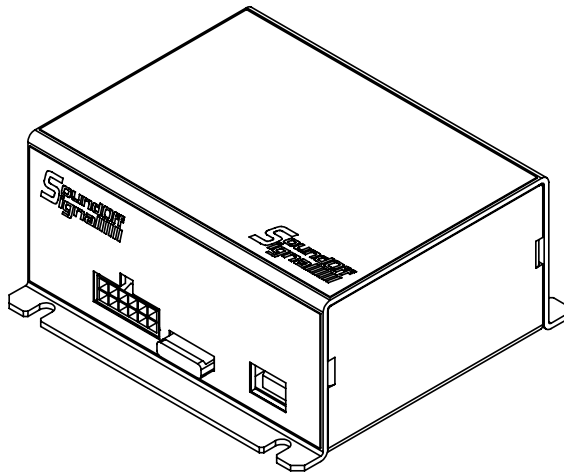


# Low Frequency Amplifier

PSRNLFANR2\*



\*Works with up to 2 LF100 Speakers

**⚠ WARNING**  
USE ONLY AS A SUPPLEMENTAL SIREN

**IMPORTANT NOTICE TO INSTALLER:**  
Make sure to read and understand all instructions and warnings before proceeding with the installation of this product. Ensure the manual and all warning cards are delivered to the end user of this equipment.

## ⚠ WARNING

- HIGH CURRENT interconnects must be properly terminated. Poor crimp quality can cause heat build-up and fire. Follow crimp connector manufacturer instructions.
- DO NOT install this product or route any wires in the Air Bag Deployment Zone. Refer to vehicle Owner's Manual for deployment zones.
- Do NOT use system to disconnect headlights, brake lights or other safety equipment.
- Unit may become hot to touch during normal operation.
- Failure to properly install connectors, fuses or wiring may cause vehicle failure or fire.
- Installation must only be performed by trained technician. Installer must determine vehicle wiring configuration and proper integration of system.
- Use proper wire gauge. All power wires connecting to positive (+) or negative (-) battery terminal or local chassis ground (-) must be sized to supply at least 125% of max. current and properly fused at power source.
- Install protective grommets when routing wire through firewall or metal.

## NOTICE:

Installers and users must comply with all applicable federal, state and local laws regarding use and installation of warning devices.

*Improper use or installation may void warranty coverage.*

To review our Limited Warranty Statement & Return Policy for this or any SoundOff Signal product, visit our website at [www.soundoffsignal.com/tech-services/returns/](http://www.soundoffsignal.com/tech-services/returns/). If you have questions regarding this product, contact **Technical Services**, Monday - Friday, 8 a.m. to 5 p.m. or after hours 5 p.m. to 8 p.m. ET at 1.800.338.7337 (press #4). Questions or comments that do not require immediate attention may be emailed to [techservices@soundoffsignal.com](mailto:techservices@soundoffsignal.com).

## INTRODUCTION:

The LF200 Low Frequency Siren System was designed as a supplemental warning system for use at high-risk areas such as intersections and other areas close to the emergency vehicle. You must continue to use the Primary siren in connection with the LF200. Failure to follow this warning can reduce the effectiveness of the siren system and cause serious injury.

The low-frequency tones of the LF200 are better able to penetrate other vehicles, thus alerting drivers to the presence of the responding emergency vehicle, these tones may also penetrate into the responding vehicle itself. This could potentially expose the operator to increased noise levels.

To help eliminate overexposure, the LF200 Low Frequency siren has been designed with a built-in time-out feature. The Occupational Safety & Health Administration (OSHA) ([www.osha.gov](http://www.osha.gov)) provides hearing conservation guidance, to determine "Permissible Noise Exposure" see Section 1910.95 (Occupational Noise Exposure). The LF200 should be configured for the minimum time-out setting until safe exposure levels are determined. The operators should take appropriate safety precautions such as wearing hearing protection. **FAILURE TO FOLLOW THIS RECOMMENDATION COULD CAUSE HEARING LOSS!**

CONTAINS	
QTY	COMPONENT
1	Low Frequency Amplifier
1	18" Wire Harness
4	#8 x 1/2" Screws
1	Installation Instruction Sheet, Folded
1	Product Warning Card
1	Siren System Warning Label
1	Instruction Card - Siren Systems



**⚠ WARNING**  
Sirens produce loud sounds that may damage hearing:  
- Roll up windows.  
- Wear hearing protection.  
- Use only for emergency response.  
- Avoid exposure to siren sound outside of vehicle.

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# Low Frequency Amplifier

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TECHNICAL SPECIFICATIONS	
Parameter	Specification
Input voltage	9-16 Vdc
Input current	8 Amps @ 13.6Vdc (100W speaker) 16 Amps @ 13.6Vdc (2x 100W speakers)
Fuse	20 Amp Mini ATO
Input Protection	Reverse Polarity Protection Voltage Spike to 35V
Standby current	<0.125mA
Operating temperature:	-40° C to +65° C
Output Frequency range	125 Hz – 1 kHz
Output voltage	58-64Vpk-pk
Output Power	1x100W RMS Max (8 Ohm Speaker) 2x100W RMS Max (8 Ohm Speaker)
Amplifier Dimensions	2.4" H (6.0 cm) 4.7" W (11.9 cm) 5.0" D (12.7 cm)
Amplifier Shipping Weight	3.25 lbs.
Warranty	3 year

## INSTALLATION:

### Configuring Instructions:

There are 2 characteristics that can be configured on the LF200 by changing the DIP switch settings:

1. Tone Time-out Duration
2. Tone Frequency

Refer to the table below to adjust the configurable settings:

	SW1	SW2	SW3	SW4	SW5	SETTING
Time-out Selection:	0	0	0			7.5 sec tone timeout (Default)
	0	0	1			15 sec tone timeout
	0	1	0			22.5 sec tone timeout
	0	1	1			30 sec tone timeout
	1	0	0			37.5 sec tone timeout
	1	0	1			45 sec tone timeout
	1	1	0			52.5 sec tone timeout
	1	1	1			60 sec tone timeout
Frequency Divide Selection:				0	0	Divide Main Speaker Signal by 4; ¼ (Default)
				0	1	Divide Main Speaker Signal by 2; ½
				1	0	Divide Main Speaker Signal by 4 & 2; ¼ & ½
				1	1	Divide Main Speaker Signal by 4; ¼

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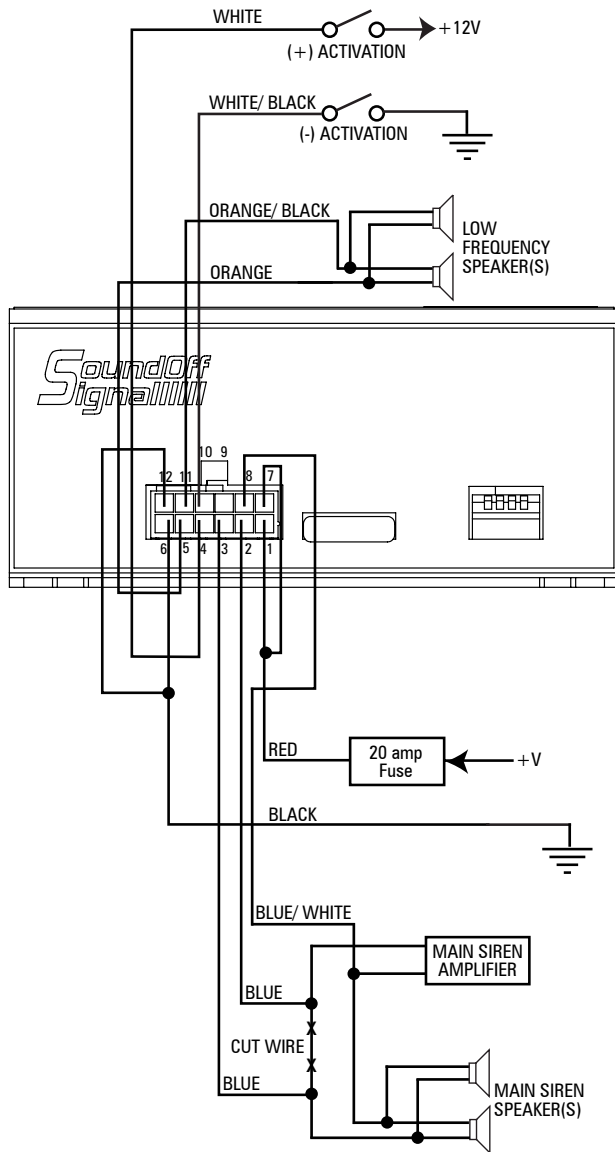
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2.

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# Low Frequency Amplifier

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### WIRE CAPACITY REQUIREMENTS FOR LOW FREQUENCY SIREN AMPLIFIER (INCOMING POWER) - EACH SUPPLY AND GROUND WIRE:

Wire Length	Minimum Wire Gauge
0 -10 FEET	14 AWG
10 -20 FEET	12 AWG
20-30 FEET	10 AWG
30+ FEET	CONSULT FACTORY

**WARNING!**  
All customer supplied wires connecting to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and FUSED at the battery to carry that load.

Ensure the siren amplifier is mounted in dry, protected environment.

### WARNING

Do not install this product or route its wires in the air bag deployment area.

Doing so may cause damage to or reduce effectiveness of the air bag, or create projectile that could cause serious injury or death.

To determine air bag deployment area refer to vehicle manufacturer's manual.

WIRE FUNCTION	WIRE PIN & COLOR	DESCRIPTION
LF Speaker Output	5 ORANGE 11 ORANGE/BLACK	ONLY connect to a Low Frequency Siren Speaker – DO NOT connect to a standard siren speaker. Route the ORANGE and ORANGE/BLACK wires from connector to the low frequency siren speaker. Use a minimum of 18ga. wire to extend the wires as needed. Connect the ORANGE wire to the speaker WHITE wire. Connect the ORANGE/BLACK wire to the speaker BLACK wire.
Activation (-)	10 WHITE/BLACK	Connect to (-) GROUND to activate the low frequency siren tone. A momentary switch will start the built-in timer. The tone will cancel after the configured time-out expires. NOTE: a primary siren signal MUST be active for the low frequency siren to activate.
Activation (+)	4 WHITE	Connect to (+) 12 Vdc to activate the low frequency siren tone. A momentary switch will start the built-in timer. The tone will cancel after the configured time-out expires. NOTE: A primary siren signal MUST be active for the low frequency siren to activate.
Main Siren Speaker Input Signal	8 BLUE/ WHITE 2 & 3 BLUE	Connect these wires to the Emergency Vehicle's primary siren speaker, as shown in the diagram to the left.

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