QUICK START FOR EX260-SEN1/2/3/4 Using RSLogix5000

POWER WIRING FOR SMC EX260-SEN*

EX260-SEN* Power Wiring in NOT the same as the EX500-GEN1 or EX250-SEN1.

Power supply connector layout

PWR: M12 4-pin plug, A-coded



No.	Designation	Description
1	SI24 V	+24 V for SI unit operation
2	SV24 V	+24 V for solenoid valve
3	S10 V	0 V for SI unit operation
4	SV0 V	0 V for solenoid valve

Typical Cordset color code (M12 female 4 pin A code standard key):

Brown => +24 (Node and Inputs) White => +24 (Valves) Blue => 0 (Node and Inputs) Black => 0 (Valves)

System Wiring:

■Wiring

Select the appropriate cables to mate with the connectors mounted on the SI unit.

Fieldbus interface connector layout

BUS OUT: M12 4-pin socket, D-coded



No.	Designation	Description
1	TD+	Transmit Data +
2	RD+	Receive Data +
3	TD-	Transmit Data -
4	RD-	Receive Data -

BUS IN: M12 4-pin socket, D-coded



No.	Designation	Description
1	TD+	Transmit Data +
2	RD+	Receive Data +
3	TD-	Transmit Data -
4	RD-	Receive Data -

Connect the "BUS IN" connector to the upstream device (PLC etc.) and connect the "BUS OUT" connector to the downstream device.



SETTING UP IP ADDRESS FOR SMC EX260-SEN*

OPTION 1: Through Switches on Unit:

- Remove power.
- Set Dip Switch 1 to **OFF** for 192.168.**0**.X. Set Dip Switch 1 to **ON** for 192.168.**1**.X.
- Set Rotary Switches to select 192.168.X.1 to 192.168.X.254.
- Apply Power.



HOLD/CLEAR setting

HOLD/CLEAR	No ₁ 2	Description
HOLD	ON	Hold the last state before communication error.
CLEAR	OFF	Clear all outputs,

Option 2: Using Rockwell BOOTP/DHCP Server Utility

USING ROCKWELL BOOTP/DHCP SERVER UTILITY WITH SMC EX260-SEN*

- To Clear any existing address, Remove Power
- Set Dip Switch 1 to OFF and Rotary Switches to 255.
- Apply power for 15 seconds, then remove power.
- Set Rotary Switches to **000**.
- Start Rockwell BOOTP/DHCP software and attach to EX260 via Ethernet port.
- With Software running and cable attached, apply power to EX260. You must have the **BOOTP/DHCP software ready and the Ethernet cable connected, then cycle power** to the EX260. The EX260's MAC address will start to show up on the screen .

You should see following screen:

5	BOOTP/DHC	P Server	2.3				
File	Tools Help						
⊢ Re	equest History-						
	Clear History	Add to	Relation List				
	(hr:min:sec)	Туре	Ethernet Addres	ss (MAC)	IP Address	Hostname	
	13:13:30	DHCP	00:30:11:02:63:	22			
	13:13:26	DHCP	00:30:11:02:63:	22			
	13:13:23	DHCP	00:30:11:02:63:	22			
	13:13:21 13:13:12	DHCP	00:30:11:02:63:	22			
	13:13:08	DHCP	00:30:11:02:63:	22			
	elation List						
	New Delete	e Enabl	e BOOTP Enat	le DHCP Dis	sable BOOTP/DHCP		
	Ethernet Addre	ss (MAC)	Туре	IP Address	Hostname	Description	
St	tatus						Entries
U	nable to service	DHCP rec	quest from 00:30:1	11:02:63:22.			0 of 256

Double Click on MAC address and IP window will pop up.

55 B	BOOTP/DHC	9 Server	2.3			
: File	Tools Help equest History-					
	Clear History	Add to	Relation List	IP Address	Hostname	
	13:18:19 13:10:15		00:30:11:02:63:22	II Address	riostilaine	
1	13:18:13 13:18:13 13:18:12	DHCP	New Entry		×	
	13:18:10 13:18:01	DHCP	Ethernet Address (MAC):	00:30:11:02:63:22		
	13:17:57	DHCP	IP Address:		. 0	~
Re	elation List	. Exchi	Hostname:			
			Description:	I		
		oo (mino)			ancel	
Sb	ahue					
Un	hable to service	DHCP rec	quest from 00:30:11:02:63:22	2		0 of 256

Fill in desired IP address and hit OK.

Address will appear in Relation List.

55	BOOTP/DHC	P Server	r 2.3			_ 🗆 🛛
File	Tools Help					
⊏B	eauest History-					
	Clear History	Add to	o Relation List			
l í						
	(hr:min:sec)	Туре	Ethernet Address (MAC)	IP Address	Hostname	<u>^</u>
	13:18:19	DHCP	00:30:11:02:63:22			
	13:18:15	DHCP	00:30:11:02:63:22			
	13:18:13	DHCP	00:30:11:02:63:22			
	13:18:12	DHCP	00:30:11:02:63:22			
	13:18:01	DHCP	00:30:11:02:63:22			
	13:17:57	DHCP	00:30:11:02:63:22			▼
	101355	DUIOD				
⊢B	elation List					
	New Delete	Enabl	BOOTE Enable DHCE			
		Enabi		1000000011101101		
	Ethernet Addre	ss (MAC)	Type IP Address	Hostname	Description	
	00:30:11:02:63	:22	192.168.0.5	5		
_S	tatus					Entries
U	nable to service	DHCP re	quest from 00:30:11:02:63:22.			1 of 256

Click on that IP Address and select "Disable BOOTP/DHCP" to retain that IP address during the next power up. Try to hit the Disable BOOTP/DHCP within 5 seconds of setting address.

5	BOOTP	/DHCI	P Servei	2.3					_ 🗆 🗙
File	Tools	Help							
	lequest H	History –			4				
	Clear I	History	Add t	o Relation L	ist				
	(hr:min:	sec)	Туре	Ethernet /	Address (MAC)	IP Address	Hostname		
	13:33:2	6 6	DHCP	00:30:11:	02:63:22	192.168.0.55			
	13:33:2	5	DHCP	00:30:11:	02:63:22				
FR	lelation L	.ist —							
	New	Delete	e Enabl	e BOOTP	Enable DHCP Dis	able BOOTP/DHCP			
	Etherne	et Addre	ess (MAC)	Тур	e IP Address	Hostneme	Description		
	00:30:1	1:02:63	:22	DHC	P 192.168.0.55	Force selected de	vice to retain (configuration in	memory at next p
S	tatus								Entries
	Disable D	HCP] (Command	successful					1 of 256

If the Disable BOOTP/DHCP Command is NOT successful (see message in lower left hand corner):

- Cycle Power to EX260
- Wait for the **MAC address along with the IP Address** to appear in the REQUEST HISTORY list
- Select the device in the RELATION LIST and click DISABLE BOOTP/DHCP.
- You should see Command Successful
- Use Dos prompt (Run CMD) to ping device.

Once Disable Command is successful, Setup is complete.

HARDWARE CONFIGURATION IN RSLOGIX

The EX260 can be set up manually as a GENERIC MODULE or you can use SMC's ADD ON PROFILE.

This is what is required for manual configuration:

When you go to Add a New Module, you select ETHERNET_MODULE Generic Ethernet Module.

Example:

- The Module Properties screen will be displayed. Perform the various settings.
- (1) Name: Input a unit name of your choice.
- (2) Comm Format: Select the data format of the Connection Parameters.
- (3) IP Address: Input the IP Address of the SI unit.



Configuration



To use SMC's ADD ON PROFILE, click on the "Add-on Profile" link under the Remarks column to download the file from the following web page:

http://www.smcusa.com/top-navigation/products/instruction-manuals/fieldbus-and-serialtransmission-system.aspx

After you have installed the AOP, you will find SMC as a choice under Vendors when you go to Add a New Module.

RSLogix5000 Version 19 or lower.

Module	Description
Allen-Bradley Cognex Corpor Endress+Hause FANUC FANUC Robotic Mettler-Toledo Parker Hannifir ProSoft Technol SMC Corporatio SMC Corporatio EX250-SENI EX260-SENI EX260-SENI EX260-SENI	ation r S Inc. I Corp. Nogy on Ethernet Valve Manifold SIU Ethernet Valve Manifold SIU Ethernet Valve Manifold SIU Ethernet Valve Manifold SIU
- EX260-SEN4 EX260-GEN2	Ethernet Valve Manifold SIU Ethernet Gateway Find Add Favorite

RSLogix5000 Version 20 or higher.

- 퓲 Ethernet		Volites				
	Enter Search Text for Modul	le Type	Clear Filters		Hide Filte	rs 🛠
	Module	Type Category Filters		Module Type Vendo	or Filters	
	Image: CIP Motion Drive Image: Communication Image: Communications Adapt Image: Controller Image: Controller Image: Digital	ter	 Park Prose Relia ✓ SMC ▼ Softin 	er Hannifin Corporation oft Technology nce Electric Corporation 19		
		Description		Vendor	Category	e
	EX250-SEN1 EX260-SEN1 EX260-SEN2 EX260-SEN3 EX260-SEN4	Ethemet Valve Manifold S Ethemet Valve Manifold S Ethemet Valve Manifold S Ethemet Valve Manifold S Ethemet Valve Manifold S	สม สม สม สม สม	SMC Corporation SMC Corporation SMC Corporation SMC Corporation SMC Corporation	Communication Communication Communication Communication Communication	
	EX500-GEN1	Ethernet Gateway		SMC Corporation	Communication	
			m		Add to Ea	*

Once you select EX260, you need to fill in the IP address, the tag name and click on the "Change" button to select the major revision. The data size may also be changed here (SINT, INT or DINT).

Controller Organizer 👻 🕂 🗙	Adapted Description ENIOT (EVOGO SENII 1.1)	
Controller Organizer	Module Properties: EN2T (EX260-SEN1 1.1) General [®] Connection Module Info Internet Protocol Vendor Type: EX260-SEN1 Ethemet Valve Manifold SIU Vendor: SMC Corporation Parent: EN2T Name: EX260_SEN1 Description: Module Definition Series: A Change	Ethemet Address Private Network: 192.168.1.
	Module Definition Series: A Change Revision: 1,1 Electronic Keying: Compatible Module Connection: DATA Data Format: Integer	Hoat Name:
	Status: Offline	OK Cancel Apply Help

LED DISPLAY:





LED	LED Status	Description
	OFF	The SI unit operating voltage is not supplied or the IP address is not set.
	Green ON	EtherNet/IP [™] communications established.
NS	Green flashing	EtherNet/IP [™] communications not established.
	Red flashing	EtherNet/IP [™] communications time out.
	Red ON	IP address duplicated.
	OFF OFF	The SI unit operating voltage is not supplied.
	Green ON	Operating normally-
MS	Green flashing	Setting error.
	Red flashing	Recoverable error.
	Red ON	Unrecoverable error.
	OFF	BUS IN side: No Link, No Activity
L/A1	Green ON	BUS IN side: Link, No Activity
	Green flashing	BUS IN side: Link, Activity
	OFF	BUS OUT side: No Link, No Activity
L/A2	Green ON	BUS OUT side: Link, No Activity
	Green flashing	BUS OUT side: Link, Activity
	Green ON	Load voltage for the valve is supplied
PWR(V)	OFF OFF	Load voltage for the value is not supplied or is outside the tolerance range (19 \vee or less)

The complete manual may be downlowded from the following web page.

http://www.smcusa.com/top-navigation/products/instruction-manuals/fieldbus-andserial-transmission-system.aspx

For Technical Assistance, please use the phone number or email listed below.

SMC North America Support: 1-800-762-7621 Or Applications Engineering at <u>aeg@smcusa.com</u>