

High-Fidelity Ceiling Speakers

Models HFCS1 and HFCS1LP



HFCS1



HFCS1LP

Description The Bogen HFCS1 and HFCS1LP ceiling loudspeakers deliver superior sound and clear intelligibility in a variety of ceiling environments.

The system can be easily installed in hard-surfaced ceilings, suspended ceilings, and new constructions.

Both speakers offer several levels of power output controlled via a front-mounted rotary tap selector switch (under grille). The low-distortion speaker design, coupled with a computer-matched venting system, delivers high intelligibility and exceptional low-frequency response for both music and speech reinforcement.

- Features**
- Wide-dispersion coaxial driver for broad, even coverage
 - Good off-axis response with smooth contouring
 - Computer-matched venting system for full bass output
 - Large back can for deeper bass response (HFCS1)
 - Low-profile housing allows greater range of installations (HFCS1LP)
 - High power handling capability for foreground sound
 - Selectable power taps via front-mounted control
 - Power taps (in watts): 32, 16, 8, 4, 2, and 1 for 70V; 32, 16, 8, 4, and 2 for 100V
 - 16-ohm input for non-transformer, multi-speaker systems (selectable via tap selector switch)
 - Compounded rubber surround, plus polypropylene and polycarbonate drivers for lasting performance
 - Easy wiring with plug-in connector
 - Integral swing-out clamps for easy installation
 - Connector provides loop-through terminals for the next speaker
 - Attachment point for seismic cable (safety cable)
 - Input terminal cover with knockouts and safety eyelet provides protection for connections
 - Off-white textured finish easily painted to match theme decor
 - Attractive, contemporary, sturdy steel grille assembly with fine perforations
 - Listed to UL Standard 60065 for US and Canada
 - Independently tested and meets requirements of UL-2043 (report available)
 - Accessory tile bridge support ring (Model TBCR, sold separately)
 - Accessory 10-foot long cable kit (Model CK10, sold separately)

Technical Specifications

| SPECIFICATIONS | HFCS1 | HFCS1LP |
|--|--|--------------------------|
| Frequency Response (-10 dB)* | 65 Hz to 19 kHz | 78 Hz to 19 kHz |
| LF Driver | 6-1/2" (165mm) Polypropylene Cone | |
| HF Driver | 3/4" (20mm) Polycarbonate Dome | |
| Sensitivity (1W/1m) | 89 dBspl (Average 100 Hz - 10 kHz) | |
| Impedance Ratings | Low (16 ohms) / High (70V/100V) | |
| Power Input (Max.) | 75W @ 16 ohms; 32W @ 70V/100V | |
| Power Settings (in watts)† | 70V: 32, 16, 8, 4, 2, 1 / 100V: 32, 16, 8, 4, 2 | |
| Baffle Material | Fire-rated (94VO) ABS | |
| Back Can Material | Heavy-Gauge Plated Steel | |
| Terminations | 4 Terminal Plug-in Input Connector | |
| Product Weight | 9 lb. | 8 lb. |
| Speaker Dimensions | 12-5/16" dia. x 12" D | 12-5/16" dia. x 7-3/4" D |
| Minimum Vertical Clearance Requirement | 11" | 6-3/4" |
| Included Accessories | Input Terminal Cover (2 Halves); (4) Screws; (1) Plug-in Input Connector | |
| Optional Accessories | Tile Bridge Support Ring (TBCR); Cable Kit (CK10) | |
| Baffle Ring & Grille Color | Off-white | |

* Half-Space Response

† Front panel, switch-selected



Specifications subject to change without notice.

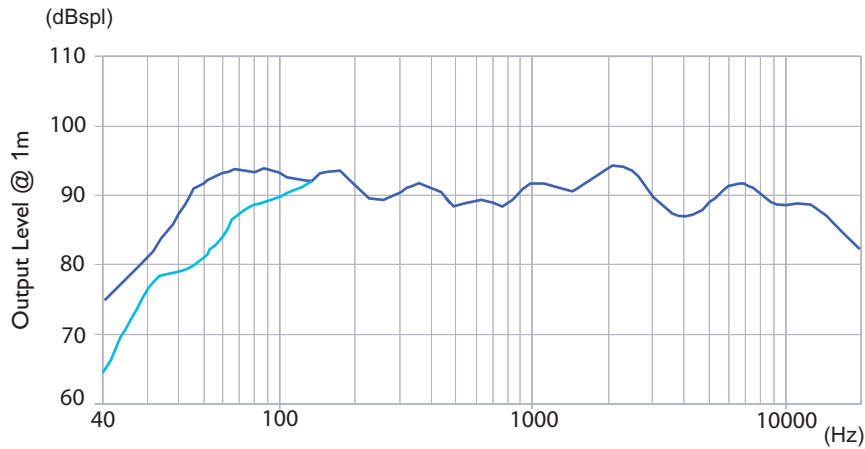
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Frequency Response

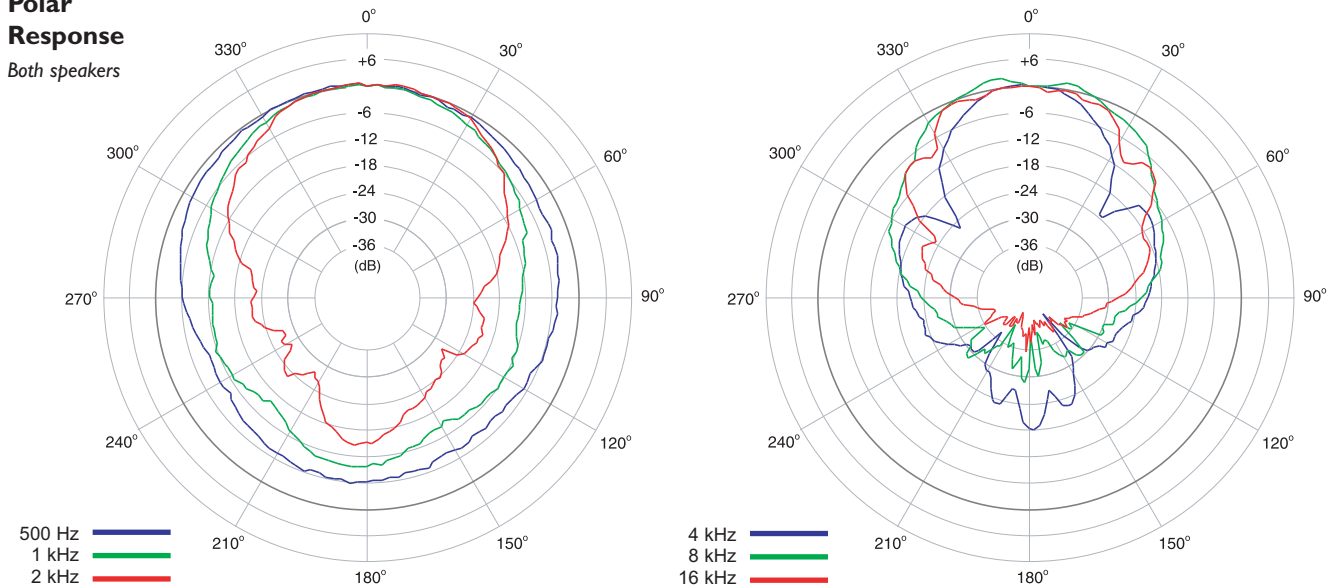
Half-space,
16 Ohms,
1W @ 1m

HFCS1 —
HFCS1LP —



Polar Response

Both speakers



Architect and Engineer Specifications

The loudspeaker shall be a Bogen Model HFCS1 or HFCS1LP Ceiling Speaker or approved equivalent, consisting of one 6- $\frac{1}{2}$ " (nominal) low frequency transducer, one 3/4" (nominal) high frequency transducer, and a filter network for dividing frequencies between the transducers.

The front baffle shall be injection-molded ABS material and the back can (enclosure) shall be plated steel. All components shall be mounted inside the enclosure.

The baffle shall be supplied in off-white with a mild texture finish to promote paint adhesion, if desired. A perforated steel speaker grille shall be provided, color-matched to the baffle.

The low-frequency driver shall utilize a molded polypropylene diaphragm (cone). A compounded rubber cone surround shall be formulated to withstand environmental conditions with high or low heat, high or low humidity, and ultra-violet light.

The high-frequency driver shall utilize a diaphragm consisting of black polycarbonate.

Integral swing-out clamps shall provide a secure installation in the ceiling surface. A safety cable attachment point shall be included in the removable terminal enclosure cover. An optional 10-foot long cable kit shall be available to serve as a backup safety cable (Model CK10). An optional tile

bridge/support ring installation bracket (Model TBCR) shall provide additional support when mounting the loudspeaker into suspended ceilings. The bracket shall also serve as a pre-installation guide for new construction installations, and provide attachment to either 16" OC or 24" OC mounting.

The input connector shall be a 4-screw pluggable input connector, providing loop-through terminals for additional speakers.

Power input selection shall be via a front-mounted rotary switch, located under the removable grille. High impedance tap selections shall be 1, 2, 4, 8, 16, and 32 watts. A low impedance 16-ohm selection shall also be provided.

Dimensions of the speaker shall not exceed 12- $\frac{5}{16}$ " diameter x 12" D (HFCS1) or 12- $\frac{5}{16}$ " diameter x 7- $\frac{3}{4}$ " D (HFCS1LP). The speaker shall require a minimum vertical clearance of 11" (HFCS1) or 6- $\frac{3}{4}$ " (HFCS1LP). Product weight shall be 9 lb. (HFCS1) or 8 lb. (HFCS1LP).

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