

SOYAL[®]

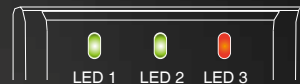
Nation Series AR-757-H

Multi Functional Access Controller

High security controller, supporting doorbell and frequency (125kHz or 13.56MHz)



3 Sets of LED Indicator



LED 1 GREEN= Arming & Access granted

LED 2 GREEN= POWER ON

LED 3 RED= Abnormal Event: Access Denied & Alarming

Industrial High Quality

Higher than commercial quality, more durable, longer working life and suitable to work in extreme environment

Single and Bi-Color Design

Go simple with single color design or go bold with bi-color design



High Security Access Controller

Built-in two relays to control door lock and trigger alarm once abnormal event occurs

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

Features



Door Bell



High Durability



Waterproof



Long Life Span



Watchdog



Anti-Passback



Web



Youtube

- 125kHz or 13.56MHz Access Controller Built-in Hardware Watchdog & Real Time Clock Function
- Standalone / Networking / Support Cascade Structure
- Support RS485 communication encryption, SSC (Soyal Security Communcation)
- In-Field Firmware Upgrade
- Arming / Force Alarm / Unclose Alarm
- Duress Code & Output
- Multi Operation Mode
- Multi Output: Door lock output (0.1-600 sec. and toggle mode) & alarm output (1-600 sec.)
- Support DESFire tags (Crypto comply with EAL4+)
- Silent Operation Mode: Push Button and All Mute
- Support One and Half Door, and One and Half Door Anti-Passback
- Auto Open Time Zone: Built in 2 time zones, with Control Panel up to 63 time zones.
- Assign user for Door Group (up to 254) and Time Zone (up to 11, with control panel up to 63)
- Holiday Edit Up to 120 days a year
- 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

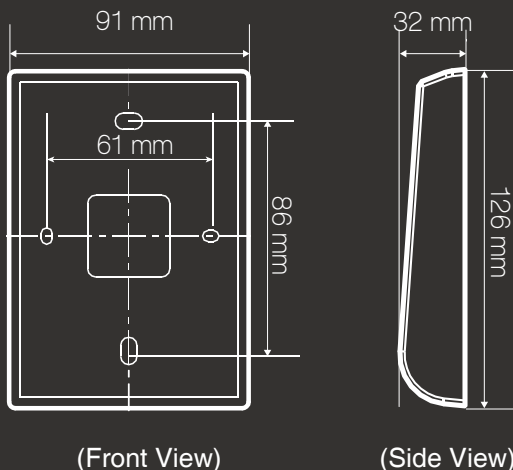
SPECIFICATION

Communication interface	Host	RS485/9600 bps (N, 8, 1) SSC (Soyal Security Communication)
	Serial	TTL Output /4800 bps (N, 8, 1)
Frequency	125kHz	13.56MHz
Supported Tags	ISO18000-2: EM4001 and EM4095 compatible	ISO 14443 Mifare Ultralight, Classic, DESFire NFC (card simulation)
	Crypto	CC Certification: 3DES Crypto comply with EAL4+
RFID Reading Range	10-18 CM	2-8 CM
UID Bits	24~32 (Adjustable)	
DI/DO	DI	Egress / Door State
	RO	Door Lock Relay
	DO	Door Lock Output / Duress Output / Alarm Output
		Arming Output (share same terminal with Security trigger signal Output)
*Required External Relay Output Module		
Doors/Floors Number	1.5 Doors / 32 Floors	
User Capacity	1024	
Event Log	3000	
Indicator	LED	3 Bi-Color LED (Green/Red)
	Buzzer	1
TAMPER	Limit switch (1 Form C/ 1000mA / 30VDC)	
Dimension (mm)	126(H)X91(W)X32(D)	
Housing Material	Housing	ABS
	Keypad	Rubber
Color	Silver, Gray, Black-Black, Black-Red, Gray-Silver	
Weight (g)	approx.155	
Power Consumption	<3W	
Power Voltage	9-24VDC	
Ingress Protection	IP54	
Enviroment	Operating Temperature	-20°C ~ +70°C
	Storage Temperature	-40°C ~ +75°C
	Operating Humidity	0%~90% (non-condensing)
	Storage Humidity	0%~95% (non-condensing)

WHAT WE OFFER

- ✓ **High Durability**
 Each Soyal material is made with finest material that meet RoHS compliance and Industrial Grade, provides you a high durability hardware that works well in every environment.
- ✓ **Anti-Cloning and Anti-Duplicate**
 We provide anti-cloning and encryption for the whole system to tighten up the security. By this mean, only tags paired to AR-757-H and as well as access reader can have access, other than that we don't even recognize the tags.
- ✓ **Expandable User Capacity**
 When scaling your system it is not only having more hardware, higher security level, and more spaces to control; it also mean there will be more people with access. Without replacing or changing installed hardware, adjust your controller user capacities by adding external Multi-Door Controller; from a thousand to more than ten thousand user capacity.
- ✓ **Beyond Access Controller**
 Each product manufactured by Soyal was made for total solution and to offer flexibility. For intense, Soyal main product is access controller but you can found Soyal on other application like offline consumption device, charging device, and many more just by changing its firmware.
- ✓ **No Exclusivity, Open Integration Resources**
 SOYAL provides open resources such as SDK and protocol document that have 'no-exclusivity and open source integration' characteristic, compatible with other system integration. We offer integration with SOYAL software or directly with SOYAL hardware. For web based, SOYAL protocols can easily corresponding to JSON interface that is suitable for GraphQL and Julia developer.

INSTALLATION(mm)



▲ Standard

HOW TO ORDER

AR-757-HXR11X1

Frequency
B=125kHz / D=13.56MHz

RTC
R=Built-in RTC

Communication
1=RS485

Waterproof
1=Weatherproof

Type
1=Standard

Color
1=Silver
2=Gray
J=Black-Black
K=Black-Red
L=Gray-Silver

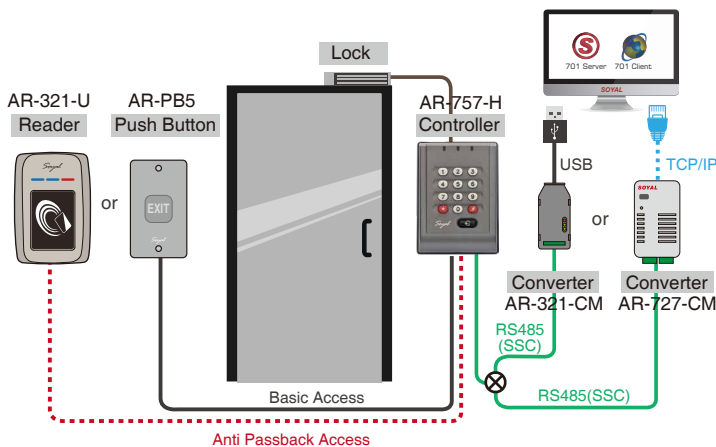
APPLICATION & STRUCTURE DIAGRAM

● 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.

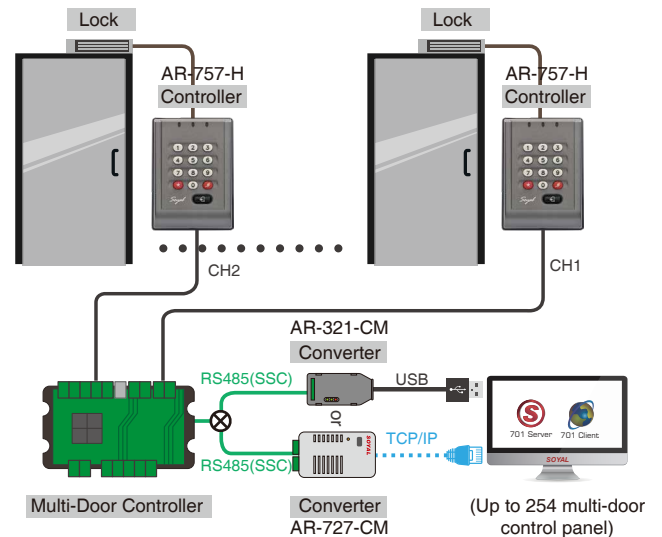
Networking: beside configuration through Wiegand Keyboard and Master Card, you can also link AR-757-H with Soyol converter to PC for configuration via SOYAL Software or for anti-cloning and encryption process.



--1024 User, 11 Timezone--

● CASCADE STRUCTURE

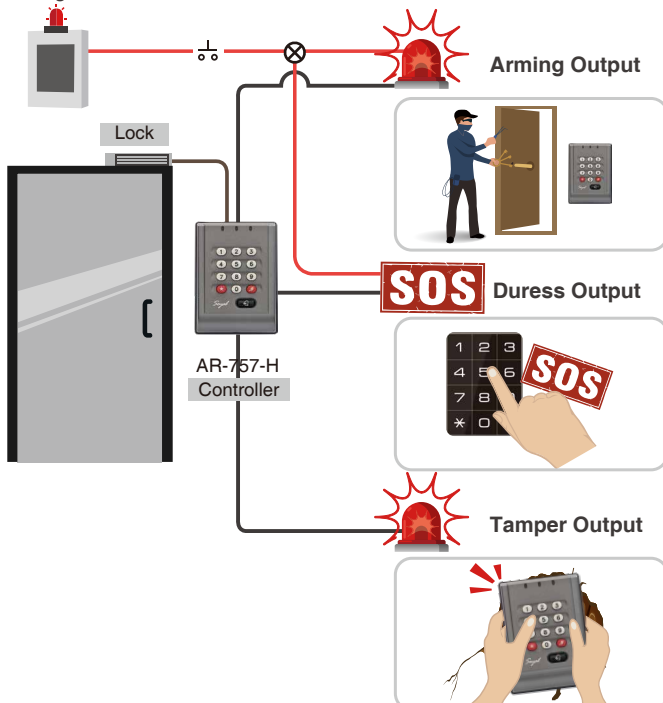
Upgrade user capacity without replacing AR-757-H installed with additional hardware of SOYAL Multi-Door Control Series. Under Multi-Door Control Panel, when RS485 communication is working normally, AR-757-H will be a Slave Reader of Control Panel. Once its communication is cut off, AR-757-H will automatically be Access Control and have control on its user and parameter setting.



--16000 User, 63 Timezone--

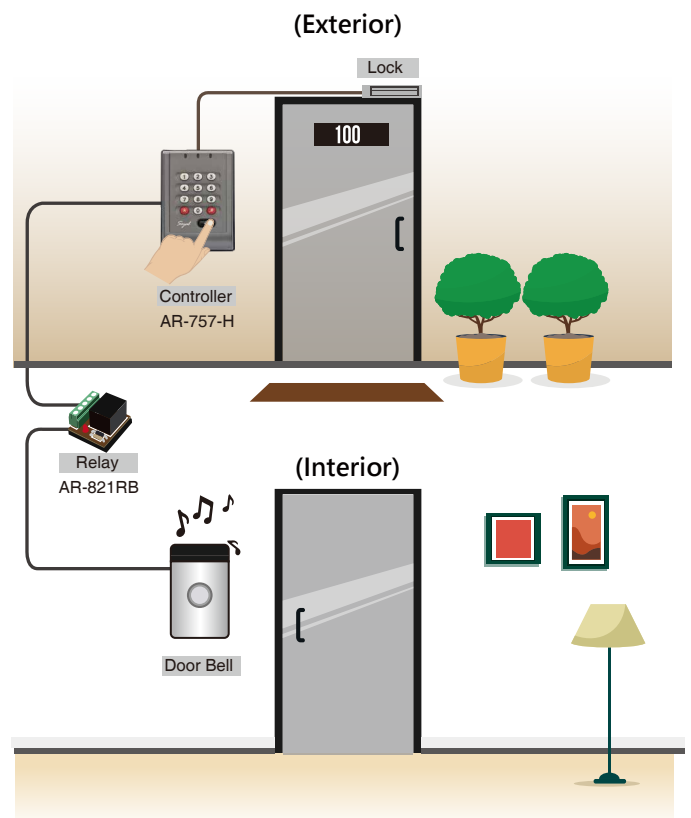
● STRENGTHEN SECURITY WITH BURGLARY SYSTEM

- **Arming Output:** Silently send signal to security host when force open door event is occurring
- **Duress Output:** In case an assailant or robber ambush at the entrance and force you to open the door or disarm the system, try to keep calm and input Duress code to open the door, which will simultaneously send a silent alert to security host.
- **Tamper Output:** When controller is removed illegally from the wall, the tamper switch will bounce and trigger alarm. At the same time send signal message to SOYAL 701 Client Software and send loud signal with additional flare alarm honk.



● ENTRANCE DOORBELL FUNCTION

Press doorbell button to notify occupant that there is a visitor coming, without knocking and afraid occupant won't hear the door knock.



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



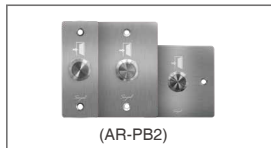
AR-757-H

- Nation Series



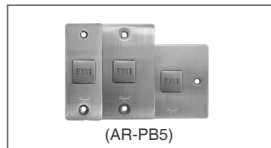
IP Based Multi Functional Controller

AR-327-E / AR-727-E



Stainless Steel Push Button

AR-PB2 Series



Stainless Steel Push Button

AR-PB5 Series

- 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

NETWORKING

- Software



701 Server 701 Client



ISP Tools

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 RS485

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

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 Soyal system (software/hardware) that later will resulting in access granted or denied, based on the availability user data on Soyal 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 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.



More FAQ