Bank Alarm Host User's Manual

Table of Contents

Welcome

Thank you for purchasing our Alarm Host!

This user's manual is designed to be a reference tool for the installation and operation of your system.

Here you can find information about features and functions, as well as a detailed menu.

Before installation and operation please read the following safeguards and warnings carefully!

Thank you for purchasing our Alarm Host!

Important Safeguards and Warnings

1．Electrical safety

All installation and operation here should conform to your local electrical safety codes.
We assume no liability or responsibility for all the fires or electrical 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 the device upwards. Handle it with care.
Do not apply power to the device before completing installation.
Do not place objects on the device.

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 device should be installed in a cool, dry place away from direct sunlight, inflammable, explosive substances and etc.

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.

7. Lithium battery
Improper battery use may result in fire, explosion, or personal injury!
When replace the battery, please make sure you are using the same model!

1 Product Overview

1.1 Introduction

This product is an alarm host designed for anti-theft purpose. It integrates alarm input, alarm output, access control, audio talk, audio push and other features. It adopts IP, GSM / GPRS transmission network. Two RS485 interfaces, with good expansibility can be linked with the DVR, to perform systematic design.

This product is suitable for bank ATM, intelligent substations, schools, office buildings monitoring system, safe city, digital campus and other fields.

1.2 Features

- 16-ch local alarm input, with vandal-proof function.
- 12-ch local NO alarm output, and alarm link output.
- 4-ch NO alarm output, may turn on/off AC 220V 10A power.
- 10/100M self-adaptive network port.
- GSM/GPRS network.
- 2 groups of independent RS485 data channels.
- Up to 5000 alarm event records with date.
- Remote user control, 1 remote data receiving center, multiple backup data receiving center.
- Remote alarm log retrieval, remote log output.
- Alarm event transmission in dual network main/sub switch.
- 1 group of network audio talk.
- 2 groups of access control ports. Audio prompt, anti-pinch and other mode available for selection. It supports local, remote direct control on door and e-lock.
- 1-ch controlling signal (DC 12V 1A) output.
- 1-ch external DC 12V 1A power supply, 1-ch DC 5V 1A power supply, which could supply power to alarm sensor.
- External standard battery (DC 12V) auxiliary power, auto charging control, support low voltage alarm.
- AC220V main power supply port, main/sub power switch, support alarm in case main power down.

1.3 Front Panel

Its front panel is shown in Figure 1- 1.

Figure 1- 1

Icon Name	Description
Status	Green：Device is running properly. Not ON：Device encounters abnormal event.
Network	Green：Network is well connected. Not ON：Network is abnormal.
Arm	Green：Device is fully armed or partially armed. Not ON：Not armed.
Unarm	Green：Device is unarmed. Not ON：Device is not in unarming status.
Door 1	Green：Door 1 access control function is normal and not triggered. Not ON：Door 1 access control function is abnormal or someone enters through door 1.
Door 2	Green：Door 2 access control function is normal and not triggered. Not ON：Door 2 access control function is abnormal or someone enters through door 2.
Z1～Z16	Green：Z1～Z16 corresponding zones have no alarm triggered. Red：Z1～Z16corresponding zones have alarm triggered.

1.4 Rear Panel

Its rear panel is shown in Figure 1- 2.
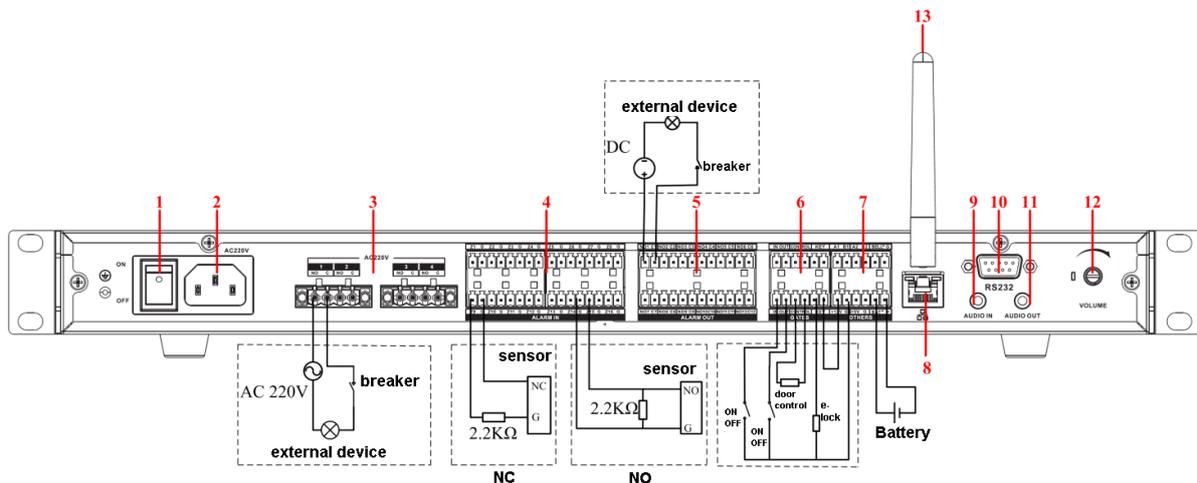
Figure 1- 2

Note:

1. **Device provides wiring port, insert power line or signal cable port into the wiring port and fasten screw. And insert set alarm port.**
2. **The exposed part of cable/wire does not go outside of hole.**

No.	Port Name	Port Description
1	Power Switch	Turn ON, OFF alarm host power.
2	Power Port	Please use the 3-pin power line to connect AC 220V in accessories.
3	Alarm Output Port（AC 220V）	4 groups of NO or NC alarm outputs, can directly control AC 220V 10A's power supply. Note: External load current cannot exceed 10A.

No.	Port Name	Port Description
4	Alarm Input Port（ALARM IN）	Switch alarm input. Note: 2.2K resistor wire on the host must be connected to the sensor side, for sensor of normally open or normally closed please see Figure 2-2.
5	Alarm Output Port（ALARM OUT）	External control of alarm output. Note: Alarm output ports in this part do not support ON/OFF power loading.
6	Access Control Port（GATES）	2 groups of access control ports, support local and remote direct control of door and e-lock. ● IN：connect access control entrance on/off ● OUT：connect access control exit on/off ● CONTROL：connect door move control port. ● KEY：connect e-lock control port. Note: E-lock section power is usually supplied by host DC12V 1A output port. When e-lock has external independent power supply, the voltage cannot exceed DC30V, and current does not exceed 1.5A.
7	Other Ports（OTHERS）	● A1, B1, A2, B2：2-ch RS485, manually connect alarm keyboard, may support input/output expansion. ● BELL：Alarm bell port, output may control DC 12V 1A, directly connect alarm bell, and alarm light. ● +12V：+12V 1A DC, supply external device. ● +5V：+5V 1A DC, support external device. ● BAT：Battery port, support DC12V standard lead-acid battery as aux power supply of alarm host.
8	Network Port	Please insert network cable.
9	RS232	To debug device, configure alarm host IP address.
10	AUDIO IN	Continuous pickup, MIC.
11	AUDIO OUT	Continuous speaker.
12	VOLUME	Audio output volume adjustment button. Rotate clockwise to volume +; rotate counterclockwise to volume -.
13	2G Antenna	2G module antenna（for only AF6016-G model）

2 SDK Client

You can login alarm host's SDK client to view and configure parameters of alarm host

2.1 Login

To login alarm host SDK client:

Step 1. In "AlarmDeviceDemo\Bin" folder, double click "ClientDemo_d.exe" file. System enters net SDK client homepage, see Figure 2- 1.
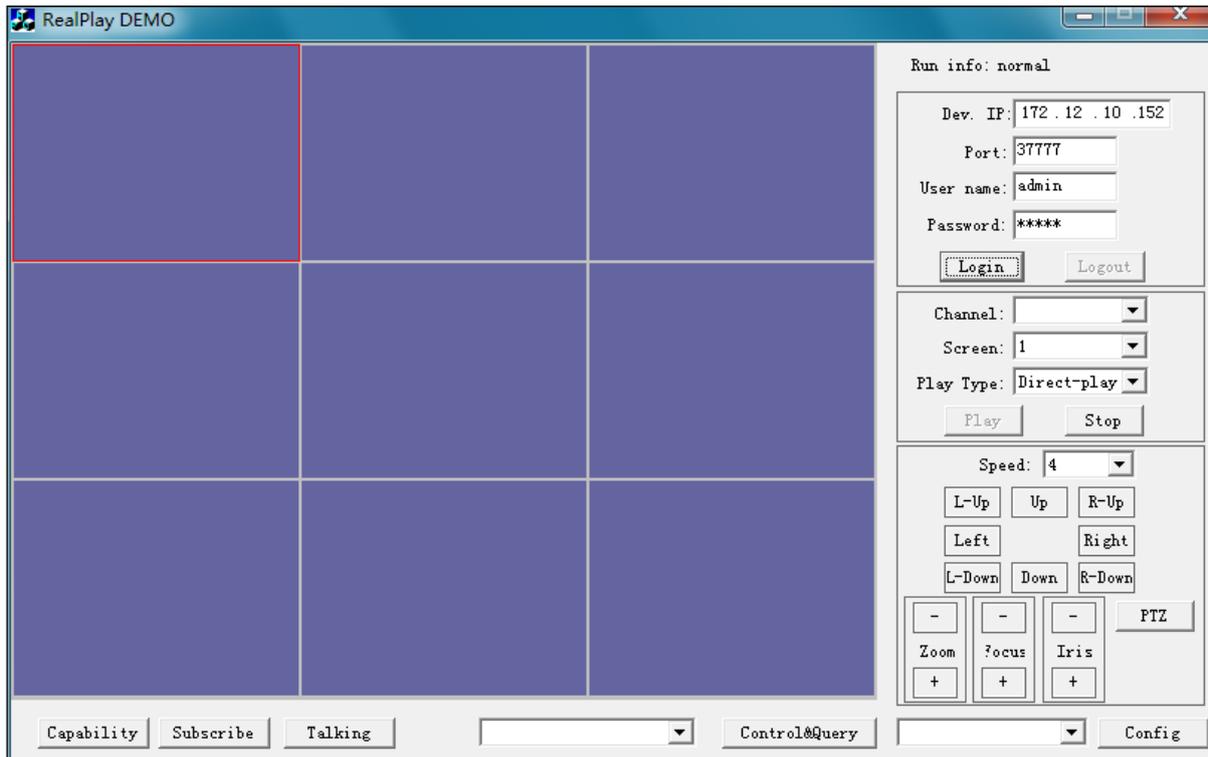
Figure 2- 1

Step 2. Enter device IP, port no., username and password. Click Login.

Note:

- **IP: device IP address, default is 192.169.1.108.**
- **Port no.: default is 37777.**
- **Username: admin**
- **Password: admin**
- **Click logout to logout.**

2.2 Device Configuration

You can configure device on zone on/off, alarm output, arm/unarm, mobile business, network, time, bypass, serial and etc.

2.2.1 Network

Wireless

Device supports wireless network connection, and to configure :

Step 1. In homepage, select wireless config in the dropdown list.

Step 2. Click Set. See Figure 2- 2.

Figure 2- 2

Step 3. Set parameters, please refer to Chart 2- 1.

Parameter	Note
Enable	Use wireless network or not, check to enable.
Keep Alive	If it does not use network within set period, it will be auto disconnected.
ANP	Select method to connect, default is：CTNET
Username	Username provided by service provider.
Password	Password provided by service provider.
Day 3G Flux Tatic (not available)	Flow control method. ● By flow：set daily flow usage max. ● By time：set daily flow time max.
Day 3G Flux Action	When flow exceeds limit, its strategy of alarm. ● Offline：auto disconnected. ● N/A：no any operation.
Day 3G Flux Up	Set daily limit for flow usage, when exceed this limit, it alarms according to strategy and controls network.
Day 3G Flux Use	Display current used flow.

Chart 2- 1

Step 4. Click Set.

Wired

You can setup network including device IP address, subnet mask and gateway.

Step 1. In homepage dropdown list, select Network.

Step 2. Click config. See Figure 2- 3.
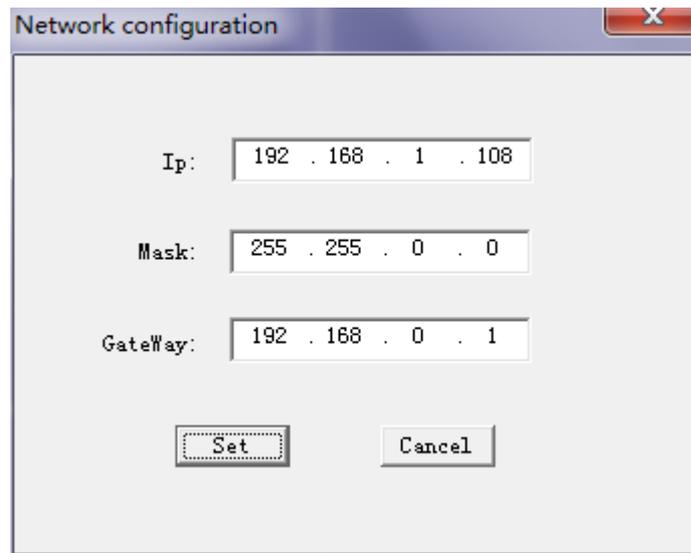
Figure 2- 3

Step 3. Enter device IP address, subnet mask, and default gateway.
Step 4. Click Setup.
Note:
- **IP: device IP address, default IP is :192.168.1.108.**
- **Default subnet mask is:255.255.255.0.**
- **Default gateway is:192.168.0.1.**

2.2.2 Time

You can set time and get time, and sync time with server.

Set and Get
Step 1. In Control&Search dropdown list, select device time.
Step 2. Click Control&Search, system shows current SDK system time, see Figure 2- 4.
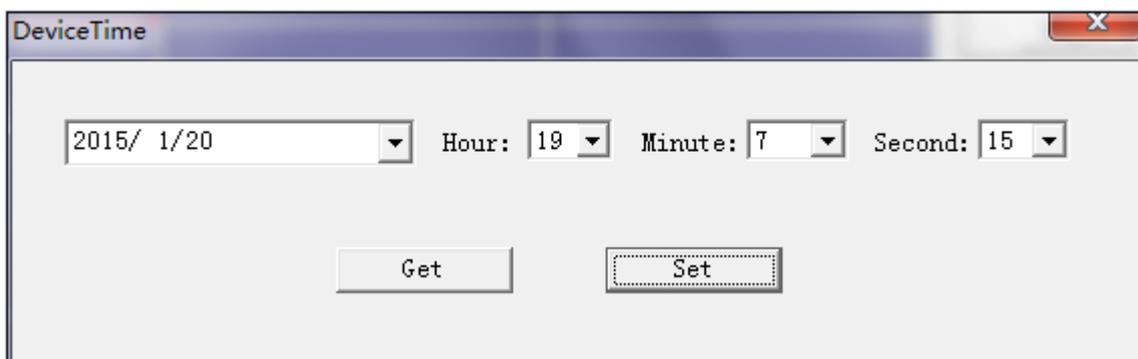
Figure 2- 4

Step 3. Click Get to view current device time.
Step 4. Click Setup to set device time.

Sync Time
Step 1. In homepage, select time sync server(cfg NTP) in dropdown list.

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Step 2. Click Set. See Figure 2- 5.
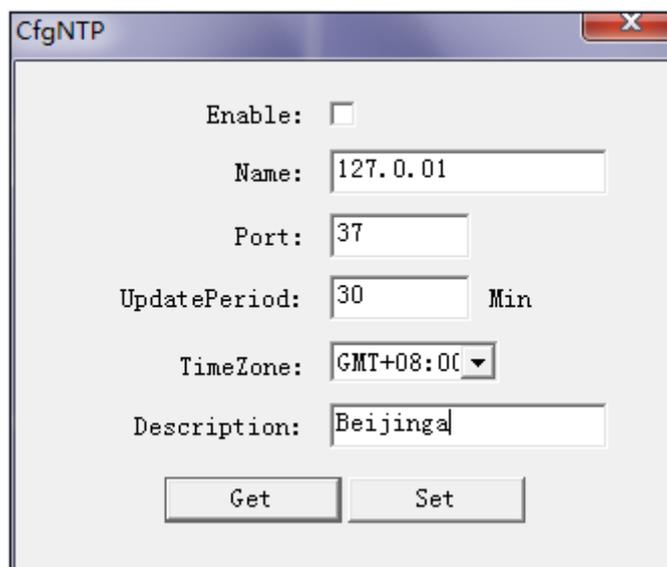
Figure 2- 5

Step 3. Click Get to get current config.
Step 4. Set parameters, see Chart 2- 2.

Parameter	Note
Enable	Enable time sync or not. Check to enable.
IP Address or Name	IP address of server you want to sync time with.
Port	Port of server to sync time.
Update Period	Sync time with server every X minute(s). X is the number you set.
Time Zone	Select time zone.
Description	Customize time zone name.

Chart 2- 2

Step 5. Set.

2.2.3 **Alarm Output**

You can configure corresponding channel alarm output mode.
Step 1. In homepage dropdown list, select alarm output config.
Step 2. Click Setup. See Figure 2- 6.
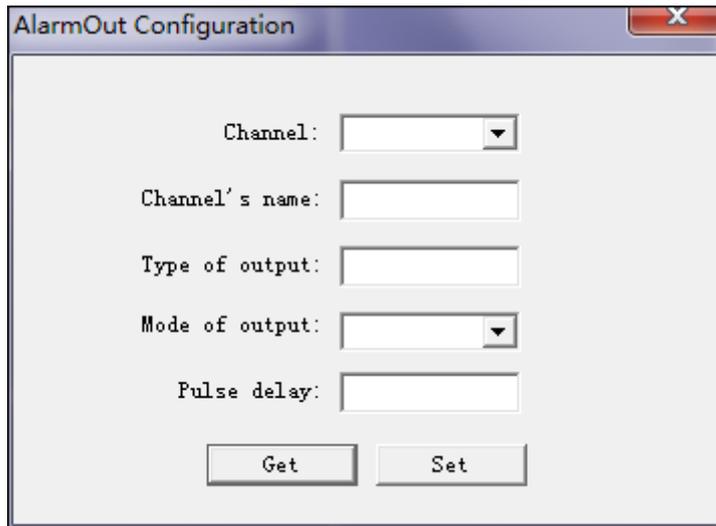
Figure 2- 6

Step 3. Click get to display existing configuration.
Step 4. Configure parameters. Please refer to Figure 2- 3.

Parameter	Note
Channel No.	Select configured channel no. The device supports 4-ch alarm outs.
Channel Name	Customize channel name.
Output Type	Customize output alarm name.
Output Mode	Select alarm output mode： ● Auto：Auto mode. ● Enforced：Enforce channel to alarm. ● Close：Close alarm output of channel.

Chart 2- 3

Step 5. Click Setup.

2.2.4 **Arm/Unarm**

Step 1. In Control&Search dropdown list, select arm/unarm.
Step 2. Click Control&Search. See Figure 2- 7.

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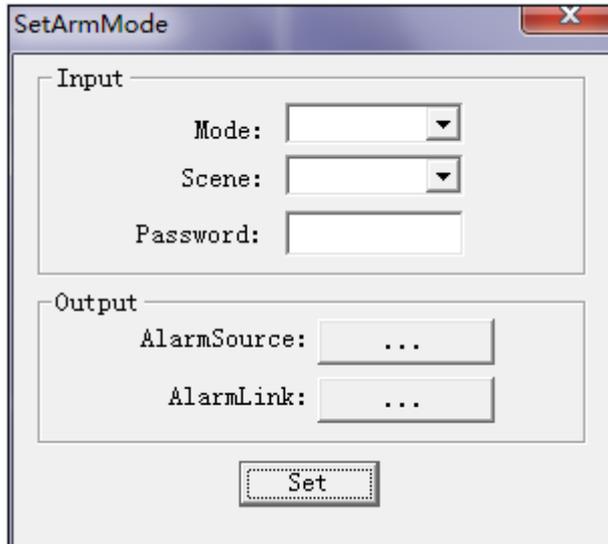
Figure 2- 7

Step 3. Set arming/unarming.
- Arm/unarm: only selections of arming or unarming.
- Scene: only supports out mode.

Step 4. Enter password.
Step 5. Click Setup.

2.2.5 **Bypass**

When device is in arming status, a zone is still monitoring peripheral sensor and take record, however, it will not send to users. When a device changes from unarming status to arming status, original bypass zone will become non-bypass status as in arming status.
Step 1. In Control&Search dropdown list, select bypass. See Figure 2- 8.
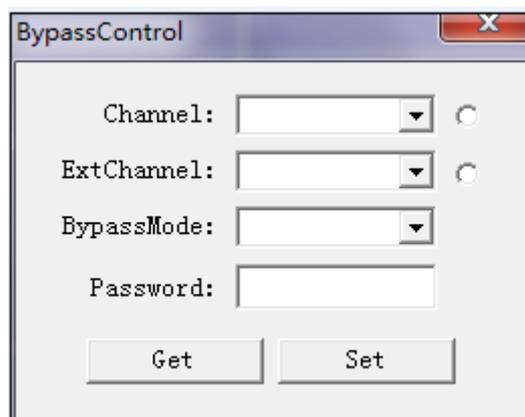
Figure 2- 8

Step 2. Set bypass.
  a) Select channel and mode, enter password.
  b) Click Setup.

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Note:
- **Cancel bypass: cancel "status" and corresponding local channel, enter password. Click Set.**
- **Get bypass status: click get local channel and set channel you want to view. Click Get. And click get local channel to view corresponding channel's bypass status.**

2.2.6 **On/Off Zone**

On/off zone configuration includes local alarm input channel, zone, sensor type and alarm link.

Step 1. In homepage dropdown list on the right, select on/off zone.

Step 2. Click Setup. See Figure 2- 9.
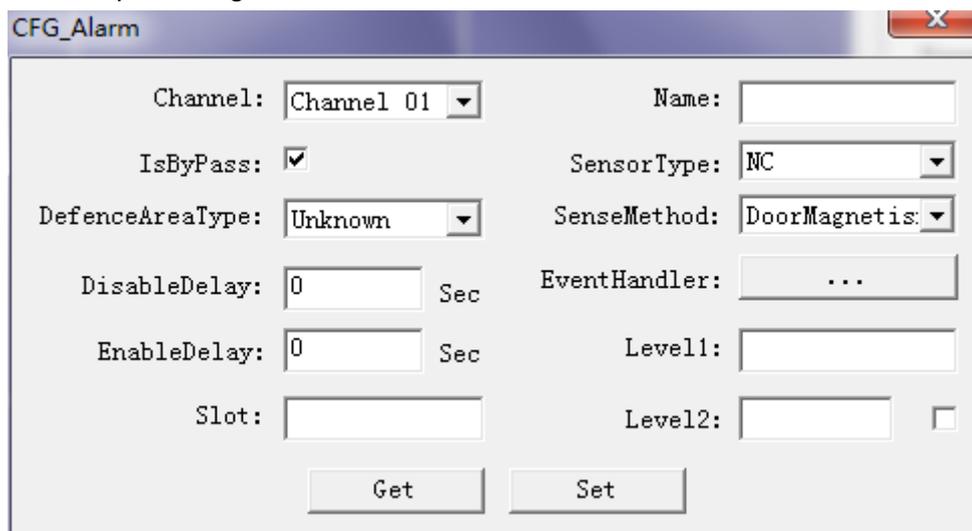
Figure 2- 9

Step 3. Click get to display existing configuration.

Step 4. Set parameters, please refer to Chart 3- 1.

Parameter	Note
Channel No.	Local alarm input channel no. It supports 16-ch alarm input.
Name	Customize channel name.
Bypass	Read-only.
Zone Type	After unarming, zone alarm upload time. ● Instant zone ● Delay zone ● All-day zone
Enter Delay	Time enter zone, when zone type is delay zone, if enter delay is 10s, then when zone alarm is triggered, user has 10S to unarm. If user successfully unarms within 10S, it will not link alarm. Otherwise, it alarms.
Exit Delay	Time exit zone, when zone type is delay zone, if exit delay is 10s, then when user set arming, which come into effect in 10s.
Sensor Type	According to sensor type, select NO or NC.
Sensor Method	Device supports the following sensor method： ● Door ● Passive IR ● Active IR ● Call Button ● Other

Link	When there is alarm input, you may auto link alarm output channel, please refer to step 5.

Chart 3- 1

Step 5. Click [· · ·] next to link setup. See Figure 2- 10.
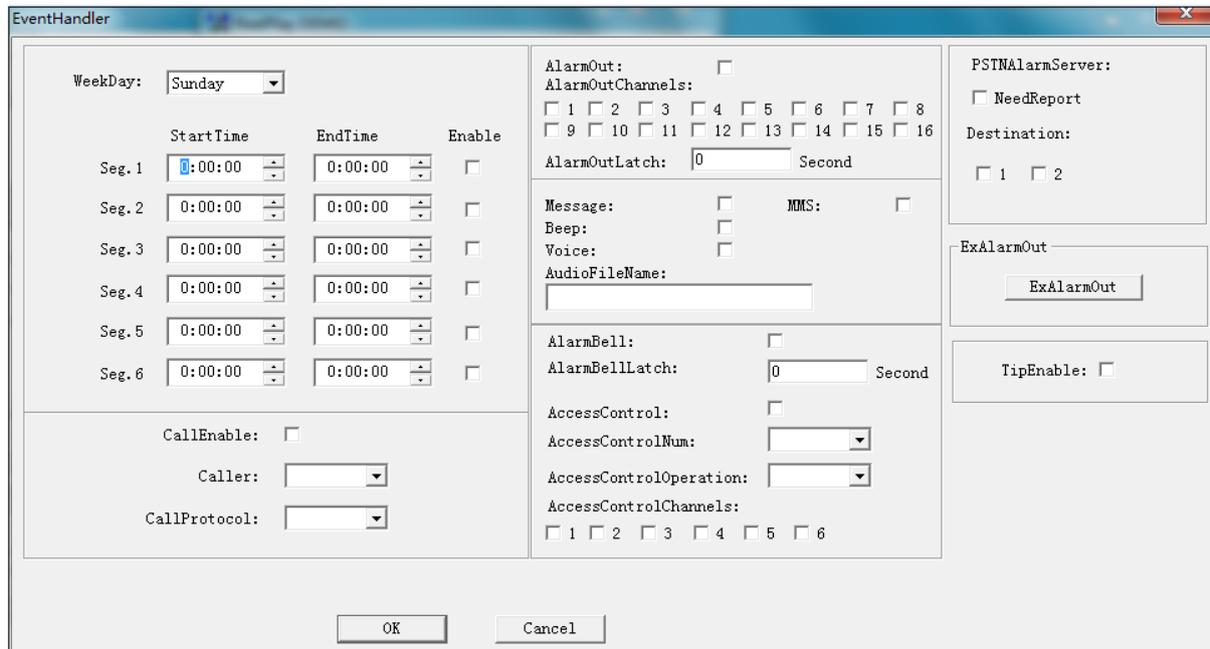
Figure 2- 10

Step 6. (Optional) When period arming is required, you must manually set arming period, you can set different periods in different weeks by checking box next to each period. Do not check box of period you do not want to enable. Period cycle unit is week.

Step 7. Set link parameters, please refer to Chart 2- 4.

Parameter	Note
Audio Call Enable	Enable audio talk call function or not, check enable if you want to use it. (not available）
Audio Call Calling Party	Device as calling party by default (not available)
Audio Call Protocol	Protocol is Cellular by default. (not available)
Alarm Output	Enable alarm output or not, check enable if you want to use it.
Alarm Output Channel	Check alarm output channel no.
Upload to Alarm Server	Upload to alarm server or not, check enable if you want to use it. (not available)
Mms	Send SMS or not.
Buzzer	Enable buzzer or not, check enable id you want to use it.
Prompt	Enable audio prompt or not, check to enable.
Link Audio File Absolute Path	After audio prompt is enabled, enter audio file name. Full name can be searched via file search. Please refer to Ch 2.3.8.
Alarm bell	Enable alarm bell or not, check enable if you want to use it.
Access Control	Enable access control or not , check to enable.
Access Control	Select access control channel.

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Parameter	Note
Channel	
Access Control Opration	Select from: ● No operation ● Auto ● Open ● Close ● Always open ● Always close

Chart 2- 4

Step 8. Click OK. Return to On/Off Zone configuration page.

Step 9. Click Setup to set complete.

2.2.7 Play Sound

Device supports play sound function. You can customize sound file, and upload or download file.

Step 1. In Control&Search dropdown list, select play sound.

Step 2. Click Control&Search. See Figure 2- 11.
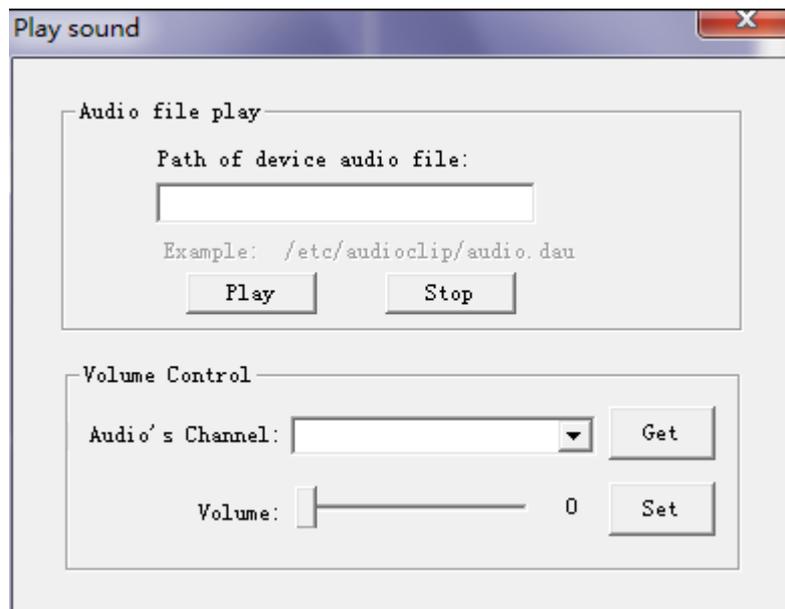
Figure 2- 11

Step 3. In sound file path, fill in file name of sound file you want to play. You can search out file name via file search. Please refer to Ch 2.3.8.

Step 4. Click Play.

    Note:

    ● Device default file format is wav.

    ● Sampling rate: 8Kbps.

    ● Data bit: 8

    ● File size does not exceed 256K.

Volume Control

Step 1. Open sound play interface.

Step 2. Select sound channel, default is 1. Click Get, volume bar will show current position of volume setup.

Step 3. You can remotely adjust volume on the bar by dragging it and click Set.

2.2.8 File Upload and Download

Step 1. In Control&Search dropdown list, select upload/download.

Step 2. Click Control&Search.

Step 3. Upload or download audio file.

    a) Click file, select file path.

    b) Click upload or download.

    Overtime: When upload or download time exceeds this time limit and operation is not complete, it will return error code.

2.2.9 Serial Config

You can connect external device via RS232.

Step 1. In homepage, select serial configuration on the right.

Step 2. Click Set. See Figure 2- 12.
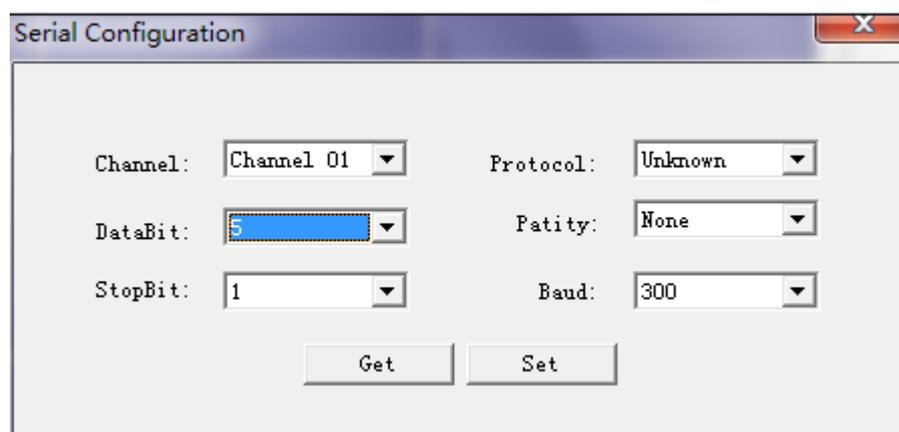
Figure 2- 12

Step 3. Click Get to see current config.

Step 4. Select serial channel, protocol and set each parameter.

    Note:

    Default baud rate: 115200.

    Default data bit: 8

    Default parity bit: 1

    Default stop bit: 1

Step 5. Click Set.

2.2.10 Access Control

You can set access control.

Access Control

You can set sound, channel, status and mode for access contol.

Step 1. In homepage, select access control(access manager) in dropdown list on the right.
Step 2. Click Set. See Figure 2- 13.
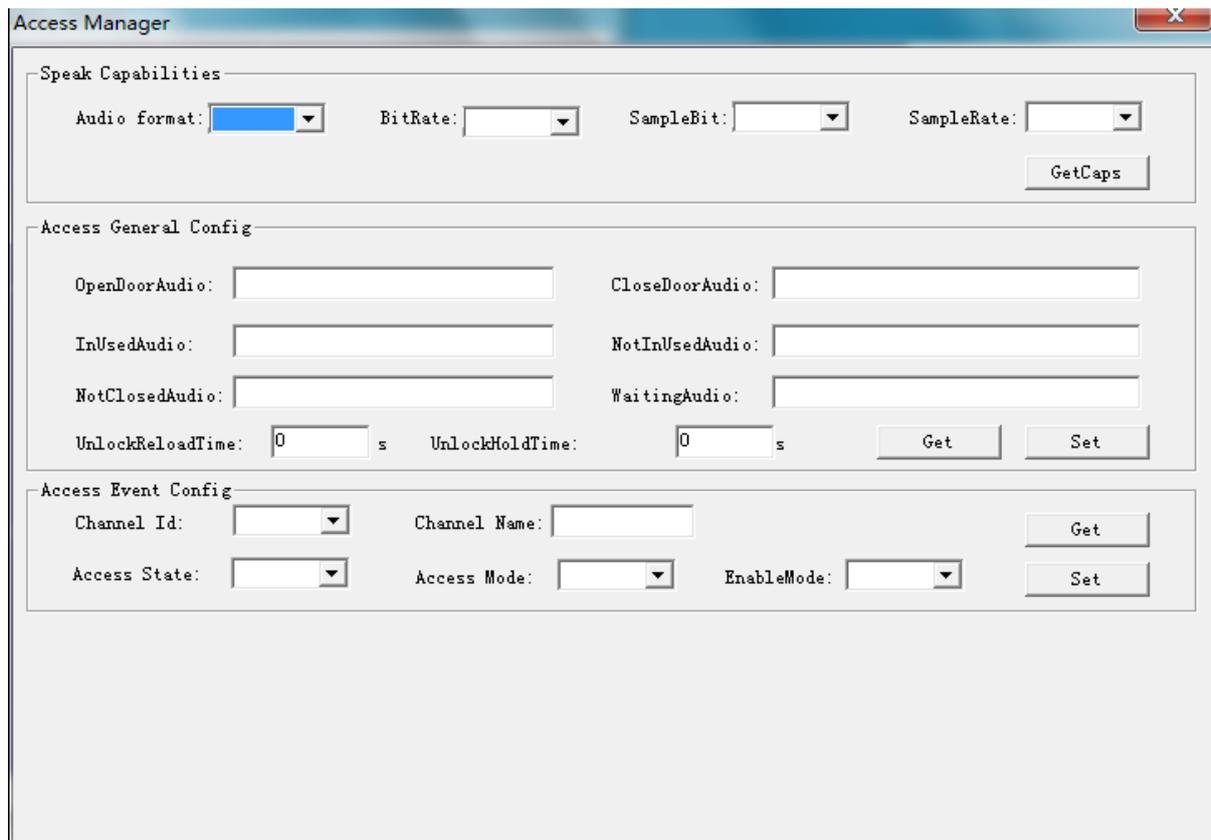
Figure 2- 13

Step 3. Config corresponding parameters, please refer to Chart 2- 5.

Parameter	Note
Speak Capabilities	Click get capabilities, and you can view audio format, bit rate, sample bit and sample rate. (not available)
Access General Config	Via access general config, you can set prompt sound to different statuses. Unlock reload time: interval between two commands. If you command for more than one time during this period interval, system will only process the first command. Unlock hold time：time that door remains open.
Access Event Config	Channel ID：select channel no. to set access control. Channel Name：customize channel name. Access Status：includes NO, NC and normal. Access Mode: when current access status is normal, system executes access mode, including anti-pinch and etc. Enable Mode：According to choose a high or low relay, high relay corresponds to door relay enable is ON, low relay corresponds to door relay enable is OFF.

Chart 2- 5

Open Access
Compel a certain channel to unlock.
Step 1. In homepage, select open in dropdown list on the right.
Step 2. Click Set. See Figure 2- 14.
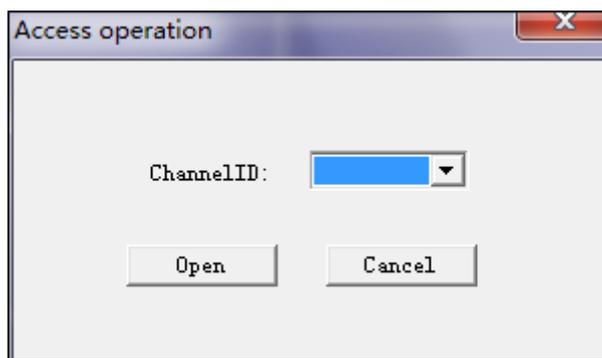
Figure 2- 14

Step 3. Select channel no. and click open.

2.2.11 **Modify Password**

You can change system password.
Step 1. In Control&Search dropdown list, select modify password.
Step 2. Click Control&Search. See Figure 2- 15.
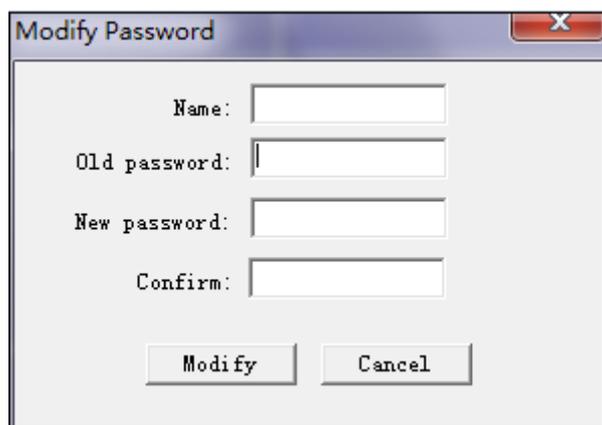
Figure 2- 15

Step 3. Enter username, old password, new password and confirm.
Step 4. Click modify.

2.2.12 **Battery Search**

You can search battery's power and status.
Step 1. In Control&Search dropdown list on the right, select battery power.
Step 2. Click Control&Search. See Figure 2- 16.

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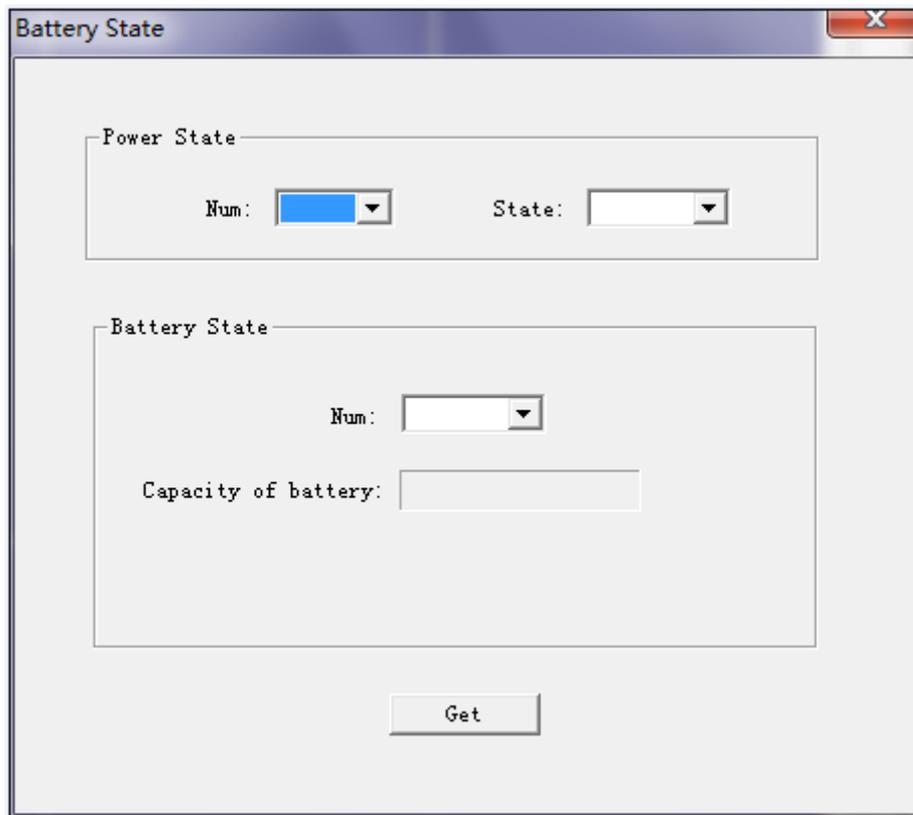
Figure 2- 16

Step 3. Click Get to search.

Note:

- **Power no.: power 1 represents main power (AC 220V).**
- **Power state: "ON" means power supply is normal. "OFF" means power supply ha leakage, and will generate corresponding alarm event.**
- **Battery no.: Battery 1 represents backup battery.**
- **Battery capacity state: it shows current battery capacity. When battery voltage is below 10V, status is 0 and generate low-voltage alarm event.**

2.2.13 **Mobile Business**

Device supports SMS service, you can send SMS to mobile phone number in setup.

Step 1. In homepage dropdown list on the right, select mobile business configuration.

See Figure 2- 17.
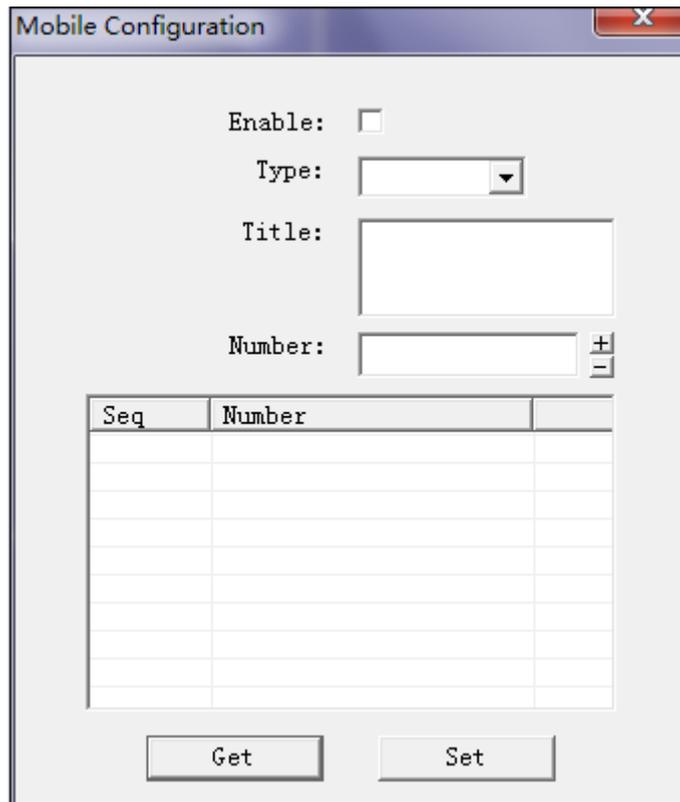
Figure 2- 17

Step 2. Check enable switch to enable mobile business.

Step 3. Select SMS type as SMS, enter info title and mobile phone you want to receive SMS.

Step 4. Click Setup.

2.2.14 Get Alarm Channel Status

You can search status of each alarm channel.

Step 1. In Control&Search dropdown list, select channel status.

Step 2. Click Control&Search. See Figure 2- 18.

Figure 2- 18

Step 3. Select search type, and fill in quantity of channel to search. Click get status.

Note:

- **Alarm input channel: corresponding alarm source, if "status" is checked, it means alarm occurs.**
- **Alarm output channel: corresponding alarm output channel, if the channel is checked, it means it has output. Under NO status, it is checked when relay is closed.**
- **Alarm bell channel: corresponding alarm bell, checked if alarm bell has output.**

2.2.15 **Get Active Zone (defence area) Status**

You can search if each zone is active.

Step 1. In Control&Search dropdown list, select get active zone, click Control&Search. See Figure 2- 19.

Figure 2- 19

Step 2. Click get, active zone chart will show corresponding active zone channel no. and activation time. You can cancel alarm with this informatin given.

Note:

Alarm input active zone expansion is currently not avaialble.

2.3 Device Management

2.3.1 Device Capacity

In homepage click device capacity, you can see Figure 2- 20, where you can view alarm host capacity in processing alarm input/output and etc.
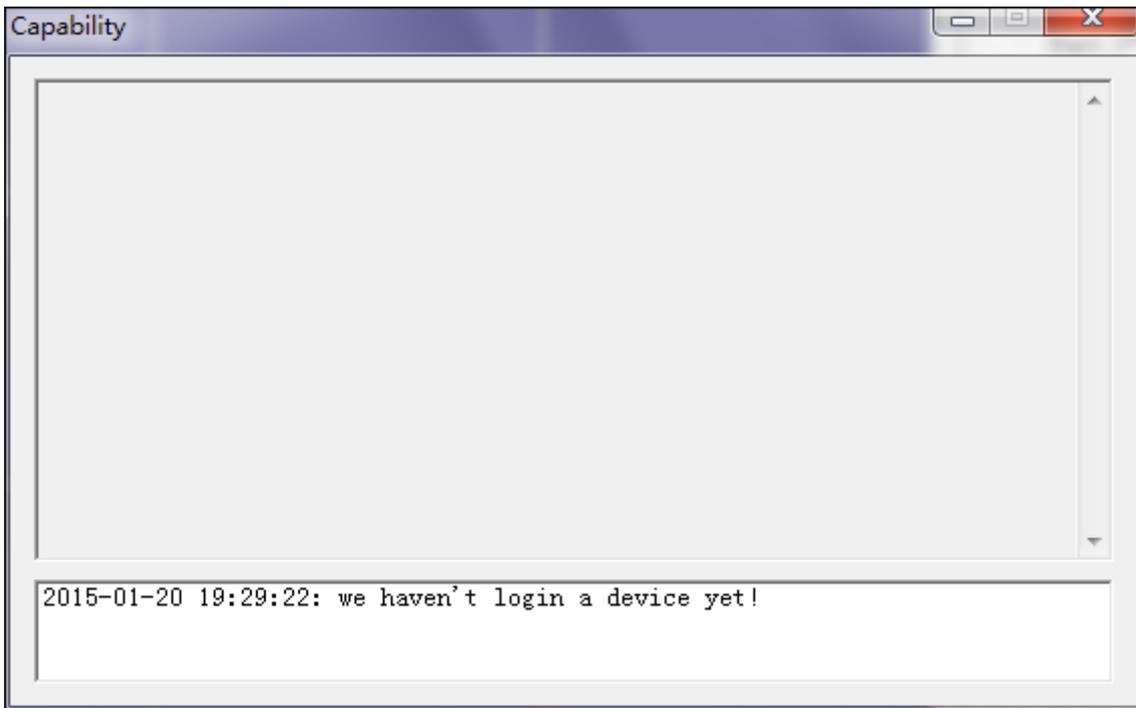
Figure 2- 20

2.3.2 Alarm Subscription

You can subscribe alarm event and cancel alarm in channel.

In homepage click alarm subscribe, see Figure 2- 21.
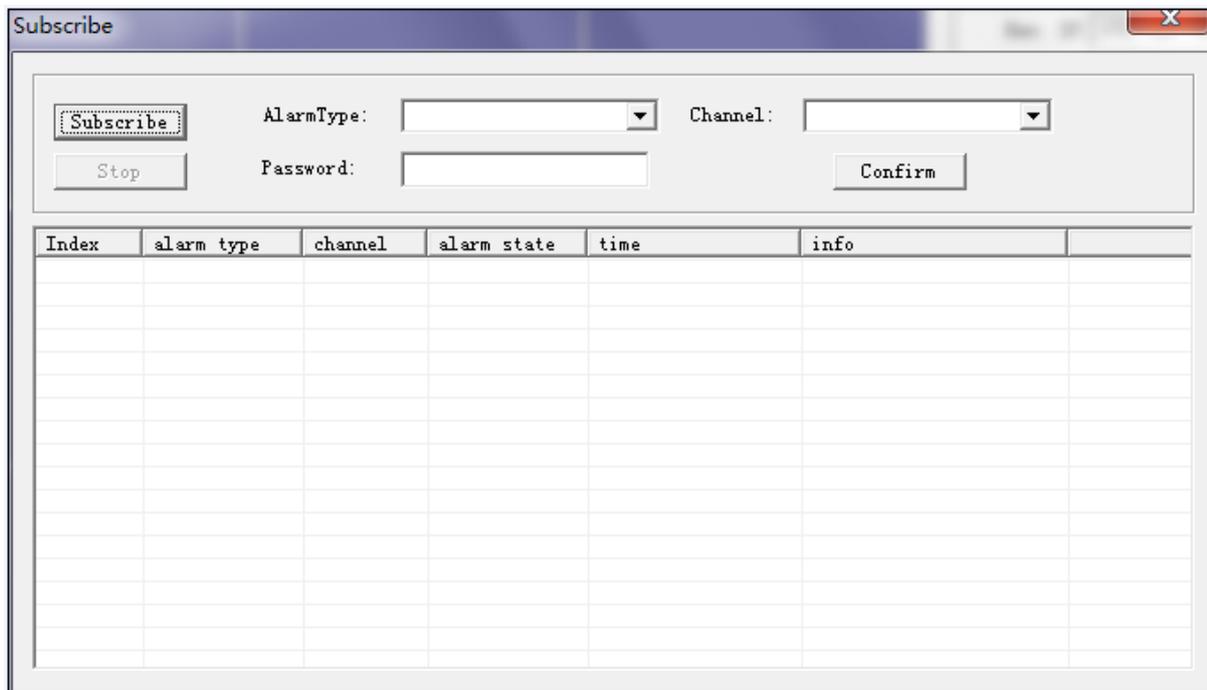
Figure 2- 21

- Click subscribe event, device will report current alarm and abnormal event one by one.
- On the right in the interface, select channel no. anf event type to cancel alarm, fill in password, click cancel alarm to remove alarm event.

Note:

- **After you subscribe, if alarm input is triggered, before it is triggered, device will auto report its corresponding channel and time of event. After it is triggered, device will auto report Stop event of current channel at current time.**
- **Power failure or vandal-proof is triggered, system will report both events.**
- **Alarm cancellation is a re-check after alarm source is triggered and linked output. After alarm is cancelled, device will close corresponding alarm source's link output.**

2.3.3 Alarm Bell Control

You can control alarm bell output.
In Control&Search dropdown list select alarm bell control, and click Control&Search.
See Figure 2- 22.
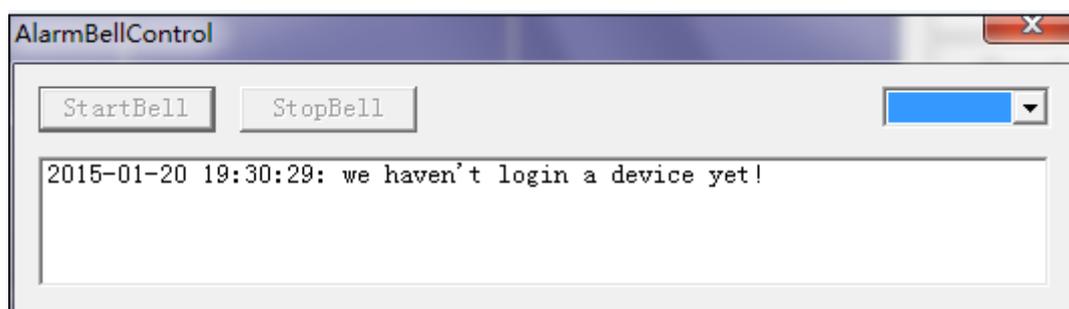
Figure 2- 22

- Click enable alarm bell output to start output.
- Click disable alarm bell output to stop output.

2.3.4 Reboot Device

You can remotely reboot the device via API.

2.3.5 Reset

You can reset device to default settings.
In Control&Search, click default, select reset all to restore all default settings.
Note:
You can only reset all for now.

2.3.6 Log Management

You can view log information in log management.
Step 1. In Control&Search dropdown list, select log management, and click Control&Search. See
 Figure 2- 23.
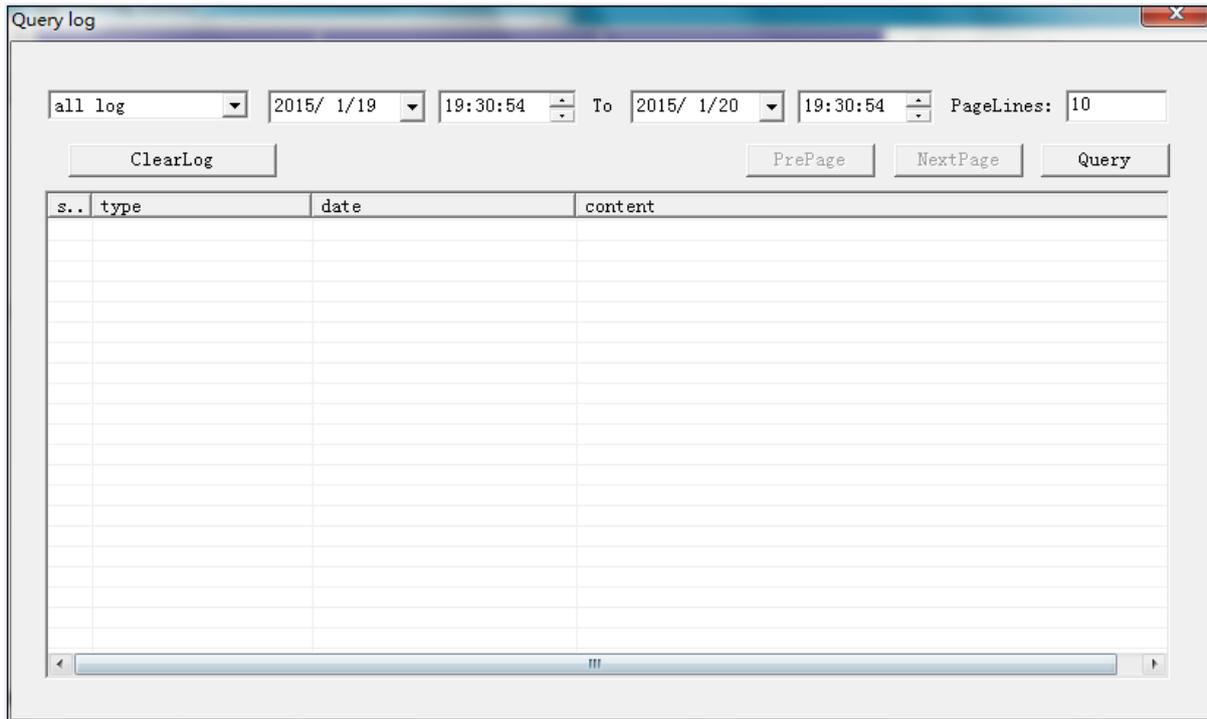
Figure 2- 23

Step 2. Select log type and time.
Step 3. Click search. Then you can start to view log.

2.3.7 **Delete Log**

You can delete all logs by deleting log API port.

2.3.8 **File Search**

You can search audio file name and path.
Step 1. In Control&Search dropdown list select file search and delete, click Control&Search. See
Figure 2- 24.
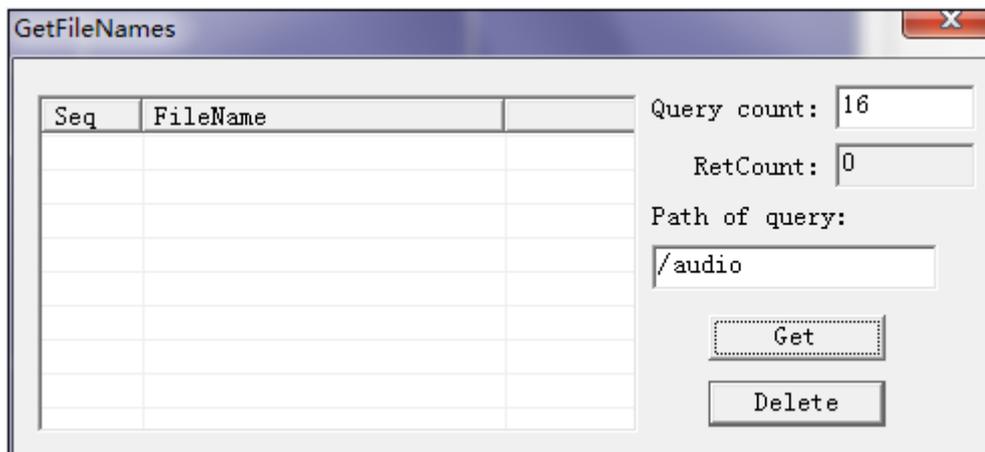
Figure 2- 24

Step 2. Click get to view all audio file names and paths.

2.3.9 **Talk**

You can talk via the audio talk interface.

Step 1. In homepage, click talk.

Step 2. Select format and channel no.

Step 3. Click start talk.

2.3.10 **Version**

You can view client version information in version interface.

2.3.11 **User**

You can search user login condition via user information.

Step 1. In Control&Search dropdown list, select user info, and click Control&Search. See Figure 2- 25.
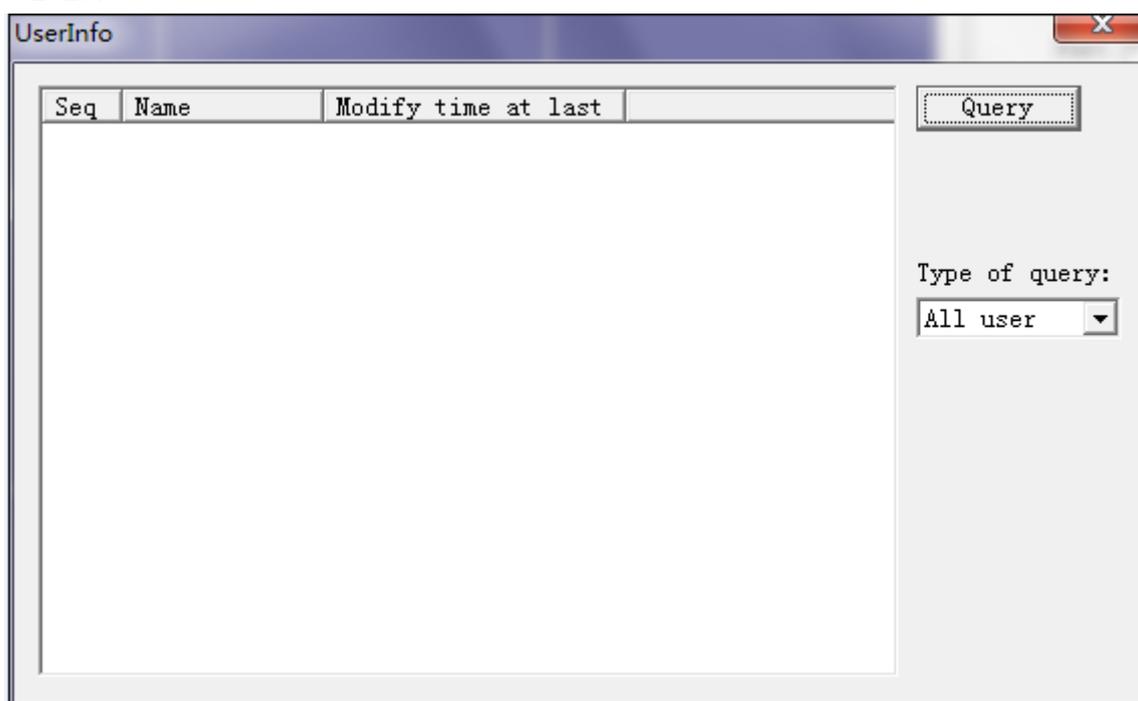
Figure 2- 25

Step 2. Select search type.

Step 3. Click start search.

2.3.12 **Remote Upgrade**

You can remotely upgrade the device.

Step 1. In Control&Search dropdown list, select remote upgrade, and click Control&Search. See Figure 2- 26.
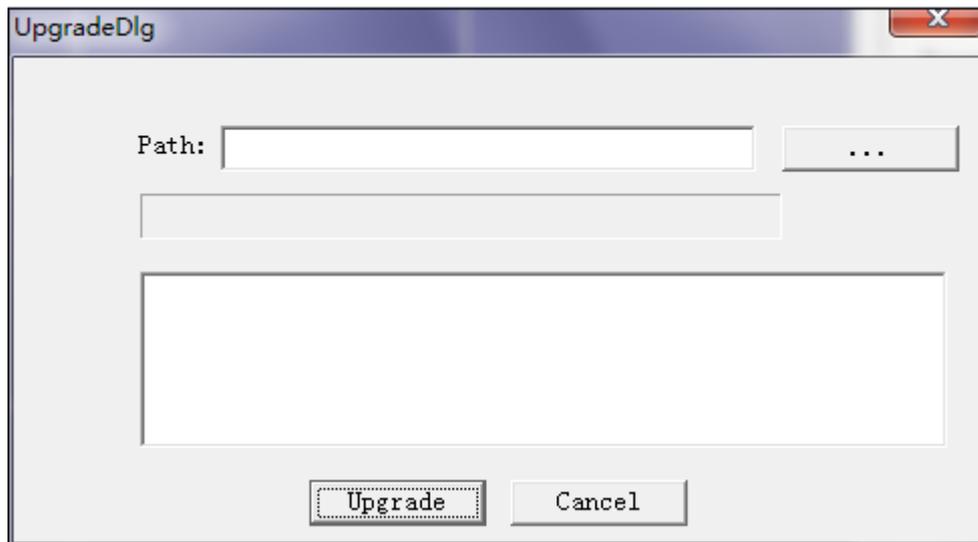
Figure 2- 26

Step 2. Click [. . .], select upgrading file.

Step 3. Click upgrade to remotely upgrade device.

Note:

Under normal condition, when upgrading file is uploaded successfully, device will auto reboot to upgrade.

If the device does not reboot automatically, please check if watch dog code is normal (Motherbozrd K3 dial code 1 to ON).

3 Alarm Programming Keyboard

The alarm host can connect alarm programming keyboard to set arming/unarming and view its operation status.

3.1 Wiring

Connection of device and alarm host is shown in Figure 3- 1. "B" and "A" ports are connected to alarm host for 485 communication. "-" and "+" are GND and +12V port respectively.

When alarm host works normally, after wiring is set correctly, device will generate "DU" sound which means it is successfully powered up. Meanwhile, device LCD screen is on, indicator flashes which represent successful registration. Now keyboard and host can work.
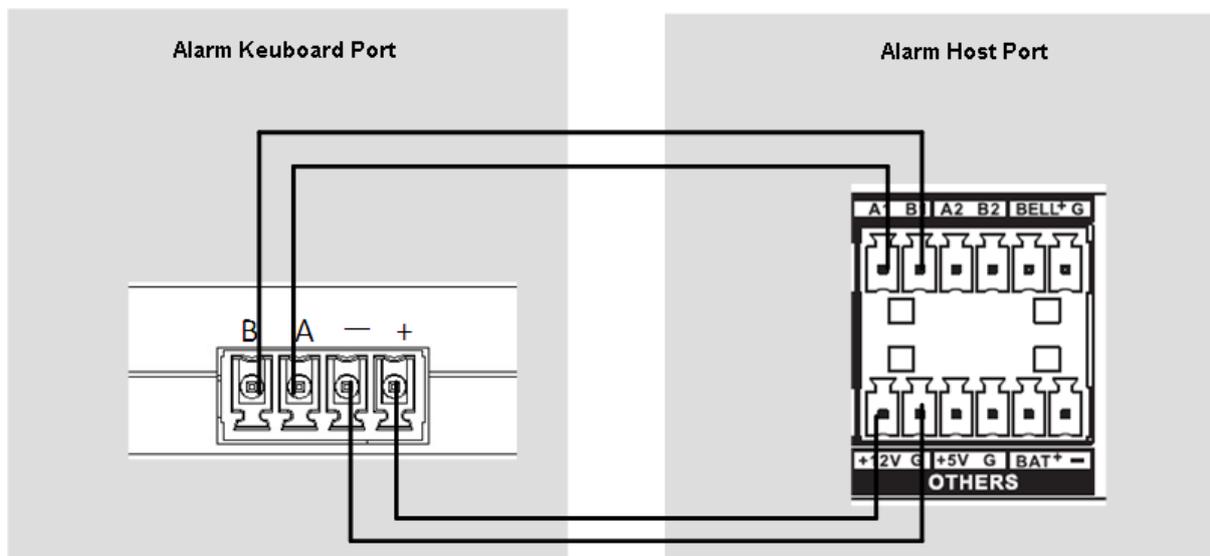
Figure 3- 1

3.2 Function

The device boots up, wait for the device registered to the alarm host, press the Menu button to enter the correct password, press the ENTER key to enter level 1 menu. Level 1 menu include: arm and unarm, zone settings, access control settings, other settings, communication settings, output settings, system status.

3.2.1 Before Operation

- When keyboard powers on for the first time, prompt the user to set the address, it is recommended that you set a different address different keyboard.
- Press * key to enter the arming interface, press the other shortcut keys to enter the "zone1-zone16" interface, saved operation is still in arming.
- In "Save or Not?" interface, the following buttons are invalid shortcuts: arm, unarm, bypass, cancel bypass, cancel alarm.
- In "Same 485Addr Exit" interface, the following buttons are invalid shortcuts: arm, unarm, bypass, cancel bypass.

- In half input of the password, such as password: ***, the following buttons are invalid shortcuts: fire, police.

Common LCD screen prompt:
- Set Fail：Host setup error.
- Authority Fail：User right is not authorized to perform certain operations.
- Function Fail：Host setup failed.
- Unknown Command：Host version and keyboard version do not match.
- Not Support：Host does not support current operation.
- Time out,Try Again：No replay received for command sent.
- Reading.：Reading host status.
- Setting.：Host is responding keyboard setup operation.
- If normally mount keyboard automatically turns in, and prompt "Same 485Addr Exit", then a keyboard with same address exists.

Note:
When the keyboard with same address exists, you modify the keyboard address, otherwise the situation will require multiple operations before it is successful.

3.2.2 **About Keyboard Operation**

- Press PgUp key, PgDn keys to select the previous page, next page..
- After all configuration operations require that you enter the correct password before the configuration take effect.
- By 0-9 number keys, enter the zone number, access number. For example: 001.
- You can search parameter config result or host operating status in the "System Status", the search process do not require password.

3.3 Arm-Unarm

The device supports to arm, unarm, bypass, cancel bypass, via main menu or shortcut key to enter configuration page.
Note:
When you select zone, you can select one, multiple or all zones. Press OK button to select, and if you press OK button again, the selection will be cancelled.

3.3.1 **Arm**

When alarm host and sensor both work as normal, you arm zone via keyboard, alarm host will respond alarm in the zone. For example to arm zone1 and zone2.
Step 1. Long press * key, enter "zone1-zone16" interface.
Step 2. Select zone1, press OK button; select zone2 via PgDn key, and press Enter.
Step 3. Press Menu key, following instructions on LCD screen, press OK key to save.
Step 4. Enter correct password, and press OK.

3.3.2 **Unarm**

Double press * key to enter zone1-zone16 interface, steps of unarm and arm are similar, please refer to Ch 3.3.1.

3.3.3 **ByPass**

After entering bypass operation, designated zone sensors will fail from the entire sensor groups, bypassed zones will not be protected, arm, unarm operations are invalid.
Press # to enter "zone1-zone16" interface, bypass operation and arm operation are similar, specific steps refer to Ch 3.3.1.

3.3.4 **Cancel ByPass**

Double press # button to enter zone1-zone16 interface, bypass cancellation operation and arm operation are similar, specific steps refer to Ch 3.3.1.

3.4 Zone Settings

Device supports intime zone, 24-h zone, delay zone. Input range of zone no.:0~255; input format must be three digits, i.e. 001.

3.4.1 **Intime**

Intime is valid only at arming status, and invalid at bypass and unarming status. Device receives alarm signal and trigger alarm. For example set zone2 to intime zone.
Step 1. Press Menu button to enter level 1 menu, select zone settings, and select Intime.
Step 2. LCD shows Input, you shall enter zone no. (i.e. 002).
Step 3. Press Enter button, and enter password.

3.4.2 **Fullday**

Regardless of arming, bypass, fullday (24-h) zone is always in arming, which means it will trigger alarm right after it receives alarm signal.
Please refer to Intime section for operation.

3.4.3 **Delay**

Delay zone setting includes enter delay and exit delay.
● Enter Delay: Time start from alarm is triggered, if during the time period no unarm operation is performed, it will alarm. (Delay time for 0 to 300 seconds). For convenience of staff operation. avoid alarm.
● Exit Delay: Time start from zone is armed, after a period of delay arming feature takes effect. (Delay time for 0 to 300 seconds). For convenience of staff operation, and when they leave zone, it will not alarm.

Example: Set zone 2 as delay zone, enter 30s delay, exit delay 20s.

Step 1. Press Menu button to enter level 1 menu, select Zone Setting, and select Delay.
Step 2. LCD screen shows "Input", please enter "002030020". "002" represents zone2, 030
     represents enter delay 30s, and "020´ represents exit delay 20s.
Step 3. Press OK button, and enter password.

3.5 Door Setting

3.5.1 Mode

Access control working mode includes: anti-pinch and other types, represented by 1, 2, 3.
To set access control mode:

Step 1. Press Menu button to enter level 1 menu, select "Door Setting", and select "Mode".
Step 2. LCD screen shows "Input:", please enter corresponding code of mode.
Step 3. Press OK, and enter password.

3.5.2 Status Control

Access control status includes: on, off, represented by 1 and 0 respectively.
Step 1. Press Menu button to enter level 1 menu, select Door Setting, and select Status.
Step 2. LCD screen shows "Input:", please input corresponding code.
Step 3. Press OK button, and enter password.

3.6 Other Settings

Other settings includes: host reset, reboot, keyboard initialization, password change, system time, key sound.

3.6.1 Reset

You can reset alarm host via keyboard and alarm host will reboot and restore default setup.
Press Menu button to enter level 1 menu, select Others Setting, and select Reset. Enter correct password, press OK button.

3.6.2 Reboot

You can reboot alarm host via keyboard.
Press Menu button to enter level 1 menu, select Others Setting, and select Reboot. Enter correct password, press OK button.

3.6.3 System Time

Device system time settings include: 1 indicates the time setting (hour, minute, second), 2 indicates the date setting (year, month, day).

Format of hour, minute, second, month and day are two digits, like: XX. Format of year is four digit, like: XXXX. Ranges of hour, minute, second are: 0 - 23,0 - 59,0 to 59 respectively. The maximum range of the year, month, day allowed are: 2000~2043,1 ~ 12,1 ~ 31 respectively.

Step 1. Press Menu button to enter level 1 menu, select Other Setting, and select System Time.
Step 2. LCD screen shows "Input:", please enter code, and press OK button. Enter password.
Step 3. Select System Time again, LCD screen shows "Input:", now enter code, and press OK button, and enter password.

3.7 Communication Setting

3.7.1 Net

Network config includes: IP address, subnet mask, gateway, port no., represented in 1, 2, 3, 4.
IP address, subnet mask, gateway format are all XXX#XXX#XXX#XXX# (# can be changed to *).
Port no. range is 0~65535.
Step 1. Press Menu button to enter level 1 menu, select Comm Setting and select Net.
Step 2. LCD screen shows "Input:", enter number code. Please note that first digit 1 represents current setting of IP address.
Step 3. Press OK button, and enter password.
Tips:
If to set port no. to 37777, then input 437777 and to set gateway to 255.255.0.0, input 3255#255#0#0#.

3.7.2 GSM

Device supports up to 3 groups of GSM number.
Steps to set GSM are similar to steps of telephone number.

3.7.3 RS485 Address

Set device RS485 address, range 001~016 which is auto allocated by host.

3.7.4 2G

Number 1~4 have the following definitions:
1: Indicates enabled status. Then enter 1 means enabled, 0 means disabled.
2: the daily flow control strategy. Then enter 1 means the flow (unit: M), 0 means the time (unit: Min).
3: Indicates daily traffic usage limits. It ranges from 0 to 65,535.
4: Indicates flow alarm strategy. Then enter the number 1 indicates the upper limit does not exceed a preset alarm, numbers 0 means exceeds a preset limit is disconnected from the network.
Example: Enable 2G and set daily flow limit to 500.
Step 1. Press Menu button to enter level a menu, select Comm Setting, and select 2G.

Step 2. LCD screen shows "Input:", please enter number(11 represents 2G function). Press OK
button, and enter password.
Step 3. Continue to enter 2G interface, LCD screen shows "Input:", enter number (20 represents
control strategy is time). Press OK button, and enter password.
Step 4. Continue to enter 2G interface, LCD screen shows "Input:", enter number (3500
represents daily limit of 500 minutes). Press OK button, and enter password.

3.8 Output Setting

3.8.1 Alarm Bell

Press Menu button to enter level 1 menu, select Output Setting, and select Alarmbell. Enter 1, to
enforce output enable; or enter 0 to disable.

3.8.2 Alarm

Press Menu button to enter level 1 menu, select Output Setting, and select Alarm. First, enter
zone no., and enter 1 to enable output; or enter 0 to disable output.

3.9 System Status

3.9.1 Zone

Press Menu button to enter level 1 menu, select System Status, and select Zone. Enter zone no.,
to search zone system status. The displayed content includes zone no. status (arm, unarm,
bypass), alarm status (alm, unalm), zone type (intime, fullday, delay). For delay, front time is
enter delay, back time is exit time.

3.9.2 Door

Press Menu button to enter level 1 menu, select System Status, and select Door. Enter 1 to view
access control group supported by current alarm host.
2 means to view access control working mode and status.
Tips:
If you want to search access control 2's working mode, then enter 2002.

3.9.3 Version

Press Menu button to enter level 1 menu, select System Status, and select Version. Press Menu
button to view alarm programming keyboard and alarm host versions.

3.9.4 System Time

Press Menu button to enter level 1 menu, select System Status, and select System Time. Press
OK button to view current system time.

3.9.5 **Communication**

Press Menu button to enter level 1 menu, elect System Status, and select Communication, enter 1: you can search host IP address, subnet mask, gateway, port no. (represented by 1, 2, 3, 4 respectively).

3.9.6 **AF Status**

Press Menu button to enter level 1 menu, select System Status, and select AF status, press OK button to view alarm host status. LCD screen shows content of "XXXXXXXX" in either 0 or 1.
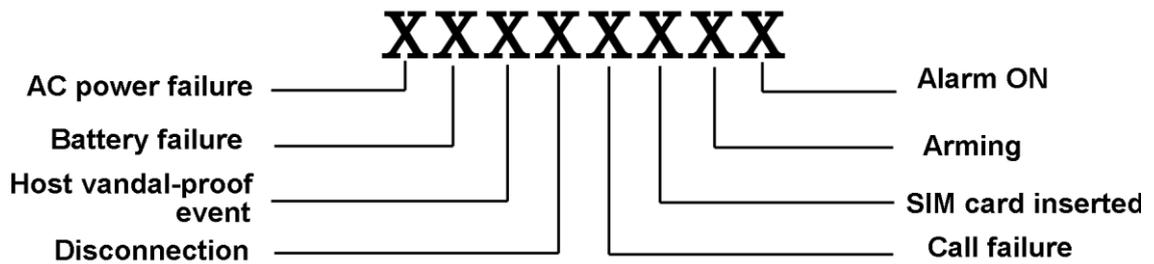
Note:
Number 0 means no, while number 1 means yes.

3.9.7 **Output**

Press Menu button to enter level 1 menu, and select System Status, and select Output. Enter number 1 to search alarmbell status. Enter number 2 plus zone no. to search zone alarm status.
Tips:
Example: To search alarm bell status, input "1". To search status of alarm output channel 16, input "2016".

4 FAQ

1. **Q: I cannot boot up the device properly after plug it to power supply.**
   - Input power is not correct.
   - Switch power line contact is not good.
   - Switch power supply is broken.
   - Program upgrading error.
   - Chassis internal wiring is reverse or loose.
   - Alarm host motherboard is broken.
   - ON mode dial switch 2 is at ON position, the configuration of ON mode is incorrect.

2. **Q: Alarm host will automatically reboot or frequently crashes minutes after startup**
   - Input voltage is unstable or too low.
   - Program file is damaged.
   - Alarm host hardware failure.

3. **Q: Unable to connect to the network after startup**
   - Network cable is not plugged in.
   - IP, mask, gateway are not configured correctly.
   - Abnormal network environment.
   - Alarm host is not fully boot up.
   - Alarm host hardware is broken.

4. **Q: Single channel, multi-channel, all alarm input without input event uploading**
   - Program does not match, re-upgrade the correct program.
   - Switch zone is configured incorrectly, you may bypass both.
   - Arming is not successful.
   - No subscription of alarm event.
   - Device disconnected.
   - Alarm host hardware failure.

5. **Q: Single channel, multi-channel, all without alarm output**
   - Linkage is not configured correctly, without successfully enabled.
   - Alarm outputs are configured as disabled.
   - Cable is not connected.
   - Alarm host hardware failure.

6. **Q: Device capacity, version, etc. cannot be searched**
   - Network disconnected.
   - Harsh network environment, within the same network device network communication rate is too low.
   - Setup error.
   - Battery contact is poor or low voltage.

7. **Q：Alarm host cannot communicate with the keyboard**

Check:

- Keyboard, power supply is normal.
- Keyboard end 120Ω resistor is at normal dial position, which is the ON position.
- Incorrect wiring.
- Alarm host serial port settings are incorrect.
- Mismatch of alarm keyboard and alarm host protocol.
- When connected to multiple keyboards, keyboard AB line's furthest end needs additonal 120 ohm resistor to eliminate reflections and impedance matching, otherwise it will cause the keyboard to communicate instable
- Too far away.

8. **Q: Cannot login Client or WEB**
   - ActiveX controls are blocked.
   - Dx8.1 or higher is not installed, upgrade the video driver.
   - Network connection failure.
   - Network setup problems.
   - Username and password are incorrect.
   - Client version does not match the version of alarm host.

9. **Q: Network connection is unstable**
   - Network instability.
   - IP address conflict.
   - MAC address conflicts.

10. **Q: Unable to disarm the alarm signal**
    - Alarm settings are incorrect.
    - Manually open the alarm output.
    - Input equipment failure or improperly connected.
    - Individual versions of program issues, upgrade program to resolve.

11. **Q: Alarm does not work**
    - Alarm settings are incorrect.
    - Alarm wiring is incorrect.
    - Alarm input signal is not correct.
    - Sensors are normally open(NO), normally closed (NC) type is inconsistent with the end of the line resistor connection.
    - An alarm device simultaneously access two loops.

12. **Q: Cannot play downloaded file**
    - Player is not installed.
    - DX8.1 or higher graphics acceleration software is not installed.
    - Files in AVI format is played by MEDIA PLAYER, the computer is not installed with DivX503Bundle.exe plug-in.
    - Win XP operating system to be installed with DivX503Bundle.exe and ffdshow-2004 1012 .exe.

13. Q: Local menu advanced operation password or network password is forgotten

     Please contact your local customer service staff or call the customer service phone at headquarters, we will guide you on how to resolve depending on model and version of the program that you provide.

Appendix A Terminology

ANP   the Analytic Network Process

ATM   Automatic Teller Machine

DVR   Digital Video Recorder

GPRS   General Packet Radio Service

GSM   Global System of Mobile Communication

NTP   Network Time Protocol

SDK   Software Development Kit

Appendix B Network Operation in Serial Configuration

1). Install and Set Serial

1. Install Hyper Terminal, and run it.
2. Click File>New Connection in the upper-left corner in Hyper Terminal.
3. According to device manager – port (COM and LPT), view COM no. of corresponding device connection.
   Note:
   Right click My Computer (winXP), or Computer (win7/8)-Property-Hardware, you can find device manager.
4. Follow step 3, select corresponding COM.
5. Set corresponding serial parameters.
6. Click OK, and now serial configuration is complete.

2). Configure Network

1. Power up device, keyboard enter "*" and you may consecutively input "*".
2. Clear "***", enter "help".
3. Follow instructions, modify device IP, gateway and mask.
   Setip   172.11.2.199   ENTER
   Setmsk   255.255.0.0   ENTER
   Setgw   172.11.0.1   ENTER
4. Check if network input is complete, then enter:
   Boot ENTER, and device runs normally!
   Now network setup is finished!

   You can re-check network setup via the boot-up process.

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