

# High-Fidelity Ceiling Speaker

## Model HFCS1



### Description

The Bogen HFCS1 ceiling loudspeaker delivers 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.

The HFCS1 offers several levels of power output via a front-mounted rotary switch. The low-distortion speaker design, coupled with dual front exit ports, 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 deep bass response
- 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
- 16-ohm input for non-transformer, multi-speaker systems
- Long-lasting, durable polycarbonate cone
- Compounded rubber surround for lasting performance
- Easy wiring with snap-on connector
- Connector provides loop-through to next speaker
- Easy to install mounting system
- Attachment point for seismic cable (safety cable)
- Input terminal cover with knockouts and safety eyelet provides protection for connections
- White textured finish easily painted to match theme decors
- Attractive, contemporary, sturdy steel grille assembly with fine perforations
- Accessory tile bridge support ring (Model TBCR sold separately)
- Accessory 10-foot long cable kit (Model CK10 sold separately)

### Technical Specifications

SPECIFICATIONS	HFCS1
Frequency Response (-10 dB)*	65 Hz to 19 kHz
LF Driver	6-1/2" PolyCone
HF Driver	20 mm (3/4") 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 Snap-Lock Input Connector
Product Weight	9 lb.
Speaker Dimensions	12-3/4" dia. x 12" D
Vertical Clearance Requirement	Minimum 11" (From Mounting Surface Front)
Included Accessories	Input Terminal Cover (2 Halves); (4) Screws; (1) Snap-Lock Input Connector
Optional Accessories	Tile Bridge Support Ring (TBCR); Cable Kit (CK10)
Baffle Ring & Grille Color	White

\* Half-Space Response

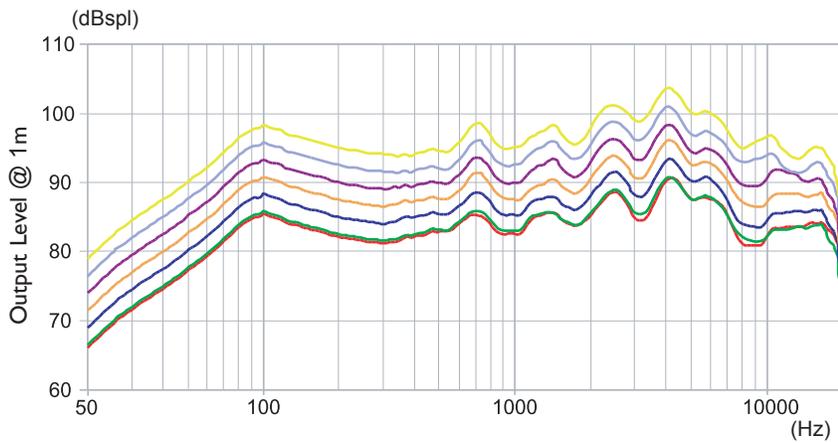
† Front panel, switch-selected



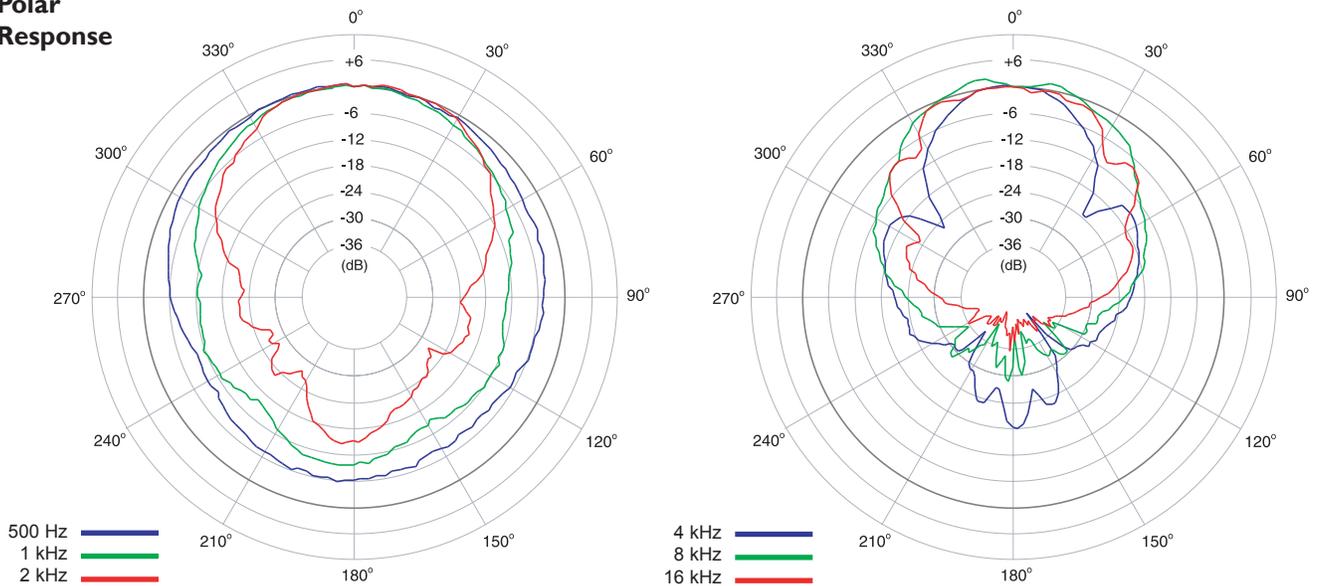
Specifications subject to change without notice.  
 © 2003 Bogen Communications, Inc.  
 Part No. 54-8016-03A Printed in U.S.A. 0303

## Frequency Response

Half-space @ 1m



## Polar Response



### Architect and Engineer Specifications\*

The loudspeaker shall be a Bogen Model HFCS1 Ceiling Speaker or approved equivalent, consisting of one 6" (nominal) low frequency transducer, one 3/4" (nominal) high frequency transducer with 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 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 cover enclosure. An optional 10-foot long cable kit shall be available to serve as a back-up safety cable (Model CK10). An optional tile bridge/support ring installation bracket shall provide additional support when mounting the loudspeaker into suspended ceilings (Model TBCR). The bracket shall also serve as a pre-installation guide for new construction installations, providing attachment to either 16" OC or 24" OC mounting.

The input connector shall be a 4-screw snap-lock input connector, providing "loop-through" 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 12-5/16" diameter x 12" D. Weight shall be 9 lb.

\* Architect and Engineer Specifications are available on CD and online in a Word document to assist you with preparing your bids.

**BOGEN**  
COMMUNICATIONS, INC.

50 Spring Street, Ramsey, New Jersey 07446, U.S.A.  
201-934-8500 FAX: 201-934-9832  
Web Site: www.bogen.com