

CONFIGURED COMMAND CENTRES



FEATURES

- 1, 2 and 4 SLC loop options
- Integral 80 Watt amplifier
- Built-in paging microphone
- Configured with One NX10-EM-ASW-16 switch LED module
- Networkable – up to 200 intelligent panels
- Integrated 80 Watt digital audio features include:
 - 2 Class A or B, 40 Watt, 25 Vrms Outputs
 - Programmable 16 channel message generator
 - Automatic one-to-one backup capability
- Local internally mounted microphone and switches provide:
 - All call, alert and selective messaging and paging by zone or area
- Up to 504 analogue-addressable points
- Multiple command centres w/control options
- Synchronised audio and visual control (panel or network wide)
- NX10-VB boosters expand audio Wattage (16 per panel)

PRODUCT INFORMATION

The NEO Series configured command centres have been designed to support a wide variety of applications. They are fully compatible with both NEO Series intelligent fire alarm control panels and NEO Series intelligent fire alarm control panels with integrated audio.

NEO Series command centres come in three variations: NX10-FACC-1 (single loop), NX10-FACC-2 (two loops) and NX10-FACC-4 (four loops). Each command centre comes in a 22.6"H x 20.3"W x 5.5"D cabinet and includes: one NX10-ACS-DSP keyboard display, one main base card (configured for 1,2 or 4 SLC loops), one NX10-ACS-ACB AC input board, an NX10-AMP-80 audio amplifier (two 40 Watt speaker outputs), one NX10-EM-PSU6 amplifier power supply and one NX10-EM-ASW-16 switch LED module.

The command centre cabinet has been designed to support a broad range of additional optional modules to suit specific application requirements. The optional modules provide the following capabilities: DACT, city tie, networking, modem, I/O drivers, switch and relay modules and many others.

To simplify installation, programming, troubleshooting, training and support, all NEO fire panels and command centres can be programmed using the same Windows-based programming tools. In addition, all NEO main PCBs, option

modules, peripherals and intelligent devices are fully compatible across the full range of NEO fire panel & command centre products.

For control and operation of a large, networked, wide area or high rise system, each command centre will support up to 252 individually assignable switches through the use of up to sixteen NX10-EM-ASW-16 switch LED modules. These modules mount to the inner doors of the command centres. The switch action can be either toggle, on/off or push button. Each switch is associated with 3 LEDs that are red, yellow and green. These LEDs are fully programmable and can be set to turn on as either a steady light and/or to blink. A large area is made available per switch and LED for user-defined text to clearly identify the intended function. This versatility means that operation and control is simplified, and status is readily available and quickly identified.

Examples of switch operations include fan and HVAC control, paging area select, message select, telephone control, purging and zone/area/point bypass. The total number of switches supported across a maximum configured network is 51,200. A key feature is that individual switch and LED response time is not affected by the size of the network and each switch and LED can be assigned to network functions as well as individual panel functions.

Each command centre is supplied with a single NX10-AMP-80 amplifier module, with associated NX10-EM-PSU6 power supply charger and NX10-MIC microphone module and can expand the audio wattage with the addition of an Shield NX10-VB audio booster. Each NX10-AMP-80 and NX10-VB has two 40 Watt speaker circuits (which can be programmed as 1:1 backup). Live or recorded audio messages can be sent to any location in a facility through either manual or automatic controls.

Control functions can include: All Call, All Evac, All Alert, Message Select and Area Select. For immediate control of paging to all areas, press the All Call button. To generate and play an evacuation message or an alert message throughout a facility push the All Evac or All Alert button. To play a particular message (up to 16 messages) in specific areas, use the individual message selection buttons followed by the individual area selection buttons.

A typical high-rise application may be configured with an NX10-VB audio booster per floor. The boosters are controlled by the control-by-event logic at the command centre to generate specific messages for specific conditions. It is easy to program, for example, a typical fire floor, floor above and floor below evacuation message that is simultaneous with adjacent alert floor messages, while simultaneously providing the capability to override automatic messages at any time with manual paging to all or selective areas.

To simplify and reduce initial system set-up, Shield Neo command centres are equipped with an installer-friendly “auto-learn/loop detection” feature that permits the rapid recognition of all signalling line circuits’ devices. This rapid recognition immediately simplifies the assignment of critical life safety functions. Assignments include intelligent detector type and operation criteria, addressable input device recognition as an alarm input, and addressable output control on a general alarm basis.

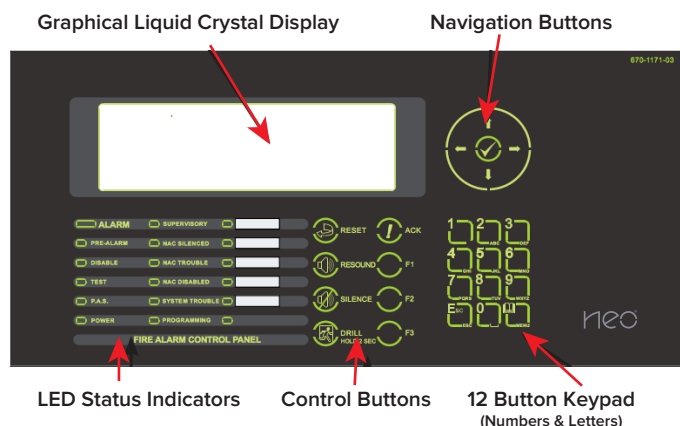
Shield NEO command centres are designed with powerful built-in installation and customisation tools to adapt to virtually any application requirement.

With Dynamix programming, typical 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.

Shield NEO configured command centres are fully field programmable via the onboard graphical LCD display and alphanumeric keypad (NX10-ACS-DSP). Front-panel programming may encompass defining the input to output relationships, configuring output circuit characteristics, entering zone, device and other text descriptions, and configuring multiple user-access passwords.

To maximise the capability and flexibility of the command centres and expand upon the customisation of an installation, the Shield-Windows based PC-NeT field configuration tool is available. This 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.

Designed with the technician in mind, each module of the command centre 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. Servicing a customer after installation can be as simple as using the Shield remote diagnostic virtual panel simulator.











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 NEO Series Intelligent Fire Alarm Control Panel(s).

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.

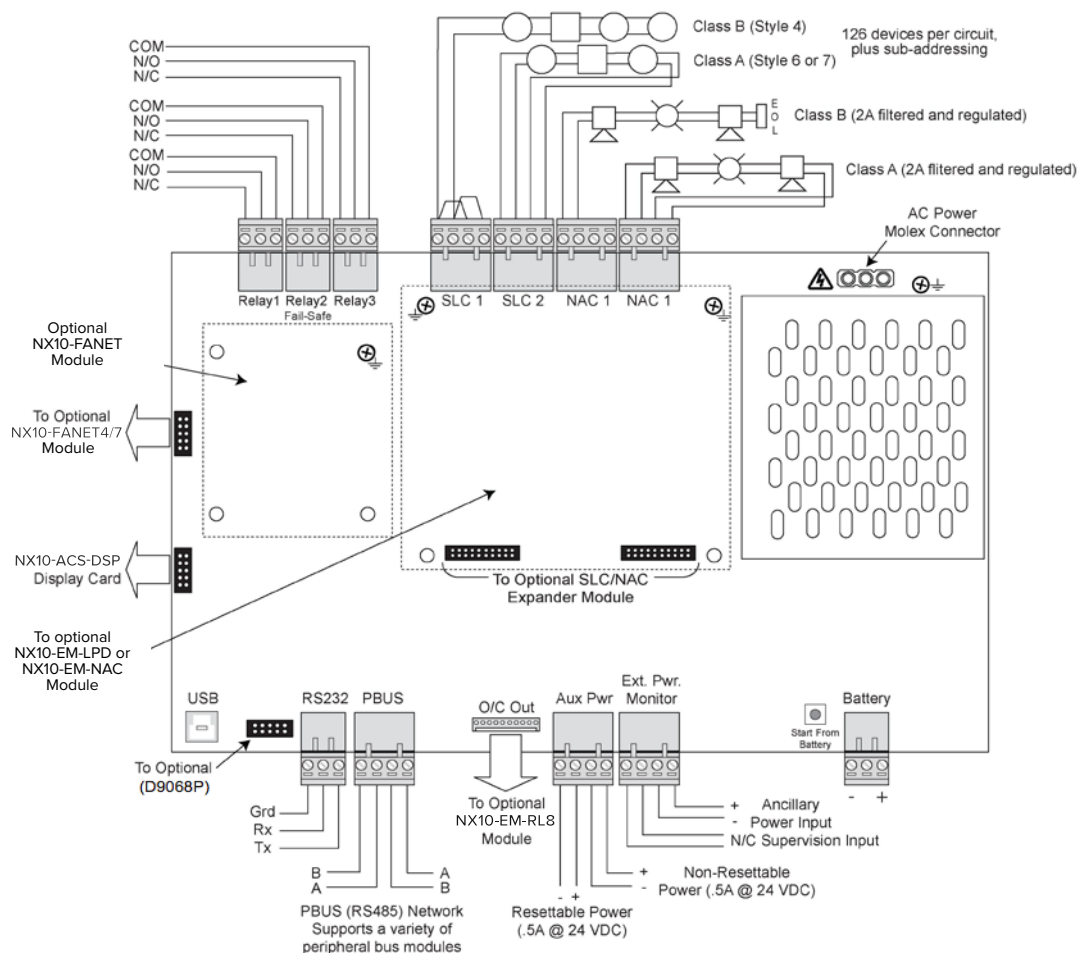
BUTTON (KEYS)

	Reset
	Ack (panel buzzer acknowledge)
	Resound (resound signals)
	Silence (silence signals)
	Fire Drill
	Function Keys (3-programmable control 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	120V (1.4A (1 or 2 loop)/2.8A (4 loop))
	240V (0.7A (1 or 2 loop)/1.4A (4 loop))
	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	10A @ 250 VAC, Time delayed, Ceramic, High breaking (In-line WireLink)
Fire, Supervisory, and Trouble Relays	
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	
3x3 Enclosure	
Back Box	22.6"H x 20.25"W x 5.5"D
Housing	24.1"H x 21.7"W x 6.0"D
3x5 Enclosure	
Back Box	35.9"H x 20.25"W x 5.5"D
Housing	37.3"H x 21.7"W x 6.0"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
NX10-ACS-2L	110 mA	195 mA
NX10-ACS-4L	175 mA	260 mA
NX10-AMP-80		
Input Voltage (DC)	24 VDC (operating range 15-30 VDC)	
Amplifier #1 Output	40 Watts @ 25 Vrms, Class A or B Wiring	
Amplifier #2 Output	40 Watts @ 25 Vrms, Class A or B Wiring	
Activation	RS-485 (PBus) or Contact Closure	
NX10-MIC	Supervised Microphone Input	

ORDERING INFORMATION

NX10-FACC-1	NEO Series Command Center with cabinet, 2 power supply's/chargers, 1 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module and microphone (126 addressable points)
NX10-FACC-2	NEO Series Command Center with cabinet, 2 power supply's/chargers, 2 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module and microphone (252 addressable points)
NX10-FACC-4	NEO Series Command Center with cabinet, 2 power Supply's/Chargers, 4 SLC, 4 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module and microphone (504 addressable points)
NX10-FACC-1P	NEO Series Command Centre with Cabinet, 2 power supply's/chargers, 1 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module, microphone and firefighter telephone (126 addressable points)
NX10-FACC-2P	NEO Series Command Centre with Cabinet, 2 power supply's/chargers, 2 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module, microphone and firefighter telephone (252 addressable points)
NX10-FACC-4P	NEO Series Command Centre with Cabinet, 2 power Supply's/Chargers, 4 SLC, 4 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module, microphone and firefighter telephone (504 addressable points)
NX10-FALCC-1	NEO Series Large Enclosure Command Centre with Cabinet, 2 power supply's/chargers, 1 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module and microphone (126 addressable points)
NX10-FALCC-2	NEO Series Large Enclosure Command Centre with Cabinet, 2 power supply's/chargers, 2 SLC, 2 NACS, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module and microphone (252 addressable points)
NX10-FALCC-4	NEO Series Large Enclosure Command Centre with Cabinet, 2 power Supply's/Chargers, 4 SLC, 4 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module and microphone (504 addressable points)
NX10-FALCC-1P	NEO Series Large Enclosure Command Centre with Cabinet, 2 power supply's/chargers, 1 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module, microphone and firefighter telephone (126 addressable points)
NX10-FALCC-2P	NEO Series Large Enclosure Command Centre with Cabinet, 2 power supply's/chargers, 2 SLC, 2 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module, microphone and firefighter telephone (252 addressable points)
NX10-FALCC-4P	NEO Series Large Enclosure Command Centre with Cabinet, 2 power Supply's/Chargers, 4 SLC, 4 NACs, two 40 watt speaker circuits, 1 NX10-EM-ASW-16 switch LED module, microphone and firefighter telephone (504 addressable points)

	NX10-FACP base card option modules**:
NX10-EM-LPD	2 SLC, 2 NAC expander card
NX10-EM-NAC	2 NAC expander card
NX10-EM-PSU	5 Amp expansion power supply module
NX10-FANET4	Network Interface Card (Style 4)
NX10-FANET7	Network Interface Card (Style 7)
NX10-EM-PRN	Thermal strip printer

Note: Specifications are subject to change without notice.