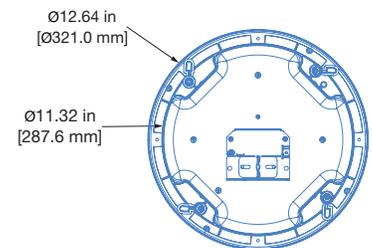
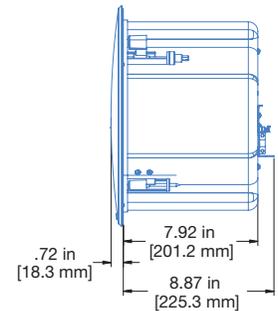
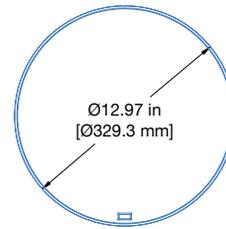


# Ashby-8C Ceiling Loudspeaker



The Ashby-8C self-powered, ceiling-mounted loudspeaker provides wide coverage and low distortion, even at high sound levels, for applications that require accurate music reproduction and intelligible voice. The Ashby-8C is ideal for applications that require a deeper low-end and higher SPL. It offers sonic performance beyond other in-ceiling loudspeakers of comparable size.

The Ashby-8C is engineered to the same award-winning standards as all Meyer Sound IntelligentDC™ loudspeakers. With on-board amplification and sophisticated signal processing, the Ashby-8C exhibits the flat frequency and phase response for which Meyer Sound loudspeakers are known.

The Ashby drivers are designed and manufactured at the Meyer Sound factory in Berkeley, California. The 0.75-inch metal-dome tweeter is concentrically mounted over an 8-inch cone driver in an innovative configuration that maximizes the surface of the wave guide.

With an incredibly smooth, consistent 100° coverage, fewer loudspeakers can cover a larger area, reducing system cost while maintaining the highest sound quality.

The Ashby-8C requires an external MPS IntelligentDC power supply. These units distribute DC power and balanced audio

to Ashby loudspeakers or other Meyer Sound IntelligentDC loudspeakers. Composite multi-conductor cables (e.g., Belden® 1502) can deliver both DC power and balanced audio from a single Phoenix™ 5-pin male connector.

The MPS-488HP can power up to 16 Ashby-8C loudspeakers (2 per channel) and can connect to Meyer Sound's RMS remote monitoring system. The MPS-482HP can power up to 4 Ashby-8C loudspeakers (2 per channel). Using a Meyer Sound IntelligentDC external source power supply has several advantages:

- Eliminates the need to use conduit (Class 2 wiring)
- Allows longer, lighter-gauge cable runs
- Preserves the advantages of self-powered systems with even more flexible installation options

Housed in an integrated zinc-plated steel-back can to meet commercial fire codes, the Ashby-8C can be flush-mounted in ceilings using a low-profile grille that blends discretely into any decor. Meyer Sound offers accessories specifically designed to install Ashby loudspeakers into a variety of ceiling environments including a pendant, a C-ring with a bridge for suspended ceilings and a new construction bracket.

## FEATURES AND BENEFITS

- Self-powered
- Easy to install
- Extremely wide and consistent coverage
- Ultra low distortion
- Exceptional SPL-to-size ratio
- Beautiful low-frequency response and reproduction of speech and music
- Supports long cable runs with light-gauge cables
- One MPS-488HP can power up to 16 Ashby-8Cs or one MPS-482HP can power up to 4 Ashby-8Cs

## APPLICATIONS

- Distributed systems for music and paging that demand high-quality audio and vocal intelligibility
- Constellation acoustic systems

## ACCESSORIES AND ASSOCIATED PRODUCTS

**C-Ring with Bridge Kit:** Used for suspended ceilings, the C-ring better distributes the clamping force of the four mounting clamps, while the bridges help support and distribute the weight of the loudspeaker.

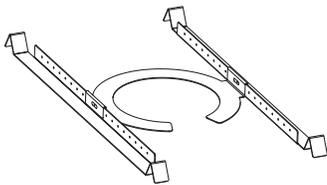
**New Construction Bracket:** This bracket can be fastened to the ceiling and acts as a template for ceiling cutout, ensuring a neat installation.

**Ashby Pendant:** Allows Ashby loudspeakers to hang from ceilings where a flush-mount is not practical. These elegant pendant enclosures utilize a minimalistic design typically used in pendant lighting to blend discreetly into the environment.

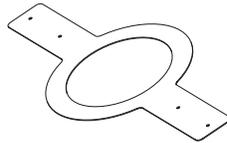
**MPS-488HP External Power Supply:** Rack-mount unit that delivers balanced audio and high-current DC power to up to eight loudspeakers; version available with RMS remote monitoring system.

**MPS-482HP External Power Supply:** 1RU 1/2 width rack unit that delivers balanced audio and high-current DC power to up to two audio channels; rack mount or use available options to mount on ceiling, wall, pole or truss configurations.

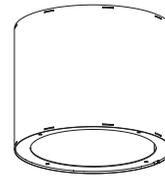
**Galileo GALAXY Network Platform:** The Galileo GALAXY Network Platform provides state-of-the-art audio control technology for loudspeaker systems with multiple zones. With immaculate sonic performance, it provides a powerful tool set for corrective room equalization and creative fine-tuning for a full range of applications.



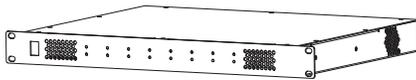
C-ring with Bridge Kit



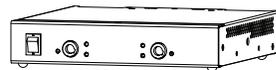
New Construction Bracket



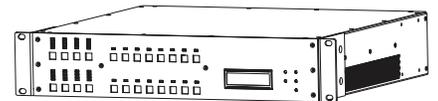
Ashby Pendant



MPS-488HP External Power Supply



MPS-482HP External Power Supply



Galileo GALAXY Network Platform

## SPECIFICATIONS

ACOUSTICAL	
Operating Frequency Range <sup>1</sup>	60 Hz – 18 kHz
Frequency Response <sup>2</sup>	67 Hz – 16 kHz ± 4 dB
Phase Response	190 Hz – 16 kHz ±45°
Linear Peak SPL <sup>3</sup>	<b>114 dB with 19 dB crest factor (M-noise)</b> , 106.5 dB (Pink Noise), 109.5 dB (B-noise)
COVERAGE	
	100° conical
TRANSDUCERS	
Low Frequency	One 8-inch cone driver
High Frequency	One 0.75-inch dome tweeter mounted concentrically in wave guide
AUDIO INPUT	
Type	Differential, electronically balanced
Connectors	Two Phoenix 5-pin male (one input and a hardwired loop output)
Input Impedance	10 kΩ differential between Audio (+) and Audio (-)
Wiring	Pin 1: DC Power (-) Pin 2: DC Power (+) Pin 3: Audio Shield, Chassis/earth Pin 4: Audio (-) Pin 5: Audio (+)
Nominal Input Sensitivity	-2.5 dBV (0.25 V rms) continuous average is typically the onset of limiting for noise and music where pink noise has 12 dB peak-to-RMS ratio
Input Level	Audio source must be capable of producing of +16 dBV (6.3 V rms) into 600 Ω to produce the maximum peak SPL over the operating bandwidth of the loudspeaker.
AMPLIFIER	
Type	High-efficiency, Class-D
Total Output Power <sup>4</sup>	440 W peak
THD, IM, TIM	<0.02%
Cooling	Natural convection through metal enclosure
DC POWER	
Connectors	Two Phoenix 5-pin male provides power and audio connection (see Wiring above)
Safety Agency Rated Operating Range <sup>5,6</sup>	48 V DC (Meyer Sound MPS-488HP or MPS-482HP Power Supply required) (NEC Class 2 Wiring Approved)
CURRENT DRAW <sup>7</sup>	
Idle Current	0.16 A average
Maximum Long-Term Continuous Current (>3 sec)	0.78 A average
Maximum Instantaneous Peak Current	3.10 A peak
PHYSICAL	
Outside Dimensions	12.64 in (321.0 mm) diameter; 8.87 in (225.3 mm) depth: front of ceiling surface to built-in safety attachment ring
Cutout Diameter Range	11.42 – 11.83 in (290.0 – 300.4 mm)
Weight	13.8 lb (6.26 kg)
Enclosure	Zinc-plated steel-back can and UL 94 V-0 rated baffle
Grille	Perforated steel 12.97 in (329.2 mm) in diameter
Mounting Options	C-Ring with bridge kit, new construction bracket, and pendant mount

## SPECIFICATIONS, CONT'D.

COMPLIANCE								
Safety Agency Certification	Standard for audio, video and similar electronic apparatus: <ul style="list-style-type: none"> <li>• UL 60065, CSA C22.2 NO. 60065-03 (AMD 2), IEC 60065, IEC 62368-1</li> <li>• Fire Rated to UL Standard 2043, Product and Accessories Installed in Air-Handling Spaces</li> </ul>							
EMC Certification	CE and FCC Part 15 Emission Class B emission limits applied.							
MAXIMUM CABLE LENGTH <sup>8</sup>								
Number of Speakers	Maximum Cable Length (feet) — Imperial				Maximum Cable Length (meters) — Metric			
	12 AWG	14 AWG	16 AWG	18 AWG	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.0 mm <sup>2</sup>	0.75 mm <sup>2</sup>
1	1200	750	475	300	320	175	90	55
2*	600	375	237	150	160	87	45	27
*This also applies to one 8C and one 5C looped.								

## NOTES

1. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
2. Half-space loading, measured with 1/3-octave frequency resolution at 4 m.
3. **Linear Peak SPL** is measured at 4 m referred to 1 m. Loudspeaker SPL compression measured with M-noise at the onset of limiting, 2-hour duration, and 50 °C ambient temperature is < 2 dB.

**M-noise** is a full bandwidth (10 Hz–22.5 kHz) test signal developed by Meyer Sound to better measure the loudspeaker's music performance. It has a constant instantaneous peak level in octave bands, a crest factor that increases with frequency, and a full bandwidth Peak to RMS ratio of 18 dB.

**Pinknoise** is a full bandwidth test signal with Peak to RMS ratio of 12.5 dB.

**B-noise** is a Meyer Sound test signal used to ensure measurements reflect system behavior when reproducing the most common input spectrum, and to verify there is still headroom over pink noise.

4. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.
5. Tolerates voltage drops up to 30% due to long cable runs. Normal operating conditions with recommended cable gauge, length, and number of speakers assures peak SPL to remain within 2 dB of max SPL specification.
6. For information about the MPS-488HP or MPS-482HP, refer to their datasheets available at [meyersound.com/documents](http://meyersound.com/documents)
7. Current draw measured at 48 V DC.
8. Some high frequency loss can occur from long analog audio cables. For lengths greater than 500 ft (150 m) Meyer Sound recommends using low capacitance shielded audio cable or AES Digital audio cable. Discuss expected high frequency loss with the cable manufacturer to determine acceptability.

## ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be self-powered and include one 8-inch (203.2 mm) diameter coaxial transducer and one 0.75-inch (20 mm) dome tweeter mounted concentrically in wave guide in front of the 8-inch driver.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: operating frequency range, 60 Hz – 18 kHz; phase response, 190 Hz – 16 kHz ±45° and a conical coverage of 100°. The loudspeaker shall be capable of maximum linear peak SPL of 114 dB peak with 19 dB crest factor, measured at 4 m referred to 1 m using M-noise.

The loudspeaker shall be equipped with two Phoenix 5-pin male connectors (pins 1, 2 for 48 V DC power, pins 3, 4, and 5 for balanced audio). One shall be the input, the second connector shall be hardwired for looping.

The audio input shall be electronically balanced with a 10 kΩ impedance and shall accept a nominal -2.5 dBV (0.25 V rms) signal.

The loudspeaker shall incorporate a highly efficient Class-D power amplifier with a total output power of 440 W peak.

Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP or MPS-482HP power supply, capable of delivering 48 V DC.

Current draw for the loudspeaker shall be 0.16 A in idle state and its maximum long-term continuous current draw shall be 0.78 A.

The loudspeaker shall tolerate voltage drops up to 30% caused by long cable runs when connected to one channel of the required power supply. Maximum cable run for a single unit is 300 ft with 18 AWG (90 m with 1.0 mm<sup>2</sup>) and the maximum cable run for two units (one looped) is 150 ft with 18 AWG (45 m with 1.0 mm<sup>2</sup>).

Loudspeaker components shall be housed in a zinc-plated steel enclosure which shall also include a UL94 V-0 rated baffle. The enclosure shall also incorporate four mounting clamps for flush-mount installations in ceilings and walls with a minimum depth of 8.87 in (225.3 mm). The grille shall be made of perforated steel and its diameter shall be 12.97 in (329.3 mm).

Dimensions shall be 12.64 in (321 mm) in diameter and 8.87 in (225.3 mm) in depth (front of ceiling surface to built-in safety attachment ring). Cutout diameter range shall be 11.32 – 11.75 in (287.6 – 298.4 mm). Weight shall be 13.8 lb (6.26 kg).

The loudspeaker shall be the Meyer Sound Ashby-8C.