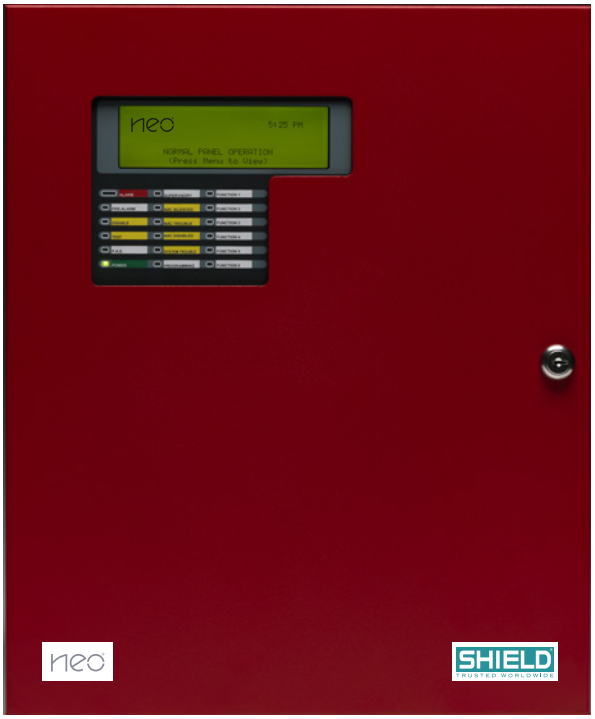
SINGLE LOOP FIRE ALARM CONTROL PANEL



NX10-FACP-1C

SIGNALING UL LISTED

FEATURES

- 126 analogue-addressable points
- Shield user interface w/graphical LCD
- “DynamiX” I/O relationship programming
- Synchronised audible and visual NAC circuits
- Superior service & maintenance diagnostics
- Peer-to-peer networking
- Automatic drift compensation per detector
- Automatic detector testing with maintenance alert
- Alarm verification and PAS.
- Class X, A or B SLC operation (supports loop-powered technology)
- Class A or B NAC circuits
- Voltage-regulated NACs (compatible with most listed NAC devices)
- Multi-pattern and two-stage NAC control
- Network-wide audible and visual synchronisation
- “Auto-learn/loop detection” programming
- Built-in intelligent multi-meter

PRODUCT INFORMATION

The NX10-FACP-1C is a small, compact single-loop fire alarm control panel for use in cost-sensitive fire alarm installations, where fewer than 126 addressable points are required. The panel contains the same features as the Shield NX10-FACP-1L, NX10-FACP-2 and NX10-FACP-4 intelligent fire alarm control panels but in a smaller, compact enclosure.

As part of the Shield NEO range, the NX10-FACP-1C can be easily used in larger applications due to its optional peer-to-peer networking capabilities.

Designed with installation and service engineers in mind, the NX10-FACP-1C is modularly packaged, using surface mount and dual flash microprocessor technology, with onboard real-timeclocks for ease of installation, troubleshooting, programming and maintenance.

The NX10-FACP-1C provides a single Class X, A or B signalling line circuit (SLC). Communication to the field devices attached to the SLC is via Shield, 100% digital protocol which has the advantages of being highly immune to noisy environments. The SLC supports up to 126 analogue-addressable devices (any combination of intelligent detectors, input and/or output devices, including loop-powered technology devices). In addition, unique sub-addressing of various input and/or output devices is permitted to expand on the overall NX10-FACP-1C system capacity.

The NX10-FACP-1C comes with two filtered, voltage-regulated notification appliance circuits (NACs), Class A or B, each rated 2 Amp @ 24 VDC. Due to exceptional regulation and high rating, the onboard NAC outputs provide compatibility with most listed notification appliance devices.

Note: Specifications are subject to change without notice.

The NX10-FACP-1C has resettable and non-resettable power outputs; each rated 0.5 Amp @ 24 VDC for connection to four-wire conventional smoke detectors and/or ancillary devices. Each NX10-FACP-1C contains three field-programmable, Form “C” relay contacts rated 1 Amp @ 30 VDC, defaulted as a fail-safe trouble relay, alarm relay and supervisory relay.

Simplifying and reducing initial system set-up, each NX10-FACP-1C panel is equipped with an installer-friendly “auto-learn/loop detection” feature that permits the rapid recognition of all signalling line circuit devices. This rapid recognition simplifies the immediate assignment of critical life safety functions. Assignments include: intelligent detector type and operation criteria, addressable input device recognition as an alarm input tand addressable output control on a general alarm basis.

Designed with built-in powerful installation and customisation tools, the NX10-FACP-1C can adapt to virtually any application requirement. With Dynamix programming, time-consuming complexities associated with I/O relationship programming such as two-stage multi-pattern NAC control, intelligent detector drift compensation, precision response/sensitivity mode settings, flexible timing functions and more are significantly reduced.

The NX10-FACP-1C is fully field programmable via the onboard graphical LCD display and alphanumeric keypad. Front panel programming may encompass defining input to output relationships, configuring output circuit characteristics, entering zone, device, and other text descriptions, and configuring multiple user-access level passwords.

Graphical Liquid Crystal Display

Navigation Buttons

LED Status Indicators

Control Buttons

12 Button Keypad
(Numbers & Letters)

To maximise the capability and flexibility of the single loop fire alarm control panel, the standard Shield Windows-based PC-NeT field configuration tool is compatible with the NX10-FACP-1C. The PC-NeT field configuration tool is a powerful, user-friendly programming tool that allows users to perform virtually any I/O relationship with multiple criteria. Simple drop-down menus with point-and-click operation make project commissioning and troubleshooting fast and efficient.

The NX10-FACP-1C can accommodate remote graphical LCD annunciators (with or without system control capabilities) on the Ad-NeT- PluS peer-to-peer network. Multiple annunciator locations can be created based on installation demands. These locations can have either: no system control, partial system control, or full system control. When installations exceed a single panel’s capacity, the Shield Ad- NeT-PluS peer-to-peer network can be implemented, providing up to 200 network nodes. The Ad-NeT-PluS is completely field programmable for inter-panel functionality or segregation of information and control based on installation requirements.

Designed with the technician in mind, each module of the NX10-FACP-1C single loop fire alarm control panel is easy to install and service. The integral power supply offers status LEDs, temperature-compensated charging, and the ability to operate directly from the batteries when AC supply is not yet available at the installation site. A unique built-in intelligent multi-meter allows technicians to interrogate any input and/or output and diagnose potential time consuming trouble issues with virtually no complications or aggravation.

Shield User Interface w/Graphical LCD:

Designed to be user-friendly and easy to operate, the Shield User Interface w/Graphical LCD (backlit 240 x 64) is the information and control center for the NX10-FACP-1C single loop fire alarm control panel.

The unit incorporates a graphical LCD display, LED status Indicators, control buttons (including 3 programmable buttons), navigation buttons, and a 12 button keypad for complete system status, interrogation, and control.

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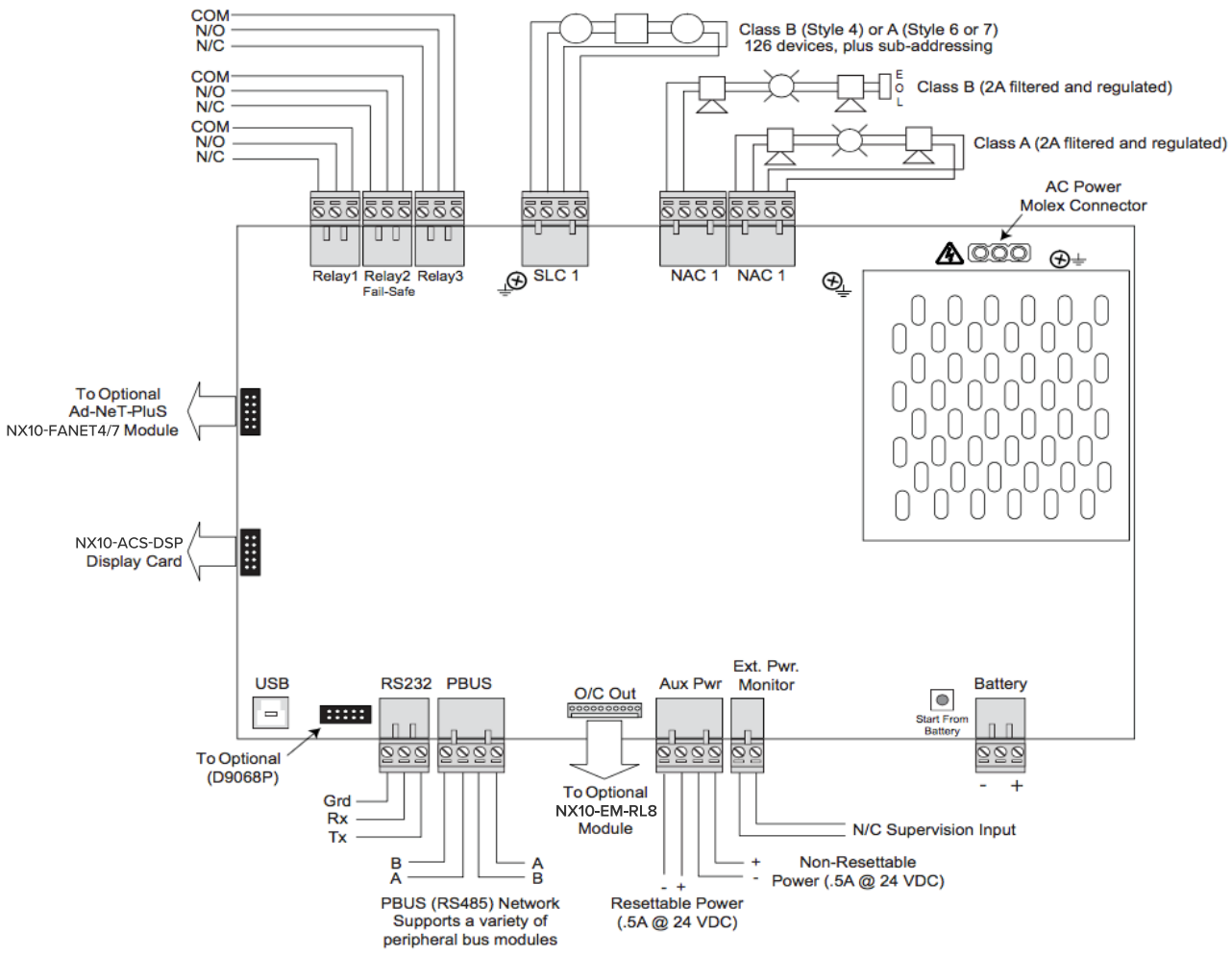
BUTTON (KEYS)

	Reset
	Ack (panel buzzer acknowledge)
	Resound (resound signals)
	Silence (silence signals)
	Fire Drill
	Function Keys (3-programmable contral buttons)
	Navigation Keys (up, down, left, right, and tick [enter])
	12 Button Keypad (numbers, letters, esc, and menu)

LED INDICATORS

Alarm	Red
Pre-Alarm	Red
Disable	Yellow
Test	Yellow
P.A.S.	Yellow
Power	Green
Supervisory	Yellow
NAC Silenced	Yellow
NAC Trouble	Yellow
NAC Disabled	Yellow
System Trouble	Yellow
Programming	Yellow
Programmable LED 1	Red
Programmable LEDs 2-5	Yellow

WIRING DIAGRAM



SPECIFICATIONS

Operating Voltage	120 VAC (1.4A) - 240 VAC (0.7A), 50/60Hz	
System-Brown-Out	98 VAC nominal	
Battery Circuit		
Charging Voltage	27.4 VDC nominal*	
Temp. Compensated Charging Current	2.3 Amp	
Battery Derating Factor	0.83A	
Battery Capacity	7 Ah (minimum), 75 Ah (maximum)	
Battery Fuse	5A @ 240 VAC, time delayed, ceramic, high breaking (in-line wire link)	
Fire, Supervisory, and Trouble Relays	(Power limited - when using system power)	
Type	Form "C"	
Rating	1A @30 VDC/VAC	
Trouble Relay	Normally active (fail-safe operation)	
Auxiliary Power Outputs	(Power limited)	
Resettable		
Voltage	24 VDC	
Current	0.5A	
Reset Time	10-15 seconds	
Non-Resettable		
Voltage	24 VDC	
Current	0.5A	
Humidity	85% RH	
Temperatures		
Operating	32 °F - 120 °F (0°C - 49°C)	
Recommended Room	60 °F - 86 °F (15°C - 27°C)	
Enclosure Dimensions	17 7/8"H x 14 3/4"W x 5 5/8"D	
SLC Loop	(Power limited)	
Class (Style)	Class X, A or B	
Voltage	24 VDC	
Minimum Return Voltage	17 VDC	
Current	0.5A	
NAC Circuits	(Power limited)	
Class (Style)	Class A or B	
Voltage	24 VDC (filtered and regulated)	
Minimum Return Voltage	16 VDC	
Current	2A (each)	
Maximum Voltage Drop	3 VDC	
Maximum Line Impedance	1.5Ω	
RS232	Supervised, optically isolated	
Baud Rate	9600	
Parity	None	
Data Bits	8	
Stop Bits	1	
Base Card Operating Current	Quiescent	Alarm
NX10-ACS-1L	110 mA	195 mA

Note: Specifications are subject to change without notice.

ORDERING INFORMATION

NX10-FACP-1C*	Single-Loop Fire Alarm Control Panel with power supply/charger, 1 SLC, 2 NACs, 3 auxiliary relays (enclosure supports batteries 7Ah - 18Ah)
NX10-FANET4	Network Interface Card Class B
NX10-FANET7	Network Interface Card Class X(A)
NX10-EM-RL8	8-Way Relay Output Card (Programmable)

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