Soyal AR-723H Proximity Access Controller User Manual

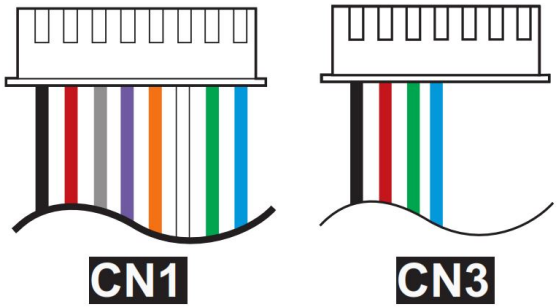
Contents

Soyal AR-723H Proximity Access Controller

Content & Feature

1. **Product**

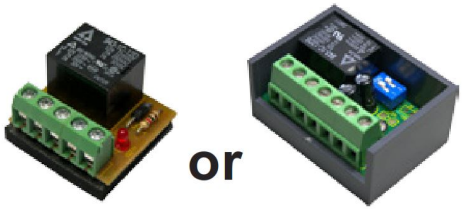
2. **Terminal Cables**



3. **Optional**

AR-WG-KEYBOARD

Master Card x2

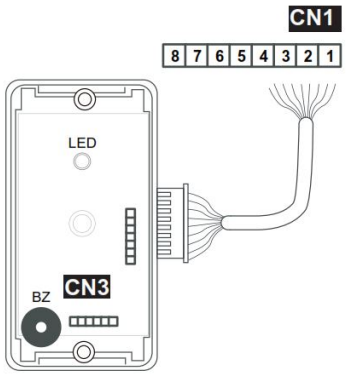


AR-821-RB **AR-721-RB**

4. **Feature**
    1. Slim design makes installation easy
    2. MASTER CARD for adding / deleting tags
    3. Set up parameters and user tags by external WG Keyboard

4. Built-in security digital opening signal
5. Built-in Watchdog to prevent from hanging up

Connector Table



Networking: CN1 8 PIN (RS-485)

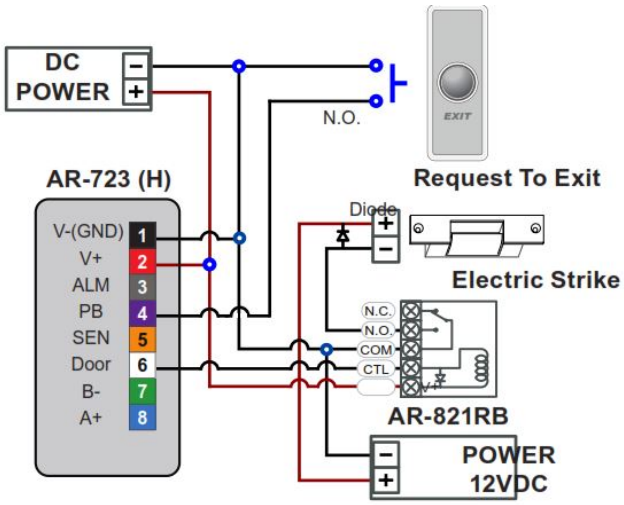
Application	Wire	Color	Description
Power	1	Black	DC 0V (GND)
	2	Red	DC 9-24V
Alarm Relay	3	Gray	Open collector output
R.T.E	4	Purple	Negative Trigger Input
Door Contact	5	Orange	Negative Trigger Input
Lock Relay	6	White	Open collector output/ Security Trigger Signal
RS-485	7	Green	RS-485 B-
	8	Blue	RS-485 A+

CN3 WG-READER or KEYBOARD Socket

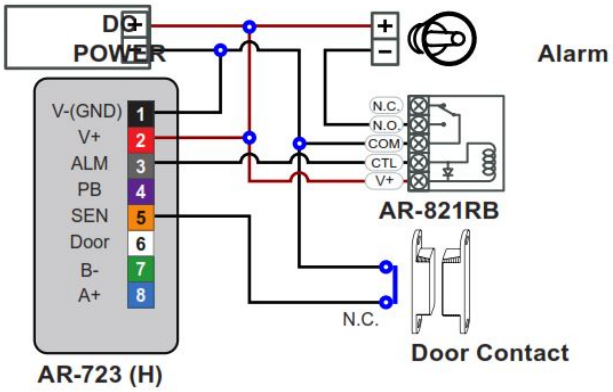
Application	Wire	Color	Description
———	1	—	———
———	2	—	———
———	3	—	———
WG	4	Blue	WG DATA 1
	5	Green	WG DATA 0
Power	6	Red	DC 9-24V
	7	Black	DC 0V (GND)

Diagram

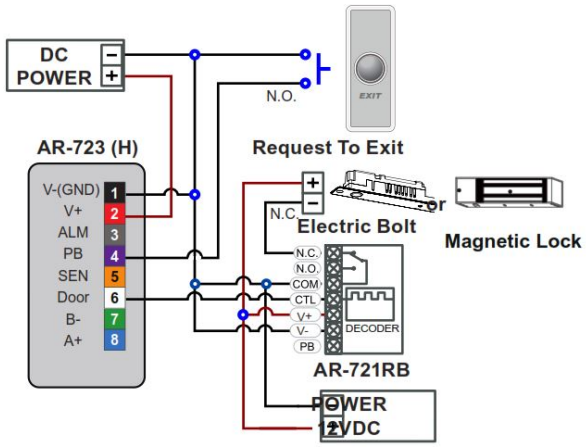
1. **Connect to Electric Strike**



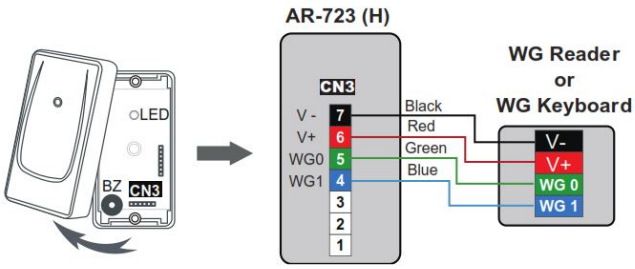
2. **Connect to Door Contact and Alarm**



3. **Strengthen security with AR-721RB**



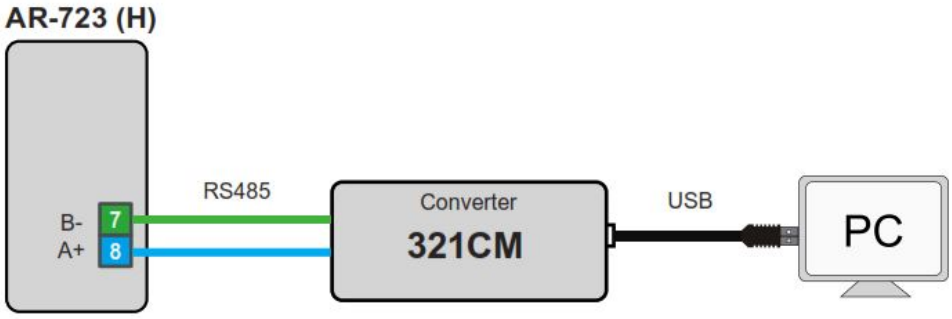
4. **Connect to Reader or Keyboard**

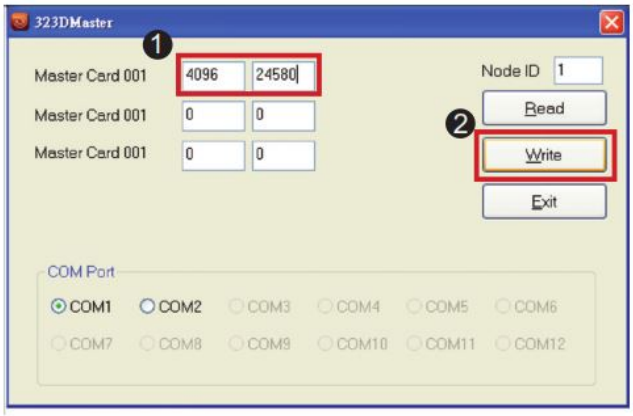


Please unload the cover before plug in AR-WGKEYBOARD.

About Master Card

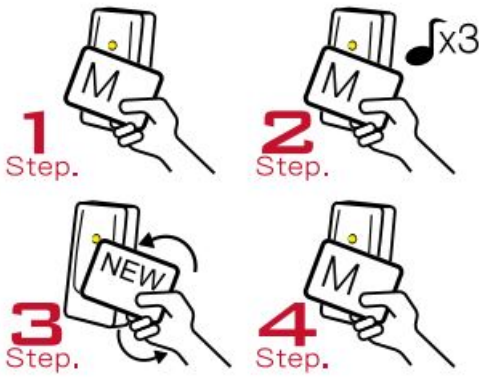
Enter the program mode





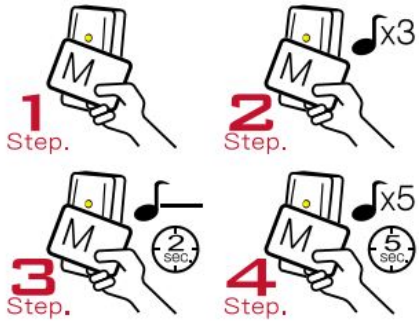
- Use the MASTER CARD software 323DMaster
- Input the MASTER CARD number, and press [Write].
- Cut off and then transmit the power, the master card number will be activated.
- Present the card, and the reader will flash green light 3 times and sound 3 beeps.Then the card becomes MASTER CARD and accesses programming mode.If MASTER CARD is presented again, it will exit programming mode.

Adding Tag



1. Present Master Card
2. After 3 short beeps [Access programming mode]
3. Present the new card or cards one by one till finished the adding.
4. Present Master Card [Exit programming mode]

Deleting All Tags



1. Present Master Card
2. After 3 short beeps[Access programming mode]
3. 1 long warning beep after 2sec.
4. 5 short beeps after 5sec: cards cleared
   P.S. Once MASTER CARD is presented after one warning beep, all card data will be cleared.

Operation process

Enter/ Exit Program Mode

- **Enter the program mode**
  Input 123456 # or *PPPPPP#)
  [e.g.] The Default Value= 123456, if already changed the Master Code= 876112, input *j876112# – program mode accessed
- **Exit the program mode**
  Input* #
- **Master Code modification**
  Access programming mode→ 09 *PPPPPPRRRRRR # [Input the 6-digit new master code twice.] e.g Set the Master code to be 876112, input * 123456 #~ 09*J876112876112 #

Set up the password [Only for connect to external K-series reader]

- **M4/M8: Individual pass code**
  - **Card or PIN:** Access programming mode 12 *UUUUU *PPPP # [e.g. User address: 00001 and pass code: 1234, input 12 * 00001*1234 #]
  - **Card and PIN:** Access programming mode13 *JUUUUU *JPPPP # [e.g. User address: 00001 and pass code: 1234, input 13 *00001 * 1234 #)I
- **M6: Public pass word**
  - **Card or PIN:** Access programming mode 15 *PPPP# [Input 4-digit pass code, default value: 4321]1
  - **Card and PIN**: Access programming mode17 *PPPP #) [Input 4-digit pass code, default value: 1234; PPPP=0000: change into Card Only]

Lift Control

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

- **Enable**

  Access programming mode 24 * 002 # [002= enable lift control]
- **Single floor**

  Access programming mode 27 * UUUUU *JFF # UUUU=User Address FF=Floor number (01-32 floor) eg] User address NO. 45, allow to access the 24th floor: 27 *00045 *)24 #)
- **Multi floors**

  Access programming mode- 21JUUUUU JS *FFFFFFFF#

  [UUUUU=User address S: 4 sets of lift control (Input: 0-3) FFFFFFFF: 8 floors setting (F=0=Disable, F=1=Enable)

  [e.g] User address NO. 168, only to the 6th and the 20th floor:

  Access programming mode- 2100168 0 00100000#21*00168*)2 *00001000 #

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

Setting Up the Arming [Only for connect to external K-series reader Alarm conditions:

1. Arming is 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: Arming is enabled and the power is suddenly off then on.

Enable/Disable Arming status (for M4/M8; Factory default armingcode is: 1234)

Standby Mode	
After door open	Do not open the door
The normal procedure to open door → **Input 4 digit arming code** → #	* → **Input 4 digit arming code** → **Present valid card**
Enter Program Mode	
Enable: Access programming mode → * * #	**Disable:** Access programming mode → * #

[The normal procedure to open door] can refer to [Access Mode].

Function Default Value

20 * DDD #				※Default Value
Function	**Selection**		**Value**	**Application**
Attendance	※0: Yes	1: No	001	Networking
Auto Re-lock	※0: Disable	1: Enable	002	Networking/Stand-Alone
Auto Open	※0: Disable	1: Enable	004	Networking/Stand-Alone
Door open button input	0: Disable	※1: Enable	016	Networking/Stand-Alone
Master Controller of Network	※0: Slave	1: Mater	032	Networking

24 * DDD #				※Default Value
Function	**Selection**		**Value**	**Application**
Auto-open door without cards at auto open zone	※0: Disable	1: Enable	001	Networking/Stand-Alone
Alarm Output/ Lift Control	※0: Alarm Output	1: Lift Control	002	Networking/Stand-Alone
Stop Alarm by door close or by push button	0: None	※ 1: Yes	064	Networking/Stand-Alone

28 * DDD #				※Default Value
Function	**Selection**		**Value**	**Application**
Dual Door Control	※0: Disable	1: Enable	064	Networking/Stand-Alone
Force Open Alarm Output	※0: Disable	1: Enable	128	Networking/Stand-Alone

Selection= O(none value)/ 1(1 x each value) [e.g.] DDD value of Enable “Auto Open” + “Exit by Push Button+ “Anti-pass-back” F(0x1)+(0x2)+(1X4)+(1×16)+(0x32)+(0x64)+(1×128)=148; As a result of that, the command will be 20* 148 Ë

Mode4/ Mode6 / Mode8

Mode	Networking/ Stand-Alone	User Capacity	Access Mode	Auto-show Duty time	Event log Capacity	120 Holidays	Anti force	Time Zone	Lift Control	Anti-pass-back
M4	Networking/ Stand-Alone	1,024	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	Yes	Yes	No	32	Yes
M6	Stand-Alone	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/ Stand-Alone	1,024	1.Card only 2.Card and PIN (4-digit individual PIN)+ # 3.Card or PIN (4-digit individual PIN)	Yes	1,200	Yes	Yes	No	32	Yes

Mode 6, the number of users up to 65535, since it reads CARD CODE(5 digits) only, unlike that Mode4/Mode8 read SITE CODE and CARD CODE(10 digits). IF Access Mode setting to use the PIN, it need to external the K-series Readers.

Factory Reset by its commands

When the device is stand-alone (not networking) Access programming mode- 20 016 #24 J064 #-26 EJ00000 01023)1#28 000 #

Note: After the Master Code is changed, factory reset doesn’t restore the Master Code back to 123456. 29 29 * #

Function	Command	Description	Mode
Entering programming mode	* PPPPPP #	PPPPPP=Master Code, default value=**123456**	M4/M6/M8
Exiting programming mode	* #		M4/M6/M8
Exiting programming mode and enabling arming status	* * #		M4/M8
Node ID setting (Connecting to 716E	00 * NNN #	NNN=Node ID, range: 001~254	M4/M8
Node ID setting (Connecting to PC directly without via 716E)	00 * NNN * VVV * nnn #	NNN=Node ID of Access Controller, VVV=Virtual 716E Node ID, nnn=Door number; range:001~254	M4/M8
Mifare tag / card format (Optional)	01 * N #	N: 0=ISO14443A; 1=ISO14443B; 2=ISO15693; 3=I Code1; 4=I Code2 PS.1. Please select the compliance,first. 2. Make sure reader and card using the same compliance.	M4/M8
Door relay time setting	02 * TTT #	TTT=Door relay time 000= Output constantly 001~600=1~600 sec. 601~609=0.1~0.9 sec.	M4/M6/M8
Alarm relay time setting	03 * TTT #	TTT=Alarm relay time 001~600=1~600 sec.	M4/M6/M8
Control mode setting	04 * N #	N=Mode 4=Mode4; 6=Mode6; 8=Mode8	M4/M6/M8
Arming delay time setting	05 * TTT #	TTT=Alarm relay time 001~600=1~600 sec.	M4/M6/M8
Alarm delay time setting	06 * TTT #	TTT=Alarm delay time 001~600=1~600 sec.	M4/M6/M8
Master card setting	07 * SSSSS * EEEEE #	SSSSS-EEEEE=00000-01023 (00000-03000 for AR-725H); SSSSS=Starting user address; EEEEE=Ending user address	M4/M8
Auto-open time zone setting	08 * N * HHMMhhmm * 6543217H #	N= 0(1st time zone) / 1(2nd time zone) HHMM= Starting time; hhmm= ending time (i.e.: 08301200=08:30 to 12:00) 6543217H= 7 days of week (Sat/Fri/Thu/Wed/Tue/Mon/Sun)+ Holiday (F= 0: disable; 1: enable); Holidays establish by the software.	M4/M6/M8
Master code setting	09 * PPPPPPRRRRRR #	PPPPPP=New master code RRRRRR=Repeat the new master code	M4/M6/M8
Setting **Suspend tag(M6)**	10 * SSSSS * EEEEE #	* =Suspend 9 =Delete;	M4/M6/M8
Setting **Delete tag(M4)**	10 * SSSSS 9 EEEEE #	SSSSS=Starting user address, EEEEE=Ending user address	M6
Set a sequence of cards as "read and access"	11 * SSSSS * EEEEE #	SSSSS=Starting card number; EEEEE=Ending card number	M4/M8
Active the suspended cards	11 * SSSSS * EEEEE #	SSSSS=Starting user address; EEEEE=Ending user address	M4/M8
Set the cards as Card mode OR PIN mode by user address	12 * UUUUU * PPPP #	Access mode: **Card or PIN**; UUUUU=user address; PPPP=4-digit pass code 0001~9999	M4/M8
Set the cards as Card AND PIN mode by user address	13 * UUUUU * PPPP #	Access mode: **Card and PIN**; UUUUU=user address; PPPP=4-digit pass code 0001~9999	M4/M6/M8
M4: Duress code setting **M6: Public PIN setting** (Card or PIN)	15 * PPPP #	PPPP=4-digit pass code (default value=**4321**) P.S. Duress code will be unavailable and become a public PIN at access mode "**Card or PIN**" of **M6**	M4/M8
Card number modification	16 * UUUUU * SSSSSCCCCC #	UUUUU= User address; SSSSS=5-digit site code; CCCCC=5-digit card code	M4/M6/M8
M4: Arming pass code setting **M6: Public PIN setting** (Card and PIN)	17 * PPPP #	PPPP=4-digit pass code (default value=**1234**; disable Arming PWD=**0000**) P.S. Arming PWD code will be unavailable and become a public PIN at access mode "**Card PIN**" and of **M6**	M4/M6/M8
Door open waiting time	18 * TTT #	TTT=Door open waiting time: 001~600=1~600 sec.; default value: 15 sec.	M4/M8
Set the card by induction (M4)	19 * UUUUU * QQQQQ #	UUUUU=User address; QQQQQ=Card quantity(**00001**=Continuously inducting)	M4/M6/M8
Reader additional setting	20 * DDD #	Please refer to function default value for details.	M4/M6/M8
Lift control setting: multi-doors	21 * UUUUU * S * FFFFFFFF #	UUUUU=User address, S=4 sets of lift control(0~3); FFFFFFFF=8 assigned floor (F=0: Disable, 1: Enable)	M4/M8
Add/Delete tag by induction (M6 only)	22 * N #	N=0(Delete tag); N=1(Add tag)	M6
AR-401ROsite number dip switch	23 * NNN * TTT #	NNN=site number, TTT= relay time: 000~600=1~600 sec.	M4/M8
Controller parameter setting	24 * DDD #	Please refer to function default value for details.	M4/M6/M8
Controller time clock setting	25 * YYMMDDHHmmss #	YYMMDDHHmmss: Year/ Month/ Day/ Hour/ Min./ Sec.	M4/M6/M8
Controller time clock setting	25 * YYMMDDHHmmss #	YYMMDDHHmmss: Year/ Month/ Day/ Hour/ Min./ Sec.	M4/M6/M8
Anti-pass-back (Enable user)	26 * SSSSS * EEEEE * N #	SSSSS=Starting user address; EEEEE=Ending user address; N=0/Enable; N=1/Disable; N=2/Initial	M4/M8
Single floor setting	27 * UUUUU * FF #	UUUUU=User Address; FF=Floor (01~32 floor)	M4/M8
Dual door control/ Active or inactive arming for force open	28 * DDD #	Please refer to function default value for details.	M4/M6/M8
Delete all tags	29 * 29 * #		M4/M6/M8
Enable the security trigger signal (with AR-721RB)	34 * 064 # **(Enable)** 34 * 000 # **(Disable)**	Change the "Door Lock" become the security trigger signal when connecting with AR-721RB.	M4/M6/M8

FCC ID: 2ACLEAR-723H

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

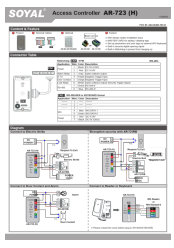
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. The device has been evaluated to meet general RF exposure statement.The device can be used in portable exposure condition without restriction

Warning: Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Documents / Resources

	Soyal AR-723H Proximity Access Controller [pdf] User Manual AR-723H Proximity Access Controller, Proximity Access Controller, Access Controller

Manuals+,