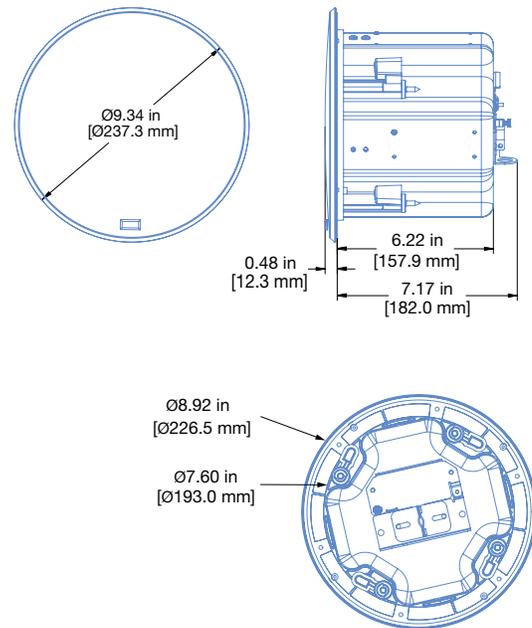


Ashby-5C Ceiling Loudspeaker



The Ashby-5C 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-5C outperforms all in-ceiling loudspeakers of comparable size.

The Ashby-5C is engineered to the same award-winning standards as all Meyer Sound IntelligentDC loudspeakers. With on-board amplification and sophisticated signal processing, the Ashby-5C exhibits the flat frequency and phase response for which Meyer Sound loudspeakers are known.

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 a 5-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-5C 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 24 Ashby-5C loudspeakers (3 per channel) and can connect to Meyer Sound's RMS remote monitoring system. The MPS-482HP can power up to 6 Ashby-5C loudspeakers. Using a Meyer Sound IntelligentDC external power supply source has several advantages including:

- Eliminates the need to use conduit (NEC 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-5C can be flush-mounted in ceilings using a low-profile grille that blends discreetly 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 reproduction of speech and music
- Supports long cable runs with light-gauge cables
- One MPS-488HP can power up to 24 Ashby-5Cs

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.

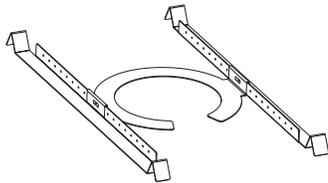
New Construction Bracket: This bracket can be fastened to the ceiling and acts as a template for the ceiling cutout, ensuring a neat installation.

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

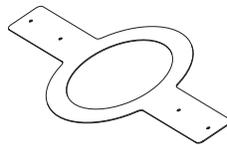
MPS-488HP External Power Supply: Rack-mount unit that delivers balanced audio and high-current DC power to up to eight loudspeakers; version available with RMS remote monitoring system.

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.

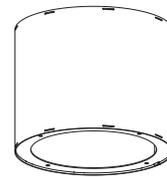
Galileo GALAXY Network Platform: The Galileo GALAXY Network Platform provides state-of-the-art audio control technology for loudspeaker systems with multiple zones. With immaculate sonic performance, it provides a powerful tool set for corrective room equalization and creative fine-tuning for a full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



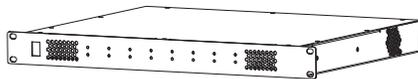
C-ring with Bridge Kit



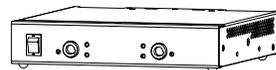
New Construction Bracket



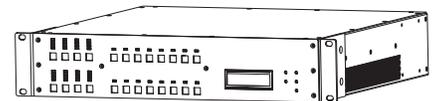
Ashby Pendant



MPS-488HP External Power Supply



MPS-482HP External Power Supply



Galileo GALAXY Network Platform

SPECIFICATIONS

| ACOUSTICAL ¹ | |
|--|--|
| Operating Frequency Range ¹ | 100 Hz – 18 kHz |
| Frequency Response ² | 110 Hz – 16 kHz ± 4 dB |
| Phase Response | 290 Hz – 16 kHz ±45° |
| Linear Peak SPL ³ | 112 dB with 19 dB crest factor (M-noise) , 104.5 dB (Pink Noise), 107.5 dB (B-noise) |
| COVERAGE | |
| | 110° conical |
| TRANSDUCERS | |
| Low Frequency | One 5-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 ⁴ | 440 W peak |
| THD, IM, TIM | <0.02% |
| Cooling | Natural convection through metal enclosure |
| DC POWER | |
| Connectors | Two Phoenix 5-pin male provide power and audio connection (see Wiring above) |
| Safety Agency Rated Operating Range ^{5,6} | 48 V DC—Meyer Sound MPS-482HP or MPS-488HP Power Supply required (NEC Class 2 Wiring Approved) |
| CURRENT DRAW | |
| Idle Current | 0.16 A rms |
| Maximum Long-Term Continuous Current (>3 sec) | 0.32 A rms |
| Maximum Instantaneous Peak Current | 1.70 A peak |
| PHYSICAL | |
| Outside Dimensions | 8.92 in (226.5 mm) diameter; 7.17 in (182 mm) depth: front of ceiling surface to built-in safety attachment ring |
| Cutout Diameter Range | 7.70 – 7.95 in (195.5 – 201.9 mm) |
| Weight | 7.8 lb (3.53 kg) |
| Enclosure | Zinc-plated steel-back can and UL 94 V-0 rated baffle |
| Grille | Perforated steel 9.34 in (237.3 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"> • UL 60065, CSA C22.2 NO. 60065-03 (AMD 2), IEC 60065, IEC 62368-1 • Fire Rated to UL Standard 2043, Product and Accessories Installed in Air-Handling Spaces | | | | | | | |
| EMC Certification | CE and FCC Part 15 Emission Class B emission limits applied. | | | | | | | |
| MAXIMUM CABLE LENGTH ⁷ | | | | | | | | |
| Number of Speakers | Maximum Cable Length (feet) — Imperial | | | | Maximum Cable Length (meters) — Metric | | | |
| | 12 AWG | 14 AWG | 16 AWG | 18 AWG | 2.5 mm ² | 1.5 mm ² | 1.0 mm ² | 0.75 mm ² |
| 1 | 1800 | 1125 | 700 | 450 | 480 | 260 | 135 | 80 |
| 2 | 900 | 550 | 350 | 225 | 240 | 130 | 70 | 40 |
| 3* | 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-482HP or the MPS-488HP, refer to their datasheets or operating instructions, all available at meyersound.com/documents
7. Some high frequency loss can occur from long analog audio cables. For lengths greater than 500 ft (150 m)—indicated by grey background in above table—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 5-inch (127 mm) diameter coaxial transducer and one 0.75-inch (20 mm) dome tweeter mounted concentrically in a wave guide in front of the 5-inch driver.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: operating frequency range, 100 Hz – 18 kHz; phase response, 290 Hz – 16 kHz ±45° and a conical coverage of 110°. The loudspeaker shall be capable of a linear peak SPL of 112 dB 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, 5 for balanced audio). One shall be the input, the second connector shall be hardwired for looping.

The loudspeaker shall have looping capabilities, and when connected to one channel of the required power supply up to three units can be powered.

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-482HP or MPS-488HP 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 0.32 A with a duration of less than 3 s.

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 450 ft with 18 AWG (135 m with 1.0 mm²) and the maximum cable run for three looped units is 150 ft with 18 AWG (45 m with 1.0 mm²).

Loudspeaker components shall be housed in a zinc-plated steel-back can enclosure which shall also include a UL94 V-0 rated baffle. The enclosure shall incorporate 4 mounting clamps for flush-mount installations in ceilings and walls with a minimum depth of 7.17 in (182 mm). Grille shall be made of perforated steel and its diameter shall be 9.34 in (237.3 mm).

Dimensions shall be 8.92 in (226.5 mm) in diameter and 7.17 in (182 mm) in depth (front of ceiling surface to built-in safety attachment ring). Cutout diameter range shall be 7.60–7.875 in (193–200 mm). Weight shall be 7.8 lb (3.53 kg).

The loudspeaker shall be the Meyer Sound Ashby-5C.