

FEATURES

- Premium Performance
- Application Flexibility
- Neodymium Components
- NT upgrade capability
- Switch configurable powering modes

APPLICATIONS

Corporate A/V, any small to medium sized live sound reinforcement, performing arts venues, houses of worship, retail, ballrooms, theaters, theme parks – these products are far more visually appealing to the installation crowd due to their cabinet design and bracket kits.

DESCRIPTION

The newest additions to the celebrated JF Series of 2-way loudspeakers redefine the concept of application flexibility. The integration of premium neodymium components and legendary crossover design in an incredibly adaptable package offers unprecedented utility. All models natively offer a combination of portable features and M10 installation points. Available universal accessories include trim plates that hide handles and provide a connection point for u-brackets, quick release flytrack segments that integrate into any enclosure and adjustable legs for use as a stage monitor. Add revolutionary EAW Focusing in the UX8800 Processor for the pinnacle of performance in any venue.

2-WAY FULL-RANGE LOUDSPEAKER 60° × 45°

See NOTES TABULAR DATA for details

CONFIGURATION

Subsystem:

	Transducer	Loading
LF	1× 12 in cone	Vented
HF	1× 1.4 in exit, 3 in voice coil	Horn-loaded
	compression driver	

Operating Mode:

	Amplifier Channels	External Signal Processing
Single-amp	LF/HF	High pass filter
Bi-amp	LF,HF	DSP w/ EAW Focusing

PERFORMANCE

PERFORMANCE		
Operating Range:	55 Hz to 20 kHz	
Nominal Beamwidt	1:	
Horz 60°		

Axial Sensitivity (whole space SPL):

Vert 45°

ty (Wri	oie space SPL):	
LF/HF	96 dB	55 Hz to 20 kHz
LF	96 dB	55 Hz to 1700 Hz
HF	108 dB	1300 Hz to 20 kHz

Input Impedance (ohms).

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	Nominal	Minimum
LF/HF	8	6.4 @ 240 Hz
LF	8	6.4 @ 190 Hz
HF	8	8.8 @ 6220 Hz

High Pass Filter: High Pass =>45 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):

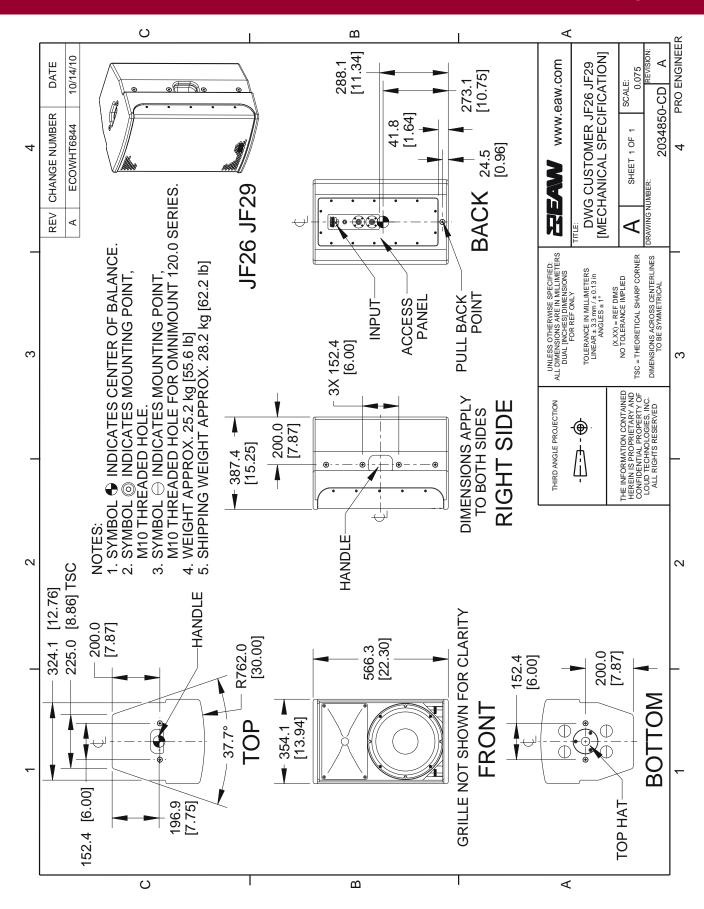
	Average	Peak
LF/HF	124 dB	130 dB
LF	124 dB	130 dB
HF	131 dB	137 dB

ORDERING DATA

Description	Part Number
EAW JF26 2-Way Full-Range Loudspeaker Black	2034851-00
Optional Accessories	
M10 × 37mm Forged Shoulder Eyebolt	0029818
EAW U-Bracket Adjustable S1 BLK [UBKT-S1]	2035474
EAW ACC Leg Adjustable S (2 Per) [ACC-LGS]	2035438
EAW ACC Flytrack S (2 Per) [ACC-FTS]	2035439
EAW ACC Cover Plate S (2 Per) BLK [ACC-CPS]	2035473
Fly Clip with Ring	0001386







NOTE: This drawing has been reduced. Do not scale.



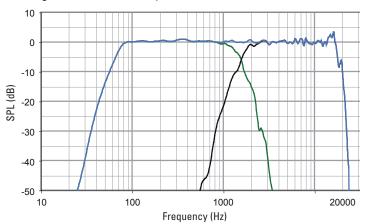


PERFORMANCE DATA

See NOTES GRAPHIC DATA for details

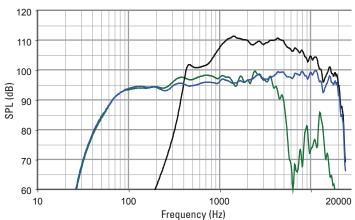
Frequency Response: Processed Multi-Amp

LF = green, HF = black, Complete = blue



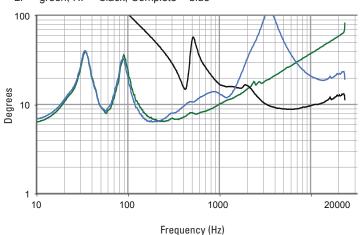
Frequency Response: Unprocessed

LF = green, HF = black, Complete = blue



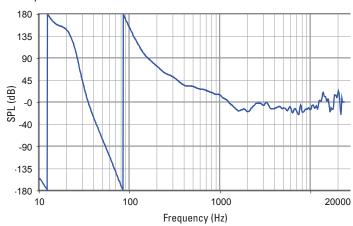
Impedance

LF = green, HF = black, Complete = blue



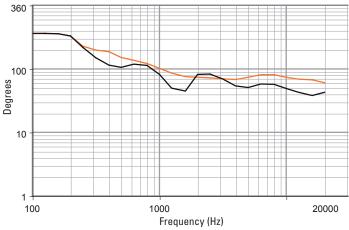
Phase Linearity

Complete = blue



Beamwidth

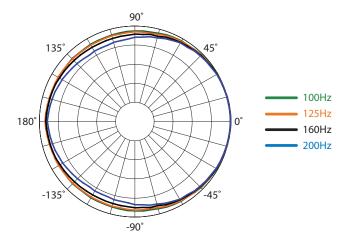
Horizontal = orange Vertical = black

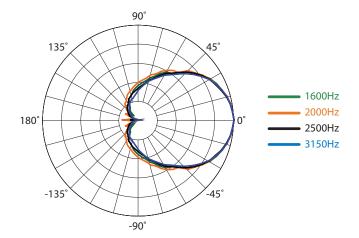


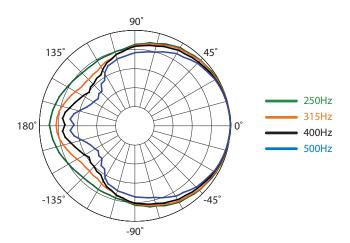


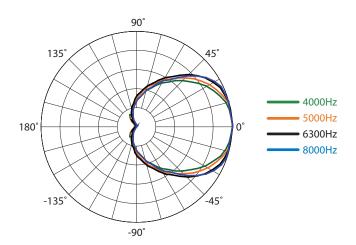
HORIZONTAL POLAR DATA

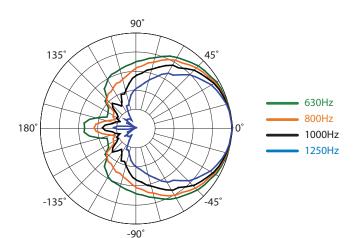
See NOTES GRAPHIC DATA for details

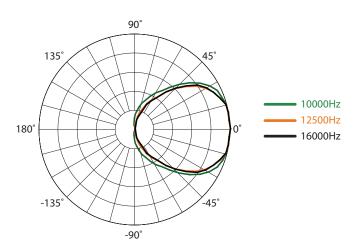










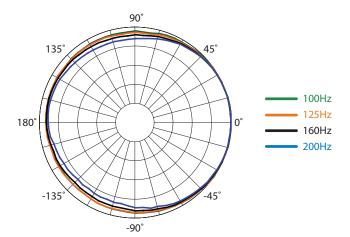


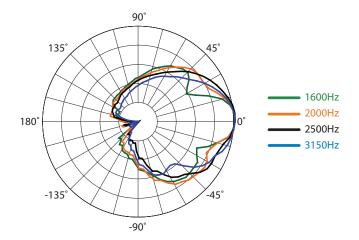


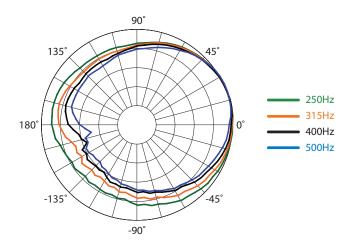


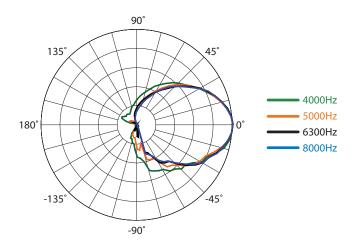
VERTICAL POLAR DATA

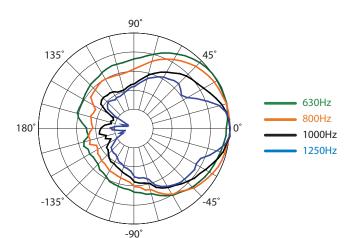
See NOTES GRAPHIC DATA for details

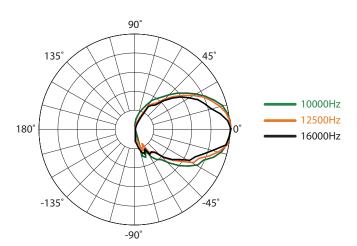








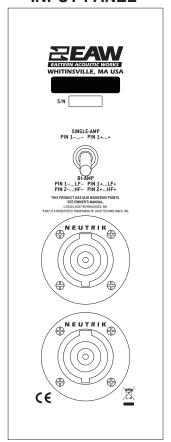




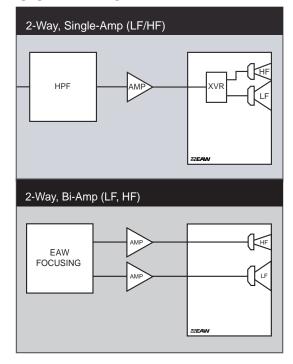




INPUT PANEL



SIGNAL DIAGRAM



LEGEND

DSP: EAW UX8800 Digital Signal Processor -or- Integral Digital Signal Processing for NT products.

HPF: High Pass Filter for crossover -or- Recommended High Pass Filter.

LPF: Low Pass Filter for crossover

Low Frequency / Mid Frequency / High Frequency. LF/MF/HF:

AMP: User Supplied Power Amplifier -or- Integral Amplifier for NT products. XVR: Passive LPFs, HPFs, and EQ integral to the loudspeaker.

EAW Focusing: Digital Signal Processor capable of implementing EAW Focusing.

NOTES TABULAR DATA

- 1. Measurement/Data Processing Systems: Primary FChart: proprietary EAW software; Secondary Brüel & Kjær 2012.
- 2. Microphone Systems: Earthworks M30; Brüel & Kjær 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
- 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.
- 12. Operating Mode: User selectable configurations. Between system elements, a comma (,) = separate amplifier channels; a slash (/) = single amplifier channel. DSP = Digital Signal Processor. IMPORTANT: To achieve the specified performance, the listed external signal processing must be used with EAW-provided settings.
- 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. Accelerated Life Test: Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.
- 18. 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.
- 19. 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 of 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.



