Ci160.2CR

Architectural Speaker

Product Overview

The KEF Ci160.2CR is a high performance shallow mount speaker designed for flush mount in-ceiling installations. It's a coincident point source design featuring KEF's proprietary Uni-Q[®] technology with a driver array that includes a 16mm high frequency aluminium dome tweeter mounted in the acoustic centre of the 160mm low frequency woofer. The tweeter features KEF's Tangerine Waveguide engineered to enhance high frequency dispersion and when combined with the Uni-Q array, creates a speaker that delivers exceptionally smooth and consistent sound across a wide listening area. The KEF Ci160.2CR is constructed using weather resistant components and the Ultra-Thin Bezel and grille are treated with a UV protective coating making this speaker ideal for background, foreground, and announcement applications in indoor and outdoor venues such as hotel rooms, corridors and school hallways.



Key Features

KEF Uni-Q[®] Technology – This proprietary driver array places the tweeter in the acoustic centre of the woofer delivering wide dispersion with consistent sound characteristics throughout the space. Because the high and low frequencies originate from the same point, acoustic lobing problems common to other speaker designs are virtually eliminated allowing fewer speakers to deliver smooth coverage across a wider listening area.

Tangerine Waveguide – In addition to protecting the driver, the Tangerine Waveguide further enhances dispersion allowing for 120 degrees of coverage.

Weather Resistant – Manufactured using a proprietary plating and powder coating process, the KEF Ci160.2CR is UV protected and designed to withstand the harshest operating environments.

Ultra-Thin Bezel (UTB) – To maintain a premium aesthetic appearance, the ABS bezel was carefully engineered to be as thin as possible while maintaining the necessary structural rigidity.

Magnetic Grille – For security and ease of installation the grille attaches by a powerful magnetic circuit and can be painted to match any décor.

Covered Crossover Circuit – The cover adds structural rigidity to the speaker assembly while protecting the electrical crossover components from potential damage.

Universal cut-out – All KEF 160mm round in-ceiling speakers utilise the same diameter opening for ease of installation and flexible component selection.

IP64 Certification – The speaker passed official IEC testing to ensure that splashing water would have no harmful effects on assembly components.

Architect and Engineer Specifications

The speaker shall be designed for in-ceiling installations and utilise a coincident point source design with the high frequency tweeter mounted in the acoustic centre of the low frequency woofer.

The speaker shall consist of a 160mm low frequency woofer and a 16mm aluminium dome high frequency tweeter featuring a waveguide for improved dispersion. It shall be mounted in a UV protected ABS baffle with a paintable bezel of no more than 5mm in width. The grille shall also be paintable, include a paint shield, and attach by a powerful magnetic circuit for ease of installation and security. The speaker shall be available with an optional rear enclosure and be IP64 certified. Without the rear enclosure, the speaker shall deliver a minimum frequency response of 52Hz - 20kHz +/- 6 dB, have a mounting depth of no more than 85mm, and a weigh of no more than 1.4kg.

The nominal impedance of the speaker shall be 8 ohms and it must achieve a minimum pressure sensitivity of 89 dB SPL at 1 meter on-axis with an input of 2.83 volts. The crossover frequency between the woofer and tweeter shall be 2.8kHz. The speaker shall meet numerous safety and performance standards listed by regulatory bodies around the world.

The speaker shall be the KEF Ci160.2CR.

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Specifications

Model		Ci160.2CR
Series		C Series
Nominal impedance		80
Sensitivity (2.83V/1m)		89dB
Frequency response (±6dB) open-backed		52Hz - 20kHz
Frequency range (-10dB)		47Hz - 45kHz
Nominal coverage (degrees)		120°
Max SPL (dB)		104dB
Crossover frequency		2.8kHz
Drive units	LF	160mm (5.5in.) Uni-Q
	HF	16mm (0.6in.)
Recommended amplifier power		10 - 100 W
Recommended high-pass filter (Hz)		50Hz
Product external dimensions	Diameter Ø	234.6mm (9.24in.)
	Depth	88.7mm (3.49in.)
Cut-out dimensions	Diameter Ø	196mm (7.71in.)
Net weight		1.4kg (3.1lbs)
Mounting depth from surface		85.2mm (3.35in.)
Optional rough in frame		RIF160R
Optional rear enclosure		RNC160R
Ideal rear volume (L)		35L
Minimum rear volume (L)		20L
Certification		IP64

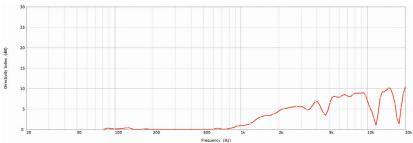
Visit KEF.COM for more about KEF and its products.

KEF reserves the right, in line with continuing research and development, to amend or change specifications. E&OE. The Ci speakers that utilise THX in the model name have undergone and passed certified THX approval.

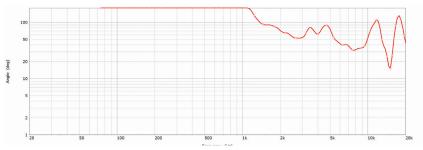
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Architectural Speaker

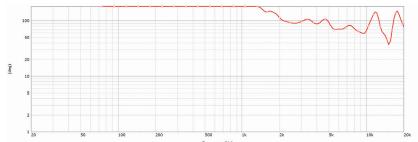
Directivity Index



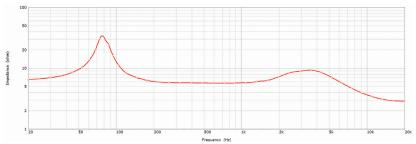
Beamwidth -3dB



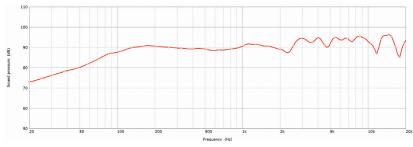
Beamwidth -6dB



Impedance



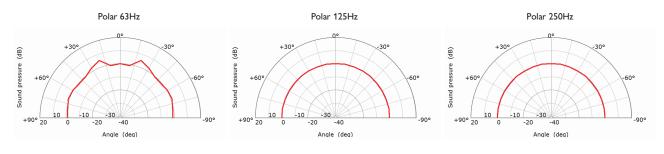
Sensitivity (2.83V/1m)

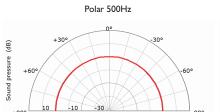


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Polar Responses





-20 -40 90

on.

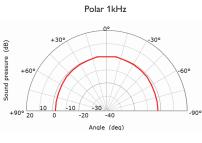
+90° 20

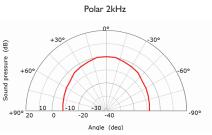
Sound pressure (dB)

+60

+90° 20

10





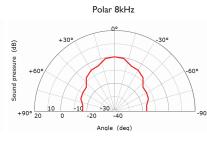


-30

Angle (deg)

-20 -40

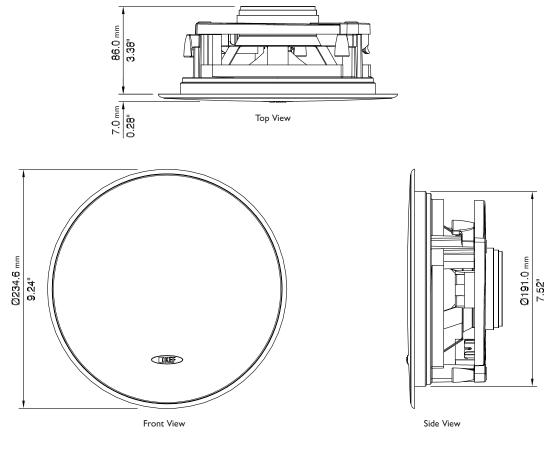
Angle (deg)

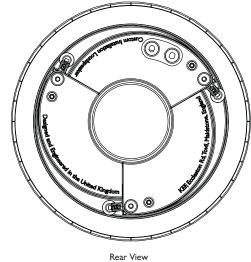




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Mechanical Diagrams





Dimensions in mm (inches) KEF reserves the right, in line with continuing research and development, to amend or change specifications. E&OE.