

KF600i



Compact High Output, High Directivity VA™ System

The KF600i is the second system to incorporate EAW's proprietary Virtual Array Technology—the unique set of engineering solutions behind the acclaimed KF850 system. The KF600i incorporates additional innovations that reduce system size and weight without sacrificing true long throw performance. For the first time, sound contractors can meet limited space requirements without compromising sonic impact, acoustic accuracy or intelligibility.

Advanced EAW Horn Technology

The "heart" of the KF600i is a compact version of the compound flare with displacement plug technology developed by Kenton Forsythe for the KF850 system. In combination with a compound flare high frequency horn, our mid-bass horn enables the compact trapezoidal KF600i package to achieve flat power response and true constant 60° horizontal coverage. This VA design makes it easy to construct idealized arrays with horizontal coverage angles of 60° to 360°.

True Three-Way Design

Centered on a large-diaphragm (250 mm/10 in.) mid horn, the KF600i exhibits significantly less distortion at high output levels as compared to all the two-way or quasi-three-way systems typically used for high output applications.

Low Frequency Wave Guide Cavity

Recessing the low frequency driver in a wave guide cavity behind the high frequency driver increases directivity and sensitivity while reducing overall system size.

Absolute Response Linearity

± 2.5 dB from 60—18,000 Hz on axis when the KF600i is operated with EAW's MX Series CCEPT™ Signal Processing Unit. Flat frequency response can be extended to below 35 Hz with EAW SB600, SB250 or SB528 subwoofers.

Compact Yet Very High Output Package

Only 33.25 in. high, 19.75 in. wide and 19.75 in. deep, the KF600i is easy to transport and install. Yet it is capable of producing greater than 130 dB SPL. This unprecedented size/output ratio means that a 5,000 watt system of four KF600s and four SB600s can be easily transported in a mini-van.

Integrated Acoustic And Electronic Systems

The KF600i has been engineered for use with EAW's MX Series CCEPT™ Electronic Signal Processing Units and an optional EAW subwoofer system. The MX Series units are preset to match the characteristics of the KF600i, providing all the signal processing required for ideal system performance, including asymmetrically sloped four-way electronic crossovers, phase correction and overload protection.

Configuration Options

The KF600i is available in a number of different configurations to satisfy distinct applications. The KF600i is designed to be tri-amplified and is intended for applications requiring maximum performance. The KF600ix is designed to be bi-amplified and is ideal for all but the most demanding applications. The special order KF600ifx incorporates a full passive crossover for applications that require the KF600's precise coverage and high definition but where maximum output is not a criterion.

As standard equipment, the KF600i includes three aircraft-style hanging points on both top and bottom as well as a foam backed vinyl-coated perforated steel grill. Each of the various

powering configurations is available in two packaging versions: an R version (for "Road" as in KF600iR & KF600ixR), a portable configuration whose complete road hardware includes recessed handles, castor pallet mounting hardware, and multi-pin connectors; and a P version (for "Permanent Installation" as in KF600iP & KF600ifxP), configured for fixed installations without handles and with heavy-duty barrier strip inputs.

Applications

The KF600i provides an unprecedented combination of compact dimensions and reduced mass along with accurate sonic definition, high directivity long throw performance, and exceptionally high output. These qualities make it the ideal choice for any application where space is limited but audio quality is of paramount importance. These include:

- ▼ Theatrical systems
- ▼ Church installations
- ▼ High-level video playback
- ▼ Concert sound reinforcement
- ▼ Dance club systems
- ▼ Corporate auditorium installations.

Architectural Specifications

The three-way loudspeaker system shall incorporate a 15-inch low frequency loudspeaker, a 10-inch mid frequency cone loudspeaker and a compression driver mounted to a constant-horizontal coverage high frequency horn. The system shall meet the following performance criteria: Frequency Response, 58 to 18k Hz + 3 dB; Axial Sensitivity (1w @ 1m), 103 dB SPL (LF), 108 dB SPL (MF), 109 dB SPL (HF); Power Handling, 250 watts 100 hour sine wave (LF), 150 watts 100 hour sine wave (MF), 80 watts 100 hour sine wave (HF); Horizontal coverage, 60 degrees between -6 dB points; Vertical coverage, 40 degrees between -6 dB points.

The system's low frequency driver shall be mounted directly behind the high frequency horn, and be loaded into a vented wave guide cavity. The mid frequency driver shall be loaded into a constant horizontal coverage horn constructed of 3 mm cross-grain-laminated birch hardwood reinforced with high density polyurethane foam and incorporating a center displacement plug. The high frequency driver shall utilize a titanium diaphragm not less than 44 mm in diameter.

The enclosure shall be constructed of void-free cross-grain-laminated birch plywood with internal bracing. It shall be finished in a black catalyzed polyurethane coating. All external hardware shall be coated or of stainless steel to protect against rust and corrosion. The front of the system shall be covered with a protective perforated steel grill assembly coated with vinyl to dampen resonances and backed with open cell foam for dust protection. Hanging fixture attachment points shall be installed in the top and bottom of the enclosure and mating clips shall be included with the system. Cabinet shape shall be trapezoidal tapered in such a way as to enable simple construction of arrays.

The three-way loudspeaker system shall be the EAW model KF600i.

