

# DS7220V2 Control Panel



The DS7220V2 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.

# **Functions**

# **Alarm Verification Option**

Central station personnel can verify alarms with a twoway voice session with the premises, or visually through an on-premises camera connected to the optional rvm4c Remote Video Module.

# **Eight On-board Zones**

The DS7220V2 Control Panel has eight on-board zones. It can have hard-wired expanded zones and wireless zones. Program any of these zones to follow one of 15 zone functions.

The DS7220V2 Control Panel also allows configuration using two resistors for each sensor loop. The control panel monitors two zones for each sensor loop, making 16 on-board zones available. Zone doubling is also available on hard-wired expanded zones.

When programming zones for entry or exit delay times, you can choose a longer delay time for zones located a longer distance from the keypad.

- ► Eight on-board zones
- ► Eight programmable Skeds
- ► RF compatibility
- Up to 32 users with optional keyfob operation available
- ► Four programmable authority levels
- ► Two communications routing destinations
- ▶ 254 event log
- ► Remote-programmable with RPS-INTL
- ► Optional Door Access Control Module (DACM)
- ► Network communication option (LAN/WAN)

# **Authority Levels and PINs**

The system supports 32 Personal Identification Numbers (PIN). The PIN default is four digits, but can range between three and seven digits. Designate an unlimited number of master PINs. Use the master PINs to reprogram existing PINs. Program PINs using up to four different authority levels, which can restrict the PIN from bypassing, testing, and disarming the system.

# Locally or Remotely Programmable

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.

Remote Programming Software (RPS) is a Windows<sup>®</sup>-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.

# LED and LCD Keypad Support

Keypad Description

DS7445i LED Keypad DS7445V2 LED Keypad Provide 16 operating LEDs, and eight system status LEDs that indicate conditions such as armed, fire alarm, and trouble.

DS7446KP LCD Keypad DS7447E LCD Keypad DS7447V2 LCD Keypad Two-line displays allow custom zone and area descriptions up to 16 characters. The end user can adjust the sounder volume and backlight intensity using easy button commands.

LED and LCD keypads can be used in the same DS7220V2 Control Panel system.

#### PK32

The DS7220V2 Control Panel has an optional PK32 Programming Key that can copy one control panel's programming to another control panel. This can be used as an installer's template. The installer could store a residential template in one PK32 and a commercial template in another PK32. The on-board LED illuminates when information is sent to or from the key, and blinks when functional diagnostics are performed on the key.

### Flexible Digital Communications

The DS7220V2 Control Panel works with most alarm receivers that support Contact ID and SIA 300 digital communicator formats and pager format. The pager format allows control panels to dial a digital pager service and leave a numeric message representing the account number, event number, area number, and zone or user number.

### **Network Communication Option**

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

#### **Event History Log**

A 254-event history log keeps a record of open and close events, alarms, and troubles organized by time and date. View the log information using the DS7447E and DS7447V2 LCD Keypads or RPS. The log also tracks the area, zone (device), user, and communication information relevant to each event. All 254 events are in non-volatile memory.

# Scheduled Events (Skeds)

Skeds are programmed events that occur at a specific 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 use the Extend Auto On Time function to add an additional hour to the

setting for Auto On, Auto Perimeter Only On and Auto Partial On. Depending on the assigned authority level, users can change a sked. Eight skeds are available.

# Fire Alarm Verification

The DS7220V2 Control Panel can automatically reset smoke detectors after an initial alarm. 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.

# Door Access Control Modules (DACMs)

A DACM grants or restricts access through a door using a keypad, credential reader, 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.

#### **Zones**

The DS7220V2 Control Panel accepts up to 24 zones in any combination of the available on-board zones, hardwired expanded zones, or wireless zones.

#### Areas

The DS7220V2 Control Panel can be divided into two independently-configurable areas. Each area can have separate keypads and a separate reporting ID.

# **Outputs**

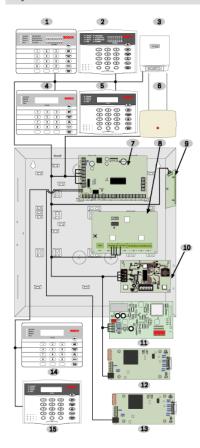
The DS7220V2 Control Panel has four on-board programmable outputs that can be expanded up to 12. **PO 1:** terminals can be configured as an alarm power output. The default configuration for PO 1 makes it a dry

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.

contact, Normally-Open (NO) relay.

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

### **System Overview**



- 1. DS7445i LED Keypad
- 2. DS7445V2 LED Keypad
- 3. Door Access Control Module (DACM)
- 4. DS7447E LCD Keypad
- 5. DS7447V2 LCD Keypad
- 6. RF3227E RF Receiver
- 7. DS7220V2 Control Panel
- 8. DX3010 Octo-output Expander
- 9. DX2010 Input Expander
- 10. DX3020 X-10 Interface Module
- 11. DX4020 Network Interface Module
- 12. DX4010i RS-232 Serial Interface Module
- 13. DX4010i RS-232 Serial Interface Module
- 14. DS7447E LCD Keypad
- 15. DS7447V2 LCD Keypad

# **Certifications and Approvals**

The DS7220V2 Control Panel complies with the following certifications, approvals, and standards.

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EN50131-1 grade 2

# Installation/Configuration Notes

### Compatibility Information

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 DS7446KP LCD Keypad DS7447E LCD Keypad DS7447V2 LCD Keypad

Fire Detectors 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

DS284THS Photoelectric Smoke Detector with heat-sens-

ing thermistor and sounder

Wireless Products RF280ETHS Wireless Photoelectric Smoke Detector with

heat-sensing thermistor and sounder RF835E Wireless TriTech\* Detector RF940E Wireless PIR Detector

RF940E Wireless PIR Detector RF1100E RF Glass Break Detector RF3227E RF Receiver

RF3334E Four-button Keyfob RF3401E RF Transmitter RF3405E RF Inertia Transmitter RF3501E RF Panic Pendant RF3503E RF Panic Button

RF3332E Two-button Keyfob

Modules DACM Door Access Control Module

DX2010 Eight-input Expander

DX2011 Eight-input Expander - D203 Metal Enclosure DX2012 Eight-input Expander - AE20 Plastic Enclosure

DX3010 Octo-output Expander DX3020 X-10 Control Module

DX4010 RS-232 Serial Interface Module
DX4010i RS-232 Serial Interface Module
DX4020 Network Interface Module
rym4c Remote Video Module

# Wiring Considerations

 Up to 305 m (1,000 ft) allowed between panel/ external power supply and keypad or DACM when using 0.8 mm wire.

- Up to 610 m (2,000 ft) 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 305 m (1,000 ft) run when powered from the panel.

# **Parts Included**

# Each standard system includes:

Quantity	Component
1	DS7220V2 control board
1	Universal enclosure
1	Transformer (18 VAC, 50 VA)
1	Hardware/resistor pack

# **Technical Specifications**

#### **Data Bus**

Data Bus: 12 VDC nominal

### **Enclosure**

Material:1.0 mm, cold-rolled steelDimensions:36.8 cm x 31.8 cm x 7.6 cm

(14.5 in. x 12.5 in. x 3 in.)

#### **Environmental Considerations**

Relative Humidity: 5% to 85% at +30°C (+86°F) non-condensing

Temperature (Operating): 0°C to +49°C (+32°F to +120°F)

# Keypads and Door Access Control Module (DACM)

Number supported: 8 maximum in any combination of keypads or

DACMs

#### **Power Outputs**

Continuous Power: 1.2 A maximum

Alarm Power: 1.85 A maximum at 11.5 VDC to 12.4 VDC

#### **Power Requirements**

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

# Telephone Interface

Telephone Interface: Terminal block

# **Trademarks**

Windows" is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

Ordering Information	
DS7220V2-BEL Control Panel For use in Belgium.	DS7220V2-BEL
DS7220V2-EXP Control Panel For export.	DS7220V2-EXP
DS7220V2-FRA Control Panel For use in France.	DS7220V2-FRA
DS7220V2-SPA Control Panel For use in Spain.	DS7220V2-SPA
DS7220V2-UK Control Panel For use in the United Kingdom.	DS7220V2-UK
DS7220V2-SWE Control Panel For use in Sweden.	DS7220V2-SWE
DS7220V2-DE Control Panel For use in Germany.	DS7220V2-DE
DS7220V2-IT Control Panel For use in Italy.	DS7220V2-IT

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