

SOYAL[®]

Multi-Door & Large Capacity Control

AR-716-E18

IP-Based Multi-Door Control Panel (18 Doors)

Designed for large access control structure, large user capacity control and parking lot access management



Communication Redundancy

Support TCP/IP and RS485. When TCP/IP disconnects, deputy RS485 communication automatically works to maintain normal communication

Time Management

Built-in RTC (Real Time Clock) for accurate date and time calculation and built-in watchdog that can prevent the device from hang up.

Large Scale Architecture

Can connect Wiegand/RS485 reader and flexibly adjust accessible door quantity. With AR-716-E02, can connect Wiegand controller for 32 doors, at the same time solve Wiegand limited transmission distance

Support Uninterruptable Power Supply

Be able to connect one UPS Power supply AR-716-TC-P to keep the device running during power outage to enhance system safety

Installation Design

Complied with Industrial standard and locking design; Quick-release terminal design for wiring, convenient for installation and maintenance

Features



Multi-door Anti-passback



Release All Door Locks in Fire event



Multiple LED indicator



Auto-Scheduled Bell Output



Expansion I/O Control



Communication Redundancy



Web



Youtube

- Each unit support 16 RS485 reader, 2 Wiegand Reader, 4 relay output, 4 digital input include fire alarm release all doors, and additional 8I8O extension I/O module is available
- Support RS485 / Ethernet communication interface for networking connection to LAN/ WAN / ADSL ; Support communication protocol of TCP/IP, DHCP, ICMP, ARP
- Support Auto-Arming/Disarm Zone Setting
- Support alarm output while devices are disconnected
- Support 14+2 doors anti-passback; be able to assign which door is for entry and which door is for exit and trigger Alarm output when Anti-pass back error ; Anti-pass back status can be automatically reset by time zone setting.
- Built-in power and data transmission LED indicators for convenient debugging and status judgement.
- Support 4 sets of passwords to control devices from readers and Auto-scheduled bell output connected through built-in 4 sets of Relay
- Support communication encryption SSC (Soyal Security Communication)
- 63 sets of time zone / 255 sets of door group, be able to set holiday and level, linked to other zones
- Built-in power, signal transmission indicators, watchdog to prevent hanging up, alarm output when devices disconnect, two Wiegand input ports, multi-door anti-passback setting and time zone auto reset
- Alternative door group selection: common door group or individual door group

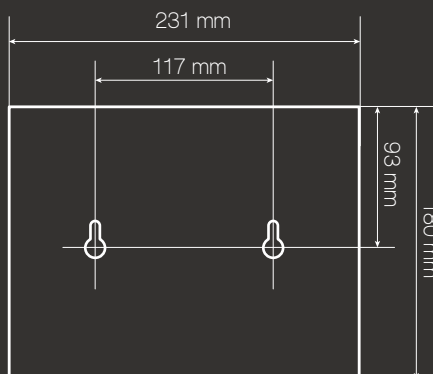
SPECIFICATION

Interface	Host	RS-485 or TCP/IP	RS485 : 9600bps or TCP/IP : 10/100M Base T (External Module)
	Slave Reader	CH1(RS-485)	8 Readers
		CH2(RS-485)	8 Readers
	WG		2 Readers
Door Numbers		18	
User Capacity		15000	
Event Log		11000	
DI/DO	DI	Built-in	Engress X2 / Fire Alarm input X1 Reserved DI X1
		External I/O extension board (AR-716-E-8I8O)	8
	DO / Relay Output	Built-in	Door Lock Relay X2 / Alarm Relay X1 Reserved RO X1
		External I/O extension board (AR-716-E-8I8O)	8
Watchdog Function		Standard	
Power Supply		9-24 VDC	
Power Consumption		<2.5W	
Communication Redundancy		NO	
Anti-Passback		16Doors	
Door Group		255	
Time Zone		63	
Others		Support UPS (purchasing external rechargeable battery)	
Dimension (mm)	PCB	180(H)x231(W)x62(D)	
	With Metal Casing	150(H)x163(W)x20(D)	
Net Weight (g)	PCB	250±10	
	With Metal Casing	1840±10	
Environment	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

- ✔ **Built-in LED Indicator**
 Built-in power and data transmission LED indicators for convenient debugging and status judgement
- ✔ **Release All Door Locks in Fire event**
 Built-in DI Fire alarm contact that can be connected with fire alarm input detector; All door locks can be released in case of Fire or emergency accident occurs
- ✔ **Multi-door Anti-passback**
 It is capable of accomplishing up to 16 Entry & Exit management in door control or car-parking system.
- ✔ **Communication Redundancy**
 Support Dual Communication interface RS485 and TCP/IP; While one of interface is failed, another interface can be worked as backup to make the system running.
- ✔ **Expansion I/O Control**
 Be able to connect I/O Extension Board for higher security door access control that the door lock can not be unlocked even if the door is forcibly damaged ; The built-in 4 Relays can be triggered simultaneously with the door relay of reader for different application such as rolling door control / Indoor lighting control / Air condition Control
- ✔ **Auto-Scheduled Bell Output**
 Be able to set 12 sets of Anto-bell time zone; connect bell output / broadcast system via 4 built-in relay on controller itself.

INSTALLATION(mm)



▲ Metal Box

HOW TO ORDER

AR-716-**EXX**-**X**-**X**

Doors No.
 02=Dual Doors (WG)
 16=16 Doors (RS485)+ 2 WG
 18=18 Doors (RS485)+ 2 WG

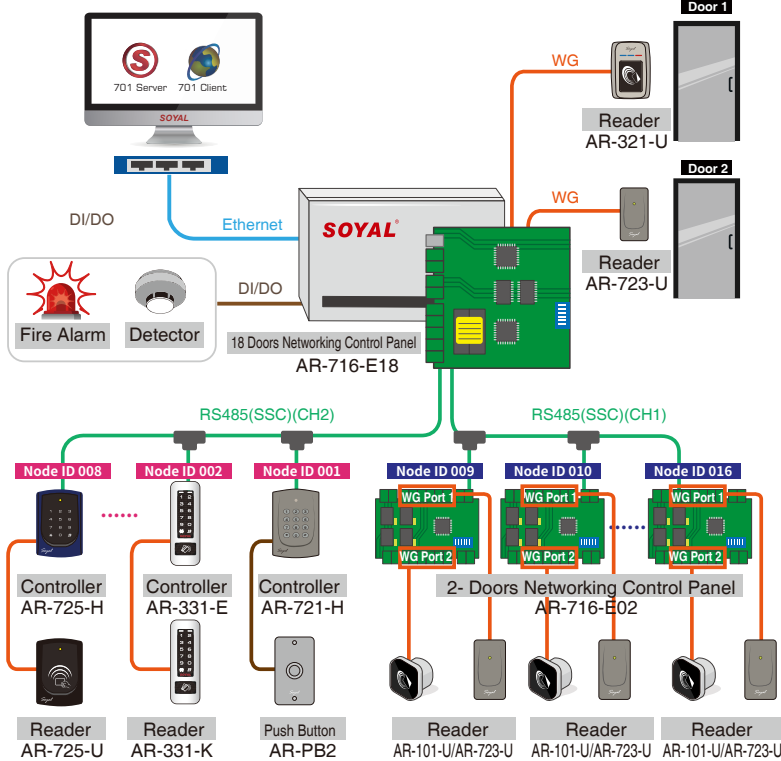
Additional Module
 A=TCP/IP Module

Type
 N/A=PCB
 M=Metal Case
 X=Plastic Mounting Base (AR-716-E18 does not have plastic mounting base option)

APPLICATION & STRUCTURE DIAGRAM

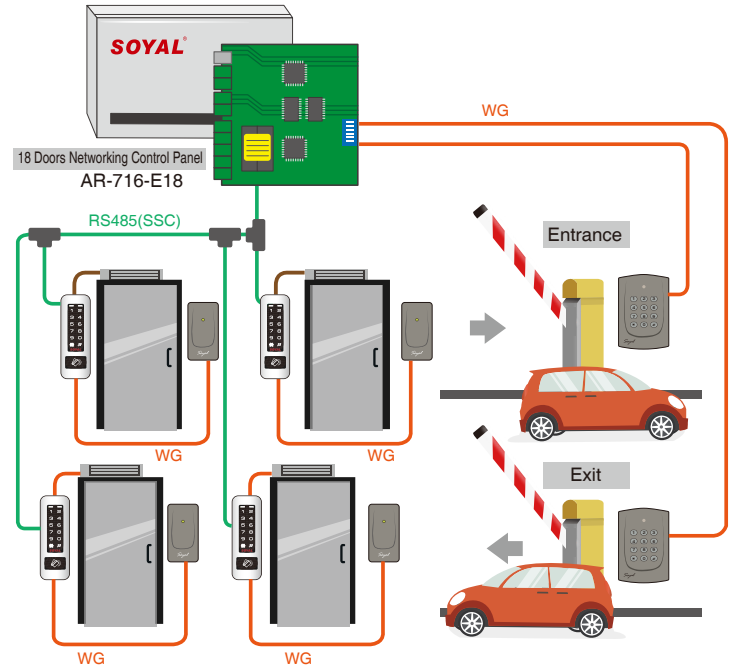
● BASIC STRUCTURE FOR MULTI-DOOR CONTROL

One Multi-door controller can connect many different types of RS485 readers and WG readers for Multi-door access control and Single / Global Anti-pass back access.



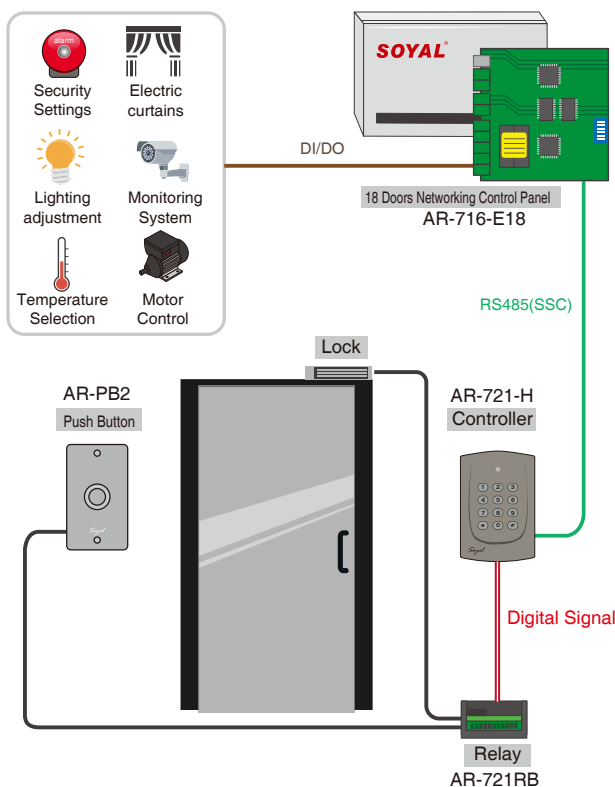
● MULTI-ENTRY ANTI-PASS BACK ACCESS IN PARKING

In order to Anti-trailing from other cars or prevent one card to use for different users, Anti-pass back function of Multi-door controller is widely used in Parking management system. After Anti-pass back is enable on User card and RS485 readers / WG readers, the same card must be swipped both on Entry and also Exit. that can prevent other car from trailing and the safety in Parking is greatly improved.



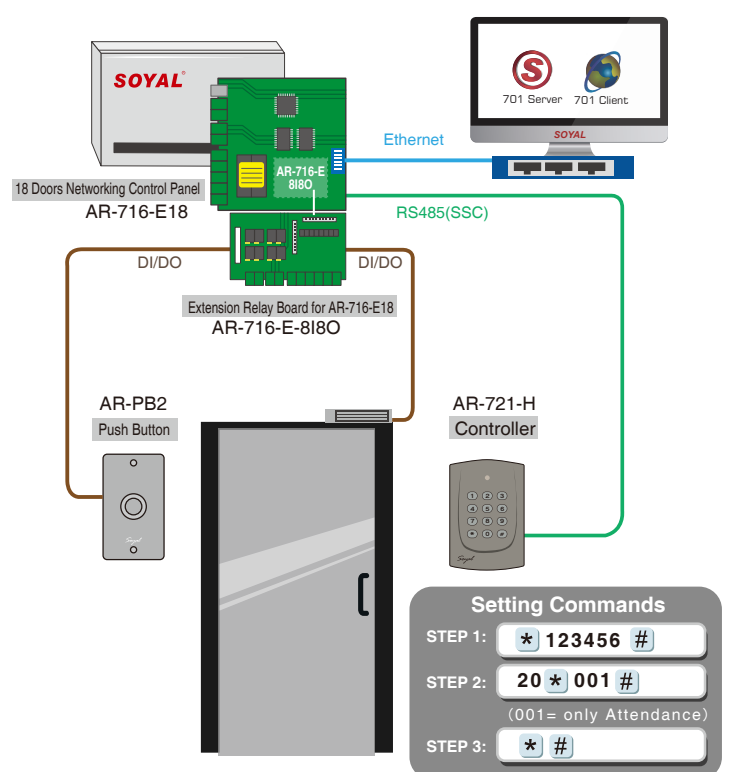
● REMOTE CONTROL

Multi-door controller is built-in 4 sets of DI/DO; 4 relays can be assigned relay numbers to trigger operated by keypad reader for different application such as lighting control, Electric curtain control, Air condition Control and Auto-scheduled output.



● ENHANCE ACCESS CONTROL SECURITY SYSTEM

Multi-door controller can connect one I/O Extension Board AR-716-8180 that directly connect with Door lock and Exit button for higher security door access control; Even if the door is forcibly damaged, the door lock can not be unlocked



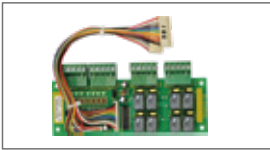
Setting Commands

- STEP 1: * 123456 #
- STEP 2: 20 * 001 #
(001= only Attendance)
- STEP 3: * #

PERIPHERALS / ACCESSORIES

EXPANSION I/O CONTROL

- Expansion I/O Control



Extension Relay Board for AR-716-E18
AR-716-E-8180



Uninterruptible Power Supply
AR-716-TC-P

- WG Reader



Proximity Reader
AR-723-U



Proximity Reader
AR-101-U/ AR-101-PBI



Proximity Reader
AR-321-U



Proximity Reader
AR-721-K



Proximity Reader
AR-725-K



Proximity Reader
AR-888-K/U

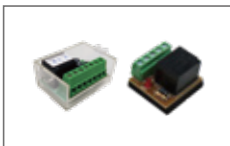
- Necessary



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

- External Relay Output

(Digital Security Relay / Arming / Duress / Alarm)



1 Form C relay with time delay
AR-721RB
1 Form C relay
AR-821RB



2 Form C relay
AR-829RB

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



USB to RS485
AR-321-CM



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



Ethernet Module for AR-716-E18
AR-727I-V3

- RS485 Controller



H Series Access Controller
AR-723-H / AR-321-H / AR-721-H



E Series Access Controller
AR-327-E / AR-727-E

- Multi-door Control Series



2 Doors Networking Control Panel
AR-716-E02

- 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

FAQ

Q: How to receive Alarm event when RS485 reader connected under Multi-door controller is disconnected?

A: Enable the function option " On K2 While Reader Off Line " on AR-716-E18 Parameters setting menu of **701Server** software; then connect alarm output or SIM device via Relay K2, offline event can be real-time sent to mobile phone via SMS devices or send via E-mail

Q: How to keep controller and reader running normally when the power failure ?

A: AR-716-E18 support UPS function but need to purchase one external rechargeable battery that can provide power and keep the device running normally when the power failure.

