



FEATURES

- Premium Performance
- Application Flexibility
- Neodymium Components
- NT upgrade capability
- Switch configurable powering modes (passive/bi-amp)

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 legendary KF Series of premium 3-way loudspeakers pack even more capability and application flexibility into an ultra-compact package. The integration of premium neodymium components, a co-axial mid/high frequency component and world-renowned crossover design into an adaptable enclosure offers unprecedented utility. They natively offer both portable features and M10 installation points. Available universal accessories include trim plates that hide handles, 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.

3-WAY FULL-RANGE LOUDSPEAKER

See *NOTES TABULAR DATA* for details

CONFIGURATION

Subsystem:

<i>Transducer</i>	<i>Loading</i>
LF 2x 10 in cone	Vented
MF 1x 1.4 in cone, 3.5 in coil compression mid	Horn-loaded
HF 1x 1.4 in exit, 1.75 in voice coil compression driver	Horn-loaded

Operating Mode:

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

PERFORMANCE

Operating Range: 64 Hz to 20 kHz

Nominal Beamwidth:

Horz 60°
Vert 45°

Axial Sensitivity (whole space SPL):

LF/MF/HF 98 dB	64 Hz to 20 kHz
LF 99 dB	64 Hz to 613 Hz
MF/HF 111 dB	473 Hz to 20 kHz

Input Impedance (ohms):

<i>Nominal</i>	<i>Minimum</i>
LF/MF/HF 8	6.6 @ 124 Hz
LF 8	6.4 @ 392 Hz
MF/HF 8	6.7 @ 3650 Hz

High Pass Filter: High Pass=>64 Hz, 12 dB/octave Butterworth

Accelerated Life Test:

LF/MF/HF 94 V	1100 W @ 8 ohm
LF 78 V	750 W @ 8 ohm
MF/HF 35 V	150 W @ 8 ohm

Calculated Axial Output Limit (whole space SPL):

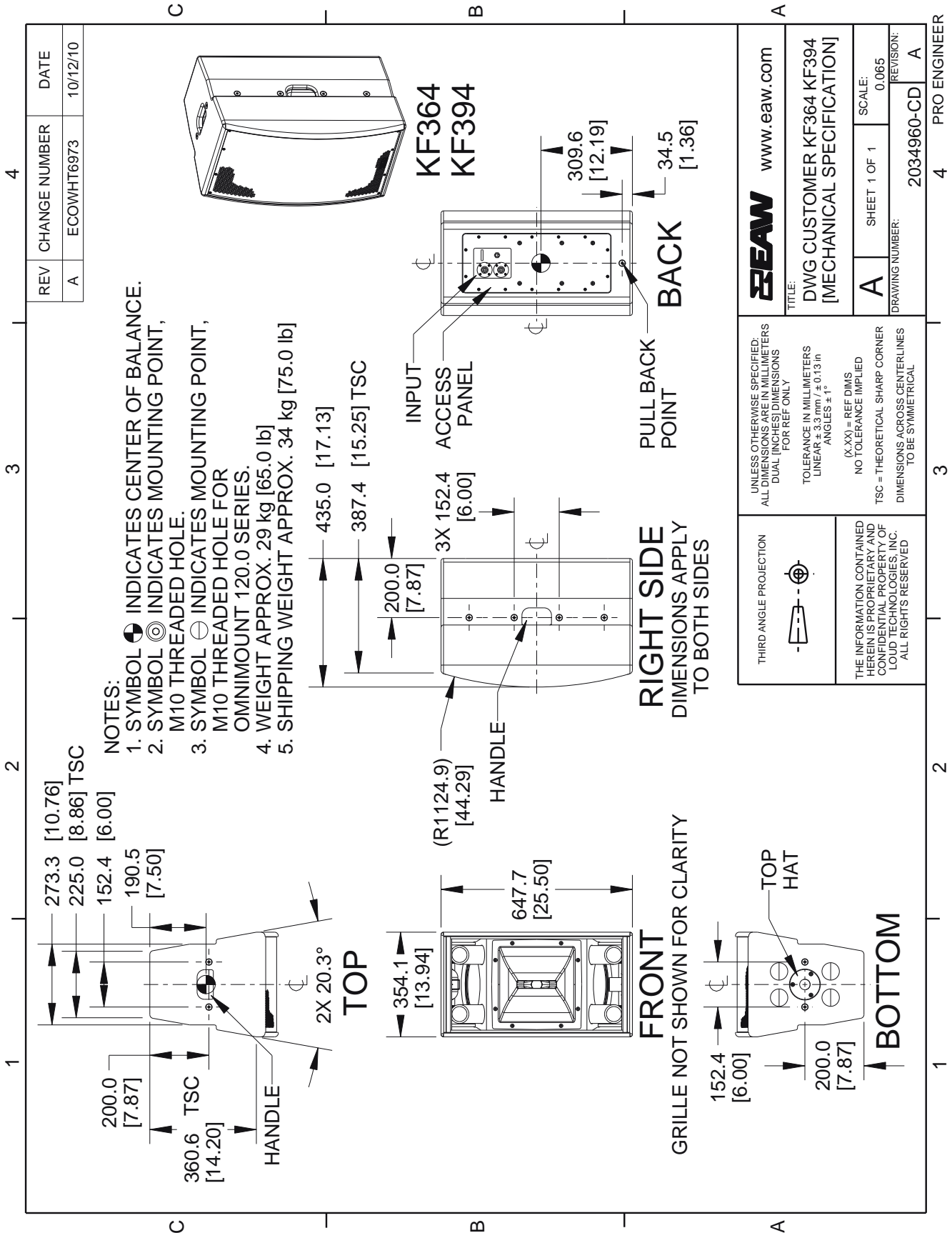
<i>Average</i>	<i>Peak</i>
LF/MF/HF 128 dB	134 dB
LF 128 dB	134 dB
MF/HF 133 dB	139 dB

ORDERING DATA

Description	Part Number
EAW KF364 3-way Full-Range Loudspeaker Black	2034958-00

Optional Accessories

M10 x 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



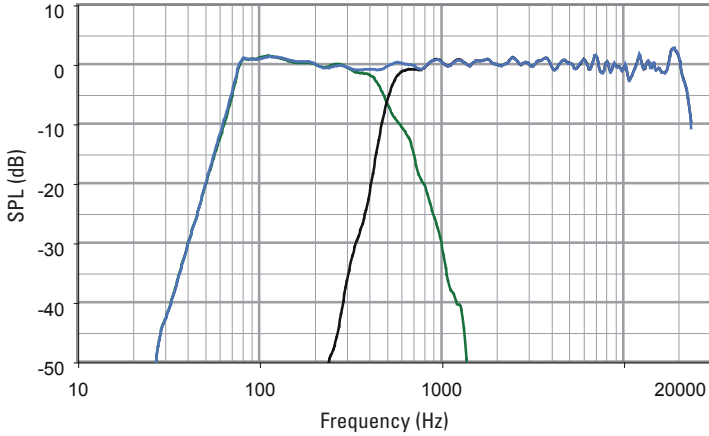
NOTE: This drawing has been reduced. Do not scale.

PERFORMANCE DATA

See *NOTES GRAPHIC DATA* for details

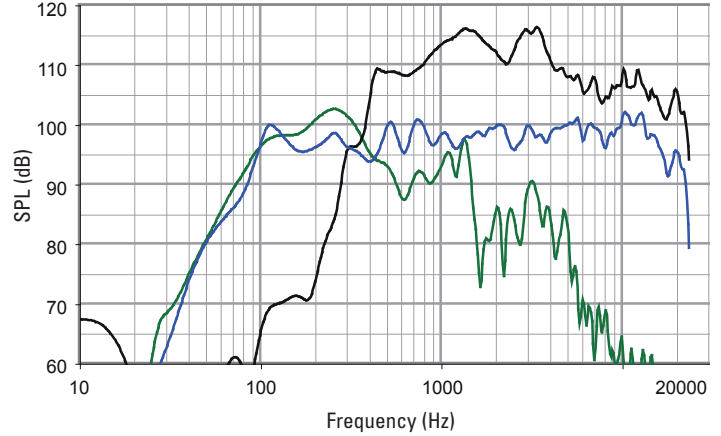
Frequency Response: Processed Multi-Amp

LF = green, HF = black, Complete = blue



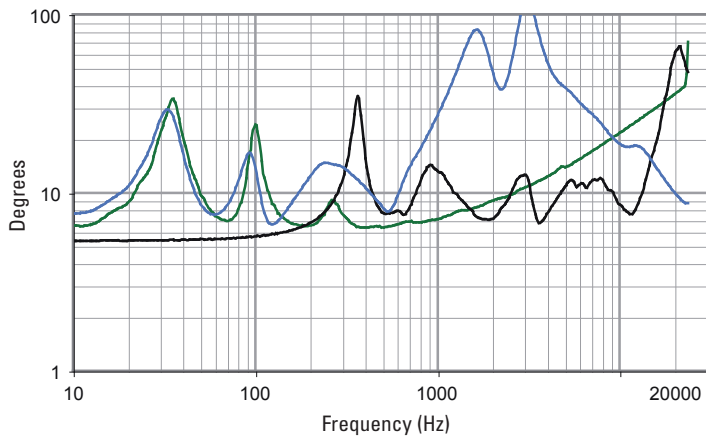
Frequency Response: Unprocessed

LF = green, HF = black, Complete = blue



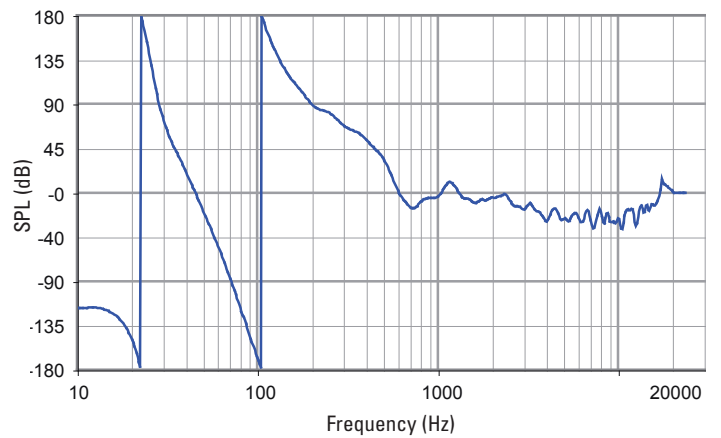
Impedance

LF = green, HF = black, Complete = blue



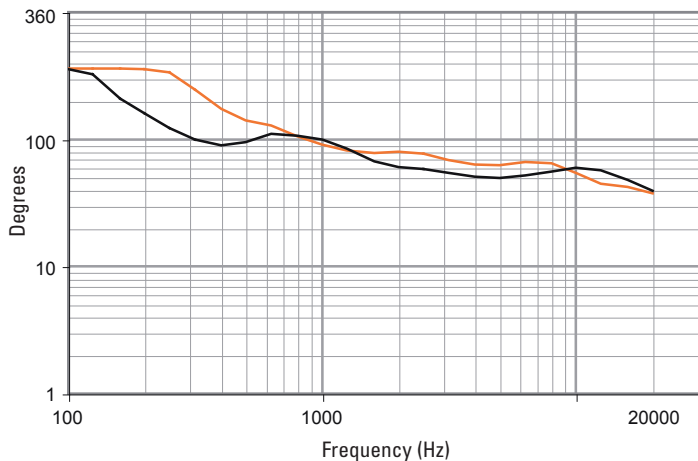
Phase Linearity

Complete = blue



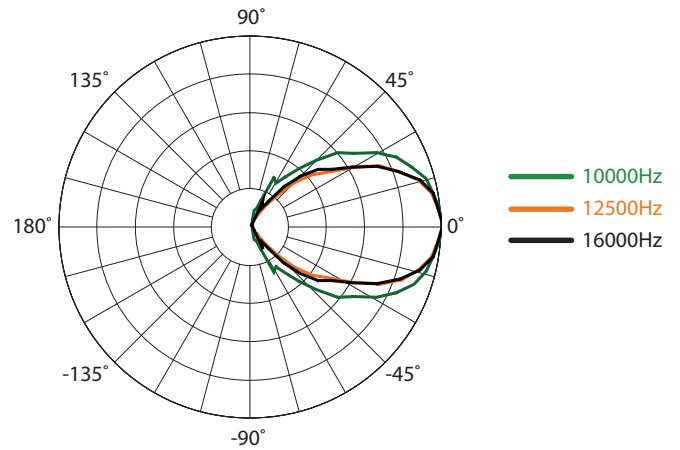
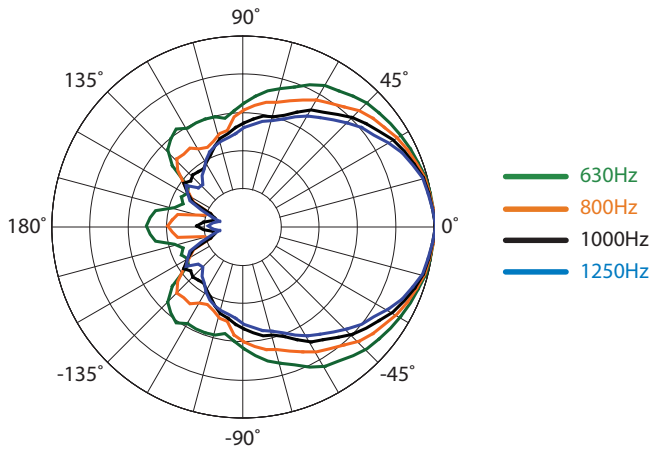
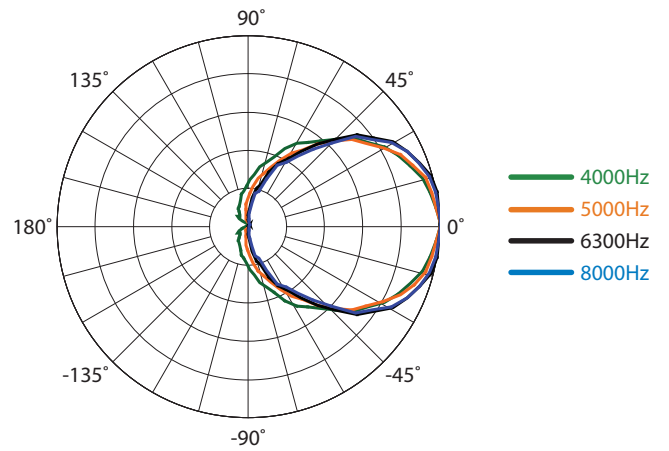
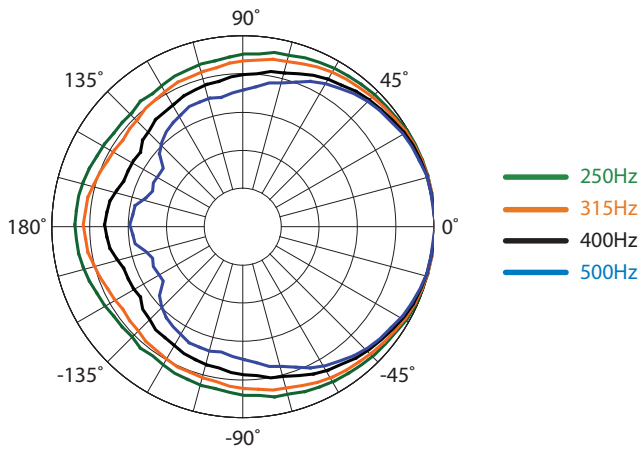
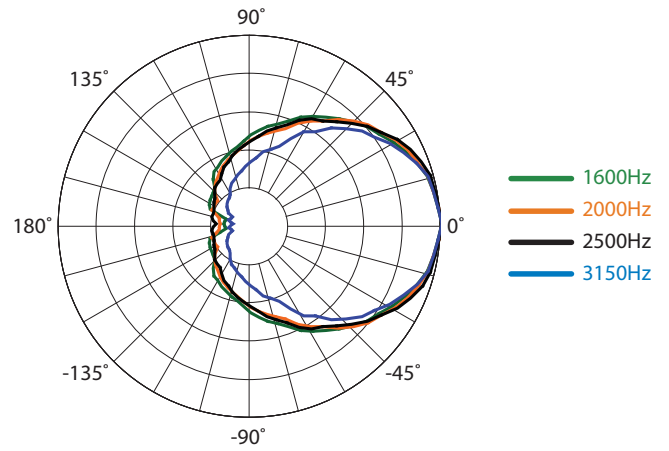
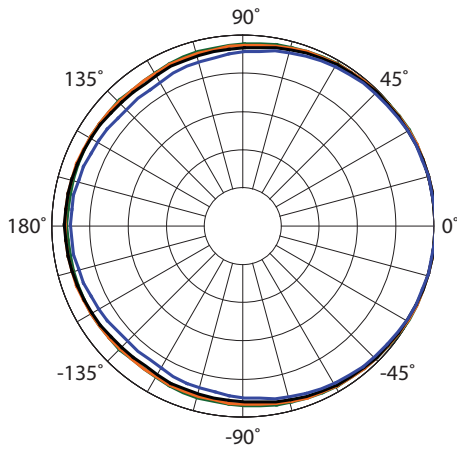
Beamwidth

Horizontal = orange Vertical = black



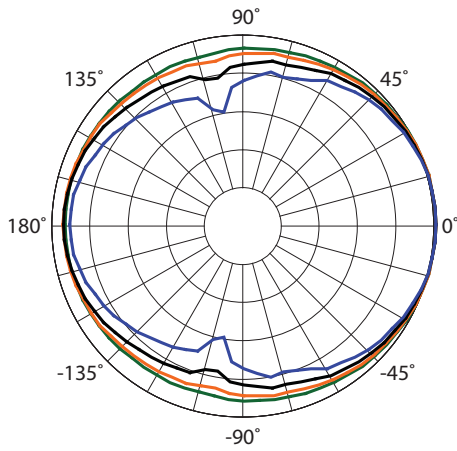
HORIZONTAL POLAR DATA

See *NOTES GRAPHIC DATA* for details

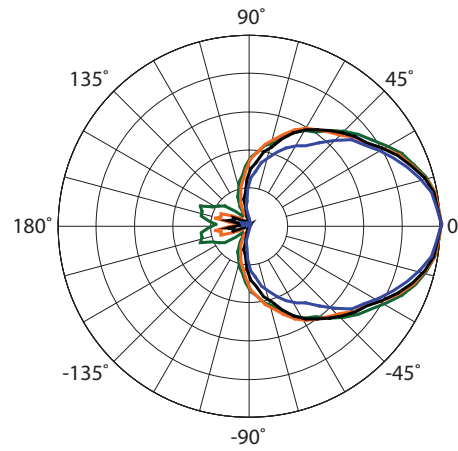


VERTICAL POLAR DATA

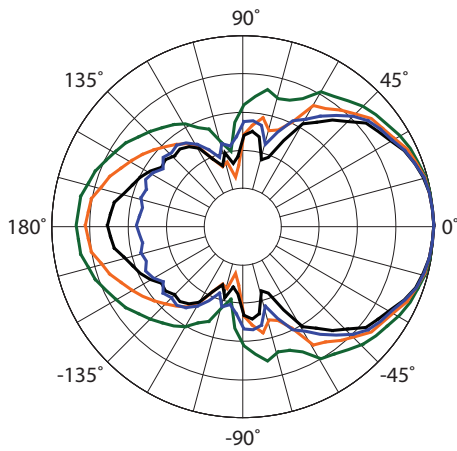
See *NOTES GRAPHIC DATA* for details



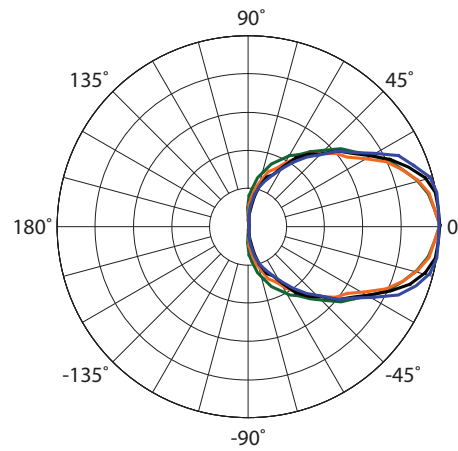
- 100Hz
- 125Hz
- 160Hz
- 200Hz



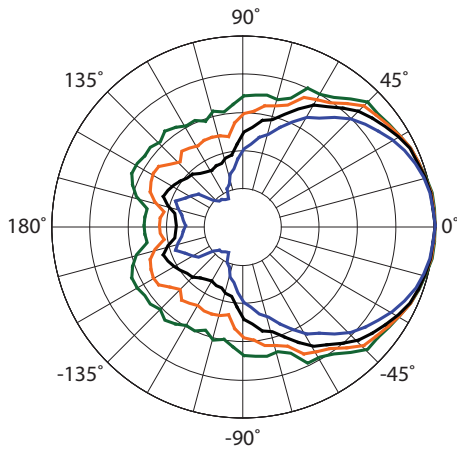
- 1600Hz
- 2000Hz
- 2500Hz
- 3150Hz



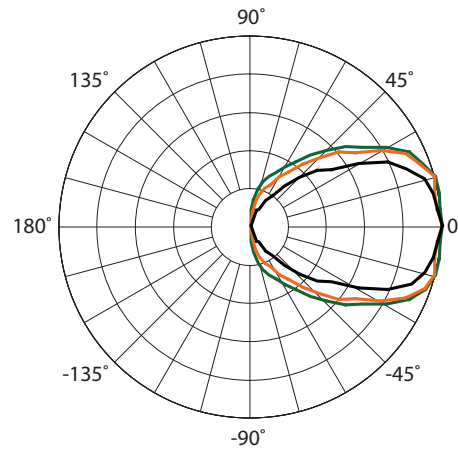
- 250Hz
- 315Hz
- 400Hz
- 500Hz



- 4000Hz
- 5000Hz
- 6300Hz
- 8000Hz

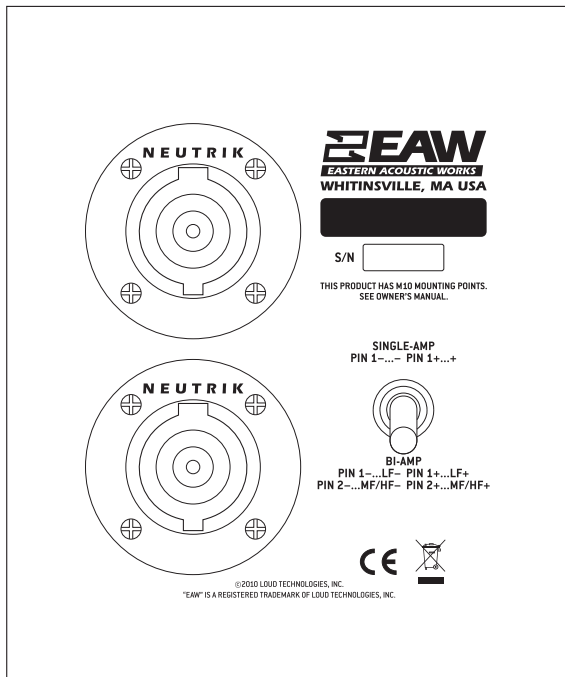


- 630Hz
- 800Hz
- 1000Hz
- 1250Hz

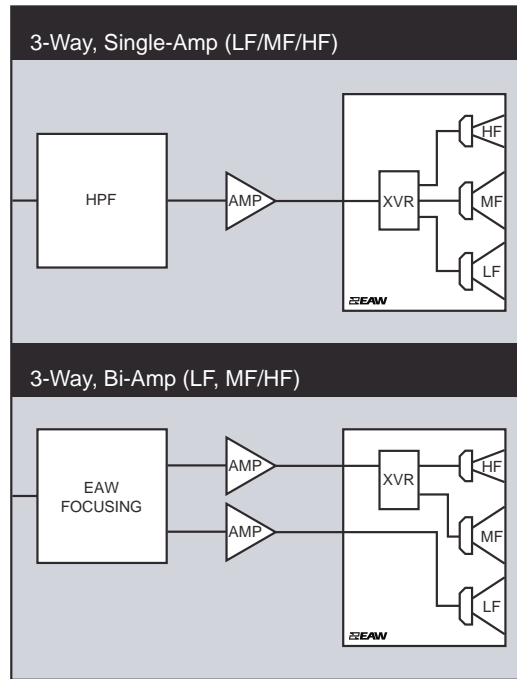


- 10000Hz
- 12500Hz
- 16000Hz

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

- Measurement/Data Processing Systems:** Primary - FChart: proprietary EAW software; Secondary - Brüel & Kjær 2012.
- Microphone Systems:** Earthworks M30; Brüel & Kjær 4133
- Measurements:** Dual channel FFT; length: 32 768 samples; sample rate: 48 kHz; logarithmic sine wave sweep.
- 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°.
- Environment:** Measurements time-windowed and processed to eliminate room effects, approximating an anechoic environment. Data processed as anechoic or fractional space, as noted.
- 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.
- Enclosure Orientation:** For beamwidth and polar specifications, as shown in Mechanical Specification drawing.
- Volts:** Measured rms value of the test signal.
- 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.
- SPL:** (Sound Pressure Level) Equivalent to the average level of a signal referenced to 0 dB SPL = 20 microPascals.
- Subsystem:** This lists the transducer(s) and their acoustic loading for each passband. Sub = Subwoofer, LF = Low Frequency, MF = Mid Frequency, HF = High Frequency.
- 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.
- 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.
- Nominal Beamwidth:** Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.
- 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.
- 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.
- Accelerated Life Test:** Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.
- 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.
- High Pass Filter:** This helps protect the loudspeaker from excessive input signal levels at frequencies below the Operating Range.

GRAPHIC DATA

- 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.
- 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.
- Processor Response:** The variation in output level with frequency for a constant input signal of 0.775 V = 0 dB reference.
- 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.
- 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).
- Polar Data:** Horizontal and vertical polar responses for each 1/3 octave frequency band 100 Hz to 16 kHz or Operating Range.