

# ABYSS

High-Resolution Subwoofer System

## ABYSS

Supercharged  
Performance.  
Miniaturized Size.



**Almost 20 years ago, MartinLogan revolutionized audio performance with the introduction of the original Abyss subwoofer, a powerhouse that redefined the standard for deep bass. This iconic subwoofer was a larger, more potent version of the highly acclaimed Dynamo. Today, the Abyss Series returns, carrying forward this legacy with a new approach.**

Introducing the modern Abyss Series subwoofers: engineered with a unique Hybrid Woofer System, these subwoofers deliver "supercharged" performance in a sleek, compact design. By enhancing performance and minimizing their footprint, the new Abyss Series redefines what you expect from a subwoofer, offering unparalleled sound quality in a miniaturized size.

These subwoofers pack an extensive feature list and impressive power into a stylish, super-compact, room-friendly design, delivering performance completely unexpected from their size. With technologies including built-in wireless signal connection, advanced Anthem Room correction, anti-vibration feet, and easy-to-use app control, Abyss Series subwoofers offer incredible performance and flexibility.

Abyss subwoofers utilize a Hybrid Woofer System, pairing two custom-designed aluminum passive radiators with an active aluminum woofer. This driver layout provides the increased output and lower distortion of a ported design while maintaining the more compact sizing and tighter bass typically associated with a sealed design. While much more difficult to design and engineer, this Hybrid system gives Abyss Series subwoofers the benefits of both sealed and ported designs all in one. This powerful woofer system is backed by the brains of the Vojtko DSP engine, whose best-in-class 500MHz DSP with 64bit processing provides the intelligence needed to control the advanced technologies and up to 1600W of Magnitude® amplification on board. This combination allows Abyss's diminutive footprint to deliver enhanced low frequency output and distortion free detail retrieval.



Abyss 10



Abyss 8

High-Resolution Subwoofer System

  
MARTIN LOGAN

## ABYSS 8

### Application

Subwoofer

### Frequency Response

23-120 Hz  $\pm 3$  dB (Anechoic via LFE input)

### Low Frequency Transducer

Triple 8" (20.3cm) Hybrid Woofer System consisting of a single high-excursion, anodized-aluminum cone in a stamped steel basket with dual anodized-aluminum cone passive radiators

### Amplifier

Magnitude® MT-1kW Amplifier with 1,000W peak (500W continuous)

### Digital Signal Processing

Ultra High-Resolution 500MHz Vojtko DSP Engine with 64bit processing

### Cabinet

Precision-crafted, sealed MDF enclosure featuring a robust 1-inch thick MDF structure with reinforced woofer baffles and center brace

### Controls (on backplate)

Level: Interactive LED Backlit Knob

Tone Sweep: Sweep Start and Pause (with status light)

Power Mode: On, 12v Trigger, Auto

Wireless Audio Pairing Button (for included MartinLogan wireless transmitter)

### Controls (via Bluetooth)

Level: -40 to 12dB (Min-Max)

Low-Pass Filter (Frequency): 35-120Hz (1° Increments)

Low-Pass Filter (Order): Bypass, Third, Fourth

Phase: 0-180° (1° Increments)

Phase (Polarity): Normal, Inverted

Preset Listening Modes: Movie, Music, Night

20-30Hz Level:  $\pm 10$ dB

Anthem Room Correction (ARC Genesis): On, Off

Tone Sweep (120-20Hz): On, Off, Pause (Frequency)

### Inputs

Line Level: Left, Right, and LFE  
XLR: LFE

Speaker Level: Left and Right (requires banana plugs)

### Wireless Input

Integrated Wireless Receiver, Wireless Transmitter Included

### Power Draw

Max: 500W  
Standby (Wireless Disabled): 0.5W  
Standby (Wireless Enabled): <2W

\*Transmitter and Subwoofer combined

### Feet

Integrated Anti-Vibration Feet (carpet spikes included)

### Weight

46.7 lbs (21.2 kg)

### Dimensions (HxWxD)\*

13.5" x 13.2" x 13.2"  
(34.3cm x 33.5cm x 33.5cm)

### Finish

Gloss Black or Satin White

\*Product height includes feet, other dimensions are cabinet only. Specifications are subject to change without notice.

## ABYSS 10

### Application

Subwoofer

### Frequency Response

22-120 Hz  $\pm 3$  dB (Anechoic via LFE input)

### Low Frequency Transducer

Triple 10" (25.4cm) Hybrid Woofer System consisting of a single high-excursion, anodized-aluminum cone in a stamped steel basket with dual anodized-aluminum cone passive radiators

### Amplifier

Magnitude® MT-1.6kW Amplifier with 1,600W peak (800W continuous)

### Digital Signal Processing

Ultra High-Resolution 500MHz Vojtko DSP Engine with 64bit processing

### Cabinet

Precision-crafted, sealed MDF enclosure featuring a robust 1-inch thick MDF structure with reinforced baffle

## Seamlessly Integrating High-Performance Audio with Elegant Design

Emphasizing high performance and decor-friendly aesthetics, MartinLogan subwoofers expertly blend audiophile musicality and theatricality with dynamic output and accuracy in a compact design. As with all MartinLogan subwoofers, the Abyss Series is designed to work with any speaker system while being uniquely engineered to keep pace with the exotic thin-film technologies utilized in MartinLogan loudspeakers.

## Hybrid Woofer System – The Ultimate Compact Powerhouse

Abyss subwoofers deliver high output and low distortion with custom-designed aluminum woofers, engineered for peak performance using advanced Klippel analysis. The lightweight, strong aluminum cones ensure excellent heat dissipation, making them perfect for powerful, compact subwoofers.

Featuring a unique Hybrid Woofer System, Abyss combines an active aluminum woofer with two aluminum passive radiators. This innovative design offers the enhanced output of a ported subwoofer while maintaining the compact size and tight bass of a sealed subwoofer. Enjoy the best of both worlds without compromises like larger cabinets or port noise.

## Magnitude® MT-1kW and MT-1.6kW Amplifiers Redefine Abyss Performance

MartinLogan's proprietary Magnitude® Amplifiers unlock the full potential of the custom-engineered Abyss woofers. Featuring two carefully crafted architectures, the advanced MT-1kW in the Abyss 8 delivers up to 1000W Peak (500W RMS) of clean power, ensuring remarkable impact and seamless musicality. Meanwhile, the MT-1.6kW in the Abyss 10 offers an impressive 1600W Peak (800W RMS), delivering powerful, deep bass with unparalleled clarity, precision and visceral impact. These ultra-efficient Class-D architectures guarantee exceptional control, providing an immersive audio experience that enhances all your favorite content.

## Advanced Vojtko DSP Engine: Elevating Subwoofer Performance

Abyss subwoofers utilize the cutting-edge, ultra-high-resolution Vojtko DSP engine, named after MartinLogan's Chief Audio Technologist. Featuring a best-in-class 500MHz DSP with 64-bit processing, the Vojtko DSP engine controls all aspects of subwoofer performance in real-time. This level of computing power enables advanced features like wireless app control, integrated wireless signal connection, and other advanced DSP functions with complete audible transparency, allowing MartinLogan engineers to fine-tune performance for maximum output and fidelity. Thanks to the computational power of this sophisticated DSP engine, Abyss subwoofers are also compatible with the award-winning Anthem Room Correction system.

## Reduced Vibration, Enhanced Bass

Solid bass performance is a critical component of any audio system and contributes to the visceral impact of your entertainment. Abyss's integrated anti-vibration feet improve bass performance while reducing floor and wall vibrations. By dramatically reducing energy transfer between the subwoofer and the floor, unwanted room rattles and buzzes are eliminated, resulting in tighter, cleaner bass and improved system clarity and dynamics. As a less intrusive alternative to acoustic room treatments, Abyss's integrated anti-vibration feet can also help minimize noise complaints by reducing vibration transfer into adjoining rooms. Suitable for all types of flooring, options include hard surface and carpet spikes.

## Fine-Tune Your Subwoofer Settings with MartinLogan's Intuitive App

By far the most convenient way to adjust a subwoofer, MartinLogan's Subwoofer Control app for iOS and Android devices allows you to easily adjust settings such as Volume, DSP Mode, Phase, and many others right from the comfort of your seat for ultimate control and ease of tuning.

## Optimize Bass Performance with Award-Winning Anthem Room Correction

Abyss subwoofers are compatible with the award-winning Anthem Room Correction system. This highly advanced software measures subwoofer performance in your room and then performs custom equalization, tuning, and calibration to achieve the highest levels of bass impact and accuracy possible for your specific installation. Requires an ARC Calibration Microphone and a PC or Mac computer (sold separately).