Simplex

4100ES Fire Control Panels

UL, CSFM Listed; FM Approved;
*MEA (NYC) Acceptance**

XA Loop Interface to the 4100ES or 4100U Fire Alarm Control Panel, Module 4100-3115

Features

Allows the Simplex® 4100ES or 4100U to operate as either an XA Loop Master Panel or an XA Loop Data Gathering Panel

When operating as an XA loop Master Panel:

- Connects to up to 255 input devices and up to 255 output devices on a single XA loop to monitor, supervise, and control
- Monitoring status includes Normal, Trouble, or Alarm
- XA loop devices can be 4-wire if command output functions are used, or 3-wire if used for monitoring only
- XA loop devices appear to the 4100ES/4100U similar to IDNet™ addressable devices including custom labels with up to 40 characters

When operating as an XA loop Data Gathering Panel:

- Communicates status and receives control from the XA loop's Autocall compatible Master Panel
- Control includes Acknowledge, Silence, Reset, and device level commands
- 4100ES/4100U operates as a stand-alone fire alarm control panel for its connected devices and appliances

4100ES or 4100U panels equipped with Simplex Network communications can send XA loop device information to other Network nodes

Description

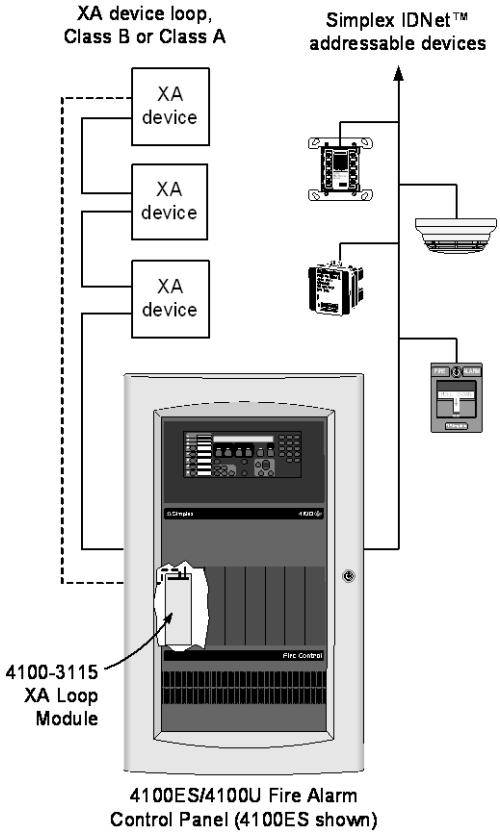
System Flexibility. When a fire alarm system using existing XA loop devices requires expansion, use of the 4100-3115 XA Loop Interface Module allows the expansion to include the capabilities of the 4100ES or 4100U fire alarm control panel. This module allows the host control panel to be selected to function as either the XA loop master controller (head end) or as a Data Gathering Panel as an intelligent device on the XA loop reporting to a remote master controller.

Multiple XA Loop Interface Modules can be installed in the 4100ES/4100U allowing a variety of system expansion situations to be satisfied. The 4100ES/4100U accepts up to a total of 30 modules of this type which also includes IDNet modules, MAPNET II® modules, and VESDA® modules

On-Board LEDs are provided for service diagnostics to indicate XA loop status, internal 4100ES/4100U communications status, and supervision status when functioning as a master controller for the XA loop.

For additional information, refer to Installation and Programming Guide 579-513.

* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7165-0026:251 (non-high rise) and 7170-0026:250 (high rise) for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Accepted for use – City of New York Department of Buildings – MEA35-93E. This product was not ULC listed as of document revision date. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Safety Products Westminster.

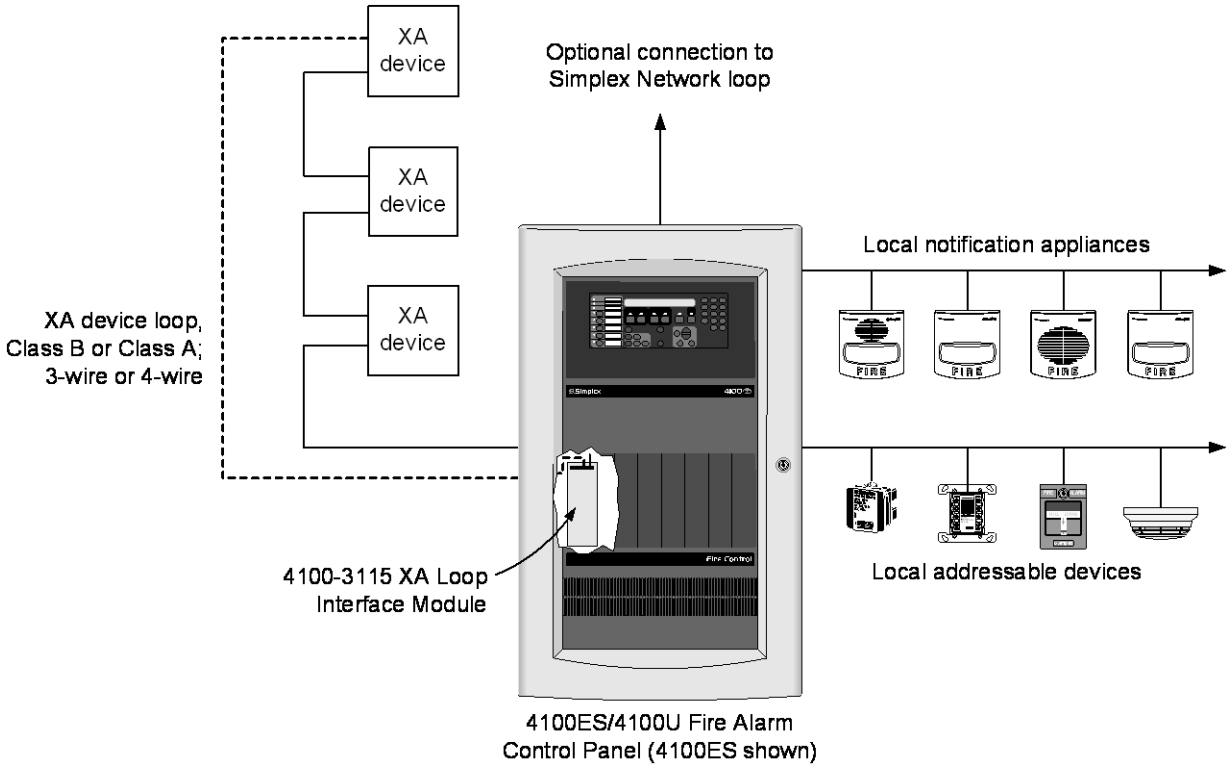


4100ES/4100U XA Loop Interface Block Diagram

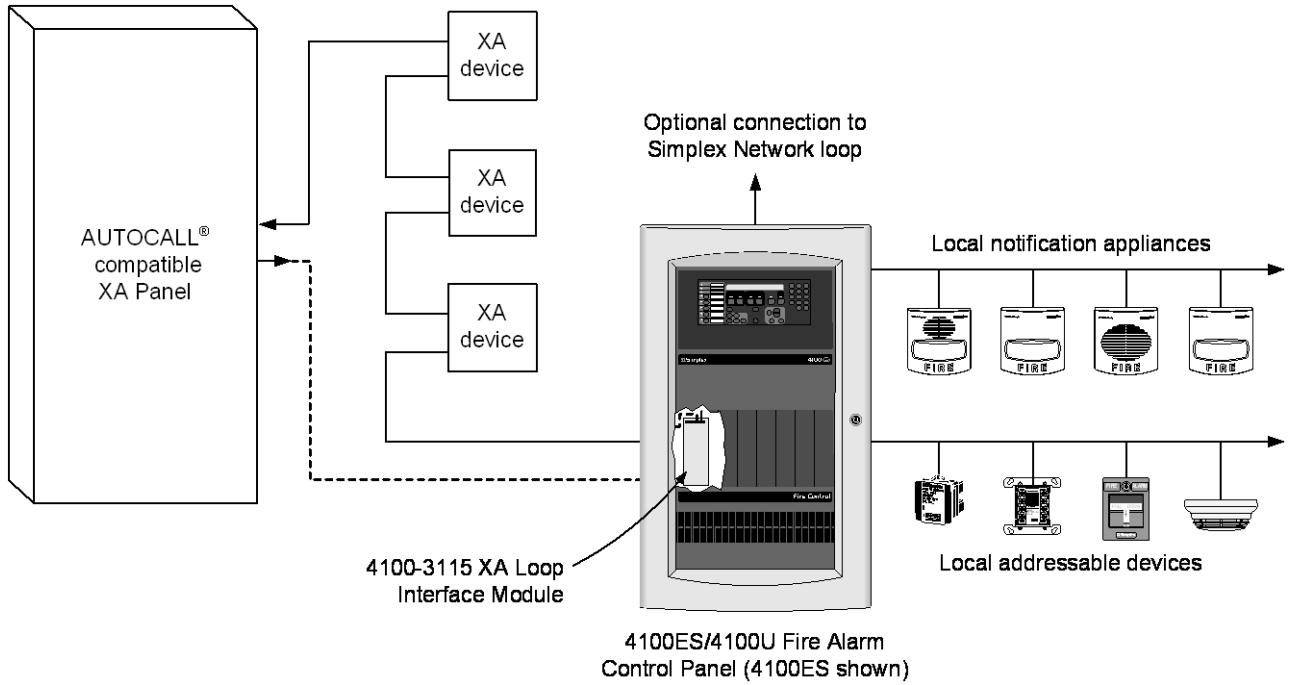
4100-3115 Specifications

Power Requirements	
Voltage	24 VDC from expansion bay power supply if present; or wired to AUX (+) and AUX (-) from Auxiliary 24 VDC in panel
Current	570 mA @ 24 VDC
XA Loop Specification Reference	
Maximum Resistance	100 Ω per wire
Maximum Capacitance	1.5 µF wire-to-wire 1.5 µF wire-to-shield
Current	500 mA
Voltage/Frequency	24 VAC, 250 Hz
Maximum Addresses per Loop	255
General Specifications	
Operating Temperature Range	32° F to 120° F (0° C to 49° C)
Humidity Range	Up to 93% RH, non-condensing @ 90° F (32° C)
Mounting	4" x 10" (102 mm x 254 mm) module requires two vertical expansion bay blocks
Output Wiring Connections	On-board terminal blocks for field wiring 18 to 12 AWG (0.82 mm^2 to 3.31 mm^2)

XA Loop Interface System Diagram, Master Panel Operation



XA Loop Interface System Diagram, Data Gathering Panel Operation



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