

Forsythe Series

EAW DS123B

Wide Coverage
Nearfield Permanent
Installation System

System Features

- **Ultra Compact Package** and horizontal configuration have been optimized from the start for use with subwoofer, enabling easy and unobtrusive installation.
- **Outstanding Sonic Accuracy**, on and off axis as a result of advanced direct radiating design for an exceptionally natural sound character.
- **Wide Coverage of 130 degrees** is maintained over its entire operating range for great sound to every seat in the house.
- **Advanced Crossover Network** provides asymmetrical slopes to equalize driver's frequency and phase response at crossover.
- **Revolutionary RCF TW116 Hard Dome Driver** for HiFi type sound with exceptional high frequency bandwidth.

Applications

The DS123B is designed for use in conjunction with a subwoofer system, in high level club playback and cabaret reinforcement systems or any nearfield application where flat response and wide coverage are required at high sound pressure levels. Its physical construction and packaging have been optimized for easy permanent installation. The DS123B's horizontal configuration permits unobtrusive hanging around the corners of a dance floor or above the perimeter of the stage.

Description

The DS123B is a three-way system utilizing all direct radiating drivers with wide coverage over the 100 to 20,000 Hz band. It boasts exceptionally flat power response due to the seamless integration of the three drivers by a complex Forsythe designed crossover network featuring asymmetrically sloped filters for frequency and phase equalization.



The low frequency section consists of an RCF L12/584 high efficiency driver mounted in a compact enclosure. The vent tuning is optimized for flat response and maximum output above 100 Hz. When used for all music reproduction applications, the DS123B is intended to work with a subwoofer system such as the EAW VB1 18 inch or VB215 dual 15 inch vented low frequency systems.

Mid frequencies are provided by a "state of the art" EAW MF170A 170mm (6.5-in) driver. It inherently offers more extended power response than any 8 or 10 inch driver, and its advanced poly-laminated cone enables lower distortion at high sound pressure levels than is possible with a compression driver.

RCF's advanced TW1 16 hard dome high frequency driver combines the open natural sound character like a HiFi soft dome with the output levels demanded in a high level professional system. This unique driver allows the DS123B to offer higher definition and smoother sound than all other systems of equal output capabilities which use compression drivers for the higher frequencies.

From the space age thermal technology used in the drivers to the custom manufactured crossover components every aspect of the DS123B is optimized for maximum reliability. EAW backs the DS123B the same as all our professional systems with a six year limited warranty against manufacturing defects.

The cabinet is constructed from MD44 high density epoxy based composite wood material

(the same wood used in designer furniture) and is extensively braced for total freedom from output robbing resonances. It is finished in a black catalyzed polyurethane chemical coating for maximum long term durability. A black cloth grill covers the entire front of the cabinet. Inputs are via binding posts on a rear panel that includes fuse protection and high frequency level control.

DS123B Specifications

Frequency Response

Axial +- 3 dB: 100 to 19,000 Hz

Axial - 10 dB: 80 to 22,000 Hz

Nominal Coverage Angle

Horizontal: 130 degrees

Vertical: 100 degrees

Axial Sensitivity:

99 dB SPL 1w @ 1m

Low Frequency Half Space

Reference Efficiency: 6%

Power Handling

AES Standard: 375 watts

100 Hour Sine Wave: 150 watts

Maximum Output

Peak: 124 dB SPL

Long Term: 120.5 dB SPL

Impedance:

8Ω

Low Frequency Subassembly

Driver:

RCF L12/584 300 mm (12-in) Cone Driver

Voice Coil Diameter:

75 mm (3-in)

Enclosure Type:

30 litres (1.06 ft³) Vented

Mid Frequency Subassembly

Driver:

EAW MF170A 170 mm (6.5-in)

Polylaminated Cone Driver

Sealed Subchamber

Enclosure Type:

High Frequency Subassembly

Driver:

RCF TW116 Hard Dome Driver

Voice Coil Diameter:

52 mm (2-in)

Crossover Data

Type:

Three-way LC Design

Slopes:

Third Order 18dB/Octave Asymmetrical Slopes

Maximum Input Before The

Onset of Distortion:

1000 Watts

Additional Descriptive Data

Finish:

Catalyzed Polyurethane Chemical Coating

Grill:

Black Cloth

Input:

Barrier Strip Binding Posts

Dimensions:

23.75 W x 15.75 H x 9.25 D