Unpacking

Before using the device, check the device model and ensure that the shipped box includes the following items:

1 X **R20K**	1 X **Wiring cover**	1 X **Sealing pressing plate**	1 X **Rope**
3 X **Rubber plug (S,M,L)**	6 X **M2.5x6 crosshead screw**	1 X **RJ45 coupler ethernet extension connector**	3 X **RJ45 cable**
3 X **Diode**			

Wall-mounting Accessories:

1 X **Wall-mounting bracket**	2 X **M4x30 crosshead screw**	4 X **ST4x20 crosshead screw**	1 X **Allen wrench**
4 X **Plastic wall anchor**	2 X **M3x6 hex socket screw**	4 X **Wall-mounting screw**	1 X **Allen wrench**

Product Overview

- Infrared LED
- Infrared Sensor
- Camera
- Photosensitive Sensor
- Card Reader
- Keypad
- Dial Key
- Dial Key
- Status LED
- Speaker

R20K
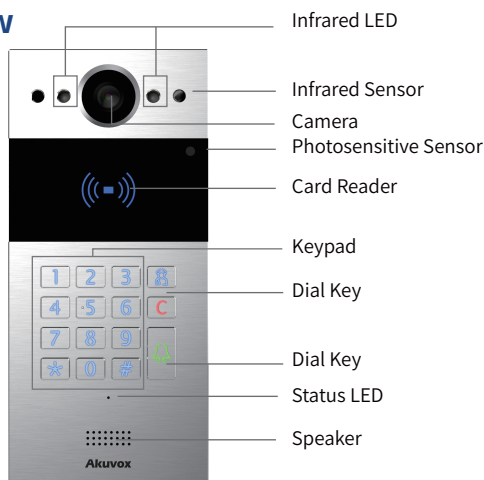
Before You Start

Tools needed
(not included in shipped box)

- Cat Ethernet Cable
- Crosshead Screwdriver
- Electric Drill

Voltage and Current Specifications
- It is suggested that use PoE or 12VDC 1A power adapter to power on device.

AWG Sizes and Properties Table
Please follow the properly wire data to install device:

| Power Supply	12VDC 1A		
AWG	20	22	24
Resistance(ohm/km)	33.9	48.5	79.6
Cross-sectional Area(mm²)	0.5189	0.3247	0.2047
Wire Length(m)	≤50	≤40	≤20

Requirements

1. Place the device away from sunlight and light sources to prevent potential damage.
2. Do not place the device in the high-temperature, and humid environments or in surroundings impacted by magnetic field.
3. Install the device on the flat surface securely to avoid personal injuries and property loss caused by device's falling.
4. Do not use or place the device near heating objects.
5. 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.
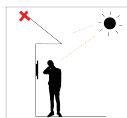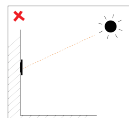
Backlight	Direct sunlight	Direct sun through window	Indirect sunlight through window	Close to light
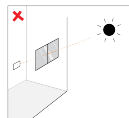
⚠ Warning!

1. To ensure safety, avoid touching power cord, power adapter, and device with wet hands, bending or pulling the power cord, damaging any components, and use only qualified power adapter and power cord.
2. Be careful that standing up on the area under the device in case of personal injuries cause by hitting the device.
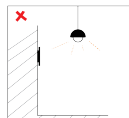
⚠ Caution

1. Do not knock device with hard objects.
2. Do not press down hard on the device screen.
3. Do not expose device to chemical products, such as alcohol, acid liquid, disinfectants, and so on.
4. To prevent the device installation from becoming loose, ensure accurate diameters and depths of screw holes. If the screw holes are too large, use glue to secure the screws.
5. Use wet cloth clean device surface softly, and then wipe the surface with dry cloth for cleaning the device.
6. If there is abnormal situation of the device, including uncommon sound and smell, please power off the device and contact Akuvox Technical Team immediately.

Wiring Interface
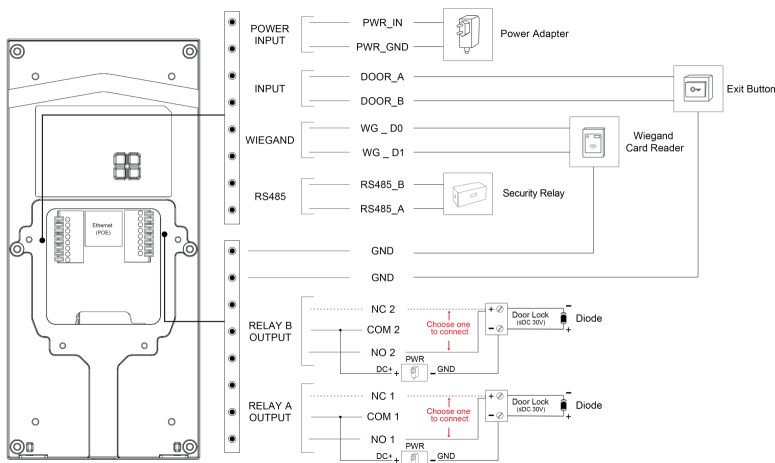
To protect the device from potential damage caused by over-voltage, it is recommended to wire a diode into the circuit. Connect the anode of the diode to the negative cable of the lock, and connect the cathode of the diode to the positive cable of the lock.
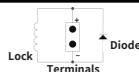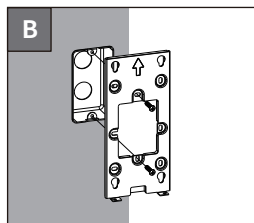
Installation
Step 1: Wall-mounting Bracket Installation
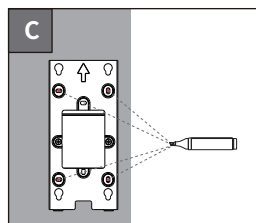**1.With embedded box(86x86 mm or 2x3 inches in size) in the wall.**
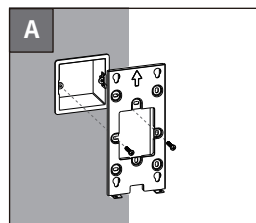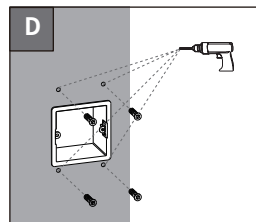
With 86x86 mm junction box.

With 2x3 inches junction box.

Attach the wall-mounting bracket to the embedded box using two **M4x30 crosshead screws.**

Mark the hole positions at the center of the four holes on the **wall-mounting bracket.**

a. Remove two **M4x30 crosshead screws** and **wall-mounting bracket.**
b. Use a 6 mm hand drill to make the four holes with a depth of 25 mm.
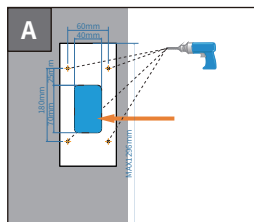c. Insert four **plastic wal anchors** into the holes.
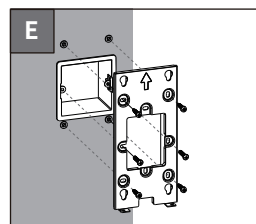
For fasten the wall-mounting bracket, tighten the four **ST4x20 crosshead screws** to **plastic wall anchors** and two **M4x30 crosshead screws.**
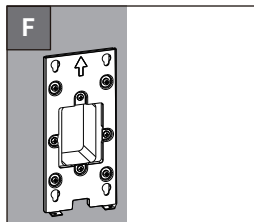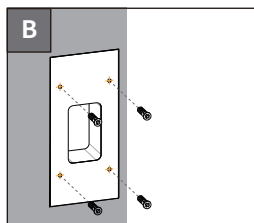
Finish the wall-mounting bracket installation.

2.Without embedded box in the wall.

a. Position the **wall-mounting template** closely against the wall, aligning it with the wire's location.
b. Use a 6mm hand drill to drill four screw holes with a depth of 25mm.
c. Cut a rectangular hole in the wall measuring 40x70mm to accommodate all required cables.

Insert four **plastic wall anchors** into the holes.
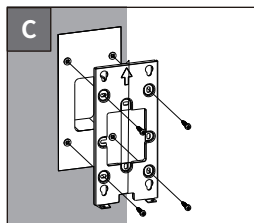
Fix the wall-mounting bracket to the wall by tightening four **ST4x20 crosshead screws** to the **plastic wall anchors.**
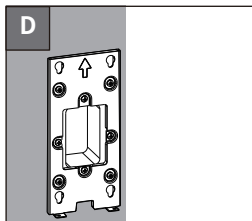
Finish the wall-mounting bracket installation.

Step 2: Main Unit Installation
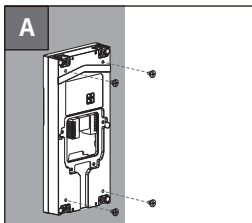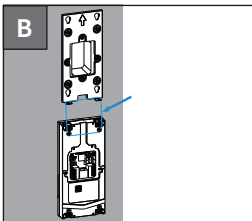

Fix four **wall-mounting screws** to the back of the device.

For easier installation, hang the device on the bracket using the **rope.**
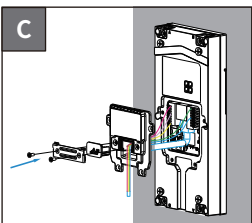
a. Make cables go through the **wiring cover,** connecting to the corresponding interfaces as needed (for details, refer to "Wiring Interface").
b. Select an appropriate **rubber plug** (small, medium, or large) to secure the wires.
c. Fasten **sealing pressing plate** with two **M2.5x6 crosshead screws.**

YS20000053

Use four **M2.5x6 crosshead screws** to fix the **wiring cover.**

Step 3: Device Mounting

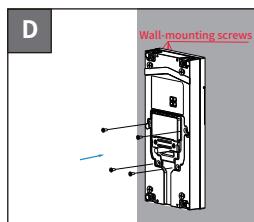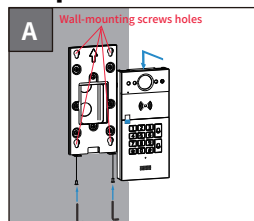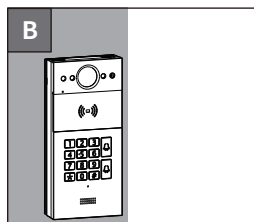a. Insert the four **wall-mounting screws** on the device into the corresponding holes on the wall-mounting bracket.
b. Press down to slide the wall-mounting screws into the groove.
c. Use **Allen wrench** to tighten the device with two **M3x6 hex socket screws.**

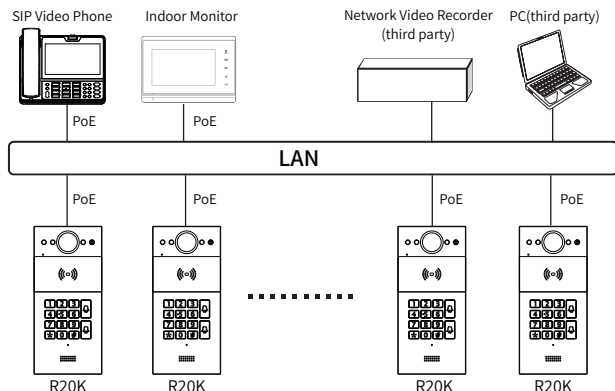Installation is completed, please remove the protect film.

LED Status Information

LED Status		Description
Blue	Always on	Normal status
	Flashing	Calling
Green	Always on	Talking
	Flashing	Receiving a call
Red	Flashing	Offline

Note: For more LED settings, please check in **Intercom > LED Setting** of R20K Web UI.

Application Network Topology

Device Test

Please verify the device status after installation:
1. **Network**: Press ***3258*** on the keypad to obtain IP address, network is working properly if the lP address is obtained.
2. **Intercom**: Enter the lP or SIP number and press **Dial** key to make a call. Or, press APT number to call. The call configuration is correct if the call is successful.
3. **Access Control**: Use pre-configured PiN code and RF card to unlock door.

Warranty

1. Akuvox warranty does not cover intentional mechanical damage or destruction caused by improper installation.
2. Do not attempt to modify, alternate, maintain, or repair device by yourself. Akuvox warranty does not apply to damages caused by anyone who is not representative of Akuvox or an Akuvox authorized service provider. Please contact Akuvox Technical Team if the device need to be repaired.

Get Help

For help or more assistance, contact us at:

https://ticket.akuvox.com/

support@akuvox.com

Scan the QR code to get more videos, guides, and additional product information.

Notice Information