Specifications

Control Features

- Eight programmable areas, each with perimeter/interior partitioning. Regular, master, associate, or shared option by area
- Real-time clock and test timer
- Up to 1000-event log, including time, date and event with area, point and user number
- Battery charging circuit; AC power, voltage and ground fault supervision
- Automatic reset circuit protectors
- On-board CPU watchdog warning buzzer and diagnostic LEDs
- Lightning and EMI protection
- Power limited external circuits

Communicator

- Built-in digital communicator with phone line monitor (loop or ground start)
- Multiple telephone numbers, primary and duplicate paths with main and alternate destinations
- All reports within each 4 route groups are programmable
- Optional dual phone line switcher monitors 2 phone lines
- Automatic test and status reports
- Time windows for arming and open/close report suppression
- Programmable answering machine work-around for remote programming on shared phone line

Programmable Outputs

- 2-amp alarm power @ 12 VDC
- 1.4-amp aux power @ 12 VDC
- 4 alarm output patterns
- Automatic bell test
- Programmable bell shut-off timer
- **D7412G:** 67 programmable outputs
- **D9412G:** 131 programmable outputs

System Response

- **D7412G**: 75 points, 8 on-board, up to 67 off-board
- **D9412G**: 246 points, 8 on-board, up to 238 off-board
- 31 custom point indexes, including fire supervisory
- Selectable point response time
- Fire alarm verification
- Fire inspector's local test
- Watch mode
- Scheduled events (Skeds) arm, disarm, bypass and unbypass points, control relays, control authority levels, control door access and more



User Interface

- Supervises up to 8 command centers (up to 32 non-supervised command centers can be used)
- Custom command center text
- **D7412G:** 4 custom functions
- **D9412G:** 16 custom functions
- Full function command menu including custom functions
- **D7412G:** 99 Users
- **D9412G:** 249 Users
- Each user has authority by area and 16-character name
- 14 custom authority levels control user's authority to change, add, delete passcodes or access control tokens/cards, disarm, bypass points, initiate system tests, and more
- Adjustable brightness/loudness for command center display/ sounder
- **D7412G:** 1 parallel printer
- **D9412G:** 3 parallel printers

Access Control

- **D7412G:** 2 access control doors and 396 tokens/cards
- **D9412G:** 8 access control doors and 996 tokens/cards
- Custom door strike, point shunt and auto disarming response by area
- Logging options for: Access Granted, No Entry, Request to Exit and Request to Enter
- 14-panel wide access levels with both manual and scheduled control

System Description

D9412G/D7412G Control/Communicators provide an integrated solution to Access Control, Security, and Fire Alarm System applications.

Control/Communicators are capable of monitoring alarm points for intruder or fire alarms while operating user command centers, (access readers, door locks - D7412G/ D9412G), and other outputs. Includes a built-in digital communicator, which reports events to selected destinations via 4 programmable route groups.

Programming and accessory modules offer flexibility and beneficial features rarely found in other security control systems.

Area Configurations

D9412G/D7412G area programming offers you 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/associate).

User Interface

D9412G/D7412G command centers provide on-premises point and system status annunciation. A fully selectable user interface can customize command center displays and simplify operation by creating menu items and functions, appropriate only to that command center.

Function Lists can help a user become familiar with the operation of the control panel.

Custom functions allow users to perform complex functions with a few keystrokes. Each may be programmed and identified by 16 characters of custom text and contain up to 32 keystrokes.

D1255 Command Center, D1256 Fire Alarm Command Center and D1257 Fire Alarm Annunciator use a 16-character English language display to show system status, area status (custom text), and point status (custom text). D720 8-point LED area command center provides command functions and annunciation for up to 8 points in a single area. Any combination of these command centers may be used within the same area.

Easy to remember commands like Command 1, Command 2, and Command 8 make an easy transition for seasoned Radionics users.

User Passcodes

D9412G/D7412G can accommodate:

- **D7412G:** 99 user passcodes
  D9412G: 249 user passcodes.
  (Each passcode individually programs with 3 to 6 digits in length and no fixed digits).

Each user is assigned one of 14 customized authority levels in each area. You may restrict passcodes to operate only during certain times.

Each user may have a 16-character customized name that may be viewed, printed, reported to a central station in Radionics' Modem IIIa^2 Communications format or retrieved with Remote Account Manager (RAM).

Security and Fire Detection

D9412G/D7412G provide eight "on-board" detection points, and up to 238 additional off-board points (depending on Model and expansion interfaces). Points may be individually programmed and used to monitor all types of burglar alarm, fire alarm, and supervision devices.

Communications

D9412G/D7412G have four route groups, sort reports by priority and are capable of transmitting reports to up to four locations. Each group has a programmable primary and backup destination. Compatible with D6600 NetCom Communications System using a D9133TTL-E Ethernet Interface Module. Radionics' Modem IIIa^2 Communications Format, available with Radionics' receiver, adds these reporting capabilities. To name just a few:

- Individual point numbers and text
- Opening/Closing reports by area number
- Remote programming attempts
- Diagnostic reports
- Access control events with user name

Event Log Storage, Viewing and Printing

D9412G/D7412G event log automatically stores up to 1000 events. All local and transmitted events are stored (some access events are selectable). Event log includes time, date and event, with area, point and user number. Users may view event log from Alpha Command Centers. Events may be retrieved remotely using RAM.

Events are printed as they are stored in event log. D9131A Parallel Printer Interfaces can be installed to record events locally on one, two, or three printers (depending on model). Each can print opening and closing, access, alarm, Skeds, or any combination of events. Each can print information from any combination of areas. Each can supervise various printer status conditions.

Event log and local printer are ideally suited for customers who like to have a record of openings and closings without having extra communications costs. Logger and RAM, can suppress reports and then retrieve events periodically using one phone call, rather than receiving several calls each day.

When the panel's event log reaches its programmed threshold of stored events, it can send a report to a receiver to remind central station to retrieve events from the panel's event log with RAM.

© 2001 Radionics

Scheduled Events (Skeds)

D9412G/D7412G internal clock and calendar help the panel operate individual scheduled events (Skeds). Skeds perform a specific function (such as arm/disarm, relay control, point bypassing, etc.). Each Sked is programmed for a time and day-of-week schedule or a date-of-year schedule.

Users may change Sked Time if programmed for local time editing. Holiday schedules can enable or disable individual Skeds during holiday periods.

- 64 scheduled events with up to 26 different functions
- Day-of-week or date-of-year schedules
- Four holiday schedules of 366 days each (leap year)

Fire Test

D9412G/D7412G Fire Test Mode suppresses reports to the central station receiver so you can test initiating and indicating devices without transmitting alarms. Initiating Fire Test Mode, sends “Fire Walk Start” to central station indicating start of test. Test events become “local only.” Command center shows how many points are to be tested.

Each time a device initiates an alarm, programmed point text displays at command center and the fire bell rings for 2 seconds. Automatic sensor reset feature allows continued testing of devices without time consuming trips to manually reset sensors. At the end of test, command center displays the number of untested points. You can also view point text for each untested point.

Ending Fire Test Mode, sends “Fire Walk End” to the central station receiver indicating end of test.

Combining Access Control with Security and Fire Detection (D7412G/D9412G)

D9412G/D7412G combined systems can help prevent false alarms making it easy to use one system that controls access, security, and fire functions.

Access control features of D7412G/D9412G can deny access during armed periods, grant access only to certain authorized users depending whether an area is master armed, perimeter armed or disarmed. Alarm system can automatically disarm when designated authorized users are granted access.

- **D7412G:** Two (2) access doors; 75 detection points; 396 Token/Users
- **D9412G:** Eight (8) access doors; 246 detection points; 996 Token/Users

D9210B Access Control Interface Module

Access is granted from Wiegand format readers or Request to Enter/Exit devices when connected to the D9210B.

Also provided are connections for door point, strike, buzzer and enclosure tamper. (One D9210B required per door).

- Each access door can be configured independently
- Door point controls access door and is part of alarm system (door does not need double contacts)
- Door contact can reset strike time when opened
- Door contact can terminate entry buzzer (if used)
- Door contact is shunted when valid access is granted
- Optional buzzer can trigger prior to end of door shunt period, warning user a “door left open” condition is about to occur
- Door point can be configured to generate alarm or trouble (or have no response) when door is left open beyond shunt period
- In addition to granting access, cards control whether system will disarm along with granting access
- Door strike can release automatically during disarmed periods, then automatically re-lock when area is armed
- Door can generate an alarm, trouble, (or have no response) depending on area’s armed condition when door is opened outside authorized access period
- REQUEST TO ENTER and REQUEST TO EXIT can be programmed to shunt door without activating strike
- An option determines whether access granted, no entry, request to enter, or request to exit messages are sent to event log

RAM IV and RAM IV Lite

These account management and panel-programming utilities allow computers equipped with the Microsoft® Windows® operating system and a modem to act as a remote programming, record storage, remote control and troubleshooting tool for the D9412G/D7412G Control/Communicators. To enhance the down/upload capabilities RAM can be used in a TCP/IP and Dynamic Host Communication Protocol (DHCP) configuration.

 © 2001 Radionics

Specifications

General

Contractor shall furnish and install, where indicated on plans, a Radionics D9412G/D7412G Control/Communicator. Panel shall be listed by Underwriters Laboratories for NFPA 72 Applications.

D9412G/D7412G shall support initiating and indicating modules and Radionics Command Centers. Power supply shall provide 1.4-amp @12 VDC for all processing functions and auxiliary requirements.

Software

D9412G/D7412G programming of all system functions shall be accomplished on site using Radionics' Hand-held D5200 Programmer or remotely using a RAM software package. A programmable system passcode shall be used to prevent unauthorized remote programming.

Panel shall accommodate up to four separate telephone numbers for primary, alternate and backup receivers, automatic test reports, selective relay activation, and custom text on associated command centers and annunciators.

When resetting alarms, arming or disarming a combination fire/burglary and/or access control system, the user shall be identified by name and number.

D7212/D7412G: Up to 99 users
D9112/D9412G: Up to 249 users

Panel's internal clock shall support Skeds (scheduled events) feature. User shall have option to alter Sked activation times using a programmable passcode.

Up to 64 programmable, scheduled event functions shall be available for controlling relays, enabling passcodes, windows, and supporting service alert feature.

Other programmable functions shall include fire alarm reset commands, and day/date/time adjustments.

Event Logger/Clock

D9412G/D7412G event log shall store up to 1000 events. All system events shall include time, date and event with area, point and user number.

Access events (optional) stored shall include: Access granted, No Entry, Request To Enter, and Request To Exit. Logger records certain functions entered at command centers. Stored events in Logger shall be retrievable with a RAM software package.

Remote Diagnostics and Controls

D9412G/D7412G shall be able to be remote controlled through use of RAM software. Features shall include: reset of audible signals, activation/deactivation of D8129 relays, interrogation of battery, point and armed status, enabling or disabling reporting functions, and shunting of reporting points during servicing.

Command Centers

D9412G/D7412G command centers shall be Radionics D1255 Command Center, D1256 Fire Alarm Command Center and D1257 Fire Alarm Annunciator. Each shall be equipped with a 16-character alphanumeric display, distinct fire and burglary tones, and backlighted multi-key touchpad.

D1255, D1256, and D1257 shall have the ability to display for each detection point: alarm, trouble, supervisory, or faulted, and custom text. In addition, expanded, addressable point displays shall include missing and extra point information. System-wide displays shall include: local system test, sensor reset, fire test mode, and user programming prompts.

Fire Test

D9412G/D7412G Fire Test Mode shall support single-person operation. All reports to central station shall be suppressed while fire test is being conducted. Fire Test Mode shall be activated by entering a user passcode at a command center. All testing data shall be visible on command center and annunciator displays during testing.

Hardware

D9412G/D7412G shall provide up to 246 individually identified addresses, (75 with D7412G). Each shall accommodate normally open and/or normally closed devices with end-of-line resistor supervision. Each point shall be programmable for fire, fire supervisory or burglary applications. Point output shall be silent or audible. Audible output shall be steady, pulsed, CA standard, or temporal code 3.

External Hardware

D9412G/D7412G shall allow use of up to three on-site parallel printers (one with D7412G), using Radionics D9131A Printer Interface Modules. Events shall print time, date, and event description with area, account, point, and user number, including text for points and users.

Installation, Warranty, and Training

D9412G/D7412G System Installation, wiring of initiating devices and signaling circuits, shall be the responsibility of installing company.

Warranty on all components shall be two years, subject to manufacturer's limitations. Training on complete system operation shall be furnished by installing company upon completion of installation.

© 2001 Radionics

Accessories/Ordering Information

Model	Description
Command Centers, Keypads and Accessories:	
D1255	Command Center
D1256	Fire Alarm Command Center
D1257	Fire Alarm Annunciator
D720	8 Point LED Area Command Center
D268	Independent Point Control Module
D269	Independent Point Control Keypad
D279	Independent Point Control
D54B	Command Center Flush Mount Kit, Brass
D54C	Command Center Flush Mount Kit, Stainless
D55	Command Center Desk Stand
D56	Command Center Surface Mnt. Conduit Box
Zone Expansion and Interface Modules:	
D8125	POPEX Module
D9127U/T	POPIT Module, U=No Tamper / T= Tamper
D8128C	OctoPOPIT Module
D940	Super Loop Module
D8129	OctoRelay Module
D127	Reversing Relay
D136	Plug-in Relay
D8121A	Derived Channel S.T.U. Non UL
D8122	Derived Channel S.T.U. UL Listed
D9131A	Parallel Printer Interface Module
D9210B	Access Control Interface Module
Detection Devices with Built-in POPIT:	
ZX835	PIR/Microwave Detector, 35 x 35 ft. (10.7 x 10.7 m)
ZX970	PIR/Microwave Detector, 60 x 60 ft. (18.3 x 18.3 m)
ZX935Z	PIR Detector, 35 x 35 ft. (10.7 x 10.7 m)
ZX776Z	PIR Detector, 50 x 50 ft. (15 x 15 m)
ZX794	PIR Detector, 90 x 90 ft. (27 x 27 m)
ZX938Z	PIR Detector, Ceiling Mount, 360° x 60 ft. (18 m)
D278S	Smoke Detector Base 12 VDC
D298M	Smoke Detector Base, Master, 24 VDC
D298S	Smoke Detector Base, 24 VDC

Model	Description
Fire Alarm Modules and Accessories:	
D125B	Dual Class B Powered Loop Interface Module
D129	Dual Class A Initiation Circuit Module
D130	Auxiliary Relay Module, 12/24 VDC
D184	Auxiliary Local Energy Interface Kit
D185	Reverse Polarity Interface Module
D192C	N.A.C. Module, Class B, 12/24 VDC, 1.8-amp
D192D	N.A.C. Module, Class A/B, 12/24 VDC, 3-amp
D928	Dual Phone Line Switcher
D8130	Release Module
Power Supplies, Transformers, Batteries & Accessories:	
D9142F	Auxiliary Power Supply, 24 VDC, 4-amp
D8132	Battery Charger Module, 12 VDC
D1640	16.5 VAC 40 VA Transformer
D113	Battery Lead Supervision Module
D122/L	Dual Battery Harness/Long Leads
D126	Battery, 12 V, 7.5 Ah
D1218	Battery, 12 V, 17.2 Ah
Enclosures, Brackets, and Phone Cords:	
D8103	Universal Enclosure
D8109	Fire Enclosure
D8108A	Attack Resistant Enclosure
D8004	Transformer Enclosure
D137	Module Mounting Bracket
D101	Lock and Key for D8103
D161/162	Dual Mod. Telephone Phone Cord, 7 ft. (2.1 m) / 2 ft. (61 cm)
Programming Products:	
D5200	Hand-held Programmer
D5500-####*	Remote Account Manager, RAM IV
D5500-####*-LTE	RAM IV Lite

* #### represents the version number of the software. Order Processing has the latest revision information.

© 2001 Radionics

Listings and Approvals

Fire

- UL: Central Station, Local, Auxiliary, Remote Station, and Household Fire Warning.
- CSFM: Approved for highrise and non-highrise.

Burglary

- UL: Central Station, Local, Police Connect, Bank Safe and Vault, Mercantile Safe and Vault, and Grade A Household
- DOD: Approved for installations in Sensitive Compartmented Information Facilities (SCIF).

Access

- UL: Access Control Systems.

© 2001 Radionics

Notes

 © 2001 Radionics