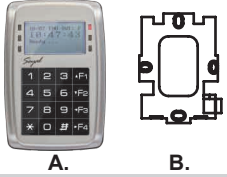
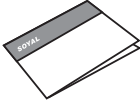
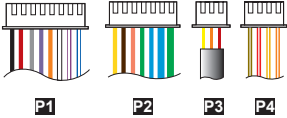


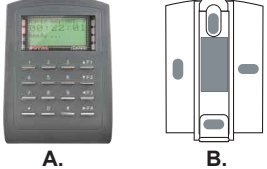
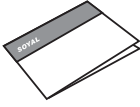
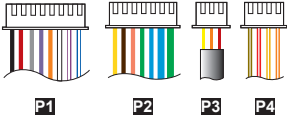




## Contents

### AR-327H [Touch-panel Metal Case]

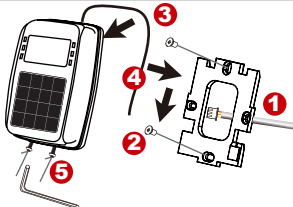
- 1 Products  

- 2 User Guide  

- 3 Terminal Cables  

- 4 Tools  

- 5 Water proof Strip  


### AR-727H

- 1 Products  

- 2 User Guide  

- 3 Terminal Cables  

- 4 Tools  

- 5 Water proof Strip  


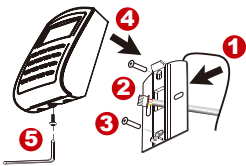
## Installation

### AR-327H



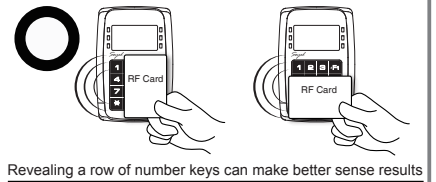
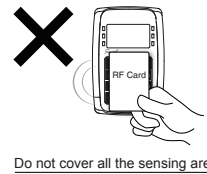
- Pull the cables from the square hole of the mounting plate.
- Use a screw to the mounting plate onto the wall.
- Attach the water proof strip to the body, then connect the terminal cables to the body and attach the body to the mounting plate.
- Use the Allen key and screws (accessories supplied) to assemble the body onto the mounting plate.
- Turn on the power, the LED will light and hear the beep sound, you will see "Ready" on LCD board.

### AR-727H



- Attach the water proof strip to the mounting plate.
- Pull the cables from the square hole of the mounting plate.
- Use a screwdriver to screw the base onto the wall.
- Connect the terminal cables to the body and attach the body to the mounting plate.
- Assemble the covers with the Allen key and screws (accessories supplied).
- Turn on the power, the LED will light and hear the beep sound, you will see "Ready" on LCD board.

## AR-327H 13.56MHz Notice



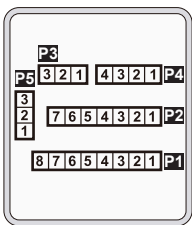
Sensing range of metal controller is small, the proposed sensing card should step aside, do not fully cover number keys.

## Notice

- 1. Tubing:** The communication wires and power line should NOT be bound in the same conduit or tubing.
- 2. Wire selection:** Use AWG 22-24 Shielded Twist Pair it should avoid star wiring.
- 3. Power supply:** Don't equip reader and lock with the same power supply. The power for reader may be unstable when the lock is activating, that may make the reader malfunction.  
The standard installation: Lock relay and lock use the same power supply, and reader use independent power supply.
- 4. F4:** At first time use, if appears no screen and green LED flashes, please press [F4] for 2 seconds.

## Connector Table

### AR-327H



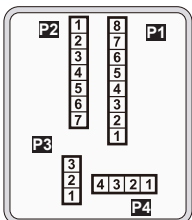
#### Cable: P1

Wire Application	Pin	Color	Description
Door Relay	1	Blue White	(N.O.)DC24V1Amp
	2	Purple White	(N.C.)DC24V1Amp
Common-COM-Point	3	White	(COM)DC24V1Amp
Door contact	4	Orange	Negative Trigger Input
Exit Switch	5	Purple	Negative Trigger Input
Alarm Relay	6	Gray	N.O./N.C. Options (by jumper)
Power	7	Thick Red	DC 12V
	8	Thick Black	DC 0V

#### Cable: P2

Wire Application	Pin	Color	Description
Networking	1	Thick Green	RS-485 (B-)
	2	Thick Blue	RS-485 (A+)
Wiegand	3	Blue	WG DAT: 1 Input ABA Data Input
	4	Green	WG DAT: 0 Input ABA Clock Input
Buzzer	5	Pink	Buzzer Output 5V/100mA, MAX
LED	6	Brown	LED Green Output 5V/20mA, MAX
	7	Yellow	LED Red Output 5V/20mA, MAX

### AR-727H



#### Cable: P3

Wire Application	Pin	Color	Description
Tamper Switch	1	Red	N.C.
	2	Orange	COM
	3	Yellow	N.O.

#### Cable: P5 (Optional)

Wire Application	Pin	Color	Description
3-PIN Connector	1	Black	GND.
	2	White	DC 12V
	3	Purple	Security trigger signal Output

#### Cable: P4

Wire Application	Pin	Color	Description
Arming Setting Input	1	Orange White	ON  OFF Latch type
Serial Port	2	Yellow White	Serial output (Transistor open collector) (4800, N,8,1)
Arming Status indication (light)	3	Red White	Arming output (Active low)/ Security trigger signal Output
Card existing indication	4	Brown White	Output LOW when card present

# LCD Access Controller

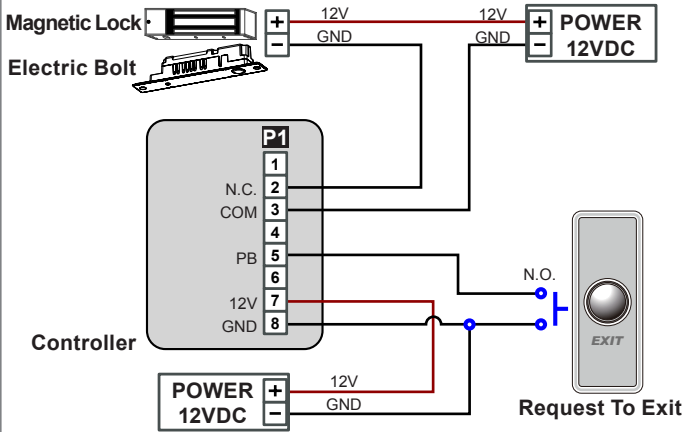
Metal Case / Standard



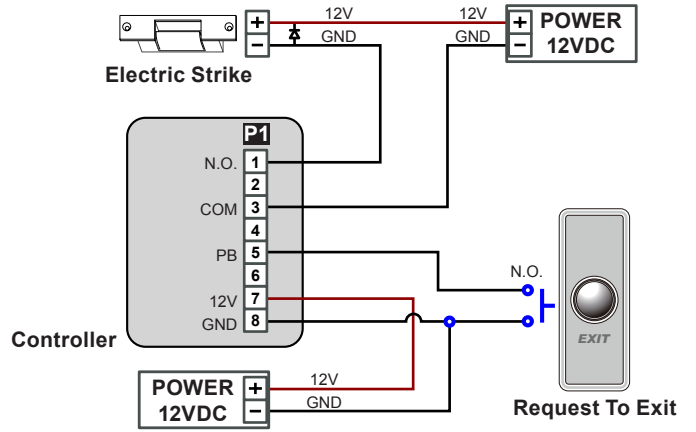
V110520

## Wiring Diagram

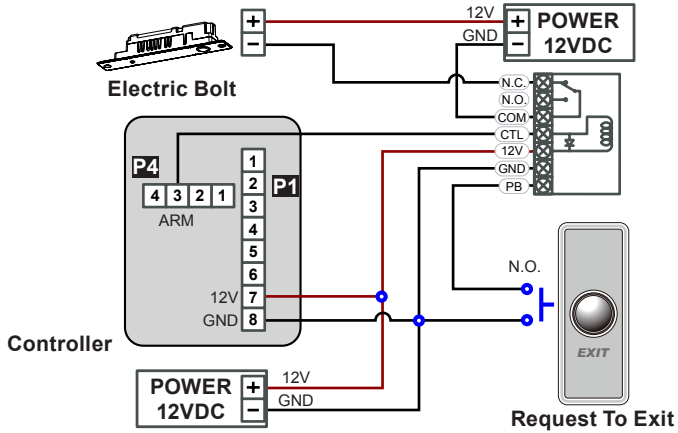
### Connect to Electric Bolt or Magnet Lock



### Connect to Electric Strike

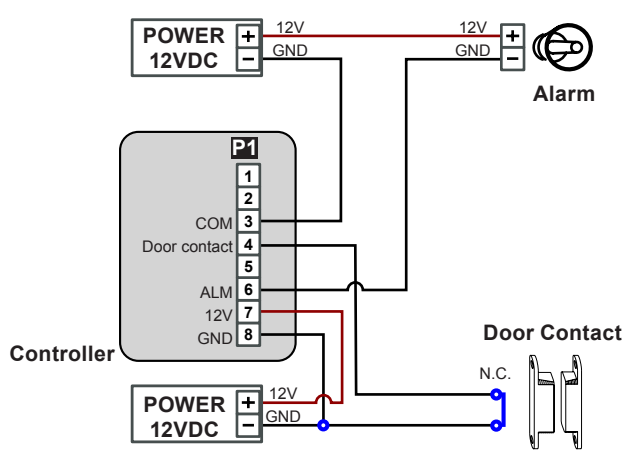


### Connect to strengthen security with AR-721RB

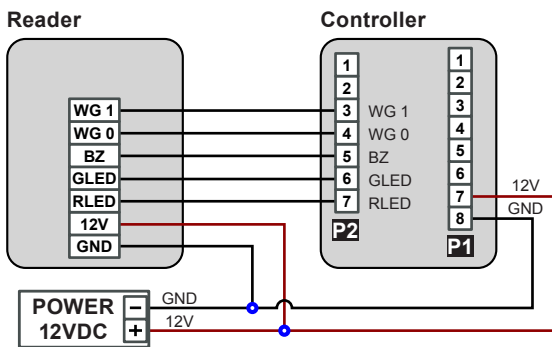


※ Security trigger signal: Please refer to the "Operation".

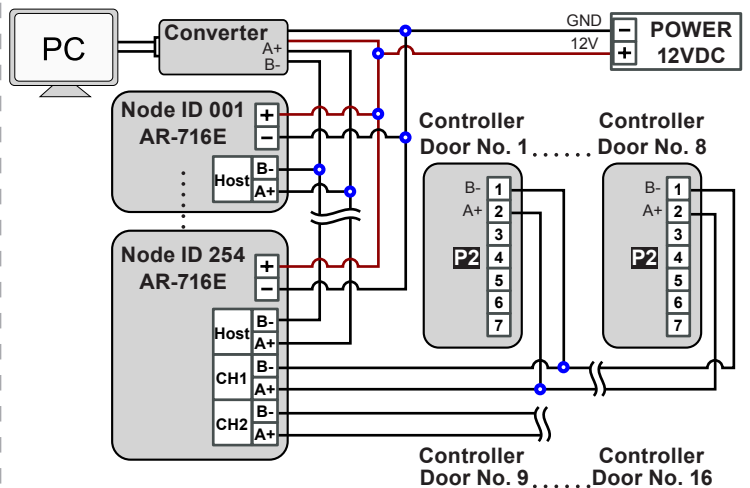
### Connect to Door Contact



### Connect to Reader

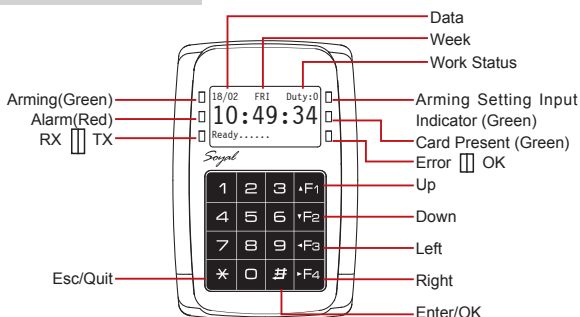


### Connect to Networking

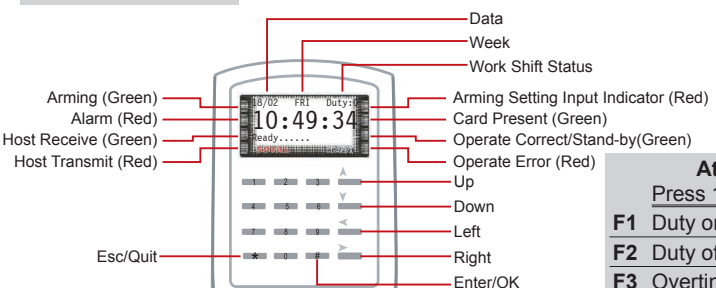


## Front Panel & Indicator

### AR-327H



### AR-727H



#### Attendance

	Press 1 time	Press 2 time
F1	Duty on	Break out
F2	Duty off	Break RTN
F3	Overtime on	Out
F4	Overtime off	Return

## Adding and Deleting Card

### Mode4/Mode8

#### • Adding Card by Card ID

Enter program mode → 1 Add/Delete → 1 Add Card > ID → Input 5-digit user address → Input Site Code → Input Card Code

#### • Adding Card RF Induction

Enter program mode → 1 Add/Delete → 2 Add > RF Learn → Input 5-digit user address →

Input Tag Units(pcs) → Close Tag into RF Area to induct.

※ For block **Sequential cards**, present the **lowest card code** card to the controller reader; for block random cards, present all the cards one by one to the controller reader.

#### • Deleteing User Address

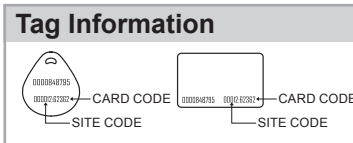
Enter program mode → 1 Add/Delete → 5 Delete > Address → Input Start address → Input End address

#### • Setting up the password

Enter program mode → 2 User Setting → 1 Password → Input 5-digit user address → Key in 4-digit PIN

#### • Setting up the access mode

Enter program mode → 2 User Setting → 2 Access Mode → Input 5-digit user address → 1: Card; 2: or PIN; 3: & PIN; 4: Pause;



### Mode6

※In Mode6, user address is card code. Only suspend or recover to add or delete the cards.

#### • Adding Card

Enter program mode → 1 Add/Delete → 7 Recover > Address → Input Start address → Input End address

※ For block **Sequential cards**, input the **lowest card code** as starting user address and input the highest card code as ending user address; for block random cards, input all the card codes one by one to the controller reader.

#### • Deleting Card

Enter program mode → 1 Add/Delete → 3 Suspend > Address → Input Start address → Input End address

※ M6 access mode setting procedure is the same as the arming password/duress code setting procedure in M4.

#### • Card Only

Enter program mode → 3 Parameters[1] → 8 Arming PWD → Input: 0000

#### • Card and PIN

Enter program mode → 3 Parameters[1] → 8 Arming PWD → Key in 4-digit PIN [0001~9999, default value: 1234]

#### • Card or PIN

Enter program mode → 4 Parameters[2] → 8 Duress Code → Key in 4-digit PIN [0001~9999, default value: 4321]

## Operation

### A. Keyboard Lock/ Unlock

#### • Lock/ Unlock

Hold down \* and # buttons in simultaneously to lock/unlock the keyboard.

### B. Enter/Escape Program Mode

#### • Enter program mode

Input \*123456# or \*PPPPPP# (PPPPPP= modified Master Code; Default= 123456)

[e.g.] If the Master Code= 876112, input \*876112# → Enter program mode

※ If without any operation for 30 seconds access controller will escape program mode.

#### • Escape program mode

#### • Changing the Master Code

Press \* continuously → 6 Quit Enter program mode → 5 Tools → 2 Master Code → Input the 6-digit new master code → Succeeded

### C. Initial Setup

#### • Restoring Factory Settings

Enter program mode → 4 Parameters[2] → 9 Factory Reset → select [1: Yes] → Succeeded...

#### • Changing the Language

Enter program mode → 5 Tools → 1 Language → 1 EN → Succeeded...

#### • Review the old events

Enter program mode → 5 Tools → 0 View Events → the display will show the history events.

#### • Changing the Node ID of Reader

Enter program mode → 3 Parameters[1] → 1 Node ID → Input New Node ID:1~254(default value: 001)

→ Input: 1~4 to Show Card ID format? (1.No, 2.WG, 3.ABA, 4.HEX) → Input Door number H: 1~254(door

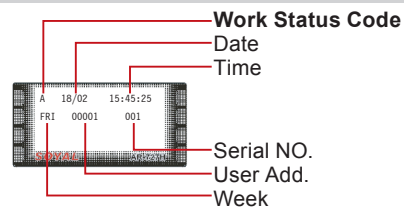
No. of its controllen) → Input Door number L: 1~254(door No. of reader) → Succeeded

[e.g.] AR-327H is the 8th slave reader under the 16th AR-716E.

Door-H input 1 6 (door NO. of controller); Door-L input 8 (door No. of the reader).

[e.g.] AR-727H is a controller and its Node ID is 8.

Door-H input 8 ; Door-L input 8



#### Work Status Code:

A: Duty On	01: PWD/PIN Error
B: Duty Off	03: Invalid Card
C: Overtime On	04: Time-zone Error
D: Overtime Off	11: Normal Access
E: Break Out	16: Egress (Request to exit)
F: Break RTN	17: Alarm
G: Out	31: Anti-pass back Error
H: Return	

### D. Security Trigger Signal

※ First Update the Firware to 7v4\_T2 later

#### • Enable the Security Trigger signal

Enter program mode → 3 Parameters[1] → 9 Arming Pulse → Input [10](default value:1000) → become the Security Trigger signal Output

※ If Request To Exit connect to [AR-721RB], the Request To Exit can control the lock immediate.

## E. Control Mode (M4/M6/M8)

Enter program mode → 5 Tools → 9 Control Mode → 1:M4, 2:M6, 3:M8 (refer to following table) → Succeeded

Mode	Networking/ Standalone	User Capacity	Access Mode	Auto-show Duty time	Event log Capacity	120 Holidays	Anti force	Time Zone	Lift Control	Anti-pass back
M4	Networking/ Standalone	1,024(727H) 3,000(327H)	1.Card only 2.Card and PIN (4-digit PIN) 3.Card or User address (5-digit) + Individual PIN (4-digit individual PIN)	Yes	1,200(727H) 1,500(327H)	Yes	Yes	11	32	Yes
M6	Standalone	65,535	1.Card only 2.Card and PIN (4-digit public PIN= Arming PWD) 3.Card or PIN (4-digit public PIN= Duress code)	No	No	No	No	No	No	No
M8	Networking/ Standalone	1,024(727H) 3,000(327H)	1.Card only 2.Card and PIN (4-digit individual PIN) 3.Card or PIN (4-digit individual PIN)	Yes	1,200(727H) 1,500(327H)	Yes	Yes	11	32	Yes

※ The users up to 65,535 in **Mode 6**, since it reads **CARD CODE**(5 digits) only, unlike that Mode4/Mode8 read **SITE CODE** and **CARD CODE**(10 digits).

## F. Anti-Pass Back(M4/M8 only)

Usually, anti-pass back is commonly applied to parking lots in order to prevent from multi-entry with one card, requires to set bith card and device as the flowings:

### • Device set-up

Enter program mode → 4 Parameters[2] → 7 Anti-pass back → 1: Yes; 2: No;(select one) → 1: In; 2: Out;(select one)

### • Card set-up

Enter program mode → 1 Add/Delete → 9 Antipass Group → Input Start address → Input End address → 1: Yes; 2: No;(select one)

## G. Lift Control

Connect with **AR-401RO16B** to control which floors the user will be able to access.

### • Setting Lift control

Enter program mode → 5 Tools → 4 Terminal Port → 1: AR-401RO16

### • Single floor set-up

Enter program mode → 2 User Setting → 4 Single Floor → Input 5-digit user address → Input single floor number: 1~32

### • Multi floors set-up

Enter program mode → 2 User Setting → 5 Single Floor → Input 5-digit user address → Select range: 1 or 2 → Input 16 digits multi floors number [0:disable, 1: enable]

[e.g.] Set NO. 114, to access the 8th and the 16th floors.

Enter program mode → 2 User Setting → 5 Single Floor → 114 # → 1 # → 000000100000001 #

Set	Floor															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## H. Arming Mode

### • Conditions:

- Arming is enabled
- Alarm system connected

### • Application:

- Door left open warnings:** these are generated when the door is held open for longer than the lock relay time and door open time.
- Force open** (Unauthorized access alarms): these are generated when a door is opened without a valid card being presented or a request to exit signal being received.
- Door contact error:** when the controller in arming status and power failure, reset power may activate alarm system.

### • Enable/Disable Arming Mode:

Enable Arming Mode	Disable Arming Mode
<b>Program Mode</b>	
Enter program mode → 7 Quit & Arming	Enter program mode → 6 Quit
<b>Door Open</b>	
Access Mode → Input 4 digit arming code → #	Access Mode → Input 4 digit arming code → #
<b>Door Close</b>	
* → Input 4 digit arming code → Present the card to the controller reader	* → Input 4 digit arming code → Present the card to the controller reader

## Manu Tree

### 1. Add/ Delete

- Add Card > ID
- Add > RF Learn
- Suspend > Address
- Suspend > ID #
- Delete > Address
- Delete > ID #
- Recover > Address
- Recover > ID #
- Antipass Group

### 2. User Settings

- Password
- Access Mode
- Extend Options
- Single Floor
- Multi Floor

### 3. Parameters[1]

- Node ID
- Auto open Zone
- Door Relay Tm
- Door Close Tm
- Alarm Relay Tm
- Alarm Delay Tm
- Arming Delay Tm
- Arming PWD
- Arming Pulse
- Auto Alarm Tm

### 4. Parameters[2]

- Auto Relock
- Egress(R.T.E)
- Attendance
- Master Node
- Force Open
- Close & Stop
- Anti-pass-back
- Duress Code
- Factory Reset
- Key (#) is Bell

### 5. Tools

- Language
- Master Code
- Master Range
- Terminal Port
- AR401RO16 Node
- Open Time Zone
- Information
- Clock Setting
- Control Mode
- View Events

### 6. Quit

### 7. Quit & Arming