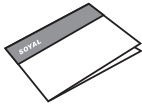


Contents

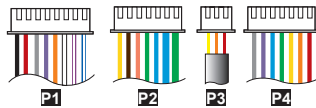
1 Products



2 User Guide



3 Terminal Cables



4 Tools

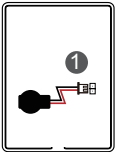


5 Relay

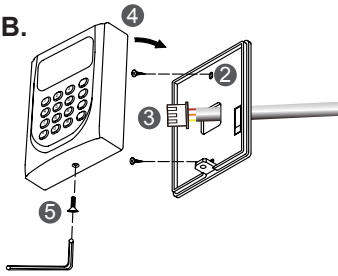


Installation

A.



B.

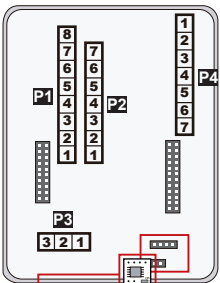


- Connected to the lithium battery to provide power to the memory.
- Use a screwdriver to screw the mounting plate to the wall.
- Pull cables ends through the access hole in the mounting plate.
- Attach AR-829E to the mounting plate and install screws (supplied) into the holes at the bottom with the allen key (supplied).
- Apply power. LED (green) will light up.

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 to 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: Door relay and lock use the same power supply, and reader use independent power supply.

Connector Table



Chinese Font Expansion Module	
MIFARE (13.56MHz)	Standard
EM (125kHz)	Optional

Cable: P1

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

Cable: P3

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

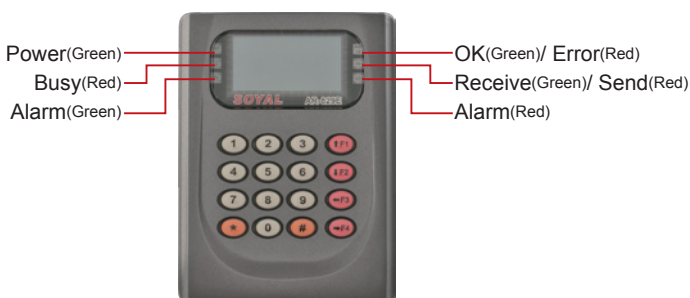
Cable: P2

Wire Application	Wire	Color	Description
Networking	1	Thick Green	RS-485 (B-)
	2	Thick Blue	RS-485 (A+)
Wiegand	3	Blue	WG DAT: 1 Input ABA Clock Input
	4	Green	WG DAT: 0 Input ABA Data 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

Cable: P4

Wire Application	Wire	Color	Description
Arming Setting Switch	1	Red	Pulse type
	2	Orange	Latch type
Alarm Input	3	Yellow	loop1 (Alarm) Sensor
	4	Green	loop2 (Alarm) Sensor
	5	Blue	loop3 (Alarm) Sensor
Serial Port	6	Purple	Serial output (Transistor open collector) (4800, N, 8, 1)
Arming LED	7	Gray	Arming output (Active low)

Front Panel & Indicator

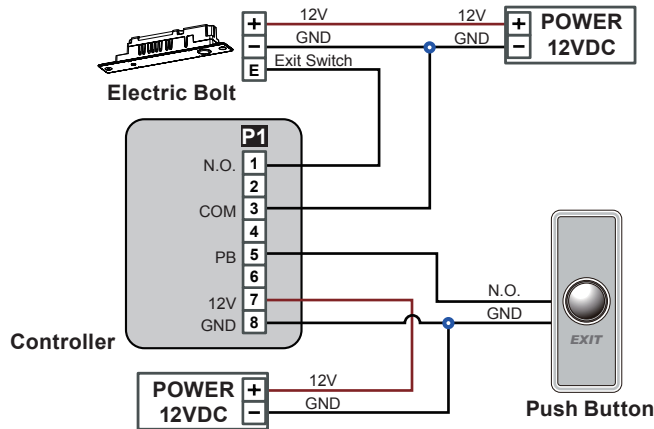


Attendance/Duty Functions		
(F1) Up	Press "1 time" Duty on	Press "2 times" Break out
(F2) Down	Duty off	Break RTN
(F3) Left	Overtime on	Go
(F4) Right	Overtime off	Return
*	Esc / Quit	# Enter / OK

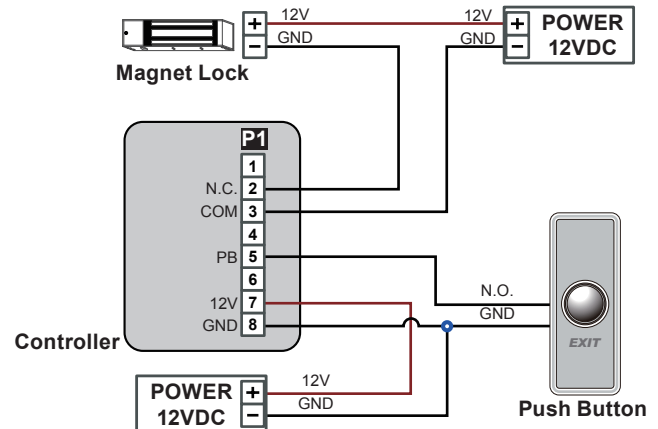
- System will automatically exit from Programming Mode when inactivating for 30 seconds.
- LED status indicates controller's mode and status.
 - Busy (red) – blinking constantly when operates in Programming Mode
 - or flashing an existed card in card learn mode, it comes 2 beeps warning and LCD panel displays "Same Card: user address / card number"
 - Error (red) – invalid card with 2 beeps warning and LCD panel displays "Card Number Err!"
 - or in anti-pass-back mode, when violates the access, it comes one beep warning and LCD panel displays "Anti-pass Error!"
 - Arming (green) – arming on status
 - Alarm (red) – any abnormal condition occurs
- Keypad will be locked up 30 sec. when constantly entering incorrect pin code or master code.
- Maximum error times of pin code and master code can be changed via the software 701Server (default: 3 times)

Wiring Diagram

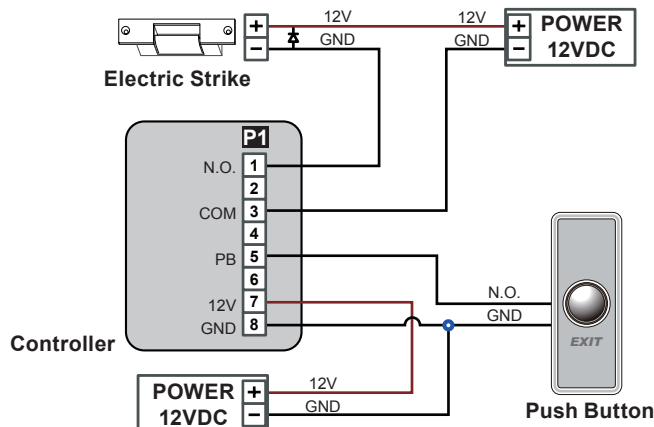
Connect to Electric Bolt



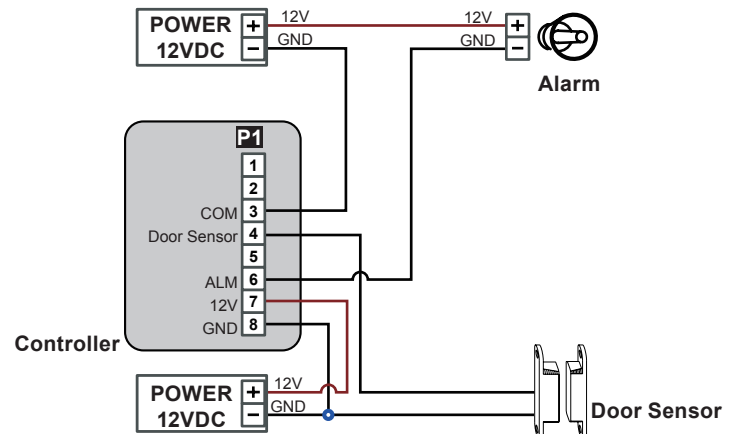
Connect to Magnet Lock



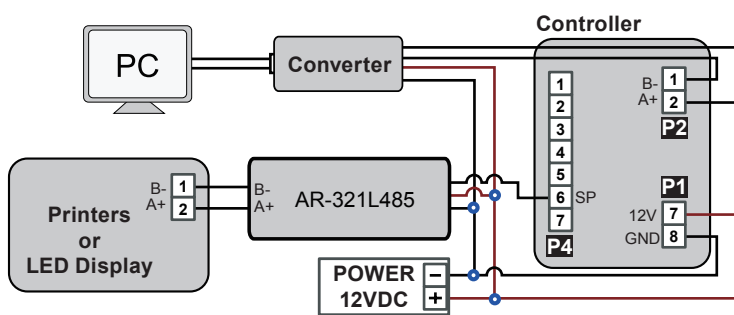
Connect to Electric Strike



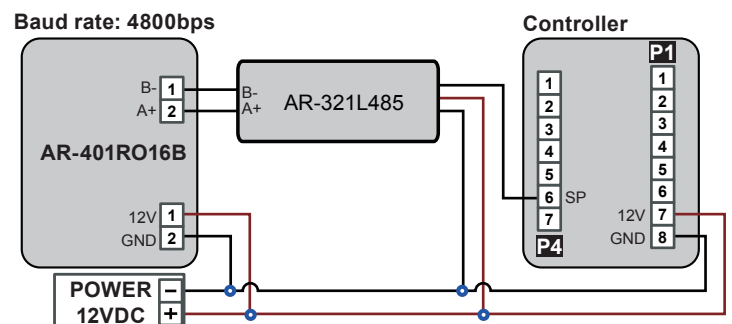
Connect to Door Sensor



Connect to Printers or LED Display



Connect to AR-401RO16B



Adding and Deleting Tag

※ User capacity: 15000 (00000~14999)

• Adding Tag by Tag ID

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

• Adding Tag by RF Learn Function

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

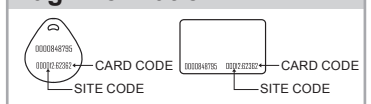
→ Input Tag Units(pcs) → Close Tag into RF Area

※A batch of tags are Sequential, present the tag with the lowest number to the controller.

• Deleting User Address

Access programming mode → 1 Add/Delete → 5 Delete > Address → Input Start address → Input End address

Tag Information



• **Setting up the access mode**

Access programming mode → 2 User Setting → 2 Access Mode → 1: Card; 2: or PIN; 3: & PIN; 4: Pause;

Programming

A. Keyboard Lock/ Unlock

• **Lock/ Unlock**

Press * and #, and at the same time to lock keyboard. Press once to unlock.

B. Entering and Exiting Programming Mode

• **Entering**

Input *123456# or *PPPPPP#

[e.g.] The Default Value= 123456. If already changed the Master Code= 876112, input *876112# → Access programming mode P.S.If entering no instruction within 30 sec., it will automatically leave the programming mode.

• **Exiting**

Press the * repeatedly → 6 Quit

• **Changing the Master Code**

Access programming mode → 5 Tools → 2 Master Code → Input the 6-digit new master code → Succeeded

C. Initial setup

• **Language Setting**

Access programming mode → 5 Tools → 1 Language → 1 EN → Succeeded → Initial system...

• **Node ID of Reader Setting**

Access programming mode → 3 Parameters[1] → 1 Node ID → Input New Node ID:1~254(default value: 001) → Input: 1~4 to Show Card ID mode (1.WG, 2.ABA10, 3.ABA8, 4.HEX) → Succeeded

E. PIN Code

Access programming mode → 2 User Setting → 1 Password → Input 5-digit user address → Input 4-digit PIN (0001~9999) → Succeeded
Or via 701Client set it on Users screen

F. Arming Password

Access programming mode → 3 Parameters[1] → 8 Arming PWD → Input 4-digit PIN (0001~9999; Default: 1234) → Succeeded
Or via 701Server and set it on AR-829E screen

G. Duress Code

Access programming mode → 4 Parameters[2] → 8 Duress Code → 4 sets (select one) → Input 4-digit PIN (0001~9999) → Succeeded
Or via 701Server to set it on AR-829E screen

※Duress Code is only available in networking mode. It will substitute a personal pin code and send the message of Duress to computer as a warning signal.

H. Setting up the alarm

• **Conditions:**

1. Arming enabled
2. Alarm system connected

• **Application:**

1. **Door open too long:** Door is open longer than door relay time plus door close time.
2. **Force open** (Opened without a valid user card): Access by force or illegal procedure.
3. **Door position abnormal:** When power is off and then on, reader on arming before power off.

• **Enable/Disable the arming status:**

Standby Mode		Card or PIN	Card and PIN
Card only			
Open the door	No open the door	Input user address → Input 4	Present the tag to reader → Input
Present the tag to reader → Input	* → Input 4 digits arming PWD	digits individual PWD → # →	4 digits individual PWD → # →
4 digits arming PWD → #	→ Present the tag to reader	Input 4 digits arming PWD → #	Input 4 digits arming PWD → #
Access Programming mode			
Enable: Access programming mode → 7 Quit & Arming		Disable: Access programming mode → 6 Quit	

J. Anti-pass-back

Access mode Card and Pin or Card or Pin or Card only for the model AR-721K
Access mode Card only for the model AR-721U, AR-737H/U (WG mode) and AR-661U

• **Device enable**

Access programming mode → 4 Parameters[2] → 7 Anti-pass-back → must select [1: Yes]

• **Card user enable**

Access programming mode → 1 Add/ Delete → 9 Antipass Group → Input 5-digit starting user address → Input 5-digit ending user address → must select [1: Yes]

F. Lift control

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

• Setting Lift control

Access programming mode → **5** Tools → **4** Terminal Port → **1**: AR-401RO16

• Single floor

Access programming mode → **2** User Setting → **4** Single Floor →

Input 5-digit user address → **Input single floor number: 1~64**

• Multi floors

Access programming mode → **2** User Setting → **5** Multi Floor → **Input 5-digit user address** → **Select range: 1 or 2 or 3 or 4** → **Input 16 digits multi floors number [0:disable, 1: enable]**

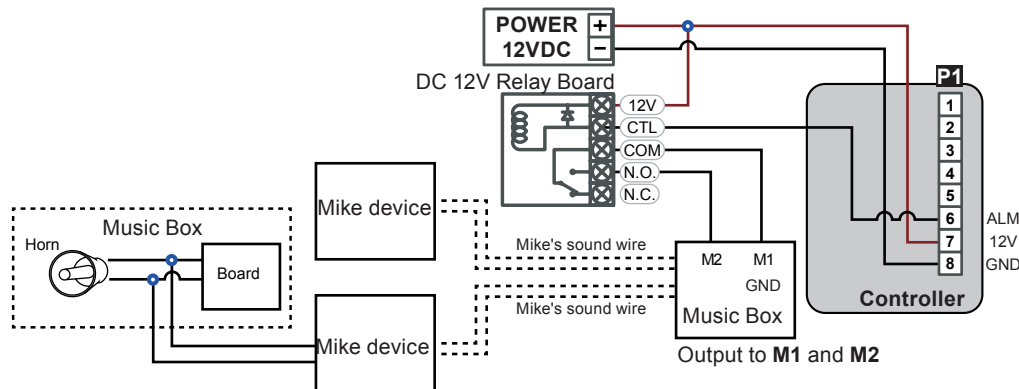
[i.e.] Set NO. 114, can use it with the 8 F and 16F:

Access programming mode → **2** User Setting → **5** Multi Floor → **114 #** → **1 #** → **000000100000001 #**

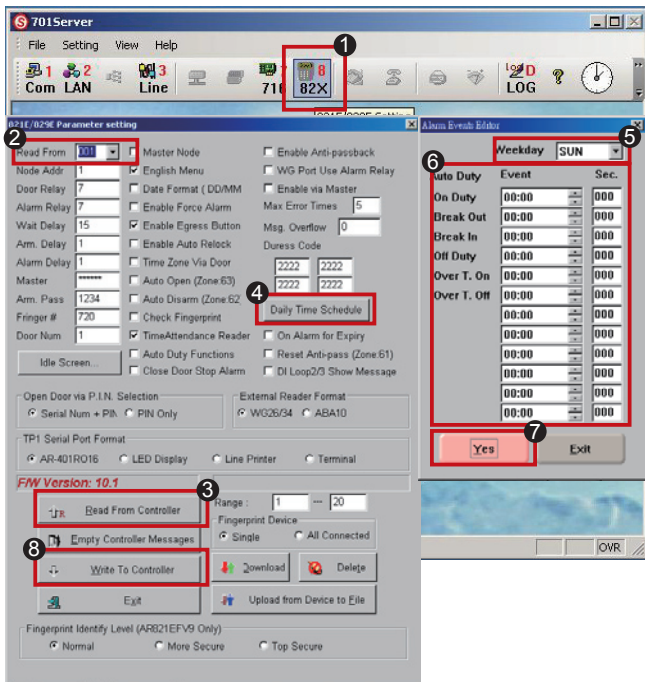
Set	Floor/ Stop															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
3	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
4	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

G. Alarm Clock (for Factory)

• Hardware installation



• Software Setting



The AR-821E/AR-829E controller can support up to 12 sets of ring per day

1. Click [82X] to [829E/821E Parameter Setting]
2. Select target node of AR-829E
3. Click [Read From Controller] to read the parameters of target 829E
4. Press [Daily Time Schedule] to start weekdays and timing settings
5. Select [SUN to MON]
6. Set up [Event] for timing to ring the bell and set up [Sec.] for activating time of ring. (Range: 01~44 seconds; if you set 0 second there will not be action.)
7. Click [Yes] after setting
8. Click [Write To Controller] to end Setting

Manu Tree

1. Add/ Delete

1. Add > Card ID
2. Add > RF Learn
3. Suspend > Address
4. Suspend > ID #
5. Delete > Address
6. Delete > ID #
7. Recover > Address
8. Recover > ID #
9. Antipass Group

2. User Setting

1. Password
2. Access Mode
3. Extend Options
4. Single Floor
5. Multi Floor

3. Parameters[1]

1. Node ID
2. Auto open Zone
3. Door Relay Tm
4. Door Close Tm
5. Alarm Relay Tm
6. Alarm Delay Tm
7. Arming Delay Tm
8. Arming PWD

4. Parameters[2]

1. Auto Relock
2. Egress(R.T.E)
3. Attendance
4. Master Node
5. Force Open
7. Anti-pass-back
8. Duress Code

5. Tools

1. Language
2. Master Code
3. Master Range
4. Terminal Port
5. AR401RO16 Node
6. Open Time Zone
7. Informations
8. Clock Setting

6. Quit

7. Quit & Arming