

# SOYAL<sup>®</sup>

## Illuminate Series AR-725-H

### Illuminated Backlight Touch Keypad Controller

Light and fashionable design controller with backlight touch keypad, supporting multiple control modes

#### Metal Frame Housing

Strengthen security with additional metal housing on its frame and back housing for crash protection and reduce damage

#### Invisible Keypad Function

External form's keypad will be invisible for user, only authorized personnel can activate and use keypad function.

#### Expandable User Capacity to More than 10,000 Users

Built-in multiple control modes:  
1. One door, one and half door  
2. Multiple doors (with multi-door controller), can be more than 10,000 user capacity

#### As RS485 Reader

Not only a controller, but an encrypted RS485 reader if utilized with other brand's controller

#### Multiple Control Functions

Flexible use, can be standalone and networking

#### Selectable Frequency

125KHz: Support EM card  
13.56MHz : Support Mifare, NFC (emulate UID), DESFire (Crypto comply with EAL4+)

## Features



Lift Control



Illuminated Touch Panel



Anti Passback



Invisible Keypad



Watchdog



Alarming for Abnormal Event



Web



Youtube

- Built-in hardware watchdog, real time clock, arming, force alarm, door close delay alarm, doorbell and duress code & output
- Built-in door auto open time zone, holiday edit, door group & time setting. With multi-door control panel, support more time and group sets
- Standalone / Networking / Support Cascade Structure
- Support RS485 communication encryption, SSC (Soyal Security Communication)
- In-field firmware upgrade
- Support DESFire tags (Crypto comply with EAL4+)
- Multiple access mode: card only, card or password, card and password
- Multi output: door lock output (0.1-600 sec. and toggle mode)& alarm output (1-600 sec.)
- Silent operation mode: push button mute and all mute
- Auto relock for anti-trailing and sneaking
- Access control, lift control, time attendance, payroll and SCADA: graphic monitoring & remote control function
- Can be an encrypted RS485 reader if utilized with other brand's controller

## SPECIFICATION

Communication interface	Host	RS485/9600 bps (N, 8, 1)
	Serial	UART PORT (Output only)/4800 bps (N, 8, 1) SSC (Soyal Security Communication)
Frequency	125kHz	13.56MHz
Supported Tags	ISO18000-2: EM4001 and EM4095 compatible	ISO 14443 Mifare Ultralight, Classic, DESFire EV1 NFC (card simulation)
	Crypto	— CC Certification: 3DES Crypto comply with EAL4+
RFID Reading Range	3-7 CM	1-3 CM
UID Bits	32	
DI/DO	DI	Egress / Door State / Door Bell (Use Keypad'#')
	RO	Door Lock Relay / Alarm Relay*
	DO	Door Bell Output (Common Alarm PIN) / Security Trigger Output*/Arming Output / Duress Output
*Required External Relay Output Module		
Doors/Floors Number	1.5 Doors / 32 Floors	
User Capacity	3000	
Event Log	1500	
Indicator	LED	GREEN= arming, disarming/standby mode & access granted RED= abnormal event: access denied & alarming
	Buzzer	1
Extend Port	Tamper Switch / Tamper Output	
Dimension (mm)	PC: 114(H)X78(W)X33(D) / Metal Housing: 125(H)X89(W)X30(D)	
Housing Material	Housing	PC / Metal Housing (PC + Zinc Alloy)
	Keypad	Illuminated Keypad / Invisible Keypad function
Color	Black, Gray, Silver, Pearl White	
Weight (g)	PC: 110 ±10 / Metal Housing: 360 ±10	
Power Consumption	<3W	
Power Voltage	9-24VDC	
Ingress Protection	IP55	
Environment	Operating Temperature	-20°C ~ +65°C
	Storage Temperature	-25°C to +70°C
	Operating Humidity	20%~90%
	Storage Humidity	5%~95%

## Keypad Features

### 1. Illuminated Touch Keypad

All-in-One: Have access by either swiping valid tags or entering PIN. Configuration setting can also directly proceed via its keypad.



### 2. Keypad-less

RFID Only: Have access by swiping valid tags. Numerical keypad is unavailable and use External WIEGAND Keyboard when configuration is necessary



DUAL LED (STOP-GO)  
VERSION



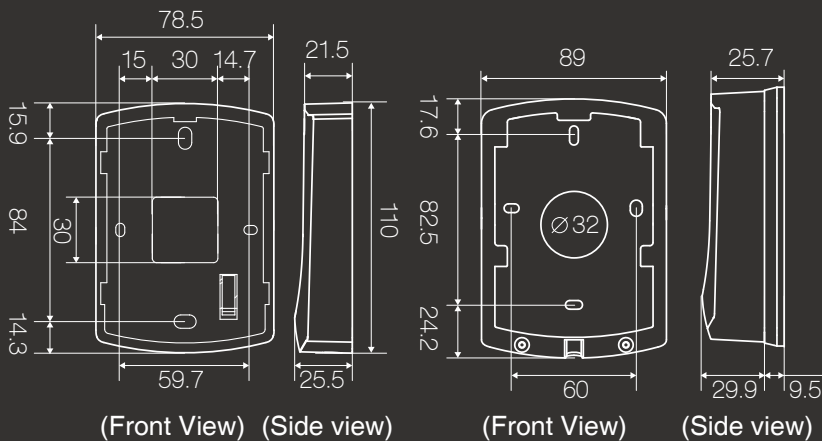
SINGLE LED  
VERSION

### 3. Illuminated Touch Keypad Invisible

The keypad function is available but there is no numerical keypad on it (invisible keypad). To make configuration easier, attach External Numerical Keypad and swipe Authorization or Master Card first for authentication and detach when finished.



## INSTALLATION(mm)



## HOW TO ORDER

# AR-725-HXR1XX1-X

### Frequency

B=125kHz  
D=13.56MHz

### RTC

R=Built-in RTC

### Communication

1=RS485

### Waterproof

1=Weatherproof  
2=Epoxy Waterproof

### Type

N/A=Standard  
(PC Housing)  
M=Metal Housing

### Type

1=Standard

### Color

1=Silver  
2=Gray  
B=Black  
P=Pearl White

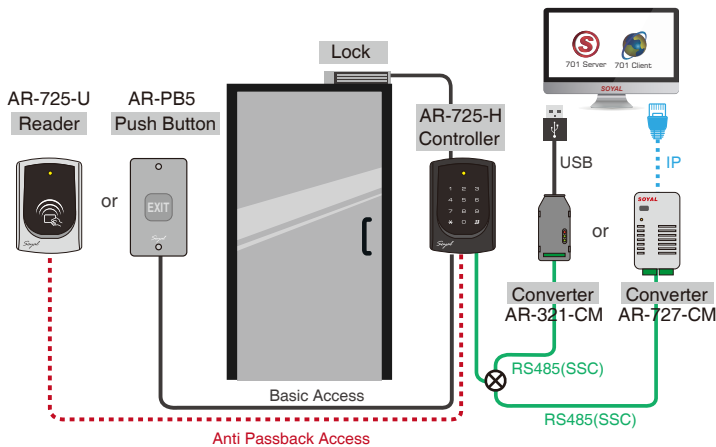
## APPLICATION & STRUCTURE DIAGRAM

### ● STANDALONE & NETWORKING ACCESS CONTROL

**Basic Access:** the most basic access, exiting venue is only by pressing a push button

**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.

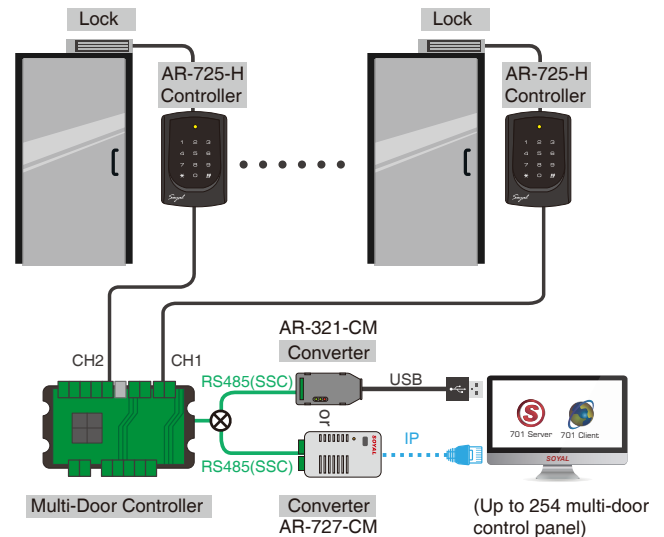
**Networking:** beside configuration through Wiegand Keyboard and Master Card, you can also link AR-725-H with Soyal converter to PC for configuration via SOYAL Software or for anti-cloning and encryption process.



--3000 User, 11 Timezone--

### ● CASCADE STRUCTURE

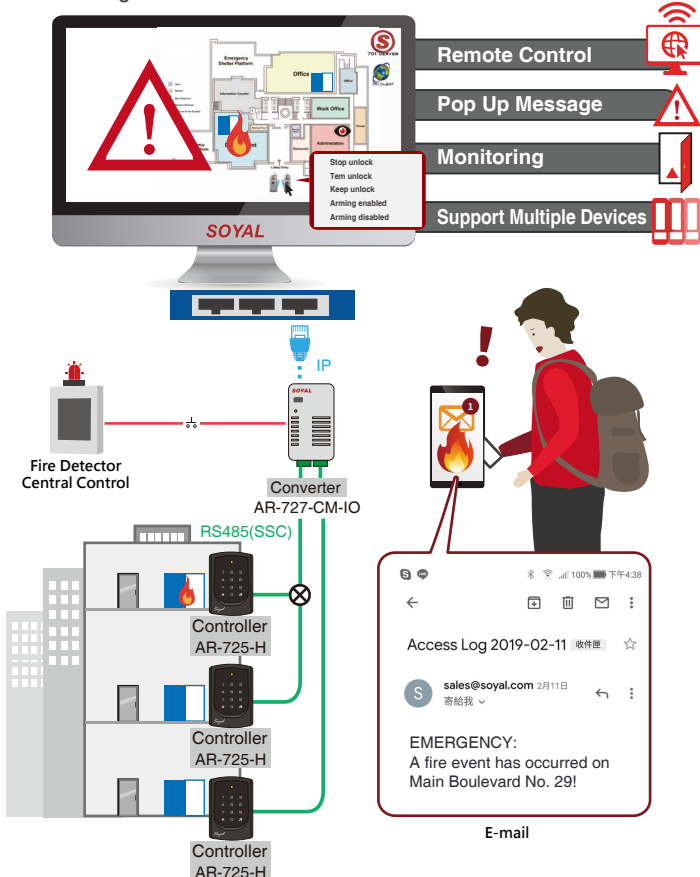
Upgrade user capacity without replacing AR-725-H installed with additional hardware of SOYAL Multi-Door Control Series. Under Multi-Door Control Panel, when RS485 communication is working normally, AR-725-H will be a Slave Reader of Control Panel. Once its communication is cut off, AR-725-H will automatically be Access Control and have control on its user and parameter setting.



--16000 User, 63 Timezone--

### ● RELEASE ALL DOOR LOCKS IN FIRE EVENT & EMAIL NOTIFICATION

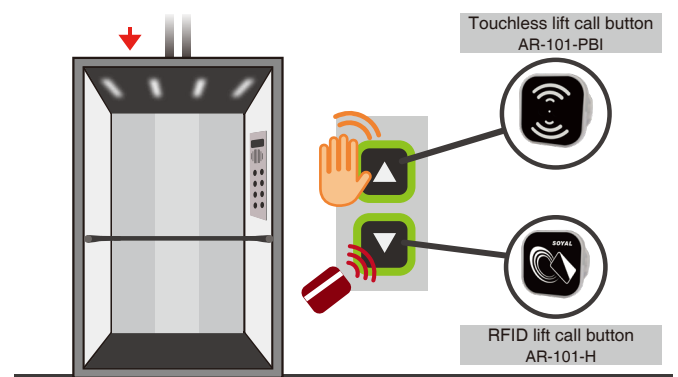
When fire event occurred, SOYAL controller connected to AR-727CM-IO will automatically release all doors to open. At the same time, send fire alarm event notification to authorized personnel to get notified of real time event.



### ● TOUCHLESS LIFT CONTROL SOLUTION

A feature for users to reach a designated single floor by swiping the user card only without pressing the elevator button rather than reading a user card and then pressing the floor button.

#### Lift Call Button



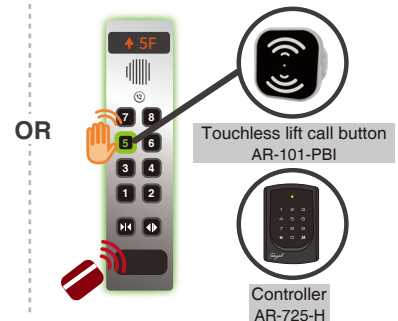
#### Floor Button inside Lift

Reach a designated single floor by swiping the user card without pressing the elevator button



#### Self-control floor access setting

Swipe valid tags and wave your hand to sensor for destination floor touchless



# PERIPHERALS / ACCESSORIES

## HIGH LEVEL SECURITY

- Anti-Cloning Kits



### Mifare Encryption

Encoder: AR-725-P  
w/Authorization Tags  
Software: Mifare Key



### Desfire Encryption

Encoder: AR-837-P  
w/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

## STANDALONE

- Input/Output



### Locks

**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 / Alarm/Siren / Burglary Security System



AR-725-H

## NETWORKING

- Software



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

701 Server & 701 Client



### Firmware Upgrade

ISP Tools

- Signal/Interface Converter



### Isolated USB to RS-485

AR-321-CM

### Isolated RS232 to RS485

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)



### TTL to RS-485

For external module converter

- Large User Capacity & Multi-Door AntiPassback



### Multi-Door Control Series

AR-716-E16: 16 Doors IP Control Panel  
AR-716-E18: 18 Doors Networking Control Panel

- Illuminate Series



### 16,000 User IP Based Access Controller / Wiegand Reader

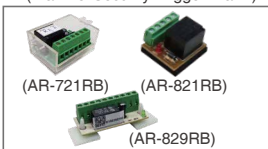
AR-725-E / AR-725-K/U



### Stainless Steel Push Button

AR-PB5 Series

- External Relay Output (Alarm & Security Trigger Alarm)



### 1 Form C relay with time delay

AR-721RB  
1 Form C relay  
AR-821RB  
2 Form C relay  
AR-829RB

- Programming



### Keyless Editing

Self programmed master card

- Necessary



### Power Supply

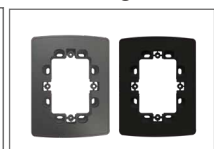
BP-W12-1500 (1.5A)  
BP-W15-2400 (2.4A)



### Proximity Tags

125kHz: EM  
13.56MHz: Mifare Classic, Mifare Desfire, UltraLight  
Tags Selection: Thin Card, Round Keyfob, Square Keyfob

- Installation Mounting Panel



### Color: Gray / Black

AR-HT-98128

## FAQ

**Q:** How to Integrate SOYAL with Face & License Plate Recognition?

**A:** As Face Recognition is more and more in demand, SOYAL provide resources and two integration method. The integration will grant access via face recognition by sending converting face data to UID to Soyol system (software/hardware) that later will resulting in access granted or denied, based on the availability user data on Soyol database system. As the integration method is various, we offer flexibility of integration based on what customer preferred.

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

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



More FAQ