



# DS7400Xi Series Addressable Control Panels



- ▶ Up to 248 zones in up to eight areas
- ▶ 400-event history buffer
- ▶ Up to 200 personal ID numbers (PINs)
- ▶ Up to 112 wireless devices
- ▶ Up to 15 keypads and/or door access control modules (DACMs)
- ▶ Up to 240 addressable points including up to 60 outputs
- ▶ Ethernet network connectivity
- ▶ Remote programming over serial interface, Ethernet network, or phonenumber

The DS7400Xi Series Addressable Control Panels can be programmed for up to eight areas, are keypad or remotely programmable, and have a wide range of features.

## Functions

### Answering Machine Override

Each control panel model has a built-in answering machine override function. No external hardware is required.

### Automatic Arming and Delayed Arming

Program an automatic arming time for each area daily. Use delayed arming to override automatic arm time or to specify a time for the panel to arm.

### Common Area Arming

Program one area to follow the arming state of some or all of the other areas. The common area arms only when all areas linked to it are armed, protecting shared areas such as foyers and entry-ways while maintaining separate areas.

### Custom Arming Configurations

Program the system to arm in different configurations to automatically bypass a group of zones.

### Easy Function Key User Interface

- Six labeled function keys eliminate the need for multi-button commands. Enter a PIN followed by the function key to perform functions such as arming, disarming, and resetting smoke detectors.
- The interface provides new users with easy to follow procedures. Expert users can quickly access items.
- A programmable Quick Arm feature allows users to turn the system on without a PIN. The system requires a PIN to turn off the system, silence alarms, or perform system tests.

### EEPROM Technology

The control panel uses electronically erasable programmable read-only memory (EEPROM). The EEPROM retains program memory, system programming, user codes, and the arm/disarm state through a power failure. There is a delay on power restore that prevents false alarms from space sensors that might take several minutes to become operational.

## Eight Areas

Divide the control panel into eight separate system areas, each area with its own keypads and reporting ID. Keypads can be programmed as master keypads, allowing access to all areas.

## Flexible Digital Communication

The communicator works with most alarm receivers, and supports 3/1, 4/1, 4/2, Contact ID, SIA, BFSK digital communicator formats and pager format. The pager format allows the control to dial a digital pager service and leave a numeric message representing the account number and event code.

## Input and Output Cross Matrix

Input and output cross matrix allows output functions to follow the status of specific input zones. Outputs can be programmed to follow any combination of one or two zones, open or closed, with the system armed or disarmed.

## LED and Alphanumeric Keypad Support

- **DS7445V2 LED Keypad:** Provides an LED per zone (LEDs 1-8 for main board zones and LEDs 9-16 for expansion zones), and eight system status LEDs that show conditions such as armed, fire alarm, and trouble.
- **DS7445i LED Keypad:** Provides an LED per zone (for main board zones 1-8 only), and eight system status LEDs that show conditions such as armed, fire alarm, and trouble.
- **DS7447V2 Alphanumeric Keypad:** Two line, freely programmable display allows 16 characters of custom text to be programmed for zone and area descriptions. The user can adjust the sounder volume and backlight intensity using easy two-button commands. The DS7447V2 is required for system programming.

**Note:** LED and LCD keypads may be mixed in the same system.

## Octal Relay Modules

The DS7400Xi Series Control Panels support up to two DX3010 Octo-Output Expander Modules. Each module supplies eight relay or solid state outputs to follow system events or to follow programmed Output Functions from the control panel.

## Output Functions

Program the output functions to follow system events or to follow one or two specific zones in a cross matrix (see Input and Output Cross Matrix). Output functions can control octal relay outputs or addressable bus outputs.

## Programmable from Keypad or Remotely

- The system is completely keypad programmable. No need for expensive handheld programmers.
- RPS-INTL provides remotely programming through an IBM® PC (or IBM compatible) running a Microsoft® Windows® operating system and communicating through a standard Hayes modem. Using an off-site computer to run diagnostics, arm systems, and bypass zones reduces service visits to a premise and provides quick customer assistance.

## Smoke Detector Alarm Verification

The DS7400Xi Series Control Panels can automatically reset the smoke detectors following an alarm. If a second alarm occurs within the verification window, an immediate fire alarm occurs, reducing potential false alarms while providing fast response to an alarm.

## Two Independent Entry Delays

Program zones to select from one of the two entry delay times. Users can select a longer entry delay time for zones located a long distance from the keypad.

## Certifications and Approvals

The DS7400Xi Series Control Panels comply with the following certifications, standards, and approvals.

Belgium	BEL INCERT
Europe	CE

## Installation/Configuration Notes

### Compatible Products

Category	Product
Keypads	DS7445Vi LED Keypad
	DS7445V2 LED Keypad
	DS7447E LCD Keypad
	DS7447V2 LCD Keypad
Modules	Conettix IP C900V2 Dialer Capture Module
	C900TTL-E Dialer Capture Module
	Conettix IP DX4020 Network Interface Module
	Door Access Control Module (DACM)
	DS7420i Dual Phone Line/Bell Supervision Module
	DS7430 Multiplex Bus Driver Module
	DS7432/E Eight-Input Remote Module
	DS7433/E Eight-Input Direct Module
	DS7436 Addressable Expansion Module
	DS7457i/iF Single-Zone Input Module
DS7457iE Single-Zone Input Module	

	DS7460i Double-Input Module
	DS7461i Single-Input Module
	DS7465i Input/Output Module
	DS7480 Bell Supervision Module
	DS7481 Single Phone Line Monitor
	DS7489 Solid State Output Module
	DX3010 Octo-output Expander
	DX4010i RS-232 Serial Interface Module
Multiplex Detectors	D7050/TH Multiplex Photoelectric Smoke Detector
	MX250/TH Multiplex Photoelectric Smoke Detector
	MX775i Multiplex PIR Intrusion Detector
	MX794i Long-Range Multiplex PIR Detector
	MX934i Multiplex PIR Intrusion Detector
	MX938i Multiplex Intrusion Ceiling Mount Detector
Intrusion Detectors	All conventional Bosch intrusion detectors, including Blue Line, seismic, PIR, TriTech, photoelectric, and TriTech PIR Microwave.
Two-wire and Four-wire Smoke Detectors <sup>1</sup>	Conventional Bosch 12 V smoke, heat, and photoelectric smoke detectors.

<sup>1</sup> Availability varies according to sales regions.

## Wiring

Use four-conductor 1.2 mm to 0.8 mm (18 AWG to 22 AWG) cable. The maximum wire length of each sensor loop is 305 m (1000 ft). The maximum multiplex bus wire length per system is 610 m (2000 ft) if using 0.8 mm (#22 AWG) wire or 1525 m (5000 ft) if using 1.0 mm (#18 AWG) wire.

## Keypads

No more than two keypads per 305 m (1000 ft) run with a total of no more than 15 keypads in the system.

## Technical Specifications

### Burglar and Fire Zone Inputs

Number of Circuits:	8 circuits on board
End of Line Resistor:	2.2 + 1.5 kΩ

### Environmental Considerations

Operating Temperature:	0°C to +49°C (+32°F to +120°F)
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### Fire Signal Initiating Circuit

Fire circuits will work with two-wire or four-wire detectors and have optional alarm verification.

Number of Circuits:	8 circuits on board, expandable to 16
Type of Circuit:	Class B, latching
End of Line Resistor:	2.21 kΩ
Supervisory Current:	5 mA
Minimum Current for Alarm:	12 mA
Maximum Short Circuit Current:	22 mA
Maximum Circuit Resistance:	60 Ω
Circuit Voltage Range:	8.5 VDC to 14.1 VDC
Maximum Impedance for Alarm:	1000 Ω
Maximum Detectors per Zone:	20 detectors (two-wire)
Total Detector Standby Current:	2.5 mA

### Lightning Suppression

MOVs and spark gaps provide suppression of lightning surges and static discharges.

### Outputs

The system provides three programmable outputs that can be controlled by alarms, access control, ground start, smoke detector reset, or the control's arming state.

Alarm Output:	Normally Open, 1.75 A contact connected to auxiliary power.
Programmable Output 1:	Solid state current sink (1 A maximum). Can be used for alarm, arming state, or access control.
Programmable Output 2:	Solid state voltage source (500 mA maximum). Can be used for alarm, arming state, or access control.

### Power Requirements

Input:	18 VAC, 50 VA, 50 Hz or 60 Hz
Total Power Output:	12 VDC, 2.5 A
Keypad Regulated Power:	12 VDC, 1.0 A
UL Listed Auxiliary Power:	12 VDC, 1.0 A
UL Listed Alarm Power Output:	1.75 A

### Trademarks

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**Ordering Information**

DS7400XI-EXP Control Panel For export. Includes a transformer and enclosure.	DS7400XI-EXP
DS7400XI-BEL Control Panel For use in Belgium. Includes a large enclosure. Always has 128 points enabled.	DS7400XI-BEL
DS7400XI-CHI Control Panel For use in China. Includes an enclosure.	DS7400XI-CHI
DS7400XI-DK Control Panel For use in Denmark.	DS7400XI-DK
DS7400XI-GR Control Panel For use in Greece. Includes an enclosure.	DS7400XI-GR
DS7400XI-FI Control Panel For use in Finland.	DS7400XI-FI
DS7400XI-FRA Control Panel For use in France.	DS7400XI-FRA
DS7400XI-HU Control Panel For use in Hungary. Includes an enclosure.	DS7400XI-HU
DS7400XI-ITA Control Panel For use in Italy.	DS7400XI-ITA
DS7400XI-NOR Control Panel For use in Norway. Includes an enclosure.	DS7400XI-NOR
DS7400XI-SPA Control Panel For use in Spain.	DS7400XI-SPA
DS7400XI-SWE Control Panel For use in Sweden. Includes an enclosure.	DS7400XI-SWE
DS7400XI16-BEL Control Panel Provides 16 zones. For use in Belgium.	DS7400XI16-BEL
DS7400XI16-SWE Control Panel Provides 16 zones. For use in Sweden.	DS7400XI16-SWE

**Hardware Accessories**

AE1 Standard Enclosure (Gray) Standard gray enclosure made of 1.0 mm cold-rolled steel. Includes a keyed lock. The dimensions are 35.6 cm x 31.8 cm x 7.6 cm (14 in. x 12.5 in. x 3 in.).	AE1
AE3 Large Enclosure (Gray) Large gray enclosure made of 1.2 mm cold-rolled steel. Includes a keyed lock. Measures 52.7 cm x 38.1 cm x 10.8 cm (20.7 in. x 15 in. x 4.25 in.).	AE3

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