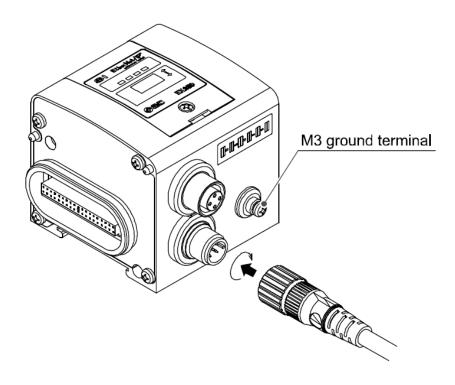
### QUICK START FOR EX250-SEN1 Using RSLogix5000

# POWER WIRING FOR SMC EX250-SEN1

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

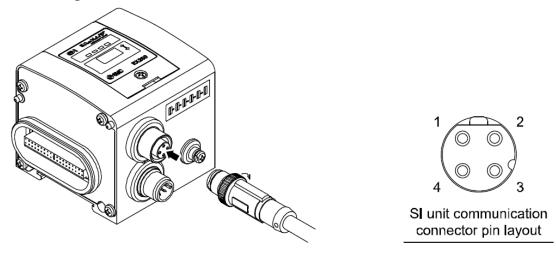


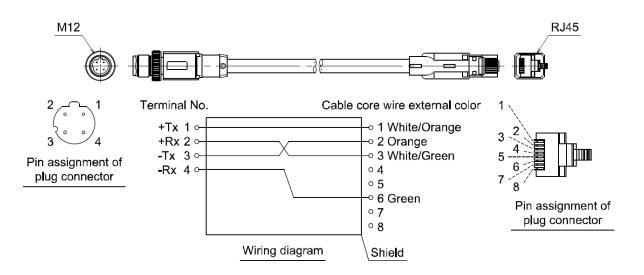
1 0 2	Pin No.	Cable color: Signal name
$\left( \bigcirc \bigcirc \right)$	1       Brown: 24 VDC +10%/-5% (for solenoid valves/output)         2       White: 0 V (for solenoid valves/output)         3       Blue: 24 VDC ±10% (for input and control)         4       Black: 0 V (for input and control)	
	2	White: 0 V (for solenoid valves/output)
4 3	3	Blue: 24 VDC $\pm$ 10% (for input and control)
	4	Black: 0 V (for input and control)
Socket connector pin layout	5	Gray: Not connected

Typical Cordset color code (M12 female 5 pin A code standard key):

Brown => +24 (Valves) White => 0 (Valves) Blue => +24 (Node and Inputs) Black => 0 (Node and Inputs) Grey => Ground (either ground here or ground on M3 lug. Not both)

# Ethernet Wiring:

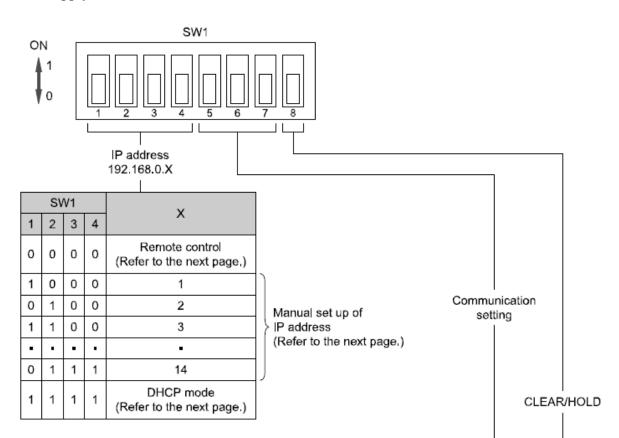




### SETTING UP IP ADDRESS FOR SMC EX250-SEN1

**OPTION 1: Through Switches on Unit:** 

- Remove power.
- Set Dip Switch 1 to 4 to select 192.168.0.X.
- X can be 1 to 14
- Apply Power.



,	SW1 Item		ltom	Contents
5	6	7	item	Contents
0	Ι	-	Communication	AUTO: The communication setting is automatically selected.
1	-	-	Communication setting	MANUAL: The communication setting follows the setting result by the switch No. 6 and No. 7.
1	0	-	Communication	Communicated at 10 Mbps
1	1	-	speed	Communicated at 100 Mbps
1	-	0	Communication	Communicated at half duplex
1	-	1	method	Communicated at full duplex

SW1	Contents
8	Contents
0	The output signal is cleared when the communication error occurs.
1	The output signal is held when the communication error occurs.

# Option 2: Using Rockwell BOOTP/DHCP Server Utility

### USING ROCKWELL BOOTP/DHCP SERVER UTILITY WITH SMC EX250-SEN1

- Remove power and set Dip Switch 1-4 to ON.
- Apply power for 15 seconds, then remove power.
- Set Dip Switch 1-4 to OFF.
- Start Rockwell BOOTP/DHCP software and attach to EX250 via Ethernet port.
- With Software running and cable attached, apply power to EX250. You must have the software ready and the Ethernet cable connected, then cycle power to the EX250. The EX250's MAC address will start to show up on the screen but only for a few seconds so you must be ready to catch it.

You should see following screen:

BOOTP/DHCP Server 2.	3			
File Tools Help				
Request History				
Clear History Add to Re	elation List			
(hr:min:sec) Type Et	thernet Address (MAC)	IP Address	Hostname	
	D:30:11:02:63:22 D:30:11:02:63:22			
	D:30:11:02:63:22			
	0:30:11:02:63:22			
	D:30:11:02:63:22 D:30:11:02:63:22			
13:13:08 DHCP 00	0:30:11:02:63:22			
Relation List				
New Delete Enable B0	DOTP Enable DHCP Dis	able BOOTP/DHCP		
Ethernet Address (MAC)	Type IP Address	Hostname	Description	
Status				Entries
Unable to service DHCP reques	st from 00:30:11:02:63:22.			0 of 256

Note: If an IP Address has already been set via BOOTP Server, you may select it from the Relation List and "Enable BOOTP" to set a different address.

Clear History         Add to           (httmin/sec)         Type           13:18:19         DHCP           13:18:15         DHCP           13:18:12         DHCP           13:18:13         DHCP           13:18:10         DHCP           13:18:01         DHCP           13:18:01         DHCP           13:17:57         DHCP           18:01         DHCP           19:17:57         DHCP           19:17	Ethernet Address (MAC) 00:30:11:02:63:22 New Entry Ethernet Address (MAC): IP Address: Hostname: Description:	IP Address		
---	---	------------	--	--

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

Fill in desired IP address and hit OK.

# Address will appear in Relation List.

😹 BOOT	TP/DHCP	Server	2.3				_ 🗆 🗙
File Too	ls Help						
- Beques	t History —						 
· · ·	ar History	Add to I	Relation List				
	arristory	Add to I	Telation List				 
(hr:mi	in:sec) T	Гуре	Ethernet Addre	ss (MAC)	IP Address	Hostname	<u>^</u>
13:18			00:30:11:02:63				
13:18			00:30:11:02:63				
13:18 13:18			00:30:11:02:63 00:30:11:02:63				≡
13:18			00:30:11:02:63				
13:18			00:30:11:02:63				
13:17		HCP	00:30:11:02:63				~
Relation	n List						 
New	Delete	Enable	BOOTP Ena	ble DHCP Di	sable BOOTP/DHCP		
Ether	net Address	(MAC)	Туре	IP Address	Hostname	Description	 
	:11:02:63:2		1300	192.168.0.55	riostidine	Description	
00.00		-		102.100.0.00			
Status-			uest from 00:30:				 Entries

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/DHC	P Server	2.3					
Fil	e Tools Help							
	Request History-	1	1					
	Clear History	Add to	o Relation List					
	(hr:min:sec)	Туре	Ethernet Address (MAC)		IP Address	Hostname		
	13:33:26	DHCP DHCP	00:30:11:02:63:22 00:30:11:02:63:22		192.168.0.55			
	13:33:25	DHCP	00:30:11:02:63:22					
	1							
	Relation List	1	1					
	New Delete	e Enabl	e BOOTP Enable DHCP	Dis	able BOOTP/DHCP			
	Ethernet Addre		Type IP Addres		Force selected de	Description	onfiguration in	memory at next r
	00:30:11:02:63	:22	DHCP 192.168.0	0.55	Torce selected de	vice to retain t	ornigaradorrin	memory achieve,
	]							
	Status Disable DHCP] (	`ommand «	ancessful					Entries 1 of 256
	produce ner je	sonnana (	succession	_				101200

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

- Cycle Power to EX250
- 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.

To clear an existing IP Address, turn off power to EX250-SEN1 and set Dip Switch 1-4 to ON. Then power up EX250. Power down EX250 and set Dip Switch 1-4 to OFF and start procedure from beginning.

#### HARDWARE CONFIGURATION IN RSLOGIX

The EX250 can be set up manually as a GENERIC MODULE or you can use our ADD ON PROFILE.

This is what is required for manual configuration:

#### Connection Parameter

Assembly Instance values:

Description	Dec	imal
Comm Format	"Data-INT"	"Data-SINT"
Input	100	100
Output	150	150
Configuration	1	1

#### Size:

Description	Si	ze
Comm Format	"Data-INT"	"Data-SINT"
Input	3 words	6 bytes
Output	2 words	4 bytes
Configuration	0 word	0 byte

#### When you go to Add a New Module, you select ETHERNET\_MODULE Generic Ethernet Module

Select Data-INT or Data-SINT and fill in the Assembly Instance and Size as shown above.

Example:

E- Controller Enet_Cnet_Test_Future	Module Properties - Local_ENB1 (ETHERNET-MODULE 1.1)
	General Connection Module Info
Controller Fault Handler	Type: ETHERNET-MODULE Generic Ethernet Module
E- Tasks	Vendor: Allen-Bradley
😑 🖓 Main Task	Parent: Local_ENB1
😟 🕞 MainProgram	Name: EX250_SEN1_1 Connection Parameters
E- B Motion Groups	Description: Instance: Size:
Ungrouped Axes	[nput: 100 6 🚔 (8-bit)
E- 🔄 Data Types	Output: 150 4 - (8-bit)
User-Defined	Comm Eormat: Data - SINT Configuration: 1 0 (8-bit)
⊕- G Strings ⊕- G Predefined	Address / Host Name
-      -      Module-Defined	
E- ⊕ I/O Configuration E- ₿ [1] 1756-ENBT/A Local_ENB1	C Host Name: Status Output
ETHERNET-MODULE EX250_SEN1_1	
ETHERNET-MODULE EX250_SEN1_2     ETHERNET-MODULE EX500_GEN1_3	Status: Offine OK Cancel Apply Help

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.

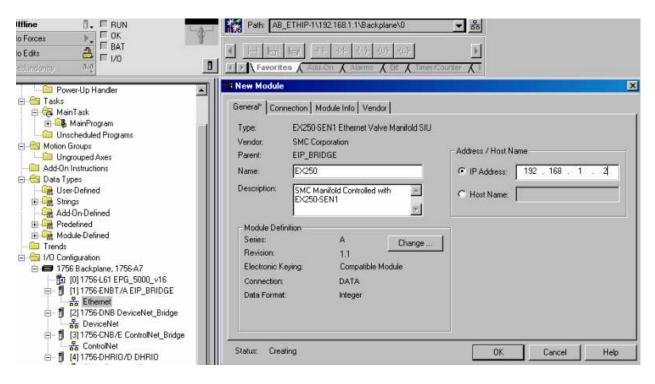
RSLogix5000 Version 19 or lower.

☐ [1] 1756-EN2T EN2T	Module	Description
	Allen-Bradley	
	FANUC	
	FANUC Robotics	
	Parker Hannifin Corp.	
	SMC Corporation EX250-SEN1	Ethernet Valve Manifold SIU
	EX260-SEN1 EX260-SEN2	Ethernet Valve Manifold SIU Ethernet Valve Manifold SIU
	EX260-SEN3	Ethernet Valve Manifold SIU Ethernet Valve Manifold SIU
	EX500-GEN1	Ethernet Gateway
		Find Add Eav
	By Category By Ve	endor Favorites

RSLogix5000 Version 20 or higher.

॑ 웹 [1] 1756-EN2T EN2T	Catalog Module Discovery Fa	ivorites					
	Enter Search Text for Modu	le Type	ar Filter	5		Hide Filte	rs 🋠
	Module	Type Category Filters	•		Module Type Vendo	r Filters	1
	CIP Motion Drive     Communication     Communications Adap     Controller     Digital	ter		Proso Reliar	r Hannifin Corporation ft Technology ice Electric Corporation g		
	✓ Catalog Number	Description			Vendor	Category	ć
	EX250-SEN1 EX260-SEN1 EX260-SEN2 EX260-SEN3 EX260-SEN4 EX260-SEN4 EX500-GEN1	Ethemet Valve Manifold SIU Ethemet Gateway			SMC Corporation SMC Corporation SMC Corporation SMC Corporation SMC Corporation SMC Corporation	Communication Communication Communication Communication Communication Communication	
	<ul> <li>13 of 330 Module Types Fo</li> </ul>	II und	li.			Add to Fa	• vorites

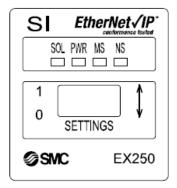
Once you select EX250, you only need to fill in the IP address and the tag name.



#### LED DISPLAY:

### LED Indication and Settings

LED indication



Display	Contents	
SOL	OFF	Insufficient power supply for solenoids
	Green light ON	Normal power supply for solenoids
PWR	OFF	Insufficient power supply for input and control
	Green light ON	Normal power supply for input and control
MS	OFF	The power supply for control is OFF
	Green light ON	Operating normally
	Green flashes	Setting error (Device has not been configured)
	Red flashes	Recoverable internal error
	Red light ON	Unrecoverable internal error
NS	OFF	The power supply for control is OFF or IP address not set
	Green flashes	EtherNet/IP <sup>™</sup> -level communication not established
	Green light ON	Multiple EtherNet/IP <sup>™</sup> -level communications established
	Red flashes	Multiple EtherNet/IP <sup>™</sup> -level communications time out
	Red light ON	IP address duplicated

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

<u>http://www.smcusa.com/top-navigation/products/instruction-manuals/fieldbus-and-serial-transmission-system.aspx</u>

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>