

EN54 ECONOMY CEILING SPEAKER

- 6W 100V LOUDSPEAKER
- SIZE 5" (130MM)
- QUICK MOUNT
- SHOCK-RESISTANT HOUSING
- HIGH EFFICIENCY
- EXCELLENT SOUND QUALITY
- FULLY CERTIFIED TO EN 54-24



OVERVIEW

The SPCF-E-06W-50-EN54 is a 6W 100V flush mount ceiling loudspeaker, which has a 5" (130mm) full-range chassis providing excellent sound quality with speech and background music, and which is certified to EN5 4-24. The speaker is fitted with a 100V transformer which has three power adjustment tappings of 6W, 3W, and 1.5W.

The SPCF-E-06W-50-EN54 has a powder coated metal chassis and grille, with the high quality powder coated finish giving good long-term protection and resistance to corrosion. A protective plastic dome covers the rear of the loudspeaker, and prevents dirt, dust and other debris or foreign objects from contacting the cone or any other part of the loudspeaker rear. The speaker's enclosure is ingress protection rated to IP21C.

As standard the speaker is coloured to match RAL9016 'Traffic White', however the speakers can be supplied in any four-digit RAL or NCS colour, as a special order.

Quick and easy ceiling mounting is provided through the use of spring clamps, with a possible ceiling thickness of between 3mm and 45mm. The flat construction method allows a low mounting depth of only 70mm.

Please note that although very thin ceilings can be used as a mounting surface, it should be ensured that the ceiling thickness and strength are appropriate to the weight of the speaker, and to the thickness and weight of the 100V line cables.

There is a metal Firedome available for this loudspeaker as an optional accessory, part number SPAC-FD-E-50, which can be used in place of the speaker's rear plastic dome cover to provide additional resilience to fire.

Enhanced Acoustic Simulator for Engineers (EASE) data for this loudspeaker is available on request.





PRODUCT ATTRIBUTES	
Power Tappings	6W / 3W / 1.5W
Impedance (100V)	1667 / 3333 / 6667 Ohms
Loudspeaker Impedance	8 Ohms
Frequency Range	104 – 17,200 Hz
Frequency Response	57 – 24,000 Hz
SPL 1W / 1m, peak	98.3 dB
SPL 1W / 4m, peak	86.3 dB
SPL Pmax / 4m, peak	94.0 dB
SPL, EN 54-24 rated noise power / 4m	85.0 dB
Sensitivity EN 54-24, 1W / 4m	74.8 dB (plastic enclosure) / 74.2 dB (metal Firedome)
Sensitivity IEC 60268-5, 1W / 1m	86.8 dB
Dispersion (-6dB, 500Hz) Horizontal / Vertical Plane*	180° / 180° (plastic enclosure or metal Firedome)
Dispersion (-6dB, 1KHz) Horizontal / Vertical Plane*	180° / 180° (plastic enclosure or metal Firedome)
Dispersion (-6dB, 2KHz) Horizontal / Vertical Plane*	140° / 140° (plastic enclosure or metal Firedome)
Dispersion (-6dB, 4KHz) Horizontal / Vertical Plane*	85° / 85° (plastic enclosure) / 84° / 84° (metal Firedome)
Temperature Range	-10 / +55 °C
Dimensions	181.5 x 65 mm (plastic enclosure)
	181.5 x 91.5 mm (metal Firedome)
Weight (net)	0.50 kg (Metal Firedome adds 0.19 kg max.)
Colour	RAL 9016 'Traffic White'
Mounting	Spring clamp
Connector	4-pin screw terminal
Ceiling Cut-out	156 mm
Maximum cable cross section	4.9 mm²
Maximum cable cross section loop	2 x 1.2 mm²
EN 54-24 Speaker Type & Minimum IP Rating	Type A (Indoors), minimum IP rating IP21

* EN 54-24 Definitions for Speaker Reference Axis, Point, Plane + Horizontal & Vertical Planes:

All measurements in the table above relate to the Reference Axis unless otherwise stated

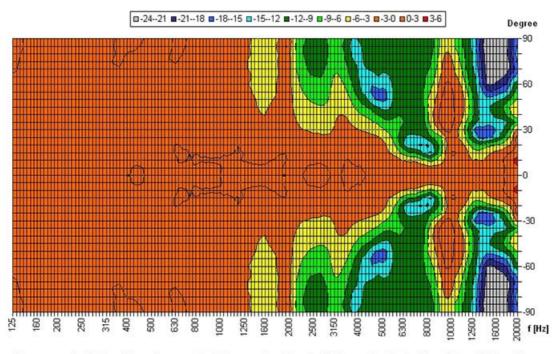
EN 54-24 Annex A, Measurement Environments:

Flush-mounted loudspeakers e.g. ceiling loudspeakers, shall be measured under half-space free field conditions. All other speakers shall be measured under free-field conditions or in a ground plane arrangement that simulates a free-field condition.

Reference Axis:
Reference Plane:
Reference Plane:
Hane is across the front of the speaker grille surface and is perpendicular to the grille surface.
Horizontal Plane:
Hane contains the reference axis and is perpendicular to the reference plane.
Reference Point:
Reference Point:
Reference Point:
Reference Axis:
Axis is through the centre of the speaker grille surface and is perpendicular to the reference plane.
Plane contains the reference axis and is perpendicular to the reference plane.
Point is at the centre of the front of the speaker grille surface and is perpendicular to the reference plane.

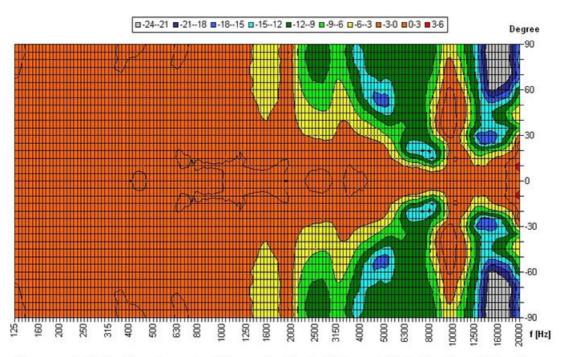


POLAR DIAGRAM — STANDARD



Parameters: Cyclic Move: 0°; Symmetry: 0...+180 sym; Freq.Smooth: 1/3 Oct; Ang.Resol.: 5°; Rel. to: 0° Axis: 0°

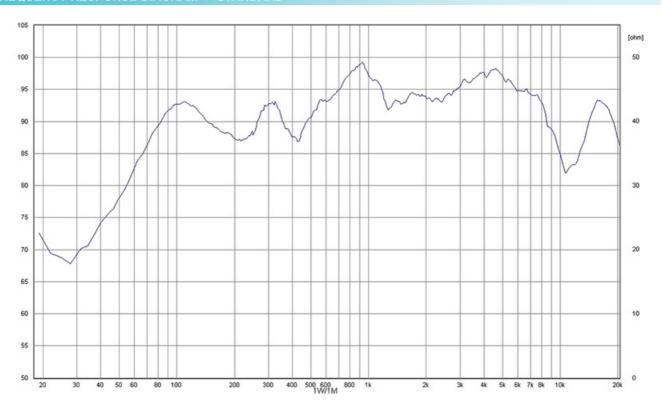
POLAR DIAGRAM — WITH SPAC-FD-E-50 FIRE DOME



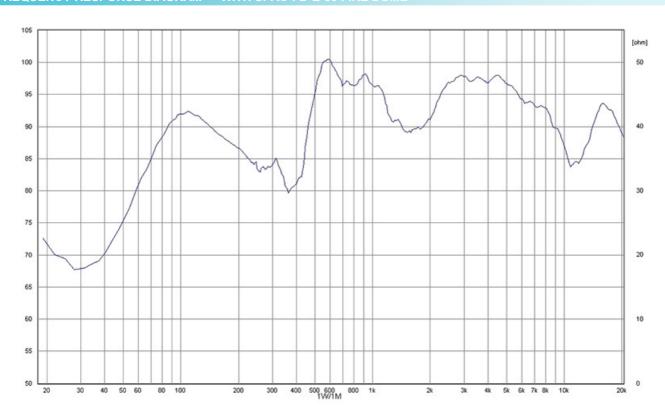
Parameters: Cyclic Move: 0°; Symmetry: 0..+180 sym; Freq.Smooth: 1/3 Oct; Ang.Resol.: 5°; Rel. to: 0° Axis 0°



FREQUENCY RESPONSE DIAGRAM — STANDARD



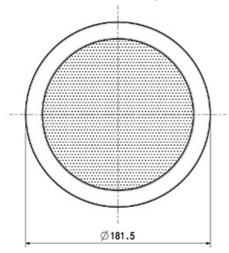
FREQUENCY RESPONSE DIAGRAM — WITH SPAC-FD-E-50 FIRE DOME

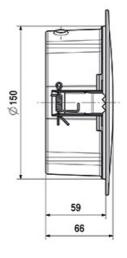


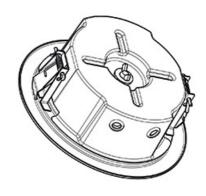


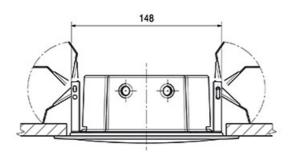
DIMENSIONAL DIAGRAMS

SPCF-E-06W-50-EN54 Speaker



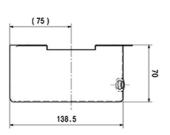


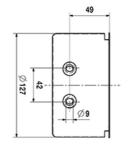


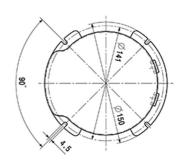


Optional Accessory: SPAC-FD-E-50 Metal Firedome











This equipment is designed and manufactured to conform to the following EU Directives:

Electromagnetic Compatibility EMC): 2014/30/EU Low Voltage: 2014/35/EU

Restriction of Hazardous Substances (RoHS): 2011/65/EU & 2015/863/EU

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Assessed to ISO 9001 LPCB Cert No: C1043