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## Overview

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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

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- 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.

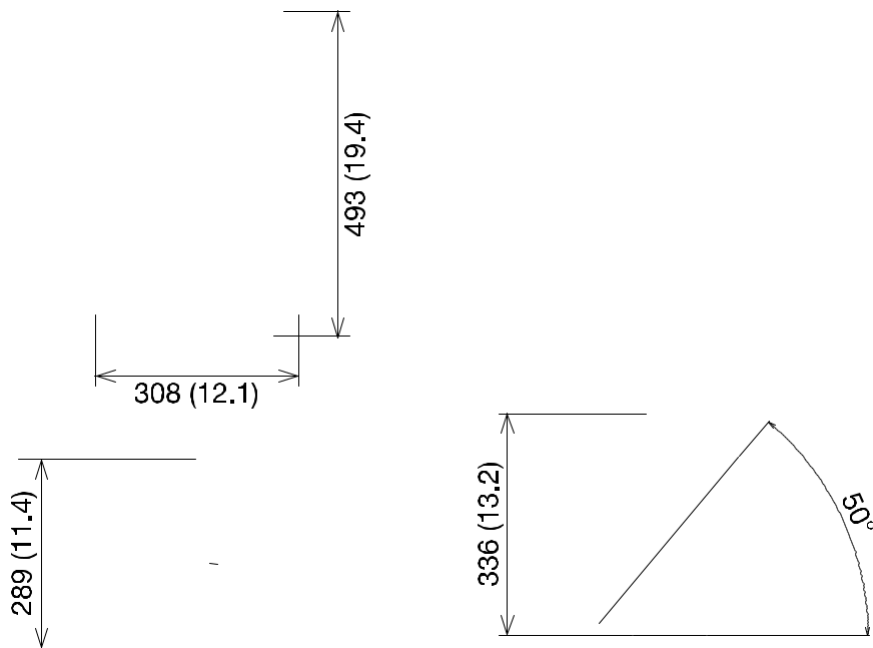
### Input/Output Specifications

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

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Unit: mm (inch)



## Options

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

## Architectural and Engineering Specifications

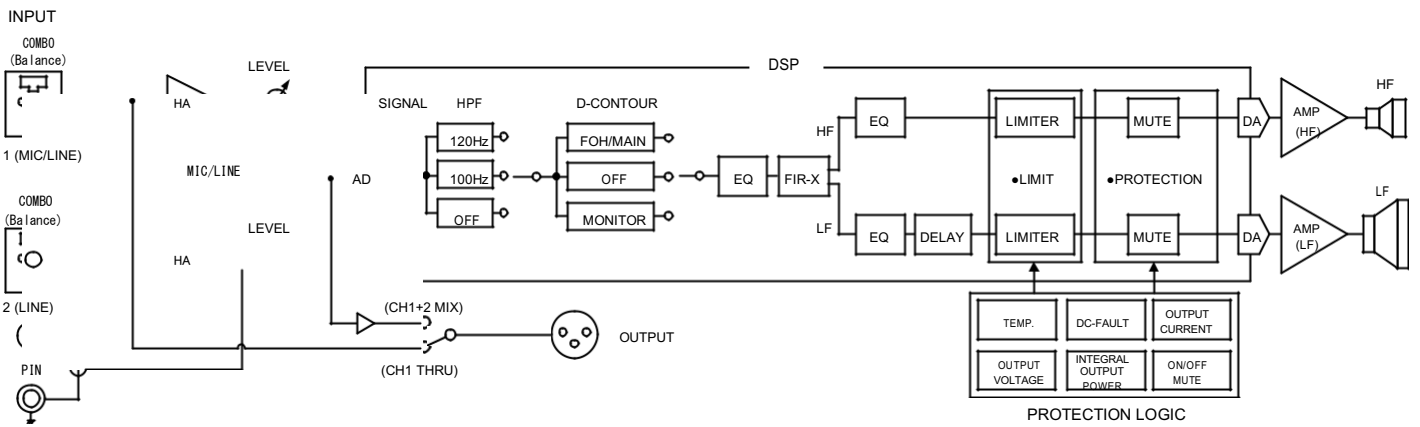
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The Yamaha DBR10 Powered Loudspeaker shall be a two-way bass-reflex type full-range loudspeaker system having a single 10" cone driver with a 2" voice coil for the low frequencies and a 1" compression driver with a 1" throat for the high frequencies. 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.

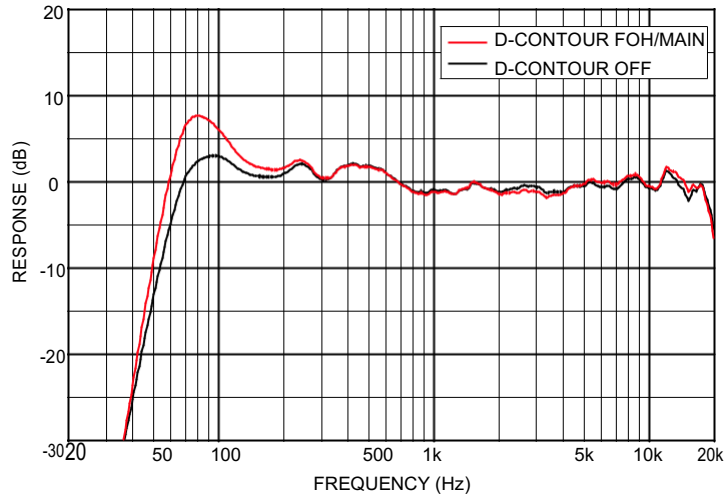
The DBR10 Powered Loudspeaker shall meet the following performance criteria: Maximum SPL shall be 129 dB at 1 meter, frequency response shall be 55 Hz to 20 kHz at 10 dB below rated sensitivity, the frequency dividing network shall have a crossover frequency of 2.1 kHz, and the nominal coverage angle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

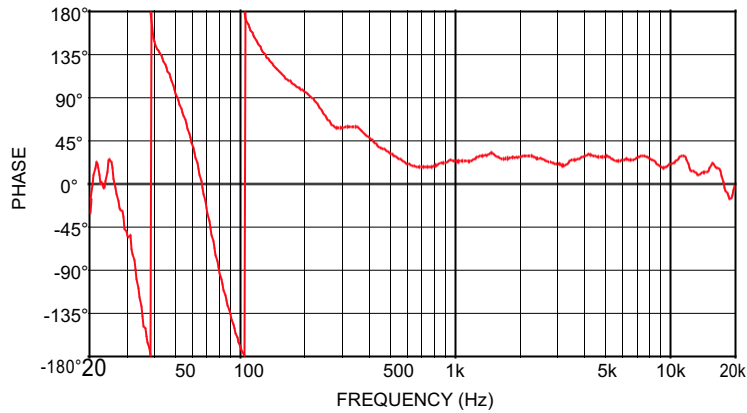
# Block Diagrams



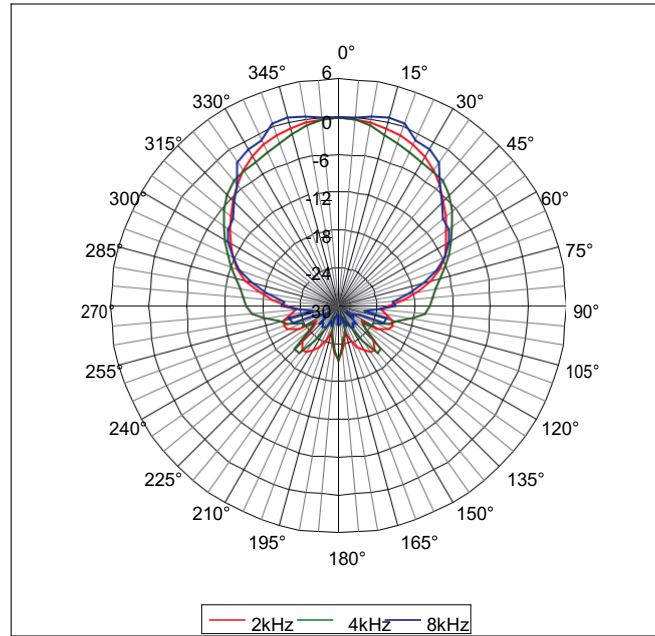
## Frequency Response



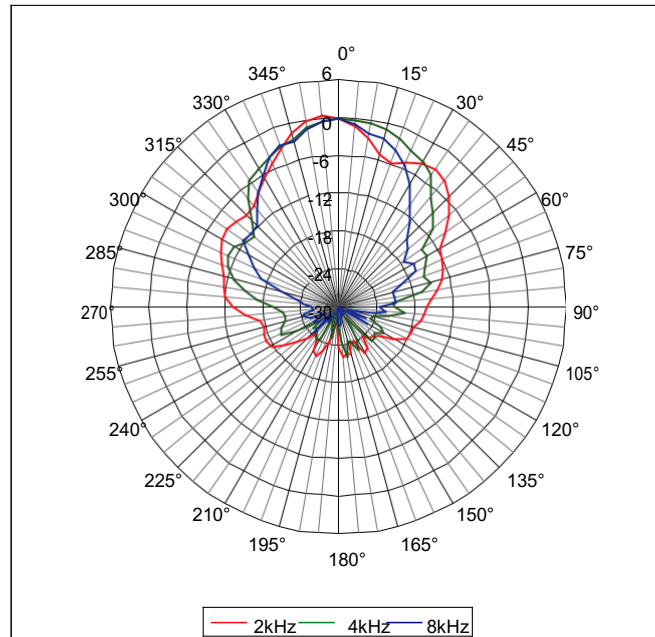
## Phase Response



## Horizontal Polar Plots



## Vertical Polar Plots



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