Unpacking

Before you begin using the device, please check the version you got and ensure that the following items are included in the shipped box:

Mainframe Accessories:

M3x5 crosshead screw x 4	M3x6 hex socket screw x 2	Sealing ring x 1
Wiring cover x 1	Sealing pressing plate x 1	Rubber Plug (S,M,L) x3
Rope x 1	Allen wrench x 1	R28A x 1
ST1.7x4 crosshead screw x 2	Diode x 3	

Wall mounting Accessories (Please find in On-wall Installation Kit Box):

ST4x20 crosshead screw x 6	Plastic wall anchor x 6
M4x30 crosshead screw x 2	Wall-mounting box x 1

Flush mounting Accessories (Please find in In-wall Installation Kit Box):

ST4x20 crosshead screw x 6	Plastic wall anchor x 6
M4x10 crosshead screw x 6	Flush-mounting bracket x 1	Flush-mounting box x 1

Product Overview

- Speaker
- Infrared LED
- Photosensitive Sensor
- Infrared Sensor
- Camera
- Screen
- Card Reader
- Numerical Keypad
- Page Up Key
- Page Down Key
- Clear Key
- Dial Key
- Mic

Call: Room Number +
Contacts: ∨ or ∧
PIN Entry : # + PIN + #
Security Center :

R28A
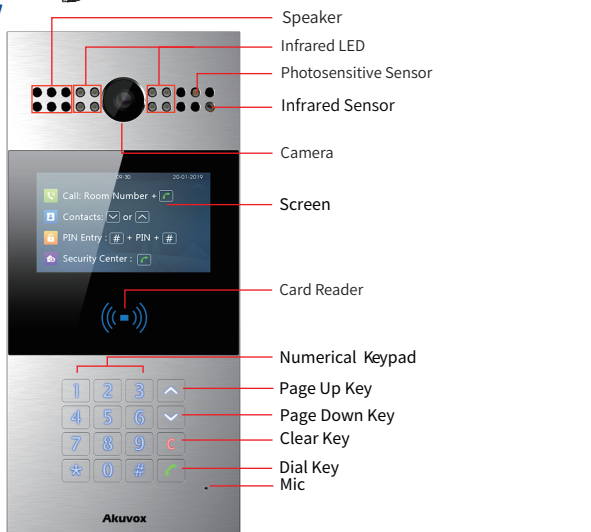
Installation Environment

Indoor and outdoor installation are supported.
If installing the device outdoors, please don't place device under direct sunlight, it will bring a bad effect or be broken with the high temperature.
If installing the device indoors, please keep device at least 2 meters away from light, and at least 3 meters away from window and door .

Backlight	Direct sunlight	Direct sun through window	Indirect sunlight through window	Close to light
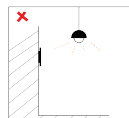
Installation

Step 1: Bracket/Box Installation

Wall Mounting

With 86 embedded box in the wall

Fix the wall-mounting box on 86 embedded box with two M4x30 crosshead screws.
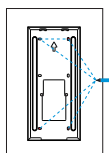
Mark the four holes of the wall-mounting box on the wall.

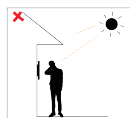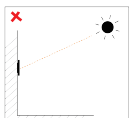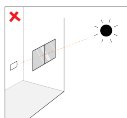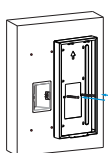Take down two M4x30 crosshead screws and wall-mounting box.
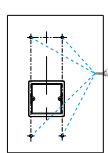
Use a hand drill with 6 mm diameter bit to make holes in the marked positions.
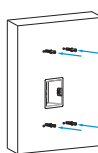
Insert the plastic wall anchors into the holes.
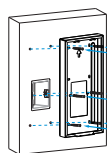
Fix the wall-mounting box with four ST4x20 crosshead screws and two M4x30 crosshead screws.

Without 86 embedded box in the wall
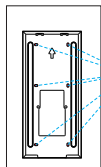
Mark the six holes of the wall-mounting box on the wall.
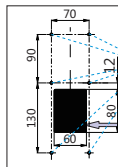
Use a hand drill with 5 mm diameter bit to make the hole in marked positions.

*Please note the relative position in the left figure and the maximum error should less than 5 mm.

Insert the plastic wall anchors into the holes you drilled before.

Fix the wall-mounting box with six ST4x20 crosshead screws.

2

Flush Mounting

Dig out a square hole (height*width*depth=262.5*121*60mm)
Note:The size of the hole should be a little larger than recommended value that can accommodate all cables.

Insert the flush-mounting box into the hole and make sure the cables of the device can route through the cable hole. Then mark the six holes of the flush-mounting box on the wall.

Take down the flush-mounting box, then use a hand drill with 6 mm diameter bit to make holes in the marked positions.

Use six M4x10 crosshead screws to fix the flush-mounting bracket on the flush-mounting box.
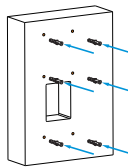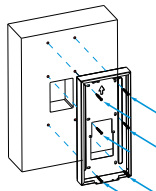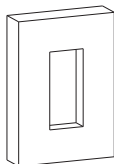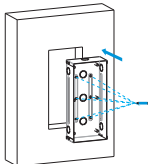
Place the flush-mounting box into the square hole until the edges of which align to the wall and make all cables go through the cable hole. Fix the flush-mounting box with six ST4x20 crosshead screws.
Note: The flush-mounting box can not over the edge of the square hole.
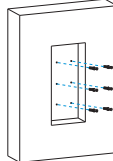
Insert the plastic wall anchors in the hole you drilled before.

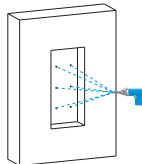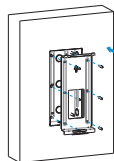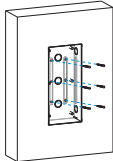### Without ST4x20 screw, please follow the below installation method.
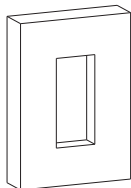
Dig out a square hole (height*width*depth=262.5*121*60mm).

Note: The size of the hole should be a little bigger than recommended value that can accommodate all cables.
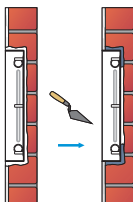
Use cement or non-corrosive structural adhesives to fill the gap between the wall and embedded box. Wait the adhesive material desiccation, go to the next step.

Waterproof Tips:
• For flush mounting installation, it is recommended to fill the gaps around the embedded box for waterproofing (to prevent water from entering the back cover of the door phone from the gap).
• For wall mounting installation, it is recommended to lock the wall-mounted bracket and the wall so that the EVA pasted on the bottom of the wall mounting bracket is close to the wall without a gap (to prevent water from entering the back cover of the door phone from the gap)
• Or it is recommended to use rain cover.
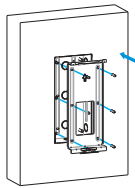
Use six M4x10 crosshead screws to fix the flush-mounting bracket on the flush-mounting box.

Step 2: Wiring cover Installation
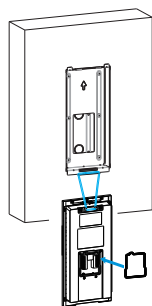
For convenient wiring, hang R28A on the wall-mounting box/ flush-mounting bracket with rope. Then insert the sealing ring into the groove.
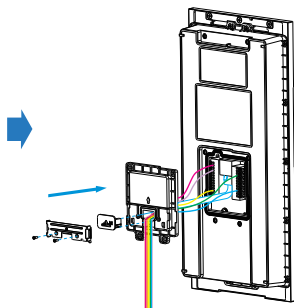
Make cables go through the wiring cover, connecting to the corresponding interfaces of the main board. Choose a suitable size rubber plug to compress cables, then fasten the sealing pressing plate with ST1.7x4 crosshead screws.
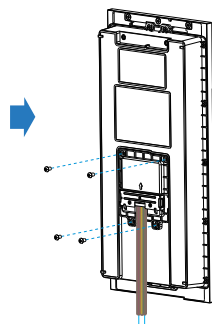
Use four M3x5 crosshead screws to fix the wiring cover.

Step 3: Device Mounting
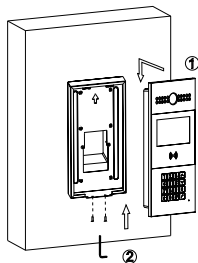
Wall Mounting
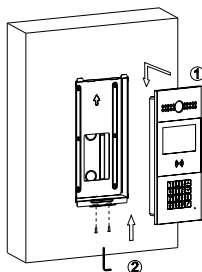
Flush Mounting

1.Place the device into the wall-mounting box/ flush-mounting bracket until the edges of which align to the wall. Then pull the device downward and ensure the groove of it hooks to the lock catches of the back box.

2.Use the Allen wrench to tighten the device with two M3x6 hex socket screws.

Application Network Topology

SIP Video Phone

Network Video Recorder
(third party)

PC
(third party)

LAN

PoE   PoE   PoE   PoE

4.3″   4.3″   4.3″   4.3″

R28A   R28A   R28A   R28A

Device Wiring

⚠ **Warning**

When you connect a device containing a coil, such as a relay or an electromagnetic lock, it is necessary to protect the intercom against voltage peak while switching off the induction load. For this way of protection we recommend a diode 1 A / 200 V (included in the accessories) connected antiparallet to the device.

Lock   Diode

Terminals

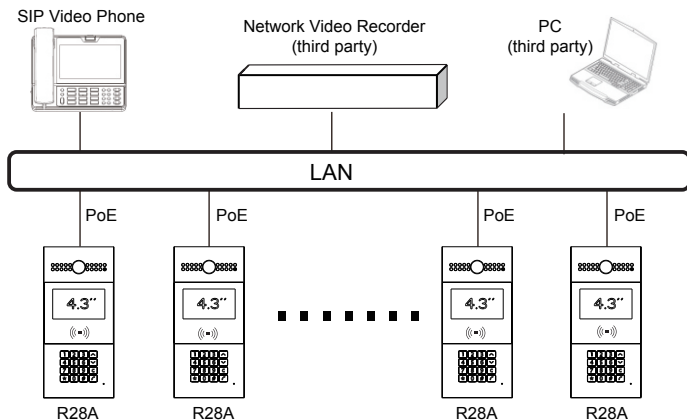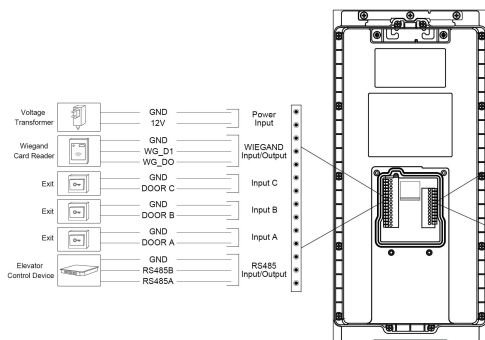| Left terminals		
Voltage Transformer	GND / 12V	Power Input
Wiegand Card Reader	GND / WG_D1 / WG_DO	WIEGAND Input/Output
Exit	GND / DOOR C	Input C
Exit	GND / DOOR B	Input B
Exit	GND / DOOR A	Input A
Elevator Control Device	GND / RS485B / RS485A	RS485 Input/Output

Right terminals		
Relay1 Output	NO1 / COM1 / NC1	Door Lock
Relay2 Output	NO2 / COM2 / NC2	Door Lock
Relay3 Output	NO3 / COM3 / NC3	Door Lock
Power Output	X / 12V_OUT / GND_OUT	Voltage Transformer

Wire Length & AWG Table

Please follow the properly measured wire gauge/length to install device:

	20 AWG	22 AWG	24 AWG	26 AWG
12V 1A Adapter	≤20m	≤10m	\	\

Configuration

1.IP Address Checking: Press *2396# to enter administrator setting interface. Click ***System Information*** to get the IP address. R28A uses DHCP by default.

2.Account Registration: On web UI, go to the path: ***Account > Basic*** page to register account and fill in the account information. ***(Please refer to admin guide for more information)***

3.DTMF Code Configuration: On web UI, go to the path: ***Intercom > Relay > Relay ID/DTMF*** and choose the DTMF code number in corresponding area.

Operation

Make a call:
Input the room number, press **Dial key** to make a call.

Receive a call:
R28A supports Auto Answer by default. Incoming calls will be answered automatically.

Unlock by DTMF:
During the call, press the corresponding DTMF code of answer unit to unlock R28A remotely.

Unlock by Card(Optional):
Place the predefined RF Card in the card reader area to open the door.

NOTICE:
Quick guide can be viewed on Global Visions website.

Global Visions

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www.globalvisionsinc.com

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