



## WHAT IS TRUTH IN SOUND?

Truth in Sound is the guiding philosophy of MartinLogan.

Where does *Truth in Sound* start? It begins with *Artists in Motion* on the cutting edge of creation—composers, musicians, sound mixers, DJs, and other innovators—never resting, always exploring, and pushing the boundaries of their art. Their passion is to create and find their *Truth in Sound*. And then, to share it with the world.

Our mission is to use unique and astonishing technology to render the most complex musical passages as faithfully to the original source as possible. MartinLogan continues in the tradition of its innovative founders, with hands-on design and engineering, and proprietary manufacturing techniques. Constant improvements on the vanguard of electrostatic and thin film transducer technology keep MartinLogan on the cutting edge of audio innovation. Because of this heritage, MartinLogan continues to be the loudspeaker of choice for people who demand the most realistically rendered audio.

## THE MARTINLOGAN STORY.

People often assume that MartinLogan was founded by a couple of guys named Martin and Logan, which is sort of right: Gayle Martin Sanders and Ron Logan Sutherland. The two met in the late '70s at a high-end audio store and convinced each other they could build an electrostatic speaker that overcame the limitations of contemporary offerings. Sanders organized a small research and development team to transform an original design he had tinkered with for more than a decade into a practical, marketable electrostatic transducer.

Sanders and Sutherland exhibited their speaker concept at the 1982 Consumer Electronics Show in Chicago. An instant hit, MartinLogan soon gained a worldwide reputation for superior electrostatic performance and arresting product design. Steady growth followed.

A COMPANY IN MOTION. By the late 2000s, MartinLogan was not only producing the world's most recognized electrostatic loudspeakers but also making strides in the use of alternative thin-film transducer materials. 2010 saw the introduction of the Motion Series, featuring Folded Motion tweeter technology, which miniaturized a high-resolution thin-film transducer into a compact tweeter design. Folded Motion tweeter technology delivered electrostatic-like high-frequency detail in more traditional speaker design.

Opposite page: The Renaissance ESL 15A electrostatic speaker.

Top right: The Motion 35XTi bookshelf speaker.

**Middle right:** The Motion 40i tower speaker and Anthem STR Integrated Amplifier.

Bottom right: The ElectroMotion ESL X electrostatic speaker.



# MARTINLOGAN'S ELECTROSTATIC LEGACY.

The performance pedigree of the Motion Series is directly attributed to its close relation to MartinLogan's legendary ultra-high-end electrostatic loudspeakers. The desire to transmute that level of performance into a more traditional and affordable speaker drove the design imperatives that created the Motion Series.

Key to its success is the unique Folded Motion and Folded Motion XT tweeter technology. This thin-film transducer design packs the accuracy and delicacy of an electrostatic panel into a small space. Crimping the dramatically light-weight film into an accordion-like structure increases the surface area, giving Folded Motion tweeters 8–10 times more surface area than typical tweeters. This ideal combination of light and large produces higher levels of accuracy, more extended bandwidth, and higher output capability, all with a faster, more efficient transient response, and virtually zero distortion. In these characteristics, the Folded Motion tweeter design can mimic the performance of an electrostatic panel in the confines of a more traditional loudspeaker enclosure.

By matching the Folded Motion tweeter to high-performance drivers and woofer systems, with hand-built and custom-tuned crossovers, the Motion Series extends MartinLogan's reputation beyond the realm of the world's finest electrostatic loudspeakers. Motion speakers continue that groundbreaking standard, delivering a richly detailed musical and cinematic experience at an unrivaled price.

#### FOLDED MOTION TWEETERS AT WORK.

An array of neodymium magnets hold constant charges. A circuit trace on the folded polyamide diaphragm, driven by the amplifier, is given a charge that continuously reverses in reaction to the audio signal. Opposite charges attract and like charges repel, causing the diaphragm to "squeeze" air like an accordion and produce sound as the charges of the magnets and diaphragm interact.







# 35XTi Bookshelf



50XTi Center











coil inductors, and low DCR steel laminate inductors for a seamless sonic presentation. Flexible installation options allow table top or

compact, slender enclosures. Subtle curves, along with MartinLogan's signature perforated grille, add to the elegant and timeless look.



Horizontal or Vertical On-wall or Off-wall

2i and 4i On-wall or Off-wall



**MOTION AFX DOLBY ATMOS® ENABLED HEIGHT EFFECTS SPEAKER.** With the Motion AFX, there's no need for complicated overhead installations. Simply place the Motion AFX in pairs (2, 4, or 6) on top of existing speakers and wire to any Dolby Atmos-enabled receiver. Even movies not mixed for Dolby Atmos will be expanded to fill the flexible speaker layouts of an Atmos system.

**DOLBY ATMOS. WHAT IS IT?** Listen to sound come alive from all directions with Dolby Atmos. The science behind this incredible experience lies in channel-based audio that moves specific sound effects around the room. The result is an incredibly realistic sonic atmosphere that immerses you in the experience, so you virtually become part of the scene. With movies, music, television shows, or playing video games, Dolby Atmos delivers the full entertainment experience. Sound technicians can mix in a 3D space creating a seamless overhead dimension and home audio systems automatically scale to your surround configuration.



**MOTION FX WIDE-DISPERSION SURROUND.** Motion FX features dual Folded Motion tweeters in a wide-dispersion array ideally suited for surround channel applications. A cascading bass-reflex port allows the speaker to deliver deep, detailed low-frequencies.

**CORNER AND SURFACE MOUNTING.** The Motion FX is designed to corner mount, wall mount, or angle-wall mount for versatile surround placement in any room.





Surround

## SLENDER PROFILE AND STUNNING PERFORMANCE.

-

The secret to the outstanding performance of the Motion SLM and SLM XL are the innovative dual 4-inch, ultra-slim fiber cone woofers, and 4-inch high-velocity passive bass radiators, paired with a Folded Motion tweeter. Motion SLM X3's three-channel soundbar design ups the ante with three Folded Motion tweeters and six 4-inch ultra-slim fiber cone woofers. The result is stunning acoustical alchemy typically found in much larger speaker systems. Hidden discretely behind the speaker's grille, the drivers are held securely in place by a black-an-odized brushed aluminum baffle mounted flush within the speaker's high-gloss black cabinet. The speakers are less than 2-inches deep when installed on-wall with the magnetic grilles and low-profile wall mount brackets.

SLM XL and SLM

Horizontal or Vertical On-wall or Off-wall





#### DESIGNED TO MATCH FLAT SCREEN TELEVISIONS.

Folded Motion tweeters have an 80° x 80° dispersion pattern, which allows SLM and SLM XL to sound the same in a horizontal or vertical orientation, making them perfect for Left-Center-Right (LCR) system applications. The logo on the grille is magnetic and can move and rotate to the proper aesthetically pleasing location in any orientation. SLM and SLM XL both include a base designed for vertical applications, allowing the speakers to sit on a shelf or equipment cabinet. For applications where an on-wall installation is not an option, SLM, SLM XL, and SLM X3 include "kick-stand" brackets that attach to the back of the cabinet, allowing them to free-stand beneath a television.



**IDEAL SUBWOOFERS FOR MOTION SPEAKERS.** Dynamo subwoofers feature powerful amplifiers and audiophile-grade woofers, extensive input options, wireless connectivity, control via a Bluetooth app, Anthem Room Correction (ARC®), and user-configurable front- or down-firing designs. They are the most advanced, high performance, affordable subwoofer systems ever brought to market. Dramatic bass detail and attack, superb extension, and room-shaking output ensure a compelling music and home theater experience.

Advanced-technology inverted surround woofers pair a powerful magnet structure with a rigid, lightweight diaphragm, and powerful amplifiers to deliver massive excursion and sound output while perfectly preserving the most subtle low-frequency details. RCA, XLR, speaker level, and wireless signal connectivity offer the most flexible



array of input options available today. iOS and Android subwoofer control apps put control in the listeners' hands, allowing precise configuration of subwoofer settings, while industry-leading Anthem Room Correction (ARC) guarantees an accurate bass performance custom-tailored to each unique listening room.

**SUBWOOFER CONTROL APP.** The MartinLogan Subwoofer Control app uses a Bluetooth connection to simplify the setup and configuration of the 600X, 800X, 1100X, and 1600X. App-based controls include volume level, low-pass filter (frequency and order), phase, 20–30Hz level, three preset listening modes, and a tone sweep feature. Available for iOS and Android.

**ANTHEM ROOM CORRECTION (ARC).** The unique size and shape of a listening space (and its contents) can make bass waves do unpredictable things, greatly affecting a subwoofer's performance. Anthem Room Correction (ARC) measures low-frequency sound output in a room and compares it to optimal response curves that account for spatial anomalies. ARC effectively removes anomalies, leaving only the ideal standard—realistically blended, natural-sounding bass. Dynamo 600X, 800X, 1100X, and 1600X utilize a Bluetooth connection with a smart-phone or USB to PC connection to run ARC. Available for Android, iOS, Mac, and PC.

**HIGH-EXCURSION, LOW-TURBULENCE, INVERTED SURROUND WOOFERS.** Dynamo subwoofers feature advanceddesign woofers with inverted surrounds and powerful magnet, motor, and suspension designs. High-power magnet structures pair with low-mass diaphragms to provide massive excursions while perfectly preserving the tiniest bass detail.

**OPTIONAL SWT-X WIRELESS INPUT.** Dynamo 600X, 800X, 1100X, and 1600X include a connection port for an optional wireless audio connection system. The SWT-X Wireless Subwoofer System (sold separately) incorporates the latest in wireless audio transmission technology, including 2.4GHz dynamic frequency selection, forward error correction, and a range up to 50 feet.



**BUILT-IN ETC (ENERGY TRANSFER COUPLER) SPIKES.** Dynamo 800X, 1100X, and 1600X come with custom ETC spikes which can be used to enhance stability on thick carpets or create tighter coupling between subwoofer and floor to improve overall sound quality. The built-in spikes are conveniently and discreetly hidden underneath the rubber feet.

**UNIQUE FRONT- OR DOWN-FIRING DESIGN.** When placed inside of a cabinet or other discreet location, Dynamo 800X, 1100X, and 1600X subwoofers can easily convert from standard down-firing to front-firing orientation. A grille is provided for use in front-firing applications.







#### **ANTHEM ROOM CORRECTION WORKS WITH:**











# ANTHEM ROOM CORRECTION IS THE MOST ADVANCED **ROOM CORRECTION SOFTWARE AVAILABLE TODAY.**

Anthem Room Correction (ARC®) puts the sophistication and power of an advanced audio lab in your hands so that you can achieve perfect sound at home. Our PhDs did the hard work, so you don't need an engineering degree to use it. ARC is sophisticated enough to produce real results that you can hear, easy enough to be used by anyone, advanced enough to allow you to customize the settings, and professional enough to give you the kind of results you'd expect from software and hardware costing thousands of dollars.

#### WHY DOES YOUR SUBWOOFER NEED CORRECTION?

The most significant detriment to the sound of an audio system is almost always the room it resides within—especially true in the realm of bass. Even in a professionally treated sound room, bass can quickly become boomy or anemic. Anthem Room Correction helps audio systems sound their best in any space. ARC offers a robust suite of tools to tame your wild sonic frontier, whether you have a tricked-out home theater, a traditional living room with carpet and thick drapes, or a modern floor plan with large open spaces and acoustically reflective furniture and windows.

YOUR ROOM AFFECTS THE SOUND. Have you ever tested the acoustics in an empty room by whistling or clapping? It brings to mind how sound is affected by a room's size, structure, and contents. Even when using optimally positioned subwoofers, the room negatively impacts sound quality considerably. Surfaces such as windows and furnishings and the geometry of the walls, floor, and ceiling add unwanted resonance and coloration, making the bass either boomy or less punchy, voices less natural, and the dialogue less intelligible. The effect on frequency response is typically  $\pm 6 \text{ dB}$ in the midrange and  $\pm 10$  dB at low frequencies.

**ARC TO THE RESCUE.** To compensate for this and to optimize the in-room response, Anthem Room Correction measures the output of each subwoofer relative to the listening area then, through a series of calculations, adjusts its output. Not only does

**ARC Mobile / ARC Genesis** 

Dynamo 600X

Dynamo 800X

Dynamo 1100X

Dynamo 1600X

ARC correct peaks and dips in a subwoofer's frequency response, but it also preserves the beneficial acoustic attributes of a roomattributes based on proven psychoacoustic science (the study of how humans hear and experience sound).

ANTHEM ROOM CORRECTION IS AVAILABLE IN TWO FLAVORS. ARC Mobile allows you to optimize your ARC enabled subwoofer by using either the internal microphone of the iOS and Android devices (for basic room correction) or an optional ARC compatible calibrated microphone (for better results). Calibrated microphones (sold separately), connect via the headphone jack (iOS) or USB (Android).

While ARC Mobile provides astonishing improvements to your in-room response, for the ultimate level or room correction, consider using ARC Genesis and an ARC compatible calibrated microphones (sold separately). ARC Genesis software for Mac and PC use the same algorithms as the mobile app to calculate correction curves, but allows more control over room correction settings.





"What you get is a serious value for your money. Beautiful, thoughtfully designed speakers with a sound that begs you to plant yourself on the couch and watch movies for hours on end." - Taps Das, Secrets of Home Theater and High Fidelity, on Motion 15i, 30i, and 40i







#### FOLDED MOTION DRIVERS.

How do you transform the breathtaking detail and lightning-fast accuracy of the world's best electrostatic transducers into more traditional loudspeaker designs? That's the (very) basic idea behind MartinLogan's exclusive Folded Motion tweeter design—a uniquely engineered thin-film diaphragm that fits into a traditional speaker cabinet. This extremely low mass diaphragm "squeezes" air, demanding significantly less excursion than a typical dome tweeter. Its folded design allows a much larger surface area (compared to that of a regular 1-inch dome tweeter), controlled dispersion characteristics, and vanishingly low distortion—delivering 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. This increases audible bandwidth without sacrificing details and minimizes distortion to an unprecedented level while increasing efficiency and the tweeter's lightning-fast response time. The result superior realism.

HIGH MAGNETIC FIELD STRENGTH FOR SUPERB CON-TROL AND EFFICIENCY. Folded Motion tweeters incorporate neodymium iron boron (NIB) rare-earth magnets, with field strengths almost 20 times those of conventional magnet materials. Combining such a powerful magnetic motor system with an extremely lightweight diaphragm yields an outstanding force-to-mass ratio. Folded Motion tweeters are very efficient and always under

### super-low distortion, astonishing clarity, and absolute precision. FOLDED MOTION TWEETERS AT WORK. An array of

perfect control. The sound that results is pure MartinLogan, with

neodymium magnets hold constant charges. A circuit trace on the folded polyamide diaphragm, driven by the amplifier, is given a charge that continuously reverses in reaction to the audio signal. Opposite charges attract and like charges repel, causing the diaphragm to "squeeze" air like an accordion and produce sound as the charges of the magnets and diaphragm interact.



#### **VOJTKO™ CROSSOVER NETWORKS.**

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 Voitko 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. Voitko 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 Voitko 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.



#### **MID-RANGE AND BASS.**

**HYBRID DESIGNS.** Although Folded Motion tweeters prove exceptional for high frequencies, they cannot recreate deep bass as effectively as a conventional speaker of similar size. Our speakers incorporate high-performance woofers, crossed over to the Folded Motion transducers via carefully tailored, precisely calculated crossover networks made with top-quality components. Low crossover frequencies, phase- and amplitude-optimized network designs, and critically damped woofers ensure a seamless transition between the two types of drivers, yielding speakers that really do offer the best of both worlds.

**CASCADING BASS REFLEX PORT.** [Motion 4i] MartinLogan's Cascading Bass Reflex Port design allows a long tuned port, which is folded over itself, to be squeezed into the Motion 4i. The result is a compact speaker with amazingly detailed bass that can play at high volumes with minimum distortion.

#### ALUMINUM CONE MID-FREQUENCY AND BASS DRIVERS.

[Motion 15i, 20i, 30i, 35XTi, 40i, 50i, and 60XTi] 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. A unique concave dust cap design reinforces the strength and rigidity of the cone while reducing break up modes.

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 rolloff and inherently operate within an ideal range for a mid-frequency reproduction (as opposed to a comparably sized woofer).

#### LOW-MOUNTED WOOFERS MINIMIZE FLOOR BOUNCE.

[Motion 20i, 40i, and 60XTi] Floorstanding Motion tower models utilize 2.5-way designs that feature two woofers positioned low in the cabinet and close to the floor. This deliberate design addresses a phenomenon known as floor bounce where sound reflected off the floor (from drivers positioned high on a cabinet), and sound aimed directly at the listener interfere with each other. Without addressing these issues, listeners would experience bloated bass and increases and decreases in sound levels throughout critical midrange frequencies. Through careful crossover design and driver positioning, floorstanding Motion speakers deliver a flat, balanced response through the bass and midrange regions.





10 Hz	100 Hz	1,000 Hz	100 dB
High-Mounted Driver, With			
Effects of Floor Bounce			
			90 dB
			80 dB
Pernonse of Hig	- Mounted Driver	With Effects of Floor Bour	
			1 <b>ce</b> 70 dB
10.11			
10 Hz	100 Hz	<b> </b> 1,000 Hz	100 dB
Sum of the Output from Two Low-Mounted Drivers	100 Hz	1,000 Hz	100 dB
Sum of the Output from	100 Hz	1,000 Hz	100 dB 90 dB

				80	dB
	$ $ $ $ $\vee$				
Response of Two	Driver System V	With Low-Mounted	Woofers	70	d D

	Motion <mark>15</mark> i	Motion 35XTi	Motion 30i	Motion 50XTi	Motion 20i	Motion <mark>40</mark> i	Motion <mark>60XTi</mark>
Application	Bookshelf	Bookshelf	Center	Center	Tower	Tower	Tower
Recommended Usage	Front, Surround	Front, Surround	Center	Center	Front, Surround	Front, Surround	Front, Surround
Installation	Flat Surface	Flat Surface	Flat Surface	Flat Surface	Floor	Floor	Floor
Finishes	Gloss Black, Matte White, Red Walnut	Gloss Black, Matte White, Red Walnut	Gloss Black, Matte White, Red Walnut	Gloss Black, Matte White, Red Walnut	Gloss Black, Matte White, Red Walnut	Gloss Black, Matte White, Red Walnut	Gloss Black, Matte White, Red Walnut
Frequency Response	60–25,000 Hz ±3 dB	50–25,000 Hz ±3 dB	65–25,000 Hz ±3 dB	50–25,000 Hz ±3 dB	46–25,000 Hz ±3 dB	40–25,000 Hz ±3 dB	35–25,000 Hz ±3 dB
Dispersion	80° x 80°	80° x 30°	80° x 80°	80° x 30°	80° x 80°	80° x 80°	80° x 30°
Sensitivity	92 dB @ 2.83 volts/meter	92 dB @ 2.83 volts/meter	91 dB @ 2.83 volts/meter	94 dB @ 2.83 volts/meter	90 dB @ 2.83 volts/meter	92 dB @ 2.83 volts/meter	94 dB @2.83 volts/ meter
Impedance	5 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6 or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6 or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6 or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6 or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6 or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6 or 8 ohm rated amplifiers.
Crossover Frequency	2700 Hz	2200 Hz	400 & 2600 Hz	900 & 2200 Hz	500 & 2600 Hz	500 & 2600 Hz	400 & 2200 Hz
High Frequency Drivers	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch	1.25 x 2.4 inch (3.2 x 6.1 cm) Folded Motion Transducer with 4.5 x 2.75	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75	1.25 x 2.4 inch (3.2 x 6.1 cm) Folded Motion Transducer with 4.5 x 2.75	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75	1.25 x 2.4 inch (3.2 x 6.1 cm) Folded Motion Transducer with 4.5 x 2.75
	(13.3 x 4.4 cm) diaphragm.	inch (11.4 x 7 cm) diaphragm.	inch (13.3 x 4.4 cm) diaphragm.	inch (11.4 x 7 cm) diaphragm.	inch (13.3 x 4.4 cm) diaphragm.	inch (13.3 x 4.4 cm) diaphragm.	inch (11.4 x 7 cm) diaphragm.
Mid Frequency Drivers	_	_	_	_	_	5.5-inch (14 cm) aluminum cone with cast polymer basket. Non-resonant asymmet- rical chamber format. Rigid structured dust cap to reduce cone breakup modes.	6.5-inch (16.5 cm) aluminum cone with cast polymer basket. Sealed chamber format. Rigid structured dust cap to reduce cone break-up modes.
Low Frequency Drivers	5.25-inch (13.3 cm) aluminum cone with cast aluminum basket. Non-resonant asymmetrical chamber format. Rigid structured dust cap to reduce cone breakup modes.	6.5-inch (16.5 cm) aluminum cone with cast polymer basket. Non-resonant asym- metrical chamber format. Rigid structured dust cap to reduce cone breakup modes.	Two 5.5-inch (14 cm) aluminum cone with cast polymer basket. Non-resonant asym- metrical chamber format. Rigid structured dust cap to reduce cone breakup modes.	Two 6.5-inch (16.5 cm) aluminum cone with cast polymer basket. Non-resonant asymmetrical chamber format. Rigid structured dust cap to reduce cone breakup modes.	Two 5.5-inch (14 cm) aluminum cone with cast polymer basket. Non-resonant asym- metrical chamber format. Rigid structured dust cap to reduce cone breakup modes.	Two 6.5-inch (16.5 cm) aluminum cone with cast polymer basket. Non-resonant asymmetrical chamber format. Rigid structured dust cap to reduce cone breakup modes.	Two 8-inch (20.3 cm) aluminum cone with cast aluminum basket. Non-resonant asymmetrical chamber format. Rigid structured dust cap to reduce cone breakup modes.
Cabinet	Ported	Ported	Ported	Ported	Ported	Ported	Ported
Components	Custom air core coil and low DCR steel laminate inductors. Polypropylene film capacitors in series and low DF electrolytic capacitors in parallel. Overall system thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polypropylene film capacitors in series and low DF electrolytic capacitors in parallel. Tweeter thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Tweeter thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polypropylene film capacitors in series and low DF electrolytic capacitors in parallel. Tweeter thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Tweeter thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Tweeter thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polypropylene film capacitors in series and low DF electrolytic capacitors in parallel. Tweeter thermal/current protection.
Recommended Amp Power	20—200 watts	20—250 watts	20—200 watts	20—300 watts	20—200 watts	20—300 watts	20—400 watts
Binding Post Inputs	Custom 5-way tool-less	Custom 5-way bi-wire tool-less	Custom 5-way tool-less	Custom 5-way bi-wire tool-less	Custom 5-way bi-wire tool-less	Custom 5-way bi-wire tool-less	Custom 5-way bi-wire tool-less
Accessories (included)	Rubber pads	Rubber pads	Rubber pads	Rubber pads	ETC spikes, Rubber feet	ETC spikes, Rubber feet	Outriggers, ETC spikes, Rubber feet
Recommended Subwoofers	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series
Weight	12 lb (5.4 kg)	17 lb (7.7 kg)	18 lb (8.2 kg)	29 lb (13.2 kg)	33 lb (15 kg)	45 lb (20.4 kg)	66 lb (30 kg)
Dimensions (HxWxD)	11.42 x 6.81 x 9.38 inch (290 x 173 x 238.25 mm)	13.5 x 7.56 x 11.68 inch (343 x 192 x 296.75 mm)	6.89 x 16.54 x 10.16 inch (174.95 x 420 x 258 mm)	7.56 x 22.83 x 12.52 inch (192 x 580 x 318 mm)	36.56 x 6.81 x 11.78 inch (928.74 x 173 x 299.21 mm)	42.49 x 7.56 x 12.81 inch (1079.12 x 192 x 325.25 mm)	47.95 x 11.42 x 14.38 inch (1217.93 x 290 x 320 mm)

	Motion 2i	Motion 4i	Motion <mark>6i</mark>	Motion <mark>8i</mark>	Motion AFX	Motion FX	Motion SLM	Motion XL	Motion X3
Application	Compact bookshelf	Compact bookshelf	Compact LCR	Compact LCR	Surround (Dolby Atmos enabled)	Surround	Ultra-slim LCR	Ultra-slim LCR	Ultra-slim passive soundbar
Recommended Usage	Front, Surround	Front, Surround	Center, Front, Surround	Center, Front, Surround	Height Effects	Surround	Center, Front, Surround	Center, Front, Surround	Center, Front
Installation	Flat surface, On-wall	Flat surface, On-wall	Flat surface, On-wall	Flat surface, On-wall	Flat surface	Flat surface, On-wall	Flat surface, On-wall	Flat surface, On-wall	Flat surface, On-wall
Orientation	Vertical	Vertical	Horizontal, Vertical	Horizontal, Vertical	Vertical	Vertical	Horizontal, Vertical	Horizontal, Vertical	Horizontal
Finishes	Gloss Black	Gloss Black	Gloss Black	Gloss Black	Gloss Black	Matte Black, Matte White	Gloss Black	Gloss Black	Gloss Black
Frequency Response	115–23,000 Hz ±3 dB	70–23,000 Hz ±3 dB	120–23,000 Hz ±3 dB	70-23,000 Hz ±3 dB	90—20,000 Hz ±3 dB	74–25,000 Hz ±3 dB	110–22,000 Hz ±3 dB	100–25,000 Hz ±3 dB	120–23,000 Hz ±3 dB
Dispersion	80° x 80°	80° x 80°	80° x 80°	80° x 80°	_	160° x 80°	80° x 80°	80° x 80°	80° x 80°
Sensitivity	86 dB @ 2.83 volts/meter	90 dB @ 2.83 volts/meter	89 dB @ 2.83 volts/meter	89 dB @ 2.83 volts/meter	87 dB @ 2.83 volts/meter	91 dB @ 2.83 volts/meter	94 dB @ 2.83 volts/meter	94 dB @ 2.83 volts/meter	93 dB @ 2.83 volts/meter
Impedance	6 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	6 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.	4 ohms. Compatible with 4, 6, or 8 ohm rated amplifiers.
Crossover Frequency	3800 Hz	2900 Hz	4000 Hz	3000 Hz	2000 Hz	4500 Hz	2600 Hz	3100 Hz	3000 Hz
High Frequency Drivers	0.94 x 1 inch (2.4 x 2.5 cm) Folded Motion Transducer with 2.8 x 1.25 inch (7.1 x 3.2 cm) diaphragm.	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch (13.3 x 4.4 cm) diaphragm.	0.94 x 1 inch (2.4 x 2.5 cm) Folded Motion Transducer with 2.8 x 1.25 inch (7.1 x 3.2 cm) diaphragm.	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch (13.3 x 4.4 cm) diaphragm.	0.75" (1.9cm) aluminum dome	Two 1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch (13.3 x 4.4 cm) diaphragm.	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch (13.3 x 4.4 cm) diaphragm.	1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch (13.3 x 4.4 cm) diaphragm.	Three 1 x 1.4 inch (2.6 x 3.6 cm) Folded Motion Transducer with 5.25 x 1.75 inch (13.3 x 4.4 cm) diaphragm.
Low Frequency Drivers	3.5-inch (8.9 cm) poly cone with stamped steel basket. Nonresonant asymmetrical chamber format. Rigid structured dust cap to reduce cone break-up modes.	4-inch (10.2 cm) paper cone with stamped steel basket. Nonresonant asymmetrical chamber format. Rigid structured dust cap to reduce cone break-up modes.	Two 3.5-inch (8.9 cm) poly cone with stamped steel basket. Nonresonant asymmetrical chamber format. Rigid structured dust cap to reduce cone break-up modes.	Two 4-inch (10.2 cm) paper cone with stamped steel basket. Nonresonant asymmetrical chamber format. Rigid structured dust cap to reduce cone break-up modes.	5.25-inch (13.4 cm) polypropylene cone with stamped steel basket.	Two 4-inch (10.2 cm) paper cone with cast aluminum basket. Non-resonant asym- metrical chamber format.	Two 4-inch (10.2 cm) paper cone. Two 4-inch (10.2 cm) paper cone passive radiators.	Two 4-inch (10.2 cm) paper cone. Four 4-inch (10.2 cm) paper cone passive radiators.	Six 4-inch (10.2 cm) paper cone.
Cabinet	Sealed	Ported	Sealed	Sealed	Sealed	Ported	Sealed	Sealed	Sealed
Components	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Overall system thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Overall system thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Overall system thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel. Overall system thermal/current protection.	Custom air core coil and low DCR steel laminate inductors. Polyester film capacitors in series and low DF electrolytic capacitors in parallel.	Custom air core coil inductors. Polyester film capacitors in series and low DF electro- lytic capacitors in parallel. Overall system thermal/ current protection.	Custom air core coil inductors. Polyester film capacitors in series and low DF electro- lytic capacitors in parallel. Overall system thermal/ current protection.	Custom air core coil inductors. Polyester film capacitors in series and low DF electro- lytic capacitors in parallel. Overall system thermal/ current protection.	Custom air core coil inductors. Polyester film capacitors in series and low DF electro- lytic capacitors in parallel. Overall system thermal/ current protection.
Recommended Amp Power	20—100 watts	20—150 watts	20—130 watts	20–180 watts	20—200 watts	20—160 watts	20—140 watts	20—140 watts	20—140 watts
Binding Post Inputs	Push style with banana jacks	Custom 5-way tool-less	Push style with banana jacks	Push style	Push style	Push style			
Accessories (included)	Wall mount bracket, Shoulder bolt, Rubber pads	Wall mount bracket, Shoulder bolt, Rubber pads	Wall mount brackets, Shoulder bolts, Rubber pads	Wall mount brackets, Shoulder bolts, Rubber pads	_	Wall mount bracket, Corner mount bracket, Shoulder bolt, Rubber bumpers	Wall mount bracket, Vertical table stand, Horizontal stands	Wall mount bracket, Vertical table stand, Horizontal stands	Wall mount bracket, Horizontal stands
Accessories (optional)	_	_	_	_	_	_	Paintable white grille	Paintable white grille	-
Recommended Subwoofers	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series	Dynamo Series
Weight	3.4 lb (1.54 kg)	6 lb (2.72 kg)	5.7 lb (2.58 kg)	8.5 lb (3.85 kg)	8 lb (3.6 kg)	9.5 lb (4.4 kg)	6.5 lb (3 kg)	9 lb (4.1 kg)	13 lb (5.9 kg)
Dimensions (HxWxD)	10 x 4.7 x 4.6 inch (255 x 118 x 117 mm)	12.6 x 5.6 x 5.7 inch (320 x 143 x 145 mm)	5.2 x 17.5 x 4 inch (132 x 444 x 101 mm)	5.6 x 22 x 5.2 inch (142 x 560 x 132 mm)	7.7 x 6.8 x 10 inch (195 x 173 x 254 mm)	11.1 x 12 x 6 inch (282 x 305 x 152 mm)	25.3 x 6.4 x 1.83 inch (642 x 162 x 48 mm)	34.1 x 6.4 x 1.83 inch (867 x 162 x 48 mm)	6.3 x 48 x 2 inch (162 x 1220 x 51 mm)

	Dynamo 400	Dynamo <mark>600X</mark>	Dynamo <mark>800X</mark>	Dynamo 1100X	Dynamo <mark>1600X</mark>
Application	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer
Finishes	Satin Black	Satin Black	Satin Black	Satin Black	Satin Black
Frequency Response	30—200 Hz $\pm$ 3 dB. Anechoic in LFE mode.	27—200 Hz $\pm$ 3 dB. Anechoic in LFE mode.	24—200 Hz $\pm$ 3 dB. Anechoic in LFE mode.	22–200 Hz $\pm 3$ dB. Anechoic in LFE mode.	20—200 Hz $\pm 3$ dB. Anechoic in LFE mode.
Low Frequency Transducer	8-inch (20.3 cm) high-excursion, inverted surround, polypropylene cone in a stamped steel basket with extended throw driver assembly.	10-inch (25.4 cm) high-excursion, inverted surround, polypropylene cone in a stamped steel basket with extended throw driver assembly.	10-inch (25.4 cm) high-excursion, inverted surround, polypropylene cone in a stamped steel basket with extended throw driver assembly; sealed non-resonant cabinet design.	12-inch (30.5 cm) high-excursion, inverted surround, polypropylene cone in a cast aluminum basket with extended throw driver assembly; sealed non-resonant cabinet design.	15-inch (38.1 cm) high-excursion, inverted surround, polypropylene cone in a cast aluminum basket with extended throw driver assembly; sealed non-resonant cabinet design.
Cabinet	Ported	Ported	Sealed	Sealed	Sealed
Amplifier	75 watts (150 peak)	120 watts (240 peak)	300 watts (600 peak)	650 watts (1,300 peak)	900 watts (1800 peak)
Software	N/A	Sub Control App: iOS and Android Anthem Room Correction: iOS, Android, and PC	Sub Control App: iOS and Android Anthem Room Correction: iOS, Android, and PC	Sub Control App: iOS and Android Anthem Room Correction: iOS, Android, and PC	Sub Control App: iOS and Android Anthem Room Correction: iOS, Android, and PC
Controls (Backplate)	Level: Min—Max Low-Pass Filter: 35—120 Hz, Bypass Phase: 0°, 180° Power Mode: On, Auto	Level: Min—Max Setting Control: Local, App Power Mode: On, Auto	Level: Min—Max Setting Control: Local, App Power Mode: On, Auto	Level: Min—Max Setting Control: Local, App Power Mode: On, Auto	Level: Min—Max Setting Control: Local, App Power Mode: On, Auto
Controls (via Bluetooth)	N/A	Level: -40–12 dB Low-Pass Filter (Frequency): 35–120 Hz Low-Pass Filter (Order): Bypass, Third, Fourth Phase: 0–180° (1° Increments) Phase (Polarity): Normal, Inverted Preset Listening Modes: Music, Night, Movie 20–30 Hz Level: ±10 dB Anthem Room Correction (ARC): On, Off Tone Sweep (20–120 Hz): On, Off, Pause (Frequency)	Level: -40–12 dB Low-Pass Filter (Frequency): 35–120 Hz Low-Pass Filter (Order): Bypass, Third, Fourth Phase: 0–180° (1° Increments) Phase (Polarity): Normal, Inverted Preset Listening Modes: Music, Night, Movie 20–30 Hz Level: ±10 dB Anthem Room Correction (ARC): On, Off Tone Sweep (20–120 Hz): On, Off, Pause (Frequency)	Level: -40–12 dB Low-Pass Filter (Frequency): 35–120 Hz Low-Pass Filter (Order): Bypass, Third, Fourth Phase: 0–180° (1° Increments) Phase (Polarity): Normal, Inverted Preset Listening Modes: Music, Night, Movie 20–30 Hz Level: ±10 dB Anthem Room Correction (ARC): On, Off Tone Sweep (20–120 Hz): On, Off, Pause (Frequency)	Level: -40–12 dB Low-Pass Filter (Frequency): 35–120 Hz Low-Pass Filter (Order): Bypass, Third, Fourth Phase: 0–180° (1° Increments) Phase (Polarity): Normal, Inverted Preset Listening Modes: Music, Night, Movie 20–30 Hz Level: ±10 dB Anthem Room Correction (ARC): On, Off Tone Sweep (20–120 Hz): On, Off, Pause (Frequency)
Inputs (Audio)	Line Level: Left, Right/LFE Speaker Level: Left and Right via banana jacks	Line Level: Left, Right/LFE Speaker Level: Left and Right via banana jacks	Line Level: Left, Right, and LFE Speaker Level: Left and Right via banana jacks	Line Level: Left, Right, and LFE Speaker Level: Left and Right via banana jacks XLR: LFE	Line Level: Left, Right, and LFE Speaker Level: Left and Right via banana jacks XLR: LFE
Input (Audio, Wireless)	N/A	SWT-X Receiver & Transmitter (sold separately)			
Inputs (Other)	N/A	USB: Micro USB (for ARC/firmware update)	USB: Micro USB (for ARC/firmware update) Trigger: 3.5 mm, 5–24 DC	USB: Micro USB (for ARC/firmware update) Trigger: 3.5 mm, 5–24 DC	USB: Micro USB (for ARC/firmware update) Trigger: 3.5 mm, 5–24 DC
Input Impedance	RCA: 8300 ohms Speaker Level: 2000 ohms (red to black)	RCA: 8300 ohms Speaker Level: 2000 ohms (red to black)	RCA: 8300 ohms Speaker Level: 2000 ohms (red to black)	RCA: 8300 ohms Speaker Level: 2000 ohms (red to black XLR: 28,000 ohms (pin 2 to 3)	RCA: 8300 ohms Speaker Level: 2000 ohms (red to black) XLR: 28,000 ohms (pin 2 to 3)
Room Correction	N/A	ARC Mobile (for Android and iOS) or ARC Genesis (for Mac and PC)	ARC Mobile (for Android and iOS) or ARC Genesis (for Mac and PC)	ARC Mobile (for Android and iOS) or ARC Genesis (for Mac and PC)	ARC Mobile (for Android and iOS) or ARC Genesis (for Mac and PC)
Power Draw	Typical: 20W, Max: 90W, Idle: 4W, Standby: 0.5W	Typical: 30W, Max: 150W, Idle: 4W, Standby: 0.5W	Typical: 70W, Max: 360W, Idle: 10W, Standby: 0.5W	Typical: 100W, Max: 600W, Idle: 15W, Standby: 0.5W	Typical: 125W, Max: 800W, Idle: 15W, Standby: 0.5W
Feet	Rubber	Rubber	Rubber, ETC (Energy Transfer Coupler) Spikes	Rubber, ETC (Energy Transfer Coupler) Spikes	Rubber, ETC (Energy Transfer Coupler) Spikes
Weight	28.5 lb (12.9 kg)	35.5 lb (16.1 kg)	30 lb (13.6 kg)	46 lb (20.9 kg)	57 lb (25.9 kg)
Dimensions (HxWxD), Front-Firing	N/A	N/A	14.6 x 12.4 x 12.7 inch (371 x 315 x 324 mm)	17.2 x 15 x 16.2 inch (436 x 380 x 411 mm)	20.1 x 17.9 x 19.1 inch (510 x 454 x 486 mm)
Dimensions (HxWxD), Down-Firing	15.2 x 13.3 x 13.7 inch (385 x 337 x 348 mm)	16.3 x 14.5 x 14.9 inch (415 x 367 x 378 mm)	13.7 x 12.4 x 13.1 inch (348 x 315 x 333 mm)	17.1 x 15 x 15.6 inch (435 x 380 x 396 mm)	20 x 17.9 x 18.5 inch (509 x 454 x 470 mm)







# martinlogan.com

(0

0

MARTIN LOGAN

©2020 MartinLogan, Ltd. All rights reserved.

Dolby, Dolby Atmos, and the double-D symbol are trademarks of Dolby Laboratories.

PN MAN0185

Printed in Canada.