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TECHNICAL DATASHEET
Public Address Systems

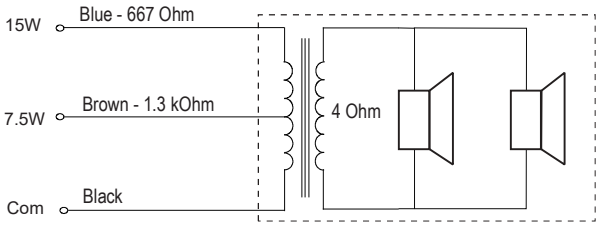
SP219
15W 100V Line Sound Projector

Introduction

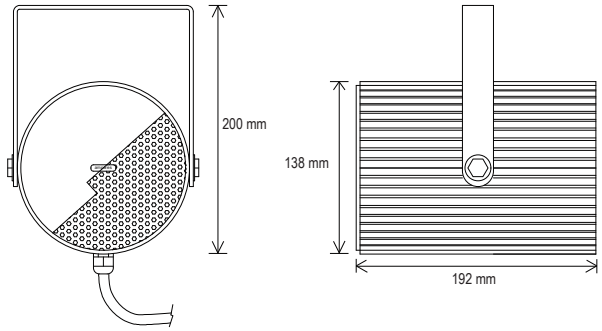
SP219 is a unidirectional sound projector which is suitable for installations in places such as corridors, tunnels, walkways and car parks. It provides a more directional sound path as compared with other common horn speakers.

SP219 is driven by a single 5" weatherproof speaker with quality matching transformer to clear sound projection and is suitable for application in outdoor as well as indoor.

Circuit Diagram



Physical Dimensions

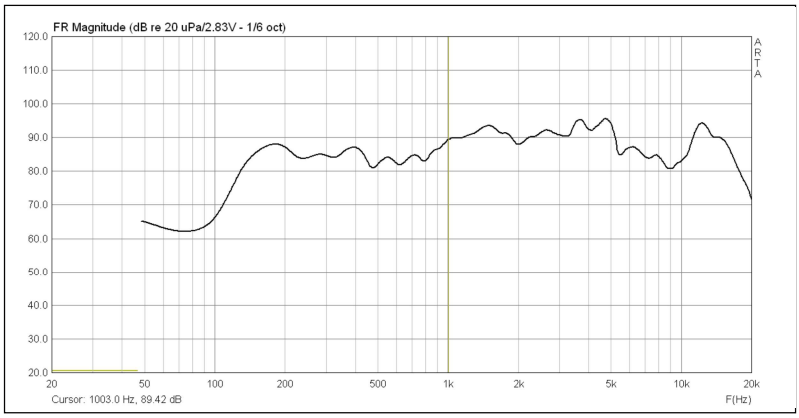


Technical Specifications

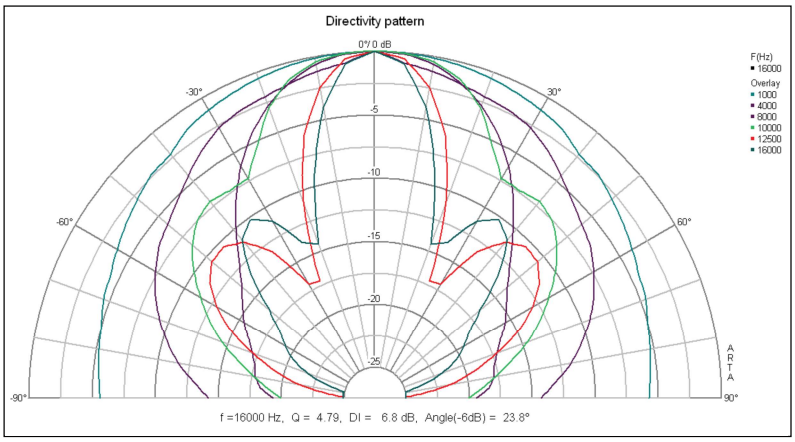
Electrical :	
Power rating	15W 100V line
Speakers	1 x 5"
Operating voltage	70 / 100V inputs
Power taps	15 / 7.5W
Primary impedance	667 / 1.3 K Ohm (+/- 5%)
Secondary impedance	8 Ohm
Performance :	
Frequency response @1W, 20-20 kHz	130 ~ 18 kHz
SPL @1W/m, 20-20 kHz	91 dB
Max SPL @ 1m, 1 kHz	102 dB
Coverage angle (1 kHz) +/- 6dB	90 deg
(4 kHz)	80 deg
(8 kHz)	60 deg
Operating temperature	-5 to 45 degree
Humidity	<90 %
Physical :	
IP ratings	IP 55
Grilles / Enclosure	Aluminum
Overall size w/o brackets	138 dia x 192 mm
Weight	2.0 kg
Colour	White

The above specifications are subjected to change without prior notice due to our continuous product improvement policy. These data are correct at the time of printing.

SPL Chart



Polar Chart (horizontal measurement)



SPL Distribution Chart for a direction : tilt angle : 0 degree.

SPL (dB) vs Distance (m) - @ 1 kHz

Horizontal Distance	1m	2m	3m	4m	5m	6m	7m
1W (ref)	91	85	81	79	77	75	74
7.5W	99	93	89	87	85	83	82
15W	102	96	92	90	88	86	85

Value rounded up without decimal points

The above table serves as guidance only and may differ due to environmental factors such as wall or floor surface materials. STIPA values may also be affected by the factors above.

Engineer's Specifications

General requirements

The sound projector should be unidirectional and able to efficiently project sound with optimal sound coverage and clarity in given area.

Coverage Area: The unidirectional sound projector should provide adequate sound coverage for the intended area, which may include indoor and outdoor spaces.

Durability: The sound projector should be designed for durable and long-lasting performance, capable of withstanding environ - mental factors such as temperature variations, humidity, and exposure to dust and moisture.

Power Handling: The sound projector should have sufficient power handling capabilities to deliver crisp and clear audio without distortion even at maximum output levels.

Frequency Response : The unidirectional sound projector should have a broad frequency range suitable for reproducing a wide range of audio content, typically between 150 - 18 kHz

Power Output: The sound projector should have a minimum power output capacity of 15 watts RMS (Root Mean Square), suitable for the intended installation size and desired sound levels.

Impedance: The sound projector should have a nominal impedance of 667 ohms to ensure compatibility with standard audio amplifiers and systems.

Mounting Options: The sound projector should offer various mounting options, such as ceiling mounting, wall mounting, or pole mounting, to ensure flexible and convenient installation possibilities.

Weather Resistance: The sound projector should be weather-re- sistant, with an IP (Ingress Protection) rating of at least IP54, to withstand exposure to rain, dust, and other environmental factors.

Compatibility: The sound projector should be compatible with industry-standard audio equipment and systems, ensuring easy integration into existing setups.

Compliance and Certification:

The unidirectional sound projector should conform to all relevant industry standards, regulations and certifications, such as CE. The manufacturer should be able to provide approriate documen- tations to certify compliance with these standards.

Warranty and Support:

The sound projector should come with a minimum warranty period of 3 years, covering any potential manufacturing defects or performance issues. The manufacturer should also provide reliable customer support and readily available technical assistance.