JFX260i Specifications

2-WAY FULL-RANGE 12-inch LF, 60°x45°

See NOTES TABULAR DATA for details

CONFIGURATION

<table>
<thead>
<tr>
<th>Subsystem</th>
<th>Transducer</th>
<th>Loading</th>
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</thead>
<tbody>
<tr>
<td>LF</td>
<td>1x 12 in cone</td>
<td>Vented</td>
</tr>
<tr>
<td>HF</td>
<td>1x 1.4 in exit, 3 in voice coil compression driver</td>
<td>CD horn</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Operating Mode</th>
<th>Amplifier Channels</th>
<th>External Signal Processing</th>
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<tbody>
<tr>
<td>Single-amp</td>
<td>LF/HF</td>
<td>DSP</td>
</tr>
<tr>
<td>Bi-amp</td>
<td>LF, HF</td>
<td>DSP w/2-way filters</td>
</tr>
</tbody>
</table>

PERFORMANCE

Operating Range 68 Hz to 20 kHz
Nominal Beamwidth
  Horz 60°
  Vert 45°

Axial Sensitivity (whole space SPL)
  LF/HF 96 dB 68 Hz to 20 kHz
  LF 96 dB 68 Hz to 1.8 kHz
  HF 106 dB 1.37 kHz to 20 kHz

Input Impedance (ohms)
  Nominal Minimum
  LF/HF 8 6.2 @ 192 Hz
  LF 8 6.0 @ 192 Hz
  HF 8 9.1 @ 5620 Hz

High Pass Filter
  High Pass =>50 Hz, 12 dB/octave Butterworth

Accelerated Life Test*
  LF/HF 63 V 500 W @ 8 ohm
  LF 63 V 500 W @ 8 ohm
  HF 40 V 200 W @ 8 ohm

Calculated Axial Output Limit (whole space SPL)
  Average Peak
  LF/HF 123 dB 129 dB
  LF 123 dB 129 dB
  HF 129 dB 135 dB

ORDERING DATA

Description Part Number

JFX260i 2-Way Full-Range Loudspeaker Black 0013480
Optional Accessories
Fly Clip with Ring 0001386
Eyebolt/Forged Shoulder (3/8-16 x 1.25 in) 104001

1 To achieve specified performance, the listed external signal processing with EAW-provided settings is required.
2 For recommendations to select power amplifier size refer to: “HOW MUCH AMPERER POWER DO I NEED?” on the EAW web site.

FEATURES

• Ideal size and performance for rigorous all-purpose use
• 12-inch LF driver for best vocal and music reproduction
• 60° pattern optimized for controlled coverage and horizontal arrays
• Asymmetric enclosure provides multiple mounting angles
• Pole mount & fly track plus Omnimount® Series 120.0 compatible mounting points
• User-selectable, single-amplified and bi-amplified operating modes

DESCRIPTION

The JFX260i full-range loudspeaker is a multi-functional design, adding considerably to its value as a full-range loudspeaker. It is an ideal size and output for wide range of programs. Combining high output capability with natural reproduction, it is specifically outfitted to serve in a variety of both portable and permanent applications. The asymmetric enclosure provides typical angles needed for ceiling and wall mounting as well as for stage monitor operation. For portable use, provisions include a pole mount cup, top/bottom fly track for rigging, and handles integral to the enclosure that facilitate handling and transport. For permanent installation, enclosure hardware includes mounting points for an Omnimount® Series 120.0 or similar bracket and fly track for suspension.

The JFX260i is particularly suitable as a nearer field main loudspeaker, a fill/delay element in larger systems, for surround sound installations, and as voice and F/X reinforcement in themed attractions. Its narrower projection pattern provides more focused coverage as well as permitting horizontal arrays of two or more. While the JFX260i is well suited as is for many applications, the addition of a SBX220 subwoofer, especially designed to complement the JFXi Series, expands the low frequency capabilities for more demanding applications. These include houses of worship, theaters, and band PA.

Six year warranty.

EAW products are continually improved. All specifications are therefore subject to change without notice.
JFX260i Specifications

ENCLOSURE

Material: Baltic birch plywood
Finish: Wear resistant textured black paint
Grille: Powder-coated perforated steel
JFX260i Specifications

PERFORMANCE DATA
See NOTES GRAPHIC DATA for details

Frequency Response: Processed Bi-amplified
LF = green, HF = black, Complete = blue

Frequency Response: Processed Single-amplified
Complete = blue

Frequency Response: Unprocessed
LF = green, HF = black, Single-amp = blue

Frequency Response: Digital Signal Processor
LF = green, HF = black, Single-amp = blue

Impedance Magnitude
LF = green, HF = black, Single-amp = blue

Beamwidth (-6 dB SPL Points)
Horizontal = orange
Vertical = black

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JFX260i Specifications

HORIZONTAL POLAR DATA (Gridlines: 6 dB axial / 15 degree radial)

See NOTES GRAPHIC DATA for details

100 Hz
125 Hz
160 Hz
200 Hz

1600 Hz
2000 Hz
2500 Hz
3150 Hz

250 Hz
315 Hz
400 Hz
500 Hz

4000 Hz
5000 Hz
6300 Hz
8000 Hz

630 Hz
800 Hz
1000 Hz
1250 Hz

10000 Hz
12000 Hz
16000 Hz
VERTICAL POLAR DATA (Gridlines: 6 dB axial / 15 degree radial)

See NOTES GRAPHIC DATA for details.
JFX260i Specifications

INPUT PANEL

SIGNAL DIAGRAM

2-Way, Single-Amp (LF/HF)

HPF
AMP
XVR
EQ
HF
LF

2-Way, Bi-Amp (LF, HF)

DSP
EQ
DELAY
HPF/LPF
AMP
AMP
HF
LF

LEGEND

HPF: High Pass Filter for crossover or Recommended High Pass Filter.
LPF: Low Pass Filter for crossover.
LF/MF/HF: Low Frequency / Mid Frequency / High Frequency.
XVR: Passive LPFs, HPFs, and EQ integral to the loudspeaker.

NOTES

TABULAR DATA

2. Microphone Systems: Earthworks M30; Bruel & Kjaer 4133
3. Measurements: Dual channel FFT; length: 32,768 samples; sample rate: 48 kHz; logarithmic sine wave sweep.
4. Measurement System Qualification (includes all uncertainties): SPL: accuracy +/-0.2 dB @ 1 kHz, precision +/-0.5 dB; 20 Hz to 20 kHz, resolution 0.05 dB; Frequency: accuracy +/-1 %, precision +/-0.1 Hz, resolution the larger of 1.5 Hz or 1/48 octave; Time: accuracy +/-10.4 µs, precision +/-0.5 µs, resolution 10.4 µs; Angular: accuracy +/-1°, precision +/-0.5°, resolution 0.5°.
5. Environment: Measurements time-windowed and processed to eliminate room effects, approximating an anechoic environment. Data processed as anechoic or fractional space, as noted.
6. Measurement Distance: 7.46 m. Acoustic responses represent complex summation of the subsystems at 20 m. SPL is referenced to other distances using the Inverse Square Law.
7. Enclosure Orientation: For beamwidth and polar specifications, as shown in Mechanical Specification drawing.
8. Volts: Measured rms value of the test signal.
9. Watts: Per audio industry practice, “loudspeaker watts” are calculated as voltage squared divided by rated nominal impedance. Thus, these are not True Watt units of energy as defined by International Standard.
10. SPL: (Sound Pressure Level) Equivalent to the average level of a signal referenced to 0 dB SPL = 20 microPascals.
11. Subsystem: This lists the transducer(s) and their acoustic loading for each passband. Sub = Subwoofer, LF = Low Frequency, MF = Mid Frequency, HF = High Frequency.
13. Operating Range: Range where the processed Frequency Response stays within -10 dB SPL of the power averaged SPL within this range; measured on the geometric axis. Narrow band dips are excepted.
14. Nominal Beamwidth: Design angle for the 6 dB SPL points, referenced to 0 dB SPL as the highest level.
15. Axial Sensitivity: Power averaged SPL over the Operating Range with an input voltage that would produce 1 W at the nominal impedance; measured with no external processing on the geometric axis, referenced to 1 m.
16. Nominal Impedance: Selected 4, 8, or 16 ohm resistance such that the minimum impedance point is no more than 20% below this resistance over the Operating Range.
17. Nominal Impedance: Selected 4, 8, or 16 ohm resistance such that the minimum impedance point is no more than 20% below this resistance over the Operating Range.
18. Accelerated Life Test: Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.
19. Calculated Axial Output Limit: Highest average and peak SPLs possible during the Accelerated Life Test. The Peak SPL represents the 2:1 (6 dB) crest factor of the Life Test signal.
20. High Pass Filter: This helps protect the loudspeaker from excessive input signal levels at frequencies below the Operating Range.

GRAPHIC DATA

1. Resolution: To remove insignificant fine details, 1/12 octave cepstral smoothing was applied to acoustic frequency responses and 1/3 octave cepstral smoothing was applied to the beamwidth and impedance data. Other graphs are plotted using raw data.
2. Frequency Responses: Variation in acoustic output level with frequency for a constant input signal. Processed: normalized to 0 dB SPL. Unprocessed inputs: 2 V (4 ohm nominal impedance), 2.83 V (8 ohm nominal impedance), or 4 V (16 ohm nominal impedance) referenced to a distance of 1 m.
3. Processor Response: The variation in output level with frequency for a constant input signal. Processed: normalized to 0 dB SPL. Unprocessed inputs: 0.775 V = 0 dB reference.
4. Beamwidth: Average angle for each 1/3 octave frequency band where, starting from the rear of the loudspeaker, the output first reaches -6 dB SPL referenced to 0 dB SPL as the highest level. This method means the output may drop below -6 dB SPL within the beamwidth angle.
5. Impedance: Variation in impedance magnitude, in ohms, with frequency without regard to voltage/current phase. This means the impedance values may not be used to calculate True Watts (see 9 above).
6. Polar Data: Horizontal and vertical polar responses for each 1/3 octave frequency band 100 Hz to 16 kHz or Operating Range.