

Akuvox Card Reader ACR-CRM11/ACR-CRP11 Configuration Manual



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About This Manual

This manual includes the wiring and configuration of Akuvox Wiegand card readers ACR-CRP11 and ACR-CRM11, guiding you to set up devices successfully.

Wiring

Color	Function	Description
Red	VCC	Connect to a 12V power adapter for power supply.
Black	GND	
Blue	GND	Connect GND and Reset wires to factory reset the device via a short circuit.
Orange	Reset	
Grey	GLD	Connect to Akuvox door phones or access control terminals' COM to receive relay signals.
Purple	Buzzer	Connect to Akuvox door phones or access control terminals' COM to receive relay signals.
Yellow	Wiegand GND	Connect to Akuvox door phones or access control terminals' Wiegand GND.
Green	Wiegand D0	Connect to Akuvox door phones or access control terminals' Wiegand D0.
White	Wiegand D1	Connect to Akuvox door phones or access control terminals' Wiegand D1.

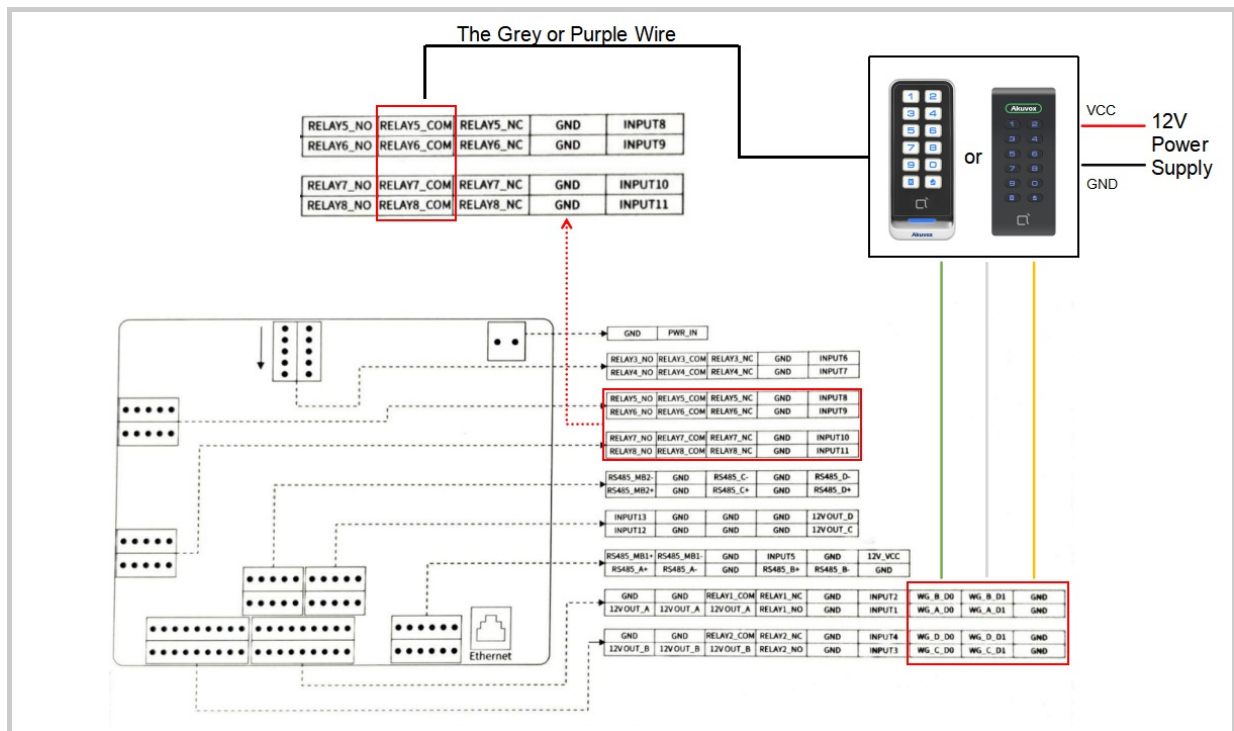
Akuvox card readers work with Akuvox door phones and access control terminals through Wiegand, requiring a 12V power supply. The diagram takes the access control terminal A094 as an example.

Tip

If the device supports 12V power output, you can use the device's 12V output and GND to supply power. Click [here](#) to view the models supporting 12V power output and configuration.

Optional Wiring

- For A094, you can use Relay5~8 to receive a signal from Relay1~4 connected to a door lock.
 - Relay5~8 can pass the signal to the card reader through the Grey or Purple wire. The card reader will beep or flash green light, indicating that the Relay1~4 is triggered. Please note that you can use either Grey or Purple wire for signaling.
 - For other door phones/access control terminals with two or three relays, simply use a different relay.
1. To use this feature, connect the Grey or Purple wire to a specific relay's COM.
 2. Use an extra wire to connect the relay's NO and any available GND.



Set the Card Reader

You can set the card reader by pressing certain keys or their combination.

Enter Configuration Mode

You can configure the card reader when it is in configuration mode.

1. Long press "❌" until you hear a short beep and press "✅".
2. Enter the correct Admin Code, the default is 1234, and the device will beep and flash green light, indicating it enters configuration mode.

Exit Configuration Mode

Press "❌" to manually exit the configuration mode.

The card reader will beep twice and exit the configuration mode automatically after:

- every successful or failed change;
- 10 seconds of inactivity.

Change Admin Code

The admin code is the prerequisite for configuring other settings. The default is 1234. Follow the steps to change it.

Note: The admin code must be 1 to 8 digits.

1. Long press "❌" until you hear a short beep and press "✅".

2. Enter the original admin code. The device beeps and flashes green light.
3. Press "0" and enter the new code.
4. Press "" and enter the new code again.
5. Press "" to confirm the change.

Set the Keypad Light

1. Long press "" until you hear a short beep and press "".
2. Enter the admin code. The device beeps and flashes green light.
3. Press "7" and then "5".
4. Press "0" to turn off the light; "1" to turn it on.

Reset to Factory Setting

1. Long press "" until you hear a short beep and press "".
2. Enter the admin code. The device beeps and flashes green light.
3. Press "8" and then "".
4. Press "0" and then "". The device will beep four times and be reset to the factory settings.

You can also reset the card reader via a short circuit.

1. Connect the blue and orange wires.
2. Power on the device and it will beep five times and flash green light once.

The device will be reset to the factory settings.

Change Wiegand Card Reader Mode

The Wiegand card reader mode should be consistent between the card reader and the door phone.

The device supports Wiegand 26 and Wiegand 34. The default is Wiegand 26.

1. Long press "" until you hear a short beep and press "".
2. Enter the admin code. The device beeps and flashes green light.
3. Press "8" and then "1".
4. Press "1" to select Wiegand 26; "2" to select Wiegand 34. The device will beep twice and flash green light, indicating that the change succeeds.

Change Wiegand Output Data Order

You can select the output order of card data between Normal and Reversed. The default is Normal order.

1. Long press "" until you hear a short beep and press "".
2. Enter the admin code. The device beeps and flashes green light.
3. Press "8" and then "3".

4. Press "1" to select the Normal order; "2" to select the Reversed order. The device will beep twice and flash green light, indicating that the change succeeds.

Change Wiegand PIN Output Format

The Wiegand PIN output format supports 4 bits and 8 bits. The default is 4 bits.

1. Long press "✕" until you hear a short beep and press "🏠".
2. Enter the admin code. The device beeps and flashes green light.
3. Press "8" and then "4".
4. Press "1" to select 4 Bits; "2" to select 8 Bits. The device will beep twice and flash green light, indicating that the change succeeds.

Change Volume

1. Long press "✕" until you hear a short beep and press "🏠".
2. Enter the admin code. The device beeps and flashes green light.
3. Press "7" and then "9".
4. Press "0" to turn off the sound; "1" to select Low volume; "2" to Medium volume; "3" to High volume. The device will beep twice and flash green light, indicating that the change succeeds.

If you want to disable the tamper alarm when the alert is triggered, long press "✕" until the beep sound stops. Then press "🏠" and enter the admin code.

Press "730" to turn it off.

Configuration

Users can swipe cards and enter PINs(Enter the PIN code and press "🏠" for confirmation)on the card reader to open doors. To do this, you need to set up the Wiegand feature and users' credentials.

Take A094 as an example.

Set up Wiegand

1. Use the IP scanner to obtain the device IP in the same LAN(Click [here](#) to download the software).
2. Enter the device IP in a browser and enter the username and password(both admin by default) to access the device web settings.
3. Go to **Device > Wiegand** and specify which Wiegand is the card reader connected to, A, B, C, or D.
4. Select the Wiegand Card Reader Mode the same as the [card reader's](#) and select the relay(s) to be triggered.

WiegandA

WiegandA Display Mode

8HN

WiegandA Card Reader Mode

Wiegand-26

WiegandA Transfer Mode

Input

WiegandA Input Data Order

Normal

WiegandA Input Clear Time

5

WiegandA Anti-passback Mode

None

There'll be safety hazards if anti-passback Mode and bistable functions are activated concurrently.

WiegandA Open Relay

☒ Relay1
☒ Relay2
☒ Relay3
☒ Relay4

5. Click Submit.

Set up the User

1. Go to **Directory > User** interface and click **Add**.
2. Set the User ID and Name.
3. Enter the PIN code and/or RF card code.

User Basic

User ID

Name

Private PIN

Code

RF Card

Code

Obtain

Add

4. Check the relay(s) to be opened by the user and select the schedule.

Access Setting

Allow To Open

☒ Relay1
☐ Relay2
☐ Relay3
☐ Relay4

Floor No.

None x

Web Relay

0

2 items Unselected Schedules

☐ 1:n1
☐ 1002:Never

1 item Selected Schedules

☐ 1001:Always

>

<

↑

↓

5. Click Submit.

[Optional]Set up Card Reader Signal

Before configuration, make sure you have [connected the devices correctly](#).

1. Go to the **Access Control > Auxiliary Output** interface. Enable the Relay connected to the card reader's signal wires.
2. You can adjust the Hold Delay, which controls the duration for which the green LED remains on or the buzzer sounds.

Akuvox

Open A Smart World

A094

Home Screen

Status

Network

Access Control

Relay

Input

Auxiliary Output

Auxiliary Input

Web Relay

Auto

Log Out

Access Control > Auxiliary Output

Output

Output ID	Output A (Relay5)	Output B (Relay6)	Output C (Relay7)	Output D (Relay8)
Action Type	Disabled	Disabled	Disabled	Disabled
Action To Execute	☐ Email	☐ Email	☐ Email	☐ Email
Hold Delay(Sec)	5	5	5	5
Output Status	Low	Low	Low	Low

Cancel

Submit

3. Go to the **Access Control > Relay** interface and specify which relays are connected to door locks. Suppose it is Relay 1.
4. Set the Trigger Delay(Sec) and the Hold Delay(Sec), which determine when and how long the relay is triggered.
5. Select the Output Relay connected to the card reader's Grey or Purple wire.

Relay	Relay1	Relay2	Relay3	Relay4
Type	DefaultState ▼	DefaultState ▼	DefaultState ▼	DefaultState ▼
Action To Execute	☐ Email	☐ Email	☐ Email	☐ Email
Mode	Monostable ▼	Monostable ▼	Monostable ▼	Monostable ▼
Trigger Delay(Sec)	5 ▼	0 ▼	0 ▼	0 ▼
Hold Delay(Sec)	5 ▼	5 ▼	5 ▼	5 ▼
Relay Status	Relay1: Low	Relay2: Low	Relay3: Low	Relay4: Low
Trigger Output	Output A ▼	None ▼	None ▼	None ▼
AccessMethod	☒ PIN ☒ RF Card	☒ PIN ☒ RF Card	☒ PIN ☒ RF Card	☒ PIN ☒ RF Card
Inter lock	☐	☒	☒	☒
Interlock Type	Input4 ▼	Input5 ▼	Input6 ▼	Input10 ▼
Unlock Method	Input3 ▼	WiegandB ▼	Input1 ▼	WiegandD ▼

Wiegand/Input Open Relay setting will be overwritten.

6. Click Submit.

If the device only has two or three relays and does not have the Trigger Output option, you can use the Action URL to receive the relay signal. Take R29S as an example.

Suppose Relay A is connected to the door lock and Relay B is connected to the card reader via COM.

1. Go to **Intercom > Relay > Open Relay Via HTTP** interface.
2. Check **Enabled** and set the Username and Password for authentication.

Open Relay Via HTTP

Enabled ☒

Session Check ☐

UserName

Password

3. Go to Phone > Action URL and check Active.
4. Enter the HTTP command in the RelayA Triggered box. This enables Relay B to be triggered along with Relay A.

For example, *http://admin:admin@192.168.35.77/cgi/OpenDoor?action=OpenDoor&DoorNum=2*

Note

- The DoorNum indicates which relay to trigger.
 - Relay A: DoorNum = 1
 - Relay B: DoorNum = 2
- The format is affected by high security mode. Please click [here](#) to view how to choose the right format.

Status

Intercom

Account

Network

Phone

Time/Lang

Call Feature

Audio

Dial Plan

Action URL

Import/Export

Action URL

Active ☒

All Schedules

1001:Always
1002:Never

>>

<<

Enabled Schedules

1001:Always

Type GET

Make Call

Hang Up

RelayA Triggered http://admin:admin@192.168.35.77/fcgi/OpenDoor?action=OpenDoor&Dr

RelayB Triggered

5. Click Submit.
6. Go to **Intercom > Relay** where you can set up the card reader signal trigger delay and activation duration.

Relay			
Relay ID	RelayA	RelayB	RelayC
Type	Default state	Default state	Default state
Mode	Monostable	Monostable	Monostable
Trigger Delay(Sec)	0	0	0
Hold Delay(Sec)	5	5	5
DTMF Mode	1 Digit DTMF		
1 Digit DTMF	0	1	2
2~4 Digits DTMF	010	012	013
Relay Status	RelayA: Low	RelayB: Low	RelayC: Low
Relay Name	RelayA	RelayB	RelayC