

# XR2500F



## Commercial and Industrial Fire Power

True flexibility and expandability covers all of your fire detection and notification needs. Enhance your installation by adding addressable detectors and input modules with a variety of conventional accessories.

- Fire, Burglary, and Access Control
- Multi-lingual menu options
- Output Groups
- Programmable fire exits
- Network communication ready

Built-in dual line DACT and 32-character LCD annunciator, make the XR2500F not only expandable but network ready. The 24 VDC 4 Amp notification appliance power is distributed between two Class B Style W notification appliance circuits (NACs) to complete your commercial or industrial installation.

## XR2500F — 574-ZONE ADDRESSABLE FIRE ALARM CONTROL PANEL

### XR2500F SYSTEM

The XR2500F FACP comes fully assembled from the factory with the following components:

- XR2500F PCB and 16 VAC, 56 VA wire-in transformer
- 20-key Keyboard with 32-character LCD Display
- 24 VDC 4 Amp Power Supply, Power Limited
- 866 Class B Style W NAC module (two)
- 893A Dual Phone Line module DACT with line supervision
- 481 LX-Bus Zone Expansion Module

### SYSTEM FEATURES

- Addressable reporting system
- Expandable to 560 addressable smoke detector capacity
- On-board 32-Character Annunciator
- Optional Graphic Annunciator output for every input in system
- Provides 566 programmable inputs

- Expands to 502 addressable Form C relay outputs
- Program from panel keypad, laptop, or remote computer
- Shared 4 Amp 24 VDC Power
- Inherently Power Limited overcurrent protection: no fuses
- 32 individual reporting areas, with common areas
- 10,000 user codes with 99 profiles
- 12,000 event buffer
- Serial 3 digital dialer or CID reporting to multiple receivers
- Select built-in SLC Loop or DB-9 RS-232
- Flash Updatable ROM: No more firmware chips to replace
- Multiple on-board status LEDs for power, system and communication status
- 1.5 Amps supervised bell output
- 1.5 Amps smoke and auxiliary output

### XR2500F SYSTEM

#### XR2500F CONTROL PANEL

The XR2500F is an Addressable Fire Alarm Control Panel suitable for commercial and industrial fire alarm applications. Addressable detectors and input modules deliver a truly flexible and expansive system for all of your fire detection and notification needs.



#### POWER SUPPLY

Notification Appliance Circuit (NAC) operation is provided by the 4 Amp, 24 VDC factory-installed power supply. Up to 6 Amps of peak power is available for inrush current demands. Two notification circuits are supplied for independent or simultaneous operation.



#### 893A DUAL PHONE LINE MODULE

The factory-installed 893A is a dual telephone line supervision module that allows the XR2500F to indicate a phone line failure to the premises and central station and switch to secondary phone line communication when the primary line is down.



#### FIRE COMMAND CENTER

A 20-key, 32-character LCD annunciator used for system operation, annunciation, and programming. A keyswitch enables the four function buttons: silence, reset, test, and fire drill. All functions are available using a code at the keyboard. The optional 630F Remote Fire Command Center provides identical operation and can be installed up to 1,000 feet from the FACP. Up to 15 Remote Command Centers can be attached to the XR2500F.



#### 866 CLASS B NAC MODULE

Two 866 modules provide Style W notification and supervision for DMP Series 800 and 900 UL listed notification appliances. This includes bells, strobes, and horns. Each 866 contains a set of Normally Closed trouble contacts to indicate irregular conditions to the panel. A NAC silence switch is also provided.



#### 481 SLC EXPANSION CARD

Each 481 Expansion Inter-face Card allows you to expand the XR2500F panel by 100 additional inputs. The 481 provides one 4-wire SLC loop connection.



## XR2500F SYSTEM

### NOTIFICATION CIRCUIT EXPANSION

Easily add NAC outputs to the XR2500F system. In addition to the two standard NAC outputs, up to eight additional Class A or B modules can be supported at the FACP. Model 865 Class A or 866 Class B NAC Modules may be combined with a power supply to provide additional 4 Amp NAC outputs. Use an 867 on the SLC Loop to further expand NAC circuits.

### DIALER COMMUNICATION

The XR2500F is unmatched in its communication capability with Serial 3 digital dialer, CID, and Network Monitoring. In addition, the XR2500F Series can report to multiple central station receivers. DMP Serial 3 format supports 16-character user, zone, and area names to increase the central station response time and limit dependence on automation literal tables for message conversion.

### NETWORK COMMUNICATION

The XR2500F Network version is the perfect solution for applications where the Internet or LAN/WAN is available. Built-in Ethernet network communication enhances network options by providing customizable check-in times and retry times. TCP communications and network backup are also options.

### NETWORK MONITORING

Network Monitoring does not rely on a server or dedicated path for its communications. Instead it communicates redundant signals using network paths provided through the Internet to ensure reliability.

DMP Network Monitoring meets UL AA High Line Security requirements by having the panel communicate with the receiver at fixed intervals. The receiver knows when to expect each check-in from the panel.

If the expected check-in is not received, the receiver generates an alarm to inform the central monitoring station operator that the panel network path needs attention. In some cases, using Network Monitoring, system personnel are aware of a problem even before system users.

### FIRE DRILL & ONE-MAN WALK TEST

Users can test fire notification bells using the Fire Drill feature. A special code is also available for installers to test the system. The one-man walk test feature allows a single technician to check the panel response to burglary, fire, panic and supervisory zones. Failed zones display and are reported at the end of the Walk Test.

### BUILT-IN PROGRAMMER & DIAGNOSTICS

No programming device required, enabling installers and service technicians to fully program the system and run diagnostics from any DMP LCD keypad. Check the electrical state of zones, find individual zone numbers, check the LX-Bus for Missing, Overlapping and/or Extra zones, and much more, all from any DMP LCD keypad.

### FLASH UPDATABLE

XR2500F panels can accept software updates from a remote location using Remote Link™ software. No need to make a trip to the site to update the panel with the latest software version.

### TRUE AREAS

The XR2500F Series provides 32 completely independent areas with a wide range of programmable options. Each area has a separate name and account number and can be independently armed.

### ZONE EXPANSION

The XR2500F provides up to 574 zones, programmable for burglary, fire, and access applications. The system contains eight burglary zones and two Class B 12 VDC powered zones. Up to 64 zones are available on the 16 keypad addresses and up to 100 zones are available on the built-in SLC Loop. In addition, add up to 500 zones using Expansion Modules.

### REMOTE LINK

The Remote Link™ programming software takes advantage of the easy-to-use simplicity of Microsoft® Windows™. The XR2500F includes an RS-232 interface for connection to an installer's laptop computer.

### XR2500F SYSTEM EXPANSION OPTIONS

A variety of expansion options may be used with the XR2500F to provide up to 574 programmable inputs and 502 programmable relay outputs. This includes addressable smoke detectors, single point addressable expanders for conventional pull station and heat detector connections, as well as 4-, 8- or 16-point addressable expanders. Provide outputs by connecting relay output modules and graphic annunciator interfaces. All of these capabilities make the XR2500F a truly full-service fire alarm system.

#### 725 24 VDC EXPANSION MODULE

The 725 provides four 24 VDC powered zones that enable you to connect 2-wire smoke detectors to the XR2500F. As a result, the 725 provides you the flexibility to retrofit a 24-Volt system without the need to run more wire or change to 12-Volt smoke detectors.



#### 710 BUS SPLITTER/ REPEATER MODULE

As a splitter, the 710 provides superior mechanical wire connecting capability for up to three additional SLC loop or digital annunciator bus circuits. This makes the 710 module an excellent junction box when terminating multiple digital SLC loop runs at one location. As a repeater, the 710 module can be installed at the end of a digital SLC loop to allow addition of another circuit, thus increasing the total wire length.

#### 710F FIRE BUS SPLITTER/ REPEATER MODULE

In addition to providing the functions of the 710, the 710F also allows the 725 Zone Expander to expand the number of 24 VDC zones.



#### 711 ZONE EXPANSION

Each 711 Single Input Expander Module provides a single addressable input to connect non-powered fire devices to the XR2500F. The 711 is mounted in an attractive, impact resistant plastic case with a removable cover and base.



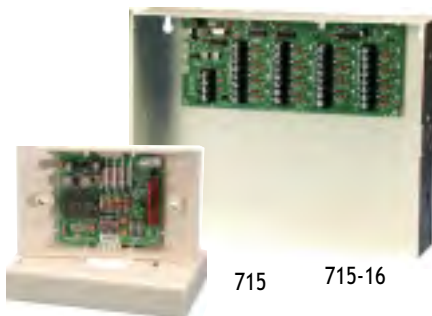
#### 714 ZONE EXPANDER

The 714 provides four inputs and is suitable for use with normally open and normally closed fire devices. 714 inputs are supervised and can be programmed for any zone type. The 714 connects to SLC loop or digital annunciator bus circuits. For added flexibility, the 714 zone expander is available in 4-, 8-, or 16-zone models.



#### 715 ZONE EXPANDER

The 715 expander provides four Class B powered inputs and is suitable for use with the 2-wire conventional smoke detectors. 715 inputs are supervised and can be programmed for any zone type. The 715 connects to SLC loop or digital annunciator bus circuits. For added flexibility, the 715 zone expander is available in 4-, 8-, or 16-zone models.



715

715-16

#### 716 OUTPUT EXPANDER

The 716 Output Expander Module provides four independently programmable Form C relays and four input following annunciator outputs (open collector) for use in a variety of remote-control and annunciator applications.



#### 717 GRAPHIC ANNUNCIATOR

The 717 module provides 20 input-following annunciator outputs (open collector) for use in a variety of remote annunciation and control applications. You can connect multiple 717 modules to the SLC loop of the XR2500F. This capability allows you to provide an annunciator output for each input of the system.



#### 461 INTERFACE ADAPTOR

The Model 461 Interface Adaptor plugs directly into the XR2500F PCB and provides expansion slots for up to five Interface Cards.



## XR2500F SYSTEM EXPANSION OPTIONS (CONTINUED)

The XR2500F FACP expands to up to 500 521LX or 521LXT Smoke Detectors. The first 100 detectors operate from the on-board LX-Bus. The second 200 detectors operate from the 481 SLC Expansion Card included in the XR2500F panel. Up to three additional SLC loops may be added by installing a 461 Interface Adaptor and additional Expansion Cards. A 505-12 Power Supply may also be needed.

### 462P PRINTER CARD

The 462P Printer Interface Card allows you to connect a serial printer to the XR2500F panel for printing real-time events such as alarms, troubles, and system reports.



Service technicians can also access a restricted option in the panel's User Menu to print all events currently in the panel's memory.

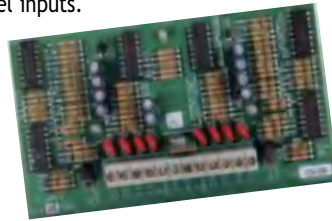
### 462N SLC LOOP INTERFACE

The 462N provides an RS-232 port for backup network communication. This allows on-site programming using DMP Remote Link™ software. The 462N Interface provides connection for the Digital 4-wire SLC Loop. The 4-wire bus supports addressable smoke detectors, relay output modules, graphic annunciator modules, and a variety of conventional expansion modules. Up to 100 individual device addresses are supported on one SLC loop.



### 869 CLASS A INPUT WATERFLOW

The 869 Module provides two class A, style D, 4-wire initiating loops for connecting waterflow switches and non-powered fire devices to the XR2500F. The 869 supervises both loops for opens, shorts, or ground fault conditions and connects to two XR2500F panel inputs.



### 521LX & 521LXT ADDRESSABLE SMOKE DETECTORS

The 521LX and LXT smoke detectors' analog features includes remote maintenance reporting, drift compensation, CleanMe™, and multi-criteria detection. To enhance the analog features the 521LX and LXT Addressable Smoke Detectors contain a single-point addressable module to allow connection to the digital 4-wire SLC loop.



### 521B(XT) SMOKE DETECTOR

With built-in self-diagnostics and direct-wire capability, the 521 Series smoke detectors also include analog features such as CleanMe™ remote maintenance/trouble reporting, drift compensation, and multi-criteria detection.

### SLR-835B & SLR-835BH CONVENTIONAL SMOKE AND HEAT DETECTORS

The SLR-835B and SLR-835BH Smoke Detector utilizes two built-in, bi-color LEDs to indicate status. The SLR-835BH combines a fixed temperature heat detector with the smoke detector.

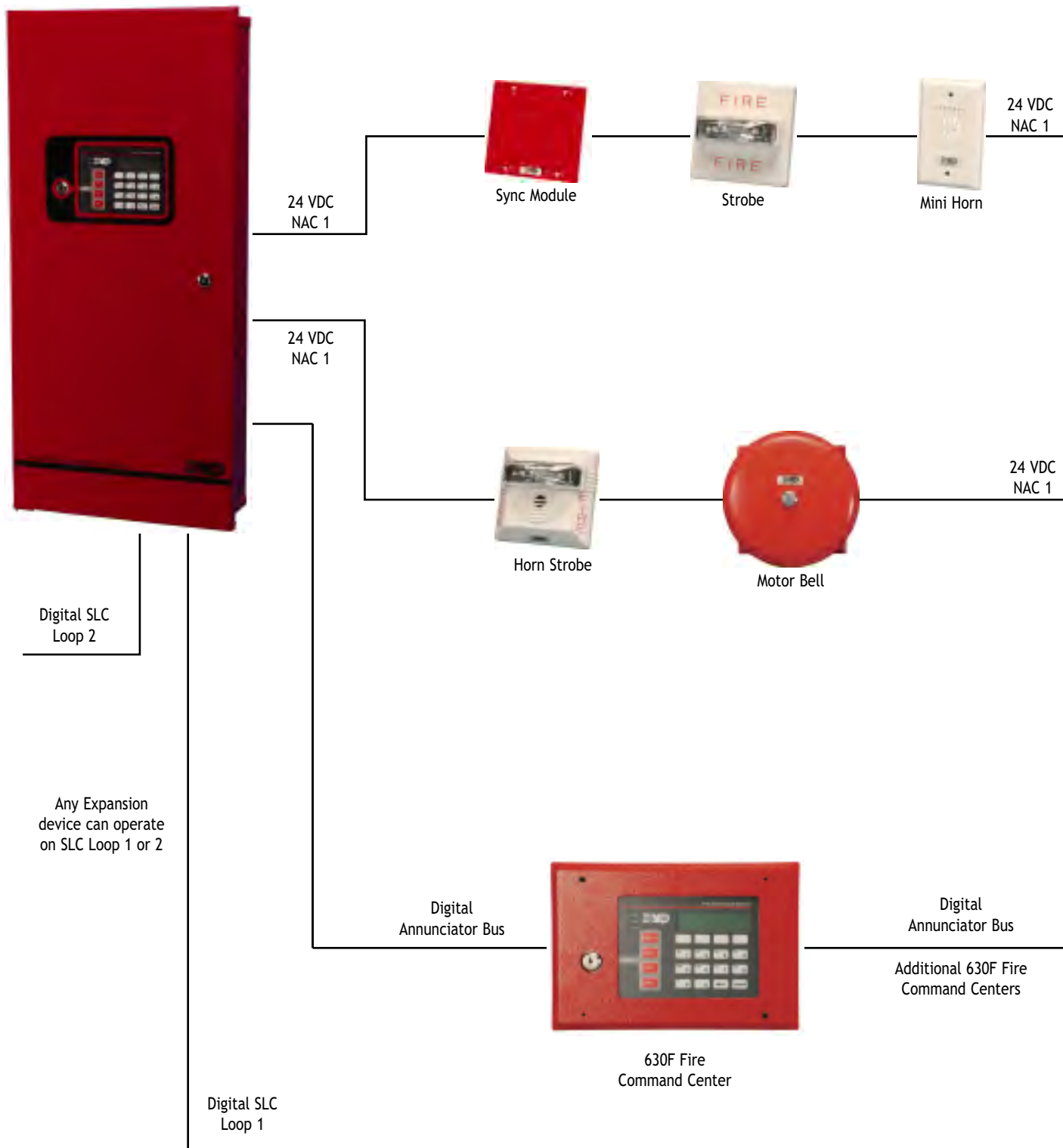


### 850 PULL STATIONS

The 850 Series Pull Station is a high quality, die-cast metal manual pull station available in either single or dual-action configurations with SPST contacts and terminal strip connections. The 850 connects to the model 711 to provide an addressable pull station.



### XR2500F TYPICAL NOTIFICATION/ANNUNCIATION



**XR2500F TYPICAL INPUT/OUTPUT**



Digital SLC Loop 2

Any Expansion Device Can Operate on SLC Loop 1 or 2

869 Class A Input Module



Two Class A Inputs.

Four 869 Modules may be used to provide eight Class A inputs total

521LX(T) Addressable Smoke Detectors. Up to 100 Devices



711 Single Input



850 Pull Station

714 Four Input Expander



To Heat Detectors and 4-wire Smoke Detectors

715 Four Input Expander



521B(XT) Conventional Smoke Detector



715-16 16 Input



SLR-835B/SLR-835BH Conventional Smoke



Four Form C Relay Outputs

716 Relay Output Expander



Four Open Collector Graphic Annunciator Outputs

717 Graphic Annunciator



Twenty Open Collector Graphic Annunciator Outputs

# FIRE PANELS

XR2500F

## REMOTE ANNUNCIATOR

630F	Remote Fire Command
690F	LCD Fire Command 32-character
790F	LCD Fire Command 32-character with 4-Zones

## DETECTORS

521B/BXT	Addressable Smoke, CleanMe
521LX/LXT	Addressable Smoke/Heat CleanMe
SLR-835B	Conventional Smoke
SLR-835BH	Conventional Smoke/Heat
5515G	Sentrol Moisture Sensor
5501	Sentrol Moisture Processor

## PULL STATIONS

850S	Single Action Pull Station
850D	Dual Action Pull Station
850S/711	Single Action Pull Station with 1 zone
850D/711	Dual Action Pull Station with 1 zone

## AUXILIARY MODULES

860	Relay Output Module
865	Style Y/Z Notification Circuit Module
866	Style W Notification Circuit Module
867	LX-Bus Notification Circuit Module
869	Style D Initiating Circuit Module
893A	Dual Phone Line Module

## EXPANSION MODULES

708	Bus Extender Module
710	Bus Splitter/Repeater
710F	Fire Bus Splitter/Repeater, 24 VDC
711	Single Zone Expansion Module
714	4-zone Class-B Expansion Module
714-8	8-zone Class-B Expansion Module
714-16	16-zone Class-B Expansion Module
715	4-zone 2-wire smoke Expansion Module
715-8	8-zone 2-wire smoke Expansion Module
715-16	16-zone 2-wire smoke Expansion Module
716	Output Expansion Module: 4 Form C relays, 4 open collector outputs
717	Graphic Annunciator: 20 open collector outputs
725	24 VDC 4-zone Expansion Module
736P	Radionics Interface Module
739	X-10 Interface Module

## INTERFACE CARDS

461	Interface Adaptor Card
462N	Network Interface Card
462P	Printer Interface Card
481	Expansion Interface Card

## POWER SUPPLIES

502-12	Provides 2 Amps @ 12 VDC
505-12/LX	Provides 5 Amps @ 12 VDC

## ACCESSORIES

300	Four-wire Harness
303	Silence/Reset Push-Button
305	Plug-in Output Relay
306	Tamper Harness
307-S	Screw-on Tamper Switch
335	Intrusion Siren
370	Lightning Suppressor
374	Surge Voltage Suppressor

## COMPUTER SOFTWARE

Remote Link Upload/Download Programming Software
System Link End-User Management Software
Advanced Reporting Module
Alarm Monitoring Module
Command Center Module
Account Groups Module
Link Server Application

## SPECIFICATIONS

Command Processor	
Transformer Input	16 VAC 56 VA
Standby Battery Models	12 VDC 365, 366, 367, 368 or 369
Auxiliary Power	12 VDC at 1.5 Amp
Temperature Range	32° F to 120° F
Relative Humidity	93% non-condensing

### XR2500F (FACP) with components

Current Draw	357mA in Standby 487mA in Alarm
Dimensions	32" H x 14.5" W x 4" D Lid adds 0.5" to each side

### NAC Output

24 VDC 4 Amps shared between NACs 1 and 2

## LISTINGS AND APPROVALS

Refer to the XR2500F Installation Guide (LT-0759), XR500 Series/XR2500F Programming Guide (LT-0679) and specific compliance listings for installation and programming requirements necessary to meet a particular approval.

Underwriters Laboratories (UL) Listed

UL 864	Commercial Fire Protective Signaling
UL 985	Household Fire Warning
UL 294	Access Control System Units
UL 365	Police Connected Burglar
UL 609	Local Burglar
UL 1023	Household Burglar
UL 1076	Proprietary Burglar
UL 1610	Central Station Burglar
UL 1635	Digital Burglar

ANSI/SIA CP-01-2000 False Alarm Reduction

California State Fire Marshal (CSFM)

New York City (MEA)

FCC Part 15

FCC Part 68

For additional information, access [www.dmp.com](http://www.dmp.com) and select Compliance.