

IntelligentDC Systems

smart alternatives for distributed audio



thinking sound



Smart. Elegant. Cost-effective.

For AV installations demanding the utmost in audio quality, Meyer Sound offers an innovative alternative: IntelligentDC self-powered systems with remote power supplies. This exclusive technology opens up a broad range of options for system designers, consultants, integrators and contractors.

IntelligentDC self-powered systems provide all the sonic advantages and signal routing flexibility of Meyer Sound's AC-powered loudspeakers. However, because IntelligentDC systems utilize DC power from a remote rack-mount power supply, there is no need for AC mains service—requiring Class 1 electrical circuits—at each loudspeaker location. Consequently, as with conventional constant-voltage solutions, these new systems can be installed without conduit*. The amplifier and signal-processing circuits store DC power for peak demands, allowing the flexibility of lengthy cable runs while preserving the advantages of self-powered systems. Also, since power and balanced audio are carried on a single multi-conductor cable terminated by a 5-pin connector, installation times and costs are comparable to those of conventional constant-voltage systems.

However, the audio performance is beyond comparison. In any application—from foreground music in an intimate restaurant to auxiliary systems in large performance halls—the audible superiority of Meyer Sound self-powered technology will be noticed, and appreciated. All two-way loudspeakers are bi-amplified systems with active crossovers, exhibiting flat frequency and phase responses that cannot be achieved using passive crossovers. Dedicated limiters protect and extend the life of the drivers and help preserve the linearity at any level.

* In North America, electrical codes identify low voltage and low current electrical wiring methods as Class 2. Europe has also adopted a unified safety standard that identifies a low voltage and low current electrical wiring as Protective Extra Low Voltage (PELV).

compact, self-powered systems with
remote IntelligentDC power supplies
exclusively from Meyer Sound



O₂ Blue Room
Berlin, Germany

Self-powered Systems: Clear Advantages

Meyer Sound self-powered systems offer clear advantages over conventional solutions—whether constant-voltage or low-impedance (2–16 ohm)—that employ separate amplifiers and loudspeakers.

Superior performance

Amplifiers and processing are ideally matched to each driver, with no long speaker cables or transformers in between to drain power, limit bandwidth or add distortion and non-linear behavior.

Enhanced intelligibility

Low distortion combined with flat frequency and phase responses reduce listener fatigue and also satisfy the STI requirements for emergency voice alarm applications.

No amplifier racks

Equipment rooms can be smaller, with reduced cooling requirements.

Improved reliability

Amplifiers, processing and circuit protection are all integrated, preventing potential damage from improper configuration or operator misuse, thus extending the life of the drivers.

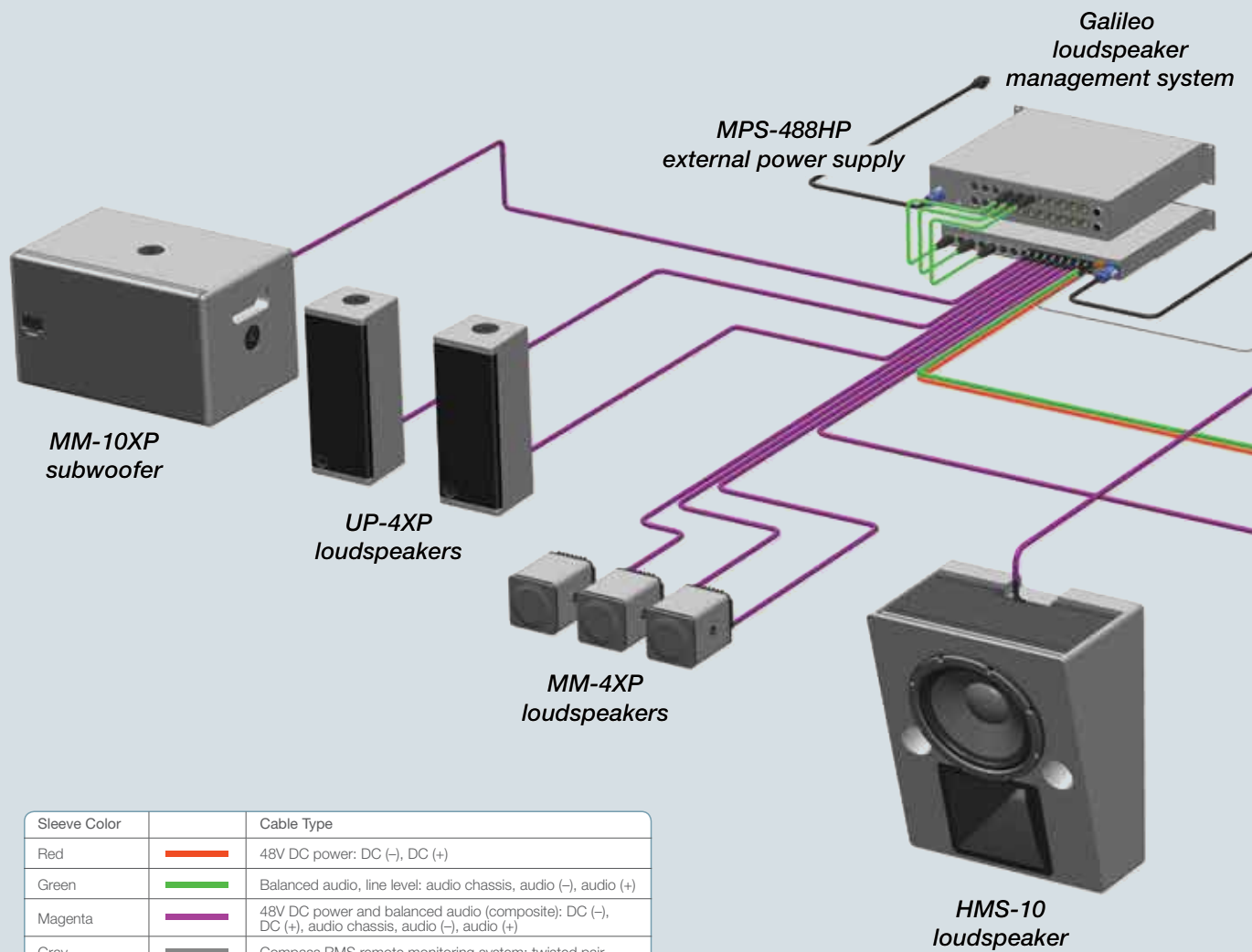
Consistency and quality

All Meyer Sound products, transducers included, are manufactured at our headquarters, in Berkeley, California, according to strict quality-control processes, enabling a level of product consistency unparalleled in the industry.

significant performance and
logistical benefits over
constant-voltage systems



Houston Airport
Houston, Texas



IntelligentDC Self-Powered: Visualize the advantages.

All the advantages of self-powered systems remain, including superior audio performance and the flexibility of sending separate audio programs to each loudspeaker. What you give up are the amp racks (and extra cooling) as well as long speaker cable runs or Class 1 wiring conduits.

An Intelligent Alternative to Constant Voltage

Some installation scenarios previously dictated a constant-voltage solution, even though doing so inevitably compromised audio performance. These were normally installations with multiple loudspeaker locations, considerable distance between equipment rooms and loudspeaker locations, and no readily available AC power connections at all loudspeaker locations.

Now Meyer Sound's IntelligentDC systems offer a new solution that combines the best of both worlds. The cost-savings of Class 2 wiring are retained, but with significant benefits compared to conventional constant-voltage solutions.

Lower distortion and wider bandwidth

For significantly better music quality and voice intelligibility.

Higher SPL output

For more headroom and greater throw distance. In many installations, this translates into fewer loudspeakers and more pleasant aesthetics.

Tighter, more powerful bass response

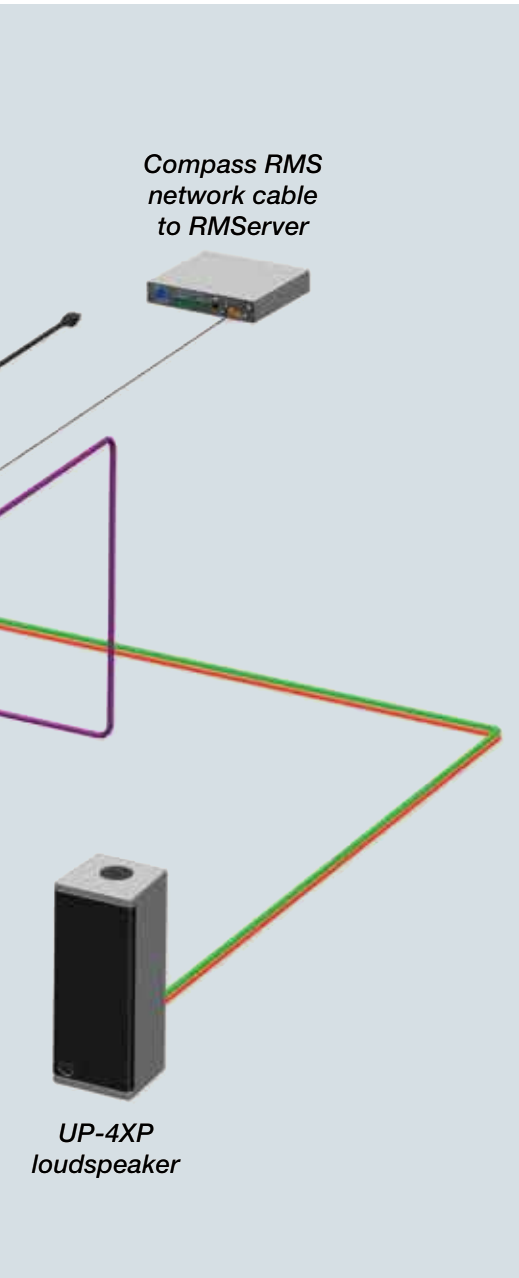
Down to 25 Hz with the UMS-1XP subwoofer.

Consistent loudspeaker-to-loudspeaker performance

For easier tuning of high-performance, multi-loudspeaker installations.

Amplifiers contained within loudspeaker cabinets

Eliminating transformer and line losses between remote amplifiers and loudspeakers.



Visibly Attractive. Visibility Optional.

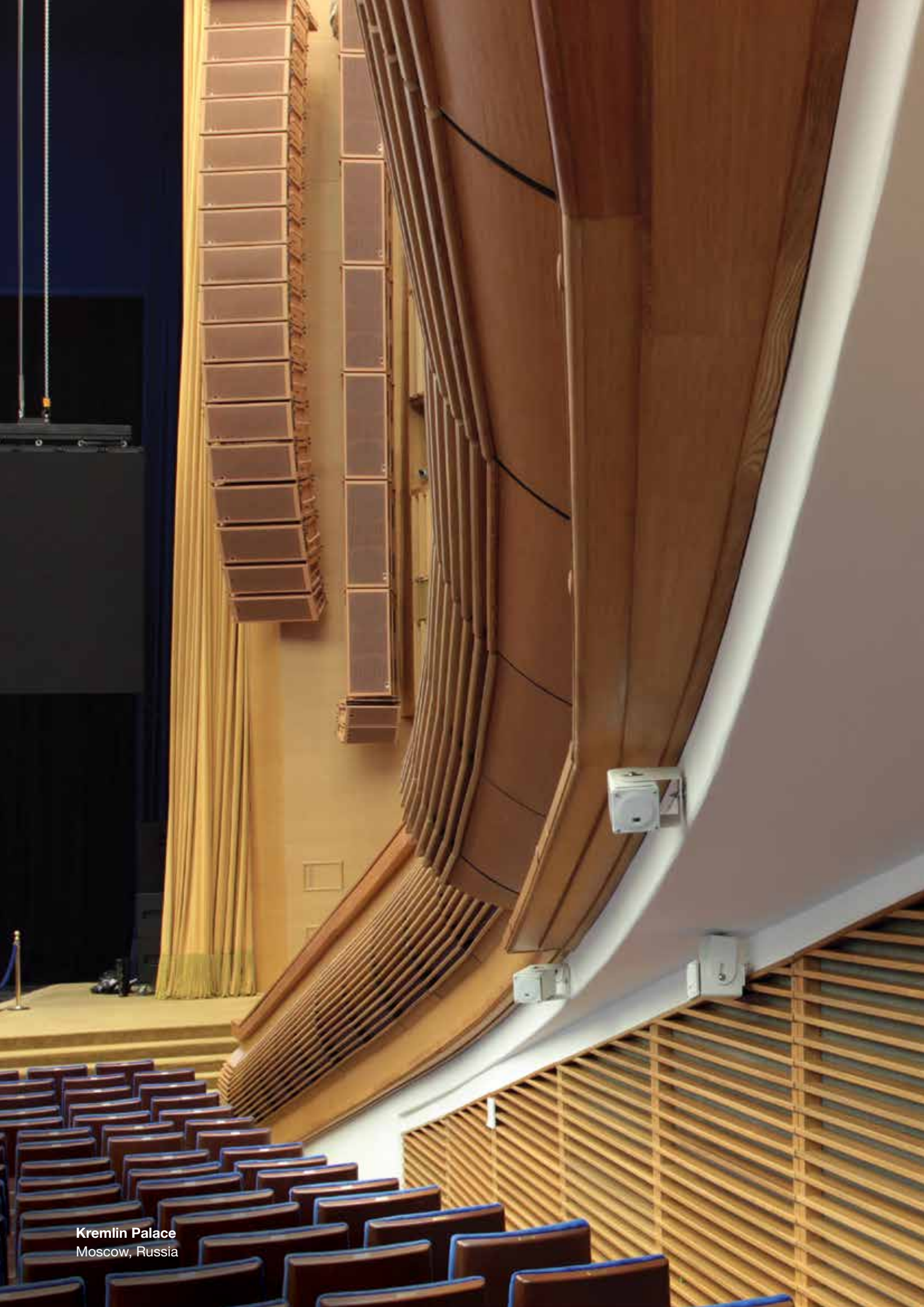
Meyer Sound installation loudspeakers with IntelligentDC technology are delightfully discreet. When surface mounted using the adjustable U-bracket, the sleek cabinets complement any elegant décor. Custom colors help integrators deliver quality sound while meeting challenging aesthetic requirements.

Applications

- AV playback systems for museums, trade show exhibits and corporate presentations.
- Foreground music and PA auxiliary systems for bars, restaurants, nightclubs, retail outlets, and cruise ships.
- Compact PA systems for meeting rooms.
- Front, underbalcony and spot fill in theatres, concert halls and places of worship.

for the architect's eye
and the music lover's ear





Kremlin Palace
Moscow, Russia

Meyer Sound Loudspeakers with IntelligentDC Technology

LOUDSPEAKER	OPERATING FREQUENCY RANGE	MAXIMUM PEAK SPL	COVERAGE	WEIGHT	DIMENSIONS
 <p>UPJ-1XP Compact VariO Loudspeaker</p>	55 Hz–20 kHz	128 dB	80° x 50° or 50° x 80° (Rotatable horn)	43 lbs (19.5 kg)	11.15" w x 22.43" h x 12.25" d (283 mm x 570 mm x 311 mm)
 <p>UP Junior-XP UltraCompact VariO Loudspeaker</p>	70 Hz–20 kHz	126 dB	80° x 50° or 50° x 80° (Rotatable horn)	26 lbs (11.8 kg)	9.00" w x 19.04" h x 10.20" d (229 mm x 484 mm x 259 mm)
 <p>UPM-1XP UltraCompact Wide-Coverage Loudspeaker</p>	75 Hz–20 kHz	123 dB	100° Symmetrical	17 lbs (7.7 kg)	6.85" w x 18.00" h x 7.70" d (174 mm x 457 mm x 196 mm)
 <p>UPM-2XP UltraCompact Narrow-Coverage Loudspeaker</p>	80 Hz–20 kHz	123 dB	45° Symmetrical	17 lbs (7.7 kg)	6.85" w x 18.00" h x 7.70" d (174 mm x 457 mm x 196 mm)
 <p>UP-4XP UltraCompact Loudspeaker</p>	66 Hz–18 kHz	121 dB	100° Symmetrical	12.2 lbs (5.53 kg)	13.84" w x 5.54" h x 5.25" d (352 mm x 141 mm x 133 mm)
 <p>MM-4XP Self-Powered Miniature Loudspeaker</p>	120 Hz–18 kHz	113 dB	80° Symmetrical	4.2 lbs (1.91 kg)	4.04" w x 4.04" h x 5.72" d (103 mm x 103 mm x 145 mm)
 <p>MM-4XPD Directional Self-Powered Miniature Loudspeaker</p>	120 Hz–18 kHz	113 dB	Hypercardioid response (see datasheet for more info)	5.2 lbs (2.36 kg)	4.04" w x 4.04" h x 7.95" d (103 mm x 103 mm x 202 mm)

LOUDSPEAKER	OPERATING FREQUENCY RANGE	MAXIMUM PEAK SPL	COVERAGE	WEIGHT	DIMENSIONS
 <p>HMS-5 Compact Surround Loudspeaker</p>	55 Hz–18 kHz	123 dB	80° Symmetrical	19.6 lbs (8.89 kg)	15.0" w x 12.0" h x 9.7" d (381 mm x 305 mm x 246 mm)
 <p>HMS-10 Surround Loudspeaker</p>	55 Hz–18 kHz	126 dB	80° Symmetrical	29.1 lbs (13.2 kg)	15.50" w x 19.50" h x 12.48" d (394 mm x 495 mm x 317 mm)
 <p>HMS-12 High-Power Surround Loudspeaker</p>	59 Hz–18 kHz	130 dB	100° Symmetrical	46 lbs (20.87 kg)	16.80" w x 25.12" h x 9.78" d (427 mm x 638 mm x 248 mm)
 <p>HMS-15 High-Power Surround Loudspeaker</p>	50 Hz - 18 kHz	133 dB	80° Horizontal, 50° Vertical	64 lbs (29 kg)	19.0" w x 29.09" h x 12.07" d (483 mm x 739 mm x 307 mm)
 <p>UMS-1XP UltraCompact Subwoofer</p>	25 Hz–160 Hz	127 dB	360° Single unit; varies for multiple units	58 lbs (26.3 kg)	22.75" w x 16.3" h x 17.51" d (578 mm x 414 mm x 445 mm)
 <p>MM-10XP Miniature Subwoofer</p>	33 Hz–228 Hz	123 dB	360°	26.7 lbs (12.11 kg)	19" w x 11" h x 12" d (482 mm x 279 mm x 305 mm)

IntelligentDC Power Supplies

MPS-488HP Power Supply

The MPS-488HP power supply was designed for installations of up to eight loudspeakers employing IntelligentDC technology. It receives eight channels of balanced audio from XLR-F inputs and routes the audio, along with high-current DC power, to the eight output channels. Rear panel switches allow individual I/O assignment, or grouping of any or all adjacent channels. Output connectors are either Phoenix 5-pin or Switchcraft EN3 5-pin. When equipped with the RMS option, the MPS-488HP allows real-time monitoring of DC loudspeakers via Meyer Sound's Compass RMS remote monitoring system.



MPS-488HPe

IntelligentDC power supply
with EN3 connectors and
optional RMS module



MPS-488HPp

IntelligentDC power supply
with Phoenix connectors and
optional RMS module

Other Remote Power Supplies

MPS-481 Power Supply

The MPS-481 was designed exclusively for powering a single MM-4XP loudspeaker (any version).



MPS-481

MM-4XP power supply

Wiring and Connectors

Meyer Sound loudspeakers with remote DC powering offer several different connector options. All can be ordered with Phoenix 5-pin plug-in connectors for quick, secure connection in any installation. In addition, many of the loudspeakers—those likely to be used in theatrical and corporate AV applications— can be ordered with the rugged EN3 circular 5-pin connector.

The larger and more powerful loudspeakers—those well suited to outdoor applications in theme parks, themed spectaculars and open-air hospitality installations—also offer the robust and environmentally sealed and locking ECO-M 7-pin connector. When ordered in conjunction with the full weather protection option, the ECO-M connector allows permanent installation in exposed outdoor locations.

Model	Phoenix 5-Pin	EN3 5-Pin	ECO-M 7-Pin
UPJ-1XP, UPJunior-XP, UPM-1XP, UPM-2XP, UMS-1XP	✓	✓	✓
UP-4XP, MM-10XP, MPS-488HP	✓	✓	
HMS-5, HMS-10, HMS-12, HMS-15	✓		
MM-4XP, MM-4XPD, MM-4XPV		✓	

All loudspeakers can be wired with a single 5-conductor cable such as Belden® 1502. For longer cable runs, particularly for larger and more powerful loudspeakers, two cables can be wired to the same connector: a larger gauge, 2-conductor cable for the DC power and a smaller gauge 3-conductor cable for the balanced audio.



Phoenix connector



EN3 5-pin connector



ECO-M 7 connector

Mounting and Rigging Options

A selection of optional mounting and rigging hardware makes it easy to position and orient IntelligentDC loudspeaker systems precisely where wanted, and at precisely the right angle, whether in portable applications or permanent installations.

U-Bracket – Ideal for a wide variety of surface mounting applications (walls, ceilings or stage lips) U-brackets allow the loudspeaker to be angled or tilted to optimize coverage. Models: MM-4XP, MM-4XPD, UP-4XP, UPM-1XP, UPM-2XP, UMS-1XP, UPJunior-XP, UPJ-1XP, HMS-5, HMS-10, HMS-12, HMS-15, MM-10.



Mounting Yoke – The mounting yoke assembly suspends a single loudspeaker and allows an almost infinite adjustment of horizontal and vertical orientation. Models: UP-4XP, UPM-1XP, UPM-2XP, UPJunior-XP, UPJ-1XP, HMS-5, HMS-10, HMS-12, HMS-15, MM-10.



Array Adapter – Array adapters provide a solid connection between loudspeakers to form a horizontal or vertical array. An adjustment slot adjusts the distance between the loudspeaker fronts to achieve the desired angle between loudspeakers. Facilities are provided for pick-up points and pull-back. Most adapters also support use with third-party pole-mount systems. In addition, the array adapter can be used for positioning the UPJ-1XP and UPJunior-XP as a floor monitor, with the front adjustment being used to adjust the angle of the loudspeaker. Models: UPJunior-XP, UPJ-1XP.

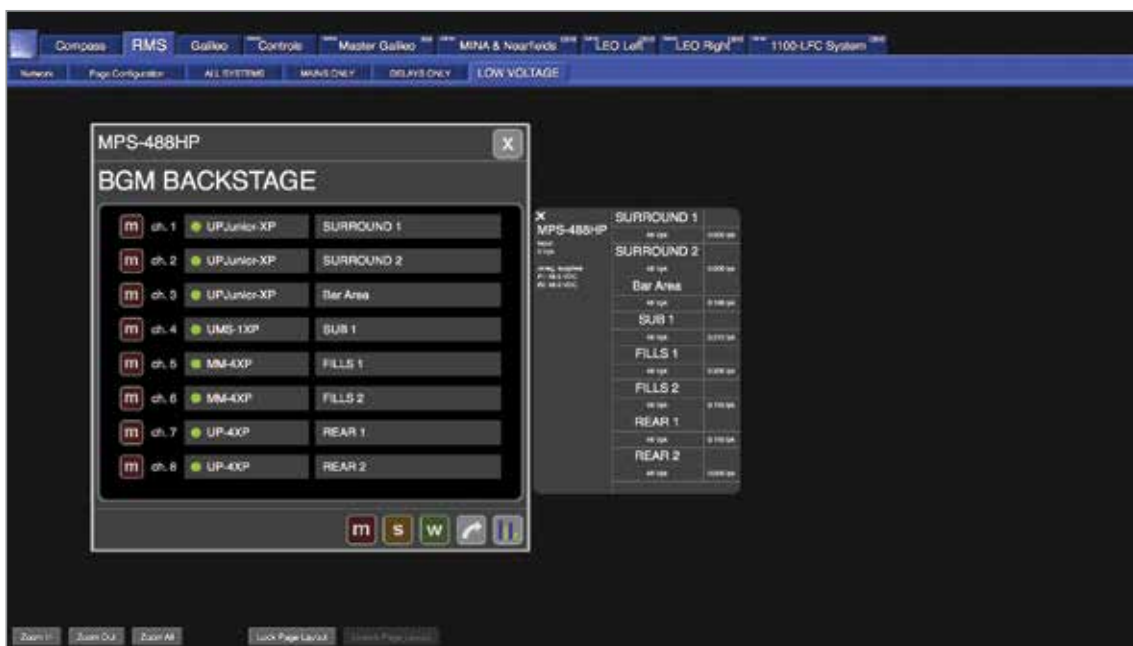


Pole Mount – Pole mount adapters provide a safe way to mount loudspeakers on poles or stands. Meyer Sound offers a pole mount adaptor for UP-4XP, UPM-1XP and UPM-2XP to be mounted onto a 1 3/8" (35 mm) diameter pole (not included). UPJunior-XP and UPJ-1XP have threaded points compatible with common third-party pole mount kits.



Compass RMS Remote Monitoring System

The Compass RMS remote monitoring system provides at-a-glance monitoring of complex loudspeaker systems on a remote Windows or Mac computer, allowing an operator to evaluate overall performance and quickly identify potential problems. Compass RMS tracks input level, voltage and DC current for each loudspeaker, and also enables selective loudspeaker muting. In IntelligentDC systems, individual loudspeakers are integrated into the RMS network via an MPS-488HP power supply equipped with the RMS option. The RMS module in the MPS-488HP connects to an RMServer, which integrates external control and notification (such as fire mute) and is programmable to provide e-mail fault notifications even when no control computer is connected. The RMS tab of the Compass software gives a clear graphic display of system status, enabling comprehensive supervision by personnel at all levels.



COMPASS RMS
software interface

Urban Outfitters Corporate Headquarters Philadelphia, Pennsylvania

Fashion trendsetting Urban Outfitters expected full-range contemporary music throughout its corporate headquarters, housed in a refurbished industrial structure. Particularly problematic was the cavernous main promenade, where loudspeakers needed to blend into the chic décor, but had nowhere to hide. The solution was to deploy a system of custom-painted MM-10XPD directional miniature loudspeakers and MM-10 miniature subwoofers.



“I was shocked by what came out of those little MM-4XPDs. At first I was skeptical that they could maintain full articulation up in such high ceilings. Meyer Sound assured me they would—and they certainly did.”

DAVE BROTMAN

Owner, DBS Audio Systems

Buddha-Bar Mexico City, Mexico

Music is integral to the ambience at Buddha-Bar Mexico, where DJs mix eclectic music through a discreet yet potent system of Meyer Sound self-powered loudspeakers. For robust reproduction in the lounge area, 15 UP-4XP loudspeakers are deployed in stereo zones, with bass support from five M1D-Sub subwoofers. On the terrace, where music must compete with street sounds, 24 MM-4XP miniature self-powered loudspeakers are augmented by nine MM-10 miniature subwoofers.



“The quality of music reproduction is really amazing on the system. It adds to the restaurant’s atmosphere and keeps the customers happy.”

EDUARDO LÓPEZ-GUERRERO

Operations Manager
Buddha-Bar Mexico

The Dubai Mall Dubai, United Arab Emirates

939 MM-4XPs provide high-quality audio for discerning shoppers. Home to 1,200 retail businesses, The Dubai Mall required a system that could provide intelligible yet discreet background music for its shoppers. For this task, 939 self-powered Meyer Sound MM-4XP loudspeakers were deployed across three floors of the luxurious main shopping area, requiring more than 37 miles of cabling. The compact loudspeakers are custom-colored to blend into the mall's interior design.



“The MM-4XPs effortlessly reproduce both speech and music. Anyone who walks around the mall now will notice the difference. It’s remarkably intelligible and balanced. Even walking down a 200-meter corridor you will not notice the sound level changing.”

MALEK GHORAYEB

General Manager
Systech Middle East

Hermitage Amsterdam Amsterdam, Netherlands

History benefits from modern audio systems. The Hermitage Amsterdam museum complex combines aesthetic elegance with modern audio technology to offer a heightened experience as visitors journey through the remarkable art collection of Russian heritage. The MM-4XP loudspeakers are mounted to the chandeliers in the church hall and are integrated into the décor of the upscale Neva Restaurant to provide subtle reinforcement for ambient soundtracks.



“Our requirements called for state-of-the-art audio systems in the various rooms, from the study centre and the church hall, to the most challenging of all: the reverberant auditorium. The Meyer Sound system can be easily adapted to meet our specific needs at any given time.”

JULIE VEGTER

Head of Programming
Hermitage Amsterdam

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