

Forsythe Series FR153

**Wide Bandwidth
Nearfield Full
Range System**



Exceptionally Wide Bandwidth

The FR153'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 Wide Horizontal Coverage

Horizontal coverage of the FR153 is greater than 130 degrees up to 10,000 Hz and 100 degrees coverage is maintained above 16,000 Hz. No other high output system can match this ability to provide excellent sound over as broad a listening area. The natural wide open sound is the result of RCF's unique TW116 hard dome high frequency driver.

State Of The Art Drivers

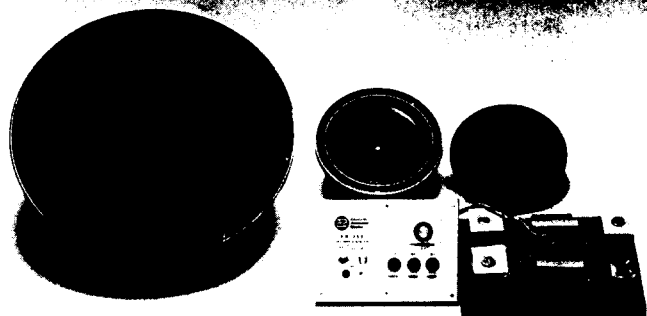
Using the latest developments in driver design permits the FR153 to reach new levels of sonic definition for a high output system. The RCF TW116 hard dome driver is a truly unique device incorporating advanced magnetic circuit design and space age magnetic fluid for voice coil cooling and damping. EAW's 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 FR153's seamless frequency response. The complex third order network utilizes asymmetrical electrical slopes to provide equalization at the crossover points resulting in maximal flat acoustic performance with effective 24 dB per octave acoustic slopes. The crossover also features electronic damping for the system, high frequency level control and driver protection fuses. Crossover construction sets the standards for quality in the audio industry: all components and assemblies are 100% tested. The crossover itself will handle 400 watts thermally for 24 hours and pass 1500 watts for 10 minutes without distortion.

Eastern Acoustic Works

Forsythe Series FR153



FR153 Components

Applications

The FR153's unique combination of wide coverage and bandwidth make it ideal for use in sound reinforcement and reproduction applications including: club and lounge PA, stage instrument monitor, portable AV presentations, audio for video playback and both portable and fixed installation dance systems.

Architect's and Engineer's Specifications

The loudspeaker system shall be of the three-way type, incorporating one 15-inch low frequency loudspeaker in a vented direct radiator enclosure, one 7-inch mid frequency loudspeaker utilizing a poly-laminated cone and a 2-inch hard dome high frequency driver. The system shall meet the following performance criteria: Frequency range: 30 to 22k Hz; Pressure sensitivity: 98 dB SPL; Power handling: 375 watts in accordance with AES standard specification; Horizontal coverage: 130 degrees between -6 dB points. The high frequency driver shall have ferro-fluid in the voice coil gap. 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 FR153.

Specifications

MODEL: FR153

Frequency Response
 +- 3 dB: 40 to 19,000 Hz
 - 10 dB: 30 to 22,000 Hz

Axial Sensitivity: 98 dB SPL
 Half Space Efficiency: 3.7 %

Power Handling
 Sine Wave: 150 watts
 AES Standard: 375 watts

Nominal Impedance: 8 ohms

Coverage Angles
 Horizontal: 150 degrees
 Vertical: 100 degrees

Maximum SPL: 123 dB SPL
 Maximum Acoustic Output: 13.9 acoustic watts

Transducer Complement
 Low Frequency: RCF PRO L15/542 380mm Cone
 Mid Frequency: EAW MF170A 170mm Cone
 High Frequency: RCF TW116 52mm Hard Dome

Crossover Data:
 Type: Third Order Equalized
 Slope: 18 dB per octave
 Frequency: 450, 3500 Hz

Enclosure Type: Vented
 Enclosure Volume: 115 liters (3.9 ft³)
 Construction: Cross-Grain- Laminated Birch
 Finish: Catalyzed Polyurethane

Dimensions: 18" H x 20" W x 25" D
 Weight: 134.1 Kg (75 lbs)

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