

Masterpiece CI Series

Truth in Sound



## State-of-the-art Truth in Sound: Masterpiece™ CI Series offers the biggest, boldest, and most lifelike performance possible.

We consider something a masterpiece when skill and artistry shape the familiar in unexpected ways, revealing an essential truth.

For MartinLogan, the essential truth is astonishing and unprecedented audio realism.

From extreme home theater to transcendent 2-channel listening, Masterpiece CI is the pinnacle of discreet in-wall and in-ceiling loudspeaker design—state-of-the-art Truth in Sound. Featuring lightning-fast, low-distortion, Folded Motion XT Obsidian tweeters, flagship-class Vojtko Crossover Networks, and unidirectional carbon fiber multi-section cone drivers with a Nomex® backer, the Masterpiece CI Series offers the biggest, boldest, and most lifelike performance possible—a tribute to the acoustic achievements of MartinLogan's original iconic masterpiece, our flagship floorstanding electrostatic speakers.

This new generation of custom installation loudspeakers artfully blends over 30 years of audio design and engineering innovation, refining it into a startling fresh loudspeaker ideal.

Each model features a family of exclusive, interlinked MartinLogan technologies that achieve a level of performance beyond that of traditional speakers.

MartinLogan presents a rare opportunity for you to own your own Masterpiece.

Let us show you.

The Masterpiece CI Series by MartinLogan

# Statement 40XW

#### FORTY DRIVERS

- SIXTEEN TWEETERS: FOLDED MOTION® XT OBSIDIAN
- SIXTEEN MID: 3.5-INCH EIGHT BASS: 6.5-INCH
- UNIDIRECTIONAL CARBON FIBER MULTI-SECTION CONES WITH A NOMEX® BACKER
- LINE SOURCE CONFIGURATION WITH CONTROLLED DISPERSION SOUND RADIATION
- VOITKO™ CROSSOVER NETWORK CONSTRUCTED FROM AUDIOPHILE-GRADE COMPONENTS
  - PHENOLIC BAFFLE SEALED BACK BOX SURFACE MOUNT GRILLE

#### **Statement 40XW Tech**

#### Statement 40XW—Discreet Installation.

Statement 40XW incorporates a reinforced backbox that embeds within a wall and an ultra-low profile, paintable, micro-perforated grille for near-invisible integration. This platform decouples the drivers from the wall surface and maintains a clean aesthetic. The speaker works with either 1/2- or 5/8-inch wallboard in new construction or retrofit installations.

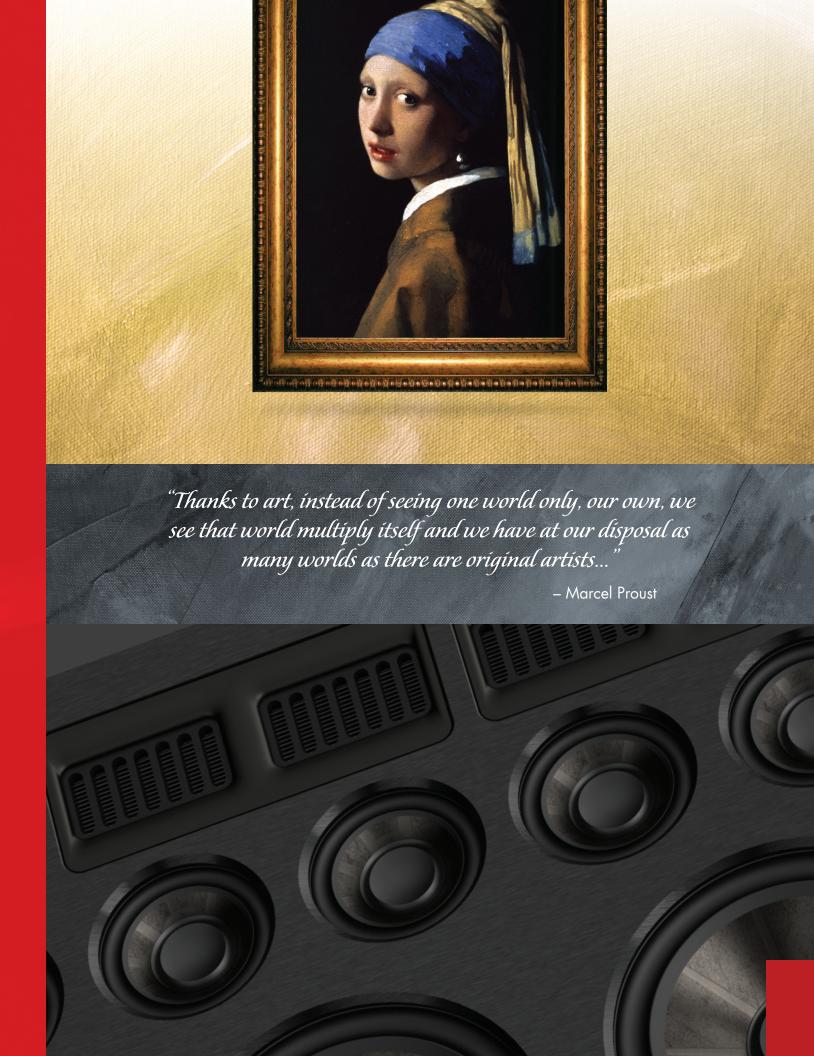
#### Benefits of Statement 40XW's Line Source

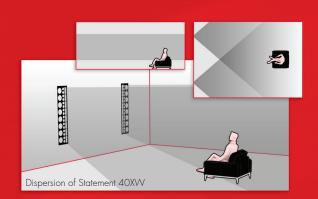
**Configuration.** Designing an in-wall speaker with performance on par with MartinLogan's most ambitious floorstanding hybrid electrostatic speakers is an immense challenge. The power and effortlessness of electrostatic speakers is breathtaking—a living manifestation of *Truth in Sound*. The *Statement 40XW* is MartinLogan's answer—a triumph of engineering delivering a seamless melding of authoritative, accurate bass and mid-range with lightning-fast thin-film tweeters. Each channel features 40 drivers, including eight unidirectional carbon fiber multisection cone woofers with a Nomex® backer, 16 matching 3.5-inch midrange drivers, and 16 exquisite Folded Motion XT Obsidian tweeters.

The use of 16 tweeters, 16 mid-range drivers, and eight woofers significantly contributes to the effortless sonic presentation of the Statement 40XW. All drivers, even superb drivers such as the carbon fiber cones and thin-film tweeters used in the speaker, begin to exhibit distortion when pushed hard. By using a large number of drivers operating in perfect unison, the movement required from each driver is a fraction of what it otherwise would be while still achieving impressive levels of overall output. The combination of such inherently high-resolution drivers and the reduction in demands on each results in a highly accurate and distortion-free performance during even the most demanding sonic passages.

Additionally, with large line source designs, as seating positions move further away from the speaker, sound levels don't drop off as quickly as they do with smaller, less efficient speakers. The ability of the *Statement 40XW* to deliver higher levels of sound over much greater distances results in an extremely uniform sound pressure throughout large rooms—especially beneficial in substantial home theaters with multiple rows of seating.







Statement 40XW—Controlled Dispersion Sound Radiation. When properly designed, line source speakers share significant benefits with hybrid electrostatic speakers, and the Statement 40XW delivers, most notably, by bringing controlled dispersion to a discreet in-wall speaker. The sound we hear from a loudspeaker is a combination of direct radiation from it to our ears, and reflections off of room surfaces—walls, floor, and ceiling. How our brains process this information is far from simple. Depending on the angle of incidence to the ears and the arrival-time difference between direct and reflected sound, reflections can blur detail and stereo imaging.

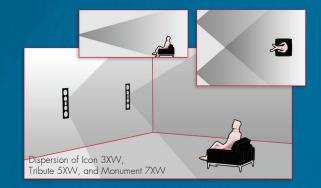
The combination of the natural 80-degree horizontal dispersion pattern of Folded Motion XT tweeters and the 53-inches of vertical dispersion provided by the line source arrangement of 16 tweeters, minimizes side-wall, floor, and ceiling reflections whose short arrival times tend to interfere with the perception of the direct sound.



# Monument 7XW

#### SEVEN DRIVERS

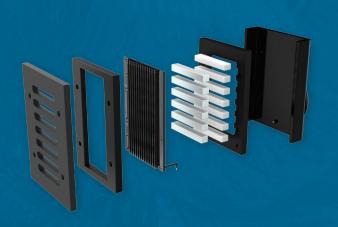
- ONE TWEETER: FOLDED MOTION® XT OBSIDIAN
- ONE MID: 6.5-INCH TWO BASS: 6.5-INCH THREE PASSIVE: 6.5-INCH
- UNIDIRECTIONAL CARBON FIBER MULTI-SECTION CONES WITH A NOMEX® BACKER
- VOJTKO™ CROSSOVER NETWORK CONSTRUCTED FROM AUDIOPHILE-GRADE COMPONENTS
- PHENOLIC BAFFLE SEALED BACK BOX DIE-CAST ALUMINUM MOUNTING-LOCK SYSTEM
  - PRE-INSTALL BRACKETS (SOLD SEPARATELY)



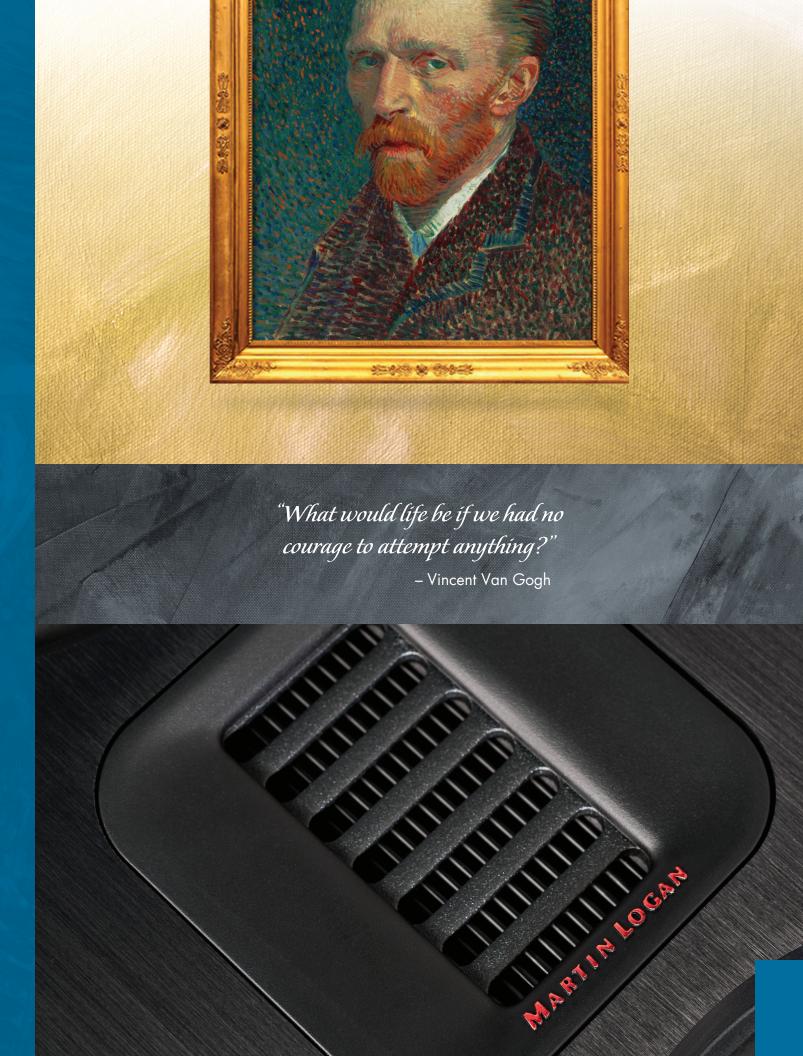
### **Masterpiece CI Tech**

#### Folded Motion® XT Obsidian 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 crimped 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 that is aurally astounding, and only by MartinLogan. Folded Motion XT Obsidian tweeters feature a black diaphragm.









# Tribute 5XW

- FIVE DRIVERS
- ONE TWEETER: FOLDED MOTION® XT OBSIDIAN
- TWO MID/BASS: 5.25-INCH TWO PASSIVE: 6.5-INCH
- UNIDIRECTIONAL CARBON FIBER MULTI-SECTION CONES WITH A NOMEX® BACKER
- VOJTKO™ CROSSOVER NETWORK CONSTRUCTED FROM AUDIOPHILE-GRADE COMPONENTS
- PHENOLIC BAFFLE SEALED BACK BOX DIE-CAST ALUMINUM MOUNTING-LOCK SYSTEM
  - PRE-INSTALL BRACKETS (SOLD SEPARATELY)

#### Powerful Mid-Frequency and Bass Drivers Featuring Unidirectional Carbon Fiber Multi-section Cones With a Nomex®

Backer. Custom built, low-distortion drivers pair high-power magnet structures with unidirectional carbon fiber multi-section cone diaphragms with a Nomex® backer to deliver massive excursion and sound output, preserve minute bass details and maximize power handling capability, all without a hint of distortion. The use of unidirectional carbon fiber yields a cone that is twice as strong as steel with a sixth of the density, providing exceptional rigidity without adding excessive weight. The multisection design of Masterpiece CI drivers serves to reduce resonant modes within the driver, allowing for a smoother response. Nomex® backers improve overall driver performance by damping the cone to prevent deleterious ringing and reduce break up modes—a crucial requirement for extremely rigid cone materials. These exceptional woofers ensure a smooth, non-resonant response necessary for seamless blending with the extreme accuracy of high-resolution Folded Motion tweeters.

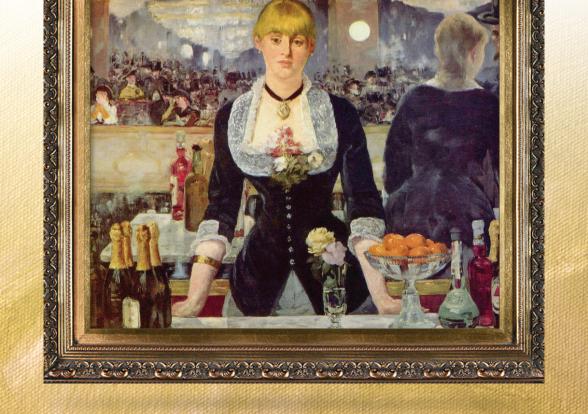
To deliver accuracy in the critical midrange, midfrequency drivers feature a specially engineered "stiff" suspension. Stiffening the suspension (the spider and surround) raises the driver's resonant frequency and optimizes its performance to achieve a natural roll-off and inherently operate within an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

Each cone includes a concave dust cap that adds additional strength and rigidity while further reducing break up modes. An inverted surround design maximizes clearance behind the grille cover to enhance driver excursion, clarity, and linearity.

Tribute 5XW and Monument 7XW feature passive radiators constructed from the same high-strength, low mass material as the woofers—unidirectional carbon fiber multi-section cone diaphragms with a Nomex® backer. These passive radiators ensure shockingly powerful, dynamic, and distortion-free bass from a small, unobtrusive, sealed enclosure.





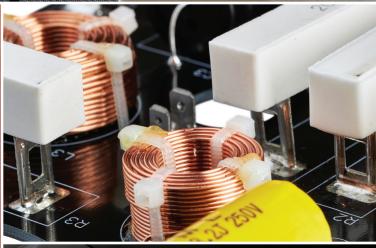


"It is not enough to know your craft - you have to have feeling. Science is all very well, but for us imagination is worth far more."

– Edouard Manet









Icon
3XW

#### • THREE DRIVERS

- ONE TWEETER: FOLDED MOTION® XT OBSIDIAN TWO MID/BASS: 5.5-INCH UNIDIRECTIONAL CARBON FIBER MULTI-SECTION CONES WITH A NOMEX® BACKER
- VOJTKO™ CROSSOVER NETWORK CONSTRUCTED FROM AUDIOPHILE-GRADE COMPONENTS
- PHENOLIC BAFFLE SEALED BACK BOX DIE-CAST ALUMINUM MOUNTING-LOCK SYSTEM • PRE-INSTALL BRACKETS (SOLD SEPARATELY)



#### Proprietary Vojtko™ Crossover Networks.

Carefully hand-built using only the most exceptional polypropylene and polyester capacitors, custom wound and large steel laminate low-DCR inductors, and double thick PCBs, Masterpiece CI Series crossovers employ MartinLogan's proprietary Vojtko topology for vanishingly low distortion and seamless driver integration. This precision-tuned network preserves even the most microscopic sonic nuances while handling the full dynamics of any source.

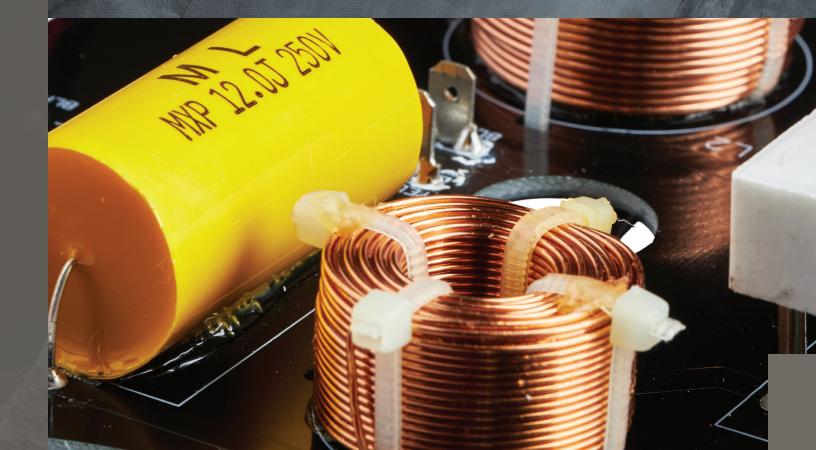
Phenolic Baffles. Monument 7XW, Tribute 5XW, and Icon 3XW utilize baffles constructed from incredibly dense and durable phenolic resin polymer—an exceptional, acoustically superior substrate. Phenolic resin polymer, the same material used in the Neolith cabinet, offers extraordinary material consistency that naturally minimizes acoustically deleterious resonances and vibrations.

**Sealed Back Box Enclosures.** The most significant benefit of a built-in acoustically inert and sealed back box is predictable volume and a construction methodology that removes the variables of the wall cavity size and construction quality from the acoustic equation, guaranteeing a consistent, accurate performance, regardless of installation. By maintaining complete control over driver performance, crossover design, and cabinet construction, Masterpiece CI in-wall and in-ceiling speakers can achieve an emotionally engaging experience on par with the rarified performance of the world's most exceptional floorstanding speakers. This sealed design also helps keep sound from leaking through the wall to unintended areas of the home, while also providing predictable airspace for the woofers to perform their best.



"The artist must be a philosopher...an artistic genius should have no other guide except the torch of reason."

– Jacques-Louis David





# Sistine 4XC

#### • FOUR DRIVERS

- ONE TWEETER: FOLDED MOTION® XT OBSIDIAN
- TWO MID: 3.5-INCH ONE BASS: 8-INCH
- UNIDIRECTIONAL CARBON FIBER MULTI-SECTION CONES WITH A NOMEX® BACKER
- VOJTKO™ CROSSOVER NETWORK CONSTRUCTED FROM AUDIOPHILE-GRADE COMPONENTS
  - SEALED BACK BOX DIE-CAST ALUMINUM MOUNTING-LOCK SYSTEM
  - PRE-INSTALL BRACKETS (SOLD SEPARATELY) SQUARE GRILLE (SOLD SEPARATELY)

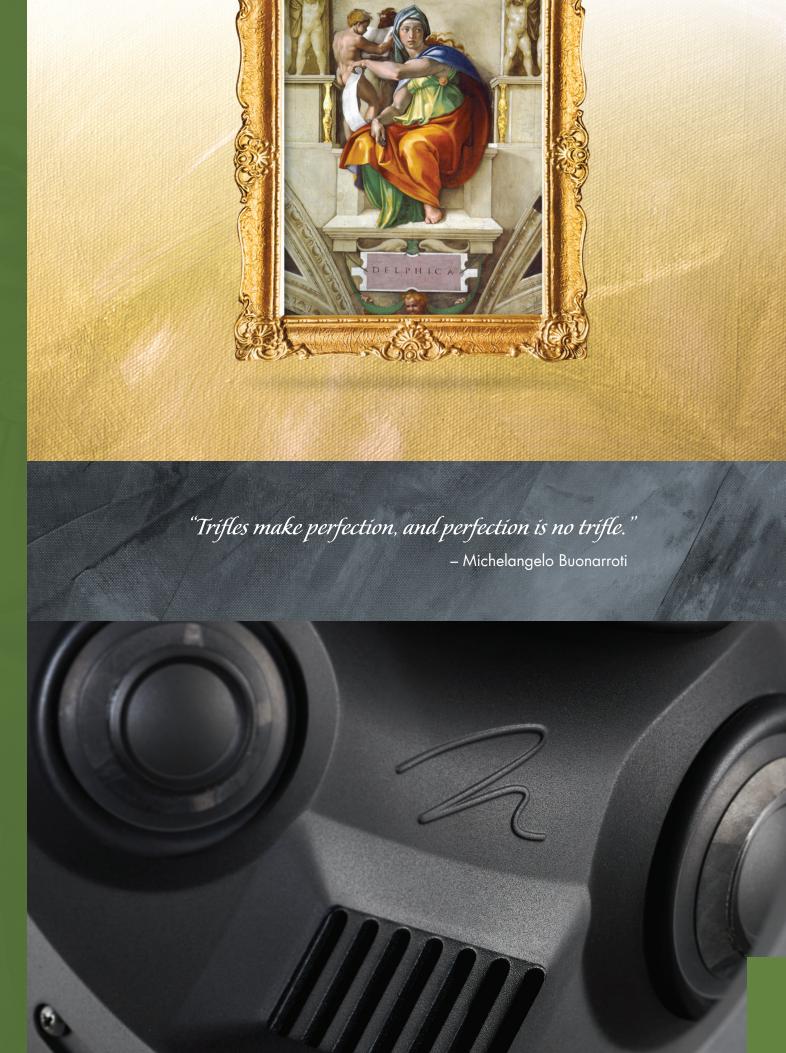


#### Die-cast Aluminum Mounting-Lock System.

A simple, yet robust die-cast aluminum mounting-lock system maximizes strength while allowing quick, trouble-free installation. Pocketed screw holes help hold the drill steady, making installation a snap. When not in use, mounting locks are secured within a self-contained housing. When moved into place, they couple the chassis firmly to the ceiling or wall, increasing the rigidity of surfaces. If ever removed, the locks retract and latch back in their housings. Each speaker includes a full-size installation template featuring quick-reference instructions, and die-cut guides for marking the cutout hole.

**Spring-Loaded Binding Posts.** Spring-loaded binding posts feature a large 4.5mm wire access hole and connect via banana plug, pin, or 10AWG bare wire.

**Pre-Installation Brackets** are available for every model in the Masterpiece CI Series, except for the *Statement 40XW*, which requires unique considerations for installation.





# Masterpiece Cl Specifications



#### Statement 40XW

#### Frequency Response

48-25,000 Hz ± 3 dB

#### Tweeter Dispersion (horizontal x vertical)

80° x 52-inch line source

#### Sensitivity

95 dB @ 2.83 volts/ meter

#### Impedance

4 ohms, Compatible with 4, 6, or 8 ohm rated amps.

#### **Crossover Frequencies**

300, 2700 Hz

#### **High-Frequency Drivers**

Sixteen 1.25  $\times$  2.4 inch (3.2  $\times$  6.1 cm) Folded Motion XT Obsidian transducer with 4.5  $\times$  2.75 inch (11.4  $\times$  7 cm) diaphragm.

#### Mid-Frequency Drivers

Sixteen 3.5-inch (8.9 cm) black unidirectional carbon fiber multi-section cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Low-Frequency Drivers**

Eight 6.5-inch (16.5 cm) black unidirectional carbon fiber multi-section cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Binding Post Inputs**

Push style (two sets for easy installation)

Custom air core coil inductors, polypropylene film capacitors, and low DF electrolytic capacitors.

#### Suitable Amplifier Range

50-800 watts

#### Max Power Handling

400 watts

#### Weight

150 lb (68.1 kg)

#### Required Wall Cavity (width)

Minimum: 14.5 inch (368 mm) Maximum: 16.5 inch (420 mm)

#### Required Wall Cavity (height, unobstructed)

Minimum: 89 inch (2260 mm)

#### Required Wall Cavity (depth)

Minimum: 3.5 inch (89 mm)

#### Enclosure (width x height x depth, excludes padding)

 $14.3 \times 84.2 \times 3.4$  inch  $(361 \times 2137 \times 86$  mm)

#### Grille (height x width)

11.5 x 59.5 inch (292 x 1511 mm)

#### Installation Kit (included—choose appropriate size)

1/2-inch drywall (PN: 40XWIWK05) 5/8-inch drywall (PN: 40XWIWK0625)



#### Monument 7XW

#### Frequency Response

#### Tweeter Dispersion (horizontal x vertical)

#### Sensitivity

95 dB @ 2.83 volts/ meter

#### Impedance

4 ohms. Compatible with 4, 6, or 8 ohm rated amps.

#### **Crossover Frequencies**

200, 3200 Hz

#### **Tweeter Aiming**

Rotatable tweeter for horizontal or vertical installations

#### **High-Frequency Driver**

1.25  $\times$  2.4 inch (3.2  $\times$  6.1 cm) Folded Motion XT Obsidian transducer with 4.5  $\times$  2.75 inch (11.4  $\times$  7 cm) diaphragm.

#### Mid-Frequency Driver

6.5-inch (16.5 cm) black unidirectional carbon fiber multisection cone with Nomex® backer and cast aluminum basket. sealed back chamber format. Concave dust cap.

#### **Low-Frequency Drivers**

Two 6.5-inch (16.5 cm) black unidirectional carbon fiber multisection cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Passive Radiators**

Three 6.5-inch (16.5 cm) unidirectional black carbon fiber cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Binding Post Inputs**

Push style (two sets for easy installation)

#### Components

Custom air core coil inductors, polypropylene film capacitors, and low DF electrolytic capacitors. Thermal/current protection.

#### Suitable Amplifier Range 20-300 watts

#### Max Power Handling

150 watts

#### Weight

44.5 lb (20.2 kg)

Overall Size (height x width x depth) 46.86 × 10.6 × 4.11 inch (1190.2 × 269.2 × 104.3 mm)

### Required Opening (including tolerance) 45.57 x 9.29 inch (1157 x 236 mm)

#### **Projection From the Wall Surface**

0.31 inch (7.8 mm)

#### Depth Required Behind the Wall Surface

3.8 inch (96.5 mm)

#### **Optional Accessories**

Pre-install bracket (PN: 7XWBRK)



#### Tribute 5XW

#### Frequency Response

 $71-25,000 \text{ Hz} \pm 3 \text{ dB}$ 

#### Tweeter Dispersion (horizontal x vertical)

80° x 30°

#### Sensitivity

94 dB @ 2.83 volts/ meter

#### Impedance

4 ohms. Compatible with 4, 6, or 8 ohm rated amps.

#### **Crossover Frequency**

2250 Hz

#### Tweeter Aiming

Rotatable tweeter for horizontal or vertical installations

#### **High-Frequency Driver**

1.25 x 2.4 inch (3.2 x 6.1 cm) Folded Motion XT Obsidian transducer with  $4.5 \times 2.75$  inch  $(11.4 \times 7 \text{ cm})$  diaphragm.

#### **Low-Frequency Drivers**

Two 5.25-inch (13.33 cm) black unidirectional carbon fiber multi-section cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Passive Radiators**

Two 6.5-inch (16.5 cm) black unidirectional carbon fiber multisection cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Binding Post Inputs**

Push style (two sets for easy installation)

#### Components

Custom air core coil inductors, polypropylene film capacitors, and low DF electrolytic capacitors. Thermal/current protection.

#### Suitable Amplifier Range

20-250 watts

#### Max Power Handling

125 watts

**Weight** 25.5 lb (11.6 kg)

Overall Size (height x width x depth) 31.13 x 10.6 x 4.09 inch (790.82 x 269.2 x 103.93 mm)

### **Required Opening (including tolerance)** 29.82 x 9.29 inch (757 x 236 mm)

#### **Projection From the Wall Surface**

0.31 inch (7.8 mm)

#### Depth Required Behind the Wall Surface

3.8 inch (96.5 mm)

#### **Optional Accessories**

Pre-install bracket (PN: 5XWBRK)



#### Icon 3XW

#### Frequency Response

78-25,000 Hz ± 3 dB

#### Tweeter Dispersion (horizontal x vertical)

#### Sensitivity

94 dB @ 2.83 volts/ meter

#### Impedance

4 ohms. Compatible with 4, 6, or 8 ohm rated amps.

#### **Crossover Frequency**

2400 Hz

#### **Tweeter Aiming**

Rotatable tweeter for horizontal or vertical installations

#### **High-Frequency Driver**

1.25  $\times$  2.4 inch (3.2  $\times$  6.1 cm) Folded Motion XT Obsidian transducer with 4.5  $\times$  2.75 inch (11.4  $\times$  7 cm) diaphragm.

#### **Low-Frequency Drivers**

Two 5.25-inch (13.33 cm) black unidirectional carbon fiber multi-section cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Binding Post Inputs**

Push style

#### Components

Custom air core coil inductors, polypropylene film capacitors, and low DF electrolytic capacitors. Thermal/current protection.

#### Suitable Amplifier Range

20-250 watts

#### Max Power Handling

125 watts

**Weight** 15.5 lb (7 kg)

Overall Size (height x width x depth) 15.98 x 9.94 x 4.11 inch (405.95 x 252.6 x 104.3 mm)

### Required Opening (including tolerance) $14.66 \times 8.64$ inch $(372 \times 219 \text{ mm})$

#### Projection From the Wall Surface

#### Depth Required Behind the Wall Surface

#### **Optional Accessories**

Pre-install bracket (PN: 3XWBRK)



#### Sistine 4XC

Frequency Response 63–25,000 Hz ± 3 dB

#### Tweeter Dispersion (horizontal x vertical)

30° x 80°

#### Sensitivity

92 dB @ 2.83 volts/ meter

4 ohms. Compatible with 4, 6, or 8 ohm rated amps.

#### **Crossover Frequencies**

400, 2250 Hz

#### **High-Frequency Driver**

 $1.25 \times 2.4$  inch  $(3.2 \times 6.1$  cm) Folded Motion XT Obsidian transducer with  $4.5 \times 2.75$  inch (11.4 x 7 cm) diaphragm.

#### Mid-Frequency Drivers

Two 3.5-inch (8.9 cm) black unidirectional carbon fiber multisection cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

#### **Low-Frequency Driver**

8-inch (20.3 cm) black unidirectional carbon fiber multisection cone with Nomex® backer and cast aluminum basket, sealed back chamber format. Concave dust cap.

Tweeter Level (dB): +2, -2, 0

Position: Front R/Rear L, Front L/Rear R, For center choose either

#### **Binding Post Inputs**

Push style

Custom air core coil inductors, polypropylene film capacitors, and low DF electrolytic capacitors. Thermal/current protection.

#### Suitable Amplifier Range

20-300 watts

#### **Max Power Handling**

150 watts

13.5 lb (6.1 kg)

## Overall Size (diameter x depth) $12.8 \times 7.5$ inch $(325 \times 190 \text{ mm})$

#### Required Opening (including tolerance)

11.46 inch (291 mm)

#### **Projection From the Wall Surface**

0.26 inch (6.6 mm)

#### Depth Required Behind the Wall Surface

7.2 inch (184 mm)

#### **Optional Accessories**

Pre-install bracket (PN: C8HTBRK) Square grille (PN: C8HTSQ)

# A Brief History of Truth in Sound

# The Birth of a Masterpiece

Picasso's youthful realistic style soon gave way to the groundbreaking cubist images that made him famous. The more traditional style of the young Van Gogh matured into the bold, colorful impressionism we recognize today.

This same artistic trajectory was traveled by **Gayle Martin Sanders** and **Ron Logan Sutherland**, as they grappled with improving the "finicky" characteristics of classic electrostatic loudspeaker designs.

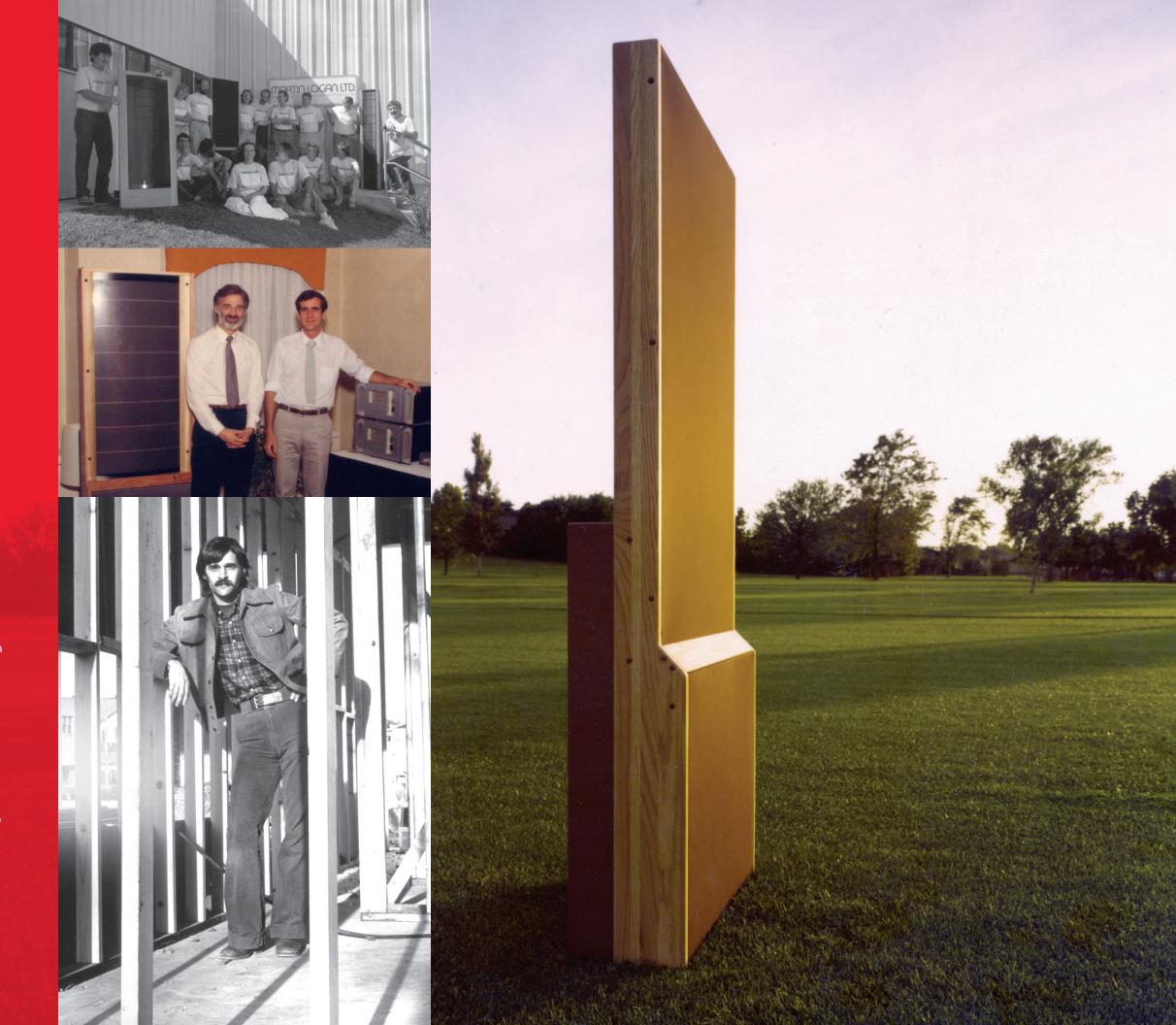
Early electrostatics were prized for their purity and clarity. But they were difficult to work with, needed lots of amplification, lacked bass, and had a limited soundstage. With the artful application of innovative materials and contemporary technology, Sanders and Sutherland improved the performance, and expanded the appeal, of this exulted audio technology.

By the early 1980s, MartinLogan had gained a worldwide reputation for superior electrostatic performance and arresting product design.

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 speakers 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.

Today's flagship Masterpiece CI Series of high performance loudspeakers is the culmination of nearly four decades of artistic growth and creative evolution.

It is, as its name implies, a masterpiece of audio realism and impact; destined to be a classic.



## Folded Motion Drivers at Work.

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 Martin-Logan'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 Control 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 perfect control. The sound that results is pure MartinLogan, with super-low distortion, astonishing clarity, and absolute precision.

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.





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