

SURROUND



HMS

UP-4XP

HMS Cinema Surround Loudspeaker



The HMS cinema surround loudspeaker is optimized for use in cinemas, high-end private theatres, screening rooms, and other surround applications. Designed to complement Meyer Sound's Acheron™



HMS-10 Cinema Surround Loudspeaker with Grille Frame

screen channel loudspeakers, the self-powered HMS maintains a wide dynamic range, exceptional fidelity, and precise clarity during the most demanding of digital soundtracks. Boasting a wide frequency range and a generous linear peak SPL with very low distortion, the HMS delivers the full intensity and nuance of cinema surround channels to every listener without compromise.

The HMS cinema surround loudspeaker is available in five models: HMS-5, HMS-10, HMS-12, HMS-15, and HMS-15AC, ranging in size, weight, driver size, and power to accommodate a wide range of venues and applications. The proprietary long-excursion cone drivers and diaphragm compression drivers are driven by an onboard amplifier that includes an active crossover, driver protection circuitry, and correction filters for flat phase and frequency response. A constant-directivity horn provides uniform, full-range, consistent coverage.

The HMS-5, HMS-10, HMS-12, and HMS-15 are equipped with IntelligentDC technology and

receive DC power and balanced audio from composite Phoenix™ 5-pin connectors. Powering the loudspeakers from an external DC source eliminates the need for AC conduits while preserving the advantages of self-powered systems. IntelligentDC loudspeakers require an MPS-488HP external power supply. The single-space 19-inch rack unit distributes DC power and balanced audio to up to eight HMS-5, HMS-10, or HMS-12 loudspeakers, or up to four HMS-15 loudspeakers. Composite multiconductor cables, such as Belden® 1502 or equivalent, can deliver both DC power and balanced audio to loudspeakers at cable lengths up to 150 feet with just 1 dB of loss in peak SPL using 18 AWG wire. Longer cable runs are possible with heavier gauges. The MPS-488HP is optionally available with an RMS™ remote monitoring system module for monitoring voltage and current draw for its attached loudspeakers from a Mac® or Windows®-based computer.

The HMS-15AC is an AC-powered version of the HMS-15. Its Intelligent AC™ power supply provides automatic voltage selection, EMI filtering, soft current turn-on, and surge suppression. The HMS-15AC is optionally available with its own onboard RMS™ remote monitoring system module for comprehensive monitoring of loudspeaker parameters from a Mac or Windows-based computer.

The versatile HMS can be suspended or mounted on walls or ceilings at fixed or adjustable angles with optional half-yoke, U-bracket, or wall-mount brackets, allowing it to be deployed per the requirements of any surround application or immersive cinema format.

Meyer Sound's industry-leading self-powered technology not only delivers unparalleled and consistent audio fidelity but also simplifies installation, whether designing new rooms from scratch or adding surround channels to existing installations. The HMS cabinet features a black textured finish and an acoustically transparent, detachable, black cloth grille that blend smartly with any theatre decor.



HMS-5 Compact Cinema Surround Loudspeaker



HMS-12 High-Power Cinema Surround Loudspeaker



HMS-15 / HMS-15AC High-Power Cinema Surround Loudspeaker

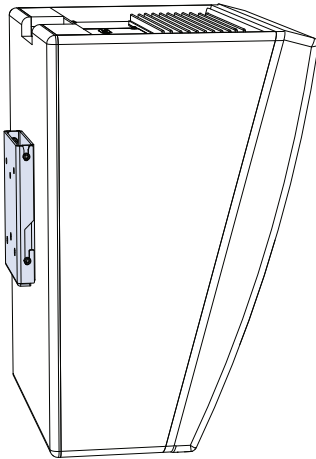
FEATURES & BENEFITS

- Exceptional fidelity and extended high-frequency performance
- Constant-directivity horn yields uniform response throughout coverage area
- Seamless integration with Acheron screen channel loudspeakers and X-800C and X-400C cinema subwoofers
- Extraordinarily flat amplitude and phase response for tonal accuracy
- IntelligentDC power affords the flexibility of lengthy cable runs to the HMS-5, HMS-10, HMS-12, and HMS-15 without conduits
- Optional mounting options provide multiple configurations for attachment to walls, ceilings, or hanging clamps

SOLUTIONS

- Cinemas and theatres
- Screening rooms
- Surround mixing for production and postproduction facilities
- High-end private theatres
- Immersive surround applications

HMS MOUNTING OPTIONS



FMB-HMS FIXED MOUNT BRACKET

Mounts HMS loudspeakers on walls at a fixed 0-degree angle. The fixed bracket mounts cabinets 0.87 inches (22 mm) from the wall.

WEIGHT

- 3.1 lbs (1.4 kg)

COMPATIBILITY

- HMS-5
- HMS-10
- HMS-12
- HMS-15/15AC

AMB-HMS ADJUSTABLE MOUNT BRACKET

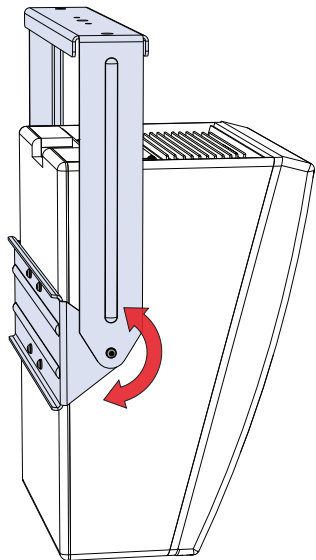
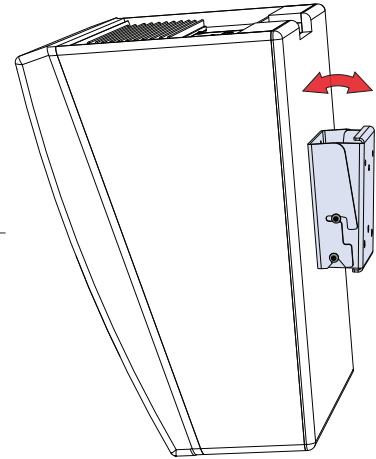
Mounts HMS loudspeakers on walls with uptilt or downtilt (see below for tilt amounts). When installed with no tilt, the bracket mounts cabinets 2.24 inches (57 mm) from the wall.

WEIGHT

- 4.2 lbs (1.9 kg)

COMPATIBILITY*

- HMS-5 (+5°/-16°)
- HMS-10 (+5°/-16°)
- HMS-12 (+5°/-12°)
- HMS-15/15AC (+5°/-10°)



HY-HMS / HY-HMS15 HALF YOKES

Suspends HMS loudspeakers with a full range of tilt (360°). The yokes can attach directly to ceilings or can accept "C" or "G" hanging clamps with standard 1/2-inch or 12 mm bolts.

WEIGHT

- HY-HMS, 12.4 lbs (5.6 kg)
- HY-HMS15, 7.6 lbs (3.4 kg)

COMPATIBILITY (HY-HMS)

- HMS-5 (360°)
- HMS-10 (360°)
- HMS-12 (360°)

COMPATIBILITY (HY-HMS15)

- HMS-15/15AC (360°)

MUB-HMS / MUB-HMS15 U-BRACKETS

Mounts HMS loudspeakers on walls or ceilings with uptilt or downtilt (see below for tilt amounts). The U-brackets include variable attachment points to place cabinets closer or further from the mounting surface.

WEIGHT

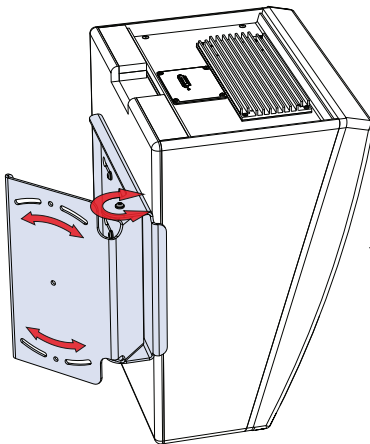
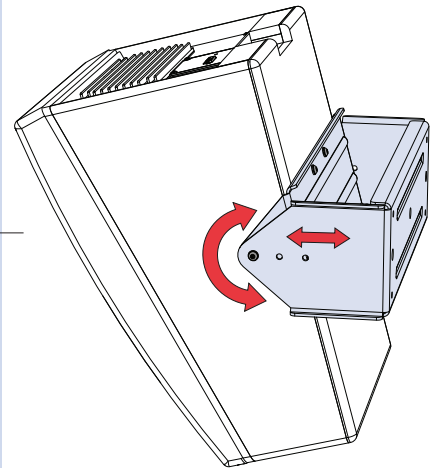
- MUB-HMS, 13.5 lbs (6.1 kg)
- MUB-HMS15, 7.6 lbs (3.4 kg)

COMPATIBILITY (MUB-HMS)†

- HMS-5 (+60°/-43°)
- HMS-10 (+32°/-25°)
- HMS-12 (+23°/-20°)

COMPATIBILITY (MUB-HMS15)†

- HMS-15/15AC (+16°/-13°)



WH-HMS WALL HINGE BRACKET

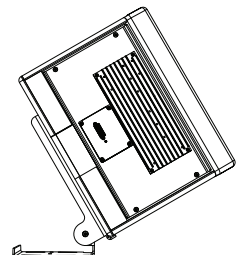
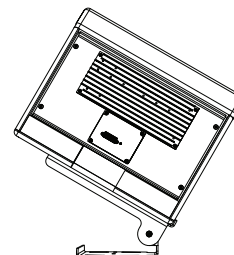
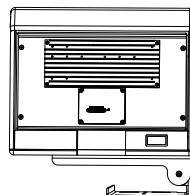
Mounts HMS loudspeakers on walls with the capability of aiming them horizontally up to 90° away from the wall. The bracket is symmetrical, allowing it to be rotated 180° so cabinets can be aimed either toward or away from the screen.

WEIGHT

- 10.4 lbs (4.7 kg)

COMPATIBILITY

- HMS-5
- HMS-10
- HMS-12



NOTES

* Wider downtilt may be possible with the AMB-HMS adjustable mount bracket depending on the building's structural components and mounting surface.

† Wider uptilt and downtilt may be possible with the MUB-HMS and MUB-HMS15 U-brackets depending on the building's structural components and mounting surface.

HMS SPECIFICATIONS

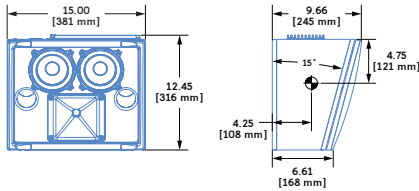
	HMS-5 COMPACT CINEMA SURROUND LOUDSPEAKER	HMS-10 CINEMA SURROUND LOUDSPEAKER	HMS-12 HIGH-POWER CINEMA SURROUND LOUDSPEAKER	HMS-15 HIGH-POWER CINEMA SURROUND LOUDSPEAKER	HMS-15AC HIGH-POWER CINEMA SURROUND LOUDSPEAKER
ACOUSTICAL					
Operating Frequency Range ¹	55 Hz – 18 kHz	55 Hz – 18 kHz	59 Hz – 18 kHz	50 Hz – 18 kHz	50 Hz – 18 kHz
Phase Response	250 Hz – 18 kHz $\pm 45^\circ$	290 Hz – 18 kHz $\pm 45^\circ$	240 Hz – 18 kHz $\pm 45^\circ$	290 Hz – 18 kHz $\pm 45^\circ$	290 Hz – 18 kHz $\pm 45^\circ$
Linear Peak SPL ²	120.0 dB	123.5 dB	126.0 dB	128.5 dB	128.5 dB
Coverage	80° symmetrical	80° symmetrical	100° symmetrical	80° horiz. by 50° vert.	80° horiz. by 50° vert.
Crossover ³	1.7 kHz	2.5 kHz	840 Hz	680 Hz	680 Hz
TRANSDUCERS					
Low Frequency	Two 5-inch long-excursion cone drivers	One 10-inch long-excursion cone driver	One 12-inch long-excursion cone driver	One 15-inch long-excursion cone driver	One 15-inch long-excursion cone driver
High Frequency	One 2-inch diaphragm compression driver	One 2-inch diaphragm compression driver	One 3-inch diaphragm compression driver	One 3-inch diaphragm compression driver	One 3-inch diaphragm compression driver
AMPLIFIER					
Type	3-channel with active crossover	2-channel with active crossover	2-channel with active crossover	2-channel with active crossover	2-channel with active crossover
CONNECTORS					
Audio/Power	One Phoenix 5-pin male composite input ⁴	One Phoenix 5-pin male composite input ⁴	One Phoenix 5-pin male composite input ⁴	Two Phoenix 5-pin male composite inputs ⁵	Audio: XLR 3-pin male input with XLR 3-pin female loop output ⁶ AC Power: powerCON 20 input with loop output
POWER					
Voltage Requirements	48 V DC Requires MPS-488HP ⁷ IntelligentDC power supply (one channel)	48 V DC Requires MPS-488HP ⁷ IntelligentDC power supply (one channel)	48 V DC Requires MPS-488HP ⁷ IntelligentDC power supply (one channel)	48 V DC Requires MPS-488HP ⁷ IntelligentDC power supply (two channels)	100–240 V AC, 50–60 Hz ^{8, 9} 90 V AC turn-on, no turn-off; fuse-protection above 265 V AC
RMS					
	Requires RMS option for MPS-488HP IntelligentDC power supply ¹⁰	Requires RMS option for MPS-488HP IntelligentDC power supply ¹⁰	Requires RMS option for MPS-488HP IntelligentDC power supply ¹⁰	Requires RMS option for MPS-488HP IntelligentDC power supply ¹⁰	Optionally equipped with 2-conductor, twisted-pair network ¹¹
PHYSICAL					
Dimensions	15.00 inches W (381 mm) 12.45 inches H (316 mm) 9.66 inches D (245 mm)	15.50 inches W (394 mm) 19.50 inches H (495 mm) 12.48 inches D (317 mm)	16.80 inches W (427 mm) 25.12 inches H (638 mm) 9.78 inches D (248 mm)	19.00 inches W (483 mm) 29.10 inches H (739 mm) 12.50 inches D (318 mm)	19.00 inches W (483 mm) 29.10 inches H (739 mm) 12.50 inches D (318 mm)
Weight	18.4 lbs (8.3 kg)	26.2 lbs (11.9 kg)	43.0 lbs (19.5 kg)	60.0 lbs (27.2 kg)	64.0 lbs (29.0 kg)
Enclosure	Multi-ply hardwood with black textured finish	Multi-ply hardwood with black textured finish	Multi-ply hardwood with black textured finish	Multi-ply hardwood with black textured finish	Multi-ply hardwood with black textured finish
Grille Frame	Acoustically transparent, detachable, black cloth-covered frame	Acoustically transparent, detachable, black cloth-covered frame	Acoustically transparent, detachable, black cloth-covered frame	Acoustically transparent, detachable, black cloth-covered frame	Acoustically transparent, detachable, black cloth-covered frame
Mounting	Rear attachment points (3.94 inches x 3.94 inches, 100 mm x 100 mm)	Rear attachment points (3.94 inches x 3.94 inches, 100 mm x 100 mm)	Rear attachment points (3.94 inches x 3.94 inches, 100 mm x 100 mm)	Rear attachment points (5.00 inches x 2.75 inches, 127 mm x 70 mm); side attachment points with 3/8"–16 threads	Rear attachment points (5.00 inches x 2.75 inches, 127 mm x 70 mm); side attachment points with 3/8"–16 threads
FMB–HMS Fixed Bracket	✓	✓	✓	✓	✓
AMB–HMS Adjustable Bracket	✓	✓	✓	✓	✓
HY–HMS Half Yoke	✓	✓	✓		
HY–HMS15 Half Yoke				✓	✓
MUB–HMS U–Bracket	✓	✓	✓		
MUB–HMS15 U–Bracket				✓	✓
WH–HMS Wall Hinge Bracket	✓	✓	✓		

NOTES

1. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
2. Free field, measured with pink noise, onset of nonlinearity, referred to 1 meter.
3. At this frequency, the transducers produce equal sound pressure levels.
4. Phoenix 5-pin wiring: Pin 1, DC power (–); Pin 2, DC power (+); Pin 3, audio shield, chassis/earth; Pin 4, audio (–), Pin 5, audio (+).
5. The HMS-15 must be connected to two adjacent channels of the MPS-488HP IntelligentDC power supply.
6. XLR 3-pin wiring: Pin 1, audio shield, chassis/earth; Pin 2, audio (+); Pin 3, audio (–).
7. For information and specifications for the MPS-488HP IntelligentDC power supply, refer to its datasheet.
8. Indicates the safety rated voltage range for the HMS-15AC.
9. The maximum long-term continuous current draw for the HMS-15AC is 1.3 A rms at 115 V AC, 0.7 A rms at 230 V AC, and 1.5 A rms at 100 V AC.
10. Reports voltage and current draw for the attached IntelligentDC loudspeakers to the host computer.
11. Reports amplifier operating parameters for the HMS-15AC to the host computer.

ARCHITECT SPECIFICATIONS

HMS-5 The loudspeaker shall be a self-powered, full-range system with an onboard 3-channel amplifier and internal processing that shall include equalization, phase correction, signal division, and driver protection. Transducers shall include two 5-inch long-excursion cone drivers and one 2-inch diaphragm compression cone driver. The crossover point shall be 1.7 kHz.



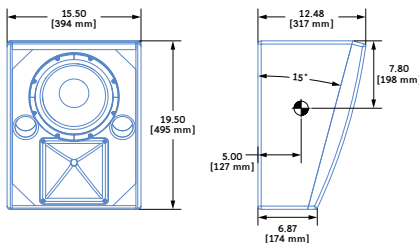
Performance specifications, measured at 1/3-octave resolution, for a typical production unit shall be: operating frequency range, 55 Hz to 18 kHz; phase response, 250 Hz to 18 kHz ± 45 degrees; linear peak SPL, measured with pink noise, 120.0 dB at 1 meter, free field. Coverage shall be 80-degree horizontal by 80-degree vertical.

The loudspeaker shall be equipped with a single Phoenix 5-pin male connector (two pins for DC power and three pins for balanced audio). Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP IntelligentDC power supply.

Components shall be mounted in a multi-ply hardwood enclosure with a black textured finish. The cabinet shall include rear attachment points for optional mounting. The grille shall be an acoustically transparent, detachable, black cloth-covered frame. Dimensions for the loudspeaker shall be 15.00 inches wide x 12.45 inches high x 9.66 inches deep (381 mm x 316 mm x 245 mm) without mounting bracket. Weight shall be 18.4 lbs (8.3 kg).

The loudspeaker shall be the Meyer Sound HMS-5.

HMS-10 The loudspeaker shall be a self-powered, full-range system with an onboard 2-channel amplifier and internal processing that shall include equalization, phase correction, signal division, and driver protection. Transducers shall include one 10-inch long-excursion cone driver and one 2-inch diaphragm compression driver. The crossover point shall be 2.5 kHz.



Performance specifications, measured at 1/3-octave resolution, for a typical production unit shall be: operating frequency range, 55 Hz to 18 kHz; phase response, 290 Hz to 18 kHz ± 45 degrees; linear peak SPL, measured with pink noise, 123.5 dB at 1 meter, free field. Coverage shall be 80-degree horizontal by 80-degree vertical.

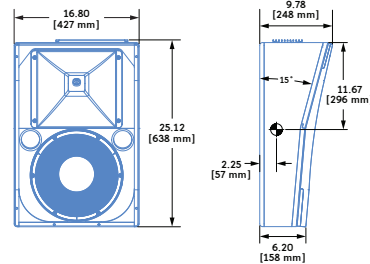
The loudspeaker shall be equipped with a single Phoenix 5-pin male connector (two pins for DC power and three pins for balanced audio). Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP IntelligentDC power supply.

Components shall be mounted in a multi-ply hardwood enclosure with a black textured finish. The cabinet shall include rear attachment points for optional mounting. The grille shall be an acoustically transparent, detachable, black cloth-covered frame. Dimensions for the loudspeaker shall be 15.50 inches wide x

19.50 inches high x 12.48 inches deep (394 mm x 495 mm x 317 mm) without mounting bracket. Weight shall be 26.2 lbs (11.9 kg).

The loudspeaker shall be the Meyer Sound HMS-10.

HMS-12 The loudspeaker shall be a self-powered, full-range system with an onboard 2-channel amplifier and internal processing that shall include equalization, phase correction, signal division, and driver protection. Transducers shall include one 12-inch long-excursion cone driver and one 3-inch diaphragm compression driver. The crossover point shall be 840 Hz.



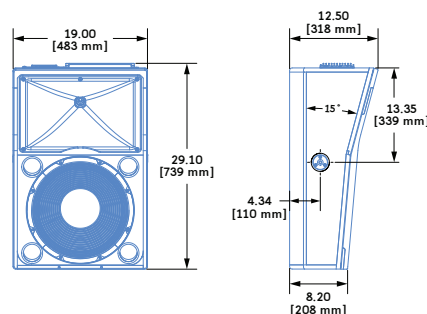
Performance specifications, measured at 1/3-octave resolution, for a typical production unit shall be: operating frequency range, 59 Hz to 18 kHz; phase response, 240 Hz to 18 kHz ± 45 degrees; linear peak SPL, measured with pink noise, 126 dB at 1 meter, free field. Coverage shall be 100-degree horizontal by 100-degree vertical.

The loudspeaker shall be equipped with a single Phoenix 5-pin male connector (two pins for DC power and three pins for balanced audio). Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP IntelligentDC power supply.

Components shall be mounted in a multi-ply hardwood enclosure with a black textured finish. The cabinet shall include rear attachment points for optional mounting. The grille shall be an acoustically transparent, detachable, black cloth-covered frame. Dimensions for the loudspeaker shall be 16.80 inches wide x 25.12 inches high x 9.78 inches deep (427 mm x 638 mm x 248 mm) without mounting bracket. Weight shall be 43 lbs (19.5 kg).

The loudspeaker shall be the Meyer Sound HMS-12.

HMS-15 The loudspeaker shall be a self-powered, full-range system with an onboard 2-channel amplifier and internal processing that shall include equalization, phase correction, signal division, and driver protection. Transducers shall include one 15-inch long-excursion cone driver and one 3-inch diaphragm compression driver. The crossover point shall be 680 Hz.



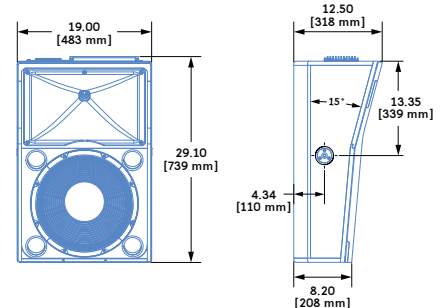
Performance specifications, measured at 1/3-octave resolution, for a typical production unit shall be: operating frequency range, 50 Hz to 18 kHz; phase response, 290 Hz to 18 kHz ± 45 degrees; linear peak SPL, measured with pink noise, 128.5 dB at 1 meter, free field. Coverage shall be 80-degree horizontal by 50-degree vertical.

The loudspeaker shall be equipped with dual Phoenix 5-pin male connectors (two pins for DC power and three pins for balanced audio). Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP IntelligentDC power supply.

Components shall be mounted in a multi-ply hardwood enclosure with a black textured finish. The cabinet shall include rear and side attachment points for optional mounting. The grille shall be an acoustically transparent, detachable, black cloth-covered frame. Dimensions for the loudspeaker shall be 19.00 inches wide x 29.10 inches high x 12.50 inches deep (483 mm x 739 mm x 318 mm) without mounting bracket. Weight shall be 60 lbs (27.2 kg).

The loudspeaker shall be the Meyer Sound HMS-15.

HMS-15AC The loudspeaker shall be a self-powered, full-range system with an onboard 2-channel amplifier and internal processing that shall include equalization, phase correction, signal division, and driver protection. Transducers shall include one 15-inch long-excursion cone driver and one 3-inch diaphragm compression driver. The crossover point shall be 680 Hz.



Performance specifications, measured at 1/3-octave resolution, for a typical production unit shall be: operating frequency range, 50 Hz to 18 kHz; phase response, 290 Hz to 18 kHz ± 45 degrees; linear peak SPL, measured with pink noise, 128.5 dB at 1 meter, free field. Coverage shall be 80-degree horizontal by 50-degree vertical.

Audio connectors shall be XLR 3-pin, female and male, accommodating balanced audio, or XLR 5-pin, accommodating both balanced audio and RMS. The internal power supply shall perform automatic voltage selection, EMI filtering, soft current turn-on, and surge suppression. Power requirements shall be nominal 100, 110, or 230 V AC line current at 50–60 Hz. UL and CE operating voltage range shall be 100–240 V AC at 50–60 Hz. Maximum long-term continuous current draw shall be 1.3 A rms at 115 V AC, 0.7 rms at 230 V AC, and 1.5 A rms at 100 V AC. AC power connectors shall be powerCON 20 with loop output. The loudspeaker shall optionally include the RMS remote monitoring system module.

Components shall be mounted in a multi-ply hardwood enclosure with a black textured finish. The cabinet shall include rear and side attachment points for optional mounting. The grille shall be an acoustically transparent, detachable, black cloth-covered frame. Dimensions for the loudspeaker shall be 19.00 inches wide x 29.10 inches high x 12.50 inches deep (483 mm x 739 mm x 318 mm) without mounting bracket. Weight shall be 64 lbs (29.0 kg).

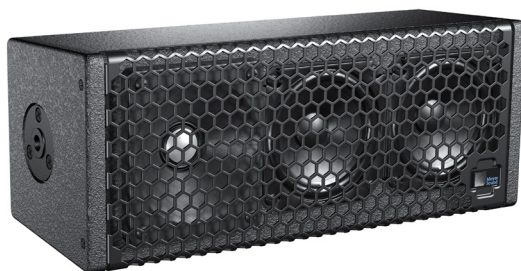
The loudspeaker shall be the Meyer Sound HMS-15AC.

HMS Datasheet — 04.198.004.03 A
Copyright © 2016, All rights reserved
Meyer Sound Laboratories Inc.

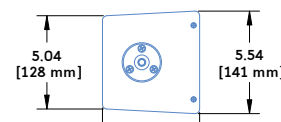
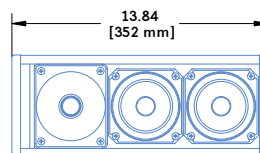
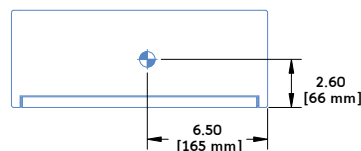
MEYER SOUND LABORATORIES INC.
2832 San Pablo Ave., Berkeley, CA 94702
+1 510 486.1166
techsupport@meyersound.com
www.meyersound.com



UP-4XP : UltraCompact Loudspeaker



Dimensions	13.84" w x 5.54" h x 5.25" d (352 mm x 141 mm x 133 mm)
Weight	12.2 lbs (5.5 kg)
Enclosure	Premium birch plywood
Finish	Black textured
Protective Grille	Powder-coated, hex-stamped steel with black mesh screen
Rigging	Top and bottom plates available with 3/8"-16 or M10 threads nuts



The UP-4XP ultracompact loudspeaker, with IntelligentDC technology, is ideally suited for applications requiring a small, inconspicuous cabinet that also delivers high sound pressure levels, low distortion, and uniform directional control. The self-powered UP-4XP offers exceptional audio performance in a compact package with the advantages of a remote power supply. As a standalone loudspeaker, the UP-4XP can be used for vocal reinforcement, frontfill coverage, and delay coverage for under-balcony applications. The UP-4XP can also be paired with an optional subwoofer to create a full-range system.

The UP-4XP boasts a wide operating frequency range of 66 Hz to 18 kHz and a maximum peak SPL of 121 dB, with very low distortion. The unit's high-frequency section includes a 1-inch metal dome tweeter on a constant-directivity, high-frequency horn with a 100-degree beamwidth. The low/mid-frequency section includes two 4-inch cone transducers that work in parallel at low frequencies — delivering a combined

acoustic output — with one of the drivers rolling off at higher frequencies to prevent interference (due to comb filtering effects) in the crossover region. The proprietary UP-4XP drivers, which are manufactured at Meyer Sound's factory in Berkeley, California, are powered by three channels of onboard power amplification that include an active crossover, driver protection, and frequency and phase correction circuitry.

With IntelligentDC technology, the UP-4XP receives DC power and balanced audio from a single loudspeaker connector, available as Phoenix™ 5-pin male or sealed SwitchCraft® EN3™ 5-pin male. Powering the unit from an external source eliminates the need for wiring conduits while still preserving the advantages of self-powered systems. The UP-4XP's amplifier and signal-processing circuits store DC power and tolerate voltage drops, thereby accommodating light-gauge cables and lengthy cable runs.

The UP-4XP requires an external MPS-488HP IntelligentDC power supply. The single-

space 19-inch rack unit distributes DC power and balanced audio to up to eight UP-4XP loudspeakers, or other Meyer Sound IntelligentDC loudspeakers. Composite multiconductor cables, such as Belden® 1502 or equivalent, can deliver both DC power and balanced to loudspeakers at cable lengths up to 150 feet with just 1 dB of loss in peak SPL using 18 AWG wire. Longer cable lengths are possible with heavier wire gauges. Meyer Sound's RMS remote monitoring system is optionally available for the MPS-488HP.

The UP-4XP's durable cabinet is coated with a black textured finish and includes top and bottom mounting plates with 3/8"-16 or metric M10 threaded nuts. QuickFly mounting options include the MUB-UP4 U-bracket, MYA-UP4 cradle-style yoke, and 1-3/8" (35 mm) diameter pole-mount adaptor.

Other options include weather protection (with the sealed EN3 connector) and custom color finishes for installations and applications with specific cosmetic requirements.

FEATURES & BENEFITS

- Extraordinary fidelity and power capability in an ultracompact package
- Metal dome tweeter delivers a smooth high-frequency response
- Wide, symmetrical pattern covers a broad listening area
- Unique crossover design eliminates combing and yields a consistent midrange response
- Exceptional SPL to size ratio
- Supports long cable runs with light-gauge cables

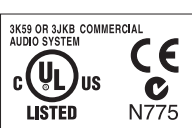
APPLICATIONS

- Frontfill and under-balcony fill coverage
- Theatrical sound reinforcement and special effects
- Portable and installed AV systems
- Compact voice reinforcement systems

UP-4XP SPECIFICATIONS

ACOUSTICAL		
Operating Frequency Range ¹	66 Hz – 18 kHz	
Frequency Response ²	72 Hz – 17.5 kHz ±4 dB	
Phase Response	360 Hz – 12 kHz ±45°	
Maximum Peak SPL ³	121 dB	
Dynamic Range ⁴	› 105 dB	
COVERAGE		
Horizontal	100°	
Vertical	100°	
CROSSOVER ⁵		
	1.5 kHz	
TRANSDUCERS		
Low Frequency ⁶	Two 4” low–frequency cone drivers	
High Frequency	One 1” metal dome tweeter	
CONNECTOR OPTIONS		
Wiring:	Phoenix 5–pin male	SwitchCraft EN3 5–pin male
DC Power (–)	Pin 1	Pin 1
DC Power (+)	Pin 2	Pin 2
Audio Shield, Chassis/Earth ⁷	Pin 3	Pin 3
Audio (–)	Pin 4	Pin 4
Audio (+)	Pin 5	Pin 5
AUDIO INPUT		
Type	Differential, electronically balanced	
Maximum Common Mode Range	±5 V DC	
Input Impedance	10 kΩ differential between positive (+) and negative (–) audio pins	
DC Blocking	Differential DC blocking up to the maximum common mode voltage	
CMRR	›50 dB, typically 80 dB (50 Hz – 500 Hz)	
RF Filter	Common mode: 425 kHz; Differential mode: 142 kHz	
TIM Filter	Integral to signal processing (<80 kHz)	
Nominal Input Sensitivity	–2.0 dBV (0.8 V rms) continuous average is typically the onset of limiting for noise and music	
Input Level	Audio source must be capable of producing +16 dBV (6.3 V rms, 9.0 V peak) into 600 Ω to produce the maximum peak SPL over the operating bandwidth of the loudspeaker	
AMPLIFIER		
Type	3–channel (class D)	
Output Power ⁸	500 W	
THD, IM, TIM	<.02%	
Load	4 Ω each low channel; 8 Ω high channel	
Cooling	Convection	
DC POWER		
Voltage Requirement	48 V DC	
Current Draw ⁹ : Idle Current	0.23 A average	
Maximum Long–Term Continuous Current (>10 sec)	1.00 A average	
Burst Current (<1 sec)	4.05 A average	
Maximum Instantaneous Peak Current	4.50 A peak	
Inrush Current	<4.0 A peak	

- NOTES:
1. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
 2. Measured free-field with pink noise at 1 meter, 1/3-octave frequency resolution.
 3. Measured free-field with music, referred to 1 meter.
 4. Taken from peak SPL, referred to A-wtd noise floor.
 5. At this frequency, the metal dome tweeter and top low-frequency driver (closest to the tweeter) produce equal sound pressure levels.
 6. Below 400 Hz, both low frequency drivers are active. At 400 Hz, the bottom low-frequency driver is attenuated by –3 dB and rolled off at higher frequencies. This reduces interaction in the higher frequencies (shorter wavelengths) of the tweeter and maintains optimum polar and off-axis frequency responses.
 7. Audio shield, chassis/earth through 220 kΩ, 1000 pF, 15 V clamped network to provide virtual ground lift at audio frequencies.
 8. Amplifier wattage based on the maximum unclipped burst sine-wave rms voltage the amplifier will produce into the nominal load impedance.
 9. Current draw measured at 48 V DC.



UP-4XP — 04.201.004.02 B2

Copyright © 2014
Meyer Sound Laboratories Inc.
All rights reserved

MEYER SOUND LABORATORIES INC.
2832 San Pablo Avenue
Berkeley, CA 94702

T: +1 510 486.1166
F: +1 510 486.8356

techsupport@meyersound.com
www.meyersound.com

ARCHITECT SPECIFICATIONS

The loudspeaker shall be a self-powered, full-range system; the transducers shall consist of two 4-inch low-frequency cone drivers and one 1-inch high-frequency metal dome tweeter. The loudspeaker system shall incorporate internal processing electronics and a three-channel amplifier, one channel for each driver. Processing functions shall include equalization, phase correction, signal division, and driver protection. The crossover point shall be 1.5 kHz. Amplifier channels shall be class D. Amplifier output power shall be 500 watts total for all three channels. Distortion (THD, IM, TIM) shall not exceed 0.02%.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: operating frequency range shall be 66 Hz to 18 kHz; phase response shall be

±45 degrees from 360 Hz to 12 kHz; maximum peak SPL shall be 121 dB at 1 meter, free field. Coverage shall be 100-degree horizontal by 100-degree vertical.

The loudspeaker shall be equipped with either a Phoenix 5-pin male or EN3 5-pin male connector (three pins for balanced audio and two pins for DC power). The audio input shall be electronically balanced with a 10-kΩ impedance and accept a nominal –2.0 dBV (0.80 V rms, 1.12 V peak) input signal. DC blocking and RF filtering shall be provided, and CMRR shall be greater than 50 dB and typically 80 dB (50 Hz to 500 Hz).

Power requirements for the loudspeaker shall be a Meyer Sound MPS-488HP IntelligentDC power supply capable of delivering 48 V DC. Current draw

for the loudspeaker during burst (< 1 sec) shall be 4.05 A average at 48 V. Current inrush during turn-on shall not exceed 4.0 A peak at 48 V.

All components shall be mounted in an acoustically vented trapezoidal enclosure constructed of premium birch plywood with a black textured finish. Top and bottom rigging plates shall be available in 3/8"–16 or M10 threads. The front protective grille shall be powder-coated, hex-stamped steel with black mesh screen.

Dimensions for the loudspeaker shall be 13.84 inches wide x 5.54 inches high x 5.25 inches deep (352 mm x 141 mm x 133 mm) without mounting bracket. Weight shall be 12.2 lbs (5.5 kg).

The loudspeaker shall be the Meyer Sound UP-4XP.