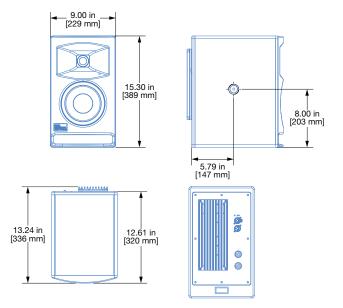
DATASHEET CINE-STUDIO

# Amie<sup>™</sup> Precision Studio Monitor







The Amie precision studio monitor is a compact, high-performance loudspeaker designed for critical audio workflows in music or cinema—where accurate translation to larger systems is a requirement. Developed to meet the demanding needs of audio professionals, Amie allows you to hear your work with unparalleled precision, image and depth.

Amie traces its lineage to Meyer Sound's Acheron® screen channel loudspeakers, sharing core technology that makes it ideal for any precision work in music, film, broadcast, or game post-production.

Amie is equally suited for both stereo and multi-channel monitoring in small- to medium-sized rooms. In any application, the addition of an Amie-Sub extends the system frequency response down to 22 Hz. The Amie Sub was specifically designed to be the companion for Amie loudspeakers—facilitating the creation of a complete system with easy integration for any configuration using the 7.1 and 2.1 integration modules installed in the Amie-Sub. A complete system is the perfect solution for music as well as for film work where the destination is a larger production room.

With its flat frequency response, Amie accurately reproduces source material at different listening levels and with its remarkable power-to-size ratio, the Amie monitor can make your room sound like a mixing stage. In addition, the phase linearity achieved in the Amie monitor creates an incredibly well-behaved impulse response, yielding superior imaging compared to any other monitor in its size category.

Sophisticated onboard signal processing and crossover circuitry optimize phase response, ensuring transparency and precise spatial imaging. When monitoring with Amie, engineers, editors and sound designers can trust that their work will successfully translate to the next stop, which could be the mix stage or the outside world.

Engineered for sonic linearity in both amplitude and time, Amie exhibits uniform response over its full dynamic range. Advanced driver protection circuitry allows for graceful handling of peak material with very low distortion and accurate phase response yielding a comfortable listening experience and allowing engineers to work in extended sessions with minimal fatigue.

Amie's high-frequency transducer is a silk-infused dome tweeter fed to a constant directivity waveguide that yields uniform, focused coverage with smooth roll-off outside the coverage area. Its low-frequency transducer is a long-excursion cone driver designed for linear behavior. An optimized, low-turbulence cabinet port enhances power handling and extends lowend response.

Powered by a proprietary, high-efficiency, two-channel, class D amplifier and possessing sophisticated DSP, Amie boasts ample headroom, low distortion, and low self-noise, delivering consistent performance even at high sound pressure levels, allowing it to reproduce the most demanding sources with uncompromising precision. The self-powered design simplifies room installations and removes variables such as amplifier and speaker cable length, so the results are always consistent wherever the Amie is used.

Loop through power connectors streamline setup of multichannel systems and necessitate fewer AC room outlets.

Meyer Sound manufactures Amie's enclosure from premium multi-ply birch, and coats it with an attractive, low gloss, textured black finish. The threaded side attachment points are 3/8-inch - 16 and accommodate an optional U-bracket, which can mount on walls and ceilings or attach to a pole mount. In addition, the optional Desk mount allows Amie to be placed on a desk with the ability to tilt.

### **FEATURES AND BENEFITS**

- Phase linearity and low distortion creates accurate imaging and reduces listener fatigue due to time smearing and unwanted harmonics
- Incredible accuracy for music mixes that translate consistently to any medium
- Seamless translation to larger cinema systems
- Linear frequency and amplitude response with sonic accuracy at any level and uniform tonal balance over a wide dynamic range
- High peak power minimizes distortion and compression and yields high crest factor
- Constant-directivity waveguide yields precise coverage reducing room interactions
- Self-powered design simplifies setup and increases reliability

### **APPLICATIONS**

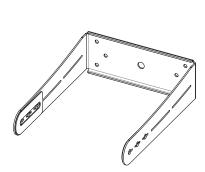
- Small- to medium-sized mixing or editing rooms
- Stereo and immersive mixing for music, film and video post-production
- Broadcast monitoring
- Music, film and video editing
- High-end playback systems

### **ACCESSORIES**

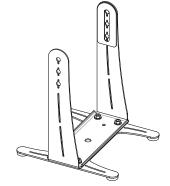
MUB-Amie U-Bracket: Enables mounting of an Amie cabinet on a wall, ceiling, or pole-mount; uses side attachment points on Amie cabinet.

**MUB-Amie U-bracket with Stand:** Mounting base to hold MUB-Amie U-Bracket, so as to support placement of an Amie on a desk and provide ability to tilt. Kit includes MUB-Amie U-bracket.

Amie Sub Compact Subwoofer: This subwoofer, housed within a compact cabinet, was specifically designed to be complementary to the Amie Precision Studio Monitor. It enables a complete system by extending the low frequency range down to 22 Hz. When the 7.1 or 2.1 integration input modules are installed in the Amie-Sub, they facilitate the creation of complete bass-managed systems including LFE handling capabilities.



MUB-Amie U-bracket



MUB-Amie U-bracket with Stand



Amie Sub Compact Subwoofer

## **SPECIFICATIONS**

ACOUSTICAL <sup>1</sup>	
Operating Frequency Range <sup>2</sup>	42 Hz – 22 kHz
Frequency Response	45 Hz – 20 kHz ± 4 dB
Phase Response	190 Hz – 20 kHz ±45°
Linear Peak SPL³	120.5 dB with 18.5 dB crest factor (M-noise), 117.5 dB (Pink noise), 120 dB (B-noise)
COVERAGE	
Horizontal Coverage	80°
Vertical Coverage	50°
TRANSDUCERS	
Low Frequency	One 6.5-inch long-excursion cone driver; 4 $\Omega$ nominal impedance
High Frequency	One 1-inch dome tweeter on a constant-directivity waveguide; 4 $\Omega$ nominal impedance
AUDIO INPUT	
Туре	Differential, electronically balanced
Maximum Common Mode Range	±15 V DC
Connectors	XLR 3-pin female input with male loop output.
Input Impedance	10 $k\Omega$ differential between pins 2 and 3
Wiring	Pin 1: Chassis/earth through 1 k $\Omega$ , 1000 pF, 15 V clamp network to provide virtual ground lift at audio frequencies Pin 2: Signal + Pin 3: Signal – Case: Earth ground and chassis
Nominal Input Sensitivity	6 dBV (2.0 V rms) continuous is typically the onset of limiting for noise and music
Input Level	Audio source must be capable of producing of +20 dBV (10 V rms) into 600 $\Omega$ to produce the maximum peak SPL over the operating bandwidth of the loudspeaker.
AMPLIFIER	
Туре	Two-channel, Class-D
Total Output Power <sup>4</sup>	900 W peak
THD, IM, TIM	< 0.02%
Cooling	Convection
AC POWER	
Connector	powerCON 20 input with loop output (up to 7 Amie loudspeakers may be safely looped)
Automatic Voltage Selection	90–265 V AC
Safety Agency Rated Voltage Range	100-240 V AC, 50-60 Hz
Turn-on and Turn-off Points	90 V AC turn-on, no turn-off; internal fuse-protection above 265 V AC
CURRENT DRAW	
Idle Current	0.160 A rms (115 V AC); 0.144 A rms (230 V AC); 0.183 A rms (100 V AC)
Maximum Long-Term Continuous Current (>10 sec)	0.68 A rms (115 V AC); 0.36 A rms (230 V AC); 0.79 A rms (100 V AC)
Burst Current (<1 sec) <sup>5</sup>	1.02 A rms (115 V AC), 0.51 A rms (230 V AC), 1.2 A rms (100 V AC)
Maximum Instantaneous Peak Current	2.7 A peak (115 V AC), 1.4 A peak (230 V AC), 3.1 A peak (100 V AC)
Inrush Current	<20.0 A peak

### SPECIFICATIONS, CONT'D.

PHYSICAL	
Dimensions	W: 9.00 in (229 mm) x H: 15.30 in (389 mm) x D: 13.24 in (336 mm)
Weight	25 lb (11.3 kg)
Enclosure	Premium multi-ply birch, low-gloss slightly textured black finish
Rigging	3/8-inch - 16 threaded side attachment points for optional mounting accessories

#### **NOTES**

- 1. Loudspeaker system predictions for coverage and SPL are available in Meyer Sound's MAPP System Design Tool.
- 2. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics.
- 3. **Linear Peak SPL** is measured in free-field at 4 m referred to 1 m. Loudspeaker SPL compression measured with M-noise at the onset of limiting, 2-hour duration, and 50 °C ambient temperature is <2 dB.

M-noise is a full bandwidth, (10Hz-22.5kHz) test signal developed by Meyer Sound to better measure the loudspeaker's music performance. It has a constant instantaneous peak level in octave bands, a crest factor that increases with frequency, and a full bandwidth Peak to RMS ratio of 18 dB.

Pink noise is a full bandwidth test signal with Peak to RMS ratio of 12.5 dB.

**B-noise** is a Meyer Sound test signal used to ensure measurements reflect system behavior when reproducing the most common input spectrum, and to verify there is still headroom over pink noise.

- 4. Peak power based on the maximum unclipped peak voltage the amplifier will produce into the nominal load impedance.
- 5. AC power cabling must be of sufficient gauge so that under burst current rms conditions, cable transmission losses do not cause the loudspeaker's voltage to drop below the specified operating range.

### **ARCHITECTURAL SPECIFICATIONS**

The loudspeaker shall be a self-powered studio monitor. Its transducers shall include one 6.5-inch diameter long-excursion cone driver and one 1-inch dome tweeter on a constant-directivity waveguide.

The loudspeaker shall incorporate internal processing and a two-channel class D amplifier, one channel for each driver. Processing shall include equalization, phase correction, driver protection, and signal division.

Performance specifications for a typical production unit shall be as follows, measured at 1/3-octave resolution: frequency range, 45 Hz to 20 kHz; phase response, 190 Hz to 20 kHz  $\pm$  30°; linear peak SPL shall be 120.5 dB with 18.5 dB crest factor, measured free-field with M-noise at 4 m referred to 1 m. Horizontal coverage shall be 80° and vertical coverage shall be 50°.

Audio connectors shall be XLR 3-pin, female and male, accommodating balanced audio. The audio input shall accept a nominal 6 dBV (2.0 V rms) signal.

The internal power supply shall perform automatic voltage selection, EMI filtering, soft current turn-on, and surge suppression. Power requirements shall be nominal 100, 110, or 230 V AC line current at 50–60 Hz. UL and CE operating voltage range shall be 100–240 V AC at 50–60 Hz. AC power connectors for input and loop output shall be powerCON 20. Maximum long-term continuous current draw shall be: 0.68 A rms (115 V AC), 0.36 A rms (230 V AC), and 0.79 A rms (100 V AC).

Components shall be mounted in an optimally tuned, vented enclosure constructed of premium multi-ply birch with a low-gloss, slightly textured black finish.

Dimensions shall be W: 9.00 in (229 mm)  $\times$  H: 15.30 in (389 mm)  $\times$  D: 13.24 in (336 mm). Weight shall be 25 lbs (11.3 kg).

The loudspeaker shall be the Meyer Sound Amie.

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