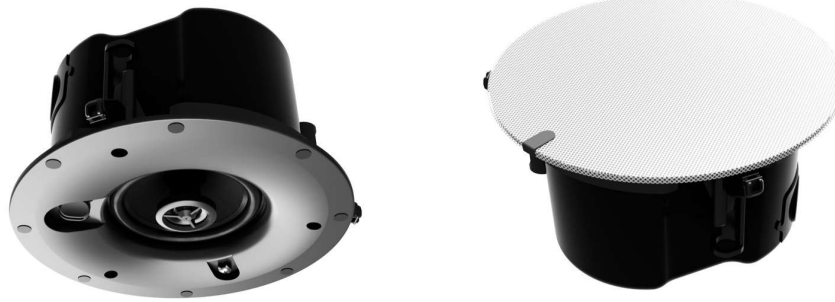


# CS-C4V and CS-C4H 4" In-Ceiling Loudspeakers



## General Description

The Cloud CS-C4V is an 4 inch coaxial two way in-ceiling loudspeaker featuring exceptional intelligibility and musical performance. Using premium drivers and electronics, the CS-C4V offers high sensitivity, smooth frequency response, and excellent off axis performance. The 4.0 inch woofer incorporates a large magnet structure, a treated paper cone, and a butyl rubber surround for lasting, low distortion performance. The 0.5 inch tweeter is a silk soft dome to smoothly distribute the high frequency energy. The integral 20 W transformer provides plenty of power even for high SPL applications. The 16 ohm impedance option allows for easy low impedance daisy chaining.

The CS-C4V incorporates several innovative features that make it a truly remarkable speaker. The ZeroEdge™ grilles are magnetically attached for easy installation, and feature a completely seamless transition from grille to ceiling. Round grilles are supplied, and are available in black or white finish. The 102 mm-deep back can offers premium acoustics in a shallow mount profile. The side cable gland means that no additional depth is required for cable entry.

The CS-C4H is identical to the CS-C4V in terms of components and performance, but features a corrosion resistant grille to make the loudspeaker suitable for installation in humid environments such as bathrooms.

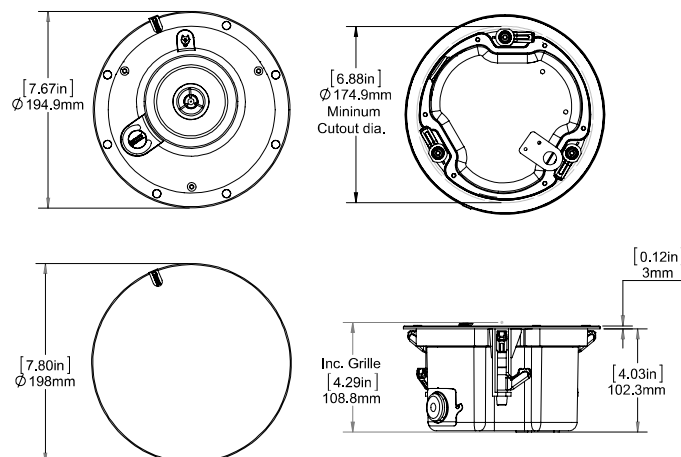
Both the CS-C4V and CS-C4H are sealed systems to keep water out of the enclosure.

**Note: The CS-C4H is not fitted with a 25/70/100 V-line transformer and thus is suitable for low-impedance use only.**

When coupled with either the CS-CSUB8 or CS-SSUB8, the CS-C4V and CS-C4H offer a premium business music system with exceptional performance and aesthetics in a small package.

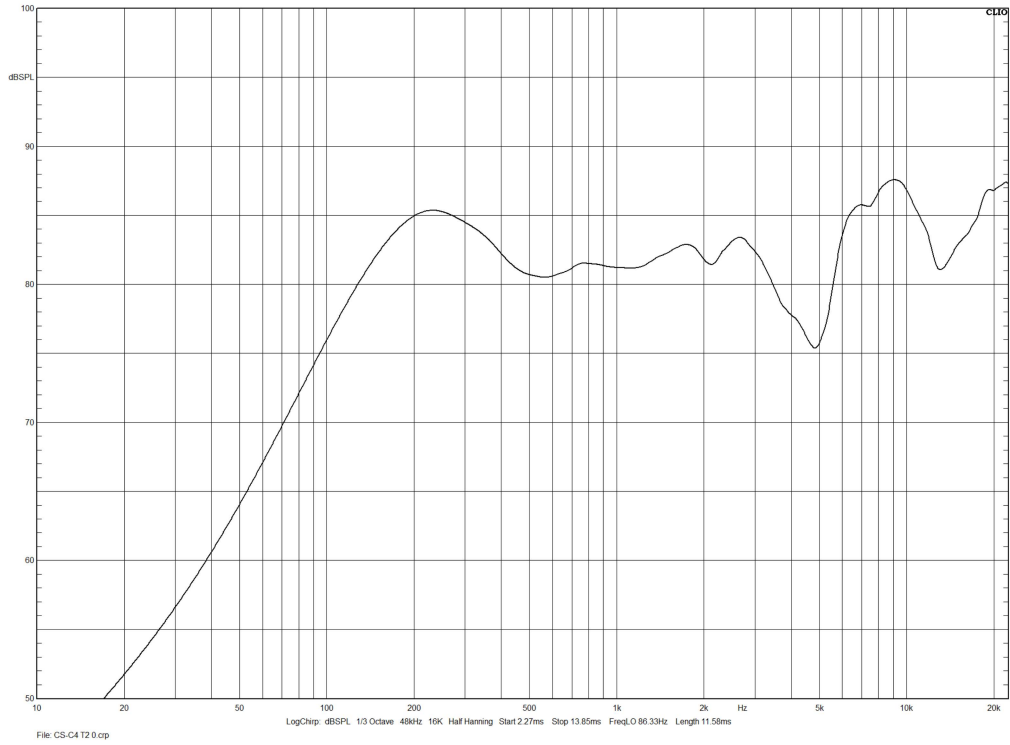
- Magnetic ZeroEdge™ grille with removable badge
- Premium drivers and electronics for exceptional sound quality and intelligibility
- Integrated high power transformer (CS-C4V)
- Front mounted tap switch (CS-C4V)
- 16 ohm impedance for low impedance daisy chaining
- 102 mm back can for installation into small ceiling voids
- CS-C4H version optimised for installation in humid environments
- 4-pin quick connector for easy daisy-chaining and secure connections
- Available colours: black, white

## Loudspeaker Dimensions

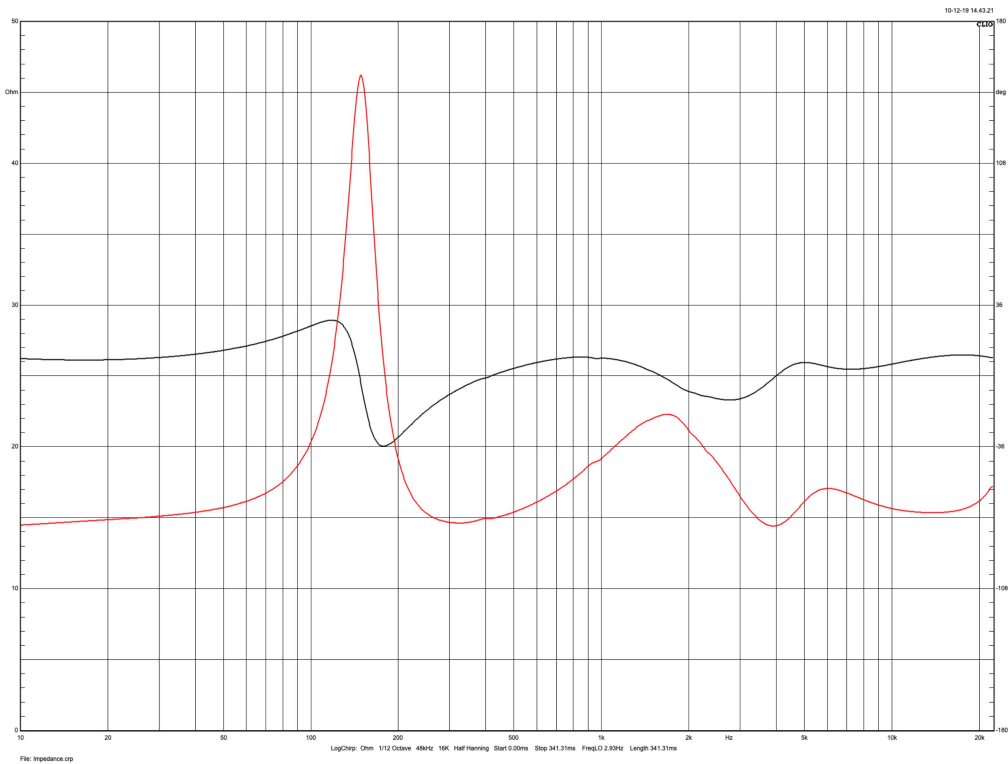


# Graphs

## Frequency Response



## Impedance



## Applications

The CS-C4V was developed as a versatile background music and mid-SPL paging speaker. It offers superior acoustic performance, premium design at an economical price point and a small footprint. It is ideally suited for use in restaurants, retail stores, airports, churches, board rooms, health care facilities, and hotels. The entire CS-C series shares the same acoustic signature, so installations with varying SPL requirements can seamlessly integrate multiple models from the line. The identically-sounding CS-C4H is suitable for installation in humid environments such as bathrooms, swimming pools, adjacent to indoor water features, etc.

## Tap Settings (CS-C4V only)

Tap	Tap Settings		
	100 V	70 V	25 V
1	16 ohm		
2	X	20 W	2.5 W
3	20 W	10 W	1.3 W
4	10 W	5 W	0.7 W
5	5 W	2.5 W	0.4 W
6	2.5 W	1.3 W	0.2 W

## Technical Specifications

Description	CS-C4V	4" 2-way in-ceiling with magnetic grille and steel back can
	CS-C4H	4" 2-way in-ceiling with magnetic grille and steel back can for humid environments
Response (f3)	127 Hz -20 kHz	
Response (f10)	84 Hz -20 kHz	
Impedance	16 ohms	
Crossover frequency	5.0 kHz	
Sensitivity (2.83 V/1 m)	83 dB	
Sensitivity (1 W/1 m)	86 dB	
Power handling	20 W	
Maximum SPL	99 dB	
Average coverage angle (2 kHz - 10 kHz)	109°	
Transformer taps	CS-C4V	20, 10, 5, 2.5 W, plus low-Z (16 ohms)
	CS-C4H	n/a (lo-Z only)
Tweeter	0.5 inch silk dome with phase plug	
Woofer	4.0 inch treated paper with rubber surround	
Input	4 pin Euroblock	
Included accessories	CS-C4V	Input cover plate, male Euroblock rubber insert
	CS-C4H	Input cover plate, male Euroblock rubber insert, SECC corrosion resistant grille
Optional accessories	Tile bridge	
Available colours	Black (RAL9011), White (RAL9003)	
Net weight/Gross weight	CS-C4V	1.62 kg (3.6 lb) / 2.4 kg (5.4 lb)
	CS-C4H	1.6 kg (3.6 lb) / 2.38 kg (5.3 lb)
Packaging	1 per box, cardboard inner packaging, single instruction sheet	

## Architect's and Engineer's Specification

The loudspeaker shall consist of one powder coated steel enclosure containing two transducers, a frequency shaping network, a transformer, and acoustic damping material. It shall incorporate an integrated clamping system including 3 dog ears. It shall include one removable circular profile steel grille affixed to the baffle via integrated magnets. The grille shall include a removable logo tab.

The loudspeaker shall include one 101.6 mm (4.0 in) low-frequency transducer and one 12.7mm (0.5 in) high-frequency transducer with a frequency shaping crossover network installed in a sealed enclosure. The low frequency voice coil diameter shall be 25.4 mm (1.0 in). The low frequency transducer shall have a treated paper cone material with a rubber surround. The high-frequency transducer shall incorporate a silk dome with a plastic phase plug.

The loudspeaker shall be available in two versions: one shall be suitable for installation in general commercial environments, the other for installation in humid environments .

The version for general use shall include a 20 W transformer with taps rated at 20 W, 10 W, 5 W, 2.5 W and 1.3 W when connected to a 70 V-line system. Said taps shall be selected via an included tap switch located on the front baffle, under the magnetically removable grille. The transformer shall accept 25 V, 70.7 V, or 100 V. The tap switch shall also include a transformer bypass position, allowing for direction connection to the 16 ohm low impedance circuit.

Nominal performance specifications shall be as follows: The loudspeaker shall have a usable frequency range extending from 90 Hz - 20 kHz (-10 dB). The nominal impedance shall be 16 ohms, and the maximum continuous RMS power handling shall be at least 20 W according to the EIA-426-B standard. Sensitivity measured at 2.83 V / 1 m shall be 87 dB. The maximum output at 1 m shall be 100 dB.

Installation for the speaker shall be by 3 blind-mount constant-tension dog ear clips and shall attach to ceiling thicknesses ranging from 0.125 inches to 1.5 inches. The external wiring shall be via 4-position 5.08 mm Euroblock connector, accepting up to 10 gauge wire. The maximum overall height shall be no more than 103 mm (4.06 in) and the maximum diameter shall be no more than 195 mm (7.7 in). The maximum visible dimensions shall be no more than 3.0 mm (0.12 in) in height by 198 mm (7.8 in) in diameter. The back can shall fit within a cutout diameter of 175 mm (6.9 in). The unit shall be factory preset to the 16-watt setting in the 100-volt operating mode, with a tap switch located on the front baffle.

The loudspeaker system for general installation use shall be the Cloud CS-C4V for both low- and high- impedance applications. The loudspeaker system for use in humid environments in low-impedance applications only shall be the Cloud CS-C4H.

### **Cloud Electronics Limited**

140 Staniforth Road, Sheffield, S9 3HF, England.  
Telephone: +44 (0)114 244 7051 Fax: +44 (0)114 242 5462  
Web: [www.cloud.co.uk](http://www.cloud.co.uk) E-mail: [info@cloud.co.uk](mailto:info@cloud.co.uk)

### **Cloud Electronics USA**

1960 Sidewinder Drive, Ste#211, Park City  
Utah 84060, United States of America.  
Toll Free: 0855 810 0161  
Web: [www.cloudusa.com](http://www.cloudusa.com) E-mail: [sales@cloudusa.com](mailto:sales@cloudusa.com)