Network Video Alarm Controller
Quick Start Guide

Version 1.0.0

Table of Contents

Welcome

Thank you for purchasing our network video alarm controller!
This quick start guide will help you become familiar with our network video alarm controller in a very short time.
Before installation and operation, please read the following safeguard and warning carefully!

Model

ARC5408B and ARC5408C

Important Safeguard and Warning

1．Electrical safety

All installation and operation here should conform to your local electrical safety codes.
The product must be grounded to reduce the risk of electric shock.
We assume no liability or responsibility for all the fires or electric shock caused by improper handling or installation.

2．Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3．Installation

Keep upwards. Handle with care.
Do not apply power to the alarm controller before completing installation.
Do not place objects on the alarm controller.

4．Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.
We are not liable for any problems caused by unauthorized modifications or attempted repair.

5．Environment

The alarm controller should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.
This series product shall be transported, storage and used in the environment ranging from -10℃ to 55 ℃.

6. Accessories

Be sure to use all the accessories recommended by manufacturer.
Before installation, please open the package and check all the components are included.
Contact your local retailer ASAP if something is broken in your package.

Before Start

About Alarm System

For the alarm system consists of the network alarm controller, though it has stable and reliable performance, it may become null in the following situations:

- The protection zone the intruder entering has not enabled the arm function or the intruder has enough knowledge to disable the system.
- The siren device installation position is not right; it does not have the warning function.
- The detector is null when there is an alarm outage and etc.
- The detector is not in the proper position and can not detect the corresponding zone.
- System can not generate an alarm when there is something wrong with the alarm signal transmission system (the service is disabled, there is malicious attack and etc).

- The device is null resulting from non-schedule maintenance of the alarm system.

About Installation Notice

- The installation engineers are recommended to check the system regularly such as once a month. It is to guarantee system long-term stable operation.
- The installation engineers are recommended to test the system regularly such as once a week.
- Please arrange some training classes for the end-user. It is to keep them familiar with the system.

System Test Notice

- After the installation, you can connect to the AC/DC power to test.
- You can test the all functions of the alarm controller after you complete all programming work.

1 FEATURES AND SPECIFICATIONS

1.1 Overview

This series product integrates on-off alarm input and output, and video processing as one multi-functional video alarm controller. It supports protection zone alarm, wireless remote arm/disarm, keypad arm/disarm, emergency alarm, video preview authority management, alarm can trigger pop-up video for you to recheck, video alarm and etc. It can be used in many environments such as bank, school, store, residential district. It can perfectly work with the alarm and surveillance solutions when there is an alarm operation and management platform.

1.2 Features

This series product has the following features:

- 8-ch programming wired zone, 32-ch wireless zone, 1-ch relay control output can extend to 9-ch output.
- 4-ch 720P analog HDCVI or 4-ch 720P network video input, may achieve alarm video review and motion, video loss, video tampering intelligent analytic, meantime support video local storage and playback.
- 1-ch audio input, 1-ch talk input and A/V reuse, 1-ch audio output and talk output reuse.
- 8-ch wireless alarm programming keypad or 8-ch wires alarm programming keypad, 16 wireless remote controls, may use keypad, remote control, smart phone APP to arm/disarm.
- Set plan to auto complete arm/disarm.
- Alarm event support report in SMS (-C/-E/-CW/-EW models)
- Main power outage detection and alternate power in place, low battery detection.
- Max of 1024 alarm events and failure event records plus 512 system logs.
- 100 web users, 23 keypad users, 3-level right management: 1 administrator, 1 installer, 21 operator.
- 1-ch 12V DC 1A AUX output and 2-ch 12V DC/500mA AUX output (1-ch controllable, used in siren output)
- 2-ch RS485, 1-ch extension alarm output (i.e. ARM708), 1-ch alarm programming keypad.
- 1-ch USB and 1-ch 2.5 inch Sata hard disk.
- Multiple backup alarm info transmission channel, support PSTN public tel network, TCP/IP network, 3G network.
- 2-ch call center, 2-ch network call center (auto registration, static IP).

1.3 System Composition

Video Video Alarm Controller and camera, detector, keypad, siren, audio device, PSTN and monitor, WEB client form a comprehensive linkage alarm system. The system basic connection figure is in Figure 1- 1.

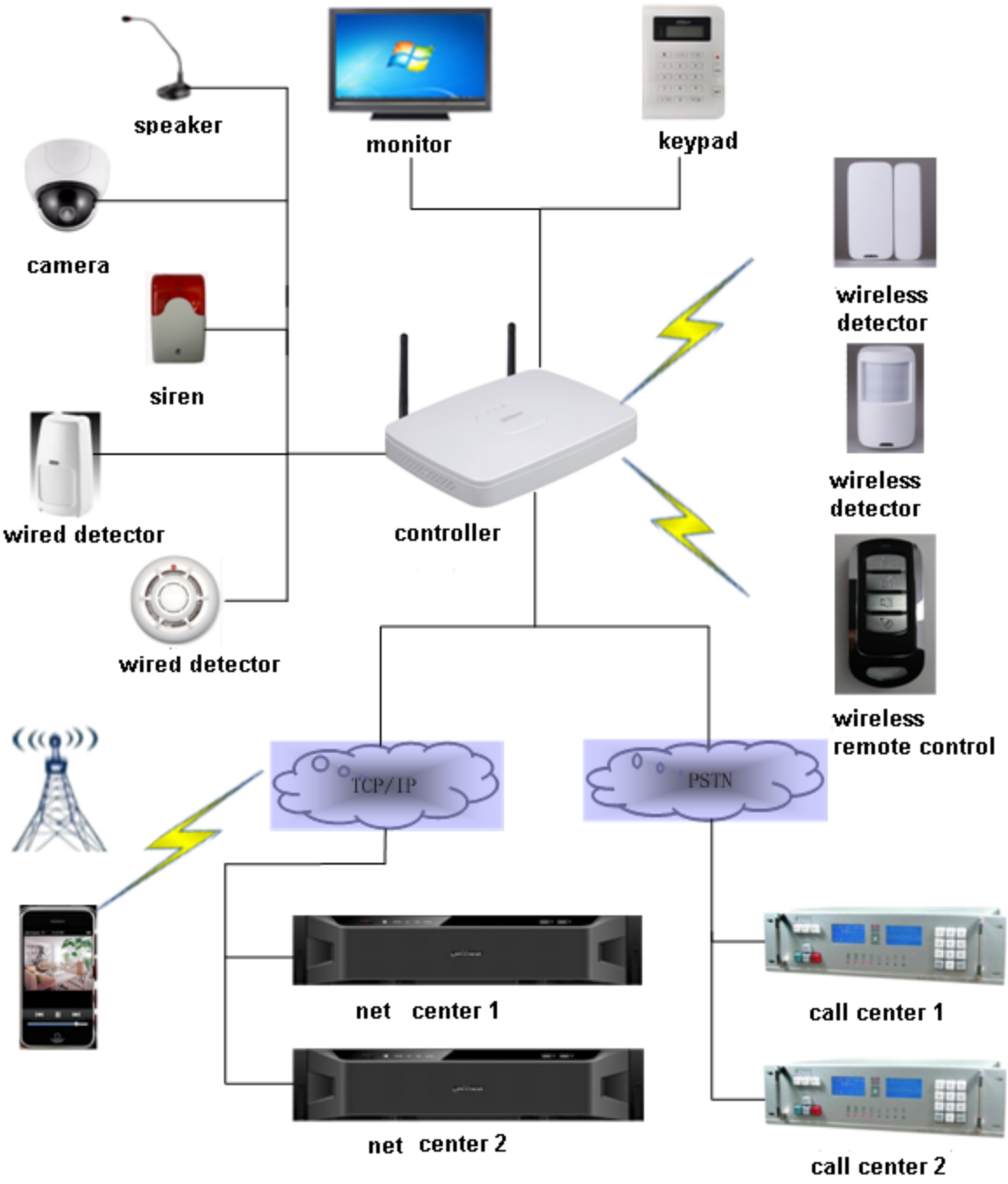

speaker
monitor
keypad
camera
wireless detector
siren
wireless detector
wired detector
controller
wireless remote control
wired detector
TCP/IP
PSTN
net center 1
call center 1
net center 2
call center 2

Figure 1- 1

2 INSTALLATION

2.1 ARC5408B Series

2.1.1 Appearance

Video alarm controller appearance is in Figure 2-1.

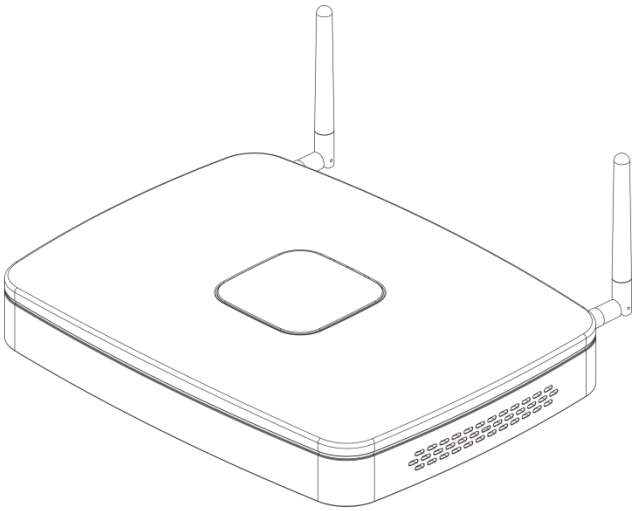


Figure 2-1

2.1.2 Battery and HDD Installation

To install battery:

Step 1. Tie the two lines symmetrically and pull through pedestal, see Figure 2-2.

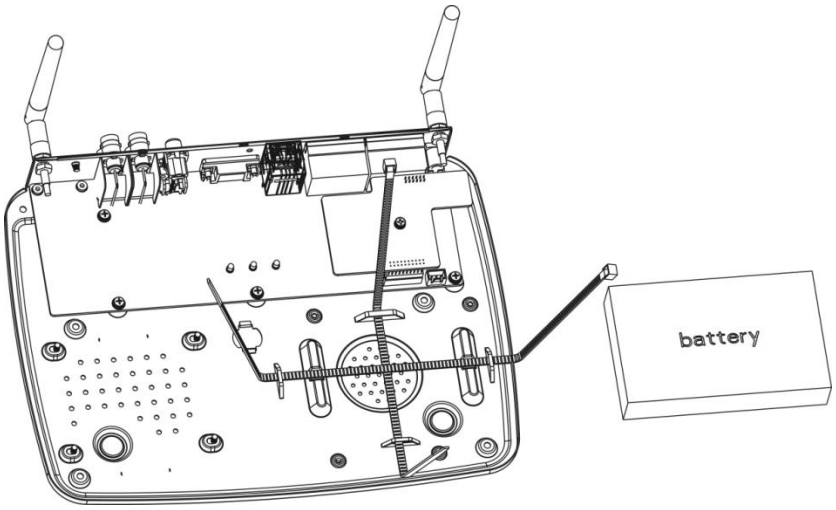


Figure 2-2

Step 2. Place battery on the tied line.Tie the battery tightly via the lines, cut the extra part of lines.

Step 3. Insert battery and lines into battery port on device, see Figure 2-3.

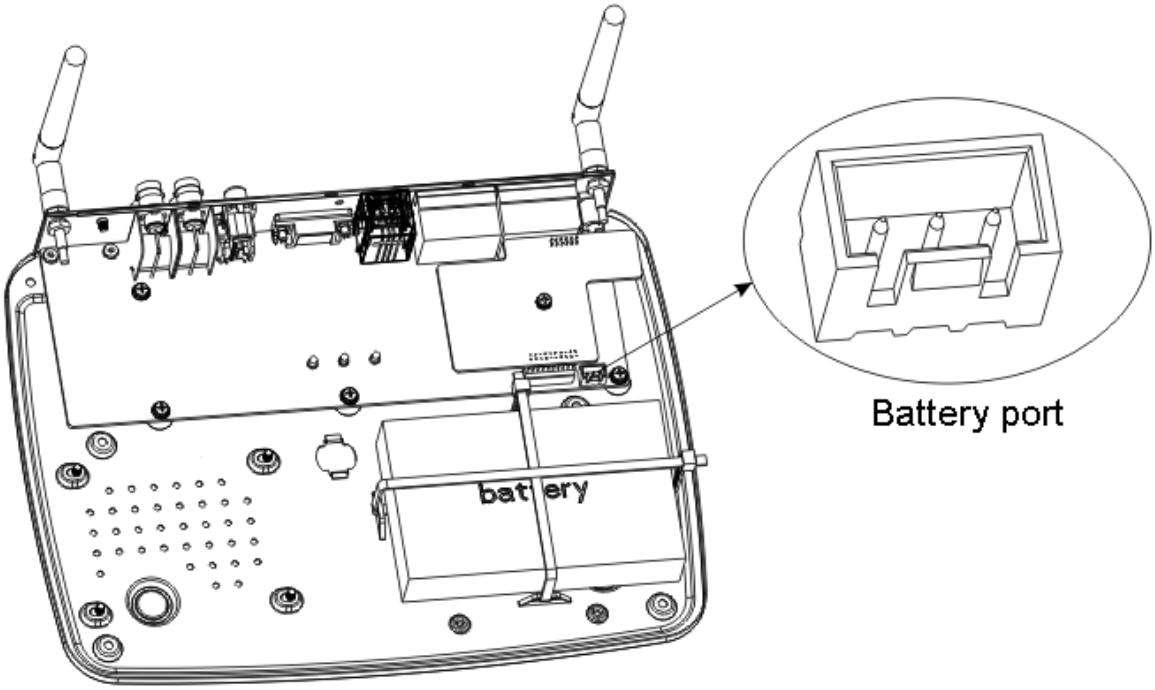


Figure 2-3

2.1.3 Install HDD

To install HDD:

Step 1. Please use 2.5 inch HDD, fix it on pedestal with screwdriver.

Step 2. Insert HDD port on motherboard, see Figure 2-4.

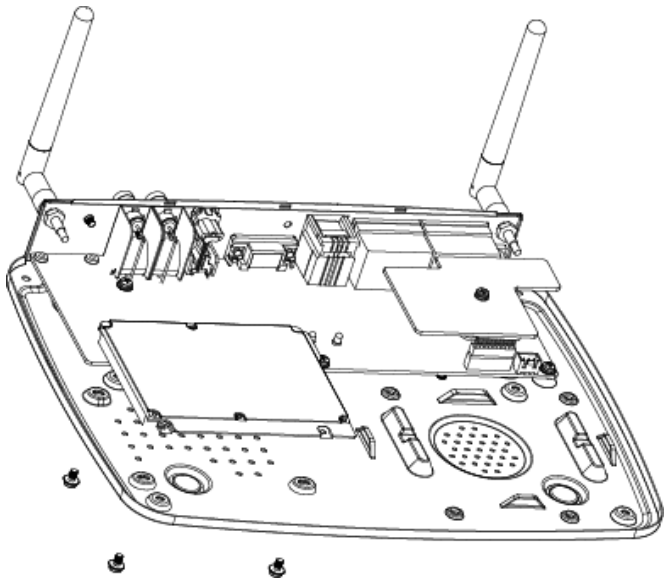


Figure 2-4

2.1.4 Wall Mount

The device supports wall mount and desktop placement.

To mount on wall:

Step 1. Open device package, take out plastic expansion bolt and self-tapping screw.

Step 2. Dig two holes on wall with distance of 184mm in between. Insert the plastic expansion bolt and fasten self-tapping screw.

Step 3. Hand the device on the screw.

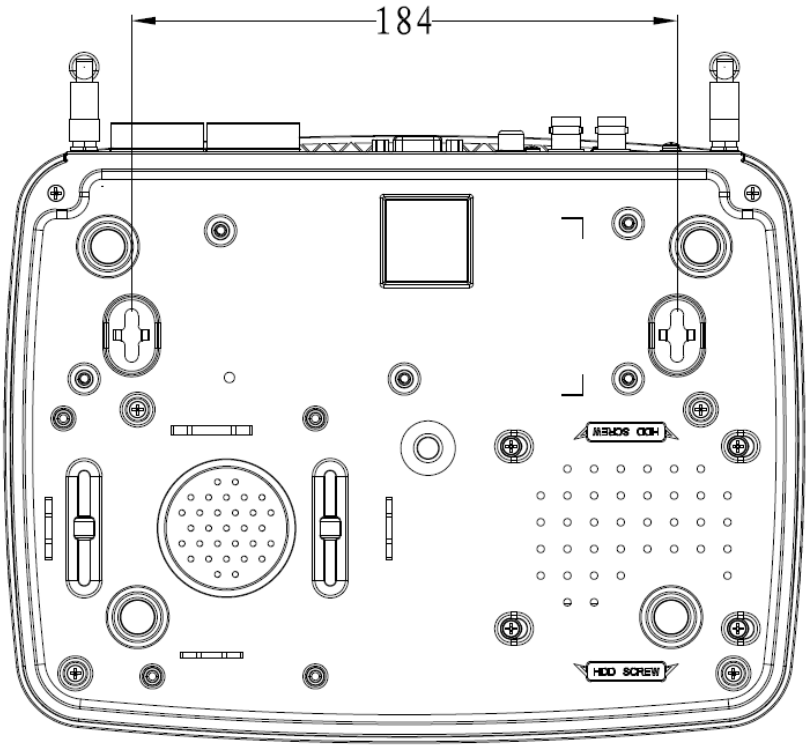


Figure 2-5

2.2 ARC5408C Series

2.2.1 Appearance

Video alarm controller appearance is in Figure 2-6.

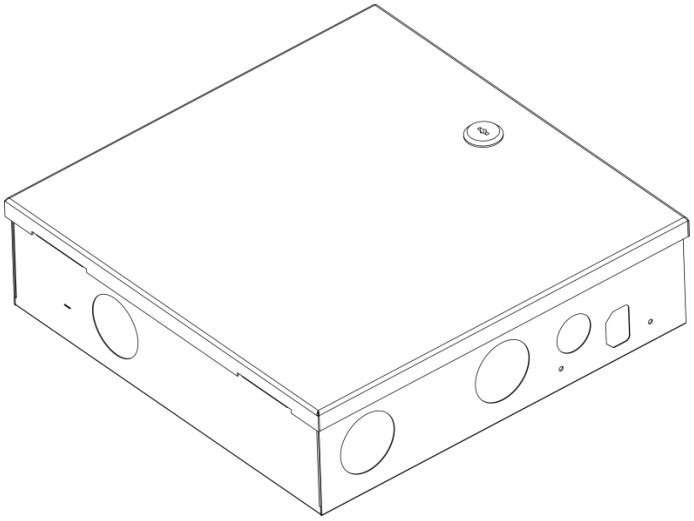


Figure 2-6

2.2.2 Battery Installation

To install battery:

Step 1. Place battery in the case, position as in Figure 2-7.

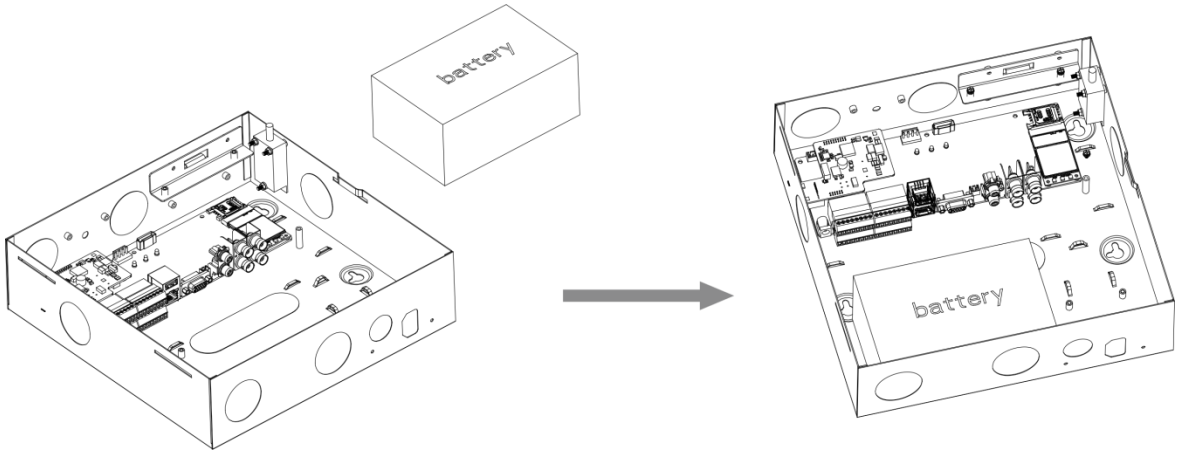


Figure 2-7

Step 2. Insert one end of battery line into battery, and insert the other end of battery into external backup power port, see Figure 2-8.

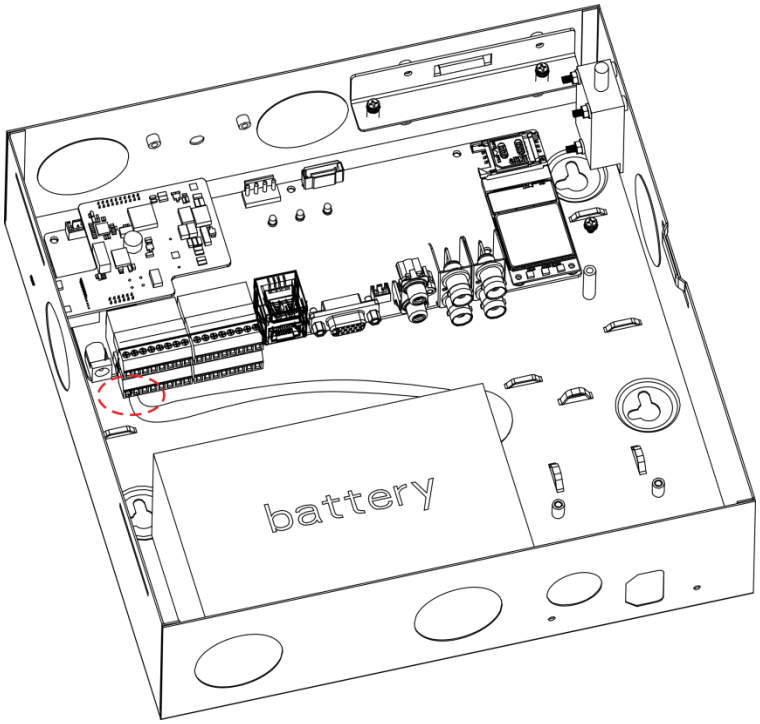


Figure 2-8

2.2.3 Power Adaptor Installation

Step 1. Refer to Figure 2-9, knock off battery cover.

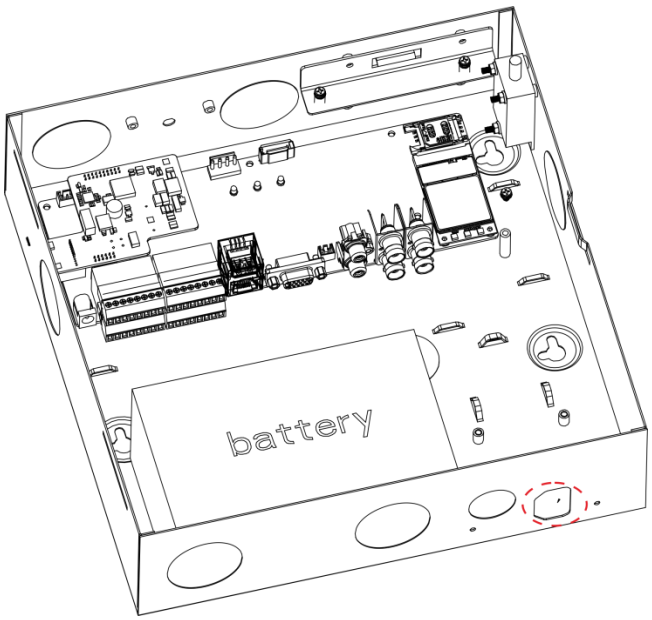


Figure 2-9

Step 2. Place power adaptor inside controller, and adaptor port faces power out hole on case. Insert power line into power port on the controller, see Figure 2-10.

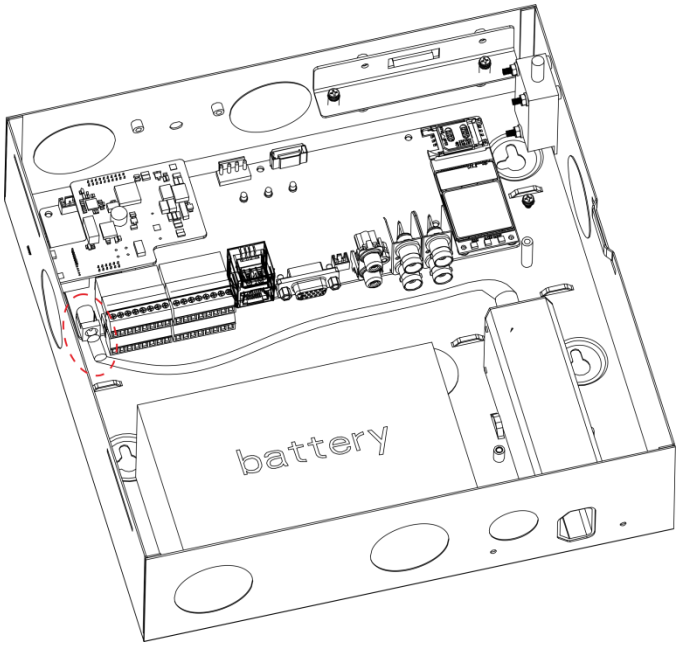


Figure 2-10

2.2.4 Install HDD

To install HDD:

Step 1. Inside the controller, insert 18.8MM screw, see Figure 2-11.

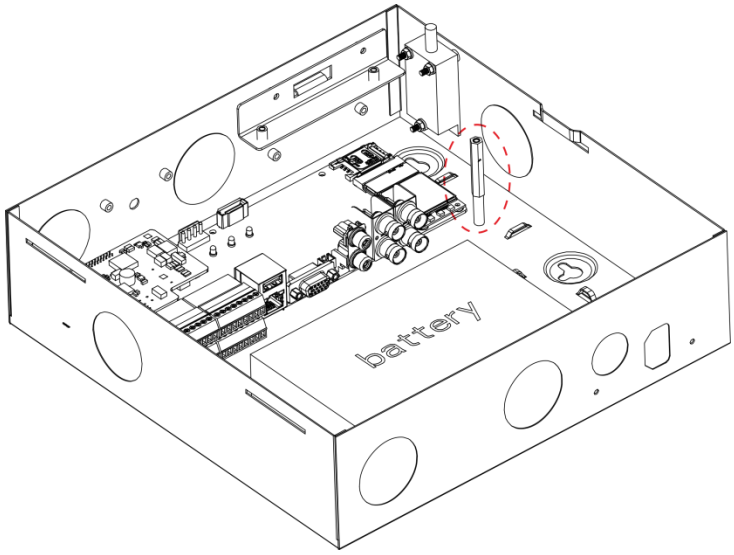


Figure 2-11

Step 2. Place anti-knock ring into the four slots of HDD bracket, and HDD screw hole faces hole on bracket, fasten anti-knock ring screw, see Figure 2-12.

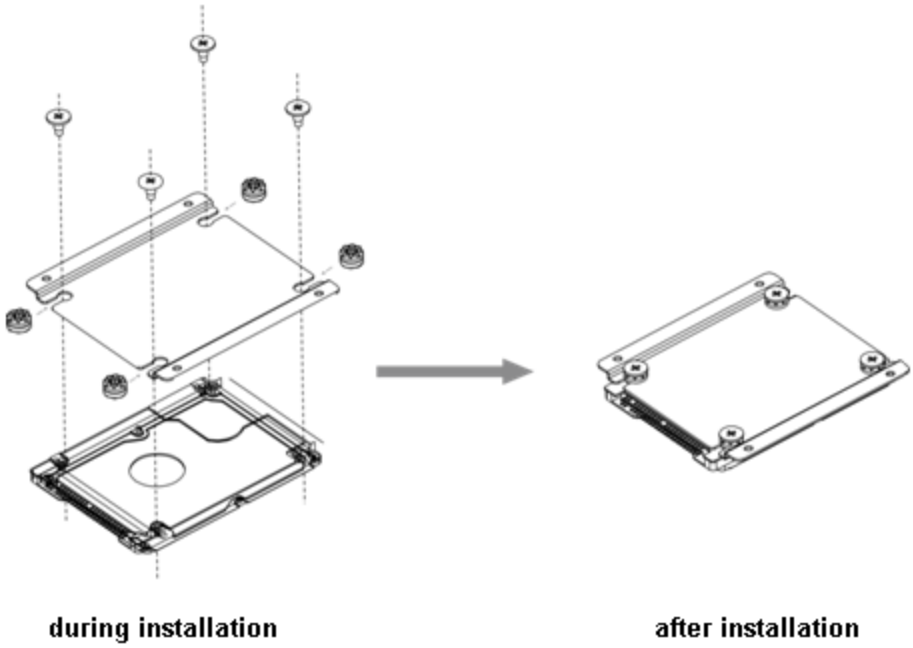


Figure 2-12

Step 3. Fix HDD with well installed bracket into the controller, see Figure 2-13.

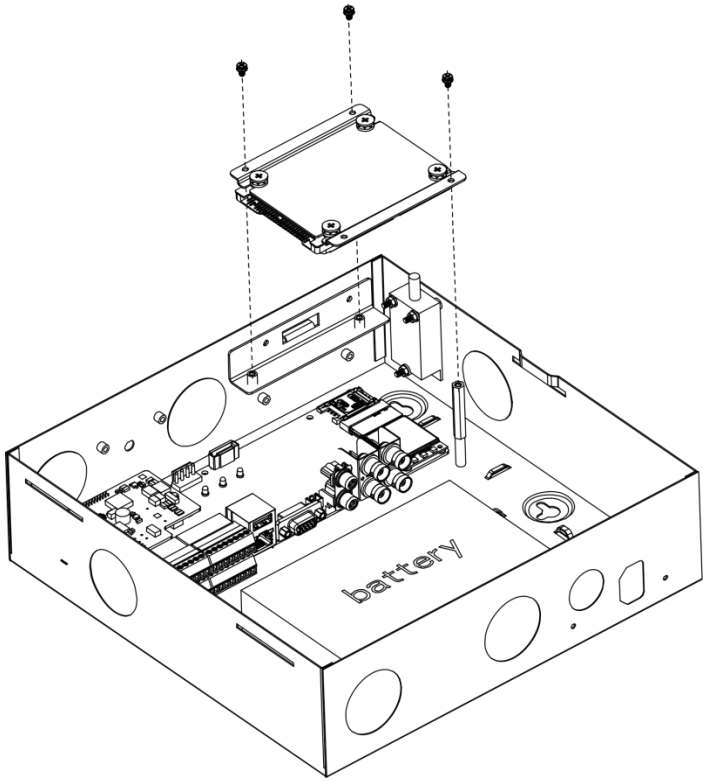


Figure 2-13

Step 4. Insert one end of HDD line into hardware, and insert the other end into HDD power port and data port on controller, see Figure 2-14.

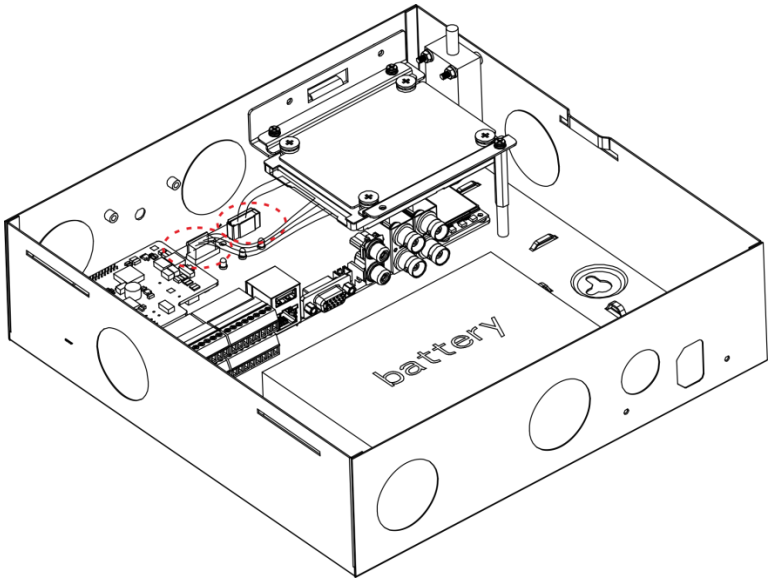


Figure 2-14

2.2.5 Wall Mount

The device supports wall mount and desktop placement.

To mount on wall:

Step 1. Open device package, take out plastic expansion bolt and self-tapping screw.

Step 2. See Figure 2-15, dig hole on wall, insert the plastic expansion bolt and fasten self-tapping screw.

Step 3. Hand the device on the screw.

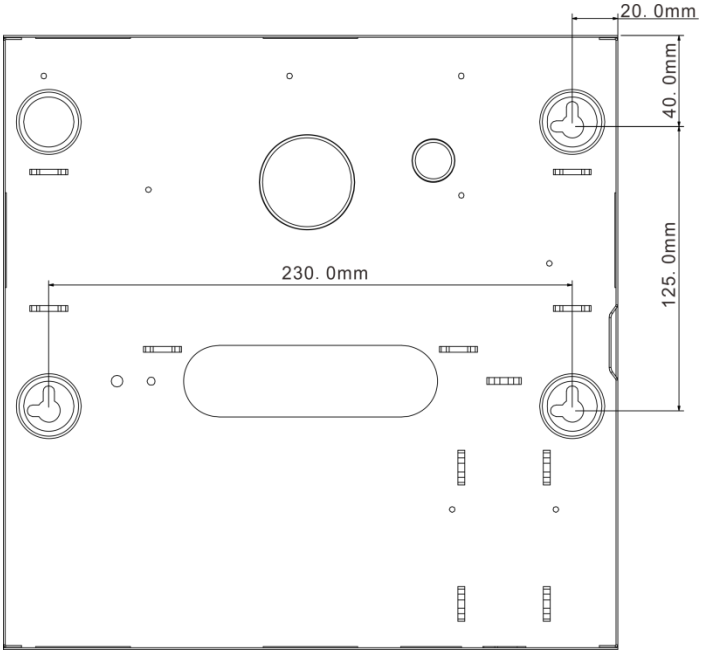


Figure 2-15

2.3 Wiring

2.3.1 Port

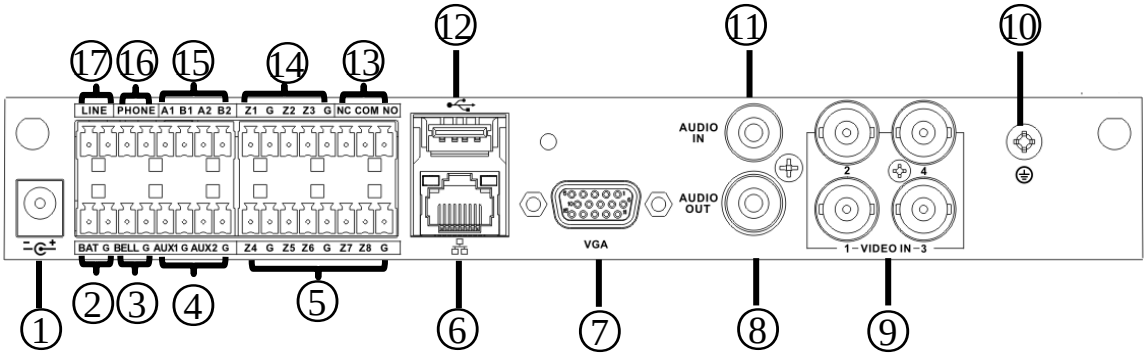


Figure 2-16

No.	Name	Note
1	Power port	14.5V power supply
2	Battery port	Connect to 12V DC 7AH，lead-acid battery
3	Siren port	Connect to siren
4	AUX power output	AUX1 connect to 12V 1A AUX power； AUX2 connect to 12V 500mA

No.	Name	Note
		AUX power, used for detector or alarm keypad power supply
5	Sensor port	Support 5-ch sensor connection
6	LAN	Ethernet port
7	VGA port	Connect to VGA display
8	Audio output port	RCA audio output, talk output
9	Video input port	4-ch video input
10	GND	Grounding
11	Audio input port	4-ch audio input
12	USB port	Mouse
13	Alarm output port	1-ch relay output
14	Sensor port	3-ch sensor connection
15	RS485 port	A1B1 to alarm programming keypad A2B2 to extension alarm output
16	Telephone port	To user phone
17	User line port	To resident phone line

2.3.2 Remote Control Key

See Figure 2-17.

Figure 2-17

Note:

- Press all arm button, after indicator is OFF immediately press emergency alarm button, to out alarm.

- Press home arm button, after indicator is OFF immediately press emergency alarm button, to instantly arm.

2.3.3 Power Line

Battery and DC power supply wirings are shown in Figure 2-18.

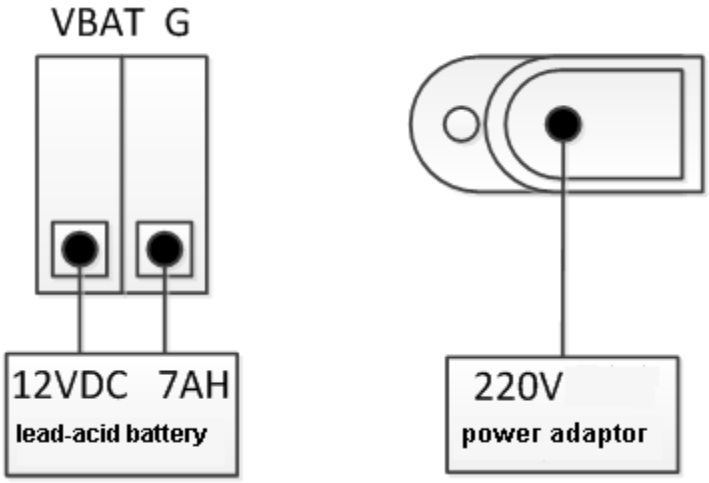


Figure 2-18

Note:

Every 3-5 year, change the lead-acid battery.

AUX power supply output 1 and AUX power supply output 2 has voltage change range when not connecting to loading output:

1). When main power supply is in place, voltage is 14V not connecting to loading output.

2). When main power supply is not in place, uses battery, voltage change range is 9V~13V not connecting to loading output.

2.3.4 Sensor Wiring

Sensor wiring is shown in Figure 2-19.

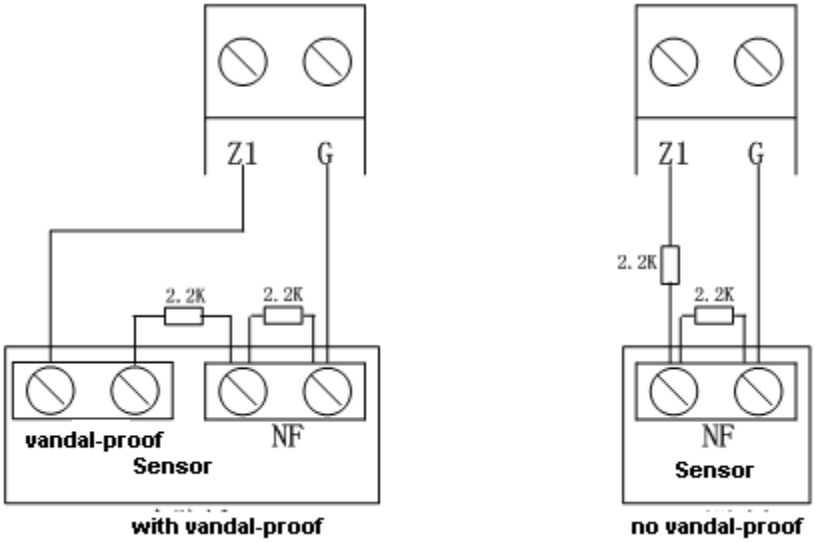


Figure 2-19

Note:

Tail wire resistance is connection close to sensor end.

Before arming, you must configure sensor type in zone setup, as NO and NC, see Ch 4.3.1.

2.3.5 Alarm Output Wiring

Alarm output wiring is shown in Figure 2-20.

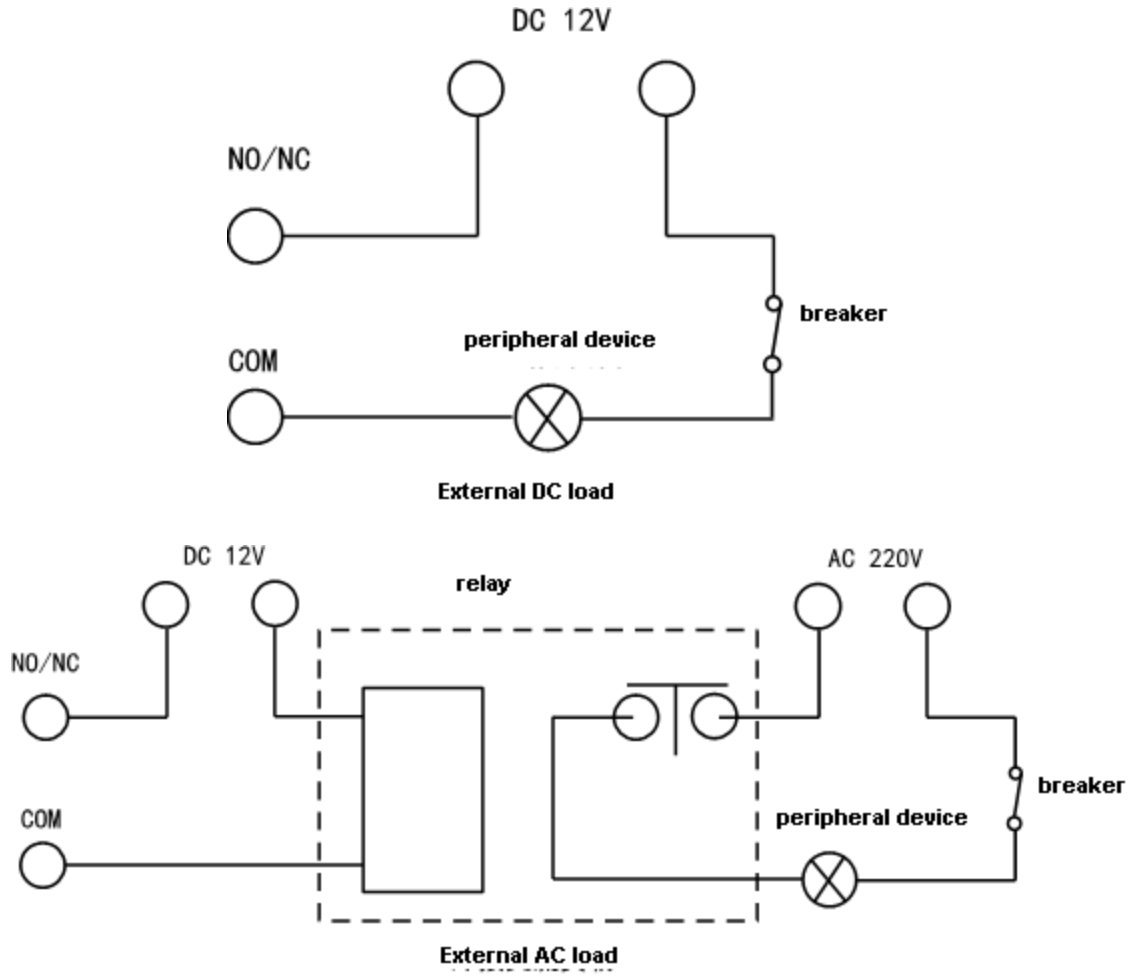


Figure 2-20

3 WEB Login and Logout

3.1 Login

Before login, make sure the device is plugged to power and boot up.

Step 1. Open IE and input alarm controller address in the address column. For example, if your alarm controller IP is 192.168.1.108, then please input http:// 192.168.1.108 in IE address column. See Figure 3- 1.

Figure 3- 1

Note:

Before first login, make sure your PC and the controller are in the same network segment.

Please be aware that the initial IP of device is 192.168.1.108.

When first login, system shows control installation page, you shall follow instructions to install control unit.

Step 2. Please input your user name and password.

Default factory name is **admin** and password is **admin**.

Step 3. Select "LAN" or "WAN" as login method.

Note:

The following takes LAN operation as an example.

Step 4. Click Login. System enters WEB homepage.

3.2 Logout

In alarm controller WEB page, select Logout tab to exit.

Note:

You must wait about 1 minute before you can login again.

4 Arm/Disarm

4.1 Arm/Disarm

4.1.1 Before Arming

1. Check wiring at each part and external devices connected.
2. Confirm whether wireless device has been successfully coded wirelessly to controller.
3. Confirm whether zone parameter is set correctly.
4. Arm all once, check whether zone is abnormal. If there is abnormal, you will see prompt as in Figure 4- 1.

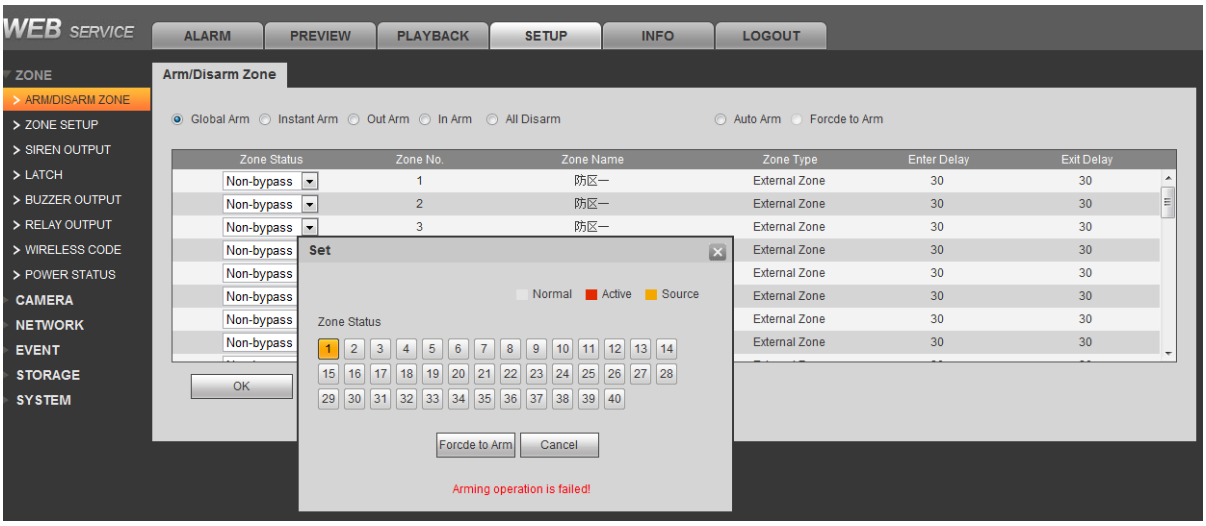


Figure 4- 1

Now you can manually check sensor, and solve abnormality, or force it to arm without solving abnormality.

4.1.2 WEB Disarm

4.1.2.1**Arm**

You can arm zone of alarm controller.

Step 1. Select SETUP>Zone Management>Arm/Disarm Zone. See Figure 4- 2.

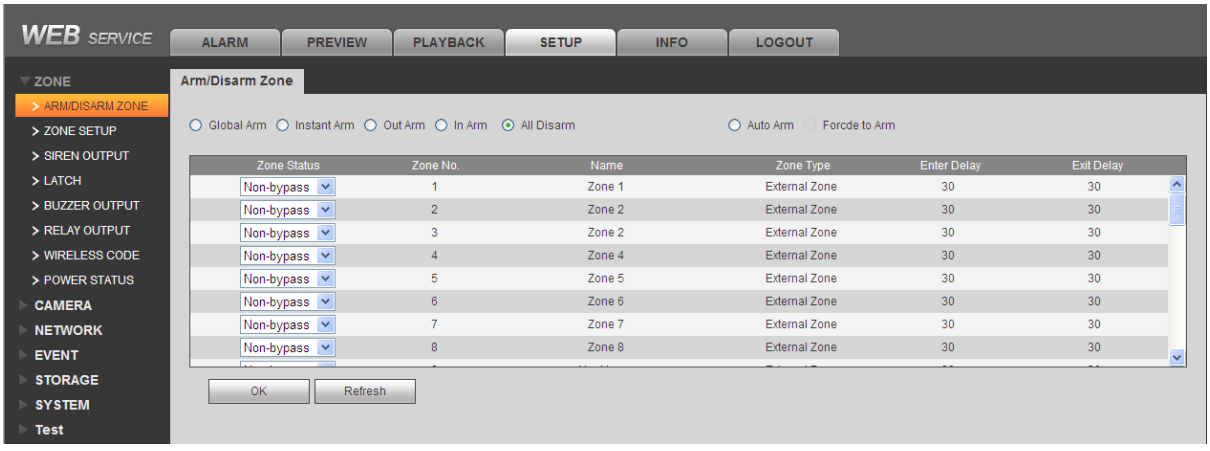


Figure 4- 2

Step 2. Set zone status of each zone.

- Non-bypass: Zone can alarm in this status.
- Bypass: The zone is temporarily shielded, when device arm again after being disarmed, the bypass zone will go armed.
- Isolated: The zone is stopped, when device arm again after being disarmed, it will remain stopped.

Note:

These zones cannot be bypass: fire zone, 24-hour sound/mute zone, emergency zone.

Step 3. Select arm type, and arm zones. Click OK. See Chart 4- 1.

Step 4. Input username and password, to confirm.

- If successfully arm, device will have prompt sound, enter exit delay status, according to set exit delay, prompt once every 1s, and prompt twice every 1s in the last 10s.
- If failed to arm, then device will prompt three times continuously. Now you need to check for zone input, and you can force to arm.

Arm type, function and scene application are shown below:

Arm Type	Description	Application
Global Arm	Exit delay, entry delay forbidden, all zones are under warning status after being armed	Such as housing being vacant for period of time (eg vacation, etc.), you need to close all zones before arming
Instant Arm	Exit delay, entry delay forbidden; after being armed, internal track, internal delay zone will auto be bypassed	When users do not go out and expect no one is using the entrance, you need the user to close all doors and windows before arming. For example, rest at home
Out Mode	Exit delay, enable entry delay, all zones are under warning status after being armed	When no one left in the house used to be closed before arming all zones
Home Arm	Exit delay, enable entry delay, after being armed, internal track, internal delay zone will auto be bypassed	When the user does not have to go out, but the person may be expected to be used later on import and export use, before arming requires the user to close up all the doors and windows
Auto Arm	Exit delay, entry delay forbidden of zones with auto bypass ON (except 24-hour zone), 8 periods for auto arming	Users want the system to automatically arm use, business on the Standard, such as company after work, to a certain point in time the system will automatically arm
Forced Arm	Exit delay, entry delay forbidden of zones with auto bypass ON (except 24-hour zone)	When a user does not want to deal with the problem has been the use of the zone

Chart 4- 1

Note:

- Enter delay and exit delay refer to Ch 4.3.2.
- When you successfully armed, you cannot change parameters of zone setup, network, event and all other parameters in menu.

4.1.2.2 **Disarm**

You can disarm arming of alarm controller.

Step 1. Select SETUP>Zone Management>Arm/Disarm Zone.

Step 2. Set zone type to Global Arm, click OK. Confirmation box pops up.

Step 3. Input username and password, confirm. Device has two tone prompt as successfully disarmed.

4.1.3 Alarm Program Keypad Arm/Disarm

- Please refer to Alarm Programming Keypad User's Manual for wired programming keypad.
- Wireless alarm programming keypad is in Ch 5.4 and 5.5.

4.1.3.3**Arm**

General Arm

Via keypad, arm the zone, alarm controller will response alarm signal in the zone.

Step 1. Press  key, to next level menu.

Step 2. By pressing  or  , select arm/disarm, press  .

Step 3. By pressing  or  , select arm, press  .

Step 4. Input arm type no., press  key.

Note:

1	Global arm
2	Instant arm
3	Out arm
4	Home Arm
5	Force to arm

Step 5. Input main user password, press  key.

If successfully arm, device buzzer has tone prompt, and enter exit delay status, according to set exit dekay, buzzer once per 1s, and buzzer twice per 1s for last 10s. If failed, then dvice will buzzer three times continuously. Now you shall check whether there is zone input, and you can force to arm.

Quick Arm

In keypad homepage, input user password, device has tone prompt, and enter exit delay status, according to set exit dekay, buzzer once per 1s, and buzzer twice per 1s for last 10s. If failed, then dvice will buzzer three times continuously. Now you shall check whether there is zone input, and you can force to arm.

Note:

Quick arm will only arm globally.

4.1.3.4**Disarm**

General Disarm

Step 1. Press  key, to next level menu.

Step 2. By pressing [^|🔍] or [v|🔔], select arm/disarm, press [↵].

Step 3. By pressing [^|🔍] or [v|🔔], select arm, press [↵].

Step 4. Input user password, press [↵].

Device has buzzer for twice, means successfully arm.

Quick Disarm

When controller is armed or disarmed with zone alarm triggered, in keypad homepage, input user password, device has buzzer, means successfully arm.

4.1.4 Wireless Remote Control Disarm

4.1.4.1**Arm**

Via wireless remote control you can set all arm, home arm and etc.

Warning:

Wireless remote control must successfully coded before arming/disarming.

Press arm key on wireless remote control.

Alarm controller has tone prompt, as successfully armed, enter exit count down status, according to set exit delay, beep once every 1s, and beep twice every 1s during the last 10s; if failed to arm, device will have tone prompt 3 times. Now you shall check whether there is zone input, and you can force to arm.

Note:

Please refer to Ch 2.3.2 for wireless remote control.

4.1.4.2**Disarm**

Under arming status, press disarm key on wireless remote control, device beeps twice, as successfully disarmed.

4.2 Add and Delete Wireless Device

Note:

Under arming status, you cannot perform any operation.

Via wireless coding function, manage wireless device, to arm/disarm from wireless device.

Select SETUP>Zone Management>Wireless Code Match.

Figure 4- 3.

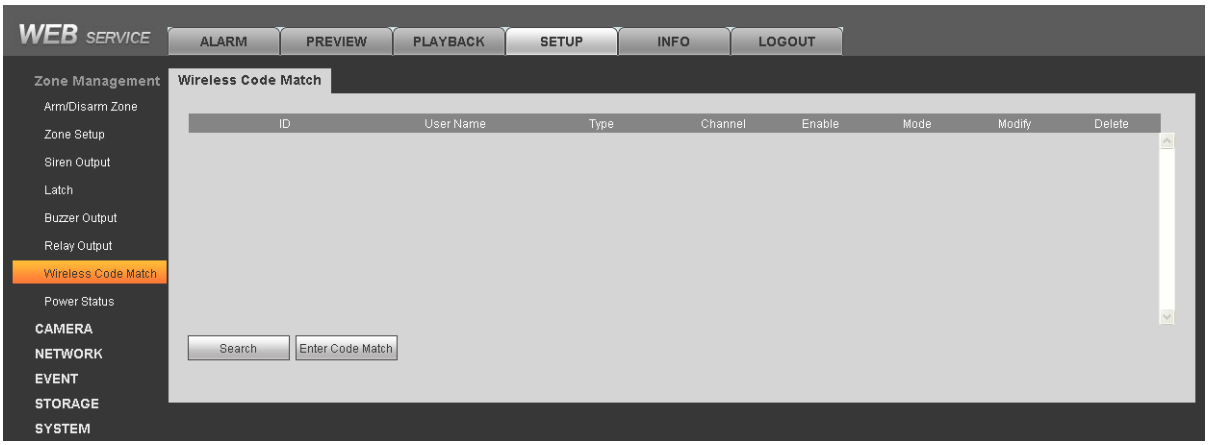


Figure 4- 3

Add Wireless Remote Control

Click Enter Code Match, and press any key on wireless remote control.If successfully matched, then WEB page will show wireless device info. See
After successfully matched, you can modify and delete wireless remote control info.

Modify wireless remote control info:

Click  , pop up parameter window.

Parameter	Note
Enable	Select enable, the device can arm/disarm and alarm.
Mode	As normal and patrol. Normal is for arming/disarming and alarm; patrol is for remote control patrol function, report to platform.
Username	Remote control name.

Delete wireless device:

Click  , and confirm, delete the wireless remote control from system, as you cannot arm/disarm or alarm.

Add Wireless Remote Sensor

Click Enter Code Match, and plug sensor to power, after indicator NO, dial vandal-proot switch, indicator starts to flash. Wait about 10s, if indicator turns OFF, it means that matching is successful. If indicator slowly flashes three times, it means that matching failed, and you shall follow above steps again to connect.
Note:
Sensor code match is available for models of ARC5408B-W, ARC5408B-CW, ARC5408B-EW and etc.

4.3 Zone Config

Set zone parameters, zone delay for each zone.

4.3.1 Zone Parameter Config

For zone parameter in each zone (such as type, arm/disarm period, alarm link and etc.) to set.

Step 1. Select SETUP>Zone Management>Zone Setup. See Figure 4- 4.

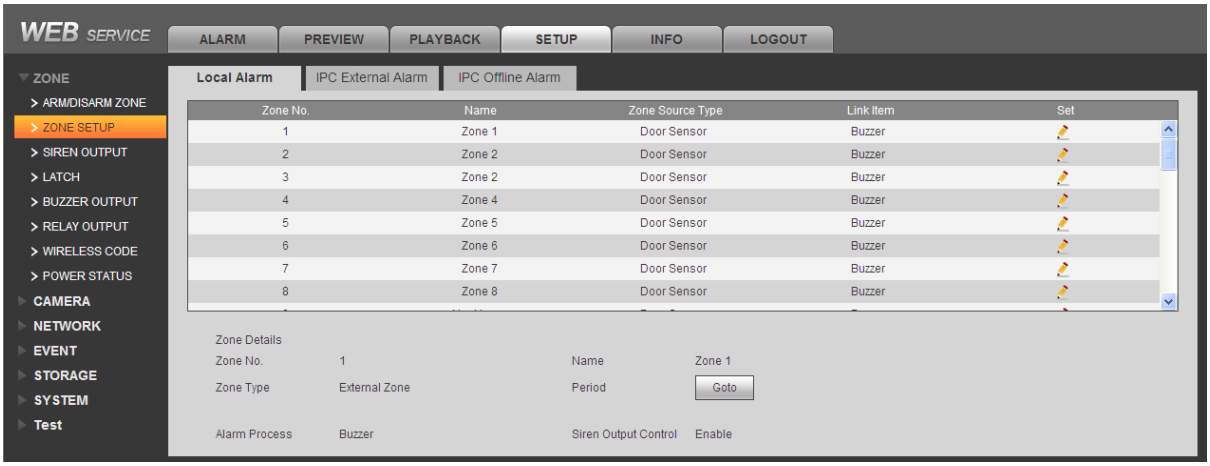


Figure 4- 4

Step 1. Click  . See Figure 4- 5.

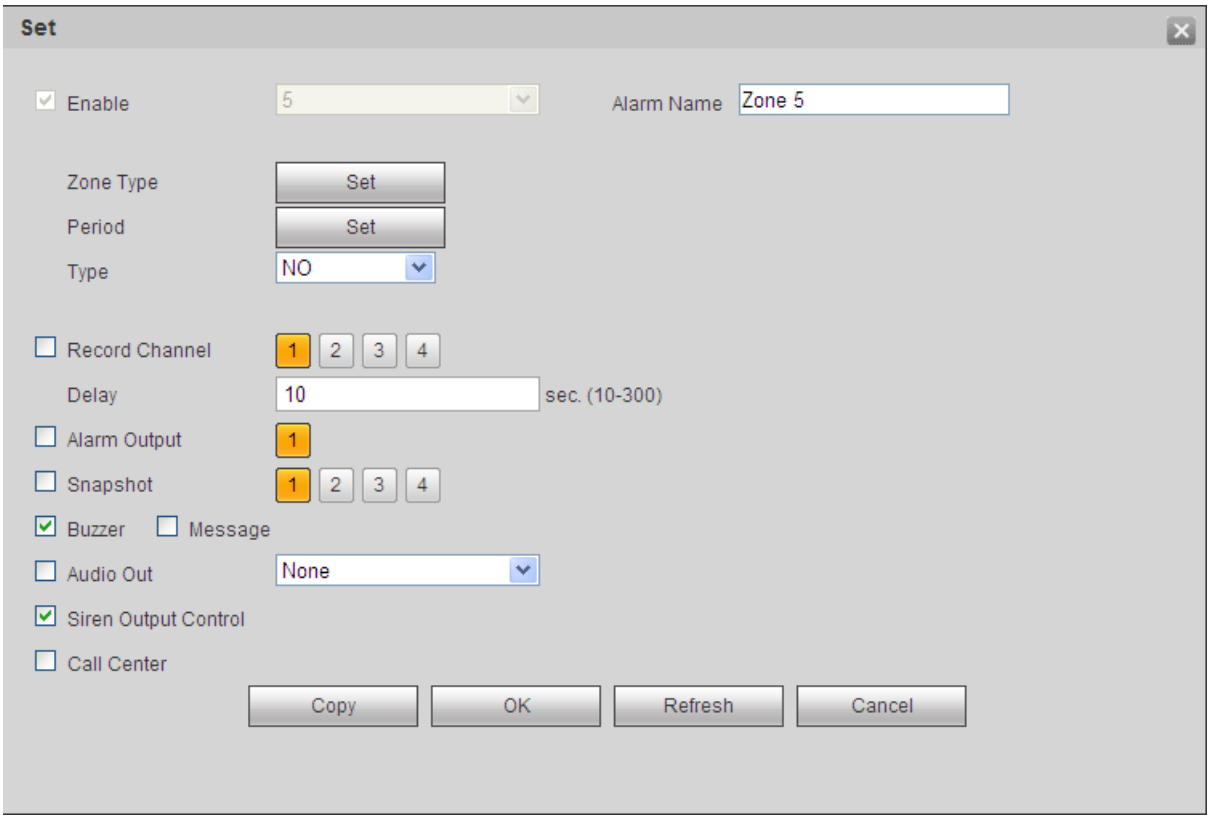


Figure 4- 5

Parameter	Note
Enable alarm input	Alarm input channel, as zone no.
Alarm Name	Customize zone name.
Zone Type	Click setup, select zone type (see below), and zone source type.
Arm/Disarm Period	Click setup, in dropdown list, select day, set period.

Parameter	Note
Device Type	NO and NC, set according to device.
Record Channel	Select corresponding record channel no., can re-select. When alarm occurs, system turns on corresponding channel to record.
Record Delay	Set delay, when alarm ends, alarm record will continue for a certain period.
Alarm Output	Alarm link output channel
Snapshot	When alarm occurs, trigger and snapshot the selected channel
Alarm Upload	Upload alarm info
Buzzer	When alarm, enable buzzer to alarm
SMS	When alarm, send SMS to set number
Audio Play	When abnormality occurs, play the selected audio file
Siren Output Control	When alarm occurs, enable siren.
Call Center	When alarm occurs, report to call center.

Zone Type	Description	Application
Fire Zone	● Device will send alarm report to alarm center. ● Not affected by arming/disarming, bypass. ● Keypad will show this zone with alarm tone prompt plus send report to alarm center; not affected by arming/disarming, cannot be bypasses. Alarm tone prompt	Mainly used heat detectors, smoke detectors
24-hour Sound Zone	● Self-carried link siren, buzzer, no need to set ● Send alarm report to alarm center. ● Not affected by arming/disarming, bypass. ● Keypad will show this zone, and send alarm prompt.	Emergency key
24-hour Mute Zone	● Device does not link alarm, buzzer. ● Send report to alarm center. ● Not affected by arming/disarming, bypass	Jewelry stores, banks and other emergency button
Emergency Zone	● Send report to alarm center. ● Not affected by arming/disarming, bypass ● Keypad will show this zone, and send alarm prompt.	Emergency key
In/out Zone 1	● Global arm, instant arm cannot provide entry delay ● Out, in mode, provide entry and zone 1 enter delay ● After arming, exit delay becomes effective immediately.	The main entrance with the keypad disarming necessary place
In/out Zone 2	● Global arm, instant arm cannot provide entry delay ● Out, in mode, provide entry and zone 2 enter delay ● After arming, exit delay becomes effective immediately.	The main entrance with the keypad disarming necessary place
Internal Zone	● Home Arm and instant arm, internal zone will be bypassed. ● When out arm, provide entry zone 1 entry delay and exit delay. Global arm, no entry delay, but has exit delay.	Hall, lounge detectors can be installed indoors
External	After arming takes effect, no entry or exit delay	Windows, fences,

Zone Type	Description	Application
Zone	to trigger alarm.	gates and other outdoor periphery

Step 2. Depends on condition, config parameter.

Step 3. Click OK to save. Click Copy to copy setup to other channels.

4.3.2 Zone Delay Config

- Entry delay: If entry delay time is set to 10s, after user set arming and trigger alarm, the user has 10 s to disarm. If the user successfully disarms within the 10s, system will not link alarm. Otherwise, the system will link alarm.
- Exit delay: If exit delay time is set to 10s, when a user arms, within 10, trigger to zone is invalid.

Step 1. Select SETUP>Zone Management>Latch. See Figure 4- 6.

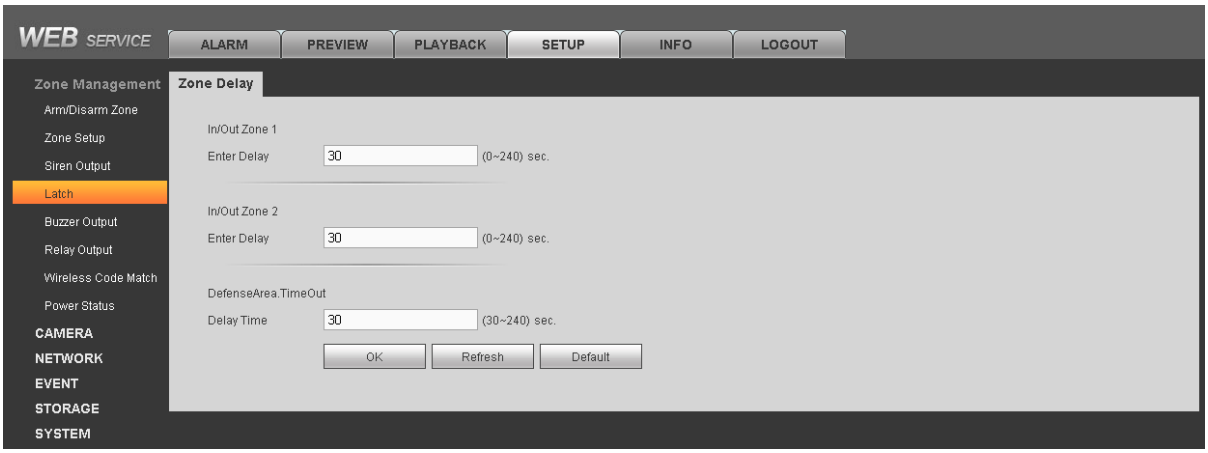


Figure 4- 6

Step 2. Input entry delay and exit delay time.

Note:

- Entry/exit delay of zone 1 is valid for entry/exit zone 1 and internal zone.
- Entry/exit delay of zone 2 is valid for zone 2.

Step 3. Click OK to save.

4.4 Emergency Alarm Config

Device provides fire alarm, endures, robbery, medical emergency, remote control alarm and other event emergency alarm function.

Step 1. Select SETUP>EVENT>Alarm Link, click Emergency Alarm. See Figure 4- 7.

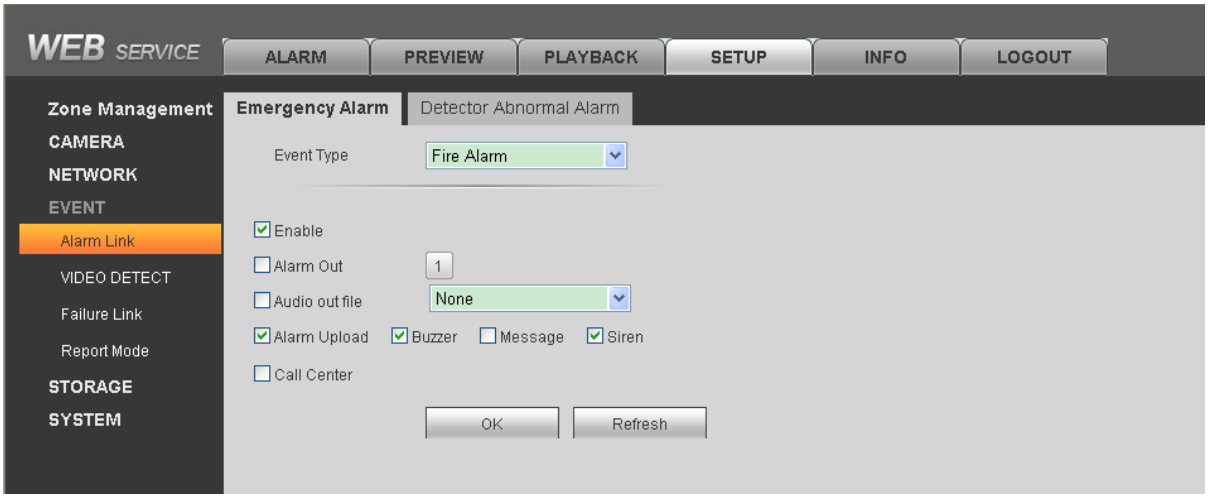


Figure 4- 7

Step 2. Select event type, and set alarm link item. Please refer to Ch 4.3.

Step 3. Click OK to save.

Fire, duress, robbery, medical emergency alarms need alarm programming keypad to achieve, see:

Type	Operation
Fire	Long press key for 3s, buzzer will start to alarm, device sends fire alarm info to alarm controller.
Duress	In homepage, input user 22's password （123457）
Robbery	Long press【SOS】 key for 3s
Medical Emergency	Long press【2】key

Note:

Wireless alarm keypad only supports SOS alarm and duress alarm.

4.5 Siren and Alarm Output Config

4.5.1 Siren Output Config

Set siren output duration when alarm occurs.

Step 1. Select SETUP>Zone Management>Siren Output.

See Figure 4- 8.

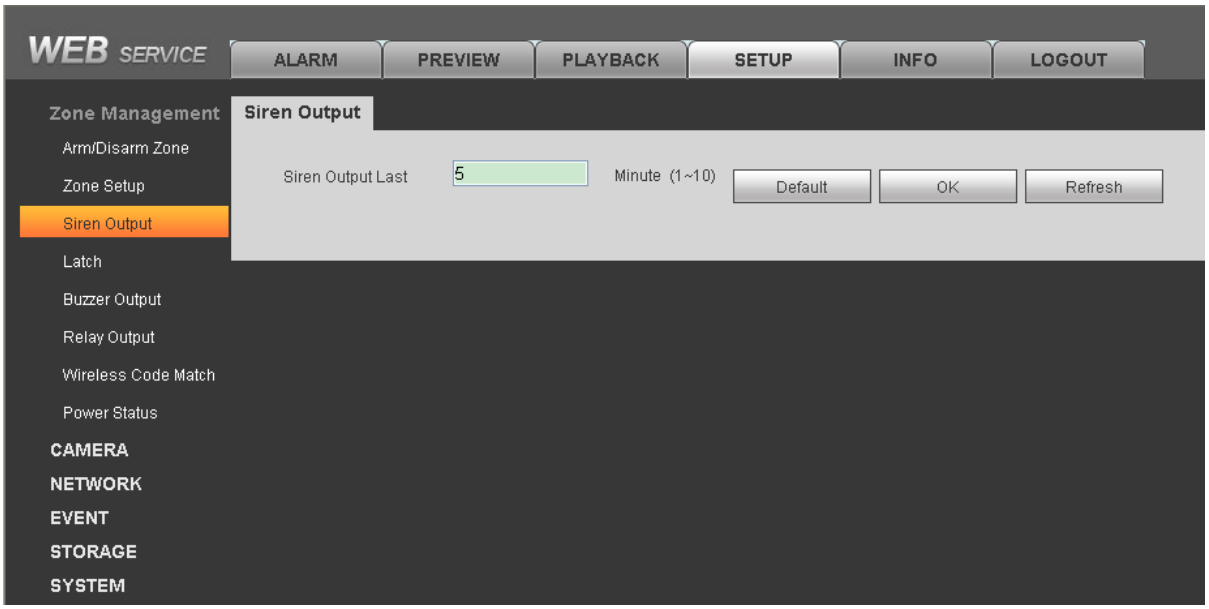


Figure 4- 8

Step 2. Input siren output duration (default is 5min).

Step 3. click OK.

4.5.2 Relay Output Config

Set relay output channel, type and period.

Step 1. Select SETUP>Zone Management>Relay Output. See Figure 4- 9.

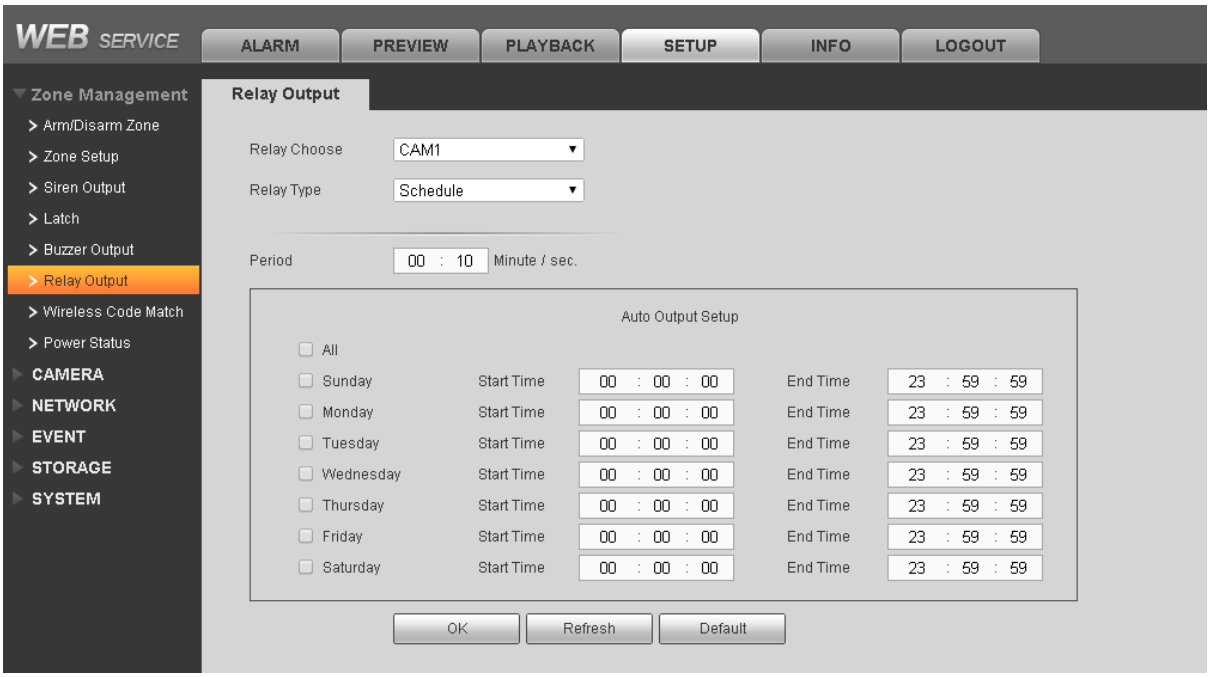


Figure 4- 9

Step 2. Select replay channel, type and duration.

Type	Note

Force	Actively enable relay output
Stop	Actively disable relay output
Schedule	Config link alarm output, trigger alarm, alarm output will output until auto OFF

Step 3. In auto output setup, set auto output date and start/end time. Until the start time, relay will automatically enable, until end time it will disable.

Step 4. Click OK.

4.5.3 Buzzer Output Config

When alarm occurs, enable buzzer during alarm time.

Step 1. Select SETUP>Zone Management>Buzzer Output. See Figure 4- 10.

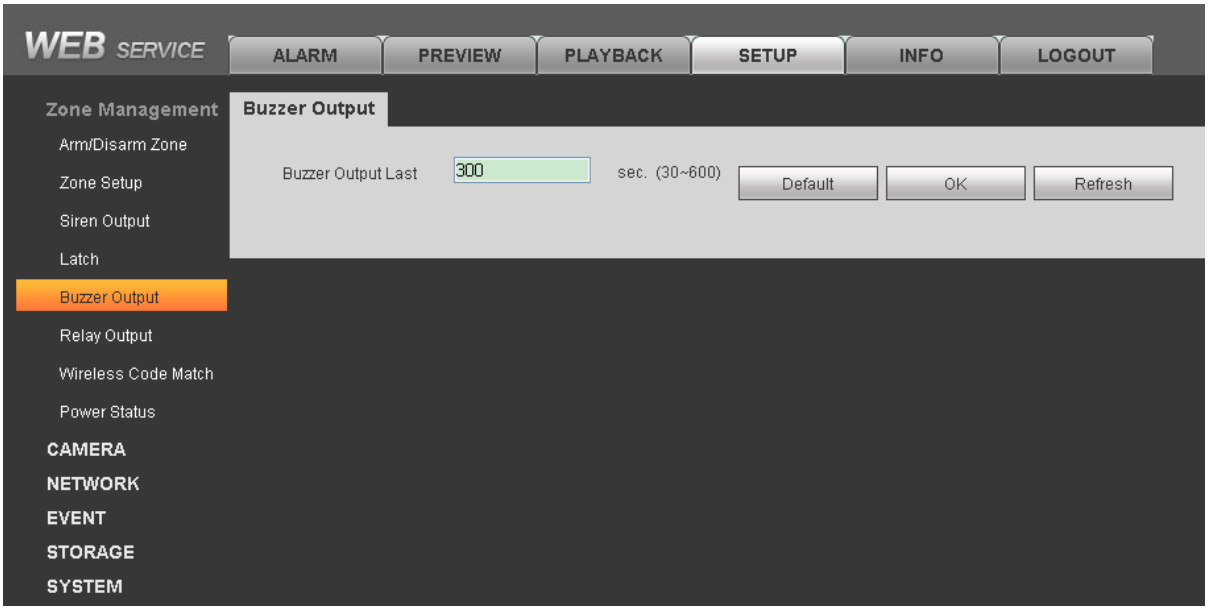


Figure 4- 10

Step 2. Input buzzer output duration.

Step 3. Click OK.

4.6 Failure Config

When HDD, network, power supply, sensor have failure, device provides related link alarm functions, but you need to set first.

HDD, network, power supply

Step 1. Select SETUP>Event>Failure Link. See Figure 4- 11.Click HDD (or Network, Power or Other Failure tab)

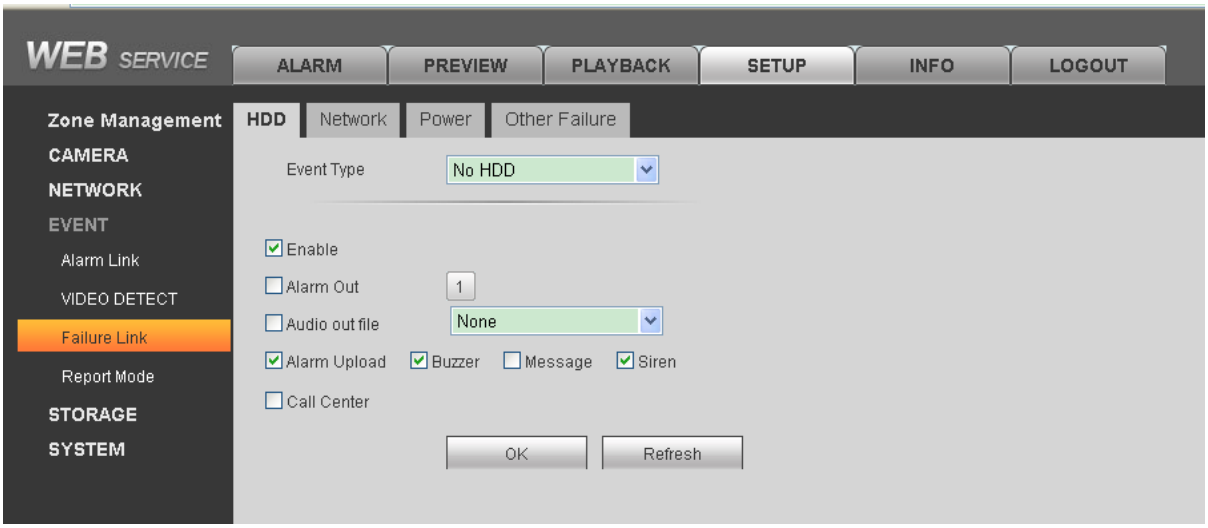


Figure 4- 11

Step 2. Select event type and set failure link parameters. Click OK to save. Please refer to Ch 4.3.

Failure Type	Situation	Indicator Status
HDD	No HDD	When HDD has failure, HDD indicator is ON.
	HDD error	
	Capacity warning	
Network	Offline alarm	When network has failure, network indicator is ON. See Figure 4-12.
	IP conflict	
	MAC conflict	
Power	Main power down	None
	Battery outage	
	Battery low	
Other Failure	PSTN cut	None
	Device vandal-proof	

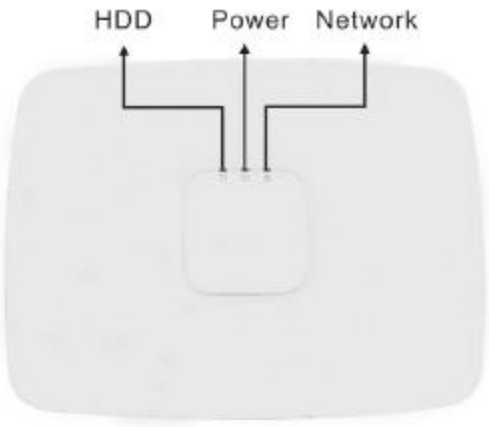


Figure 4- 12

Step 3. Click OK.

Detector failure alarm parameter setup

Step 1. Select SETUP>Event>Alarm Link>Detector Abnormal Alarm. See Figure 4- 13.

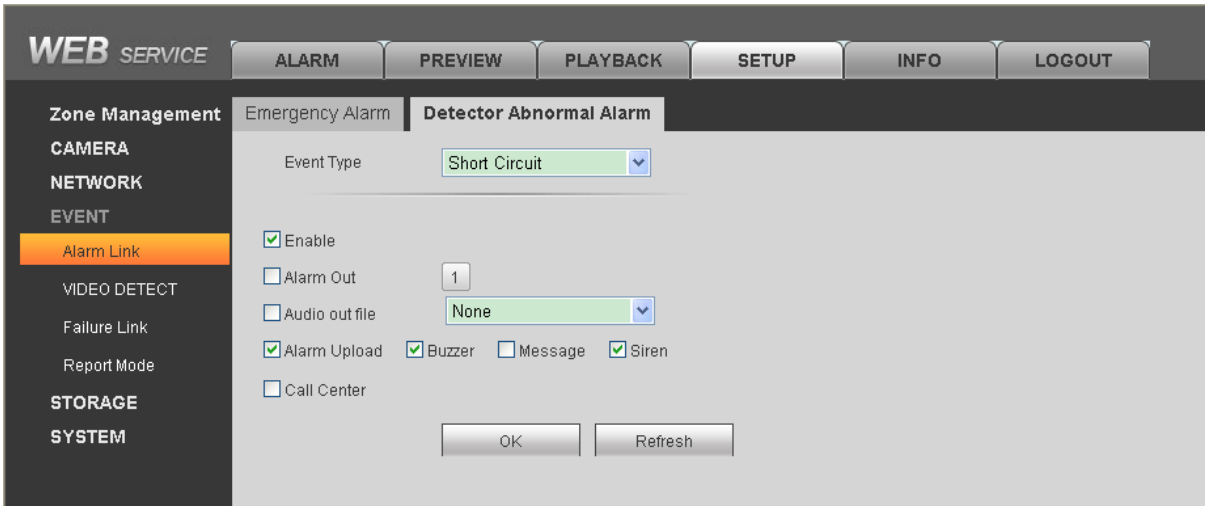


Figure 4- 13

Step 2. Select failure event, and set parameter. See chart below Figure 4-5.

Step 3. Click OK to save.

Note:

Refer to 2.3.4, if the zones Z1 and G interfaces directly connected in series with the line and short-circuit alarm function is enabled, the device will issue a short circuit alarm signal.

If the zone is not connected detector circuit alarm enabled, the device will report the breaking event, but does not affect use. If you want to eliminate the circuit, the zone can be isolated or two 2.2k resistor in series with the access zones.

Detector failure alarm is not controller by arm and disarm.

4.7 Video Alarm Config

Note:

Video alarm is not controlled by arm/disarm.

4.7.1 Motion Detection

Via system analysis of video image, when it detects mobile signal with preset sensitivity, it will immediately enable video detection alarm. System supports three video detection types: motion detection, video loss, tampering.

Step 1. Select SETUP>Event>Video Detect. See Figure 4- 14.

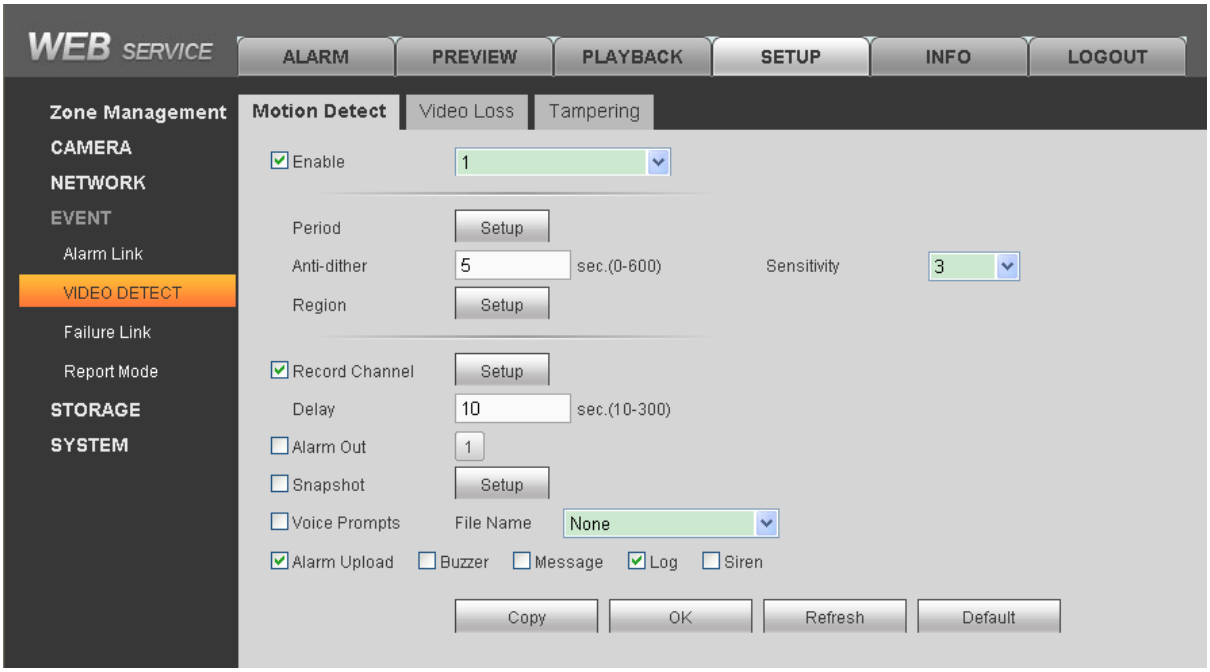


Figure 4- 14

Step 2. Select tab you want to config.

Step 3. Configure parameter.

Step 4. Click OK.

Click Copy to copy setup to other channels.

Parameter Name	Note
Enable Channel	Select channel to set.
Arm/disarm Period	Set motion detection period, as detection is enabled only in the set period.
Anti-dither	Set Anti-dither time, range is 0～600s
Sensitivity	Sensitivity setup has 6 levels, mainly take brightness as subject. The higher the number the higher the sensitivity. Level 1 is min, level 6 is max, default is level 3.
Region	Set motion detection region. The red area is motion detection fortified area, drag the mouse to drag the area to remove the red, that is undefended areas. Only fortified area mobile signal appears to be detected.
Record Channel	When you select the desired video channels (check), an alarm occurs, the system automatically starts the channel for video
Record Delay	Record delays for certain period, and stops. Range：10～300
Alarm Output	When alarm occurs, external device with link alarm ports enabled
Snapshot	When motion detection occurs, snapshot the selected channel.
Audio Prompt	Play the selected audio file when motion detection.
Buzzer	When alarm is enabled, enable buzzer.
SMS	When alarm is enabled, send SMS to specific number.
Log	In system log, record motion detection log info.
Siren	Enable siren when alarm occurs.

4.7.2 Video Loss

Via analyzing video image, when system detects channel has video loss, device will alarm.

Step 1. Select SETUP>EVENT>Video Loss. See Figure 4- 15.

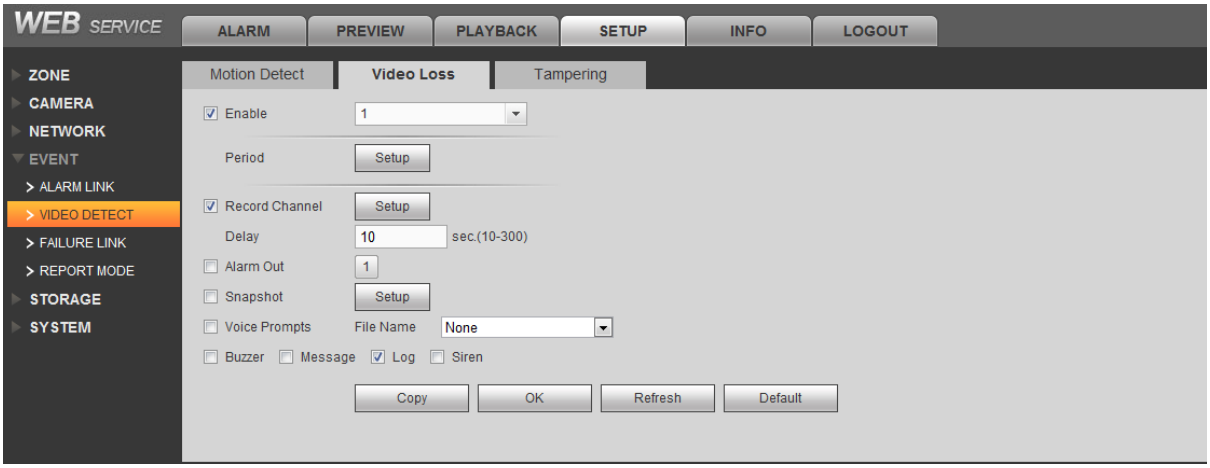


Figure 4- 15

Step 2. Select tab you want to configure. See chart below Figure 4-14.

Step 3. Click OK.

Click Copy to copy setup to other channels.

4.7.3 Tampering Detection

When camera is tempered, or video is only output one color due to light and other factors, it cannot monitor the site. Via setting tampering alarm, we can prevent this situation.

Step 1. Select SETUP>EVENT>Tampering. See Figure 4- 16.

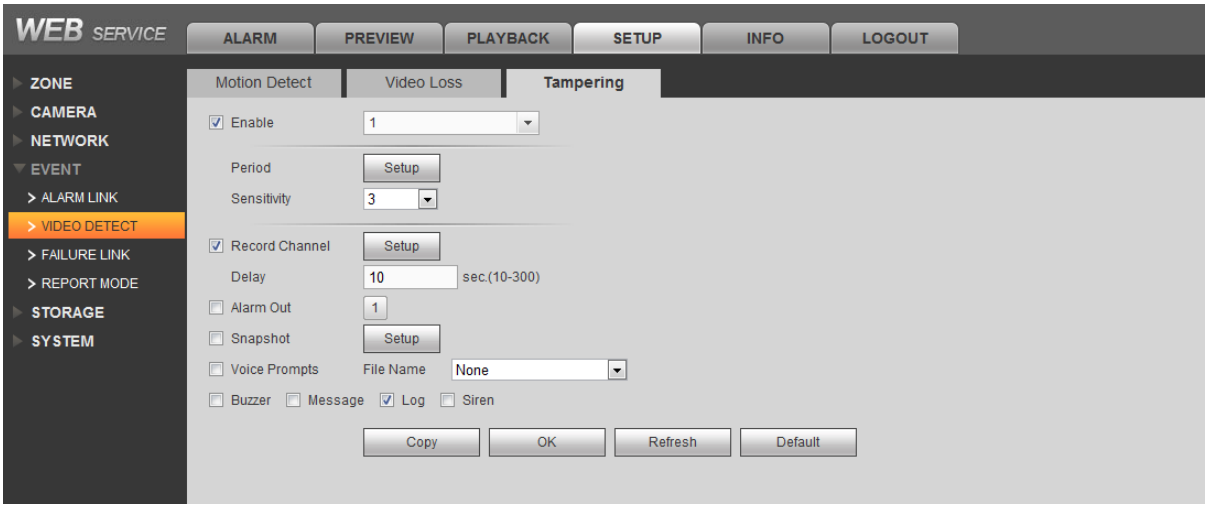


Figure 4- 16

Step 2. Select tab you want to configure. See chart below Figure 4-14.

Step 3. Click OK.

Click Copy to copy setup to other channels.

4.8 Event Report Config

You can select network priority and report mode when alarm occurs. When alarm occurs, alarm info will be reported according your selected report mode.

Step 1. Select SETUP>Event>Report Mode. See Figure 4- 17.

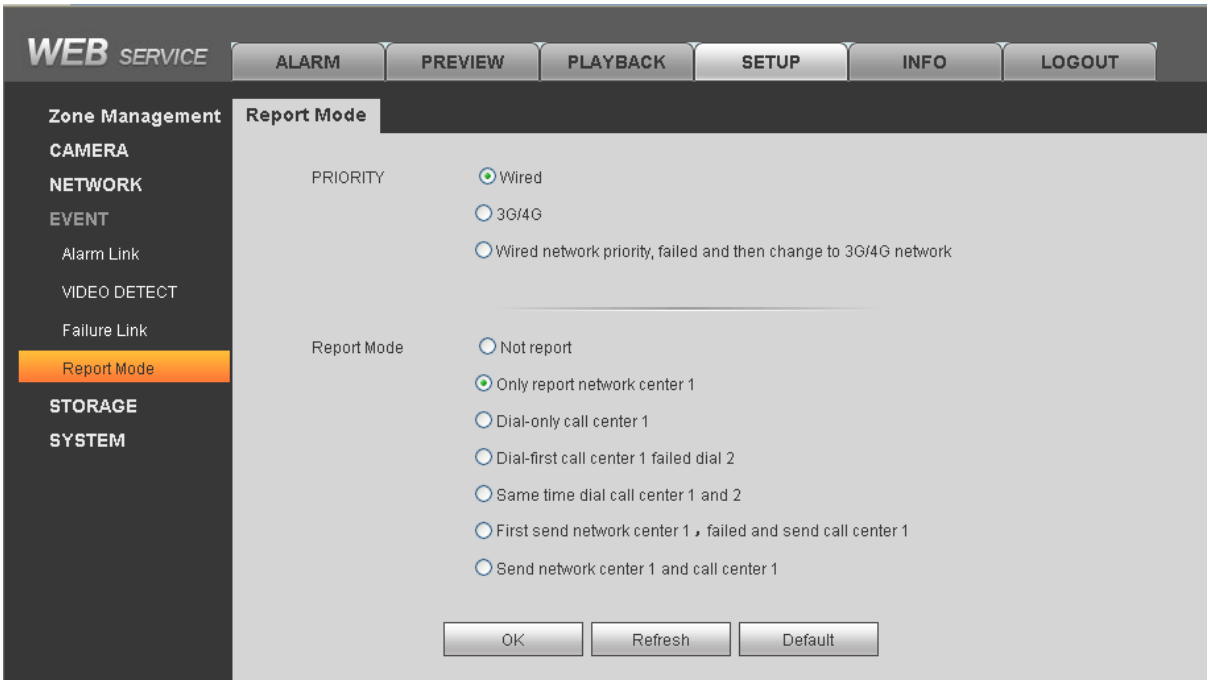


Figure 4- 17

Step 2. Select network priority and report mode.

PRIORITY: apply to TCP/IP protocol transmission, by setting network priority; you can select to transmit via wired Ethernet or 3G/4G wireless network transmission.

Setup	Note
Wired only	Event via wired Ethernet network transmit to alarm center
3G/4G network	Event via 3G/4 wireless network transmit to alarm center
Wired network priority, failed convert to 3G/4G network	Event priority through a wired Ethernet transmission to the central station, if the cable network failure, switching to 3G / 4G network transmission; if a wired network is restored, then the next alarm event switches to the wired network.

Report mode: Via report mode config, you can select transmit event via Ethernet or telephone line.

Setup	Note
Not report	Under this mode, event will not be reported to network and call center
Report to network center 1 only	Evert will be reported to network center 1（auto register, direct connect IP, SDKDemo, WEB）
Dial call center 1 only	Event will be reported to call center 1（center config see Ch 4.10.1）
Dial call center 1 and if failed, dial 2	Event will be reported to call center 1, if failed, dial call center 2
Dial call center 1 and 2 at the same time	Event will be reported to call center 1 and 2
Sent to network center 1, if failed, send to call center 1	Event will be reported to network center 1, if failed, event will be sent to call center 1
Send to network center 1	Event will be reported to both network center 1

Setup	Note
and call center 1	and call center 1

Step 3. Click OK to save.

4.9 Event Info View

You can view alarm info via WEB or alarm programming keypad,

Via WEB:

Select ALARM>Zone Event, you can view each zone's arming/disarming info and detector abnormality.

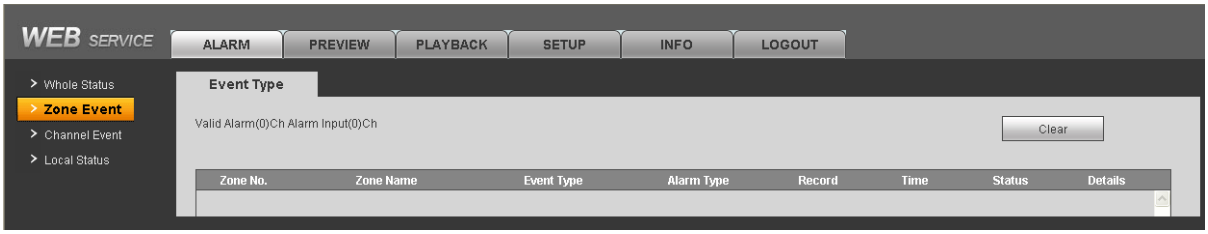
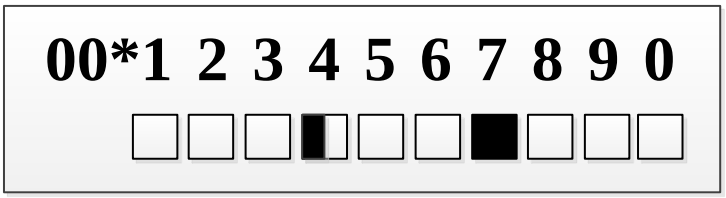


Figure 4- 18

Via alarm programming keypad:

Long press  key to shoe zone 1~10 alarm info. See below. 00*1234567890 means zone 1~10 in group 00. If you want to view zone 11~20 alarm info please input 01 here, so forth. Zone 21~30 is 02; zone 31~40 is 03.

When check box is empty, the zone is normal. When check box is black, the zone is under alarm status. When check box is B/W, the zone is under source trigger but no alarm output.



4.10 Network Config

4.10.1 Call Center

You can set call center parameter, when alarm occurs, system will send alarm info to call center.

Warning:

If you want to send alarm info to call center, you must check "call center" when you set alarm link.

Step 1. Select SETUP>Network>Call Center. See Figure 4- 19.

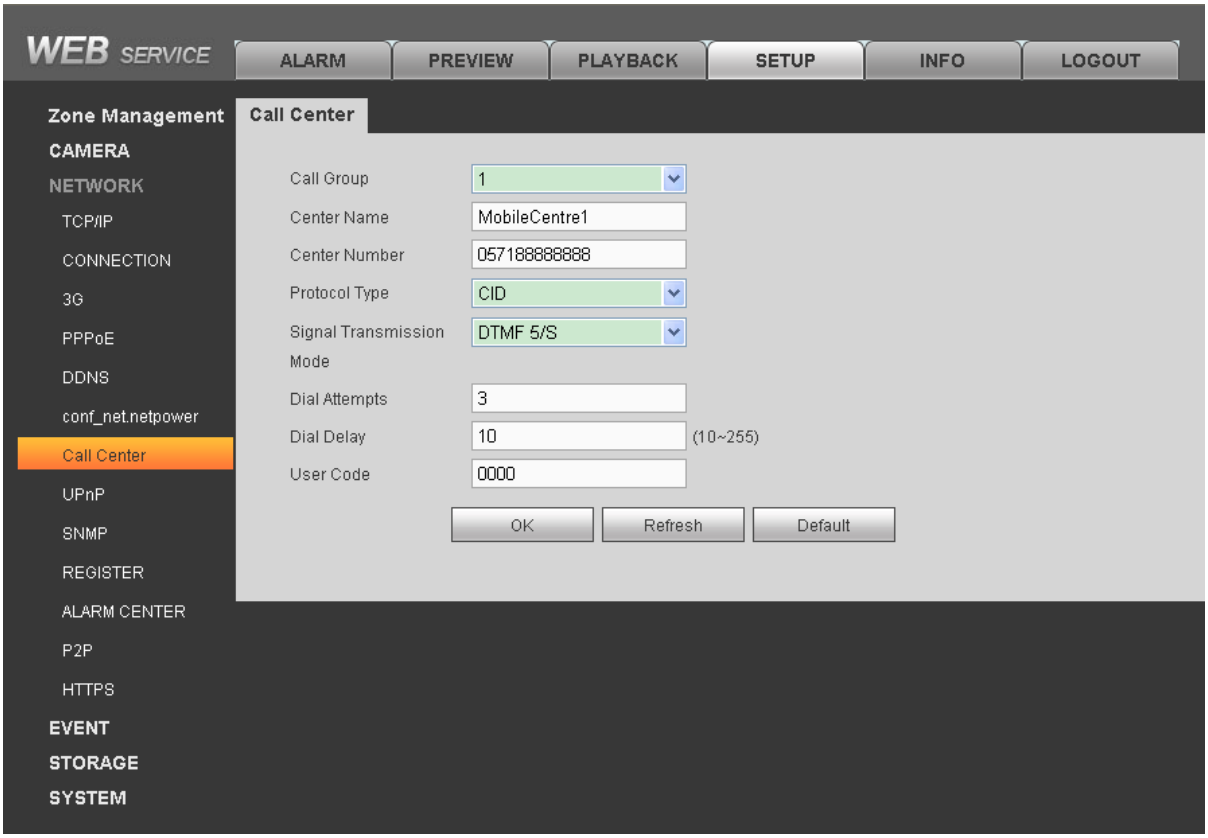


Figure 4- 19

Step 2. Configure parameters, click OK. See

Parameter	Note
Call Group	By default there are two groups of call, you can select in the dropdown list.
Center Name	Customize center name.
Center Number	Call center number.
Protocol Type	Use default value, default is CID
Signal Transmission Mode	Use default, default is DTMF 5/S
Dial Attempts	If call center does not pick up call, it will try this number of times, range is 1～9
Dial Delay	Time interval between two attempts
User Code	Call center provided user code, default is 0000

Step 3. Click OK.

4.10.2 Register

When controller connects to WAN, it will auto report its current position to server specific by user, to provide convenience for user access.

Step 1. Select SETUP>Network>Register. See Figure 4- 20.

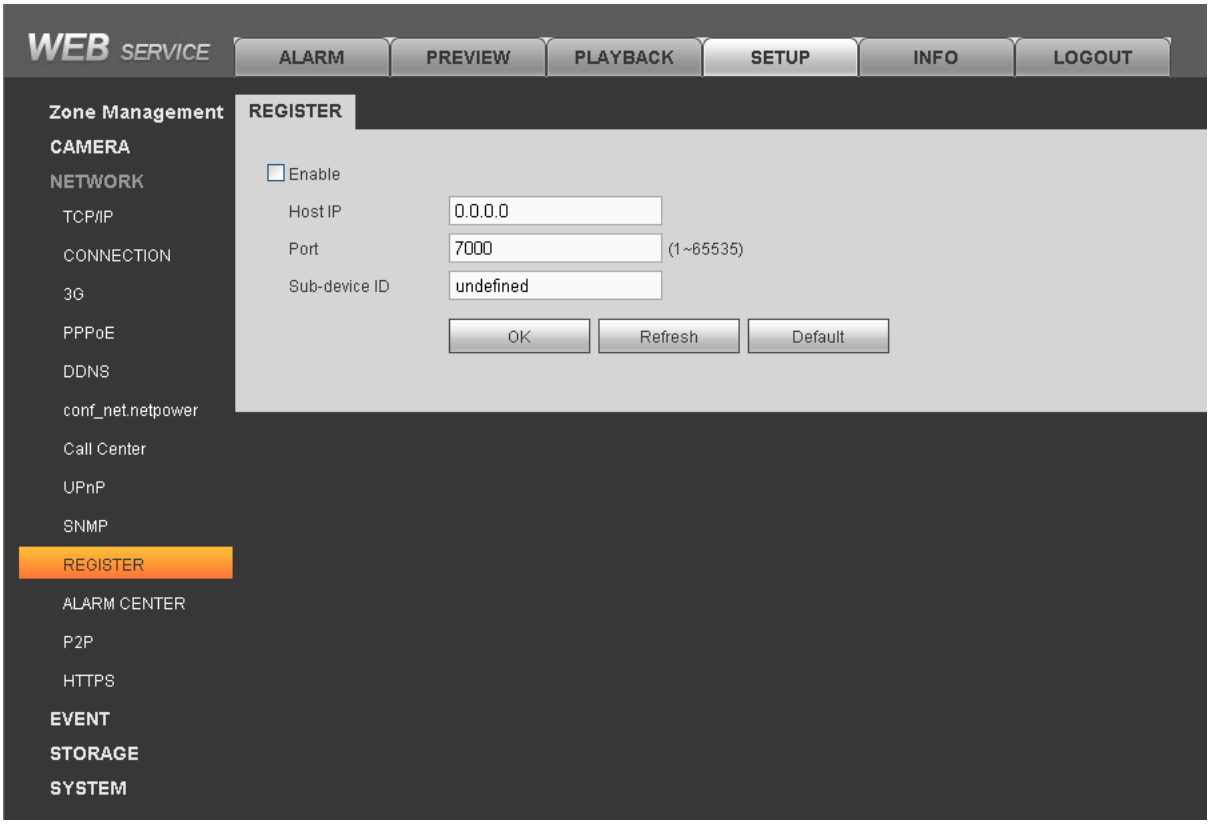


Figure 4- 20

Step 2. Click check box, enable this function.

Step 3. Configure controller IP address, port and sub device ID.

Parameter	Note
Host IP	Need to register to server IP or server domain.
Port	Port of server used to auto register
Sub-device ID	Allocated by server, used as the controller ID

Step 4. Click OK.

4.10.3 P2P

After P2P function is enabled, open mobile client software, directly input SN or scan the two-dimension code, save setup as you can arm/disarm on client, while achieve goal to manage multiple controllers. You do not need to apply for dynamic domain name, map port and deploy transit server.

Warning:

To use this function, you must connect the controller to WAN. Otherwise, this function is disabled.

Step 1. Select SETUP>Network>P2P. See Figure 4- 21.

Figure 4- 21

Step 2. Click check box to enable P2P.

Step 3. Click Save.

After setup is done, “status” is online, as P2P registration is successful.

When P2P registration is successful, you can scan QR code via mobile phone or directly enter SN to add controller, to access and manage controller, please refer to Smart Phone Client User’s Manual.

5 Wireless Alarm Programming Keypad Operation

Wireless alarm programming keypad model is ARK20C-MW, applicable for ARC5408B-W, ARC5408B-CW, ARC5408B-EW, ARC5408C-W, ARC5408C-CW, ARC5408C-EW controller models.

5.1 Key

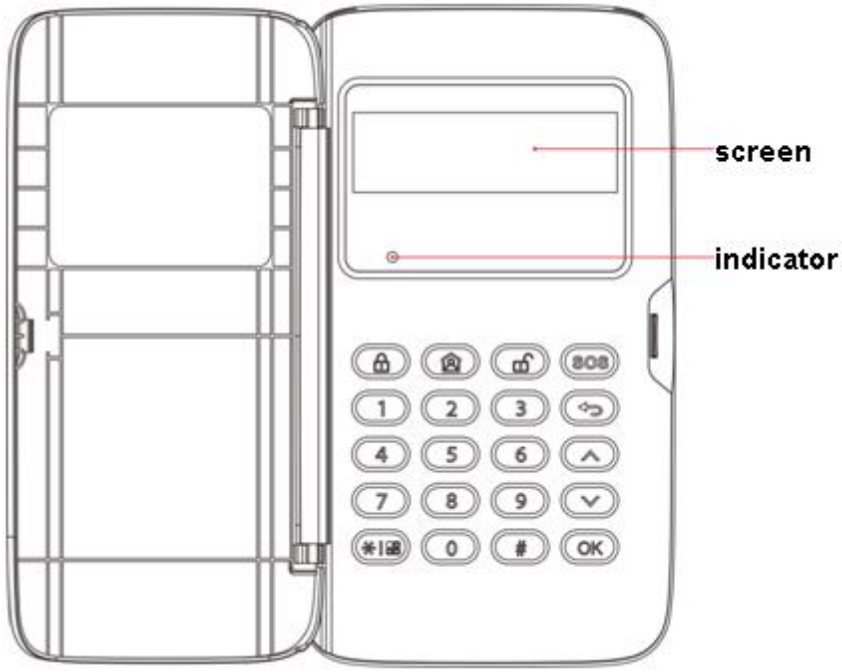


Figure 5-1

Key	Name	Note
	Menu	Click this key to： ● Enter main menu ● Enter *.
	Arm	This key is used to quickly arm. After arming, you can see “A” at the upper-left corner on screen. Note: Valid in homepage only.
	Home Arm	This key is used to quickly arm at home. After arming, you can see “S” at the upper-left corner on screen. Note: Valid in homepage only.
	Disarm	This key is used to quickly disarm. After disarming, you can see “D” at the upper-left corner on screen. Note: Valid in homepage only.
SOS	Emergency Alarm	Long press this key for 3s, buzzer starts to alarm, and send alarm info to controller.
	Return	Click this key, you can： ● Wireless match code. ● Delete wrong input ● Back to previous menu.
	Page Up	In menu, click this key to page up.
	Page Down	Click this key, you can：

Key	Name	Note
		● In menu, click this key to page down. ● Long press this key to view zone alarm info.
OK	OK	Click this key, you can： ● Enter sub menu ● Save setup. ● Restart keypad.

5.2 Wireless Match Code

Before use, you must wireless match code with alarm controller. When successfully match code, you can set and arm/disarm.

Step 1. In WEB Wireless Code interface, click Enter Code Match. See Figure 5-2.

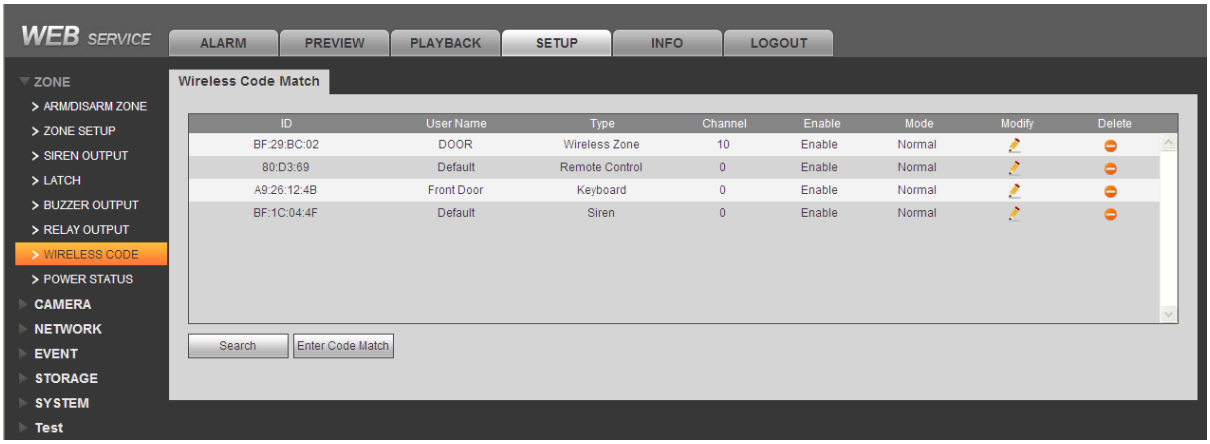


Figure 5-2

Step 2. Power up wireless alarm programming keypad, and select language.

System shows it is matching code.

Step 3. Click Return.

If it shows matching is successful, then code match is complete. If it shows matching failed, then click return key to match again.

Note:

For already matched keypad, if you want to match to another controller, long press OK key to restart, and match code.

5.3 Before Operation

5.3.1 Notice

Under this environment, alarm keyboard is plugged to power and registration is successful, enter main interface.

[Menu]+[Up/down page selection]+[OK]+[Up/down page sub selection]+[OK]+[Operation]

Note:

Different operations and methods refer to each chapter.

5.3.2 Function Menu List

Function	Sub Function	Function	Sub Function
Arm/Disarm	● Arm ● Disarm ● Bypass isolate	COM	● Network ● Tel
Zone	● Type ● Link	Output	● Siren ● Alarm output
Other	● Reset ● Key tone ● Time ● User ● Reboot	Status	● Zone ● Access control ● Version ● Time ● COM ● Host status ● Output

5.3.3 Prompt Explanation

You may see the following prompt on screen:

- Setup failed: Controller setup error.
- No right: A user does not have certain right to operate.
- Invalid operation: Maybe that version of controller does not match version of alarm programming keypad.
- Reading: It is reading status of controller.
- Setting: Controller is responding setup of wireless alarm programming keypad.

5.3.4 User

5.3.4.1**User Right**

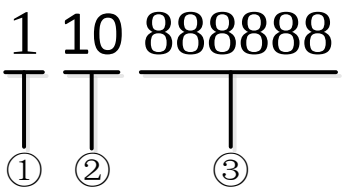
Different user has different right, see below:

User Type	Code	Default Password	Right	Note
Administrator	00	123456	● Arm/disarm ● Bypass isolate ● User management ● Reset controller	First login user please change your password, please refer to Ch 5.3.1 and 5.3.4.2.
Operator	01~20	—	● Arm/disarm ● Bypass isolate ●	By default, there is no operator user, you shall configure operator as you need, please refer to] Ch 5.3.1 and 5.3.4.3.
Installer	21	909090	● Set	—
Duress User	22	123457	● Arm/disarm ● Reset controller	When a duress user operates, it will send duress report.

5.3.4.2**Modify Password**

Operation method: [Encode command] +[OK]+[Admin password]

Encode command is composed as follows:



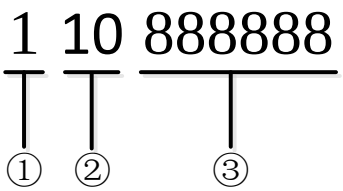
No.	Note
①	Encode address, means the operation is to modify password, default is 1
②	User encode，range is 00~22. 00 is admin user，01~20 is operator user，21 is installer user，22 is duress user.
③	New password, composed of 6 digits of number.

Note:
Different user cannot have repeated password.

5.3.4.3**Add User**

Operation method: [Encode command]+[OK]+[Admin password].

Encode command is composed as follows:

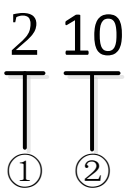


No.	Note
①	Encode address, means the operation is to modify password, default is 1
②	User encode，range is 00~22。00 is admin user，01~20 is operator user，21 is installer user，22 is duress user.
③	New password, composed of 6 digits of number.

5.3.4.4**Delete User**

Operation method: [Encode command]+[OK]+[Admin password].

Encode command is composed as follows:



No.	Note
①	Encode address, means the operation is to delete user, default is 2
②	Code to delete user.

5.4 Arm

When alarm controller and detector work as normal, via wireless alarm keypad to arm zone, alarm controller will respond to alarm signal in zone.

Quick Arm

Operation method: Before you enter any menu, click  /  and press administrator password/opertor password.

Operation result:If successfully arm, keypad shows “A/S” at the upper-left corner. Controller will have tone prompt, and enter exit delay status, according to set exit dekay, buzzer once per 1s, and buzzer twice per 1s for last 10s. If failed, then dvice will buzzer three times continuously. Now you shall check whether there is zone input, and you can force to arm.

Note:

 : quickly arm.

 : quickly arm at home.

General Arm

Operation method: [arm type encode]+[OK]+[Admin password/operator password]

Operation result:If successfully arm, controller will have tone prompt, and enter exit delay status, according to set exit dekay, buzzer once per 1s, and buzzer twice per 1s for last 10s. If failed, then dvice will buzzer three times continuously. Now you shall check whether there is zone input, and you can force to arm.

Arm type:

1	Global arm
2	Instant arm
3	Out arm
4	Home Arm
5	Force to arm

5.5 Disarm

When zone is armed, you can disarm zone.

Quick Disarm

Operation method: Before you enter any menu, click  to enter administrator password/operator password.

General Disarm

Operation method: [OK]+[Admin/operator password].

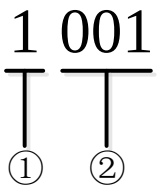
5.6 Bypass Isolation

- Non-bypass: the zone is at normal status, you may perform various arming operations.

- Bypass: This zone is shielded for the arming, when disarm, the zone will resume non-bypass status.
- Isolate: The zone is stop, when device arm again after disarming, the isolated zone is still stop

Operation method: [Encode command]+[OK]+[Admin password/operator password]

Encode command is composed as follows:



No.	Note
①	Bypass/isolation type code.
②	Zone number，range is 001~256. Such as zone 1，number is 001

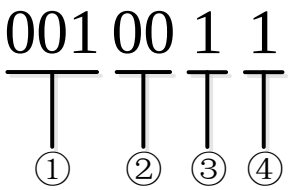
5.7 Zone Setup

5.7.1 Type Setup

You can set zone parameter.

Operation method: [encode command]+[OK]+[Installer password].

Encode command is as follows:



No.	Note
●	Zone number，range is 001~256. Such as zone 1，no. is 001
●	Zone type code
●	Enter delay，range is 0~240，unit is s，besides delay zone, when set other zone, you can ignore this parameter.
●	Exit delay，range is 0~240，unit is s，besides delay zone, other zone setup can ignore this parameter.

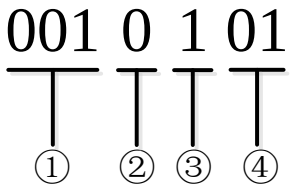
Code	Zone Type	Code	Zone Type
00	Instant zone	08	All-day zone
01	Fire zone	09	Internal zone
02	Medical zone	10	External zone
03	Duress zone	11	Not alarm
04	Delay zone	12	24-hour sound zone
05	Enter/exit zone 1	13	24-hour mute zone
06	Enter/exit zone 2	14	Emergency zone
07	Track zone	-	-

5.7.2 Link Setup

You can set zone alarm link parameter.

Operation method: [Encode command]+[OK]+[Installer password].

Encode command is composed as follows:



No.	Note
①	Zone no., range is 001~256. Such as zone 1，no. is 001
②	Link type：0-siren，1-alarm output，2-buzzer
③	Link enable：0-not enable，1-enable
④	Link no. is alarm output no., default is 0

5.8 Other Setup

5.8.1 Reset Controller

Via keypad you can reset alarm controller, so alarm controller will restore default settings.

Operation method: enter [installer password].

5.8.2 Key Tone

You can enable or disable key tone.

Operation method: enter [code command].

Note:

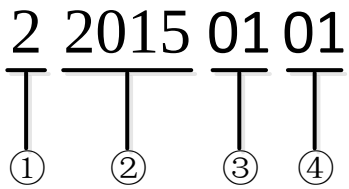
Code command: 1- enable, 0-disable.

5.8.3 System Time

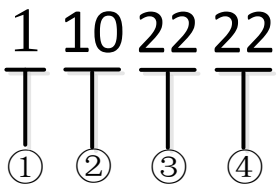
You can set system date and time.

Operation: [code command] +[OK]+[installer password].

Code command includes date command and time command, see below:



No.	Note
①	Code address, means the operation is to set system date, default is 2.
②	Year , range is 2000～2043.
③	Month, range is 1～12.
④	Day, range is 1～31.



No.	Note
①	Code address, means the operation is to set system tiime, default is 1.
②	Hour, range is 0～23.
③	Minute, range is 0～59.
④	Second, range is 0～59.

Note:

If you want to set date and time at the same time, please follow the above operation twice, set date first and then set time.

5.8.4 Reboot

Via keypad you can reboot alarm controller.

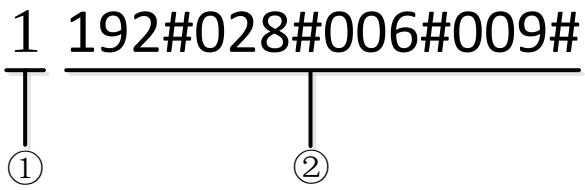
Operation method: enter [installer password].

5.9 COM Setup

5.9.1 Network

You can set controller IP address, subnet mask, gateway and port.

Operation method: [code command]+[OK]+[installer password].



No.	Note
①	Network parameter code：1-IP address，2-subnet mask，3-gateway，4-port
②	Address code, format is XXX#XXX#XXX#XXX#；or port, format is ［port］+［#］.

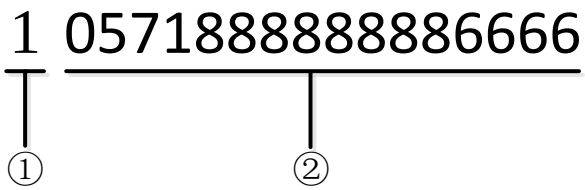
Note:

"#" can be replaced with "*".

5.9.2 Telephone

You can set 2 groups of tel alarm center and tel alarm center enable option.

Operation method: [code command]+[OK]+[installer password].



No.	Note
①	Tel number composition：1—set first group phone number，2—set second group phone number
②	Telephone number, max of 16 digits of number.

5.10 Output Setup

5.10.1 Siren Output

You can enable or disable siren output function.

Operation method: enter [code command] +[installer password]

Note:

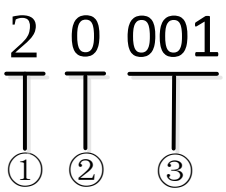
Code command: 1-enable force to output, 0-disable.

5.10.2 Alarm Output

You can set alarm output mode, and control alarm output.

- Set alarm output mode

Operation method: enter [code command]+[installer password]

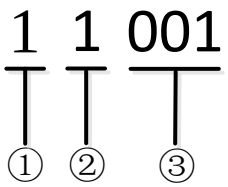


No.	Note
①	Code address, means this operation is to set alarm output mode, default is 2.
①	Alarm output mode：0-auto，1-force，2-OFF
②	Alarm output no., range is 001～064.

- Control alarm output

In auto mode, you can enable or disable alarm output.

Operation method: enter [code command]+[installer password].



No.	Note
①	Code address, means this operation is to control alarm output, default is 1.
②	Alarm output enable：1-enable alarm output，0-disable alarm output
③	Alarm output no., range is 001～064.

5.11 View System Status

5.11.1 Zone

You can search zone system status, including zone no., arm/disarm status (arm, disarm, bypass), alarm status (alarm, non-alarm), zone type (entry/exit, all day, delay. In delay display, front time is entry delay, and rear time is exit delay).

Operation method: enter [code command]+[OK]

Note:

Here code command is the zone no., range is 001~256. For example, for zone 1, enter 001.

5.11.2 Host Version

You can view versions of wireless alarm programming keypad and alarm controller.

Operation method: [OK].

Note:

- Wireless alarm programming keypad version is shown by letter “K”.
- Alarm controller version is shown by letter “F”.

5.11.3 System Time

You can view system time of alarm controller.

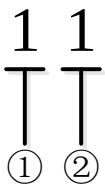
Operation method: [OK].

5.11.4 Communication

You can search controller IP address, subnet mask, gateway, port and RS485 address.

Operation method: enter [code command] + [OK] +[administrator/operator password]

- Search IP address, subnet mask, gateway and port no. commands are shown below.



No.	Note
①	Code address, means this operation is to search IP address, subnet mask, gateway and port.
②	Search content：1—IP address，2—subnet mask，3—gateway，4—port.

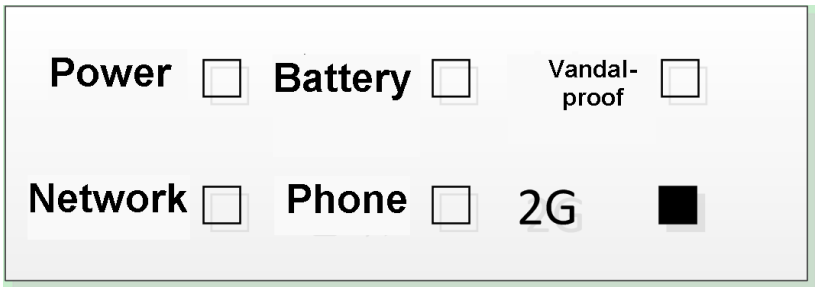
- Code command to search RS485 address: enter number 【2】.

5.11.5 Host Status

You can view each module status in alarm controller.

Operation method: [OK].

Result is shown below.



Note:

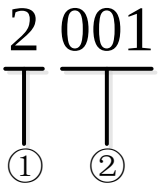
When check box is black, it means corresponding module has error. When check box is empty, it means corresponding module is normal.

5.11.6 Output

You can search controller siren status and output stauts.

Operation method: enter [code command] + [OK].

- Search siren status code command: enter number key 【1】.
- Code command to search output status is shown below.



No.	Note
①	Code address, means this operation is to search alarm output status of a certain zone, default is 2.

②	Alarm no., range is 001～064.

Appendix 1Contact ID Event Code

CID Code	Description
100	Medical
110	Fire
120	SOS sound
121	Duress
122	24-hour mute
123	24-hour sound
130	Robber
131	External zone
132	Internal zone
134	Entrance/exit zone
301	Main power outage
302	Low battery
350	Communication failure（MAC conflict, IP conflict, offline）
351	PSTN offline
401	Arm/disarm
403	Auto arm
405	Force to arm
408	Instant arm
441	Home arm
601	Manual test
602	Period test
945	HDD capacity warning
946	HDD failure

Note

- **For detailed operation introduction, please refer to our resource CD included in your package for electronic version of the *User's Manual*.**
- **Slight difference may be found in user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks mentioned are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website for more information.**