



The CM 461 Flush Mount Ceiling Loudspeaker is designed for low ceiling applications in a public address system. The unit consists of a 100 mm dynamic full range loudspeaker driver, capable of delivering up to 98 dB of Sound Pressure Level (SPL). Coupled with the unit's frequency response of 64 Hz ~ 20 kHz, it gives the unit excellent speech and music reproduction properties.

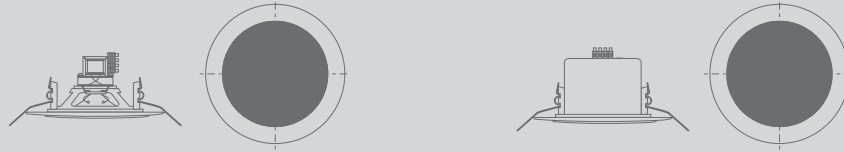
The unit's built-in line matching transformer makes it suitable for a 70 V and 100 V distributed speaker system. Multiple power tapings on the transformer allows for outputs of 6, 3 and 1.5 W (100 V line system) or 3, 1.5 and 0.8 W (70 V line system).

The loudspeaker driver unit is mounted onto an aesthetically pleasing 135 mm circular metal grille finished with a matted surface in White. The whole unit is spring mounted on to the ceiling board without any visible screw holes and more importantly without any hassle.

There is also a back enclosure model available (CM 461E). With the metal back enclosure, crosstalk within the ceiling cavity can be prevented while acoustic damping material lining the enclosure reduces echoing.

- 135 mm circular white epoxy coated metal grille, utilising a 100 mm dynamic full range speaker driver unit, suitable for general PA applications requiring clarity in speech reproduction.
- Spring mounted installation to eliminate visible mounting screws.
- Ready fitted line matching transformer with multiple impedance tapings, suitable for 70 V and 100 V distributed speaker system.
- Carefully designed with simplicity in installation & finished aesthetically for ease of matching to any ceiling type and interior facade.

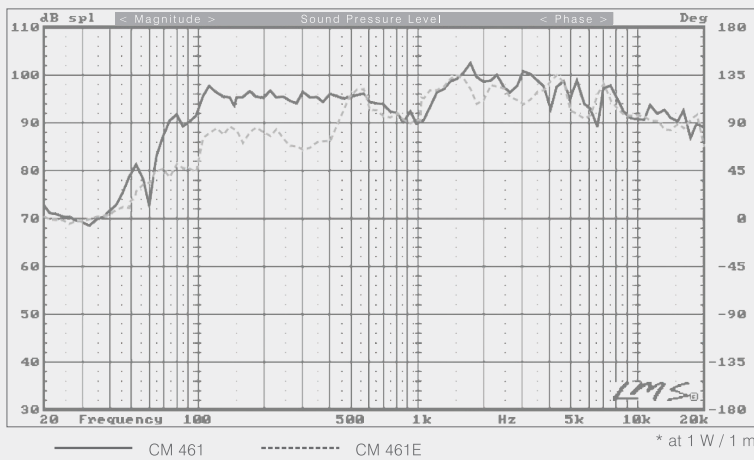
**CM 461****CM 461E**



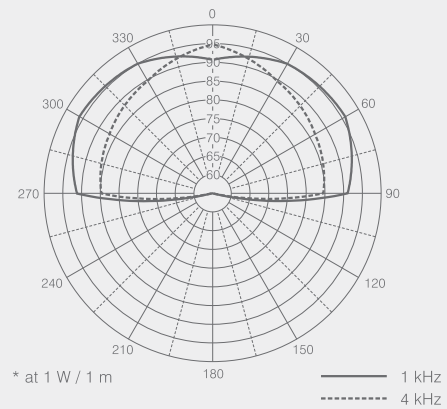
Technical Specifications

	CM 461	CM 461E
Rated Input	100 V : 6 W (6 - 3 - 1.5 W) 70 V : 3 W (3 - 1.5 - 0.8 W)	100 V : 6 W (6 - 3 - 1.5 W) 70 V : 3 W (3 - 1.5 - 0.8 W)
Maximum Power	9 W	9 W
Rated Impedance	1.7 kΩ (1.7 - 3.3 - 6.3 kΩ)	1.7 kΩ (1.7 - 3.3 - 6.3 kΩ)
Sensitivity (1 W / rated at 1m)	90 / 98 dB	90 / 98 dB
Coverage Angle (1 kHz, -6 dB)	180 deg.	180 deg.
Frequency Response	64 Hz ~ 20 kHz	100 Hz ~ 20 kHz
Speaker Component	100 mm Dynamic Full Range Loudspeaker	100 mm Dynamic Full Range Loudspeaker
Safety	Acc. to EN 60065	Acc. to EN 60065
Material & Finish	Grille and Mesh; White	Grille and Mesh; White
Dimensions	Dia 135 x 80 mm	Dia 135 x 100 mm
Weight	0.52 kg	0.70 kg

Frequency Response



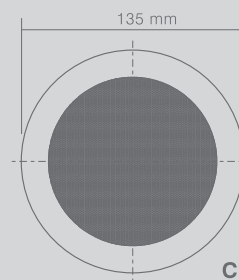
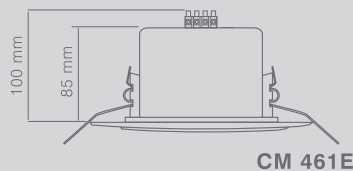
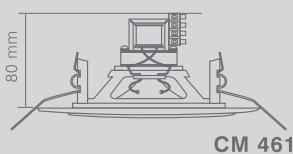
SPL Polar Plot



Engineers' Specifications

The flush mount ceiling loudspeaker unit shall consist of a 100 mm dynamic full range loudspeaker driver, mounted on to a 135 mm circular white metal grille. The unit shall be spring mounted to the ceiling to avoid visible mounting screw. A line matching transformer shall be provided with multiple power tapings of 6, 3 & 1.5 W (100 V) / 3, 1.5 & 0.8 W (70 V) suitable for distributed speaker systems. The loudspeaker unit shall have a useable frequency range

of 64 Hz ~ 20 kHz (CM 461) / 100 Hz ~ 20kHz (CM 461E) with a minimum SPL of 90 dB at 1 W/m, 1 kHz and a coverage angle of 180 deg.. The weight of the speaker unit shall not exceed 0.52 kg (CM 461) / 0.70 kg (CM 461E) and dimensions shall be not more than 135 mm diameter and depth 80 mm (CM 461) / 100 mm (CM 461E).



CM 461 / CM 461E