Alarm Control Panel

User Manual

V1.0.2

ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.

Cybersecurity Recommendations

Mandatory actions to be taken towards cybersecurity

1. Change Passwords and Use Strong Passwords:

The number one reason systems get "hacked" is due to having weak or default passwords. It is recommended to change default passwords immediately. The password of this device is made up of 4 to 6 numbers.

2. Update Firmware

Please do not update firmware randomly. If you need to update firmware, please contact technical support or manufacturer.

"Nice to have" recommendations to improve your network security

1. Change Passwords Regularly

Regularly change the credentials to your devices to help ensure that only authorized users are able to access the system.

2. Check the Log:

If you suspect that someone has gained unauthorized access to your system, you can check the system log.

3. Physically Lock Down the Device:

Ideally, you want to prevent any unauthorized physical access to your system. The best way to achieve this is to install the recorder in a lockbox, locking server rack, or in a room that is behind a lock and key.

Foreword

General

This user manual (hereinafter referred to be "the Manual") introduces the functions and operations of the Alarm Control Panel (hereinafter referred to be "the Control Panel").

Models

DHI-ARC3008C, ARC3008C, DH-ARC3008C, OEM-ARC3008C

Safety Instructions

The following categorized signal words with defined meaning might appear in the Manual.

Signal Words	Meaning
⚠️DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
⚠️WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
⚠️CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
⚠️TIPS	Provides methods to help you solve a problem or save your time.
📖NOTE	Provides additional information as the emphasis and supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.0.2	Delete specification appendix	June 2019
V1.0.1	Update Appendix 3 Event Log Messages.	October 2018
V1.0.0	First Release.	September 2018

Privacy Protection Notice

As the device user or data controller, you might collect personal data of others such as face, fingerprints, car plate number, Email address, phone number, GPS and so on. You need to be in compliance with the

local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures include but not limited to: providing clear and visible identification to inform data subject the existence of surveillance Area and providing related contact.

About the Manual

- The Manual is for reference only. If there is inconsistency between the Manual and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the Manual.
- The Manual would be updated according to the latest laws and regulations of related regions. For detailed information, see the paper manual, CD-ROM, QR code or our official website. If there is inconsistency between paper manual and the electronic version, the electronic version shall prevail.
- All the designs and software are subject to change without prior written notice. The product updates might cause some differences between the actual product and the Manual. Please contact the customer service for the latest program and supplementary documentation.
- There still might be deviation in technical data, functions and operations description, or errors in print. If there is any doubt or dispute, please refer to our final explanation.
- Upgrade the reader software or try other mainstream reader software if the Manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and the company names in the Manual are the properties of their respective owners.
- Please visit our website, contact the supplier or customer service if there is any problem occurred when using the device.
- If there is any uncertainty or controversy, please refer to our final explanation.

Default Access Codes

- Supervisor User: 1234
- TECHNICIAN: 1961

Important Safeguards and Warnings

This Chapter describes the contents covering proper handling of the Device, hazard prevention, and prevention of property damage. Read these contents carefully before using the Device, comply with them when using, and keep it well for future reference.

Operation Requirement

- Modify the default access codes after installation to avoid being stolen.
- Do not place or install the product in a place exposed to sunlight or near the heat source.
- Keep the product away from dampness, dust or soot.
- Keep the product installed on the stable place to prevent it from falling.
- Do not drop or splash liquid onto the product, and make sure there is no object filled with liquid on the product to prevent liquid from flowing into the product.
- Operate the device within the rated range of power input and output.
- Do not dissemble the Device randomly.
- Transport, use and store the Device under the allowed humidity and temperature conditions.

Electrical Safety

- Use the battery as required; otherwise there might result in fire, explosion, or inflammation.
- When replacing battery, make sure the same type is used.
- Use the recommended power cables in the region and conform to the rated power specification.
- The power source shall conform to the requirement of the Safety Extra Low Voltage (SELV) standard, and supply power with rated voltage which conforms to Limited power Source requirement according to IEC60950-1. Please note that the power supply requirement is subject to the device label.
- Connect the device (I-type structure) to the power socket with protective earthing.
- The appliance coupler is a disconnection device. When using the coupler, keep the angle for easy operation.

Table of Contents

1 Introduction

1.1 Overview

The product is the high performance anti-theft controller designed for the middle and small alarm solution application. Adopting embedded Linux operation system and relying on embedded platform, the system can run steadily with advanced controlling technology and strong data transmission ability. The embedded design also supports the product with high security and excellent stability.

The product can work both independently and with professional app in mobile phone, which is convenient for remote viewing and alarm status controlling. The product can also be connected to the network to form the strong security monitoring network, working with the professional alarm platform software to show the strong networking and remote monitoring ability.

The product can be widely applied in the store, warehouse, family, and so on for security protection.

1.2 Features

📖

The functions might be different depending on the software and hardware version of the model you purchased.

- 8 onboard wired Zones.
- 3 programmable hardware outputs on the Control Panel mainboard, including 1-relay output used as siren output and 2-mos transistor outputs of OC type.
- Outputs operation follows system events, Zone events, Area, Link and scheduling programs.
- 1 Alarm Control Panel case tamper and 1 leave-wall tamper.
- 1 siren tamper input.
- Up to 8 Areas, and every Area with 2 partitions.
- Up to 8 Keypads.
- Up to 100 users with 8 authority levels for different users (Supervisor, Manager, Master, User, Temporary, Duress, Patrol, and Technician).
- 1000 events log.
- Supports more than 11 Zone types.
- 7 sorts of Zone terminations, including closed-circuit (NC), open-circuit (NO), end-of-line (EOL) resistors, double end-of-line (DEOL) resistors, triple end-of-line (3DEOL) resistors, inertial type for vibration detector and pulse type for roller shutter.
- Configurable Zone resistance (2K7, 4K7, and 6K8).
- With 2 RS-485 ports for Keypads connection and extended connections.
- With PSTN port for alarm event report function, supporting CID (Contact ID).
- 3 telephone numbers for monitor station (PSTN), 8 telephone numbers for vocal message, and 8 telephone numbers for SMS.
- With GSM/GPRS network ports for events SMS reporting and remote control, events vocal message reporting by dialing and remote control, and mobile phone app connection ability when Ethernet connection is failed.
- With 10/100M self-adaptive Ethernet port.

- Supports abnormality alarm, including network disconnected alarm, PSTN fault alarm, tampering alarm, low battery alarm, battery loss alarm, power loss alarm, and keyboard faults alarm.
- In-field firmware upgradable.
- App-based system control through DMSS.

1.3 Terms and Definitions

Refer to the terms and definitions that are used in the Manual as below.

Table 1-1 Terms and definitions

Term	Definition
Area	The 8 Areas that can be armed.
Zone	Protection zones under Area.
Partition	The scope of Partition is larger than Zone and under Area.
Numeric key	Key 0–9 on the Keypad.
Function key	The other keys except Numeric keys, such as ESC and ENTER.
Key combination	Total Fn + Numeric key.
User Menu	Menus programmed by the User.
Installer Menu	Menus programmed by the TECHNICIAN.
Access Code	A specified code, from 4 to 6 digits, that allows the user to operate the Keypad.
TECHNICIAN	A person that is authorized to access the Installer Menu to program the system.

2 About the Keypad

This chapter introduces the dimension, main functions, indicators, keys operations, and installation of the Keypad.

2.1 Dimension

Figure 2-1 Dimension (mm [inch])
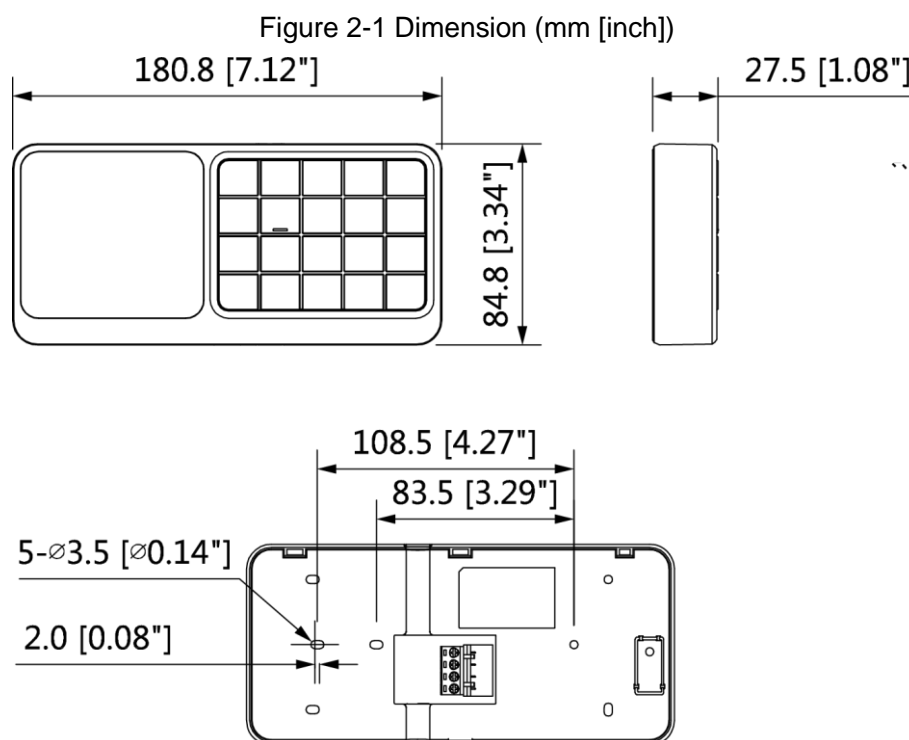
2.2 The Grand Tour

Figure 2-2 Grand tour
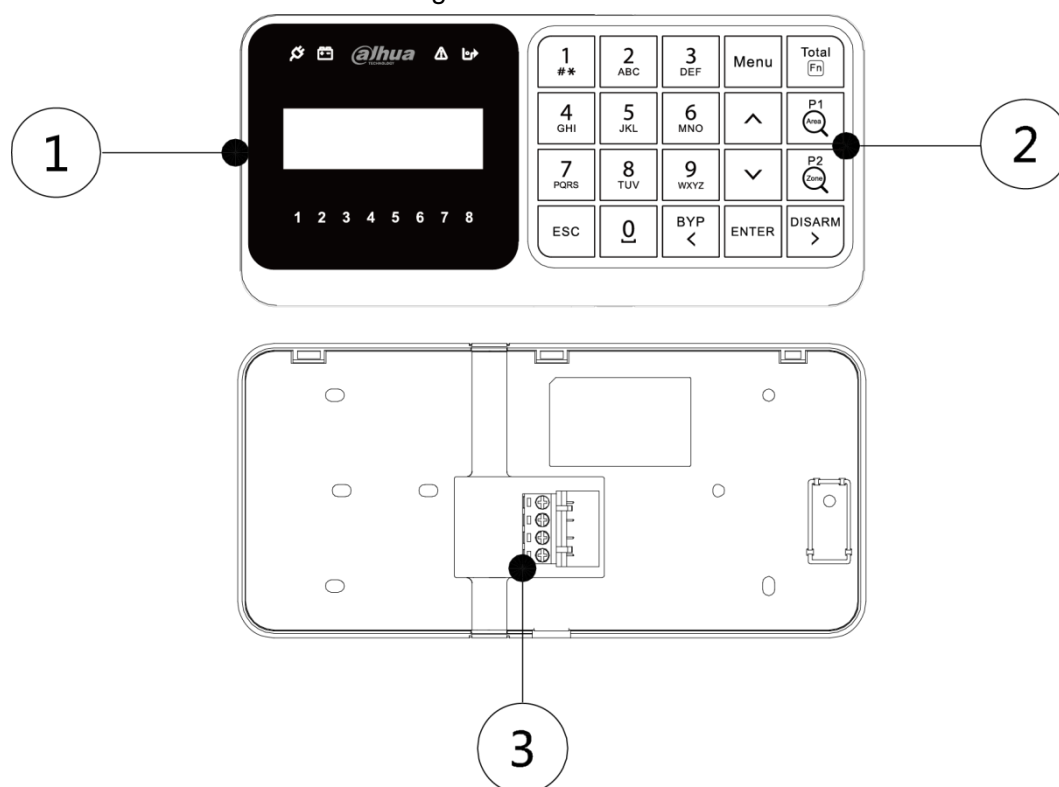
Table 2-1 Functions introduction

No.	Name	Function
1	LCD display	Show all the system information including management and programming. For details, see "2.5 Main Interface of LCD Display."
	LED indicators	Give information about power status, battery status, failures, bypass, and alarm status of each Area. For details, see "2.4 LED Indicators."
2	The keys	The Keypad keys can do numerous functions. Each key has specific function. For details, see "2.3 The Keys."
3	Ports	● +12V: Supplies 12V DC. ● GND: Ground. ● RS485_A1 ● RS485_B1

2.3 The Keys

The Keypad keys can do numerous functions. Each key has a specific function as explained below.

Figure 2-3 The keys
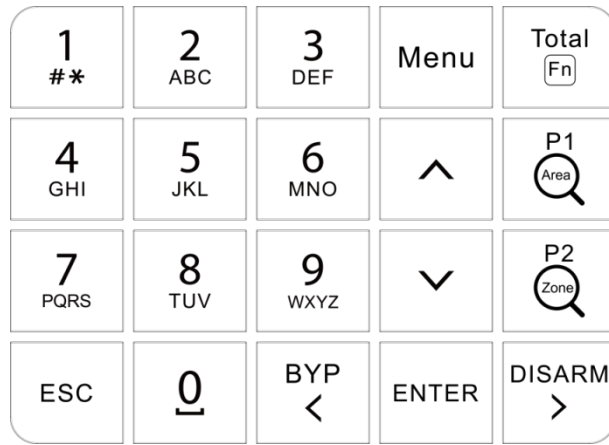
2.3.1 Numeric Keys (0 to 9)

The numeric keys give the functions as below:
- Type in access codes as required to access programming (TECHNICIAN or user) or to arm/disarm.
- The keys from 1 to 8 represent eight zones. When the zone is not ready, you can press and hold the key to show the NOT READY details, and when the key LED light slowly flashes or quickly flashes, press and hold the key to show the alarm details.
- The keys from 0 to 8 can be used to type in or edit alphanumeric descriptions.
- Press 1 to type in "#", "*", and ".". Press 0 to type in space.

2.3.2 Other Function Keys

Table 2-2 Other function keys

Key	Function
ESC	Exit from the current menu or return to the previous menu.
BYP <	• Move the pointer to the left when you edit. • Press and hold [BYP <] to delete text. • Bypass the Zones as below: 1. Type in the access code. 2. Press [BYP <]. The interface for setting the bypass Zones is shown. 3. Press the corresponding numeric key of the Zones that you want to bypass. For example, if you want to bypass Zone 12, press Key 1 and then press Key 2. 4. Press Enter to confirm the setting.
Menu	• Enter the User Menu or the Installer Menu. • Quick input. For example, if your type in 130, press [Menu] immediately to confirm the input; otherwise the input will become invalid. • Quick jump. For example, if you want to view the 200th log from 300 logs, type in 200, and then press [Menu] to jump to the 200th log page.

Key	Function
∧ ∨	● Increase or decrease numbers. ● Switch options on the interface. ● Page turning.
ENTER	● Enter the sub menu. ● Switch to the next menu of the same level in editing mode. ● Confirm the input.
Total Fn	● Arm the whole Area. ● Rapid Total Arming to the whole Area. ● Give combination operations. For details, see Table 2-3.
P1 Area	● Arm the PARTITION 1. ● Rapid Arming the PARTITION 1. ● Give combination operations. For details, see Table 2-3.
P2 Zone	● Arm the PARTITION 2. ● Rapid Arming the PARTITION 2. ● Give combination operations. For details, see Table 2-3.
DISARM >	● Disarm. ● Move the pointer to the right when you edit number or letter.

2.3.3 Key Combination Operations

How to press key combination: Press in sequence.

For example, if you need to press ⎡Total Fn⎤ + 0, press ⎡Total Fn⎤ first, and then press 0.

Table 2-3 Key combinations

Key	Function
⎡Total Fn⎤ + 0 (F0)	On the main interface, press ⎡Total Fn⎤ + 0 (F0) to show the GSM and wireless signal strength. The GSM signal is shown with eight bars, and the wireless signal is shown with four bars. Press ⎡Total Fn⎤ + 0 (F0) again to return to the main interface. Without pressing ⎡Total Fn⎤ + 0 (F0), the system automatically returns to the main interface in 2 min.
⎡Total Fn⎤ + 1 (F1)	● Panic Activation (silent activation or with sirens and Keypad buzzer) ● On the menu of ZONE TROUBLES, ZONE MANAGER, and CHIME ZONES, press ⎡Total Fn⎤ + 1 (F1) to show the Area selection interface where can select the Areas within which to do the searching and filtering. ● On the OUTPUTS menu, press ⎡Total Fn⎤ + 1 (F1) to do a test to the output circuit, and Active is shown.

Key	Function
[Total Fn] + 2 (F2)	● Robbery Activation (silent activation) 📖 There is no response on the interface but this event is recorded in the log. ● On the menu of ZONE TROUBLES, ZONE MANAGER, and CHIME ZONES, you can select the Zone on which you can do the searching and filtering. ● Edit text on the interfaces such as description of module, zone, user code, output, timer and display. ● Edit telephone number, SMS number, and SIM number on the TEL NUMBER menu, and PSTN number on MONITOR STATION menu..
[Total Fn] + 3 (F3)	● Medical Activation (with Keypad buzzer) ● On the WALK TEST menu, switch between individual test and multiple test. ● On the TEL NUMBER menu, start a phone call test or message test.
[Total Fn] + 4 (F4)	● Fire Alarm Activation (with Keypad buzzer and siren) ● On the TEL NUMBER menu, stop a phone call test.
[P1 Area] + (1–8)	Query which zones under the specified Area.
[P2 Zone] + (1–99)	Query which Areas the specified zone belongs to.

2.4 LED Indicators

There are 12 LED indicators on the Keypad that respectively gives information about power status, battery status, faults, bypass, and alarm status of each Area.

2.4.1 Overview

The Table 2-4 shows the icon, color, and meaning of each LED indicator.

Table 2-4 LED indicators overview

Icon	Color	Meaning
[plug icon]	Green	Power status
[battery icon]	Green	Battery status
[warning icon]	Red	Fault status
[bypass icon]	Green	Bypass
1 2 3 4 5 6 7 8	Red	Alarm status of eight Areas

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2.4.2 Status

Power LED Indicator ( )

- **Glows**: The system operates with normal power supply.
- **Slowly flashes**: The system does not operate normally due to a lack of power supply, and therefore a check must be given.
- **Quickly flashes**: The system is in installer programming mode or on the Walk Test Zone mode. If a lack of power supply occurs when the system is in either of these two modes, the LED indicator also quickly flashes.

Battery LED Indicator ( )

- **Slowly flashes**: Battery defects such as low power and powering off quickly.
- **Off**: Battery operates normally.

Fault LED Indicator ( )

- **Glows**: System faults (main power loss, battery low voltage or missing), and you can view the details on the SYSTEM TROUBLES menu.
- **Slowly flashes**: Tampering is happening to the Control Panel, siren, or Keypad.
- **Off**: The system operates normally.

Bypass LED Indicator ( )

- **Glows**: There is at least one bypassed zone.
- **Off**: There is no bypassed zone.

1-8 LED Indicators

There are eight LED indicators located below the LCD display represent the status of the Areas. From left to right they show the alarm status of Area 1 to Area 8. See Figure 2-4.

Figure 2-4 Area status LED indicators

- **Glows**: The Area is armed.
- **Slowly flashes**: The alarm is in progress or the alarm has occurred
- **Quickly flashes**: The Area is in alarm condition and the linkage is in progress. This condition disappears when the Area is disarmed. The indicator starts to flash slowly and is cancelled when a valid user code is typed in again followed by the command DISARMED.
- **Off**: The Area is disarmed.

$\square$

By pressing and holding the number key corresponding to each Area for three seconds, you can view where exactly the alarm is in the Area. For example, when the Area 5 indicator quickly flashes, press and

hold Key 5, then * shows where the alarm is located exactly. This operation can only view the Zone-related alarms, but cannot view the system faults alarms.

2.5 Main Interface of LCD Display

The Keypad is equipped with a back-lit LCD display that shows all the system information including management and programming.

When the display is off and everything is working properly, the first line shows the date and time, and the second line contains a series of data that represent Area in use in the system.

Figure 2-5 Example of Keypad with 8 Areas assigned

```
31/08/18   X   17:30
_ _ _ _ _ _ _ _
```
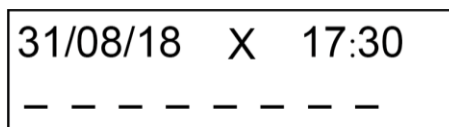
Each dash can represent a different meaning according to the event activated by the Area. Refer to Table 2-6 for the event description and symbol of each event.

Symbols on the First Line of Display

Table 2-5 Symbols on the first line of display

Symbol	Meaning
01/01/03	Day/Month/Year
x	● **H**: Holiday period active ● **T**: Telephone dialer calling ● **P**: Disarming period for Patrol user
00:00	Hour : Minutes
⬜⬜⬜⬜⬜...	Level of GSM signal. Each ⬜ is equivalent to one bar, and maximum eight bars.

Symbols on the Second Line of Display

Table 2-6 Symbols on the second line of display

Symbol	Event
Upper case **T**	Total Arming
1	Partition Arming 1
2	Partition Arming 2
Upper case **P**	Partition 1 + Partition 2 arming
Lower case **t**	Total Forced Arming
Upper case **A**	Alarm
<	Entry delay time

Symbol	Event
>	Exit delay time
*	Area not ready (Zones open)
!	Alarm delay

Alarm Message Display

During an alarm, the main interface shows the general reason description for the alarm in the first line, for example, ZONE ALARM. The alarm message remains displayed for the entire duration of the alarm.

To verify the event that caused the alarm, you can press and hold the corresponding numeric key (from 1 to 8) to show the event details. The display will show the Zone or the event that triggered the alarm.

To examine whether any other Zones are involved in the alarm, press $\boxed{\wedge}$ and $\boxed{\vee}$ to scroll up and down the page. Normally, the display shows the last Zone affected by the event.

At this moment, if there is a telephone call in progress, when you type in the user code and then press $\boxed{\substack{\text{DISARM} \\ >}}$, the display shows the question: $\boxed{\substack{\text{31/08/18 T 17:30} \\ \text{STOP TELEPHONE?}}}$. Press $\boxed{\text{ENTER}}$ again to confirm the stopping of telephone call, or press $\boxed{\text{ESC}}$ to return to the main interface and not to stop telephone call.

Display of GSM Signal Strength

By pressing $\boxed{\substack{\text{Total} \\ \text{Fn}}}$ + 0 (F0), the display shows the value of GSM signal strength in the first line of main interface. The value persists for about two minutes, or you can press $\boxed{\substack{\text{Total} \\ \text{Fn}}}$ + 0 (F0) again to exit. You can also monitor the GSM signal strength during a call in progress.

● None $\boxed{}$: No GSM signal.

● One $\boxed{l}$: Minimum GSM signal

● Eight $\boxed{l}$: Maximum GSM signal

2.6 Installation

Figure 2-6 Keypad installation
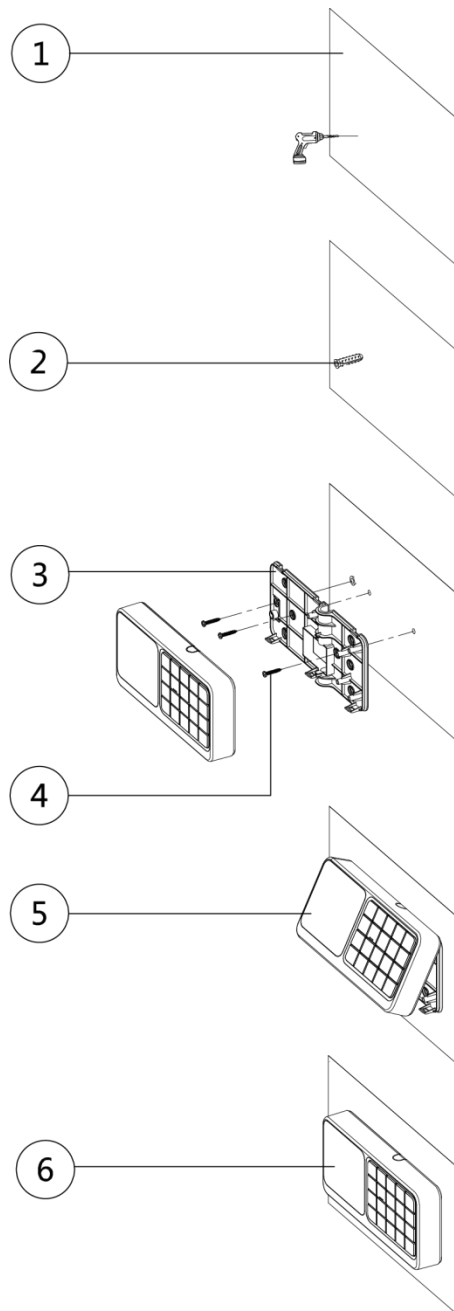
Step 1 Loosen the screws on the back of Keypad to remove the rear panel.

Step 2 Pull the cables out of the rear panel.

Step 3 Drill a hole on the wall①, and put the expansion bolt② through the rear panel to fix it onto the wall.

Step 4 Put the self-tapping screws④ into the other installation holes on the rear panel③ and then fasten screws.

Step 5 Connect the cables to the ports on the main board.

Step 6 Align the clamps on the top of main board with the ones on the rear panel⑤, and then slowly attach the main board to the rear panel. The installation is completed⑥.

3 Arming and Disarming

3.1 Arming

When you arm the system, the detectors that are connected to it are activated. If any alarm event occurs, the detectors give an alarm.

The functions provided by the key combinations for Robbery, Panic, Medical, and Fire are always active even though the system is disarmed (if enabled by the TECHNICIAN).

The system has the types of arming as below:
- Total Arming
- Partition 1 Arming
- Partition 2 Arming
- Partition 1+2 Arming
- Forced Arming
- Rapid Arming
- Arming through Timer
- Arming from dialing or SMS

3.1.1 Total Arming

Total Arming activates protection to the entire alarm system and used when there are no persons inside the Premise.

From total arming, you can only proceed to disarming.

To use the Total Arming, do the following:

Step 1   Confirm that all Zones are ready to be armed, which means there must not be any $*$ character in the place of dash in the second line of the LCD display.
To identify which Zone is not ready, do the following:

1)   Press and hold the numeric key (from 1 to 8) where the $*$ character appears.

The first OPEN Zone shows on the display.

2)   Press [^] and [v] to scroll up and down the page to show other not ready Zones.

After these Zones are identified, you can send a person to do the onsite examination or go to ZONE MANAGER menu to set bypass for these Zones.

Step 2   Enter your user code, and then press [Total Fn].

The numbers of Areas ready for arming are shown on the second line of the LCD display.

Step 3   Select the Areas that need to be involved in the arming by pressing the corresponding numeric key (from 1 to 8).

Step 4 Press [ENTER] to do the arming.

The Keypad emits a confirmation buzzer.

The armed Area shows an upper case **T**, and the corresponding LED indicator lights up. The Areas that are not armed continues to show a dash. You can add other Areas to the arming at any time. See Figure 3-1.

If the Exit Delay is active, the Keypad keeps sounding a buzzer for the entire programmed Exit Delay period.

Figure 3-1 Total arming

```
31/08/18        17:30
T T T T – – – –
```
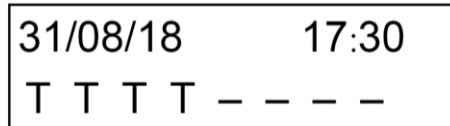
3.1.2 Partition 1 Arming

Partition Arming 1 activates partial protection with part of system armed and only activates a predefined group of detectors.

From Partition Arming 1, you can only proceed to Partition Arming 1+Partition Arming 2, or Total Arming.

To use the Partition Arming 1, do the following:

Step 1 Confirm that all Zones are ready to be armed, which means there must not be any $*$ character in the place of dash in the second line of the LCD display.

To identify which Zone is not ready, do the following:

1) Press and hold the numeric key (from 1 to 8) where the $*$ character appears.

The first OPEN Zone shows on the display.

2) Press [^] and [v] to scroll up and down the page to show other not ready Zones.

After these Zones are identified, you can send person to do the onsite examination or go to ZONE MANAGER menu to set bypass for these Zones.

Step 2 Enter your user code, and then press [P1 Area].

The numbers of Areas ready for arming are shown on the second line of the LCD display.

Step 3 Select the Areas that need to be involved in the arming by pressing the corresponding numeric key (from 1 to 8).

Step 4 Press [ENTER] to do the arming.

The Keypad emits a confirmation buzzer.

The armed Area shows the number **1**, See Figure 3-2, and the corresponding LED indicator lights up. The Areas that are not armed continues to show a dash. You can add other Areas to the arming at any time.

If the Exit Delay is active, the Keypad keeps sounding a buzzer for the entire programmed Exit Delay period.

Figure 3-2 Partition arming 1

```
31/08/18           17:30
1  1  1  1  –  –  –  –
```

The Areas can be armed in different and mixed modes, for example, you can have two Areas have Total Arming mode, and two have Partition Arming 1.

Figure 3-3 Mixed arming 1

```
31/08/18           17:30
1  T  1  T  –  –  –  –
```

3.1.3 Partition 2 Arming

Partition Arming 2 activates partial protection with part of system armed and only activates a predefined group of detectors. To use the Partition Arming 2, do the following:

From Partition Arming 1, you can only proceed to Partition Arming 1+Partition Arming 2, or Total Arming.

Step 1 Confirm that all Zones are ready to be armed, which means there must not be any * character in the place of dash in the second line of the LCD display.

To identify which Zone is not ready, do the following:

1) Press and hold the numeric key (from 1 to 8) where the * character appears.

The first OPEN Zone shows on the display.

2) Press $\boxed{\wedge}$ and $\boxed{\vee}$ to scroll up and down the page to show other not ready Zones.

After these Zones are identified, you can send person to do the onsite examination or go to ZONE MANAGER menu to set bypass for these Zones.

Step 2 Enter your user code, and then press $\boxed{\text{P2}}$.

The numbers of Areas ready for arming are shown on the second line of the LCD display.

Step 3 Select the Areas that need to be involved in the arming by pressing the corresponding numeric key (from 1 to 8).

Step 4 Press $\boxed{\text{ENTER}}$ to do the arming.

The Keypad emits a confirmation buzzer. The armed Area shows the number **2**, See Figure 3-2, and the corresponding LED indicator lights up. The Areas that are not armed continues to show a dash. You can add other Areas to the arming at any time.

If the Exit Delay is active, the Keypad keeps sounding a buzzer for the entire programmed Exit Delay period.

Figure 3-4 Partition arming 2

```
31/08/18            17:30
2 2 2 2 – – – –
```

The Areas can be armed in different and mixed modes, for example, you can have two Areas have Total Arming mode, and two Areas have Partition Arming 2 mode. See Figure 3-5.

Figure 3-5 Mixed arming 2

```
31/08/18            17:30
2 T 2 T – – – –
```

3.1.4 Partition 1+2 Arming

Partition Arming 1 + Partition Arming 2 activates partial protection with part of system armed and only activates the detectors that belong to these two Partitions.

📖

From Partition Arming 1 + Partition Arming 2, you can only proceed to Total Arming of an Area.

To perform Partition Arming 1 + Partition Arming 2, you should arm one of the two Partitions with the other is already armed (the order does not matter). For the arming procedures of Partition Arming, see "3.1.2 Partition 1 Arming" and "3.1.3 Partition 2 Arming."

After the arming operation is completed, the armed Area shows the upper case **P**. See Figure 3-6.

Figure 3-6 Partition arming 1 and Partition arming 2

```
31/08/18            17:30
P  P  P  P – – – –
```

The Areas can be armed in different and mixed modes, for example, you can have one Partition Arming 1, one Partition Arming 2, and one Total Arming mode. See Figure 3-5.

Figure 3-7 Mixed arming

```
31/08/18            17:30
2 T  1  P – – – –
```

3.1.5 Forced Arming

Forced Arming allows you to override not ready system arming caused by open Zones, without any additional operations. This type of arming can be useful when the open or not ready Zones are windows or doors whose status you know and that you wish to leave open. Another instance where Forced arming is useful is when one or more sensors are in a TROUBLE condition but you do not want to put them into bypassed status.

In order for an access code to be able to provide Forced Arming, you must have the relevant attribute programmed, for details, see "4.6 ACCESS CODES" menu.

After the Forced Arming has been set, the bypass LED indicator lights up showing that some detectors are automatically bypassed. If the Forced Arming is set for the whole Area, a lower case **t** is shown on the LCD display, see Figure 3-8.

- The Forced Arming could inhibit sensors that you DID NOT wish to bypass from arming without your realizing it.
- After disarming, all the detectors involved in the Forced Arming will become available for arming again.

Figure 3-8 Forced arming

```
31/08/18          17:30
2 1 t t – – – –
```
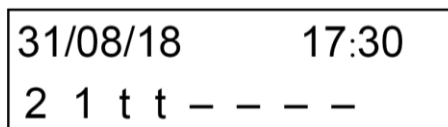
3.1.6 Rapid Arming

Rapid Arming allows you to Arm the alarm system without entering the user code. The only difference between Rapid Arming and arming with the code is the practicality of performing the operation quickly. To Disarm the system, you must type in a valid code.

Preparation

To use the Rapid Arming, the TECHNICIAN must have programmed the Keypad. Otherwise, the Keypad cannot do the Rapid Arming.

Procedure

To do the Rapid Arming, press and hold ⌷ (Total Fn) for the arming that you require on the Areas that belong to the Keypad.

- You can also arm the system with IMMEDIATE or DELAYED exit time for Rapid Arming if this is programmed by the TECHNICIAN.
- To disarm from Rapid Arming, you need to type in a valid user code.

3.1.7 Arming through Timer

You can arm the alarm system by timer that is set on the SYSTEM TIMER menu.

This setting can be managed and programed by the TECHNICIAN, Supervisor, and Manager. For details, see "4.10 SYSTEM TIMERS" menu.

The system also supports programming HOLIDAYS during which the TIMER will not have any effect. For details, see "4.12 HOLIDAY" menu.

3.1.8 Arming from Remote

The alarm system can also be armed from telephone through a specific procedure with an interactive vocal guide or through SMS messages.

3.2 Disarming

When you disarm the system, all the connected detectors are deactivated.

The system has the types of arming as below:

- Total Disarming
- Disarming through Timer
- Disarming through Telephone or SMS text
- Disarming under Duress

3.2.1 Total Disarming from the Keypad

You can do the disarming where there is an alarm or you just want to disarm.

Step 1 Type in the user code on the Keypad.

Step 2 Press $\boxed{\substack{\text{DISARM} \\ >}}$.

The Area that can be disarmed is shown on the LCD display.

Step 3 Press the corresponding key on the Keypad to the Area that you want to disarm.

Step 4 Press $\boxed{\text{ENTER}}$ to disarm the Area totally.

3.2.2 Total Disarming with the Timer

You can disarm the alarm system by timer that is set on the SYSTEM TIMER menu.

This setting can be managed and programed by the TECHNICIAN and Supervisor user. For details, see "4.10 SYSTEM TIMERS" menu.

The system also supports programming HOLIDAYS during which the TIMER will not have any effect. For details, see "4.12 HOLIDAY" menu.

3.2.3 Total Disarming through Telephone or SMS

The alarm system can also be disarmed from telephone through a specific procedure with an interactive vocal guide or through SMS text messages.

3.2.4 Disarming under Duress

You can do the disarming with a changed use code or a specific duress code to give an duress alarm. Take the normal use code is 1234 as an example. You can increase or decrease the last figure.

Step 1 Type in the changed user code, for example, 1235.

Step 2 Press $\boxed{\substack{\text{DISARM} \\ >}}$.

The Area that can be disarmed is shown on the LCD display.

Step 3 Press the corresponding key on the Keypad to the Area that you want to disarm.

Step 4 Press $\boxed{\text{ENTER}}$ to disarm the Area totally.

4 User Menu

This Chapter describes the operations included in the User Menu.

The User Menu consists of many menus for management and programming operations as below:
- ZONE TROUBLES
- SYSTEM TROUBLES
- ZONES MANAGER
- LOGBOOK EVENT
- CHIME ZONES
- ACCESS CODES
- TECHNICIAN
- FIRMWARE VERSION
- WALK TEST
- SYSTEM TIMERS
- DATE/TIME
- HOLIDAY
- TEL NUMBERS
- REMOTE SERVICE
- SECURITY CODE

To enter the User Menu, you need an access code. So the User Menu is accessible from the codes that have an appropriate security level. The factory default user code is 1234 that is also the user code of Supervisor user with the highest authority.

It is possible to scroll through the menus by the up and down arrow keys, or to go directly to the required

menu by pressing the number of the menu + $\boxed{\text{Menu}}$.

To exit from the User Menu, press $\boxed{\text{ESC}}$ until the Keypad requests "EXIT FROM MENU?", then press $\boxed{\text{ENTER}}$

to confirm or press $\boxed{\text{ESC}}$ again to cancel.

4.1 ZONE TROUBLES

The ZONE TROUBLES menu examines which Zones are in NOT READY status and the reason for the fault, and then judge if it is necessary to close it or bypass it.

<u>Step 1</u> Type in the access code, and then press $\boxed{\text{Menu}}$.

The ZONE TROUBLES menu is shown on the LCD display. See Figure 4-1.

Figure 4-1 Zone troubles

```
⟨01⟩
ZONE TROUBLES
```

<u>Step 2</u> Press $\boxed{\text{ENTER}}$ to enter the menu.

● If there are no fault Zones, the interface shows "NO TROUBLE."

● If there are Zones in trouble, there are three categories: TAMPER, SHORT, and MASK.
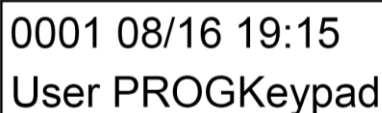
Step 3 Press [ENTER] to enter the programming mode. See Table 4-1.

Table 4-1 Zone troubles programming

Option	Description
Trouble type	Shows type of trouble. ● TAMPER: Tampering detectors. ● SHORT: Short circuit. ● MASK: Anti-shielding.
STATUS	Shows the Zone exclusion mode: ACTIVE, ISOLATE, TEST, and BYPASSED. Press [∧] [∨] to select the specific exclusion mode. ● A: ACTIVE The Zone is in normal condition. ● I: ISOLATE The Zone is excluded (removed) permanently and can be brought back only when switching to ACTIVE. ● T: TEST The Zone is temporarily excluded for a period that is defined by the TECHNICIAN, and the Zone continues to be part of the armed Zones but do not generate alarms. ● B: BYPASSED The Zone is temporarily bypassed from arming of the system. The Zone can be re-armed when the Area is disarmed.

If there are many trouble Zones, you can set a search filter by AREA and ACTIVATION STATUS as below.

● Filter by AREA: Press [Total Fn] + 1 (F1). See Figure 4-2.

Figure 4-2 Filter by Area

《 FILTER AREA 》

………
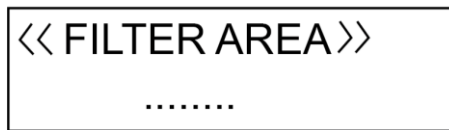
Press the corresponding numeric keys of Areas that you want to search, and then press [ENTER] to start filtering.

● Filter by ACTIVATION STATUS: Press [Total Fn] + 2 (F2). See Figure 4-3.

Figure 4-3 Filter by activation status

《 FILTER STATUS 》
SHOW : ACTIVE

Press $\boxed{\wedge}$ and $\boxed{\vee}$ to alter the searching criterion: ALL, BYPASSED, TEST, ISOLATE, and ACTIVE.

Step 4 Press $\boxed{\text{ENTER}}$ to confirm the setting, and then press $\boxed{\text{ESC}}$ to return to the ZONE TROUBLES menu.

Then you can press $\boxed{\wedge}$ and $\boxed{\vee}$ to move to the next menu or press $\boxed{\text{ESC}}$ to exit from the User Menu.

4.2 SYSTEM TROUBLES

The SYSTEM TROUBLES menu examines which faults are present in the alarm system. If the Fault LED indicator glows or flashes, a system fault might be present.

To find what the fault is, you need to enter the SYSTEM TOUBLES menu as below:

Step 1 Type in the access code, and then press $\boxed{\text{Menu}}$.

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press $\boxed{\wedge}$ and $\boxed{\vee}$ to scroll up and down until you reach the SYSTEM TOURBLES menu, and

then press $\boxed{\text{ENTER}}$.

● If there are no system faults, see Figure 4-4.

Figure 4-4 System troubles

```
〈02〉
SYSTEM TROUBLES
```

● If there are system troubles, which include three categories: TAMPER, TROUBLE, and COM TROUBLE. See Table 4-2.

Table 4-2 System troubles programming

Option	Description
TAMPER	● Panel Tamper ● Siren Tamper ● Module Tamper
TROUBLE	● System date and time ● 220V AC main supply ● Low battery ● Battery trouble ● PSTN line ● GSM line ● Antenna fault ● SIM expiration ● PWD default
COM TROUBLE	Device fault (such as Keypad and module)

Step 3 Press [ENTER] to confirm the setting, and then press [ESC] to return to the SYSTEM TROUBLES menu.

Then you can press [^] and [∨] to move to the next menu or press [ESC] to exit from the User Menu.

4.3 ZONE MANAGER

The ZONES MANAGER menu allows any Zone of the system to be placed in BYPASS regardless of its current status (open or trouble).

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [∨] to scroll up and down until you reach the ZONE MANAGER menu, and then press [ENTER].

The ZONE MANAGER menu is shown on the LCD display. See Figure 4-5.

Figure 4-5 Zone manager

〈03〉
ZONE MANAGER

Step 3 Press [^] and [∨] to select the desired Zone, and then press [ENTER].

The submenu for changing status is shown.

Step 4 Press [^] and [∨] to select the status for the desired Zone.

- ACTIVE: The Zone is in normal condition.
- ISOLATE: The Zone is excluded permanently and can be brought back only when switching to ACTIVE.
- TEST: The Zone is temporarily excluded for a period that is defined by the TECHNICIAN, and the Zone continues to be part of the armed Zones but do not generate alarms.

⚠️

TEST mode is not applicable to the type Entry 1 delay and Entry 2 delay.

- BYPASSED: The Zone is temporarily bypassed from arming of the system. The Zone can be re-armed when the Area is disarmed.

Step 5 Press [ENTER] to confirm the setting, and then press [ESC] to return to the wired zones selection menu.

Then you can continue with programming other wired zones, or press [ESC] to return to the ZONE

MANAGER menu from where you can press [^] and [∨] to move to the next menu or press

[ESC] to exit from the User Menu.

📖

- Repeat the previous steps to manage other Zones if needed.
- If there are many trouble Zones that you want to manage, you can set a search filter by AREA and ACTIVATION STATUS. For details, see "4.1 ZONE TROUBLES."

4.4 LOGBOOK EVENT

The LOGBOOK EVENT menu contains all the Control Panel events with the respective date and time, such as alarms, arming and disarming, faults.

The events are shown from the most recent to the oldest, and when the event memory is filled up, the oldest event makes room for the most recent ones.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [∨] to scroll up and down until you reach the LOGBOOK EVENT menu, and then

press [ENTER] to enter the interface that shows the latest stored event. See Figure 4-6.

Figure 4-6 The latest stored event

```
0001 08/16 19:15
User PROGKeypad
```

- The first line shows the event with its number and the date and time.
- The second line shows the event details.

Step 3 Press [^] and [∨] to select the event, and then press [ENTER] to extend the display to view more details of the event.

Step 4 Press [ESC] to return to the log event selection menu.

Then you can continue with viewing other log events, or press [ESC] to return to the LOGBOOK

EVENT menu from where you can press [^] and [∨] to move to the next menu or press [ESC] to exit from the User Menu.

4.5 CHIME ZONES

The CHIME ZONES menu is useful for obtaining a Keypad buzzer sound whenever a specific Zone is affected while the system is disarmed. This function is particularly useful for monitoring the presence of persons in particular Zones or the opening of a door or window.

28

The CHIME ZONES menu activates CHIME mode for an individual Zone. In any case, only the Zones defined by the TECHNICIAN as CHIME Zones can be activated in the CHIME mode.

<u>Step 1</u> Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

<u>Step 2</u> Press [∧] and [∨] to scroll up and down until you reach the CHIME ZONES menu, and then press [ENTER].

- If the TECHNICIAN did not program any Zone with CHIME mode, the interface shows "NO FOUND."
- If the TECHNICIAN programmed the Zone with CHIME mode, continue the operations.

<u>Step 3</u> Press [∧] and [∨] to select YES or NO.

<u>Step 4</u> Press [ENTER] to confirm the setting, and then press [ESC] to return to the CHIME ZONES menu.

Then you can press [∧] and [∨] to move to the next menu or press [ESC] to exit from the User Menu.

- Repeat the previous steps to set CHIME mode for other Zones if needed.
- If there are many Zones that you want to set CHIME mode, you can set a search filter by AREA and ACTIVATION STATUS. For details, see "4.1 ZONE TROUBLES."

4.6 ACCESS CODES

The ACCESS CODES menu allows you to customize the user codes for accessing the Control Panel. Each user is assigned with a code that is linked with an Authority level. Users with high authority can do most of operations in the system, and those with low authority are restricted to some operations.

4.6.1 Authority Level

Table 4-3 Authority level

User type	Authority level
Supervisor	All operations on all Areas. Factory default setting is 1234.
Manager	All operations on the Areas allowed by the Keypad. The Manager can change his own code and those of a lower level, but cannot change the Supervisor code.
Master	Operations only on the Areas that are assigned to Master. The Master can only change his own code and those of a lower level and access the User Menu up to option 9.
User	Operations only on the Areas that are assigned to User. The User can only change his own code and access the User Menu up to option 9.
Temporary	Valid only for an arming and disarming operation. The Temporary does not have access to the User Menu.

User type	Authority level
Duress	Valid only for arming and disarming with automatic activation of the duress output. The Duress does not have access to the User Menu.
Patrol	Valid only for disarming operation. When the patrol time ends, the Zones are automatically armed again.

4.6.2 Configuring Authority Level

Step 1 Type in the access code, and then press ⌷Menu.

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press ⌷^ and ⌷˅ to scroll up and down until you reach the ACCESS CODES menu, and then

press ⌷ENTER.

The Access Code 1 submenu is shown. See Figure 4-7.

📖

Access Code 1 is always the Supervisor code. From 2 onwards it is possible to program users with an authority level. You can set up to 99 access codes.

Figure 4-7 Access Code 1

```
〈002〉            -->A
AccessCode1
```

Step 3 Press ⌷^ and ⌷˅ to select a desired access code, and then press ⌷ENTER to enter the programming mode.

Step 4 Set the authority parameters. See Table 4-4.

- For Supervisor and Manager, you only need to set STATUS，LEVEL, ARMING, FORCED ARM, and LINK submenus. For Master, User, Temporary, and Duress, you should set all the submenus.

- In each submenu, press ⌷^ and ⌷˅ to alter the options. After setting each submenu,

press ⌷ENTER to enter the next submenu.

Table 4-4 Access code level and submenus

Submenu	Setting
STATUS	Set the code to an operating or non-operating status. ● ACTIVE ● ISOLATE
LEVEL	Give an authority level to the user. For the different authority level, see Table 4-3.
AREAS	Establish on which Areas the access code can operate.
PART1	Establish whether the access code can operate Partition 1 and Partition 2 arming types under the selected Areas.

Submenu	Setting
PART2	
ARM	Establish whether the access code has the authority to arm or disarm the Control Panel.
DISARM	● YES ● NO ● YES LINK 4: The access code can link the output 4 when arming or disarming.
ARMING	Establish whether the code, when armed, activates the system immediately or leaving Area exit delays. ● IMMEDIATE ● DELAYED
FORCED ARM	Establish whether the code can arm the system even with alarm detectors in a not ready status. For example, windows left open deliberately or defective sensors. ● YES ● NO
STOP CALL	Establish whether the access code can answer or stop a telephone call when there is a telephone call in progress. ● YES ● NO
ZONE STATUS	Establish whether the access code can change the Zone status, for example, from ACTIVE to DISALED. ● YES ● NO
REMOTE	Establish whether the access code can control the Control Panel through telephone call or SMS. ● YES ● NO
TIMER	Establish whether the access code is limited to operation only during certain time period. There are four TIMERS can be given to the access code, and each TIMER can select from eight timers that are configured in the system. If you select 0, the access code can operate during the whole period instead of limited time period.
LINK 1, 2, 3, 4	Establish whether the access code has the authorization to activate command outputs (maximum 4) and the number of outputs to be activated. ▢▢ ● This function is valid only when the Link type is selected in OUTPUT menu of Installer Menu. ● The output to be activated must set the categories item to LINK type by the TECHNICIAN on the OUTPUTS menu.
NEW CODE	Type in a new code that contains from 4 to 6 digits and cannot start with 0. For details, see "4.6.3 Configuring Access Code."

Step 5   Press [ENTER] to confirm all the settings, and then press [ESC] to return to the access codes selection menu.

Then you can continue with programming other access codes, or press [ESC] to return to the ACCESS CODES menu from where you can press [^] and [ˇ] to move to the next menu or press [ESC] to exit from the User Menu.

4.6.3 Configuring Access Code

Setting an Access Code

If you want to set or change the access code, follow the steps described in "4.6.2 Configuring Authority Level" to enter the NEW CODE submenu.

Step 1   On the NEW CODE submenu, type in the new code, and then press [ENTER].
The confirmation text "PWD VALID" is shown.

Step 2   Type in the new code again, and then press [ENTER] to store the new code.
If the code is not valid or typed incorrectly, the operation will not succeed and two beeps with the text "PWD INVALID" confirming the error. In this case, repeat the operation correctly.

Step 3   Press [ESC] to exit.

Deleting an Existing Access Code

📖

Access Code 1 cannot be deleted.

Step 1   On the Access Code submenu, for example, Access Code 2, press and hold [BYP <] for at least three seconds.
The "NO PRESENT" message is shown to indicate that the Access Code is deleted.

Step 2   Press [ESC] to exit.
A deleted access code is no longer operational but can be reactivated by a user with an appropriate authority level such as Supervisor.

Customizing the Description of Access Code

You can customize the factory default description (Access Code no.) if needed.

Step 1   On the access code submenu (Figure 4-7), press [Total Fn] + 2 (F2) to enter the editing status.

Step 2   Press [BYP <] and [DISARM >] to move to the position of the description, and then insert the character by using the specific key (0 to 9).

Step 3 Press [ENTER] to finish and save the description.

Step 4 Press [ESC] to exit from the submenu or press [ENTER] to continue.

4.7 TECHNICIAN

The purpose of the TECHINCIAN menu is to authorize the TECHICIAN to access Installer Menu. Otherwise, the TECHNICIAN cannot make any programming changes to the Control Panel without your authorization.

In practice, for the TECHINCIAN to be able to access programming, the TECHINCIAN must be authorized by a valid user code (Temporary, Duress and Patrol are not valid).

The operation is confirmed by three buzzers and makes the TECHINCIAN Code operational and authorized for a personalized period of hours. The period hours can be set from 1 hour to 10 hours in the SYSTEM TIMING menu of Installer Menu.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [v] to scroll up and down until you reach the TEHCNICIAN menu, see Figure 4-8.

Figure 4-8 TECHNICIAN menu

〈07〉
TECHNICIAN

Step 3 Press [ENTER].

Three beeps confirm the TECHNICIAN code operational and authorized for a defined period.

Step 4 Press [^] and [v] to move to the next menu or press [ESC] to exit from the User Menu.

4.8 FIRMWARE VERSION

The FIREWARE VERSION examines the version of software installed in the Control Panel and the Keypad. If necessary, specify it to your TECHNICIAN. The Control Panel can be updated to more recent versions.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [v] to scroll up and down until you reach the FIRMWARE VERSION menu, see Figure 4-9.

Figure 4-9 Firmware version

〈08〉
FIRMWARE VERSION

Step 3 Press [ENTER] to show the Host Version (Control Panel version), and then press [ENTER] again to switch to show the Keypad Version.

Step 4 Press [ESC] to return to the FIREWARE VERSION menu.

Then you can press [^] and [˅] to move to the next menu or press [ESC] to exit from the User Menu.

4.9 WALK TEST

The WALK TEST menu tests the functionality of the installed detectors and examines the response of the OPEN/CLOSED/TAMPER/FAILURE status to the Control Panel.

- Only the Zones with ACTIVE status can be tested.
- When the system in the Armed status, entering WALK TEST menu prompts the unauthorized message.
- When one Keypad has entered the Walk Test mode, other Keypads shows "OUT OF USE."
- The WALK TEST menu cannot return to the main interface automatically.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [˅] to scroll up and down until you reach the WALK TEST menu,see Figure 4-10.

Figure 4-10 Walk test

〈09〉
WALK TEST

Step 3 Press [ENTER] to enter the interface that shows the status of the connected detectors: CLOSED, OPEN, TAMPER, SHORT, and MASK. For example, see Figure 4-11.

Figure 4-11 Test menu

〈CLOSED〉   -->A
Wired Zone 1
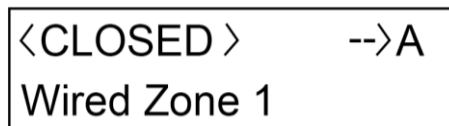
Step 4 Press [Total Fn] + 3 (F3) to switch between A (multiple test) and B (individual test).

- If you select A, only the Zone triggered is shown.
- If you select B, you can press [^] and [˅] to select another Zone to be tested.

Step 5 Press [ESC] to return to the WALK TEST menu.

Then you can press [^] and [˅] to move to the next menu or press [ESC] to exit from the User Menu.

4.10 SYSTEM TIMERS

The SYSTEM TIMERS sets the START and STOP time and days of the week for each Timer.

The SYSTEM TIMERS can be used in other submenu settings named Timer. The Timer can be used for timed Arming/Disarming of specific Areas, authorizing codes to work within time limits, and timed activation/deactivation of specific Control Panel outputs.

<u>Step 1</u> Type in the access code, and then press $\boxed{\text{Menu}}$.

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

<u>Step 2</u> Press $\boxed{\wedge}$ and $\boxed{\vee}$ to scroll up and down until you reach the SYSTEM TIMERS menu, see Figure 4-12.

Figure 4-12 System timer

```
⟨10⟩
SYSTEM TIMER
```

<u>Step 3</u> Press $\boxed{\text{ENTER}}$ to enter the submenu from where you can select a desired Timer that you want to set (totally eight timers).

By pressing $\boxed{\text{Total}\atop\text{Fn}}$ + 2 (F2), you can enter the EDITING mode for changing the description of timer.

<u>Step 4</u> Press $\boxed{\vee}$ and $\boxed{\vee}$ to select a timer, and then press $\boxed{\text{ENTER}}$ to enter the programming mode.

<u>Step 5</u> Configure the Timer settings. See Table 4-5.

On each submenu, press $\boxed{\wedge}$ and $\boxed{\vee}$ to alter the options. After setting each submenu, press $\boxed{\text{ENTER}}$ to enter the next submenu.

Table 4-5 Timer settings description

Submenu	Setting
STATUS	● ACTIVE: Timer enabled. ● ISOLATE: Timer enabled by temporarily locked, but you still can continue to configure other settings. ● OFF: Timer is completely disabled, and you cannot continue the next pages of settings.
TYPE	● START ONLY: Used only for automatic arming operations. ● STOP ONLY: Used only for automatic disarming operations. ● START/STOP: Used only for both automatic arming and disarming operations.
START TIME	Type in the start time for automatic arming by pressing the corresponding keys and then press $\boxed{\text{Menu}}$ to confirm the value. You can also press $\boxed{\wedge}$ and $\boxed{\vee}$ to change the value.

| Submenu	Setting
STOP TIME	Type in the start time for automatic disarming by pressing the corresponding keys and then press [Menu] to confirm the value. You can also press [^] and [∨] to change the value.
DAYS	Select the week days to be active for the Timer. Press Key 1 to 7 to select the day (M T W T F S S).
HOLIDAYS	Establish whether the timer being programmed refers to the holidays programmed in "4.12 HOLIDAY." ● YES: The timer is blocked during the holiday periods. For example, if associated with the arming/disarming of Areas, it no longer causes disarming during the holiday period; if associated to a code, remote controls or outputs, these will no longer be operative during the holiday period. ● NO: The timer does not follow the holiday conditions, and therefore continues active whatever is associated with it.
ARMING	Select the type of arming for the Timer. ● DELAYED ● IMMEDIATE
FORCEDARM	Select whether the Timer arming will be forced. ● YES ● NO

Step 6 Press [ESC] to returns to the Timer selection menu.

Then you can continue with programming other Timers, or press [ESC] to return to the SYSTEM

TIMER menu from where you can press [^] and [∨] to move to the next menu or press [ESC]

to exit from the User Menu.

4.11 DATE/TIME

The DATE/TIME menu sets the time of the Control Panel.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [∨] to scroll up and down until you reach the DATE/TIME menu, see Figure 4-13.

Figure 4-13 Date and time

〈11〉
DATE/TIME

Step 3 Press [ENTER] to enter the programming mode. See Table 4-6.

Type in the value, press [Menu] to show the value, then press [ENTER] to confirm the value. You can also press [∧] and [∨] to change the value, and press [ENTER] to move to next editing.

Table 4-6 Date and time settings

| Submenu	Setting
TIME	Set the time for the Control Panel.
DATE	Set the date for the Control Panel.
SOL TO LEG	Set the day and the month for the automatic change of time from Solar to Legal.
LEG TO SOL	Set the day and the month for the automatic change of time from Legal to Solar.
EXPIRY	Set the expiration date of the SIM card (if prepaid) installed in the GSM telephone communicator. ● It is suggested to set a minimum period of 10 days before the real expiration of the SIM card so as to have adequate warning time to recharge it and extend its validity. ● At the set date, the fault status LED indicator will light up. And if programmed, SMS messages can be sent to external telephone numbers.

Step 4 Press [ENTER] to confirm the setting.

Step 5 Press [ESC] to return to the DATE/TIME menu.

Then you can press [∧] and [∨] to move to the next menu or press [ESC] to exit from the User Menu.

4.12 HOLIDAY

The HOLIDAY menu sets the holiday dates of the year when the Timers must not affect the system. You can program up to 20 holidays, and a holiday period can consist of just one day.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [∧] and [∨] to scroll up and down until you reach the HOLIDAY menu, see Figure 4-14.

Figure 4-14 Holiday

〈12〉
HOLIDAY

Step 3 Press [ENTER] to enter the submenu from where you can select a Holiday that you want to program.

◫

By pressing [Total Fn] + 2 (F2), you can enter the EDITING mode for changing the description of holiday.
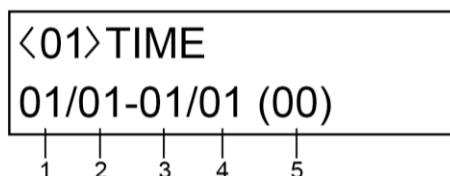
Step 4 Press [^] and [∨] to select a holiday, and then press [ENTER] to enter the programming mode. See Figure 4-15.

Figure 4-15 Holiday programming

```
〈01〉TIME
01/01-01/01 (00)
      ┬   ┬   ┬   ┬    ┬
      1   2   3   4    5
```

- 1: Holiday start day
- 2: Holiday start month
- 3: Holiday end day
- 4: Holiday end month
- 5: Holiday year

Step 5 Type in the value, press [Menu] to show the value, and then press [ENTER] to confirm the value. You

can also press [^] and [∨] to change the value, and then move on to the next field.

Step 6 Press [ENTER] to confirm the setting.

Step 7 Press [ESC] to returns to the holiday selection menu.

Then you can continue with programming other holidays, or press [ESC] to return to the HOLIDAY

menu from where you can press [^] and [∨] to move to the next menu or press [ESC] to exit

from the User Menu.

◫

To delete a Holiday, on the Holiday selection interface where the Holiday name is shown, press

and hold [BYP <] for at least three seconds.

4.13 TEL NUMBER

The TEL NUMBER menu sets the telephone numbers that will be used by the dialer for voice calls and SMS. You can program up to 8 different telephone numbers for vocal messages, and 8 numbers for text SMS. You can also record the SIM card number that is installed in the Control Panel.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [∨] to scroll up and down until you reach the TEL NUMBER menu, see

Figure 4-16.

38

Figure 4-16 Telephone number

```
⟨13⟩
TEL NUMBER
```

Step 3 Press [ENTER] to enter the interface from where you can select the submenus from TEL NUM, SMS

NUM, and SIM NUM by pressing [^] and [∨].

Step 4 Configure the telephone number submenu settings.

● TEL NUM

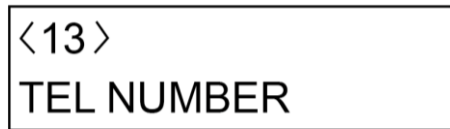1) On the TEL NUM submenu, press [ENTER] to enter the interface from where you can select a

telephone number that you want to program by pressing [^] and [∨].

2) After selecting a telephone number, press [ENTER] to enter the programming mode.

3) Configure the telephone number settings. See Table 4-7.

Table 4-7 Telephone number setting

Submenu	Setting
STATUS	● ACTIVE: Allow the telephone number to call. ● ISOLATE: Do not allow the call in and out of the telephone number.
STOP CYCLE	● YES: When the alarm event occurs, if the event is programmed to link multiple telephone numbers, press # key on your telephone to hang up the call, the calling will not link to other telephone numbers. ● NO: When the alarm event occurs, if the event is programmed to link multiple telephone numbers, the calling will continue to call other telephone numbers although pressing # key on your telephone.

Other functions:

◇ Press [Total Fn] + 2 (F2) to enter the EDITING mode for changing the telephone number. You

can type in up to a maximum of 24 digits. Use the horizontal cursor keys to move within

the number. Any of the digits can be overwritten. By positioning at any point in the number

(for example, at the start) and holding down [ESC], it is possible to delete all the digits from

that point onwards (for example, deletion of the entire number).

◇ Press [Total Fn] + 3 (F3) to do a test call on this number.

◇ Press [Total Fn] + 4 (F4) to interrupt the call in progress at any time.

4) Press [ESC] until returns to the start of TEL NUM submenu.

● SMS NUM

1) On the SMS NUM submenu, press [ENTER] to enter the interface from where you can select a

telephone number that you want to program by pressing [^] and [∨].

2) After selecting a telephone number, press [ENTER] to enter the programming mode.

3) Configure the SMS number settings. See Table 4-8.

Table 4-8 SMS number setting

Submenu	Setting
STATE	• ACTIVE: Allow the text SMS to be sent and received. • ISOLATE: Do not allow the text SMS to be sent and received.
SYSTEM	Press 1 to 7 to select the corresponding week days to send the system status message to this SMS number.
CREDIT	Press 1 to 7 to select the corresponding week days to send the balance information of the SIM card that is installed in the Control Panel.
SMS TIME	Type in the specific time for SYSTEM and CREDIT.
AREA	Press 1 to 8 to select the alarm event from which Area can be sent to this SMS number.
EVENT	Press 1 to 5 to select which event can be sent to this SMS number. • 1: S-system event • 2: M-module • 3: E-Emergency • 4: I-Arm/Disarm • 5: Z-Zones

4) After completing the settings, press [ESC] until returns to the start of SMS NUM submenu.

• SIM NUM

Record the SIM card number that is installed in the Control Panel.

Step 5 Press [ESC] to return to the TEL NUMBER menu.

Then you can press [^] and [∨] to move to the next menu or press [ESC] to exit from the User Menu.

4.14 REMOTE SERVICE

The REMOTE SERVICE menu gives possibility to activate the alarm Control Panel remotely by telephone from the control center of your Installer.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [∨] to scroll up and down until you reach the REMOTE SERVICE menu, see Figure 4-17.

Figure 4-17 Remote service

⟨14⟩
REMOTE SERVICE

Step 3 Press [ENTER] to enter the programing mode.

Step 4 On the **STATE** submenu, select **YES** or **NO**.

- YES: Allows remote control by the Installer from telephone call, SMS, App, or Platform.
- NO: Do not allow the remote control by the Installer.

Step 5 Press [ESC] to return to the REMOTE SERVICE menu.

Then you can press [^] and [v] to move to the next menu or press [ESC] to exit from the User Menu.

4.15 SECURITY CODE

The SECURITY CODE menu sets the code that is used to protect your alarm Control Panel from connecting with personal computers locally or remotely of your Installer.

Step 1 Type in the access code, and then press [Menu].

The ZONE TROUBLE menu is shown on the LCD display (Figure 4-1).

Step 2 Press [^] and [v] to scroll up and down until you reach the SECURITY CODE menu, see Figure 4-18.

Figure 4-18 Security code

Step 3 Press [ENTER] to enter the programming mode. See Figure 4-19.

Figure 4-19 Security code programming

Step 4 Type in 4 to 6 digit code, and then press [Menu].

The code is shown.

Step 5 Press [ENTER] to confirm and close the code programing mode.

If the code has already been programmed, 6 asterisks will appear instead of dashes.

Step 6 Press [ESC] to return to the SECURITY CODE menu.

Then you can press [^] and [v] to move to the next menu or press [ESC] to exit from the User Menu.

Appendix 1 Keypad Buzzer Sound

Appendix table 1-1 Keypad sound

Buzzer sound	Description
One slight beep	Keypad pressing.
One beep	Menu entering.
Continuous three beeps	● Switching between the first menu and the last menu after login the system. ● Authorizing the TECHICIAN to access Installer Menu.
Two beeps, first short and second long	● Login fault. ● Access code modification fault. ● Bypass failed.

Appendix 2 Event Log Messages

Appendix table 2-1 Event log messages

Event message	Description	Event message	Description
P1.Arm	Partitial1 Arm	AL.	Alarm
P2.Arm	Partitial2 Arm	S.T.RES	Siren Tamper Restore
AL.PAN.	Panic Alarm	AL.S.T	Siren Tamper Alarm
AL.ROB.	Robbery Alarm	TAM.	Tamper
AL.MED.	Medical Alarm	Keypad TAM. RES.	Keypad Tamper Restore
AL.Fire	Fire Alarm	AL.K.T	Keypad Tamper Alarm
WD.Zone	Wired Zone	COMM.	Communication
WD.Z	Wired Zone	COMM.Restore	Communication Restore
AL.TAM.	Tamper Alarm	AL.C.T	Communication Trouble Alarm
AL.AM.	Anti-Mask Alarm	AL.COMM.Trouble	Communication Trouble Alarm
LOWBAT.	Low Battery	2G/4G COMM.RES.	2G/4G Communication Restore
WL.Zone	Wireless Zone	PSTN COMM.RES.	PSTN Communication Restore
WL.Z	Wireless Zone	PSTN ACT.	PSTN Activation
Access Code ERR.	Access Code Error	IN.MODU.TAM.RES.	Input Module Tamper Restore
PROG.Mode End	User Program Mode End	IN.M.T	Input Module Tamper
TECH.AUT.Expired	TECHNICIAN Authorization Expired	AL.IN.Module TAM	Input Module Tamper Alarm
Technician AUT.	TECHNICIAN Authorization	IN.Module	Input Module
User PROG.Mode	User Program Mode	OUT.MODU.TAM.RES	Output Module Tamper Restore
TECH.PROG.M	TECHNICIAN Program Mode	OUT.M.T	Output Module Tamper
TECH.PROG.Mode	TECHNICIAN Program Mode	OUT.Module TAM.	Output Module Tamper
TROU.	Trouble	WL.	Wireless
SYS.BAT.TROU.	System Battery Trouble	WL.IN.M.T.RES.	Wireless Input Module Tamper Restore
SYS.BAT.Low.VOL.	System Battery Low Voltage	WLI.M.T	Wireless Input Module Tamper
SYS.BAT. Restore	System Battery Restore	WL.IN.MODU.TAM	Wireless Input Module Tamper
SYS.	System	WL IN.Module	Wireless Input Module

Event message	Description	Event message	Description
RES.	Restore		

Appendix 3 User Menu Map

ZONE TROBULES

TAMPER
SHORT
MAST

SYSTEM TROUBLES

TAMPER

Siren Tamper

Panel Tamper

Wall Tamper

TROUBLE

Com Trouble

ZONE MANAGER

Wired Zone 1–8

STATUS

LOGBOOK EVENT

CHIME ZONES

ACCESS CODES

Access Code 1–99

STATE

LEVEL

ARMING

FORCEDARM

LINK1-4

NEW CODE

TEHCNICIAN

FIRWARE VERSION

WALK TEST

SYSTEM TIMERS

TIMER 1-8

STATE

TYPE

START TIME

DAYS

HOLIDAYS

ARMING

FORCEDARM

DATE/TIME

TIME

DATE

SOL TOL EG

LEG TO SOL

EXPIRY

HOLIDAY

Holiday 1–20

TIME

TEL NUMBER

TEL NUM

TEL NUM 1–8

STATE

STOP CYCLE

SMS NUM

SMS NUM 1–8

STATE

SYSTEM

CREDIT

SMS TIME

AREA

EVENT

SIM NUM

REMOTE SERVICE

STATE

SECURITY CODE

Appendix 4 FAQ

1   Q: The Alarm Control Panel does not boot up after it is powered on.

A: Possible reasons as below.
- Power input is incorrect.
- AC adapter damage that causes there is no 14.5V DC output.
- No power input.
- Program upgrading error.
- Main board damage.

2   Q: The Alarm Control Panel automatically reboots several minutes after booting up, or it often crashes.

A: Possible reasons as below.
- The input voltage is not stable or too low.
- Poor heat dissipation, too much dust, or the bad operating environment.
- Hardware fault.

3   Q: Time display is not correct.

A: Possible reasons as below.
- Wrong setting.
- Poor battery contact or low voltage.
- Crystal oscillator working status is abnormal.

4   Q: Network connection is unstable.

A: Possible reasons as below.
- Network is not stable.
- IP address conflicts.

5   Q: Alarm is not generated.

A: Possible reasons as below.
- Alarm setting is not correct.
- Alarm wiring is not correct.
- Alarm input signal is not correct.
- There is no output activation duration set for the Area that the Zone belongs to.

6   Q: Keypad does not register correctly.

A: Possible reasons as below.
- Wrong connection between the Keypad and the Control Panel. Please connect to A1 port and B1 port on the Control Panel.
- Check whether the Keypad 485 address is set to 0.
- When multiple Keypads are connected to the Control Panel, their 485 addresses must be different.
- Keypad hardware fault or Control Panel hardware fault.

7   Q: I forgot the access code.

A: Restore to the factory default setting by moving both DIP 5 and DIP 6 to the ON position.

8   Q: The configuration cannot be restored to the factory default setting.

     A: The reason for this question is the parameter "FACTORY RST" is set to "NO" on the SYSTEM
        FUNCTIONS menu, so the DIP reset does not work. In this case, please return the Control
        Panel to the manufacturer.

9   Q: The battery cannot be charged, or it cannot be fully charged, or it is charged slowly.

     A: Possible reasons as below.
        ● The adapter that you use is not the original or the output voltage is not 14.5V DC.
        ● The adapter hardware is damaged. Please disconnect the adapter from the Control
          Panel, and then check whether the output voltage of the adapter is 14.5V DC.
        ● The charging circuit of mainboard is damaged.
        ● The battery is damaged.

10   Q: The Keypad has no response when pressing.

     A: Possible reasons as below.
        ● The main board is damaged.
        ● Wrong connection between RS-485 wires and the Control Panel or the connection
          becomes loose.
        ● Keypad DIP address setting is wrong.