

# 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 amplifiers

### 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™** 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.



**Concentric Summation Array (CSA)™** 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.

## TECHNICAL SPECIFICATIONS

### 2-WAY COAXIAL LOUDSPEAKER

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

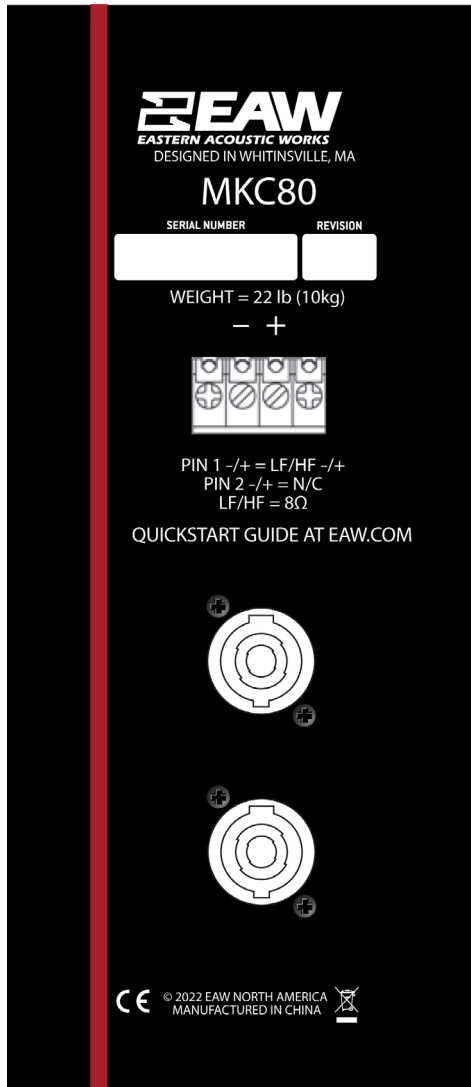
1 Calculated peak SPL at 1m with stated crest factor pink noise. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.

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.

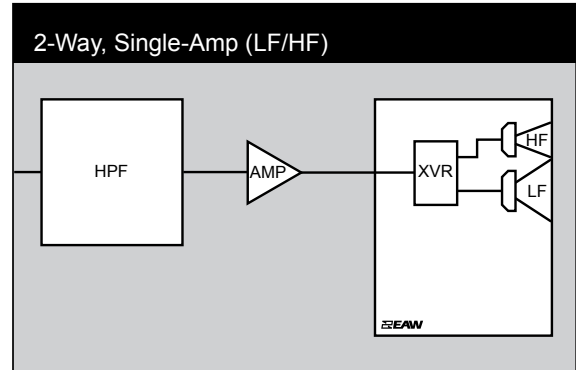
3 Nominal Beamwidth: Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.

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

**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.

**RECOMMENDED AMPLIFIER CONFIGURATION**

**SINGLE-AMP**



| MODEL   | PER CHANNEL | PER AMPLIFIER |
|---------|-------------|---------------|
| UXA4403 | 2           | 8             |

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

**RIGGING CONFIGURATION**



**MOUNTING HARDWARE**

**EAW**

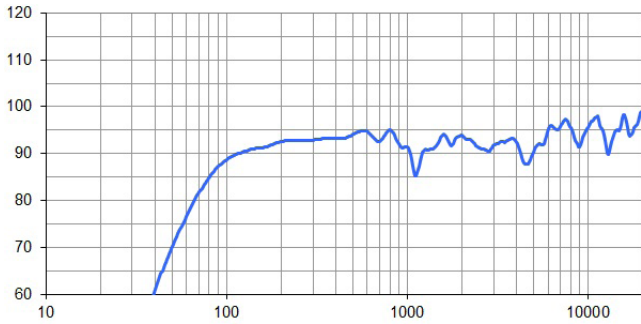
| DESCRIPTION                              | PART NUMBER |
|--|-------------|
| <b>U-Bracket (BLK)</b>                   | 2071719-90  |
| <b>U-Bracket (WHT)</b>                   | 2071789-90  |
| <b>Pivoting Wall Mount Bracket (BLK)</b> | 2071833     |



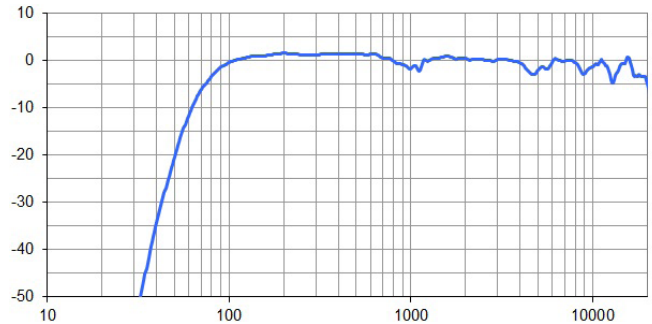


**PERFORMANCE GRAPHS**

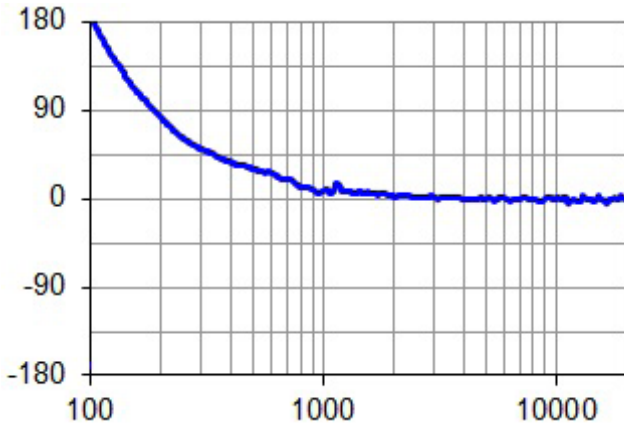
**FREQUENCY<sup>1</sup>** ■=Overall Response Unprocessed



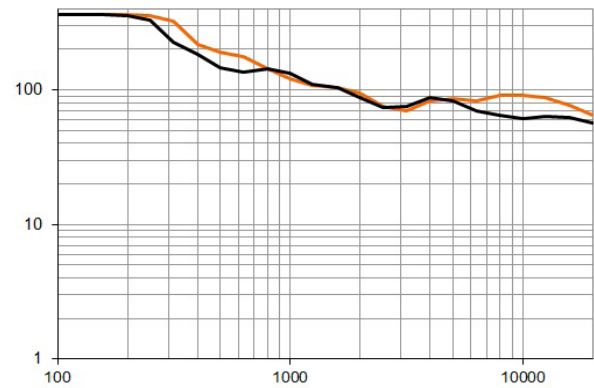
**FREQUENCY<sup>1</sup>** ■=Overall Response Processed



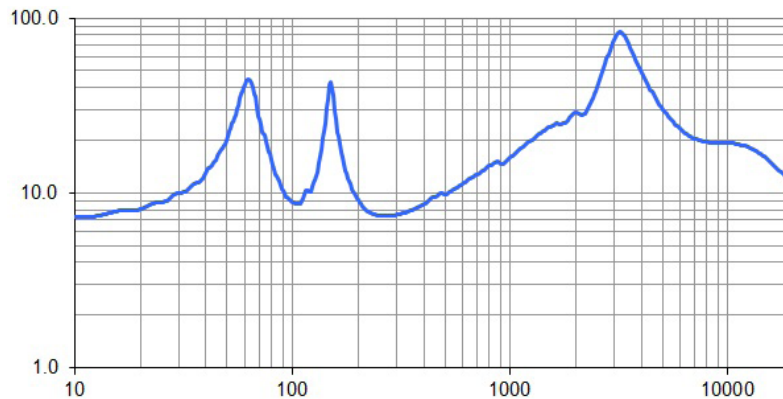
**PHASE LINEARITY**



**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.