

KEY FEATURES

- ▶ Easily arrayable cabinet
- ▶ Enclosure in 18 mm birch plywood
- ▶ Custom 15" woofer with 4" coil
- ▶ B & C titanium compression driver
- ▶ 4 M10 anchoring points
- ▶ Dual-mode passive filter
- ▶ Full Range or Bi-amp operation mode

APPLICATION

- ▶ Theatres
- ▶ Auditorium
- ▶ Live clubs
- ▶ Band PA
- ▶ Touring



GENERAL DESCRIPTION

2-way bass-reflex system with double 15" woofer and 2" high frequency unit.

Enclosure in 18mm birch plywood with internal reinforcement and scratch-resistant finish designed to resist the rigours of touring applications.

Trapezoidal profile to reduce internal reflection of soundwaves and facilitate the construction of speaker arrays.

Custom 15" woofer with 4" coil and aluminium windings for clean, punchy bass response. High efficiency and power handling thanks to the use of a heavy duty magnet structure and an efficient voice coil cooling system.

B&C titanium compression driver with 3" voice coil and 2" exit offers optimum extension at high frequencies and very low distortion right down to the mid-range frequencies.

This is the ideal unit for requirements of high sound pressure and excellent extension at low frequencies. Combines extended and smooth frequency response with a mid-range that is powerful and never oppressive, ensuring excellent speech intelligibility. Ideal for theatres, auditoriums, live music club venues, band PA's and general touring applications.

Dual-mode passive filter with facility for full-range or bi-amp operation with external processing of the signal.

4M10 anchoring points for suspended installation.

The connector panel's have dual Neutrik NL4 Speakon for reliable input and loop through connections.

TECHNICAL SPECIFICATIONS

ELECTRICAL PERFORMANCE

Configuration	2 WAY	BI-AMP
Recommended amplifier (1)	1600W rms	1600W LF / 160W HF
Long term power AES (2)	800 W	800W LF / 80W HF
Short term power IEC 268-5	3200 W	3200W LF / 320W HF
Nominal impedance	4 ohm	4 ohm LF / 8 ohm HF
Frequency response @ -6dB (3)	40 Hz - 18 kHz	40Hz - 2kHz LF 1kHz - 18kHz HF
Sensitivity @1W, 1m (4)	102 dB	102dB LF / 108dB HF
Max SPL (5)	137 dB	137dB LF / 133dB HF
Dispersion @-6 dB (HxV)	60° x 40°	60° x 40°
Dispersion on listening plane @-6dB (H x V)	55° x 38°	55° x 38°
Crossover frequency	1,6 kHz	1,3 kHz - 24 dB oct.
Recommended HP filter	30 Hz - 24 dB oct.	30 Hz - 24 dB oct.

Additional data: automatic resetable driver protection in full-range filter mode

PHYSICAL

Low frequency woofer	2 x 15" - coil Ø 4"
High frequency driver	1 x 2" + coil Ø 3"
Input connectors	2 x speakon NL4 paralleled
Net dimensions (WxHxD)	515 x 1290 x 485 mm
Net weight	73 kg
Shipping dimensions (WxHxD)	640 x 1460 x 600mm
Shipping weight	85 kg
Enclosure materials	18 mm birch plywood
Finish	wear-resistant textured black paint
Mounting hardware	4 x M10 anchoring points
Grille	black powder coated perforated steel

(1) amplifier power on nominal loudspeaker impedance

(2) 2 hours, pink noise with crest factor 2, applied RMS voltage corresponding to the power on the minimum of the modulus of the impedance of the speaker in full range mode, or of the driver in bi-amp mode.

(3) full-space on axis

(4) average SPL measured over the freq. response range

(5) calculated based on short term power capacity and measured 1W, 1m full space sensitivity

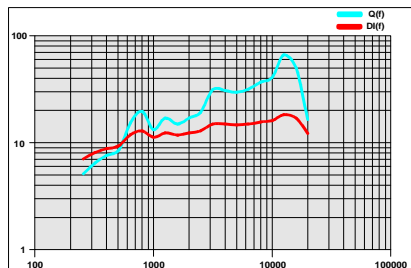


Professional Audio Equipment

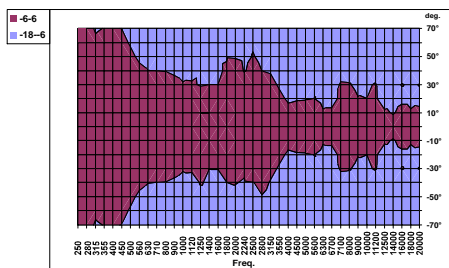
PSR 230

2 x 15" - two way
full range or bi-amped mode
speaker system

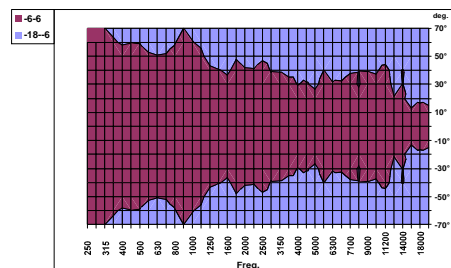
Q FACTOR & DIRECTIVITY INDEX (DI)



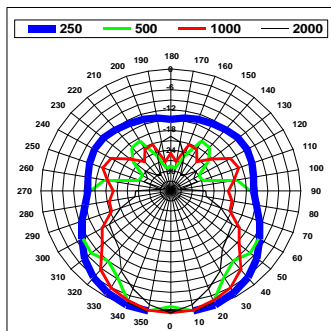
VERTICAL BEAMWIDTH (-6dB)



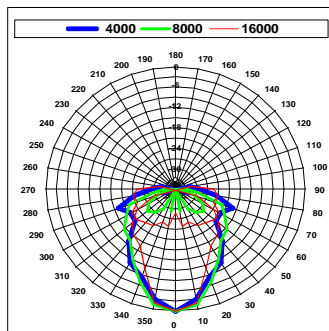
HORIZONTAL BEAMWIDTH (-6dB)



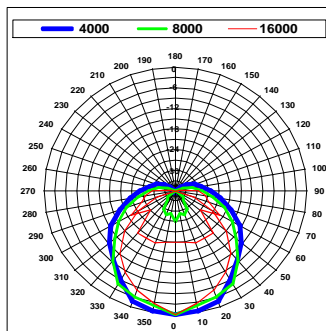
VERTICAL POLAR DIAGRAM



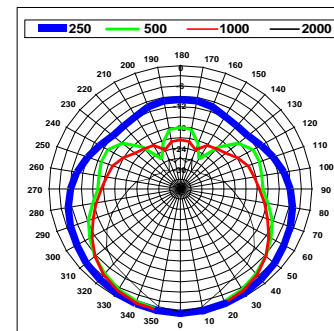
VERTICAL POLAR DIAGRAM



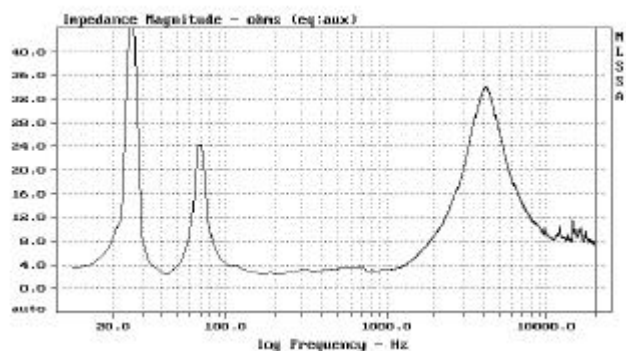
HORIZONTAL POLAR DIAGRAM



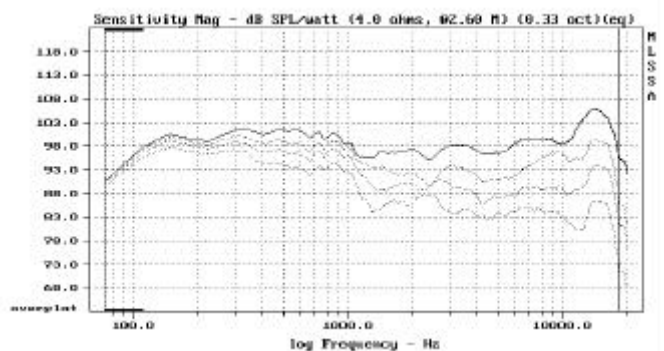
HORIZONTAL POLAR DIAGRAM



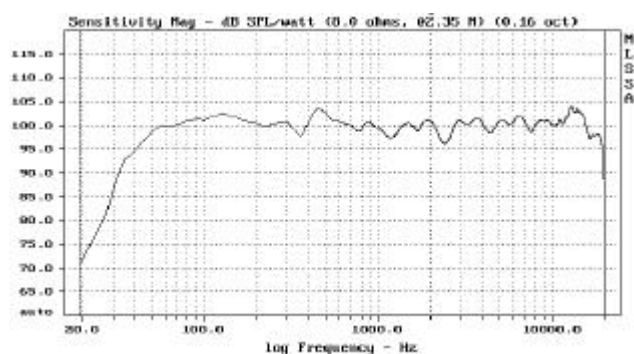
INPUT IMPEDANCE



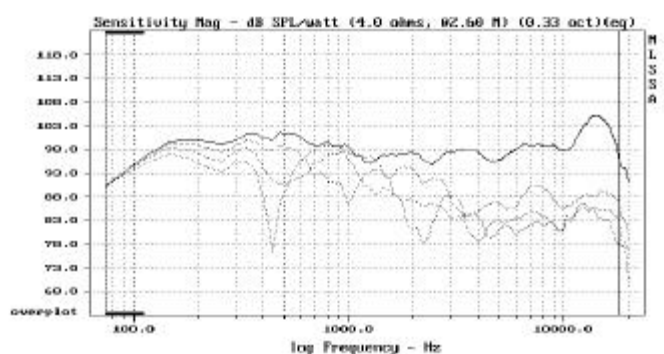
HORIZONTAL OFF-AXIS RESPONSE (0°/ 30°/ 45°/ 60°)



FULL SPACE FREQUENCY RESPONSE



VERTICAL OFF-AXIS RESPONSE (0°/ 30°/ 45°/ 60°)



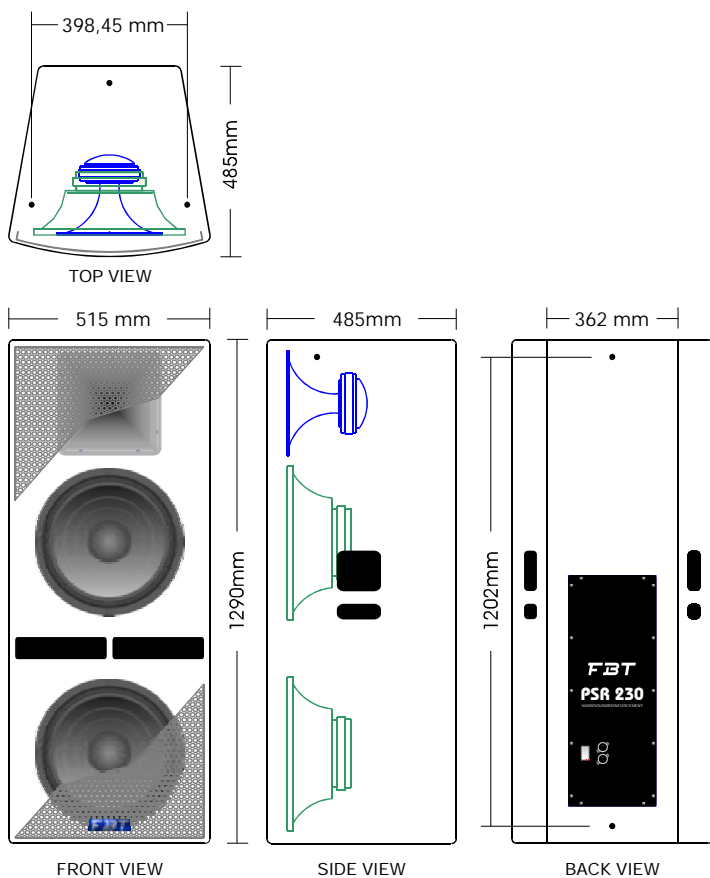


Professional Audio Equipment

PSR 230

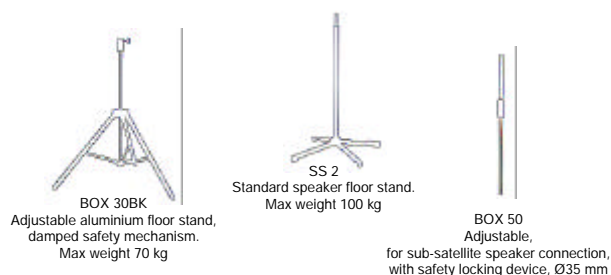
2 x 15" - two way
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DIMENSION DRAWINGS

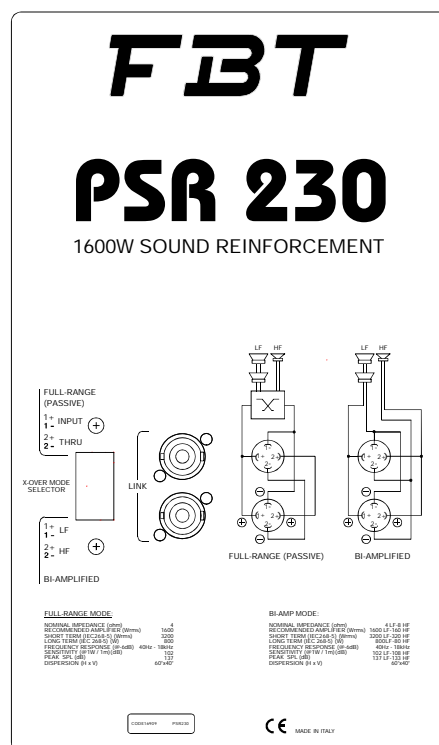


APPROVED PRODUCT

ACCESSORIES



INPUT PANEL & BLOCK DIAGRAM



ARCHITECTURAL & ENGINEERING SPECS.

The 2-way full range loudspeaker system shall incorporate two 15" LF transducers and a 2" (51mm) voice coil HF compression driver.

The HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 60° (H) x 40° (V).

An internal dual-mode passive filter shall provide acoustical crossover and system equalization.

Input panel shall easily change from passive to biamp operation via internal connector.

System frequency response shall vary no more than +/- 6dB from 40Hz to 18kHz measured on axis.

The loudspeaker shall produce a sound pressure level (SPL) of 102 dB on axis at 1 meter.

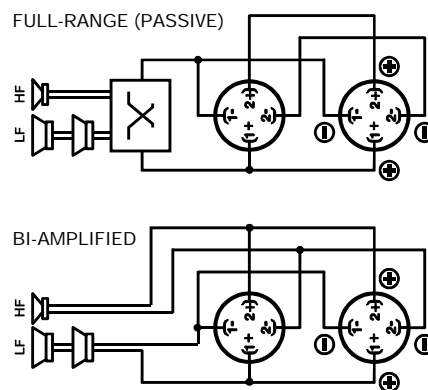
It shall handle 800 watts of amplifier power long term (AES standard) and shall have a nominal impedance of 4 ohm.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 18mm birch plywood with internal reinforcement.

Input connectors shall be two NL4 speakon. A total of 4 M10 anchoring points for suspended installation shall be provided (three on top and one on bottom side).

The front of loudspeaker shall be cloth coverable with a powder-coated perforated grille.

The 2-way full-range loudspeaker shall be the FBT model PSR 230.



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