



#### Control Features

- Eight programmable areas, each with perimeter/interior partitioning, master, associate, and shared area operation
- Real time clock, test timer and up to 1000 event memory log (including date, time, event, point ID and User ID)
- Battery charging circuit and voltage supervision, AC power 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 routing group 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 lines

#### Programmable Outputs

- 12 VDC, 2 Amp alarm power
- 1.4 Amp Aux power
- 4 alarm output patterns
- Automatic bell test
- Programmable bell shut-off timer
- 67 programmable outputs
- One parallel printer

#### System Response

- Eight on-board detection points, up to 67 off-board points for a total of 75 points
- 31 custom point responses, including fire supervisory
- Selectable loop 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

- Supervise up to 8 command centers (up to 32 non-supervised command centers can be used)
- Custom command center text
- Full function Function List, including up to 4 Custom Functions

- 99 users, each with authority by area and 16 character name
- 14 custom authority levels control user's authority to change, add, and delete passcodes and access control tokens, disarm, bypass points, initiate system tests, and more
- Adjustable brightness/loudness for command center display/sounder

#### Access Control

- Two access control doors (each requires optional D9210 module)
- Custom door strike, point shunt and auto disarming response by area
- Up to 396 Wiegand user identification devices with assigned Access Level by door
- Logging options for: Access Granted, No Entry, Door Held Open, Request to Exit/Request to Enter
- Up to 14 panel wide Access Levels with both manual and scheduled control

## System Description

The Radionics D7412 Control/Communicator provides an integrated solution to Access Control, Security, and Fire Alarm System applications.

The D7412 is a central control panel capable of monitoring alarm points for intruder or fire alarms while operating user command centers, access readers, door locks and other outputs. The D7412 includes a built-in digital communicator which reports events to selected destinations via programmable routes. With programming and accessory modules the D7412 offers flexibility and beneficial features rarely found in other security control systems.

### Area Configurations

Area programming offers you a wide selection of different system configurations. Each area is assigned to one of up to eight account numbers to define annunciation, control, and reporting functions.

### User Interface

Command centers provide on-premises point and system status annunciation. The D7412 provides a fully selectable user interface so you can customize command center displays and simplify operation by creating menu items and functions and by only showing those menu items that are appropriate to that area.

The Function List can help the new user to become familiar with the features of the control panel. You program the Function List for features and Custom Functions that can be viewed at each command center.

Custom Functions allow users to perform complex functions with a few keystrokes. Up to 4 Custom Functions can be programmed, each identified by 16 characters of custom text. You can program the panel with functions containing up to 32 keystrokes each.

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

The D7412 includes easy to remember command functions. Familiar commands like Command 1, Command 2, and Command 8 make the D7412 an easy transition for seasoned Radionics customers.

### User Passcodes

The D7412 system can accommodate up to 99 individually programmed user passcodes. Passcodes are 3 to 6 digits in length with no fixed digits.

Each user is assigned to one of 14 customized authority levels in each individual area. You can assign the user to a different authority level for each area and assign a time profile to control the user's passcode use.

Each user can be identified by a 16 character customized name. When logged events associated with the user are printed, reported to the central station in Radionics' Modem IIIa<sup>2</sup>™ communications format, or retrieved with

Remote Account Manager 3 (RAM 3), the name associated with the user passcode is included.

### Security and Fire Detection

The D7412 provides eight "on-board" detection points. Add expansion interfaces and up to 67 additional points to provide up to 75 detection points. All points are individually programmable and may be used to monitor all types of burglar alarm, fire alarm, and supervision devices. The D1255, D1256, and D1257 command centers show the status of individual points with custom text.

### Communications

The D7412 sorts reports by priority and is capable of transmitting reports to up to four Route Groups. Each Route Group has a programmable Primary and Backup destination. The Radionics' Modem IIIa<sup>2</sup>™ communications format, available with Radionics' D6500 Receiver and the D7412, adds these reporting capabilities - to name just a few:

- Reports individual point numbers, point text and other event information
- Opening/closing reports from up to 99 users, with user name
- Identifies Opening/Closing reports by area number
- Reports access control events with up to 396 user ID's
- Reports remote programming attempts
- Includes Diagnostic Reports

### Local Event Storage and Printing

Up to 1000 events can be recorded in the D7412 built in Logger memory. All events - local only and transmitted reports - are automatically stored. Each event log entry contains the time, date, event description, account number, point number, and user ID.

A command center function allows selected users to view the event log from the command center. The events can be retrieved remotely using RAM 3.

Events print as they are stored in the D7412's event log. One D9131A Parallel Printer Interface can be installed to record events locally on a printer. The printer can record opening and closing, access, alarm, Skeds, or any combination of events. The D7412 can supervise various printer status conditions.

### Logger/Printer Applications

Logger and Local Printer are ideally suited for the customer who would like to have a record of openings and closings without having the extra communications cost. Using Logger and RAM 3, you can suppress reports and then retrieve the security system events periodically using one phone call, rather than receiving several calls each day.

When the panel's event log reaches the programmed threshold of stored events, the D7412 sends a report to the D6500 receiver to remind the central station to retrieve events from the panel's log with RAM 3.

## Scheduled Events (Skeds)

- Day-of-week or date of the year schedules
- Four holiday schedules of 365 days each
- Up to 64 scheduled events with 26 different functions
- Remotely programmable with User control capability from the command center

The D7412's internal clock and calendar help the panel operate individual scheduled events (Skeds). You can program each Sked to perform a specific function (such as arm/disarm, relay control, point bypassing, etc.). Each Sked is programmed for a time and either a day of the week schedule or a date of the year schedule.

The User can change the time for the Sked if the Sked is programmed for local time editing. Holiday schedules can be used to enable or disable individual Skeds during the holiday periods.

## Fire Test

In the Fire Test Mode, the D7412 suppresses reports to the receiver so you can test initiating and indicating devices without transmitting alarms to the central station. When you put the D7412 in Fire Test Mode, the panel sends a report to the central station to indicate the start of the test. Test events then become "local only". The command center shows how many points are to be tested.

Each time a device initiates an alarm, the programmed point text displays at the command center. The automatic sensor reset feature of the Fire Test Mode allows you to continue testing additional devices without time consuming trips to the command center to manually reset sensors. At the end of the test, the command center displays the number of untested points. You can also view the point text for each untested point.

When you take the D7412 out of Fire Test Mode, the panel sends a report to the receiver indicating the completion of the test.

## Combining Access Control with Security and Fire Detection

A combined system can help prevent false alarms by making it easy to use just one system that controls security, access, and fire functions.

The access control features of the D7412 can deny access during armed periods. It can also grant access only to certain authorized users depending on whether the area is master armed, perimeter armed, or disarmed. The alarm system can automatically disarm when designated authorized users are granted access.

The D7412 can control two (2) Access Doors as part of the 75 intrusion and fire detection points.

You can use up to 396 Wiegand user identification devices in the D7412 system. Up to four of the Wiegand user devices can be associated with each of the 99 user names, passcodes and area authority levels.

## D9210 Access Control Module

Access can be granted from a Wiegand style access control device (access reader) when connected to a D9210 Access Control Module. Access may also be granted from a REQUEST TO EXIT or a REQUEST TO ENTER input.

The D9210 Access Interface Module provides for connections of the access door point and the door strike. Up to two D9210s can be incorporated on each system. Each D9210 controls one door.

- Each access door can be configured independently from the other doors.
- The same alarm door contact point controls the access door and is part of the alarm system (the door does not need to have double contacts).
- The door contact can be either normally open or normally closed and is used to reset the door strike time when the door either opens or closes depending upon programming.
- The door contact can terminate a programmable door entry buzzer (if used).
- The door contact is shunted when valid access is being granted through the door.
- An optional buzzer can be triggered prior to the end of a door shunt period to warn the user that a "door left open" condition is about to occur.
- The access point can be configured to generate an alarm or a trouble (or have no response) when the door is left open beyond the door shunt period.
- The reading of access cards, in addition to the granting of access, can control whether the system will disarm along with granting of access.
- The door strike can be programmed to be held open automatically during the disarm period and then automatically re-lock when the area is armed.
- The system can be configured to generate an alarm, a trouble, (or have no response) depending upon the area's armed condition when the door is opened outside of an authorized access period.
- An option is provided that can control whether access granted conditions or no entry conditions send events to the log by door.
- REQUEST TO ENTER and REQUEST TO EXIT can be programmed to shunt the door without activating the strike.

## Specifications

### General

The contractor shall furnish and install, where indicated on the plans, a Radionics D7412 Control/Communicator. The panel shall be listed by Underwriters Laboratories for NFPA 72 Applications.

The D7412 shall support initiating and indicating modules and Radionics Command Centers. The D7412 Control/Communicator power supply shall provide 1.4 Amps of power for all processing functions and 12 VDC auxiliary requirements.

## Software

Programming of all system functions shall be accomplished at the site using the Radionics D5200 Programmer or remotely through a Remote Account Manager software package. A programmable system passcode shall be used to prevent unauthorized remote programming attempts.

The D7412 programming shall provide for up to four separate telephone numbers for primary, alternate and backup receivers, automatic test reports, selective relay activation, and custom text on the associated command centers and annunciators.

Up to 99 user passcodes shall be programmable to identify the user when resetting alarms or arming and disarming a combination fire/burglary and access control system.

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

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

## Event Logger/Clock

An integral 500-1000 event logger shall record all system events and include the time, date, event, and point ID for each event. Types of events to be stored shall include: alarms, restorals, troubles, access events, and openings and closings by user. Programming options shall allow the Logger to record certain functions entered at command centers. The stored events in Logger shall be retrievable with a Remote Account Manager 3 software package.

The D7412's internal clock shall support the Skeds (scheduled events) feature. The user shall have the option to alter the Sked activation times using a programmable passcode.

## Command Centers

System command centers shall be Radionics D1255 Command Center, D1256 Fire Command Center, and D1257 Fire Annunciator. Each of these shall be equipped with a 16-character alphanumeric display, distinct fire and burglary tones, and backlit multi-key touchpad.

The D1255, D1256, and D1257 shall have the ability to display the following for each detection point: alarm, trouble, service, 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.

## Remote Diagnostics and Controls

Remote control through the use of the Remote Account Manager software shall include: reset of audible signals, activation/deactivation of D8129 relays, interrogation of battery, point and armed status, the enabling or disabling of reporting functions, and the shunting of reporting points during servicing.

## System Test

The Fire Test mode shall support single person operation. All reports to the central station shall be suppressed while the fire test is being conducted. The Fire Test mode shall be activated by entering a user passcode at the D1255R. All testing data shall be visible on command center and annunciator displays during testing.

## Hardware

The D7412 shall provide up to 75 individually identified addresses. 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. Also, silent or steady and/or pulsed audible, and local or remote reporting to a receiver.

## External Hardware

The D7412 shall allow the use of one on-site parallel printer using Radionics D9131A Printer Interface Module. Events shall print as they are stored in logger. The printer shall print the time, date, account number, event, point ID, point text.

## Installation, Warranty, and Training

Installation of the system, wiring of initiating devices and signaling circuits shall be the responsibility of the installing company.

Warranty on all components shall be for one year, subject to manufacturer's limitations. Training in the complete operation of the system shall be furnished by the installing company upon completion of the installation.

## Listings and Approvals

### Fire

UL: Central Station, Local, Auxiliary, Remote Station, and Household Fire Warning.

CFSM, FM and NYC-MEA approved.

### Burglary

UL: Central Station, Local, Police Connect, Bank Safe and Vault, Mercantile Safe and Vault, and Grade A Household systems.

DOD: Approved for installations in Sensitive Compartmented Information Facilities (SCIF).

### Access

UL: Access Control Systems.



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