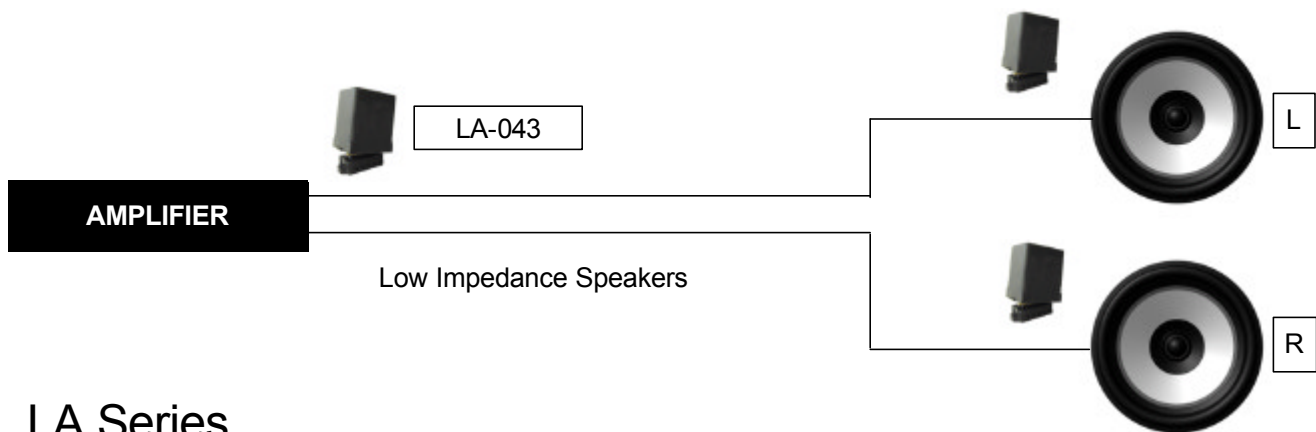


AUDIO LINE Surge Protection

Speakers and Audio Equipment



LA Series

Equipment installed outdoors are effective antennae for power impulses created by lightning. Speakers mounted in stadiums, on light poles, on tops of buildings or on the ground are great examples. Amplifiers and other audio source equipment in the energy surge's path to ground often suffer the greatest damage in such events. Even lightning striking near an audio installation can induce high current into speaker leads and cause catastrophic damage. Protecting that equipment is simple and inexpensive with LA Series surge protectors from Juice Goose.

LA Series models are designed to protect two pairs of speaker leads (four wires). The mounting base (Item PCB-1B, sold separately) also has a connection for a ground wire. The unit is rated for operating currents up to five amps (350 watts at 70 volts) for each of two wire pairs. For higher current requirements terminals may be bridged to protect a single pair of speaker leads with maximum current up to ten amps. The LA Series includes models designed for various peak voltages from under 15 to 100. (See the LA Selection Chart for additional information.)



LA 100
with PCB1B
Base

The LA Series is designed with three stage component protection - varistors (MOV), wire wound inductors and silicone avalanche diodes (SAD) - to provide sub nanosecond response to surges up to 5,000 amps. This design is tuned to have ultra low impedance of only 0.02 ohms per wire pair.

For additional information:
713-772-1404
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Selection Chart

LA Surge Protector

4 Ohm

Wattage	Voltage (RMS)	Voltage (Peak)	Amperage (per speaker)	LA Model
10	6.3	8.9	1.6	015
20	8.9	12.6	2.2	015
40	12.6	17.9	3.2	020
50	14.1	20.0	3.5	030
75	17.3	24.5	4.3	030
100	20.0	28.3	5.0 *	030
150	24.5	34.6	6.1 *	043
200	28.3	40.0	7.1 *	043

8 Ohm

10	8.9	12.6	1.1	015
20	12.6	17.9	1.6	020
40	17.9	25.3	2.2	030
50	20.0	28.3	2.5	030
75	24.5	34.6	3.1	043
100	28.3	40.0	3.5	043
150	34.6	49.0	4.3	060
200	40.0	56.6	5.0 *	060

16 Ohm

10	12.6	17.9	0.8	020
20	17.9	25.3	1.1	030
40	25.3	35.8	1.6	043
50	28.3	40.0	1.8	043
75	34.6	49.0	2.2	060
100	40.0	56.6	2.5	060
150	49.0	69.3	3.1	100
200	56.6	80.0	3.5	100

70 Volt

10	70.0	100.0	0.1	100
20	70.0	100.0	0.3	100
40	70.0	100.0	0.6	100
50	70.0	100.0	0.7	100
75	70.0	100.0	1.1	100
100	70.0	100.0	1.4	100
150	70.0	100.0	2.1	100
200	70.0	100.0	2.8	100

*** Requires Bridging**

The LA surge protector is designed for two pairs of speaker leads plus a connection to ground.

The device is rated for a maximum current load of 5 amps per pair of leads.

For a 10 amp capacity see separate instructions for bridging connections.

LA Series Surge Protection Features and Installation



LA Series
with PCB Base

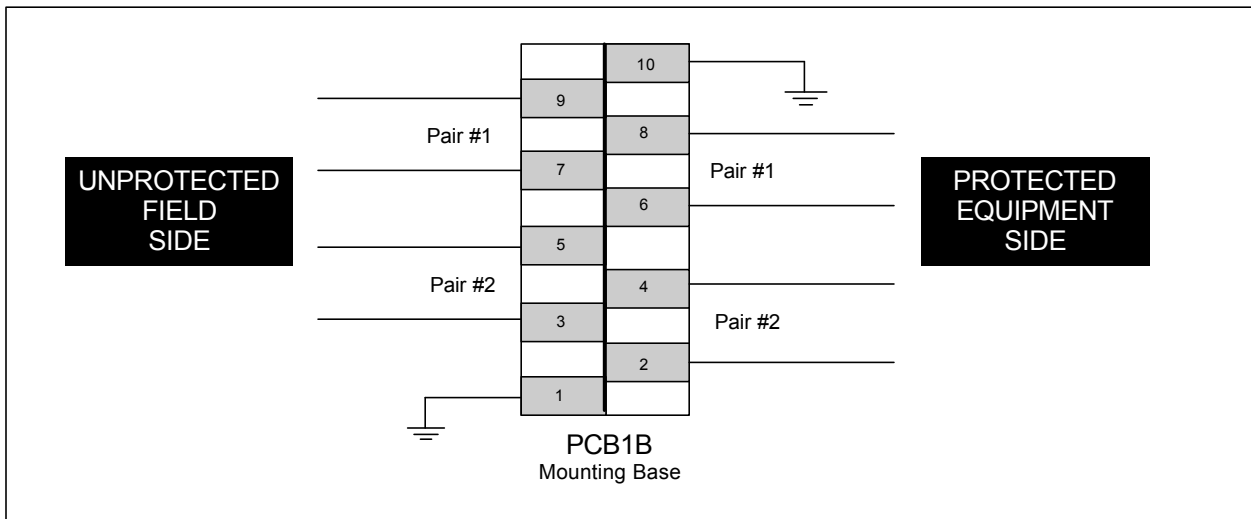
The LA Series surge protector has a gold plated card edge designed to mount into the PCB1B gold plated female connector. (Note: PCB1B base is sold separately.) The base assembly can be mounted to any stable, flat surface. It should be located close to the protected equipment.

When the LA protection module is inserted in the base the circuits connected to the base are conducted through the protector in a serial manner from the four "Field Side" terminals to the four "Equipment Side" terminals. Either terminals 1 or 10 of the PCB1B base should be attached to an approved ground (using 12 or 10 AWG conductor) in order for the surge protection device to work.

This device is fast acting and effective, employing the best surge protection technology. In cases of extreme exposure to lightning or repeated exposure to induced surges the main surge protection component may need to be replaced. Typically, this device can withstand and protect against 50 occurrences of 2,000 amp surges. When replacement is required, simply unplug the main protection module from the base and replace it with a new one.

Specifications

Peak Surge Current (10 times) 8x20 us	5kA
Life Expectancy 8x20us (2kA)	50 Occurrences (typ)
Response Time	<1ns
Resistance	.02 Ohm (typ)
Series Inductance	136 uh per pair
Terminal Wire Size	26 tp 10 AWG



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