

## Overview

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The DXR12 is an extremely high-power loudspeaker that is capable of producing a maximum SPL of 132dB with its impressive 1100W of power. It is the perfect solution for live sound applications that demand wide bandwidth and extremely high-resolution sound.



## Features

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- Output levels up to 132dB SPL with 1100W of power
- Precise 48-bit 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
- Intelligent onboard 3-channel mixer with flexible IN/OUT connectivity for versatile system integration
- Flexible HPF control allows optimum matching with DXS subwoofers
- Universal switching-mode power supply for world-wide use
- Durable, compact ABS enclosures
- Symmetrical enclosure design for mirror-mode floor monitoring
- Dual-angle pole mount plus rigging points for standard eye-bolts and optional U-brackets

## Specifications

### General Specifications

System Type		2-way, Bi-amp powered speaker, Bass-reflex type
Components	LF	12" cone, 2.5" voice coil, Ferrite Magnet
	HF	1.4" compression driver, 1" throat, Ferrite Magnet
Frequency Range	(-10dB)	52Hz-20kHz
Crossover Type		FIR-X tuning™ (Linear phase FIR filter)
Crossover Frequency		2.1kHz
Coverage Angle (Horizontal x Vertical)		90° x 60° Constant directivity horn
Output Power*1	Dynamic	1100W (LF: 950W, HF: 150W)
	Continuous	700W (LF: 600W, HF: 100W)
Maximum SPL (1m, on axis)		132dB SPL
Processing		D-CONTOUR: FOH/MAIN, MONITOR, OFF
Controls		LEVEL x 3, LINE/MIC, HPF, D-CONTOUR, FRONT LED DISABLE, LINK MODE, POWER
Cooling		Fan cooling, 4 speeds
Power Requirements		100V-240V, 50Hz/60Hz
1/8 Power Consumption		110W
Floor Monitor Angle		50° Symmetrical
Pole Socket		35mm with 2-way features (0 or 7 degrees)
Handle		Side x 2
Rigging Points		Top x 2, Rear x 1 (Fits for M10 x 18mm eyebolts)
Material, Finish, Color		ABS, Matte Finish, Black
Dimensions (W×H×D)		362mm x 601mm x 350 mm (14.2" x 23.6" x 13.7")
Net Weight		19.3kg (42.5lbs)
Optional Accessories		UB-DXR12

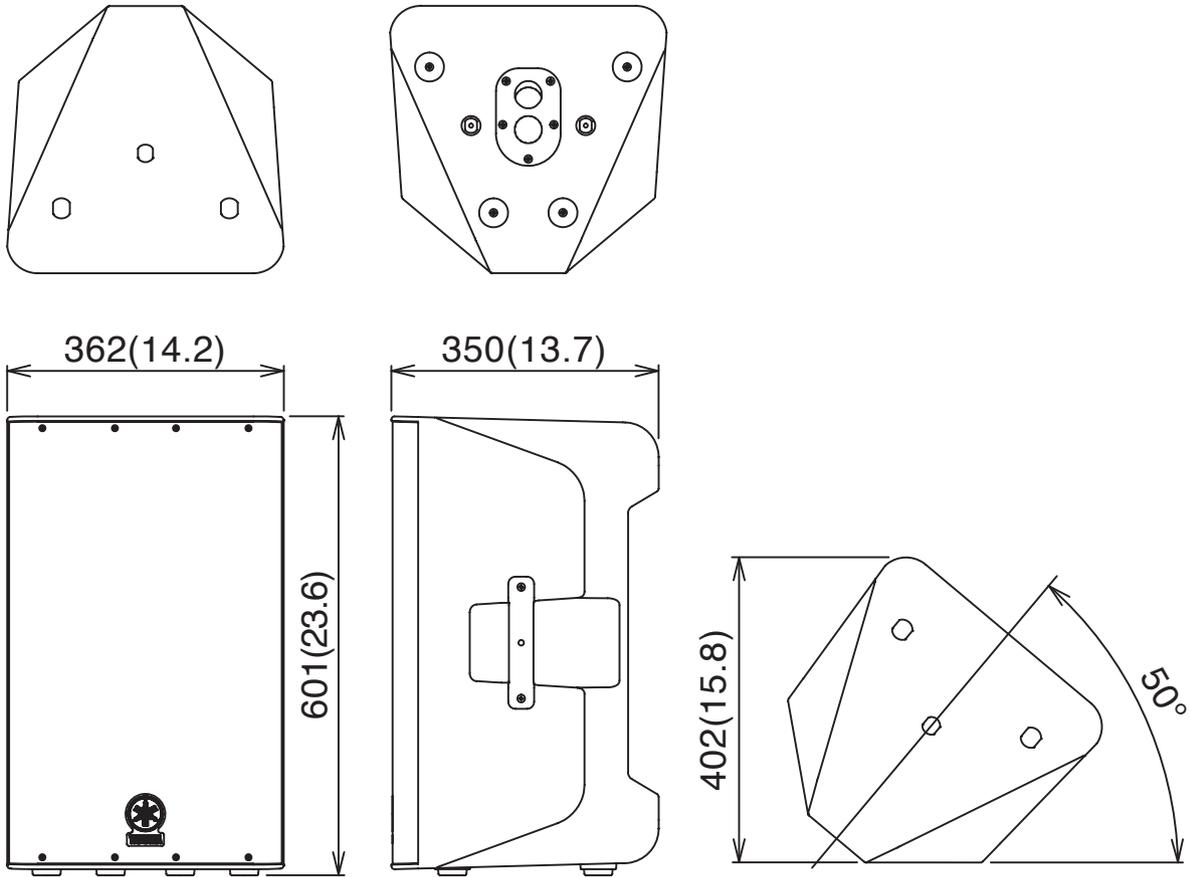
\*1 Power rating (120V, 25°C). This is total value of individual output power.

### Input/Output Specifications

Connectors	Input	INPUT1: XLR3-31 x 1, INPUT2: Phone x 2, INPUT3: RCA PIN x 2
	Output	THRU: XLR3-32 x 1 (Parallel with INPUT1), LINK OUT: XLR3-32 x 1
Input Impedance		INPUT1: LINE: 12kΩ, MIC: 8kΩ INPUT2, 3: L, R: 40kΩ, MONO: 20kΩ
Input Sensitivity (LEVEL: Maximum)		INPUT1: LINE: +1dBu, MIC: -32dBu INPUT2, 3: -13 dBu
Input Sensitivity (LEVEL: Center)		INPUT1: LINE: +11dBu, MIC: -22dBu INPUT2, 3: -3 dBu
Maximum Input Level		INPUT1: LINE: +24dBu, MIC: +20dBu INPUT2, 3: +16dBu

## Dimensions

Unit: mm (inch)



## Options

- U Bracket UB-DXR12

## Architectural and Engineering Specifications

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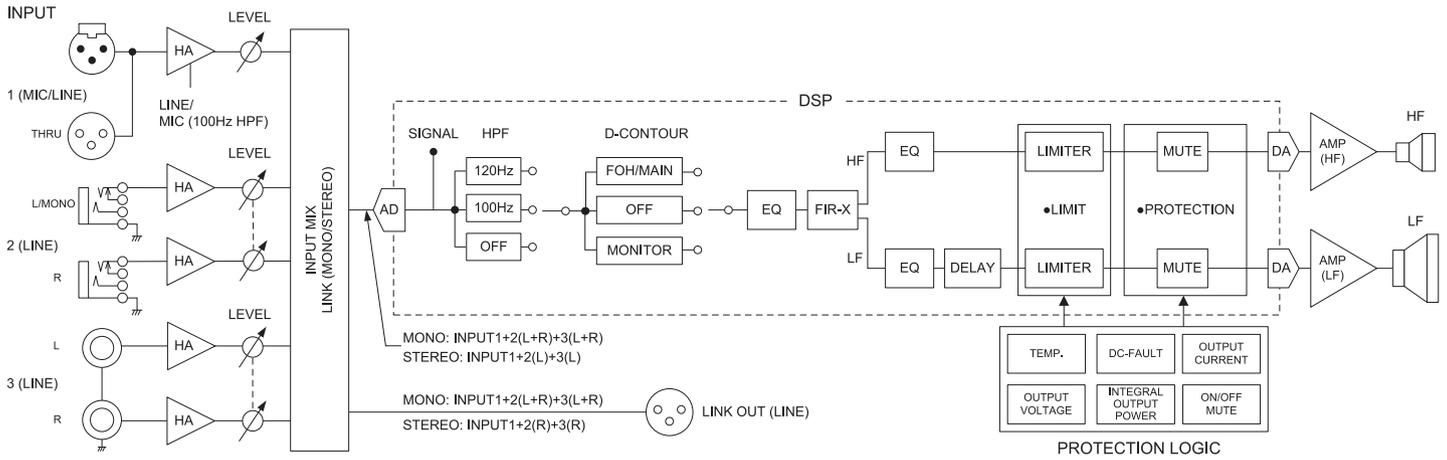
The Yamaha DXR12 Powered Loudspeaker shall be a two-way bass-reflex full-range loudspeaker system. The DXR12 shall incorporate a single 12" cone with a 2.5" voice coil for the low frequencies, and a 1.4" compression driver with a 1" throat for the high frequencies.

The loudspeaker shall incorporate a class-D amplifier (1100 watts dynamic/700 watts continuous) and DSP functions such as FIR-X tuning (linear phase FIR filters) and D-CONTOUR (multi-band compression). The amplifier section of the loudspeaker shall have a universal power supply that accepts AC line input from 100V to 240V at 50Hz or 60Hz, and shall be cooled by a 4-speed fan.

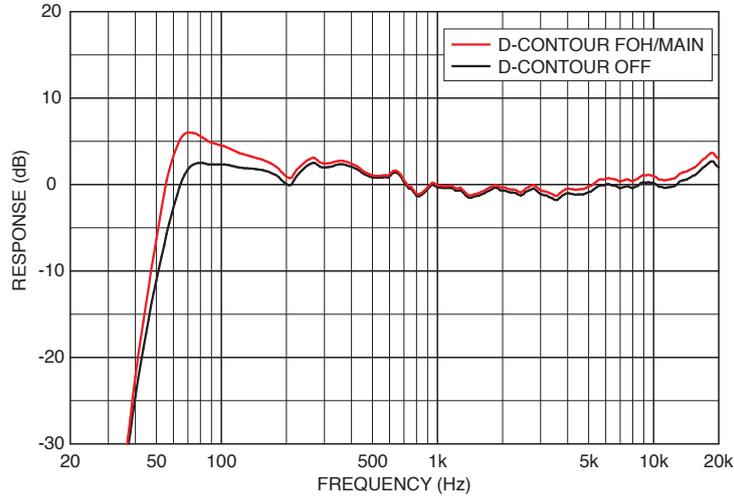
The DXR12 Powered Loudspeaker shall meet the following performance criteria: Maximum SPL shall be 132 dB SPL at 1 meter, frequency response shall be 52 Hz to 20 kHz at 10 dB below rated sensitivity, the frequency dividing network shall have a crossover frequency of 2.1 kHz, and the nominal coverage angle shall be 90° horizontal and 60° vertical via a constant directivity horn.

The loudspeaker shall include mixing functionality and have one XLR3-31 connector, two phone jacks, and two RCA pin jacks for input. It shall have one XLR3-32 connector for "thru" output and one XLR3-32 connector for "link" output. The cabinet shall be constructed of ABS and have aluminum die-cast handles. The loudspeaker shall have threaded mounting points for M10 eyebolts (top x 2, rear x 1) and a 35 mm pole socket with a two-way feature (0 or 7 degrees). Optional UB-DXR12 U-Brackets shall be available for rigging. Dimensions shall be 362 (W) x 601 (H) x 350 (D) mm. Weight shall be no more than 19.3 kg.

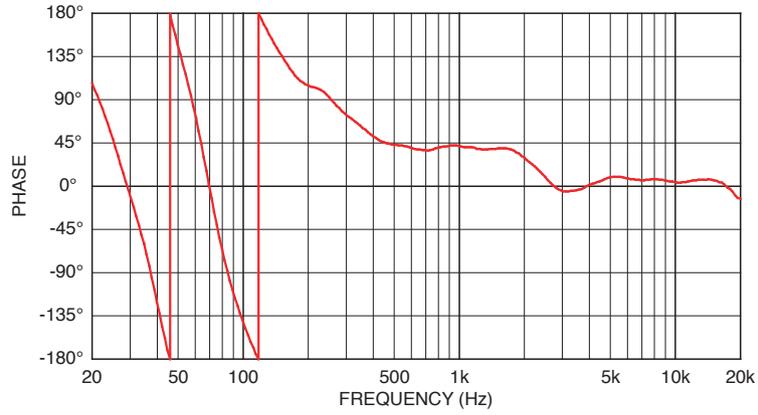
# Block Diagrams



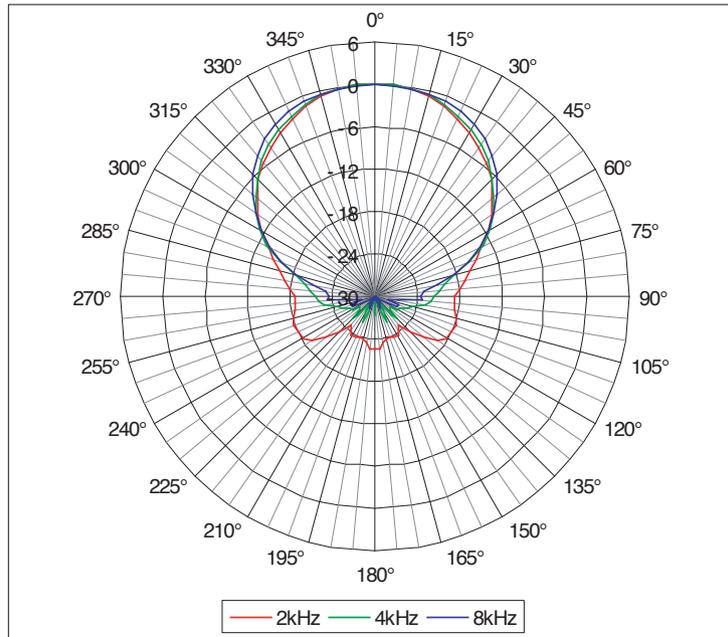
## Frequency Response



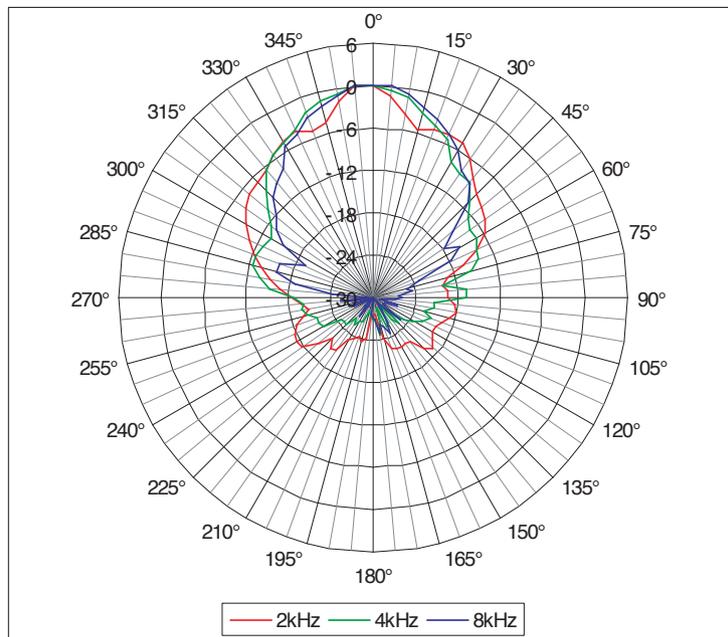
## Phase Response



## Horizontal Polar Plots



## Vertical Polar Plots



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Created in March, 2017

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