

Checking communications between customer PC and PLC

(This procedure is current as of 5/11/11)

To complete the installation of RSLogix, the ability of the PC to communicate with a PLC must be verified. Connect both the serial (1747-CP3) and Ethernet cables to laptop and PLC.

For Ethernet connections set the IP address for the PC to something like 192.168.100.254 (subnet mask 255.255.255.0). **Be sure to set the PC's IP address back to dynamic when you are all done testing**.

In Windows 7 Pro, this is how to do it:

> Open the Control Panel and click on 'View network status and tasks'





> Click on 'Local Area Connection'







> Click on 'Properties'

Local Area Connection Status	×
General	
Connection	
IPv4 Connectivity:	Internet
IPv6 Connectivity:	No Internet access
Media State:	Enabled
Duration:	2 days 05:24:28
Speed:	1.0 Gbps
Details	
Activity	
Sent —	Received
Bytes: 1,032,373,664	1,471,545,119
Properties Disable	Diagnose
	Close



> Click on 'Internet Protocol Version 4 (TCP/IPv4) and click on 'Properties'





> Click on 'Use the following IP address' and set it as shown (245-254), then click 'OK':

Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
🔘 🖸 Datain an IP address automatically
• Use the following IP address:
IP address: 192 . 168 . 100 . 254
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
 Obtain DNS server address automatically
• Us <u>e</u> the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit Advanced
OK Cancel

Open RSLinx Classic and click on the 'Configure Drivers' button or click on the 'Communications' pull-down and then on 'Configure Drivers...'

RSLinx Classic Gateway - [RSWho - 1]	P⊂ Security Window Help	_ D ×
✓ Autobrowse Refresh ▲ Mot Br →	owsing	
For Help, press F1		NUM 06/01/10 12:48 PM //





Select 'Available Driver Types:'

figure Drivers		3
Available Driver Types:	Add New	<u>C</u> lose
	<u>Annuew</u>	<u>H</u> elp
Configured Drivers:		
Name and Description	Status	□
AB_DF1-1 DH485 Sta: 0 COM1: RUNNING	Running	Configure.
		Startup
		-
		<u>S</u> tart
		Stop
		Delete
1		

For serial, select RS-232 DF1 devices and click on the 'Add New...' button

RS-232 DF1 devices	Add New	<u>C</u> lose
RS-232 DF1 devices Ethernet devices Ethernet/IP Driver 1784-KT /KTX(D)/PCMK for DH+/DH-485 devices 1784-KTC(X) for ControlNet devices DF1 Polling Master Driver 1784-PCC for ControlNet devices 1784-PCC(S) for ControlNet devices 1784-PCC(S) for ControlNet devices 1784-PCC(S) for ControlNet devices 1784-PCC S) for ControlNet devices 1784-PCC S) for ControlNet devices 1784-PCC S) for DH+ devices S-S SD/SD2 for DH+ devices Virtual Backplane (SoftLogix58xx) DeviceNet Drivers (1784-PCD/PCIDS,1770-KFD,SDNPT drivers) PLC-5 (DH+) Emulator driver SOftLogix5 driver Remote Devices via Linx Gateway	Status	<u>H</u> elp Configure. Startup <u>S</u> tart Stop <u>D</u> elete

Click 'OK'	
Add New RSLinx Classic Driver	×
Choose a name for the new driver. (15 characters maximum)	OK
AB_DF1-1	Cancel



Click 'Auto-Configure'.

If the cable is connected, you'll see this:

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Configure R5-232 DF1 Devices	Configure R5-232 DF1 Devices
Device Name: AB_DF1-1	Device Name: AB_0F1-1
Comm Port: CDM1 Device: PLC-CH0	Comm Port: COM1 Device: SLC-CH0/Micro/PanelView
Baud Rate: 19200 💌 Station Number: 🔟 (Octal)	Baud Rate: 19200 Tation Number: 00 Decimal)
Parity: None 💌 Error Checking: BCC 💌	Parity: None Error Checking: BCC
Sop Bits: 1 Protocol: Full Duplex 💌	Stop Bits: 1 Protocol: Full Duplex 💌
Auto-Configure	Auto Configure
Use Modem Dialer Configure Dialer	Use Modem Dialer Configure Dialer
OK Cancel <u>D</u> elete <u>H</u> elp	OK Cancel <u>D</u> elete <u>H</u> elp

For Ethernet, select 'Ethernet devices' and click on the 'Add New...' button

Configure Drivers		<u>? ×</u>
Available Driver Types: BS-232.DE1 devices Ethemet devices Ethemet/IP Driver 1784-KT/KTX(D)/PKTX(D)/PCMK for DH+/DH-485 devices 1784-RCC for ControlNet devices DF1 Polling Master Driver 1784-PCC for ControlNet devices 1784-PCC for ControlNet devices 1784-PCC / AIC+ Driver DF1 Slave Driver S-S SD/SD2 for DH+ devices Virtual Backplane (SoftLogix58xx) DeviceNet Drivers (1784-PCD/PCIDS,1770-KFD,SDNPT drivers) PLC-5 (DH+) Emulator driver SLC 500 (DH485) Emulator driver SoftLogix5 driver Remote Devices via Linx Gateway	Add New	<u>L</u> lose <u>H</u> elp Configure Startup <u>Start</u> Stop <u>D</u> elete

Click 'OK'	
Add New RSLinx Classic Driver	×
Choose a name for the new driver. (15 characters maximum)	OK I
AB_ETH-1	Cancel





Enter the appropriate IP address (see note below)

	ping	/	
Station	Host Name		Add <u>N</u> ew
0	192.168.100.103 📕		
63	Driver		<u>D</u> elete
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If there is already a program in the PLC and you don't know the IP address, reconnect the serial cable.

- ➤ Go on-line
- > Double-click "Channel Configuration"
- > Click the "Chan. 1-System" tab
- > Read the IP address for the current program.
- > The address *should* be one of the following for SLC devices:

CPM	192.168.100.102
MBS	192.168.100.103
CURING	192.168.100.104
PHS	192.168.100.105
LOCAR	192.168.100.106
CUBING	192,168,100,107



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vailable Driver Types:		Close
Ethernet devices	✓ <u>A</u> dd New	
		<u>H</u> elp
onfigured Drivers:		
Name and Description	Status	
AB_DF1-1 DH485 Sta: 0 COM1: RUNNING	Bunning	Configure
AB_ETH-1 A-B Ethernet RUNNING	Running	
		Star <u>t</u> up.
		Start
		Stop
		Dalata

Minimize RSLinx

Open RSLogix and click on 'Communications'. Next, click on 'Who Active Go Online'



👸 RSLogix 5000			
<u>File E</u> dit <u>V</u> iew <u>S</u> earch <u>L</u> ogic <u>C</u>	ommunications <u>T</u> ools <u>W</u> indow <u>F</u>	<u>H</u> elp	
	n a	- 638 F V (RQ
No Controller		th: <none></none>	
No Edits			×
Redundancy But		Favorites 🖌 Alarms 👗 Bit 👗 Timer/Counter 🗍	Input/Output
Add Branch Level			

The following dialog box appears:





Click on the '+' to the left of either AB_DF1-1, DH-485 or AB_ETH-1, Ethernet. (Not shown here, but you will see the associated device(s) in the right side of a split window.) A RED X indicates no communication. A question mark indicates an unknown device. Select the desired device and click 'Go Online'. It might take a couple of minutes. If you have comms, you will see the program on the PLC and a green bar in the upper left corner.

It is a good idea to disconnect, shutdown, reboot, and reconnect to make sure that everything works again.