



## 40i Floor Standing Speaker - Gloss Black

MO40IGB

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Floorstanding speaker featuring a Folded Motion® tweeter, 5.5-inch aluminum cone midrange driver, and dual 6.5-inch aluminum cone woofers with a rear-firing bass port. Available in three stylish finishes: gloss black, matte white, and red walnut.

The secret to Motion 40i's outstanding performance lies in its Folded Motion® tweeter, 5.5-inch aluminum cone midrange driver, dual 6.5-inch aluminum cone woofers with a rear-firing bass port, and a proprietary Vojtko crossover network. This double woofer design produces vibrant, accurate deep bass performance. Motion 40i delivers the classic broad soundstage of the Motion Series from a newly designed enclosure enhanced by the slightest of modifications, including the drive-stabilizing dust cap design, stiffened motor suspension, and low-mounted woofers to reduce an acoustically harmful phenomenon known as floor bounce. The speaker's enclosure sports a reinforced baffle and a fabric grille. Available in three stylish finishes: gloss black, matte white, and red walnut.

### Features

- **Low Frequency Driver**
  - Two 6.5" (16.5cm) aluminum cone with cast polymer basket. Non-resonant asymmetrical chamber format. Rigid structured dust cap to reduce cone break-up modes.
- **Mid Frequency Driver**
  - 5.5" (14cm) aluminum cone with cast polymer basket. Non-resonant asymmetrical chamber format. Rigid structured dust cap to reduce cone break-up modes
- **High Frequency Driver**
  - 1" x 1.4" (2.6cm x 3.6cm) Folded Motion Transducer with 5.25" x 1.75" (13.3cm x 4.4cm) diaphragm.
- **Folded Motion Tweeters**

MartinLogan's signature Folded Motion tweeter utilizes an extremely low mass diaphragm that "squeezes" air, thus demanding significantly less excursion than the typical 1-inch dome tweeter. Its folded design allows for a much larger surface area (compared to that of a regular 1-inch dome tweeter), controlled dispersion characteristics, and vanishingly low distortion. It's a miracle of audio engineering that's able to deliver much of the high-frequency detail and speed of a large, dynamic electrostatic panel in a small space. Folded Motion XT tweeters, advanced thin-film transducer technology even further, with a 40% larger radiating surface and 80x30-degree controlled dispersion. This tweak increases audible bandwidth without sacrificing details and minimizes distortion to an unprecedented level while increasing efficiency and the tweeter's already lightning-fast response time. The result—superior realism and alarming specificity is aurally astounding, and only by MartinLogan.

- **Powerful Aluminum Cone Mid-Frequency and Bass Drivers**

Custom built, low-distortion drivers pair high-power magnet structures with aluminum cone diaphragms to deliver massive excursion and sound output, preserve minute bass details, and maximize power handling capability, all without a hint of distortion. A unique concave dust cap design reinforces the strength and rigidity of the cone while reducing break up modes.

The use of aluminum for cones maximizes rigidity and strength of the drivers without adding excessive weight. This, along with the exceptional damping properties of aluminum, ensures the smooth, non-resonant response necessary for seamless blending with high-resolution Folded Motion tweeters. An added benefit of aluminum is its outstanding thermal conduction capability which allows cones to serve as efficient heat sinks for voice coils.

To deliver accuracy in the critical midrange, mid-frequency drivers feature a specially engineered "stiff" suspension. Stiffening the suspension (the spider and surround) raises the driver's resonant frequency and optimizes its performance to achieve a natural roll-off and inherently operate within an ideal range for a mid-frequency reproduction (as opposed to a comparably sized woofer).

• **Proprietary Vojtko Crossover Networks**

Premium Motion Series speakers feature proprietary Vojtko crossover networks using polypropylene and low-DF electrolytic capacitors, custom-wound inductors, and thermal and current protection.

Vojtko crossovers are named after MartinLogan's chief audio technologist, Joe Vojtko. His unique approach to crossover design is as big of a part of the "MartinLogan Sound" as are electrostatic and Folded Motion thin-film driver technologies. A Vojtko crossover isn't so much a set of design requirements as it is a philosophy. Vojtko crossovers are designed in such a way that all drivers are kept within their optimal frequency range and balanced with one another. The drivers themselves are as much a part of a Vojtko crossover as are capacitors and resistors. Before the design of any crossover begins, drivers are carefully selected or designed to operate within a very intentional frequency range and with precise and predictable performance parameters. Vojtko crossovers are always built from high-quality parts, and care is taken to avoid overly complex topologies—a straightforward objective due to the careful selection of woofers and tweeters. The final (and most critical) aspect of a Vojtko Crossover is that final voicing is conducted in a space that is indicative of a real-world environment. This pragmatic approach allows MartinLogan speakers to sound their best in real-world rooms.

• **Modern Design Featuring Luxurious Finishes**

Discreetly hidden behind fabric wrapped magnetic grilles, Folded Motion and aluminum cone drivers are held securely in place beneath matte black trim that masks tweeter and woofer mounting hardware for a clean, modern aesthetic. Solid cabinets, designed to eliminate fidelity robbing vibrations, are constructed from 18mm (0.7-inch) MDF with 31mm (1.2-inch) thick front baffles. Motion 60XTi and 50XTi feature additional internal bracing to further reduce cabinet resonance.

MartinLogan's premier Motion Series speakers are available in three luxurious finishes and matching metallic trim—gloss black with black grilles and gunmetal grey trim, matte white with silver grilles and silver trim, and red walnut with black grilles and champagne colored trim.

• **Custom 5-Way Tool-less Binding Post**

Ensure a secure connection, gold-plated for better signal transfer. Bi-wiring option on some models.

Frequency Response	40-25,000 Hz ±3dB
Recommended Amplifier Power	20-300 watts per channel
Horizontal Dispersion	80°
Vertical Dispersion	80°

Sensitivity	92 dB/2.83 volts/meter
Impedance	4 Ohms Compatible with 4, 6, or 8 Ohm rated amplifiers.
Crossover Frequency	500 & 2,600 Hz
High Frequency Transducer	1" x 1.4" (2.6cm x 3.6cm) Folded Motion Transducer with 5.25" x 1.75" (13.3cm x 4.4cm) diaphragm
Mid Frequency Transducer	5.5" (14cm) aluminum cone in a non-resonant asymmetrical chamber format. Cast polymer basket. Rigid structured dustcap reduces cone break-up.
Low Frequency Transducer	Two 6.5" (16.5cm) aluminum cone woofers in a non-resonant asymmetrical chamber format. Cast polymer basket. Rigid structured dust caps reduce cone break-up.
Components	Precision Vojtko with custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel
Inputs	Custom 5-way bi-wire tool-less binding posts
Weight	49 lbs. (22.2 kg)
Dimensions	42.5" x 7.6" x 12.8 " (107.9cm x 19.2cm x 32.6cm)