

Content in package

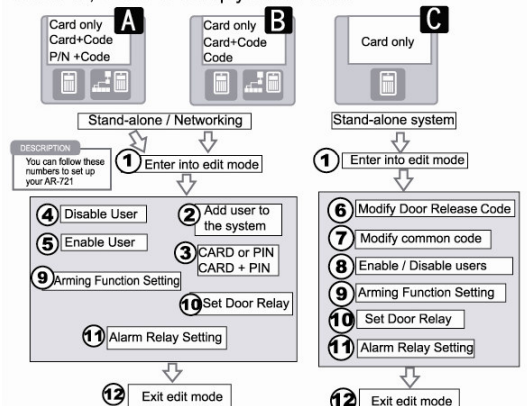


3 Component

4 Wiring



Please follow the guide step by step to set up your AR-721H
Select A, B or C to set up your AR-721H



1 How to enter into Edit Mode

04*4# → 4 beep sounds → **A Mode 4**

04*8# → 8 beep sounds → **B Mode 8**

04*6# → 6 beep sounds → **C Mode 6**

Press * 123456 #

2 Add the users to the system "How to set personal information"

1 Add Users by card proximity

1 9 * 0 0 0 0 1 * 0 0 0 0 1 #

User Number Quantity

Add one user : Press 00001

Add 10 users : Press 00010

Continuing Card Number must be necessary

1024 Users

1024 Users

3 Card or PIN, Card and PIN

1 To start access mode A or B in your system

1 2 * 0 0 0 0 1 * 6 8 7 5 #

User Number User Code

1024 Users

User Code: 0000-9999

2 To start access mode A or B in your system

1 3 * 0 0 0 0 1 * 5 6 7 8 #

User Number User Code

1024 Users

User Code: 0000-9999

A Reading Card or User Number + User Code

B Reading Card or User Code only

LED light

BEEP!!

Description

A green LED light and Beep sound mean the card holder was accepted

4 Disable User

1 Disable Single Card or A range of cards:

1 0 * 0 0 0 0 1 * 0 0 0 0 1 #

User Number User Number

Disable single card : Using the same USER NUMBER

A range of cards

1 0 * 0 0 0 0 1 * 0 0 0 1 0 #

The first User Number the last User Number

The first User Number User No. 00001

The Last User Number User No. 00010 (Total: 10 cards)

Description

You can cancel a series of users with continuing User numbers.

5 Enable user to the system -Mode 6

1 1 * 0 0 0 0 1 * 0 0 0 0 1 #

User Number User Number

Enable single card : Using the same USER NUMBER

A range of cards

1 1 * 0 0 0 0 1 * 0 0 0 1 0 #

1st number: The first user number of users

The first User Number the last User Number

The Last User Number User No. 00010 (Total: 10 cards)

Description

You can enable a series of u continuing User numbers.

6 Modify Door Release Code

Modify Door Release Code

1 5 * 4 3 2 1 #

Card only or Code only

Disable Door Release Code

1 5 * 0 0 0 0 #

All users can access the door by only pressing Door release Code (Default value: 4321) on the unit.

This function is disable. All users cannot access the door by only entering Door Release Code

7 Modify common code to the system

1 7 * 1 2 3 4 #

Card + Code

Disable common code to the system

1 7 * 0 0 0 0 #

All users can access the door by flashing card and entering common code (Default value: 1234) on the unit.

User can access the door by flashing card on the unit.

8 Enable & Disable Users

1 Add & Delete users by flashing card (reading card)

2 2 * 1 # Value: 1 Store the card holder

2 2 * 0 # Value: 0 Delete the card holder

One card only 1 1 * 1 5 0 3 1 * 1 5 0 3 1 #

A range of cards 1 1 * 1 5 0 3 1 * 1 5 0 3 5 #

2 Add the users by pressing buttons on key pad

One card only 1 0 * 1 5 0 3 1 * 1 5 0 3 1 #

A range of cards 1 0 * 1 5 0 3 1 * 1 5 0 3 5 #

3 Delete users by pressing buttons on key pad

One card only 1 0 * 1 5 0 3 1 * 1 5 0 3 1 #

A range of cards 1 0 * 1 5 0 3 1 * 1 5 0 3 5 #

You can delete & add a series of card holders with continuing User numbers.

9 Arming state setting

Enable Arming Function

A. By keypad :

when leave edit mode , press * * * Arming

* * # disable Arming

Arming Delay TM

0 5 * 0 0 2 #

Value: 001-600 = 1sec-600secs delay time

B. By card proximity :

Enable Function "Arming": 1 2 3 4 #

Disable Function "Arming": 1 2 3 4 #

Enable Alarm None Delay TM

2 8 * 1 2 8 #

Disable: 2 8 * 0 0 0 #

*Under Non-arming status, alarm system still work when "FORCE OPEN" happened !!

10 Set the door relay release time and Arming idle time

Door relay release time

0 2 * 0 0 3 #

Value: 000 / Always Door open

Value: 001-600 / 1second to 600 secs

Value: 601-609 / 1second to 0.9seconds

Arming idle time

1 8 * 0 1 5 #

Value: 001-600 / 1second to 600 secs

Default value: 15seconds

11 Alarm Relay Setting

Alarm Delay TM

0 3 * 0 0 3 #

Relay Time

Value: 001-600 / 1second to 600 secs

000=Latch (Trigger)

*This function is for user to stop the arming system before Alarm effect !!

Exit the Edit Mode

Exiting Edit mode → * # Exit the programming mode and return to the reading mode

Exiting Edit mode → * * # Exit the programming mode, set controller to arming state and return to the reading mode

Function Default Value

Command: 2 0 * N N N # Listed above with [*] markings are the factory setting

Functions	Optional	Value	Remark
Recording every entry/exit on Time Attendance Report	0: YES 1: NO	001	network
Auto Re-Lock	0: disable 1: enable	002	
Auto Open/ Auto Disarming	0: disable 1: enable	004	network
Door Exit Release (Push Button)	0: disable 1: enable	016	
Master Reader / Network	0: minor 1: major	032	network
Entry / Exit door	0: exit door 1: entry door	064	network
Anti-pass-back door	0: disable 1: enable	128	network

INSTALLATION DIAGRAM

P1 Table 1 - Connector P1 Color Coding

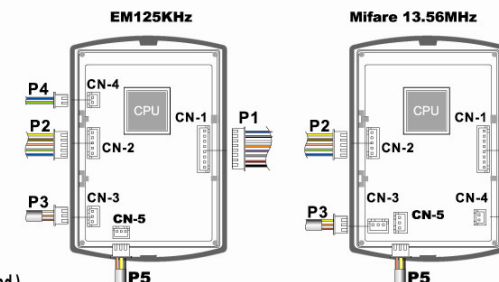
Wire Application	Wire	Color	Description
Door Relay	1	Blue White	(N.O.) DC24V1Amp
	2	Purple White	(N.C.) DC24V1Amp
	3	White	(COM) DC24V1Amp
Door Sensor	4	Orange	Negative Trigger Input
Exit Switch	5	Purple	Negative Trigger Input
Alarm Output	6	Grey	Transistor Output (Open Collector Active Low)
Power	7	Thick Red	DC Power 12V
	8	Thick Black	DC Power 0V

P2 Table 2 - Connector P2 Color Coding (Wiegand Read Head)

Wire Application	Wire	Color	Description
Wiegand	1	Thin Blue	Wiegand DAT:1 Input
	2	Thin Green	Wiegand DAT:0 Input
Beeper	3	Pink	Beeper Output 5V/100mA Low
LED	4	Brown	LED Green Output 5V/20mA Max
	5	Yellow	LED Red Output 5V/20mA Max

P3 Table 3 - Connector P3 Color Coding (Tamper Switch)

Wire Application	Wire	Color	125KHz	13.56MHz
Tamper Switch	1	Red	N.C.	COM
	2	Orange	N.O.	N.O.
	3	Yellow	COM	N.C.



Notice

P5 Cable is not included in AR-721H standard package, please make the order for your demand of P5 Cable..

ITEM NO. P5 Cable: BB-PH 2.0-3P-200

P4 Table 4 - Connector P4 Color Coding

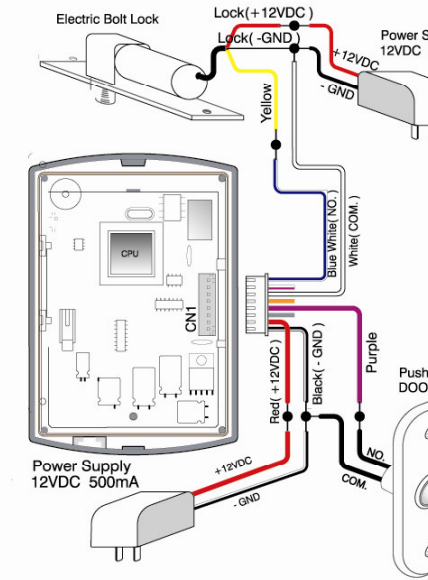
Wire Application	Wire	Color	Description
Networking Module	1	Thick Green	RS-485(B-)
	2	Thick Blue	RS-485(A+)

NEW! P5

Wire Application	Wire	Color	Description
Networking Module	1	Thick Green	RS-485(B-)
	2	Thick Blue	RS-485(A+)
	3	Thick Black	GND

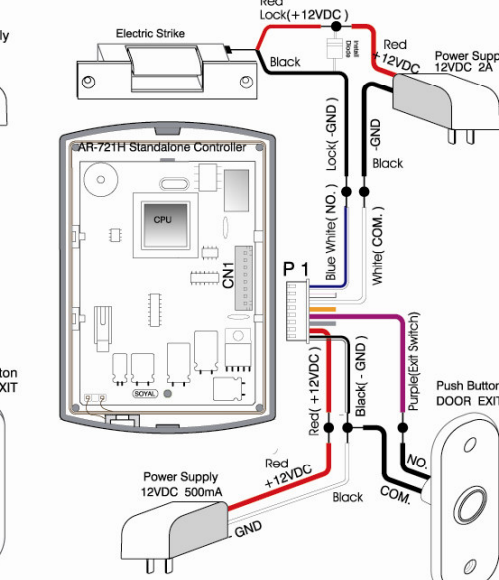
1 Electric bolt lock

The installation of 721H and electric bolt lock



2 Electric strike

The installation of 721H and electric strike

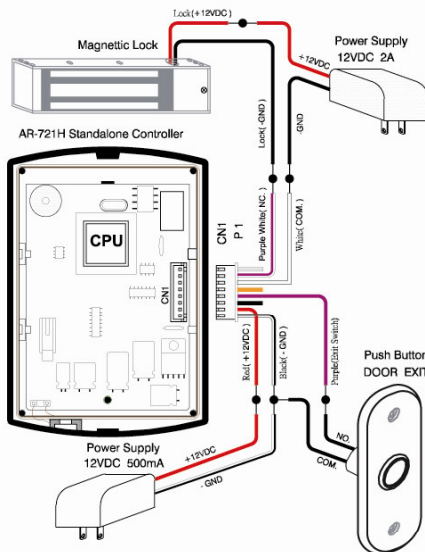


You can contact SOYAL support center by E-mail for help..

Export@soyal.com

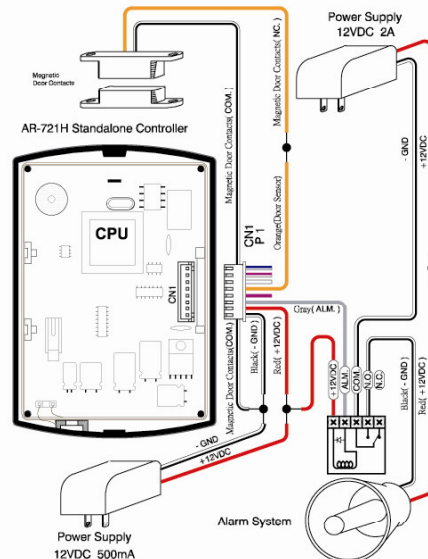
3

The installation of 721H and magnetic lock



4

The installation of 721H magnetic door contacts and alarm system



Function Default Value

A number of often-used functions has been set before installation, and these functions can be tabled below. Users are allowed change the setting by command input. "Command 20".

20*XXX# Designated Functions Setting Table

Functions	Optional	Value	Remark
Time Attendance	0 Yes *	001	Networking
	1 No		
Auto Re-Lock	0 disable *	002	
	1 enable		
Auto Open	0 disable *	004	Networking
	1 enable		
Door Exit Release(Push Button)	0 disable	016	
	1 enable*		
Master Reader / Network	0 slave*	032	Networking
	1 master		
Entry / Exit door	0 exit door*	064	
	1 entry door		
Anti-pass-back	0 disable*	128	
	1 enable		

[*] markings is the ex-factory setting, the default value is " 016 ".
Step 1: Decide each option of function by "0" or "1".

Step 2: Pick up the items with option1.

Step 3: Sum up the value of each items above.

Example :

Enable 【Auto Re-Lock】 -----> 002

Enable 【Door Exit Release (Push Button)】 -> 016

+ Enable 【Anti-pass-back door】 -----> 128

= " 002+016+128 = 146 "

Step 4: Command: 2 0 * 1 4 6 #

24*NNN# Particular Functions

Functions	Option	Bit	Value
Star" Auto Open Zone "function	0: By push button* 1: Auto.	0	001
Lift Control / Alarm Output	0: Alarm output* 1: Lift control	1	002
Stop Alarm by...	0: Push button* 1: Close door	6	064
Doorbell output	0: Disable* 1: Enable	7	128

28*NNN# "Force Open Alarm" Output

Value	Option	Command
000	Disable	28*000#
128	Enable	28*128#

[*] Markings is the ex-factory setting, the default value is " 000 ".
EX: How to set your AR-721H with "Auto Open Zone" and "Doorbell output" function?

【Star "Auto Open Zone"】 by automatically-> 001
【Doorbell Output】 -----> 128

Total value: 129

Command List

Function	Command	Access Mode
Enter into programming mode	* P P P P P (default:123456) #	M4/6/8
Exit programming mode	* #	
Exit programming mode with arming and back to reading mode	* * #	M4/6/8
Node ID setting	00 * N N N # (Node ID: 001~254)	M4/6/8
Door relay time setting	02 * T T T (000-600 sec.) # (T=0 Relay time)	M4/6/8
Alarm relay time setting	03 * T T T (000-600 sec.) # (T=601-609=0.1-0.9 sec.)	M4/6/8
Access Mode setting	04 * N (Mode type (4 / 6 / 8)) #	M4/6/8
Arming Delay Time Setting	05 * T T T # (Arming delay time, 001~600 sec.)	M4/6/8
Alarm Delay Time Setting	06 * T T T # (Alarm delay time, 001~600 sec.)	M4/6/8
Master Card Setting	07 * N N N N # N N N N # Starting User Number / Ending User Number (00000~01023)	M4/8
Auto-Open Zone Setting	08 * N (0/1) * H H M H H M # 111111 # N : 0=first open zone ; 1=second open zone M M S S M M S S : Start time to End time 111111 : 7 days of a week (Sun/ Mon/ Tues/ Wed/ Thur/ Fri / Sat) (1=Auto Open ; 0= Function close)	M4/6/8
Master Code Setting	09 * P P P P P # P P P P P # New Master Code / Again New Master Code	M4/6/8
Stop or Delete the Transponder(s)	10 * D D D D # (9) E E E E # Starting User Number / Stop (Delete) / Ending User Number	M4/6/8
Add Transponder(s) (Card / Key Tag) to the system	11 * C C C C # E E E E # Starting User Number / Ending User Number	M6
Enable the Transponder(s) to the system	11 * C C C C # E E E E # Starting User Number / Ending User Number	M4/8
Add a User Code to the system	12 * C C C C # P P P P # User Number / User Code	M4/8
Add a User Code to the system	13 * C C C C # P P P P # User Number / User Code	M4/8
Arming Output Time Setting	14 * T T T # (Arming output time, 000~250 sec.)	M4/6/8
Duress Code Setting	15 * P P P P #	M4/8
Common Code Setting	Duress Code (0001~9999, Default value: 4321)	M6
Card Number Modification	16 * N N N N # S S S S # C C C C # User Number / Card Number (Side code & card code)	M4/8
Common Code Setting (M4/8)	17 * P P P P # Common Code(0001~9999 Default value:1234 , 0000:Card Only)	M4/8
Function Button (M6)		M6
Door Opening Time Setting	18 * T T T # (1~600 sec., Default value: 15 sec.)	M4/6/8
Add Transponders	19 * S S S S # N N N N # User Number / Quantity (Contiguously Flashing card When N=1)	M4/8
Factory Setting-1 (Function Default Value)	20 * N N N # (Please refer to "Function Default Value" for more information.)	M4/6/8
Lift Control Setting : Multi-floors	21 * N N N N # X # B B B B B B B # User Number / Group / Access which floors	M4/8
Add Users by flashing card	22 * N (0 / 1) # (0=delete single card / 1=adding single card)	M6
AR-401RO16 Relay Time Setting	23 * N N N # C C C # Node ID / Relay Time	M4/8
Factory Setting-2 (Function Default Value)	24 * N N N # (Please refer to "Function Default Value" for more information.)	M4/6/8
Real Time Clock Setting	25 * Y Y # M M # D D # H H # M M # S S # (Year / Month / Day / Hour / Min. / Sec.)	M4/6/8
Anti-Pass-Back	26 * C C C C # E E E E # F (0 / 1 / 2) # Starting Card Number / Ending Card Number (0: Enable, 1:Disable, 2:Initial)	M4/8
Lift Control Setting-Single floor	27 * 0000 # X X # User number / Floor number	M4/8
Force Open Alarm Setting	28 * X X X # (000=disable , 128=enable)	M4/6/8
Delete all cards	29 * 29 #	M4/6/8