Simplex 4006-9802

Simplex 4006-9802 IDC Expansion Module

Instruction Manual

1. Introduction

The Simplex 4006-9802 IDC Expansion Module is designed to augment the capacity and functionality of compatible Simplex fire alarm systems. This module provides five additional Class B Initiating Device Circuits (IDCs), each capable of supporting up to 30 Simplex current-limited smoke detectors, electronic heat detectors, manual stations, and various contact closure initiating devices. It offers flexibility for system expansion and can be configured for Class A operation with an optional adapter. This manual provides essential information for the proper installation, operation, and maintenance of the 4006-9802 module.

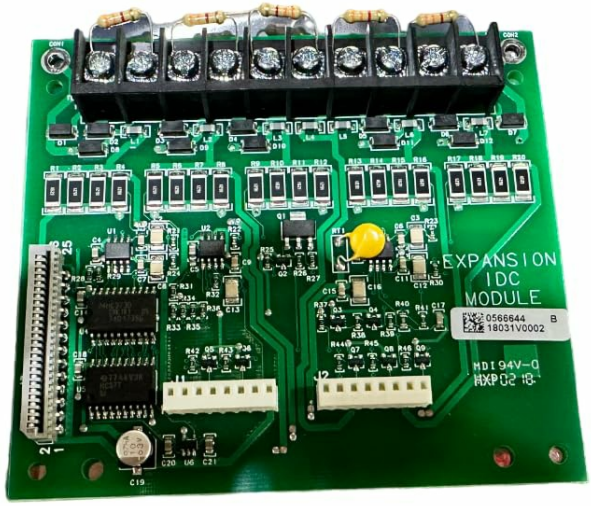

Figure 1: Simplex 4006-9802 IDC Expansion Module. This image shows the compact design of the module, typically

featuring terminal blocks for wiring connections and possibly indicator LEDs.

2. Safety Information

Read all instructions carefully before installing or operating this module. Failure to follow these instructions may result in property damage, injury, or death. Installation and servicing must be performed by qualified personnel only, in accordance with all local and national electrical codes and standards, including NFPA 72.

- **Disconnect Power:** Always disconnect all power sources to the fire alarm control panel before installing, servicing, or removing the module.
- **Electrostatic Discharge (ESD):** Handle the module with care to prevent damage from electrostatic discharge. Use appropriate ESD precautions.
- **Wiring:** Ensure all wiring is correct and secure. Incorrect wiring can cause system malfunctions or damage.
- **Compatibility:** Use only with compatible Simplex fire alarm control panels and initiating devices as specified in the system documentation.

3. Setup and Installation

The 4006-9802 IDC Expansion Module is designed for internal installation within a compatible Simplex fire alarm control panel enclosure. Refer to the specific control panel's installation manual for detailed instructions on mounting locations and procedures.

3.1 Mounting

1. Ensure all power to the fire alarm control panel is disconnected.
2. Locate an available mounting slot or designated area within the control panel enclosure.
3. Carefully align the module with the mounting standoffs or guides.
4. Secure the module using the provided hardware (screws or clips), ensuring it is firmly seated.

3.2 Wiring

The module provides five Class B IDCs. Each IDC supports up to 30 Simplex current-limited smoke or electronic heat detectors, manual stations, or other contact closure initiating devices. For Class A operation, an optional adapter module is required.

- **Class B Wiring:** Connect initiating devices to the designated IDC terminals on the 4006-9802 module. Ensure proper polarity and end-of-line resistor (EOLR) placement as specified in the system documentation.
- **Class A Wiring (with optional adapter):** If using the optional Class A adapter, follow its specific wiring instructions to convert the Class B IDCs to Class A. This typically involves a return path for the circuit.
- **Power and Data Connections:** Connect the module to the fire alarm control panel's power and data bus as indicated in the control panel's installation manual.

3.3 Configuration

After physical installation and wiring, the module and its IDCs must be configured within the fire alarm control panel's programming. Refer to the control panel's programming manual for details on:

- Adding the 4006-9802 module to the system.
- Assigning device types and locations to each IDC.
- Setting up response types for alarms and troubles.

4. Operating the Module

The 4006-9802 IDC Expansion Module operates as an integral part of the Simplex fire alarm system. Once properly installed and configured, it continuously monitors the connected Initiating Device Circuits for alarm or trouble conditions.

- **Normal Operation:** During normal operation, the module's IDCs are supervised, and no alarm or trouble indicators are active.
- **Alarm Condition:** When an initiating device (e.g., smoke detector, manual pull station) on an IDC activates, the module detects the change and communicates it to the fire alarm control panel. The control panel then initiates programmed responses (e.g., sounding alarms, notifying authorities).
- **Trouble Condition:** If a fault occurs on an IDC (e.g., open circuit, short circuit, ground fault), the module reports a trouble condition to the control panel. The control panel will indicate the trouble and may activate specific trouble signals.

5. Maintenance

The 4006-9802 IDC Expansion Module requires minimal maintenance. Regular system inspections and testing, as required by NFPA 72 and local codes, will ensure its continued reliable operation.

- **Visual Inspection:** Periodically inspect the module for any signs of physical damage, loose connections, or excessive dust accumulation.
- **Cleaning:** If necessary, gently clean the module's exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure power is disconnected before cleaning.
- **System Testing:** Follow the fire alarm control panel's maintenance schedule for testing all connected initiating devices and circuits to verify proper communication and response through the 4006-9802 module.

6. Troubleshooting

Most issues related to the 4006-9802 module will be indicated by the fire alarm control panel as a trouble condition. Refer to the control panel's manual for specific trouble codes and their resolutions.

Symptom	Possible Cause	Action
IDC Trouble Indication	Open circuit, short circuit, ground fault on an IDC. Incorrect EOLR.	Verify wiring integrity, check EOLR value and placement, inspect devices on the circuit.
Module Not Recognized by Panel	Improper installation, faulty data connection, incorrect panel programming.	Ensure module is seated correctly, check data bus wiring, verify panel programming.

Symptom	Possible Cause	Action
Intermittent Alarms/Troubles	Loose wiring connections, environmental factors, faulty device.	Inspect all wiring connections, check for environmental interference, test individual devices.

If troubleshooting steps do not resolve the issue, contact Simplex technical support or a qualified service technician.

7. Specifications

Feature	Detail
Model Number	4006-9802
Brand	Simplex
Number of IDCs	5
IDC Type	Class B (expandable to Class A with optional adapter)
Devices per IDC	Up to 30 Simplex current-limited smoke/heat detectors or contact closure devices
Sensor Type	IDC (Initiating Device Circuit)
Alarm Type	Audible (via connected system)
Item Weight	1 Pound (approx. 0.45 kg)
Product Dimensions	6 x 9 x 5 inches (approx. 15.24 x 22.86 x 12.7 cm)
UPC	742779302724
GTIN	742779302724

8. Warranty and Support

Simplex products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact your authorized Simplex distributor. Warranty coverage typically applies to defects in materials and workmanship under normal use.

8.1 Technical Support

For technical assistance, installation questions, or troubleshooting beyond the scope of this manual, please contact your authorized Simplex dealer or technical support. Ensure you have your product model number (4006-9802) and system details available when seeking support.