
SELECTRONIX, INC.
WOODINVILLE, WA

SUPERSTEP SERIES 4000
SEQUENCING STEP
CONTROLLERS

INSTALLATION & OPERATING
TECH NOTE 201

BACnet MS/TP Converter Wiring and Configuration
for Selectronix Building Management Interface

Introduction

This addendum describes how to wire and configure the SLC4081 or SLC4082 BACnet I/P to BACnet MS/TP converter. This device converts the BACnet I/P information from the SLC4075-x, Touchscreen Gateway (TSGW) to BACnet MS/TP, an RS-485 protocol for the Selectronix Building Management Interface. A Bill of Materials and schematic to support the installation are included.

1 Bill of Materials

Part Number	Description	Remarks
SLC4081	BACnet I/P to MS/TP converter, pre-programmed with Selectronix data points	
SLC4082	BACnet I/P to MS/TP converter, pre-programmed with Selectronix data points	Less expensive equivalent to SLC4081
SLC4083	Transformer, 120/24 V ac, Chassis mount, ¼” quick disconnect terminals	For use with either SLC4081 or SLC4082 SLC4076, 24V dc is optional power
SLC4076 (optional)	Power Supply, 24V dc, DIN rail mount	Compatible with SLC4081 or SLC4082 For SLC4081 or SLC4082 , a 24 V ac transformer may be used.
	DIN Rail to mount SLC4076	
SLC4020-x	Cable, to connect SLC4075, Touchscreen Gateway (TSGW) to SLC4081 BACnet converter	-x is required length from TSGW to SLC4081. Standard lengths are 1, 2, 3, 6, 10, 20, 35 feet.

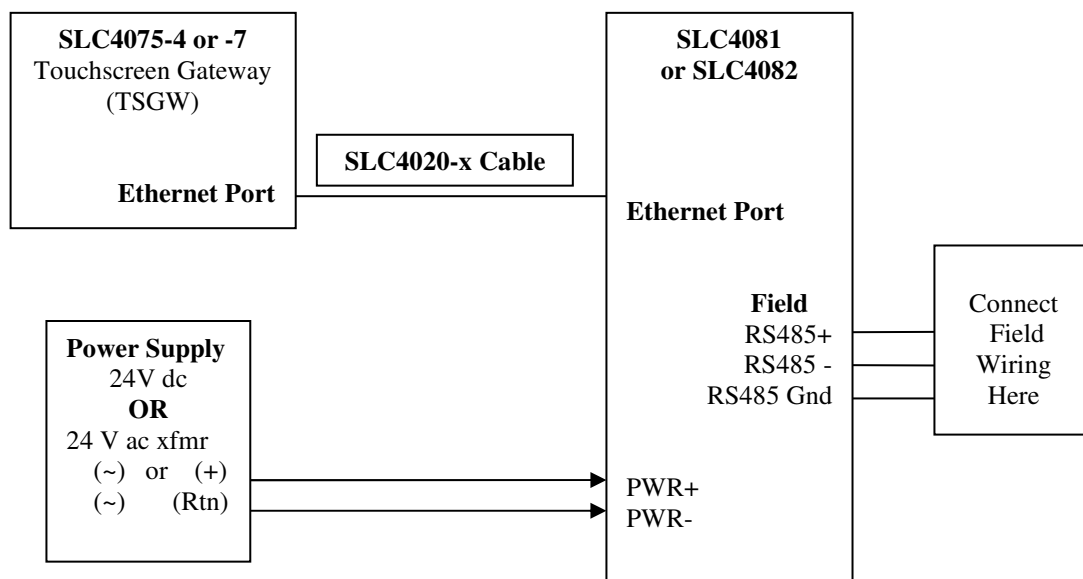


Figure 1 BACnet I/P to BACnet MS/TP Converter Wiring Diagram

2 SLC4081 ProtoNode Customer Configuration Instructions

Equipment Required:

1. Laptop PC configured with static IP address of 192.168.0.102
2. Power supply, 24V dc

Procedure:

1. Connect 24V power to the ProtoNode
2. Connect the laptop to the ProtoNode using a straight-through cable.
3. Using a browser, enter 192.168.0.103 and see the Sierra Monitor screen
 - a. Locate the configuration file sent from Selectronix xxxxxxxx.csv
 - b. Upload this file to the unit:**
 - i. Select <Diagnostics & Debugging> on the home page
 - ii. In the Navigation pane, select <Setup>
 1. Select <File Transfer>
 2. Select <Choose File> and select the applicable configuration file
 3. Select <Submit> and see various status messages, then “Configuration update complete...”
 - c. Restart the system**
 - i. Select <System Restart>
4. If you have any other issues with the ProtoNode settings, free technical support is available from ProtoConvert
 - a. By email:
 - i. support@protoconvert.com
 - b. By phone
 - i. USA/Canada (Toll Free) : +1-888-793-0418 Ext 2
5. If you have any other issues with the data points, contact Selectronix
 - a. By email
 - i. techsupport@selectronix.us
 - b. By phone
 - i. (425) 788-2979

3 SLC4082 BB2 Customer Configuration Instructions

The SLC4082 Babel Buster 2 (BB2) is delivered with all the data points pre-programmed to be compatible with the SLC4075-x Touchscreen gateway.

The unit may be re-configured to change the Instance ID from the default 4082, MS/TP MAC address from the default 121, or MS/TP baud rate from the default 38400. ***When multiple units are to be installed on the same network, each unit must be assigned a unique Instance ID and MAC address.***

The default IP address for the unit has been changed to: 192.168.0.103

Do Not Change This Address, as it must be compatible with the IP address of the SLC4075 (192.168.0.104), and is never visible on a common network, even if multiple SLC4082s are on a common network.

The BB2 contains an http server which provides for re-configuration.

Required Equipment

1. External 24V ac or 24V dc power supply.
2. Laptop PC with wired Ethernet port.
3. A standard Ethernet patch cable, such as SLC4020-x.

Detailed Instructions

4. Configure a laptop computer to have the TCP/IP settings as follows:
 - a. Static IPV4 Address: 192.168.0.99
 - b. Subnet Mask: 255.255.255.0
 - c. Default Gateway: 0.0.0.0
5. Connect the laptop PC to the switch and to the BB2
6. Default Logon ID: system
7. Default Password: admin

3.1 Change SLC4082 Instance ID

BACnet Port Management

192.168.0.103/pgBIPNetwork.html

Data Objects | BACnet Client | BACnet Router | Modbus TCP | **System Setup**

Setup | BBMD |

Config File | BACnet IP Port | Local Host | User |

This page displays BACnet IP port settings.

Refresh

BACnet IP Settings: [Local Network Settings](#)

Device Instance: Save

Port (default 0xBAC0 = 47808):

Device Object Name:

Device Description:

8. Select <System Setup>; <Setup>; <BACnet IP Port>
9. Change BACnet IP Settings; Device Instance to the desired value
 - a. The range of Node is 1-4194302
10. <Save>
11. Wait while the information is saved to the unit
12. The browser should automatically refresh, but if it doesn't, <Refresh> to verify the value
13. has been changed

3.2 Change SLC4082 MS/TP MAC Address or Baud rate

BACnet Port Management

192.168.0.103/pgBIPNetwork.html

Data Objects | BACnet Client | BACnet Router | Modbus TCP | **System Setup**

Setup | BBMD |

Config File | BACnet IP Port | Local Host | User |

MSTP Port Configuration

MSTP MAC address: Max Masters: MS/TP Baud Rate: Update

14. Change the MSTP Port Configuration MSTP MAC address to the desired value
 - a. The range of MAC addresses is 1-127
15. Change the baud rate using the drop down arrow to either 9600, 19200, or 76800.
16. <Save>
17. Wait while the information is saved to the unit
18. The browser should automatically refresh, but if it doesn't, <Refresh> to verify the value has been changed

Questions: Call Selectronix at (425) 788-2979 or email techsupport@selectronix.us

