

# AR-716-E16

Contents												
		Danal Maur	ting Rose (AR 716 E16 X)	<ol> <li>Motol</li> </ol>	Poy							
			Panel Mounting Base (AR-716-E16-X)		16-E16-M)							
9 18 1					OVAL							
			Option		JOTAL	Option						
					•							
		Al	R-701B-X		ACCESS CONTROL SYSTEM Model:							
Fit 35mm DIN Rail or Mount directly												
Specification	on											
CPU	32bit / ARM32 72MHz / Flash 51	2KB Temperature	-20℃ ~ +70℃		Aux. WG Port	WG 26 / WG 34						
Memory	2048KB (2MB)	Digital Input	2 Door Open Button/ 2 Door Sensor/ 1 Fire-alarm		Anti-pass-back	16 Doors						
Power Supply	9 ~ 24VDC	Relpy Output	2 Door Relay / 1 Alarm Relay		Lift Control	Yes						
Power Consumption	< 3W	Door Relay Time	Toggle, 0.1~600 Sec.	oggle, 0.1~600 Sec.		255						
Interface /	RS-485 : 9600 bps (N, 8, 1)	Alarm Relay Time	loggle, 0.1~600 Sec.			63 (stand-alone /networking)						
Baud Rate	Ethernet : 10/100M Base T	User Capacity	16,000 (Default value) / 32,000 /	,000 (Default value) / 32,000 / 65,000		YES						
External Readers	2 RS-485 + 2 WG	Event log	32,000		DIP_SW	8 (Node ID: 1~254)						
Connector	Table											
	<b>U</b>	15 CN13/CN14/CN12 C	N10/CN11/CN9	_		(R)						
		1 7 6 5 4 3 2 1 7 Fire. WG PORT0	6 5 4 3 2 1 WG PORT1	Connector CN7/CN3 Power Supply		r Supply						
	LED Dip-switch	ALM		GND	1 OV Input							
	Reset			VIN (716-E16)	2 9~2 <mark>4VD</mark>	C Input						
	(Hold till BUSY LED is blinking)		Relay LED	GND	3 0V Outp	ut						
		D TCP/IP ⊠ Module K1	K2 K3	VOUT(Slave unit	s) 4 9~24VD	C Output						
		Door	Door ALM	Connector CNS	0/CN10/CN11 W	G Port 1						
	Host CH1 C	H2 Door/Alarm Relay			Pin Descrip							
	21 21 21 2	1 6543	2 1 4 3 2 1	WG1	2 Wiegand	DAT: 1 Input						
	CN20 CN1 CN2 C	N3 CN18 CN4/CN5/	CN6 CN7/CN8	BZ	3 Beeper	Output						
Connector C	N1 Host RS-485	onnector CN4/CN5/	ENG WG Door / Alarm Relay	LEDG	4 LED Gre	en Output						
Code	Pin Description	Code Pin	Description	SEN (N.C.)	6 Door Sta	itus Input						
LA+	1 Host RS-485(A+)	Alarm Relay	K3-N.O./N.C.	EGR: PB (N.O.)	) 7 Exit Butt	on Input						
LB-	2 Host RS-485(B-)	Dutput 2		Connector CN1	2/CN13/CN14	VG Port 0						
Connector: CN	CH1 Slave RS-485	Output (WG1) 4	COM	Code	Pin Descri	ption						
Code	Pin Description	Door 0 Relay 5	K1-N.O./N.C.	WG0	1 Wiegar	nd DAT:0 Input						
LA+	1 RS-485(A+)	Output (WG0) 6	СОМ	WG1 BZ	2 Wiegar							
LB-	2 RS-485(B-)	Connector CN15 F	ire-alarm Input	LEDG	4 LED G	reen Output						
Connector CN	3 CH2 Slave RS-485	Code Pin	Description	LEDR	5 LED R	ed Output						
Code	Pin Description	Fire-ALM 1 GND 2	Fire-alarm Input	SEN (N.C.)	6 Door S	tatus Input						
LA+	1 RS-485(A+)											
LB-	2 RS-485(B-)	Code Pin	Description		Bin Descri	ntion						
	-	V- 1	0V	TCP/IP Socket	1 CAT5							
		V+ 2	5V (Max. 50mA)									
Installation												
	. 231 mm	1		110 mm								
	<	<b>&gt;</b>	←									
	11/mm			80 mm								
		56		8								
					-							
			Metal Box	90 r	ਿ <b>Plas</b>	tic						
			Amorai Boy		∃ <b>Nou</b>	nting Base						

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# **16 Doors IP Control Panel**

ROHS SOR FC (C





# **AR-716-E16**

## Wiring Diagram



## IP Setting





# **AR-716-E16**

# Initial Setup:

oftware: Connection	
1. Open the "701 Server" Software $\rightarrow$ There are two ways to open the Cor	nmunication Port setting window: $\boxed{\mathbf{CI}}_{\mathbf{COM}}^1$ and $\rightarrow$ Communication Port Setting
Communication Port Setting X	
Select Area : 00:Area00	
Area Communication Port         COM:1       COM:2       COM:3       COM:4       COM:5       COM:6       COM:7       COM:8         COM:9       COM:10       COM:11       COM:12       COM:13       COM:14       COM:15       COM:16         COM:9       COM:10       COM:11       COM:12       COM:13       COM:14       COM:15       COM:16         COM:17       COM:18       COM:19       COM:20       COM:21       COM:22       TCP/IP Only       [5]         Disable       Remote Co-701Server TCP-LINK Connection       192.168.0.18       :       1631         Communication       Port       1631       100ms       100ms         Local TCP-LINK Address       127.0.0.1       Port       1631         Save Current Area       Yes       Cancel	<ul> <li>a. According to the computer Detection results to select the port (Use the RS-485)</li> <li>b. Select [TCP/IP Oonly] (Use the Ethernet)</li> <li>c. Select the option: Polling Message From Controller</li> <li>d. Polling Interval: 200ms - meaning the PC polls the controller every 200ms once it accesses the message from the controller</li> <li>e. Click YES</li> </ul>
After COM Port setting, there are two ways to open the Node Number for $\rightarrow$ Node Number for Polling	or Polling window: and Setting Select Serial Port Select Serial
File Setting View Help	f. Select node ID (for example:001) and access controller
	" 327E/3xxE/7xxE/8xxE/716Ev5"
Node Number for Polling X	g. If use the Ethernet mode, please check the "IP"; if use the RS-485
Area         00:BuildingA         IP Address         Port         Net-Point Name         Node Range           0000         327E/3xxE/7xxE/6xxE/716EV5         0	mode, there's no need to check
2 001 327E/3xxE/7xxE/8xxE/716Ev5 ✓ 2 P 192.168.1.173 1621 716-E16	(Default value: 192 168 1 127)
□002         TCP_IO         ∨         □P         192.168.1         1.74         1601           □003         101H/3230/3218888W/721/723/75. ∨         □P         192.168.1         1.75         1621	i. Input 1621 in "Port" column(Default value: 1621; the Port number
004 327E/3xcE/7xcE/8xcE/716Ev5 ↓ D 0 . 0 . 0 0 Ves	is predetermined by SOYAL for connection to the network)
	j. Select LAN BASE
	k. Click YES
Open Controller On/Off Line window to check the device connection sta	tus: 🕄
Controller On/Off Line	
	Well: controller successfully connected to PC.
Sub Node(03)	8 Not connected well: the following checks are required.
oftware: Parameters Settting: Door Number and Users Edit	
After the 701Server Software connection, go click 82xEv5 Parameters S	etting to set up 716-E16's door number
a. Roll and select the Targe Node ID of 716-E16 (The same as the dip-su	vitch)
b. Click " <b>Read</b> " to read back the parameter of 716-E16	
c. Click "716-E16" button to set up Door Number	
d. Input the new Door Number of Slave Reader, which door number must	t be unique and non-repetitive

	File Setting View	Help			
	☐1 ⊕2 55 €33 55 COH LAN 55 Line 592		🛛 . Ç 🍄 😔 🕬		
H/E Ser	rial Controller Parameter Edit			×	-
a) Targe	t Node 00:BuildingA V 001	∼ Main WGA		Free Zone Alarm Schedule	
New I Door	Node ID 1 Enable For Relav 7 Enable A	orce Alarm	Duress Code 0	Duty Shift 716E16/721Ev	
Relay	[WG] 7 Is Entry I		Date Time Format(DD/MM)	Lift Control Time (Sec.) 15	
Open too lo	too long 15 Enable P ong[WG] 15 Egress B	eep Sounds	Enable Black Tag  Reset Antineer(Time Zene (1))	Area Code (None Polling) 0	
Alarm	Relay 15 Close Sto	uto Relock	Alarming on Expiried Access	PS485 - 1	
Arme	d Delay 1 Share Do	or Relay	EV5 WG out/HV3 Lift out	Lift Controller   Host Comm. Port	
Alarm	Delay 1 Free Zono	e Open Imm.	Lock/Disable Keyboard	O LED Panel O Line Printer	
Edit F	Wd Ena. Disa	arm Zone(62)	Enable AUTO Duty Time Shift Show WG Port message on LCD	CN11 (RS485-2)	
Arme	Nr. 1 Skip PIN	Check	Dupl. check at enroll Finger	O AR837EA	
Door	Nr[WG] 2 Door Ope	en for Any Tag	Master 0 0	AR837EF-9DO	
Card	or PIN Access Mode	Eingerprint Se	nithe Level	○ ○ Lift Controller	
	Address + PIN Code (M4)   Pin Code (M4)	ode Only (M8) O Level Low	Level Medium      Level High	Card Reader / Voice Module     Jing Brinter	
E-Co	ntroller Firmware Ver:4.4	Target Contr	oller	CN9 (RS485 - 3)	
l O	Read from Controller Write	to Controller    Selected	Only OAll Connected Controller		
	Read File V	Vrite File	: 0 499		
	Empty Log	Exit Dead Size	Delete Finger/Face	Card Reader / Voice Module	
	<b>_</b>	Read This			
Controller Parameters			×		
Node ID Door #	Relay Port Node ID	Door # Relay Por	t i		
CH1 (01/WG0)	None ~ CH2 (09)	9 None	~		BuildingA:001:716-E16
CH1 (02/WG1)	CH2 (10)	☐ 10	*		Sub Node(10) Sub Node(09)
CH1 (03) 🖂 3	None <u>CH2</u> (11)				Sub Node(05)
CH1 (04)	CH2 (12)		Remarks:		
CH1 (05)	CH2 (13)		-Connect to V	NG reader: tick off the op	tion, do not required to set
CH1 (06)	CH2 (14)	14	door number,	701Client will indicate do	por number 17 automatically,
CH1 (07) 7	CH2 (15)		triggering K1	relay.	
	CH2 (15)		-Connect to c	controller: tick on the option	on and set the door number
	012 (10)		-Connect to \	NG reader: tick off the op	tion, do not required to set
			door number,	701Client will indicate do	por number 18 automatically,
			triggering K2	relay.	
			-Connect to c	controller: tick on the option	on and set the door number
l l l l l l l l l l l l l l l l l l l	OK	Cancel	or 03 to 08	Reader Node ID must be	e set up from 01 to 08
		Ganteen	CH2: RS-485	Reader Node ID must b	e set up as 09 to 16

## **Factory Reset**

### **Reset Button:**

- **Step1:** After powering on the device, please firstly connect **Fire** contact on **CN15** to **GND** Ground. **Step2:** Press [RESET] button on the main board for more than 5 seconds till the BUSY LED is
- blinking ,release [RESET] button.
- Step3: After reset, the device will automatically restart and the IP address will be changed back to default value : 192.168.1.127
- Step4: Disconnect Fire contact on CN15 from GND Ground.

### Remarks: LED Description

### POWER LED

When the controller is connected to the power, [POWER] will turn on green LED; if there is no light, it means the power supply has some problems.

#### BUSY LED

When the red LED is lit, the memory is being cleared and restored to the factory default action. If you do not perform "Flash Restoring", but the [RESET] and [BUSY] has been blinking in red, that indicates a PCB problem should be excluded.

### • RS-485 Connection: HOST RX & HOST TX LED

 $[{\rm HOST}\,{\rm RX}]: {\rm When}\ {\rm receiving}\ {\rm incoming}\ {\rm data}\ {\rm from}\ {\rm the}\ {\rm host}\ {\rm PC}, \ {\rm the}\ {\rm green}\ {\rm LED}\ {\rm will}\ {\rm keep}\ {\rm blinking}\ [{\rm HOST}\,{\rm TX}]: {\rm When}\ {\rm transmitting}\ {\rm the}\ {\rm data}\ {\rm back}\ {\rm to}\ {\rm the}\ {\rm host}\ {\rm PC}, \ {\rm the}\ {\rm red}\ {\rm LED}\ {\rm will}\ {\rm be}\ {\rm blinking}\ [{\rm HOST}\,{\rm rx}]: {\rm the}\ {\rm transmitting}\ {\rm the}\ {\rm data}\ {\rm back}\ {\rm to}\ {\rm the}\ {\rm host}\ {\rm PC}, \ {\rm the}\ {\rm red}\ {\rm LED}\ {\rm will}\ {\rm be}\ {\rm blinking}\ [{\rm to}\ {\rm to}\ {\rm$ 

