

## CR200

Wirefree Communicating  
Alarm System



User – Installation – Programming Manual



All information in this document have been collected and carefully verified, nevertheless Elkron S.p.A. can not be held responsible for any possible errors and omission.

Elkron S.p.A. reserves the right to modify or improve at any times and without notice the products described in this manual.

Besides it is possible that this manual refers to any information about products (hardware or software) or services not yet on the market. These references or information do not mean that Elkron S.p.A. intends to release these products or services.

Elkron is a registered trade mark of Elkron S.p.A.

All trade marks mentioned in the document belong to their respective owners.

© Copyright Elkron S.p.A. 2006

All rights reserved. Reproduction of this document is allowed only for CR200 system installation.



Via Cimarosa, 39 – 10154 Torino (TO) – ITALY  
Tél. +39 (0)11.3986711 – Fax +39 (0)11. 3986790  
www.elkron.it – mail to: [info@elkron.it](mailto:info@elkron.it)

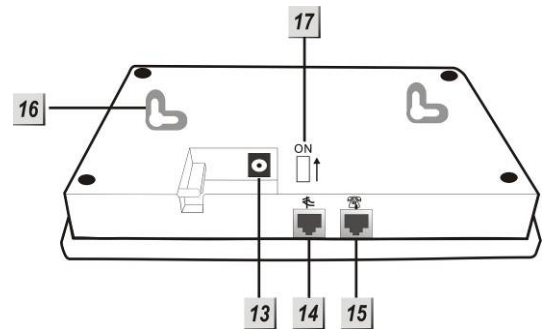
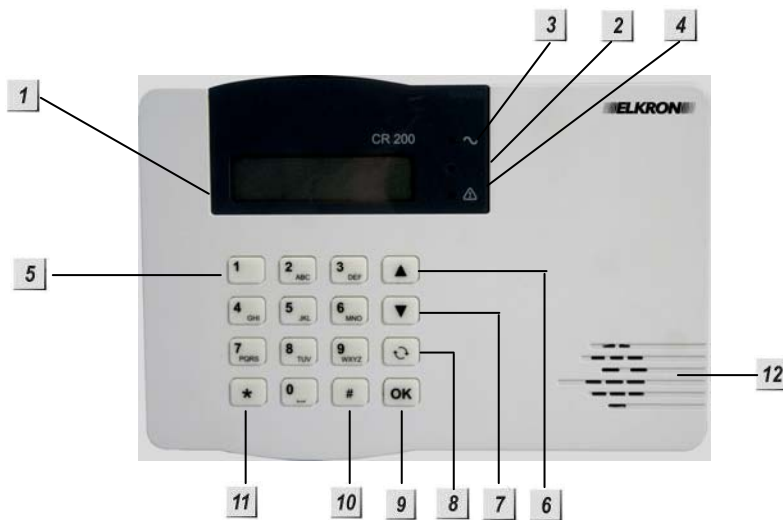
# SUMMARY

<b>SUMMARY.....</b>	<b>3</b>
<b>1 APPLICATION OVERVIEW.....</b>	<b>5</b>
1.1 Identifying the parts.....	5
1.2 The power supply.....	6
1.3 Connecting the telephone line.....	6
1.4 How to install the control panel.....	6
1.5 Four – level password .....	6
1.6 Getting started.....	7
<b>2 INSTALLER SET UP MENU.....</b>	<b>8</b>
2.1 Reporting method .....	8
2.2 Installer Code .....	9
2.3 Digital Center .....	9
2.3.1 Setting Telephone Numbers .....	9
2.3.2 Setting Account Numbers .....	10
2.3.3 Check-In Report.....	11
2.3.4 Offset Period.....	11
2.3.5 Receiver Ass.....	11
2.3.6 Follow-On .....	12
2.3.7 Verification .....	12
2.4 Opt. settings .....	12
2.4.1 Device +/- Option .....	12
2.4.2 DC Option .....	12
2.4.3 Duress Options .....	13
2.4.4 Lacth Option .....	13
2.5 Devices +/- .....	13
2.5.1 Adding Devices.....	13
2.5.2 Edit Devices.....	18
2.5.3 Remove Devices.....	19
2.5.4 Program Siren.....	20
<b>3 CONFIGURING YOUR SYSTEM.....</b>	<b>22</b>
3.1 Telephone Settings ( <i>for voice report only</i> ).....	23
3.1.1 Telephone Nubers .....	23
3.1.2 Message Menu .....	24
3.2 Code Settings .....	26
3.2.1 Pin Code .....	26
3.2.2 Temporary Code.....	28
3.2.3 Duress Code.....	29
3.2.4 Master Code .....	30
3.3 Time Settings.....	30
3.3.1 A. Entry Time (Away Entry Time) .....	30
3.3.2 A. Exit Time (Away Exit Time) .....	31
3.3.3 H. Entry Time (Home Entry Time) .....	31
3.3.4 A. Exit Time (Home Exit Time) .....	31
3.3.5 Alarm Length .....	32
3.3.6 Siren Delay .....	32
3.3.7 Mobility Check .....	32
3.3.8 Supervision .....	33
3.4 Sound Settings.....	33
3.4.1 A. Entry Sound (Away Entry Sound) .....	33
3.4.2 A. Exit Sound (Away Exit Sound) .....	33
3.4.3 H. Exit Sound (Home Exit Sound) .....	33
3.4.4 H. Entry Sound (Home Entry Sound) .....	33
3.4.5 Door Chime.....	34
3.4.6 Warning Beep .....	34
3.4.7 Ring Tone .....	34
3.5 General Settings.....	34
3.5.1 Final Door .....	34
3.5.2 Remote Controller Entry Enable .....	34
3.5.3 Tamper Alarm .....	35
3.5.4 Panel Siren .....	35
3.5.5 Interference.....	35
3.5.6 AC Report .....	35
3.6 Clock.....	36

3.6.1	Time .....	36
3.6.2	Date .....	36
<b>3.7</b>	<b>Devices +/- .....</b>	<b>36</b>
<b>3.8</b>	<b>Walk Test.....</b>	<b>36</b>
<b>4</b>	<b>OPERATION.....</b>	<b>37</b>
<b>4.1</b>	<b>Entering User Menu .....</b>	<b>37</b>
<b>4.2</b>	<b>Away (Alarm on) Mode .....</b>	<b>37</b>
4.2.1	Arming the system.....	37
4.2.2	Stopping the Exit Delay .....	38
4.2.3	Extend the Exit Delay .....	38
<b>4.3</b>	<b>Forced Arming.....</b>	<b>38</b>
<b>4.4</b>	<b>Disarm (Alarm off) Mode .....</b>	<b>39</b>
<b>4.5</b>	<b>Home Arm Mode.....</b>	<b>39</b>
4.5.1	Home Modus einrichten.....	40
4.5.2	Stopping the Exit Delay .....	40
4.5.3	Extend the Exit Delay .....	40
4.5.4	Forced Arming .....	40
<b>4.6</b>	<b>Partial (bypass) Arm Mode.....</b>	<b>40</b>
<b>4.7</b>	<b>Alarm Activation.....</b>	<b>42</b>
<b>4.8</b>	<b>Stop the Alarm and Alarm Display .....</b>	<b>43</b>
4.8.1	Stopping the Alarm .....	43
4.8.2	Alarm Memory .....	45
<b>4.9</b>	<b>Event Log.....</b>	<b>45</b>
<b>4.10</b>	<b>Up/Downloading (for digital reporting only).....</b>	<b>46</b>
4.10.1	Remote Up/Downloading.....	46
4.10.2	Local Up/Downloading.....	47
<b>4.11</b>	<b>False Alarm Management.....</b>	<b>47</b>
4.11.1	Duale Ply Entry Warning .....	47
4.11.2	Alarm Abort Reporting (Digital Reporting only) .....	47
4.11.3	Sequential Verification Reporting (Digital Reporting only) .....	47
<b>4.12</b>	<b>FAULTY SITUATIONS .....</b>	<b>48</b>
4.12.1	Fault Message Display .....	48
4.12.2	Clearing Fault Message Display.....	49
4.12.3	Viewing/Clearing the Fault Message .....	49
4.12.4	Fault Event Response .....	49
4.12.5	Fault Message Nomenclature.....	50
<b>4.13</b>	<b>Dialing .....</b>	<b>51</b>
4.13.1	Auto Dialing .....	51
4.13.2	Call Acknowledgment .....	51
4.13.3	Auto Radial .....	51
4.13.4	Auto Dialing .....	52
<b>4.14</b>	<b>One-Way Listen-In Communication .....</b>	<b>52</b>
4.14.1	Opening One-Way Listen-In Communication.....	52
4.14.2	Terminating the One-Way Listen-In Communication .....	52
4.14.3	Opening the One-Way Listen-In Communication.....	53
4.14.4	Terminating the One-Way Listen-In Communication .....	53
<b>4.15</b>	<b>Remote Access .....</b>	<b>54</b>
<b>4.16</b>	<b>Remote Access Options.....</b>	<b>54</b>
<b>5</b>	<b>APPENDIX.....</b>	<b>55</b>
<b>5.1</b>	<b>Reset Procedure.....</b>	<b>55</b>
<b>5.2</b>	<b>Communication Protol and format.....</b>	<b>55</b>
5.2.1	Handshake Tone .....	55
5.2.2	Placement.....	55
5.2.3	Composition.....	55
5.2.4	Message Blocks.....	55
5.2.5	Placement.....	55
5.2.6	Message Composition .....	56
5.2.7	Data Tone .....	56
5.2.8	Kiss off (Acknowledgement) Tone.....	56
5.2.9	Event code.....	57

# 1 APPLICATION OVERVIEW

## 1.1 IDENTIFYNG THE PARTS



1. **Backlight LCD Display**
2. **Microphone**
3. **Green LED**  
AC Power Indicator; the Green LED will light up when AC Power is on.
4. **Yellow LED**  
Fault Indicator; the Yellow LED will light up when any fault situation is detected and turn off when all fault conditions are restored.
5. **Numeric Keys**
6. **▲ Keys**  
In Programming mode, press this key to move the cursor and scroll the display upwards.
7. **▼ Keys**  
In Programming mode, press this key to move the cursor and scroll the display downwards.
8. **↻ Keys**  
In Programming mode, use this key for deleting a digit, canceling the selection, aborting the current screen and returning to the previous screen etc.
9. **OK - Keys**  
To confirm the keyed-in data or confirm the selection.
10. **# Keys**  
To enter the Programming menu.
11. **\* Keys**  
For Telephone Number Setting; it represent 3-second delay when dialing.
12. **Buzzer**
13. **DC Jack**  
For connecting the DC 12V 500mA power adapter.
14. **Phone Jack marked Line**  
This jack is for the connection to the phone line from the wall.
15. **Phone Jack marked Phone**  
This jack is for the connection to the telephone unit.
16. **Two Mounting Holes**
17. **Battery Switch**

## 1.2 THE POWER SUPPLY

An AC power adapter is required to connect to a wall outlet. Be sure only to use an adapter with the appropriate AC voltage rating to prevent component damage. A DC 12V output and 500mA adapter is generally used to power the Control Panel.

### RECHARGEABLE BATTERY

- In addition to the adapter, there is a rechargeable battery inside the Control Panel that serves as a back up in case of a power failure.
- The battery used is a 7.2V 600mAH Ni-MH rechargeable battery pack.
- During normal operation, the AC power adapter is used to supply power to the Control Panel and at the same time recharge the battery.
- When the battery is fully charged, it can provide back-up power for a period of at least 16 hours. It takes approximately 48 hours to fully charge the battery.

**NOTE:** The CR200 is equipped with Backlit LCD display and Backlit 16-button keypad to add the convenience of easy operation when in dark. However, when AC power is missing and for the reason of conservation of rechargeable battery, both Backlit features will be disabled until the AC power is again supplied.

## 1.3 CONNECTING THE TELEPHONE LINE

Two telephone jacks can be found next to the DC jack for the connection of your telephone line and telephone set.

- Plug one end of the enclosed telephone cable into the socket jack on the wall.
- Plug the other end of the enclosed telephone cable into the socket marked **Line**.
- Plug your telephone set into the other socket marked **Phone**.

## 1.4 HOW TO INSTALL THE CONTROL PANEL

**The easiest way to get to know the system and get it up and running quickly is to get all the devices and accessories programmed on a tabletop before locating and mounting them.**

The Control Panel can be mounted on the wall or wherever desired. Ensure the Control Panel is fitted at approximately chest height where the display can be easily seen and the keypad convenient to operate.

- Using the 2 holes of the Wall Mounting Cross Bracket as a template, mark off the holes' positions.
- Drill 2 holes and fix the screws & plugs provided.
- Hook the CR200 unit onto the Wall Mounting Bracket (holding the unit with the front facing you).

## 1.5 FOUR – LEVEL PASSWORD

In order to provide highest security in operating the system, CR200 offers 4 levels of authorization.

### PIN CODE

- There are a total of 4 User PIN Codes per each system. The PIN Code is the 1st level of password. When the display panel asks you to key in **Enter Code** or **P-Code**, please enter your User PIN Code.
- **1234** is set as default User 1 PIN Code by the factory.
- User 2-4 PIN codes are deactivated by factory default.

### MASTER CODE

- The Master Code has the authorization to enter Programming Mode. When the display panel asks you to key in **M-Code**, please enter your Master Code.
- **1111** is set as default Master Code by the factory.

### INSTALLER CODE

- The Installer Code is for the installer to enter Installer menu for programming system parameters such as Tel. Number, Account Number, etc.
- When the display panel asks you to key in **I-Code**, please enter your Installer Code.
- **7982** is set as default Installer Code by the factory.

## GUARDIAN CODE

- The Guardian Code has the same authorization as the PIN Code. It is used by the patroller of the Central Station.
- The Guardian Code is a 4-digit number and is generated automatically by the Control Panel by reversing the digit sequence of the 4-digit Account Number.

### EXAMPLE:

If the Account Number is set to **6327**, then the Guardian Code is automatically assigned to be **7236**.

### NOTE :

- The CR200 normally only reports open/close status of the system to the Central Station when the user chooses so. However, whenever the patroller uses Guardian Code to arm/disarm the system, the CR200 will report the open/close status to the Central Station.
- Any of the Codes can NOT be set the same. If you set the same number, the display panel will show: **Code is use, select another** to prompt the user to choose differently.

## 1.6 GETTING STARTED

1. Find a suitable location for the Control Panel to be installed.
2. Apply the AC Power. You will hear a long beep. **Alarm On** will be displayed on the first line and **00:01 01 Jan** displayed on the second line of the screen indicating the system is in Away mode (this is the default mode).
3. Press **1** key on the keypad, the display will show.

	E	n	t	e	r		C	o	d	e		
							*	.	.	.		

4. Key in the remaining **234** (default User1PIN code, 1234) within 30 sec.
5. Press **OK**. You will hear 2 short beeps and the display will show.

		A	l	a	r	m		O	f	f			
		0	0	:	0	1		0	1		J	a	n

The system is now in Disarm mode.

### NOTE :

- In Step 4, press **G** (cancel) key will clear a previously entered code.
- **OK** key confirming the entered PIN code should be pressed within 30 sec. Otherwise, the display will go back to **Alarm On** and the system remains armed.
- During entering PIN code, if more than 20 keys (including **OK** & **G** key) were pressed without a valid PIN code strings, it will inhibit further key presses for 1 minute.
- In Step3, if you press a key other than numeric keys, the display will remain the same requesting you to key in **1234** (default PIN code) and then press **OK**.
- The Control Panel has **Screen Saver** function. The **Alarm off** message will be displayed for 180 sec. only. Only current date & time is displayed on the second row afterwards.

## 2 INSTALLER SET UP MENU

Before you program your CR200 please set your desired reporting method in the **Installer Menu**.

When the system is in **Alarm off** mode, please follow the steps to enter the **Installer menu**.

1. Press **\* key**.

The screen will prompt you to enter the **User1** PIN code.

		I	-	M	o	d	e	E	n	t	e	r		
		P	-	C	o	d	e	.	.	.	.			

2. Key in **User1** PIN code (default is 1234) within 10 sec.

The screen will prompt you to enter the Installer code.

		I	-	M	o	d	e	E	n	t	e	r		
		P	-	C	o	d	e	.	.	.	.			

3. Key in **7982** (default Installer code) within 10 sec.

4. Press **OK**, then the Installer Menu will be displayed.

		R	e	p	o	r	t	M	e	t	h	o	d		
		I	n	s	t	a	l	I	-	C	o	d	e		

### NOTE :

- Use **▲&▼** to move the cursor to select the item, press **OK** to confirm the selection.
- **\*** displayed in front of an option indicates the current setting.
- In **Installer Menu**, if no key is pressed within 10 minutes, the Control Panel will automatically exit this menu and return to **Alarm Off** display.

### 2.1 REPORTING METHOD

In **Installer** menu, select **Reporting Method**, the screen allows you to set which reporting method mode should be followed in an emergency event.

1. Press **OK**, from the previous screen and the display is shown.

		V	o	i	c	e	R	e	p	o	r	t		
o		D	i	g	i	t	a	l	R	e	p	o	r	t

Select between the favoured reporting method. Different reporting method results in different set up processes.

#### **Voice Report:**

An alarm event will be reported by calling out telephone line to summon help.

#### **Digital Report:**


An alarm event will be reported to the Central Monitoring Station in an emergency (factory default).

2. Press **OK** on the selected reporting method and the following screen will displayed:

		A	r	e		y	o	u		s	u	r	e	?		
										(	+	O	K	)		

Press **OK** to confirm or press **G** to return to the previous menu.

### IMPORTANT NOTE :

 Once **OK** is pressed, all previous settings will be reset back to factory default, except Log Events and already Learnt-In devices.

3. If **Voice Report** is selected, the display will show:

		R	e	p	o	r	t	M	e	t	h	o	d		
		I	n	s	t	a	l	I	-	C	o	d	e		



If **Digital Report** is selected, the display will show:

		R	e	p	o	r	t		M	e	t	h	o	d	
		I	n	s	t	a	l	-	C	o	d	e			
		D	i	g	i	t	a	l		C	e	n	t	e	r
		O	p	t	.	S	e	t	t	i	n	g	s		
		D	e	v	i	c	e	s		+	/	-			
		U	p	/	d	o	w	n		L	o	a	d		

## 2.2 INSTALLER CODE

The Installer Code is used to enter Installer Menu.

The Installer Code consists of 4 digits and has been set to **7982** as default by the factory. Before you set your own Installer Code, **7982** has to be keyed in.

To set the Installer Code:

1. Enter the Installer Code menu by press **OK**, then the the Installer Code Menu will be displayed.



		E	n	t	e	r		N	e	w		C	o	d	e	
										.	.	.	.			

2. Enter your new 4 digit Installer code and press **OK** again. The following screen will be displayed:

		R	e	p	e	a	t		N	e	w		C	o	d	e	
										.	.	.	.				

3. Enter your new installer code again and press **OK** to confirm. It will then return to the Installer menu.

### IMPORTANT NOTE :

-  Remember to select the Reporting Method before doing all the settings.
-  The following menu will be displayed only when “Digital Report” is selected.

## 2.3 DIGITAL CENTER

		T	e	l	.	N	u	m	b	e	R	s			
		A	c	c	.	N	u	m	b	e	R	s			
		C	h	e	c	k	-	i	n		R	p	t		
		O	f	f	s	e	t		P	e	R	i	o	d	
		R	e	c	e	i	v	e	r		A	s	s	.	
		F	o	l	l	o	w		O	n					
		V	e	r	i	f	i	c	a	t	i	o	n		

### 2.3.1 Setting Telephone Numbers

In **Installer** menu, select **DigitalCenter** and then **Tel. Number**, the screen allows you to set/change/delete the Central Monitoring Station telephone numbers.

Two telephone numbers can be programmed in priority order (A & B).

#### NOTE :

- A and B represent the priority numbers of the two Central Station respectively, with A having the higher priority.
- If the Tel. number for a particular priority number has not been stored, six dots are displayed to indicate the memory spot is empty.
- Only 11 digits can be displayed on the Tel. numbers list. Non-fitting numbers are indicated with “.” after the incomplete number.

#### STORE TEL. NUMBERS

1. Move the cursor to the **Tel. Number** submenu and press **OK**.

The display will show the following screen when no tel. number has been entered:

*		A)	.	.	.	.	.	.					
		B)	.	.	.	.	.	.					

2. Press **OK**.

The following screen will be shown for you to enter the phone number.

[illegible]

3. Key in the phone number.

4. Press **OK**.

The screen will return to the **Tel. Number** screen to show you the stored phone number and for you to store another number:

*		A)	2	2	1	8	0	5	5	1				
		B)	.	.	.	.	.	.						

**NOTE :**

- The maximum length of a number is 20 digits including \* & #. If this length is reached, the Control Panel will sound 5 beeps and no key can be keyed in except **G** key and **OK** key.
- While entering the number, the **G** key is used as backspace. However, if the number field is empty, pressing the **G** key will return to **Tel. Numbers** screen.
- While entering the number, when the 15<sup>th</sup> position is reached, non-fitting numbers will be scrolled sideward to the left.

## CHANGE TEL. NUMBERS

1. On the **Tel. Number** screen, Press **OK**.

2. The following screen will be displayed for you to confirm if you really want to change.

		C	h	a	n	g	e		N	u	m	b	e	r	
2	2	1	8	0	5	5	1				?	(	O	k	)

3. Press **OK** to confirm. The following screen will be displayed for you to enter the new number.

[illegible]

**NOTE :**

- Press **G** to abort and the screen returns to **Tel. Number** screen.
4. Key in the new number.
5. Press **OK**.

The new number will then override the previous one. The screen returns to **Tel. Number** screen.

## DELETE TEL. NUMBERS

To delete a telephone number, follow the Step 1 to Step 3 of **Changing Tel. Number** as described above, and when **Enter new No.** prompt screen is displayed:

[illegible]

1. Press **OK**, then the previous stored number will be deleted.

### 2.3.2 Setting Account Numbers

In **Installer** menu, select **Acc. Number**, the following screen allows you to set/change/delete the Account Number associated with the Central Monitoring Station number which is programmed in **Tel. Number** menu.

Two Account Numbers can be programmed in this menu in priority order (A & B).

*	A)	.	.	.	.	.	.						
	B)	.	.	.	.	.	.						

**NOTE :**

- A and B represent the priority number of the two Central Station respectively and should correspond to the priority numbers set in **Tel. Numbers** menu, with **A** having the higher priority.
- If the Acct Number for a particular priority number has not been stored, six dots are displayed to indicate the memory spot is empty.

		A)	0	0	0	0									
		B)	.	.	.	.	.	.							

- To set/change the account number, follow the same steps as those to set/change/delete the Tel. Number described in previous section.
- Be sure to update the Account Number accordingly whenever the Monitoring Station number is updated.
- The Account Number is a 4-digit number. Further key pressing of numeric number after 4 digits is prohibited and the Control Panel will sound 5-beep error sound while a number less than 4 digits is ended with **OK**, an error message **No. of digit must be 4** will be displayed, and you are requested to enter a new number again.

### 2.3.3 Check-In Report

This is to select whether the Control Panel needs to do check-in reporting to the Central Station automatically and to select the period of time between check-in reports. Options available are **Disable, 6 Hrs, 12 Hrs, 18 Hrs, 1 Day, 2 Days, 3 Days, 7 Days, and 28 Days.**

		C	h	e	c	k	-	I	n		R	p	t		
		D	i	s	a	b	l	e							v

- **Disable** is set as factory default, meaning the Control Panel will not make **Auto Check-In** reports.

### 2.3.4 Offset Period

This is to set the time delay before the first **Auto Check-In** report to be made. For example, if **Offset** time period is set to 2 Hours, then the Control Panel will make the first **Auto Check-In** report after 2 hours, then afterwards reports periodically at regular intervals set by **Check-In Rpt** described above.

Options available are 1 Hr, 2 Hrs, 3 Hrs, 4 Hrs, 8 Hrs, and 12 Hours.

		O	f	f	s	e	t		P	e	r	i	o	d	
		1					H	r							v

- **1 Hr** is set as factory default.

### 2.3.5 Receiver Ass.

This is for you to select how many Central Station Receivers should the Control Panel report to.

Options available are **Receiver 1 or Receiver 2** and **Receiver 1 and Receiver 2**. Where **Receiver 1** means the Central Station telephone number which is set as priority **A**, and **Receiver 2** means the Central Station telephone number which is set as priority **B** in **Tel. Settings** menu respectively.

If you choose **Receiver 1 and 2**, the Control Panel will need to successfully report to both receivers.

If you choose **Receiver 1 or 2**, the Control Panel will try to dial Receiver 1 first. If it is failed, the Control Panel will then try to dial Receiver 2. As long as one of the two Receivers is reported, the job is done.

		R	c	v	1	/		R	c	v	2			
		R	c	v	1	&		R	c	v	2			

- **Receiver 1 / Receiver 2** is set as factory default.

**NOTE :**

**Rcv 1 / Rcv 2 means Receiver 1 or Receiver 2.**

**Rcv1 & Rcv 2 means Receiver 1 and Receiver 2.**

### 2.3.6 Follow-On

After a digital alarm reporting is successfully made, you may choose to enable/disable an automatic one-way Listen-In communication channel with the Central Monitoring Station.

o		F	o	I	I	o	w	-	O	n		O	f	f	
		F	o	I	I	o	w	-	O	n		O	n		

- **Follow-On Off** is set as factory default.

#### NOTE :

- When **Follow-On Off** is selected, no one-way Listen-In communication channel will be opened.
- When **Follow-On On** is selected, an event code 606 will be sent to the Central Monitoring Station. Central Monitoring Station can press DTMF “1”, and a 3-min one-way Listen-In communication channel will be opened automatically. During the 3-min period, the Control Panel will emit a beep via the telephone handset signaling 20 secs of time remaining to alert to the call recipient. If the call recipient needs more conversation time, s/he may press DTMF “1” to extend another 5 minutes. Press DTMF “0” to terminate the call and resume the alarm siren. Press DTMF “9” to terminate both the call and alarm siren.

### 2.3.7 Verification

This is use to set the Sequential Verification Reporting.

o		S	e	q	.	V	e	r	i	f	.	O	f	f	
		S	e	q	.	V	e	r	i	f	.	O	n		

- **Seq.Verif.Off** (Sequential Verification Off) is set as factory default.

#### NOTE :

- If there are more than one PIR motion sensor or Door Contact whose attribute is set as Burglar, with **Verification On**, when the first sensor is triggered, the panel will report a **Burglar** alarm (event code 130) to the Central Monitoring Station.
- If a second sensor is triggered again within 30 minutes, the panel will report another **Alarm confirm** (event code 139) to the Central Monitoring Station.
- If **Verification Off** is selected instead, the panel will only send the first Burglar alarm (event code 130) to the Central Monitoring Station.

## 2.4 OPT. SETTINGS

		D	e	v	.	+	/	-		o	p	t	.			
		D	C		O	p	t	i	o	n						
		D	u	r	e	s	s			O	p	t	i	o	n	
		L	a	t	c	h		O	p	t	i	o	n			
		U	P	/	D	o	w	n		L	o	c	.			

#### 2.4.1 Device +/- Option

**Dev. +/- opt.** limits the use of various functions in the Control Panel. This option allows you to choose whether to turn on programming mode or not.

o		P	-	M	o	d	e		O	n					
		P	-	M	o	d	e		O	f	f				

- **P-Mode On** is set as factory default.

#### 2.4.2 DC Option

This is to select whether to add **Set/Unset** as an extra device attribute when adding Door Contact. This allows the Door Contact to set or unset the alarm system on its own without the user having to arm/disarm the system with a PIN code.

		S	e	t	/	U	n	s	e	t		O	n		
o		S	e	t	/	U	n	s	e	t		O	f	f	

- **Set/Unset Off** is set as factory default.

**NOTE :**

- When **Set/Unset On** is selected, this new device zone attribute will be displayed along with other zone attributes as an extra choice when adding a Door Contact.
- When **Set/Unset Off** is selected, this new device zone attribute will not be displayed along with other zone attributes as an extra choice when adding a Door Contact.

**2.4.3 Duress Options**

This is to enable/disable the Duress Code option in the Programming Menu.

o		D	u	r	e	s	s	O	n						
		D	u	r	e	s	s	O	f	f					

- Duress On** is set as factory default.

**NOTE :**

- When **Duress On** is selected, Duress Code option will be available in Code Settings menu of the Programming Menu.
- When **Duress Off** is selected, Duress Code option will be hidden in the Code Settings menu and cannot be programmed.

**2.4.4 Lacth Option**

This is to program the Latch Key Reporting feature for all users and any arming/disarming actions of the Remote Controllers of the system.

o		L	a	t	c	h	E	n	a	b	l	e			
		L	a	t	c	h	O	f	f						
		L	a	t	c	h	O	n							

- Latch Enable** is set as factory default.

**NOTE :**

- When **Latch Enable** is selected, the system reports to the Central Monitoring Station the arming/disarming actions of the user(s) and RC(s) that is/are programmed to do so in the Programming Menu.
- When **Latch Off** is selected, this feature is completely hidden from the Programming Menu and disabled.
- When **Latch On** is selected, all arming/disarming actions of all users and RCs will be reported to the Central Monitoring Station without individual programming process in the Programming Menu.

**2.5 DEVICES +/-**

If **Devices +/-** is selected in Programming Main menu, the **Device +/-** menu is displayed. From here you can edit all the devices previously learnt-in, add or delete devices including the external sirens.

		A	d	d	D	e	v	i	c	e					
		E	d	i	t	D	e	v	i	c	e	s			
		R	e	m	o	v	e	D	e	v	i	c	e		
		P	r	o	g	r	a	m	S	i	r	e	n		

**2.5.1 Adding Devices**

- To learn in a sensor, move the cursor to the position **Add Device**, then press **OK**, a prompting message is displayed.

*	P	u	s	h	B	u	t	t	o	n	O	n	*		
	D	e	v	i	c	e	t	o	A	d	d				

- Press the test button on the sensor or any button on the Remote Controller.
- If a signal is detected, the screen will show you the type of the device on the second line. For example:

		D	e	t	e	c	t	e	d	(	O	K	?)		
		D	o	o	r	C	o	n	t	a	c	t			

**NOTE :**

The categories of devices are listed as followings:

- Door Contact ---- DC
  - PIR Sensor ---- IR
  - External PIR ----- EIR
  - Remote Controller --- RC
  - Remote Keypad ---- KP
  - Smoke Detector ----- SD
  - Water Sensor -----WS
  - Indoor Siren ----- IS
  - Outdoor Siren -----HP
  - Night Switch -----NS
4. Press **OK** to confirm the device type. A prompting message will be displayed for 2 sec. to prompt you to select the zone number for the device.

S	e	l	e	c	t	D	e	v	i	c	e		
		Z	o	n	e								

5. Then all the available unused zones (zones which have no device added in) out of a total 20 zones will be displayed on the screen.

		Z	o	n	e	0	1						
		Z	o	n	e	0	2						
		Z	o	n	e	0	3						
		.											
		.											
		.											
		Z	o	n	e	2	0						
		S	t	o	p								

6. Use **▲&▼** keys to move the cursor to the desired zone number then press **OK**.

**NOTE :**

- When a sensor is added to the system for the second time (without removing first). An error message will be displayed.

A	l	r	e	a	d	y	e	x	i	s	t		
		i	n	S	y	s	t	e	m				

The message will be displayed for 2 sec. then the screen return to Step 1. screen to wait for the signal from another device.

- Pressing **G** key will abort the procedure and will not learn-in the device.
- Press **STOP** key will abort the procedure and will not learn-in the device.
- Depending the type of the device, different screens will then be displayed accordingly for further configuration purpose.

**DOOR CONTACT**

7. After a zone number for the Door Contact is assigned, you can further specify how it will work in different modes. You are requested to make a selection among **Burglar**, **Home Omit**, **Home Access**, **Entry**, **24 Hour**, **Fire**, **Medical Emg** and **Water** device:

		B	u	r	g	l	a	r					
		H	o	m	e	O	m	i	t				
		H	o	m	e	A	c	c	e	s	s		
		E	n	t	r	y							
		2	4	H	o	u	r						
		F	i	r	e								
		M	e	d	i	c	a	l	E	m	g		
		W	a	t	e	r							
		S	e	t	\	U	n	s	e	t			

## NOTE :

### **B FOR BURGLAR DOOR CONTACT**

- When the system is in Arm mode, if a **Burglar** Door Contact is triggered, a **Burglar Alarm** will be activated immediately, a burglar message will be reported.
- When the system is in Armed mode, the Control Panel is counting down the Entry Delay, if a **Burglar** Door Contact is triggered, the Control Panel does not respond.
- During the Exit Delay period, if a **Burglar** Door Contact is triggered, the Control Panel does not respond .

### **O FOR HOME OMIT DOOR CONTACT**

- When the system is in Home mode, if a **Home Omit** Door Contact is triggered, the Control Panel does not respond.
- When the system is in Full Arm mode, if a **Home Omit** Door Contact is triggered, the Control Panel will respond in the same way as if a **Burglar** Door Contact is triggered. However a a burglar message will be reported.

### **A FOR HOME ACCESS DOOR CONTACT**

- When the Door Contact has been set to **Home Access** and triggered when the system is in Arm mode, the Control Panel will start a Burglar Alarm and a burglar message will be reported.
- When the system is in Home mode, if a **Home Access** Door Contact is triggered, the Control Panel will start an Entry Delay period to give enough time to disarm the system
- However, during the Entry Delay or Exit Delay period, if a **Home Access** Door Contact is triggered, the Control Panel does not

### **E FOR ENTRY DOOR CONTACT**

- If the Door Contact has been set to **Entry** and triggered when the system is in Arm mode, the Control Panel will start an entry period to give enough time to disarm the system.
- After the delay period has expired and no correct PIN code entered, the Control Panel will respond with a **Burglar Alarm** and a burglar message will be reported if the system has not been disarmed.
- If the Door Contact has been set to **Entry** and triggered when the system is in Disarm mode, the Control Panel will sound a ding-dong Door Chime (if programmed).

### **H FOR 24H BURGLAR DOOR CONTACT**

- The **24H burglar** Door Contact is active at all times and does not have to be armed or disarmed.

### **F FOR FIRE DOOR CONTACT**

- The **Fire** Door Contact is active at all times and does not have to be armed or disarmed.

### **M FOR MEDICAL DOOR CONTACT**

- The **Medical** Door Contact is active at all times and does not have to be armed or disarmed.

### **W FOR WATER DOOR CONTACT**

- The **Water** Door Contact acts as an universal transmitter, and a wired water leakage sensor can be connected to it.
- The **Water** Door Contact is active at all times and will not have to be armed or disarmed.

### **S FOR SET/UNSET DOOR CONTACT**

- If the Door Contact is set to **Set/Unset** when the Door Contact is disengaged, the system will enter Arm mode; when the Door Contact is engaged, the system will enter Alarm off mode.

## NOTE :

- When the attribute is selected as Set/Unset, Latch Option must set as **Enable** (please refer to section 2.4 Opt.Settings, 2.4.4 Latch Option for details) so that a Latch Report On/Off selection will appear.
8. Use ▲&▼ keys to make your selection and confirm by pressing **OK** key.

9. You are now invited to give a name or location description to the device to help understand system events. You can enter up to 10 characters followed by **OK** key or just press **OK** key for no name. Please see **Device Naming** for more details.

E	d	i	t		N	a	m	e									
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

10. The zone name & device attribute is displayed. Press **OK** key again to confirm.

I	n	s	t	a	l	i	e	d	:		(	O	K	?	)		
D	C		B	a	c	k	d	o	o	r		B					

Adding a Door Contact is now complete.

#### NOTE :

- If **G** key is pressed, all the learning/setting processes having done will be ignored, the screen returns to **Device +/-** menu.

If the attribute selected is **Set/Unset**, please continue the below steps:

11. Press **OK** key to confirm preferred Device attribute. Choose whether you wish to enable or disable the Latch option and press **OK** key.

		L	a	t	c	h	.	R	p	t	.	O	n				
		L	a	t	c	h	.	R	p	t	.	O	f	f			

#### PIR DETECTOR

12. After a zone number for the PIR is assigned the following choice screen is displayed.

		B	u	r	g	l	a	r									
		H	o	m	e		O	m	i	t							
		H	o	m	e		A	c	c	e	s	s					
		D	e	l	a	y											
		E	n	t	r	y											

#### NOTE :

- For a PIR Detector, you may choose between **Burglar**, **Home Omit**, **Home Access**, and **Entry**.
  - For detailed functional description of PIR Detector in these 4 different device modes, please refer to the Note section following Step 7 for adding Door Contact.
  - B** for **Burglar** PIR Detector
  - O** for **Home Omit** PIR Detector
  - A** for **Home Access** PIR Detector
  - E** for **Entry** PIR Detector
13. Use the **▲&▼** to make your selection and confirm by pressing **OK**. You are now invited to give a name or location description to the device to help understand system events. You can enter up to 10 letters as you please for the name followed by **OK** or just press **OK** for no name attribute. Please see section Device Naming for details.

E	n	t	e	r		N	a	m	e		+	O	K				
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

14. Press **OK** when finished and the display will show The display will show the newl zone name and the attribute next to the device:

I	n	s	t	a	l	i	e	d	:		(	O	K	?	)		
I	R		H	a	l	i	w	a	y		E						

15. Press **OK**, adding a PIR is now completed, screen returns to the **Device +/-** menu.

#### NOTE :

- Press **G**, all the learning/setting processes having done will be ignored, the screen returns to **Device +/-** menu.



## EXTERNAL PIR

16. You are now invited to give a name or location description to the device to help understand system events. You can enter up to 10 letters as you please for the name followed by **OK** or just press **OK** for no name. Please see section **Device Naming** for details.

E	n	t	e	r		N	a	m	e		+	O	k		
.	.	.	.	.	.	.	.	.	.	.					

17. Press **OK** when finished and the display will show the new zone name next to the device.
18. Press **OK** confirm, adding an EIR is now complete. Screen returns to the **Device +/-** menu.

### NOTE :

- When EIR is triggered in Away Arm mode, the Control Panel will sound its alarm siren. The LCD display remains as unchanged. No reporting will be made.
- When EIR is triggered in Home Arm mode, the Control Panel will emit a warning beep every 2 sec until the pre-defined Alarm Length expires. The LCD display remains unchanged. No reporting will be made.
- When EIR is triggered in Alarm off mode, the Control Panel will not respond.
- When EIR's Tamper is triggered in Away Arm mode, the Control Panel will sound its alarm and reporting will be sent.

## REMOTE CONTROLLER

19. After a zone number for the RC is assigned the following choice screen is displayed.

		P	e	r	s	o	n	a	l		A	t	t		
		M	e	d	i	c	a	l		E	m	g			

### NOTE :

- For a Remote Controller, you may choose between **Personal Attack**, and **Medical Emergency** device mode.
- P for Personal Attack Remote Controller**  
Control Panel will give a **Personal Attack** alarm when the panic button is pressed for 3 seconds long or twice within 3 seconds. A Panic message will be reported.

- M for Medical Emergency Remote Controller**

Control Panel will give a **Medical Emergency** alarm when the panic button is pressed for 3 seconds long or twice within 3 seconds. An Emergency message will be reported.

20. Use the ▼&▲ to make your selection and confirm by pressing **OK**. You are now invited to give a name or location description to the device to help understand system events. You can enter up to 10 letters as you please for the name followed by **OK** or just press **OK** for no name. Please see section **Device Naming** for details.

E	n	t	e	r		N	a	m	e		+	O	k		
.	.	.	.	.	.	.	.	.	.	.					

21. Press **OK** when finished and the display will show the new zone name next to the device:

I	n	s	t	a	l	l	e	d	:		(	O	K	?)	
R	C		M	R	.	S	M	I	T	H					

22. Press **OK**, adding a RC is now completed, screen returns to the **Device +/-** menu.

### NOTE :

- After a Remote Controller is added in, you can use the Remote Controller to arm/disarm the system. In addition, pressing the **Panic** button for 3 seconds or twice within 3 seconds, the Control Panel will generate a Panic alarm.
- The **Panic** alarm generated from the Remote Controller will have to be silenced at the Control Panel only. See section **Stop the Alarm**.
- Press **G**, all the learning/setting processes having done will be ignored, the screen returns to **Device +/-** menu.

## OTHER DEVICES

For Smoke Detector, Remote Keypad, Water Sensor and Night Switch, no further option needs to be specified, hence after it is detected, a zone is assigned, and the zone name entered, the following screen is displayed.

I	n	s	t	a	l	l	e	d	:		(	O	K	?	)
S	D		L	i	v	i	n	g	r	o	o	m			

Press **OK** to confirm, adding a smoke detector, or a Remote Keypad or a Water Sensor or a Night Switch is now completed.

## DEVICE NAMING

Detectors can be given names and location descriptions to help understand system events. The devices can be named when first installing them or by editing them afterwards, the procedure is similar for both situations.

- When the **Enter zone Name** screen is displayed, the keypad can be used to enter text. Simply locate the corresponding numeric keys to the desired alphabets/symbols and press repeatedly until the wanted alphabets/symbols appear. Release the key and the flashing cursor automatically jumps to the next position for you to continue with the next letter by the same method.
- The keys have the following functions:

1	1
2	2ABCabc
3	3DEFdef
4	4GHIghi
5	5JKLjkl
6	6MNOnno
7	7PQRSpqrs
8	8TUVtuv
9	9WXYZwxyz
0	0<space>/-&' . +

*	*
#	#
↶	Delete character and backspace

- When the name is complete, press **OK** to confirm and return to the previous or main menu.

### NOTE :

- The name can be erased by clearing the display by entering backward spaces and pressing **OK**.

## DEVICE DISPLAY NOMENCLATURE

The devices are displayed throughout the menus and especially where there are zone lists. The meanings of the display components are shown in an example below:

Zone number  
Device type                      Zone attribute  
PIR Zone 03 B

The PIR detector is in zone 03, programmed for burglar mode.

### 2.5.2 Edit Devices

To edit all the devices that have already been installed, choose **Edit Devices** in the **Device +/-** menu, all the devices being included in the system will be displayed. You may Press **G** to exit.

	D	C	B	a	c	k	d	o	o	r				
	I	R	H	a	l	l	w	a	y					
	R	C	M	r	.	S	M	I	T	H				
	S	D	K	i	t	c	h	e	n					
	S	T	O	P										

1. Use ▲&▼ keys to scroll the display and choose the desired device for editing. For DC, IR and RC, when selected by pressing **OK**, the first screen will ask if you want to change the device attribute:

	B	u	r	g	l	a	r					
	H	o	m	e		O	m	i	t			
	H	o	m	e		A	c	c	e	s	s	
	E	n	t	r	y							
	2	4		H	o	u	r					
	F	i	r	e								
	M	e	d	i	c	a	l		E	m	g	
	W	a	t	e	r							

If no changes is wished here, press **G** to skip to Step 3.

2. Use ▲&▼ keys to scroll the display and choose the desired device attribute by pressing **OK**. The screen will show:

Z	o	n	e		T	y	p	e	?	(	O	k	?)
D	C		B	a	c	k	d	o	o	r		E	

3. Press **OK** to confirm. The next screen will ask if you want to change the name

P	r	o	g	r	a	m		N	a	m	e		?
B	a	c	k	d	o	o	r						

4. Press **G**, if re-naming is not required to exit to the previous device list or press **OK** if you wish to edit the zone name:

E	n	t	e	r		N	a	m	e		+	O	k
.	.	.	.	.	.	.	.	.	.	.	.	.	.

5. Edit the zone name and press **OK** when completed to return to the previous device list.
6. Proceed to edit other devices or Press **G** to return to **Add/Delete Device** menu.

### TO EDIT OTHER DEVICES (SD/ KP/ WS/NS)

1. Use ▲&▼ keys to scroll the display and choose the desired device for editing. When selected by pressing **OK**, the first screen will ask if you want to change the zone name. To confirm, press **OK** or press **G** to exit.

P	r	o	g	r	a	m		N	a	m	e		?
B	a	c	k	d	o	o	r						

2. Press **OK** if you wish to edit the zone name:

E	n	t	e	r		N	a	m	e		+	O	k
.	.	.	.	.	.	.	.	.	.	.	.	.	.

or press **G** to exit to the previous device list.

3. Edit the zone name and press **OK** when completed to return to the previous device list.
4. Proceed to edit other devices or Press **G** to return to **Add/Delete Device** menu.

### 2.5.3 Remove Devices

Adding a device a second time is prohibited unless it is removed from the system first. To delete a device, choose **Remove Device** in the **Device +/-** menu.

1. Use ▲&▼ keys to scroll the display. All the used zones with the device names are listed in order of the zone numbers.

	D	C		B	a	c	k	d	o	o	r		
	I	R		H	a	l	l	w	a	y			
	R	C		M	r	.	S	M	I	T	H		
	S	D		K	i	t	c	h	e	n			

- Press **OK** when the required device is chosen. The following prompt message will be displayed for you to reconfirm.

		R	e	m	o	v	e	:			(	O	k	?)
R	C		M	R	.	S	M	I	T	H				

- Press **OK**. Deleting a device is now completed. The screen returns to previous device list.

#### NOTE :

- If the selected sensor/zone is not what you want to delete, press **G** to exit, the device list is again displayed for you to make another selection.
- If **Remove Device** menu is chosen while no device has been installed, the display will show **No device available** for 2 sec. and return to the **Device +/-** menu.
- Proceed to remove other devices or Press **G** to return to **Add/Delete Device** menu.

### 2.5.4 Program Siren

If an outdoor Bell Box, Indoor Bell Box or Universal Receiver etc. is to be included in the system, it should be programmed first by the Control Panel, so that the Control Panel can communicate with these auxiliary devices.

To program these auxiliary devices, select **Program Siren** in the **Device +/-** menu.

		L	e	a	r	n	S	i	r	e	n			
		S	i	r	e	n	T	a	m	p	.	O	n	
		S	i	r	e	n	T	a	m	p	.	O	f	
		C	o	n	f	i	r	m	O	n				
		C	o	n	f	i	r	m	O	f				
		E	n	t	r	y	S	n	d	O	n			
		E	n	t	r	y	S	n	d	O	f			

#### LEARN SIREN

If any detector or Remote Controller has been added already:

- Put all the desired Auxiliary devices into learn mode (Refer to their individual Operational Manual).
- Move the cursor to the position **Learn Siren**.
- Press **OK**.
- The Control Panel will then sound a long beep and transmit Learning code to all devices simultaneously. The Out Door Bell Box should respond by activating its siren & strobe light momentarily, the Indoor Bell Box should respond by 2 short beeps while the status LED lights up for 3 seconds.
- Place these auxiliary devices out of Learn mode. Adding them into the system is completed.


#### NOTE :

- If any of these devices does not respond, make sure that the device is in learn mode and repeat the steps again.
- After they are added in, every time pressing a PIN code & followed by **OK** key will result in the Control Panel transmitting signal to all of them.
- If no other detector or Remote Controller has been added first, the following message will be displayed in Step 3:

		P	i	e	a	s	e		a	d	d			
			o	n	e		d	e	v	i	c	e		

The message will be displayed for 2 sec. then the screen returns to **Device +/-** menu. You are requested to add a detector or Remote Controller first before trying to program these auxiliary devices again.

#### IMPORTANT NOTE

-  For the following options, whichever option is selected, when the Control Panel transmits the signal, all added sirens will simultaneously received the signal and all will acted accordingly.

## **SIREN TAMP.ON, SIREN TAMP.OFF**

The Outdoor Siren and Indoor Siren tamper switch can be enabled and disabled remotely. This is used especially when replacing siren battery.

- Disable the Siren tamper switch by selecting **Siren Tamp.Off** and press **OK**. All added sirens will temporarily lose their Tamper Protection simultaneously.
- Enable the Siren tamper switch by selecting **Siren Tamp.On** and press **OK**. All added sirens will be enabled with the Tamper protection simultaneously.

### **NOTE :**

- The Siren tamper disable will automatically revert to **On** after about an hour if not switched back.

## **CONFIRM ON, CONFIRM OFF**

Both the Outdoor Siren and the Indoor Siren can be enabled for arming and disarming confirmation where beeps are emitted from the Siren to validate that the system has been armed and disarmed.

- Disable the Siren Confirmation by selecting **Confirmation Off** and press **OK**.
- Enable the Siren Confirmation by selecting **Confirmation On** and press **OK**

## **ENTRY SND ON, ENTRY SND OFF**

The Outdoor Siren and Indoor Siren can be enabled or disabled from sounding the Entry Delay warning beeps.

- Disable the Siren Entry Sound by selecting **Entry Snd Off** and press **OK**
- Enable the Siren Entry Sound by selecting **Entry Snd On** and press **OK**.

### 3 CONFIGURING YOUR SYSTEM

If the system is in Disarmed (Alarm off) mode, to enter the Programming mode, follow the steps below.

1. Press # key.

The screen will prompt you to enter a User PIN code.

		P	-	M	o	d	e	E	n	t	e	r		
		P	-	C	o	d	e	.	.	.	.			

2. Key in **1234** (default **User1** PIN code) within 30 sec. The screen will prompt you to enter the Master PIN code.

		P	-	M	o	d	e	E	n	t	e	r		
		M	-	C	o	d	e	.	.	.	.			

#### NOTE :

- During keying in the PIN code, press **G** will clear the code field (making all the \* dots again). If the code field is empty, press **G**, the screen will exit and return to **Alarm Off** screen.
3. Key in **1111** (default **Master** Code) within 30 sec.
  4. **Press OK**

The following message is displayed for 2 sec. and the Programming Main menu will be displayed.

		P	r	o	g	r	a	m	M	e	n	u		
M	a	k	e	a	S	e	l	e	c	t	i	o	n	

5. Press **▲&▼** keys to move the cursor downward or upward. If you selected the **Digital Report** in the **Installer Menu**, your Programming Main Menu will show:

		W	a	l	k	T	e	s	t					
		C	o	d	e	.	S	e	t	t	i	n	g	s
		T	i	m	e	.	S	e	t	t	i	n	g	s
		S	o	u	n	d	S	e	t	t	i	n	g	s
		G	e	n	.	S	e	t	t	i	n	g	s	
		C	l	o	c	k								
		D	e	v	i	c	e	s	+	/	-			

If **Voice Report** is selected in **Installer Menu**, then the Programming Main Menu will show an additional setting for "**Tel. Settings**".

6. After making a selection by moving the cursor to the desired item, press **OK** to confirm the selection. The display will show the individual programming screen accordingly.

#### NOTE :

- If a down-arrow symbol **V** appears in the last column of the screen, it indicates the selection list can be downwardly scrolled. If the lowest position is reached, the down-arrow symbol disappears.
- If an up-arrow symbol **Λ** appears in the last column of the screen, it indicates the selection list can be upwardly scrolled. If the top position is reached, the up-arrow symbol disappears.
- By pressing **G**, the screen will also return to **Alarm Off** screen.
- After User1, 2, 3 & 4 PIN codes and Master code are programmed with new numbers, remember to enter the newly programmed codes when accessing Programming mode afterwards.
- In Programming mode, if no key is pressed within 5 minutes, the Control Panel will automatically exit Programming mode to Alarm Off mode.

### 3.1 TELEPHONE SETTINGS (FOR VOICE REPORT ONLY)

In **Telephone Settings** menu, the following parameters can be programmed at your discretion.

*		T	e	l	.	N	u	m	b	e	r	s			
		M	e	s	s	a	g	e	s						

#### 3.1.1 Telephone Nubers

- In **Tel.Setting** menu, select **Tel Numbers**, the screen allows you to set/change/delete the emergency telephone numbers
- A maximum of six numbers can be stored in priority order (in the order of A, B, ...to F).

##### NOTE :

- A, B, ...to F represent the priority number of the six Tel. numbers respectively.
- If the Tel. number for a particular priority number has not been stored, six dots are displayed to indicate the memory spot is empty.
- Only 11 digits can be displayed on the Tel. Numbers list. Non-fitting numbers are indicated with .. after the incomplete number.

#### STORE TEL. NUMBERS

1. Move the curser to the **Tel. Number** submenu and press **OK**.

The display will show the following screen when no Tel. number is entered:

*		A	)	.	.	.	.	.	.						
		B	)	.	.	.	.	.	.						
		C	)	.	.	.	.	.	.						
		D	)	.	.	.	.	.	.						
		E	)	.	.	.	.	.	.						
		F	)	.	.	.	.	.	.						

2. Press **OK**.

The following screen will be shown for you to enter the phone number.

E	n	t	e	r		n	e	w		N	o	.	+	O	K
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

3. Key in a phone number.
4. Press **OK**.

The screen will return to the **Tel. Number** screen to show the stored phone number, and for you to store another number:

*		A	)	2	2	1	8	0	5	5	1				
		B	)	.	.	.	.	.	.						

##### NOTE :

- The maximum length of a number is 20 digits including \* & #. When this length is reached, the Control Panel will emit 5 beeps and no key can be keyed in except **G** key and **OK** key.
- While entering the number, the **G** key is used as backspace. However, if the number field is empty, pressing the **G** key, the screen will return to **Tel. Numbers** screen.
- While entering the number, when the 15<sup>th</sup> position is reached, non-fitting numbers will scroll sideward to the left.

#### CHANGE TEL. NUMBERS

1. On the **Tel. Number** screen, press **OK**.
2. The following screen will be displayed for you to confirm if you really want to change.

C	h	a	n	g	e		N	u	m	b	e	r			
2	2	1	8	0	5	5	1				?	(	O	K)	

3. Press **OK** to confirm. The following screen will be displayed for you to enter the new number.

E	n	t	e	r		n	e	w		N	o	.	+	O	K
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

**Note :**

- Press **G** to abort and the screen returns to **Tel. Number** screen.

4. Key in the new number.

5. **Press OK**

The new number will then overwrite the previous one. The screen returns to **Tel. Number** screen.

**DELETE TEL. NUMBERS**

To delete a telephone number, follow Steps 1 to 3 of **Changing Tel. Number** described above, and when **Enter new No.** prompt screen is displayed.

E	n	t	e	r		n	e	w		N	o	.	+	O	K
.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

6. Press **OK**, then the previous stored number will be deleted.

**SPECIAL CHARACTERS FOR SETTING**

Two special keys \* & # are provided to help you to store the number:

- \* represents a 3-second delay or pause and the Control Panel will not dial \* .
- # key, which the Control Panel will dial as entered.

**STORING A PAGER NUMBER**

Pager number – \* - # – Identity code – # - **OK**

The Identity code is a number that you can key in at your discretion. This enables the recipient to know the call is from the Auto Dialer.

You can choose to use any number of \* or # to match the protocols of the pager system used in your area.

**STORING A TELEPHONE NUMBER IN EPABX PHONE SYSTEM**

EPABX Access code 0/9/8 – \* – Tel. Number – **OK**

You can add as many \* as required.

**STORING A TELEPHONE NUMBER WITH EXTENSION NUMBER**

Tel number – \* – \* – extension number – **OK**

You can add as many \* as required.

**3.1.2 Message Menu**

- This menu is for you to record and play the emergency messages.

		R	e	c	o	r	d		M	s	g				
		P	l	a	y		M	e	s	s	a	g	e		

- With a total capacity of 20 sec, you are allowed to record the emergency messages in 5 parts.
  - Address message – 8 sec.
  - Burglar message – 3 sec.
  - Fire message – 3 sec.
  - Panic message – 3 sec.
  - Emergency message – 3 sec.



- In an emergency, the Control Panel will dial the emergency phone numbers according to the priority order, then first play the Address message and then play the specific part message (Burglar, Fire, Panic and Emergency) according to the nature of the alarm raised.

## RECORDING THE MESSAGES

When **Record Msg.** is selected, the following **Recording Selection** menu is displayed for you to select which part of the message is to be recorded.

		A	d	d	r	e	s	s		M	s	g							
		B	u	r	g	l	a	r		M	s	g							
		F	i	r	e		M	s	g										
		P	A		M	s	g												
		E	m	e	r	g	e	n	.	M	s	g							

### A) Recording Address Message

- Move the cursor to select **Address Msg** and then press **OK**, the screen will ask you to confirm:

S	t	a	r	t		R	e	c	o	r	d	i	n	g					
A	f	t	e	r		t	h	e		B	e	e	p						

- Press **G** to abort, or press **OK** to confirm. A prompt Message will be displayed for 2 sec.

S	t	a	r	t		R	e	c	o	r	d	i	n	g					
A	f	t	e	r		t	h	e		B	e	e	p						

- After 2 sec, the Control Panel will emit a long beep, the following prompt message will be displayed, and recording will start:

*	N	o	w		R	e	c	o	r	d	i	n	g		*				
	E	n	d		w	i	t	h		O	k								

- Press **OK** to end the message; the screen will go to **Specific Part Selection** menu to allow you to select a specific part to be recorded.

#### NOTE :

- Any time, press **G** will abort recording and the message will not be saved. The screen returns to **Recording Selection** menu.
- The maximum length of Address message is 8 sec. When the 8 sec duration is over, recording will stop automatically. The message being recorded will be saved.
- When recording, make sure you are facing the microphone and are within the range of 30 cm.
- When recording, make sure the message is recorded in a quiet environment.
- Address message must be recorded before the Control Panel can dial out at an Alarm situation.

### B) Recording Specific Alarm Messages

- The specific alarm message selection menu is as below:

		B	u	r	g	l	a	r		M	s	g							
		F	i	r	e		M	s	g										
		P	A		m	s	g												
		E	m	e	r	g	n	.	m	s	g								

- Selection a specific message and follow the same procedure as those for recording Address message to record each message respectively.

#### NOTE :

- The message length for each specific message is 3 sec only.

## C) Changing a Message

If for any reason, changing any part of the recorded message is required, follow the same procedure to record a new message for the particular part. The new message will overwrite the previous one.

### PLAYING MESSAGES

1. Move the cursor to select Tel. Number to call out and then press **OK**.

o	A)	2	2	1	8	0	5	5	1			
	B)	.	.	.	.	.	.	.	.			

2. The Control Panel will dial out the number selected, and the screen will show:

D	i	a	l	i	n	g	.	.	.	.		
	P	l	e	a	s	e		w	a	i	t	!

3. All the recorded messages will be played respectively and will be heard on the Tel. handset. The Address message will be played first, the screen will show:

	N	o	w		P	l	a	y	i	n	g	:	
	A	d	d	r	e	s	s		M	s	g		

After the Address message is completely played, the specific alarm messages are played accordingly, the screen will show.

	N	o	w		P	l	a	y	i	n	g	:	
	B	u	r	g	l	a	r		M	s	g		

After playing the specific alarm messages, the Address message is played again and starts a new cycle. Playing the message will be repeated for 5 times, and then the screen returns to the menu.

#### NOTE :

- No message is recorded at factory default.
- Address message must be recorded and a Tel. Number must be entered before the Control Panel can dial out.
- Only the recorded messages will be played. Specific messages that are empty will be skipped when playing. E.g. If only Address Msg & Burglar Msg are recorded, then Address Msg & Burglar Msg will be played, and Fire Msg, PA Msg, Emergen.Msg will be skipped.
- While playing the messages, press **G** key will stop playing and the screen returns to **Play selection** menu.

## 3.2 CODE SETTINGS

In **Code Settings** menu, the following parameters can be programmed at your discretion.

o	P	i	N		C	o	d	e				
	T	e	M	p	.	C	o	d	e			
	D	u	r	e	s	s		C	o	d	e	
	M	a	S	t	e	r		C	o	d	e	

#### NOTE :

- **Duress Code** will only appear when the Duress Function is set as **On** under the **Duress Option** of Installer Menu's **Opt.Settings**.

### 3.2.1 Pin Code

- There are 4 User Pin Code in total, and each consists of 4 digits. User PIN code #1 is activated and set as **1234** by factory default. Before setting own User PIN Code #1, **1234** has to be keyed in every time when **Entering Code** is required.
- User PIN codes #2~#4 are deactivated by factory default.
- All 4 User Pin Codes are used to regularly arm/disarm the system and are allowed to access the Programming mode accompanied with the Master Code.

## TO SET YOUR OWN PIN CODE

1. Move the cursor to the item **Pin Code** then press **OK**. The following screen is displayed:

*		1	)	*	*	*	*								
		2	)	.	.	.	.								
		3	)	.	.	.	.								
		4	)	.	.	.	.								

2. Move the cursor to the desired # of **User Pin Code** then press **OK**. The following screen is displayed:


3. Key in a preferred 4-digit number then press **OK**.

4. The following screen will be displayed:


You are requested to enter the same code again (as entered in Step 3).

5. Key in the same code again, then press **OK**. If the code is correct, a **Latch Report** Option will appear for your selection.


### NOTE :

- The **Latch Option** will only appear on the screen when the Report function has been set to be **Enable** under the **Latch Option** of Installer Menu's **Option Settings**.
6. Once the Latch Reporting has been set, the screen changes to the following:


7. You are now invited to give a name for this User who will be using this newly programmed code to help better understand system events. You can enter up to 10 letters as you please for the name followed by **OK**, or simply press **OK** for no name. Please see section **User Naming** for details.

Then, the screen returns to the **PIN Code** menu, showing post-programmed status of each User PIN code:

*		1	)	M	R	.	S	M	I	T	H				
		2	)	M	R	S	.	S	M	I	T	H			
		3	)	*	*	*	*								
		4	)	.	.	.	.								

### NOTE :

- **2) MRS. SMITH**, representing the User #2 PIN code is set up and user name specified.
  - **3) \* \* \* \*** representing this User #3 code is programmed without user name specified.
  - **4) . . . .** representing the User #4 code is not yet set up for activation.
8. Proceed to set additional User PIN Codes as instructed from Steps 2 to 7. When completed, press **G** and the screen returns to **General Settings** menu, setting the PIN code is completed.

### NOTE :

- In **Step 4**, if the code is not correct, a **Code is not correct** prompt message will be displayed 2 sec., and you are requested to repeat Step 2 to enter again.

#### 3.2.1.1 User Naming

Each individual User can be given a name for easy recognition when understanding system events. User Names can be named when first setting them or by editing them afterwards when resetting them, the procedure is similar for both situations.

- When the **Enter New Name** screen is displayed, the keypad can be used to enter text. Simply locate the corresponding numeric keys to the desired alphabets/symbols and press repeatedly until the wanted alphabets/symbols appear. Release the key and the flashing cursor automatically jumps to the next position for you to continue with the next letter by the same method.
- The keys have the following functions:

1	1
2	2ABCabC
3	3DEFdef
4	4GHIghi
5	5JKLjkl
6	6MNOnno
7	7PQRSpqrs
8	8TUVtuv
9	9WXYZwxyz
0	0<space>/-&' . +

*	*
#	#
↶	Delete character and backspace

- When the name is complete, press **OK** to confirm and return to the previous or main menu.

#### NOTE :

- The name can be erased by clearing the display by entering backward spaces and pressing **OK**.

#### TO DELETE USER PIN CODE

Except User #1 which is activated by factory default and cannot be deleted in any way, User#2, 3 and 4 PIN codes can be deleted by following the steps below:

- Move the cursor to the item **PIN Code** then press **OK** the following screen will show the status of each User PIN code:

*	1	)	M	R	.	S	M	I	T	H				
	2	)	M	R	S	.	S	M	I	T	H			
	3	)	*	*	*	*	*	*	*					
	4	)	.	.	.	.	.	.	.					

- Move the cursor to the desired # (2~4) of programmed user PIN code to be deleted, then press **OK** the following screen is displayed.

		D	e	l	e	t	e							
		P	i	N	-	C	o	d	e	(	+	O	k	)

- Press **OK** and the screen returns to previous one with the deleted User PIN code marked with ●●●●

#### 3.2.2 Temporary Code

- The Temporary Code is used to arm/disarm the system for a temporary user and is valid only once per Arming and once per Disarming. Afterwards, the Temporary Code is automatically erased and needs to be reset for a new Temporary user.
- The Temp. Code consists of 4 digits and is not activated as default by the factory.

#### TO SET TEMPORARY CODE

- Use the arrow keys to select **Temp. Code** and press **OK**.

	E	n	t	e	r		N	e	w		C	o	d	e
							.	.	.	.				

- You can key in your preferred 4-digit number and then press **OK**.

	R	e	p	e	a	t		N	e	w		C	o	d	e
							.	.	.	.					

3. You are prompted to re-enter the same code again and press **OK**. If the code is correct, the screen changes to the following:

*		L	a	t	c	h	.	R	p	t	.	O	f	f	
		L	a	t	c	h	.	R	p	t	.	O	n		

You are requested to choose to have all arm/disarm actions of the user to be reported to the Central Monitoring Station or not.

4. Press **▲&▼** keys to select your option and press **OK**. The screen returns to **General Setting** menu, setting the Temporary code is completed.

#### NOTE :

- There is no User Naming feature for Temp. Code.

### TO DELETE TEMP. CODE

After the Temp. Code is programmed, it can be deleted by following the steps below:

1. Move the cursor to the item **Temp. Code** then press **OK**.

		D	e	l	e	t	e								
		P	i	n	-	C	o	d	e	(	+	O	K	)	?

2. Press **OK** and the screen returns to **Code Settings Menu**

### TO EDIT TEMP. CODE

After the Temp. Code is programmed, it can be edited by following the steps below:

1. Move the cursor to the item **Temp. Code** then press **OK**.

		D	e	l	e	t	e								
		P	i	n	-	C	o	d	e	(	+	O	K	)	?

2. Press **G** key, the next screen will ask you to enter your new Temp. code and repeat it for double confirmation.
3. Make your selection whether to have the Latch Key Reporting or not press **OK**. The screen returns to **Code Setting** menu, editing the Temporary code is completed.

### 3.2.3 Duress Code

- Duress Code can also be used to arm/ disarm the system. However, when this code is used for accessing the system, the Control Panel will report a secret Emergency alarm message to the Call recipient to indicate of a **Duress Situation in Progress**.
- There is **NO** siren sounding for duress alarm.
- Control Panel will play Emergency alarm voice message for **Voice Reporting**.
- The Duress Code consists of 4 digits and is not activated by factory default.

#### NOTE :

- **Duress Code** will only appear when the Duress Function is set as **On** under the **Duress Option** of Installer Menu's **Opt.Settings**.

### TO SET DURESS CODE

1. Use the arrow keys to select **Duress Code** and press **OK**.

		E	n	t	e	r		N	e	w		C	o	d	e	
												.	.	.	.	

2. Key in a preferred 4-digit number and then press **OK**.

		R	e	p	e	a	t		N	e	w		C	o	d	e	
												.	.	.	.		



1. Press **OK** on A. Entry Time and the following screen will be displayed:

	D	i	s	a	b	e								
	1	0	S	e	c									
o	2	0	S	e	c									
	3	0	S	e	c									
	4	0	S	e	c									
	5	0	S	e	c									
	6	0	S	e	c									
	7	0	S	e	c									

- **20 sec.** is set as factory default.

**NOTE :**

- If incorrect PIN code is entered and/or the entry delay time has expired, then the system will trigger the Burglar alarm.

### 3.3.2 A. Exit Time (Away Exit Time)

While the system gets into Away arm mode by Control Panel, Remote controller (RC) or Remote keypad (KP), an Away exit timer starts counting down.

During the counting down period, pressing the Arm Button of the RC can restart the counting. In addition, it is allowed to use correct Pin code or press Disarm Button of the RC to stop the counting and return to disarm mode.

- Options available are Disable (exit timer prohibited), 10 sec., 20 sec. up to 70 sec. in 10-sec increments.
- 30 sec.** is set as factory default.

**NOTE :**

- If incorrect PIN code is entered and/or the Exit delay time has expired, then the system will trigger the Burglar alarm.

### 3.3.3 H. Entry Time (Home Entry Time)

When Door Contact (DC) or PIR Detector (IR) is set as **Entry / Home Access** attribute, the system gets into counting down period (Home entry timer) while the DC or IR is triggered under Home arm mode.

During the counting down period, it is allowed to use correct Pin code to disarm the alarm and the alarm reporting is not sent. On the other hand, if the correct Pin code has not been entered during the period, Control Panel raises an alarm and sends alarm report.

- Options available are disable (alarm immediately) , 10 sec., 20 sec., up to 70 sec. in 10-sec increments.
- 20 sec.** is set as factory default.

**NOTE :**

- If incorrect PIN code is entered and/or the entry delay time has expired, then the system will trigger the Burglar alarm.

### 3.3.4 A. Exit Time (Home Exit Time)

While the system gets into Home arm mode by Control Panel, Remote controller (RC) or Remote keypad (KP), an Away exit timer starts counting down.

During the counting down period, pressing the Home Button of the RC can restart the counting. In addition, it is allowed to use correct Pin code or press Disarm Button of the RC to stop the counting and return to disarm mode.

- Options available are Disable (exit timer prohibited), 10 sec., 20 sec. up to 70 sec. in 10-sec increments.
- 30 sec.** is set as factory default.

**NOTE :**

- If incorrect PIN code is entered and/or the Exit delay time is expired, then the system will trigger the Burglar alarm

This is to select the period of time that the built-in siren should sound when an alarm is activated. You can choose from 1 to 15 min. in 1-min increments or to disable the siren.

[illegible]

- ### 3.3.6 Siren Delay

This is for you to decide how long should the Control Panel suppress all audible alarms after a Burglar alarm is reported. Options are **Disable** and 1-min delay to 10-min delay in increments of 1 minute.

o	D	i	s	a	b	e						
	1	M	i	n								
		.	.	.								
	1	0	M	i	n							

- NOTE :**

- This Siren Delay setting will not be activated when in Fire or Emergency event appears.

This is to disable or enable the Mobility Timer with selected countdown period. Options available are **Disable**, **4 Hours**, **8 Hours** and **12 Hours**.

If the Mobility Timer is enabled, it will count down the pre-programmed time length. When the timer times out without being reset, a Medical Alarm will be reported to the Emergency phone numbers.

[illegible]

- NOTE :**

- When the **Mobility CHK** is set with a specified timer, the Control Panel will report a Medical Emergency to the Central Monitoring Station when the timer runs out unless one of the following actions occurred in advance to reset the timer:
  - In **Home** mode: whenever any **Home Omit** DC, IR is triggered, or whenever any of the keys of the Control Panel is pressed.
  - In **Disarm** mode: whenever any of the DC or IR (except **24 Hr, Fire, Medical Emergency and Water**) is triggered, or whenever any of the keys of the Control Panel is pressed.
- When the system is set to **Away Arm**, the timer automatically stops. When the system enters **Home Arm** or **Disarm** mode, the timer automatically starts again.



### 3.3.8 Supervision

This is to disable or enable the Supervision feature with selected supervision period. This means the Control Panel will need to receive a functional signal from each and every device of the system within the selected period. If any device failed to do so, the Control Panel will send in a Sensor-Out-Of-Order report to the Central Monitoring Station. Options available are **Disable**, **4 Hours**, **6 Hours**, **8 Hours**, **12 Hours**, and **24 Hours**.

o	D	i	s	a	b	l	e						
	4		H	o	u	r	s						
	6		H	o	u	r	s						
	8		H	o	u	r	s						
	1	2		H	o	u	r	s					
	2	4		H	o	u	r	s					

- **Disable** is set as factory default for 433AM & 868AM.
- **12 Hours** is set as factory default for 868FM

## 3.4 SOUND SETTINGS

	A	.	E	n	t	r	y		S	o	u	n	d
	A	.	E	x	i	t		S	o	u	n	d	
	H	.	E	n	t	r	y		S	o	u	n	d
	H	.	E	x	i	t		S	o	u	n	d	
	D	o	o	r		C	h	i	m	e			
	W	a	r	n	i	n	g		B	e	e	p	
	R	i	n	g		T	o	n	e				

### 3.4.1 A. Entry Sound (Away Entry Sound)

This is for you to decide whether the Control Panel sounds count-down beeps and volume of beep during the Away entry timer (see section 4.7-A Entry Timer).

- Options available are **High** (high volume of beep), **Low** (low volume of beep) and **Off** (no beep):

	V	o	l	u	m	e		H	i	g	h		
o	V	o	l	u	m	e		L	o	w			
	O	f	f										

- **Volume Low** is set as factory default.

### 3.4.2 A. Exit Sound (Away Exit Sound)

This is for you to decide whether the Control Panel sounds count-down beeps and volume of beep during the Away exit timer (see section 4.7-A Exit Timer).

- Options available are **High** (high volume of beep), **Low** (low volume of beep) and **Off** (no beep):
- **Volume Low** is set as factory default.

### 3.4.3 H. Exit Sound (Home Exit Sound)

This is for you to decide whether the Control Panel sounds count-down beeps and volume of beep during the Home entry timer (see section 4.7-H Exit Timer).

- Options available are **High** (high volume of beep), **Low** (low volume of beep) and **Off** (no beep):
- **Volume Low** is set as factory default.

### 3.4.4 H. Entry Sound (Home Entry Sound)

This is for you to decide whether the Control Panel sounds count-down beeps and volume of beep during the Home entry timer (see section 4.7-H Entry Timer).

- Options available are **High** (high volume of beep), **Low** (low volume of beep) and **Off** (no beep):
- **Volume Low** is set as factory default.

### 3.4.5 Door Chime

This is for you to decide whether the Control Panel will sound a Door Chime if the Entry Point of Door Contact or PIR Detector that is activated while the system is in Disarm mode.

		V	o	I	u	m	e		H	i	g	h			
		V	o	I	u	m	e		L	o	w				
o		O	f	f											

- **(Door Chime) Off** is set as factory default.

### 3.4.6 Warning Beep

This is for you to decide whether the Control Panel will sound a warning beep whenever a fault message has been detected and displayed. The warning beep will be disappeared after the Fault message has been read by the user.

		V	o	I	u	m	e		H	i	g	h			
		V	o	I	u	m	e		L	o	w				
o		O	f	f											

- **(Warning Beep) Off** is set as factory default.

### 3.4.7 Ring Tone

This is for you to decide whether the Control Panel will sound the ringing tone when there is a coming-in phone call.

		V	o	I	u	m	e								
o		O	f	f											

- **(Ring Tone) Off** is set as factory default.

## 3.5 GENERAL SETTINGS

		F	i	n	a	l		D	o	o	r				
		R	C		E	n	t	E							
		T	a	m	p	e	r		A	l	a	r	m		
		P	a	n	e	l		S	i	r	e	n			
		I	n	t	e	r	f	e	r	e	n	c	e		
		A	C		r	e	p	o	r	t					

#### 3.5.1 Final Door

Turn on and off the Final Door Set Option.

		F	i	n	a	l	D	o	o	r		O	f	f	
o		F	i	n	a	l	D	o	o	r		O	n		

- **Final Door On** (Final Door Set Option On) is set as factory default.

#### NOTE :

- When **Final Door Arming** is programmed, the Control Panel will arm after the entry door is closed. For more description of this feature, please refer to Sec. 4.2 **Away (Alarm On) Mode of Operation**.

#### 3.5.2 Remote Controller Entry Enable

Turn on and off the Remote Controller disarm function.

o		R	C		E	n	t	E		O	f	f			
		R	C		E	n	t	E		O	n				

- **Remote Controller Entry Enable On** is set as factory default.

#### NOTE :

- When **Remote Controller Entry Enable** is set as **Off**, it will not be possible to disarm the Control Panel when the system is fully armed unless an entry point device is activated first. This feature is used to ensure that the system cannot be disarmed with a stolen Remote Control without unlocking a door first.
- When **Remote Controller Entry Enable** is set as **On**, the Remote Controller can Arm and Disarm the Control Panel as normal without activating an entry point first.

### 3.5.3 Tamper Alarm

This is for you to choose whether the siren should sound alarm when the tamper is triggered.

<input type="radio"/>	A	w	a	y	<input type="radio"/>	A	r	m	<input type="radio"/>	O	n	l	y	<input type="radio"/>	
<input type="radio"/>	N	o	r	m	a	l	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	V

- **Away Arm Only** is set as factory default.
  - **Away Arm Only** means, when tamper is triggered under Away arm mode, Control Panel raises an local alarm; the Control Panel sends report to the under others modes (Home/disarm modes), the siren does not sound.
  - **Normal** means, Control Panel raises a local alarm for tamper-trigger in all mode.
  - Either **Away arm only** or **normal** is selected, the system sends tamper-triggered report to Central Monitoring Station in all modes while tamper is triggered.

### 3.5.4 Panel Siren

This is for you to decide to enable or disable the Control Panel built-in Siren when there is an alarm event.

<input type="radio"/>	<input type="radio"/>	S	i	r	e	n	<input type="radio"/>	O	f	f	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	o	S	i	r	e	n	<input type="radio"/>	O	n	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- **Siren On** is set as factory default.

### 3.5.5 Interference

Turn on and off the detection feature of interference.

<input type="radio"/>	<input type="radio"/>	D	e	t	e	c	t	i	o	n	<input type="radio"/>	O	f	f	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	D	e	t	e	c	t	i	o	n	<input type="radio"/>	O	n	<input type="radio"/>	<input type="radio"/>

- **Detection Off** is set as factory default.

#### NOTE :

- When the **Detection On** is selected, whenever the signal jamming period lasted longer than 30 seconds, this fault event will be logged, reported to the Central Monitoring Station and displayed on the LCD to warn the user.
- When the **Detection Off** is selected, CR200 will not check interference status.

### 3.5.6 AC Report

This is for you to decide whether the Control Panel should report to Central Monitoring Station when AC failure is detected.

<input type="radio"/>	R	e	p	o	r	t	<input type="radio"/>	o	n	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	R	e	p	o	r	t	<input type="radio"/>	o	f	f	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	V

- **Report Off** is set as factory default.

#### NOTE :

- When **Report on** is selected, the Control Panel will report AC failure event to Central Monitoring Station if AC fault resides for more than 1 hour.
- When **Report off** is selected, the control unit will not report any AC failure.
- Once AC power is restored for more than 1 hour, an AC restored event will be reported to the Central Monitoring Station.
- Change in status has to remain for 1 hour to be reported to the Central Monitoring Station.

## 3.6 CLOCK

### 3.6.1 Time

This is for you to program the current time to be displayed. (Hour & minute)

		T	i	m	e		S	e	t	t	i	n	g		
		0	0	:	0	0				(	▲	▼	OK	)	

- Hour flashes first, use ▲&▼ keys to choose a correct number for the current hour. Hours are indicated by **00 ~ 23**.
- Press **OK** to confirm. Next, the screen will be displayed for you to set the correct minute.
- Minutes are then flashing.
- Use ▲&▼ keys to choose a correct number.
- Press **OK** to confirm.

### 3.6.2 Date

This is for you to set the current date.

		D	a	t	e		S	e	t	t	i	n	g		
		0	1		J	a	n			(	▲	▼	OK	)	

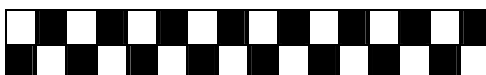
- Months flash first, use ▲&▼ keys to choose the current Month.
- Press **OK** to confirm. Next, the screen will be displayed for you to set the current day.
- Days are then flashing.
- Use ▲&▼ keys to choose the correct day.
- Press **OK** to confirm.

## 3.7 DEVICES +/-

If **Devices +/-** is selected in Programming Main menu, the **Device +/-** menu is displayed. For Device +/- steps, please refer to **section 2.5 “Device +/-”** under **Installer setup menu**.

## 3.8 WALK TEST

- When **Walk Test** is selected, the Green & Yellow LED's will flash 3 times with 3 beeps, and the following two test patterns are displayed for 2 sec. each.



- Then the following message is displayed:

*				W	a	i	k		T	e	s	t		*

- Pressing the test button on the sensor or any button on the Remote Controller or triggering the sensor, if the Control Panel received the signal, it will sound 2 short beeps and the display will show you which sensor with its zone number that is reacting.

I	R			Z	o	n	e	0	2		D			
H	a	i		w	a	y								

- The message will be displayed for 30 sec. or being replaced by another test signal.
- Pressing **G** key, the screen will return to **Walk Test** banner.

### EXIT WALK TEST

- To exit **Walk Test** mode, press **G** key.
- If no test signals are received for 5 minutes, the Control Panel will exit **Walk Test** mode and return to **Alarm Off**. Press **OK** key to add another 5 minutes.

## 4 OPERATION

### 4.1 ENTERING USER MENU

When the system is in Disarm mode (Alarm off), entering a valid user code can access the user menu, the system can then be Away armed or Home armed via this menu.

When the first numeric key is pressed, the display will show:

		E	n	t	e	r		C	o	d	e				
								*	.	.	.				

when the complete PIN code is keyed in followed by **OK**, within 10 sec., the first two lines of the user menu is shown:

		A	w	a	y		A	r	m						
		H	o	m	e		A	r	m						

A flashing dot will appear next to **Away Arm**, the complete menu list consists of:

		A	w	a	y		A	r	m						
		H	o	m	e		A	r	m						
		B	y	p	a	s	s								
		L	o	g											

These items can be scrolled through by using the ▼ & ▲ keys.

#### NOTE :

- If there is any fault event occurred, no matter if the fault condition has been rectified, when you enter the PIN Code followed by **OK**, the following screen will be displayed.

		F	a	u	l	t		D	s	p					
		A	w	a	y		A	r	m						
		H	o	m	e		A	r	m						
		B	y	p	a	s	s								
		L	o	g											

And the cursor stays at **Fault Dsp** position. To arm the system, please see the section **Forced Arming** below.

#### NOTE :

- If **G** is pressed when the screen displays **Alarm off**, an **Enter Code** prompt screen will be displayed. After entering a Pin Code, the above screen will also be displayed.
- After 30 seconds of key-inactivity, the system will automatically exit User Menu and return to **Alarm off** mode.

### 4.2 AWAY (ALARM ON) MODE

#### 4.2.1 Arming the system

If the system is in Disarm mode (Alarm off), to arm the system:

- Enter your PIN code and press **OK**. The display will show:

		A	w	a	y		A	r	m						
		H	o	m	e		A	r	m						
		B	y	p	a	s	s								
		L	o	g											

and the cursor stays at **Away Arm**.

2. Press **OK** and the screen will display:

		T	i	m	e	T	o	E	x	i	t		
						3	0	s	e	c			

The defined Exit Delay is displayed on the second line, and is counting down. During the Exit Delay period, the exit sound plays, unless it has been chosen to switch off.

3. When the Exit Delay time is up, or the Entry Door Contact (Final Door programmed as On) is closed, the Control Panel will emit a long beep. The Alarm On will display on the screen and the system is in Arm mode.

#### NOTE :

- When **Final Door** is set as **Off**, the Control Panel enters **Alarm On** mode only when the Exit Delay time is up.
- The Control Panel has **Screen Saver** function. The **Alarm on** message will only be displayed for 180 sec. Only current date & time is displayed on the second line afterwards.
- The system can also be armed by using the Remote controller (Optional).

### 4.2.2 Stopping the Exit Delay

The Exit Delay can be stopped by disarming the system.

1. Press **G** key.
2. The screen will ask you to enter the PIN code. In addition, the counting down Exit Delay is displayed on the left side of the 2<sup>nd</sup> line.
3. Enter your PIN code and then press **OK**. **Alarm Off** will be displayed on the screen and the system returns to Disarm mode.

#### NOTE :

- The Exit Delay can also be stopped by pressing the **Disarm** button on the Remote Controller (Optional).
- If the Exit Delay period times out before the code can be entered, the system will arm.

### 4.2.3 Extend the Exit Delay

During the Exit Delay period, the delay time can be extended by pressing the **ARM** button on the Remote Controller (Optional). Each time the **ARM** button is pressed, the delay time starts counting from the beginning.

#### NOTE :

- While you arm the system, if a Door Contact or PIR sensor has been triggered (eg. Door is open), arming is also prohibited. To arm the system, please see the section **Forced Arming** below.

## 4.3 FORCED ARMING

While you try to arm the system by entering the PIN Code, if any fault situation occurred before, the display will show:

		F	a	u	l	t	D	s	p				
		A	w	a	y	A	r	m					

If you move the cursor to **Away Arm** position and press **OK**, the Control Panel will emit a ding-dong warning sound to indicate arming is prohibited, and the message **Fault DSP** is displayed in the middle of the top display row and alternates at 2-second intervals with individual fault events.

#### NOTE :

- In the same situation, if you arm the system by pressing the **Arm** button on the Remote Controller, the Control Panel will respond in the manner as described above and arming is also prohibited.
- At this moment, you can first rectify all of the problems and clear the **Fault display** (please see section 4.12 **Fault Situation**), and then arm the system afterwards.
- However, if you want to put the system into Arm mode with the fault situation persisting, it is still possible by following the steps below to execute **Forced Arming**.

1. Enter your PIN Code and press **OK**, a prompt message will be displayed.

		F	a	u	l	t	A	r	m				
						(	O	k	?)				

2. Press **OK** to confirm.
3. The Exit Delay counting down screen is displayed as in above section.
4. When the Exit Delay time is up, the Control Panel will emit a long beep. **Alarm On** will display on the screen and the system is in Arm mode.

**NOTE :**

- Pressing **G** at anytime, followed by **PIN Code** and **OK**, the screen will return to **Alarm Off**.
- The **Fault DSP** screen has a time-out of 5 minutes. It will automatically exit and return to **Alarm Off** screen afterwards.
- If a sensor is bypassed (Please see section **Partial Arm mode**, the fault condition of that sensor will not be checked.
- If a sensor tamper or out-of-order occurs, you can temporarily bypass it or permanently remove it.

**ARMING WITH DOOR OPENED**

- While you arm the system, if any door was detected as open, the Control Panel will also emit a ding-dong warning sound to indicate arming is prohibited. The message **Fault DSP** is displayed in the middle of the top display row and alternates at 2-second intervals with the sensor that is being triggered.
- At this moment, you can close the open door, after which the fault display will be cleared automatically and the screen returns to **Alarm off**. You then can arm the system again.
- However, if you want to put the system into Arm mode with the door open, it is still possible by following the Steps described above to execute **Forced Arming**.

#### 4.4 DISARM (ALARM OFF) MODE

To disarm the system:

If the system is in either the Away Arm mode or Home Arm mode (Alarm ON), enter your PIN Code and press **OK**. If the PIN code is correct, the Control Panel will emit 2 short beeps and return to Disarm mode. The screen will show:

		A	l	a	r	m	O	f	f				
		0	6	:	4	3	0	1	J	a	n		

**NOTE :**

- When the system is Home Armed, pressing the **DISARM** button on the Remote Controller will disarm the system.
- When the system is Away Armed, pressing the **DISARM** button on the Remote Controller can disarm the sytem when either an **Entry** device has been triggered, or when the **Remote Controller Entry Enable** has been set to **ON**.

#### 4.5 HOME ARM MODE

Home Arm Mode allows the home to be partially armed. Thus, part of the areas are protected with the Alarm, while others allow the user to move freely without self triggering the alarm.

**NOTE :**

- HOME mode can only be entered when the system is in DISARM mode.

#### 4.5.1 Home Modus einrichten

1. When the system is in Disarm mode, key in your Pin Code then press **OK**.
2. Press ▼ to move the cursor down to select **Home Arm**.
3. Press **OK** and the screen will display.

		T	i	m	e		T	o		E	x	i	t		
						3	0		s	e	c				

The defined Exit Delay is displayed on the second line, and is counting down. During the Exit Delay period, the exit sound plays, unless it has been chosen to switch off.

4. When the Exit Delay time is up, the Control Panel will emit a long beep. **Home** will display on the screen and the system is in Home Arm mode.

#### NOTE :

- The system can also be armed by using the Remote controller (Optional).

#### 4.5.2 Stopping the Exit Delay

Exit Delay can be stopped following the steps described in **Stopping the Exit Delay** in section 4.2, **Away Mode**.

#### 4.5.3 Extend the Exit Delay

Exit Delay can be extended following the steps described in **Extend the Exit Delay** in section 4.2, **Away Mode**.

#### 4.5.4 Forced Arming

If any fault condition occurred, a door was found open, or any sensor is triggered, when pressing **OK** in Step 3 above, or when pressing **Home** button on the Remote Controller, the Control Panel will emit a ding-dong warning sound to indicate entering the Home mode is prohibited. You can rectify the problem first, clear the fault display, and then try again. Or you can do forced arming to enter Home mode compulsorily. Please follow the instructions described in **Forced Arming** in Section 4.3.

### 4.6 PARTIAL (BYPASS) ARM MODE

Partial (Bypass) Arm mode allows the user to deactivate (bypass) any sensors at their discretion. This feature allows your home to be armed, yet the person inside the house can move freely in the area where the sensor is bypassed.

#### To put the system into Partial (Bypass) Arm mode:

1. Enter your PIN code and press **OK** within 10 seconds. The display will show:

		A	w	a	y		A	r	m						
		H	o	m	e		A	r	m						
		B	y	p	a	s	s								

2. Press ▼ to move the cursor down to select **Bypass**.
3. Press **OK**
4. All the zones are listed in zone number order.

		D	C		B	a	c	k	d	o	o	r			
		I	R		H	a	l	l	w	a	y				
		D	C		F	r	o	n	t	d	o	o	r		
		I	R		L	i	v	i	n	g	r	o	o	m	
		R	C		M	R	.	S	M	I	T	H			
		S	t	o	p										



5. Press ▼ & ▲ keys to select the zone to be bypassed.

		B	y	-	p	a	s	s		(	O	k	?	)		
D	C		B	a	c	k	d	o	o	r						

6. Press **OK** to confirm the selection. The selected zone will be marked with a \* character at the front, to indicate that device is to be bypassed.

**NOTE :**

- The zones can be toggled between bypassed and not bypassed by pressing the **OK** key repeatedly, followed by the \* character appearing for Bypass setting and \* character disappearing for Bypass unsetting.
7. Repeat Steps 5 to 6 to continue selecting the device to be bypassed.
  8. After all the sensors to be bypassed have been selected, press **G** to return to user menu and the cursor stays at **Arm**.
  9. Press **OK** to select **Arm** and to arm the system.

**NOTE :**

- If a sensor is bypassed, then the Contorl Panel will not respond to its triggering in Arm mode.
- The bypass setting is effective for one time only. Once the system is disarmed, the bypass setting is cleared automatically.
- When a sensor is bypassed, the system can be armed directly regardless of its fault situation (if any). However, its fault situation is still being monitored and will be logged and displayed when accessing the **Log** submenu.

## 4.7 ALARM ACTIVATION

For Alarm Activation by Events and Control Panel Responses, please refer to the following table:

**Control Panel Mode & Response Table**

Type of Alarm	Alarm Attribute	Disarmed	Away Arm	Home Arm	Exit Timer	Away Arm Entry Timer	Home Arm Entry Timer
Burglar	"B"	No Response	Instant Burglar Alarm	Instant Burglar Alarm	No Response	No Response	No Response
Home Omit	"O"	No Response	Instant Burglar Alarm	No Response	No Response	No Response	No Response
Home Access	"A"	No Response	Instant Burglar Alarm	Start Entry Timer	No Response	No Response	No Response
Delay	"D"	No Response	Instant Burglar Alarm	Instant Burglar Alarm	No Response	No Response	No Response
Entry	"E"	No Response	Start Entry Timer	Start Entry Timer	No Response	No Response	No Response
24 HR.	"H"	Instant Burglar Alarm	Instant Burglar Alarm	Instant Burglar Alarm	Instant Burglar Alarm	Instant Burglar Alarm	Instant Burglar Alarm
Medical	"M"	Emergency Alarm	Emergency Alarm	Emergency Alarm	Emergency Alarm	Emergency Alarm	Emergency Alarm
Fire	"F"	Fire Alarm	Fire Alarm	Fire Alarm	Fire Alarm	Fire Alarm	Fire Alarm
Water	"W"	Water Alarm	Water Alarm	Water Alarm	Water Alarm	Water Alarm	Water Alarm
Set/Unset	"S"	Arm/Disarm	Arm/Disarm	Arm/Disarm	Arm/Disarm	Arm/Disarm	Arm/Disarm
External PIR	" EIR "	No Response	Instant Burglar Alarm (but no reporting)	Warning Beep	No Response	No Response	No Response

## 4.8 STOP THE ALARM AND ALARM DISPLAY

During any alarm, the Control Panel will sound its siren and dial the Emergency Telephone Numbers and the display will show:

A	L	A	R	M	!		A	L	A	R	M	!			
			A	L	A	R	M	!		A	L	A	R	M	!

### 4.8.1 Stopping the Alarm

During an alarm, to stop the siren and clear display:

1. Key in your PIN code and press **OK**.

#### NOTE :

- If pressing any key other than the first digit of the PIN code, the screen will prompt you to enter your PIN code.
- 2. If the PIN code is correct, the alarm siren will be stopped.

**If the alarm is stopped before reporting process begins:**

- **For Voice Reporting only**

3. The display will show you the device that triggered the alarm with its zone number:

A	l	a	r	m		S	t	a	r	t	e	d		B	y
0	1	)	.	I	R		H	a	l	l	w	a	y		

4. Press **OK**.
5. If more than one alarm events have been raised, the Control Panel continues displaying the 2nd alarm event with **02).** at the beginning of the 2nd line.
6. Repeat pressing further keys until all alarm events are displayed. The display will show:

	S	y	s	t	e	m		r	e	a	c	h	e	d	
	N	o	n	e											

7. Press **OK**, and display returns to **Alarm off**.

- **For Digital Reporting only**

1. The display will show you the device that triggered the alarm with its zone number:

A	l	a	r	m		S	t	a	r	t	e	d		B	y
0	1	)	.	I	R		H	a	l	l	w	a	y		

2. Press **OK**.
3. If more than one alarm events have been raised, the Control Panel continues displaying the 2nd alarm event with **02).** at the beginning of the 2nd line.
4. Repeat pressing further keys until all the alarm events are displayed. The display will show:

	C	l	e	a	r		A	l	a	r	m				
		D	i	s	p	l	a	y	?	(	O	K	?)		

5. Press **OK**, the display returns to **Alarm off**.

#### NOTE :

- Press **G** or no key is pressed within 5 sec., the screen returns to 1<sup>st</sup> device display. You can repeat from the beginning to view the alarm event one more time.
- No alarm reporting will be made. However one **OPEN** report by this user will be reported.

**If the alarm is stopped before reporting is finished:**

• **For Voice Reporting only**

1. The display will show you the device that triggered the alarm with its zone number:

A	l	a	r	m	S	t	a	r	t	e	d	B	y
0	1	)	.	I	R	H	a	l	l	w	a	y	

2. Press **OK**.
3. If more than one alarm events have been raised, the Control Panel continues displaying the 2nd alarm event with **02).** at the beginning of the 2nd line.
4. Repeat pressing further keys until all the alarm events are displayed. The display will show:

S	y	s	t	e	m	r	e	a	c	h	e	d
N	o	n	e									

5. Press **OK**, and the display returns to **Alarm off**.

• **For Digital Reporting only**

1. The display will show:

		R	e	p	o	r	t	i	n	g			
		P	l	s		w	a	i	t				

2. After the reporting process is over, a prompt message will be displayed.

		P	r	e	s	s	O	k	T	o			
		C	o	n	t	i	n	u	e				

3. Press **OK**, the display will show you the source of the alarm as indicated in **Step 3** (for voice/digital reporting only).

A	l	a	r	m	S	t	a	r	t	e	d	B	y
0	1	)	.	I	R	H	a	l	l	w	a	y	

Proceed to display the alarms and clear the alarm displays as specified in **Steps 4 to 7** (for voice/digital reporting only) in previous section and the system returns to **Alarm Off**.

**If the alarm is stopped after reporting has been finished:**

• **For Voice Reporting only**

1. The device which triggered the alarm with its zone number is displayed.

A	l	a	r	m	S	t	a	r	t	e	d	B	y
0	1	)	.	I	R	H	a	l	l	w	a	y	

Proceed to display the alarms and clear the alarm displays as specified in **Steps 4 to 6** (for voice/digital reporting only) in previous section.

2. After all the alarm events are cleared, then the display will show:

S	y	s	t	e	m	r	e	a	c	h	e	d
2	6	9	4	0	6	6	7					

3. Press **OK**, the display returns to **Alarm off**.

• **For Digital Reporting only**

4. The device which triggered the alarm with its zone number is displayed:

A	l	a	r	m	S	t	a	r	t	e	d	B	y
0	1	)	.	I	R	H	a	l	l	w	a	y	

Proceed to display the alarms and clear the alarm displays as specified in **Steps 4 to 7** (for voice/digital reporting only) in previous section.

## NOTA :

- When an alarm (other than Panic Alarm) is raised, press the **Disarm** button on the Remote Controller will also stop the alarm (Optional).
- Panic Alarm must be silenced at the Control Panel. This is to prevent the Remote Controller from being snatched from the user and silence the alarm using the Disarm button.

### 4.8.2 Alarm Memory

If an alarm was raised without being silenced during your absence, and the alarm reporting has been carried out; the screen will stay on the **Alarm warning** display.

A	L	A	R	M	!		A	L	A	R	M	!			
			A	L	A	R	M	!		A	L	A	R	M	!

- When you return and disarm the system by pressing the **DISARM** button on the Remote controller, the **Alarm warning** display still remains unchanged.
- To clear the display, follow the same steps as **Stopping the Alarm** described above, you can see the source of the alarm.
- If more than one alarm events, including **Device Tampered**, have occurred, repeat pressing further keys, the alarm events will be displayed one by one sequentially until all events are displayed. Then the screen returns to **Alarm off**.

## 4.9 EVENT LOG

The alarm log records the last 20 system events including:

- All Alarm Events with Device ID
  - All Fault Warning Events
  - All Arming And Disarming Events
- The logged events are displayed in reverse chronological order (most recent event first).
  - The log is marked with a **Start** label before the most recent entry, and **End** after the oldest entry.
  - To View Log:
    - Key in the User PIN Code and press **OK** while in Disarm mode to access User's Menu.
    - Press the ▼ key repeatedly to select **Log** and then press **OK**. The start of the log will be displayed:

					S	T	A	R	T						
						▼									

- The log can be scrolled up and down and viewed with the ▲&▼ keys; the most recent event will display first.
- An example of logged event is given below; where the first line tells the time and date of the event, the second line tells the type of event, and the third line either states the User or the device that caused the event. Abbreviations as **DC** stands for Door Contact, **LB** is short for low battery, **Tamp** means Tamper where **Rest.** is short for restore.

	0	2	:	3	8		0	1		J	a	n			
	D	i	s	a	r	m									
	U	s	e	r		1									

	0	2	:	4	0		0	2		J	a	n			
	P	a	n	i	c										
	D	A	V	I	D		D	C							

## 4.10 UP/DOWNLOADING (FOR DIGITAL REPORTING ONLY)

CR200 uses a DTMF downloading protocol and the downloading can be initiated by the Central Monitoring Station using ring-back security or by using user/installer initiation.

- Generic downloading software runs on Windows 95, 98, XP, 2000, and Vista paired with a special DTMF modem in the same package.
- All the programmable features available to the Installer are accessible for up/downloading and editing.
- The following diagnostic information and managerial information can be uploaded:
  - Event Log
  - Transmitter battery status
  - Control Panel battery status
  - Last recorded received signal strengths
  - Transmitter supervision status
  - RF interference status
- To Up/Download:
  1. Key in the User PIN Code and press **OK**.
  2. Press the ▼ key repeatedly to select **Up/Download** and then press **OK**. The screen shows two options to choose based on your location:

		R	e	m	o	t	e		A	c	c	e	s	s	
		L	o	c	a	l			A	c	c	e	s	s	

3. Use ▲&▼ keys to select and press **OK** to confirm your selection.

### 4.10.1 Remote Up/Downloading

1. When **Remote Access** is selected, the screen will show:

P	l	e	a	s	e		w	a	i	t		f	o	r	
		R	e	m	o	t	e		A	c	c	e	s	s	

Wait here for the connection from the Central Monitoring Station or press **G** to exit to **Alarm Off** mode.

2. During attempts of **Remote Access** connection, the screen will show:

U	p	/	D	o	w	n	l	o	a	d	i	n	g		
-	-	>													

The arrow will shift to the right and back to the left to indicate the attempt to connect is in progress.

3. After the connection is successful, the display will show:

U	p	/	D	o	w	n	l	o	a	d	i	n	g		
=	=	>													

The arrow has changed to double line and continued shifting right and left to indicate the connection is in progress.

4. When the up/downloading of the Central Monitoring Station is finished, CR200 automatically returns to **Alarm Off** mode.

### 4.10.2 Local Up/Downloading

1. When **Local Access** is selected, the screen will show:

U	p	/	D	o	w	n	l	o	a	d	i	n	g		
-	-	>													

The arrow will shift to the right and back to the left to indicate the attempt to connect is in progress.

2. After the connection is successful, the display will show:

U	p	/	D	o	w	n	l	o	a	d	i	n	g		
=	=	>													

The arrow has changed to double line and continued shifting right and left to indicate the connection is in progress.

3. When the up/downloading is finished, and as indicated so from the Pilot Software, CR200 will automatically returns to **Alarm Off** mode.

#### NOTE :

- During the Uploading & Downloading process, press **G** to exit and the display will ask you to reconfirm:

	Q	u	i	t		U	p	/	d	o	w	n			
			M	o	d	e		?		(	+	O	k	)	

Press **OK** to return to **Alarm Off** mode.

## 4.11 FALSE ALARM MANAGEMENT

CR200 has 3 regulatory false alarm management facilities built-in:

- Dual-Ply Entry Warning
- Alarm Abort Reporting  
(Digital Reporting only)
- Sequential Verification Alarm Reporting  
(Digital Reporting only)

### 4.11.1 Duale Ply Entry Warning

- This is to warn the user that an alarm report to the Central Monitoring Station is about to be made.
- When a zone not programmed for delay is violated during the Entry Delay, or the correct PIN code was not entered within the programmed Delay period, a 30-sec internal alarm is given before an alarm report is made.
- If a valid user PIN code is entered within the 30 seconds, the alarm will be aborted and the system returns to normal status.
- If no valid user PIN code is entered, a burglar alarm will be sent.

### 4.11.2 Alarm Abort Reporting (Digital Reporting only)

- This feature is designed to report Disarm action of those valid User PIN codes (programmed to Latchkey.Rpt.Off) within 90 seconds of the alarm being generated.
- Automatically, with Latchkey Reporting being set to ON, all arm and disarm actions of the User PIN code is reported to the Central Monitoring Station every time.

### 4.11.3 Sequential Verification Reporting (Digital Reporting only)

- A sequential verification alarm report is generated when a second alarm from a different Burglar DC200 or Burglar IR200 is registered within a 30-min period.
- This Sequential Verification Report will be sent in addition to the zone alarm report.
- Alarms cannot be verified after the Entry Delay has been initiated.

## 4.12 FAULTY SITUATIONS

- The Control Panel is capable of detecting following fault events:
  - Control Panel Low Battery
  - AC Power Fail
  - Sensor Out-of-order
  - Sensor Low Battery
  - Device and Control Panel Tamper
  - Interference Detection
- In case any fault condition is detected, the Control Panel will respond with a **Fault** display and/or **Fault** alarm respectively according to the nature of the faulty event.

### DEVICE SABOTAGED

- The Control panel, Door Contact, Remote Keypad & PIR sensors are **Tamper** protected.

### CONTROL PANEL

- A Tamper switch protects CR200 from any removal attempts away from its cross mounting bracket
- Another Tamper switch protects the Power Supply Lid from being opened or removed.

### PIR SENSOR

A Tamper switch protects the enclosure from being opened.

### DOOR CONTACT

- A Tamper switch protects the enclosure from either being opened or being removed from the mounting surface.

### SENSOR LOW BATTERY

If the battery voltage of PIR sensor, Door Contact, Remote Keypad, Water Sensor, Remote Controller or Smoke Sensor is low, a Sensor Low Battery message will be detected.

### SENSOR OUT-OF-ORDER

The PIR sensor, Door Contact, or Smoke Sensor, after installed, will transmit a periodic supervision signal at intervals between 60 min. to 100 min.

If the Control Panel can't receive the signals transmitted from an individual sensor for a period of selection for 4, 6, 8, 12 Hours, a **sensor out-of-order** fault event will be detected.

### INTERFERENCE

CR200 will detect interference on the 868Mhz band.

After a continuous interference signal is present for more than 30 seconds, an interference event can be logged, reported and displayed on the LCD (if Fault Display submenu is chosen).

#### 4.12.1 Fault Message Display

- When any fault situation persists, the Control Panel will respond as below when it is in Disarm mode:
  - The Yellow LED will light to indicated the fault condition
  - The LCD will display the type of fault and the source of the fault in the Fault Display section of the User Menu.
  - A warning beep will sound at every 30 seconds. It will only be disappeared when the Fault Message has been read.
  - If a fault condition is detected while the system is in full arm mode, the fault event display will not be generated until the system is disarmed.



#### 4.12.2 Clearing Fault Message Display

- The Yellow LED will turn off automatically once all of faulty conditions are restored, or any faulty devices are removed. It can't be cleared manually.
- On the contrary, the fault message display retains even though the faulty conditions have been restored.
- The fault message can only be cleared manually after the fault condition has been rectified.

#### 4.12.3 Viewing/Clearing the Fault Message

To check what the fault condition is:

1. When the system is in Disarm mode. Enter your PIN Code followed by **OK**.
2. The screen will display

		F	a	u	l	T		D	s	p				
		A	r	m										

and the cursor stays at **Fault Dsp**.

3. Press **OK** to select **Fault Dsp**.
4. All the fault events are listed. Use▲&▼ key to move the cursor downwards or upwards. The screen is also scrolled down or up respectively.
5. After viewing all the fault events, press ⏏ key, a prompt message is displayed.

		C	l	e	a	r		F	a	u	l	t		
				D	s	p	:		(	O	K	?)		

6. Press **OK**, then the fault event, which the fault condition has been rectified, will be cleared and the screen returns to **Alarm off**.

#### NOTE :

- In **Step 6**, if ⏏ key is pressed, the screen returns to **Alarm off**, the Yellow LED stays on, the Control Panel keeps sounding a short beep every 30 seconds, and the fault event display retains.
- If the fault condition has not been rectified, the fault event display will not be cleared. It will come on again while you try to arm the system and the faulty condition inhibits the system from being armed, then the fault message will be displayed again. The fault event display can be cleared only after the fault condition has been rectified.
- Even when the fault message is cleared, the fault event is still retained in the **Log**.
- A warning beep will only be disappeared when the Fault Message has been read or cleared.

#### 4.12.4 Fault Event Response

When a fault condition is detected, in addition to the fault display, the Control Panel will also respond separately according to the nature of the fault event.

- **AC Power Fail**
  - The yellow LED will light and the fault message will be displayed. If the system is set as digital reporting, Control Panel will also send report to the Central Monitoring Station within 1 hour.
- **Control Panel Low Battery**
  - Any time the Panel battery Low is detected, yellow LED will light while this fault message can be viewed on LCD under **Fault Display**.
- **Panel Sabotaged**
  - If the Tamper switch on the Control Panel is triggered while the system is in Armed & Home mode, the Control Panel will sound an audible alarm and report **Burglary** alarm.
  - While if the system is in Disarm mode, no alarm will be generated.
- **Sensor Low Battery**
  - Any time battery low on any sensor is detected, yellow LED will light while this fault message can be viewed on LCD under **Fault Display**.

- **Sensor Sabotaged**
  - If the Tamper switch on the PIR Sensor or Door Contact is triggered while the system is in Arm & Home mode, the Control Panel will sound an audible alarm and report **Burglary** alarm.
  - While if the system is in Disarm mode, no alarm will be generated.
  - The above functions will depends on how the Tamper has been set.
- **Sensor out-of-order**
  - When the system is in Arm mode and Control Panel can't receive the supervisory signal from each individual PIR sensor, Door Contact or Smoke Sensor for a pre-set period, the Control Panel will sound an audible alarm and yellow LED will light while this fault message can be viewed on LCD under **Fault Display**.
  - While if the system is in Disarm mode, no alarm event will be generated.
  - Sensor Restoration is also reported.
- **Interference**
  - When the system is programmed with Interference Detection On, and when there is an interference detected for 30 seconds, the yellow LED will light and the fault message can be viewed under the **Fault Display**.

#### 4.12.5 Fault Message Nomenclature

The fault event message is displayed in short form as below:

Fault Condition	—	Message displayed
AC Power Fail	—	<b>AC failure</b>
Control Panel low battery	—	<b>Panel L.B.</b>
Control Panel sabotaged	—	<b>Panel Tamper</b>
Sensor Low Battery	—	(Sensor w/ Zone Name) + <b>L.B.</b>
Sensor Sabotaged	—	(Sensor w/ Zone Name) + <b>Tamper</b>
Sensor out-of-order	—	(Sensor w/ Zone Name) + <b>out</b>

#### EXAMPLE :

- If **DC Z 01 L.B.** is displayed, it means Zone 1 Door Contact is low battery.

#### NOTE :

- While you arm the system, if any of Door Contact or PIR is triggered,, arming is also progibited and the sensor triggered will be displayed as fault message.

Sensor triggered	Message displayed
Door Contact triggered	(DC w/ Zone Name) + <b>open</b>
PIR triggered	(IR w/ Zone Name) + <b>Active</b>

## 4.13 DIALING

### For Voice Reporting only.

#### 4.13.1 Auto Dialing

- If the system is in Arm mode, when an alarm occurs, the Control Panel will immediately dial the phone numbers stored and play the recorded messages.
- If the system is in Home mode or Disarm mode, when an audible alarm is initiated, the Control Panel will wait 15 seconds and then dial the phone numbers.
- After dialing, the Control Panel will delay 5 seconds then starts to play the message. It will first play the general part of the recorded message then play the specific alarm message (Burglar, Fire, Medical or Panic) depending on the nature of the alarm.
- To ensure the call is successfully received by the recipient, the recipient should acknowledge the message by pressing the appropriate button on the telephone set.
- The Control Panel, while playing the message, will check if any acknowledgement signal is received. If the recipient does not acknowledge the call, the message will be repeated for a period of 80 seconds; the Control Panel will then consider the call as unsuccessful and will try to dial the next phone number in priority.
- If more than one number is programmed, the Control Panel will continue to dial the number(s) until two emergency calls are successfully answered with either keys 1 or 0, or closed down with a key 9 acknowledgement.

#### NOTE :

- CR200 Auto-Dialling feature operates only under Tone-Dialling method.

#### 4.13.2 Call Acknowledgment

If the recipient successfully receives the call, s/he should acknowledge it by pressing the **0**, **9** or **1** button on the telephone set.

#### ACKNOWLEDGING WITH SIGNAL 0

If the recipient presses **0** on the phone set as the acknowledging signal, the Control Panel will then take the following actions:

- The Control Panel will go back on-hook.
- The Control Panel will continue Alarming.
- The Control Panel will try to dial the phone numbers of the next priorities until two recipients have acknowledged the call.

#### ACKNOWLEDGING WITH SIGNAL 9

If the recipient presses **9** on the phone set as the acknowledging signal, the following will happen:

- The Control Panel will go back on-hook.
- The Control Panel will stop alarming and stop dialing.

#### ACKNOWLEDGING WITH SIGNAL 1

The recipient can press **1** to acknowledge the call and also initiate a one-way Listen-In communication channel. Please see **One-Way Listen-In Communication** in next section for details.

#### 4.13.3 Auto Radial

- When only one Emergency phone number is stored and that number is engaged, the Control Panel will automatically redial that number up to a maximum of 5 times with an interval of 62 sec. between dialing attempts.
- When more than one telephone numbers are stored, the Control Panel will dial in accordance to the set priority order. If the number being dialed is engaged, it will try the next number. Each number will be tried up to a maximum of 5 times and the redial interval between each number is 5 sec.
- The maximum number of times the Control Panel will retry is 15 times.

**NOTE :**

- If no phone Number is programmed, the Control Panel will not dial.
- When dialing a pager number, the Control Panel will only send the identity code, it will not play the message and the call is not considered to be successful.
- The same pager number will be dialed only once.
  - **For Digital Reporting only**

**4.13.4 Auto Dialing**

- When only one Central Station telephone number is stored and that number is engaged, the Control Panel will automatically redial that number up to a maximum of 5 times with an interval of 62 sec. between dialing attempts.
- When two Central Station telephone numbers are stored, the Control Panel will dial in accordance to the set priority order. If the number being dialed is engaged, it will try the next number. Each number will be tried up to a maximum of 5 times and the redial interval between each number is 5 sec.
- The maximum number of times the Control Panel will retry is 10 times.

**NOTE :**

- If no Account Number is programmed, the Control Panel will not dial.

**4.14 ONE-WAY LISTEN-IN COMMUNICATION**

**For Voice Reporting only.**

**4.14.1 Opening One-Way Listen-In Communication**

- In an emergency, the call recipient can also press 1 to acknowledge the call and also initiate a one-way Listen-In communication.
- The one-way Listen-In Communication channel enables you to permit the recipient to listen in to what is happening on your side.
- The communication channel, once opened, lasts for 3 minutes. The recipient will hear repeated beep sound 20 seconds before CR200 hangs up the line.
- If the recipient needs more time to listen, s/he can press the 1 button on the telephone set again to add another 5 minutes.

**NOTE :**

- When the recipient opens the one-way Listen-In communication channel by pressing 1, the Control Panel will then stop alarming to allow listen-in communication.

**4.14.2 Terminating the One-Way Listen-In Communication**

- After a one-way Listen-In communication is initiated, the recipient can terminate the communication by pressing 0 or 9 on the phone set.

**TERMINATING BY SIGNAL 0**

If the recipient presses **0** on the phone set, the following will happen:

- The one-way Listen-In communication will be terminated.
- The audible alarm will continue.
- The Control Panel will go back on-hook.

The Control Panel will try to dial the phone number of the next priority until 2 calls have been acknowledged.

**TERMINATING BY SIGNAL 9**

- The one-way Listen-In communication will be terminated.
- The Control Panel will go back on-hook.
- The alarm will be silenced.
- The Control Panel will stop dialing.

**NOTE :**

- In any case, if the recipient does not terminate the voice communication by pressing 0 or 9, the Control Panel will automatically go on-hook as it is terminated by signal 0 after 5 minutes of the Listen-In communication initiation. And this call is still considered as being acknowledged.
- If the recipient needs more time to listen, s/he can press the 1 button on the telephone set again to add another 5 minutes.
  - **For Digital Reporting only.**

**4.14.3 Opening the One-Way Listen-In Communication**

- The Control Panel, after sending the alarm message and receiving a kiss-off signal from the Central Monitoring Station, will hang up the line immediately.
- In case double confirming the alarm message is required by the Central Station, the personnel in the Central Station may open the one-way Listen-In communication channel by following the steps below (Follow-On must be set as On in DigitalCenter of the Installer Menu):
  1. Dial the Control panel within 3 minutes of disconnecting the line after the alarm reporting.
  2. The Control Panel will answer the call on the second ring. The caller will hear 2 short beeps.
  3. The caller should key in the Guardian code. The first key should be keyed in within 3 seconds after the Control Panel answers the call and complete code entering within 30 seconds.
  4. If the Guardian code is correct, the Control Panel will emit a long beep to indicate the listen-in path is now open.
  5. Press 1 button on the caller's phone set to send a DTMF 1 signal, the one-way Listen-In communication is then opened.
- The one-way Listen-In communication channel enables the Central Monitoring Station personnel to listen in to what is happening on your side.
- The communication channel, once opened, lasts for 3 minutes. The caller will hear repeated beep sound 20 second before the Control Panel hangs up the line.
- If the recipient needs more time to listen, s/he can press the 1 button on the telephone set again to add another 5 minutes.

**NOTE :**

When the Central Monitoring Station opens the one-way Listen-In communication channel, the Control Panel will then stop the audible alarm to allow Listen-In communication.

**4.14.4 Terminating the One-Way Listen-In Communication**

After one-way Listen-In communication initiated, the Central Station personnel can terminate the communication by sending DTMF 0 signal. If DTMF 0 signal is received, the one-way Listen-In communication will be terminated and the Control Panel will go back on-hook.

**NOTE :**

- In any case, if the one-way Listen-In communication is not terminated by Central Station, the Control Panel will automatically go on-hook as it is terminated by signal 0 in 5 minutes after the Listen-In communication is initiated.

## 4.15 REMOTE ACCESS

The Control Panel gives you the power to control your system Remotely through the telephone line by following the steps below:

1. Dial the Control Panel's phone number on the telephone set.
2. Hang up on the first ring (hang up once you hear the ring).
3. Wait for 8 to 10 seconds.
4. Dial the Control Panel's phone number again.
5. The Control Panel will answer the phone on the first ring of the second call.
6. Key in your PIN Code. The first key should be keyed in with in 3 seconds after the Control Panel answers the call.
7. If the PIN Code is correct, a long beep will be heard. You can then press the appropriate key on the phone set to Control your system the way you want.

## 4.16 REMOTE ACCESS OPTIONS

If entering your PIN Code correctly after the long beep, the following keys can be entered from your phone set for different controlling purposes:

- **Press 1 ---**  
Open the one-way Listen-In Communication Channel. You can then listen in to what is happening in your house.
- **Press 2 ---**  
Put the system into Away mode (Arm the system)
- **Press 3 ---**  
Disarm the system
- **Press 5 ---**  
Disable the one-way Listen-in Communication Channel
- **Press 9 ---**  
Check the System mode
- **Press 0 ---**  
To hang up

### NOTE :

- After you press 1 to open the one-way Listen-In communication channel, you can press 0 to close the channel or the Control Panel will hang up automatically after 5 minutes.
- If you need to continue listening, press 1 again, and another 5 minutes will be added.
- When you press 9 to check the system mode, the Control Panel will report 1 long beep for armed, 2 beeps for disarmed, and 5 beeps for alarm occurred.
- Remember to press 0 before you hang up, or the Control Panel will hang up automatically 30 seconds after you (except in the situation that the one-way Listen-In Communication Channel was opened by pressing 1, the Control Panel will hang up 5 minutes after.)

## 5 APPENDIX

### 5.1 RESET PROCEDURE

If more than 17 incorrect keys entered, then the unit will revert to normal **Alarm On** mode.

- **Reset to Factory Default Setting**

The Control Panel can clear all programmed parameters by the following sequence:

1. Power down Control Panel and remove the battery
2. Apply power while holding down the ▲ key.
3. Release the ▲ key when a tone is heard, **Enter Code** will be displayed.
4. Enter the following keys sequence: ▲▼▲▼▲▼▲▼ OK
5. Press the G key.
6. All programmed parameters are reset to factory default setting.
7. If more than 17 incorrect keys entered, then the unit will revert to normal **Alarm On** mode.

**NOTE :**

- Once the **System Reset** is executed, all the programmed data are returned to its default value and all the devices having been learnt-in are removed. You have to do the programming and learn in the device one by one again.

### 5.2 COMMUNICATION PROTOL AND FORMAT

**The CR200 Control Panel communicates with Central Station receiver by using Contact-ID protocol.**

The Control Panel to RECEIVER communication section is composed of three basic elements:

the Handshake Tone sequence, Message Blocks, and Acknowledgements. The Handshake Tone sequence consists of a pair of single-frequency tones sequenced in time. The Message Blocks consist of a series of DTMF tone bursts separated by spaces. The Acknowledgement Tone is a single tone burst.

#### 5.2.1 Handshake Tone

The Handshake Tone sequence is produced by the RECEIVER. The purpose is to signal the Control Panel that the communication channel is ready.

#### 5.2.2 Placement

The Handshake Tone sequence is emitted by the receiver after going off-hook and delaying an interval of at least 0.5 seconds but typically no greater than 2.0 seconds. This time allows the phone network connection to settle before the communication process begins.

#### 5.2.3 Composition

The handshake tone sequence shall consist of:

A burst of 1400 Hz.  $\pm 3\%$  tone with a duration of 100 msec.  $\pm 5\%$

A pause of 100 msec.  $\pm 5\%$

A burst of 2300 Hz.  $\pm 3\%$  tone with a duration of 100 msec.  $\pm 5\%$

#### 5.2.4 Message Blocks

A Message Block is sent by the Control Panel. Each message block contains sufficient information to report an event in the system.

#### 5.2.5 Placement

The first message block is sent beginning 250 msec. (250 min., 300 max.) after the end of either the Handshake Tone sequence or after a Kiss off (Acknowledgement) tone. The delay is timed from the end of the tone.

### 5.2.6 Message Composition

The form of the message is:

Where ACCT MT QXYZ GG CCC

ACCT = 4 Digit Account number (0-9, B-F)

MT = Message Type, 18H.

Q = Event qualifier, which gives specific event information:

XYZ = Event code (3 Hex digits 0-9, B-F)

GG = Group or Partition number (00H)

CCC = Zone Number

000 CR200

001 Zone 1

002 Zone 2

003 Zone 3

.....

.....

018 Zone 18

019 Zone 19

020 Zone 20

021 Guardian code 1

022 Guardian code 2

### 5.2.7 Data Tone

The message is sent using standard DTMF tones.

The timing of the tones shall be as follows:

Burst ON time – 50 msec. (50 min., 60 max.)

Burst OFF time – 50 msec. (50 min., 60 max.)

### 5.2.8 Kiss off (Acknowledgement) Tone

The Kiss off tone from the receiver is used to tell the Control Panel that the message has been received successfully. The frequency of the tone is 1400 Hz.  $\pm 3\%$ . The Control Panel detect a minimum of 400 msec. of tone before considering the kiss off to be valid.



### 5.2.9 Event code

- **100 - Medical**
  - When the Wrist Transmitter (WTR, RC, DC or Panel) is triggered.
- **101 - Personal emergency**
  - When the Wrist Transmitter (WTR) or Emergency Pendant (EP) is pressed.
- **110 - Fire**
  - When the DC, Panel, RC is triggered.
- **111 - Smoke**
  - When the Smoke Detector (SD) is triggered.
- **120 - Panic**
  - When the Panic Button of the Remote Controller (RC) is pressed.
- **121 - Duress**
  - When the Duress Code is entered to Disarm or Arm the system.
- **130 - Burglary**
  - When any one of the following devices is triggered:
    - The Door Contact (DC) set at **Burglary (@ B)**
    - The Door Contact (DC) set at **24 Hours (@ H)**
    - The Door Contact (DC) set at **Delay (@ D)**
    - The PIR set at **Burglary (@ B)**.
    - The PIR set at **Delay (@ D)**.
    - Tamper Fault under Arm mode.
- **131 - Perimeter**
  - When the DC set at **Entry (@ E)** is triggered.
  - When the PIR set at **Entry (@ E)** is triggered.
- **132 – Interior**
  - When the DC set at **Home Omit (@ O)** is triggered.
  - When the PIR set at **Home Omit (@ O)** is triggered.
- **137 – Burglary Tamper**
  - When the Tamper Switch on the Control Panel is triggered
- **139 – Alarm Confirmation**
  - When the Alarm was verified by the triggering of a second alarm from a different Burglar IR200 or DC200 within a 30-min period.
- **147 - Sensor Supervisor Failure**
  - When the CR200 can't receive the signal transmitted from any one of the following devices individually for a period of more than 4 Hours.
    - Door Contact
    - PIR Sensor
    - Smoke Detector
- **154 – Water leakage**
  - When the Water Sensor connected to DC set at **Water (@W)** is triggered

- **301 - AC Failure**
  - When the AC power fails for more than 10 sec.
- **302 - Low battery**
  - When the battery voltage of the Control Panel is low
- **383 – Sensor Tamper**
  - When the Tamper Switch on any one of the following devices is triggered.
    - Door Contact
    - PIR and EIR Sensor
    - KP
- **384 - Sensor Low Battery**
  - When the battery voltage of any one of the following devices is low.
    - Door Contact
    - PIR Sensor
    - Smoke Sensor
    - Wrist Transmitter
- **400 – Open/Close (Reserved)**
  - When the system is opened (disarmed) or closed (armed) by using the Remote Controller.
  - 401- O/C by user
  - When the system is opened (disarmed) or closed (armed) by entering the Guardian code.

**NOTE :**

- The CR200 normally doesn't report open/close status. However, whenever arming or disarming the system by entering the Guardian Code, the CR200 will report event code 401 with Zone Number 021 or 022.
- **407 - Remote Arm/Disarm (Reserved)**
- **456 - Partial Arm**
  - When partially arm the system by entering the Guardian Code.
- **602 - Periodic test report**
  - When the CR200 makes periodic Check-in reporting.
- **606 – Follow-On**
  - When CR200 opens a one-way Listen-In communication channel with the Central Monitoring Station.





**Made in TAIWAN**

**ELKRON S.p.A.** Via Cimarosa, 39 – 10154 Torino (TO) – ITALY

Tel. +39 (0)11.3986711 – Fax +39 (0)11.3986790

[www.elkron.it](http://www.elkron.it) – mail to: [info@elkron.it](mailto:info@elkron.it)

