

Overview

The DXR12mkll is an extremely high-power loudspeaker that is capable of producing a maximum SPL of 134 dB 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

- Boarded larger yet much lighter 1.75" Neodymium HF compression driver
- High Output LF Unit Featuring 2.5" VC magnet
- High Efficiency 1100W Class-D Amplification
- Ultra-Precise 48bit DSP Processing for High-Definition Sound- FIR-X Tuning™
- D-Contour: Intelligent Dynamic Control for Consistent Clarity At Any Output Level
- Intelligent Onboard 3-Channel Mixer
- Rigging Points for Standard Eye-Bolts and Optional U-Brackets



Specifications

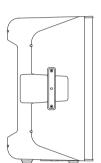
General Specifications

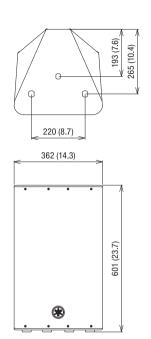
| Speaker Type | | 12" 2-way, Bi-amp powered speaker, Bass-reflex type |
|------------------------------------|----|--|
| Frequency Range (-10dB) | | 52Hz - 20kHz |
| Nominal Coverage | Н | 90° |
| | V | 60° |
| Components | LF | Diameter: 12" cone, Voice Coil: 2.5", Magnet: Ferrite |
| | HF | Diaphragm: 1.75", Type: 1" throat compression driver, Magnet: Neodymium |
| Crossover | | FIR-X tuning™ (linear phase FIR filter) |
| Output Power | | Dynamic: 1100W (LF: 950W HF: 150W) / Continuous: 700W (LF: 600W HF: 100W) |
| Maximum Output Level (1m; on axis) | | 134dB SPL |
| I/O Connectors | | INPUT: XLR3-31 x 1 , INPUT2: Phone x 2 (Unbalanced), INPUT3: RCA PIN x 2 (Unbalanced), |
| | | THRU: XLR3-32 x 1 (Parallel with INPUT 1), LINK OUT: XLR3-32 x 1 |
| Processors | | D-CONTOUR :FOH/MAIN, MONITOR, OFF |
| Power Requirements | | 100V - 240V, 50Hz/60Hz |
| Power Consumption | | 110W |
| Flying and Mounting Hardware | | Top x 2, Rear x 1 (Fits for M10 x 18mm eyebolts) |
| Pole Socket | | 35mm with 2-way features (0 or 7 degrees) |
| Dimensions (W x H x D) | | 362mm x 601mm x 350mm (14 2/8" x 23 5/8" x 13 6/8") |
| Net Weight | | 18.6kg (41.0lbs) |
| Accessories | | UB-DXR12 (U-bracket) |
| Others | | Material: ABS (Matte Finish, Black) |

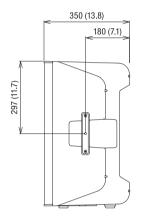


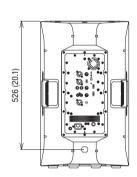
Dimensions

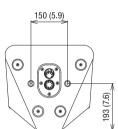
Unit: mm (inch)











Options

Speaker Cover SPCVR-1201U-Brackets UB-DXR12

• Wall Bracket BWS251-300/BWS251-400

Baton Bracket BBS251Ceiling Bracket BCS251



Architectural and Engineering Specifications

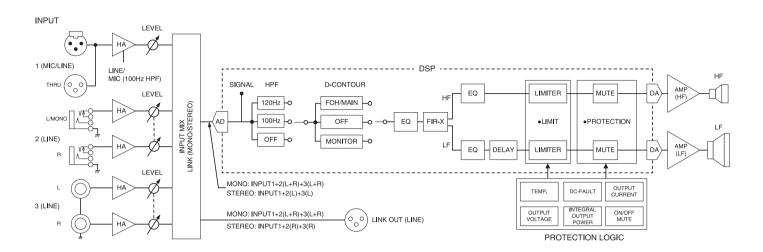
The Yamaha DXR12mkll shall be a powered loudspeaker for sound reinforcement applications. The loudspeaker shall be a full-range, two-way, bi-amplified, bass-reflex type with built-in digital signal processing. The loudspeaker shall have one 12" cone low-frequency transducer with a 2.5" voice coil, and one 1" throat high-frequency compression driver with a 1.75" diaphragm. The total continuous power rating shall be 700 watts (bi-amplified, with 600 watts delivered to the LF transducer and 100 watts delivered to the HF transducer). The crossover frequency shall be 2.1 kHz (FIR-X filter). The loudspeaker shall be capable of meeting the following performance criteria: reproduction frequency range shall be 52 Hz to 20 kHz (-10 dB), and maximum output SPL shall be 134 dB (peak, pink noise @ 1m). The loudspeaker's amplifiers shall be efficient class-D types. Coverage angles shall be 90° horizontal and 60° vertical. The loudspeaker shall have a 3-channel input mixer with one balanced XLR input connector, two unbalanced phone jack input connectors, and two unbalanced RCA pin jack input connectors. One XLR THRU output connector and one XLR LINK OUT output connector shall be provided.

The loudspeaker shall provide built-in digital signal processing at a sample rate of 48 kHz. Digital signal processing shall provide FIR-X tuning for optimum crossover characteristics and overall response with minimal phase distortion. D-CONTOUR intelligent multiband compression with selectable FOH/MAIN and MONITOR modes shall also be provided to maximize clarity at all power levels.

The loudspeaker enclosure shall be constructed of durable ABS and finished with a durable polyurea coating. Rigging points shall be provided for use with standard eyebolts, and optional U Brackets will offer a variety of mounting configurations. The dimensions of the loudspeaker shall be $362 \times 601 \times 350$ mm (W x H x D, including rubber feet). The weight shall be 18.6 kg.

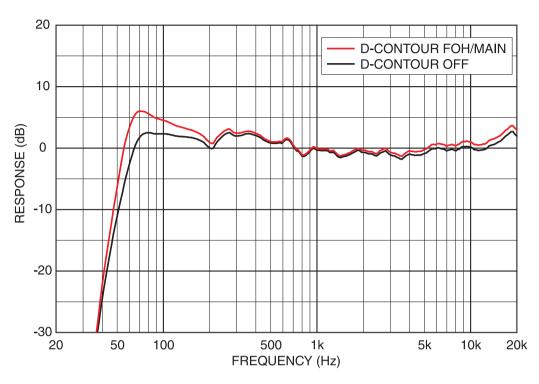


Block Diagrams

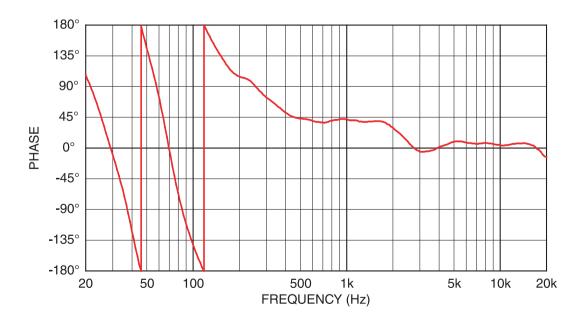




Frequency Response

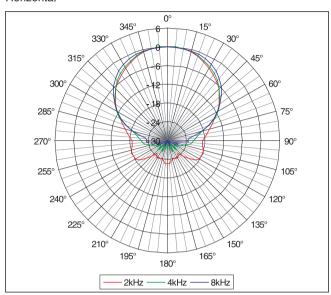


Phase Response



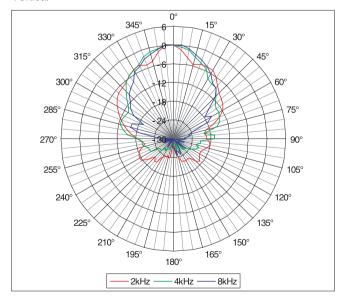
Horizontal Polar Plots

Horizontal



Vertical Polar Plots

Vertical



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