

M10PF

The MacPherson M10PF is a full-bandwidth, multi-application loudspeaker that excels in both audio quality and application flexibility. The primary application for the M10PF is in overhead suspension applications. Multiple threaded attachment points allow a variety of installations to be accommodated. The very compact multi-angled cabinet design also allows the M10PF to be used as a low-profile floor monitor or "wedge." The M10PF can also be stand mounted with the addition of an optional pole-mount adapter. The 2-way design incorporates a sophisticated crossover network, allowing a single amplifier channel to produce high SPL with minimum frequency and phase anomalies. The internal components include a 10-inch woofer and a 1-inch high-frequency compression driver coupled to a constant-directivity horn. The high-frequency response pattern is 60-degrees in both the horizontal and vertical axes.

The M10PF can be effectively used for a wide variety of live and playback sound reinforcement applications. These include corporate A/V, houses of worship, theater, and theme parks. The M10PF is designed expressly for use in single-cabinet point-source applications, including stereo and split point-source configurations. The M10PF's wide dispersion and cabinet geometry is optimized for applications other than narrow point-source horizontal arrays.

A total of twelve threaded attachment ("rigging") points allow the M10PF to be used in numerous permanent and portable applications. An optional "yoke" mounting bracket allows an M10PF to be supported horizontally.

The clean-lined powder-coated aluminum bracket offers two mounting profiles. The normal mounting profile allows the cabinet to be adjusted over a 360-degree range.



The "tight" profile was provided for height-limited ("tight hang") applications, e.g., attaching M10PF cabinets to a trade-show-related lighting truss. Two of the M10PF's attachment



points are provided for attachment of an optional "pole cup" mounting adapter. When used in floor monitor applications the M10PF's integral thermoplastic "skid plates" protect the cabinet's finish.

Field experience has proven the M10PF's value. One user apologetically described the M10PF in non-technical but real-world terms: "it's really cute, and sounds great!" While possibly not an endorsement that an engineer would appreciate, it does confirm the M10PF's successful design.

Major strengths of the M10PF include its compact overall size and excellent audio quality. By utilizing a high-performance 10-inch woofer the enclosure's dimensions could be scaled without compromising the desired audio quality. The enclosure's size and carefully designed proportions are such that it can serve unobtrusively in many integrated overhead sound-lighting applications, as well as finding use in floor "wedge" and various utility situations. If the overhead suspension capabilities of the M10PF are not required, please refer to the companion M10P.

- Features**
- Smooth voice and music reproduction
 - Compact multi-angle design
 - 2-way design with integral crossover
 - Rugged hardwood plywood enclosure
 - Integral surface-protecting "skid plates"
 - Overhead suspension attachment points

M10PF

The M10PF's audio performance is well behaved in both the frequency and phase domains, resulting in superb voice and music reproduction. An additional benefit is that unwanted interactions between loudspeakers and live microphones are minimized. This can increase a system's gain-before-feedback performance. The M10PF also exhibits a carefully controlled off-axis power response. This can reduce unwanted room interactions, resulting in improved intelligibility and vocal clarity. Carefully implemented bracing inside the enclosure minimizes the generation of unwanted vibrations. Internal damping materials were carefully selected for optimal performance. What's the result when human beings listen to the M10PF? A consistently positive reaction to the audio quality both during controlled (demo) listening and actual use.



Inside and out, the M10PF is a fully professional-grade product. The enclosure is made of hardwood plywood, providing durability as well as minimal audio resonance. The textured epoxy paint finish provides a rugged yet elegant appearance. The M10PF's low profile was designed to minimize obstruction of sight lines. An integral handle provides assistance during transportation and set up. Two NL4 connectors are located in a recessed area of the cabinet, offering both aesthetic and functional benefits.

When describing a product it's important to point out its limitations as well as its strengths. While the M10PF's overall audio quality is very good, its compact size and design criteria serve to limit its performance in the low-frequency (sub-100 Hz) range. The M10PF's design goal was

for smooth phase-coherent audio response, rather than extending the low end with "tricks" such as aggressive filters or sub-optimal port-tuning. The M10PF's low-frequency performance should not pose a problem for the intended applications. However in other cases, such as in front-of-house applications, external subwoofers would generally be required. In addition, the M10PF is also not designed for applications where extreme SPL levels are required. For example, for rock n' roll applications the M10PF would not be applicable as a drum monitor. Does the M10PF go "loud"? Certainly. But it's not a high-power design in the absolute sense. Again, the M10PF works great for its intended applications!

M10PF Specifications

Standard Configuration

M10PF: Full range, black finish

Frequency Response (on axis)

± 2 dB, 90 Hz to 17 kHz

Coverage (between -6 dB points)

Horizontal: 60 degrees

Vertical: 60 degrees

Nominal Impedance

8 ohms

Sensitivity

96 dB, broadband, one watt, one meter

Maximum SPL

117 dB, broadband, one meter, one minute

Recommended Amplifier Power

200 watts RMS into 8 ohms

Connectors

Two, Neutrik® NL4

Attachment Points

Twelve, 5/16-18 threads

Components

LF: 10-inch woofer

HF: 1-inch exit compression driver

Enclosure

Hardwood plywood, textured epoxy finish, powder-coated perforated steel grill with open-cell foam backing

macpherson

www.macpherson-inc.com

M10PF

Dimensions

13.4 inches high (34.0 cm)
19.5 inches wide (49.5 cm)
15.2 inches deep (38.6 cm)

Weight

35.9 pounds (16.3 kg)

Applications

Overhead suspension, floor monitor ("wedge"), stand-mounted (with optional bracket), or utility use

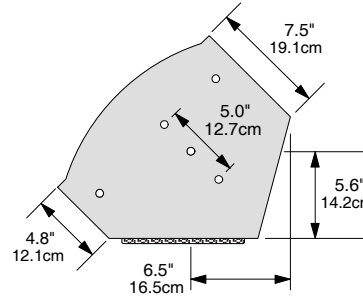
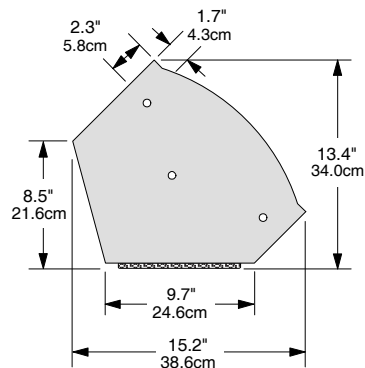
Options

"Yoke" mounting bracket for overhead suspension applications. Available from MacPherson, bracket material is aluminum with a black power-coat finish.

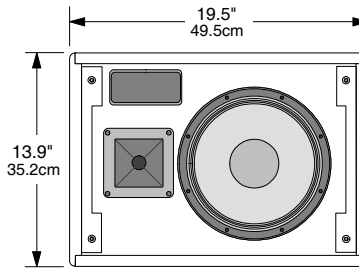
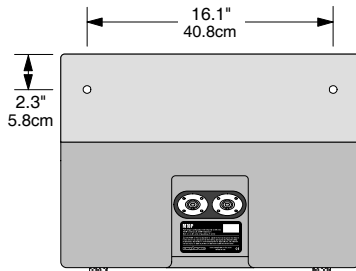
Warranty

Three years from date of original purchase

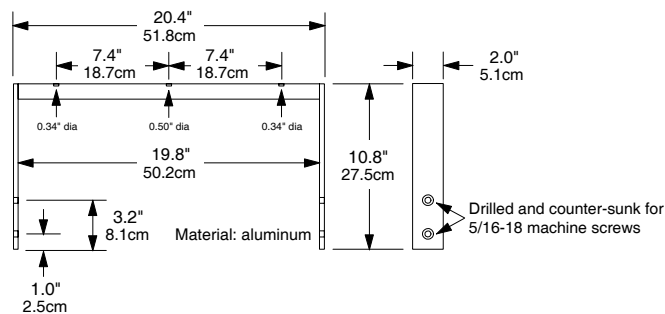
Contents subject to change without notice. Dimensions provided for general reference only.



Twelve 5/16-18 threaded attachment points provided; points on 5.00-inch spacing compatible with Ultimate Support BMB-200K mounting bracket



Optional Yoke for M10PF



macpherson

www.macpherson-inc.com