SOYAL AR-727-CM HTTP Server Instruction Manual

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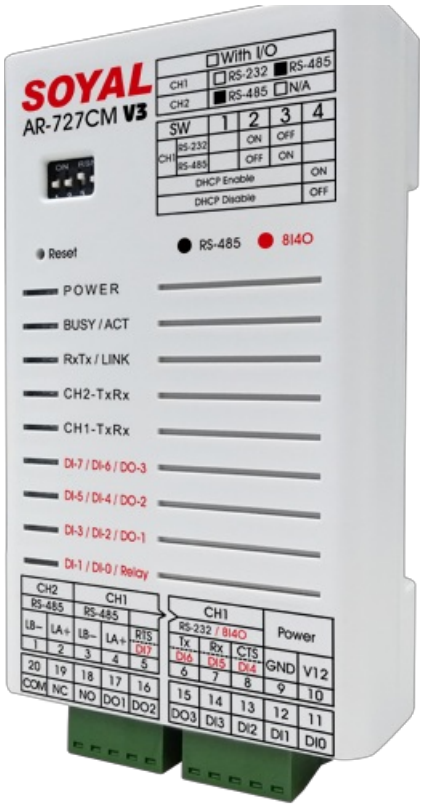
SOYAL
ACCESS CONTROL SYSTEM

SOYAL AR-727-CM HTTP Server



Product Information

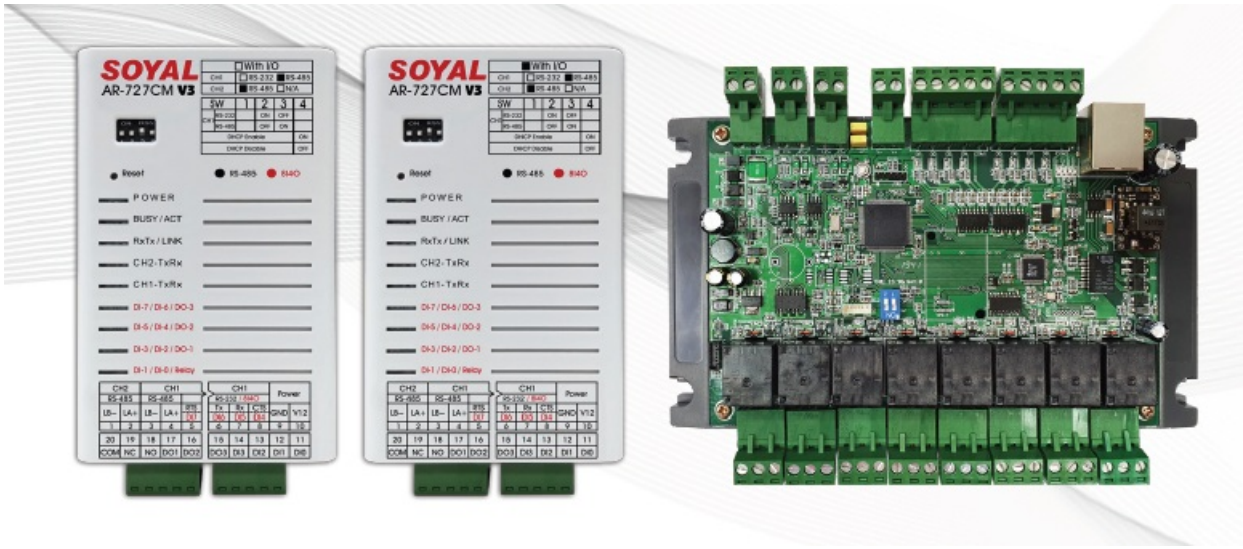
The SOYAL Operation Manual provides information and instructions for the AR-727-CM HTTP Server. The HTTP Server is a device that allows for easy setup via smartphone, tablet, or PC by entering the IP address of the device through a web browser. It is compatible with SOYAL Enterprise Series, SOYAL Industry Series (TCP), AR-716-E18 Ethernet module, AR-727i-V3, and Converter AR-727-CM. The device can control and monitor recent status of onboard DI/DO through HTTP Server and can connect to Fire Detector Central Control when fire alarm occurred, automatically notifying designated controller to open the door. It also establishes a Server-Client connection bridge to extend wiring, limitless wiring distance, or to provide wireless connection. The device provides TCP to Wiegand signal conversion and works with third party integration of Monitoring Software and SCADA.

Product Usage Instructions

To use the AR-727-CM HTTP Server, follow the below instructions:

1. Ensure that the device meets the system requirements. The Web Browser Setting Interface is cross-platform and does not limit any particular operating system, smartphone, or tablet.
2. Download the SOYAL Website Software from the SOYAL website.
3. Refer to the Table of Contents in the SOYAL Operation Manual to find specific instructions for using the HTTP Server.
4. Log in to the HTTP Server page using the web browser. The device connection status can be viewed on this page.
5. Configure network settings, RS485 parameter settings, and I/O direct control and query settings as needed.
6. Set up TCP/IP converter settings, fire alarm auto release doors, TCP/IP remote I/O control settings, and server-client mode communication bridge as needed.
7. Change the login password as needed.
8. Refer to the FAQ section, YouTube videos, and firmware section for additional support and information.

System Requirements



- Web Browser Setting Interface
- Cross-Platform Services does not limit to particular operating system, smartphone, or tablet
- Setting Fire Alarm Auto Release Doors and TCP/IP Remote I/O Control Setting

SOYAL Website

Software Download

HTTP Server Introduction

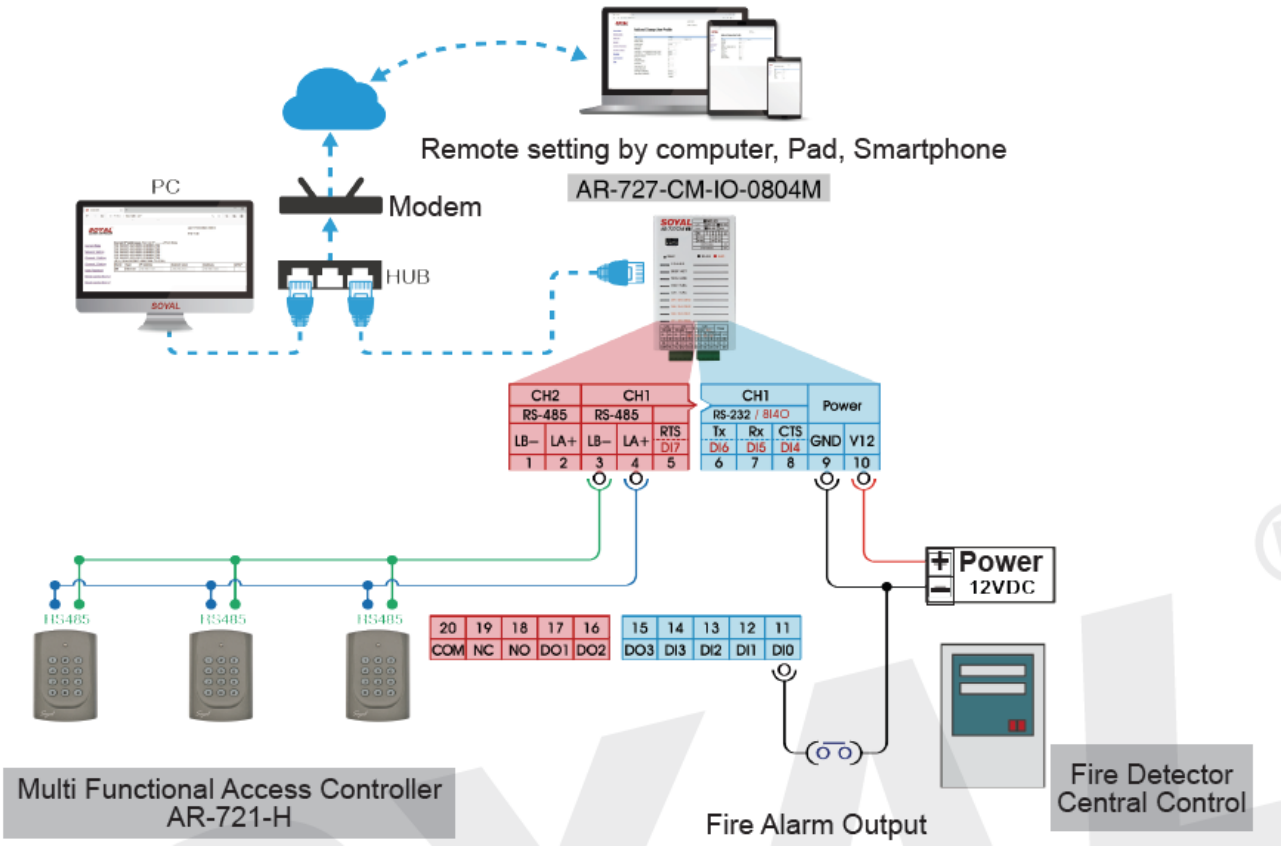
Main Features

- Easy setup via Smartphone, Tablet, and PC by entering IP address of the devices through web browser
- HTTP Server is compatible for SOYAL Enterprise Series (listed on separate manual refer to 'Operation Manual Enterprise Series HTTP Server'), SOYAL Industry Series (TCP), AR-716-E18 Ethernet module AR-727i-V3 and Converter AR-727-CM.

	Interface Menu	Enterprise Series	Industry Series (TCP) AR-727-CM-0804M AR-401-IO-0808R-U2	AR-727i-V3 (AR-716-E18 Ethernet module)	Converter AR-727-CM
1	Current State	V	V	V	V
2	Network Setting	V	V	V	V
3	Controller Setting: Event Log /User List / Controller Parameter / User Add/Change / Timezone / Clock	V			
4	Login Password	V	V	V	V
5	RS485 Setting: Channel 1 Setting / Channel 2 Setting		V		V
6	I/O Control Setting: Direct Control IO 0~3 / Direct Control IO 4~7		V		

- HTTP Server Comparison Table
- Devices with DI/DO onboard, through HTTP Server could directly control and monitor recent status of onboard DI/DO
- Connect to Fire Detector Central Control when fire alarm occurred, automatically notified designated controller to open door
- Establish a Server-Client connection bridge to extend wiring, limitless wiring distance, or to provide wireless connection.
- AR-727-CM-IO-0804M through its DI/DO features provides TCP to Wiegand signal conversion, at the same time all of Industrial Series built-in
- Modbus communication protocol that could easily works with third party integration of Monitoring Software and SCADA.

Architecture Schematic Diagrams



Note :

- To ensure the best connection quality, the maximum amount of the connection of Controller is 8 for each channel of AR-727-CM, so that the total amount is 16 Controllers.

Interface Overview

Log in HTTP Server page

1. Through PC, Tablet, or Smartphone web browser software/app, enter device IP Address and enter HTTP Server interface (default IP Address 192.168.1.127)

2. When entering HTTP Server page required entering ID and Password. Default ID: SuperAdm / Password: 721568 which can also be found on serial no. sticker that include on the packaging. (For older version, default ID: admin / password: admin)

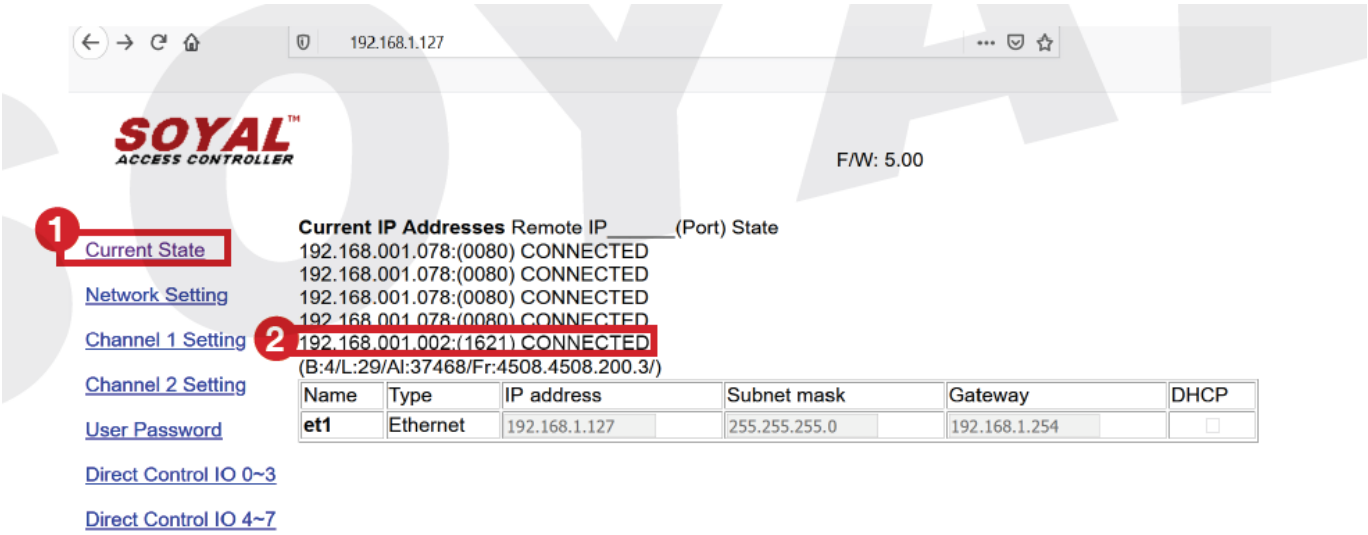
   Note : User Name is different from old and new version, password can be modify via [User Password] setting on the list but will not be change from updating new version. If you forgot the password, the solution is pressing Reset Button to reset it as default value.

Firmware Version	User name	Password (changeable)
After 2020/01/21	SuperAdm	Default Password : 721568 or self-definition
Before 2020/01/21	admin	Default Password : admin/ password not required or self-definition

3. Device Model no. and Firmware Version

   After logged in, on the top right side will show the controller's model no. including the firmware version

Device Connection Status

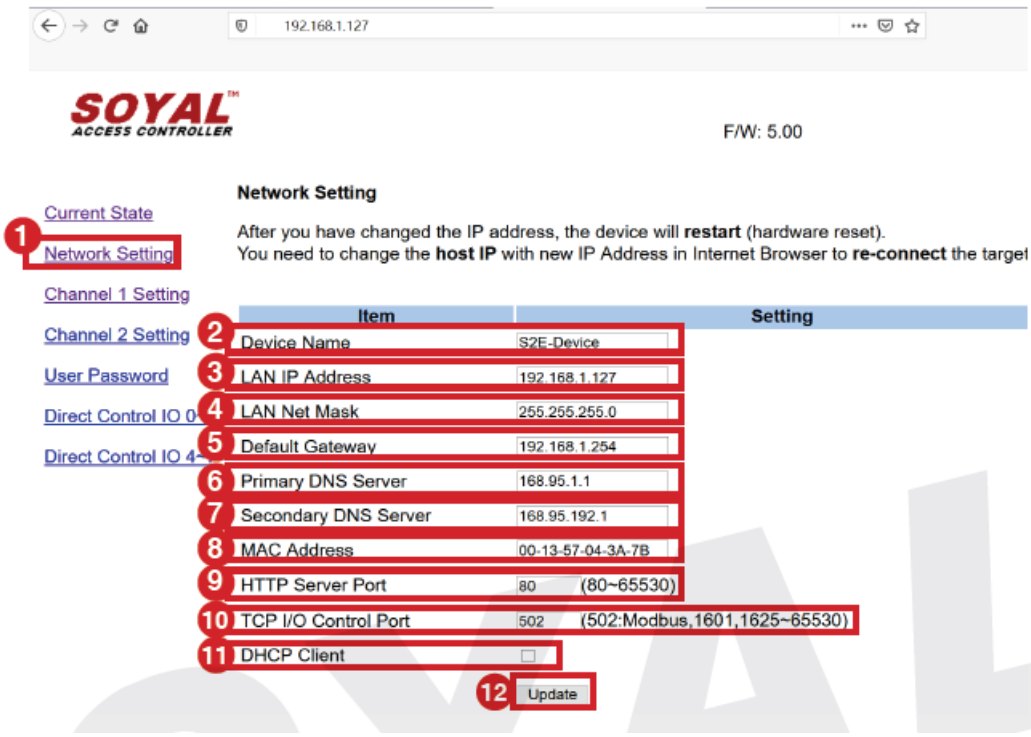


1. After logged in, the first menu that will automatically show Current State that will indicate connection status
2. Connection Status can be seen between devices to HTTP Server (Port 80) and device to 701Server (Port 1621 for Enterprise Series Controller or via AR-727-CM CH1 / Port 1623 if via AR-727CM CH2)

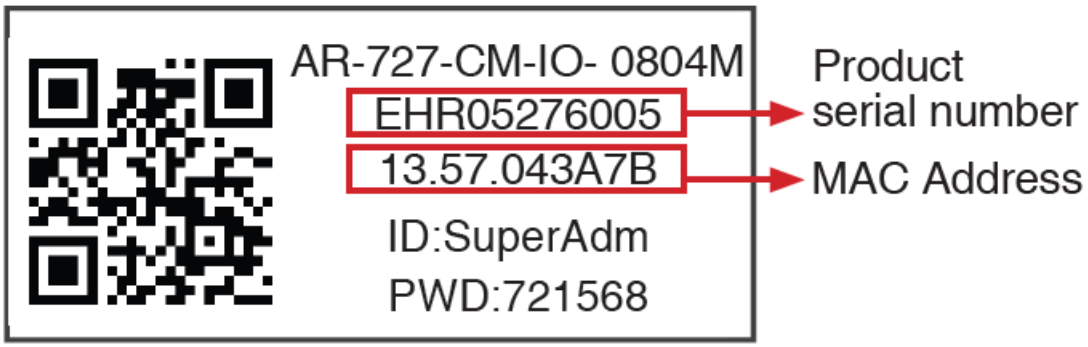
Note :
From the example above:

1. 192.168.001.078:(0080) CONNECTED -> indicated device with IP address 192.168.1.78 has connected to HTTP Server
2. 192.168.001.002:(1621) CONNECTED -> indicated device with IP address 192.168.1.2 has connected to 701Server

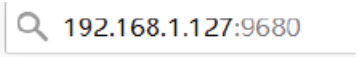
Network Setting



1. Click the ‘Network Setting’ on the left side menu
2. Device Name: Rename network device, could be used to differentiate between one device and another
3. LAN IP Address: Enter IP address designated for the device of the intranet. Default setting is 192.168.1.127
4. LAN Net Mask: Subnet Mask of the intranet
5. Default Gateway: Default gateway of the intranet.
   if there is Internet connection access, this IP address must point to the router or the gateway provided by the ISP
6. Primary DNS Server: Domain Name Server 1
7. Secondary DNS Server: Domain Name Server 2
8. MAC Address:Network physical address (this field cannot be changed). Each TCP/IP device has designated MAC address that could be found on the serial number sticker



9. HTTP Server Port: 80
   Web browser service port, it can be change if there is information security consideration but should not have the same TCP Port with 701Server connection to devices which is 1621 or 1623



   For Example: changing into 9680, to enter the HTTP Server you need to enter IP address followed with Port
   *the designated Port should be remembered all time, if not necessary to change the Port, please let it remain default which is 80.
10. TCP/IP Control Port:
    Setting of I/O Control Port.

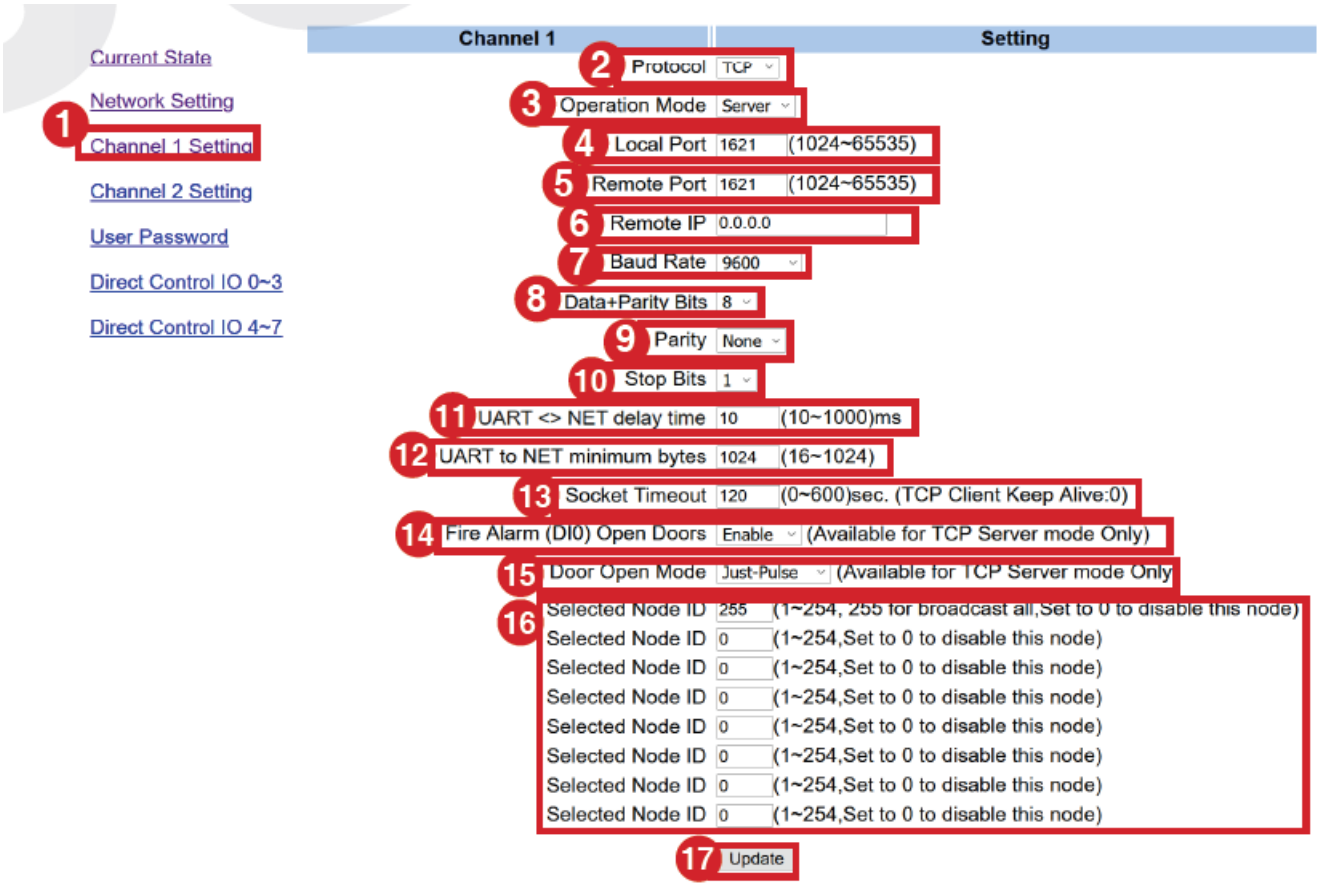
Enter 1601 when using 727APP or mobile app connection

Enter 502 for Modbus communication protocol application

11. DHCP Client: Ticking this feature will enable dynamic host protocol which means devices will automatically obtain IP address without manually typing and assigned device to a designated IP address.
12. Update: Press Update button to save changed.

    When you changed the LAN IP Address, after entering Update button, on the browser field required to type new IP address.

RS485 Parameter Setting



1. Select ‘Channel 1 Setting’ to setup RS485 connection on Channel 1
2. Protocol: Choose TCP
3. Operation Mode: Server (Default)
4. Local Port:

   Default Value 1621 (it is changeable to other Port but should not have the same TCP Port with Server HTTP Port 80)
5. Remote Port: Default Value 1621, change into 0.
6. Remote IP: Set as 0.0.0.0

   Note: Step no. 3-6 required a setup when applying Server-Client Mode connection bridge (Refer to 3-3)
7. Baud Rate: Fixed value 9600
8. Data Bits: The added value of Data bits and Parity Bits, the default is (8) means 8 Data Bits and No Parity

   For example: Serial Port Parameter Setting for 9600,0,8,1

   AR-727-CM Data Bits set to 9 (the actual output will be 8 bit + 1 parity = 9), then set the Parity into ‘Even’
9. Parity: Default Value None

10. Stop Bits:Default Value 1

    Note: Step no. 7-10 required a setup when wiring to third party devices that have different Serial Port Setting.
11. UART to NET delay time: Transmission delay time in milliseconds
12. UART to NET minimum bytes: Data transfer length default value 1024 (please do not change)
13. Socket Timeout: Time waiting for connection, set to 0 means to keep the connection alive or keep alive (if it is unnecessary refrain from set up into 0)
14. Fire Alarm (DI0) Open Doors:

    Enabling this feature will activate release all doors or specified doors under fire alarm event (triggered DI0 signal), only available under Server Mode
15. Door Open Mode:

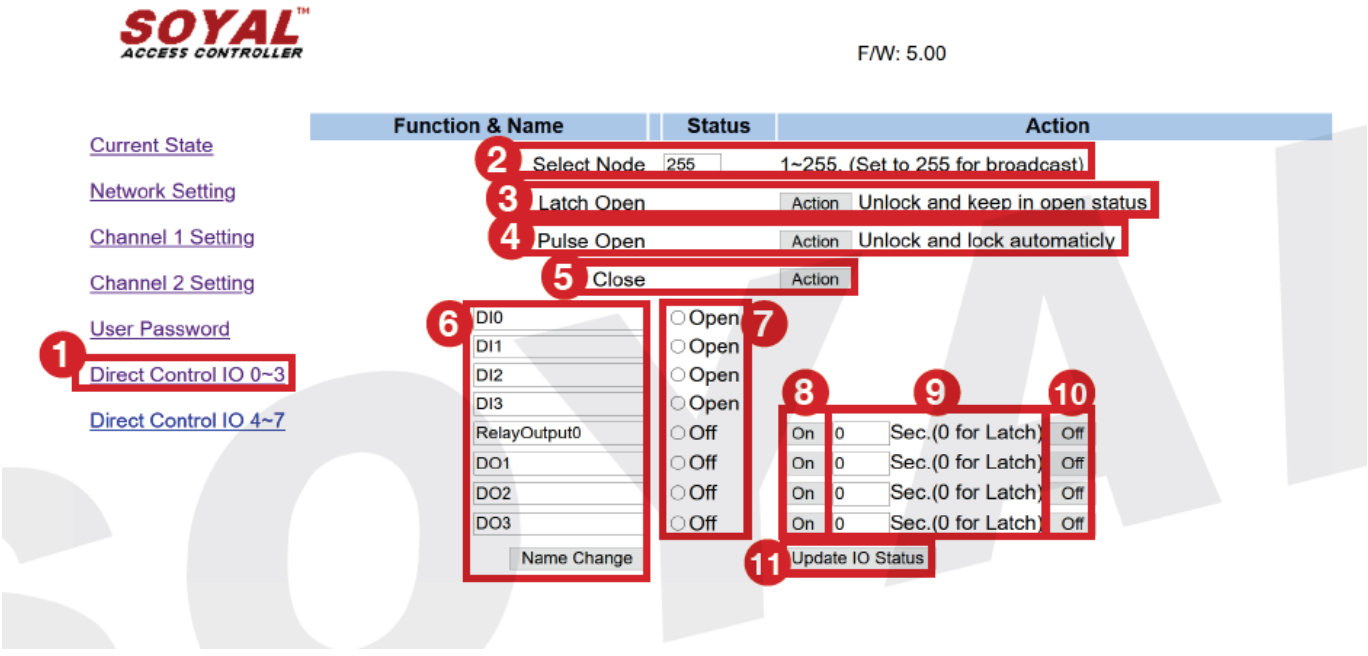
    Release lock mode, there are two options to choose ‘Just-Pulse’ or ‘Keep Latch’. Under a connection to Fire Alarm System, for safety purpose during Fire Event select ‘Keep Latch’. For other purpose such as remote open door for visitor, select ‘Just-Pulse’.
16. Selected Node ID:

    Select broadcast or specified group of doors to release lock under Fire Event (each RS485 Channel could specified up to 8 doors).

    Note: Step no.14-16 required a setup when applying Fire Alarm Auto Release Doors (Refer to 3-2)
17. Update:

    Press Update button to save changed.

I/O Direct Control and Query



1. IO Direct Control includes DI/DO direct and remote control over devices. This also includes direct control of devices connected to Industry Series (TCP) over RS485.

    ‘Direct Control IO 0~3’

    Direct control over DI0, DI1, DI2, DI3 and DO0, DO1, DO2, DO3

    Direct control over RS485 CH1&CH2

    ‘Direct Control IO 4~7’

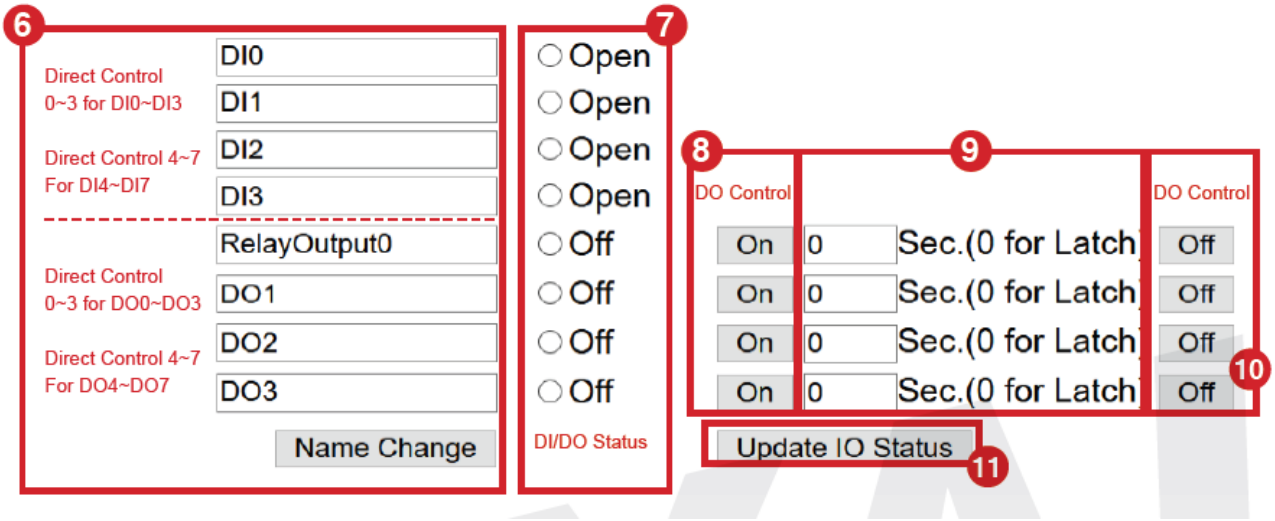
    Direct control over DI4, DI5, DI6, DI7 and DO4, DO5, DO6, DO7

Direct control over RS485 CH1&CH2

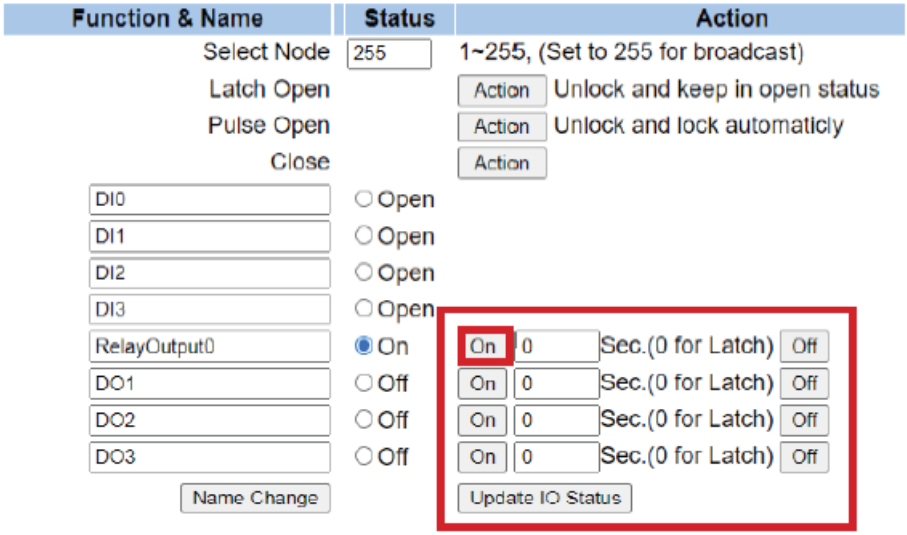
2. Select Node: Enter broadcast or specified node ID to do control between Latch Open(3)/Pulse Open(4)/Close(5) remotely on RS485 CH1&CH2.
   Enter 255 to release doors for all controllers under RS485 CH1&CH2.
   Enter specified node ID to control only one specific node ID under RS485 CH1.
   (Example enter 'Select Node 1' means to do actions for Node ID 1 on RS485)
   Action Control over RS485 CH1&CH2

Latch Open	Action	Unlock and keep in open status
Pulse Open	Action	Unlock and lock automaticly
Close	Action	

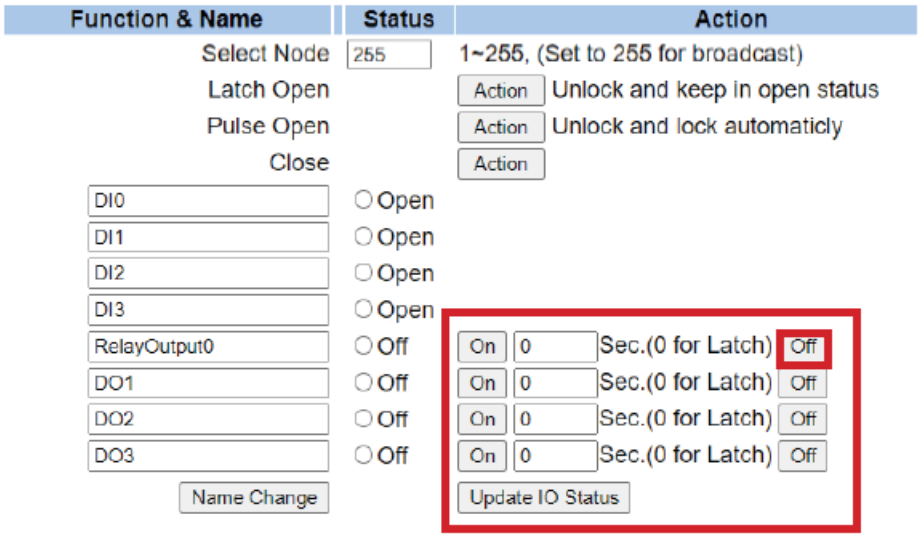
3. Latch Open: Release lock continuously
4. Pulse Open: Release lock and lock automatically door relay time limit reached (according to devices Door Relay Time Setting)
5. Close: Lock door
   Press 'Action' to implement direct control from step 3-5.



6. Rename DI/DO:
   Change the name of DI/DO and select 'Name Change' to save changed.
7. DI/DO Status:
   The status change of DI/DO will be displayed here
8. DO Control:
   Click ON to trigger DO, and click OFF to disable DO from triggering Clicking ON for DO0, the DI status will automatically ON



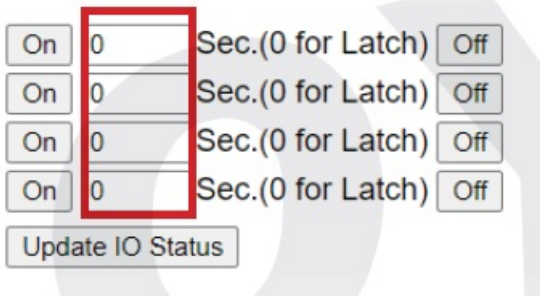
Clicking OFF for DO0, the DI status will automatically returned to OFF status



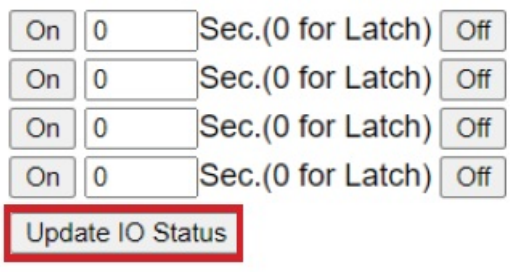
9. DO Control (Output Time)

   Change the Output Time of DO control between the range of 0~600 seconds. Entering 0 means latch mode, output continuously.

   Entering between 1~600 seconds means output ON according to output time set.



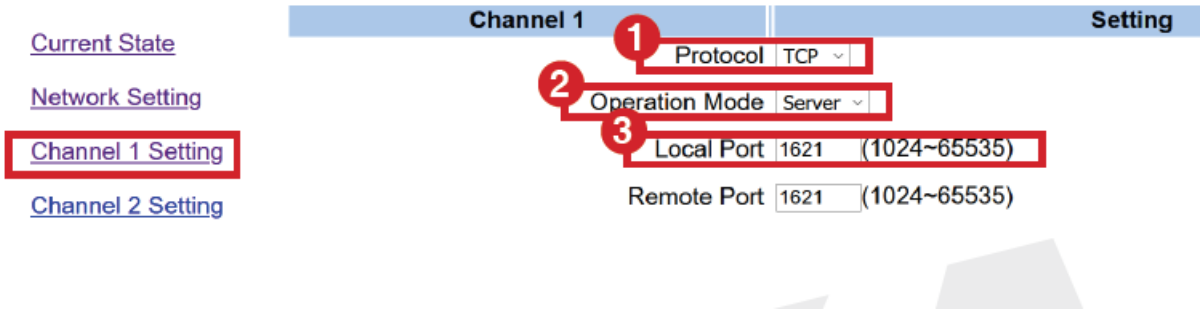
10. Update IO Status: Get real time IO current status by clicking Update IO Status



TCP/IP Converter Setting

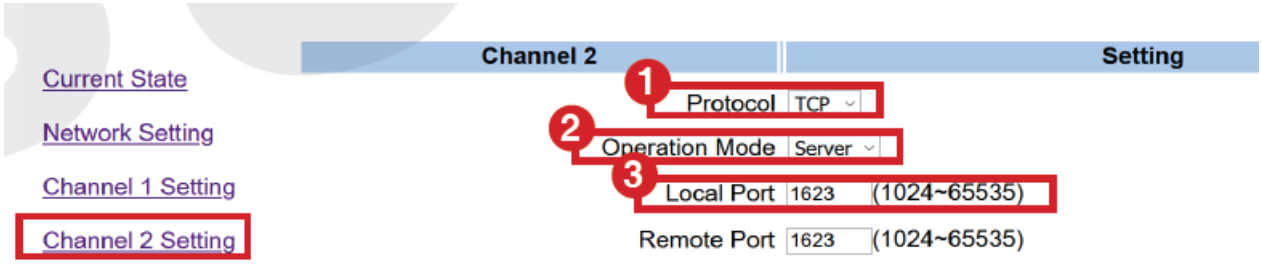
Wiring SOYAL access controller to PC can be done via RS485 or TCP/IP interface. For SOYAL access controller that built-in RS485, via Industry Series (TCP) or AR-727-CM achieve RS485 to TCP/IP connection.
Each device built in two RS485 channels that differentiate between CH1 and CH2.

CH1 Setting:



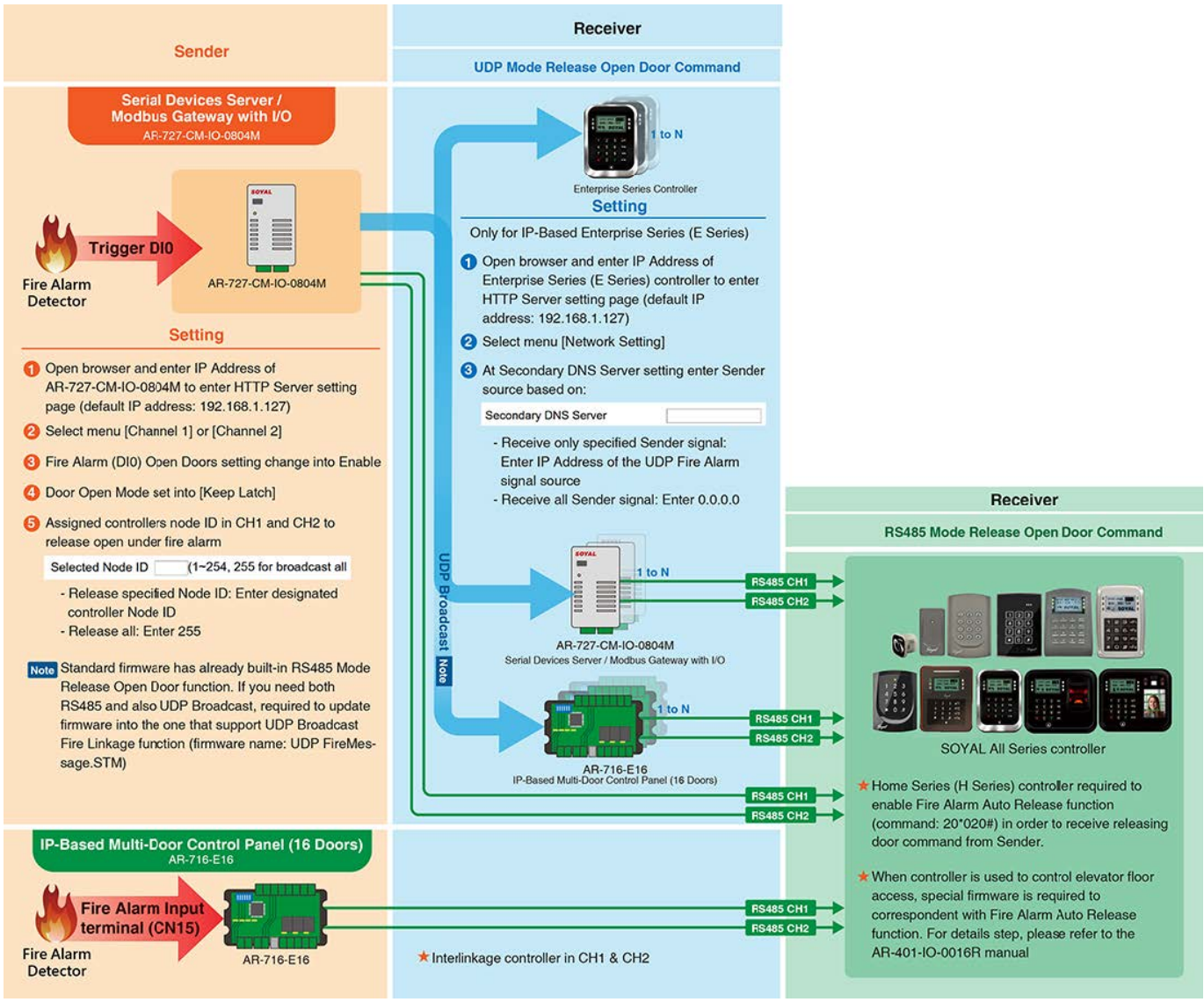
1. Protocol : TCP
2. Operation Mode: Server
3. Local Port 1621

CH2 Setting:

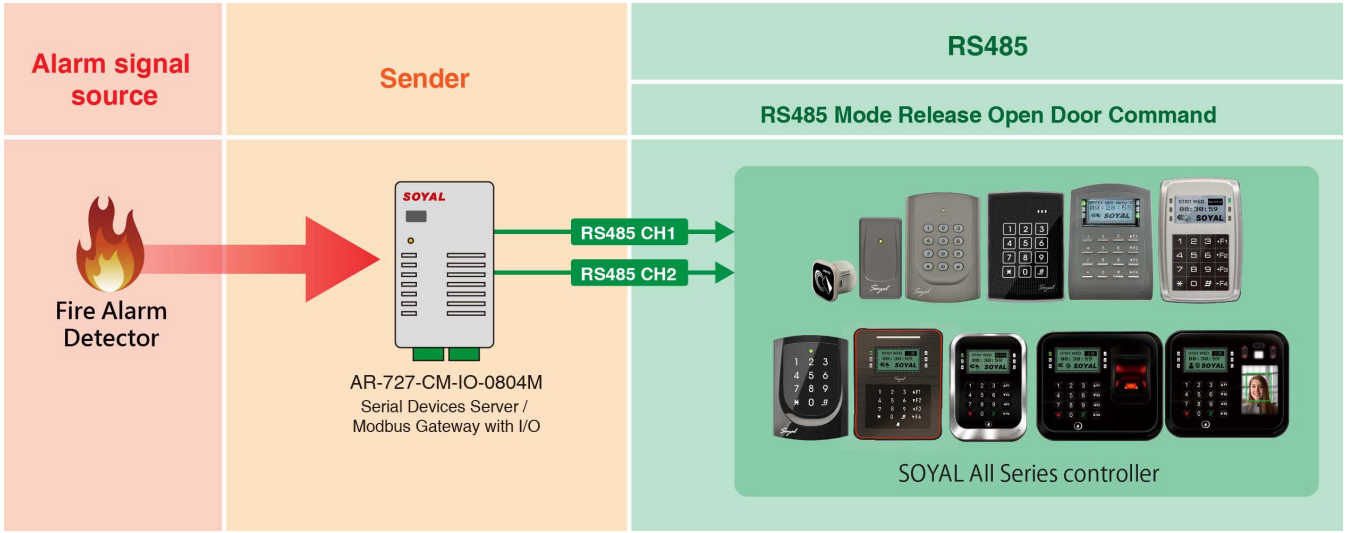


1. Default Value Protocol UDP change into TCP
2. Operation Mode: Server
3. Local Port 1623

Fire Alarm Auto Release Doors
SOYAL provides various options for Fire Event Solution. This is taking a consideration of onsite situation and human safety when escaping fire and evacuation while maintaining safety for authorized area.
Door Release Functions:(1) RS-485 automatically door release (2) UDP automatically door release (3) RS-485 & UDP Dual-release
The functions above are all capable of self-define function of (a) broadcast all controllers or (b) release specific door only.
Note: Multi-door control panel AR-716-E16 only supports All-release function, please utilize AR-727CM-IO or E series controller with TCPIO directly if you have assignment requirement.
Releasing all doors is suggested for public spaces where user could directly escape building for safety precaution and quick evacuation process. Meanwhile releasing only a specified doors is suitable to keep doors remain locked for high authorized area or for building with warehouses, treasure room, or server IT room.



Fire Alarm Auto Release Doors (RS485 method)



SOYAL ACCESS CONTROLLER

AR-727CM 8i8o 220804 UDP File Message

F/W: 5.03

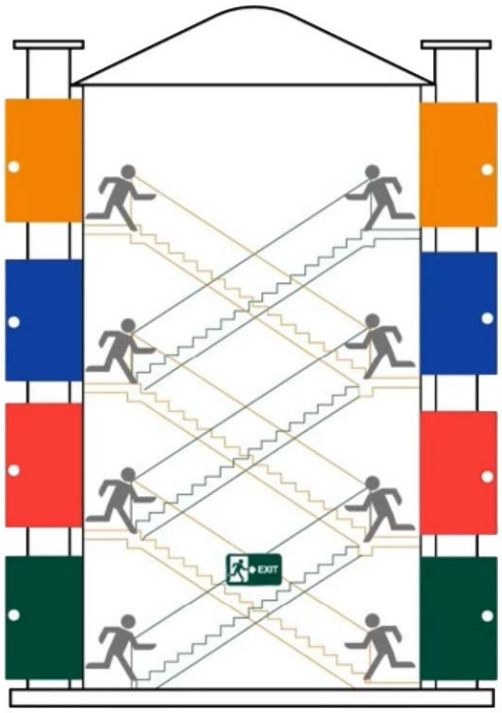
- Current State
- Network Setting
- CH-1 Setting
- CH-1 Fire Release
- CH-2 Setting
- CH-2 Fire Release
- User Password
- Direct Control IO 0~3
- Direct Control IO 4~7
- CH-2 RCUs

Channel-1	Nodes/IO
Fire Alarm (DI0) Open Doors	Enable (TCP Server mode Only)
Door Open Mode	Keep-Latch (TCP Server mode Only)
Release Node ID	255 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)
Release Node ID	0 (1~254,255=All,0:Disable)

Update

- **STEP 1 :** Select CH1 Setting, confirming the Protocol is TCP mode
- **STEP 2 :** Select CH1 Fire Release, confirming “Fire Alarm (DI0) Open Doors” is “Enable” STEP 3 : Confirm “Door Open Mode” is “Keep-Latch”
- **STEP 4 :** Assign the release door of fire emergency procedure, each RS-485 Channel is capable of unlocking up to 8 doors.
  - Release all doors under fire event, input 255 in first field.
  - Release assigned doors under fire event, input assigned Node ID of the controller in the fields.
- **STEP5.** Press “Update”

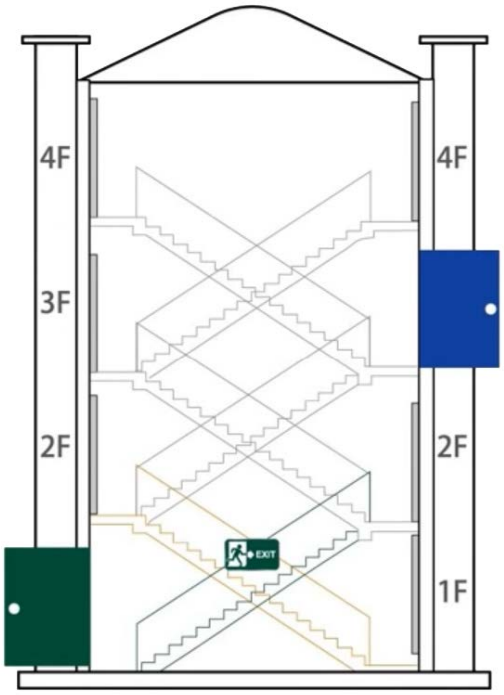
Release all doors



Parameter Setting:
Input 255 on first field to enable UDP broadcast function and input 0 on the rest of the fields, all electric locks

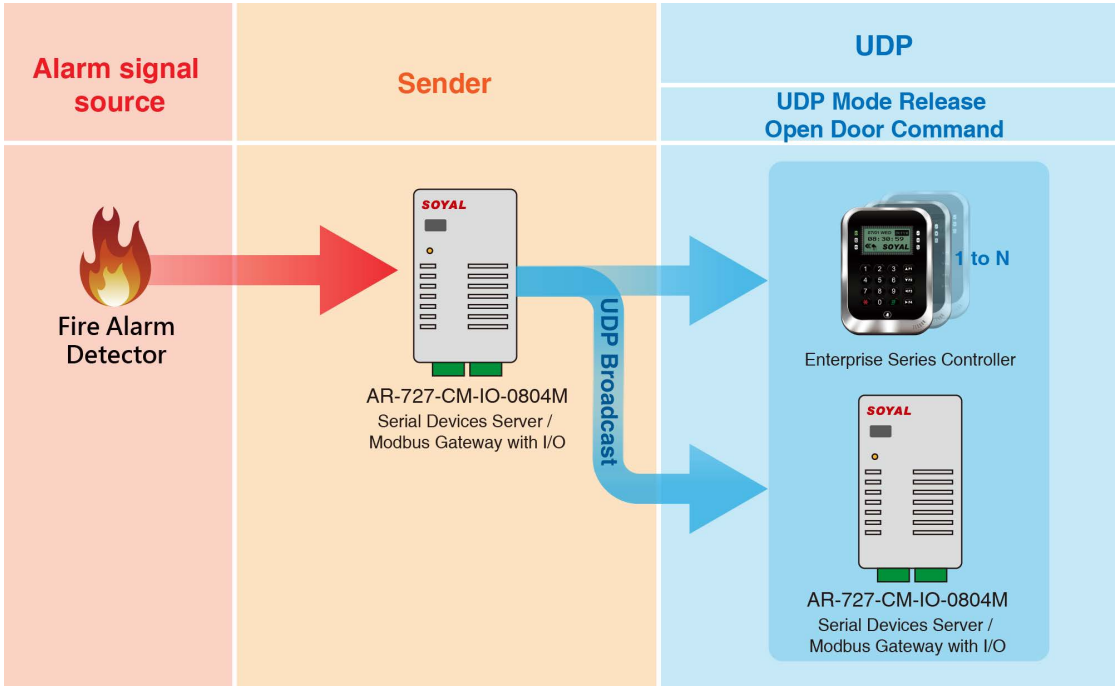
connect with the assigned channel will be released immediately.

Release specified doors only



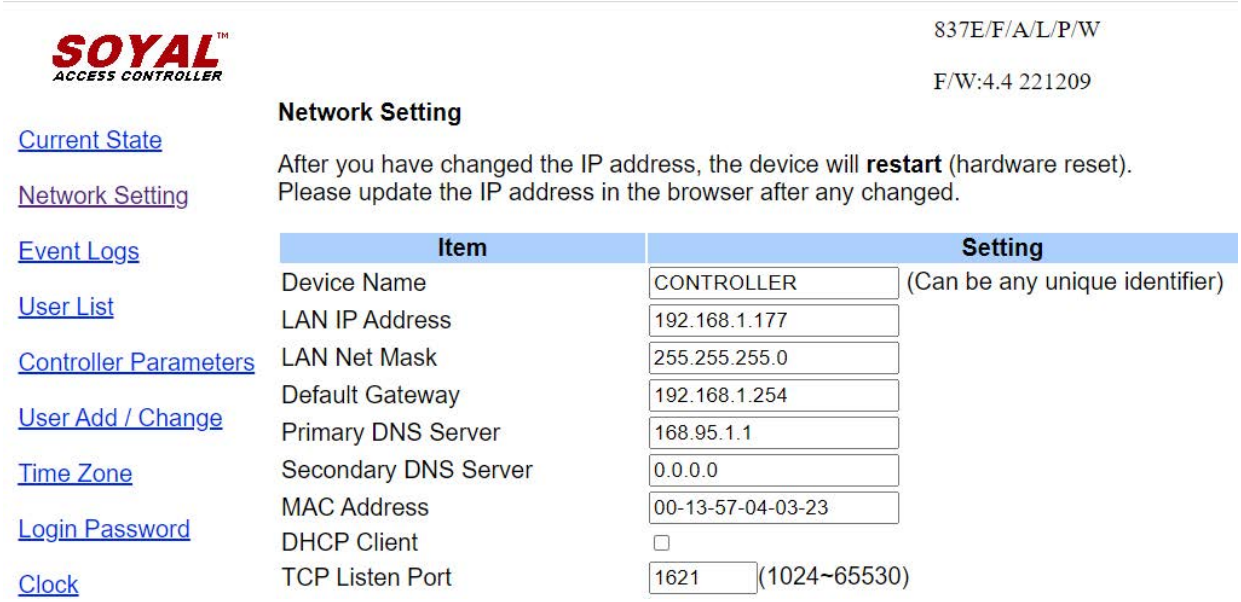
Parameter Setting:
Input the specified Node ID of controller in fields, the electric locks will be released via RS-485, remaining the safety of high security area,optimizing emergency evacuation and operator management.

Fire Alarm Auto Release Doors (UDP method)

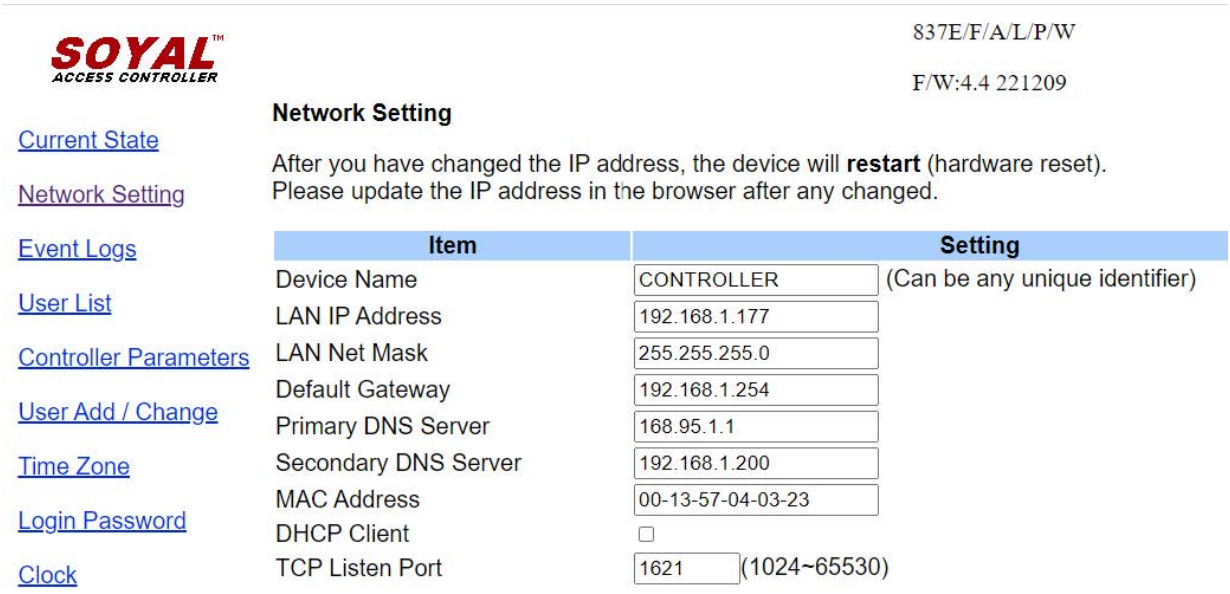


Compatibility: Enterprise series (E series) controller with TCPIP
Enterprise Series controller could accept “Release door lock” command via UDP from any of the serial servers AR-727-CM-0804M or AR-401-IO-0808R-U2 (required customized firmware, refer to Ref 3.)
The condition to this setup is only available for Enterprise Series Controller with Ethernet connection and under the same intranet.

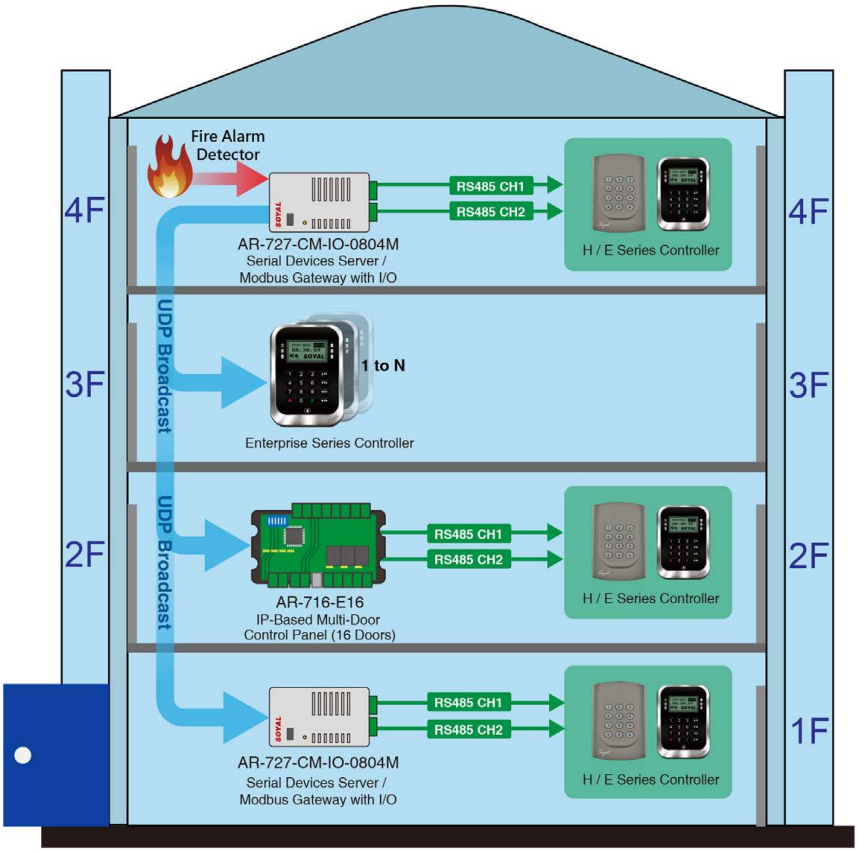
- **STEP 1 :** Enter the parameter setting page of controller on browser
- **STEP 2 :** Select network setting
- **STEP 3 :** Set up the “Secondary DNS Server”
  - 0.0.0.0 : unlocked by any fire detector in same intranet.



  - 192.168.1.200 (self-defined IP) : unlocked by specified AR-727CM-IO.



Fire Alarm Auto Release Doors (RS-485 & UDP Dual-release)



Introduction:
This configuration could broadcast plenty of controllers simultaneously, the primary AR-727CM-IO could receive fire input and broadcast door release signal to secondary devices, including AR-727CM-IO/AR-716-E16/E series TCP controller.
Finally, the secondary devices will transfer the door release signal to the access controller via RS-485. (parameter setting refer to 3-2-1)

Parameter Setting :

- **STEP 1 :** Set the IP Address of primary AR-727CM-IO
- **STEP 2 :** Enter the WEB page of AR-727CM-IO/AR-716-E16/E series controller
    - AR-727CM-IO-0804M:

SOYAL ACCESS CONTROLLER

AR-727CM 8i8o 220804 UDP File Message

F/W: 5.03

Current State
Network Setting
CH-1 Setting
CH-1 Fire Release
CH-2 Setting
CH-2 Fire Release
User Password
Direct Control IO 0~3
Direct Control IO 4~7
CH-2 RCUs

Network Setting

After you have changed the IP address, the device will **restart** (hardware reset).
You need to change the **host IP** with new IP Address in Internet Browser to **re-connect** the target.

Item	Setting
Device Name	S2E-Device
LAN IP Address	192.168.1.200
LAN Net Mask	255.255.255.0
Default Gateway	192.168.1.254
Primary DNS Server	168.95.1.1
Secondary DNS Server	168.95.192.1
MAC Address	00-13-57-04-8F-20
HTTP Server Port	80 (80~65530)
TCP I/O Control Port	1601 (502:Modbus,1601,1625~65530)
DHCP Client	☐

Update

- AR-716-E16

SOYAL ACCESS CONTROLLER

716E16/721E2

F/W:4.4 221129

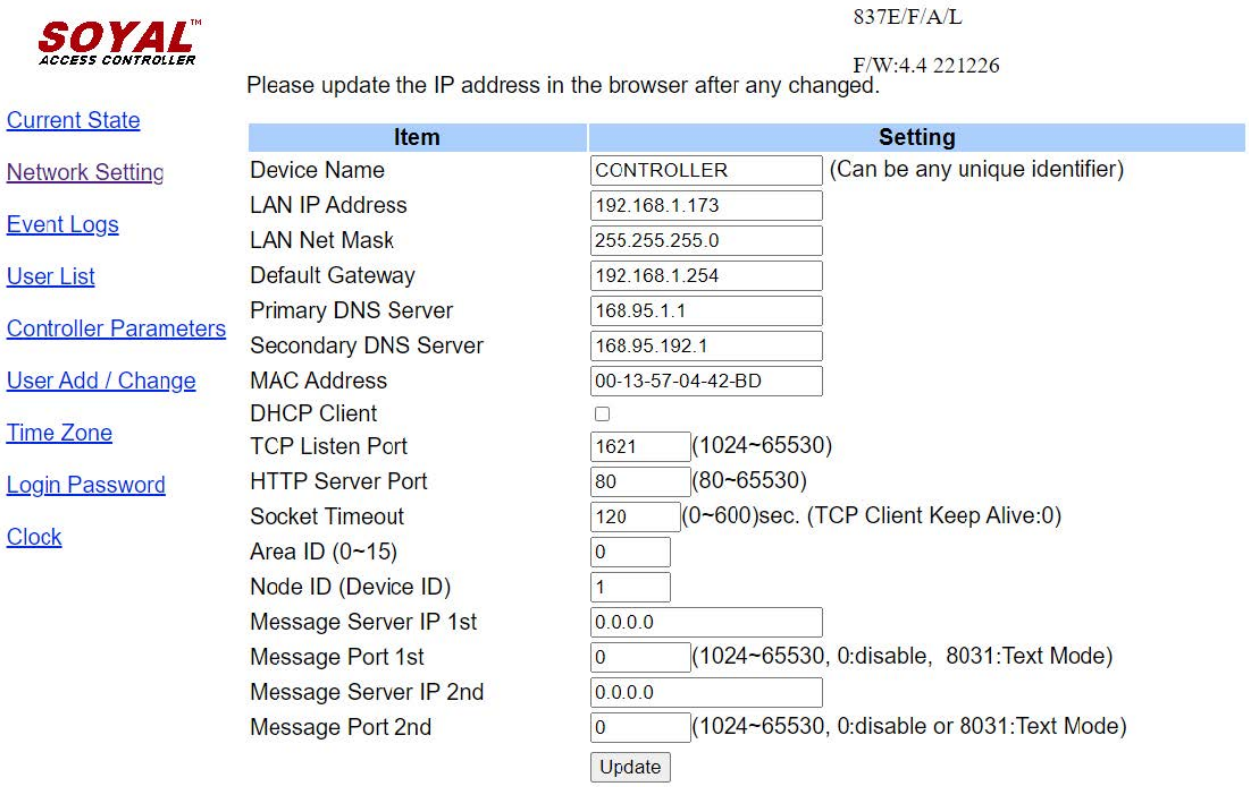
Current State
Network Setting
Event Logs
User List
Controller Parameters
User Add / Change
Time Zone
Login Password
Clock

Network Setting

After you have changed the IP address, the device will **restart** (hardware reset).
Please update the IP address in the browser after any changed.

Item	Setting
Device Name	CONTROLLER (Can be any unique identifier)
LAN IP Address	192.168.1.190
LAN Net Mask	255.255.255.0
Default Gateway	192.168.1.254
Primary DNS Server	168.95.1.1
Secondary DNS Server	168.95.192.1
MAC Address	00-13-57-03-50-B8
DHCP Client	☐
TCP Listen Port	1621 (1024~65530)

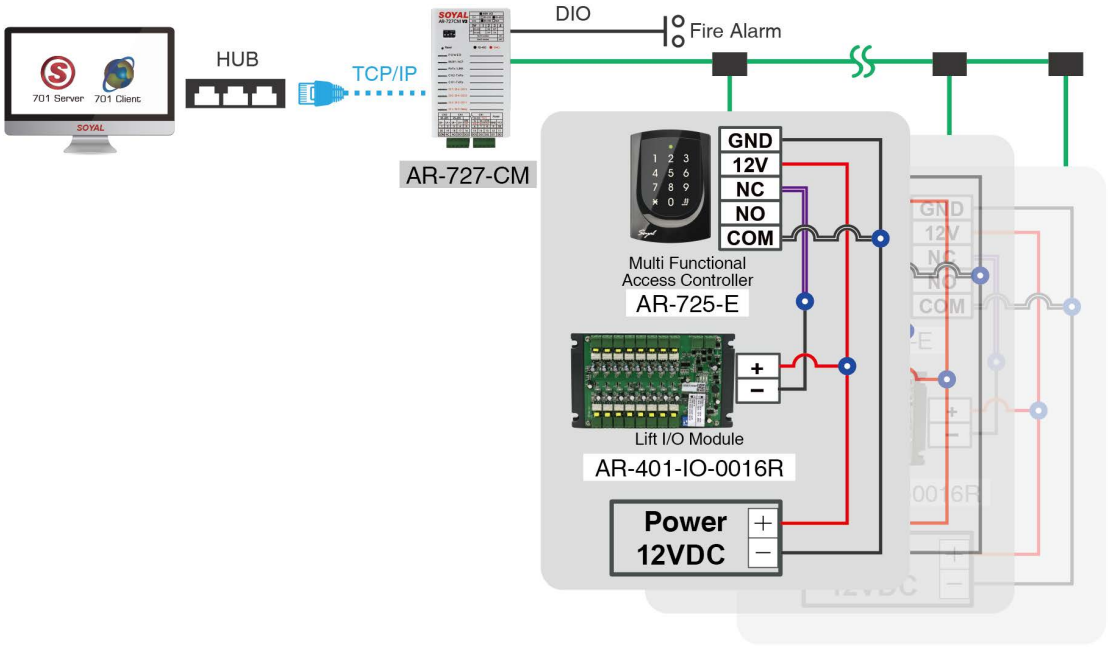
- E Series Contoller



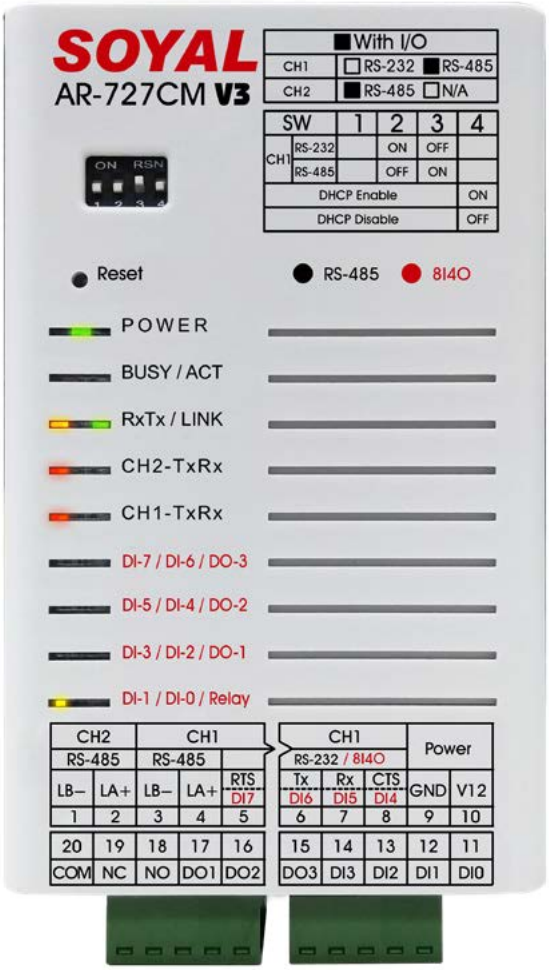
- **STEP 3 :** Assign the release door of fire event :
  - AR-727CM-IO: Input 255 to release all doors or assign the specified Node ID of controller. (details refer to 3-2-1)
  - AR-716-E16: All H/E series controllers connect to AR-716-E16 will be released automatically, not required to assign the controller.
  - E series controller: E series controller with TCP could be assigned with fixed IP of primary AR-727CM-IO as individual fire signal input.

Fire Alarm Auto Release Lift Door
Under AR-727CM-IO, the lift access controller supports connection to Fire Alarm. With special firmware, in normal situation, when users swipe RFID tags, the controller' s relay doesn't act. It only acts once receiving fire alarm signal. Relay is controlled by fire alarm signal instead of valid tags.

This function is available at the firmwares:
725E-V2: APS725Ev2__V0403_200415 ACCESS_DONT_OPEN_DOOR.STM 725HD: 725HD_7V3 190530 ACCESS_DONT_OPNE_DOOR.ISP

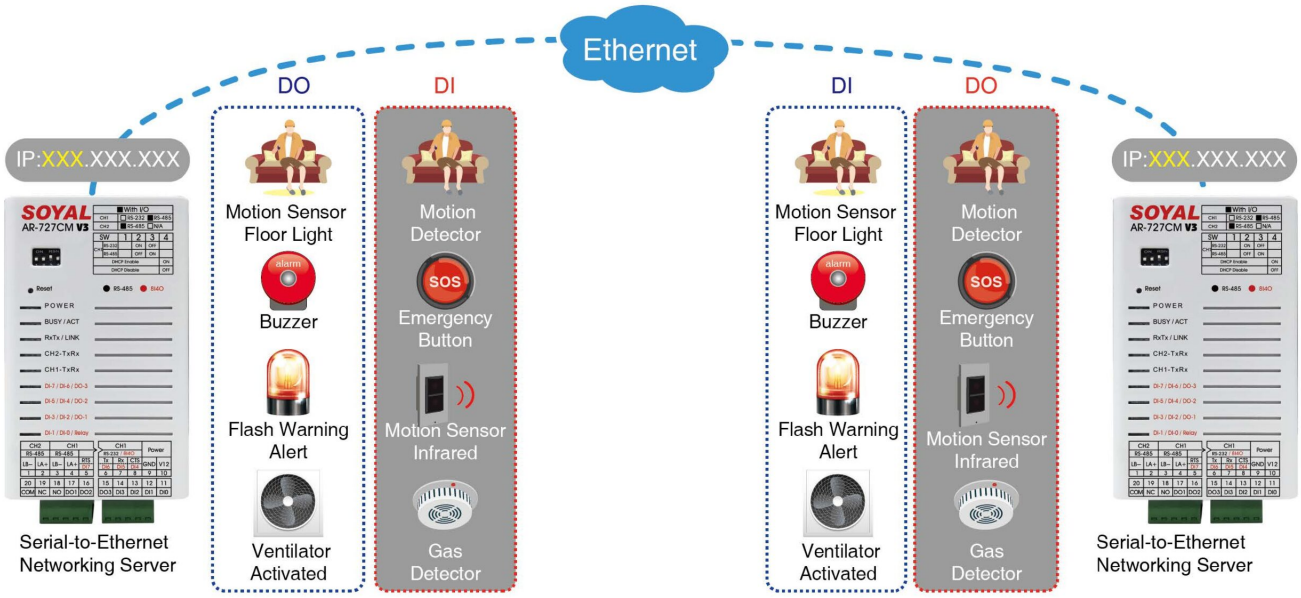


Fire Alarm Indicator



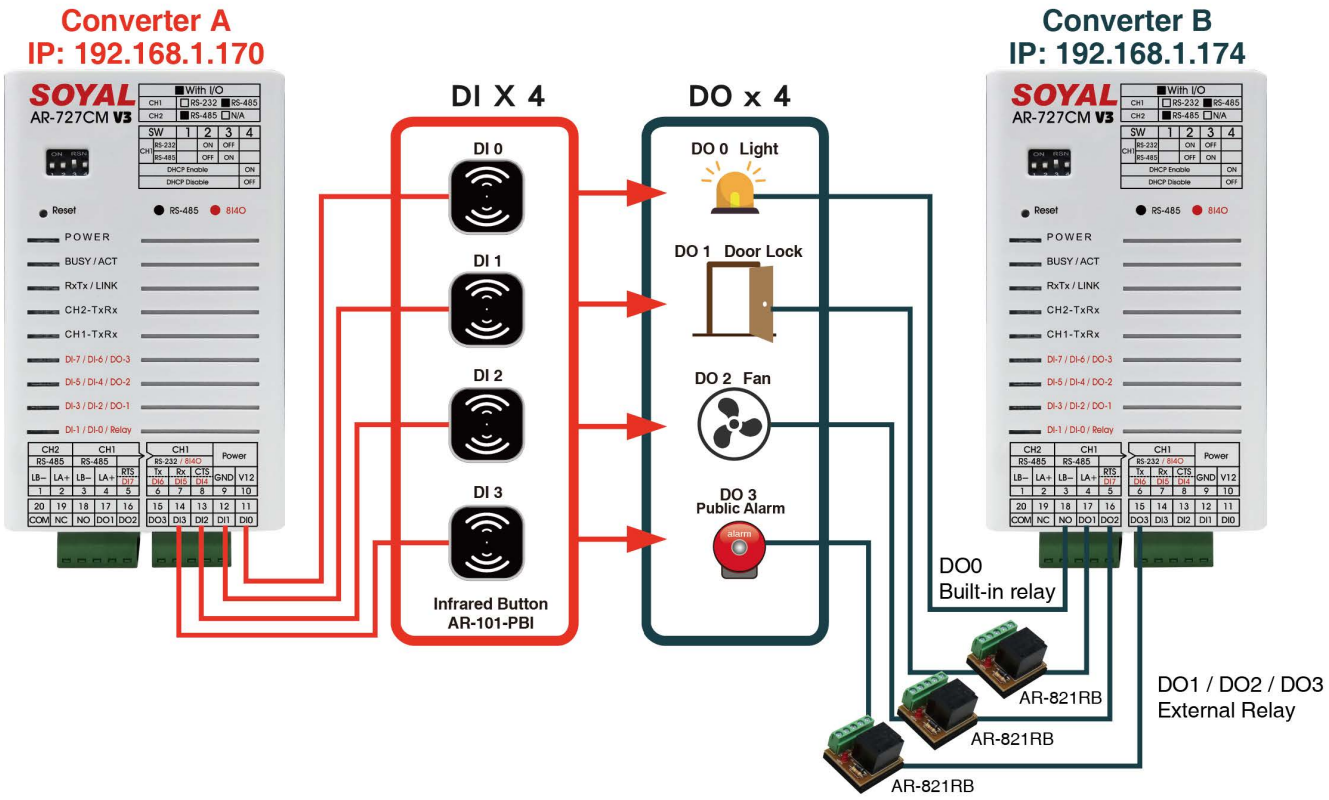
Indicator when Fire Alarm Event is happening:
DI0 LED will continuous blinking > sensing Fire Alarm Event CH1 or/and CH2 TX red LED will fast blink > Release doors

TCP/IP Remote I/O Control Setting



Remote I/O Control Setting is a function where when DI is triggered, the DO with linkage control will control remote device or sending a warning (i.e: if temperature in a factory is too high, it will send alert to AR-727CM-IO, the network linking to a remote fan that connected to AR-727CM-IO too, will activate ventilation system and send an alarm to Emergency Status Board in Main Factory).
Conditions:

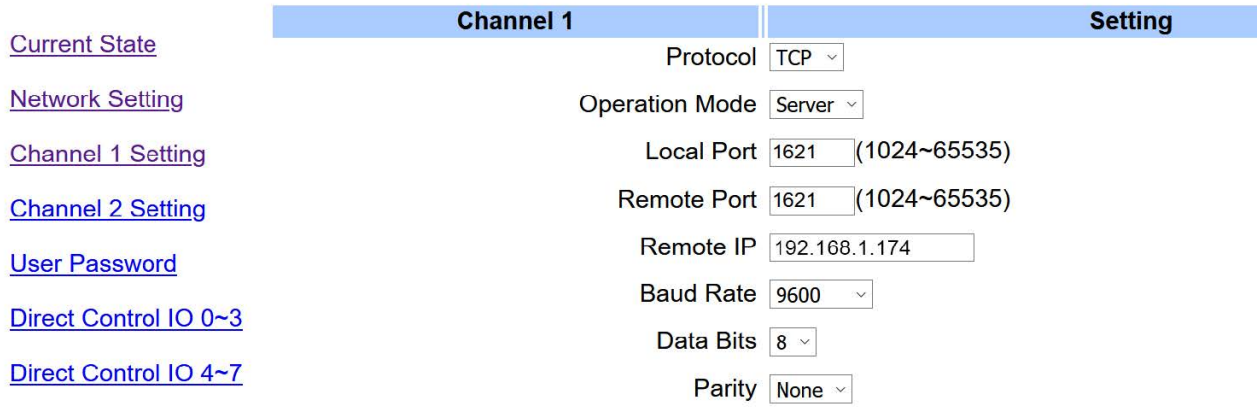
- Both serial servers AR-727-CM-0804M or AR-401-IO-0808R-U2 that will operate interlinkage IO control must be on intranet or the same subnet mask, or implement connection using VPN.
- Required customize firmware for this feature (refer to Ref 4.)
- One-to-one control, fixed direction control



Serial Server A	→	Serial Server B
DI0	→	DO0
DI1	→	DO1
DI2	→	DO2
DI3	→	DO3

Setting:
Example Serial Server A IP Address is 192.168.1.170 and Serial Server B IP Address is 192.168.1.174
Set Serial Servers A as Server

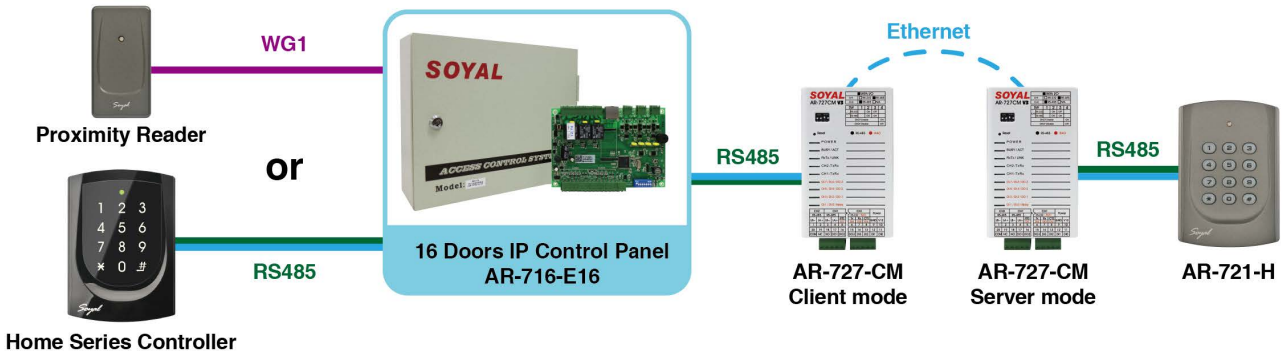
- **STEP 1 :** Operation Mode: Set as Server
- **STEP 2 :** Local Port: Enter 1621
- **STEP 3 :** Remote Port: Enter 1621
- **STEP 4 :** Remote IP: Enter Serial Server B IP Address 192.168.1.174
- **STEP 5 :** There is no need to do any set up for Converter B



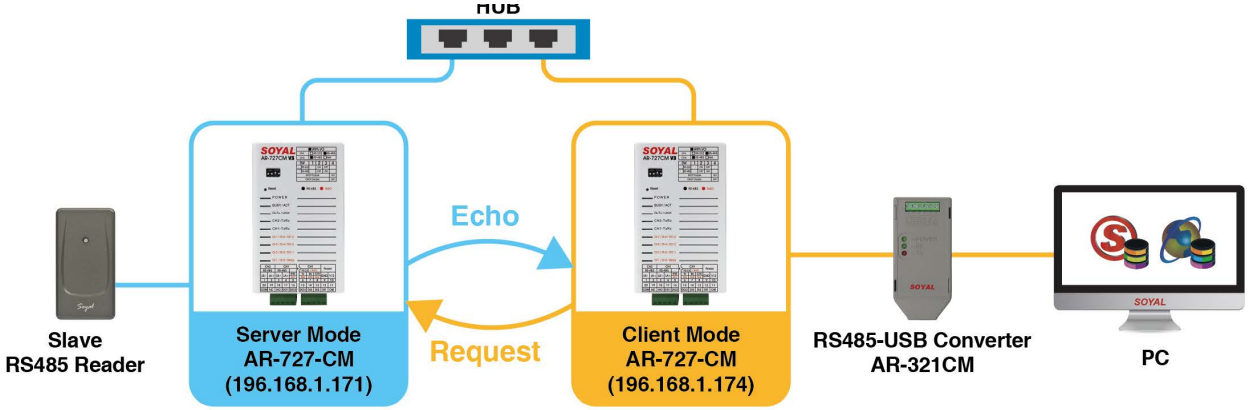
Youtube Video Tutorial regarding TCP/IP Remote IO Control Setting

Server-Client Mode Communication Bridge
Industry Series (TCP) AR-727-CM-0804M, AR-401-IO-0808R-U2 and AR-727-CM converter offer a communication bridge as Server-Client Mode that could solve issue with:

1. Master and Slave Reader cable wiring into wireless

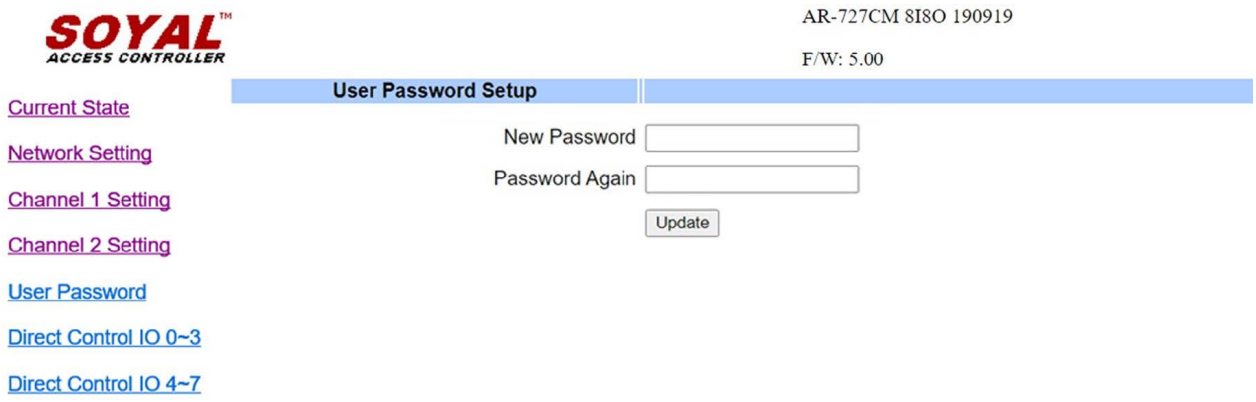


2. Data transfer between two devices via TCP/IP



<table>
<tr><th>SETTING</th><th>AR-727CM CLIENT MODE (for MASTER RS485 DEVICE)</th><th>AR-727CM SERVER MODE
(for SLAVE RS485 DEVICE)</th></tr>
<tr><td rowspan="2">NETWORK SETTING</td><td>Network Setting
After you have changed the IP address, the device will restart (hardware reset
You need to change the host IP with new IP Address in Internet Browser to re
<table><tr><th>Item</th><th></th></tr><tr><td>Device Name</td><td>S2E-Device</td></tr><tr><td>LAN IP Address</td><td>192.168.1.174</td></tr><tr><td>LAN Net Mask</td><td>255.255.255.0</td></tr><tr><td>Default Gateway</td><td>192.168.1.254</td></tr><tr><td>Primary DNS Server</td><td>168.95.1.1</td></tr><tr><td>Secondary DNS Server</td><td>168.95.192.1</td></tr><tr><td>MAC Address</td><td>00-13-57-04-36-25</td></tr><tr><td>HTTP Server Port</td><td>80 (80~65530)</td></tr><tr><td>TCP I/O Control Port</td><td>502 (502:Modbus,</td></tr><tr><td>DHCP Client</td><td>☐</td></tr><tr><td></td><td>Update</td></tr></table></td><td>Network Setting
After you have changed the IP address, the device will restart (hardware rese
You need to change the host IP with new IP Address in Internet Browser to re
<table><tr><th>Item</th><th></th></tr><tr><td>Device Name</td><td>S2E-Device</td></tr><tr><td>LAN IP Address</td><td>192.168.1.171</td></tr><tr><td>LAN Net Mask</td><td>255.255.255.0</td></tr><tr><td>Default Gateway</td><td>192.168.1.254</td></tr><tr><td>Primary DNS Server</td><td>168.95.1.1</td></tr><tr><td>Secondary DNS Server</td><td>168.95.192.1</td></tr><tr><td>MAC Address</td><td>00-13-57-04-39-B9</td></tr><tr><td>HTTP Server Port</td><td>80 (80~65530)</td></tr><tr><td>TCP I/O Control Port</td><td>502 (502:Modbus,</td></tr><tr><td>DHCP Client</td><td>☐</td></tr><tr><td></td><td>Update</td></tr></table></td></tr>
<tr><td>IP Address: 192.168.1.174</td><td>IP Address: 192.168.1.171 (Remote IP)</td></tr>
<tr><td rowspan="2">CH 1& CH2 SETTING</td><td><table><tr><th>Channel 1</th><th>Setting</th></tr><tr><td>Protocol</td><td>TCP</td></tr><tr><td>Operation Mode</td><td>Client</td></tr><tr><td>Local Port</td><td>1621 (1024~65535)</td></tr><tr><td>Remote Port</td><td>1621 (1024~65535)</td></tr><tr><td>Remote IP</td><td>192.168.1.171</td></tr><tr><td>Baud Rate</td><td>9600</td></tr><tr><td>Data Bits</td><td>8</td></tr><tr><td>Parity</td><td>None</td></tr><tr><td>Stop Bits</td><td>1</td></tr><tr><td>UART to NET delay time</td><td>10 (10~1000)ms</td></tr><tr><td>UART to NET minimum bytes</td><td>1024 (16~1024)</td></tr><tr><td>Socket Timeout</td><td>120 (0~600)sec. (TCP Client Keep Alive:0)</td></tr><tr><td></td><td>Update</td></tr></table></td><td><table><tr><th>Channel 1</th><th>Setting</th></tr><tr><td>Protocol</td><td>TCP</td></tr><tr><td>Operation Mode</td><td>Server</td></tr><tr><td>Local Port</td><td>1621 (1024~65535)</td></tr><tr><td>Remote Port</td><td>1621 (1024~65535)</td></tr><tr><td>Remote IP</td><td>0.0.0.0</td></tr><tr><td>Baud Rate</td><td>9600</td></tr><tr><td>Data Bits</td><td>8</td></tr><tr><td>Parity</td><td>None</td></tr><tr><td>Stop Bits</td><td>1</td></tr><tr><td>UART <> NET delay time</td><td>10 (10~1000)ms</td></tr><tr><td>UART to NET minimum bytes</td><td>1024 (16~1024)</td></tr><tr><td>Socket Timeout</td><td>120 (0~600)sec. (TCP Client Keep Alive:0)</td></tr><tr><td>Fire Alarm (DI0) Open Doors</td><td>Disable (Available for TCP Server mode Only)</td></tr></table></td></tr>
<tr><td>Protocol = TCP Operation Mode = Client
Remote Port for CH1 = 1621; Remote Port for CH2 = 1623 Remote IP: 192.168.1.171
(Server Mode AR-727CM’ s IP for Slave RS485 devices)</td><td>Protocol = TCP Operation Mode = Server Remote IP = 0.0.0.0</td></tr>
</table>

Change Login Password



- **STEP 1 :** Select ‘User Password’
- **STEP 2 :** Enter new password (there’s capital letter differentiation)
- **STEP 3 :** Retype the new password
- **STEP 4 :** Press Update button to save changed.

References

FAQ

Q 1 : How many units of access controller that can be connected to each of RS485 channel?
A : There is no limitation to it but we suggest to wire up to 8 units access controller per channel, combining both channel up to 16 units access controller per unit of AR-727- CM/Industry Series (TCP).

Q 2 : How long wiring distance of RS485?
A : RS485 wiring can support up to 1000M, but due to environment conditions the suggested wiring distance is 300M (parallel wiring), more than that please consider purchasing RS485 signal enhancer AR-RS485REP.

Q 3 : What cable type for RS485 wiring?
A : We recommend using twist AWG22 cable

- We connect controller to CH2 of 727CM, but there is no response from PC.
- Why?How to use DHCP function for 727CM?

YouTube Videos

- Product Application TCP/IP Remote IO Control Setting
- Peripheral expansion application Release locks Solution in Fire Alarm Event(2018) Peripheral expansion application Release locks Solution in Fire Alarm Event(2017)

Firmware
Firmware of AR-727-CM in different applications:
(latest firmware version will keep updated, contact SOYAL team for more information)

Ref no.	Functions	Firmware Version
Ref 1.	Support Modbus protocol	APX727i3 V0500 8I4O 201112 MODBUS_TCP.STM
Ref 2.	Support TCP/IP to Wiegand Converter	APX727i3 V0500 8i4o WG Converter 200417.STM
Ref 3.	Fire Alarm Event UDP Mode	APX727i3 V0500 8I8O 190930 UDP FireMessage.STM
Ref 4.	TCP/IP Remote I/O Control Setting	APX727i3 V0500 200814 MODBUS_TCP DI03_Trigger_DO03.STM

Documents / Resources

	**SOYAL AR-727-CM HTTP Server** [pdf] Instruction Manual AR-727-CM, AR-727-CM HTTP Server, HTTP Server

References

- SOYAL FAQ | SOYAL TECHNOLOGY CO., LTD
- SOYAL FAQ | SOYAL TECHNOLOGY CO., LTD