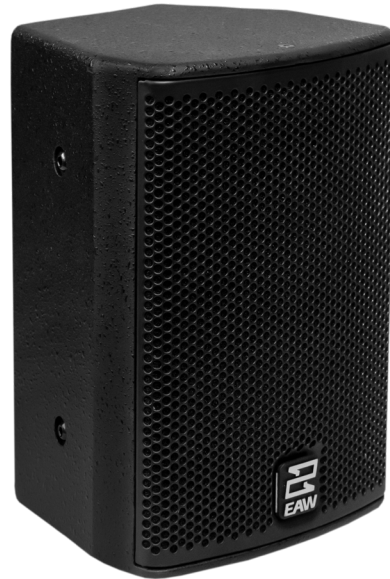


# MKC50

## 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 UX4401 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 a 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™** 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.



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

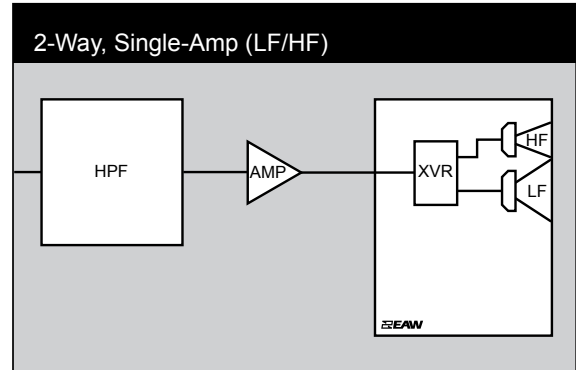
3 Nominal Beamwidth: Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.

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

**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.

## RECOMMENDED AMPLIFIER CONFIGURATION

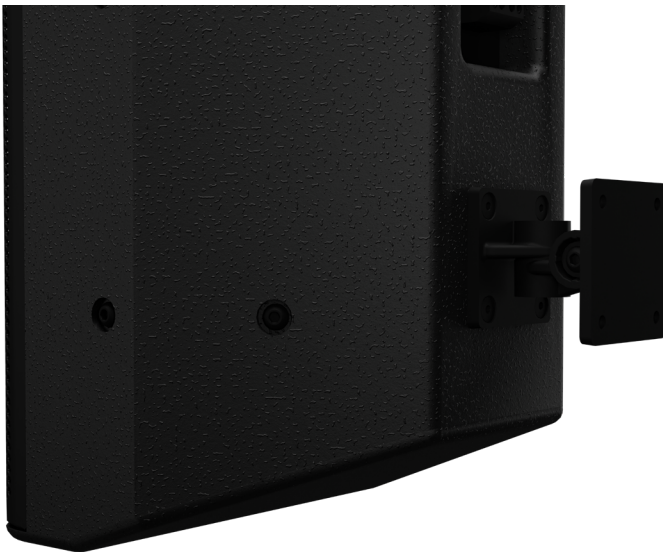
### SINGLE-AMP



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

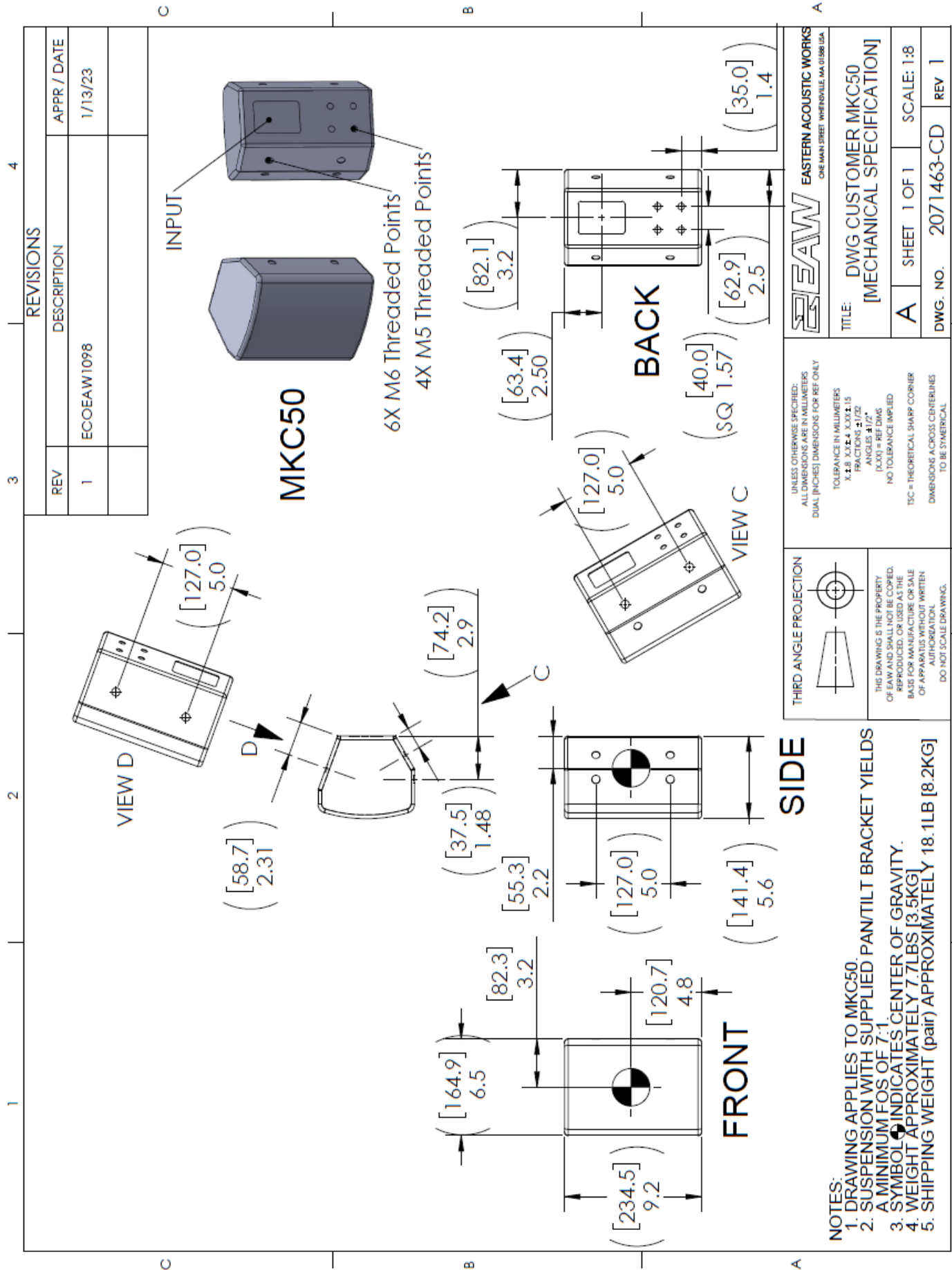
## RIGGING CONFIGURATION



### MOUNTING HARDWARE

#### EAW

DESCRIPTION	PART NUMBER
<b>Pan &amp; Tilt Bracket</b>	(shipped with product)
<b>Ceiling Bracket</b>	



- NOTES:
1. DRAWING APPLIES TO MKC50.
  2. SUSPENSION WITH SUPPLIED PAN/TILT BRACKET YIELDS A MINIMUM FOS OF 7:1.
  3. SYMBOL INDICATES CENTER OF GRAVITY.
  4. WEIGHT APPROXIMATELY 7.7LBS [3.5KG].
  5. SHIPPING WEIGHT (pair) APPROXIMATELY 18.1LB [8.2KG].

REVISIONS		APPR / DATE
REV	DESCRIPTION	
1	ECOEA W1098	1/13/23

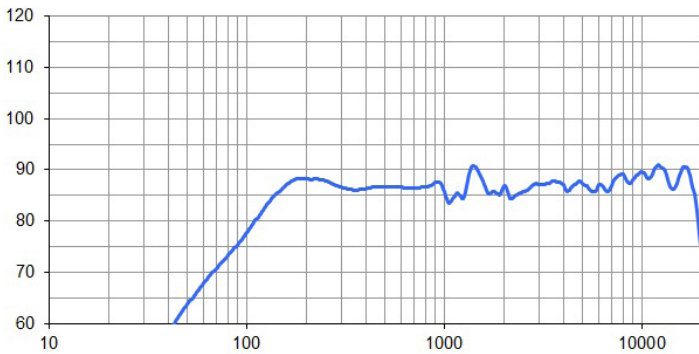
UNLESS OTHERWISE SPECIFIED:  
 ALL DIMENSIONS ARE IN MILLIMETERS  
 DIMENSIONS FOR REF ONLY  
 TOLERANCE IN MILLIMETERS  
 X .8 .12 & 4 .001 .15  
 FRACTIONS ±1/20  
 ANGLES ±1/2°  
 (XXX) = REF DIMS  
 NO TOLERANCE IMPLIED  
 TSC = THEORETICAL SHARP CORNER  
 DIMENSIONS ACROSS CENTERLINES  
 TO BE SYMMETRICAL

THIRD ANGLE PROJECTION  
  
 THE DRAWING IS THE PROPERTY  
 OF EAW AND SHALL NOT BE COPIED,  
 REPRODUCED, OR USED AS THE  
 BASIS FOR MANUFACTURE OR SALE  
 OF APPARATUS WITHOUT WRITTEN  
 AUTHORIZATION.  
 DO NOT SCALE DRAWING.

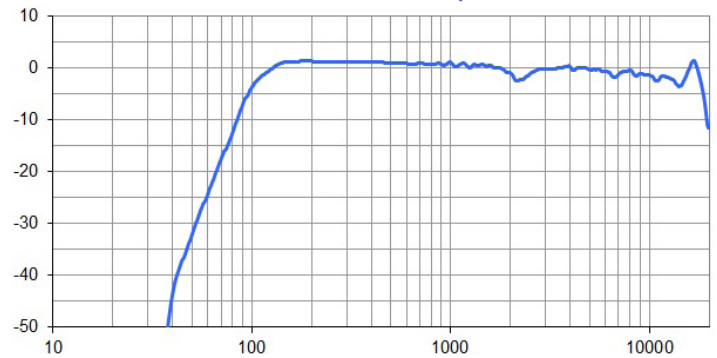
EASTERN ACOUSTIC WORKS ONE MAIN STREET WINTERSVILLE, MA 01891 USA	
TITLE: DWG CUSTOMER MKC50 [MECHANICAL SPECIFICATION]	
A	SHEET 1 OF 1
SCALE: 1:8	
DWG. NO.	2071463-CD
REV	1

**PERFORMANCE GRAPHS**

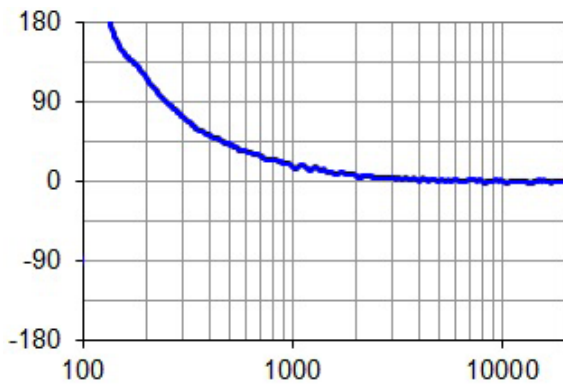
**FREQUENCY<sup>1</sup>** ■=Overall Response Unprocessed



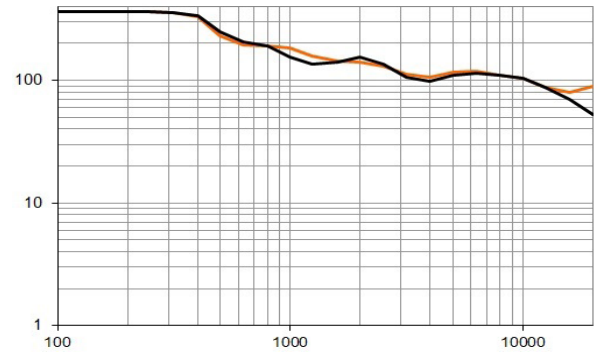
**FREQUENCY<sup>1</sup>** ■=Overall Response Processed



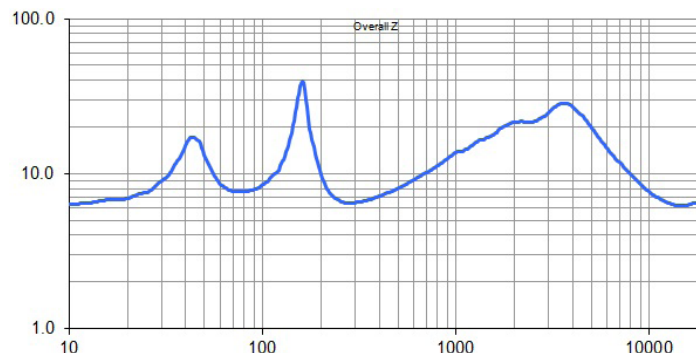
**PHASE LINEARITY**



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



**IMPEDANCE**



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.