Manuals+ — User Manuals Simplified.

SOYAL AR-727-CM Device Network Server Instruction Manual
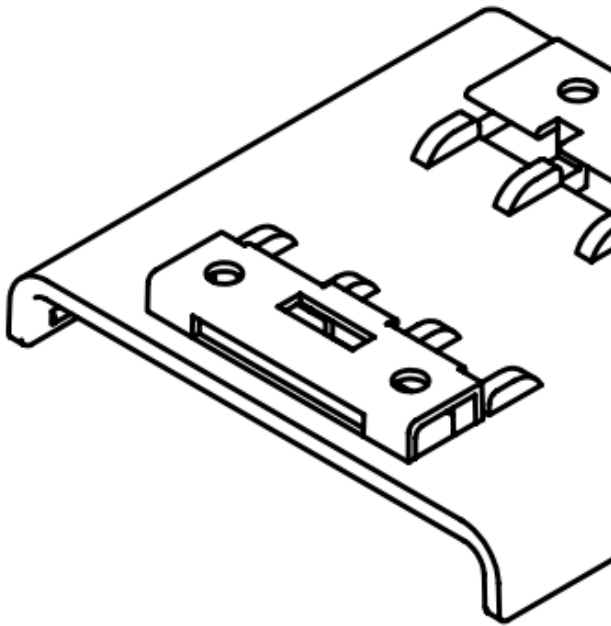
AR-727-CM
Instruction Manual

Contents

AR-727-CM Device Network Server

1 Product	2 Accessories

- RS-485 Serial-Ethernet Server is built-in RS-485 transmission interface that can connect RS485 controller to network communcation , without the needs for computer transfer.

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.
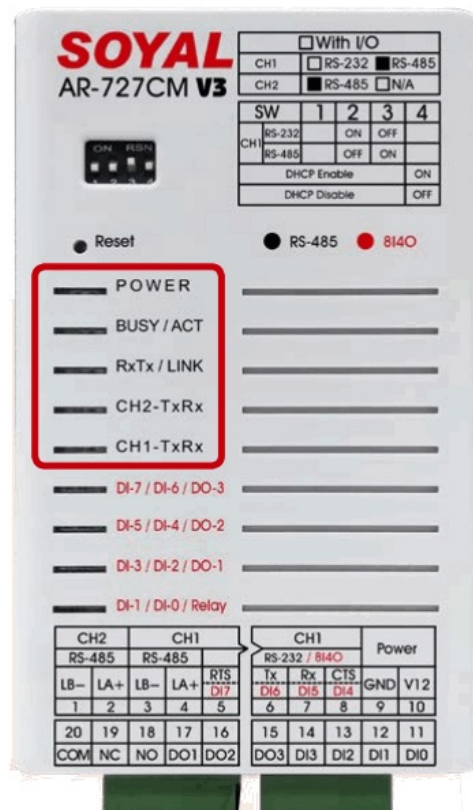
Specification

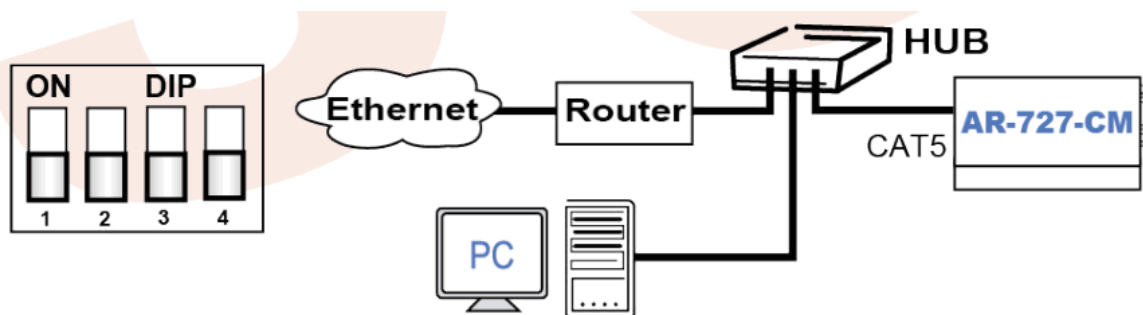|	
Interface	10/100 Mbps BaseT Ethernet <–> RS485 (By order: RS232,RS232+RS485) Auto detect
Baud Rate	4800 bps – 115200 bps
Protocol	ARP, IP,TCP Client,UDP, CMP, HTTP, DHCP, NetBIOS
Serial Buffer	1K each channel
LED Indicator	9 LEDs for Power, Communication
Watchdog Function	Yes
Active Distance	300m~1200m (RS485)
Surge Suppression	Power: 30 Volt, bi-directional avalanche breakdown device. RS485 6.5 Volt, bi-directionalavalanche breakdown device. 400W peak power dissipation. Clamping time < 1 picosecond(theoretical)
Fuses	Power PTC 150mA , RS485 PTC 30mA
Isolation	Optical 5 kV
Power Supply	9-24 VDC
Power Consumption	<2W
OS Supported	Windows 7/8/10, Win Server 2008/2012/2016
Network/Device setting	HTTP Web browser, UDP Updater change IP address

Indicator

The position of the LED indicator for input and output terminal is equivalent to the text description

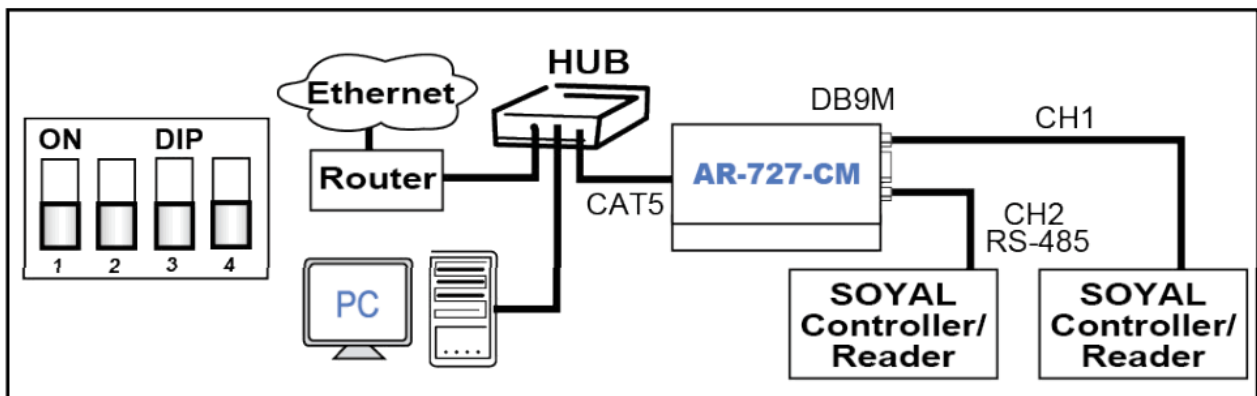|	
Power	Power Supply Indicator (Green Light)
BUSY	Watchdog Reset processing (Light Red then Flash)
ACT	Connect with PC by Software (Green Light)
RxTx	Ethernet Receive/ Transmit (Green/Red flash)
LINK	RJ45 network cable plug status (Green Light)
CH2 TxRx	RS485(Reader)Polling Status (Red/Green Flash)
CH1 TxRx	RS485 or RS232 (Reader) Polling Status (Red/Green Flash)

	With I/O	
CH1	☐ RS-232	■ RS-485
CH2	■ RS-485	☐ N/A

SW		1	2	3	4
CH1	RS-232		ON	OFF	
CH1	RS-485		OFF	ON	
DHCP Enable					ON
DHCP Disable					OFF

● Reset   ● RS-485   ● 8I4O

- POWER
- BUSY / ACT
- RxTx / LINK
- CH2-TxRx
- CH1-TxRx
- DI-7 / DI-6 / DO-3
- DI-5 / DI-4 / DO-2
- DI-3 / DI-2 / DO-1
- DI-1 / DI-0 / Relay

CH2		CH1			CH1			Power	
RS-485		RS-485			RS-232 / 8I4O				
LB–	LA+	LB–	LA+	RTS DI7	Tx DI6	Rx DI5	CTS DI4	GND	V12
1	2	3	4	5	6	7	8	9	10
20	19	18	17	16	15	14	13	12	11
COM	NC	NO	DO1	DO2	DO3	DI3	DI2	DI1	DI0

AR-727-CM (2 UART Ports): Connection and Configuration
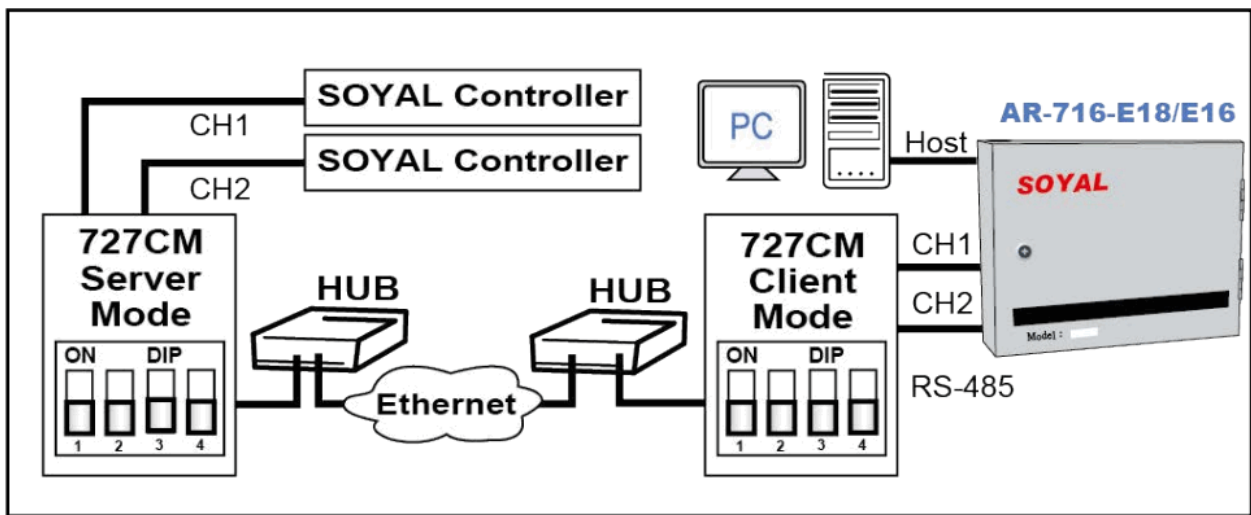
A. IP setting

B. Normal use

C. Remoe use (Server mode and client mode)

D. DIP Switch Settings
※ CH1 only can select either RS-485 or RS-232.
※ RS-232 is requested by order.

DIP Switch			2	3	4
Normal Run Mode and Networking Setup	RS-232		ON	OFF	
Normal Run Mode and Networking Setup	Two RS-485 Wires		OFF	ON	
DHCP Enable (Auto IP Address Configuration)					ON
DHCP Disable (Auto IP Address Configuration)					OFF
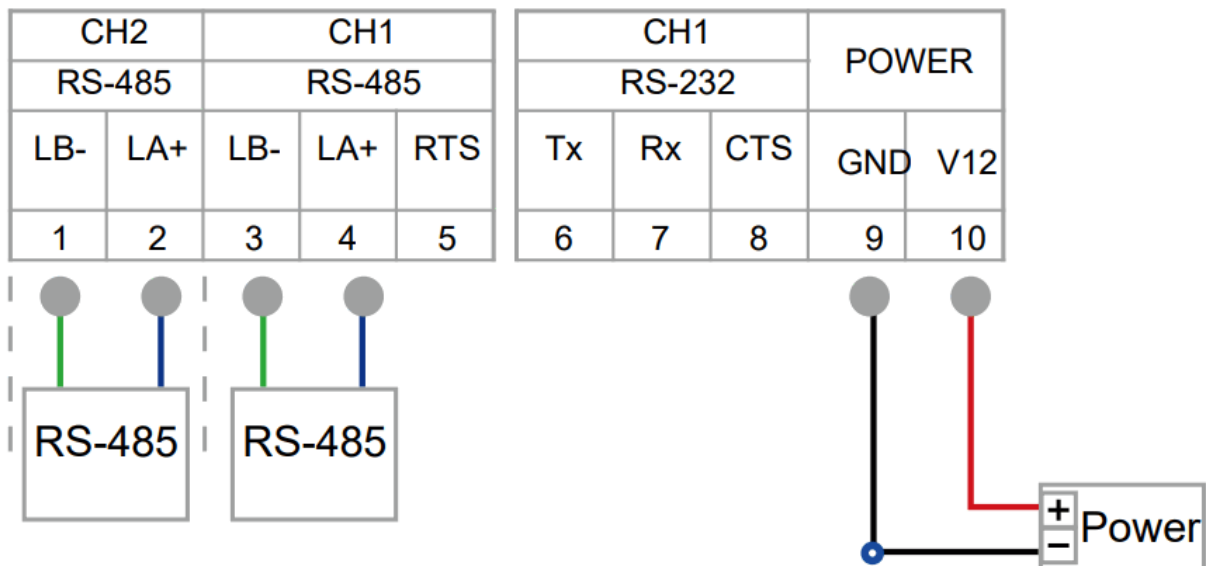
Web Console

Set up IP Address:

1. Connect the device to a computer, Then turn on your Web Browser and type "**http://192.168.1.127**" on IP address to start web console.
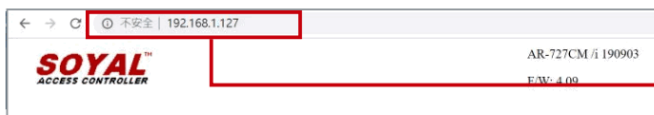
※http://192.168.1.127 is the factory default, if the IP address has been changed, the new IP address may be entered.

2. When you type the IP address, you will see the [Current State] page.
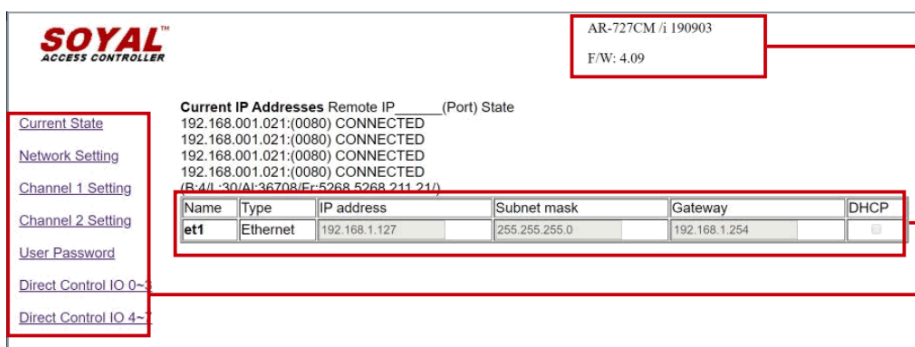
The version of ISP Firmware

Current IP address

Main Menu

3. Login Type "User name" & "Password" on the pop up login window.

※ Factory Default :

User name: SuperAdm

Password: 721568

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

4. Click on [Network Setting] on Main Menu to set up new IP address.
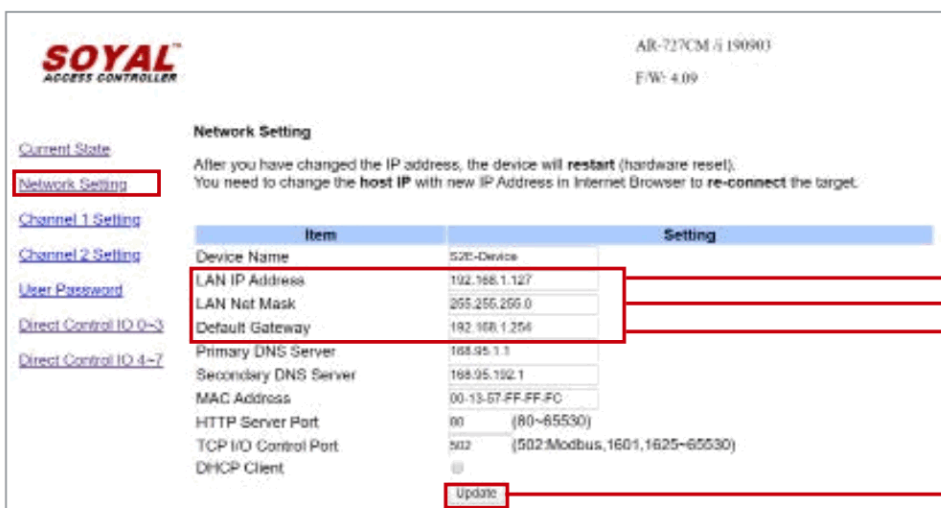
a.Type the new IP address
b.Type the new LAN Net Mask
c.Type the new Default Gateway

d.Click it to update

5. Click on [User Password] on Main Menu to change

Type the new Password.

6. Click on [Channel 1 Setting] or [Channel 2 Setting] on Main Menu to set the port.

- Set the [Operation Mode] at the [Server] or the [Client].
- At the [Server]: [Remote Port] need to be set [0].
- At the [Client]: [Remote Port] need to be set as the server port.
- At the [Server]: [Remote IP] need to be set [0.0.0.0].
- At the [Client]: [Remote IP] need to be set as the server IP address.
- [UART to NET minimum bytes]: Proposes to set more than 900.

More Detail: Software Manual – AR-727-CM HTTP Server

Update the ISP Firmware
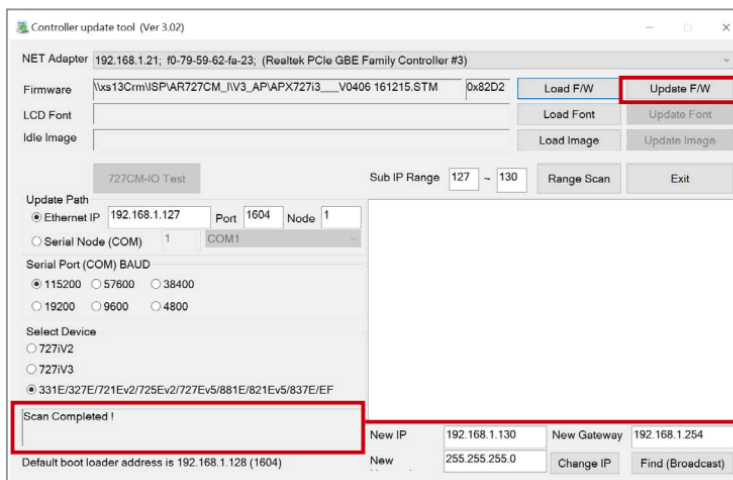
Way 1: Normal Ethernet Connection

Step 1: Execute the software [UdpUpdater.exe] that please login the SOYAL website to download

Step 2: Type IP Address

Step 3: Select Device [727iV3]

Step 4: 【Load F/W】open the documents that have the new ISP Firmware
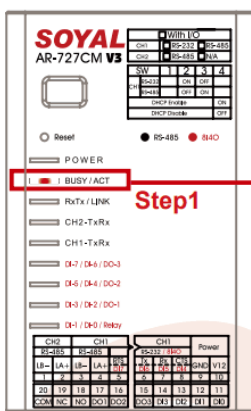
Step 5: Click the new ISP Firmware, for example 【APX727i3_V0409 8I8O190903.STM】and click【Open】

Step 6: Click 【Update F/W】to start the firmware update

Step 7: Done when the screen shows "Scan Completed". Click 【Exit】to finish.

Way 2 : Entering Boot Load Mode (When the 401-IO-0808R-U2 program does not work, you can use this method to re-download)


Step 1: Entering Boot Load Mode
Cut off the power supply--> pressing the "Reset" button for a hold and then repower at the same time until BUSY/ACT led turns ON and keep blinking.

Step 2: Execute UdpUpdater.exe that please login the SOYAL website to download

Step 3: Click on Range Scan to generate a set of IP address, double click to auto key-in this address to Ethernet IP box

Step 4: Load F/W open the documents that have the new ISP Firmware

Step 5: Click the new ISP Firmware, for example APX727i3_V0409 8I8O190903.STM and click Open
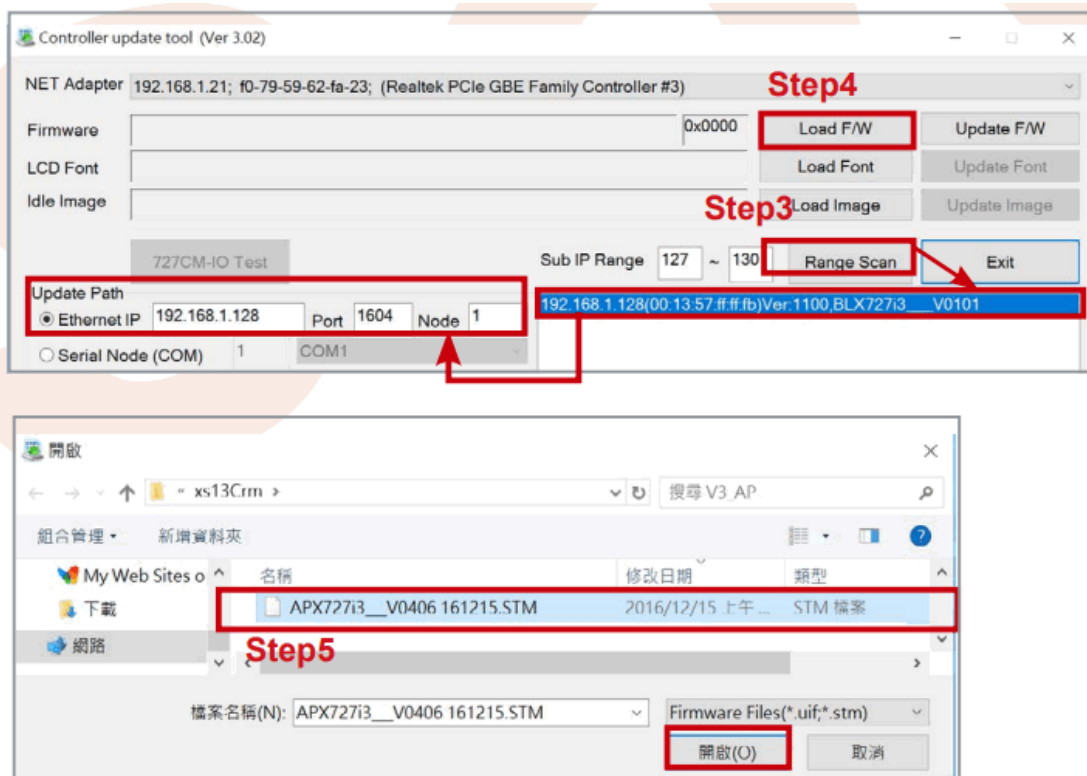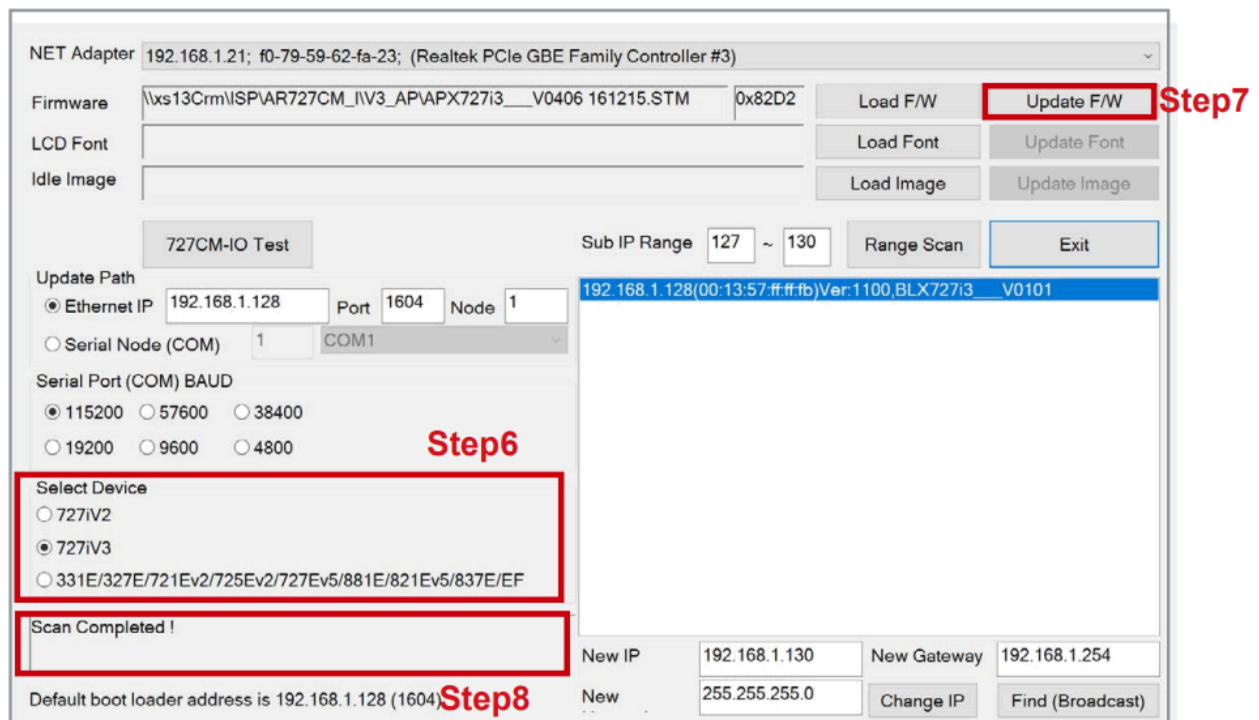
Step 6: Select Device 727iV3
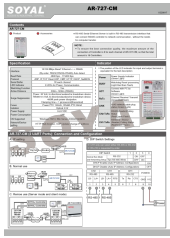Step 7: Click Update F/W to start the firmware update
Step 8: Done when the screen shows "Scan Completed".
Click Exit to finish.

V220817

Documents / Resources

SOYAL AR-727-CM Device Network Server [pdf] Instruction Manual
AR-727-CM Device Network Server, AR-727-CM, AR-727-CM Network Server, Device Network Server, Network Server, Device Server, Server