The DMP XR2400F Addressable Fire Alarm Control Panel is an expandable Fire Alarm Control with built-in DACT and 32-character LCD annunciator. The complete system provides 234 programmable inputs and 200 programmable outputs for commercial and industrial fire alarm applications. The 24 VDC 4 Amp notification appliance power is distributed between two Class B Style W notification appliance circuits (NAC’s). Multiple NAC’s can be added with conventional or addressable power supplies and boosters. Addressable detectors and input modules (along with a variety of conventional accessories) round out the XR2400F to deliver a truly flexible and expansive system for all of your fire detection and notification needs.

XR2400F SYSTEM

The XR2400F comes fully assembled from the factory with the following components:

- XR2400F PCB and transformer
- 20-key keyboard and 32-character LCD display
- 504-24 power supply and transformer
- 866 Class B NAC module (two)
- 893A Dual Phone Line module
- 462N SLC Loop Interface with RS-232 Programming Input

SYSTEM FEATURES

- 24 VDC 4 Amp NAC Power Supply, Power Limited
- Addressable reporting system
- Expandable to 200 addressable smoke detector capacity with CleanMe™ and drift compensation
- Built-in 2-line DACT with line supervision

- Up to two 4-wire Digital SLC Loop, 100 Devices each
- Expands to four Class A inputs
- On-board 32-Character Annunciator
- Graphic Annunciator output for every input in system
- Expands to 200 addressable Form C relay outputs
- Program from panel keyboard, laptop, or remote computer
- Additional printer output option
- One-man walk test and fire drill operation
- Pager output
- Two Class B Style W NAC outputs
- Shared 4 Amp 24 VDC Power
- Electronic overcurrent protection: no fuses
- Inherently Power Limited
FOUR AMP POWER SUPPLY
The XR2400F provides a built-in 24 VDC 4 Amp power supply for NAC operation. Up to 6 Amps of peak power is available for inrush current demands. Two notification circuits are supplied for independent or simultaneous operation.

NOTIFICATION CIRCUIT EXPANSION
NAC outputs can be easily added to the XR2400F 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 the Model 504-24 Power Supply to provide additional 4 Amp NAC outputs.

BUILT-IN COMMUNICATION
The XR2400F is unmatched in communication capability with its Digital Dialer, Multiplex, Paging, and Data Network communication to one or two receivers. The DMP Serial 3 SDLC format supports 16-character point names to improve central station notification. Modem I and Contact ID reporting to non-DMP receivers may be programmed to meet a wide range of monitoring requirements.

SYSTEM OPERATION
The XR2400F can be easily operated using the 20-key keyboard and LCD display. A keyswitch enables the four system function keys provided for silence, reset, test, and fire drill operation. All of these functions are also available on the 630F Remote Fire Command Center.

REMOTE LINK
The Remote Link™ programming software takes advantage of the easy-to-use simplicity of Microsoft® Windows®. The XR2400F includes an RS-232 interface for connection to an installer’s laptop computer.

XR2400F PCB

XR2400F CONTROL PANEL
The XR2400F Fire Alarm Control Panel provides complete system control for local NAC operation, DACT communication to the central station, and local LCD and remote LCD annunciator support. The microprocessor based FACP also provides input for Class A zone expansion, conventional 521B(XT) smoke detectors, pull stations, and heat detectors.

FIRE COMMAND CENTER
The Fire Command Center is a 20-key, 32-character LCD annunciator used for system operation, annunciation, and programming. A keyswitch is provided to enable 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 7 Remote Command Centers can be attached to the XR2400F.

504-24 POWER SUPPLY
The factory installed 504-24 Power Supply is a cost effective, 4 Amp, 24 VDC power supply that provides Notification Appliance Circuit (NAC) power to the two 866 NAC modules. Two Amps are available for both circuits. Additional 504-24 and 504-24LX Power Supplies may be added to expand the system.

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.

893A DUAL PHONE LINE MODULE
The factory installed 893A is a dual telephone line supervision module that allows the XR2400F 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.

462N SLC LOOP INTERFACE
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. A second SLC loop can be added to the XR2400F by adding a 481 Interface Card. The 462N also provides an RS-232 port for connection to an installer’s laptop computer. This allows on-site programming using DMP Remote Link™ software.
DMP SERIES 800 AND 900 NOTIFICATION APPLIANCES

800 SERIES 12 VDC HORNS
The DMP 800 Series 12 VDC audible notification appliances are compact, electronic alarm appliances listed under UL 464 for Audible Appliances in public mode Fire Protection Systems. They are ideal for alarm signaling in individual rooms, apartments, hotels, motels, and offices—where attractive appearance, dependable performance, and an economical installation are prime concerns.

- 801 Mini Horn, 12 VDC
- 802 Multi-tone Horn, 12/24 VDC
- 803 Standard Horn, 12/24 VDC
- 806-6 six-inch Bell, 12 VDC
- 806-10 ten-inch Bell, 12 VDC

821 STROBE & 822 STROBE PLATE
The DMP Model 821 Strobe (12 VDC) and Model 822 Strobe Plate (12 VDC) are designed for maximum performance, reliability, and cost-effectiveness while meeting or exceeding the latest requirements of NFPA 72 (National Fire Alarm Code-1999), ANSI 117.1 (American National Standard for Accessible and Usable Building and Facilities), and UL Standard 1971 (Signaling devices for the Hearing Impaired).

823 HORN STROBE
The Model 823 Horn Strobe (12 VDC) is a low current design with zero inrush notification appliance only available through DMP. The appliance provides a selectable continuous horn tone or temporal pattern (Code 3) tone when constant voltage from a Fire Alarm Control panel (FACP) is applied. Select from two settings for each tone: 90 dBA or 95 dBA.

831 SINGLE SYNC MODULE & 832 DUAL SYNC MODULE
The Model 831 and 832 Sync Modules are used with the 803 horn, the 821, 822, and 823 strobe appliances (12 VDC), or the 921, 922, 923, and 924 strobe appliances (24 VDC). When used with the 923 and 924 Horn/Strobes, the sync modules provide independent synchronized temporal pattern (Code 3) horn and synchronized strobe flash operation.

900 SERIES 24 VDC HORNS
The DMP 900 Series 24 VDC audible notification appliances are compact, electronic alarm appliances listed under UL 464 for Audible Appliances in public mode Fire Protection Systems. They are ideal for alarm signaling in individual rooms, apartments, hotels, motels, and offices—where attractive appearance, dependable performance, and an economical installation are prime concerns.

- 901 Mini Horn, 24 VDC
- 904 Horn, 24 VDC
- 906-6 six-inch Bell, 24 VDC
- 906-10 ten-inch Bell, 24 VDC

921 & 922 MULTI-CANDELA STROBE APPLIANCES
DMP’s 921 and 922 Series Multi-Candela Strobe Appliance and Strobe Plates (24 VDC) offer a field selectable choice of four candela settings. These versatile strobe appliances will satisfy virtually all requirements for indoor, wall mount applications.

923 MULTI-CANDELA HORN/STROBE
The DMP’s 923 Multi-Candela Horn/Strobe Appliance will satisfy virtually all requirements for indoor, wall mount applications. The horn portion of the appliance includes a field selectable continuous horn tone or temporal pattern (Code 3) with selectable dBA settings of 90 or 95 dBA. The strobe options include field selectable candela ratings of 15, 30, 75, or 110cd.

924 MULTI-CANDELA HORN/STROBE APPLIANCE
DMP’s 2-Wire 924 Series Multi-Candela Horn/Strobe Appliance offers a field selectable choice of four candela settings and a selectable choice of either continuous horn or temporal pattern (Code 3) tone when constant voltage from the Fire Alarm Control Panel (FACP) is applied. Each tone has 3 field selectable settings for dBA levels.

906
SPEC SHEET

XR2400F SYSTEM EXPANSION

A variety of expansion options may be used with the XR2400F to provide up to 234 programmable inputs and 200 programmable outputs. This includes addressable smoke detectors, single point addressable expanders for conventional pull station and heat detector connections, as well as four, eight or sixteen point addressable expanders. Provide outputs by connecting relay output modules and graphic annunciator interfaces. All of this capability make the XR2400F a truly full-service fire alarm system.

521LX & 521LXT ADDRESSABLE SMOKE DETECTORS
The 521LX and LXT Addressable Smoke Detectors are the industry’s first conventional smoke detector with analog features such as remote maintenance reporting, drift compensation, CleanMe™, and multi-criteria detection. Additionally, the smoke detectors contain a single point, addressable module which allows connection to the digital 4-wire SLC loop.

600 SERIES HEAT DETECTORS
The 600 Series Conventional Heat Detectors feature combination rate-of-rise and fixed temperature operation, with 135°F (57°C) or 200°F (94°C) models, visual indication, single circuit operation, and normally open contacts. These features are incorporated into an attractive, durable, and low profile design. The unit protrudes only 1-3/8 inches from the ceiling surface using a junction box mounting. The pleasantly contoured, all-white finish design conforms aesthetically to most ceilings.

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 normally open contact, which closes when the pull station is activated, is rated for 1 Amp @ 30 VDC. The 850 series has been tested by UL for compliance to the latest requirements of the Americans with Disabilities Act (ADA). The 850 can connect to the Model 711 to provide an addressable pull station.

710 BUS SPLITTER/REPEATER MODULE
As a splitter, the 710 provides superior mechanical wire connecting capability for up to three additional 12 VDC LX-Bus or keypad 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
In addition to providing all of the functions of the 710 listed above, the 710F also allows you to use the 725 Zone Expander to expand the number of 24 VDC zones.

711 AND 711E CONVENTIONAL ZONE EXPANSION
The 711 and 711E Single Input Expander Modules provide a single addressable input you can use to connect non-powered fire devices to the XR2400F. Both modules are contained in attractive, impact resistant plastic cases with removable covers and bases. Wire entry points are provided on the case to accommodate a variety of installation requirements.
714 Zone Expander
The 714 contains four inputs and is suitable for use with normally open and normally closed fire devices. Individual loops are supervised with 1k EOL resistors and can be programmed for any fire loop type.

715 Input Zone Expansion Module
The 715 expander contains four Class B powered inputs and is suitable for use with the 2-wire 521B(XT) conventional smoke detectors. Individual inputs are supervised with an End-of-Line resistor and can be programmed for any zone type.

716 Output Expander Module
The 716 Output Expander Module provides four independently programmable Form C relays and four input following annunciator outputs (open collector) for use by XR2400F panels in a variety of remote annunciation and control applications. You can connect multiple 716 modules to the panel digital SLC loop for up to 200 auxiliary relays and 234 annunciator outputs.

717 Graphic Annunciator
The 717 module provides 20 input following annunciator outputs (open collector) for use by DMP XR2400F Fire Alarm Control panel in a variety of remote annunciation and control applications. You can connect multiple 717 modules to the SLC loop of the XR2400F. This capability allows you to provide an annunciator output for each input of the 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 XR2400F. 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.

481 SLC Expansion Card
The 481 Expansion Interface Card allows you to expand the XR2400F panel by 100 additional inputs. The 481 provides one 4-wire SLC loop connection.

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 XR2400F. The 869 supervises both loops for opens, shorts, or ground fault conditions and connects to two XR2400F panel inputs.

504-24LX Addressable Power Booster
The optional 504-24LX provides intelligent 4 Amp 24 VDC class B style W NAC operation. The power booster can be remotely mounted and individually assigned to one of 200 independent addresses for operation via the 4-wire digital SLC loop. Multiple power boosters can be programmed for simultaneous or independent operation as well. Various sections of a facility can be zoned for separate fire alarm notification by the XR2400F control. The 504-24LX Power Booster supervises AC and battery power to the supply and the condition of the NAC circuit. All information is reported to the XR2400F via the polled digital SLC loop.

460 Interface Adaptor
The Model 460 Interface Adaptor plugs directly into the XR2400F PCB and provides five expansion slots for Interface Cards.

462P Printer Card
The 462P Printer Interface Card allows you to connect a serial printer to the XR2400F 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.
XR2400F TYPICAL NOTIFICATION/ANNUNCIATION

Digital Annunciator Bus

Digital SLC Loop 1

Digital SLC Loop 2

504-24LX 24 VDC Addressable Power Booster

24 VDC NAC 1

831 Sync Module

922 Strobe Plate

921 Strobe

901 Mini-Horn

24 VDC NAC 2

923 Horn Strobe

802 Multi-tone Horn

906 Motor Bell

803 Horn

24 VDC NAC 3

831 Sync Module

923 Horn Strobe

906 Motor Bell

802 Multi-tone Horn

904 Horn

24 VDC NAC 4

904 Horn

906 Motor Bell

901 Mini-Horn

Digital SLC Loop 1

Additional 630F Fire Command Centers

24 VDC NAC 4
**XR2400F TYPICAL INPUT/OUTPUT**

869 Class A Input Module

Two Class A Inputs

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

Digital SLC Loop 1

521LX(T) Addressable Smoke Detector

Up to 100 devices

Digital SLC Loop 2

711 Single Input Expander

714 Quad Input Expander

505-12 Power Supply with 716 Relay Output for smoke reset

715 Quad Input Expander

850 Pull Station

Up to 100 Devices

Any Expansion device can operate on SLC Loop 1 or 2

521LX(T) Addressable Smoke Detector

Digital SLC Loop 2

600 Series Heat Detector

521B(XT) Conventional Smoke Detector

Four Form C relay outputs

Four open collector graphic annunciator outputs

717 Graphic Annunciator

Twenty open collector graphic annunciator outputs

521LX(T) Addressable Smoke Detector
REMOTE ANNUNCIATORS
630F Remote Fire Command

DETECTORS
SLR-835B Photoelectric Smoke
521B/BXT Addressable Smoke, CleanMe
521LX/LXT Addressable Smoke/Heat CleanMe
601 135° Rate-of-Rise Heat
602 200° Rate-of-Rise Heat
603 135° Fixed Temp Heat
601 200° Fixed Temp 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 w/ 1 zone
850D/711 Dual Action Pull Station w/ 1 zone

AUXILIARY MODULES
860 Relay 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
895 Voice Module

COMPUTER SOFTWARE
Remote Link Programming Software
System Link End-User Software
Alarm Monitoring Module
Command Center Visual Command and Control Module
Advanced Reporting Module

SPECIFICATIONS
Command Processor
Transformer Input 16.5 VAC 40 VA
Standby Battery 12 VDC 28 Ah
(100 VA charges up to four 7 Ah batteries)
Auxiliary Power 12 VDC at 1 Amp
NAC Power Input 12 VDC at 1.5 Amp
XR2400F FACP (with components)
Current Draw 332mA in Standby
490 in Alarm
Enclosure Dimensions 32” H x 14.5” W x 4” D
Lid adds 1” to each side

EXPANSION MODULES
708 Bus Extender Module
710 Splitter/Repeater
710F 24 VDC Splitter/Repeater
711/E Single Point Zone Expander
714 4-zone Class-B Expander
714-8/16 8 or 16-zone Class-B Expander
715 4-zone expander for 2-wire smokes
715-8/16 8/16-zone expander for 2-wire smokes
716 Output Expander; 4 Form C relays, 4 open collector outputs
717 Graphic Annunciator; 20 outputs
725 24 VDC 4-zone expander
736P Radionics Interface Module

INTERFACE CARDS
460 Interface Adaptor
462FM 9600 Baud Modem
462N Network Interface
462P Printer Interface
472 Inovonics Interface
481 Expansion Interface

POWER SUPPLIES
502-12 Provides 2 Amps @ 12 VDC
502-80 80-hour Standby Charger
504-24 Provides 4 Amps @ 24 VDC
505-12 Provides 5 Amps @ 12 VDC
508 8 Amps @ 12 or 24 VDC
AL400ULM 4 Amps @ 12 VDC or 3 Amps @ 24 VDC
AL400ULX 4 Amps @ 12 VDC or 3 Amps @ 24 VDC
AL600ULM 6 Amps at 12 VDC or 24 VDC
AL600ULX 6 Amps at 12 VDC or 24 VDC

ACCESSORIES
305 Plug-in Relay Output
306 Tamper Harness
322 100VA Wire-in Transformer
370RJ Lightning Suppressor 2 RJ Jacks
394 Direct Programming Cable
491 Load/Save Module

24 VDC MULTI-CANDELA STROBES
921-MCW Remote Strobe
922-MCW Remote Strobe with Retrofit Plate
923-MCW Horn Strobe
924-MCW Audible Strobe

12/24 VDC NOTIFICATION APPLIANCES
801 12 VDC Mini Horn
802 12/24 VDC Multi-tone Horn
803 12/24 VDC Standard Horn
806-6 6-inch 12 VDC Bell
806-10 10-inch 12 VDC Bell
821 12 VDC, 15/75 candela Strobe
822 12 VDC, 15/75 candela Strobe, Retrofit Plate
823 12 VDC, 15/75 candela Horn Strobe
901 24 VDC Mini Horn
904 24 VDC Horn
904WP 24 VDC Weatherproof Horn
906-6 6-inch 12 VDC Bell
906-10 10-inch 12 VDC Bell

12/24 VDC SYNC MODULES
831 12/24 VDC Single Circuit Sync Module
832 12/24 VDC Dual Circuit Sync Module

LISTINGS AND APPROVALS
• UL 864 Control Units for Fire Protective Signaling
• Central Station
• Remote Station
• Local
• Proprietary
• UL 294 Access Control
• UL 1610 Central Station
• NFPA 72
• CSFM