ARIES®-SLX
Network Interface Card

Kidde Fire Systems

Effective: May 2020
K-76-605

FEATURES

- ***Interconnects up to 32 ARIES®-SLX network nodes***
- ***Supports Single and Dual Channel Communication***
- ***Programmable from control unit user interface or configuration software tool***
- ***Control units can be configured to operate individually or within groups***
- ***UL Listed***
- ***FM Approved***

DESCRIPTION

The Network Interface Card (P/N 76-600000-009) provides true peer-to-peer functionality when installed in an ARIES®-SLX or legacy ARIES® control unit.

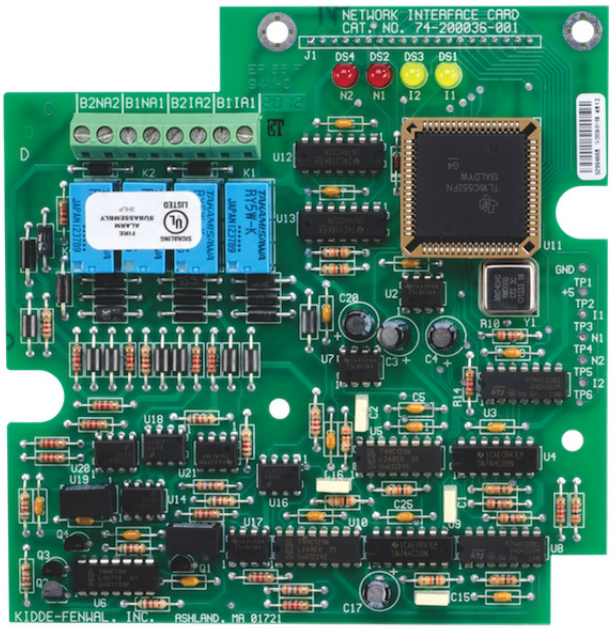
The network is capable of performing the following fire-alarm and/or suppression system operations on a network-wide basis:

- Event initiation
- Protected-premises local and/or remote event annunciation
- Occupant notification via audible and visible signaling appliances
- Process/equipment control to activate safety procedures
- Fire extinguishing system release
- Off-premises transmissions to central station or fire department via third-party digital communicator and programmable relays

The network provides several convenient interconnect programming schemes wherein control units can be configured individually or within created groups of control units.

Groups can be programmed to selectively interact as separate entities for event reporting, event output control (EOC), acknowledgment of events, alarm silencing, and system resets.

EOC programming statements can be entered at control units using the appropriate configuration tool (for example, the ARIES-SLX Configuration Tool, ACT-SLX). After this is done, an input on one control unit can activate an output on any other control unit, or on all other networked control units programmed to receive the input.



Consistent with peer-to-peer operation and the interconnect wiring style, a control unit that becomes disabled shall be automatically isolated from its shared control unit(s) and the shared control unit will exhibit a network message identifying the affected control unit and the fault type. Shared control units that are not affected by a fault will remain functional and interconnected.

PHYSICAL

The Network Interface Card mounts to the control unit's printed circuit board as a "daughter" card and provides peer-to-peer interconnection for up to 32 control unit nodes.

For additional information, refer to the Installation Instructions, P/N 06-236520-002.

Single channel interconnect wiring is accomplished using one pair # 18 AWG, twisted/shielded wire. Dual channel interconnect wiring requires two pair # 18 AWG, twisted/shielded wire and provides protection against a single wire-to-wire short or open fault on the network communication channels.

Communication is RS-485 with a maximum distance of 4000 ft, 1219 m. between control units and nominal 2.5 second unit to unit response with Class B wire. This timing increases slightly when operating on a redundant pair under a fault condition.

An optional Fiber-Optic Converter Card (OCC) can be used to interconnect control unit nodes using 62.5/125 multi-mode duplex fiber-optic media. Using the OCC allows longer distances between nodes (up to 1 mile/1.6 km) and provides greater immunity to electromagnetic interference, including lightning. The ARIES-SLX networking structure supports a mixture of fiber-optic and twisted-wire interconnections among networked control units. One OCC and one NIC are required for each node interconnected using fiber.

All electrical and physical characteristics and listings of the network module are consistent with the host ARIES-SLX or legacy ARIES Control Unit.

TECHNICAL SPECIFICATION

Input Voltage:	5 Vdc
Operating Current:	250 mA
Operating Temp:	32°F - 120°F (0°C - 49°C)
Networking Wire:	Class B, Single or Dual Channel
Communications:	Per RS-485 Standard 9600 Baud
Wire Type:	Twisted, Shielded, Low-Capacitance Fire Alarm Wire (Recommended) # 18 AWG
Minimum Node-to-Node	4,000 ft. (1219 m)

PROGRAMMING

Modem Connection:	Not available
Field Programming:	Local and network programs entered at individual control units

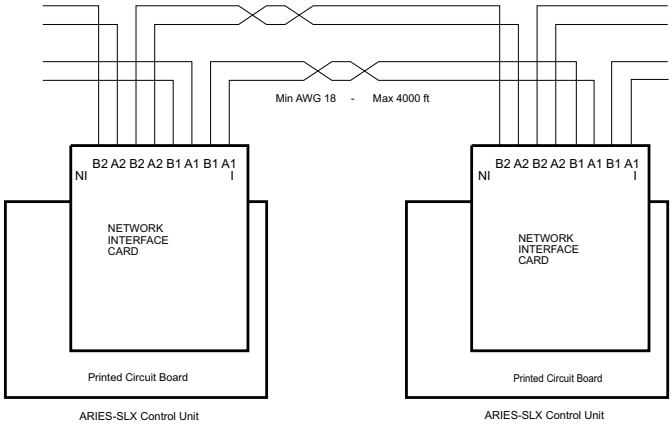


Figure 1. ARIES®-SLX System Block Diagram

ORDERING INFORMATION

Part Number	Description
76-600000-009	ARIES®-SLX Network Interface Card (NIC). For use with ARIES®-SLX and legacy ARIES® control units. One required for each node.
76-600000-006	Fiber Optic Converter Card (Optional Module). Refer to K-76-604 for details.

EXPORT INFORMATION (USA)
Jurisdiction: EAR
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This document contains technical data subject to the EAR.

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