

SOYAL®

Multi-Door & Large Capacity Control

AR-716-E18

18 Doors Networking Control Panel

It is used in large-scale access control architecture for personnel entry and exit control and parking lot access management; RS-485 or TCP / IP communication interface can be selected forming a network loop ; Built-in Wiegand input port to be able to connect with various types of WG readers.

Communication Module

Built-in RS485 or optional TCP/IP communication interface for networking connection and management setting on Computer.

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

Each controller can connect up to 16 units of RS485 reader and 2 units of WG reader for Multi-door Entry / Exit access control ; each RS485 reader can be connected to one WG reader to entry and exit using Card / PIN , or be able to connected to one push button for exit; it also support to connect 16 units of 2-WG door controller AR-716-E02 for 32 doors control solving the shortcomings of WG signal transmission distance limitation.

Installation Design

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

SOYAL

Model:

Caution:
Do not touch the board when power is on.
Do not touch the board when power is on.
Do not touch the board when power is on.
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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

- Support RS485 communication encryption, SSC (Soyal Security Communication)
- Support RS485 / Ethernet communication interface for networking connection to LAN/ WAN / ADSL ; Support communication protocol of TCP/IP 、DHCP 、ICMP 、ARP
- Built-in watchdog that can prevent the device from hang up.
- Support Auto-Arming/Disarm Zone Setting
- Built-in 2 WG Port that be able to connect 2 WG readers
- Support alarm output while devices are disconnected
- Built-in 4 Digital Input / output; be able to open all door locks in case of emergency
- 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 trasmission LED indicators for convenient debugging and status judgement.
- One controller support 16 RS485 readers and one computer can control up to 4064 RS485 readers.
- 63 sets of Time zone / 255 sets of Door Group , be able to set holiday and level , link with other zones.
- Support 16 doors Anti-pass back; be able to assign which door is for entry and which door is for exit.
- Alternative door group selection ; common door group or individual door group
- Support 4 sets of passwords to control devices from readers and Auto-scheduled bell output connected through built-in 4 sets of Relay.

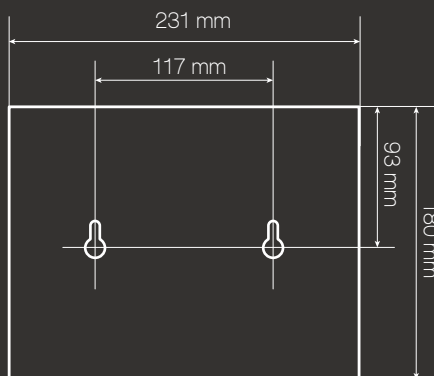
SPECIFICATION

User Capacity	15000		
Event Log	11000		
Power Voltage	9-24VDC		
Power Consumption	<2.5W		
Communication interface	Host	Host Node 1~254	
		RS-485	9600bps(N,8,1)
		Ethernet	10/100M Base T
	Slave Reader	CH1(RS-485)	8 Readers
		CH2(RS-485)	8 Readers
	WG	2 Readers	
DI Input	4+8 (AR-716-IO) Egress / Door State / Fire Input		
DO Output	4+8(AR-716-IO) Door Lock Relay / Alarm Relay		
Communication Redundancy	No		
Anti-Passback	16 Doors		
Door Group	255		
Time Zone	63		
Dimension(mm)	Metal Casing	180(H)x231(W)x62(D)	
	PCB	150(H)x163(W)x20(D)	
Weight(g)	Metal Casing	1840±10	
	PCB	250±10	
Housing Material	Metal		
Others	Support UPS (purchasing external rechargeable battery)		
Environment	Operating Temperature	-20°C ~ +65°C	
	Storage Temperature	-25°C to +70°C	
	Operating Humidity	20%~90%	
	Storage Humidity	5%~95%	

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 Auto-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

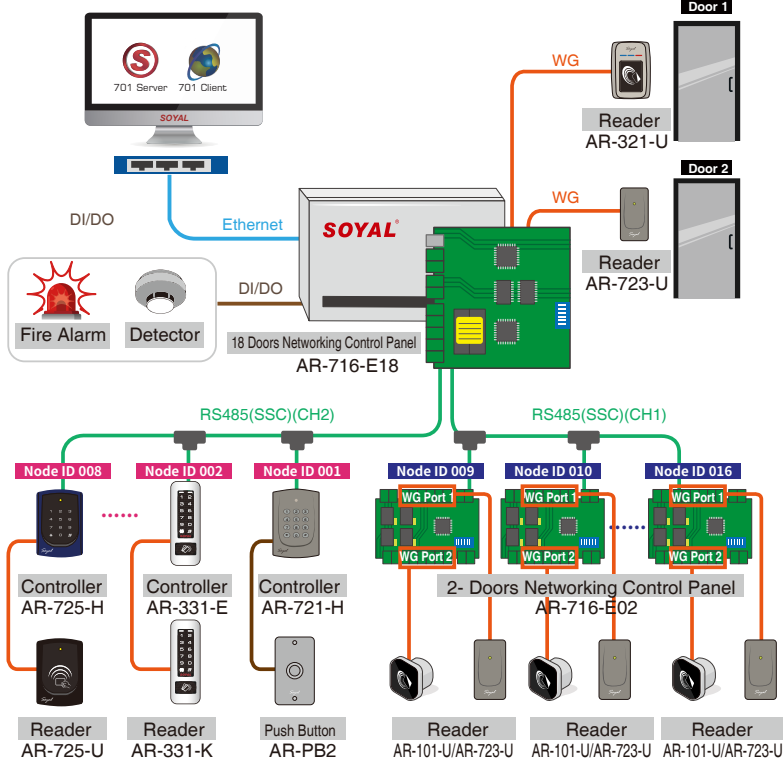
Additional Module
 A=TCP/IP Module

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

APPLICATION & STRUCTURE DIAGRAM

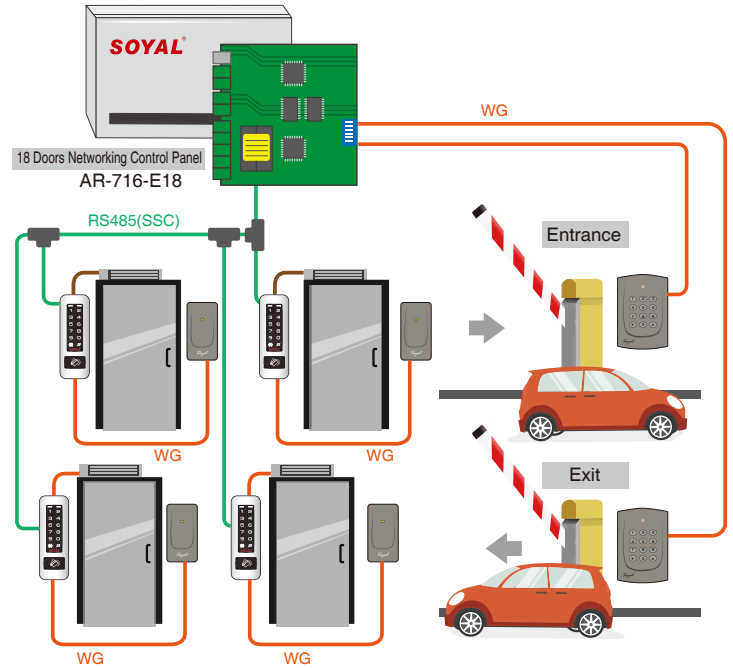
● BASIC STRUCTURE FOR MULTI-DOOR CONTROL

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.



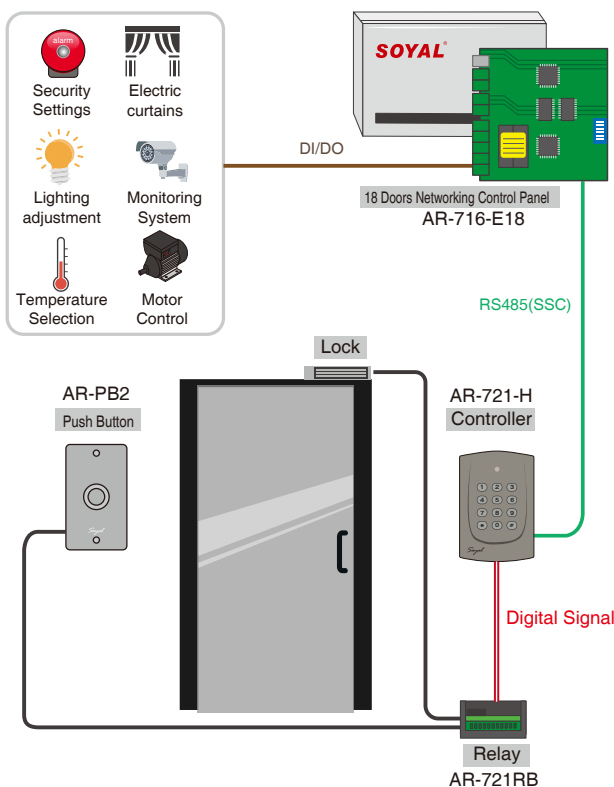
● MULTI-ENTRY ANTI-PASS BACK ACCESS IN PARKING

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.



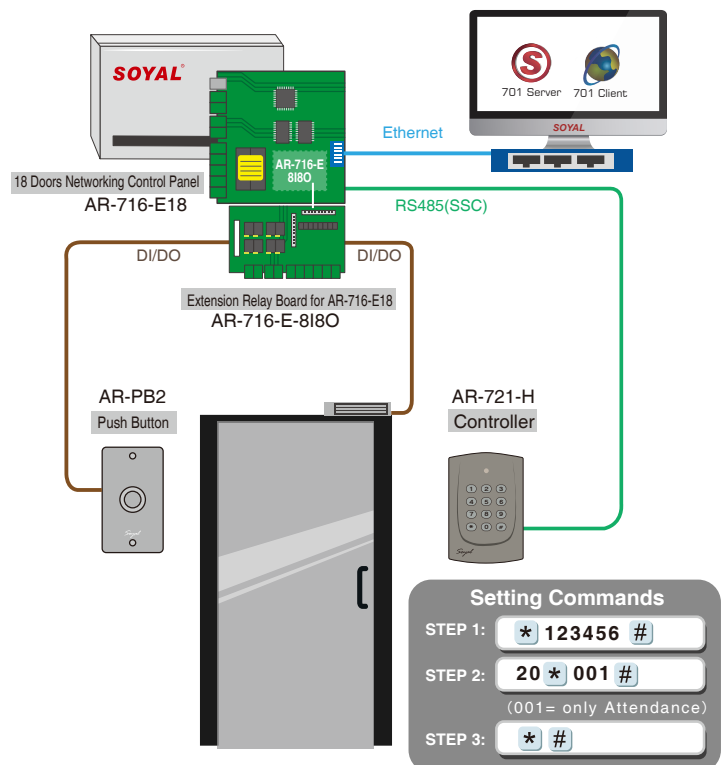
● REMOTE CONTROL

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

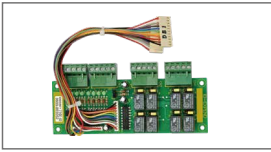
Multi-door controller can connect one I/O Extension Board AR-716-8180 that directly connect with Door lock and Exit button for higher security door access control; Even if the door is forcibly damaged, the door lock can not be unlocked



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



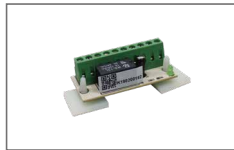
Power Supply
BP-W12-1500 (1.5A)
BP-W15-2400 (2.4A)

- 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
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)



Ethernet Module for AR-716-E18
AR-727-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-270
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.



More FAQ