

Overview

The DBR10 is the most compact model in its series and in its class. Capable of delivering a maximum SPL of 129dB from its compact enclosure, the DBR10 can be used as a utility speaker in a variety of environments.



Features

- Output levels up to 129dB SPL with 1000W of power
- Precise DSP processing with Yamaha's proprietary FIR-X tuning™ delivers high-definition sound
- D-CONTOUR intelligent multi-band dynamic processing delivers powerful, consistently high-quality sound at all output levels in FOH or monitor applications
- Extensive DSP protection functions for maximum output
- Custom-designed transducers and top-quality components add up to unequalled performance
- Extremely accurate 90 x 60 constant directivity horn
- Easy-to-use Onboard 2-channel mixer with flexible IN/OUT connectivity for versatile system integration
- Flexible HPF control allows optimum matching with DXS subwoofers
- Durable, compact plastic enclosures

Specifications

General Specifications

| | | |
|--|------------|--|
| System Type | | 2-way, Bi-amp Powered Speaker, Bass-reflex Type |
| Components | LF | 10" cone, 2" voice coil, Ferrite Magnet |
| | HF | 1" compression driver, 1" throat, Ferrite Magnet |
| Frequency Range | (-10dB) | 55Hz-20kHz |
| Crossover Type | | FIR-X tuning™ (Liner phase FIR filter) |
| Crossover Frequency | | 2.1kHz |
| Coverage Angle (Horizontal x Vertical) | | 90° x 60° Constant directivity horn |
| Output Power*1 | Dynamic | 700W (LF: 500W, HF: 200W) |
| | Continuous | 325W (LF: 260W, HF: 65W) |
| Maximum SPL (1m, on axis) | | 129dB SPL |
| Processing | | D-CONTOUR: FOH/MAIN, MONITOR, OFF |
| Controls | | LEVEL x 2, LINE/MIC, HPF, D-CONTOUR, THUR/MIX, POWER |
| Cooling | | Fan cooling, 4 speeds |
| Power Requirements | | 100V, 100-120V, 220-240V, 110/127/220V (Brazil), 50Hz/60Hz |
| 1/8 Power Consumption | | 60W |
| Floor Monitor Angle | | 50° |
| Pole Socket | | 35mm (Bottom x 1) |
| Handle | | Top x 1 |
| Rigging Points | | Bottom x 2 (Fits for M8 x 15mm eyebolts) |
| Material, Finish, Color | | Plastic, Black |
| Dimensions (W×H×D) | | 308mm x 493mm x 289mm (12.1" x 19.4" x 11.4") |
| Net Weight | | 10.5kg (23.2lbs) |
| Optional Accessories | | BBS251, BCS251, BWS251-300, BWS251-400, SPCVR-1001 |

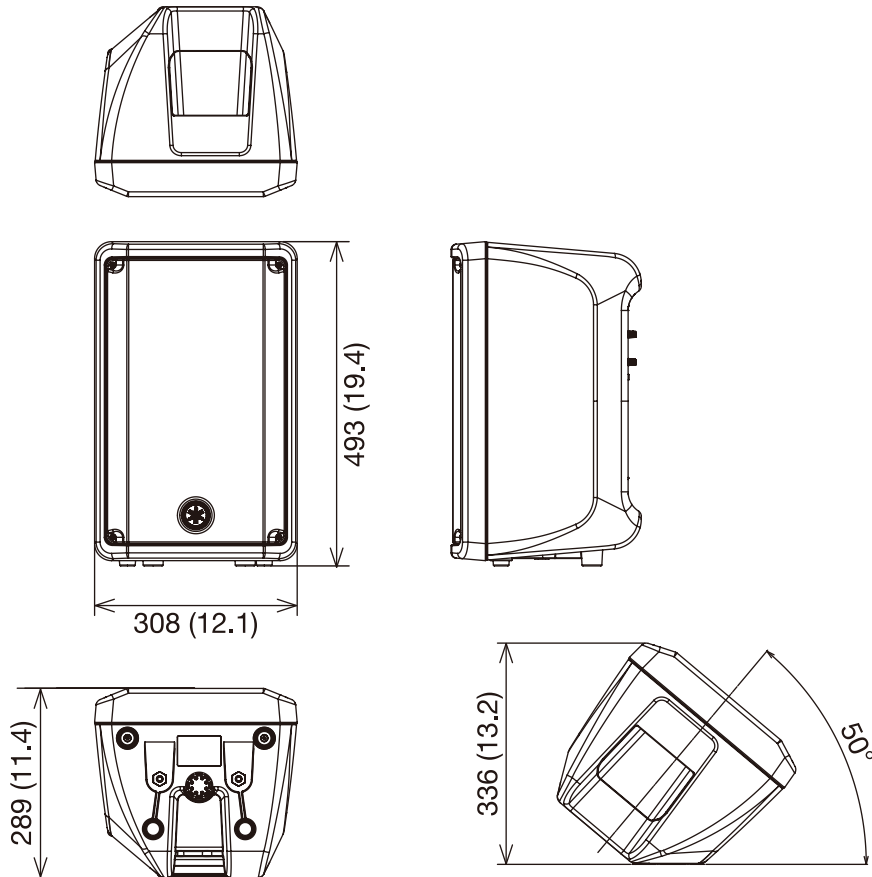
*1 Power rating (120V, 25°C). This is total value of individual output power.

Input/Output Specifications

| | | |
|------------------------------------|--------|---|
| Connectors | Input | INPUT1: Combo x 1, INPUT2: Combo x 1 + RCA-pin x 2 (Unbalanced) |
| | Output | XLR3-32 x 1 (CH1 Parallel Through or CH1 + CH2 Mix) |
| Input Impedance | | INPUT1 (XLR, TRS Phone): 3kΩ INPUT2: (XLR, TRS Phone, RCA Pin): 10kΩ |
| Input Sensitivity (LEVEL: Maximum) | | INPUT1: LINE: 0 dBu, MIC: -32dBu INPUT2: 0 dBu |
| Input Sensitivity (LEVEL: Center) | | INPUT1: LINE: +10dBu, MIC: -22dBu INPUT2: +10dBu |
| Maximum Input Level | | INPUT1: LINE: +24dBu, MIC: -8 dBu INPUT2: +24dBu |

Dimensions

Unit: mm (inch)



Options

- Baton Bracket BBS251
- Ceiling Bracket BCS251
- Wall Bracket BWS251-300
- Wall Bracket BWS251-400
- Speaker Cover SPCVR-1001

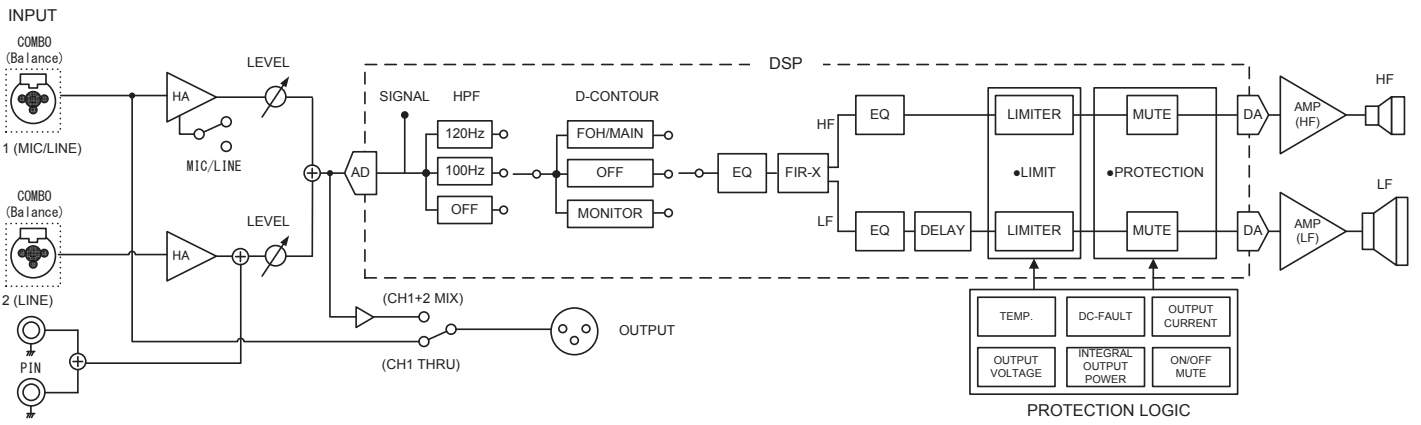
Architectural and Engineering Specifications

The Yamaha DBR10 Powered Loudspeaker shall be a two-way bass-reflex type full-range loudspeaker system having a single 10" cone driver with a 2" voice coil for the low frequencies and a 1" compression driver with a 1" throat for the high frequencies. The loudspeaker shall incorporate a class-D amplifier (1000 watts dynamic/465 watts continuous) and DSP functions such as FIR-X tuning (linear phase FIR filters) and D-CONTOUR (multi-band compression). The amplifier section shall have a 4-speed fan for cooling.

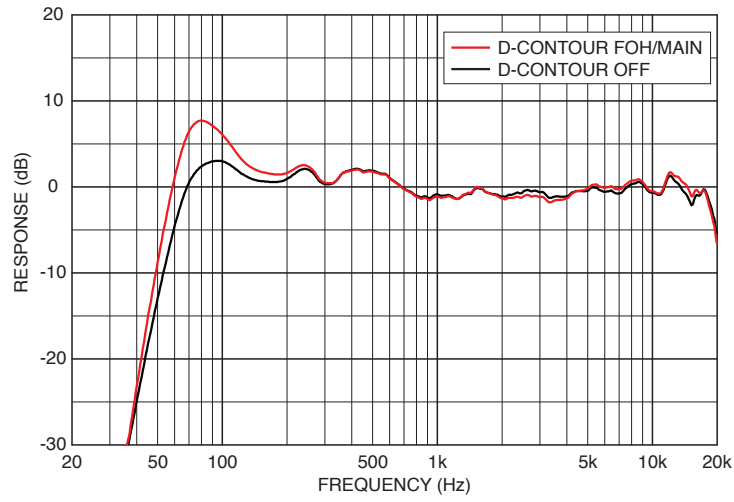
The DBR10 Powered Loudspeaker shall meet the following performance criteria: Maximum SPL shall be 129 dB at 1 meter, frequency response shall be 55 Hz to 20 kHz at 10 dB below rated sensitivity, the frequency dividing network shall have a crossover frequency of 2.1 kHz, and the nominal coverage angle shall be 90° horizontal and 60° vertical via a constant directivity horn.

The loudspeaker shall have two Combo connectors and one RCA pin connector for input, and one XLR3-32 connector for CH1 Parallel Through or CH1+CH2 Mix output. The cabinet shall be constructed of plastic and have handles. The cabinet shall also have threaded mounting points for M8 eyebolts (bottom x 2, rear x 1) and a 35 mm pole socket. Dimensions shall be 308 (W) x 493 (H) x 289 (D) mm. Weight shall be no more than 10.5 kg.

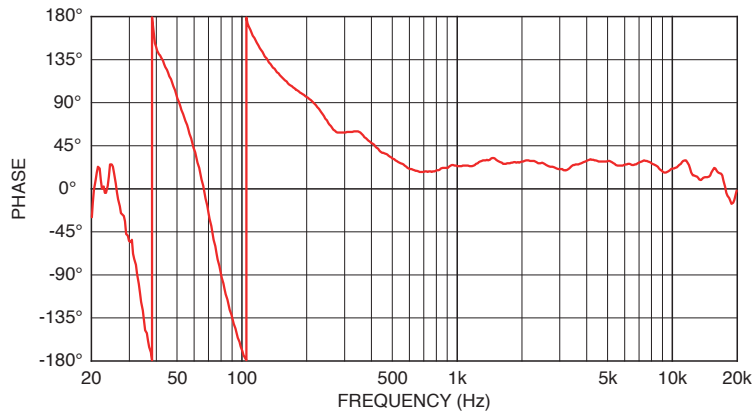
Block Diagrams



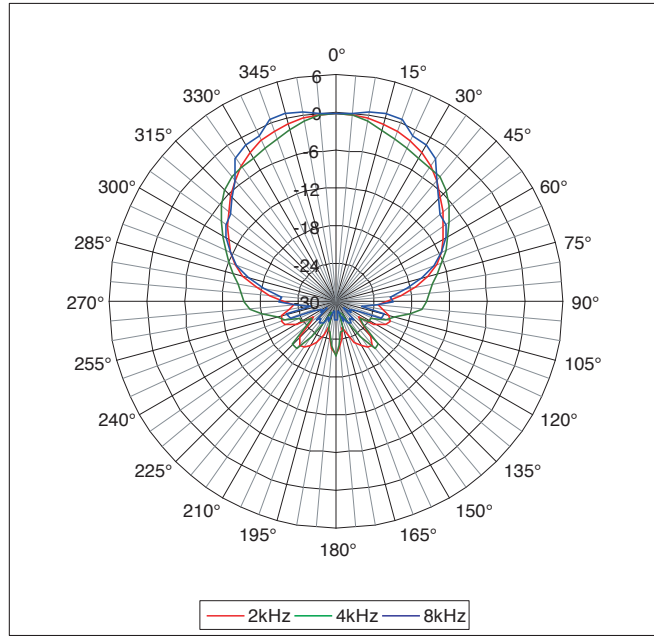
Frequency Response



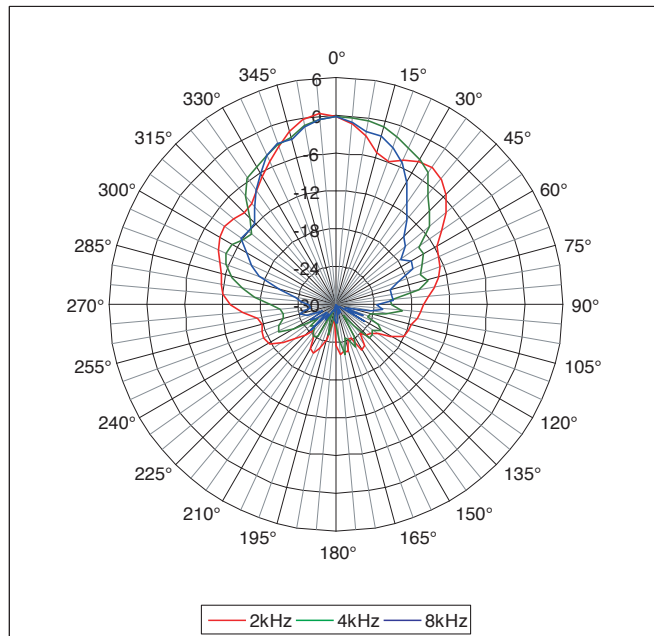
Phase Response



Horizontal Polar Plots



Vertical Polar Plots



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Created in March, 2017