D9412GV3 Control Panel

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BOSCH
Invented for life

▶ Fully integrated intrusion, fire, and access control allows users to interface with one system instead of three

▶ Conettix IP-based communication options provide high-speed, secure alarm transport and control through connection of up to two wired (DX4020) and/or wireless (ITS-DX4020-G) network interfaces

▶ Up to 32 programmable areas with perimeter and interior partitioning

▶ 246 points with flexible configuration options to meet multiple installation requirements

▶ Commercial Wireless allows up to 238 RF points

The D9412GV3 Control Panel delivers a powerful new solution for intrusion, access control, and fire alarm system applications. The control panel includes a communicator that sends events to selected public switched telephone network (PSTN), IP network, or general packet radio service (GPRS) destinations through four programmable route groups. The control panel provides up to 246 individually identified points. Each point:
- Accommodates normally-open (NO) and normally-closed (NC) devices with end-of-line (EOL) resistor supervision
- Is programmable for fire, fire supervisory, or intrusion applications.

With the D9412GV3 you can:
- Monitor alarm points for intruder or fire alarms while operating user keypads and other outputs
- Program all system functions locally or remotely (attended or unattended) through Remote Programming Software (RPS); program critical parameters on-site through a keypad.
- Add up to eight doors of access control using the optional D9210BLC Access Control Interface Module.

Functions

Programmable Outputs
- 2 A alarm power at 12 VDC
- 1.4 A auxiliary power at 12 VDC
- Four alarm-output patterns
- Programmable bell test

System Response
- High-performance micro-controller provides industry-leading system response
- 31 custom point indexes, including fire supervisory
- Selectable point response time
- Cross point capability
- Fire alarm verification
- Fire inspector's local test
- Watch mode
- Scheduled events (skeds) arm, disarm, bypass and unbypass points, control relays, control authority levels, and control door access

User Interface
- Supervision of up to 16 keypads (up to 32 unsupervised keypads can be used)
- Custom keypad text is fully programmable, including remote programming

- Full function command menu including custom functions
- Authority by area and 16-character name for each user
- 14 custom authority levels control user's authority to change, add, or delete passcodes or access control credentials; to disarm or bypass points; and to start system tests

Area Configurations
Area programming offers a wide selection of different system configurations. Each area is assigned an account number to define annunciation, control, and reporting functions. Multiple areas can be linked to a shared area which is automatically controlled (hallway or lobby). Area arming can be conditional on other areas (master or associate). Any area can be configured for perimeter and interior arming, not requiring a separate area for this function.

Two Man Rule
Two Man Rule provides added security by requiring:
- Two people present at opening
- Two unique passcodes on the same keypad to disarm an area

Without the second passcode, the system denies entry.

Early Ambush
Early Ambush requires two passcode entries on the same keypad. Enter the same passcode twice or have two unique passcodes, depending on the configuration. The first entry disarms the area and the second entry stops a timer programmed to send a duress event. If the second entry does not occur within the programmed time, the system generates a duress event. Early Ambush allows users to inspect the premises and use the system to confirm that the area is safe to enter, providing added security.

Easy Exit Control
The D9412GV3 Control Panel changes from one armed state to another armed state without disarming. For example, if you change the state from Master Arm to Perimeter Arm, the control panel complies and reports the change. Easy Exit Control reduces the number of keystrokes, simplifying system operation.

Programmable Passcode-controlled Menu List
The system prompts users to enter a passcode prior to viewing the keypad menu. The keypad display shows the user the menu options allowed according to the user's authority level. Passcode-controlled menus provide users only with the options and information pertinent to them, simplifying system operation.

Passcode Follows Scope
Use Passcode Follows Scope to restrict passcode arming and disarming to the keypad's immediate local area, even if the keypad can report events from other areas. Passcode Follows Scope simplifies the arming and disarming procedure without limiting any other keypad capabilities.

Invisible Walk Test
A menu item allows the user to test invisible 24-hour points within the scope of the keypad without sending a report to the central station.

Door-Activated Custom Function
A custom function activates when user credentials are presented to a D9210B door controller's reader. The custom function behaves as though the user performed a function at the keypad associated with the door controller.

Passcodes
User passcodes contain three to six digits. Assign each user one of 14 customized authority levels in each area. Restrict passcodes to operate only during certain times.
The Two Man Rule and Early Ambush options require two passcodes, providing additional security in financial establishments such as banks.

Communications
The D9412GV3 Control Panel prioritizes and sends reports in Contact ID or Modem IIIa[2] communications formats to four route groups. Each group has a programmable primary and backup destination.
The D9412GV3 provides flexible communications for most central stations with reporting capabilities such as:
- Individual point numbers
- Opening or closing reports by user and area number
- Remote programming attempts
- Diagnostic reports

The D9412GV3 uses the DX4020 Ethernet Network Interface Module and/or the ITS-DX4020-G GPRS/GSM Communicator to communicate with the Conettix D6600 and D6100i Communications Receiver/Gateways. Using Conettix IP communication offers a secure path that includes anti-replay/anti-substitution features and provides enhanced security with encryption. Both the DX4020 and ITS-DX4020-G can be used for remote programming.

Security and Fire Detection
The D9412GV3 Control Panel provides eight on-board points, and up to 238 additional off-board points (depending on model and expansion interfaces). You can program individual points to monitor all types of burglar alarms, fire alarms, and supervision devices.

Commercial Wireless
The Commercial Wireless platform, powered by Inovonics wireless mesh network technology, ensures superior range, reliability, and scalability for commercial applications. Using a wide range of transmitters and repeaters, this proven technology provides flexibility and performance to meet the most stringent requirements. This exclusive protocol is available only on Commercial Wireless products.
The Commercial Wireless platform sends redundant information on several multi-frequency channels within the FCC Part 15 900 MHz band, providing superior range and reliability. In comparison, systems that use a

single frequency technology can only send information on one narrow band channel. Any interference within the band can cause missed signals. With wireless registration, it is easy to add this technology to any application.

Event Log

The event log stores up to 1,000 local and transmitted events. The event log includes time, date, event, area, point, and user number. View the event log from a keypad or use RPS to remotely retrieve event information. RPS operators can retrieve events periodically using one phone call, rather than receiving several calls each day. When the event log reaches a programmed threshold of stored events, it can send an optional report to a receiver.

Access Control

The D9412GV3 provides custom door strike, point shunt and auto disarming response by area. There are 14 panel-wide access levels with both manual and scheduled control.
Store, view, or print access events such as:
- Access granted
- No entry
- Request-to-enter
- Request-to-exit

Scheduled Events (Skeds)

The internal clock and calendar start individually scheduled events (skeds). Skeds perform functions such as arm or disarm, relay control, or point bypassing. The D9412GV3 Control Panel offers:
- 40 scheduled events with up to 25 different functions
- Eight opening windows and eight closing windows
- Eight user windows
- Day-of-week, date-of-month, or holiday only schedules
- Four holiday schedules of 366 days each (leap year)

Fire Test

When a user activates Fire Test Mode, the control panel suppresses all reports to the central station. The keypad and annunciator show all testing data. An automatic sensor reset feature saves time; you do not need to reset the sensors manually. At the end of test, the keypad shows the number of untested points.

Programming, Diagnostics and Controls

Installers can do limited programming on-site with a keypad (critical parameters; such as, .Account IDs, Central Station and RPS IP addresses and phone numbers, reporting formats, and such).They can also do full programming on-site or remotely (attended or unattended) with RPS. A programmable system passcode prevents unauthorized remote programming. D9412GV3 Control Panels accommodate up to four separate destinations for primary, alternate, and backup receivers for automatic test reports. When resetting alarms or arming or disarming a system, the user is identified by name and number.

ROM Updates

An on-site flash update key provides for easy feature enhancements without replacing ROM chips.

Commercial Fire Alarm Support

Suitable for Commercial Fire (UL 864, 9th Edition) applications.

Certifications and approvals

	FCC	Designed to comply with Part 15

Region	Certification	
USA	UL	AMCX: Central Station Alarm Units (ANSI/UL 1610 and 1635); AMTB: Control Panels, SIA False Alarm Reduction (UL 864 and ANSI/SIA CP-01-2000); AOTX: Local Alarm Units (ANSI/UL 609 and ANSI/UL 464); APAW: Police Station Alarm Units (ANSI/UL 365 and ANSI/UL 464); APOU: Proprietary Alarm Units (ANSI/UL 1076); NBSX: Household Burglar Alarm System Units (ANSI/UL 1023); UOJZ: Control Units, System (ANSI/UL 864); UTOU: Control Units and Accessories, Household System Type (ANSI/UL 985)
	FM	
	CSFM	7167-1615:0239 CONTROL UNIT (HOUSEHOLD) CONTROL UNIT (HOUSEHOLD)
	CSFM	7165-1615:0238 FIRE ALARM CONTROL UNIT (COMMERCIAL)
	CSFM	7167-1615:0239
	FDNY-CoA	6059 [D9412GV3 & D7412GV3]

Installation/configuration notes

Compatible Products

Keypads

D1260 Series Keypads
(D1260, D1260W, D1260R, D1260BLK, D1260B)

D720 Series Keypads
(D720, D720W, D720R, D720B)

D1255 Series Keypads
(D1255, D1255W, D1255B, D1255RB)

D1256RB Fire Keypad

D1257RB Remote Fire Alarm Annunciator

D1265 Touch Screen Keypad

D279A Independent Zone Control

Detectors

D278S Four-wire Addressable Detector Base, 12 VDC

D285/TH Photoelectric Smoke Detector Heads

D298S Addressable Detector Base, 24 VDC

D7050 Series Addressable Photoelectric Smoke and Smoke Heat Detector Heads

F220-B6PM/S Addressable Detector Bases with POPITs

MX775i Addressable PIR Detector

MX794i Long Range Multiplex PIR Detector

MX934i Addressable PIR Detector

MX938i Addressable PIR Detector

ZX776Z PIR Detector

ZX794Z Long Range PIR Detector

ZX835 TriTech Microwave/PIR Detector

ZX935Z PIR Detector

ZX938Z PIR Detector

ZX970 PIR/Microwave Detector

Bosch conventional detectors, including Blue Line, seismic, PIR, TriTech PIR Microwave, photoelectric, heat, and smoke.

Enclosures

D8103 Universal Enclosure

D8108A Attack-resistant Enclosure

D8109 Fire Enclosure

Magnetic Contacts

Bosch magnetic contacts include recessed, terminal connection, miniature, overhead door, and surface mount.

Modules

Conettix ITS-DX4020-G GPRS/GSM Integrated Communicator

Conettix DX4020 Network Interface Module

Conettix DX4010V2 USB/Serial Interface Module

Conettix C900V2 Dialer Capture Module

D113 Battery Lead Supervision Module

D125B Dual Class B Initiating Module

D127 Reversing Relay Module

D129 Class A Initiating Module

D130 Auxiliary Relay Module

D185 Reverse Polarity Signaling Module

D192G Notification Appliance Circuit Module

D928 Phone Line Switcher

D5060 MUX Programmer

D8125 POPEX Point Expander

D8128D OctoPOPIT Eight-point Expander

D8125MUX Point Expander

D8125INV Wireless Interface Module

D8129 Octo-relay Module

D8130 Door Release Module

D9127 Series POPIT Modules

D9131A Parallel Printer Interface Module

D9210BLC Access Control Interface Module

DS7432 Eight-input Remote Module

DS7457i Series Single-zone Multiplex Input Modules

DS7460i Two-input Module

DS7461i Single-input Multiplex Module

DS7465i Input and Output Module

ICP-SDI-9114 SDI Splitter

Programming

RPS or RPS-LITE Remote Programming Software

Readers

ARD-R10 iCLASS Mullion Reader

ARD-R40 iCLASS Switchplate Reader

ARD-RK40-09 iCLASS PIN Reader

ARD-VSMART iCLASS Reader

D8223 Prox Pro Reader

D8224 Mullion Reader

D8224-SP Switch Plate Reader

D8225 Mini Mullion Reader

D8301W Low-profile Proximity Readers

Commercial Wireless Products

ISW-D8125CW Commercial Wireless Interface

ISW-EN7280 Serial Receiver

ISW-EN4200 Serial Receiver

ISW-EN4204R LED Receiver

ISW-EN4216R LCD Receiver

ISW-EN4016SK Survey Receiver

ISW-EN5040-T High-power Repeater

ISW-EN1210 Universal Transmitter (Single-input)

ISW-EN1210EOL Universal Transmitter with EOL Resistor

ISW-EN1210SK Survey Transmitter

ISW-EN1210W Door-Window Transmitter with Reed Switch

ISW-EN1215EOL Universal Transmitter with Wall Tamper and EOL Resistor

ISW-EN1215WEOL Door-Window Transmitter with Wall Tamper, Reed Switch, and EOL Resistor

ISW-EN1223D Water-resistant Pendant Transmitter (Double-button)

ISW-EN1223S Water-resistant Pendant Transmitter (Single-button)

ISW-EN1223SK Survey Pendant Transmitter

ISW-EN1233D Necklace Pendant Transmitter (Double-button)

ISW-EN1233S Necklace Pendant Transmitter (Single-button)

ISW-EN1235D Beltclip Pendant Transmitter (Double-button)

ISW-EN1235S Beltclip Pendant Transmitter (Single-button)

ISW-EN1235DF Fixed-location Transmitter (Double-button)

ISW-EN1235SF Fixed-location Transmitter (Double-button)

ISW-EN1242 Smoke Detector-Transmitter

ISW-EN1247 Glassbreak Sensor-Transmitter

ISW-EN1249 Billtrap Transmitter

ISW-EN1260 PIR Motion Sensor Transmitter (Commercial and High-end Domestic Applications)

ISW-EN1261HT PIR Motion Sensor Transmitter (High-traffic Areas)

ISW-EN1262 PIR Motion Sensor Transmitter (Residential and Low-traffic Commercial Applications)

ISW-EN1265 PIR Motion Sensor Transmitter (Ceiling-mount Applications)

Parts included

The D9412GV3 includes the following parts:

Quant.	Component
1	D9412GV3 Board
1	Mounting Skirt
1	Faceplate with D9412GV3 Label
1	Literature pack • Installation Instructions • Owners Manual • Release Notes
1	Literature CD containing all product literature

The available kits come with the parts indicated in the following table:

Components	Kits -A	-B	-C
D9412GV3 Board	1	1	1
D101F Lock and Key Set			1
D122 Dual Battery Harness		1	
D161 Dual Modular Phone Cord		2	
D928 Dual Phone Line Switcher		1	
D1640 Transformer		1	1
D8103 Enclosure			1
D8108A Attack-resistant Enclosure	1		
D8109 Fire Enclosure		1	

Technical specifications

Communications

SDI Bus A (+):	9 VDC 4572 m (15,000 ft)
SDI Bus B (-):	9 VDC 4572 m (15,000 ft)
Telephone Connection:	• One telephone line • D928 Dual Phone Line Module required for two telephone lines

Environmental Considerations

Relative Humidity:	5% to 93% at +30°C (+86°F), non-condensing
Temperature (Operating):	0°C to +50°C (+32°F to +122°F)

Number of...

Areas:	8
Card Readers (Doors):	8
Credentials (Tokens):	996
Custom Functions:	16
Events:	Up to 1000
Passcode Users:	249, plus 1 service passcode
Parallel Printers:	3
Points:	246 (8 on-board, up to 238 off-board)
Programmable Relay Outputs:	131
RF Points:	238
SKEDs:	64

Power Requirements

Current Draw (Maximum):	300 mA
Output (Alarm):	2 A at 12 VDC
Output (Auxiliary, Continuous Power, and Switched Auxiliary combined):	1.4 A at 12 VDC nominal
Voltage (Operating):	12 VDC nominal
Voltage (AC):	16.5 VAC 40 VA plug-in transformer (D1640)

Trademarks

Inovonics is a trademark of Inovonics Wireless Corporation.

Ordering information

D9412GV3 Control Panel
Includes one printed circuit board (PCB) with mounting skirt and faceplate with label, and a literature pack and CD.
Order number **D9412GV3**

D9412GV3-A Attack-resistant Package
Contains one PCB, one transformer, and one attack-resistant enclosure.
Order number **D9412GV3-A**

D9412GV3-B Fire/Burglar Package
Contains one PCB, one dual battery harness, two telephone cords, one telephone line switcher, one transformer, and one fire enclosure.
Order number **D9412GV3-B**

D9412GV3-C Standard Burglar Package
Contains one PCB, one lock and key set, one transformer, and one universal enclosure.
Order number **D9412GV3-C**

Accessories

ICP-SDI-9114 SDI Splitter
Provides the ability to set up two independent SDI buses from a single SDI connection on the control panel.
Order number **ICP-SDI-9114**

D928 Dual Phone Line Switcher
Allows the control panel to operate over and supervise two separate phone lines. Only one D162 phone cord is supplied. Two additional D161 or D162 phone cords are required.
Order number **D928**

D110 Tamper Switch
Screw-on tamper switch that fits all enclosures. Shipped in packages of two.
Order number **D110**

ICP-EZTS Dual Tamper Switch
Combination tamper switch with a wire loop for additional tamper outputs.
Order number **ICP-EZTS**

D101 Lock and Key Set
Short-body lock set with one key supplied. Uses the D102 (#1358) replacement key.
Order number **D101**

D122 Dual Battery Harness
Harness with circuit breaker. Connects two batteries to a compatible control panel.
Order number **D122**

D122L Dual Battery Harness with Long Leads
Color-coded harness with circuit breaker and leads measuring 89 cm (35 in.). Connects 12 V batteries to compatible control panels.
Order number **D122L**

D126 Standby Battery (12 V, 7 Ah)
A rechargeable sealed lead-acid power supply used as a secondary power supply or in auxiliary or ancillary functions.
Order number **D126**

D1218 Battery (12 V, 18 Ah)
A 12 V sealed lead-acid battery for standby and auxiliary power with two bolt-fastened terminals. Includes hardware for attaching battery leads or spade connectors
Order number **D1218**

D1224 Battery (12 V, 26-28 Ah)
A 12 V sealed lead-acid battery for standby and auxiliary power with two bolt-fastened terminals. Includes hardware for attaching battery leads or spade connectors.
Order number **D1224**

D137 Mounting Bracket
Used to mount accessory modules in D8103, D8108A, and D8109 enclosures.
Order number **D137**

D138 Mounting Bracket, Right Angle
Used to mount accessory modules in D8103, D8108A, and D8109 enclosures.
Order number **D138**

D1640 Transformer
System transformer rated at 16.5 VAC, 40 VA.
Order number **D1640**

D8004 Transformer Enclosure
For applications such as fire alarm that might require a transformer enclosure.
Order number **D8004**

D8103 Enclosure
Grey steel enclosure measuring 41 cm x 41 cm x 9 cm (16 in. x 16 in. x 3.5 in.).
Order number **D8103**

D8108A Attack Resistant Enclosure
Grey steel enclosure measuring 41 cm x 41 cm x 9 cm (16 in. x 16 in. x 3.5 in.). UL Listed. Includes lock and key set. B520, B4512, and B5512 require the B12 mounting plate.
Order number **D8108A**

D8109 Fire Enclosure
Red steel enclosure measuring 40.6 cm x 40.6 cm x 8.9 cm (16 in. x 16 in. x 3.5 in). UL Listed. Includes a lock and key set.
Order number **D8109**

D9002-5 Mounting Skirt

Mounts inside D8103, D8108A, and D8109 enclosures. Can accept up to six standard 7.62 cm x 12.7 cm (3 in. x 5 in.) cards.
Order number **D9002-5**

Software Options

RPS Kit (USB)

Account management and control panel programming software with USB security key (dongle).
Order number **D5500C-USB**