Product Description Optional Modules

### **N-ELR Mounting Plate**

The N-ELR is a single End-of-Line resistor plate which is required for use in Canada. An ELR, which is supplied with each module and fire alarm control panel, is mounted to the ELR plate. Resistors mounted to the N-ELR plate can be used for the supervision of a monitor and control module circuit.

# 1.7 Optional Modules

The FACP main circuit board includes option module connectors for the following modules:

#### **4XTMF Transmitter Module**

The 4XTMF provides a supervised output for local energy municipal box transmitter, alarm and trouble reverse polarity. It includes a disable switch and disable trouble LED. A jumper on the module is used to select an option which allows the reverse polarity circuit to open with a system trouble condition if no alarm condition exists. The module plugs into connectors J10 and J11 which are located near the top left of the main circuit board. When the 4XTMF module is installed, Jumper JP6, on the main circuit board, must be cut to allow supervision of the module.

### **SLC-2LS Expander Module**

The SLC-2LS Expander Module allows expansion of the FACP from one SLC circuit to two SLC circuits. The module plugs into connector J3 which is located in the lower right corner of the main circuit board. The wiring for the second SLC connects to terminals located on the expander module.

### **DACT-UD2 Digital Alarm Communicator/Transmitter**

The DACT-UD2 is used to transmit system status to UL-listed Central Station receivers via the public switched telephone network. All circuitry and connectors are contained on a compact module which plugs into connector J2, which is located near the bottom center of the main circuit board.

The MS-9600UDLS/E is provided with a factory installed DACT-UD2. Refer to "DACT-UD2 Installation" on page 36 and to the DACT-UD2 manual, which is included with the FACP, for DACT-UD2 wiring and programming information.

### **IPDACT - Internet Protocol DACT**

The IPDACT is a compact, Internet Protocol Digital Alarm Communicator/Transmitter designed to allow FACP status communication to a Central Station via the internet. No telephone lines are required when using the IPDACT. Using Contact ID protocol from the FACP, the IPDACT converts the standard DACT phone communication to a protocol that can be transmitted and received via the internet. It also checks connectivity between the FACP and Central Station. Refer to the IPDACT Product Installation Document P/N 53109 for additional information.

### 1.8 Accessories

# 1.8.1 PS-Tools Programming Utility

The PS-Tools Programming Utility can be used to locally or remotely program the FACP directly from most IBM compatible computers (PC), running Windows<sup>TM</sup> XP or newer. FACP program files can also be created and stored on the PC and then downloaded later to the control panel. The P/N: PK-CD Kit includes the FACP Windows-based Programming Utility software on CD-ROM with on-line help file. A standard USB cable with male-A to male-B connectors, which must be purchased separately, is required by the MS-9600UDLS for local connection of the PC to the USB port J4 on the DACT-UD2. The MS-9600LS requires connection to the Serial Port on FACP connector TB7. Remote programming requires that the PC have a 2400 baud or faster modem.

# 2.5 Power-limited Wiring Requirements

Power-limited and nonpower-limited circuit wiring must remain separated in the cabinet. All power-limited circuit wiring must remain at least 0.25" (6.35 mm) away from any nonpower-limited circuit wiring and nonpower-limited circuit wiring must enter and exit the cabinet through different knockouts and/or conduits. A typical wiring diagram for the FACP is shown below.

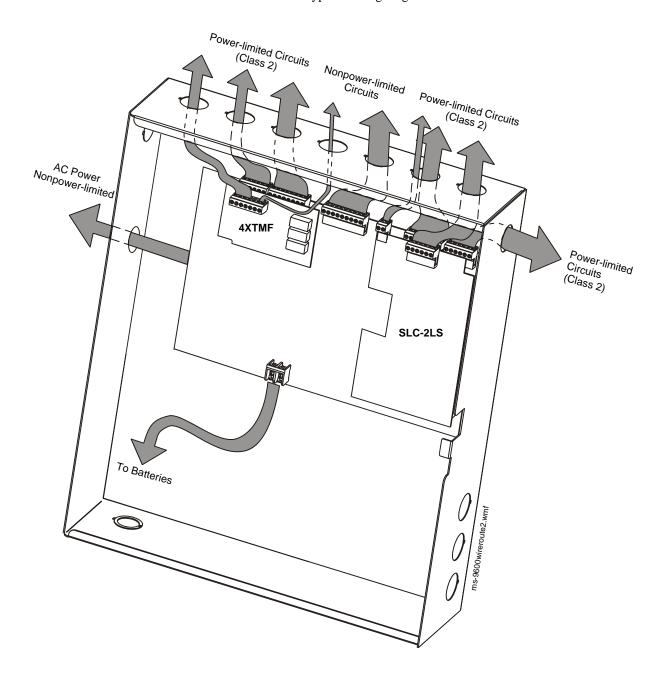


Figure 2.9 Typical Power-limited Wiring Requirements

- 8. When the installation has been complete, enable the 4XTMF module by sliding the disconnect switch to the left
- 9. Test system for proper operation

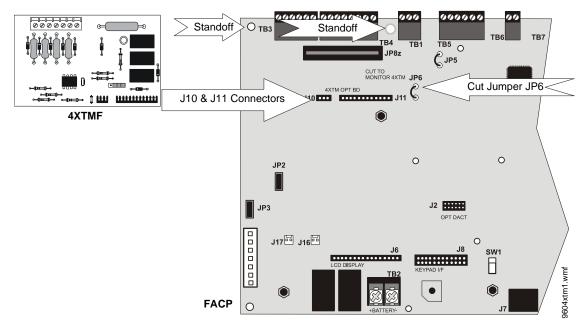


Figure 2.16 4XTMF Connectors to FACP Connectors



**NOTE:** Jumper JP5 on the FACP main circuit board can be used to configure the FACP supervisory relay for operation with the 4XTMF module. The supervisory relay must be programmed as shown on the main circuit board silk-screen (TB5, Terminals 4, 5 & 6). Cutting JP5 will allow the 4XTMF to generate a trouble if the supervisory contact opens Leaving JP5 in will prevent generation of a trouble if the supervisory contact opens

# 2.6.3 Auxiliary Trouble Input (J16 & J17)

Auxiliary Trouble Inputs 1 (J17) and 2 (J16), which are located on the FACP main circuit board, can be used to monitor for trouble conditions on auxiliary equipment such as power supplies. J16 and/or J17 can be connected to any open collector trouble output on the auxiliary equipment. The control panel will indicate a trouble condition if a trouble is sensed at the Auxiliary Trouble Inputs.

If the 4XTMF Module is installed and FACP jumper JP6 has been cut to supervise it, Auxiliary Trouble Input 1 (J17) will monitor the 4XTMF for trouble conditions.

### 2.6.4 SLC-2LS Expander Module

The optional SLC-2LS Expander Module provides a second SLC loop for the FACP control panel. This allows connection of an additional 318 addressable devices, bringing the total to 636 addressable devices which can be connected to the FACP. Refer to the SLC Wiring Manual for information on connecting devices to the SLC.

**IMPORTANT!** When SLC wiring is run in conduit, each SLC loop must be installed in separate conduit.

The following steps must be followed when installing the SLC-2LS Expander Module:

- 1. Remove all power (AC and DC) from the FACP before installing the SLC-2LS module
- 2. Remove four screws from main FACP motherboard, from locations indicated in following illustration, and replace with four supplied metal standoffs