Scientific Home

● Scientific Life

OPERATING AND

INSTALLATION GUIDE

Please read this manual before using it and save it for future reference.

► Technical parameters of outdoor station

Product Material	aluminium alloy
Transmission Mode	digital transmission
Working voltage	DC12V
Operating temperature	-20℃ ~ +55℃
Operating current	60-80mA
Standby current	10-20mA
Installation Method	wall mounting type
Installation Dimension	130x54x40mm

► Technical parameters of Indoor unit

Working voltage	DC12V
Call duration	120s
Call way	two-way communication
Operating temperature	-20℃ ~ +55℃
Operating current	60-80mA
Standby current	10-20mA
Display Screen	seven-inch color LCD screen
Resolution	800×480

► Ringtones Selection on the monitor (7 ringtones cyclical selection):

When the monitor is standby, press the talk ⓦ button till the "BI"sound, then press the monitor 🔲 button till the "BI" sound, the setting mode starts(for10 seconds,the indicator flashing), press the monitor 🔲 button for ringtones cyclical selection. Press the talk ⓦ button to confirm and exit.

► Ring time/quantity selection on the monitor ("dingdong" ring quantity for 3-10 times, other ringtones -example"beep"-ring time for 6-20 seconds ring):

When the monitor is standby, press the talk ⓦ button till the "BI" sound, then press the intercom call ⊙ button till the "BI" sound, the setting mode starts(for 10 seconds, the indicator lamp flashing), press the monitor 🔲 button for increasing ring quantity/time, press the unlock 🔑 for decreasing the ring quantity/time. Pressthe talk ⓦ button to confirm and exit.

► Unlocking time seoction on the monitor(2s-20s):

When the monitor is standby, press the talk ⓦ button till the "BI" sound, then press the unlock 🔑 button till the "BI" sound, the setting mode starts(for 10 seconds, the indicator flashing), press the monitor 🔲 button for increasing the unlock time2s-20s, press the unlock 🔑 for decreasing the unlock time2s-20s,(every press increase/decrase by one second). Press the talk ⓦ button to confirm and exit.

► Restore factory setting on the monitor:

Press the talk ⓦ button till the power on, a long beep will sound, the restore factory setting finish.

4-wire villa intercom system diagram1

► Standard Set Diagram
(1 outdoor station for 1 indoor monitor):

Power Adapter

Outdoor Station

extra power supply of electric lock

Electromagnetic Lock

FIG. 1
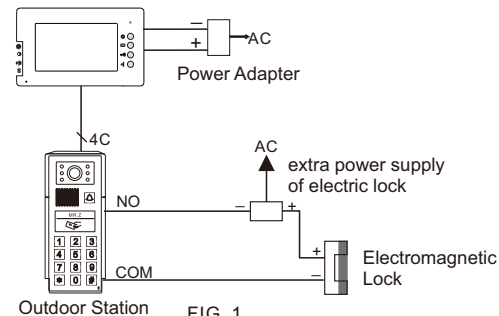
（4C:The diameter of the RVVP wire is 0.5mm square）

► Detailed conection diagram

indoor monitor backview

Indoor monitor

Power Adapter   CN1   audio gnd v+ video   CN2

4wires connection detail
red blue
yellow white

extra power supply of electric lock

CN1   audio gnd v+ video

magnetic lock

NC COM NO   CN2

outdoor station backview
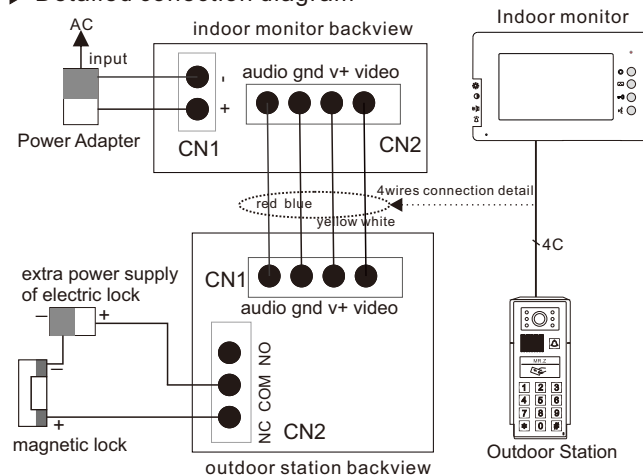
Outdoor Station

FIG. 2

▶ Extension Connection Diagram
(1 outdoor station for max 4 indoor monitors):

Power
Adapter

Power
Adapter

Power
Adapter

Power
Adapter

AC

AC

AC

AC

4C

4C

4C

4C

AC

NO

COM

extra power supply
of electric lock

Electromagnetic
Lock

Outdoor Station
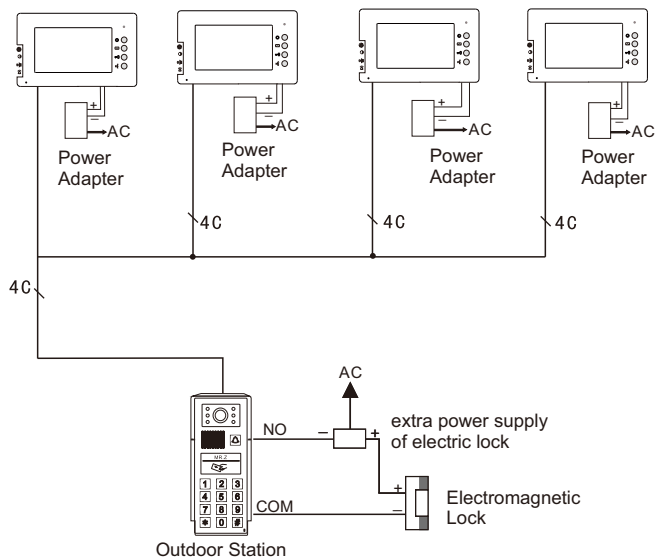
FIG. 3

（4C:The diameter of the RVVP wire is 0.5mm square）

▶ Indoor monitor:

Brightness
contrast
Call Volume
Ringer Volume

intercom call
Monitor
Unlock
Talk

FIG. 6 front view

CN1

- +

J2 J1 J3

CN2
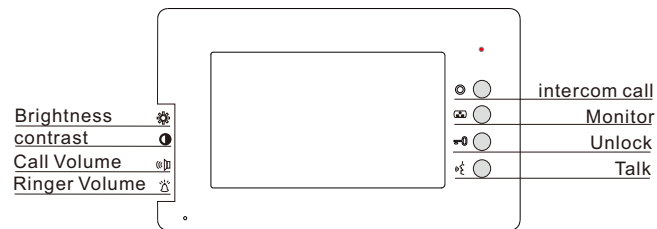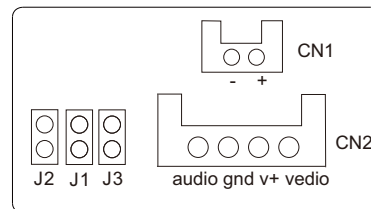
audio gnd v+ vedio

FIG. 7 back view

▶ Notes for indoor monitor:

◆ CN1 is for a power，the negative"-" and the positive"+".

◆ The indoor monitor CN2 (audio、gnd、V+、video) is accordingly wired
with the outdoor station CN1(audio、gnd、V+、video).

◆ J1 plug in when the outdoor station need the power from indoor monitor.

◆ J2 is a video jumper Pin, at the time of two or more indoor monitors
connection, The J2 on the furthest indoor monitor need plug in, the J2
on the other monitors is unplugged.

◆ J3 is a ringtone selection jumper Pin, at the time of two or more indoor
monitors connection, the J3 on the one of the monitors need plug in,
other monitors J3 is unplugged.

14 Master card function

1) Add new master card (00-04 indicates the label of 5 master cards, 00 is the first, 01 is the second…).
In the setting mode:
Press "*" "7" (red light flashing, Bi -- long ring), and then input 00-04 (if the blue light is on, it means that this number has a parent card. Press "*" "*" to clear the card, and the green light flashes after clearing. At this point, you can add a parent card. If the green light indicates that this number has no master card, you can add master card), press "#" to exit back to set mode, and then press "#" to exit the setting.

2) Delete all master cards
In the setting mode:
Press "*" "4" (red light flashes, Bi -- long ring), and then enter 01 (Bi -- long ring, red light stops flashing, and the mother card is deleted successfully). Finally, press "#' to exit back to set mode, and then press '#" to exit the setting.
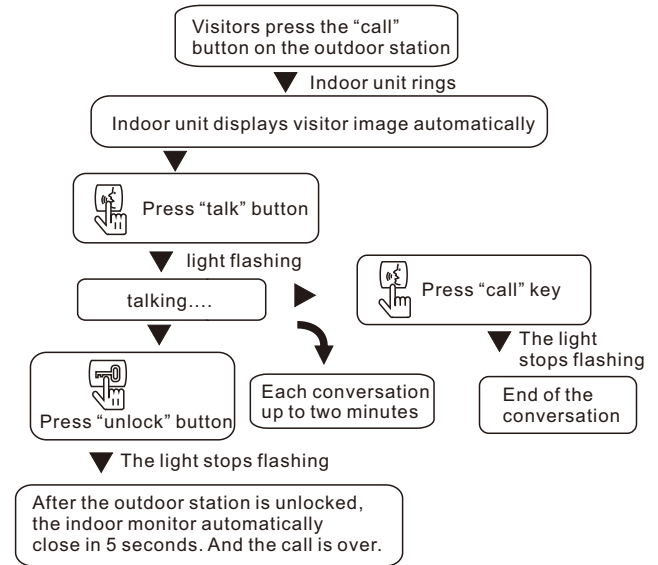
3) Add user card with mother card
The first time you swipe the card, BI- BI rings twice with a long front sound and a short back sound and opens the door. When you swipe the master card again within 5s, it will ring the Bi long sound -- green light flashing and enter the automatic card adding state. At this point, you can add the user card, the third swipe master card, the Bi --Bi sound occurs, the front sound is long and the back sound is short, exit the setting, or automatic exit setting without operation in 10s.

   Note: add card to the master card, no card + password to open the door, each time swiping card directly open the door;If there is a duplicate card number when adding the card number, it will BiBi, indicating invalid.

15）Prompt sound effect
If input error, it will have BiBi prompt tone. If there is no operation in 40 seconds after entering the setting state, exit automatically and there is BiBi prompt tone. If the button is not pressed when it is not in the set state, it will exit automatically after 10 seconds. If under the card and password opening method, swipe card or fingerprint correctly and wait for password inputting. If no operation is done after 20 seconds, it will exit automatically with BiBi prompt tone.

▶ Visitors call:

Visitors press the "call" button on the outdoor station
▼ Indoor unit rings
Indoor unit displays visitor image automatically
▼
Press "talk" button
▼ light flashing
talking…. ▶ Press "call" key
▼ The light stops flashing
Press "unlock" button
Each conversation up to two minutes
End of the conversation
▼ The light stops flashing
After the outdoor station is unlocked, the indoor monitor automatically close in 5 seconds. And the call is over.

▶ Monitoring:

press 👥 to preview the door station image
▼
Press the "talk" button on indoor monitor to talk with door station
▼
Press the "talk" button again to close

▶ Internal communication:

press the Internal call button ● to call other indoor monitors
▼
Press the "talk" button on other indoor monitors for talk
▼
Press the "talk" button again to close
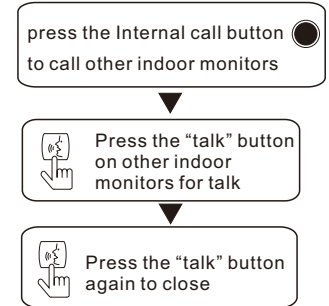
▶ Outdoor station:

1. The outdoor station display diagram
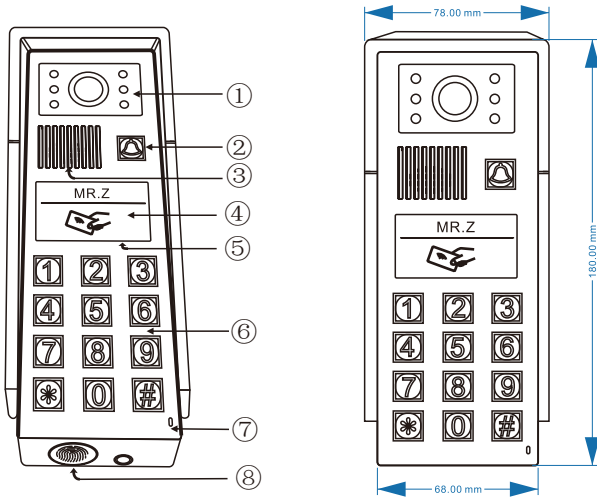
No.	Function Description	No.	Function Description
①	camera	⑤	card swiping coil
②	call button	⑥	password button
③	horn hole	⑦	microphone
④	nameplate	⑧	fingerprint head

9）Change management password
In the setting mode:
Press "*" "3", the red light flashes, enter 4-8 bit management passwords twice, at last press "#" to confirm(Bi -- long ring, and the outdoor station exit to set mode directly), the password is modified successfully . (if the administrative password is 223456, input method should be: press "*" "3", red light flashes, and press 223456+223456+#)

10）Restore ex-factory management password:
If you forget to manage your password, please recharge the battery and press "#" button before BiBiBiBiBi sound.

11）Set the opening time of the door machine
In the setting mode:
Press "*" "1' (red light flashes, Bi -- long ringing), enter double digits (00-99) to indicate the opening time (issued Bi sound, red light stops flashing), press "#" to exit setting. If set to 05, the opening time is 5 seconds, and so on. Note that if set to 00, inducting one time is on and inducting again is off. (factory setting time default 2s).

12）Unlock button
The unlock button is external interface. The external switch should be connected with the unlock button. When the switch is pressed, the outdoor station have a green light and the lock will be open.

13）Turn on/off the buzzer function
In the setting mode:
a. Turn on the buzzer: press "*" "2" (red light flashes, Bi -- long ring), press "0" "1" (Bi -- long ring, red light stops flashing and set successfully), press "#" to exit the setting.
b. Turn off the buzzer: press "*" "2" (red light flashing, Bi -- long ring), press "0" "2" (Bi -- long ring, red light stop flashing, setting successful), press "#" to exit the setting.

6）Automatically find the free position and add new users
In the setting mode:
Press "*" "9" (the system will automatically locate the free numbers to add users, green light flashing), Firstly swipe the card (a Bi long ring when swiping the card indicates adding card successfully). Secondly add the fingerprint (when inputting fingerprint, Bi Bi Bi sound occurs and the last Bi will be a long ring, and the fingerprint successfully. Failure to add fingerprint if Bi Bi sound occurs). Thirdly adding password (password is set to 4 to 8 passwords length. For setting password, enter the password and press "#" to confirm. Adding password successful by sending out the Bi - long ring). Finally press "#" to exit the user settings, and display shows a red light. You can then add another set of numbers after exiting, with the same pattern set as above. Or press "#" to exit the settings.
   Note: When you have 100 users, and you add a new user method with automatic look-up, the last user will be replaced.

7）Clear cards, passwords and fingerprints
In the setting mode:
a. Clear all cards, passwords and fingerprints: press "*" "8" (red light flashes, Bi -- long ring), and press "8" "8" (Bi -- long ring, red light stop flash) to indicate successful clearance, press "#" to exit back setting mode, and then press "#" to exit setting.
b. Delete a certain door card + password + fingerprint: press 000-099 (if the blue light is on, it means the bit has information, you can press "*" "*" to clear the bit, and the green light flashes after clearing. If the green light is on, it means that there is no data on this bit, complete the function of deleting the card, and finally press "#" to return to the setting mode, and then press "#" to exit the setting). Or quit automatically after 40s.

8）Restore factory Settings
In the setting mode:
Press "*" "8" (red light flash), press "9" "9" (Bi -- long ring, and the outdoor station back to set mode), then the outdoor station restore factory settings.
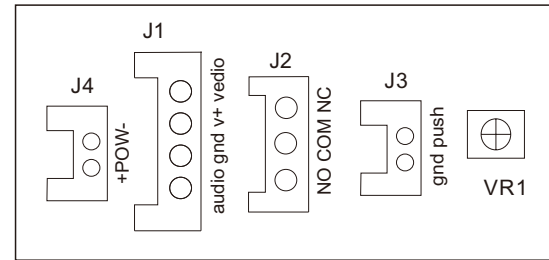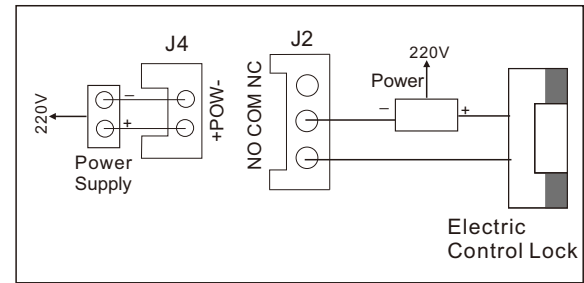

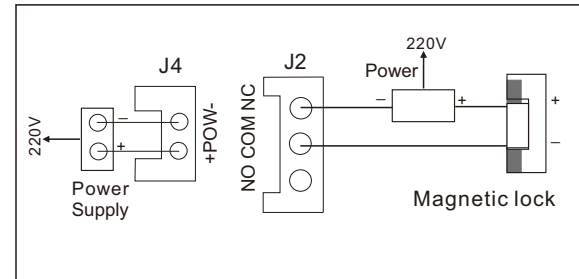FIG.3 Rear view of outdoor station

FIG. 4:Electric lock wiring diagram

FIG. 5:Magnetic lock wiring diagram

2. Description of the outlet of the outdoor station

1) J1: Connection to Indoor monitor. audio/gnd /v+/video is respectively wired in red/blue/yellow/white.

2) J4: The power interface, and the mark "-" is negative pole, and the mark "+" is positive pole.

3) VR1: The horn potentiometer of the outdoor station. Turn it clockwise is up and turn it backward is down.

4) J2: Connection to the electric lock.

5) J3: Connection to the unlock button.

3 .Operating instructions

1) Storage
Can save 100 cards, passwords and fingerprints, can be set two ways to open the door: the first way is cards, passwords or fingerprints. The second way is either a card with a password or a fingerprint with a password.

2)Enter the setting mode:
Press "#", green light flashes for 3 times, make Bi sound, and press management password twice(123456+123456) and press "#" to make sure, then enter the setting mode, and the red light turns on.Can press "*" to exit when input error. The factory management code is 123456.

3）Set the door opening mode
In the setting mode:
Door opening method 1: Press "*" "0" (red light flashes), press "8" "1" (make Bi sound, red light stops flashing), and finally press "#" to exit setting (open the door by card, password or fingerprint).
Door opening method 2: Press "*" "0" (red light flashes), press "8" "2" (make Bi sound, red light stops flashing), and finally press "#" to exit setting (open the door by card and password or by fingerprint and password).

4）Door opening method
A. card + password: first swipe the card and make Bi sound, then the green light flashes for 3 times, and then enter the password. If no password is entered in 20s, automatically exit with BiBi sound.

B. Fingerprint + password: press fingerprint first, and Bi sound occurs if valid, then green light flashes for 3 times, and then enter password. If no password is entered in 20s, exit automatically with BiBi sound.
C. Password opening: after entering the password, press "#" to confirm. If the password is valid, open the door with a long Bi sound and the green light flashes for 3 times. BIBI sound occurs if invalid.
D. Card opening: when the opening is successful, make a Bi sound and then the green light flashes three times.
E. Fingerprint opening: when the opening is successful, make a Bi sound and then the green light flashes three times.
   Note: If invalid when inputting the password or using card 3 times in 3 minutes, the lock is locked for 60 seconds (the key and induction card are invalid).

5）Add users
In the setting mode :(000~099 represents the label of 100 users, 000 is the first, 001 is the second…).
Press 000-099 (if the light is blue, it means that the bit has data. you can press "*" "*" to clear the bit data, green light flashes after clearing, then you can add users. If green light flashes, which indicates the bit has no data, you can add card + code + fingerprint). Firstly swipe the card (a Bi long ring when swiping the card indicates adding card successfully). Secondly add the fingerprint (when inputting fingerprint, Bi Bi Bi sound occurs and the last Bi will be a long ring, and the fingerprint successfully. Failure to add fingerprint if Bi Bi sound occurs). Thirdly adding password (password is set to 4 to 8 passwords length. For setting password, enter the password and press "#" to confirm. Adding password successful by sending out the Bi - long ring. When setting the password, you can press the "*" key to cancel if you press the wrong key, and then re-enter the password, press "#" key to confirm). Finally press "#" to exit the user number settings, and display shows a red light. you can then add another set of numbers after exiting, with the same pattern set as above. Or press "#" to exit the settings.