



CCTV & Security Distributor

Waterproof Integrated Access Controller

User Manual



AC920P

Read the manual before usage and keep for future reference.

<http://www.provisual.com>



1. Product Appearance

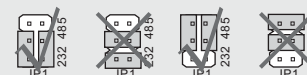


- The Front
- The Back
- 1.1 Color: Silvery
- 1.2 Dimension: 120mm×58mm×22mm

2. Important Notices

Failure to follow the instructions below may lead to the malfunction of the system, property damage and even physical injury.

- Connection and operation on any components or the controller with power on is strictly prohibited.
- Connect the system according to the instructions described in this manual.
- The RS232 cable connected to the computer should be no more than 15 meters.
- The RS485 cable connected to the computer should be no more than 1200m.
- Please use the specified power supply.
- The communication mode between the controller and computer should be either RS232 or RS485.



2.7 When RS485 mode is applied, a highway can connect maximally 32 controllers with identification address differs from each other.

3. Product Introduction

Water proof product series is RF integrated access controller. The series supports EM, HID and Mifare cards according to difference models. It is the most advanced one-door controller at present. It adopts metal case, practical keyboard and built-in microprocessor. It can supply protection for 2000 users. Moreover, the device is characterized by ultra low ultra-power consumption, lightened keyboard, independent password, Wiegand output, output short-circuit protection, door-magnet alarm, exit button, and door bell interface etc, which can be applied in family, office room, residence community and other public places.

4. Function Feature

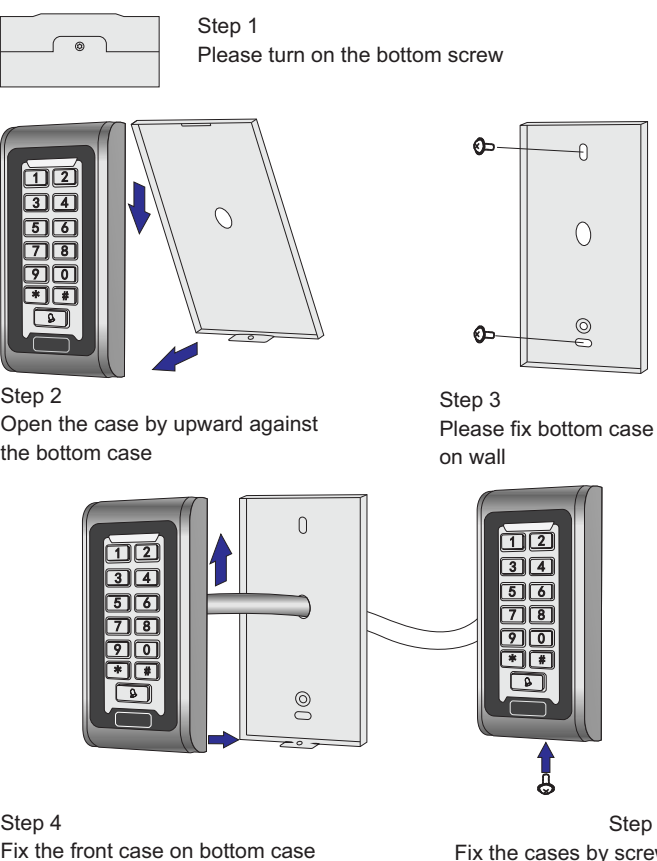
- Supper Low Consumption: Standby current less than 30mA.
- Lighted Keyboard: User can operate keyboard without light.
- User Capacity: It supports 2000 users.
- Independent Password: User can open door by password without card.
- Password Modify: User can modify password by himself.
- High Speed Search: After read card, door can open within 0.1s.
- Output Short Circuit Protection: When lock or alarm output short circuit, output will be closed within 100µS automatically.
- Wiegand Output: It outputs W26 card number or WG 4 keypad number.
- Delete Card: if user loss the card, manager can delete the card by keypad to avoid any safety loophole.
- Dismiss Alarm: When dismissed abnormally, device buzzer will alarm.
- Door Bell keypad: Keypad is isolated with circuit, it can connect with door bell.

5. Parameter

- Working Voltage: DC9-28V
- Storage Capacity: 2000 users
- Quiescent Current: ≤30mA
- Temperature: -25℃~60℃
- Read Distance: 3~8cm
- Humidity: 10%~90%

- Lock Output: ≤3A
- Output Short Circuit Protection: ≤100µS
- Alarm Output: ≤20A
- Open Time: 0-99 (can be adjusted)

6. Installation Instruction



7. Manager Operation

- Restore Factory Setting: After device power off, please press # button and do not release it, then power on, if device beep, please release the button. Now finish. Note: The operation of restore factory setting will not delete user information.
- Enter Administrator Operation Status: Enter administrator operation → Press * → Input admin password → Press # to confirm. Administrator default password is: 999999.
- Modify Administrator Password: Modify administrator Password → Press 0 → Input new password # → Input again #. Note: Administrator password is 6 – 8 digital any number, please remember it.
- Add User: Add card continuously → Press 1 → Read card 1 → Read card 2... → Press # to end. Appoint card number to add → Press 1 → Card NO. 1+# → Read card → Card NO. 2+#... → Press # to end.
- Delete All: Delete all → Press 20000 → Press # to confirm delete all.
- Open Door Way Setup: Set the way of open door. 7.6.1 Open by Card: Setup card to open door → Press 3 → Press 0 → Confirm #.

- Appoint ID number and card number to add: Press 1 → ID NO. 1+# → Card NO. 1+# → Card NO. 2+#... → Press # to end. Note: Input ID number is 1-4 digital, the range is 1-2000, such as 1,01, 001, 0001 are mean ID number 1. Adding card user has a default password "1234", but this password can not open door, it will be used when modify password only.
- Appoint ID number and add password: Appoint ID number and card number to add → Press 1 → ID NO. 1+# → Password+# → ID NO. 2+# → Password+# → ID NO. 3+# → Password+#... → Press # to end. Note: It is used in no card user, password have no relative with card, input digital is 4, but can not be "1234".
- Delete User: 7.5.1 Delete Card → Read card to delete → Press 2 → Read card 1 → Read card 2... → Press # to end.
- Appoint ID number to Delete: Appoint ID number and read card to add → Press 2 → ID NO. 1+# → Read card → ID NO. 2+#... → Press # to end.
- Delete All: Delete all → Press 20000 → Press # to confirm delete all.
- Open Door Way Setup: Set the way of open door. 7.6.1 Open by Card: Setup card to open door → Press 3 → Press 0 → Confirm #.

- Open by Card + Password: Setup card + password to open door → Press 3 → Press 1 → Confirm #.
- Open by Card or Password: (Default) Setup card or password to open door → Press 3 → Press 2 → Confirm #.
- The Time of Lock Open Setup: Setup open door time → Press 4 → Press 0-99 → Confirm #. Note: Open Time range: 0-99s, default is 5s.
- Alarm Time Setup: Setup alarm time → Press 5 → Press 0-3 → Confirm #. Note: Alarm Time Range: 0-3 min, default is 1 min.
- Door-magnet Alarm Setup: 7.9.1 Shield door-magnet alarm function (default): Shield door-magnet alarm → Press 6 → Press 0 → Confirm #. 7.9.2 Start Door-magnet Alarm Function: Start door-magnet alarm → Press 6 → Press 1 → Confirm #.
- Safe Mode Setup: There are two situations after start the function: 7.9.2.1 If open door and do not close normally, after 1 min, the built-in beeper send alarm sound and close door or close directly after 1 min. 7.9.2.2 User open lock, door open after 20s, or door is opened by force. The external and built-in beeper alarm simultaneously.

- Normal Mode (Default): Setup normal mode → Press 7 → Press 0 → Confirm #.
- Lock Mode: Setup lock mode → Press 7 → Press 1 → Confirm #. It means that user present invalid card or input wrong password for ten times continuously within 10 minutes, system will be locked for 10 minutes.
- Alarm Mode: Setup alarm mode → Press 7 → Press 1 → Confirm #. It means that user present invalid card or input wrong password for ten times continuously within 10 minutes, external warner and built-in beeper will alarm simultaneously.
- User Operation: 7.11.1 User modify password by card: User modify password by card → Press * → Read card → Input old password # → Input new password # → Input again.
- User Modify Password by ID Number: User modify password by ID number → Press * → Input ID number → Input old password # → Input new password # → Input again.

- Open Door by Password: Open door by password → Input user password → Press # to open door. After input correct password, door will open.
- Open Door by Card + Password: Open door by card + password → Read card → Input user password → Press # to open door. After present valid card and input correct password, door will open.
- Release Alarm Operation: 7.16.1 External alarm and built-in beeper alarm simultaneously. Release alarm → Read valid card → Release alarm or Input admin password → It can release alarm.
- Close Alarm Sound: 7.16.2 Close Alarm Sound. Release alarm → Read valid card → Release alarm or Input admin password → It can release alarm.

7.17 Audible and Visual Indication

Operation status	Red Light	Green Light	Buzzer	Memo
Standby	Flash slow	Off		
Button			Beep	
Success	Off	On	Beep —	
Fail			Beep Beep Beep	
Go to Edit	On	Off	Beep —	
Setup Status	On	On		Indicator Light is Yellow
Exit Edit	Flash Slow	Off	Beep —	
Open Lock	Off	On	Beep —	
Alarm	Flash Fast	Off	Alarm Sound	

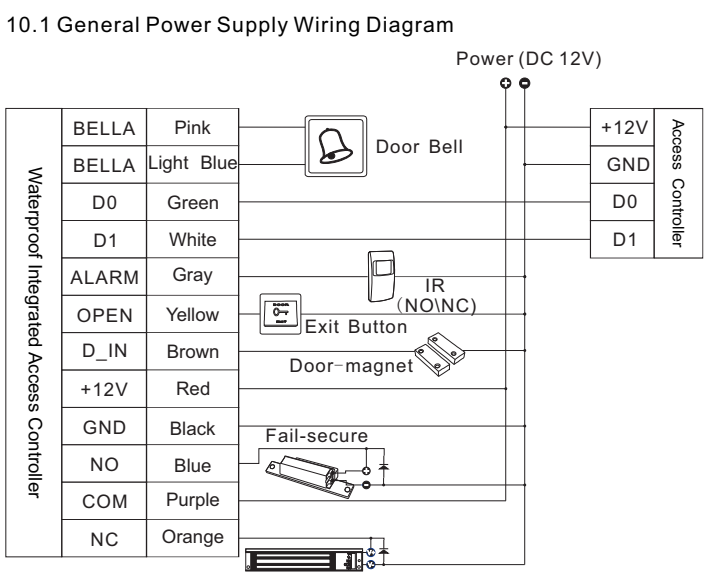
8. Instructions for Keypad

- Not all readers are facilitated with keypad. The reader models facilitated with keypad support 6-digit password.
- The reader will transform 6-digit password into Wiegand 26 format and send the data to controller.
- The user should input the 2nd digit within 2s after inputting the 1st digit, otherwise the 1st digit will be deleted automatically and the user has to input the password again.
- If wrong number is input, the user can press the ESC key and re-input the password again.
- After input password, please press "#" keypad, it means over.
- When take it as reader, please set Safe Mode as default.

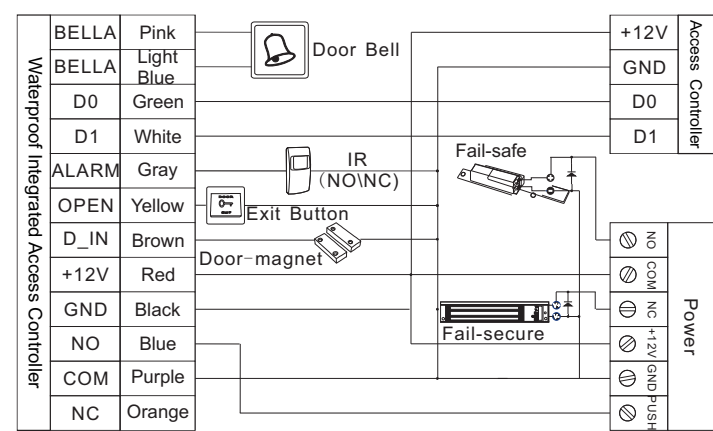
9. Wiring Nomination

Wire No	Mark	Color	Function
1	BELL_A	Pink	One port of door bell
2	BELL_B	Light Blue	Another port of door bell
3	D0	Green	Weigand output wire D0
4	D1	White	Weigand output wire D1
5	ALARM	Gray	Warner negative (alarm positive connect with +12V)
6	OPEN	Yellow	One port of exit button (the another port connect with GND)
7	D_IN	Brown	One port of door magnet (the another port connect with GND)
8	DC12V	Red	Power supply 9-28V input(DC input +)
9	GND	Black	Power supply 9-28V input (DC input-)
10	NO	Blue	Relay normal open (connect with fail-secure lock)
11	COM	Purple	Relay common port (connect with power GND)
12	NC	Orange	Relay normal close (connect with fail-safe lock)

10. Wiring Diagram



10.2 Power Supply Wiring Diagram



10.3 Wiring Diagram Spacification

Connection Device	Cable Type	Main Point
Power Supply – Int-egrated Access Controller	RVV2*1.0	Distance <100M
Integrated Access Controller - Controller	RVV4*0.5	Distance 60m, can not over 100m
Integrated Access Controller - Lock	RVV4*1.0(with door-magnet)	Distance <150M
Integrated Access Controller - Exit Button	RVV2*0.5	Distance <150-200M
Integrated Access Controller - IR Warner	RVV2*1.0	Distance <200M