

## Specifications

### Features

- Remote NAC Power Supply with 6 A of notification power
- Outputs can be configured for NAC output or constant auxiliary power
- 4 Class B, Style Y Circuits
- Multiple output patterns
- Ground fault indication
- Over voltage indication
- Regulated 24 V output (nominal)
- Over current protection
- Charger control monitor
- Supervision of AC, battery and circuit expander
- Fully supervised outputs
- Compatible with the following Radionics controls: D7022 FACP, D7024 Fire Alarm Control/Communicator and the D8024, D9024 and D10024 Analog FACPs

### Description

The Radionics D7038 Remote Notification Appliance Circuit (RNAC) Power Supply is UL Listed to be used in commercial fire alarm applications. This regulated power supply provides up to six amps of power that are used to recharge batteries and operate both continuous and intermittent alarm loads. This six amps of power can be distributed through the four Class B, Style Y circuits that are part of the D7038. It is also compatible with any UL Listed control unit utilizing reverse polarity supervised notification outputs using 24 VDC regulated outputs.

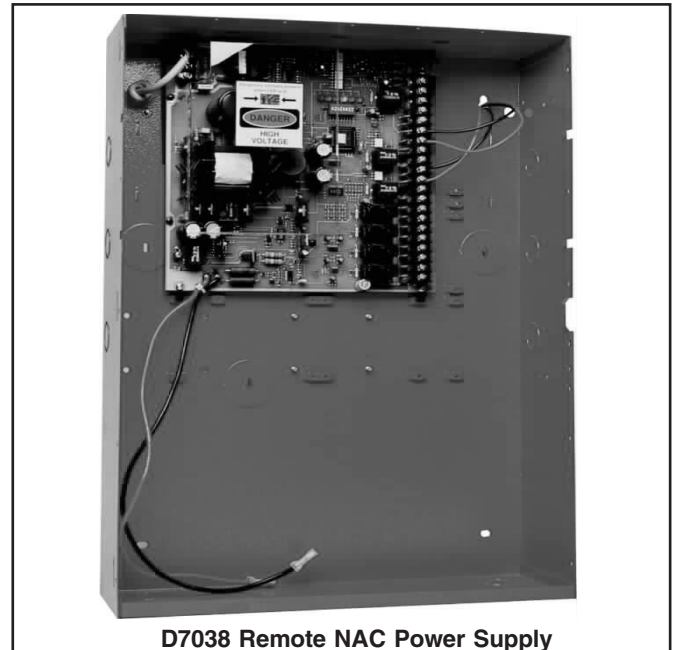
The D7038 is provided in a red enclosure that houses the power supply board and standby batteries. Ample room is provided inside the enclosure to make AC power connections and route field wiring to connection points on the power supply board. All wiring is connected to the power supply board via screw terminals that can accept up to #12 AWG (2.3 mm) wire.

The D7038 can be connected to the D7024 via the four wire connection to the Option Bus. This connection provides individual control of each output by the D7024, and complete supervision of the power supply.

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

The NAC Input Variable option allows for split functioning of the D7038's inputs. Input 1 can either be set to drive all four NAC outputs, or NAC Outputs 1 and 2. If the latter option is chosen, then Input 2 will drive NAC Outputs 3 and 4.

There are seven local status display LEDs on the D7038 board that monitor the following conditions: High Voltage, AC OK, Low Battery, Loop Trouble, Ground Fault, Output Active and NAC Short.



### Application

The D7038 is designed to add four additional notification appliance circuits (NFPA 72, Class B, Style Y) to a fire alarm control panel.

The D7038 can be used with other fire alarm control panels. Supervision and control is provided through a supervised, polarity reversal output (depending on the panel that is in use). For the D8024, D9024 and D10024 analog panels, the D7038 connects through a NAC circuit. No serial bus connection is necessary.

The D7038 can also be used as a power supply for fire-protective signaling systems.

### Installation

The D7038 power supply board and enclosure are shipped in one box. The D7038's enclosure should be mounted in a convenient location for servicing and maintenance. The power supply board must be mounted in the enclosure using the provided hardware.

Primary power (120 VAC) from an unswitched dedicated branch circuit is routed to the power supply enclosure and connections are made inside. Field wiring to control modules or continuously powered devices are routed into the enclosure via knockouts provided on the enclosure.

When all circuits are determined to be free of earth grounds and wire-to-wire shorts, connect the primary power to the supply and then install the batteries in the locations provided in the enclosure.

# Specifications

General Specifications	
Operating Temperature	+32°F to +120°F (0°C to +49°C)
Input Power	120 VAC, 60 Hz, 2.5 A
Battery Voltage	24 VDC, nominal (20.2 to 28.0 VDC)
Max. Battery Capacity	38 Ah
Output Voltage (AC Operation)	27.4 +/- 0.1 VDC @ 25°C (77°F)
Output Voltage (DC Operation)	24.1 +/- 0.6 VDC @ 25°C (77°F)
Total Output Current	6 A
Ripple Voltage	≤ 250 mV <sub>pp</sub>
Enclosure Dimensions (w/o door)	14.8 in. W x 20.4 in. H x 4.1 in. D (38 cm W x 52 cm H x 10.4 cm D)

NAC Input Specifications	
Input Voltage	9 to 30 VDC/VRMS
Input to Output Response Time	≤ 50 ms
EOL Resistor	User supplied

NAC Output Specifications	
Standby Voltage	-5.0 VDC
EOL Resistor	2.2K ohms +/- 5%
Output Voltage	24.1 or 27.4 VDC)
Rated Output Current (per output) x 4	1.5 A
Max. Output per Circuit	2.5 A
Max. Output for All Circuits	6.0 A

Auxiliary Output Specifications	
Output Voltage	24.1 or 27.4 VDC
Max. Output Current	850 mA

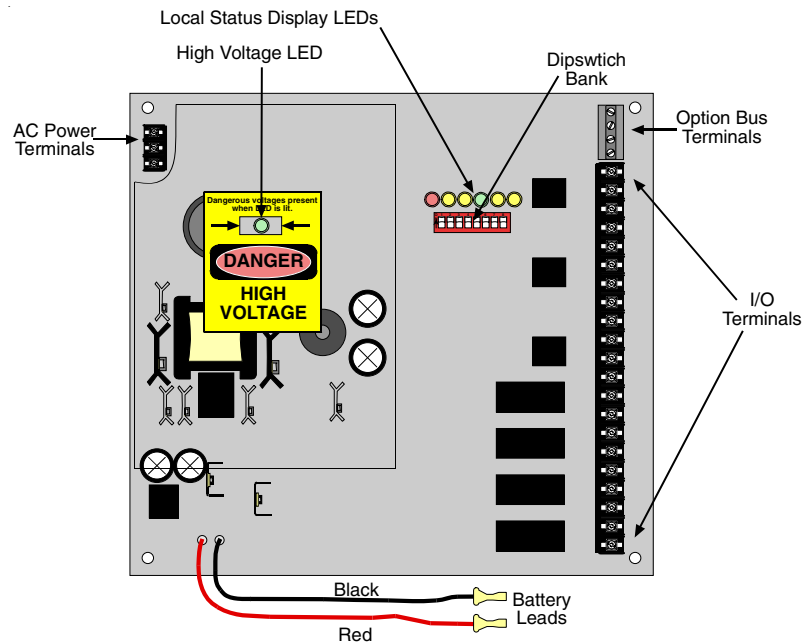
Trouble Relay Output Specifications	
Contact Type	Form "C"
Contact Rating	1.5 A @ 32 VDC

## Listings and Approvals

- UL 864 Listed Control Unit Accessory
- UL1481 Listed Power Supply for Fire-Protective Signaling Systems
- CSFM
- NYC-MEA

## Ordering Information

Model Number	Description
D126	12 V, 7 Ah Battery
D1224	12 V, 24 Ah Battery
D1238	12 V, 38 Ah Battery
D7038	Remote NAC Power Supply



**D7038 Remote NAC Power Supply Board**



CERTIFICATE NO. A5137