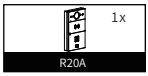
Akuvox Smart Intercom

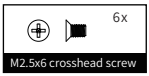
R20A Wall-mounting Installation Quick Guide

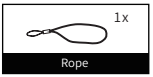
Unpacking

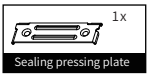
Before using the device, check the device model and ensure that the shipped box includes the following items:

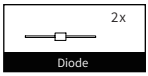


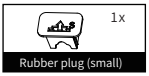


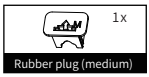






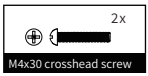


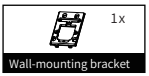






Wall-mounting Accessories :

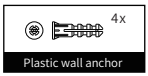


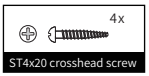




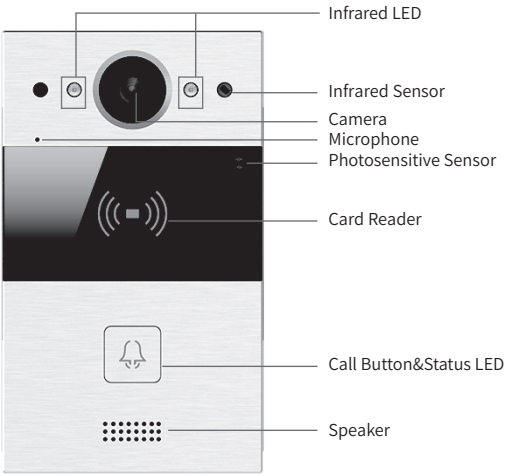








Product Overview



R20A

Akuvox Smart Intercom

R20A Wall-mounting Installation Quick Guide

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.

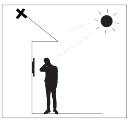
AWG Sizes and Properties Table

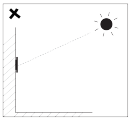
Please follow the properly wire data to install device:

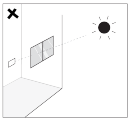
Power Supply	12VDC 1A		
AWG	20	22	24
Resistance (ohm/km)	33.9	48.5	79.6
Cross-sectional Area (mm^2)	0.5189	0.3247	0.2047
Wire Length (m)	⩽50	⩽40	⩽20

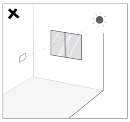
Requirements

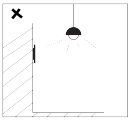
1.Place the device away from sunlight and light sources to prevent potential damage.
2.Do not place the device in the high-temperature, and humid environments or in surroundings impacted by magnetic field.
3.Install the device on the flat surface securely to avoid personal injuries and property loss 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.

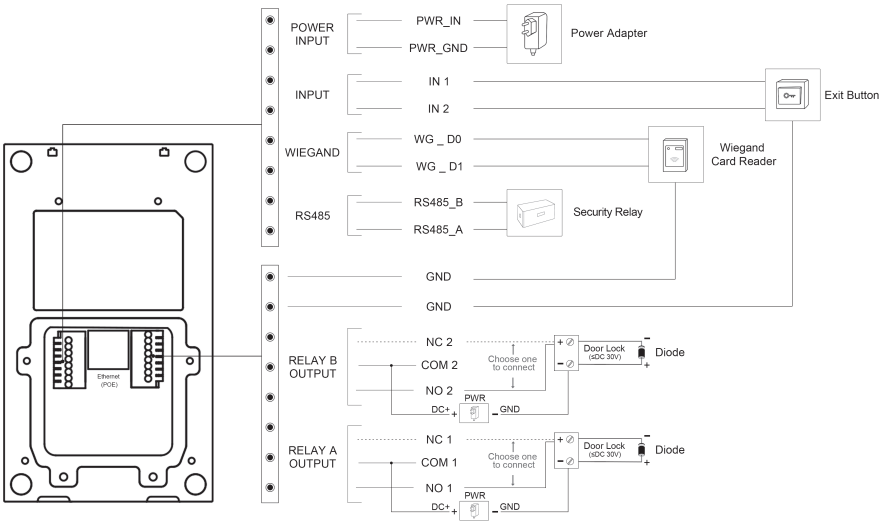
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⚠ Caution

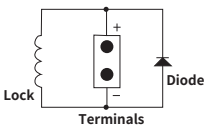
1.Do not knock device with hard objects.
2.Do not press down hard on the device screen.
3.Do not expose device to chemical products, such as alcohol, acid liquid, disinfectants, and so on.
4.To prevent the device installation from becoming loose, ensure accurate diameters and depths of screw holes. If 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.

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 interccom against voltage peak while switching off the induction load.For this way of protection we recommend a diode 1A/200V(included in the accessories)connected antiparallet to the device.

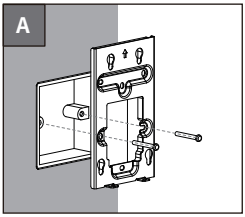


Installation

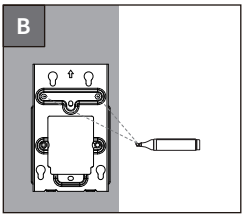
Step1:Wall-mounting Bracket Installation

1. With an electrical junction box in the wall

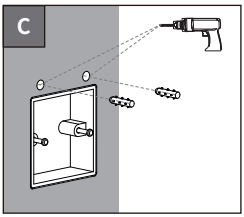
1.1. With an 86x86 mm junction box



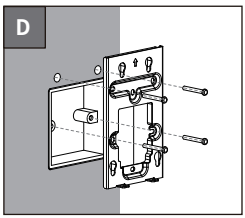
Fix the wall-mounting bracket on the embedded box with two **M4x30 crosshead screws.**



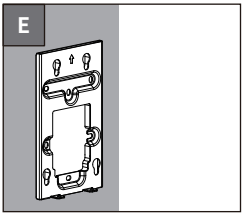
Mark two holes on the wall.



a. Take down the two **M4x30 crosshead screws** and remove the **wall-mounting bracket.**
b. Use a 6 mm hand drill to make two holes with a depth of 25 mm.
c. Insert two **plastic wall anchors** into the screw holes.

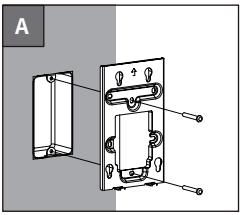


Tighten the **wall-mounting bracket** and junction box on the wall with two **ST4x20 crosshead screws** and two **M4x30 crosshead screws.**

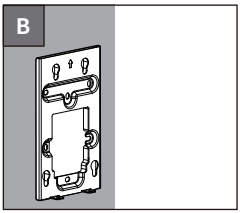


Finish the wall-mounting bracket installation.

1.2. With a 2x3 inches junction box.

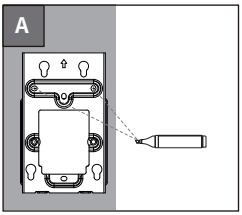


Fix the **wall-mounting bracket** on the 2x3 inches junction box with two **M4x30 crosshead screws.**

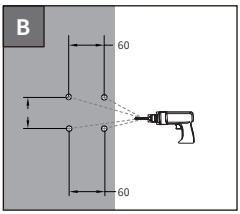


Finish the wall-mounting bracket installation.

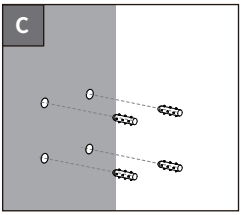
2.Without an electrical junction box in the wall



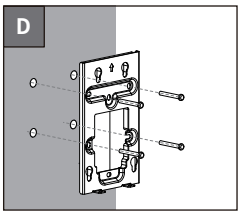
Mark four screw holes through the **wall-mounting bracket** on the wall.



Use a 6 mm hand drill to drill the four holes with a depth of 25 mm.



Insert four **plastic wall anchors** into the holes.

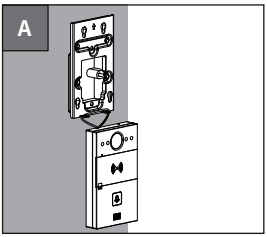


Fix the **wall-mounting bracket** with four **ST4x20 crosshead screws.**

Step 2: Main Unit Installation

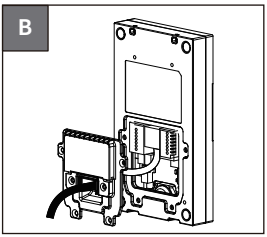
R20A
Wall-mounting Installation Quick Guide

A



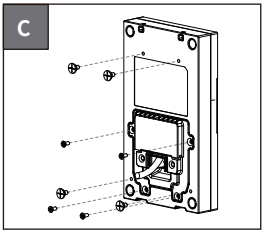
Hang R20A on the **wall-mounting bracket** with rope for easier installation.

B



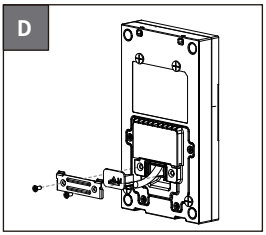
Make wires go through the **wiring cover** and connect them to the corresponding (for details, refer to "Wiring Interface").

C



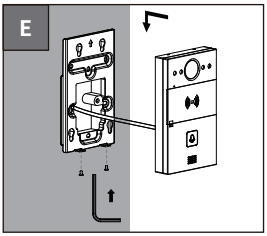
a. Fasten the **wiring cover** with four **M2.5x6 crosshead screws.**
b. Fix four **wall-mounting screws** on the back of R20A.

D

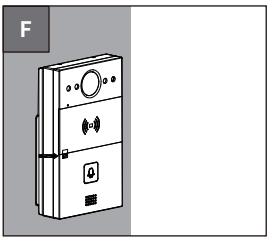


a. Select a suitable **rubber plug** to secure the wires.
b. Fix **sealing pressing plate** to the **wiring cover** with two **M2.5x6 crosshead screws**.

YS20000046

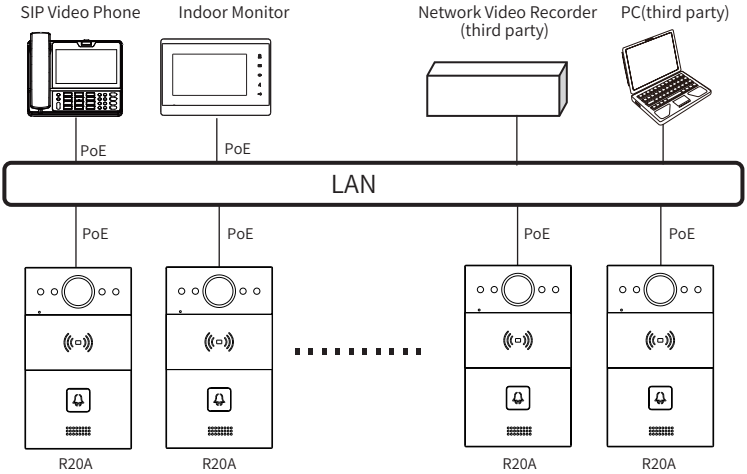


a. Insert the four **wall-mounting screws** on the device into the corresponding holes on the **wall-mounting bracket**.
b. Press down to slide the **wall-mounting screws** into the groove.
c. Use the **Allen wrench** to tighten the device with two **M3x6 hex socket screws**.



After successful installation, check the stability of device and remove the protective film.

Application Network Topology



Device Test

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

Note: For more LED settings, please refer to R20A web: **Intercom > LED Setting**.

Device Test

Please verify the device status after installation:

1. **Network**: Press and hold **Call button** to obtain IP address, network is working properly if the device announce IP address. If no IP address is obtained, E12X will announce "IP 0.0.0.0".
2. **Intercom**: Press **Call button** to make a call. The call configuration is correct if the call is successful.
3. **Access Control**: Use pre-configured 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

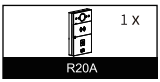
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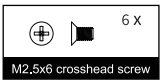
R20A Quick Guide

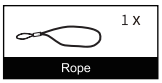
Unpacking

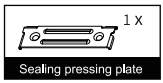
Before using the device, check the device model and ensure that the shipped box includes the following items:


1 X
R20A

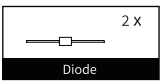

1 X
Wiring cover

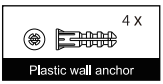

6 X
M2.5x6 crosshead screw

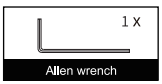

1 X
Rope

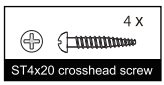

1 X
Sealing pressing plate


4 X
Wall-mounting screw


2 X
Diode

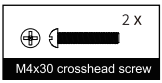

4 X
Plastic wall anchor

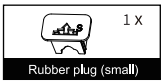

1 X
Allen wrench

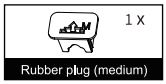

4 X
ST4x20 crosshead screw

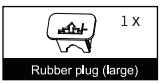

2 X
M3x6 hex socket screw


1 X
Wall-mounting bracket


2 X
M4x30 crosshead screw


1 X
Rubber plug (small)

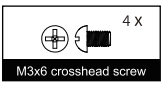

1 X
Rubber plug (medium)

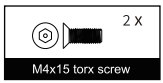

1 X
Rubber plug (large)

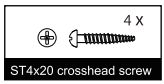
Flush-mounting Accessories :

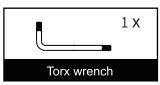

1 X
Flush-mounting bracket

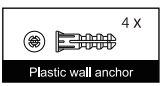

1 X
Flush-mounting box


4 X
M3x6 crosshead screw

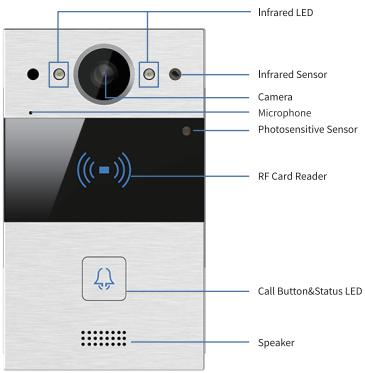

2 X
M4x15 torx screw


4 X
ST4x20 crosshead screw


1 X
Torx wrench


4 X
Plastic wall anchor

Product Overxiew



R20A

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.

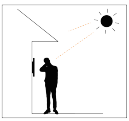
AWG Sizes and Properties Table

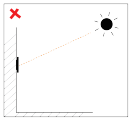
Please follow the properly wire data to install device:

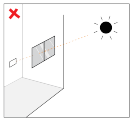
Power Supply	12VDC 1A		
AWG	20	22	24
Resistance (ohm/km)	33.9	48.5	79.6
Cross-sectional Area (mm^2)	0.5189	0.3247	0.2047
Wire Length (m)	⩽50	⩽40	⩽20

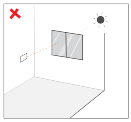
Requirements

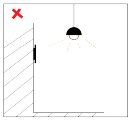
1.Place the device away from sunlight and light sources to prevent potential damage.
2.Do not place the device in the high-temperature, and humid environments or in surroundings impacted by magnetic field.
3.Install the device on the flat surface securely to avoid personal injuries and property loss 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

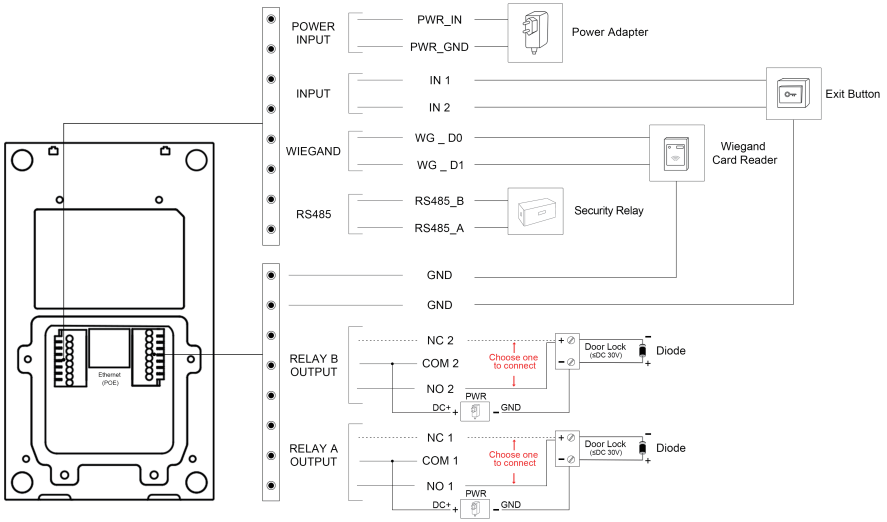
Warning!

1.To ensure safety, avoid touching power core, power adapter, and device with wet hands, bending or pulling the power core, 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.

Cautious

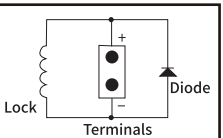
1.Do not knock device with hard objects.
2.Do not press down hard on the device screen.
3.Do not expose device to chemical products, such as alcohol, acid liquid, disinfectants, and so on.
4.To prevent the device installation from becoming loose, ensure accurate diameters and depths of screw holes. If 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.

Device Wiring



Warning

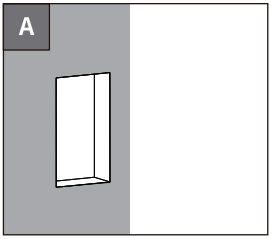
When you connect a device containing a coil, such as a relay or an electromagnetic lock, it is necessary to protect the intercom against voltage peak while switching off the induction load. For this way of protection we recommend a diode 1 A / 200 V (included in the accessories) connected antiparallet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



Installation

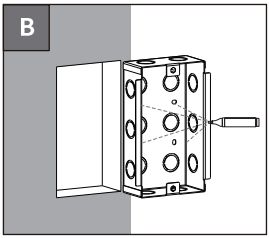
Step 1: Flush-mounting Box Installation

1.1 Normal Installation

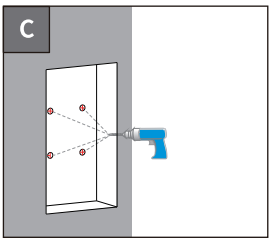


Cut out a square hole on the wall with the dimension 180*101*50mm (height*width*depth).

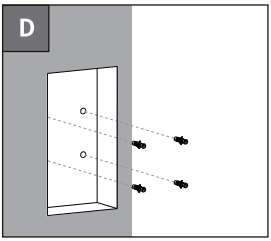
Note: Make sure that the cables within the hole or reserve a cable tube.



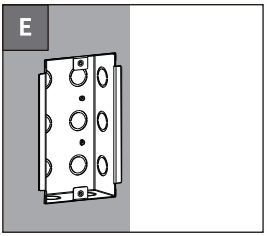
a. Insert the **flush-mounting box** into the hole, lead the wires to through the cable holes.
b. Mark four screw holes on the wall.



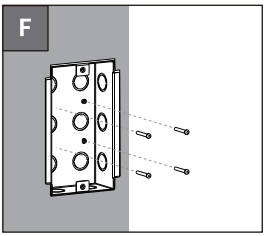
a. Insert the **flush-mounting box** into the hole, lead the wires to through the cable holes.
b. Mark four screw holes on the wall.



Insert four **plastic wall anchors** into the screw holes.

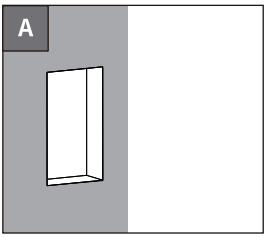


Place the **flush-mounting box** into the square hole, ensuring that the edges are closely against the wall and all wires go through the cable hole.



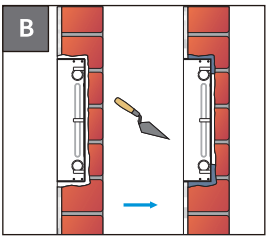
a. Tighten the four **ST4x20 crosshead screws** to the **plastic wall anchors** to fasten the **flush-mounting box**.
b. Use cement or non-corrosive adhesive to fill the gap between the wall and the box.

1.2 Simple Installation (with lower resistance of vandalism)



Cut out a square hole on the wall with the dimension 180*101*50mm (height*width*depth).

Note: Make sure that the cables within the hole or reserve a cable tube.

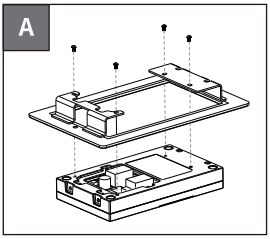


a. Use cement or non-corrosive adhesive to fill the gap between the wall and the flush-mounting box.
b. Wait for the cement to dry before proceeding to the next step.

Note: To prevent water from entering the back cover of the door phone, it is recommended to fill the gaps around with waterproof material.

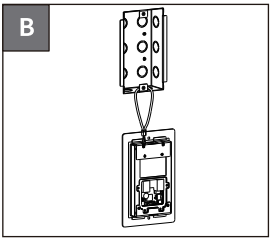
Step 2: Main Unit Installation

A



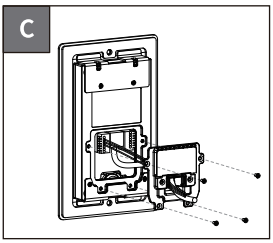
Use four **M3x6 crosshead screws** to fix **R20A** on the flush-mounting bracket.

B



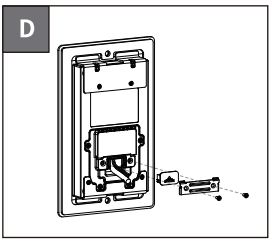
Hang **R20A** on the **flush-mounting box** with rope for easier installation.

C



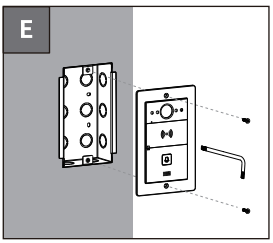
a. Make wires go through the **wiring cover** and connect them to the corresponding interfaces of the main board.
b. Fasten the **wiring cover** with four **M2.5x6 crosshead screws**.

D



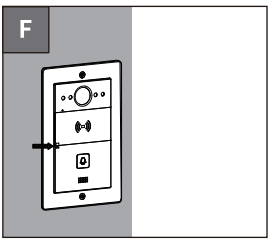
a. Select a suitable **rubber plug** to secure the wires.
b. Fix **sealing pressing plate** to the **wiring cover** with two **M2.5x6 crosshead screws**.

E



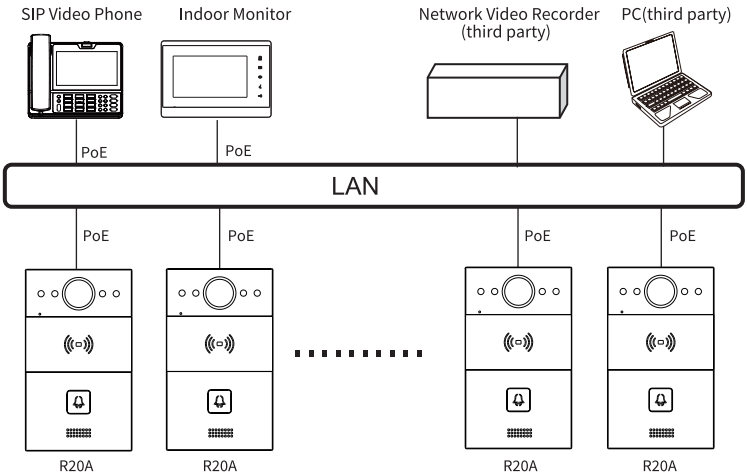
a. Place the device into the **flush-mounting box**.
b. Use **Torx wrench** to tighten the device with two **M4x15 Torx head screws**.

F



After successful installation, check the stability of device and remove the protective film.

Application Network Topology



Device Test

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

Note: For more LED settings, please refer to R20A web: **Intercom > LED Setting**.

Device Test

Please verify the device status after installation:

1.**Network**: Press and hold **Call button** to obtain IP address, network is working properly if the device announce IP address. If no IP address is obtained, E12X will announce "IP 0.0.0.0".

2.**Intercom**: Press **Call button** to make a call. The call configuration is correct if the call is successful.

3.**Access Control**: Use pre-configured 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.

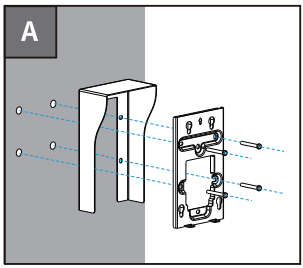
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Akuvox Smart Intercom

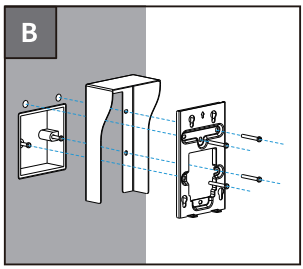
R20A
Rain Cover Quick Guide

1. On-wall installation



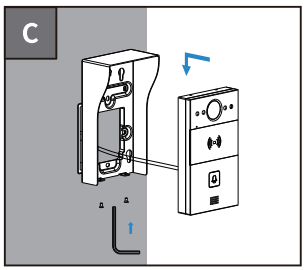
Without embedded box on the wall

Use four **ST4x20 crosshead screws** to secure the **rain cover** and **wall-mounting bracket** to the wall in sequence.



With embedded box on the wall

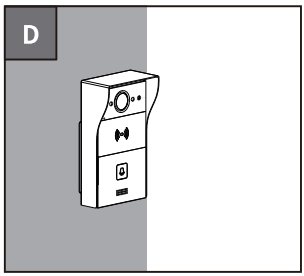
Use two **ST4x20 crosshead screws** and two M4x30 crosshead screws to secure the **rain cover** and **wall-mounting bracket** to the wall in sequence.



a. After completing the wiring and installing the accessories on the back of the device according to the R20A Quick Guide, insert the four **wall-mounting screws** on the device into the corresponding holes on the wall-mounting bracket.

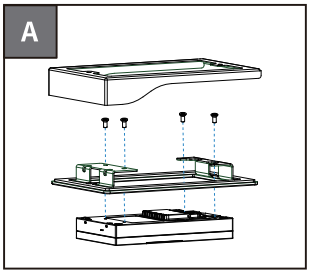
b. Press down to slide the **wall-mounting screws** into the groove.

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



Installation is done.

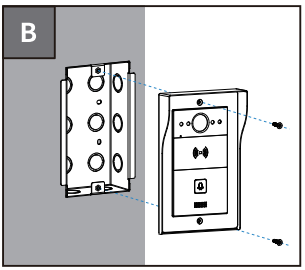
2. In-wall installation



a. Align the main unit with the slot of the **flush-mounting bracket**, ensuring the device's direction matches the arrow on the bracket.

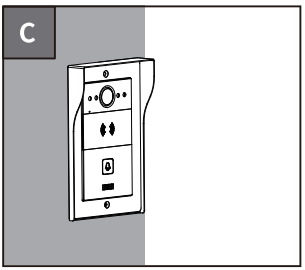
b. Secure the main unit to the **flush-mounting bracket** using four **M3x6 crosshead screws**.

c. Fit the **rain cover** onto the **flush-mounting bracket**.



a. After completing the wiring and installing the accessories on the back of the device according to the R20A Quick Guide, sequentially insert the main unit into the **rain cover** and then into the **flush-mounting box**.

b. Secure the **flush-mounting bracket** to the **flush-mounting box** using two **M4x15 Torx head screws**.



Installation is done.

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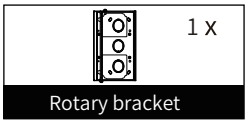
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www.akuvox.com

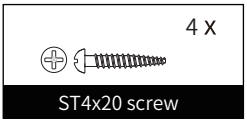
Akuvox Smart Intercom

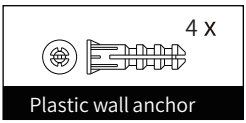
R20A/R20A-2
Quick Guide

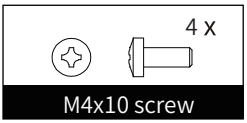
Unpacking

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

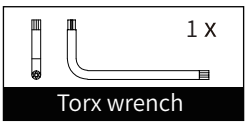






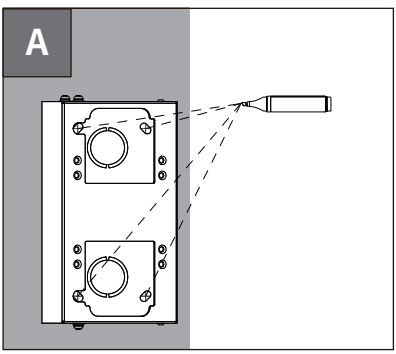




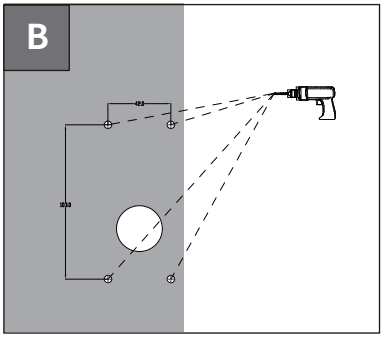


Installation

Step1: Rotary Bracket Installation

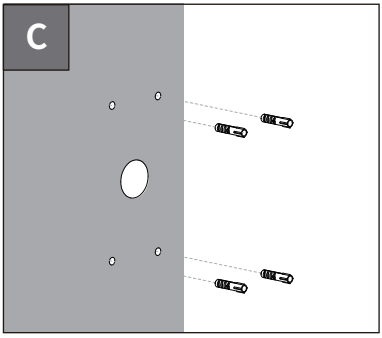


a. According to cable positions, place the **adjustable angle bracket** on wall.
b. Mark four screw holes on the wall.

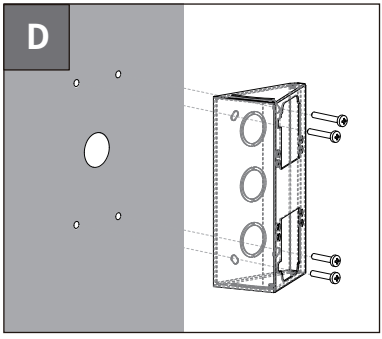


a. Take down the **adjustable angle bracket**.
b. Use a 6 mm hand drill to make the four holes with a depth of 20 mm.

> Note: Make sure the spacing between these holes matches the measurement indicated in the figure.

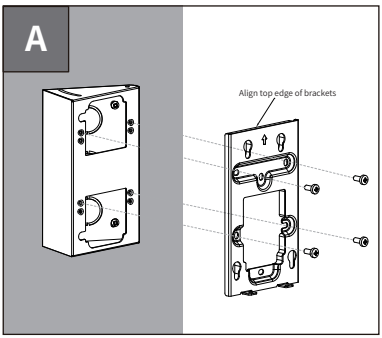


Insert four **plastic wall anchors** into four drilled holes.



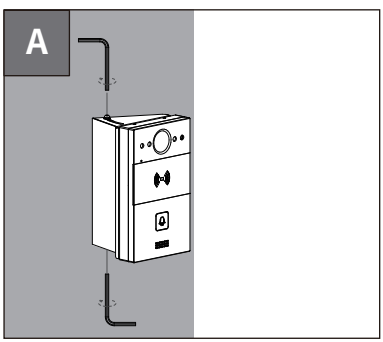
Tighten the four **ST4x20 crosshead screws** to the **plastic wall anchors** to fasten the **adjustable angle bracket**.

Step2: Wall-mounting Bracket Installation



a. Place **wall mounting bracket** onto the **adjustable angle bracket**, ensuring that their top edges are aligned.
b. Use four **M4x10 crosshead screws** to fasten the adjustable angle bracket.

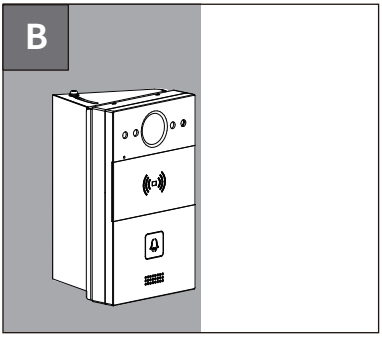
Step3: Rotary Bracket Adjustment



a. Use **Torx wrench** to secure **M3x8 Torx head screws** on the adjustable angle bracket, but do not fully tighten them.
b. Adjust the bracket angle according as needed.
c. Fully tighten the two **M3x8 Torx head screws**.

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R20A/R20A-2
Quick Guide



Check the device is securely installed, functions properly, and the installation is complete.

Get Help

For help or more assistance, contact us at:

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