## MKC50

# 2-Way Coaxial Loudspeaker

- Highly versatile, compact coaxial loudspeaker
- ▶ 1 in Dome tweeter provides superior dispersion, fidelity and output
- Flexible accessory solutions for wall, ceiling or pole mount applications
- Weather protection and transformer options
- Companion UXA4401 Amplifier



#### **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. Other deployment options include a ceiling and mic stand mount.

With an innovative new port design and top of the line 1 in dome tweeter, MKC50 offers pristine audio output, similar to that of a professional studio monitor.

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



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



#### **TECHNICAL SPECIFICATIONS**

#### **2-WAY COAXIAL LOUDSPEAKER**

PERFORMANCE		
Max SPL <sup>1</sup> (12 dB Crest Factor)	121dB	
Max SPL <sup>1</sup> (6 dB Crest Factor)	115dB	
Operating Range <sup>2</sup>	80Hz-20kHz	
Nominal Beamwidth <sup>3</sup>	110 degrees conical	
Axial Sensativity	87dB	
Calculated Axial Output	109dB average, 121dB peak	
Nominal Phase	±15° from ideal high-pass filter	
Input Impedance	8 ohms nominal, 6.2 ohms @ 15kHz minimum	
Recommended HPF	80Hz 12dB/oct	
ACCELERATED LIFE TEST <sup>4</sup>		
LF/HF	150W @ 8ohms	
CONFIGURATION		
LF Transducer, Loading	1x5.25in cone, 1.25in VC, Vented	
HF Transducer, Loading	1x1in dome tweeter, coaxial	
Operating Modes	Single-Amp (LF/HF, DSP w/ EAW Focusing & DynO)	
PHYSICAL		
Physical Rigging	3x pairs of M6 threaded points for pole or microphone stand mount adapters 4x M5 threaded pattern for wall or ceiling mount bracket	
Dimensions (HxWxD)	9.3 x 6.5 x 5.6in (235 x 165 x 141mm)	
Net Weight	7.2 lbs (3.3kg)	
Shipping Weight	Approx. 20 lbs. (9kg) [Sold/Shipped in Pairs]	
Mounting Accessories	Pan/Tilt Bracket (included in box) 5:1 Design factor Metal wall mount Pan/Tilt bracket Ceiling mount bracket (uses included pan/tilt bracket) Pendant Bracket U-Bracket (WP Only)	
Input Connector	1x Neutrik NL4, 2-pin barrier strip	

<sup>1</sup> 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.

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



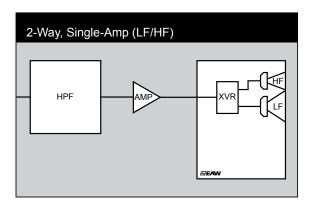
<sup>2</sup> Operating Range: Range where the processed Frequency Response stays within -10 dB SPL of the power averaged SPL within this range; measured on the geometric axis. Narrow band dips are excepted.

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

#### **INPUT**



#### **SIGNAL**



### **LEGEND**

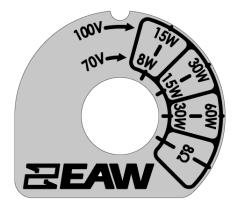
**LF/MF/HF:** Low Frequency / Mid Frequency / High Frequency.

**AMP:** User Supplied Power Amplifier

**XVR:** Passive LPFs, HPFs, and EQ integral to the loudspeaker.

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

#### TRANSFORMER SWITCH



The transformer switch is accessible from the front of speaker (located behind logo on grill). Clockwise is higher power taps, counterclockwise for lower power taps.

#### **RECOMMENDED AMPLIFIER CONFIGURATION**

#### **SINGLE-AMP**



MODEL	PER CHANNEL	PER AMPLIFIER
UXA4401	1	4
UXA4403	4	16

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

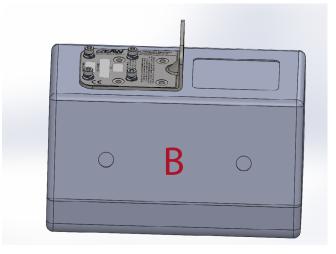
#### **RIGGING CONFIGURATION**



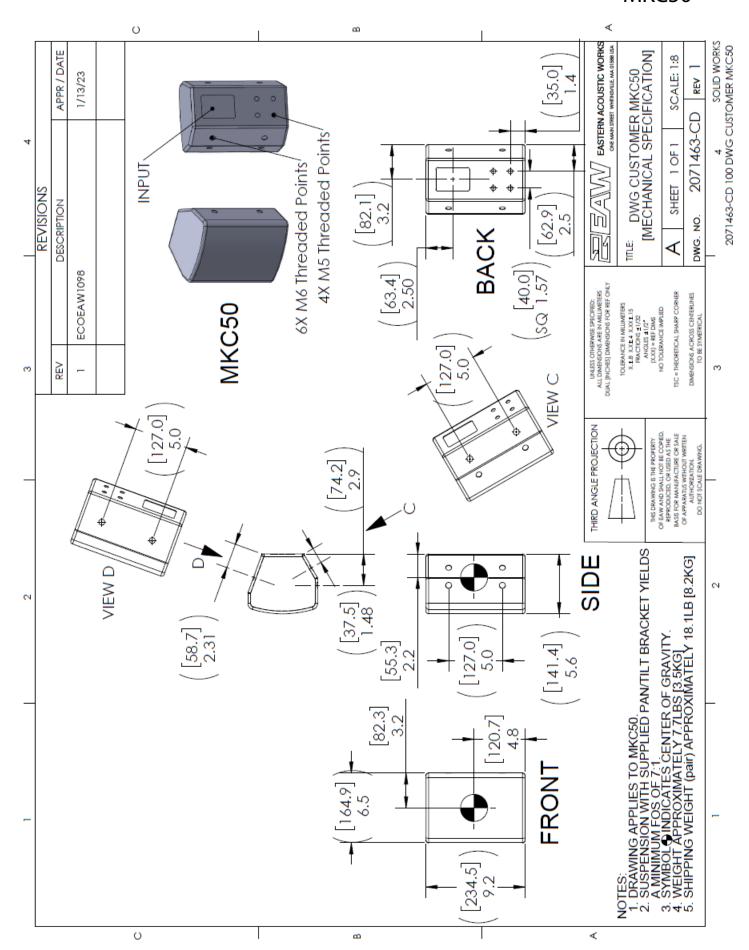
#### **MOUNTING HARDWARE**

#### **EAW**

DESCRIPTION	PART NUMBER
Pan & Tilt Bracket (A)	(shipped with product)
Ceiling Bracket	2072229-90, 2072230-90
WP U-Bracket	2071664-90, 2071790-90
Pendant Bracket (B)	2072260

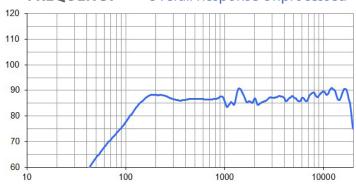


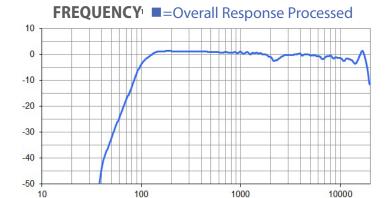




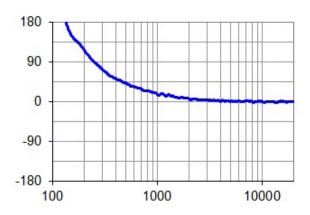
#### **PERFORMANCE GRAPHS**

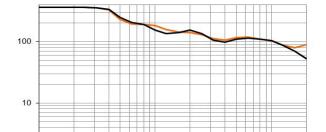






#### **PHASE LINEARITY**

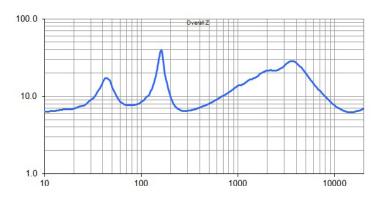




**BEAMWIDTH**<sup>2</sup> ■=Horizontal ■=Vertical

#### **IMPEDANCE**

100



<sup>1</sup> 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.



<sup>2</sup> 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.