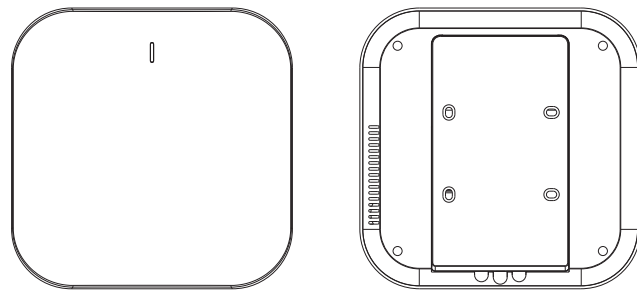


LHD8100 MANUAL



Overview

LHD8100 is suitable for indoor installation only. It manages and controls all connected sensors, sirens, remote controllers, and other devices, and connects to the control centre to report the status and alarm messages of all devices and receive configuration and control commands from the control centre.

LHD8100 Alarm Panel requires a 10M/100M Ethernet or 4G (LTE) network to connect to the control centre. When both networks are connected, the Panel gives priority to Ethernet. If the Ethernet fails, the Panel automatically switches to the 4G network. The 4G module can be used to send SMS and voice call alerts in the event of an alarm.

You can install iOS and Android applications by scanning the QR code link below with your cellphone. After registering your account and adding devices, you can set up users and events for push, SMS, and voice calls.



iOS APP



Android APP

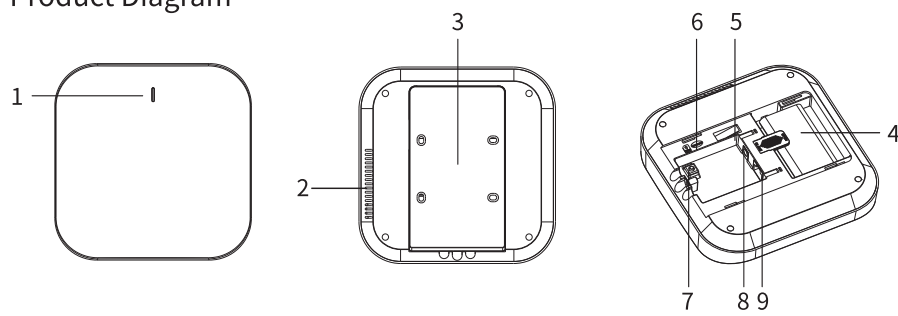
Download Link for IOS: <https://apps.apple.com/cn/app/6447154033>

Download Link for Android: <https://play.google.com/store/apps/details?id=com.ihorn.alarm.internat>

Packing List

- Alarm Panel
- Ethernet Cable
- Security Kit
- Adapter
- Manual

Product Diagram



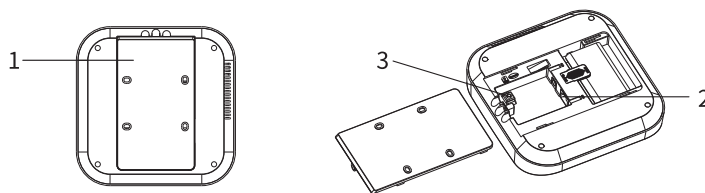
- | | | |
|------------------------------|-----------------------|--------------------|
| 1. Tricolour indicator light | 4. Backup battery | 7. Power switch |
| 2. Speaker | 5. Anti-tamper switch | 8. DC Power socket |
| 3. Back cover | 6. SIM card holder | 9. Ethernet socket |

Specification

Ethernet Connector	Supports RJ-45, 100M, Adaptive 10M/1000M.
Cellular Network	Supports 4G CAT1
Cellular Network Format	GSM (EGSM900MHz, DCS1800MHz)
LTE-FDD	B1/B3/B5/B7/B8/B20
Defense Zone	100
Remote Controller	32
RFID Card	64
Room Number	64
Administering User	64

Application Scenarios	64
Keypad User	64
Monitoring Center	2, through SIA DC-09, AES data encryption transmission optional
Partition	32
Sub-device Connection Protocol	FSK
Radio communication frequency	868/433 MHz
Communication Encryption Method	AES 128
Communication Distance	800m (Open Area)
Sub-device Hopping Time	36~128S
OTA Upgrade	Support LTE&IP
Voice Prompt	Support
Alarm Sound Pressure	80dB
Indicator Light	Tricolor LED Light
Anti-tamper	Off-wall Tampering
Power Supply	DC12V (AC220V Adapter)
Backup Battery	Supports up to 12 hours of standby time.
Installation	Wall-mount or 3M adhesive mounting
Working Temperature	-10~55°C
Working Humidity	5~95%RH
Product Dimension	164*164*35mm
Implementation Standards	CE, EN50131-2

Connecting to Network



1. Slide down the back cover.
2. Connect the power supply and Ethernet cable to the outlet.
3. Press and hold the power button for 3 to 5 seconds until the LED lights up. It takes around 2 minutes to connect to the server.

If the Ethernet connection does not connect automatically, disable the proxy, add the MAC address to the white list, and enable DHCP in the router settings, and support the APP to set a static IP.

Note: To connect the alarm panel to a 4G network, you need a NANO-SIM card with a disabled (you can use a cell phone to disable it) PIN code and sufficient credit on the account to support 4G LTE, SMS service, and call charges.

If the alarm panel cannot connect to Cloud via 4G, use Ethernet to set the network parameters in the application. To set the Access Point Name (APN), user name and password correctly, contact the SIM operator's support service.

LED Indicator

The LED indicators are available in red, green, and blue to indicate the arming, disarming, and guarding status of the system (or the last operating partition). With constant illumination indicating that the system is not connected to the APP server, and blinking indicating that the system is connected to the APP server or that the shutdown is delayed, the brightness of the LEDs can be set through the APP's "Settings⇒LED Brightness Settings".

Color	Status	Normal On	Blink Slowly (once/3 sec)	Blink Fastly(once/sec)	Flash (5 times/sec)
Red	Arm	No connection to server	Ethernet connected to server	4G network connected to server	Shutdown Delay
Green	Disarm				
Blue	Stay				

Account

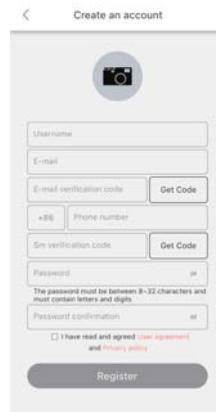
Users with administrator privileges can configure the security system using the application. The administrator account, which contains information about the added alarm panels, is encrypted and placed on Cloud.

All parameters of the security system and connected devices set by users are stored on the local panel. These parameters are inseparable from the alarm panel. Changing the alarm panel administrator does not affect the settings of the connected device.

Accounts allow for merging: You can be an administrator for one panel and a user for another.

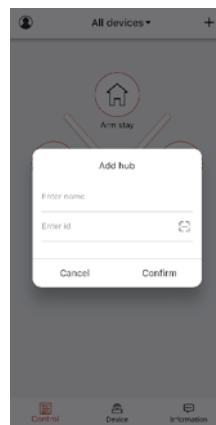
Create an Account

As part of the process of creating an account in the application, you will need to confirm your e-mail and phone number.



Adding an alarm panel to the Application

1. Log in to your account;
2. Open the "+" menu and select "Add panel" ;
3. At the registration stage, type in the name of the panel and scan the QR code located under the cover (or manually enter the registration number);



4. Waiting to be successfully added..

Installation

1. Before installing the alarm panel, please make sure that you have chosen the best location: the 4G signal status is stable as shown on the APP, all the devices have been tested for radio communication, and the alarm panel is in a relatively hidden location (to prevent vandalism).
2. The device is for indoor use only, and it should be reliably attached to a solid surface (vertical or horizontal). We do not recommend installation with bi-facial tape: it does not guarantee a secure fixing.
3. Positions in which the panel cannot be installed:
 - Outdoor;
 - Near or inside any metal object that causes radio signal attenuation and shielding;
 - Areas with weak GSM signals;
 - Near sources of radio interference: less than 1M from routers and power cords;
 - Locations where the temperature and humidity exceed the permissible limits.

Installation of the Alarm Panel

Securing the alarm panel to the mounting bracket with screws prevents accidental movement of the alarm panel and minimizes the risk of tampering with the panel.

If the alarm panel is securely fastened, attempting to remove it will trigger the tamper alarm and the system will send a notification.



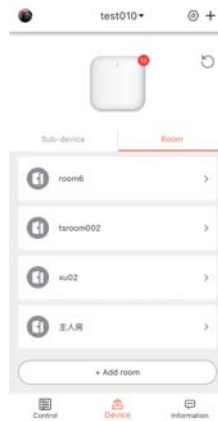
“Room” in the APP

Virtual rooms are used to group connected devices. You can create up to 64 rooms, and each device can be located in only one room.

Note: If you do not create a room, you cannot add devices to the application.

Creating and Setting a Room

Rooms can be created using the application "+Add room".



1. Please assign a name to the room, this will help to quickly find the desired room in the list;
2. Go to the room settings menu by pressing List;
3. To delete a room, side-swipe and click Delete. Deleting a room erases all its settings.






Add Device

1. Tap "+" in the application, then select Add sub-device option;
2. Name the item, scan the QR code (or manually type in the ID), select the room and partition, and proceed to the next step;
3. After tapping OK, press the sub-device pairing button and the LED will blink. To perform detection and pairing, sub-device should be located within the coverage area of the panel's wireless network.

Note: If the connection fails at the first attempt, try again after 10 seconds..

Icons

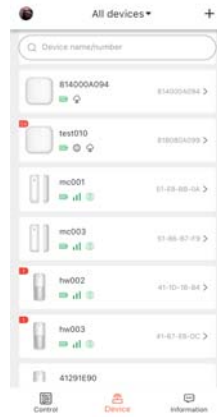
The below icons show some of the device status. You can see them in the device list of the application.

Icon	Meaning
	Low Power
	Sufficient Power
	Normal Connection
	Ethernet connection is working
	Signal Strength

Panel Status



1. Enter “device” page and tap “all devices”.

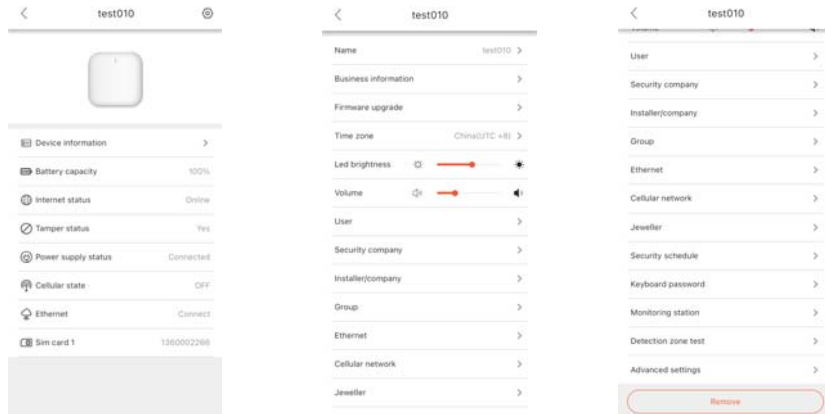


2. Select the alarm panel from the list.

Power	Device battery level by percent ratio
Network Status	Online/Lost
Removal Status	Yes/No
Power Status	Connected/Disconnected
Cellular Status	ON/OFF
Ethernet	Connected/Disconnected
SIM Card 1	Shows the number of the SIM card
Device Information	Panel Model, hardware version No., software version,device ID

Settings

You can change the settings in the application by clicking the Panel Setting Button “”.



Settings Reset

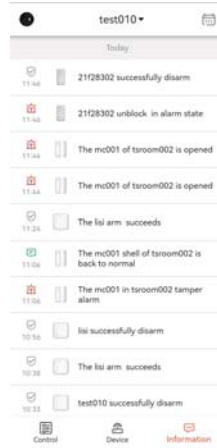
To reset the alarm panel to the default settings, please turn it on, then press and hold the power button for 30 seconds (during the period, the panel will be turned off and on, then the LED flashes blue, hold still for a few seconds till you hear the turn-on music again). At the same time, all connected detectors, room settings, and user settings will be deleted.

User



After adding a host to the account, you will become the administrator of this device and can manage other user privileges of the device. You can have up to 64 users/administrators for one alarm panel. The administrator can invite users to join the security system and determine their privileges.

Event and Alarm Notification



The centre notifies users of events in three ways: push notifications, text messages, and calls.

Notifications are set in the User Management section:

Event Type	Specific Event	Notification Type
Fault	Device Off-line	SMS
	RFI	
	Low Battery	
	Anti-tamper Alarm	
Alarm	Intrusion Alarm	SMS Call
	Fire Alarm	
	SOS	
	Water Leakage Alarm	
	Gas Leakage Alarm	
Event	Device not restored while arming	APP Notification
	Panel fault while arming	
Arm/Disarm	Arm	APP Notification
	Disarm	
	Arm Stay	

If an internet connection is available, Cloud sends a push notification to the security system application and a text message to the phone number specified when registering the account. For phone notifications, the alarm panel dials the phone number specified by the user when registering for the account.

We only call when an alarm is created to draw your attention and reduce the possibility of missing important alerts. We recommend using this type of notification. The alarm panel continuously calls all users who have activated this type of notification in the order specified in the user settings. If a second alarm occurs, the panel will call again.

Note: Once you answer the call, the alarm tone will be played twice by the alarm panel. We recommend that you save the phone numbers associated with the SIM card of the alarm panel in your cell phone address book. If one user has already answered the call, the system will not call the next user, otherwise the system will keep trying each associated number.

Integration to the CMS

The screenshot shows the 'Monitoring station' configuration screen. It includes the following sections:

- Protocol:** A dropdown menu.
- Primary IP address:**
 - IP: Text input field with placeholder 'Please enter IP'.
 - Port: Text input field with placeholder 'Please enter Port'.
- Secondary IP address:**
 - IP: Text input field with placeholder 'Please enter IP'.
 - Port: Text input field with placeholder 'Please enter Port'.
- Alarm channel:**
 - Ethernet: Toggle switch (currently off).
 - Cellular network: Toggle switch (currently off).
- Encryption:** Toggle switch (currently off).
- Send coordinates:**
 - Send coordinates: Toggle switch (currently off).
- Save:** A red button at the bottom.

The default protocol is SIA DC-09. In “Monitoring Station” you can type in the IP address of your CMS. LHD8100 Security system will be integrated to your monitoring station.

Maintenance

1. You need to check the performance of the security system periodically;
2. Remove dust, spider grids, and other contaminants from the device. Do not use any substances containing alcohol, acetone, gasoline, and other reactive solvents to clean the device.

Security Requirement

1. When installing and using the alarm panel, observe the general electrical safety regulations for the use of electrical appliances and the requirements of electrical safety regulatory laws;
2. Do not disassemble the device while it is powered on;
3. Do not use the device with damaged power cords.

Warranty

The product warranty is valid for 2 years after purchase and does not apply to the preinstalled battery. If the device does not work properly, you should first contact support service. In most cases technical problems can be solved remotely.