

# Illuminate Series

# AR-725-E

# Illuminated Touch Keypad Multi-Function Controller

Light and fashionable design IP-based controller with backlight touch keypad and flexible control mode, standalone and networking



#### **Metal Frame Selectable**

Metal frame is able to enhance protection and reduce destruction upon collision and damage

#### **Invisible Keypad**

Keypad function is workable without numerical number. Activate keypad when doing programming of the controller and back to no keypad function once finished

#### **Backlight Touch Keypad**

Waterproof and wear resistant seamless keypad design makes printing word worn out easily

#### Support SOYAL Cascade Structure

Built-in multiple control modes:

- 1. One door
- Two door (with WG reader)
- 3. Multiple doors (with multi-door control panel)

#### Reader Mode Supported

Not only a controller, but a reader if utilized with other brand's controller

#### **HTTP WEB Server Remote Management**

Controller is able to remotely managed at any time via browsers not restricted by computer brands or mobile phone brands

#### 2 Sets of UART Ports

Flexible integration with peripheral devices, like I/O module, floor control panel, LED display, infrared thermo-camera, etc.

# **Features**

















- Two doors control: Two sets of push button and door status, relay output for lock and WG output for reader
- Multiple DO outputs: Lock, alarm, arming, duress and digital relay
- Standalone / Networking is switchable during working Support RS485 communication encryption, SSC (Soyal Security Communication)

• Supported frequency: 125kHz, 13.56MHz and dual band

 Communication Redundancy : Support TCP/IP and RS485 interface, when main communication disconnects, deputy communication will work to maintain normal work



- Built-in watchdog, real time clock, anti-vandalism switch, ingress protection, alarm setting, holiday edit, auto open door time zone, door group, door status DI, anti-passback function and duress code & output
- Support user capacity: 16,000 / 32,000 / 65,000 users
- Support floor control: 64 / 32 / 16 floors
- In case Ethernet disconnects, controller is still able to identify UID and record event log
- Multiple access mode: card only, card or password, card and password

#### **SPECIFICATION**

Communication interface	Host	RS485(9600 bps (N, 8, 1) / TCP/ IP SSC (Soyal Security Communication)	
	Serial	UART (TTL, 4800-115200 bps) x 2	
Frequency	125kHz / 13.56Mhz / Dual Band		
	125kHz	ISO18000-2: EM4001 and EM4095 compatible	
Supported Tags	13.56MHz		
Crypto	13.56MHz:CC Certification: AES Crypto comply with EAL5+		
RFID Reading Range	125kHz: PC: 10-15 cm / Metal Housing: 5-9 cm 13.56MHz: PC: 2-8 cm / Metal Housing: 2-5 cm		
UID Bits		24~64 Bit (Adjustable)	
DI/DO	DI	Push Button X2 / Door Sensor X2	
	DO	Security Output / Arming Output / Duress Output / Duress Output	
	RO	Door Lock Relay	
Doors/Floors Number	2 Doors / 64 Floors		
User Capacity	16,000		
Event Log	32,000		
Indicator	LED	1 Bi-Color LED	
	Buzzer 1		
Extend Port	Limit switch(1 Form C/ 1000mA / 30VDC)		
Dimension (mm)	PC: 110(H)X79(W)X26(D) Metal Housing: 125(L)X89(W)X30(H)		
Housing Material	PC / PC + Metal		
Color	Silver / Gray / Black / Pearl White		
Weight (g)	PC: 120±10 / Metal Housing: 470±10		
Power Consumption	<5W		
Power Voltage	9-24VDC		
Ingress Protection	IP55		
Enviroment	Operating Temperature		-20°C ~ +70°C
	Storage Temperature		-40°C ~ +75°C
	Operating Humidity		0%~90%
	Storage Humidity		0%~95%

#### WHAT WE OFFER

#### Double Doors Control

Connected with Reader, it can manage 2 access control by a single unit of controller. The second set of access control also has the exit switch, door contact status and door output control, can also set different access level (such as - can access Door A but can not access Door B).

## Real-Time Event Log Integration

After reading card, IP-based controller will actively send the event logs through port 8031 for the integration with the 3rd party program.

## **Auto-Schedule Function**

AR-327-E special firmware connects with DO module AR-401RO16B, using Lift Control program enabling you to control each Digital Output and formulate a time schedule for each output, up to 64. It's suitable for each various switching devices, such as lighting, sprinkler system, air conditioning, etc

# **Extended Application of Auto Open Time**

The Wiegand reader Auto-Open time zone setting is able to control the infrared activation function / output the second set of door contact functions at a specific time.

#### Auto-Alarm Function

Built-in 16 sets of alarm to output flash light, alarm clock, broadcast system, and each set of alarm can set the output time.

# With 2 Sets of UART Port

It can be applied to:

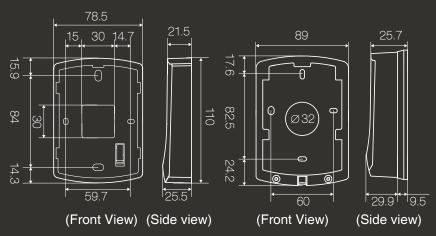
- (1) 256-point Mailbox Management System
- (2) Auto-scheduling control function-64-point DO control
- (3) Printer integration
- (4) Voice module (AR-721V-V2)

# Reader Mode Supported

Controller can be set to Reader mode, with Wiegand output that can be integrated with various brands of controllers, with a dual-band format that turns into Wiegand dual-band Reader.

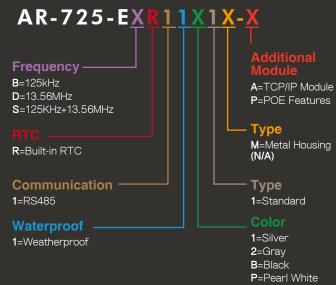
# **INSTALLATION**(mm)

▲ AR-725-E



▲ AR-725-E (Metal Housing)

#### **HOW TO ORDER**



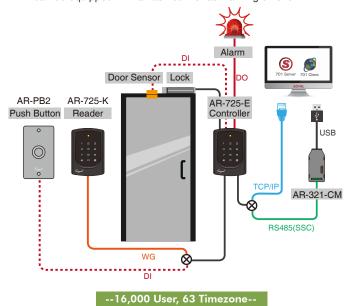


#### **APPLICATION & STRUCTURE DIAGRAM**

#### STANDALONE & NETWORKING ACCESS CONTROL

Anti Passback: restrict user to re-enter before exiting venue or increase security level by having access reader at the other side of the door. Both entering and exiting will required swipe card or keyfob for access.

AR-725-E can detect abnormal event with the door contact status in arming mode. When a forced entry or door opening too long, an alarm is generated and sent to the software, AR-725-E alarm output can be equipped with a flash buzzer as warning on site.



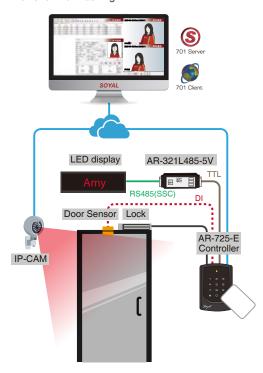
#### BUILT-IN HTTP WEB SERVER

IP-Based Controller has built-in HTTP WEB Server for Access Control, just input IP address, have it logged in to remotely control a single controller, enabling adding User card, time zone setting, review event logs, etc, even more can remotely open/close door regardless the brand of computer and smart phone. As long as there is a WEB browser, the remote management function can be achieved.



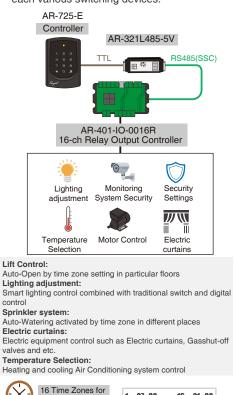
#### • REAL-TIME CAPTURING LIVE PICTURE

once tapping card on access controller, capturing live picture for administrator to crosscheck the live picture and the database picture; it can display the name on LED signboard simultaneously. The captured picture will be saved in path 701Client for tracking.



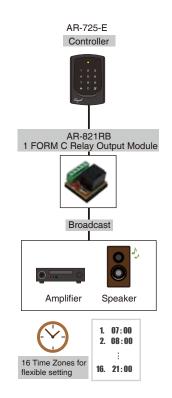
#### AUTO-SCHEDULING

Smart Home System: AR-725-E connect with DO module for auto-control, can formulate a ime schedule for each output, up to 64. It's suitable for each various switching devices.



#### AUTO-ALARM

Built-in 16 sets of Alarm to output flash light, alarm clock, broadcast system, and each set of Alarm can set the output time.





# PERIPHERALS / ACCESSORIES

#### HIGH LEVEL SECURITY

Anti-Cloning Kits



Mifare Encryption Encoder: AR-725-P Authorization Tags Software: Mifare Key



**Desfire Encryption** Encoder: AR-837-P Authorization Tags Software: 323D Master

#### Expansion I/O Control



I/O Modules AR-401 Series: Multiple Channel I/O Module AR-403 Series: Tiny Digital I/O Module

# AR-725-E

#### NETWORKING

Software



File Based & Data Based Interchangeable Software for Upgrade **Access Control, Time** Attendance, Status Monitoring and Configuration



UdpUpdate

Remote Lift Control and Time **Table Setting** 

701 Server & 701 Client

#### Signal/Interface Converter



**POE Module** AR-MDL-RJ45-POE-12V12W AR-321-CM



Isolated USB to RS-485 Isolated RS232 to **RS-485 Converter** AR-321-CM-485232



**Ethernet to RS485** AR-727-CM AR-727-CM-IO-0804M (with I/O for Fire Alarm to open all doors)

# STANDALONE

Input/Output



Magnetic Lock AR-0600M Electric Bolt Lock AR-1207 Series Cabinet Lock AR-1211-P/AR-1213-P Electric Strike AR-YS-130NO/AR-YS-131NO



Door Sensor / Push Button / Alarm / Burglary Security System

#### Multi-Door AntiPassback



Multi-Door Control Series AR-716-E16: 16 Doors IP Control Panel AR-716-E18: 18 Doors IP Control Panel

#### **Extensive Applications** (UDP/TCP)



Infrared Thermo-Camera, LPR (License Plate Recognition)

#### Illuminate Series

• External Relay Output (Security / Arming / Duress / WIEGAND Unlock Door/Alarm)



Touch Keypad **Proximity Reader** 

AR-725-K **Proximity Reader** AR-725-U

(AR-821RB) (AR-829RB) 1 Form C relay with time delay

AR-721RB 1 Form C relay AR-821RB

2 Forcm C relay

UART Port x 2
Programming
Necessary



Lift Control / I/O Module / Voice Module / Bluetooth Module / **Infrared Thermo-Camera** 



**Keyless Editing** Self programmed master card





**Proximity Tags** 125kHz: EM



Installation

Mounting Panel

AR-HT-98128

# Printer / LED display /

**Power Supply** BP-W12-1500 (1.5A) BP-W15-2400 (2.4A)

#### 13.56MHz: Mifare Classic, Mifare Plus, Mifare Desfire, UltraLight Tags Selection: Thin Card. Round Keyfob, Square Keyfob

# FAQ

# Q: What is the difference betweeen SOYAL **Home Series and Enterprise Series Controller?**

SOYAL access controller classified into two categories in term of A: specification; Home Series and Enterprise Series.

SOYAL Home Series controller has already include all basic standalone and networking access controller that you need. But E series controller provide what Home Series controller has already have, and more advanced features like built in more user capacity, UART Port for extension module, and extension interface like Ethernet and POE.

#### Q: How to set the IP address offline without computer for AR-725-E?

Besides online setting IP address by computer via the built-in HTTP Web Server, offline setting by keypad is also workable, that suited on site or when IP address is unknown.

• The default IP address: 192.168.1.127

To edit IP address: for example: 192.168.77.10

STEP 1. Entering programming mode

STEP 2. Input 01\*0\*192168077010# by keypad.





