Contents

Contents

1.0	Overview	5
1.1	Module Control	5
1.1.1	Option Bus Control	5
1.1.2	Conventional NAC Input Control	5
1.2	Pulsed Bell Operation	5
1.3	Power Management	5
1.4	Low AC Line Detection	5
1.5	Ground Fault Indication	5
1.6	Circuit Supervision	5
1.7	Expander Supervision	5
1.8	Auxiliary Power Supply	5
2.0	Specifications	7
2.1	Enclosure	7
2.2	Storage and Operating Temperature	7
2.3	Power	7
2.4	NAC Input	7
2.5	Option Bus Input	7
2.6	NAC Outputs (x4)	8
2.7	Auxiliary Output	8
2.8	Trouble Relay Output	8
3.0	Installing the D7038	9
3.1	Enclosure Installation	9
3.2	D7038 Board Installation	10
4.0	Wiring the D7038	11
4.1	AC Power Connections	11
4.2	Battery Connections (24 VDC Only)	12
4.3	Option Bus Connections	15
4.4	NAC Input Connections	16
4.5	Trouble Relay Connections	17
4.6	Auxiliary Output Connections	17
4.7	NAC Output Connections	18
4.7.1	NAC Circuits	18
4.7.2	Auxiliary Circuits	18
5.0	D7038 DIP Switch and Option Bus Settings	19
5.1	Option Bus Address	20
5.2	NAC Input Variable	20
5.3	AC Fail Time Delay	20
6.0	D7038 Local Status Display	
Indev		23

D7038

Figures and Tables

Figures

Figure 1: D7038 Remote NAC Power Supply Board	9
Figure 2: D7038 Enclosure and Board Installation	10
Figure 3: AC Power Connections	11
Figure 4: Battery Connections Inside D7038 Enclosure	12
Figure 5: Battery Connections Using an External Battery Case	12
Figure 6: Wiring the Option Bus	15
Figure 7: Wiring the NAC Inputs	16
Figure 8: Wiring the Trouble Relay	17
Figure 9: Wiring the Auxiliary Outputs	17
Figure 10: Wiring the NAC Outputs	18
Figure 11: Auxiliary Power Circuit Configuration	18
Figure 12: D7038 DIP Switch Orientation	19
Figure 13: D7038 LEDs	21
Tables	
iables	
Table 1: Wire Gauge Calculations	11
Table 2: Wire Gauge Table (based on solid wire)	11
Table 3: Standby Time Calculation	13
Table 4: Calculating the Required Battery Size	18
Table 5: Standby Load Battery Size (in amp-hours)	14
Table 6: Alarm Load Battery Size (in amp-hours)	14
Table 7: DIP Switch Settings	19
Table 8: Local Status Display LED Functions	2

Introduction

1.0 Overview

The D7038 is a Remote Notification Appliance Circuit (NAC) Power Supply designed to add four additional NACs (NFPA 72 Class B, Style Y) to a Fire Alarm Control Panel (FACP).

It is supervised by the control panel. It consists of the controller board, backup batteries and enclosure.

The D7038 is also compatible with any UL Listed control unit utilizing reverse polarity supervised notification outputs, using 24 VDC regulated outputs. It can be configured for constant auxiliary power.

1.1 Module Control

1.1.1 Option Bus Control

The D7038 can connect to the Option Bus of the D7024 Fire Alarm Control/Communicator.

See Section 4.3 for information on firmware version and panel compatibility.

1.1.2 Conventional NAC Input Control

For conventional panels, the D7038 connects via the FACP's NAC outputs that conform to NFPA 72 Class B. Please refer to the control panel's NAC compatibility information.

1.2 Pulsed Bell Operation

The D7038 can generate two pulsed bell patterns on command when connected via the option bus in addition to steady activation of the output. The patterns are Pulsed and NFPA Temporal.

- Pulsed: 60 PPM (0.5 sec. on, 0.5 sec. off).
- NFPA Temporal: In compliance with ANSI standard S3.41: 0.5 sec on, 0.5 sec off, 0.5 sec on, 0.5 sec off, 0.5 sec on, 1.5 sec off, etc.

1.3 Power Management

The controlling section of the board has un-interruptible power. The bulk 27.4/24 volt output will not drop out for more than 3 seconds upon the loss of the AC Line voltage.

1.4 Low AC Line Detection

Sensing circuitry will detect a line input voltage below 96 VAC, then will switch from the primary AC Line voltage to battery backup.

1.5 Ground Fault Indication

The Option Bus and Polarity Reversal Inputs are electrically isolated from the local power supply and indicating circuits. The D7038 supervises itself for grounded field connections and indicates a fault condition if one is found.

1.6 Circuit Supervision

Each NAC is supervised for short circuit and open conditions using a 2.2 k Ω resistor at the end of the loop. Devices on these loops must have a blocking diode on their input so that the 2.2 k Ω EOL supervision resistor can be read when the polarity of the output is "backwards" when in the standby state. The devices will then activate when the polarity is switched to "forward" when in alarm.

1.7 Expander Supervision

A "watchdog" supervises the operation of the D7038 processor and attempts to restart it if it fails. If the processor fails to restart, or power fails entirely, the installer supplied EOL device will be disconnected from the input to report the trouble condition. If power is available, the Trouble LED will light if the processor fails to operate.

1.8 Auxiliary Power Supply

The D7038 can be wired to supply constant auxiliary power through its NAC outputs. See Section 4.7.2 for additional information.

Specifications

2.0 Specifications

2.1 Enclosure

The enclosure is manufactured from 18 Ga. cold-rolled steel and measures 12.75 in. W x 14.75 in. H by 3.5 in. D (32.4 cm W x 37.5 cm H x 8.9 cm D). A keyed lock and mounting hardware is included.

2.2 Storage and Operating Temperature

• +32° to +120°F (0° to +49°C).

2.3 Power

D7038 Power Specifications					
Input Power	120 VAC (+10%/-15%), 60 Hz, 2.5 A				
Brown-out Voltage	96 VAC				
Battery	24 VDC nominal (20.2 to 28.0 VDC range)				
Battery Capacity	6.5 Ah to 38 Ah				
Output Voltage	27.4 VDC +/- 0.1 VDC @ 25°C (77°F) Battery = 24.1 +/- 0.6 VDC @ 25°C (77°F)				
Output Current	6.0 A				
Load Regulation	400 mV				
Line Regulation	200 mV				
Ripple Voltage	≤ 250 mV pp				
Standby Current Draw	150 mA				

2.4 NAC Input

D7038 NAC Input Specifications					
Non-polarized Input Voltage 9 to 30 VDC/VRMS					
Input to Output Response Time	≤ 50 ms				
Minimum Impedance of Source	1.7 k Ω				

• Compatible with NFPA 72 Class B NAC

2.5 Option Bus input

• Interface Level: 0 to 12 V

Specifications

2.6 NAC Outputs (x4)

D7038 NAC Output Specifications					
Standby Voltage	5.0 VDC				
EOL Resistor	2.21 k Ω Radionics by Detection Systems P/N: 25899				
Output Voltage	24.1 to 27.4 VDC				
Rated Output Current (per output)	1.5 A				
Max. Output Current (per output)	2.5 A				

[•] NFPA 72 Class B, Style Y NAC

Note: The total current draw of all NAC outputs and the auxiliary output cannot exceed 6 A.

2.7 Auxiliary Output

D7038 Auxiliary Output Specifications					
Output Voltage	9 to 30 VDC/VRMS				
Max Output Current	850 mA				

2.8 Trouble Relay Output

D7038 Trouble Relay Output Specifications					
Contact Type	Form "C"				
Contact Rating	1.5 A, 32 VDC				

Installing the D7038

3.0 Installing the D7038

The D7038 board and the enclosure are shipped together. The board, however, still needs to be mounted into the enclosure. Hardware for mounting the board to the enclosure is located in the hardware pack.

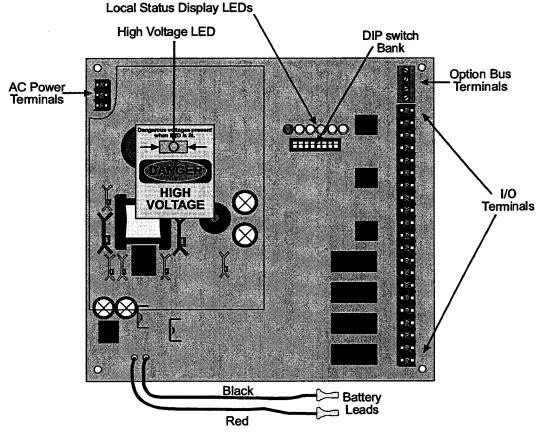


Figure 1: D7038 Remote NAC Power Supply Board

3.1 Enclosure Installation

- 1)Use the enclosure as a template and mark the top mounting holes on the mounting surface. Be sure there is enough clearance to open the door for maintenance.
- 2) Pre-start the mounting screws for these two holes. Slide the enclosure onto these mounting screws so that the screws move up into the thinner section of the holes. Tighten the screws.
- 3) Screw in the remaining two screws in either set of bottom mounting holes.
- 4) Knock out the desired wire entrances on the enclosure.

See Figure 2 for details.

Installing the D7038

3.2 D7038 Board Installation



The D7038 board is static-sensitive. Make sure you touch ground before handling the board. Doing so will discharge any static electricity in your body.

- 1)Connect the ground wire.
- 2) Insert the two support posts into the control retainer holes as shown in Figure 2.
- 3) Slide the top of the board into the retainer tabs (the slots under the top of the frame). Once in the retainer tabs, the board will rest on the two support posts.
- 4) Secure the bottom of the board by screwing the two bottom corners through the support posts and through to the enclosure.

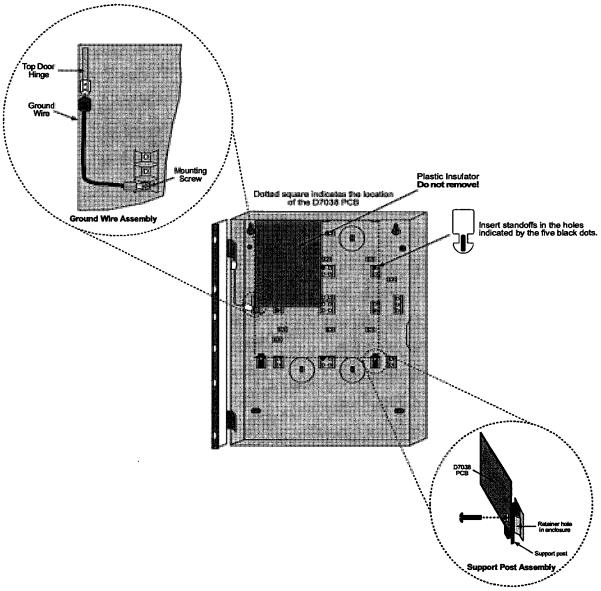


Figure 2: D7038 Enclosure and Board Installation

4.0 Wiring the D7038

Note: All terminals are fully protected against ESD and lightning transients.

Use wire gauge based on Tables 1 and 2. The terminals can accommodate up to two #12 AWG (2.3 mm) wires.

1. Guaranteed min. NAC voltage at full load.		23.5 volts
2. Largest value for all of the notification appliances' min. operating voltages	s.	
3. Max. wiring voltage drop.	Subtract Line 2 from Line 1.	4
4. Total load for a given NAC.		
5. Max. allowable line resistance.	Divide Line 3 by Line 4.	
6. Total wiring run length.		A part of the second
7. Total wire needed.	Multiply Line 6 by Line 2.	
8. Max. wire resistance per foot.	Divide Line 5 by Line 7.	
9. Choose a wire size with a resistance per foot less than Line 7.		61 7 1123

Table 1: Wire Gauge Calculations

AWG B&S Gauge	Ohms per Foot
12 (2.3 mm)	0.00158
14 (1.8 mm)	0.00253
16 (1.5 mm)	0.00402
18 (1.2 mm)	0.00639

Table 2: Wire Gauge Table (based on solid wire)

Note: NFPA 72 requires the use of #18 AWG (1.2 mm) or larger in fire applications.

4.1 AC Power Connections



Disconnect all power (AC and battery) before servicing the D7038. Wait until the High Voltage LED is off before handling any connections.

AC Power runs to the L1 (120 VAC), GND and L2 (Neutral) terminals.

102 VAC to 132 VAC with 6 A capacity should feed the local power supply. The output voltage will be a filtered 27.4 VDC (500 mV ripple max.) under all conditions.

The D7038 supports surge currents up to 8 A for several seconds. Devices with large inrush currents will not cause a power supply shutdown.

A trouble condition will be registered, but not indicated, if AC power falls below 102 V for over five seconds. A programmable time delay (see

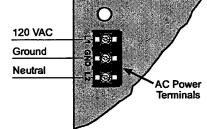


Figure 3: AC Power Connections

Section 5.3 AC Fail Time Delay) allows the indication of AC Failure to be delayed by 1, 6, 12, or 24 hours. The default is six hours.

See Figure 3 for wiring details.

1.2 Battery Connections (24 VDC Only)

The backup battery plugs into the terminal marked B+/B- at the lower left corner of the board (see Figure 4). The D7038 requires two backup batteries in series.

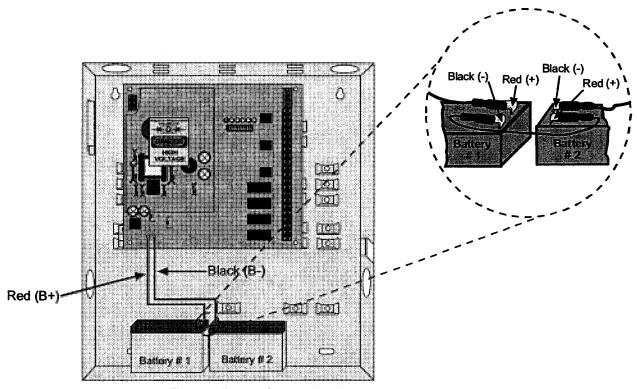


Figure 4: Battery Connections Inside D7038 Enclosure

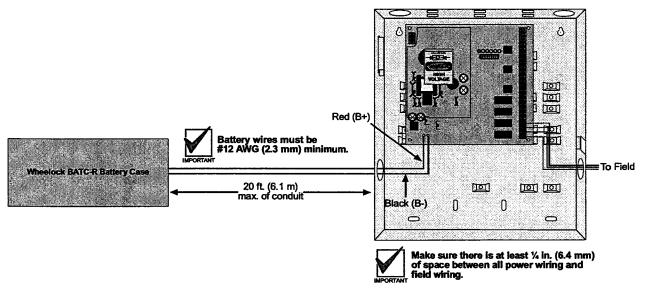


Figure 5: Battery Connections Using an External Battery Case

To determine the standby battery requirements, refer to Table 3:

Device	Quantity	Standby Current per Device	Total Standby Current per Device (Quantity x Standby Current per Device)	Alarm Current per Device	Total Alarm Current per Device (Quantity x Alarm Current per Device)
D7038 Remote NAC Power Supply	1	150 mA	150 mA	150 mA	150 mA
		Grand Total		Grand Total	
		Standby Current		Alarm Current	

Table 3: Standby Time Calculation

The required battery size to support the system can be calculated using the format shown in Table 4, or Tables 5 and 6 can be used to estimate the required battery size.

Grand Total Standby Current (in amps):	cs	
Total Hours of Standby Required (usually 24 or 60):	HS	
Total Standby Capacity (multiply CS x HS):	TS = CS x HS	
Grand Total Alarm Current (in amps):	CA	
Divide by 0.6:	CAA = CA ÷ 0.6	
Total Hours of Alarm Time Required (usually 0.083 or 0.25):	НА	
Total Alarm Capacity (multiply CAA x HA):	TA = CAA x HA	
Total Alarm Capacity Required (add TA + TS):	TC = TA + TS	
Required Capacity with 20% Derating (TC ÷ 1.2):	C = TC ÷ 1.2	

Table 4: Calculating the Required Battery Size

	Capacity Required for 24 Hours	Capacity Required for 48 Hours	Capacity Required for 60 Hours	Capacity Required for 72 Hours	Capacity Required for 80 Hours
Grand Total Standby Current					
100 - 200 mA	5.8	11.5	14.4	17.3	19.2
201 - 300 mA	8.6	17.3	21.6	25.9	28.8
301 - 400 mA	11.5	23.0	28.8	34.6	38.4
401 - 500 mA	14.4	28.8	36.0	×	x
501 - 600 mA	17.3	34.6	×	×	×
601 - 700 mA	20.2	x	. x	x	×
701 - 800 mA	23.0	x	×	x	x
801 - 900 mA	25.9	x	×	x	×
901 - 1000 mA	28.8	x	×	×	×
1001 - 1100 mA	31.7	x	×	×	×
1101 - 1200 mA	34.6	х	×	х	Х

Table 5: Standby Load Battery Size (in amp-hours)

	Capacity Required for 5 minutes	Capacity Required for 10 minutes	Capacity Required for 15 minutes	Capacity Required for 30 minutes	Capacity Required for 45 minutes
Grand Total Standby Current					
250 - 500 mA	0.1	0.1	0.2	0.3	0.5
501 - 999 mA	0.1	0.2	0.3	0.6	0.9
1.0 - 1.5 A	0.2	0.3	0.5	0.9	1.4
2.6 - 2.0 A	0.2	0.4	0.6	1.2	1.8
2.1 - 2.5 A	0.3	0.5	0.8	1.5	2.3
2.6 - 3.0 A	0.3	0.6	0.9	1.8	2.7
3.1 - 3.5 A	0.4	0.7	1.1	2.1	3.2
3.6 - 4.0 A	0.4	0.8	1.2	2.4	3.6
4.1 - 4.5 A	0.5	0.9	1.4	2.7	4.1
4.6 - 5.0 A	0.5	1.0	1.5	3.0	4.5
5.1 - 5.5 A	0.6	1.1	1.7	3.3	5.0
5.6 - 6.0 A	0.6	1.2	1.8	3.6	5.4

Table 6: Alarm Load Battery Size (in amp-hours)

For batteries larger than 7.0 Ah, the addition of Wheelock's BATC-R Battery Case will be necessary to hold the batteries. Connections between the batteries in the Wheelock BATC-R Battery Case and the control panel need to be in conduit and no more than 20 ft. (6.1 m) from the control panel. All power wiring must exit from the left side of the D7038 enclosure.

Battery wires must be #12 AWG (2.3 mm).

The D7038 will provide a regulated output voltage of 24.1 VDC (500 mV ripple max.) when operating from the standby batteries under all conditions, including when the batteries are nearly depleted.

A low battery condition will be reported when the battery voltage drops below 20.4 V for the pair.

The D7038 will fully charge depleted 6.5 Ah batteries with 48 hours.

A disconnected battery will be indicated within one minute.

4.3 Option Bus Connections

The option bus (if used) runs to the terminals labeled TX, RX, RTN and +12 V (see Figure 6).

The Option Bus connection can be used with Radionics' D7024 Fire Alarm Control/Communicator with firmware revision 2.0 (or later). The D7038 will be considered a new option module type that can indicate specific trouble conditions back to the control panel, such as AC, battery, etc.

See Section 5.0 to set the D7038's address for use with the Option Bus.

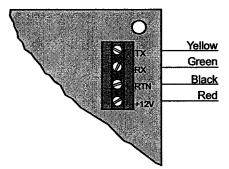


Figure 6: Wiring the Option Bus

1.4 NAC Input Connections

There are two inputs that can be used with 12 or 24 volt polarity reversal outputs from a conventional panel that conform to NFPA 72, Class B (used instead of the option bus connection). Please refer to the control panels' compatibility information.

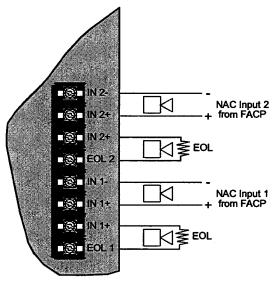
Polarity reversal on Input 1 will activate NAC Outputs 1 and 2; Input 2 will activate NAC Outputs 3 and 4. DIP switch settings will allow NAC Input 1 to control all four outputs (see Section 5.0, "D7038 DIP Switch and Option Settings").

If the control panel detects a trouble condition on either set of outputs, the appropriate EOL device will be disconnected from the reversal loop. These inputs are electrically isolated from the controlling section of the board.

The D7038 can be placed anywhere on a FACP's NAC circuit.

See Figure 7 for wiring details.

Note: Connect either the D7038's Option Bus or NAC Input terminals to the FACP. Do not connect both.



The EOL resistor value is dependent on the conventional panel.

Figure 7: Wiring the NAC Inputs

4.5 Trouble Relay Connections

The trouble relay provides one set of Form "C" contacts for connection of an appliance of choice. It can be wired in series with the Auxiliary Output to provide power to the appliance.

The relay will be activated by the controlling section of the board to indicate a fault condition. See Figure 8 for wiring details.

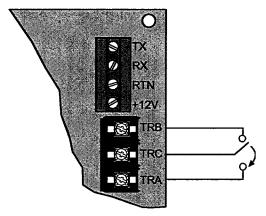


Figure 8: Wiring the Trouble Relay

4.6 Auxiliary Output Connections

The auxiliary output provides a continuous, unsupervised 24 V output to power external devices. It is rated at 0.85 A. It can be wired in series with the trouble relay to provide power to the associated appliance.

A short circuit on this output will not affect the operation of the D7038 in any way. See Figure 9 for wiring details.

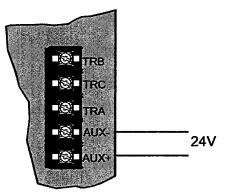


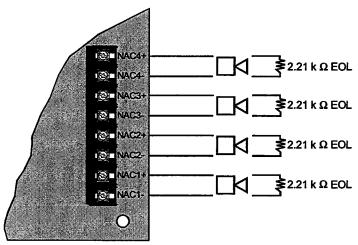
Figure 9: Wiring the Auxiliary Outputs

4.7 NAC Output Connections

Four outputs, consisting of two Form C relays, switch the load to the 24 volt bus. Each output sources up to 2.5 A, limited by an overall 6 A capacity.

4.7.1 NAC Circuits

Overload protection will interrupt the circuit within 5 seconds given an overload of 8 A total. When de-energized, the relay will switch a monitoring circuit across the output to verify EOL termination, allowing reporting of an open or shorted output condition. See Figure 10 for wiring details.



EOL Resistor P/N: 25899 Radionics by Detection Systems, Inc.

Figure 10: Wiring the NAC Outputs

4.7.2 Auxiliary Circuits

The D7038 can be wired to supply constant auxiliary power through its NAC outputs. See Figure 11 for wiring details.

Note: Reverse polarity connections of some notification appliances may not be detected by the D7038 NAC supervision.

Make sure that the notification appliances are connected properly and tested before installation is completed.

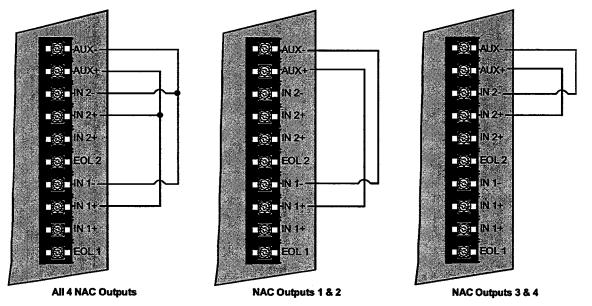


Figure 11: Auxiliary Power Circuit Configuration

DIP Switch and Option Bus Settings

5.0 D7038 DIP Switch and Option Bus Settings

The following options must be set with the DIP switches: Option Bus Address, NAC Input Variable and AC Failure Time Delay.

See Figure 1 for the location of the DIP switch bank on the D7038 board. See Figure 12 for proper DIP switch positioning. See Table 7 for DIP switch settings.

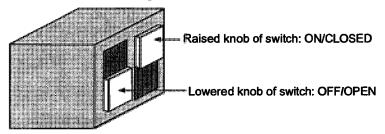


Figure 12: D7038 DIP Switch Orientation

				DIP Switches	· W		
Option Settings	1	2	3	5	6	7	8
Option Bus Address 1	-	-	-	On/Closed	Off/Open	Off/Open	Off/Open
Option Bus Address 2	-	•	-	Off/Open	On/Closed	Off/Open	Off/Open
Option Bus Address 3	-	-	-	On/Closed	On/Closed	Off/Open	Off/Open
Option Bus Address 4	•	-	•	Off/Open	Off/Open	On/Closed	Off/Open
Option Bus Address 5	-	•	-	On/Closed	Off/Open	On/Closed	Off/Open
Option Bus Address 6	-	-	-	Off/Open	On/Closed	On/Closed	Off/Open
Option Bus Address 7	-	-	-	On/Closed	On/Closed	On/Closed	Off/Open
Option Bus Address 8	-	<u>-</u>	-	Off/Open	Off/Open	Off/Open	On/Closed
Option Bus Address 9	-	-	-	On/Closed	Off/Open	Off/Open	On/Closed
Option Bus Address 10	-	•	-	Off/Open	On/Closed	Off/Open	On/Closed
Option Bus Address 11	-	•	-	On/Closed	On/Closed	Off/Open	On/Closed
Option Bus Address 12	•	•	•	Off/Open	Off/Open	On/Closed	On/Closed
Option Bus Address 13	-	-	•	On/Closed	Off/Open	On/Closed	On/Closed
Option Bus Address 14	-	-	-	Off/Open	On/Closed	On/Closed	On/Closed
Option Bus Address 15	-	•	-	On/Closed	On/Closed	On/Closed	On/Closed
NAC Input Variable	On/Closed	-	-	-	-	-	-
AC Fail Time Delay (6 Hr Default)	-	Off/Open	Off/Open	-	-	-	-
AC Fail Time Delay (1 Hr)	-	On/Closed	Off/Open	-	-	-	-
AC Fail Time Delay (12 Hr)	-	Off/Open	On/Closed	-	-	-	-
AC Fail Time Delay (24 Hr)	-	On/Closed	On/Closed	-	-		•

Table 7: DIP Switch Settings

DIP Switch and Option Bus Settings

5.1 Option Bus Address

Note: To activate a new address.

To activate a new address, remove the AC and battery power from the D7038. Restore power once it has been removed. The new address will become active once power has been restored to the D7038.

If using the Option Bus connection, the D7038 needs to have its own address (1 to 15). Use switches 5 through 8.

Refer to Figure 11 for proper DIP switch positioning.

5.2 NAC Input Variable

Instead of having Input 1 drive NAC Output 1 and 2 and Input 2 drive NAC Output 3 and 4, Input 1 can be set to drive all four outputs. Set DIP Switch 1 to the ON/CLOSED position to select this option.

5.3 AC Fail Time Delay

A trouble condition will be registered, but not indicated, to the panel if the AC falls below 102 V for over five seconds. A programmable time delay allows the indication of AC Failure to be delayed by 1, 6, 12, or 24 hours. The default value is six hours.

Use DIP switches 2 and 3 for these settings.

Local Status Display

6.0 D7038 Local Status Display

There are seven local status display LEDs on the D7038 board: High Voltage (located under clear plastic shield), Output Active, NAC Short, Low Battery, AC OK, Ground Fault and Loop Trouble.

See Figure 1 for the location of each LED on the board. See Table 8 for the abbreviation, color and function of each onboard LED.



There is a warning label on the clear plastic shield indicating that the D7038 is a high voltage device. It should not be serviced until power is removed (both AC and battery) and the High Voltage LED is off.

See Table 8 for the functions of the Local Status Display LEDs.

LED	Abbreviation	Color	Function
High Voltage	HVLT	Green	Warns of dangerous voltages when lit.
Output Active	ОИТ	Red	Indicates one of the NACs (1-4) is currently active.
NAC Short	SHRT	Yellow	Indicates that there is a short on one of the four NAC outputs.
Low Battery	LBAT	Yellow	Indicates that there is a missing or dead battery.
AC OK	ACOK	Green	Indicates that the input is OK and that the power supply is running from the AC line.
Ground Fault	GFLT	Yellow	Indicates that the NAC output wiring has been imporperly connected to an external source or ground.
Loop Trouble	TBL	Yellow	Indicates that one, or both, NAC Input EOL device(s) has been disconnected due to one or more of the following faults: faulty AC power (after a delay); low battery fault; ground fault; NAC output fault (EOL shorted, EOL open, NAC overcurrent).

Table 8: Local Status Display LED Functions

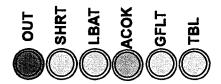


Figure 13: D7038 LEDs

D	7	O	3	8
_	•	•	•	•

Local Status Display

Notes:

Index

Index

A	N	
AC Fail Time Delay20	NAC	
Auxiliary Circuits	Circuit	
Connections	Connections	18
Auxiliary Output	Input	
Connections17	Connections	16
Specifications8	Conventional Control	
Auxiliary Power Supply5	Specifications	7
•	Variable	20
В	Output	
	Connections	18
Battery	Specifications	
Calculating the Required Battery Size13	•	
Connections12	0	
Connections Using an External Battery Case 12		
Standby Time Calculation13	Option Bus	
•	Address	
C	Connections	15
Other th Orange to the	Control	5
Circuit Supervision5	Input	
D	Specifications	
U	Overview	5
DIP Switch Switch Orientation	Р	
Switch Settings19	PCB	
E	Installation	10
_	Power	
Enclosure	AC Connections	
Specifications7	Management	
Expander Supervision5	Specifications	7
	Pulsed Bell Operation	
G	NFPA Temporal	5
	Pulsed	5
Ground Fault Indication5	<u></u>	
	T	
l l		
	Trouble Relay	4-
Installation	Connections	1/
PCB10	Trouble Relay Output	_
•	Specifications	8
L	14/	
LED Functions21	W	
	VAII min -	
Local Status Display21	Wiring	
Low AC Line Detection5	NFPA 72 Requirement	11
	Wire Gauge Calculations	11

Compatibility List

1.0 NAC Devices Compatible with the D7038

Radionics has found the following Notification Appliance Circuit (NAC) devices to be compatible with the D7038 Remote NAC Power Supply under the method required by Underwriters Laboratories.

Manufacturer	Device Model	Description
Radionics	D411	2-wire Synchronization Module
Radionics	D412	4-wire Synchronization Module
Radionics	D419A	24 V, 75 cd Mini Horn Strobe
Radionics	D421A	24 V, 15/75 cd Mini Horn Strobe
Radionics	D422A	24 V, 15/75 cd Horn Strobe
Radionics	D423A	24 V, 75 cd Horn Strobe
Radionics	D424A	24 V, 30 cd Horn Strobe
Radionics	D432A	24 V, 150 cd Horn Strobe
Radionics	D441	24 V, 6 in. Bell
Radionics	D443	24 V, 10 in. Bell
Radionics	D449	24 V Mini Horn
Radionics	D449W	24 V, White Mini Hom
Radionics	D451A	24 V, 15 cd Mini Horn Strobe
Radionics	D457	12/24 V Mutti-tone Horn
Radionics	D470	12/24 V (3) Multiple Input Horn
Radionics	D478A	24 V, 75 cd (3) Multiple Input Horn Strobe
Radionics	D504S	24V, 15 cd Horn Sync Strobe
Radionics	D506S	24V, 15/75 cd Synchronized Strobe
Radionics	D507	24V, 110 cd Remote Strobe
Radionics	D514	24V, 75 cd Remote Strobe
Radionics	D515	24V, 30 cd Remote Strobe
Radionics	D522S	24V, 110 cd Synchronized Strobe
Radionics	D523S	24V, 110 cd Remote Strobe Retro Plate
Radionics	D524	Speaker with 15 cd Sync Strobe
Radionics	D526S	Speaker with 15/75 cd Sync Strobe
Radionics	D527S	Speaker with 15 cd Sync Strobe
Radionics	D529S	Speaker with 75 cd Sync Strobe
Radionics	D531S	Speaker with 75 cd Strobe
Radionics	D532	24V, 15/75 cd Remote Strobe Retro Plate
Radionics	D533	24V, 30 cd Remote Strobe Retro Plate
Radionics	D534	24V, 75 cd Remote Strobe Retro Plate



Manufacturer	Device Model	Description
Radionics	D535S	24 V, 15 cd Synchron. Strobe Retro Plate
Radionics	D536S	24 V, 15/75 cd Synchron. Strobe Retro Plate
Radionics	D537S	24 V, 75 cd Synchron. Strobe Retro Plate
Radionics	D538	24V, 15 cd Remote Strobe Retro Plate
Radionics	D541S	24 V Synchronized Horn
Radionics	D543S	24 V Weatherproof Synchronized Horn
Radionics	D544S	24 V, 15 cd Sync or Remote Strobe
Radionics	D545S	24 V, 15/75 cd Sync or Remote Strobe
Radionics	D546S	24 V, 30 cd Sync or Remote Strobe
Radionics	D547S	24 V, 75 cd Sync or Remote Strobe
Radionics	D548S	24 V, 110 cd Sync or Remote Strobe
Radionics	D552S	24 V, 15 cd Ceiling Sync or Remote Strobe
Radionics	D553S	24 V, 110 cd Ceiling Sync or Remote Strobe
Radionics	D554S	24 V, 110 cd Sync or Remote Retro Plate
Radionics	D555S	24 V, 15 cd Sync or Remote Retro Plate
Radionics	D556S	24 V, 15/75 cd Sync Remote Retro Plate
Radionics	D557S	24 V, 75 cd Sync Remote Retro Plate
Radionics	D558S	24 V, 75 cd Synchronized Mini-Horn Strobe
Radionics	D559S	24 V, 15/75 cd Synchronized Mini-Horn Strobe
Radionics	D561S	24 V, 15 cd Mini-Horn/Strobe
Radionics	D570S	24 V, 15 cd Synchronized Horn/Strobe
Radionics	D571S	24 V, 15/75 cd Synchronized Horn/Strobe
Radionics	D572S	24 V, 110 cd Synchronized Horn/Strobe
Radionics	D573S	24 V, 30 cd Synchronized Horn/Strobe
Radionics	D574S	24 V, 75 cd Synchronized Horn/Strobe
Radionics	D577S	24 V, 30 cd Sync or Remote Strobe Retro Plate
Radionics	D579S	24 V, 15 cd Seaker w/ Sync Strobe, ceiling wht
Radionics	D580S	24 V, 30 cd Horn Sync Strobe, ceiling wht
Radionics	D581S	24 V, 75 cd Horn Sync Strobe, ceiling wht
Radionics	D582S	24 V, 100 cd Horn Sync Strobe, ceiling wht
Wheelock	AH-24-R	24 V Synchronized Horn
Wheelock	AH-24WP-R	24 V Weatherproof Synchronized Horn
Wheelock	AMT-12/24-R	12/24 V (3) Multiple Input Horn
Wheelock	AMT-24-IS-VFR	12/24 V, 75 cd (3) Multiple Input Horn Strobe
Wheelock	AMT-24-LS-VFR	12/24 V, 15 cd (3) Multiple Input Horn Strobe
Wheelock	AMT-24-LSM-VFR	12/24 V, 15/75 cd (3) Multiple Input Horn Strobe
Wheelock	AS-2415W-FR	24 V, 15 cd, 2-wire Audible Sync Strobe
Wheelock	AS-2430W-FR	24 V, 30 cd, 2-wire Audible Sync Strobe
Wheelock	AS-2475W-FR	24 V, 75 cd, 2-wire Audible Sync Strobe
Wheelock	AS-24110W-FR	24 V, 110 cd, 2-wire Audible Sync Strobe
Wheelock	AS-241575W-FR	24 V, 15/75 cd, 2-wire Audible Sync Strobe
Manufacturer	Device Model	Description

M/h a ala ala	AC 04150 FW	04 V 45 and O wire Avadible Come Chaba
Wheelock	AS-2415C-FW	24 V, 15 cd, 2-wire Audible Sync Strobe
Wheelock	AS-241575C-FW	24 V, 15/75 cd, 2-wire Audible Sync Strobe
Wheelock	AS-2430C-FW	24 V, 30 cd, 2-wire Audible Sync Strobe
Wheelock	AS-2475C-FW	24 V, 75 cd, 2-wire Audible Sync Strobe
Wheelock	DSM-12/24-R	4-wire Synchronization Module
Wheelock	E-70-SL-24-VFR	Speaker with 15 cd Sync Strobe
Wheelock	E-70-SLM-24-VFR	Speaker with 15/75 cd Sync Strobe
Wheelock	E-90-IS-24-CFW	Speaker with 75 cd Strobe
Wheelock	E-90-SL-24-CFW	Speaker with 15 cd Sync Strobe
Wheelock	ET-1070-IS-24-VFR	Speaker with 75 cd Strobe
Wheelock	ET-1070-LS-24-VFR	Speaker with 15 cd Strobe
Wheelock	ET-1070-LSM-24-VFR	Speaker with 15/75 cd Strobe
Wheelock	ET-1070-MS-24-VFR	Speaker with 30 cd Strobe
Wheelock	ET-1080-IS-24-VFR	Speaker with 75 cd Strobe
Wheelock	ET-1080-LS-24-VFR	Speaker with 15 cd Strobe
Wheelock	ET-1080-LSM-24-VFR	Speaker with 15/75 cd Strobe
Wheelock	ET-1090-IS-24-CFW	Speaker with 75 cd Strobe
Wheelock	ET-1090-LS-24-CFW	Speaker with 15 cd Strobe
Wheelock	ET-1090-MS-24-CFW	Speaker with 30 cd Strobe
Wheelock	MB-G10-24-R	24 V, 10 in. Bell
Wheelock	MB-G6-24-R	24 V, 6 in. Bell
Wheelock	MIZ-24-IS-VFR	24 V, 75 cd Mini Hom Strobe
Wheelock	MIZ-24-LS-VFR	24 V, 15 cd Mini Horn Strobe
Wheelock	MIZ-24-LSM-VFR	24 V, 15/75 cd Mini Horn Strobe
Wheelock	MIZ-24-R	24 V Mini Horn
Wheelock	MIZ-24-W	24 V White Mini Horn
Wheelock	MT-12/24-R	12/24 V Multi-tone Horn
Wheelock	MT-24-IS-VFR	24 V, 75 cd Horn Strobe
Wheelock	MT-24-LS-VFR	24 V, 15 cd Horn Strobe
Wheelock	MT-24-LSM-VFR	24 V, 15/75 cd Horn Strobe
Wheelock	MT-24-MS-VFR	24 V, 30 cd Horn Strobe
Wheelock	NS-2415W-FR	24 V, 15 cd, 2-wire Horn Sync Strobe
Wheelock	NS-2475W-FR	24 V, 75 cd, 2-wire Horn Sync Strobe
Wheelock	NS-241575W-FR	24 V, 15/75 cd, 2-wire Horn Sync Strobe
Wheelock	RS-24110-HFR	24 V, 110 cd Remote Strobe
Wheelock	RS-2415-VFR	24 V, 15 cd Remote Strobe
Wheelock	RS-241575-VFR	24 V, 15/75 cd Remote Strobe
	RS-2430-VFR	24 V, 30 cd Remote Strobe
Wheelock	I TO ETOU VI II	ET T, OU OU FIGHIOLO OLI ODO
Wheelock Wheelock	RS-2475-VFR	24 V, 75 cd Remote Strobe

Manufacturer	Device Model	Description
Wheelock	RSP-2415-HFR	24 V, 15 cd Remote Strobe Retro Plate
Wheelock	RSP-241575-VFR	24 V, 15/75 cd Remote Strobe Retro Plate
Wheelock	RSP-2430-HFR	24 V, 30 cd Remote Strobe Retro Plate
Wheelock	RSP-2475-HFR	24 V, 75 cd Remote Strobe Retro Plate
Wheelock	RSS-2415C-FW	24 V, 15 cd, Ceiling Sync or Remote Strobe
Wheelock	RSS-24100C-FW	24 V, 100 cd, Ceiling Sync or Remote Strobe
Wheelock	RSS-24110W-FR	24 V, 110 cd, Sync or Remote Strobe
Wheelock	RSS-241575W-FR	24 V, 15/75 cd, Sync or Remote Strobe
Wheelock	RSS-2415C-FW	24 V, 15 cd, Ceiling Sync or Remote Strobe
Wheelock	RSS-2415W-FR	24 V, 15 cd Sync or Remote Strobe
Wheelock	RSS-2430W-FR	24 V, 30 cd Sync or Remote Strobe
Wheelock	RSS-2475W-FR	24 V, 75 cd Sync or Remote Strobe
Wheelock	RSSP-2415W-FR	24 V, 15 cd Sync or Remote Strobe
Wheelock	RSSP-2430W-FR	24 V, 30 cd Sync or Remote Strobe
Wheelock	RSSP-2475W-FR	24 V, 75 cd Sync or Remote Strobe
Wheelock	RSSP-241575W-FR	24 V, 15/75 cd Sync or Remote Strobe
Wheelock	SM-12/24-R	2-wire Synchronization Module
Wheelock	SR-24110-VFR	24 V, 110 cd Synchronized Strobe
Wheelock	SR-2415-VFR	24 V, 15 cd Synchronized Strobe
Wheelock	SR-241575-VFR	24 V, 15/75 cd Synchronized Strobe
Wheelock	SRP-24110-HFR	24 V, 110 cd Synchron. Strobe Retro Plate
Wheelock	SRP-2415-HFR	24 V, 15 cd Synchron. Strobe Retro Plate
Wheelock	SRP-241575-VFR	24 V, 15/75 cd Synchron. Strobe Retro Plate
Wheelock	SRP-2475-HFR	24 V, 75 cd Synchron. Strobe Retro Plate
System Sensor	MDL SYNC-CIRCUIT	Synchronizing Module
System Sensor	MASS2415 ADA	24 V, 15 cd Sounder Strobe
System Sensor	MASS2475 ADA	24 V, 75 cd Sounder Strobe
System Sensor	MASS24110 ADA	24 V, 110 cd Sounder Strobe
System Sensor	S241575	24 V, 15/75 cd Strobe
System Sensor	P241575	24 V, 15/75 cd Horn Strobe
Gentex	GXS41575WR	24 V, 15/75 cd Remote Strobe
Gentex	GX90S-4-15/75	24 V, 15/75 cd Horn Strobe

Disclaimer Notice: Radionics makes no claim either written, oral or implied that any NAC devices, other than the ones listed here, will work with the D7038 Remote NAC Power Supply.

2.0 4-wire Smoke Detectors Compatible with the D7038

Radionics has found the following 4-wire smoke detectors to be compatible with the D7038 Remote NAC Power Supply under the method required by Underwriters Laboratories.

Manufacturer	Detector Model	Mounting Base Model
Radionics	D296	N/A
Radionics	D285	D292, D293A, D293E, D293S
Radionics	D285TH	D292, D293A, D293E, D293S
Radionics	D273	N/A
Radionics	D273TH	N/A
Radionics	D254	D290
Radionics	D255	D290
Radionics	D281A	D290
Radionics	D282A	D290
Radionics	D283A	D290
Radionics	D294	N/A
Radionics	D299	N/A
Detection Systems	DS240	N/A
Detection Systems	DS250	MB4W, MB4WA, MB4WE, MB4WS
Detection Systems	DS250TH	MB4W, MB4WA, MB4WE, MB4WS
Detection Systems	DS284	N/A
Detection Systems	DS284TH	N/A
Electro Signal Lab	541C	N/A
Electro Signal Lab	541CXT	N/A
Electro Signal Lab	541AXT	N/A
Electro Signal Lab	449CLT	N/A
Electro Signal Lab	741U	N/A
Electro Signal Lab	741UT	N/A
Electro Signal Lab	742U	N/A
System Sensor	6424	N/A
System Sensor	DH-400ACDC	N/A

Disclaimer Notice: Radionics makes no claim either written, oral or implied that any smoke detectors, other than the ones listed here, will work with the D7038 Remote NAC Power Supply.

3.0 Magnetic Door Holders Compatible with the D7038

Radionics has found the following magnetic door holders to be compatible with the D7038 Remote NAC Power Supply under the method required by Underwriters Laboratories.

Manufacturer	Magnetic Door Holder Model Number
Radionics	D370B
Radionics	D370C
Radionics	D371B
Radionics	D371C
Sentrol	DHF-1224
Sentrol	DHR-1224
Sentrol	DHS-1224
Sentrol	DHF-24120
Sentrol	DHR-24120
Sentrol	DHS-24120
Sentrol	DHF-24220
Sentrol	DHR-24220
Sentrol	DHS-24220

Disclaimer Notice: Radionics makes no claim either written, oral or implied that any magnetic door holders, other than the ones listed here, will work with the D7038 Remote NAC Power Supply.