Meyer Sound PANTHER



Meyer Sound announces PANTHER, a new flagship linear line array loudspeaker engineered to meet rapidly evolving demands for large-scale touring and installed systems.

Complex and visually-focused production scenarios, coupled with tighter safety regulations, often restrict the space and weight allowed for loudspeakers. At the same time, environmental policies require greater energy efficiency and a smaller footprint for transport as more productions shift to a networked signal infrastructure. Responding to these demands, PANTHER's acoustic output is closer to the significantly larger and heavier LEO® line array loudspeaker and occupies the slender form factor of the existing LYON® line array loudspeaker. Despite stadium levels of performance, PANTHER weighs just 150 lb (68 kg) and offers substantial savings on current draw from the previous generation flagship line array loudspeaker. A dual analog/Milan™ AVB network input module means PANTHER offers flexible signal distribution options and each cabinet comes standard with an IP55 weather protection rating - all at a substantially lower initial cost compared to LEO and LYON.

"This is our most significant loudspeaker introduction in more than a decade," says John Meyer, President & CEO of Meyer Sound. "PANTHER advances my commitment to making loudspeakers with linear response, predictable coverage, and extended headroom for dynamic, uncompressed music reproduction — transient peaks in particular. Essentially, PANTHER produces nearly the same power and headroom as LEO in the footprint of LYON. I'm proud of how our engineers achieved ambitious performance benchmarks while reducing weight and increasing energy efficiency."

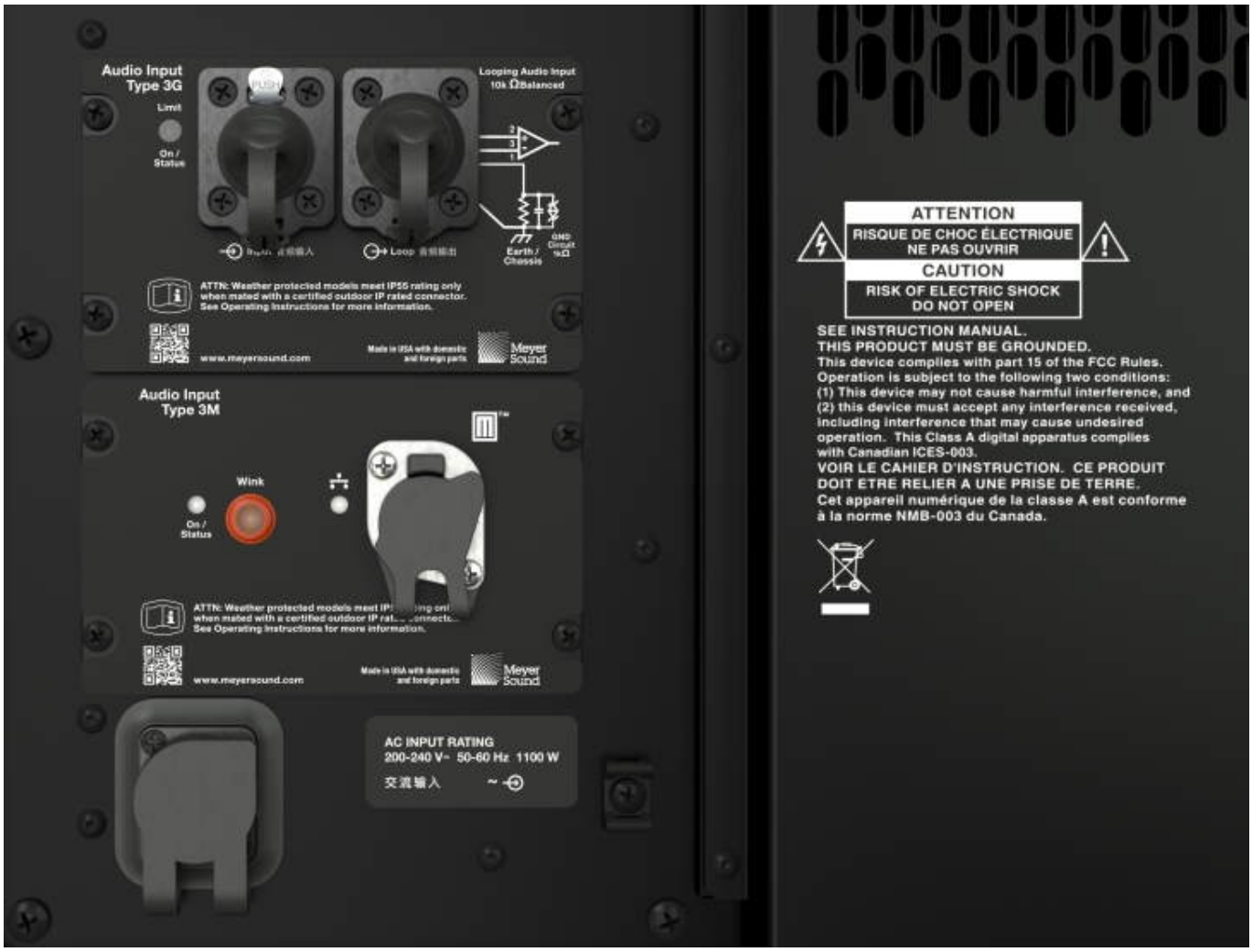
The electronics module in PANTHER is an all-new, lightweight design incorporating a

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four-channel Class D amplifier coupled to an innovative power supply. With advanced power factor correction and higher voltage rails, the new amplifier package delivers higher peak current to the loudspeakers while presenting a stable load to the AC line.

PANTHER also features new, longer-excursion 12-inch low-frequency cone drivers and new 3-inch compression drivers. Each incorporates advanced magnet structures using new materials for higher flux density despite substantial weight reduction. Combined with a new LF port design, PANTHER has a maximum peak output of more than 150 dB SPL. Weighing only 150 lb (68 kg), PANTHER is a significantly lighter box than anything in its class.

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While never compromising John Meyer’s performance goals, the PANTHER engineering team, led by Engineering Director, Acoustical & Mechanical, Katie Murphy, pursued a unified approach to weight reduction.

“With PANTHER, we excelled with a full system design approach,” says Murphy. “We had the electrical and mechanical engineers working in a coordinated effort, which meant we could leverage reduced amplifier and transducer weight with new cabinet designs and materials to further reduce weight. Everybody was in sync at every

step to achieve our goals.”

Reduced weight means more PANTHER loudspeakers can be flown on a single motor, and larger arrays can share the same truss and hang points with extensive video and lighting gear. Also, larger and longer arrays can be flown outdoors while complying with new safety regulations related to wind events. Shipping costs will be substantially reduced, particularly when air transport is required. PANTHER’s significant weight and size reduction also contributes to less CO2 emissions during transportation.

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The PANTHER family consists of three cabinets with different horizontal coverage patterns. PANTHER-M and PANTHER-W are 95 and 110 degrees, respectively, and will be familiar options for existing Meyer Sound owners. PANTHER-L features an all-new long throw horn with a tightly defined 80-degree horizontal pattern. Three options allow system designers to precisely tailor coverage in any size venue with uniform response from front to back and enable deployment of fewer arrays or shorter arrays in some applications, such as in-the-round configurations.

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As with all Meyer Sound loudspeakers, PANTHER offers the service longevity that comes with the optimally matched transducers, amplifiers, and processing of self-powered systems. In addition, PANTHER offers new features that assure a greater long-term return on investment.

- Certified Milan AVB Input Standard: By incorporating Meyer Sound's new Avnu Alliance-certified Milan input module, PANTHER becomes the world's first Milan Certified line array loudspeaker. With this advancement, PANTHER extends Milan-based networked systems all the way to the loudspeaker cabinet, while the always-active parallel analog input assures backward compatibility with existing hardware.
- Weather Protection Standard: PANTHER is weather protected to the new IEC IP55 standard with full rain protection when using mating Neutrik TOP series signal and powerCON connectors. No rain hood is required.

With standard weather protection, the same PANTHER cabinets can be used for indoor or outdoor events with no special preparations required. With the compact size and lower weight, the same PANTHER inventory can be assigned to a wide range of applications, from theaters and convention halls up to arenas, stadiums, and festival sites. Expanded flexibility means PANTHER systems spend less time in the warehouse and more time generating revenue. And, when on tour, a tight truck pack with no amplifier racks further reduces expenses for enhanced ROI.

Meyer Sound's continual investment in materials and design standards means not only is the performance class-leading, but the price is substantially lower than the previous generation and below the most direct competitor models when factoring in comparable amplification and processing. The PANTHER linear line array loudspeaker will go into production and ship in February 2022. United Kingdom-based rental company Major Tom Ltd., one of the initial launch partners, will deploy PANTHER on Ed Sheeran's 2022 + - = ÷ x ("Mathematics") Tour.

"Everybody on the team really came together and put their hearts and souls into this project," comments Katie Murphy. "We went all out to create a loudspeaker that would define line array technology for years to come."

"We see PANTHER as more than just a new product, but as something that adds a new dimension to what we are doing as a company," adds John Meyer. "It has the potential to change the path we are on in the sound industry. I'm excited to see how industry professionals - and, more importantly, audiences - respond to it."

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