GV4 panels are the premier commercial control panel line from Bosch. GV4 panels integrate intrusion, fire and access control providing one simple user interface for all systems. With the ability to adapt to large and small applications, the D9412GV4 provides up to 246 individually identified points that can be split into 32 areas. The control panel includes a communicator that sends events to selected public switched telephone network (PSTN), IP network, or cellular network destinations through four programmable route groups. With the D9412GV4 you can:

- Monitor alarm points for intruder or fire alarms while operating keypads and other outputs
- Program all system functions local or remote using Remote Programming Software (RPS) or by using basic programming through the keypad.
- Add up to eight doors of access control using the optional D9210C Access Control Interface Module.

Functions

Programmable Outputs
- 2 A alarm power at 12 VDC
- 1.4 A auxiliary power at 12 VDC

- 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 wired and/or cellular network interfaces
- Up to 32 programmable areas, each supporting both perimeter and interior points
- 246 hardwired, addressable or wireless points with flexible configuration options to meet multiple installation requirements
- Your choice of touch screen, vacuum florescent, ATM style or LED keypads

- Four alarm-output patterns
- Programmable bell test

System Response
- High-performance micro-controller provides industry-leading system response
- High-speed device bus (NEW)
- 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)
- Remote Programming Software (RPS) Lite allows end users to perform control panel management tasks – Add/Delete/Change user passcodes and authorities, view and print the panel history event log
• 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 system configurations. Each area is assigned an 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.

**Custom Functions**
For added convenience, Custom Functions can be programmed to eliminate keystrokes for users allowing the installer to program an easy command for a complicate function. For example, a custom function can be written to bypass a group of points and arm the system, allowing the user to perform this function with one easy command. This can be used to control a particular room, or even a single door allowing customized access. In additions, Custom Functions can be activated with a token or card, or automatically as a scheduled event (SKED) providing further flexibility and ease of use.

**Door-Activated Custom Function**
A custom function activates when user credentials are presented to a D9210C Access Control Interface Module door controller’s reader. The custom function behaves as though the user performed a function at the keypad associated with the door controller.

**Passcode Security**
For high security applications, GV4 can be configured for several different passcode options.
• Dual Authentication – requires a user to enter their passcode and also use a token or card (NEW).
• Two-Man Rule - Requires two people with two unique passcodes to be present at the time of opening.
• Early Ambush - Allows users to verify that the facility is safe by requiring two passcode entries at the same keypad, sending a duress event if the user does not enter the passcode a second time after inspecting the premises.

**Easy Exit Control**
The D9412GV4 Control Panel changes from one armed state to another armed state without disarming. For example, if you change the state from Perimeter Arm to Master 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.

**Flexible Control**
The system provides the flexibility to select added convenience or high security. For example, you can restrict passcode arming and disarming to a keypad’s immediate local area, even if the user has access to other areas. This is particularly useful for high security areas, where a user may have access to the area, but would prefer to only disarm the area individually rather than with the rest of the system. Another option is to program the system to disarm all areas the user can access from any keypad.

**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.

**System Users**
The system supports up to 1000 users, each can have a passcode, an access token and a wireless keyfob (NEW). User passcodes contain three to six digits. Passcodes can be assigned to one of 14 customized authority levels in each area, and can be restricted to operate only during certain times.

**Communication Formats**
The D9412GV4 Control Panel prioritizes and sends reports in Contact ID or Modem IIIa communications formats to four route groups. Each group has a programmable primary and backup destination.

**IP Communication**
The D9412GV4 uses the B420 Ethernet Communication Module (NEW), DX4020 and/or the ITS-DX4020-G Cellular 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. The B420, DX4020 and ITS-DX4020-G can all be used for remote programming.

GV4 is the first Security Control panel to support DNS (Domain Name System) for both remote programming and central station communication. DNS provides ease of use, eliminating the need to use static IP addresses as your reporting destination and accommodates a simple solution for central station disaster recovery.
IP Setup is available via the installer keypad menus and the remote programming software, eliminating the need to use complicated internet programming tools such as ARP and Telnet (NEW).

**Communication Paths**
D9412GV4 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.

**Firmware Updates (NEW)**
Remote firmware updates using the RPS Firmware Update wizard through the IP connection (B420 Ethernet Communication Module) as well as an on-site flash update key, provides for easy feature enhancements without replacing ROM chips.

**A wide variety of input options**
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 application.
- Can be hard-wired, addressable, or wireless.

**Security and Fire Detection**
The D9412GV4 Control Panel provides eight on-board points, and up to 238 additional off-board points. You can program individual points to monitor all types of burglar alarms, fire alarms, and supervision devices.

**Access Control**
The D9412GV4 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

**Wireless Interface (NEW)**
The B820 SDI2 Inovonics Interface Module connects an Inovonics EN4200 Serial Receiver to the control panel SDI2 bus, allowing this UL Listed (NEW) wireless system to be programmed locally via the panel keypad, as well as remotely through RPS.

**Event Log**
The event log stores up to 1,000 local and transmitted events. The event log includes time, date, event, area, point, user number, and transmission status (NEW). View the event log from a keypad or use RPS to remotely retrieve event information. RPS operators can retrieve events periodically using one 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.

**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 D9412GV4 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 program locally or remotely through RPS as well as basic keypad programming. A programmable system passcode prevents unauthorized remote programming.

**Two Data Buses (NEW)**
GV4 provides 2 data buses which support a wide array of components. The SDI bus supports keypads access and communications modules and also allows connection of existing components in a retrofit application. The new SDI2 bus supports input and output devices as well as a new wireless interface module, and an Ethernet communicator. SDI2 allows these devices to be mounted up to 1000 ft (305 m) from the control panel, providing installation convenience and flexibility.

**Commercial Fire Alarm Support**

**Certifications and Approvals**

<table>
<thead>
<tr>
<th>USA:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>UL 365</td>
<td>Police Station Connected Burglar Alarm Units and Systems</td>
</tr>
<tr>
<td>UL 609</td>
<td>Local Burglar Alarm Units and Systems</td>
</tr>
<tr>
<td>UL 636 (NEW)</td>
<td>Holdup Alarm Units and Systems</td>
</tr>
<tr>
<td>UL 864</td>
<td>Control Units and Accessories for Fire Alarm Systems (Commercial Fire)</td>
</tr>
<tr>
<td>UL 985</td>
<td>Household Fire Warning System Units</td>
</tr>
<tr>
<td>UL 1023</td>
<td>Household Burglar Alarm System Units</td>
</tr>
<tr>
<td>UL 1076</td>
<td>Proprietary Burglar Alarm Units</td>
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<tr>
<td>UL 1610</td>
<td>Central Station Burglar Alarm Units</td>
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<tr>
<td>ANSI/SIA CP-01:2010</td>
<td>False Alarm Reduction</td>
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<tr>
<td>CSFM</td>
<td>California Office of The State Fire Marshall</td>
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### FCC Part 15 Class B

<table>
<thead>
<tr>
<th>Region</th>
<th>Certification</th>
</tr>
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<tbody>
<tr>
<td>USA</td>
<td>UL</td>
</tr>
<tr>
<td></td>
<td>AMCX.S1871, Central Station Alarm Units; AMTB.S1871, Control Panels, SIA False Alarm Reduction; AOTX.S1871, Local Alarm Units; APAW.S1871, Police Station Alarm Units; APOU.S1871, Proprietary Alarm Units; NBSX.S1871, Household Burglar Alarm System Units; UOJZ.S1871, Control Units, System; UTOU.S1871, Control Units and Accessories, Household System Type</td>
</tr>
</tbody>
</table>

FDNY-CoA #6102 UL 864 9th Edition [D9412GV4, D7412GV4]

| CSFM | 7167-1615:0243 Catagory 7167 - Control Unit (Household). [D9412GV4, D7412GV4, D7212GV4] |

### Installation/Configuration Notes

#### Compatible Products

**Keypads**
- D1265 Touch Screen Keypad
- D1255 Series Keypads (D1255, D1255W, D1255B, D1255RB, D1265)
- D1260 Series Keypads (D1260, D1260W, D1260R, D1260BLK, D1260B)
- D1256RB Fire Keypad
- D1257RB Remote Fire Alarm Annunciator
- D720 Series Keypads (D720, D720W, D720R, D720B)
- 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 12/24 VDC Addressable Detector Bases with POPITs
- FCC-380 Carbon Monoxide Detector
- 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 Professional Series, Blue Line Gen2, Blue Line, Classic Line, Commercial Line, and Ceiling Mount motion detectors, as well as glass break, seismic, request-to-exit, photoelectric, heat, and smoke detectors.

#### 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 B420 Ethernet Communication Module (NEW)
- Conettix ITS-DX4020-G Cellular 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
- B208 Octo-input Module (NEW)
- B308 Octo-output Module (NEW)
- B820 SDI2 Inovonics Interface Module (NEW)
- 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
- D9210C 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

Wireless
B820 SDI2 Inovonics Interface Module
SDI2 Inovonics Interface and Receiver Kit. Includes B820 and EN4200 (ENKIT-SDI2)
EN1210 Universal Transmitter (Single-input)
EN1210EOL Universal Transmitter with EOL Resistor
EN1210W Door Window Transmitter with Reed Switch
EN1215EOL Universal Transmitter with Wall Tamper, Reed Switch, and EOL Resistor
EN1223D Water-resistant Pendant Transmitter (Double-button)
EN1223S Water-resistant Pendant Transmitter (Single-button)
EN1224-ON Multiple-Condition Pendant Transmitter
EN1223D Necklace Pendant Transmitter (Double-button)
EN1223S Necklace Pendant Transmitter (Single-button)
EN1235D Beltclip Pendant Transmitter (Double-button)
EN1235DF Fixed-location Transmitter (Double-button)
EN1235SS Beltclip Pendant Transmitter (Single-button)
EN1235SF Fixed-location Transmitter (Single-button)
EN1247 Glass-break Detector Transmitter
EN1249 Bill Trap Transmitter
EN1242 Smoke Detector Transmitter
EN1260 Wall Mount Motion Detector
EN1261HT High Traffic Motion Detector
EN1262 Motion Detector with Pet Immunity
EM1265 360° Ceiling Mount Motion Detector
EN4200 Serial Receiver
EN5040-T High Power Repeater with Transformer

Parts Included
The D9412GV4 includes the following parts:

<table>
<thead>
<tr>
<th>Quant.</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D9412GV4 Board</td>
</tr>
<tr>
<td>1</td>
<td>Mounting Skirt</td>
</tr>
<tr>
<td>1</td>
<td>Faceplate with D9412GV4 Label</td>
</tr>
<tr>
<td>1</td>
<td>Literature pack</td>
</tr>
<tr>
<td></td>
<td>• Installation Instructions</td>
</tr>
<tr>
<td></td>
<td>• Owners Manual</td>
</tr>
<tr>
<td></td>
<td>• Release Notes</td>
</tr>
<tr>
<td>1</td>
<td>Literature CD containing all product literature</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Kits</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>-A</td>
<td>D9412GV4 Board</td>
</tr>
<tr>
<td>-B</td>
<td>D122 Dual Battery Harness</td>
</tr>
<tr>
<td>-C</td>
<td>D161 Dual Modular Phone Cord</td>
</tr>
<tr>
<td></td>
<td>D928 Dual Phone Line Switcher</td>
</tr>
<tr>
<td></td>
<td>D1640 Transformer</td>
</tr>
<tr>
<td></td>
<td>D8103 Enclosure</td>
</tr>
<tr>
<td></td>
<td>D8108A Attack-resistant Enclosure</td>
</tr>
<tr>
<td></td>
<td>D8109 Fire Enclosure</td>
</tr>
<tr>
<td></td>
<td>D101 Lock and Key Set</td>
</tr>
<tr>
<td></td>
<td>D101F Lock and Key Set</td>
</tr>
</tbody>
</table>

Technical Specifications

Communications

| 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: | 32 |
| Card Readers (Doors): | 8 |
Credentials (Tokens): 999
Custom Functions: 16
Events: Up to 1000
Passcode Users: 999, 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Draw (Maximum)</td>
<td>300 mA</td>
</tr>
<tr>
<td>Output (Alarm)</td>
<td>2 A at 12 VDC</td>
</tr>
<tr>
<td>Output (Auxiliary, Continuous Power, and Switched Auxiliary combined)</td>
<td>1.4 A at 12 VDC nominal</td>
</tr>
<tr>
<td>Voltage (Operating)</td>
<td>12 VDC nominal</td>
</tr>
<tr>
<td>Voltage (AC)</td>
<td>16.5 VAC 40 VA plug-in (D1640)</td>
</tr>
</tbody>
</table>

Trademarks

Inovonics is a trademark of Inovonics Wireless Corporation.

Ordering Information

D9412GV4 246-point Control Communicator
Order number D9412GV4

D9412GV4-A Attack-resistant Package
Contains one PCB, one transformer, and one attack-resistant enclosure.
Order number D9412GV4-A

D9412GV4-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 D9412GV4-B

D9412GV4-C Standard Burglar Package
Contains one PCB, one lock and key set, one transformer, and one universal enclosure.
Order number D9412GV4-C

Accessories
SDI2 Inovonics Interface and Receiver Kit
Kit containing B820 and EN4200 for use on SDI2 bus panels.
Order number ENKIT-SDI2

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

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)
Sealed lead-acid standby and auxiliary rechargeable power supply.
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

D1238 Battery (12 V, 38 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 D1238

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
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

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

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

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. Requires the D2402 Mounting Plate. Order number D8108A

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

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

Software Options
RPS Kit (USB)
Account management and control panel-programming software with USB security key (dongle). Order number D5500C-USB