbl
[4][1][4]	AC LOSS	[0][1][2]	Jamm tr. rstr
[4][1][5]	Aux Fail	[0][2]	Wl butt mod
[4][1][6]	Clock NOT set	[0][2][1]	Jamming trbl
[4][1][7]	Bus FAIL	[0][2][2]	Jamm tr. rstr
		[0][3]	Printer modul
		[0][3][1]	Prn trouble
		[0][3][2]	Prn trbl rstr
		[0][3][3]	Prn buff full
		[0][3][4]	Prn buff rstr

6.5.8 Add Keypad and Module

Below table is to add/delete module、approve module、check performance of bus-line etc.

Hot key	Accessory	Instruction
[1]	Add/Del Module	Add/Del Module
[1][1]	Keypad	Add keypad
	None	None
	LCD	Add RP248KCL
[1][2]	Zone Expander	Add /delete zone expansion module
	None	Zone expansion module unused
	ZE08	Add 8zones expansion module RP248EZ8
	ZE16	Add 16zones expansion module RP248EZ16

[1][3]	Utility Output	Add/delete output expansion module
	None	Output expansion module unused
	UO04	Add 4line Output expansion module RP248EO4
[1][4]	Power Supply	Add /delete power expansion module
	None	Power expansion module unused
	PSO1	Add power expansion module
[1][5]	event	
[1][6]	WI button mod	
[1][7]	Printer modul	
[2]	Verity Module	Approve expansion keypad and module
[3]	Bus Test	Test bus-line communication quality
[4]	Bus Scanning	Check bus-line and report all module in it

8) MISCELLANEOUS →

Hot Key	MISCELLANEOUS	Instruction
[1]	WL BUTT ALLOC	

Miscellaneous: Distribution of the wireless button			
Hot Key		Item	Instruction
8		Miscellaneous	Allow to program the wireless button emitter
8	1	Distribution of the wireless button	Use the key [STAT] or [BYP], Moving the cursor, input the button's Number which you want to program into the system Press [ENTER] W BUTT ALLOCAT: BUTT #=01 (1:01)
			Choose one as following: ● Press key [ENTER], Skip to next Button BUTT=01 (EMPTY): 1)SKIP ● Write or cover the data on the choice place, press key [ENTER] BUTT=01 (EMPTY): 2) (RE) WRITE ● Erase the Data on the choice place,

press key [ENTER]

BUTT=01 (EMPTY):
3) ERASE

● Press key [STAY] and [ENTER], confirm your choice

ERASE LOCATION
ARE YOU SURE? N

●

6.6 Communication Protocols

Format Name	(PPS) Pulses/ sec	Kiss off/ Handsha ke	Validation	Inter Digit Time	Code Form at
Silent Knight/ADEMCO Slow	10	1400Hz	Dual Round	650	0F
Silent Knight/ADEMCO Slow Extended	10	1400Hz	Dual Round	650	4F
Radionics/DCI/Franklin Slow	10	2300Hz	Dual Round	650	17
Silent Knight Fast	20	1400Hz	Dual Round	650	0E
Silent Knight Fast Extended	20	1400Hz	Dual Round	650	4E
Sescoa/Franklin/Vertix/DCI Extended	20	2300Hz	Dual Round	650	56
Universal high speed	20	2300Hz	Dual Round	390	12
Radionics	20	1400Hz	Dual Round	390	02
Radionics	20	2300Hz	Dual Round	390	12
Radionics Extended	20	1400Hz	Dual Round	390	42
Radionics Extended	20	2300Hz	Dual Round	390	52
Radionics	40	1400Hz	Dual Round	390	00
Radionics	40	2300Hz	Dual Round	390	10
Radionics Extended	40	1400Hz	Dual Round	390	40
Radionics Extended	40	2300Hz	Dual Round	390	50
Radionics	40	1400Hz	Parity	390	20

Radionics	40	2300Hz	Parity	390	30
Radionics Extended	40	1400Hz	Parity	390	60
Radionics Extended	40	2300Hz	Parity	390	70
Sescoa Super Fast with parity	(4+3+parity)			03B1	
Ademco Point	(Contact)ID (DTMF ,parity)			0420	
DTMF Express	(4+2+parity)			0520	

6.7 RP248CN Control Panel Contact ID Reporting Codes

Event Reporting		Contact ID		
Zone Alarm/Disarm		Report Code		
Entry/Exit Alarm		134		
Entry/Exit Restore		134		
Panic Alarm		130		
Panic Restore		130		
24 Hours Zone Alarm		133		
24 Hours Zone Restore		133		
Tamper Zone Alarm		137		
Tamper Zone Restore		137		
Smoke Zone Alarm/Restore		111		
Fire Zone Alarm/Restore		112		
Waterproof Zone Alarm/Restore		113		
High Temperature Zone Alarm		114		
High Temperature Zone Restore		114		
Pipeline Zone Alarm/Restore		116		
Fire Zone Alarm/Restore		117		
Warning Sound Alarm		122		
Warning Sign Alarm		123		
Perimeter Zone Alarm/Restore		131		
Interior Zone Alarm/Restore		132		
Daytime/Night Zone Alarm/Restore		135		
Open Zone Alarm/Restore		136		
System Zone Alarm/Restore		140		
Detector Tamper Zone Alarm/Restore		144		
24 Hours Zone Alarm/Restore		151		
Gas-fired Alarm		151		
Gas-fired Restore		151		
Low Temperature zone		152		

Alarm/Restore				
Temperature Dissipate Alarm/Restore		153		
Liquid Leak Alarm		154		
Liquid Leak Restore		154		
Oil Leak Alarm/Restore		155		
Gas Leak Alarm/Restore		157		
High Temperature Alarm/Restore		158		
Temperature Dissipate Alarm/Restore		159		
Airflow Unsteady Alarm		161		

Special Function				
Urgency Key-depress Alarm		100		
Urgency Key-depress Restore		100		
Fire Zone Alarm		110		
Fire Zone Restore		110		
Fire Key-depress Alarm		115		
Fire Key-depress Restore		115		
Medical Treatment Emergency Alarm		120		
Medical Treatment Emergency Restore		120		
Menace Alarm		121		
Menace Restore		121		

Fault Reporting				
AC Fault		301		
AC Restore		301		
Low Battery Power		302		
Battery Power Restore		302		
Warning Sign Fault		321		
Warning Sign Restore		321		
Fire Zone Fault		373		
Fire Zone Restore		373		

On/Off Reporting				
User Arm	6A	401		
User Unarm	6A	401		
User 0 Quick Arm/Disarm	62	408		
Force Arm	63	574		
Periodic Test	64	602		

USER FUNCTIONS

Hot Key		Display	Explanation
1. BYPASS			
	1.1	BYPASS ZONES	Provides the ability to bypass any of the system's intrusion zones, as described on page 34.
	1.2	BYPASS RESET	Removes any bypass(es) previously placed on an intrusion zone(s)
	1.3	BYPASS RECALL	Recalls the most recent zone bypass(es)
2. ACTIVITIES			
	2.1	UTIL OUTPUT	Allows user control of previously designated extemal devices, as described on page 36
	2.2	SWITCH AUX	Interrupts the power supplied to the system's smoke detector(s) for a predetermined interval. thus resetting and "readying" them for subsequent alarms, as described on page 33.
	2.3	TERMINATE FM	If Follow-Me phone No. were chosen, their operation can be terminated. use this function when an alarm has been tripped and there is no nned to utilize the Follow-Me phone call.
	2.4	INITIATE CALL	By initiating a call to you're alarm company, this allows them to perform a remote programming operation on your system
	2.5	HAND OVER	Similar in intent to Initiate Call (above), Hand Over allows your alarm company to call you and, during the call, "hand over" to them the control of your security system
	2.6	VOID REP PRG	For installer use only. Some protocols have a report code to the monitoring station for entering and exiting the installer programming. To avoid the entering report and save time, this function postpones the report for two minutes during which the installer can enter the programming menu and no report will be made.
	2.7	FM PHONES	Allows the entry and/or editing of any phone numbers used with the Follow-Me feature. In case of an alarm, your system will generate a telephone call to a designated system phone or pager user and, when connected to the Voice module, employ voice messages to announce the event that has occurred. Refer to the Voice Module Programming and Operations Manual for more information. Refer to page 38 for details about editing Follow-Me numbers.
	2.8	ENABLE U/D	Each time this function is enabled, your alarm company may subsequently gain a single remote access to your system to make any required programming changes. Contact your dealer for additional information.
	2.9	DEL RMT MSG	Deletes a message that has been sent to the LCD from the Upload/Download software.
	2.0	CANCEL REPORT	Sends a "Cancel Alarm" report message to the Central Station. This function is used if the alarm was activated by mistake
3.VIEW			

	3.1	TROUBLE	Should be used when the system has detected a problem, which is evidenced by the rapid flashing of the Power LED, as described on page 73.
	3.2	ALARM MEMORY	Allows the viewing of the five most recent alarm conditions stored by the system.
	3.3	NOT READY STA	Allows the viewing of all "not ready" zones.
	3.4	ZONE STATUS	Allows the display of all system zones and their current status.
	3.5	EVENT LOG	Allows the viewing of significant system events including date and time
	3.6	SERVICE INFO	Allows the display of any previously entered service information and the system version.
	3.7	OVERVIEW	Select between the following LCD keypad display types: 3.7.1 Single: The keypad displays the partition name, time, and date. 3.7.2 All: the keypad displays the status of all relevant partitions. Each partition is represented by a status letter, as follows: A: Partition Armed S: Partition Stay Armed L: Partition in Alarm N: Partition Not Ready R: Partition Ready
4.MAINTENANCE			
	4.1	KEYPAD TEST	Momentarily tests the keypad indicators and the system's external sounder(s).
	4.2	BATTERY TEST	Tests the system's standby battery(ies)
	4.3	LCL CHIM OFF	Use to turn OFF a particular keypad's internal sounder for any function involving the

			Chime feature.
	4.4	LCL CHIM ON	Use to turn ON a particular keypad's internal sounder for any function involving the Chime feature.
	4.5	PAR CHIM OFF	Use to disable the internal sounder for all keypads in the partition for any function involving the Chime feature
	4.6	PAR CHIM ON	Use to enable the internal sounder for all keypads in the partition for any function involving the Chime feature.
	4.7	LCL BUZZ OFF	Use to turn OFF a particular keypad's internal sounder during both Entry and Exit Delay time periods and all fire and burglar alarms.
	4.8	LCL BUZZ ON	Use to turn ON a particular keypad's internal sounder during both Entry and Exit Delay time periods and all fire and burglar alarms.
	4.0	WALK TEST	Used to easily test and evaluate the operation of selected zones in your system
5.ACCESS CODE			
6.CLOCKS			
	6.1	SYSTEM TIME	Allows the setting of the system time, as described on page 49.
	6.2	SYSTEM DATE	Allows the setting of the system date, as described on page 49.
	6.3	NEXT ARM	Used to automatically Away arm a disarmed system at a specific time within the next 24 hours. Next Arm works for one time only since the system deletes the setting after it is acted upon.

No.	Item	Description
6.4	NEXT DISARM	Used to automatically disarm an armed system at a specific time within the next 24 hours. Next Disarm works for one time only since the system deletes the setting after it is acted upon.
6.5	DAILY ARM/HOM	Enables you to define a weekly program with up to two time intervals per day, during which the system automatically arms, activates UOs, or prevents users from disarming, as described on page 50.
6.6	DAILY DISARM	Use to define up to 20 vacation periods and the partitions that will be armed automatically during vacation.
6.7	VACATION	
6.7.1	PARTITION	
7.INSTALLER		
8.ACCESS CNTRL		
8.1	OPEN DOOR	Defines the door mode for each door and the reader criteria for each reader in the system.
8.1.1-8.1.8	DOOR No 1 - 8	
8.2	CUSTOM MSG	Configures the time schedules by which users can access the system.
8.2.1-8.2.8	UNIT No 1 - 8	
9.MISCELLANEOUS		
9.1	PRINTER CNTRL	1 Printer 1 on Activates printer 1 2 Printer 1 off Deactivates messages to printer 1 3 Printer 2 on Activates printer 2 4 Printer 2 off Deactivates messages to printer 2
9.2	ANTI-CODE	Some systems (defined during installation of the systems) are not ready to Arm after an alarm or tamper condition. To restore the system to Normal Operation mode, a technician code or an Anti-code must be entered. Entering the code supplied by the technician at this location will restore the system to the Normal Operation mode.
9.3	DURESS RESTOR	Deactivates a latched UO that has been activated as a result of a duress code being entered.