Contents

AR-837-EF:Fingerprint

1 Products

Or

9DO   3DO

2 Terminal Cables

CN4   CN5

CN6   CN3   CN8   CN13

3 Tools

Screws
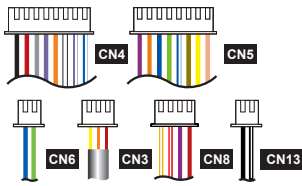
Water proof Strip

4 Optional
- Ethernet : DMOD-NETMA10 (TCP/IP Module included RJ45 Connector) or DMOD-NETMA11 (TCP/IP Module with POE function)
- Any Wiegand Output Module (CN10)
- AR-MDL-721V (Voice Module)
- AR-321L485-5V (TTL to RS-485 Converter)

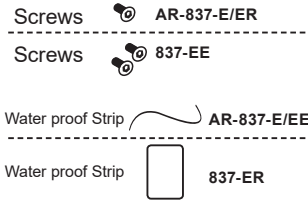### AR-837-E/ EE / ER:LCD Access Controller

1 Products

837-E   837-EE   837-ER

2 Terminal Cables

CN4   CN5

CN6   CN3   CN8   CN13

3 Tools

Screws   AR-837-E/ER

Screws   837-EE

Water proof Strip   AR-837-E/EE

Water proof Strip   837-ER

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AR-837-W:LCD Card Energy Saver

1 Products

2 Terminal Cables

CN4   CN5

CN6   CN3   CN8   CN13

3 Tools

Screws
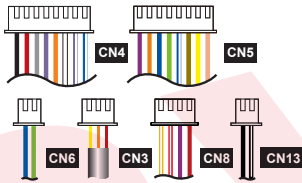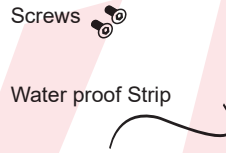
Water proof Strip

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Installation (AR-837-E/EE/EF/W)
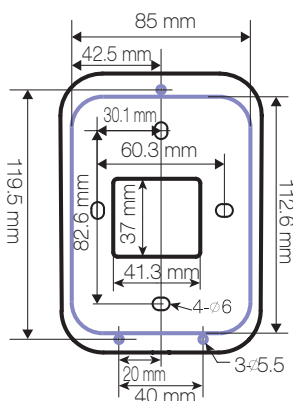
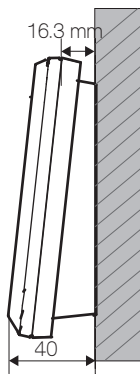A-1.Surface Mounted   A-2.Embedded   B.

或

1

2

- A-1.Surface Mounted: Use a screwdriver to screw the mounting plate to the wall. A-2.Embedded: To dig a hole for 837-E:85mmx113mm / 837-EF:128mmx109mm; and then, use a screwdriver to screw the mounting plate to the wall.
- Pull cable ends through the access hole in the mounting plate.
- Attach AR-837-E or AR-837-EF to the mounting plate and install screws (supplied) into the holes at the bottom with the allen key.
- Apply power. LED (green) will light up with one beep.

INSTALLATION

AR-837-E

85 mm
42.5 mm
30.1 mm
60.3 mm
119.5 mm
82.6 mm
37 mm
41.3 mm
112.6 mm
4-∅6
20 mm
40 mm
3-∅5.5

16.3 mm
40

8.5 mm
25 mm
20 mm (Digging depth))

- Surface mounting hole(Front View)
- Flush mounting hole(Front View)

- Surface mounting hole (Side view)
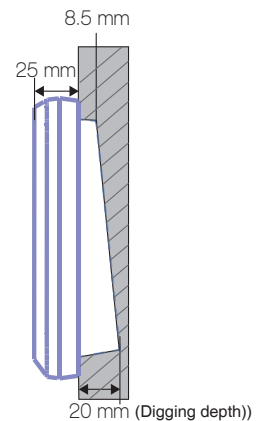
- Flush mounting hole (Side view)

AR-837-EE/EF/W

- Surface mounting hole(Front View)
- Flush mounting hole(Front View)
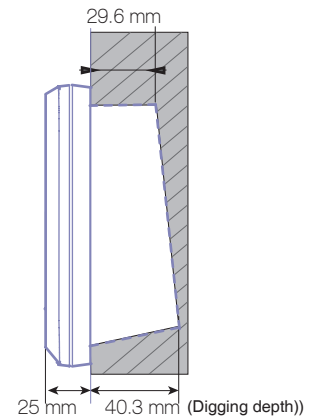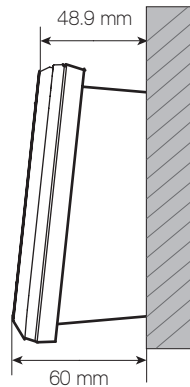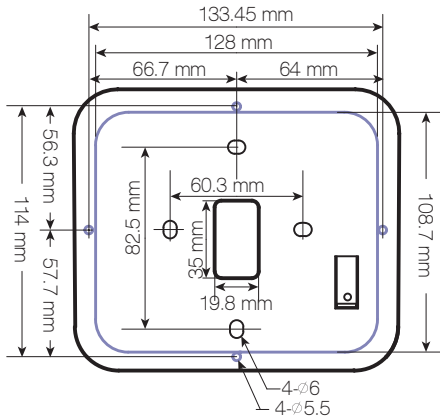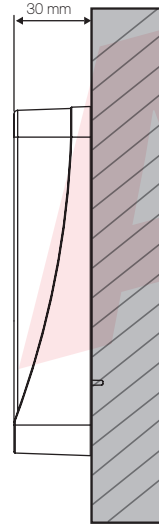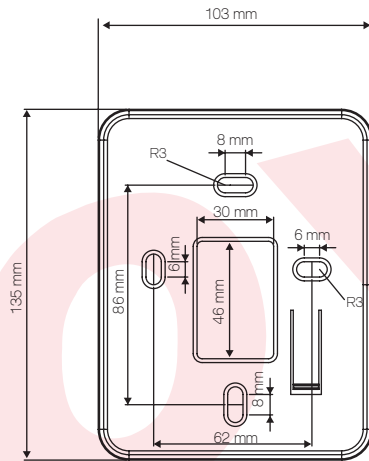- Surface mounting hole (Side view)
- Flush mounting hole (Side view)

AR-837-ER

- Surface mounting hole(Front View)
- Surface mounting hole (Side view)

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

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 cause a malfunction in the reader.

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

Connector Table (1)

Cable: CN3

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

Cable: 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 Sensor	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
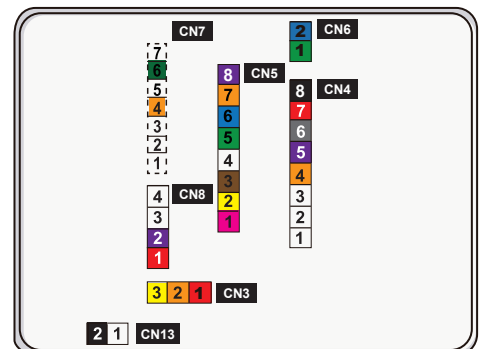
Cable: CN6

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

LCD / Biometrics Access Controller / LCD Card Energy Saver

RoHS Compliant SOR FC CE NCC

Connector Table (1)

Cable: 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 Sensor	7	Orange	Negative Trigger Input
WG Exit Switch	8	Purple	Negative Trigger Input

Cable: CN8

Wire Application	Wire	Color	Description
Reserved	1	Red	--
Security trigger signal	2	Purple	Security trigger signal Output
Arming	3	Red White	Arming Output
Duress	4	Yellow White	Duress Output

Cable: CN13

Wire Application	Wire	Color	Description
Door Bell	1	Black White	Transistor Output Max. 12V/100mA (Open Collector Active Low)
	2	Black	DC 0V

※AR-837-ER does not support the CN13 doorbell output function, and the doorbell function can only be triggered through the # key by enabling it using command 3-9-6. When using this special method, the output point is the CN4 alarm output gray wire.

Connector Table (2): Optional

Cable: CN7

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

Cable: CN9

Wire Application	Wire	Color	Description
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	Blue	--

Cable: CN10

Wire Application	Wire	Color	Description
HID 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	--

Wiring Diagram

Connect to Electric Bolt
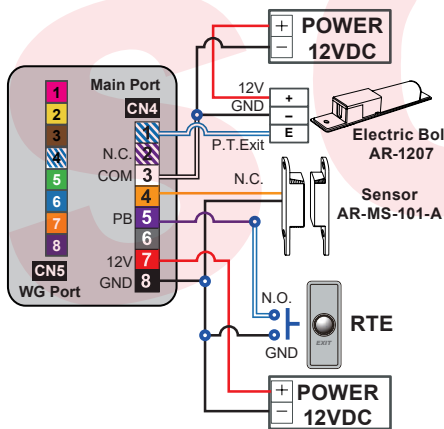
Connect to Magnetic Lock
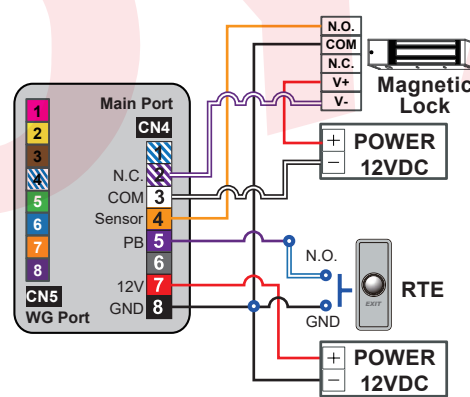
Connect to Electric Strike
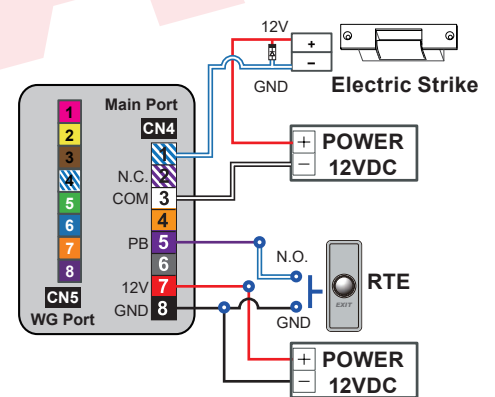
Door Open Too Long Alarm Wiring Method (External Sensor)
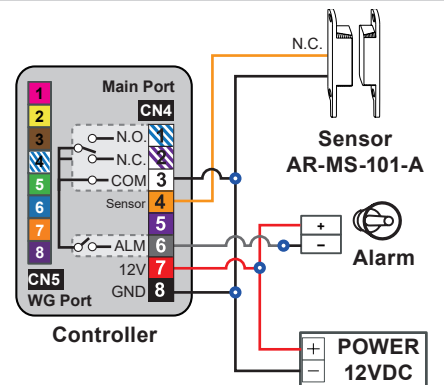
Tamper-Switch Alarm Wiring Method
(Connect to Central Monitoring System through Modbus via Universal I/O Module)
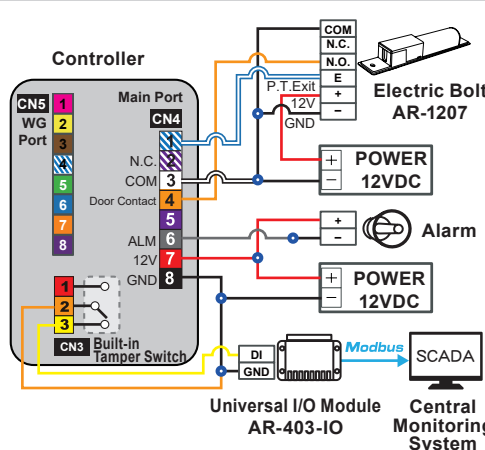
※ Enable WG Port option [Enable Force Alarm] via Parameter Setting of 701Server Software

Tamper-Switch Alarm Wiring Method
(WG Port Sensor Wiring Method)
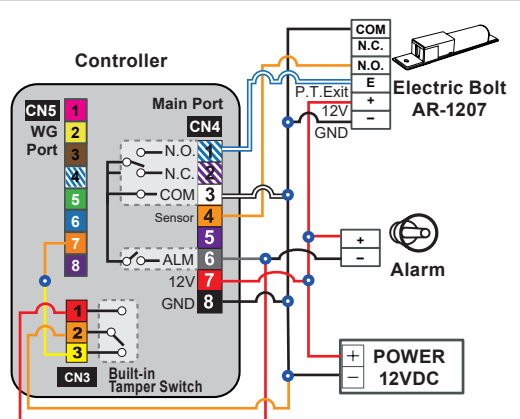
※ Enable [Share Door Relay] & WG Port option [Enable Force Alarm] via Parameter Setting of 701Server Software

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

Strengthen security with AR-721RB
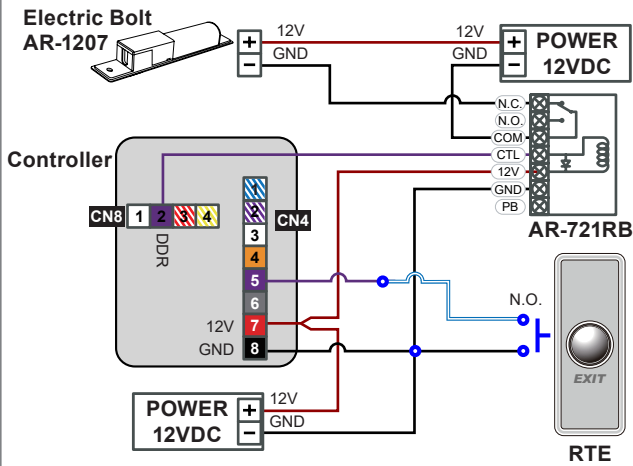
※ This wiring method is not eligible for "Share Door Relay" function (set up via parameter setting of 701ServerSQL). If there is external wiring to Wiegand reader, WG Port must enabled Digital Relay Output to enable "Share Door Relay" function.

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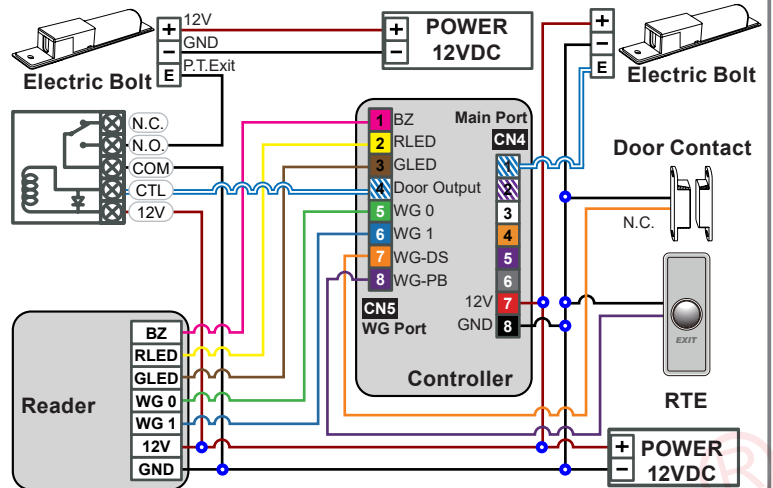
※ The Wiring of **Disable** "Share Door Relay" (Set up via the parameters setting Window of 701ServerSQL)

WG Mode / Controller Mode Setting Method
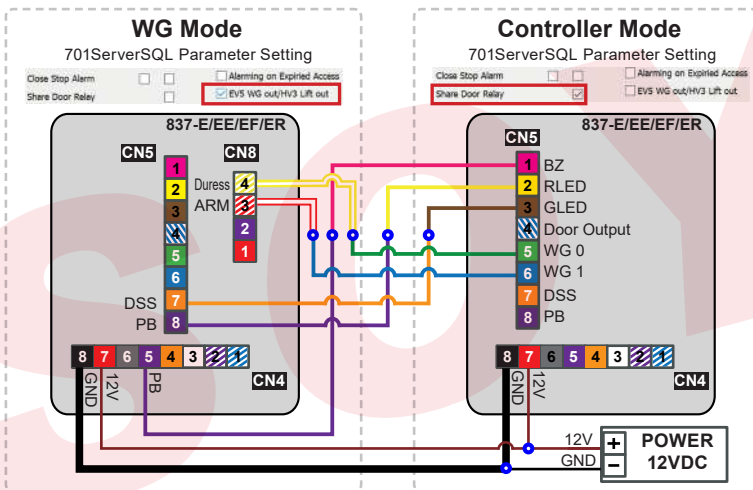
1. AR-837-E/EE/EF/ER can be set up as WG26/WG34/WG64 while the Controller is in WG Mode. These Controller can also be paired with the Controller that has WG input function.

2. Networking Setting: Select E Series Controller Parameter Edit in 701Server,tick up the function "Ev5 WG out/Hv3 Lift out"

3. Please restart the controller after pressing "Write to Controller".

Programming

A. Keyboard Lock/ Unlock

● **Lock/ Unlock**
Press ✳ and # simultaneously to lock keyboard. Press simultaneously 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 no instruction is entered 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 UID (0=No, 1=WG, 2=ABA, 3=HEX)** → **Enable DHCP(0:No, 1:En, 2=Exit)** → Succeeded

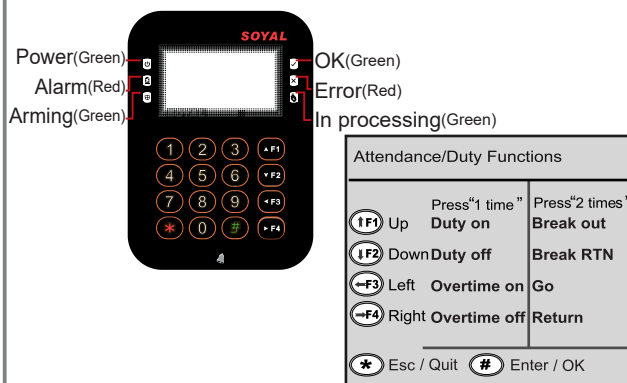# LCD / Biometrics Access Controller / LCD Card Energy Saver

Function Description of Front Panel & Indicator

Power(Green)
Alarm(Red)
Arming(Green)

OK(Green)
Error(Red)
In processing(Green)

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

1. System will automatically exit Programming Mode when inactivating for 30 seconds.
2. LED status indicates controller's mode and status.
   OK (green) – blinking constantly when operating 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
3. Keypad will be locked up 30 sec. when incorrect pin code or master code is constantly entered.
4. Maximum error input of pin code and master code can be changed via the software 701Server (default: 5 times)
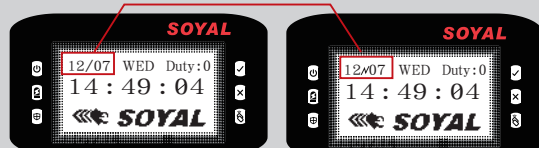
Networking : / and ∕∕ interactively flash between the Month and DAY.
   [e.g.] 12/07←→12∕∕07

Stand-alone : No flashing   [e.g.] 12/07

(←Reference to picture)

Manu Tree

※ **The full screen menu setting is on **

1. Add/ Delete	**2. User Setting**	**3. Parameters[1]**	**4. Parameters[2]**	**5. Tools**	0. UART Port CN9
1. Add > Card ID	1. Password	1. Node ID	1. Auto Relock	1. Language	A. Event Logs
2. Add > RF Learn	2. Access Mode	2. OnOff OpenZone	2. Egress(R.T.E)	2. Master Code	
3. Suspend > Address	3. Extend Options	3. Door Relay Tm	3. Miscellaneous	3. Master Range	**6. Quit**
4. Suspend > ID #	4. Single Floor	4. Door Close Tm	4. Force Open	4. Terminal RS-485	
5. Delete > Address	5. Multi Floor	5. Alarm Relay Tm	5. Close & Stop	5. Ext.Comm CN11	**7. Quit & Arming**
6. Delete > ID #	6. Enroll Finger	6. Alarm Delay Tm	6. Anti-pass-back	6. Open Time Zone	
7. Recover > Address	7. Delete Finger	7. Arming Delay Tm	7. Duress Code	7. Informations	
8. Recover > ID #		8. Arming PWD	8. Password Mode	8. Clock Setting	
9. Antipass Group			9. Factory Reset	9. Daily Alarm	

D. Adding and Deleting Tag

※ **User capacity: 16384 (00000~16383)**

Tag Information
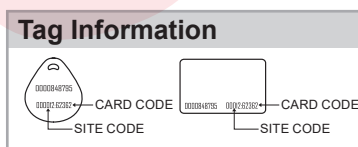
- **Adding Tag by Tag ID**

  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**
  ※If the batch of tags are **Sequential**, input Tag Units(pcs) in the quantity of the tags and present the tag with the **lowest number** to the controller for adding all the tag data; otherwise, the tags must be presented to the controller individually

- **Suspend User Address**

  Access programming mode → ⬜1 Add/Delete → ⬜3 Suspend -> Addr → **Input Start address** → **Input End address**

- **Suspend Tag by Tag ID**

  Access programming mode → ⬜1 Add/Delete → ⬜4 Suspend -> ID # → **Input Site Code** → **Input Card Code**

- **Recover User Address**

  Access programming mode → ⬜1 Add/Delete → ⬜7 Delete -> Addr → **Input Start address** → **Input End address**

- **Recover Tag by Tag ID**

  Access programming mode → ⬜1 Add/Delete → ⬜8 Delete -> ID # → **Input Site Code** → **Input Card Code**

- **Deleting User Address**

  Access programming mode → ⬜1 Add/Delete → ⬜5 Delete -> Addr → **Input Start address** → **Input End 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**

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. Adding / Deleting Fingerprint

- **Adding**

  Access programming mode → [2] User Setting → [6] Enroll FP → Key in 5-digit user address →1 or 2 different fingers on the sensor lens → Succeeded

  P.S. The AR-837EF(9000DO) needs to collect twice for each fingerprint ; however, AR-837EF(1500DO) needs to collect three times for each fingerprint.
- **Deleting**

  Access programming mode → [2] User Setting → [7] Delete FP → Key in 5-digit user address → Succeeded

  P.S. If you want to delete all users' FP, key in **99999** [#]

G. Access Mode

Access programming mode → [2] User Setting
→ [2] Access Mode
→ Key in 5-digit user address (00000~08999)
→ **0: Invalid; 1:Card; 2: Card or PIN; 3: Card and PIN**
（**837EF**: → Finger Identify: 0: Must ; 1: Ignore ）
→ Succeeded

Access Mode		Finger Identify (837EF Only)		Result (837EF Only)
Hardware	701Client	Hardware	701Client	
0:Invalid		0: Must	☐ Just fingerprint ☐ Just card control	Invalid User
		1: Ignore	☑ Just fingerprint ☑ Just card control	
1:Card		0: Must	☐ Just fingerprint ☐ Just card control	Finger+Card
		1: Ignore	☑ Just fingerprint ☑ Just card control	1. Card Only 2. Finger Only
2:Card or PIN		0: Must	☐ Just fingerprint ☐ Just card control	1. Finger+Card 2. Finger+PIN 3. Card+Finger+PIN 4. Card+Finger+Card 5. PIN+Finger+PIN 6. PIN+Finger+Card
		1: Ignore	☑ Just fingerprint ☑ Just card control	1. Card Only 2. PIN Only 3. Finger Only
3:Card and PIN		0: Must	☐ Just fingerprint ☐ Just card control	Finger+Card+PIN
		1: Ignore	☑ Just fingerprint ☑ Just card control	1. Card+PIN 2. Finger+PIN

H. 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

I. Arming Delay Time

Access programming mode → [3] Parameters[1] → [7] ArmingDelayTm → **Enter armed sta. Delay time(Sec), Range:000~255；**
Armed pulse out-put time (10ms) ,Range：000~255 → Succeeded

J. PIN & UID Length setting

Access programming mode → [3] Parameters[1] → [9] PIN & UID format → **User PIN Length Range:4~8(4 is default value)；**
Card PIN Length Range:2~8(4 is default value)

K. Duress Code

Access programming mode → [4] Parameters[2] → [7] Duress Code → **4 sets (select one)** → **Input 4-digit PIN (0001~9999)** → Succeeded
Or via 701Server to set it on AR-829E-V5 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.
※The Duress Code 0000 means that disable Duress Function and the default value is set as 0000 already.

L. Terminal Port

Access programming mode → [5] Tools → [4] Terminal Port → **0:Lift ; 1:Host ; 2:LED ; 3:PRN (default value:1)** → **Baud Selection**
(default value:9600) → Succeeded

M. Setting up the alarm / arming

- **Conditions:**
  1. Arming enabled
  2. Alarm system connected
- **Situations:**
  1. **Door is open overtime**: 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 is abnormal**: Happening when power is off and then on again, besides, reader was on arming before power went off.

- **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	Present the tag to reader → Input
Present the tag to reader → **Input 4-digit arming PWD** → #	* → **Input 4-digit arming PWD** → Present the tag to reader	**4-digit individual PWD** → # → **Input 4-digit arming PWD** → #	**4-digit individual PWD** → # → **Input 4-digit arming PWD** → #
Access Programming mode			
Enable: Access programming mode → 7 Quit & Arming		**Disable:** Access programming mode → 6 Quit	

※ **[Use FP] can substitute for [Induct valid card].**

N. Anti-pass-back

While connecting with AR-721-U, AR-737-H/U(WG mode) and AR-661-U for anti-pass-back function, the access mode must be "Card" only.

- **Device enable**

  Access programming mode → 4 Parameters[2] → 6 Anti-pass-back → master controller select [1: Yes] → WG 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]

O. Lift control

[e.g.] Connect with **AR-401RO16B** to control which floor the user will be able to access. (BAUD9600)

- **Setting Lift control**

  Access programming mode → 5 Tools → 4 Terminal Port → **0 : Lift Controller → Baud Selection 0 : 9600**

  Access programming mode → 5 Tools → 5 Terminal Port → **1 : Lift Controller**

  (need to use 725L485)

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
	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
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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

- **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]**

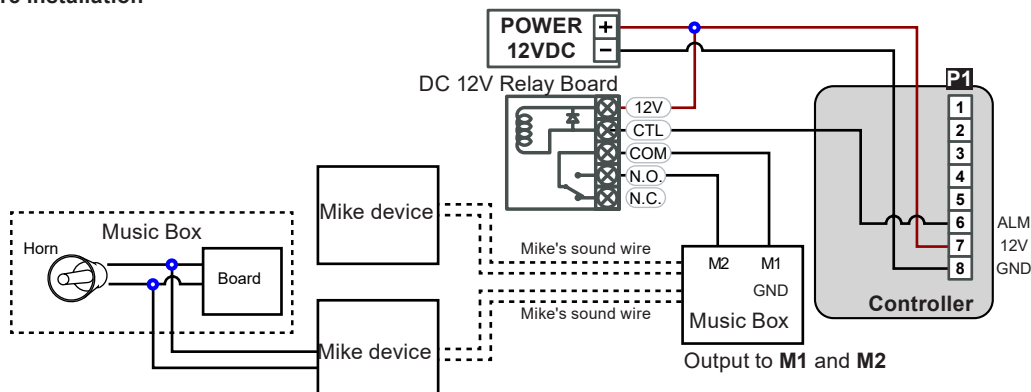 [e.g.] Set NO. 114, can use it through the 8 F and 16F:

  Access programming mode → 2 User Setting → 5 Multi Floor → **114 # → 1 # → 0000000100000001 #**

P. Alarm Clock (for Factory)

Access programming mode → 5 Tools → 9 Daily Alarm → **Set (00~15) → Set Start Tm (24 Hours) ; Set Effect Sec. (Seconds as the bell time, Range:1~255) → Set Weekday (0:disable, 1: enable)** → Succeeded

- **Hardware installation**

Q. OpenZone

Access programming mode → **3** Parameters[1] → **2** OnOff OpenZone → **Main Controller Auto Open Zone (0:disable, 1:enable)** → **Open Door Imm. During Open Zone (0:No, 1:Yes)** → **WG1 Port Auto Open Zone (0:disable, 1:enable)** → **Open Door Imm. During Open Zone (0:No, 1:Yes)** → Succeeded

R. Open TimeZone

Access programming mode → **5** Tools → **6** Open TimeZone → **Set (00~15)** → **Time (24 Hours) ; Main Port (0:disable, 1: enable) ; WG Port (0:disable, 1: enable)** → **Weekday (0:disable, 1: enable)** → succeeded

Firmware Upgrade

Get the upgrade software from SOYAL or our distributor and run "UdpUpdater" software

● **Execute the software**   The software is within SOYAL CD or please login the SOYAL website to download
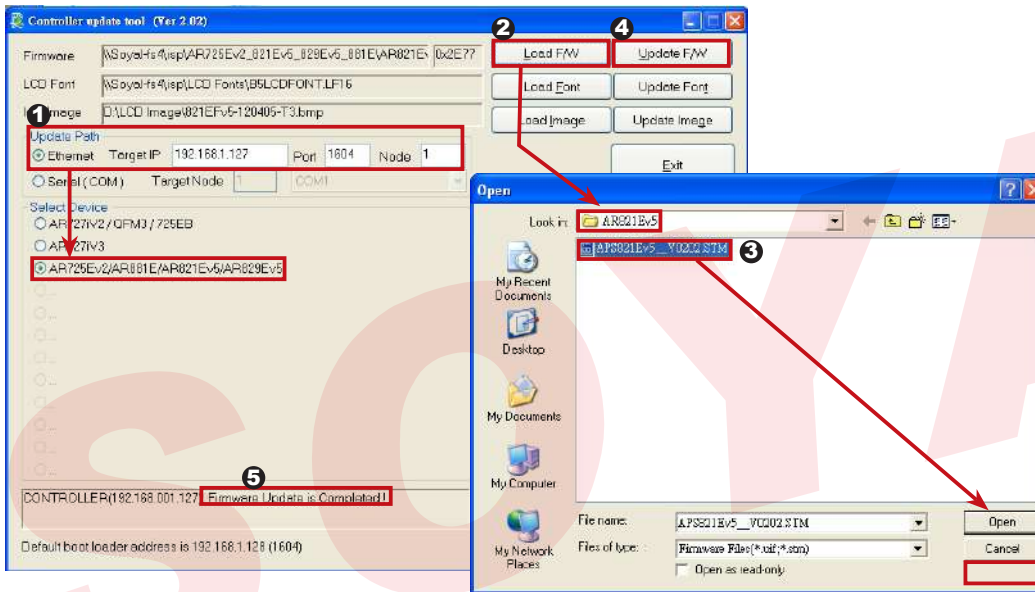
● **Update the firmware**

[Please login the SOYAL website to download the new ISP Firmware.]

1. Input the Target Address and Port
2. [Load F/W] open the documents that have the new ISP Firmware
3. Click the new ISP Firmware and [Open] it
4. Click [Update F/W] to start the firmware update
5. Till the screen shown [Firmware Update is Complete]

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 on the main board untill the ERR (Red) LED of screen lights up. (Refere to the picture beside)

RESET

※ **After operation as above, you will hear a long reminder sound,and wait until the sound disappears, and then reset the power of the controller. The device will be restored to factory settings.**
※ **After having done the "Factory Reset," the External Communication Port must be reset. Or the biometric sensor won't be functional.**
   5 Tools → **5** **Ext. Comm Port (0:FP-200 ; 1:Lift ; 2:Vein2000 ; 3:FP-9000 ; 4:Reserved)**
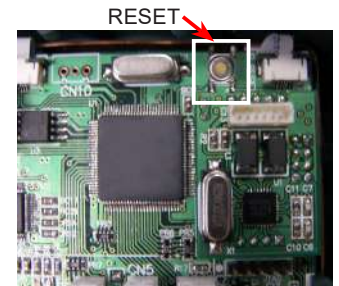
IP Setting

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

If the IP address of AR-837 (E/EE/ER/EF) has be changed, we must enter the new IP address.

- **Page menu**

Current Status ← Monitor the on-line computer

Network Setting ← IP Setting

User Password ← Change the Log-in information

- **Current State**

Online Status is able to monitor and
show which computer is linking on Ethernet Module

Show which computer is linking on Ethernet Module.

Current IP address

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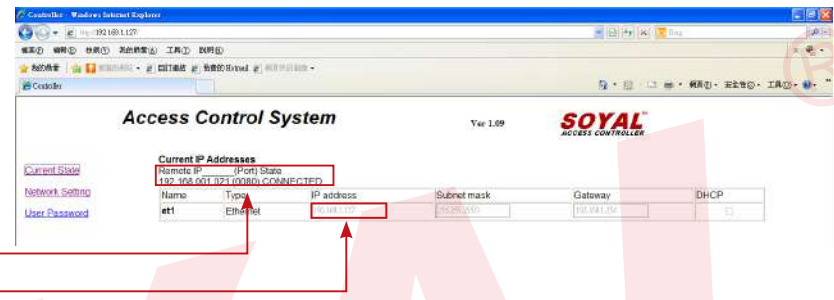When you choose the "Networking Setting" or "User Password" at first.
Log-in window will pop out and please input
※ At the Factory Default
User name: SuperAdm / Password: 721568

> **NOTE :**
>
> - User Name is different from old and new version, password can be modify via [User Password] setting on the list but will not be change from updating new version. If you forgot the password, the solution is pressing Reset Button to reset it as default value.
>
> | Firmware Version | User name | Password (changeable) |
> |---|---|---|
> | After 2020/01/21 | SuperAdm | Default Password : 721568 or self-definition |
> | Before 2020/01/21 | admin | Default Password : admin/ password not required or self-definition |
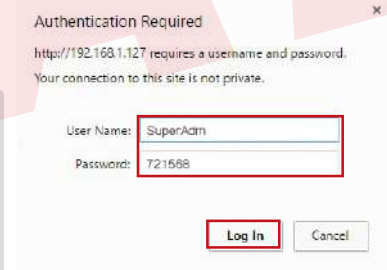
- **Networking Setting**

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

- **User Password**

Change the log-in password to lock the IP setting of Ethernet Module.
The password is composed of 10 characters at most which can be either A~Z or 0~9.

Full Function Command Menu Table

● **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 no instruction is entered within **30 sec.**, it will automatically leave the programming mode.
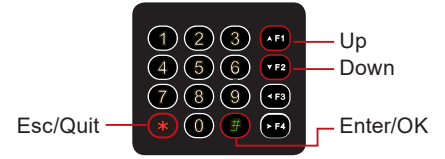
Up — Down — Esc/Quit — Enter/OK

1. Add/ Delete

1-1. Add -> Card ID

1-1-1
```
User Address:
00000    XXXXX
Range: (0-16383)
```
↓ 1-1-2
```
Set (User Address) Code:
00000    XXXXX
(1-10 Digital)
```
↓ 1-1-3
```
Set (User Address) Code:
00000:_XXXX
Range: (0-65535)
```

1-2. Add -> RF-learn

1-2-1
```
User Address:
F3: Prev  F4: Next
Range: (0-016383)
```
↓ 1-2-2
```
Tag Uints (pcs)
Must be Sequence
Range: (1-016378)
```
↓ 1-2-3
```
Close Tag
Into RF Area
```

1-3. Suspend -> Address

1-3-1
```
Input Start Address
Range: (0-16383)
```
↓ 1-3-2
```
Input End Address
Range: (0-16383)
```

1-4. Suspend > ID #

1-4-1
```
Set    Site:
00000:XXXXX
Range:  (0-65535)
```
↓ 1-4-2
```
Set    Code:
00000:XXXXX
Range:  (0-65535)
```

1-5. Delete > Address

1-5-1
```
Input Start Address
Range: (0-16383)
```
↓ 1-5-2
```
Input End Address
Range: (0-16383)
```

1-6. Delete > ID #

1-6-1
```
Set    Site:
00000:XXXXX
Range:  (0-65535)
```
↓ 1-6-2
```
Set    Code:
00000:XXXXX
Range:  (0-65535)
```

1-7. Recover > Address

1-7-1
```
Input Start Address
Range: (0-16383)
```
↓ 1-7-2
```
Input End Address
Range: (0-16383)
```

1-8. Recover > ID #

1-8-1
```
Set    Site:
00000:XXXXX
Range:  (0-65535)
```
↓ 1-8-2
```
Set    Code:
00000:XXXXX
Range:  (0-65535)
```

1-9. Antipass Group

1-9-1
```
Input Start Address
Range: (0-16383)
```
↓ 1-9-2
```
Input End Address
Range: (0-16383)
```
↓ 1-9-3
```
Enable Antipass
0: NO    1: YES
Data: 0
```

2. User Setting

2-1. Password

2-1-1
```
User Address:
F3: PreV  F4: Next
Range (0-016383)
```
↓ 2-1-2
```
Input PIN Code
Rang: 0000~9999
```

2-2. Access Mode

2-2-1
```
User Address:
F3: Prev  F4: Next
Range (0-163833)
```
↓ 2-2-2
```
0: Invalid   1: Card
2: Card or PIN
3: Card & Pin
```
2-2-3 (837EF) ↓
```
Finger / Face
0: Must   1: Ignore
000000=0
```

2-3. Extend Options

2-3-1
```
User Address:
F3: Prev  F4: Next
Range (0-16383)
```
↓ 2-3-2
```
Is Guard User
0: NO   1: YES
```
↓ 2-3-3
```
Enable Antipass
0: NO   1: YES
Data: 1
```

2-4. Single Floor

2-4-1
```
User Address:
F3: Prev  F4: Next
Range (0-016383)
```
↓ 2-4-2
```
Set Single Floor
(Range: 01~64)
Clear the Others
```

2-5. Multi Floors

2-5-1
```
User Address:
F3: Prev   F4: Next
Range: (0-016383)
```
↓ 2-5-2
```
Select Range:
1: 01-16   2: 17-32
3: 33-48   4: 49-64
```
↓ 2-5-3
```
0->NO   1->YES
Current Setting:
1000000000000000
```

2-6. Enroll Finger (837EF)

2-6-1 (837EF)
```
User Address:
F3: Prev   F4: Next
Range: (0-016383)
```
↓ 2-6-2 (837EF)
```
Enroll Fingers ?
Range: (1-2)
1
```
↓ 2-6-3 (837EF)
```
Put 1st Finger Center
Image Pls
Scan Data …
```

2-7. Delete Finger (837EF)

2-7-1 (837EF)
```
User Address:
F3: Prev   F4: Next
Range: (0-099999)
000000
```

Full Function Command Menu Table

3. Parameters [1]

3-1. Node ID

3-1-1
Input New NodeID
Range: 001~254
Current Data: 001

3-1-2
Main Door Number
Range: 000~255

3-1-3 ↓
WG1 Door Number
Range: 000~255

3-1-4 ↓
Show WG Message
0: NO 1:Enable
1

3-1-5 ↓
Enable DHCP
0: No 1: En 2: Exit
192.168.001.127*
0

3-1-6 ↓
IP Address (IPv4)
192.168.001.127
192.xxx.xxx.xxx

3-1-7 ↓
Net Mask (IPv4)
255.255.255.000
255.xxx.xxx.xxx

3-1-8 ↓
Gateway (IPv4)
192.168.001.254
192.xxx.xxx.xxx

3-2. OnOff OpenZone

3-2-1
Open Door Imm.
During Open Zone
0: No 1: Yes
0

3-2-2 ↓
Main Controller
Auto Open Zone
Dis/Enable (0/1)
0

3-2-3 ↓
WG1 Port Auto Open
Zone Dis/Enable (0/1)
0

3-3. Door Relay Tm

3-3-1
Main Door OpenTm
Range: 000~609
601~609=0.1~0.9
007

3-3-2 ↓
WG1 Door OpenTm
Range: 000~609
601~609=0.1~0.9
007

3-4. Door Close Tm

3-4-1
Main Door Close
delay time (Sec)
Range: 000~255
015

3-4-2 ↓
WG1 Door Close
delay time (Sec)
Range: 000~255
015

3-5. Alarm Relay Tm

3-5-1
Alarm Relay Time
Range: 000~609
601~609=0.1~0.9
015

3-6. Alarm Delay Tm

3-6-1
Alarm Output
Delay time (Sec)
Range: 000~255

3-7. Arming Delay Tm

3-7-1
Enter armed sta.
Delay time (Sec)
Range: 000~255
001

3-7-2 ↓
Armed Pulse out-
put time. (10ms)
Range:000~255
000

3-8. Arming PWD.

3-8-1
Input PIN Code
Range: 0000~9999
1234

3-9. PIN&UID format

3-9-1
User PIN Length
Range: 4~8
4

3-9-2 ↓
Card UID Length
Range: 2~8
4

3-9-3
Show UID :0=No
1=WG 2=ABA
3=HEX 4=WG26
5=ABA8
1

3-9-4 ↓
NFC 13.56MHz RF
0: Disable
1: Enable
1

3-9-5
RFID 125KHz RF
0: Disable
1: Enable
1

3-9-6 ↓
'#' is Door Bell
0: Disable
1: Enable
0

3-9-7
User Capacity:
0: 16384 1: 32768
2: 65536 (0~2)
0

3-9-8 ↓
Enable Buzzer
0: NO 1: YES
1

※**User PIN Length Range:4~8(4 is default value)；Card PIN Length Range:2~8(4 is default value)**

4. Parameters [2]

4-1. Auto Relock

4-1-1
Main Controller
Auto Relock Door
0: NO 1:YES
0

4-1-2 ↓
WG Prot
Auto Relock Door
0: NO 1:YES
0

4-2. Egress(R.T.E)

4-2-1
Main Controller
Request To Exit
0: Dis 1:Enable
0

4-2-2 ↓
WG1 Port
Request To Exit
0: Dis 1:Enable
0

4-3. Miscellaneous

4-3-1
Main Controller
TimeAttendance
0: YES 1: NO
0

4-3-2 ↓
WG1 Port
TimeAttendance
0: YES 1: NO
0

4-3-3 ↓
Main Controller
Skip PIN Check
0: NO 1: YES
0

4-3-4 ↓
WG1 Port
Skip PIN Check
0: NO 1: YES
0

4-3-5 ↓
Main Controller
Pass any Tags
0: NO 1: YES
0

4-3-6 ↓
WG1 Port
Pass any Tags
0: NO 1: YES
0

4-3-7 ↓
WG1 Port
Share Main Relay
0: NO 1: YES
0

4-3-8 ↓
Tag Second time
interval (10ms)
Range: 0000~9999
0100

4-3-9 ↓
Max error times
for lock keypad
Range: (0~9)
5

Full Function Command Menu Table

4. Parameters [2]

4-3. Miscellaneous

4-3-10
```
Main Controller
On Egress Beeps
0: NO   1: Bi   2: Bibb
2
```
↓
4-3-11
```
WG1 Port
On Egress Beeps
0: NO   1: Bi   2: Bibb
2
```

4-3-12
```
Lock Door Relay
0: NO   1: YES
0
```
↓
4-3-13 (837EF)
```
Main Controller
Free Tag Always
0:NI   1:YES
0
```

4-4. Force Open ..

4-4-1
```
Main Controller
Force Open Alarm
0: NO   1: YES
0
```
↓
4-4-2
```
WG1 Port
Force Open Alarm
0: NO   1: YES
0
```

4-5. Close & Stop

4-5-1
```
Main Controller
Close Door Stop
Alarm 0: NO   1:YES
0
```
↓
4-5-2
```
WG1 Port
Close Door Stop
Alarm 0: NO   1:YES
0
```

4-6. Anti-passback

4-6-1
```
Main Controller
Anti-passback
0: NO   1: YES
0
```
↓
4-6-2
```
WG1 Port
Anti-passback
0: NO   1: YES
0
```

4-7. Duress Code

4-7-1
```
Input PIN Code
Range: 0000~9999
```

4-8. Password Mode

4-8-1
```
Password Mode
0: Addr. & PIN(M4)
1: PIN(M8)   2:M6
1
```

4-9. Factory Reset

4-9-1
```
0: System Param.
1: User Setting
2: System & User
2
```

5. Tools

5-1. Language

5-1-1
```
0: English (USA)
1: Chinese (TW)
0
```

5-2. Master Code

5-2-1
```
Input MasterCode
000001~999999
123456
```

5-3. Master Range

5-3-1
```
Input Start Addr
Range: (0-16383)
000000
```
↓
5-3-2
```
Input End Addr
Range: (0-16383)
000000
```

5-4. Terminal RS485

5-4-1
```
0: Lift 1: Host
2:LED   3: PRN
1
```
↓
5-4-2
```
Baud Selection
0: 9600    1: 19200
2: 38400   3: 57600
```

5-5. Ext.Comm CN11

5-5-1
```
0: Suspend   1:Lift
2: Voice   3: PRN
1
```
↓
5-5-2
```
0: 4800   1: 9600
2: 19200   3: 38400
1
```
↓
5-5-3
```
Elevator floor
button available
Range: (1~600)
000
```

5-5. Ext.Comm CN11 (837EF)

5-5-1 (837EF)
```
0: FP-Type  1: Lift
2: Vein2000  3:
FP9000  4:……..
```

5-6. Open Time Zone

5-6-1
```
Set <F1~F4,#>: 01
00:00~00:00  ..
SuMoTuWeThFrSaHo
 0 0 0 0 0 0 0 0
```
↓
5-6-2
```
Time=00:00~00:00
Main Port  (0/1):0
WG Port (0/1):0
```
↓
5-6-3
```
Weekday:  (0/1)
SuMoTuWeThFrSaHo
X X X X X X X X
0 0 0 0 0 0 0 0
```

5-7. Informations

5-7-1
```
F/w Ver:   4.4T
Users:  00000
Messages:   00000
Press any Key ...
```

5-8. Clock Setting

5-8-1
```
YY: XXXX   MM: XX
Day: XX    Hour: XX
Min: XX    Sec: XX
```
↓
5-8-2
```
Month/Day Format
0: DD/MM   1: MM/
DD
```

5-9. Daily Alarm

5-9-1
```
Set <F1~F4,#>: 01
00:00 Sec.=000
SuMoTuWeThFrSaHo
 0 0 0 0 0 0 0 0
```
↓
5-9-2
```
Start Tm=00:00
Effect Sec.=000
```
↓
5-9-3
```
Weekday:   (0/1)
SuMoTuWeThFrSaHo
X X X X X X X X
0 0 0 0 0 0 0 0
```

5-0. UART Port CN9

5-0-1
```
0: Lift9600  1: PRN
2: LED     3: Voice
0
```
↓
5-0-2
```
Elevator floor
button available
Range: (1~600)
015
```

5-A. Event Logs

5-A-1
```
20'06/04 2359:26

(M24)Controller
Power On   00000
```

※ **More Details**：**Introduction of New Function Commands for Enterprise E Controller and Home H Controller**

6. Quit

7. Quit & Arming