SOYAL®

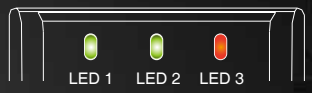
Nation Series

AR-757-H Access Controller

High security access controller equipped with 125kHz or 13.56MHz and doorbell function



Indicator(LED)



LED 1 GREEN= arming & access granted
LED 2 GREEN= POWER ON
LED 3 RED= abnormal event: access denied & alarming

Long Life Span

AR-757-H well known for its sturdy design and durability with long life span up to 10 years

Single and Dual-Color Design

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



High Security Access Controller

Equipped with double relay to control door lock and trigger alarm when abnormal event occurred

Doorbell Button

No door knocking or shouting needed when you can press doorbell button effortlessly

Features



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.)
- 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

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 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
	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	1.024	
Event Log	3000	
Indicator	LED	3 Bi-Color LED
	Buzzer	1
Extend Port	Tamper Switch / Tamper Output / Wiegand IN	
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)	155±10	
Power Consumption	<3W	
Power Voltage	9-24VDC	
Ingress Protection	IP54	
Enviroment	Operating Temperature	-20℃ ~ +65℃
	Storage Temperature	-25℃ to +70℃
	Operating Humidity	20%~90%
	Storage Humidity	5%~95%

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.

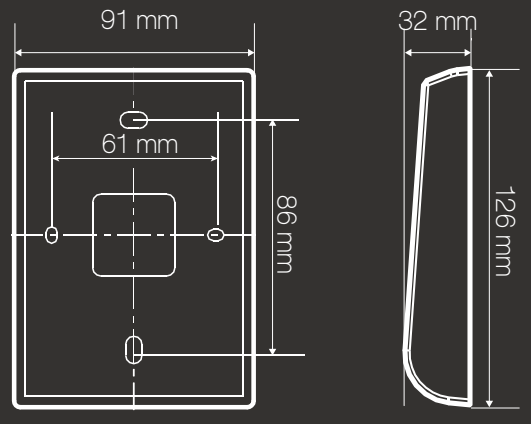
Beyond Access Controller

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)



(Front View) (Side View)

▲Standard

HOW TO ORDER

AR-757-HXR11X1

Frequency
B=125kHz / **D**=13.56MHz

RTC
R=Built-in RTC

Communication
1=RS485

Waterproof
1=Weatherproof

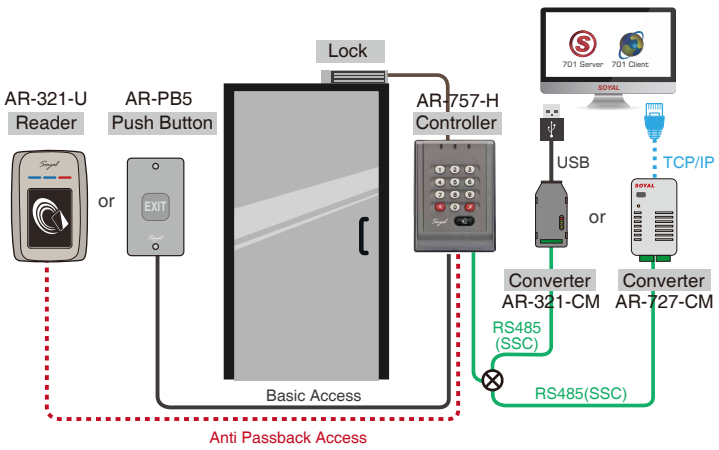
Type
1=Standard

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

APPLICATION & STRUCTURE DIAGRAM

STANDALONE & NETWORKING ACCESS CONTROL

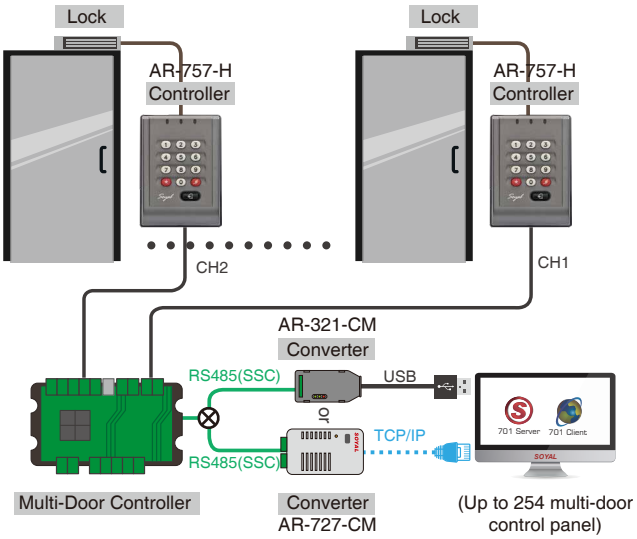
Basic Access: the most basic access, exiting venue is only by pressing a push button
Anti Passback: restrict user to re-enter before exiting venue or increase security level by having access reader at the other side of the door. Both entering and exiting will required swipe card or keyfob for access.
Netwoking: beside configuration through Wiegand Keyboard and Master Card, you can also link AR-757-H with Soyal converter to PC for configuration via SOYAL Software or for anti-cloning and encryption process.



--1024 User, 11 Timezone--

CASCADE STRUCTURE

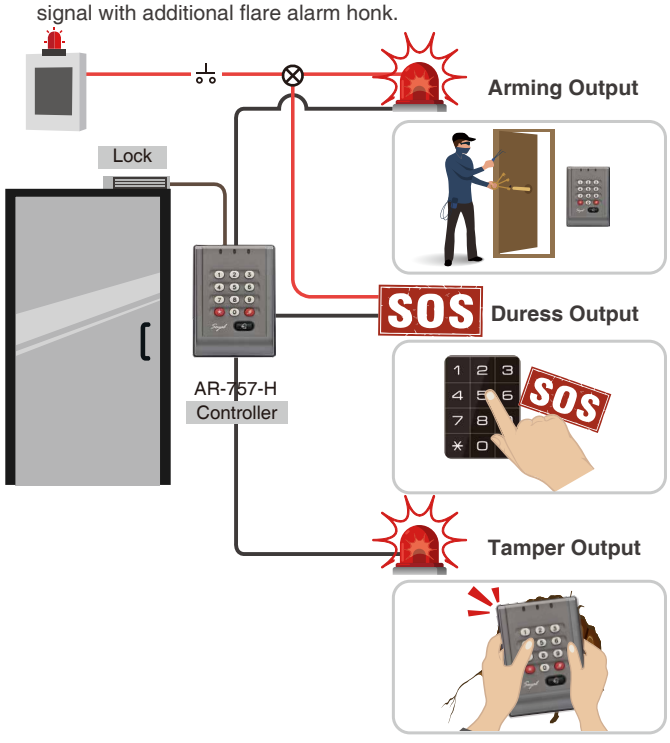
Upgrade user capacity without replacing AR-757-H installed with additional hardware of SOYAL Multi-Door Control Series.
Under Multi-Door Control Panel, when RS485 communication is working normally, AR-757-H will be a Slave Reader of Control Panel. Once its communication is cut off, AR-757-H will automatically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



--16000 User, 63 Timezone--

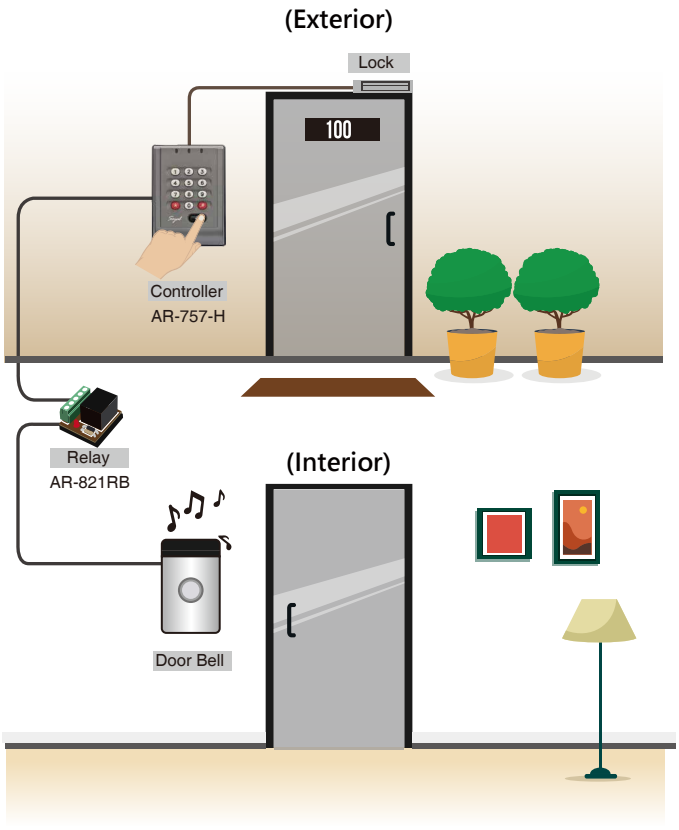
STRENGTHEN SECURITY WITH BURGLARY SYSTEM

- **Arming Output:** Silently send signal to security host when force open door event is occuring
- **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.



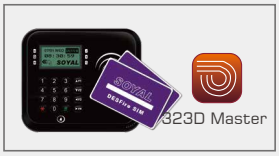
PERIPHERALS / ACCESSORIES

HIGH LEVEL SECURITY

- Anti-Cloning Kits

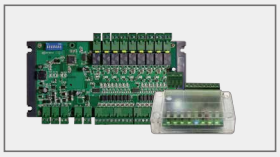


Mifare Encryption
Encoder: AR-725-P
w/Authorization Tags
Software: Mifare Key



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

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

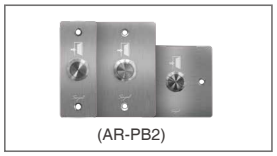


Multi-Door Control Series
AR-716-E16: 16 Doors IP Control Panel
AR-716-E18: 18 Doors Networking Control Panel

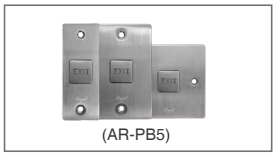
- Nation Series



16.000 User IP Based Access 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

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 betweeen SOYAL H Series and E Series Controller?

A: SOYAL access controller classified into two categories in term of specification; H Series and E Series.
SOYAL H Series controller has already include all basic standalone and networking access controller that you need. But E series controller provide what H 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