

# R A D I O N I C S

## Omegalarm D4112 Control/Communicator Specifications Sheet

### Description

The D4112 is an integrated Control/Communicator. It has six end-of-line resistor supervised, hardwire protective zones — five standard programmable zones and one nominal 12 VDC powered zone optimized for two-wire smoke detectors. In addition to the six hardwire zones, three programmable software zones can be used to initiate special signals (such as panic or duress alerts) from a Command Center. Up to 350 mA of current is available for auxiliary 12 VDC powered devices, as well as 1.5 A at 12 VDC nominal for alarm annunciating devices. The D4112 has been designed and rigorously tested to withstand radio frequency interference and high voltage surges common to lightning areas.

The D4112's built-in communicator has the ability to report to two telephone numbers (primary and alternate). The alternate central station telephone number is used to back up signals that were not received at the primary number.

### D420 Command Center

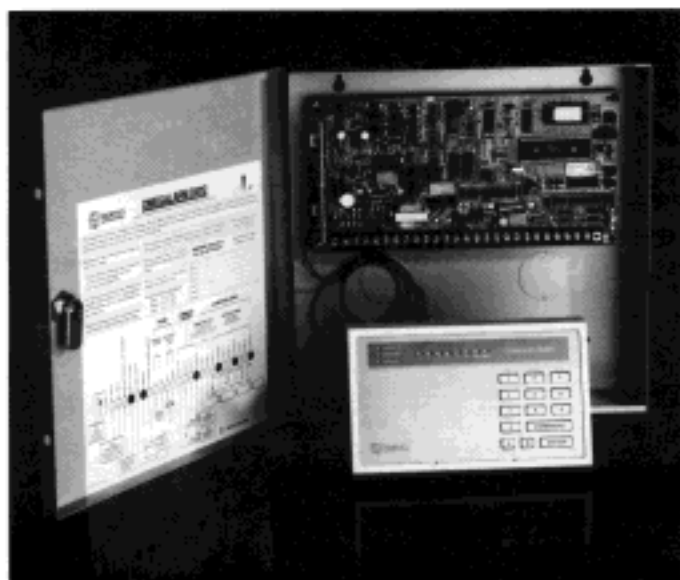
The D4112 communicates to the D420 Command Center through a four-conductor cable. One or two Command Centers can be connected to the D4112 providing complete system control to the user.

The D420 Command Center is an aesthetically pleasing, low profile, surface mount unit. The system status is displayed with indicator LEDs for Perimeter Arm, Interior Arm, AC Power, and Command Mode. Individual zone status LEDs annunciate the condition of each of the six protective zones. Two function keys are pre-programmed to perform one-touch command functions (Command 44 and Command 47).

### Two Wire Devices

Zone 1 of the D4112 is a fully programmable two-wire powered zone which is optimized for smoke and heat detectors. Up to ten smoke detectors can be installed with heat detectors on this zone. Smoke and heat detectors cannot be combined with other types of detection devices on this zone. To be in compliance with U.L. 985 and NFPA 74, only smoke detectors shown on Radionics Technogram #73-05514-000 can be used with this panel.

**NOTE:** For Household Fire Alarm applications, smoke and heat detectors can only be placed on *Zone 1*. Zone



1 can be reset from any system Command Center using function key B (or Command 47).

### Programming

Programming the D4112 security system is accomplished with the Radionics D5100 Bar Code Programmer. This is the same programmer that is used with the D8112 and D6112 Control/Communicators and the D6500 Security Receiver.

The 4112:MAIN Product Handler is arranged in twelve different sections, called "modules." Each module contains program items which relate to a specific function of the D4112 security system. Programming the system, and reviewing and accessing entries is simple and fast.

A unique, sturdy, 4-wire, D5106 Programmer Interface Cord connects the D5100 to the D4112.

### Remote Account Manager

To complement the D4112 Control/Communicator, Radionics offers a remote programming package. D4112, D6112 and D8112 security systems can be programmed and armed from a central station or your customer service office. With the R.A.M., programs can be changed or edited at any time. It can also perform remote system diagnostics, and troubleshoot a system over the telephone line. If the trouble cannot be corrected over the phone, problem zones can be bypassed until your service team can respond.

## Specifications

**UL Listings:** The D4112 is U.L. listed for Central Station Grade A (with a D127 Reversing Relay), Grade B, and Grade C Burglary Alarm, Digital Police Connection, Local Grade A Burglary Alarm, and Household Fire and Burglary Alarm applications. Install at least one D420 Command Center for U.L. certification. The D4112 is also approved for California State Fire Marshal and Household Fire Alarm applications.

### D4112C Includes:

- D4112 Control/Communicator
- Enclosure: 20 gauge base, 22 gauge door; cold rolled steel. Color: light gray. Outer dimensions: height:11.25", width:11.25", depth:3". Lock and key.
- D420 Command Center:
- D1625 Transformer: 16.5VAC, 25 VA, 60 HZ

### D4112

- Includes all the equipment contained in the D4112C except the D420 Command Center.

### D4112M Includes:

- D4112 Control/Communicator on mounting skirt. The D4112M can be mounted into any D8112 or D6112 type enclosure. A **D8108A** Attack Resistant Enclosure is required for U.L. certificated Local, Central Station, or Police Connected Burglary Alarm applications.

### Power:

- Primary: 16.5 VAC, 25 VA Class 2 plug-in transformer (not supplied with D4112M).
- Secondary: 12 VDC, 6 Amp-hour rechargeable lead acid battery (D126) (not included).

**Charging Circuit:** 13.5 VDC trickle charge.

### Voltage Outputs:

**Auxiliary Power:** Nominal 12 VDC at 350 mA continuous output. Circuit protected by a self-resetting thermal circuit breaker.

**Alarm Output:** Nominal 12 VDC at 1.5 A on alarm. Programmable for Steady or pulsed output. *For Residential Fire (NFPA 74) it is recommended that you limit your alarm power output to 300 mA.*

**Alternate Alarm Output:** Nominal 12VDC subtracted from Alarm Output (1.5 A). Optional D136 Relay required.

**Powered Zone Outputs:** Nominal 12 VDC, current supplied by auxiliary power supply.

Zone 1: Idle: 20mA, Maximum: 45mA

### Current Requirements:

D4112 Control/Communicator with no load (this current is not sourced by the Auxiliary Power):  
Idle: 75 mA, Transmitting: 150 mA

D420 Command Center: Idle: 30mA, Maximum: 65 mA

### Data Transmission Formats:

Programmable for all Radionics Omegalarm formats (Modem II, BFSK and Pulse), and some other industry standard formats. Is compatible with most major brands of receivers.

### Command Centers:

Four-conductor serial cable wiring to Command Centers.

### Telco Connections:

A D160 Phone cord (not included) is wired directly into the D4112 Terminal Strip and plugged into an RJ31X.

### Protective Circuits:

All hardwire zones are fully supervised using end-of-line resistors (included). Detection devices must be normally open and/or normally closed dry contact switches for the six programmable zones. Zone one allows two-wire powered devices or normally open and normally closed switches to be installed.

### Programming:

The D4112 Control/Communicator is programmed with the Radionics D5100 Bar Code Programmer or the Remote Account Manager. The D5100 Programmer must contain the appropriate product handler for the D4112.

### RFI/Lightning Transient Protection:

MOVs protect all input and output connections. Spark gaps supply additional protection. Transient tested to  $\pm 6$  kV.

### D4112 System Command Functions:

The following functions are programmable and can be initiated from a remote Command Center in the D4112 security system:

COMMAND 1	Master Arm
COMMAND 2	Perimeter Arm (No Delay)
COMMAND 3	Perimeter Arm with Delay
COMMAND 4	Reset Sounders, Alarm Memory
COMMAND 4 3	Initiate Remote Programming
COMMAND 4 4	Local System Test Mode (Function Key A)
COMMAND 4 7	Reset Detectors (Function Key B)
COMMAND 5	Personal Passcode Change
COMMAND 6	Perimeter Watch Mode
COMMAND 7	Special Alert
COMMAND 8	Partial Perimeter Bypass
COMMAND 9	Police Alert
COMMAND 0	Selective Zone Arming

Duress Passcode and Force Arming

Function Key A	Local System Test (COMMAND 44)
Function Key B	Reset Detectors (COMMAND 47)