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## 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 status 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	[ARM]+[master code]
3	Arm Stay zones	[STAY]
4	Arm Stay zones by code	[STAY]+[master code]
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]+[ phone No.]
12	Display trouble	[*]+[3][1]
13	Display triggered record	[*]+[3][2]
14	Display unready zone	[*]+[3][3]
15	Display zone status	[*]+[3][4]
16	Display memory	[*]+[3][5]
17	Test keypad	[*]+[4][1]
18	Test Stand-by battery	[*]+[4][2]
19	Off door chime	[*]+[4][3]
20	On door chime	[*]+[4][4]
21	Off partition door chime	[*]+[4][5]
22	On partition door chime	[*]+[4][6]
23	Off buzzer	[*]+[4][7]
24	On buzzer	[*]+[4][8]
25	Delete memory	[*]+[4][9]
26	Set/change users code	[*]+[5]
27	Set time	[*]+[6]+[1]
28	Set date	[*]+[6]+[2]
29	Next Auto arm time	[*]+[6]+[3]
30	Next Auto disarm time	[*]+[6]+[4]
31	Auto arm	[*]+[6]+[5]
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**

<b>LCD Display</b>	<b>Trouble</b>
MAIN□LOW BATT	Battery Power low
MAIN□AC TROUBLE	AC lost
MAIN□BELL LOOP	Siren trouble
FLASE 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

### RP208KCL (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, 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.

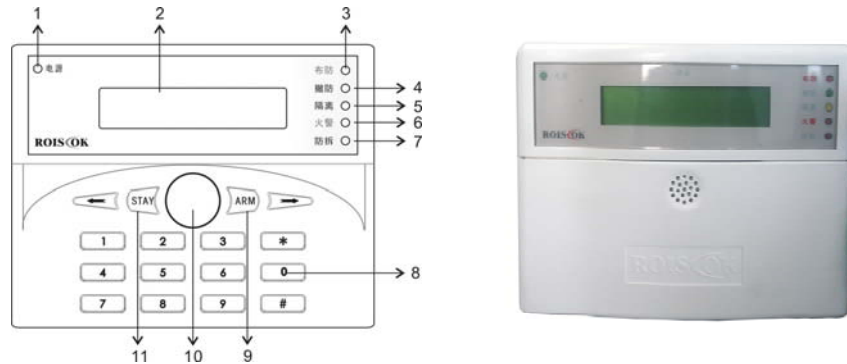


Fig.1 Layout of the RP208KCL

#### Keys Instruction

- |                 |                                  |
|-----------------|----------------------------------|
| 1 □ Power LED   | 7- Tamper LED                    |
| 2 □ LCD Display | 8 □ Digit and Function key-press |
| 3 □ Arm LED     | 9 □ Arm key-press                |
| 4 □ Disarm LED  | 10 □ Buzzer                      |
| 5 □ Bypass LED  | 11 □ Stay Arm key-press          |
| 6 □ Fire 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

### **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 status.
- Flicker-- The system is under the delay period status.

### **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 fired.

#### **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 flicker.

#### **8. Digit Keys**

- When programming, key in 0-9 digits.
- Under the status 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 status, 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 status.
- Back t o the anterior menu or return to the normal status.

## **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 status.

#### **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 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 status. Then the power LED is on, LCD display partition, clock, date, etc..

**Modifying/Setting the master Code**

step	Operation
1	In disarm status, depress[*][5][#] to entry into function status
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 status, depress [*][5] to entry into function status
2	Entry Master Code: such as [5][6][7][8]
3	Modify/set user 1 code, depress [1] or Modify/set user 2 code, depress [2] or ... The other user codes can be modify/set in the same way.
4	Entry the new user code: <b>For example, [3][3][5][5]</b>
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 status, depress [*][5] to entry into user function status
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 users can be deleted in the same way.
4	Entry the [#] 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][1]+[MASTER CODE]+[MM][DD][YY]

Month, Date and Year should be two digits.

Set time: [\*][6][2]+[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][1]+[MASTER CODE]+[08][18][06]

[\*]+[6]+[2]+[MASTER CODE]+[16] [28]

### 3.7 Set follow-me numbers

(Refer to the section 6.5.6 of chapter 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 status, depress [\*][2][7][master code][#] can entry into setting follow-me number and modify status. 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 zone or exterior zone.

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 zones would not be triggered. Please leave away from all the stay zones immediately.

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. Defaulted exit delay time is 30s.

### Arm with code

Your RP248CN offers two methods of arming, quick arm and code arm. It is defaulted is quick arm. If user requires code arm, be sure to program the system as code arm in advance. When RP248CN is set as code arm, it cannot support [ARM] and [STAY] for quick arming. Instead, it should be operated as [ARM] + [Master Code], or [STAY] + [Master Code] to arm or stay arm.

### Arm sound

If selected, Bell Squawk on Arming will produce a brief confirmation "chirp" from the system's external sounder(s) once the system is armed and the Exit Delay expires. To cancel it, refers 6.5.2 in Chapter 6.

## 3.9 Disarm and disarm sound

### Disarm system

RP248CN can set couples of codes (4 digits or 6 digits), one of them is master code, and the others are user code. In arming status, any correct code can disarm the system.

Steps	Description
1	When enter an armed zone, the keypad will beep to remind the system exit delay begins. The defaulted delay time is 30 seconds.
2	<b>disarm</b> <ul style="list-style-type: none"><li>● Before end of entry delay, please input a code and [#] to disarm, or else the system will alarm</li><li>● If code is wrong, the keypad will emit three short beeps. Then depress [*] and input code again.</li></ul>
3	Check keypad LCD display status: <ul style="list-style-type: none"><li>● "XXXXXX DISARMED"-- no alarm when armed;</li><li>● "XXXX □ALARM/ NOV 01,07 18:15 →"-- alarmed and the alarm time.</li></ul>
4	Key [←][→] use to check other alarmed events

### On/Off Audible Kiss-off

It is defaulted that RP248CN will give a long beep to remind disarm successfully. To on/off the buzzer, press [\*] + [4] + [master code] + [7] or [8].

### **3.10 Duress code disarm**

If you are ever coerced to disarm your system, you can comply with the intruder's wishes while sending a silent, duress alarm, to the Central Station. To do so, you must use a special Duress Code.

Which when used, will disarm the system in the regular manner, while simultaneously transmitting a silent alarm to the central station. All 10 codes (including one Master Code and 9 User Codes) can activate the Duress disarming by adding 1 to The last digit of your user codes. The Duress Code and the User code share the first 3 digits. Example:

User code =1-2-3-4; duress code is 1-2-3-5

User code =5-6-7-8; duress code is 5-6-7-9

User code= 7-8-9-0; duress code is 7-8-9-1

Note: Under no circumstances must the Duress Code be used haphazardly or without reason. Central Stations, along with Police Departments, treat Duress Codes very seriously and take immediate action.

### **3.11 Stop siren/bell and stop dialing a number**

If outside premises, open an entry door; the keypad(s) will beep indicating that the Entry Delay period has begun. The entry delay is defaulted as 30 seconds.

#### **Silencing an alarm in progress**

Observe the keypad. If any of the following conditions is evident, an alarm has occurred:

- The ARM LED is flashing
- Z1,Z2,Z3... are displayed on the LCD

It's best to enter the premises only after police or a security company has investigated and you feel confident that the burglar is no longer on your premises.

### **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 STATUS 0 01

01) FRONT DOOR 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) FRONT DOOR 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 [←] to exchange [Y] and [N], and depress [#] to confirm.

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

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, AL- means zone(s) armed.

### **Cancel bypass**

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

### **Bypass reset**

Under user function status (USER FUNCTION), use key [←][→] to choose (2)BYPASS RSET, and depress [#] to confirm. Input a correct user/master code

and [#] (It is unnecessary to input code, if quick arm is allowed). LCD will display as follows, depress [#] to confirm bypass reset:

BYPASS RESET  
HIT [#] TO CONFIRM

### **Exit user function status**

Depress [\*] twice to exit user function state. Then the Power LCD will be lit on, which means it is in normal status now.

### **3.13 Exit a error operation**

When operate incorrectly, depress [\*] to cancel and then operate again.

### **3.14 Keypad alarm**

RP208CN Keypad (RP208KCL) provides 3 groups emergency keys, which can be pushed at anytime, and the police, fire department, or medical assistance is required. Emergency Alarm is defaulted as silence alarm.

- Press 1 and 2 simultaneously, and for at least two seconds, will activate a Panic Alarm.
- Press 4 and 5 simultaneously, and for at least two seconds, will activate a Fire Alarm.
- Press 7 and 8 simultaneously, and for at least two seconds, will activate a Medical Emergency.

### **3.15 Entry delay and exit delay**

The 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 6.5.3 of Chapter 6.

### **3.16 Trouble and display**

When the keypad sends out three short beep regularly, indicating that the system exists some troubles. When get rid of the troubles, the system will

restore to normal status and stop beeping. Troubles include Battery Low, AC power, No Clock, No Communication, No Siren etc. Press [\*]+[3] to search on the LCD.. Depress [←][→] to check the last or the next event.

The troubles displayed as follows:

LCD Display	Trouble
MAIN□LOW BATT	Battery Power low
MAIN□AC TROUBLE	AC lost
MAIN□BELL LOOP	Siren trouble
FLASE 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.

### 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.

### 3.18 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 emits the continuous"beep-"after system installation is complete and be powered.

2. Please review the chapter 2 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 status.

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 status.

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

#### **4.3 Main board 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"

5/7/8/10/11/13//14/16 □ "Z1-Z8" the port for zones 1, defaults as Entry/Exit Delay Zone.

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

18 □ "GND" 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 □ “PHONE” port of user phone
- 33 □ alarm dial indicator lamp
- 34 □ alarm panel audio transformer

#### **4.4 Install Control Panel and Keypad**

The RP208CN control panel should be installed 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 LINE used for connecting the line, PHONE for telephone. Such as Fig.2 shows.

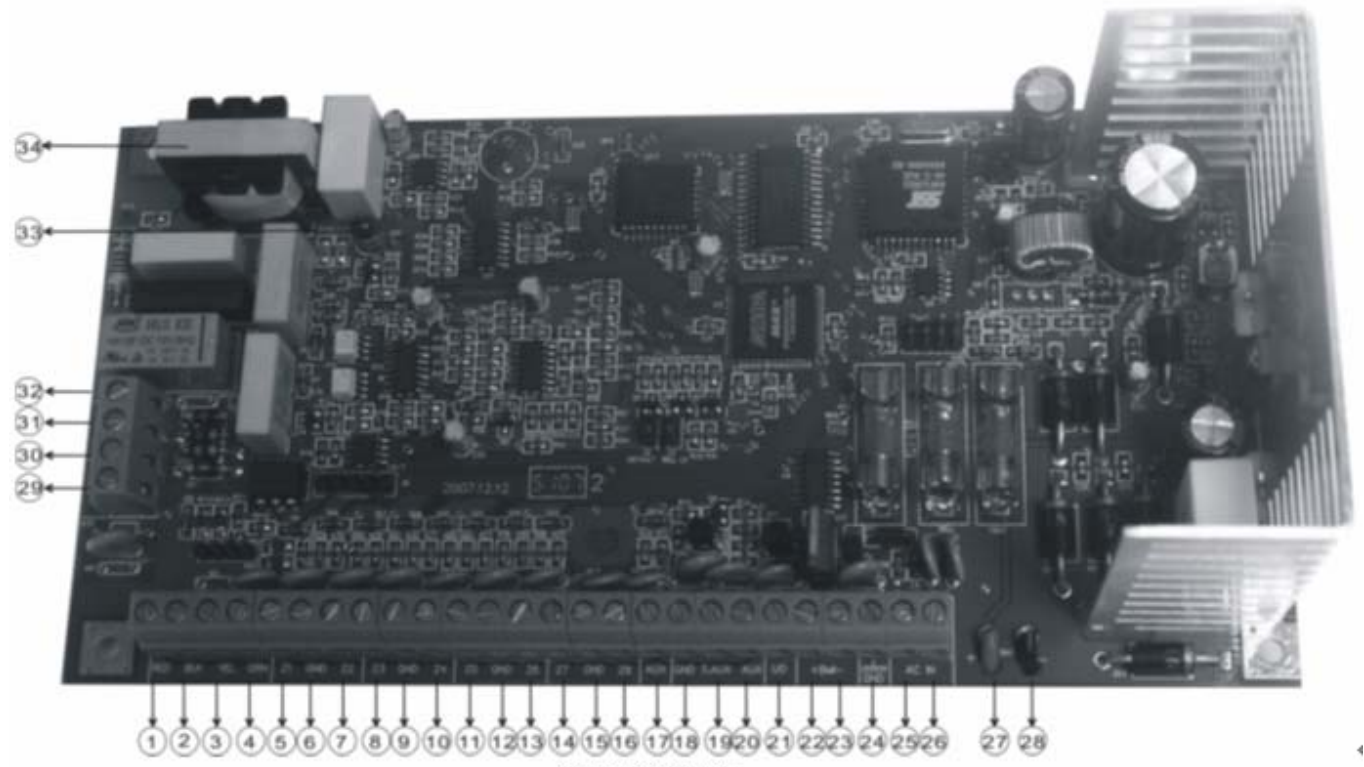


Fig.2 RP248MB+

#### 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.

#### 4.7 Connect 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  $\Omega$  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.3, connecting voice module, only need to insert it into the connector on

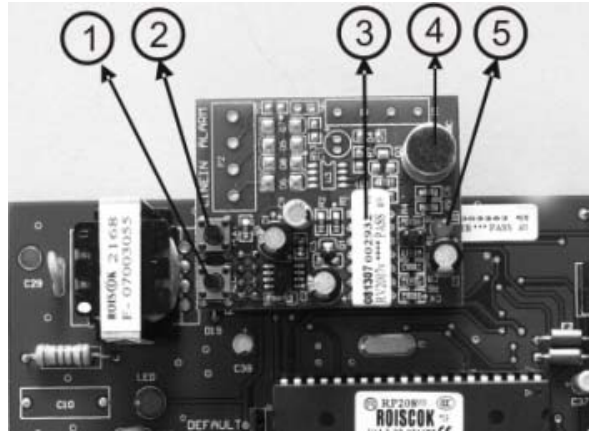
the control panel.

1(record)□recording button

2(play)□test record button

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

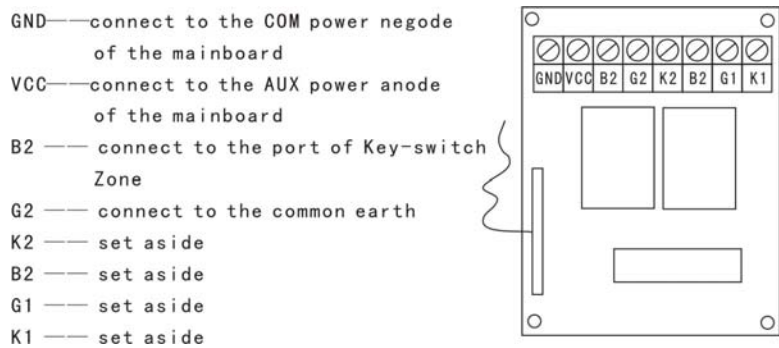
4□recording microphone



**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:



**Fig.4 Remote Receiver**

## CHAPTER 5 - FUNCTION AND TECHNICAL DATA

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

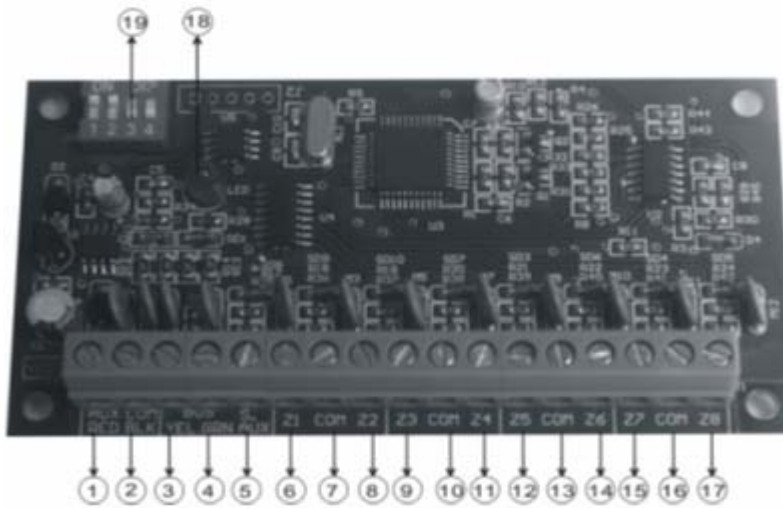
## **5.2 Features of RP248MB and Expansion Modules**

### **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 2.2K $\Omega$
- 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.5 RP248EZ8**

- 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 module
- 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).

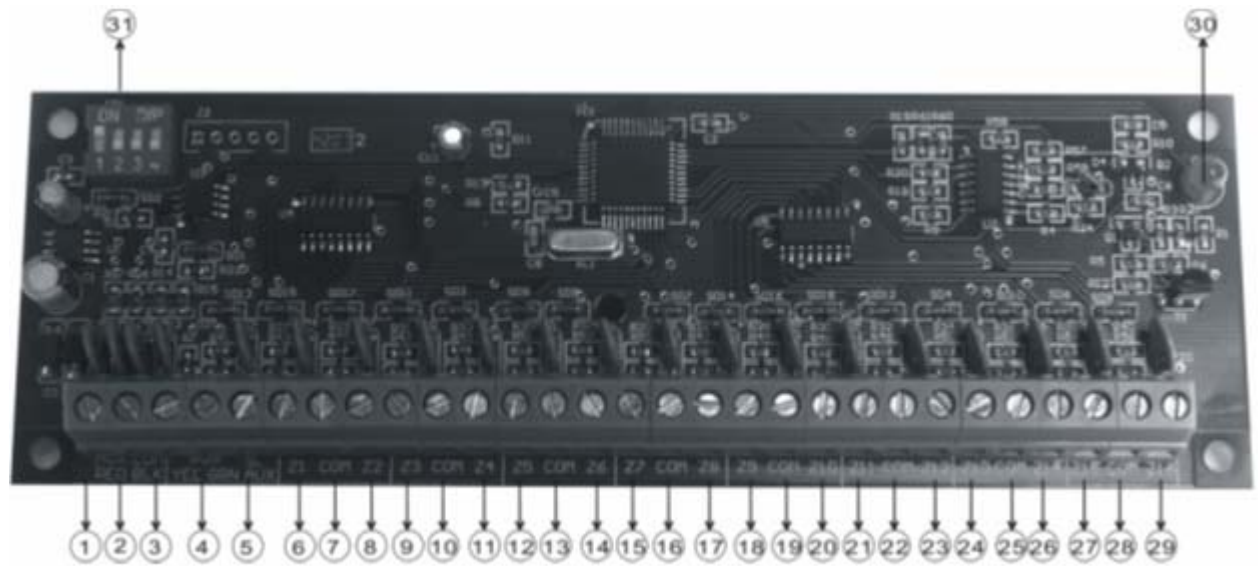


Fig.6 RP248EZ16

### **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

**Clock**

- Built-in Digital Clock

**Siren Voice Output**

- Siren Voice type is Programmable. Current output  $\square$ 750mA (max)

**Built-in Digital Communicator**

- Build-in digital communicator and compatible with Contact ID  $\square$ 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**

- 50 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

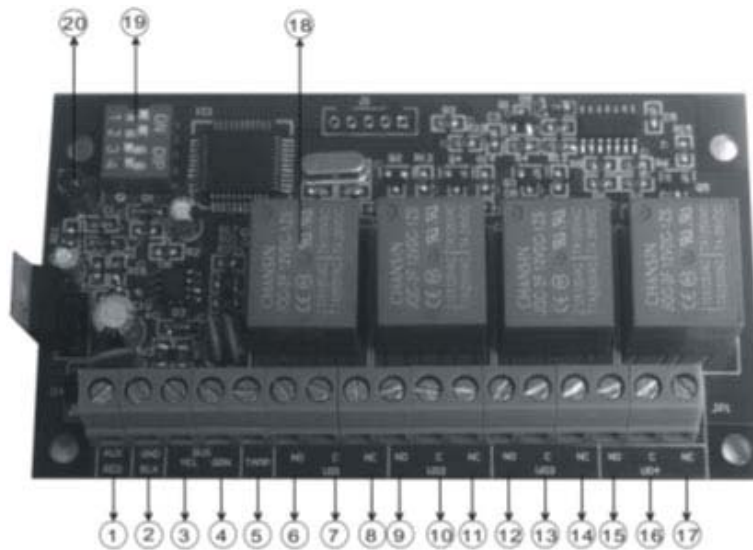


Fig. 8. Instruction of the RP248EO4

#### **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 0.5A

Fuse for BELL: Bell/LS power 1A

Fuse for BAT: battery power 2A

Dimension/weight: 201x100x65xmm/258g

### **Keypad RP248KCL**

Current consumption: 90mA typical, 130mA max

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

Dimensions/ Weight: 110x130x25mm/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: 105x55x16mm

### **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: 166x55x16mm

**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 Module RP248EO4**

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 mainboard

Dimensions: 105x59x16mm

## CHAPTER 6 PROGRAMMING DIRECTION

### 6.1 Programmable Items

RP248CN's menu indicates the user functions and programming via LCD keypad. There are seven 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 21)
5. Power the system ( AC or/and standby battery)
6. After a brief"beep", the default has been restored and then cut the JUMPER.
7. Check the LED indicators. When inter program mode, the ready LED will be flickering.

### 6.3 Program Explain

Be sure the DEFAULT jumper is off.

Program system is to set/change location data of the control panel. RP248CN has 94 locations 01-94 for setting data, and each data will correspond to a function of the control panel. The location is made up of 2 digitals and the data of location are made up of 1 digital, 2 digital or multi-digital. Not all the

locations need to be set; most of the locations have default data.

Connect the mainboard and the keypad(s), through RP248KCL program when the power is on.

#### 6.4 Check Location Data

Under programming status to check location data, LCD displays the relative system information after entry to the location, but any code won't display.

#### 6.5 Entry/Exit Program Status

##### 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 section 6.5.8 of chapter6. 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 status. If the LCD displays the zone's name, time and date, please depress [\*]+[7]+[#] and installer code enter the program status.

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]	Exit/Entry Delay 1		Exit/Entry delay 1
[1][1][1]	Entry Delay 1	30	Entry delay 1, range:

		seconds	0-225s
[1][1][2]	Exit Delay 1	45 seconds	Exit Delay 1, range: 0-225s
[1][2]	Exit/Entry 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]	Switched Auxiliary Break	10 seconds	The interval time between turn on and turn off the power, range: 01-90 seconds
[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 Bypass	YES	Bypass zones: YES: Bypass the zone is allowed NO: Bypass the zone is not allowed
[2][0][4]	Quick Bypass	NO	Quick Bypass: YES: Bypass the zone without code NO: should enter a code to bypass a zone
[2][0][5]	False Code Trouble	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 Squawk	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 Phone 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-Minute Bypass	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]	Double Verification of Fire Alarms	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 Panic	NO	Audible panic: YES: the emergency Keys will drive the exterior siren or bell NO: silence
[2][1][2]	AC Report Delay	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]	Buzzer/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]	Alarm 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 Temporal Pattern	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 Master      Grand	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
[3]	SET CLOCK		Set Clock: Set the system's date and time
[3][1]	System D ATE	JAN 1 1997	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	PARTTTIO N 1-8	Partitions 1-8 mark
[6]	TAMPER SOUND	BUZZER ONLY(3)	Set temper sound: 1. Silence 2. Bell 3. Keypad buzzer 4. Bell and buzzer 5. When arm start bell, when

			disarm start buzzer
[7]	DEFAULT ENABLE/ DISABLE	ENABLE	ENABLE: all the system parameters could be restored to the default; DISABLE: could not restore the system parameters to the default

### 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 emit 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]	NULL		Unused zone's type. Which can be used to close the zones
[3][0][1]	Exit/Entry Delay 1	Zone 1	Exit/Entry delay 1
[3][0][2]	Exit/Entry Delay 2		Exit/Entry delay 2
[3][0][3]	Exit/Entry (OP)Delay		If the zone is bypass during the exit delays, even if the zone is opened, the system still can be

			armed
[3][0][4]	Entry Follower	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 zone	The zones except zone1 and zone2	No entry delay, it will be triggered and alarm immediately.
[3][0][6]	Internal+ Exit/Entry Delay1		Stay arm, zone will be bypass automatically; Arm, zone has entry/exit delay 1
[3][0][7]	Internal+ Exit/Entry Delay2		Stay arm, zone will be bypass automatically; Arm, zone has entry/exit delay 2
[3][0][8]	Internal+ Exit/Entry (OP)Delay		Stay arm, zone will be bypass automatically; Arm, zone has exit/entry (OP) delay
[3][0][9]	Internal+ Entry Follower		Stay arm, zone will be bypass automatically; Arm, zone has entry follower
[3][1][0]	Internal+ Instant zone		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 zone		When the system is triggered, It will alarm at the armed status and report trouble at the disarmed status
[3][1][3]	24 Hours zone		The zone will be triggered, whatever the system is armed or disarmed
[3][1][4]	Fire zone		Armed, It will alarm when the short the port; Disarmed, it will report trouble when open the port
[3][1][5]	Panic zone		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
[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]	Slow		1 minute
[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]	MAINTENANC		Maintenance

	E		
[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]	Wireless zone		Add and delete wireless zone

#### 6.5.4 Programmable Utility Output

Hot Key	Output	Default	Instruction
[0]	No Output	Yes	
[1]	System		Response system events
[1][1]	Event		
[1][1][1]	Warning Follow		Activated with the bell
[1][1][2]	Line Trouble		Activated with phone line trouble
[1][1][3]	Communication Trouble		Activated with centre station communication trouble
[1][1][4]	Trouble Follow		Activated with system trouble
[1][1][5]	Ground Pulse		Connect ground before dial-up in 2-3 seconds advance
[1][2]	Mode		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]	Division		Response partition and the partition events
[2][1]	Event		
[2][1][0][1]	Prepare Follow(Latched)		UO will be activated when partition is ready
[2][1][0][2]	Warning 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]	Alarm Follow (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 Follow (Latched)		UO is activated when medical alarm until the system is armed 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]	Bell 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][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 Right		For appoint user codes grade: basic user, one-time code
[2]	Code Distribute		Appoint code to its partition
[3]	Master Code	1234	Master code is the highest grade
[4]	Main Installation Code	0296	Master installer code is used for modification to all data
[5]	Deputy Installation Code	0299	Deputy installation code can be amended only specific parameters*
[6]	Code Digit		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 status;
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" status, 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 status;
10. Program system through deputy installer code:

In normal status, 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 Number		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]	Entry and Identify Code		Remote control computer communication
[4][1]	Entry Code	5678	Entry remote control function
[4][2]	Identify Code	0001	Remote control station computer to identify control panel
[5]	Control		Dial control

[5][0][1]	MS Allow	Yes	Yes: allow report to center station No: not allow report to center station
[5][0][2]	FM Allow	Yes	Yes: allow report to follow-me number No: not allow report to follow-me number
[5][0][3]	U/D Allow	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]	Check Dialing 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 Initial Call	Yes	Remote control program
[5][0][8]	Call Remote Station	Yes	Remote control program
[5][0][9]	Auto Call	No	Remote control program
[5][1][0]	RSP	Yes	Remote control program
[5][1][1]	UL	No	Yes: make control panel comply to UL requirement
[5][1][2]	Instruction OFF	No	KISS
[5][1][3]	Instruction Handshake Signals	No	
[6]	Parameter		Dial parameter
[6][1]	Ms Re-dial Times		Re-dial times of center station communication failure
[6][1][1]	8 Times	Yes	Default 8 times
[6][1][2]	3 Times		
[6][2]	Fm re-dial times		Re-dial times when follow-me numbers communication failure
[6][2][1]	3 Times	Yes	Default 3 times
[6][2][2]	8 Times		
[6][3]	The Times of Remote Stations Ringing	12	Set bell times from remote station 0-15 default 12

[6][4]	Time of Dialing Tone		Time of control box waiting for dialing tone
[6][4][1]	3 Seconds	Yes	Default 3 seconds
[6][4][2]	9 Seconds		
[6][5]	Time of Waiting for Re-dial		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]	Way of Dial		Choose ways of dialing
[6][6][1]	DTMF	Yes	Default is DTMF
[6][6][2]	Impulse, 20BPS		
[6][6][3]	Impulse, 10BPS		
[6][7]	Pulse on / off Ratio		
[6][7][1]	67%/33%		Europe
[6][7][2]	61%/39%	Yes	USA- default
[7]	Call Parameter		
[7][1]	MS Arm/Disarm		Report arm/disarm to center station
[7][1][1]	No Report		
[7][1][2]	Report to Monitoring Station 1		
[7][1][3]	Report to Monitoring Station 2		
[7][1][4]	Report to Monitoring Station 3		
[7][1][5]	Report to All Monitoring Stations		
[7][1][6]	Call Standby Mode	Yes	Report to center station 1, if can't, turn to report to center station 2
[7][2]	MS Emergency		Report emergency events to center station
	Option 1-6		Same as [7][1]arm/disarm
[7][3]	MS Non-emergency		Report non-emergency events to center station
	Option 1-6		Same as [7][1]arm/disarm
[7][4]	Follow- me Number		
[7][4][1]	No Report		
[7][4][2]	According to Division Zone Report	Yes	
[7][4][3]	Report to All Follow-me Numbers		
[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 is 00, It doesn't report to the center station.

Hot Key	Report Code	Hot Key	Report Code
[1]	Urgency Key	[4][2]	Trouble restore
[1][1]	Emergency Alarm	[4][2][1]	Low battery
[1][1][1]	Medical Emergency	[4][3][2]	Bell Restore
[1][1][2]	Urgency Alarm	[4][3][3]	Telephone Restore
[1][1][3]	Fire Alarm	[4][3][4]	AC Restore
[1][1][4]	Menace Alarm	[4][3][5]	Auxiliary power restore
[1][2]	Alarm Restore	[4][3][6]	Clock set
[1][2][1]	Medical Emergency Restore	[4][3][7]	Bus-line restore
[1][2][2]	Urgency Alarm Restore	[4][3][8]	Wrong code restore
[1][2][3]	Fire Alarm Restore	[5]	Power module trouble
[1][2][4]	Menace Alarm Restore	[5][1]	Trouble
[2]	Zone	[5][1][1]	Low battery
[2][1][X]	Alarm	[5][1][2]	Bell trouble
[2][2][X]	Alarm Restore	[5][1][3]	AC trouble
[2][3][X]	Trouble	[5][1][4]	Auxiliary power failure
[2][4][X]	Trouble Restore	[5][2]	Trouble restore
[2][5][X]	Bypass	[5][2][1]	Low battery restore
[3]	Accessory Tamper	[5][2][2]	Bell restore
[3][1]	Keypad	[5][2][3]	AC restore
[3][1][1]	Tamper	[5][2][4]	Auxiliary power restore
[3][1][2]	Tamper Restore	[6]	Arm
[3][2]	Output	[6][1]	User arm
[3][2][1]	Tamper	[6][2]	On/off switch arm
[3][2][2]	Tamper Restore	[6][3]	Auto arm
[3][3]	Power Supply	[6][4]	Remote arm
[3][3][1]	Tamper	[6][5]	Quick arm

[3][3][2]	Tamper Restore	[6][6]	Force arm
[3][4]	Event Record	[7]	Disarm
[3][4][1]	Tamper	[7][1]	User disarm
[3][4][2]	Tamper Restore	[7][2]	On/off switch disarm
[4]	Main board Restore	[7][3]	Auto disarm
[4][1]	Trouble	[7][4]	Remote disarm
[4][1][1]	Low Battery	[8]	Other
[4][1][2]	Bell Trouble	[8][1]	Entry program
[4][1][3]	Telephone Trouble	[8][2]	Exit program
[4][1][4]	AC Trouble	[8][3]	Monitor station test
[4][1][5]	Auxiliary Power Failure	[8][4]	Remote station test
[4][1][6]	Clock Unset	[8][5]	Recall
[4][1][7]	Bus-line Trouble	[8][6]	System restore
[4][1][8]	Wrong Code	[9]	Special code

### 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
	UO4	Add 4line Output expansion module RP248EO4
[1][4]	Power Supply	Add /delete power expansion module
	None	Power expansion module unused
	PSO15	Add power expansion module
[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
-----	--------------	--

### 6.6 Communication Protocols

Format Name	(PPS) Pulses/sec	Kiss off/ Handshake	Validation	Inter Digit Time	Code Format
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

### 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 Alarm/Restore		152		
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		

<b>Special Function</b>				
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		

<b>Fault Reporting</b>				
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		

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

## ROISCOK's Warrant

**ROISCOK** Electronics Ltd., and its **Subsidiaries** and **Affiliates** ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 18 months from the date of production. Because of Seller does not install or connect the product and because the product maybe used in conjunction with products not manufactured by **Seller**, seller cannot guarantee the performance of security system which uses this products. **Seller's** obligation and liability under this warranty is ex-depressly limited to repairing or replacing, at **Sellers** option, within a reasonable time after the date of delivery, any product not meeting the specifications.

**Seller's** obligation under this warranty shall not include any transportation charges, or costs of installation or any liability for direct, indirect or consequential or delay. **Seller** does not represent that its products may not be compromised or circumvented that the product will prevent any persona, injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. **Buyer** understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery, fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result.

Consequently, **Seller** shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause of origin, sellers maximum liability shall not exceed the purchase price of the product, which shall be the complete and exclusive remedy against seller.

No employee or representative of Seller is authorized to change this warranty in any way or grant any other warranty. All products should be test at least once a week.