AR-327-E / 727-E

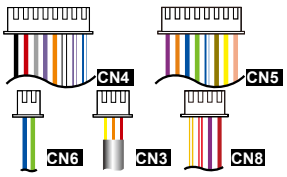
Contents

AR-327-E:Touch-panel Metal Case

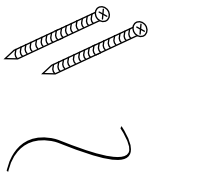
1 Products

2 User Guide

3 Terminal Cables



4 Tools

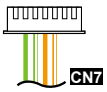


Water proof Strip

5 Optional

AR-821RB

AR-721RB
Digital Relay



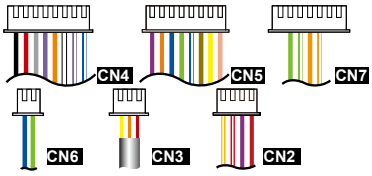
TCP/IP Module
and Cable

AR-727-E

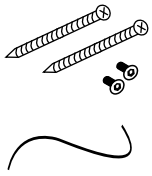
1 Products

2 User Guide

3 Terminal Cables



4 Tools



Water proof Strip

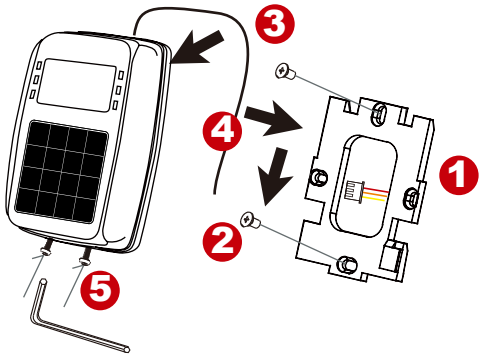
5 Optional

AR-821RB

AR-721RB
Digital Relay

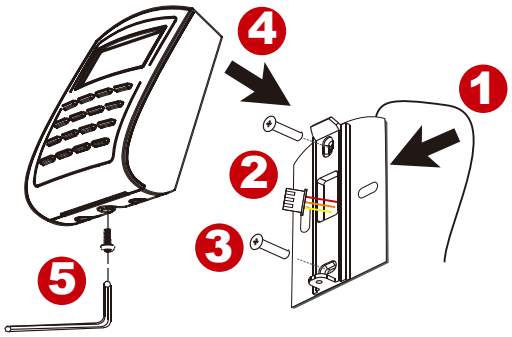
Installation

AR-327-E



- 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-727-E



- 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.

Notice

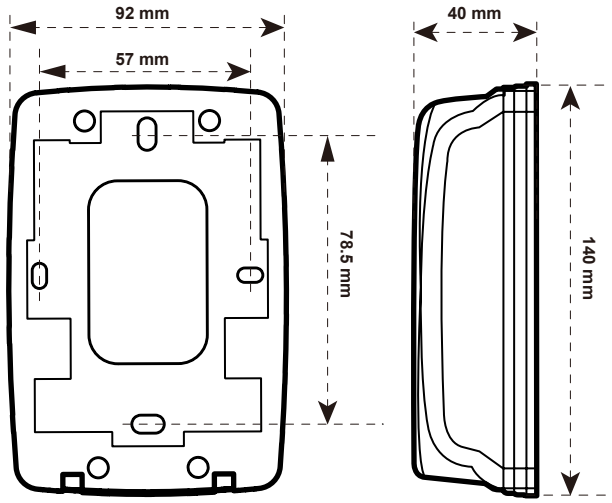
1.Tubing: The communication wires and power line should NOT be bound in the same conduit or tubing.

2.Wire selection: Use AWG 22-24 Shielded Twist Pair to avoid star wiring ,CAT 5 cable for TCP/IP connection. 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.

3.Power supply: The standard installation: Door relay and lock use the same power supply, and reader use independent power supply.

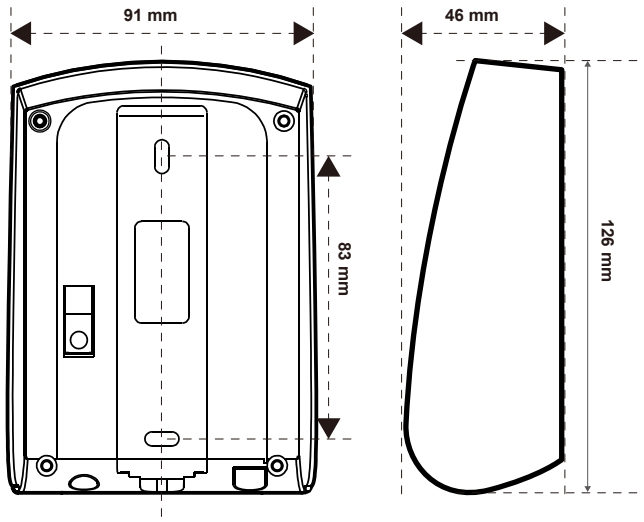
INSTALLATION

AR-327-E



Front View　　Side view

AR-727-E



Front View　　Side view

Connector Table

Cable: P1 CN4

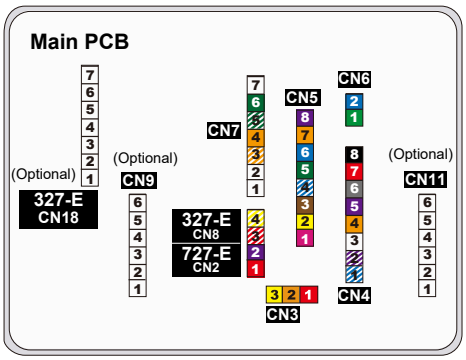
Wire Application	Wire	Color	Description
Lock Relay	1	Blue White	(N.O.)DC24V1Amp
	2	Purple White	(N.C.)DC24V1Amp
Lock Relay COM	3	White	(COM)DC24V1Amp
Door Contact	4	Orange	Negative Trigger Input
Exit Switch	5	Purple	Negative Trigger Input
Alarm Relay	6	Gray	N.O./N.C. Optional (by jumper)
Power	7	Thick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

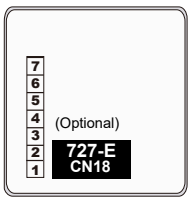
Cable: P2 CN5

Wire Application	Wire	Color	Description
Beeper	1	Pink	Beeper Output 5V/100mA, Low
LED	2	Yellow	Red LED Output 5V/20mA, Max
	3	Brown	Green LED Output 5V/20mA, Max
Door Output	4	Blue White	Transistor Output Max. 12V/100mA (Open Collector Active Low)
Wiegand	5	Thin Green	Wiegand DAT: 0 Input
	6	Thin Blue	Wiegand DAT: 1 Input
WG Door Contact	7	Orange	Negative Trigger Input
WG Exit Switch	8	Purple	Negative Trigger Input

Cable: P3 CN7 (AR-327-E By order)

Wire Application	Wire	Color	Description
	1	---	---
	2	---	---
TCP/IP Module Output	3	Orange White	Net - TX+
	4	Orange	Net - TX-
	5	Green White	Net - RX+
	6	Green	Net - RX-
	7	---	---





AR-727-E LCD-PCB

Cable: P4 CN6

Wire Application	Wire	Color	Description
RS-485 for Lift Controller	1	Thick Green	RS-485(B-)
	2	Thick Blue	RS-485(A+)

Cable: P5 CN3

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

Cable: P6 CN8

Wire Application	Wire	Color	Description
Power	1	Red	DC 12V Output
Security trigger signal	2	Purple	Security trigger signal Output
Arming	3	Red White	Arming Output
Duress	4	Yellow White	Duress Output

AR-327-E / 727-E

Optional Cables

Cable: P7 CN11 (Optional:Lift Control w/ AR-725L485; SW:RS485-2)
P9 CN9 (Optional:Voice Module; SW:RS485-3)

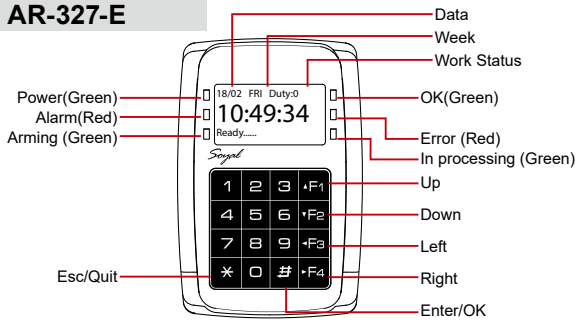
Wire Application	Wire	Color	Description
TTL Port for Lift Control or Voice Module (*Required speaker 8Ω / 1.5W (Max. 2W)	1	Black	DC 0V
	2	Yellow	TX
	3	White	TE
	4	Orange	RX
	5	Red	DC 5V
	6	---	---

Cable: P8 AR-327-E: CN10 / AR-727-E: CN18

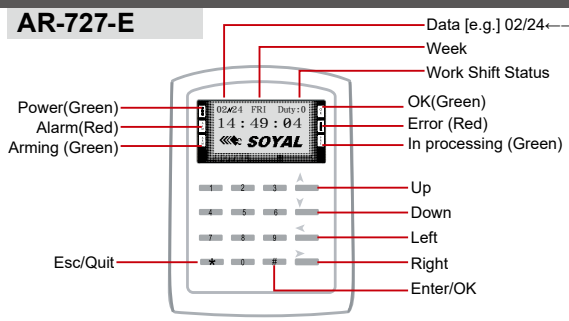
Wire Application	Wire	Color	Description
HID ProxII RF Module	1	Orange	ANT 1
	2	Purple	ANT 2
	3	Black	DC 0V
	4	Red	DC 5V
	5	Blue	Wiegand DAT: 1 Input
	6	Green	Wiegand DAT: 0 Input
	7	White	--

Front Panel & Indicator

AR-327-E



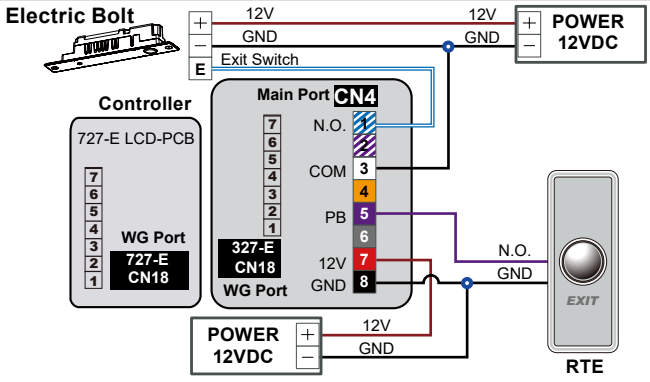
AR-727-E



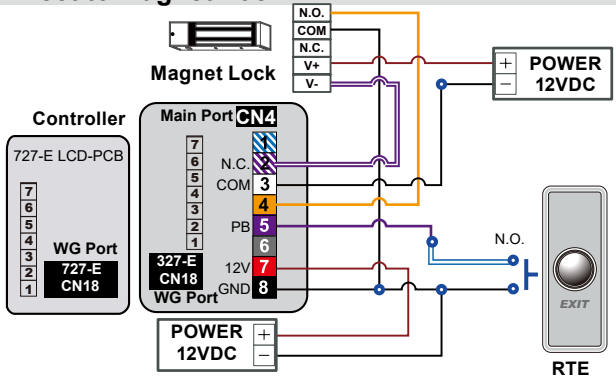
Attendance/Duty Functions		Press"1 time"	Press"2 times"
F1	Up	Duty on	Break out
F2	Down	Duty off	Break RTN
F3	Left	Overtime on	Go
F4	Right	Overtime off	Return
*	Esc / Quit	#	Enter / OK

Wiring Diagram

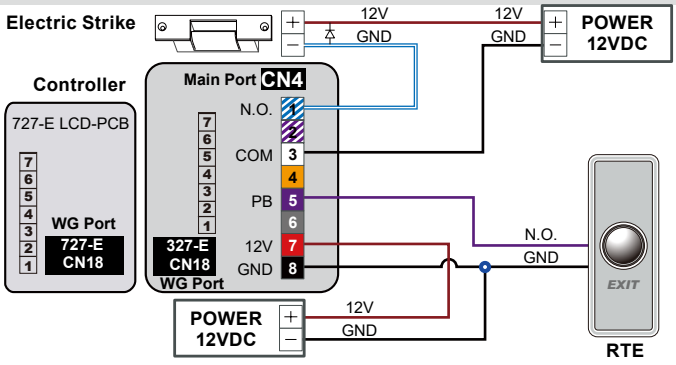
Connect to Electric Bolt



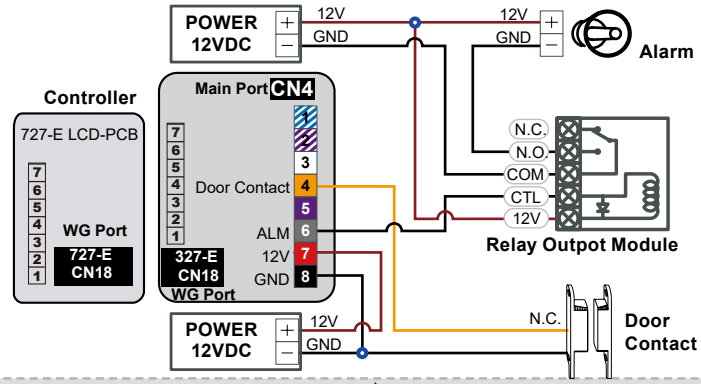
Connect to Magnet Lock



Connect to Electric Strike

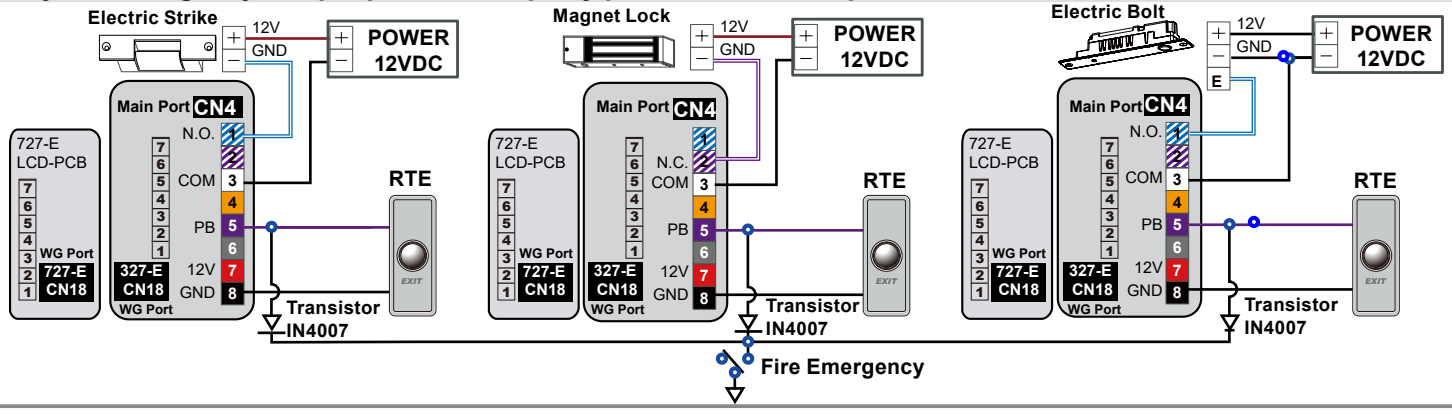


Connect to Door Contact

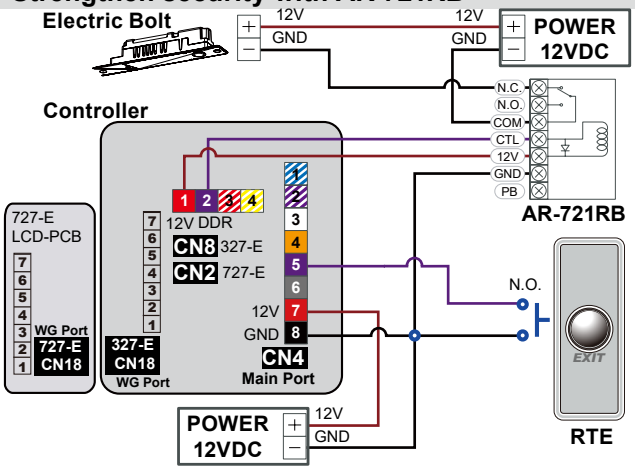


※ The Wiring of **Enable** "Share Door Relay" (Set up via the parameters setting Window of 701ServerSQL)

If any fire emergency, the people can escape by press a switch to open all doors

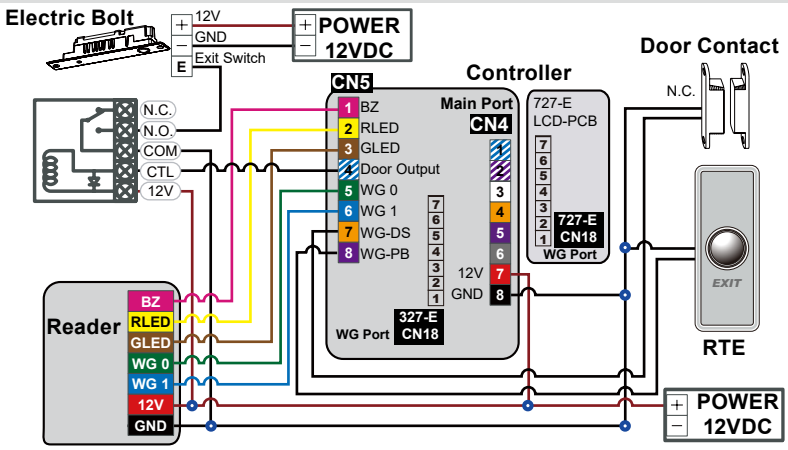


Strengthen security with AR-721RB



※ The Wiring of **Enable** "Share Door Relay" (Set up via the parameters setting Window of 701ServerSQL)

Connect to Reader



※ The Wiring of **Disable** "Share Door Relay" (Set up via the parameters setting Window of 701ServerSQL

Adding and Deleting Tag

※ User capacity: 16384 (00000~16383)

- **Adding Tag by Tag ID**

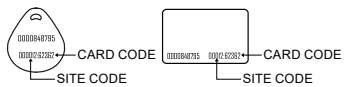
  Access programming mode → 1 Add/Delete → 1 Add -> Card ID → **Input 5/6-digit user address** → **Input Site Code** → **Input Card Code**

- **Adding Tag by RF Learn Function**

  Access programming mode → 1 Add/Delete → 2 Add -> RF-Learn → **Input 5/6-digit user address** → **Input Tag Units(pcs)** → **Close Tag into RF Area**

  ※ If adding a batch of **Sequential** tags, please input Tag Units(pcs) in the quantity of the tags and present the tag with the **lowest card code** to the access controller.

Tag Information



- **Deleting User Address**

  Access programming mode → 1 Add/Delete → 5 Delete -> Addr → **Input Starting address** → **Input Ending address**

- **Deleting Tag by Tag ID**

  Access programming mode → 1 Add/Delete → 6 Delete -> ID # → **Input Site Code** → **Input Card Code**

- **Setting up the access mode**

  Access programming mode → 2 User Setting → 2 Access Mode → **Input User Address** → **0: Invalid; 1: Card ; 2: Card or PIN; 3: Card & PIN**

Programming

A. Keyboard Lock/ Unlock

- **Lock/ Unlock**

  Press * and #, and at the same time to lock keyboard. Press again 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 or 7 Quit and Arming (Please refer to alarm / arming setting)

- **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 → 0 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) → **Main Door Number : 0~255** → **WG1 Door Number : 0~255** → **Show WG Message (0=No,1=Enable)** → Network setting → Succeeded

D. PIN Code

- Access programming mode → 2 User Setting → 1 Password → **Input 5/6-digit user address** → **Input 4-digit PIN (0001~9999)** → Succeeded Or via 701Client set it on Users screen

E. Setting up the alarm / arming

- **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.

F. Enable Voice Module (supporting version : F/w Ver 3.02 or later)

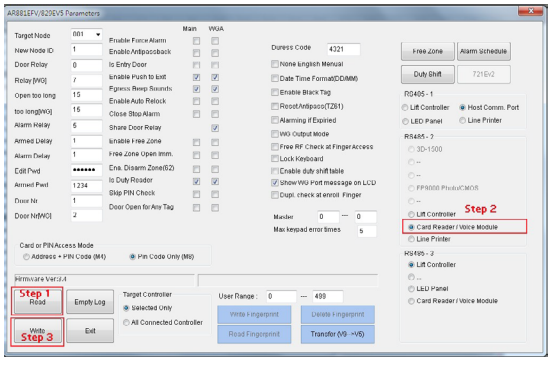
- Hardware setting

  Access programming mode → 5 Tools → 5 Ext. Comm Port → 2 Voice

- Software Setting

  701 Server 

  or 



- **Step 1.** Click "Read."

  Step 2. Select "Card Reader" in RS485-2 section.

  Step 3. Click "Write" to finish the setting.

E. Setting up the alarm / arming

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

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

Restoring Factory Settings

Reset all device parameters and user card data

- **Reset all device parameters and user card data:**
  Access programming mode → 4 Parameters2 → 9 Factory Reset →**0 : System Param ;**
  1 : User Setting ; 2 : System & User
- **Reset IP Setting:**
  When the device's power is on, press the【RESET】button the main board untill the ERR (Red) LED of screen lights up. (Reference to picture)

※ After operation as above, you will hear the long reminder sound,and wait until the sound disappear then reset the power of the controller,the device will restore factory 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. OnOff OpenZone
3. Door Relay Tm
4. Door Close Tm
5. Alarm Relay Tm
6. Alarm Delay Tm
7. Arming Delay Tm
8. Arming PWD
9. PIN&UID format

4. Parameters[2]
1. Auto Relock
2. Egress(R.T.E)
3. Miscellaneous
4. Force Open
5. Close & Stop
6. Anti-pass-back
7. Duress Code
8. Password Mode
9. Factory Reset

5. Tools
1. Language
2. Master Code
3. Master Range
4. Terminal Port
5. Ext.Comm Port
6. Open Time Zone
7. Informations
8. Clock Setting
9. Daily Alarm
0. UART Port
A. Event Logs

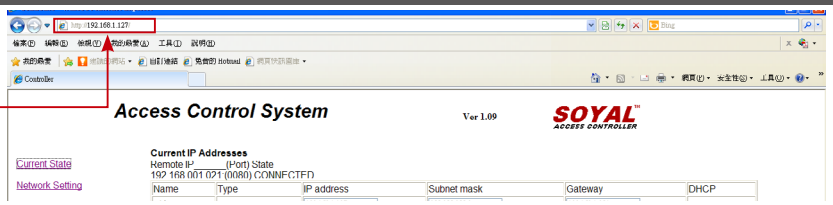
6. Quit

7. Quit & Arming

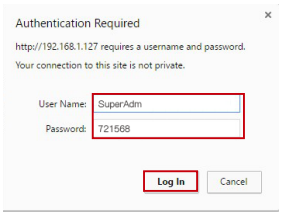
IP Setting

- **Open your Web Browser and input factory default IP address: http://192.168.1.127**

If the IP address of AR-327-E / 727-E has changed We must enter the new IP address.

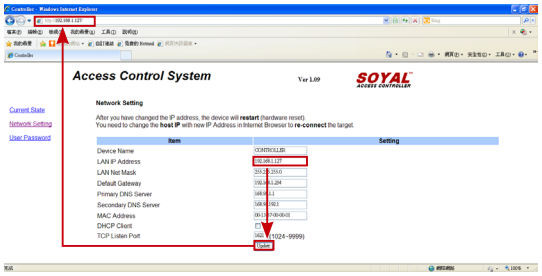


- **Log-in User Password**
  When you choose the "Networking Setting" or "User Password" at first. Log-in window will pop out and please input
  ※ At the Factory Default
  User name: SuperAdm
  Password: 721568

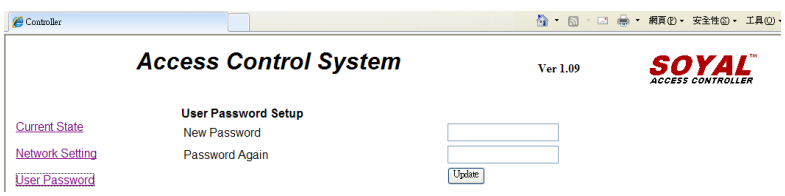


- **Networking Setting**

You will find initial IP Address 192.168.1.127 and check MAC Address is the same as sticker on Ethernet Module device. Please revise IP address you want, and then click "Update" button. After updating the IP, please re-connect the Web Browser by new IP address.



- **User Password**
  Change the log-in password to lock the IP setting of Ethernet Module.
  The password composes of 10 characters at most, it can be either A~Z or 0~9.



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.

Warnings :
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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.