# MKC80

# 2-Way Coaxial Loudspeaker

- High output, compact coaxial loudspeaker
- Patented CSA coaxial horn provides superior control, fidelity and output
- Integrated M10 mouting, handle and pole mount
- Weather protection and transformer options
- Companion UXA4403 amplifers

### **OVERVIEW**

The MKC series represents a major evolution of coaxial loudspeakers. Available as standard in black or white, the MKC series offers a full-suite of driver sizes allowing the series to span a powerful index of installation applications and configurations. The enclosures can be deployed in either horizontal or vertical orientations through the use of an pan & tilt wall bracket or a U-Bracket. Other deployment options include a pole stand mount with two available tilt positions.

Equipped with a CSA aperture, MKC80 takes single speaker pattern control to new levels. The technology delivers consistent tonality throughout the entire coverage, area even at high SPL levels.



### 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<sup>™</sup> 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<sup>™</sup> Dynamic Optimization actively tracks input spectrum and power delivery, continually wicked maximizing output and fidelity at any drive level.



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



Concentric Summation Array (CSA) <sup>™</sup> A method of seamlessly integrating MF and HF components within a single horn. With CSA, multiple subsystems sum coherently, without interruption to either HF or MF wavefronts.



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# **TECHNICAL SPECIFICATIONS**

#### 2-WAY COAXIAL LOUDSPEAKER

PERFORMANCE		
Max SPL <sup>1</sup> (12 dB Crest Factor)	132dB	
<b>Max SPL<sup>1</sup></b> (6 dB Crest Factor)	126dB	
Operating Range <sup>2</sup>	60Hz-20kHz	
Nominal Beamwidth <sup>3</sup>	90 x 60 degrees, rotatable	
Axial Sensitivity	93dB	
Calculated Axial Output	120dB Average, 132dB Peak	
Nominal Phase	±15° from ideal high-pass filter	
Input Impedance	8 ohms nominal, 7.4 ohms @ 270Hz minimum	
Recommended HPF	60Hz 12dB/oct	
ACCELERATED LIFE TEST <sup>4</sup>		
LF/HF	450W @ 8ohms	
CONFIGURATION		
LF Transducer, Loading	1x8in cone, 2in VC, Vented	
HF Transducer, Loading	1x1-in exit, 35mm voice coil compression driver, Concentric Summation Array (CSA) loaded	
Operating Modes	LF/HF, DSP w/ EAW Focusing & DynO	
PHYSICAL		
Physical Rigging	2x M10 Suspension points 4 x M6 threaded pattern for wall or ceiling mount bracket 2x pairs of M6 threaded points for pole mount adapter	
Dimensions (HxWxD)	16.6 x 10.0 x 10.5in (422 x 255 x 267mm)	
Net Weight	22 lbs. (10kg)	
Shipping Weight	Approx. 26 lbs. (11.8kg)	
Mounting Accessories	U-Bracket Ceiling mount bracket Metal wall mount Pan/Tilt bracket	
Input Connector	2x Neutrik NL4, 2-pin barrier strip	

1 Calculated peak SPL at 1m with stated crest factor pink noise. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.

2 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.

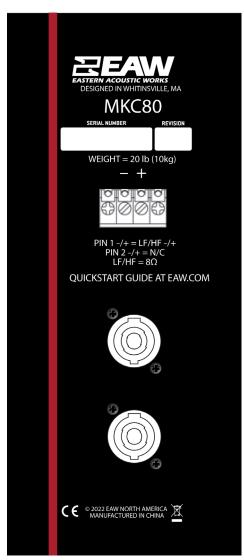
3 Nominal Beamwidth: Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.

4 Accelerated Life Test: Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.

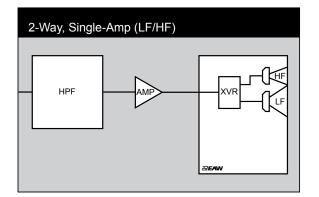


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INPUT



SIGNAL



# LEGEND

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.	



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## **RECOMMENDED AMPLIFIER CONFIGURATION**

### **SINGLE-AMP**



MODEL		PER AMPLIFIER
UXA4403	1	4

EAW strongly recommends utilizing the processing setting to take full advantage of your speakers. Pair with EAW UXA Amps for the best performance of EAW Core Technologies

### **RIGGING CONFIGURATION**



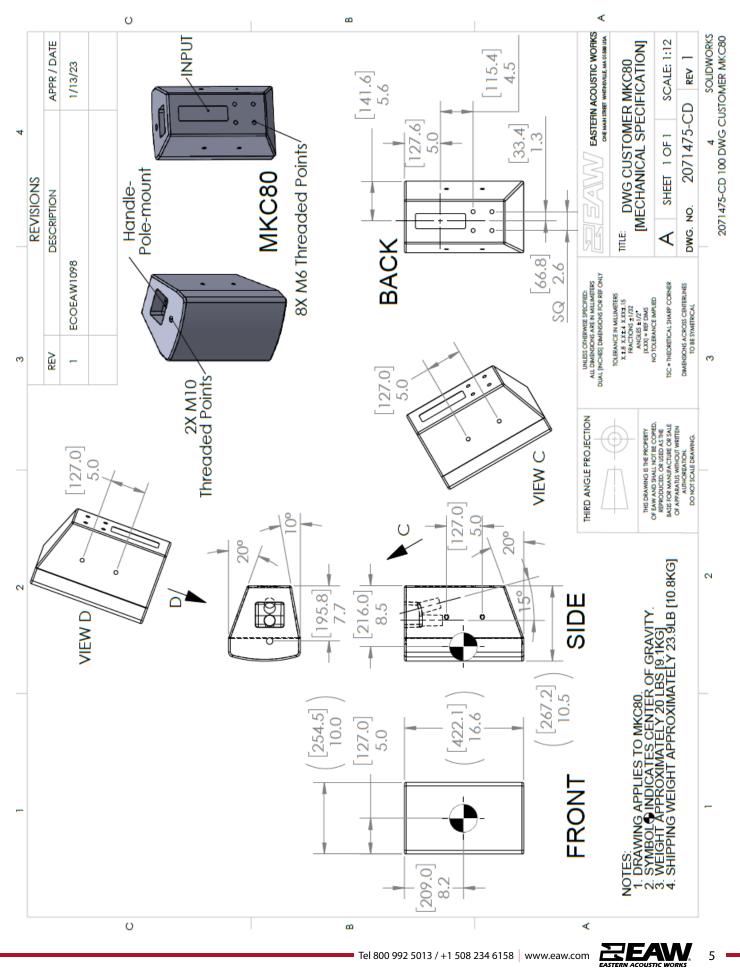
#### **MOUNTING HARDWARE**

EAW			
DESCRIPTION	PART NUMBER		
U-Bracket (BLK)	2071719-90		
U-Bracket (WHT)	2071789-90		
Pivoting Wall Mount Bracket (BLK)	2071833		



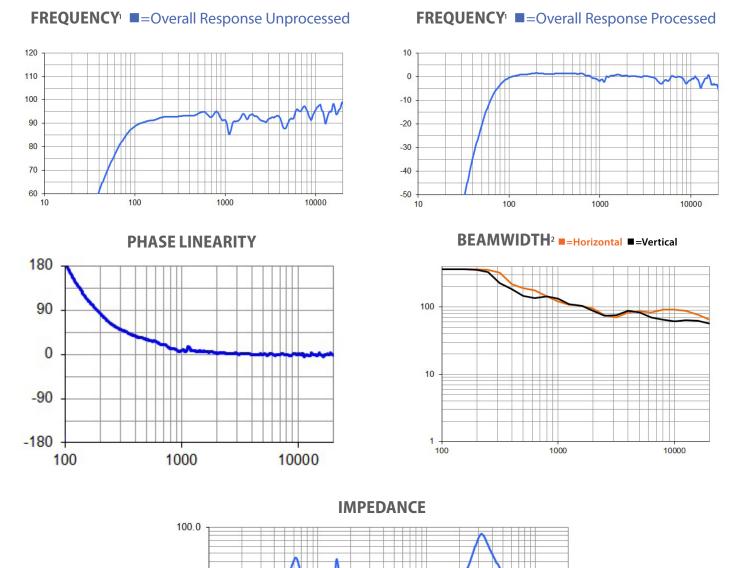


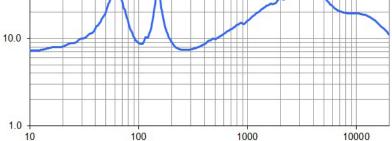
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### **PERFORMANCE GRAPHS**





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.

