

# DS7220V2 Control Panel



## Security Systems

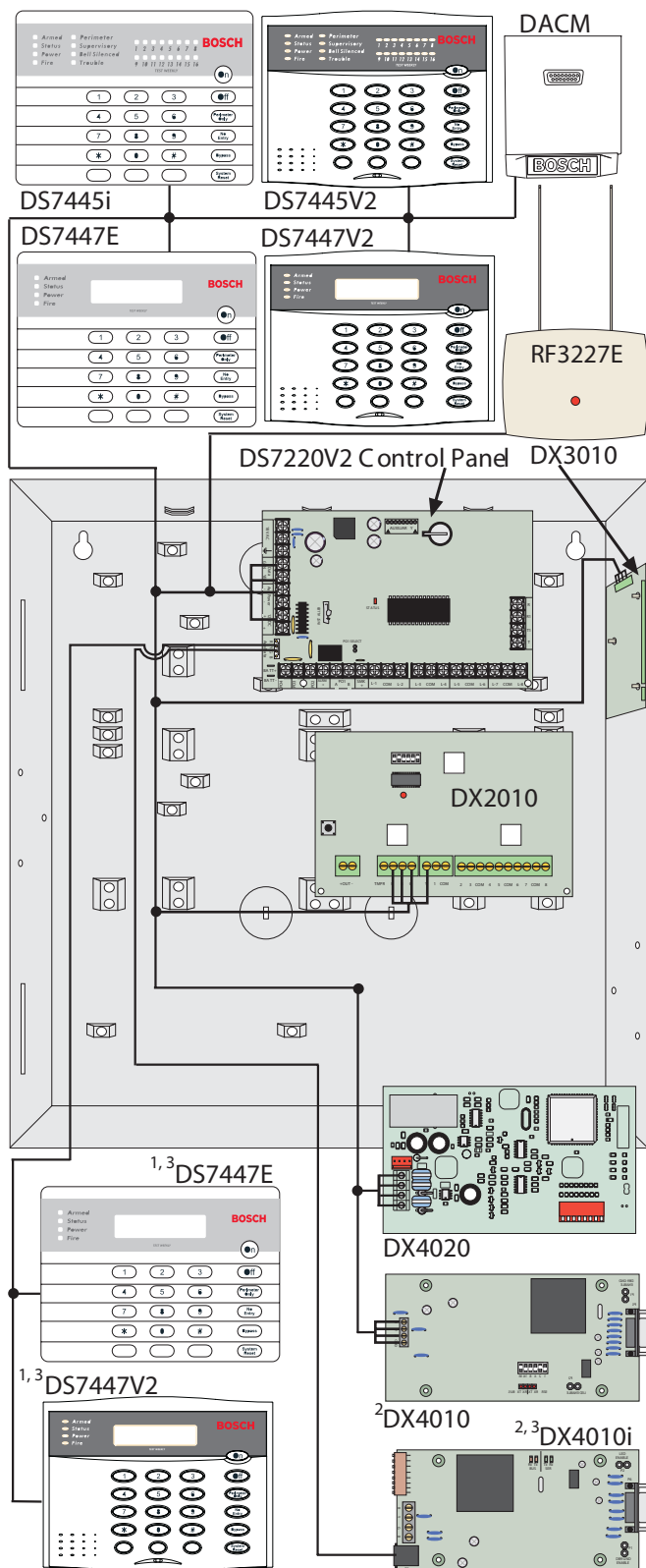


The Ds7220V2 control panel has eight zones expandable to 24, four outputs expandable to 12, and two areas. It is suitable for commercial burglary and residential fire/burglary applications.

### Features

- 8 on-board zones
- 8 programmable Skeds
- RF compatibility
- Up to 32 users with optional keyfob operation available
- 4 programmable authority levels
- 2 communications routing destinations
- 254 event log
- Remote-programmable with RPS-INTL
- Optional Door Access Control Module (DACM)
- Network communication option (LAN/WAN)
- Alarm verification inputs and outputs

**System Overview**



**Functions**

**1. Alarm verification option**

Central station personnel are able to verify alarms with a two-way voice session with the premises and/or visually through an on-premises camera connected to the optional rvm4c Remote Video Module.

**2. Eight on-board zones**

The DS7220V2 Control Panels have eight on-board zones, and, can have hard-wired expanded zones and/or wireless zones. Any of these zones may be programmed to follow one of 15 programmable zone functions.

The DS7220V2 Control Panels also allow doubled zone configuration utilizing two resistors per sensor loop. The panel monitors two zones per sensor loop in this configuration, making 16 on-board zones available. Zone doubling is also available on hard-wired expanded zones.

Zones may be programmed for one of two programmable entry/exit delay times allowing longer entry/exit delay time for zones located a long distance from the keypad.

**3. 32 users; four programmable authority levels**

The system supports 32 Personal Identification Numbers (PINs), which are four digits in length by default, but may range between three and seven digits. Any number of PINs may be designated as master PINs; these are the only PINs that can be used to reprogram PINs. PINs other than the master PINs may be programmed any of four different authority levels allowing them to be restricted from bypassing, testing and disarming the system.

**4. Programmable from keypad or RPS-INTL**

The system is completely keypad programmable (DS7447E or DS7447V2 Keypad required). An Installer's Keypad feature is also available that allows quick access to the programming menu.

RPS-INTL is a Windows®-based account management and panel programming and diagnostic utility. It is designed to remotely (or locally using the DX4010i Aux Data pins) set up and program the DS7220V2 Control Panels.

## 5. LED and alphanumeric keypad support

The DS7220V2 Control Panels can use the DS7445i and DS7445V2 LED (light-emitting diode) Keypads and the DS7447E and DS7447V2 LCD (liquid-crystal display) Keypads. The DS7445i and DS7445V2 provide an LED per zone (for 16 zones), plus eight system status LEDs that indicate conditions such as armed, fire alarm, and trouble. The DS7447E and DS7447V2 two-line displays allow for 16 characters of custom text to be programmed for zone and area descriptions. The end user can adjust the sounder volume and backlight intensity using easy button commands. LED and LCD keypads may be mixed in the same system.

## 6. PK32

The DS7220V2 Control Panels have an optional PK32 Programming Key that functions much like a blank disk and can be used to copy one panel's programming to another panel. This can be used as an installer's template (an installer could store a residential template in one PK32 and a commercial template in another PK32). An on-board LED lights to indicate when information is sent to or from the key, and blinks when functional diagnostics are performed on the key.

## 7. Flexible digital communications

The DS7220V2 Control Panels will work with most alarm receivers in use today. They support Contact ID and SIA 300 digital communicator formats and personal dialling. The pager format allows the panels to dial a digital pager service and leave a numeric message representing the account number, event number, area number and zone/user number.

## 8. Network communication option

Adding a DX4020 Network Interface Module provides bi-directional communications over an Ethernet network. The network can also be used for both remote programming sessions with RPS-INTL and central station (ARC) reporting.

## 9. Event history log

A 254-event history log, which can be read at the DS7447E and DS7447V2 LCD Keypads or retrieved by RPS-INTL, keeps track of Open/Close events, Alarms, Troubles, etc. by time and date. Area, zone (device), user and communication information relevant to each event is also tracked. All 254 events are in non-volatile memory.

## 10. Skeds (scheduled events)

Skeds are programmable events that occur at a specific (programmable) time of day and day of week. These events include Auto On, Auto Perimeter Only On, Auto Partial On, Auto Off and Sked Output Function. Users can extend the Auto On, Auto Perimeter Only On and Auto Partial On time by one hour using the Extend Auto On Time function. Depending on the assigned authority level, users can change a Sked. Eight Skeds are available.

## 11. Fire alarm verification

The DS7220V2 Control Panels can be programmed to perform an automatic reset of the smoke detectors should an alarm occur. If a second alarm occurs within the verification window, an immediate fire alarm results. This reduces potential false alarms, while still providing fast response to an alarm.

## 12. Door Access Control Modules (DACMs)

A DACM grants or restricts access through a door using a keypad or credential reader, a Request to Exit (REX) input, or a door contact. Each DACM replaces one system keypad and supervises one door. The DACM can also function as a stand-alone device.

## 13. Zones

The DS7220V2 accepts up to 24 zones consisting of any combination of the eight on-board zones plus hard-wired expanded zones and/or wireless zones.

## 14. Areas

The DS7220V2 can be divided into two independently-configurable areas. Each area has its own keypads and can have its own reporting ID.

## 15. Outputs

The DS7220V2 has four on-board programmable outputs that may be expanded up to 12.

**PO 1:** terminals can be configured as an alarm power output. The default configuration for PO 1 makes it a dry contact, Normally-Open (NO) relay.

**PO 2:** can be used with Alarm + as a supervised siren driver. Connect an approved 4  $\Omega$  or 8  $\Omega$  speaker. Alternatively, PO 2 can sink up to 500 mA, 12 VDC.

**PO 3 and PO 4:** can be configured for Alarm Output. These outputs can sink 500 mA, 12 VDC each.

## Parts included

Each standard system includes:

Quant.	Component
1	DS7220V2 control board
1	Universal enclosure
1	Transformer (18 VAC, 50 VA)
1	hardware/resistor pack

## Certifications and Approvals

Country	Certification/Listing Number
Europe	CE: EN50131

## Trademarks

Windows<sup>®</sup> is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

## Planning

### Compatible products

The following products are compatible with the DS7220V2 system:

Category	Product
Batteries	D126 12 V, 7 Ah Standby Battery
	D1218 12 V, 18 Ah Standby Battery
	D1240 12 V, 4 Ah Standby Battery
Keypads	DS7445i LED Keypad
	DS7445V2 LED Keypad
	DS7447E LCD Keypad
	DS7447V2 LCD Keypad
Fire Products	D132A Smoke Detector Reversing Relay
	DS250 Photoelectric Smoke Detector
	DS250TH Photoelectric Smoke Detector with heat-sensing thermistor
	DS284 Photoelectric Smoke Detector
	DS284TH Photoelectric Smoke Detector with heat-sensing thermistor
RF Products	DS284THS Photoelectric Smoke Detector with heat-sensing thermistor and sounder
	RF280ETHS Wireless Photoelectric Smoke Detector with heat-sensing thermistor and sounder
	RF835E Wireless TriTech <sup>®</sup> Detector
	RF940E Wireless PIR Detector
	RF1100E RF Glass Break Detector
	RF3227E RF Receiver
	RF3332E 2-Button Keyfob
	RF3334E 4-Button Keyfob
	RF3401E RF Transmitter
	RF3405E RF Inertia Transmitter
	RF3501E RF Panic Pendant
	RF3503E RF Panic Button
	Modules
DX2010 8-Input Expander	
DX3010 Octo-Output Expander	
DX4010 RS-232 Serial Interface Module	
DX4010i RS-232 Serial Interface Module	
DX4020 Network Interface Module	
RVM4C Remote Video Module	

### Wiring considerations

- Up to 1,000 ft (305 m) allowed between panel/external power supply and keypad or DACM when using 0.8 mm wire.
- Up to 2,000 ft (610 m) allowed between panel/external power supply and keypad or DACM when using 1.2 mm wire.
- No more than two keypads/DACMs (0.8 mm) or three keypads/DACMs (1.2 mm) are recommended on any 1,000 ft (305 m) run when powered from the panel.

### Technical Specifications

DS7220V2 Control Panel	
<b>Data Bus</b>	12 VDC nominal
<b>Enclosure</b>	
Material:	1.0 mm, cold-rolled steel
Dimensions (HxWxD):	14.5 in. x 12.5 in. x 3 in. (36.8 cm x 31.8 cm x 7.6 cm)
<b>Environmental Considerations</b>	
Relative Humidity:	5% to 85% at +86°F (+30°C) non-condensing
Temperature (Operating):	+32°F to +120°F (0°C to +49°C)
<b>Keypads/DACMs</b>	
Number supported:	8 maximum; any combination of keypads or DACMs
<b>Power Outputs</b>	
Continuous Power:	1.2 A maximum
Alarm Power:	1.85 A maximum at 11.5 VDC to 12.4 VDC
<b>Power Requirements</b>	
Primary Voltage Input:	18 VAC, 50 VA transformer
Secondary Voltage Input:	Two 12 VDC, 7 Ah or 12 VDC, 18 Ah sealed lead-acid rechargeable batteries
Current Requirements:	100 mA
<b>Telephone Interface</b>	Terminal block
<b>Model No.</b>	<b>Product Name</b>
DS7220V2	Control Panel

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