



# SM1BOE - Signal Control Power Supply

## Overview:

The SM1BOE Signal Control Power Supply is designed to convert one (1) alarm input into six (6) siren outputs and one (1) strobe output. The SM1BOE also provides resettable panic output power and aux. power for motion sensors or accessories.

## Specifications:

- Input 115VAC / 60 Hz, 1.8 amps.
- Six (6) speaker outputs.
- Common speaker driving circuit (keeps speakers in phase).
- Six (6) alarm silence switches.
- One (1) alarm strobe output (2 amps max.).
- Isolated Trigger input.
- AC and Battery Fail LED indication.
- Trigger and Emergency LED indicator on front panel.
- Isolated trouble LED input 12VDC to 24VDC.
- Exterior speaker circuit breaker protection (PTC).
- Strobe output circuit breaker protection (PTC).
- Resettable 12VDC Panic Output.
- 12VDC auxiliary power output (2 amps max.).
- Four (4) filtered and electronically regulated outputs.
- Built-in charger for sealed lead acid or gel type batteries.
- Zero voltage drop when switching over to battery backup.
- AC input and DC output LED indicators.
- Short circuit and thermal overload protection.
- Includes battery leads.

Enclosure Dimensions: 15.5”H x 12”W x 4.5”D



## Installation Instructions:

The SM1BOE should be installed in accordance with article 760 of The National Electrical Code or NFPA 72 and all applicable Local Codes.

1. Mount the SM1BOE in a desired location.
2. Connect interior speakers to terminals marked Speaker 1 through 5 and external speakers to terminals marked [Ext. Speaker]. (For wiring multiple speakers to one output refer to fig. 3 to 6)
3. Connect the alarm output of the control panel to the terminals marked [+ Input Trg. -].
4. Connect strobe to terminals marked [+ Strobe -]. This output will reset when the alarm condition is terminated
5. Connect the LED indicator of the remote panic device to the resettable panic power output terminals marked [+ Panic -]. This output is reset by depressing the Panic Reset Switch on the enclosure door.
6. Connect the low current panic output option of the alarm panel to the terminals marked [+ Panic LED -]. When power is applied to these terminals the EMERGENCY LED on the enclosure door will illuminate.
7. Connect devices (ie. Motion detectors, glass break detectors etc.) that require constant power to the terminals marked [1P and 1N thru 4P and 4N].
8. Connect AC to the black and white leads from the transformer.
9. Connect battery to terminals marked [+ BAT — ] on the Power Supply Board (battery leads included).

## LED Diagnostics:

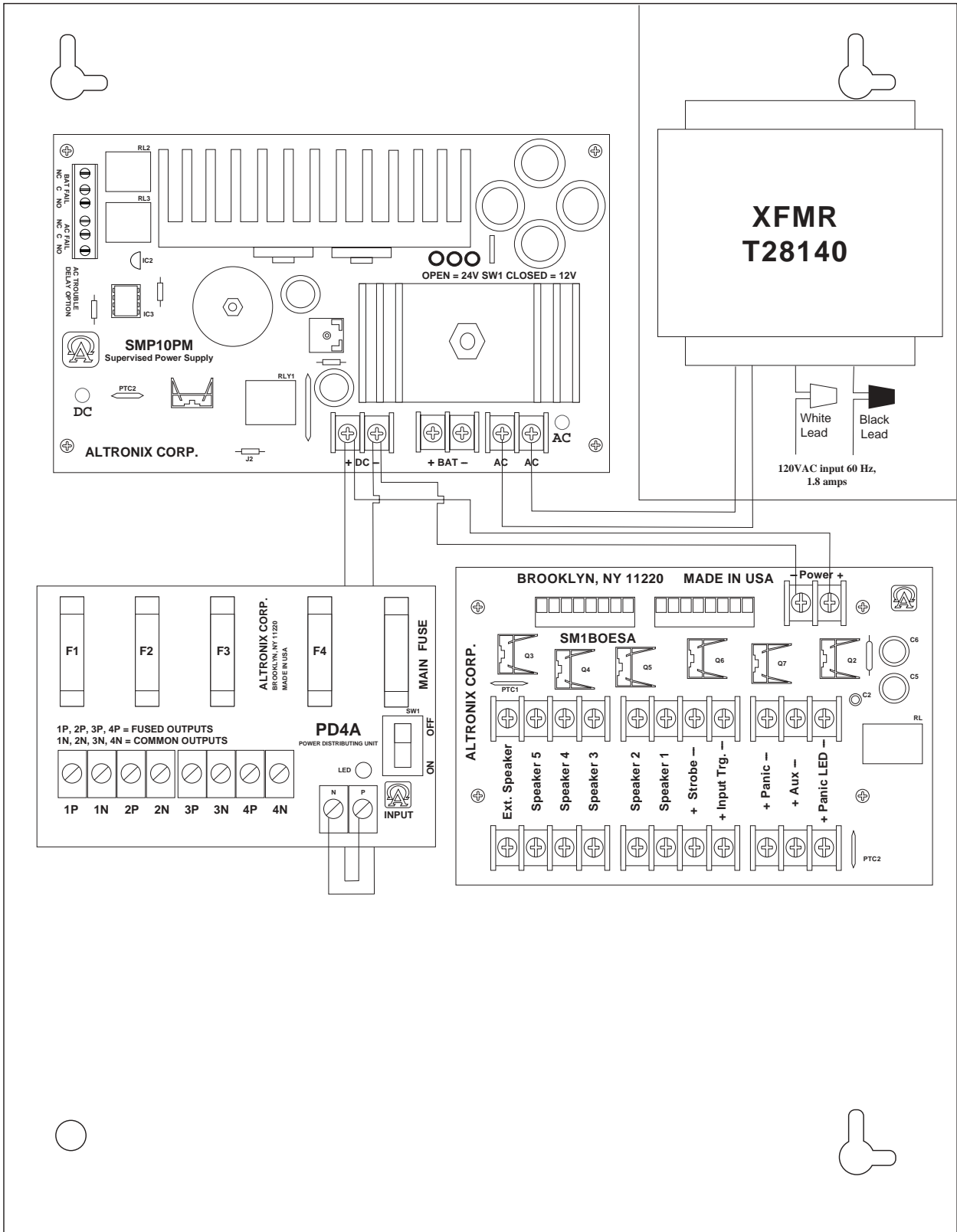
### Front Panel

LED	ON	OFF
EMERGENCY	Panic circuit tripped	Normal operating condition
ALARM	Alarm system tripped	Normal operating condition
BATTERY ON	Normal operating condition	Discharged or no stand-by battery
AC ON	Normal operating condition	Loss of AC, Stand-by battery supplying power

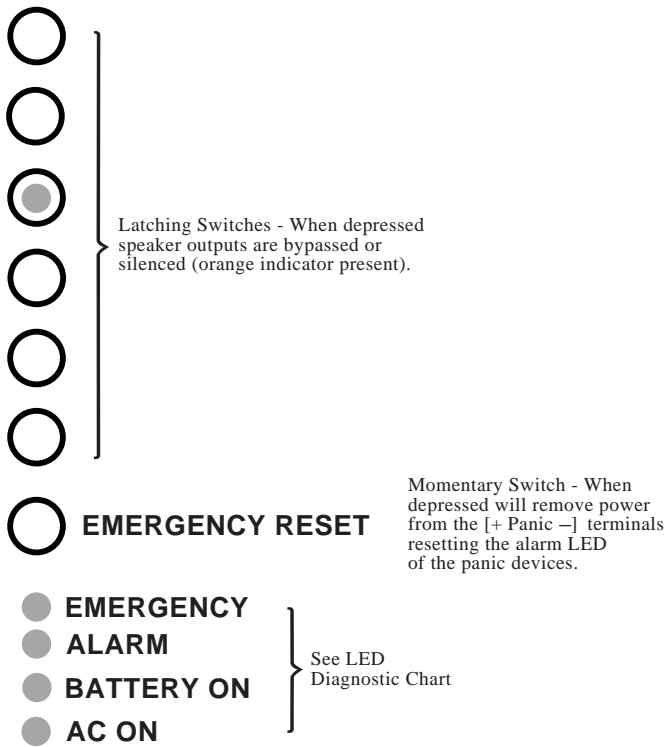
**LED Diagnostics:  
SMP10PM**

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition
ON	OFF	Loss of AC, Stand-by battery supplying power
OFF	ON	No DC output
OFF	OFF	Loss of AC. Discharged or no stand-by battery. No DC output

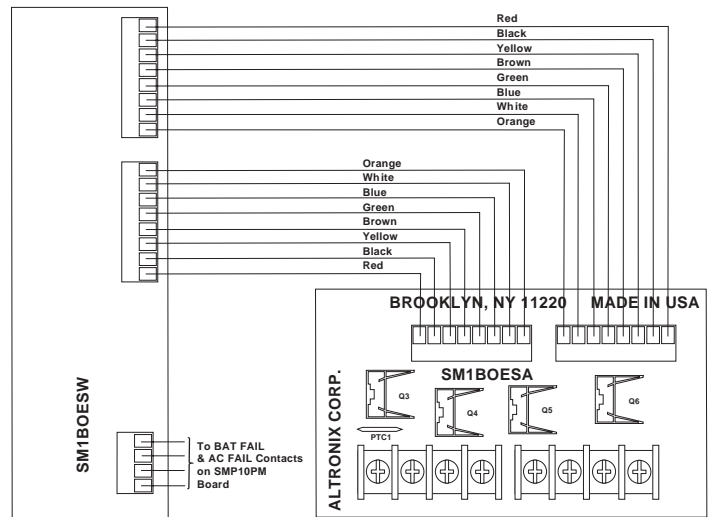
**Fig. 1**



**Fig. 2 - Front Panel Legend**



**Fig. 3**



**Terminal Identification:  
SMP1BOESA**

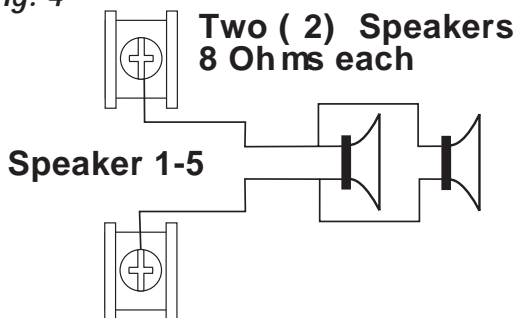
Terminal Legend	Function/Description
Ext.Speaker Speaker 1-5	Connecting speakers to these terminals will provide a yelping output in an alarm condition.
+ Strobe -	Provides 12VDC @ 2 amps max. to power visual indicators in an alarm condition.
+ Input Trg. -	Connects to the alarm output of a control panel. The input trigger voltage is 12VDC / 40mA.
+ Panic -	Provides power to the LED indicators of the panic devices. Voltage is removed from these terminals whenever the Panic Reset switch is depressed.
+ Aux -	Provides a 12VDC @ 2 amps max. continuous output. Can be used to power motion detectors.
+ EMERGENCY LED -	The low current panic output of the control panel will be connected to these terminals and upon a panic activation will light the emergency LED on the enclosures cover.

**SMP10PM**

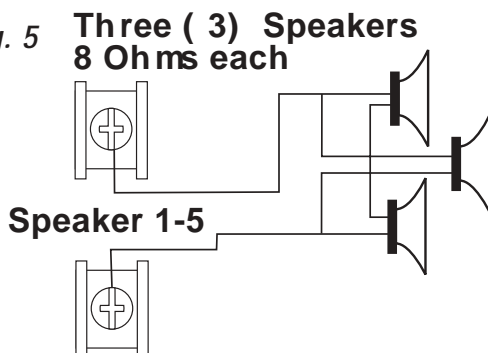
+ BAT -	Stand-by battery (leads provided).
---------	------------------------------------

**Typical Speaker Wiring Diagrams:**

**Fig. 4**

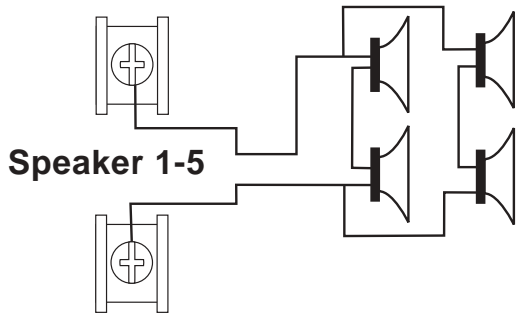


**Fig. 5**



**Typical Speaker Wiring Diagrams:**

**Fig. 6 Four ( 4 ) Speakers  
4 or 8 Ohms each**



**Fig. 7 External Hook-up**

