Siemens MXL Driver for PXC Modular

These installation instructions cover the connection of the Siemens MXL Driver to the Siemens system only. For hardware installation of the PXC Modular, see the PXC Modular Series Installation Instructions (553-638).

NOTE:
The Siemens MXL and FireFinder XLS Drivers use the same underlying code for firmware and the license. However, the start-up and commissioning process for the Siemens MXL and FireFinder XLS Drivers is not the same. For consistency, always use the MXL license part number (LSM-INT-SBTMXL) and the MXL documentation for the Siemens MXL Driver.

Since the underlying code is the same, the firmware and driver license do not need to be updated if the MXL system is migrated to XLS in the future.

Product Description
The Siemens MXL Driver enables communication between the APOGEE® Automation System and the Siemens system.

Product Numbers
- PXC00-PE96.A  PXC Modular, Ethernet or RS-485 ALN, 96 FLN nodes
- PXC100-PE96.A  PXC Modular, Ethernet or RS-485 ALN, 96 FLN nodes, TX-I/O support
- PXX-485.3  Expansion Module, three RS-485 FLN connections
- LSM-INT-SBTMXL  License for Siemens MXL PXC Modular Driver

Caution Notation

CAUTION
Equipment damage or loss of data may occur if you do not follow a procedure as specified.

Expected Installation Time
30 minutes

Required Tools and Materials
- Flat-blade screwdriver (1/8-inch blade width).
- Wire strippers.
- Cabling and connectors. See the Connecting the Siemens MXL Driver to the MXL System section.

CAUTION
Always wear an electro-static discharge (ESD) wrist strap and discharge accumulated static before touching field panel components.

Prerequisites
- Driver hardware is installed according to its respective installation instructions.

Depending on the type of installation, other prerequisites may have to be completed.
Connecting the Siemens MXL Driver to the MXL System

Follow these steps to connect the Siemens MXL Driver to the MXL system:

1. Follow all shutdown procedures necessary to prevent damage to any equipment or harm to any personnel.
2. Turn OFF power to the PXC Modular enclosure.
3. In the MXL enclosure, locate the NIM-1R or NIM-1W module (hereafter referred to as the NIM-1 module). This module will be plugged into the connectors on a MOM-2 or MOM-4 module. If it is plugged into a MOM-4 module, note whether the NIM-1 module is plugged into the slot closest to the terminal block labeled TB3 or TB4.
   
   ⇧ If the NIM-1 is plugged into a MOM-2 module, or if it is plugged into the slot closest to terminal block TB4, the following instructions apply to connections on TB4.
   
   ⇧ If the NIM-1 module is plugged into a MOM-4 module, in the slot closest to TB3, the following instructions apply to connections on TB3.

4. Connect one end of the shielded twisted pair cable to terminal 1 and 2 on the appropriate terminal block. (See Figure 1 and Figure 2.)
   - Terminal 1 is the negative (-) terminal
   - Terminal 2 is the positive (+) terminal.
   - There is no terminal available for the shield, so it will be connected at the driver.

5. Connect a 120-ohm, 1/4 watt resistor between terminals 3 and 4 of this same terminal block. (See Figure 2.)

6. At the PXC Modular, attach the +, -, and S leads of the RS-485 cable to an FLN connector, and plug the connector into the FLN1 port on the RS-485 Expansion Module.
   - Allow an additional 12 inches (305 mm) of cable before terminating to the connector.

   NOTE:
The standard practice used by MXL installers would also require a 120-ohm resistor between terminals 1 and 2. Do NOT install a resistor across these terminals.

7. Turn ON power to the PXC Modular enclosure.
8. Start any other equipment that might have been shut down for this installation.

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Figure 1. Connecting the Siemens MXL Driver to the MXL System.
Figure 2. Connecting the Siemens MXL Driver to the MXL System.

NOTE:
The standard practice used by MXL installers would also require a 120-ohm resistor between terminals 1 and 2. Do NOT install a resistor across these terminals.