

KF210

2-Way Line Array Loudspeaker

- ▶ Lightweight, compact, and high output line array system.
- ▶ Integrated, IP55 rated weather protection for demanding outdoor environments an audience is able to withstand.
- ▶ Bi amp or passive operation

OVERVIEW

The KF210 line array system is a lightweight, compact, high output loudspeaker system offering integrated weather protection for a wide range of applications.

The KF210 incorporates four handles for easy handling, and a proprietary 3-point rigging system for suspension. Bi-amp or passive operation can be selected to optimize output or amplifier channel use via NL4 connectors with WP covers. The system is rated to IP55 for permanent installation in demanding environments backed by EAW's full warranty.

Engineered for a wide variety of applications, the compact KF210 module is comprised of 3in voice coil compression driver mounted to EAW's patented Isophasic waveguide, and two 2.5in voice coil high power 10in LF drivers. The output of these sources delivers up to 141dB with accurate pattern control to 400Hz to master challenging acoustic spaces.



TECHNOLOGIES



Beamwidth Matched Crossovers Introduced over a decade ago for our MK series loudspeakers, EAW Engineers use carefully-designed HF horns and crossovers to eliminate polar irregularities through the crossover point.



Focusing™ Use of advanced digital signal processing to perfect the impulse response of a loudspeaker in the time domain. Eliminating horn "honk" and splashiness, this makes the loudspeaker sound like a studio monitor instead of a "PA" speaker.



DynO™ Dynamic Optimization actively tracks input spectrum and power delivery, continually wicking maximizing output and fidelity at any drive level.



Phase Aligned LF™ Tuned spacing of LF components to extend pattern control without the need for enormous horns.



Symmetry of Sources™ Symmetrical arrangement of acoustic sources along a common axis for utmost consistency throughout the coverage pattern.

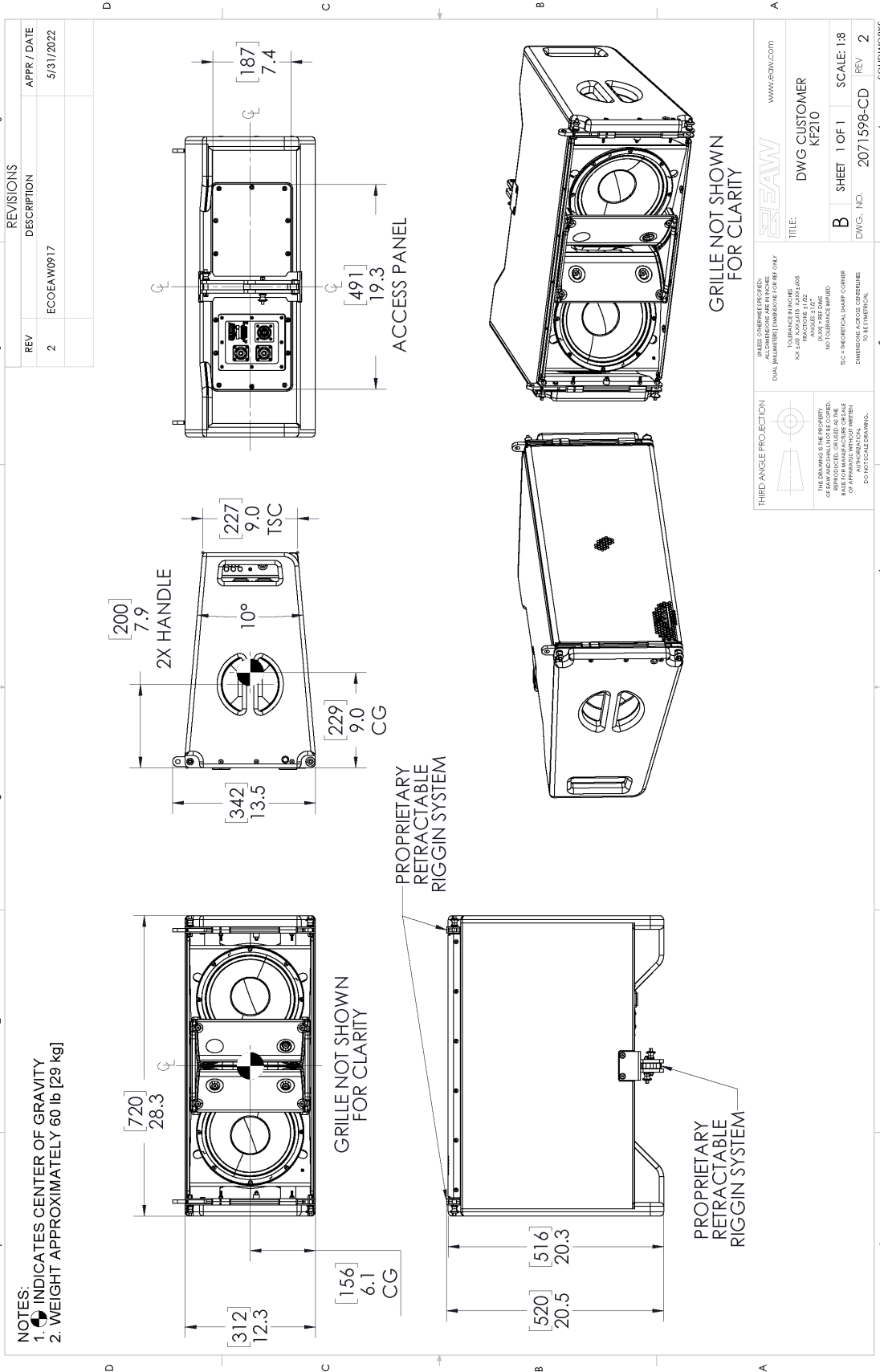


TECHNICAL SPECIFICATIONS
2-WAY FULL RANGE LINE ARRAY LOUDSPEAKER 90° X 12°

CONFIGURATION		
Subsystem	Transducer	Loading
LF	2x10" cone, 2.5" VC	Vented
HF	1x1.4" exit, 3" VC compression drivers	Isophasic Wave Guide
Operating Mode		
	Amplifier Channels	External Signal Processing
Single-amp	LF/HF	DSP w/EAW Focusing™ & DynO™
Bi-amp	LF, HF	DSP w/EAW Focusing™ & DynO™

PERFORMANCE		
Operating Range		55Hz–18kHz
Nominal Beamwidth		Horz: 90° Vert: 12°
Axial Sensitivity		
LF/HF	101 dB	55Hz to 18kHz
LF	99 dB	55Hz to 1200Hz
HF	107 dB	800Hz to 18kHz
Calculated Axial Output Limit (whole space SPL)	Average	Peak
LF/HF	128 dB	140 dB
LF	127 dB	139 dB
HF	129 dB	141 dB
Input Impedance (ohms)	Nominal	Minimum
LF/HF	8	5.3 @ 330 Hz
LF	8	6.4 @ 440 Hz
HF	8	8 @ 4400 Hz
Accelerated Life Test		
LF/HF	63V	500 W @ 8 ohm
LF	69V	600 W @ 8 ohm
HF	35V	150 W @ 8 ohm
High Pass Filter		50 Hz, 12 dB/octave Butterworth

PHYSICAL	
Physical/Rigging	3-Point Integrated Rigging
Dimensions (HxWxD)	12.3 X 28.3 X 20.5in (314 X 720 X 520mm)
Weight	60lbs (29kg)
Flyware	KF210 FLYBAR

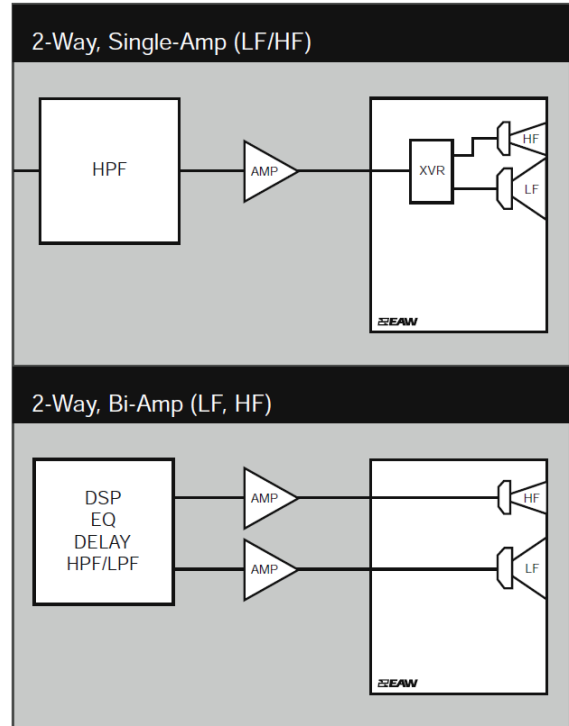
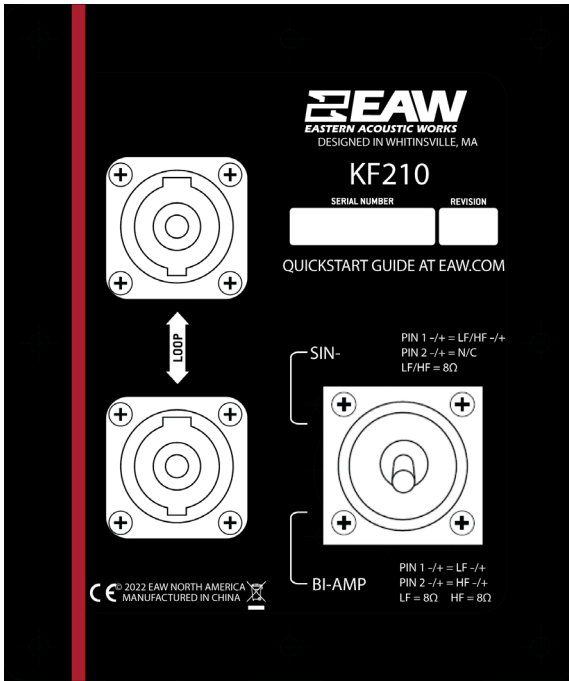


REVISIONS		APPR / DATE
REV	DESCRIPTION	5/31/2022
2	ECCOEA00917	

 THIRD ANGLE PROJECTION THE DRAWINGS & THE PROPERTY OF EASTERN ACOUSTIC WORKS. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS ACROSS CORNER TO METRIC. DO NOT SCALE DRAWING.		WWW.EAW.COM TITLE: DWG CUSTOMER KF210	
B SHEET 1 OF 1 SCALE: 1:8 DWG. NO. 2071598-CD REV 2		6 SOLIDWORKS 2071598-CD (2) DWG CUSTOMER KF210	

INPUT PANEL

SIGNAL DIAGRAM

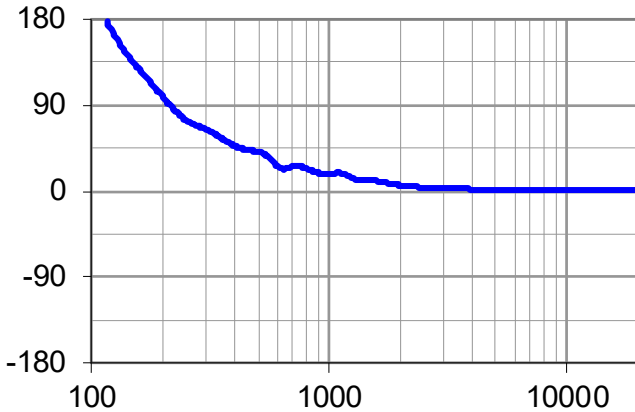


Legend

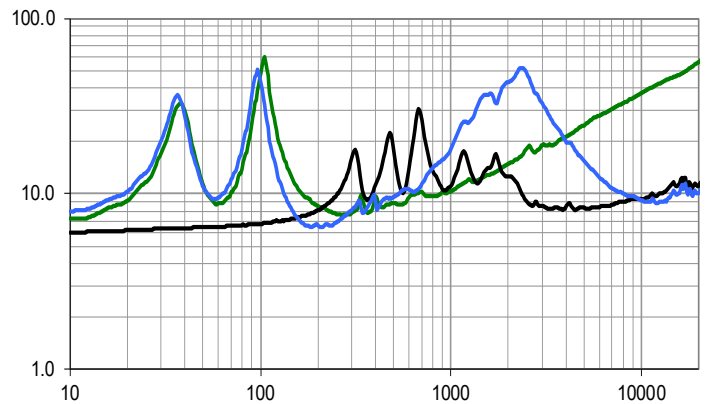
- HPF** High Pass Filter for crossover –or– Recommended High Pass Filter
- LPF** Low Pass Filter for crossover
- LF/MF/HF** Low Frequency / Mid Frequency / High Frequency
- AMP** User Supplied Power Amplifier –or– Integral Amplifier for NT products
- XVR** Passive LPFs, HPFs, and EQ integral to the loudspeaker
- EAW Focusing** Digital Signal Processor capable of implementing EAW Focusing
- EAW DynO** Digital Signal Processor capable of implementing EAW DynO processing

PERFORMANCE GRAPHS

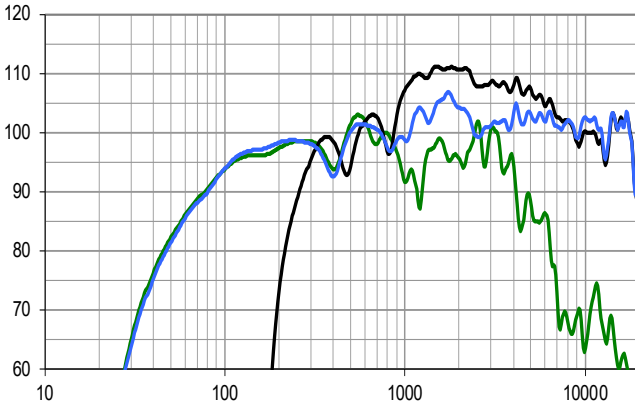
Phase Linearity



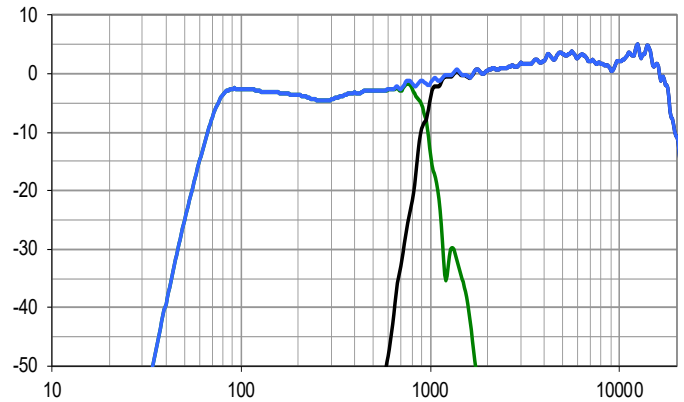
Impedance ■=LF Bi Amped ■=HF Bi Amped ■=Single Amp LF/HF



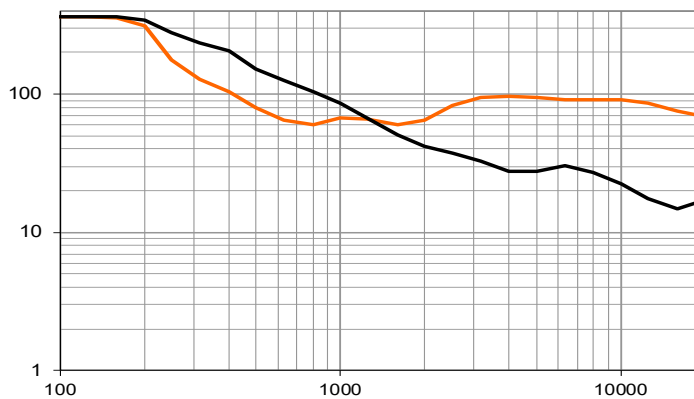
Unprocessed Frequency Response¹ ■=LF Processed ■=HF Processed ■=Overall



Processed Frequency Response¹ ■=LF Processed ■=HF Processed ■=Overall



Beamwidth² ■=Horizontal ■=Vertical



1 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 (8ohm nominal impedance), or 4 V (16 ohm nominal impedance) referenced to a distance of 1 m.

2 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.



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