

## **StuDiomaster presents New CORE Array System**



The new StuDiomaster CORE is a highly versatile, self-powered hi-mid top and sub stack, suitable for high efficiency portable sound reinforcement applications, including in larger 'medium size' size venues where wider constant frequency coverage is required. To achieve this wider coverage CORE employs a constant curve array hi-mid cabinet, together with a powerful self-powered, active sub.

Constant curvature arrays are an increasingly popular solution for efficiently providing wide and consistent, high quality coverage in venues where a full-blown line array would be overkill and point source systems just not enough. Constant curvature arrays are fundamentally different from line arrays, in that they provide wider coverage rather than longer throw and increasingly narrow coverage. The precision curvature of the CORE hi-mid cabinet effectively emulates a three element fixed curvature array, producing a highly accurate super-wide 100° horizontal signal and 70° vertical coverage; extending to the outer reaches of an auditorium, right down to the front of the stage.

In contrast with other portable constant curve array systems, CORE is especially purposed for full-scale musical performance, with two variants - CORE 121 and CORE 151 - respectively having 5" and 8" MF drivers; rather than the 2" or smaller drivers more usually deployed in this product class. In the CORE 121 these are matched with 9x 1" dome HF drivers, and 12x 1" dome tweeters in the CORE 151. This gives the two CORE curvature arrays a highly accurate response across the full mid and high frequency spectrum (from 200 to 18000 Hz + 5dB), throughout the 100° (H) x 70° (V) coverage.

All this high resolution, high transparency MF / HF requires substantial low-end support. This is delivered at output levels of up to 128 dB by a lightweight and compact reflex sub; featuring a 12" LF driver on the CORE 121 and 15" LF driver on the CORE 151. The subs provides the CORE systems with integrated bi-amplification - 300 W (HF-MF) / 700 W (LF) on the CORE 121 and 400 W (HF-MF) / 700 W (LF) on the CORE 151\* - in addition to onboard DSP and an integrated 4-channel mixer. (\* RMS)



The mixer module and connector panel is mounted at a convenient angle for ease of use and provides 2x mic/line, a hi-z instrument and stereo line level inputs, Bluetooth® wireless audio connectivity, selectable link outputs and an independent sub level. DSP processing includes presets for DJ, Music or Vocal applications and provides access to 3-band EQ, limiter, output delay, master volume and channel metering. Power and audio signals are transmitted from the sub to the curve array via the adjustable air-suspension speaker pole and a unique top hat connector,

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eliminating external cabling.

StuDiomaster General Manager Patrick Almond says, “CORE exploits unique hybrid performance characteristics of a curvature array cabinet in providing extraordinary horizontal coverage, within a design with the necessary signal power and throw for a wide range of performance, playback and presentation applications; including - with up to 4,400 W system peak power - serious music performance in larger venues. Yet CORE is a sleek, discrete and compact design, relatively lightweight and easily portable. Making it among the most versatile and cost / performance efficient systems in its product class.”

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