

opa 15 ACTIVE

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Acoustic Excellence™



The OPA-15 Active is an extremely narrow-profile self-powered sound reinforcement system designed for high-level professional audio applications. The OPA-15 Active is a two-way design that utilizes a newly-developed low frequency transducer that maximizes low frequency output in a remarkably narrow enclosure format. The Active's electronics module utilizes full class-D topology and features on-board DSP to create high-order active Linkwitz-Riley crossover filters and full parametric equalization. The power module features a total of 1,600 watts of peak power. The bi-amplified design provides 1,200 watts of peak low frequency power and 400 watts of peak high frequency power. The total continuous rated system power is 800 watts. Both the low frequency and the high frequency sections have compressor/limiter dynamics that are factory-programmed for maximum system dynamics and system protection. All DSP parameters are designed to insure maximum system performance and response linearity. The woofer is On Point Audio's NP-15N that features a newly-developed ultra-narrow mechanical suspension mounted to a 15-inch (381-mm) direct radiating diaphragm. The NP-15N frame has been optimized specifically for use with this suspension/diaphragm assembly that allows a conventional 15-inch cone assembly to fit in a width of only 14 inches. This is accomplished by a new suspension geometry that minimizes the suspension width while maximizing linear displacement. This unique woofer allows the OPA-15 Active to present a remarkably narrow horizontal width while offering all of the advantages of a truly professional 15-inch two-way actively-powered system.

The vented low-frequency design of the enclosure is further optimized to a 6th order alignment via the on board DSP and combines low frequency response extension and very high-order ultra-low-frequency filtering to increase the system's dynamic headroom and its low frequency transducer's reliability.

The OPA-15 Active system's sensitivity has been optimized for superior fidelity and clarity rather than artificially high on-axis sensitivity. The overall design of the system was based on integrating multiple parameters to

- Ultra-compact, high-powered 15-inch two-way system
- On-board amplifier with 2,000 peak watts total – 1,000 watt low-frequency amplifier and 1,000 watt high frequency amplifier
- Built-in digital signal processing module with custom-tuned EQ, crossover, and dynamics parameters deliver maximum sound quality and output
- 60° x 40° constant-directivity high-frequency horn with 1.75-in (44.5-mm) pure titanium compression driver
- 15-inch woofer with large-format 4-inch voice coil and neodymium magnet
- Multiple M10 fly points for suspension or rigging plus a built-in pole mount enable use for fixed or mobile applications
- Trapezoidal injection-molded polypropylene enclosure permits use as a floor monitor

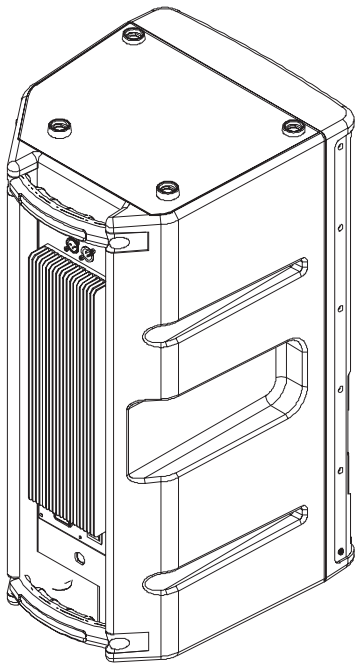
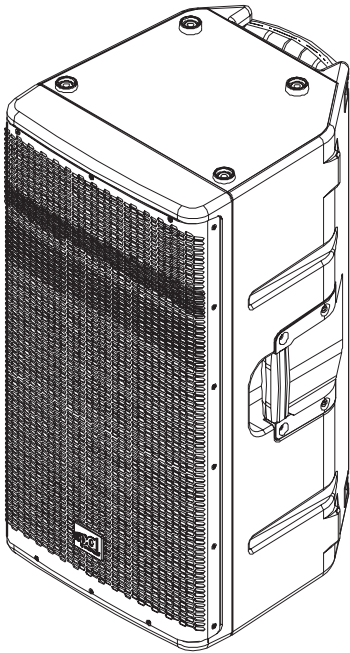
achieve superior overall performance rather than an inappropriate focus on particular performance specifications. This approach yields a superior overall system where all parameters are optimized to achieve the best possible performance and intelligibility. The OPA-15 Active features an injection-molded enclosure designed for high impact resistance and excellent acoustic properties. The modified trapezoidal geometry allows the OPA-15 Active to be used as either a conventional sound reinforcement system or as a high output floor monitor. The vented low frequency design ensures superior mechanical reliability and low-distortion output at very low frequencies.

The NP15N woofer features a 4-inch (101.6-mm) diameter voice coil that offers very high power handling and superior system reliability. The unique frame design has been optimized for use in the OPA-15 Active enclosure. This low frequency transducer has been designed for excellent acoustic damping, superior clarity and intelligibility.

The high frequency compression driver has an optimized throat design that provides wide bandwidth control of acoustic radiation. The long throw wave guide is ideal for the vast majority of both indoor and outdoor portable sound reinforcement applications and insures high direct-to-reflected acoustic ratios. The high compression ratio driver also features neodymium magnetics to insure ultra-high efficiency. The medium-format diaphragm assembly and associated active crossover design are optimized for low distortion at very high sound pressure levels.

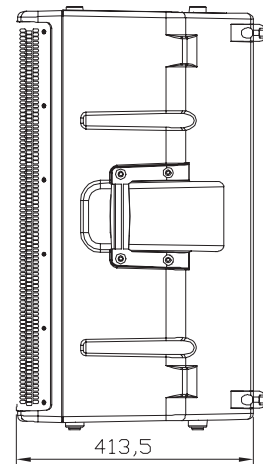
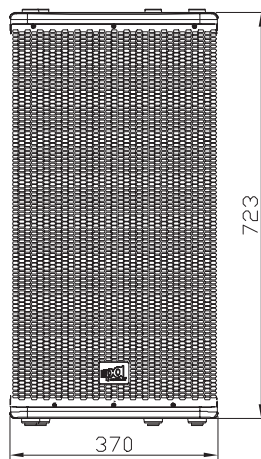
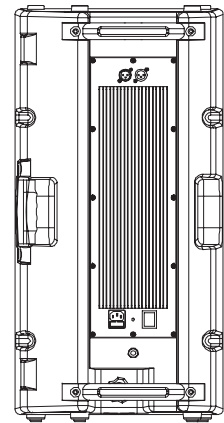
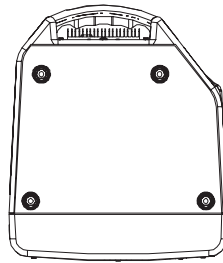
The OPA-15 Active's enclosure design features multiple handles and a standard 1.375-inch (35-mm) loudspeaker stand mount internal adaptor. There are also 7 x M10 fly points for permanent installation or rapid rigging. The system features both 3-pin XLR-type input and XLR thru output connectors. The "full face" metal grill offers substantial driver protection and is extremely acoustically transparent.





Specifications

System Type:	Powered 15-inch two-way full-range
Frequency Range (-10 dB):	45 Hz - 20,000 Hz
Frequency Response (-3 dB):	50 Hz - 20,000 Hz
Coverage Pattern (H x V):	60° x 40°
Total Power (Peak / Continuous):	2,000 / 1,000 watts
LF Power (Peak / Continuous):	1,000 / 500 watts
HF Power (Peak / Continuous):	1,000 / 500 watts
Crossover Frequency / Type:	1,500 Hz / Linkwitz-Riley
LF Driver:	NP15N 15-inch
HF Driver:	ND175 1.75-inch titanium
Rated Max SPL (Peak / Continuous):	128 dB / 125 dB
Dimensions (H x W x D) inches:	29.21 x 14.57 x 16.25 in
Dimensions (H x W x D) mm:	742 x 370 x 413 mm
Enclosure Material:	Injection-molded PP
Net Weight :	63 lb / 28.6 kg



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