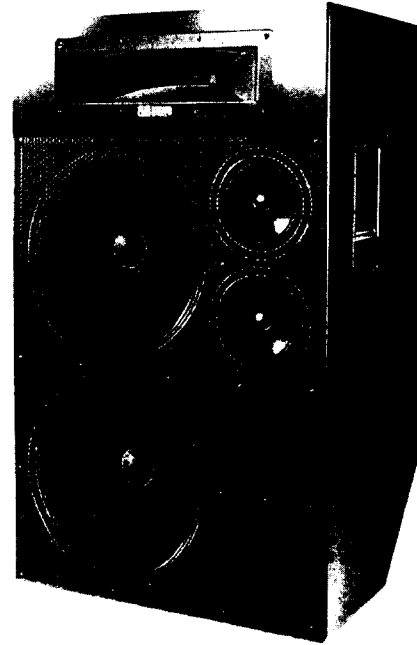


Forsythe Series FR253

**Wide Bandwidth
High Output
Nearfield Full
Range System**



Exceptionally Wide Bandwidth

The FR253's usable frequency range of 30 Hz to 22,000 Hz enables it to accurately reproduce the full musical spectrum from deep fundamentals to the most delicate overtones. This enables your audio presentation to take full advantage of modern electronically synthesized music with hi-fi realism.

Unmatched High Output And Power Handling

With 104 dB SPL sensitivity and over 600 watts AES power handling, the FR253 is capable of output greater than 130 dB SPL. Not only is this one of the highest output vented systems on the market today, but the computer optimized design permits the FR253 to maintain this high output level in the low frequency band, as reflected by its ability to produce over 44 acoustic watts into a half space environment.

Wide Horizontal Coverage

Horizontal coverage of the FR253 is greater than 100 degrees up to 10,000 Hz and 90 degrees coverage is maintained above 16,000 Hz. The MF170A mid-range drivers ensure flat power response through the critical vocal band.

State Of The Art Drivers

The RCF N481 compression driver and H3709 horn combination permit smooth response to beyond 18,000 Hz. EAW's advanced MF170A 7-inch mid-range driver utilizes a poly-laminated cone to reduce distortion, while its small piston size has been optimized for flat power response. The RCF PRO L15/542 bass driver was computer optimized for ideal vented box performance, enabling lower distortion over its pass band.

Advanced Crossover Network

Kenton Forsythe's advanced crossover is the key to the FR253's seamless frequency response and low distortion. The complex third order network utilizes asymmetrical electrical slopes to provide equalization at the crossover points resulting in maximal flat acoustic performance. The crossover is constructed to such high standards that it virtually eliminates typical passive crossover induced distortion.

Applications

The FR253's unique combination of wide bandwidth, high output and wide horizontal coverage make it ideal for use in high quality portable music reproduction applications. FR253's have proved themselves throughout the world in both portable and installed dance music systems, sound reinforcement for legitimate theaters, portable speech reinforcement, club PA systems and on stage keyboard monitors. The FR253's exceptionally flat frequency response and full passive crossover design makes operation simple, eliminating the need for external crossovers, bi-amping, or complex equalization that is required with all competitive systems with similar output capabilities. This ease of use makes the FR253's particularly suited for rental use where many people will be operating it with varying degrees of sound system operational knowledge.

Features

The FR253 is delivered as a complete system ready to roll. Standard features include: perforated steel grill, recessed handles, slant back with castors and catalyzed polyurethane chemical coating black finish. Options include flight hardware and multi-pin connectors.

Architect's and Engineer's Specifications

The loudspeaker system shall be of the three-way type, incorporating two 15-inch low frequency loudspeakers in a vented direct radiator enclosure, two 7-inch mid frequency loudspeakers utilizing a poly-laminated cone and a compression driver with 44 mm composite diaphragm mounted to a cast aluminum constant horizontal coverage horn. The system shall meet the following performance criteria: Frequency range: 30 to 20 k Hz; Pressure sensitivity: 104 dB SPL; Power handling: 625 watts in accordance with AES standard specification; Horizontal coverage: 100 degrees between -6 dB points. The high frequency driver shall have cast reinforcing ridges in the diaphragm. The crossover shall be a third order design incorporating asymmetrical slopes providing driver equalization.

The cabinet shall be constructed of void-free cross-grain-laminated birch plywood and coated with catalyzed polyurethane finish. All the drivers shall be protected with a perforated steel grill coated in vinyl.

The loudspeaker system shall be the Eastern Acoustic Works Forsythe Series model FR253.

Forsythe Series FR253

Specifications

MODEL:	FR253
Frequency Response	
+ 3 dB:	42 to 16,000 Hz
- 10 dB:	30 to 20,000 Hz
Axial Sensitivity:	104 dB SPL
Half Space Efficiency:	7.4 %
Power Handling	
Sine Wave:	300 watts
AES Standard:	625 watts
Nominal Impedance:	4 ohms
Coverage Angles	
Horizontal:	100 degrees
Vertical:	50 degrees
Maximum SPL:	131 dB SPL
Maximum Acoustic Output:	46.25 acoustic watts
Transducer Complement	
Low Frequency:	2x RCF PRO L15/542 380 mm Cone
Mid Frequency:	2x EAW MF170A 170 mm Cone
High Frequency:	RCF N481/H3709 Driver/Horn
Crossover Data:	
Type:	Third Order Equalized
Slope:	18 dB per octave
Frequency:	450, 3000 Hz
Enclosure Type:	Vented
Enclosure Volume:	260 liters (9.0 ft ³)
Construction:	Cross-Grain- Laminated Birch
Finish:	Catalyzed Polyurethane
Dimensions:	41" H x 25"W x 20" D
Weight:	74.09 Kg (163 lbs)

Eastern Acoustic Works