

PRODUCT INFORMATION GUIDE

Mission *Pilastro* Loudspeaker

Construction

Enclosure	Multi-way system with ABR bass loading and pressure release midrange enclosure.
Construction	'Granitech' moulded enclosure with 20mm laminated wood trim.
Damping	Internal fire-retardant anechoic grade foam damping inserts lined with Sonafil sound absorbent.

Electrical

L.F. Unit	4 x 200mm (8") air dried Nomex cone with 40mm voice coil and double layer high temperature aluminium former. 6 x 200mm (8") ABR with air dried Nomex cone.
M.F. Unit	2 x 180mm (7") natural hemp cone with rubber surround and Kapton voice coil former.
H.F. Unit	28mm (1½") viscous-laminated ring dome, ferrofluid-cooled, with neodymium magnet and pressure controlled rear chamber.

Cross-Over network:

L.F Unit	Phase corrected 2 nd order.
M.F Unit	Acoustic 2 nd order.
H.F Unit	2 nd order.
Terminals	Multi-way, gold-plated, triwireable binding posts.

Specifications

Enclosure Type	3-Way ABR loaded, floor-standing tower.
Frequency Response ±3dB	25Hz to 48kHz
-6dB Point	22 Hz
Sensitivity SPL/m/2.83V	95 dB
Cross-Over Frequency	110Hz and 2.2kHz
Effective Volume	82 Litres
Nominal Impedance	6 Ohms (minimum 3.2 Ohms)
Recommended Amplifier	15 - 500 W/C
Cabinet Dimensions (H x W x D)	1460 x 309 x 510 (mm) 57.5 x 12.2 x 20.1 (inches)
Finishes	To order
Net weight	155 Kg (per speaker cabinet)

Features

'Granitech' ultra rigid cabinet
Pressure release midrange enclosure
Wide bandwidth HF unit
High sensitivity
Air dried Nomex cone bass driver
Natural Hemp mid driver
Ring dome HF unit
ABR bass loading
Hard wired audiophile grade crossover

Benefits

- Eliminates cabinet coloration and structural resonance
- Allows natural 'breathing' of midrange units – increases effective internal volume
- Pushes HF distortion components beyond audibility – suitable for SACD and DVD Audio sources.
- Improves dynamic behaviour of any amplifier – suitable for low output valve amplifiers.
- Controlled cone behaviour for low distortion, powerful bass
- Optimum rigidity and mass controlled, diaphragm material – improved transient attack and efficiency – natural and accurate midrange characteristics.
- Highly refined, ultra-low distortion, wide bandwidth HF unit.
- Tight control of bass extension with minimum distortion.
- Maximum signal transfer from amplifier to drive units.

Mission Pilastró

Mission's Pilastró is beautifully harmonious. Gone are the sharp, rectangular edges that personify conventional speakers. The gently flowing curves of the Pilastró offer not just elegance but a streamlining for sonic waves that removes disturbing diffraction effects. The result is a speaker that fills the room with beautiful sound effortlessly.

Beneath the superbly styled and finished cabinet lies a wealth of technological sophistication. Every component part of the Pilastró has been selected for optimum acoustic performance. The result is a triumph of engineering dedicated to revealing the passion and emotion that encompass music reproduction at its finest.

- A multitude of drive units are employed to achieve unparalleled sound quality over an astonishing bandwidth. Precision engineering of each drive unit and its component materials married to advanced crossover techniques provides smooth, seamless sonic output from a seismic 22Hz to an ultrasonic 56kHz. The result is excellent transparency through to the source - all you'll hear is the music.
- The Mission Pilastró has been designed to achieve an astonishing sensitivity of 95dB of acoustic output for 1 Watt of amplifier power. Put into context the Mission Pilastró requires just 60 Watts to attain a 105dB crescendo. Just imagine what that does for dynamic headroom. A solid-state amplifier will be just coasting along, even during the most demanding musical peaks, while users of tube amplifiers will welcome the easy breathing nature that these speakers introduce. Overall distortion is dramatically reduced whilst the natural dynamic swings and moods of any musical composition is fully revealed.
- Even that bugbear of the amplifier-speaker interface – wildly swinging impedance phase angles – has been taken into account in the design of the Pilastró. To obtain the optimum performance from the drive units and enclosure, the crossover includes elements which effectively compensate for the driver impedance peaks. This has the by-product of making the speaker an 'easy load' for the amplifier to drive, so you can be sure that whatever amplifier is used, the Mission Pilastró will make the best of its output.
- It has long been said that the best loudspeaker cabinet is no cabinet at all. The next best cabinet is that of the Mission Pilastró. Formulated from a granular structure that mimics granite but achieves the fine surface finish of highly polished marble, the main enclosure material, to which all the drive units are attached, is acoustically inert. Tap the enclosure surface and you will hear how 'quiet' it is. Accordingly the enclosure plays no part in the acoustic output of the Mission Pilastró – all you hear is the output of the drive units.
- Normally such a rigid enclosure would pass all vibration from the bass units to whatever the speaker is standing on. In past designs efforts such as decoupling, isolation and mass damping techniques have been used to try and control vibration. Mission engineers approached the problem directly by removing the source of vibration. Each bass unit is horizontally opposed by its partner and linked via a force pipe. The force generated in each bass unit chassis by extreme cone movement is cancelled by the opposing force from its partnering bass unit so effectively that the bass units can be allowed to 'float' on the enclosure fixing points. As well as reducing vibration, transient impact is improved as all the energy is now devoted to cone movement. What you hear is clean, clear bass performance with exceptional precision to beat and rhythm – the cornerstone of musical energy.

- Mounted on the front of the svelte enclosure is a combination of advanced midrange and treble drivers. Midrange output is handled by two 18cm drivers that feature a unique formulation cone that uses natural hemp as its constituent material. By controlling resonances within the cone via a double roll surround, each musical note starts and stops precisely with no overhang or blurring of the musical message. A natural material for a natural sound that brings uncanny realism to vocals and instruments.
- The highest octaves within the bandwidth of human hearing and beyond are produced by a new ring dome treble unit that maintains efficient high frequency output to 56kHz and above. Though only bats can hear frequencies this high, the design effort is not wasted. By moving the upper frequency limit beyond audibility, our engineers have also pushed distortion elements into the inaudible region and are able to maintain exact transient performance within the audible range. Cymbals shimmer, strings soar and percussion is precise.