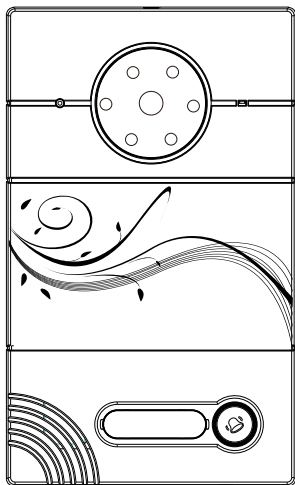


## Installation and Operation manual

For TCP/IP With 280 System

Model:

SD-R5  
SD-R2  
SD-C3  
SD-C5  
SD-C7  
SD-C12  
SD-R10  
SD-C15  
AC-C5



The picture is only a schematic diagram. The actual product shall prevail.

**Outdoor Panel**

## ■ Remark

*Please follow the user manual for correct installation and testing. If there is any doubt please call our tech-supporting and customer center.*

*Our company applies ourselves to reformation and innovation of our products. No further notice for any change. The illustration shown here is only for reference. If there is any difference please take the actual product as the standard.*

*The product and batteries must be handled separately from household waste. When the product reaches the end of service life and needs to be discarded, please contact the local administrative department and put it in the designated collection points in order to avoid the damage to the environment and human health caused by any disposal. We encourage recycling and reusing the material resources.*

# CATALOG

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<b>Product appearance</b> .....	<b>1</b>
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<b>Technical parameter</b> .....	<b>8</b>
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<b>Safety &amp; Precautions</b> .....	<b>30</b>

## Product description

### Application:

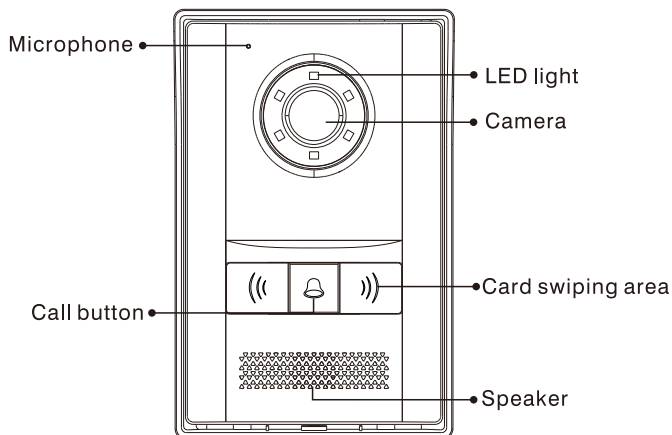
280SD is outdoor panel based on TCP/IP communication protocol, supporting digital video intercom and SIP communication protocol.

280AC is an Internet access control system based on TCP/IP protocol.

**Operating system:** Linux

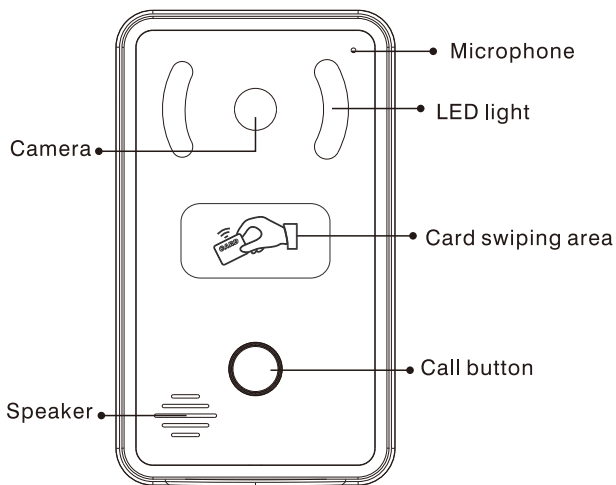
## Product appearance

Model: 280SD-R2

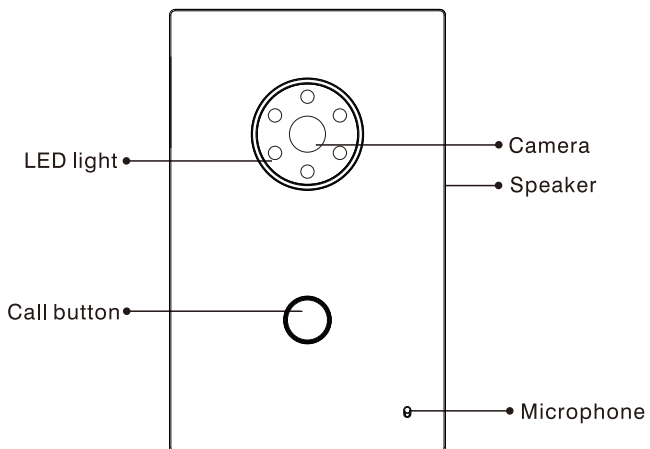




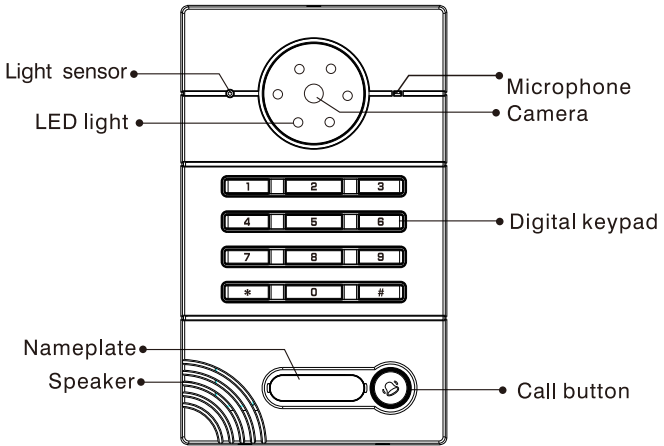
Model: 280SD-R5



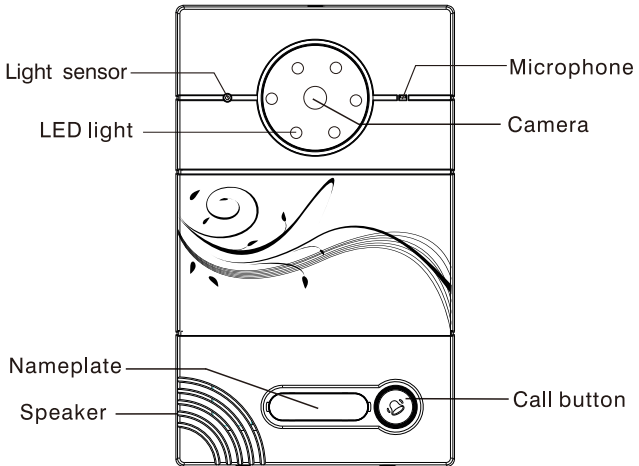
Model: 280SD-C7



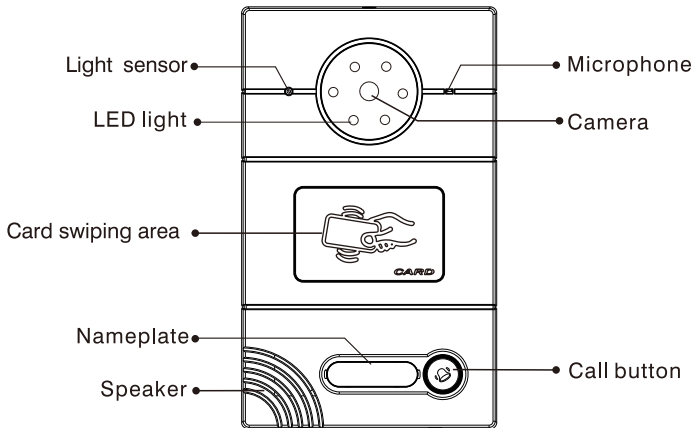
Model: 280SD-C3(with digital keypad)



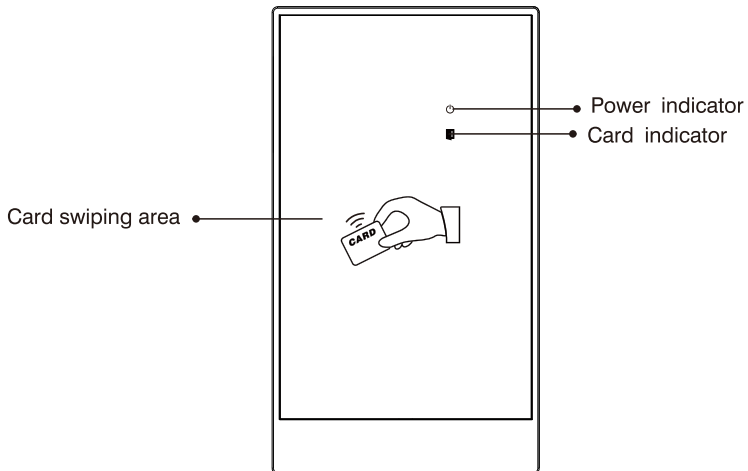
Model: 280SD-C3(single button type)



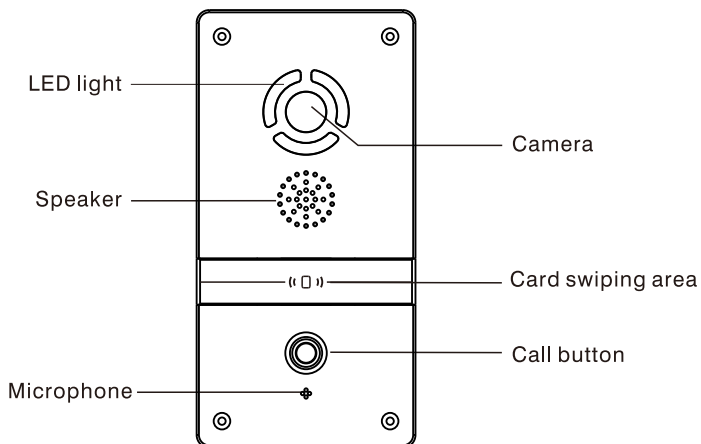
Model: 280SD-C3(With Card Reader)



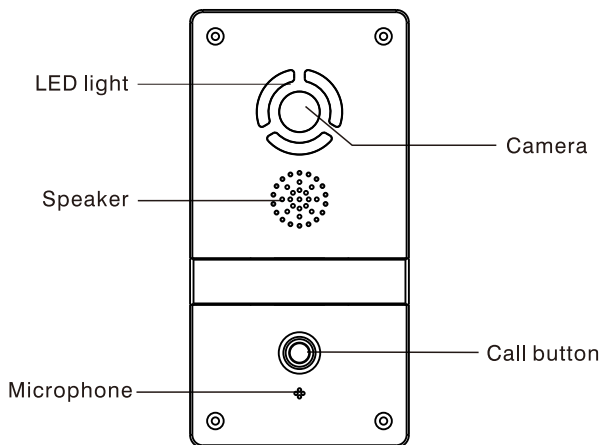
Model: 280AC-C5(Access Controller)



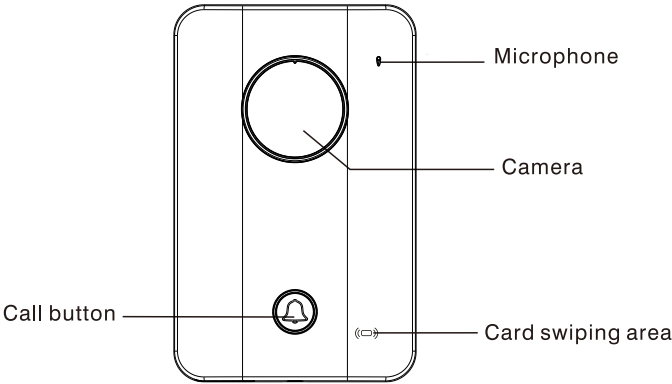
Model: 280SD-C12(With Card Reader)



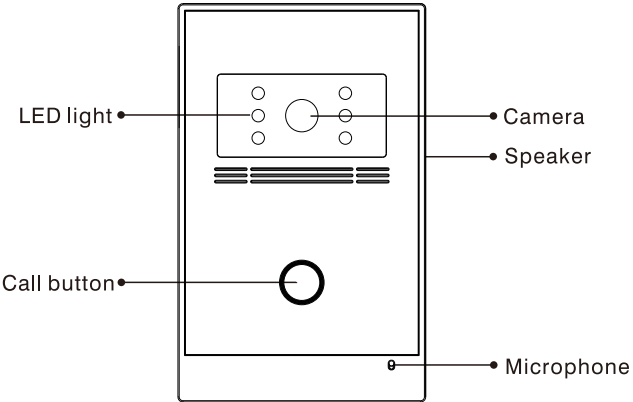
Model: 280SD-C12(No Card Reader)



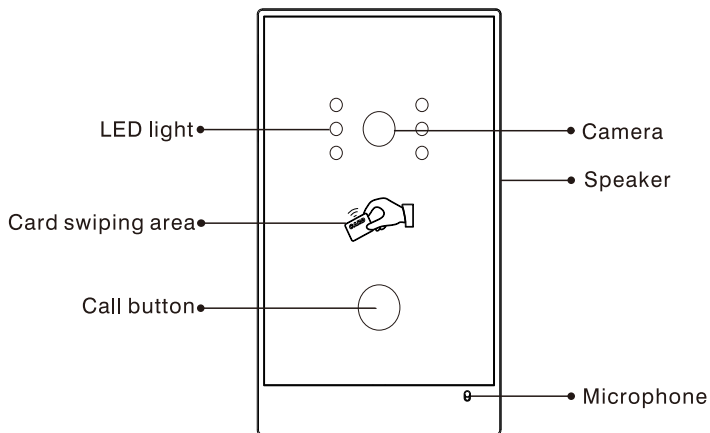
Model: 280SD-R10



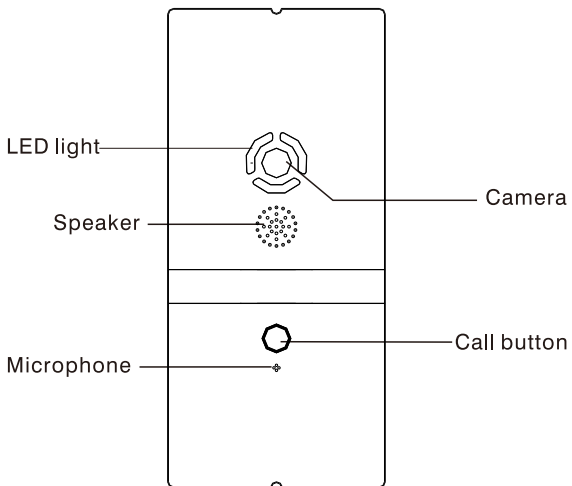
Model: 280SD-C5(With Metal Surface)



Model: 280SD-C5(With Glass Surface)



Model: 280SD-C15



## Basic function

- ◇ Call indoor monitor by one button;
- ◇ Support unlocking by IC/ID access control card or password (ID Optional);  
(Note: this function is only applicable to the panel with card swiping function.)
- ◇ IC/ID card information can be registered on outdoor panel. Registration information of max. 100,000 IC/ID cards can be stored (ID Optional);  
(Note: this function is only applicable to the panel with card swiping function.)
- ◇ Support unlocking by Exit button and door magnetic detection;
- ◇ Support LED light for night vision;
- ◇ Support POE power supply (optional).

## Technical parameter

- ◇ **Working voltage:** DC12V
- ◇ **Rated power:** 3W
- ◇ **Standby power:** 1.5W
- ◇ **Camera resolution:** 1280x720
- ◇ **Working temperature:** -40~+70°C
- ◇ **Storage temperature:** -10~+70°C
- ◇ **Storage relative humidity:** 20%~93%
- ◇ **CPU frequency:** 1GHz

## Product executive standard

- ◇ GB/T 37078-2018 "Technical specifications for access control system".
- ◇ DB 31/T294-2018 "Requirements for intelligent security technology in residential district".

# Package contents

Model: R2



Expansion tube    Screw    Screw wrench

Model: R10



Screw

Model: C12 (flush mounted type)



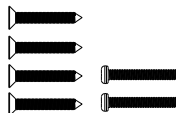
Screw    Screw wrench

Model: C12 (surface mounted)



Screw

Model: R5



Expansion tube

Screw

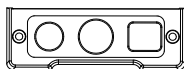
Model: C3



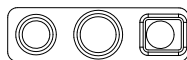
Screw

Screw wrench

Model: C5/C7



Wiring cover



Sealing ring 1



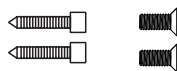
Sealing ring 2



Screw wrench



Sealing plug



Screw



## Basic operation

### 1. Call indoor monitor

In standby mode, press the call button on outdoor panel to call indoor monitor. During the call, press the call button on outdoor panel again to end the call. If the call fails or indoor monitor is busy, outdoor panel will emit a beep.

### 2. Unlocking by card

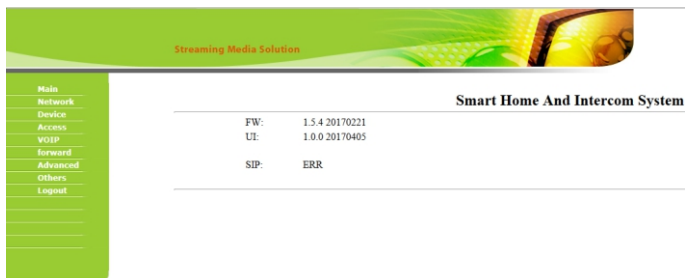
Put the registered IC/ID (ID Optional) card on card reader area of the outdoor panel. If IC/ID (ID Optional) card has been authorized, after unlocking the door by card, the system will issue a voice message that "the door has been opened", otherwise it will emit a beep. (Note: this function is only applicable to the panel with card swiping function.)

### 2. Unlocking by access password

In standby mode, enter "unlocking password+#". After unlocking, the system will issue a voice message that "the door has been opened", otherwise it will emit a beep (for C3 digital keypad model).

# WEB settings

Connect outdoor panel to PC through the switch. Input IP address of outdoor panel in the web browser of PC (The IP addresses of PC and outdoor panel must be in the same network segment. Default IP address is 192.168.68.90), then input user name and password (default user name is "admin" and the password is "123456") to enter into the following interface:



## 1. Network Settings

Click the icon "Network" on the left side to enter the interface as shown below:



**DHCP:** dynamic IP function.

**IP address:** for the same system on the same network segment, IP address can not be repeated.

**Subnet mask:** the original subnet mask is 255.255.255.0, which normally doesn't need to be changed.

**Default gateway:** according to the project site IP network allocation

**DNS:** it refers to IP address of the DNS server

**Server IP:** IP address of digital management software installed in the management center computer

**Access password:** IP access password for management software

Normally, management center, indoor monitor and outdoor panel are in the same LAN for communication; if they are not in the same LAN, the call can be realized on the internet; in this case, SIP server needs to be set.

After the setup is completed, click the icon "Submit" to enable the settings.

## 2.Device Settings

Streaming Media Solution

Device Settings

BuildNo: 0

UnitNo: 0

RoomNo: 1111

No.: 1

Password: \*\*\*\*\*

Mode: Person

Range: Site

Timeout: 120s

Language: English

Volume: 8

Video: 1280x720

Bitrate: 768K

Forward: Site by user

Submit

Building No. and Unit No. are the ones where outdoor panel is located.

The No. can be set from 1 to 9. Device No. is mainly used for distinguishing the outdoor panel when it is watched by indoor monitor.

Password refers to the one used in your login to the webpage for outdoor panel settings (default password is 123456).

Outdoor Panel Mode: Person Panel (Villa Outdoor Panel)

Language selection: only support simplified Chinese and English.

System volume: adjust the system volume with 6 levels for selection.

Video size: 320x240, 640x480 or 1280x720.

Call forwarding: the call can be made one by one or simultaneously.

After the setup is completed, click the icon "Submit" to enable the settings.

### 3.Access Settings

Click the icon "Access" on the left side to enter the interface as shown below:

Streaming Media Solution

Access Settings

Unlock Timeout: 3s

Unlock Delay: 0s

Elev refer: 12

Admin Card: 0931198

Security ON/OFF:

Unlock Password: 0000

Submit

Unlock Timeout is used for controlling the unlocking time ranging from 1 to 9s.

Unlock Delay refers to the delayed time of opening the door ranging from 0 to 9s.

Elev refer is used for setting the floor of outdoor panel ranging from 01~99. (It is effective when outdoor panel is set as unit panel).

### Card registration

The Admin Card is used for registering user card. There are two ways of registering the admin card:

1. The user enters card No. of the admin card in the box after "Admin Card" and then click the button "Submit". In this case, the admin card is registered successfully.
2. If the user isn't aware of admin card No., please enter 0 in the box first and click the button "Submit". Then place the admin card close to the swiping area. When the system gives an indication tone, it means that the admin card is registered successfully.

Then register the user card. The user shall swipe the admin card first. The system emits a beep. Then place the card to be registered near the swiping area within 10 seconds. When the system gives an indication tone, it means that the user card is registered successfully. When registering the user card, the card to be registered shall be swiped 10 seconds after the admin card is swiped. Once a user card is registered, the registration time will postpone for 10 seconds. When there is no activity for 10 seconds, the system will exit from registration status automatically. To register a new user card, the user shall swipe the admin card again.

#### 4.SIP Settings

Click the icon "VOIP" on the left side to enter into the following interface:

The screenshot shows a web interface for 'Streaming Media Solution'. On the left is a green navigation menu with the following items: Main, Network, Device, Access, VOIP, forward, Advanced, Others, and Logout. The 'VOIP' item is highlighted. The main content area is titled 'SIP Settings' and contains the following fields and controls:

- Enable:
- Proxy:
- Realm:
- User:
- Password:
- H.264:
- STUN IP:
- STUN Port:
- Submit:

**Proxy:** URL of SIP proxy server in format: sip:ip or sip:domain name.

**Realm:** realm of the device, usually the same as IP or domain name.

**User name:** refers to the name of the SIP proxy server, provided by the SIP proxy server administrator.

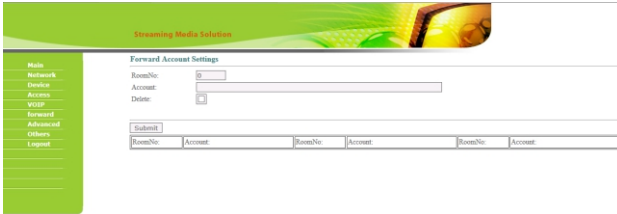
**Password:** the password to access the SIP proxy server, provided by the SIP proxy server administrator.

STUN IP and Port refer to the IP and port of public server for NAT traversal of audio and video.

Once this is set up, click the button "Submit" to enable new settings.

## 5.Call Forwarding

Click the icon "Forward" on the left side of the page to enter the interface as shown below:



The screenshot shows the 'Forward Account Settings' page. On the left is a green sidebar with a menu containing: Main, Network, Device, Access, VSP, Forward, Advanced, Others, and Logout. The 'Forward' option is highlighted. The main content area has a header 'Streaming Media Solution' and a sub-header 'Forward Account Settings'. Below this are input fields for 'RoomNo', 'Account', and 'Date'. A 'Submit' button is located below the 'Date' field. At the bottom, there is a table with columns for 'RoomNo' and 'Account', with three rows of empty cells.

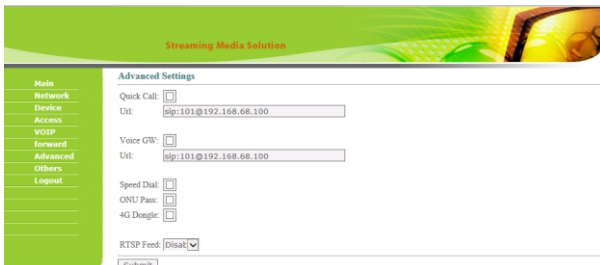
The room number can be bound with the telephone number. When a visitor calls but there is no answer within 25 seconds, the system will automatically forward the call to the phone. Specific steps are as follows:

1. Enter the room number first, then enter the phone number you want to bind;
2. To delete this account, check the box;
3. Once this is set up, click the button "Submit" to enable new settings.

(**Note:** This item requires support of extension module or local SIP service provider.)

## 6. Advanced Settings

Click the icon "Advanced" on the left side of the page to enter the interface as shown below:



The screenshot shows the 'Advanced Settings' page. On the left is a green sidebar with a menu containing: Main, Network, Device, Access, VSP, Forward, Advanced, Others, and Logout. The 'Advanced' option is highlighted. The main content area has a header 'Streaming Media Solution' and a sub-header 'Advanced Settings'. Below this are several settings: 'Quick Call' with a checkbox, 'Line' with a text input field containing 'sip:101@192.168.68.100', 'Voice GW' with a checkbox, 'Line' with a text input field containing 'sip:101@192.168.68.100', 'Speed Dial' with a checkbox, 'ONU Pass' with a checkbox, '4G Doogle' with a checkbox, and 'RTSP Feed' with a dropdown menu set to 'Disal'. A 'Submit' button is at the bottom.

**Quick Call:** Check the box to enable this function. It refers to the call to management center. Enter the SIP address of specified management center device in the box after URL. The device can be indoor monitor or SIP phone of other manufacturers.

Check the box of Voice GW to enable voice gateway. The settings are as follows:

1. Connect LAN port of voice module to the computer through the switch, set the computer's IP address to 192.168.2.\*, open IE browser, and enter http://192.168.2.1 and default password "admin" to the setup interface;

2. According to the situation of used internet, assign appropriate IP address to WAN port of voice module (IP of WAN port cannot be in the same network segment as the one of LAN port. If WAN port is set to 192.168.2.\*, the gateway of LAN port will be adjusted automatically rather than 192.168.2.1). Enable the access permission of WAN port and click "Apply".

3. FXO port settings: set the SIP user ID of the port, set DTMF mode to RFC2833 and click "Apply".

4. IP address of WAN port for voice gateway is in the URL for system development module of outdoor panel. The final port No. is default port of the system. The format of URL bar is: [SIP user ID of FXS port] @ [IP of WAN Port]: 5062.

5. Once this is set up, click "Submit" to enable new settings.

**Speed Dial:** press a number key to call directly;

**ONU Pass:** check the box to enable ONU settings;

**4G Dongle:** check the box to enable 4G Internet;

**RTSP Feed:** check the box to bind media address of third-party video network management.

Once this is set up, click "Submit" to enable new settings.

## 7. Other Settings

Click the icon "Others" on the left side of the page to enter the interface as shown below:



Click Reboot to restart the system.

## 8. Logout

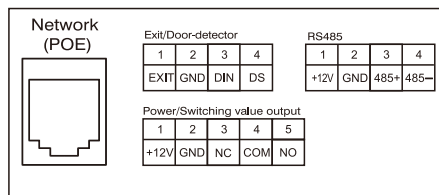
Click the icon "Logout" on the left side. In next page, click the icon "Submit" to log out the system.



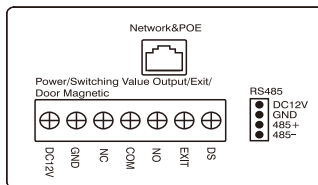




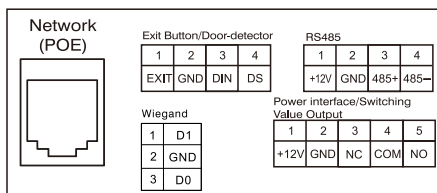
# Wiring diagram of outdoor panel



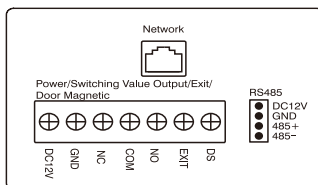
R2/R5



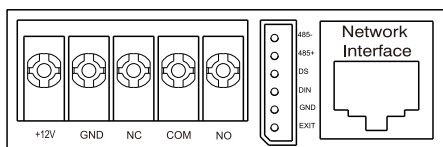
C3



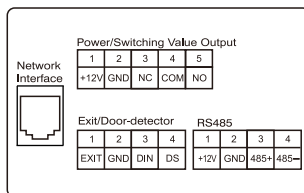
R2



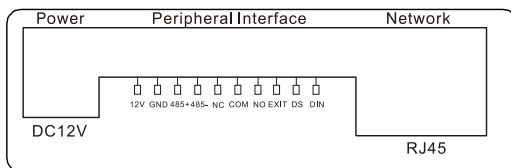
C3



c5/c7



R10

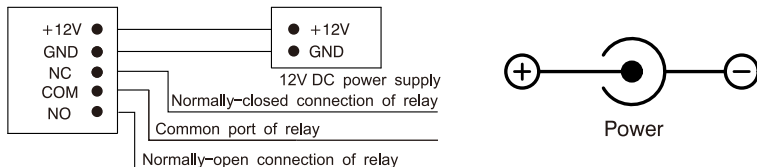


C12/C15

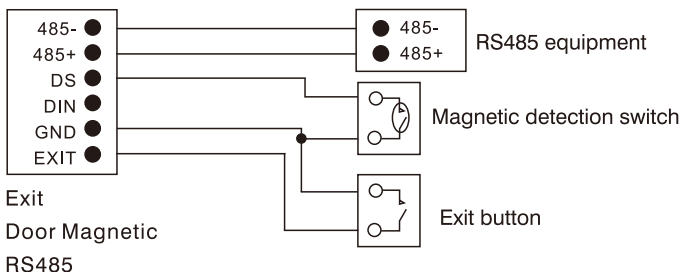


#### 4. Power/Switching value output

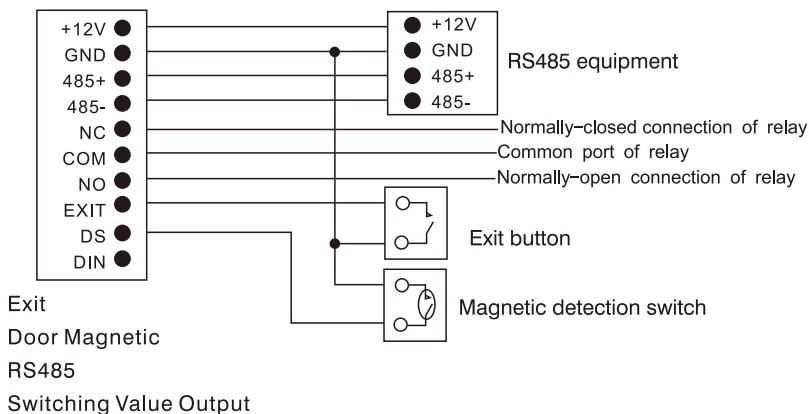
Connect power interface of outdoor panel to 12V DC power. Switching value output connects with electric lock. Independent power supply is required for the lock.



#### 5. RS485/Exit/Door Magnetic

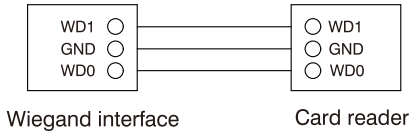


#### 6. RS485/Switching Value Output/Exit/Door Magnetic



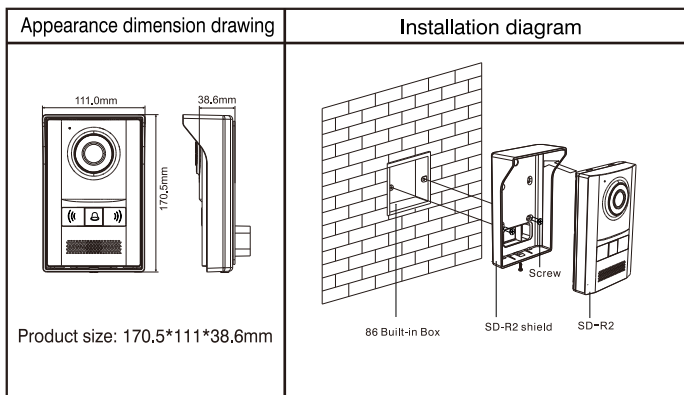
## 7. Wiegand interface

Wiegand output interface: connect to card reader through the Wiegand interface;

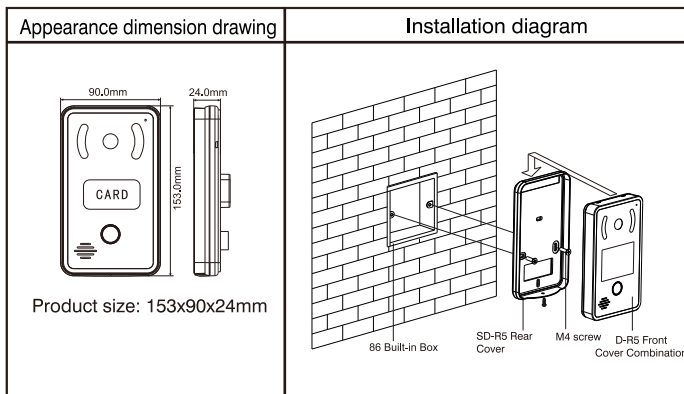


# Installation instructions

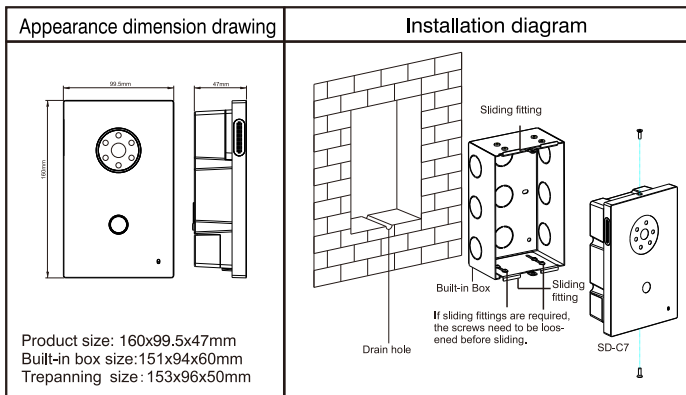
## Model:SD-R2



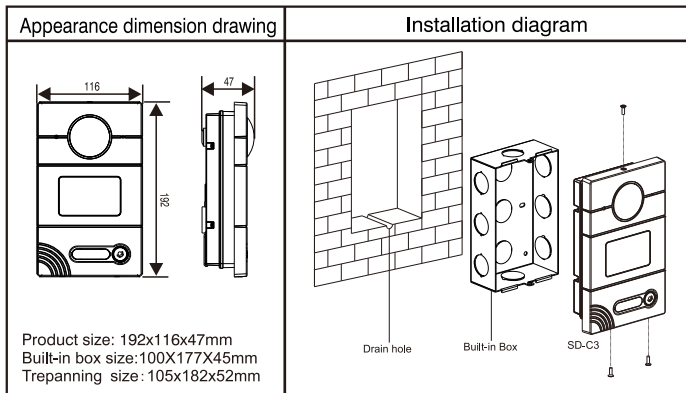
## Model:SD-R5



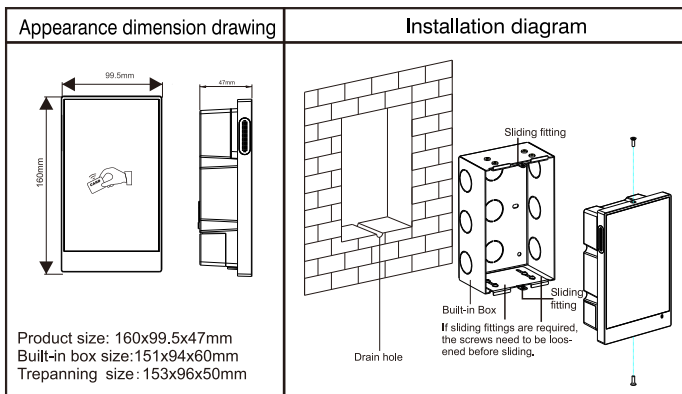
## Model:SD-C7



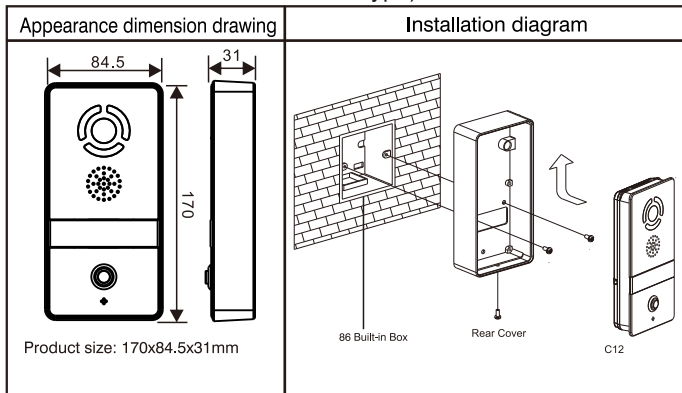
## Model:SD-C3



## Model:AC-C5

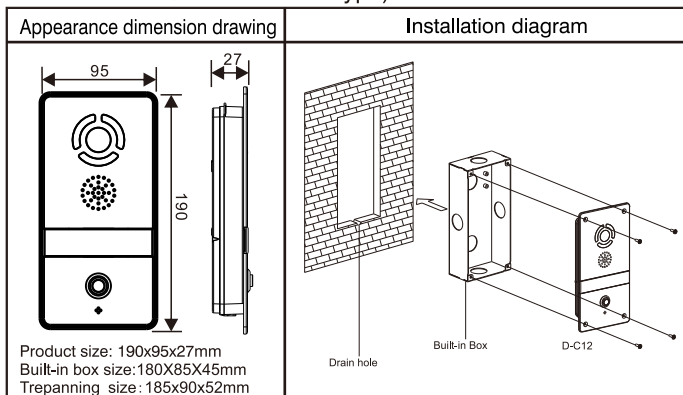


## Model:SD-C12 (surface mounted type)

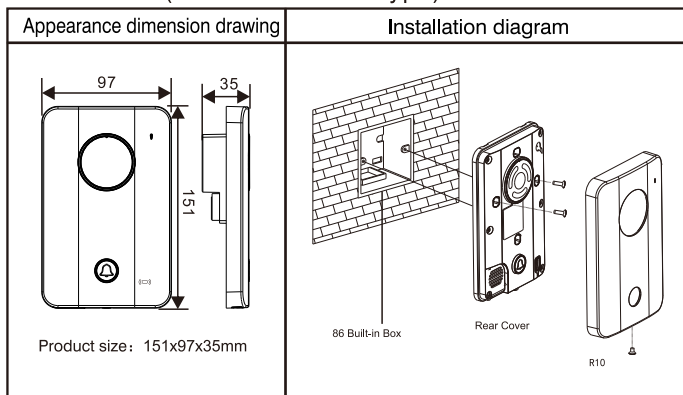




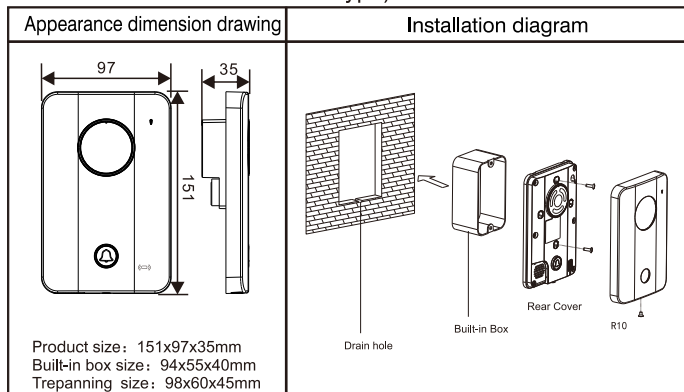
Model:SD-C12 (flush mounted type)



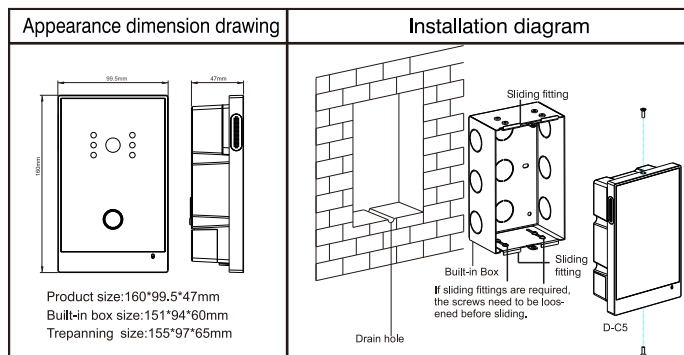
Model:SD-R10(surface mounted type)



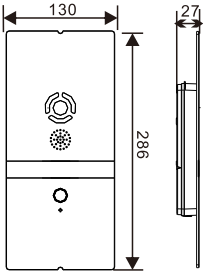
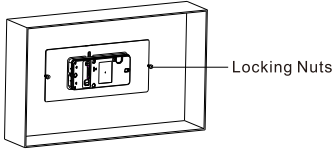
## Model:SD-R10 (flush mounted type)



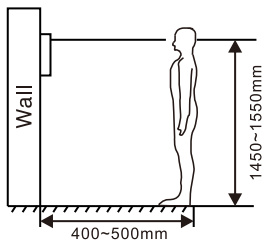
## Model:C5



Model:SD-C15

Appearance dimension drawing	Installation diagram
 <p>Product size: 286x130x27mm</p>	 <p>Locking Nuts</p> <p>Back Side of Mailbox</p>

Installation notes:



[Suggestion]: During the installation, the display screen should be 1450~1550mm from the ground.

## Troubleshooting

Some common failures and troubleshooting methods are listed for your reference. In case of failure which cannot be repaired, do not disassemble or repair the product by yourself. Please contact the after-sales service department.

When outdoor panel fails to call indoor monitor:

- a. When setting villa outdoor panel, please make sure building No. and unit No. of outdoor panel are the same as the ones of indoor monitor;
- b. Please check whether the network is connected;
- c. Please check if there are any security settings for the network, such as VLAN configuration;
- d. Indoor monitor cannot be set as sub device only. Main device is required.

# Safety & Precautions

## Safety & Precautions

To protect you and others from harm or protect your device from damage, please read the following information before using your device.

Do not install equipment in the following areas:

- Do not install equipment in high temperature, humidity, near the magnetic field, such as generators, transformers or magnets, etc.
- Do not place the equipment near the heating items such as the electric heater or the liquid container.
- Do not place the device directly in the sun or near the heat source, which may cause the body to be discolored or deformed.
- Do not install the equipment in an unstable position to avoid the property losses or personal injury caused by the falling of device.

### Prevent electric shock, fire and explosion

- Do not use damaged power cord, plug or loose power outlet.
- Do not touch the power cord with wet hands or unplug the power source by pulling the power supply.
- Do not bend or damage the power cord.
- Do not touch the equipment with wet hands.
- Do not let the power slide, or cause a collision.
- Do not use power supply without manufacturer approval.
- Do not splash water or other liquids into the equipment.

### Clean surface

- Use a soft cloth dipped in a small amount of water to clean the surface of the machine and dry it with a dry cloth.

### Other matters needing attention

- In order to prevent damage to the paint or housing, do not expose the device to chemical products, such as thinner, gasoline, alcohol, insect repellent, sunscreen, or pesticides, etc.
- Do not beat or hit the device with a hard object.
- Do not disassemble, refit or modify the device at your own discretion. The arbitrary modification is not covered under warranty. When any repair required, please contact the customer service center.
- When the device emits abnormal sound, smell or smoke, unplug the power immediately and contact the customer service center in time.
- If you do not use the device for a long time, it is recommended to unplug the power adapter, take out memory card and put the device in a dry environment.

