

Overview

The DSR215 is a high-power, 2-way active loudspeaker system driven by a new 1500W Class-D amplifier that gives it the ability to output a 138dB maximum peak SPL. It's the perfect solution for live sound applications that require simple setup and powerful SPL levels. Featuring two cast frame 15" woofers, a neodymium compression driver with a large diameter 2" titanium diaphragm, it reproduces a wide frequency range, from powerful well contoured bass to extreme treble with outstanding clarity.



Features

- Ultra-precise 48-bit digital sound processing
- D-CONTOUR (Dynamic-CONTOUR) multi-band dynamic processing
- All-new 1500W Class-D amplifiers with PFC switching mode power supply
- Maximum SPL 138dB peak
- Extensive protection of the transducers, amplifiers and power supply from high performance DSP
- Premium-grade, custom-designed transducers
- Exclusive 90° × 60° CD Waveguide Horn
- Extended bass response
- Heavy-duty 16-gauge (1.6mm) steel grille
- Locking IEC cable

Specifications

General Specifications

System Type		2-way, Bi-amp Powered Speaker, Bass-reflex Type
Components	LF	2 × 15" cone, 2.5" voice coil, Ferrite
	HF	2" Titanium diaphragm compression driver, 1" throat, Neodymium Magnet
Frequency Range	(-10dB)	45Hz-20kHz
Crossover Type		FIR-X tuning™ (linear phase FIR filter)
Crossover Frequency		1.7kHz
Coverage Angle (Horizontal x Vertical)		90° x 60° Constant directivity horn
Output Power*1	Dynamic	1500W (LF: 1020W, HF: 480W)
	Continuous	1300W (LF: 850W, HF: 450W)
Maximum SPL (1m, on axis)		138dB SPL
Processing		D-CONTOUR: ON, OFF
Controls		LEVEL, LINE/MIC, HPF, D-CONTOUR, FRONT LED DISABLE, POWER
Cooling		Natural convection
Power Requirements		100V-240V, 50Hz/60Hz
1/8 Power Consumption		140W
Handle		Side x 2
Material, Finish, Color		Wood, LINE-X®, Black
Dimensions (W×H×D)		467mm x 1158mm x 520mm (18.4" x 45.6" x 20.5")
Net Weight		49.8kg (110lbs)

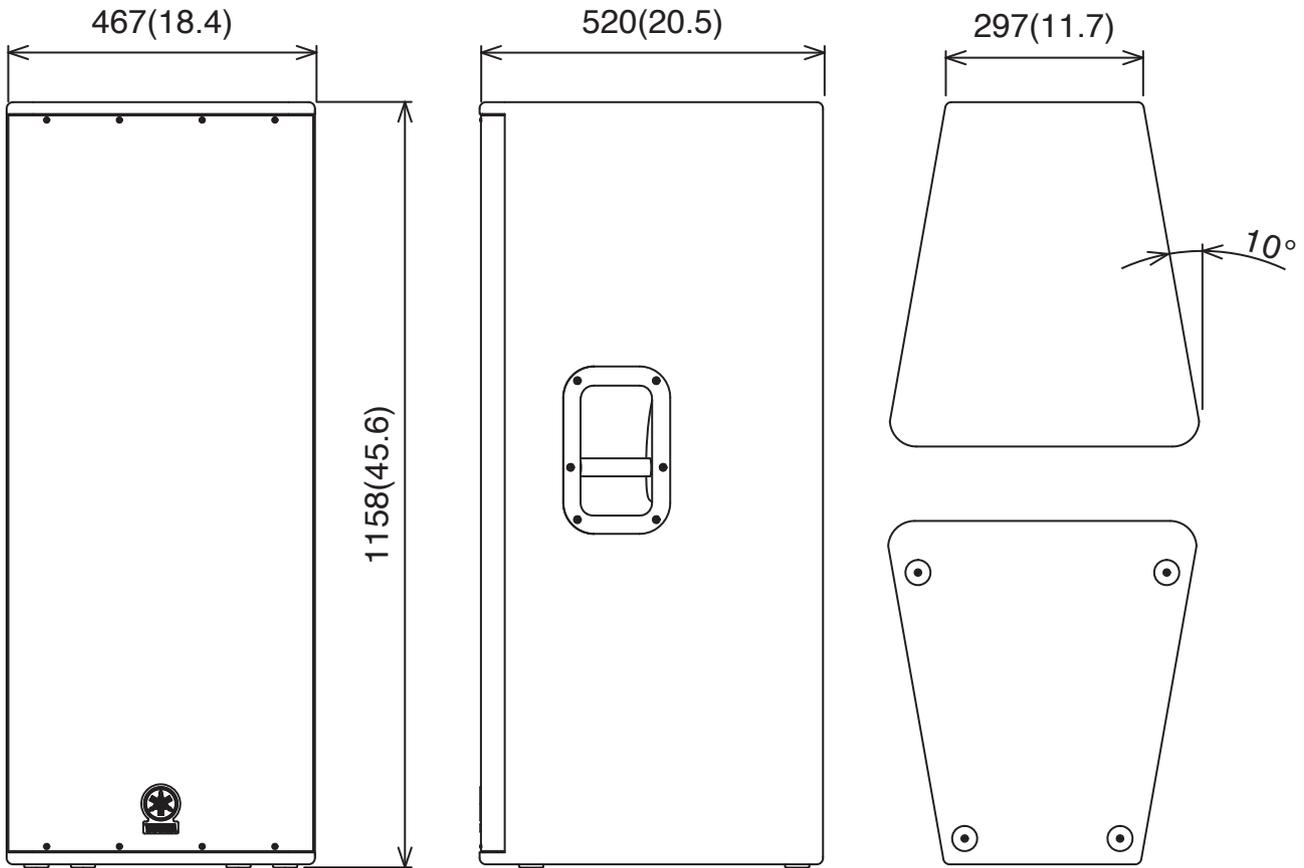
*1 Power rating (120V, 25°C). This is total value of individual output power.

Input/Output Specifications

Connectors	Input	XLR-3-31 x 1 (Balanced), TRS Phone Jack x 1 (Balanced)
	Output	XLR-3-32 x 1 (Balanced), Parallel connection with INPUT
Input Impedance		INPUT1: LINE: 12kΩ, MIC: 8kΩ
Input Sensitivity (LEVEL: Maximum)		INPUT1: LINE: 0dBu, MIC: -25dBu
Input Sensitivity (LEVEL: Center)		INPUT1: LINE: +7dBu, MIC: -18dBu
Maximum Input Level		INPUT1: LINE: +24dBu, MIC: -11dBu

Dimensions

Unit: mm (inch)



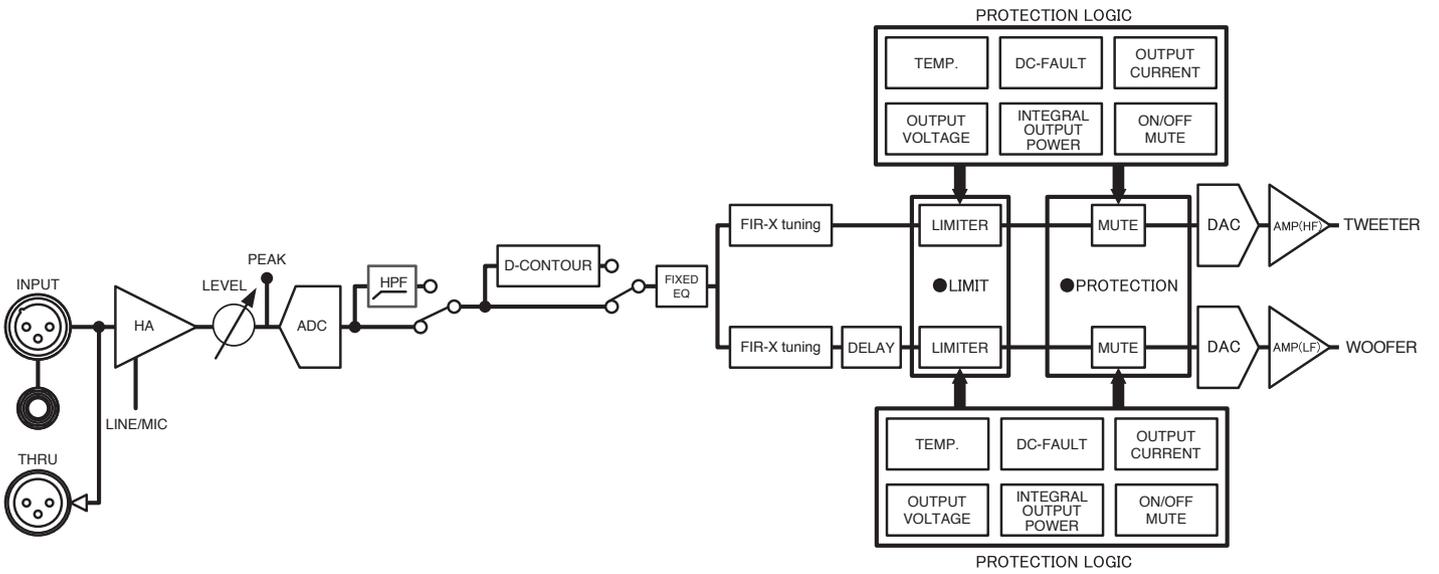
Architectural and Engineering Specifications

The Yamaha DSR215 Powered Loudspeaker shall be a two-way bass-reflex full-range loudspeaker system. The DSR215 shall incorporate dual 15" cones with 2.5" voice coils for the low frequencies, and a 2" compression driver with a 1" throat for the high frequencies. The loudspeaker shall incorporate a class-D amplifier (1500 watts dynamic/1300 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 natural convection.

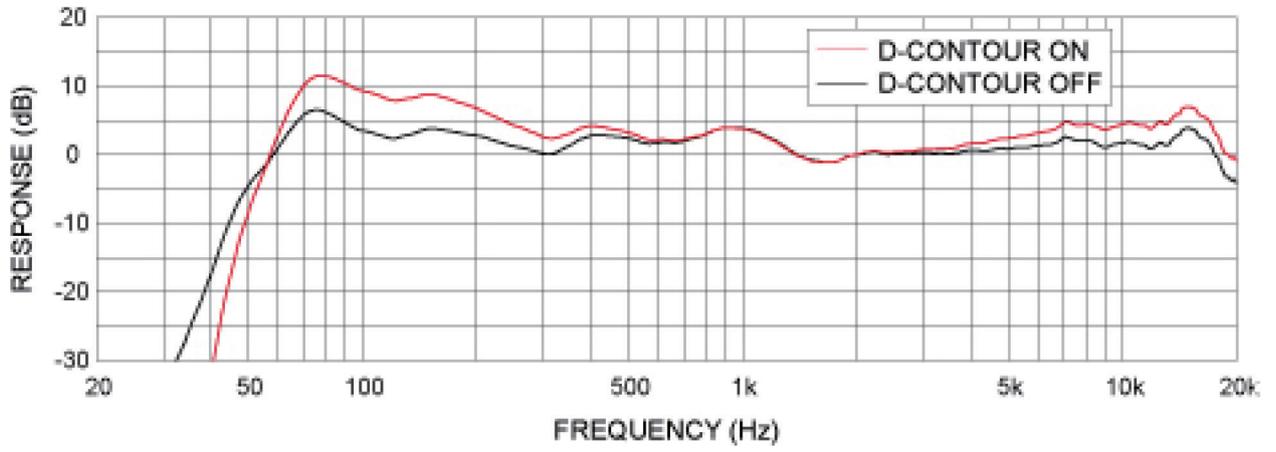
The DSR215 Powered Loudspeaker shall meet the following performance criteria: Maximum SPL shall be 138 dB SPL at 1 meter, frequency response shall be 45 Hz to 20 kHz at 10 dB below rated sensitivity, the frequency dividing network shall have a crossover frequency of 1.7 kHz, and the nominal coverage angle shall be 90° horizontal and 60° vertical via a constant directivity horn.

The loudspeaker shall have one XLR3-31 connector and one TRS phone jack for input, and one XLR3-32 connector for parallel connection with the input. The cabinet shall be constructed of wood and have aluminum die-cast handles. Dimensions shall be 467 (W) x 1158 (H) x 520 (D) mm. Weight shall be no more than 49.8 kg.

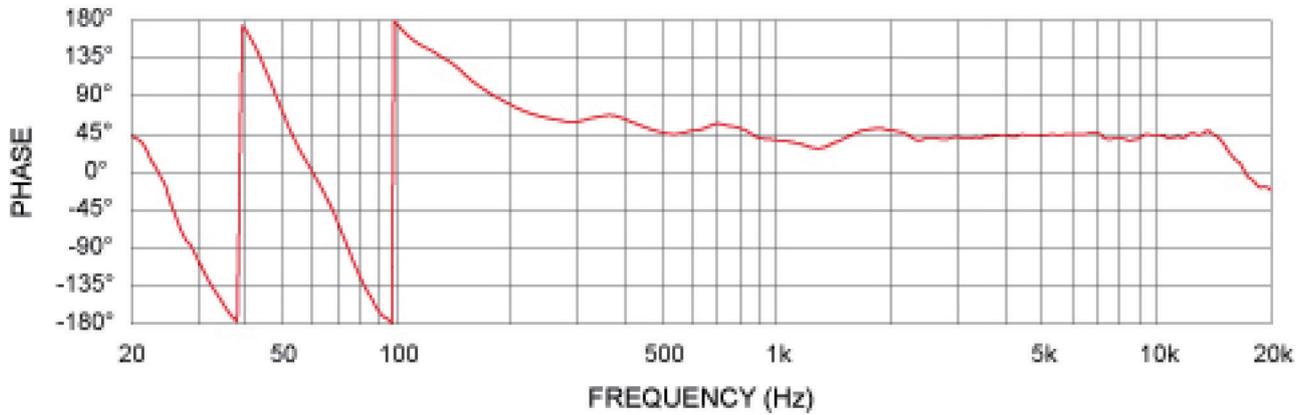
Block Diagrams



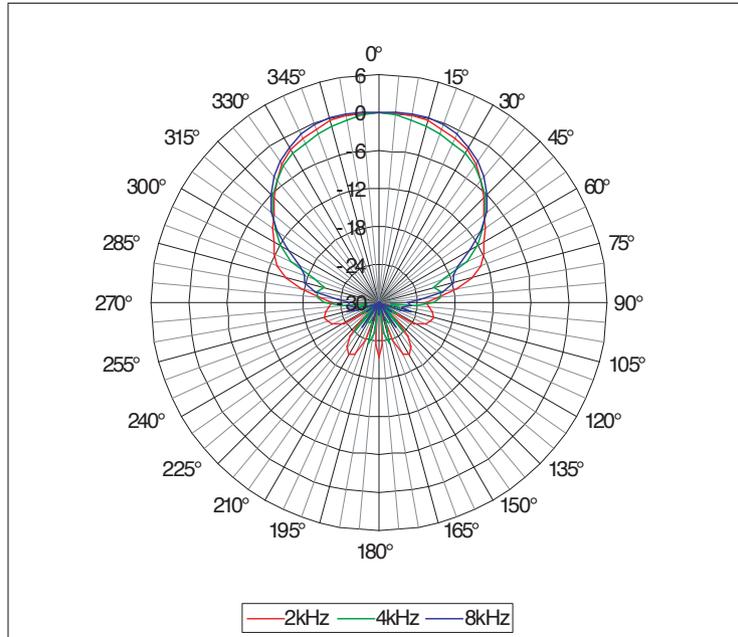
Frequency Response



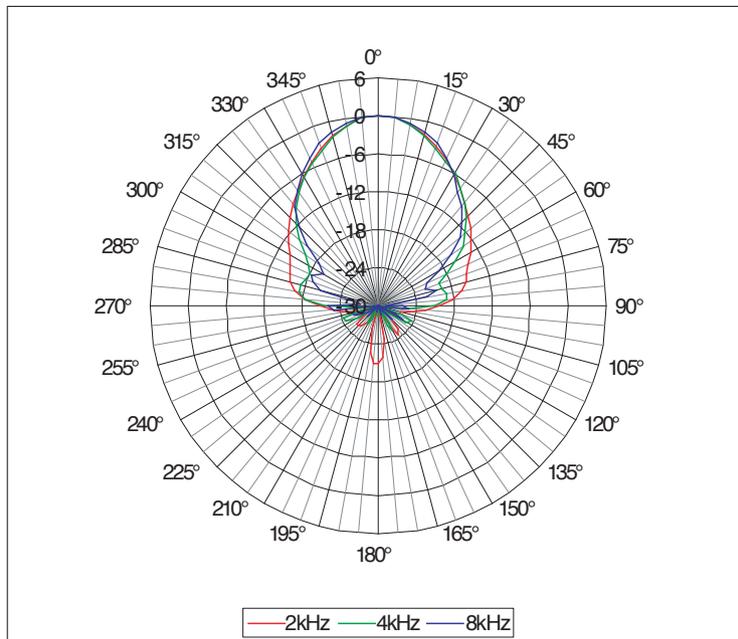
Phase Response



Horizontal Polar Plots



Vertical Polar Plots



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YAMAHA CORPORATION
P.O.BOX 1, Hamamatsu Japan
www.yamahaproaudio.com