

MKC120

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 UX4403 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, MKC120 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	
Max SPL¹ (12 dB Crest Factor)	135dB
Max SPL¹ (6 dB Crest Factor)	129dB
Operating Range²	48Hz-20kHz
Nominal Beamwidth³	90 x 60 degrees, rotatable
Axial Sensitivity	95dB
Calculated Axial Output	123dB Average
Nominal Phase	±15° from ideal high-pass filter
Input Impedance	8 ohms nominal, 7.4 ohms @ 270Hz minimum
Recommended HPF	45Hz, 12dB/oct
ACCELERATED LIFE TEST ⁴	
LF/HF	600W @ 8ohms
CONFIGURATION	
LF Transducer, Loading	1x12" cone, 2.5" VC, Vented
HF Transducer, Loading	1x1-in exit, 44mm voice coil compression driver, Concentric Summation Array (CSA) loaded
Operating Modes	LF/HF, DSP w/ EAW Focusing & DynO
PHYSICAL	
Physical Rigging	11x M10 Suspension Points, 4x M6 Mounting pattern for wall mount bracket
Dimensions (HxWxD)	22.4 x 14.5 x 13.4in (569 x 367 x 341mm)
Net Weight	36.1 lbs (16.4kg)
Shipping Weight	Approx. 42 lbs (19.1kg)
Mounting Accessories	U-Bracket Ceiling mount bracket Metal wall mount 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.

ORDERING INFORMATION

DESCRIPTION	PART NUMBER
EAW MKC120 Black (2 per box)	2071474-90
EAW MKC120 White (2 per box)	2071623-90
EAW MKC120PL-WP Black (2 per box) - Weather-Protected Plastic Cabinet	2071633-90
EAW MKC120PL-WP White (2 per box) - Weather-Protected Plastic Cabinet	2071634-90
EAW MKC120MTPL-WP Black (2 per box) - Weather-Protected Plastic Cabinet with Transformer	2072338-90
EAW MKC120MTPL-WP White (2 per box) - Weather-Protected Plastic Cabinet with Transformer	2072339-90

RECOMMENDED AMP CONFIGURATION (SINGLE AMP)

MODEL	PER CHANNEL	PER AMPLIFIER
UXA4403	1	4

EAW strongly recommends utilizing UXA Amplifiers for the best performance of EAW Core Technologies



RIGGING CONFIGURATION

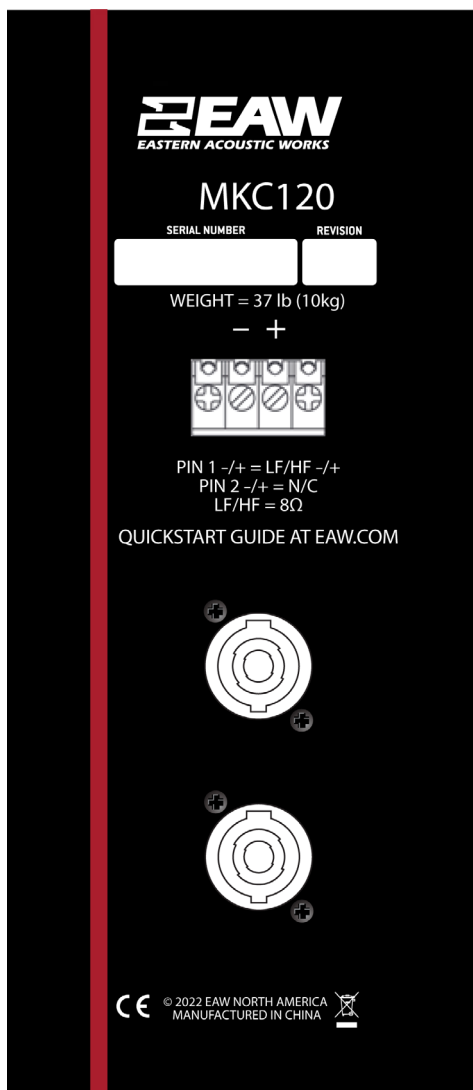


MOUNTING HARDWARE

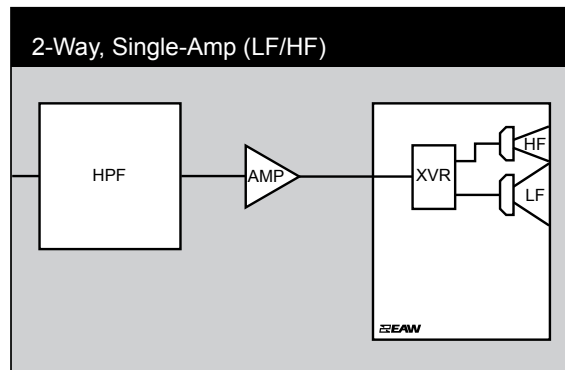
DESCRIPTION	PART NUMBER
U-Bracket (WP Rated)	2071720-90, 2071784-90
Ceiling Mount Kit (WP Rated)	2072199-90, 2072200-90
Metal Wall Mount Bracket (WP Rated)	2071833-90, 2072116-90



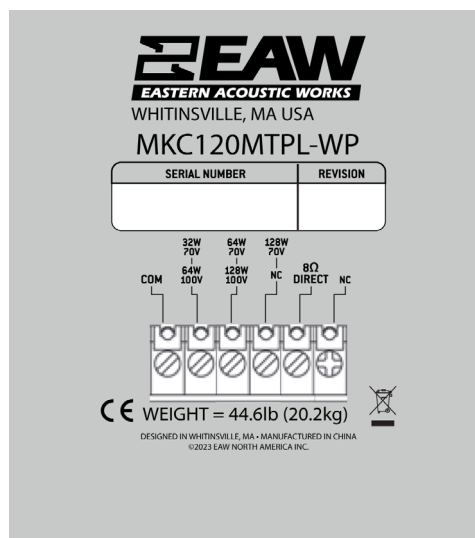
INPUT



SIGNAL



MULTITAP INPUT

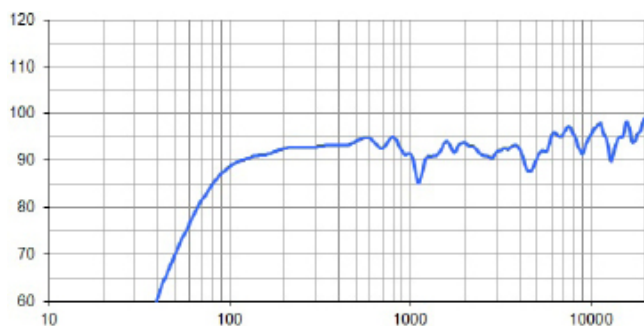


LEGEND

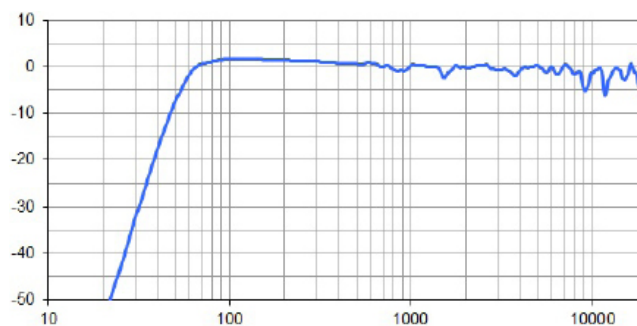
- LF/MF/HF:** Low Frequency / Mid Frequency / High Frequency.
- AMP:** User Supplied Power Amplifier –or– Integral Amplifier for NT products.
- XVR:** Passive LPFs, HPFs, and EQ integral to the loudspeaker.
- EAW Focusing:** Digital Signal Processor capable of implementing EAW Focusing.

PERFORMANCE GRAPHS

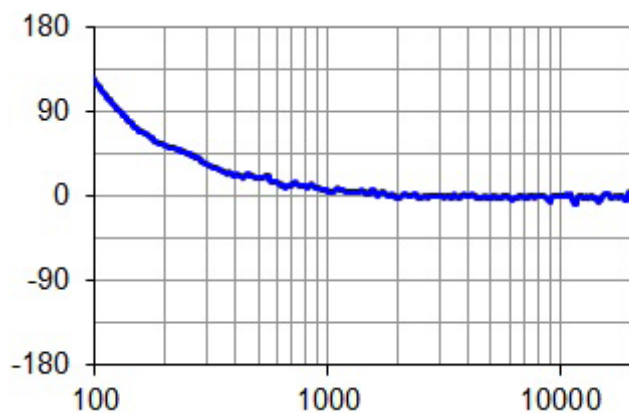
FREQUENCY¹ ■=Overall Response Unprocessed



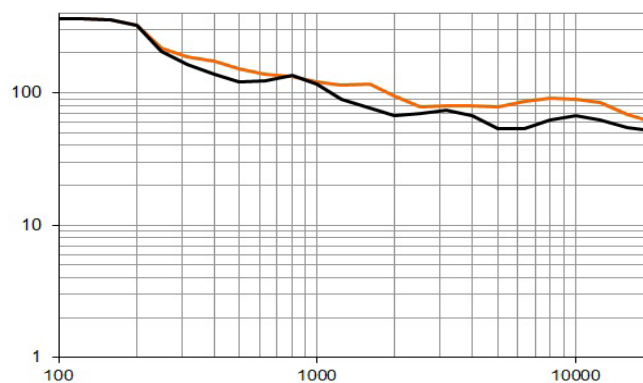
FREQUENCY¹ ■=Overall Response Processed



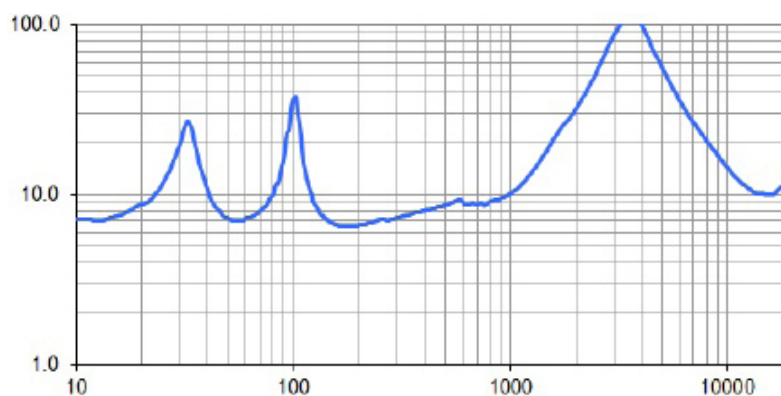
PHASE LINEARITY



BEAMWIDTH² ■=Horizontal ■=Vertical

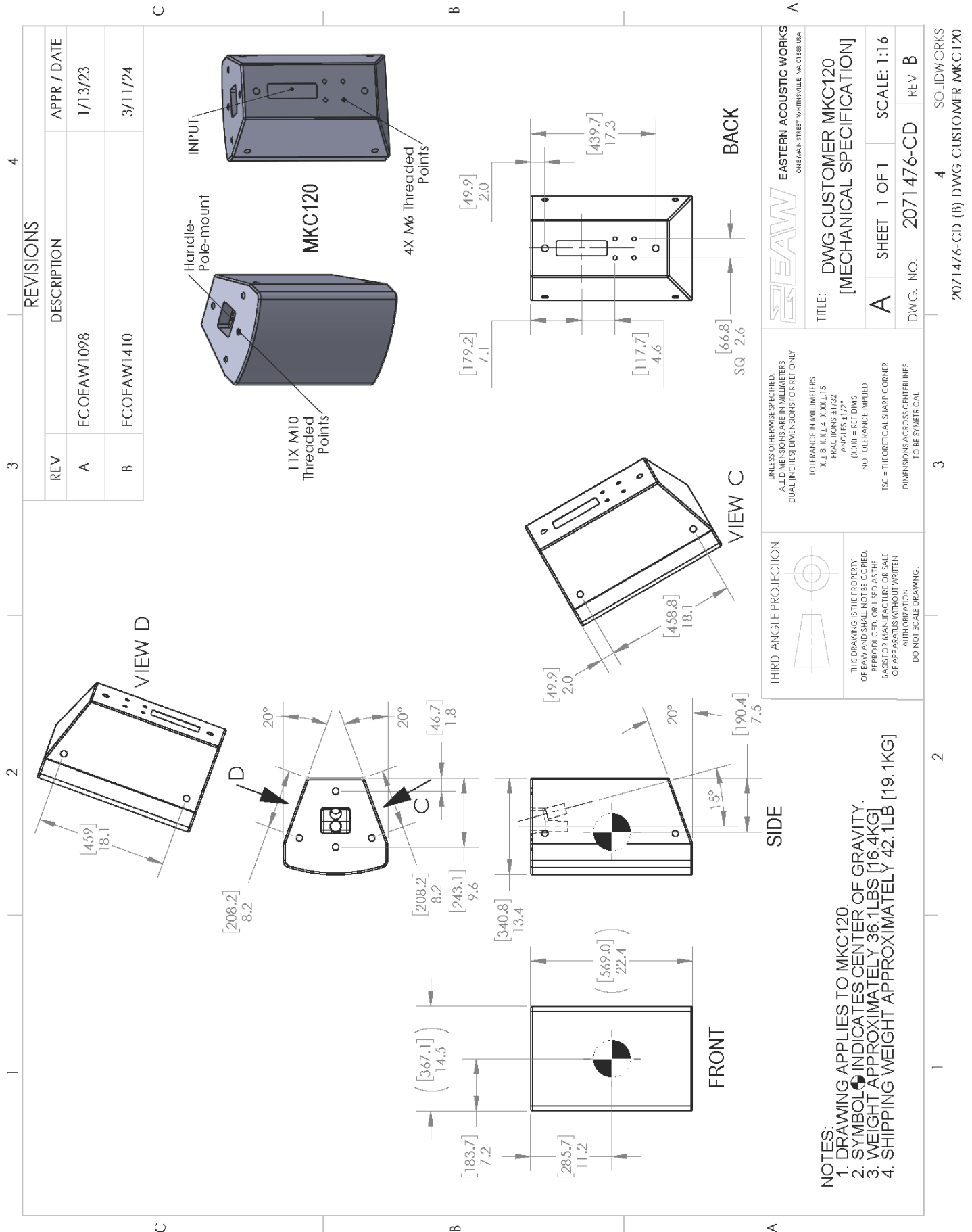


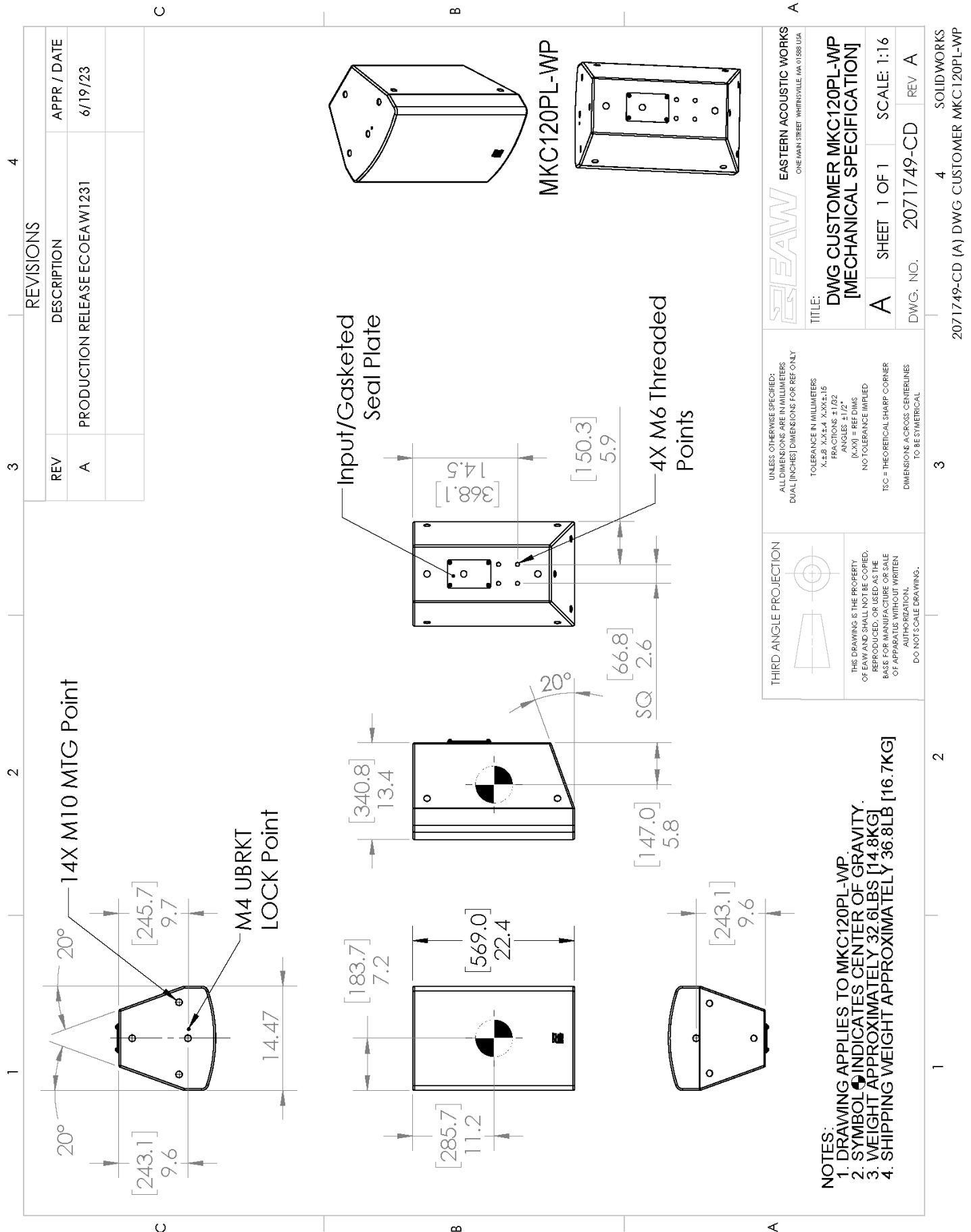
IMPEDANCE

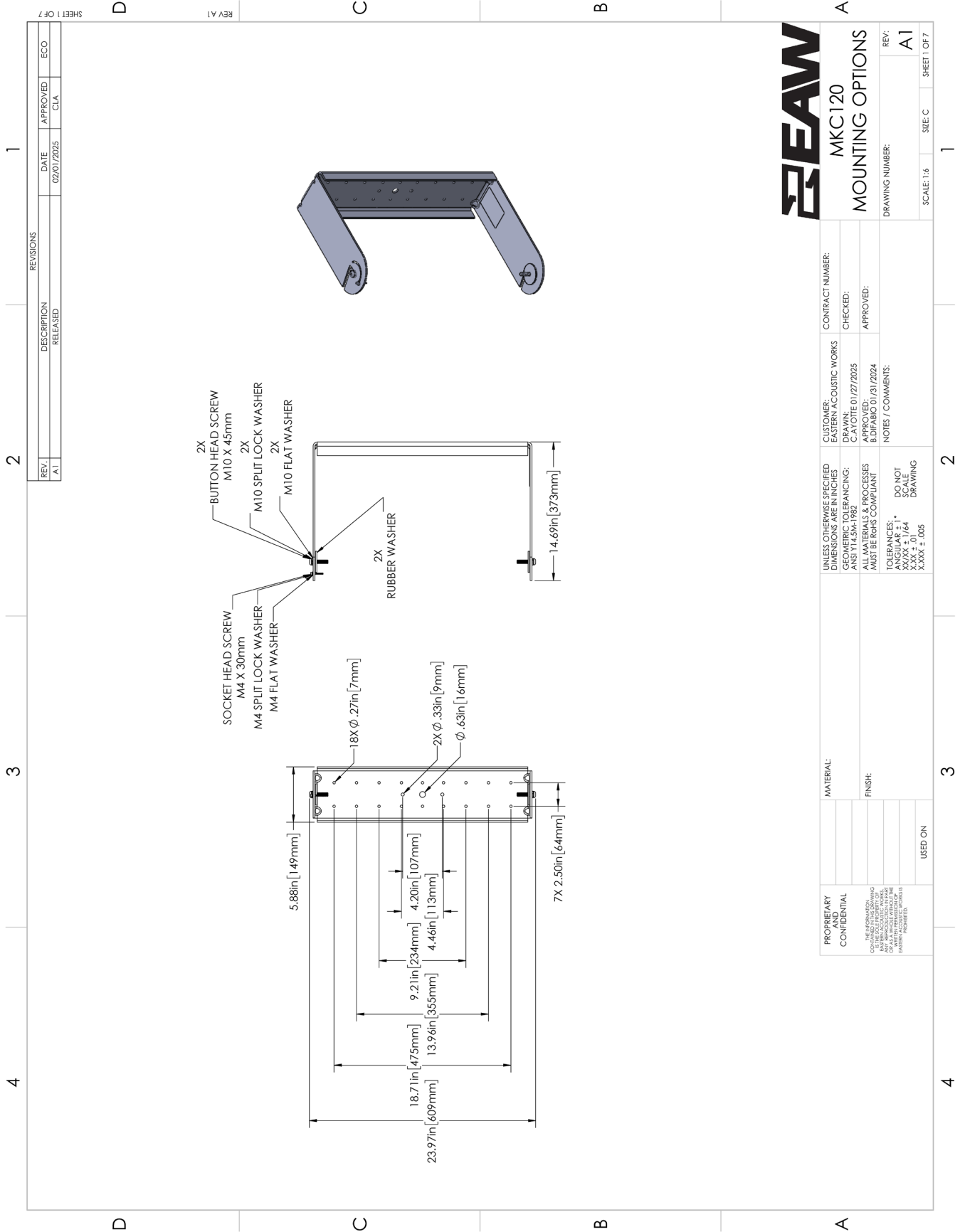


1 Variation in acoustic output level with frequency for a constant input signal. Processed: normalized to 0 dB SPL. Unprocessed inputs: 2 V (4 ohm nominal impedance), 2.83 V (8ohm nominal impedance), or 4 V (16 ohm nominal impedance) referenced to a distance of 1 m.

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.







MKC120
MOUNTING OPTIONS

REV: A1
DRAWING NUMBER:
SCALE: 1:6
SHEET 1 OF 7

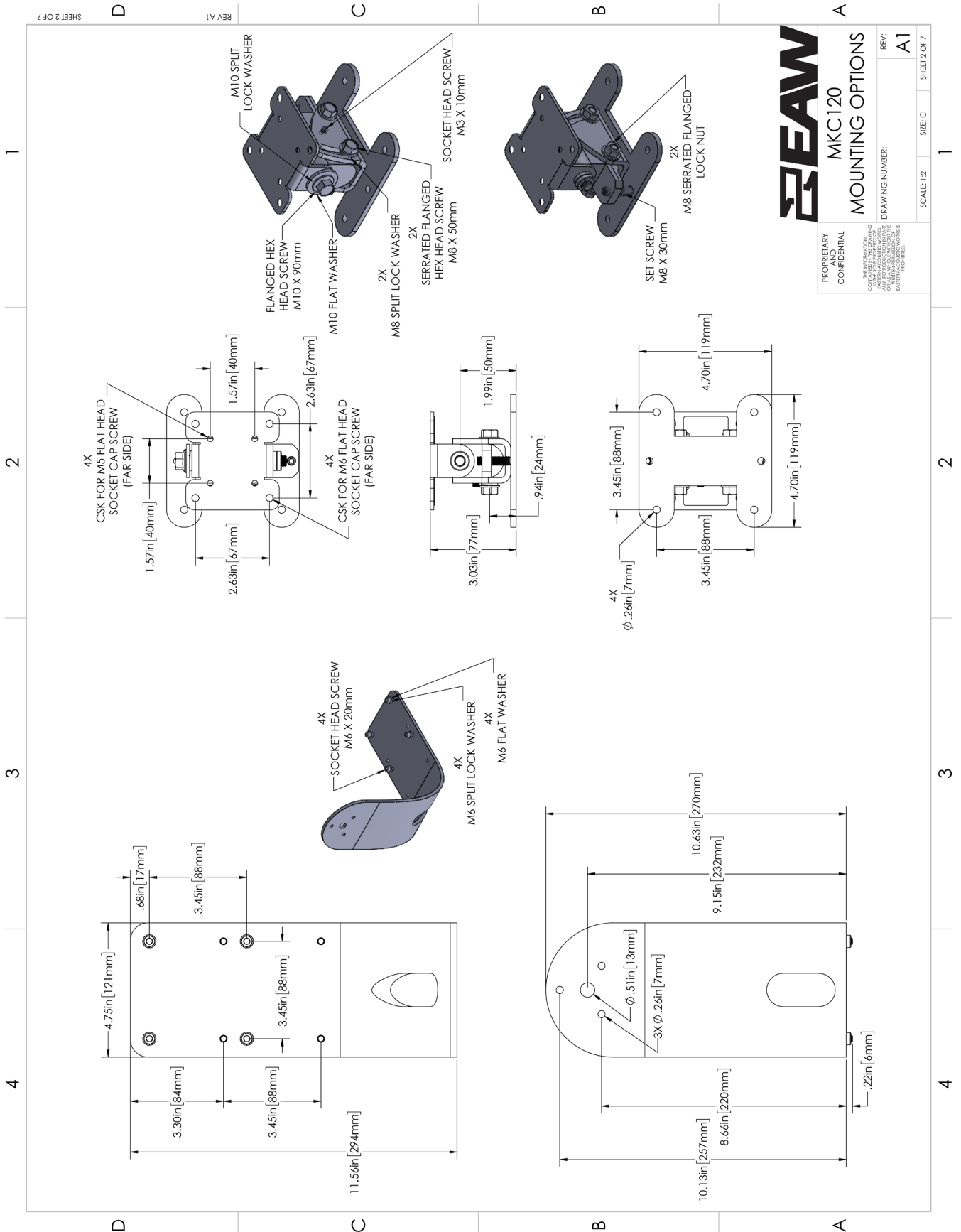
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A1	RELEASED	02/01/2025	CLA
ECO			

PROPRIETARY AND CONFIDENTIAL	MATERIAL:	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES GEOMETRIC TOLERANCING: ANSI Y14.5M-1982 ALL MATERIALS & PROCESSES MUST BE ROHS COMPLIANT TOLERANCES: ANGULAR ± 1° LINEAR ± .010 HOLE ± .010 X.XXX ± .005	CUSTOMER: EASTERN ACOUSTIC WORKS DRAWN: C.ATOTTE 01/27/2025 APPROVED: B.DIFABIO 01/31/2024 NOTES / COMMENTS:	CONTRACT NUMBER: CHECKED: APPROVED:
	FINISH:			
	USED ON			

MKC120
MOUNTING OPTIONS

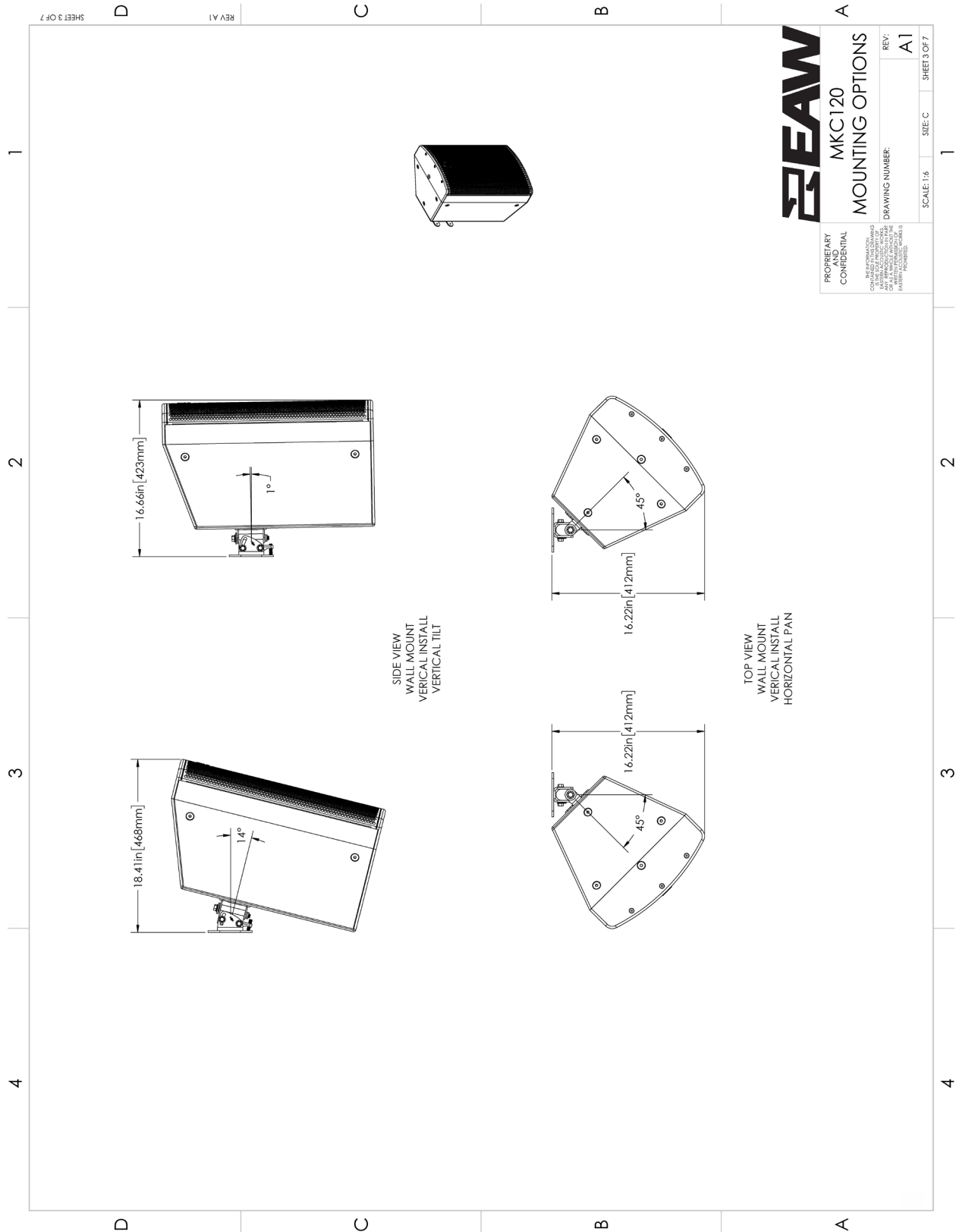
DRAWING NUMBER:	REV: A1
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SCALE: 1:2	SIZE: C	SHEET 2 OF 7
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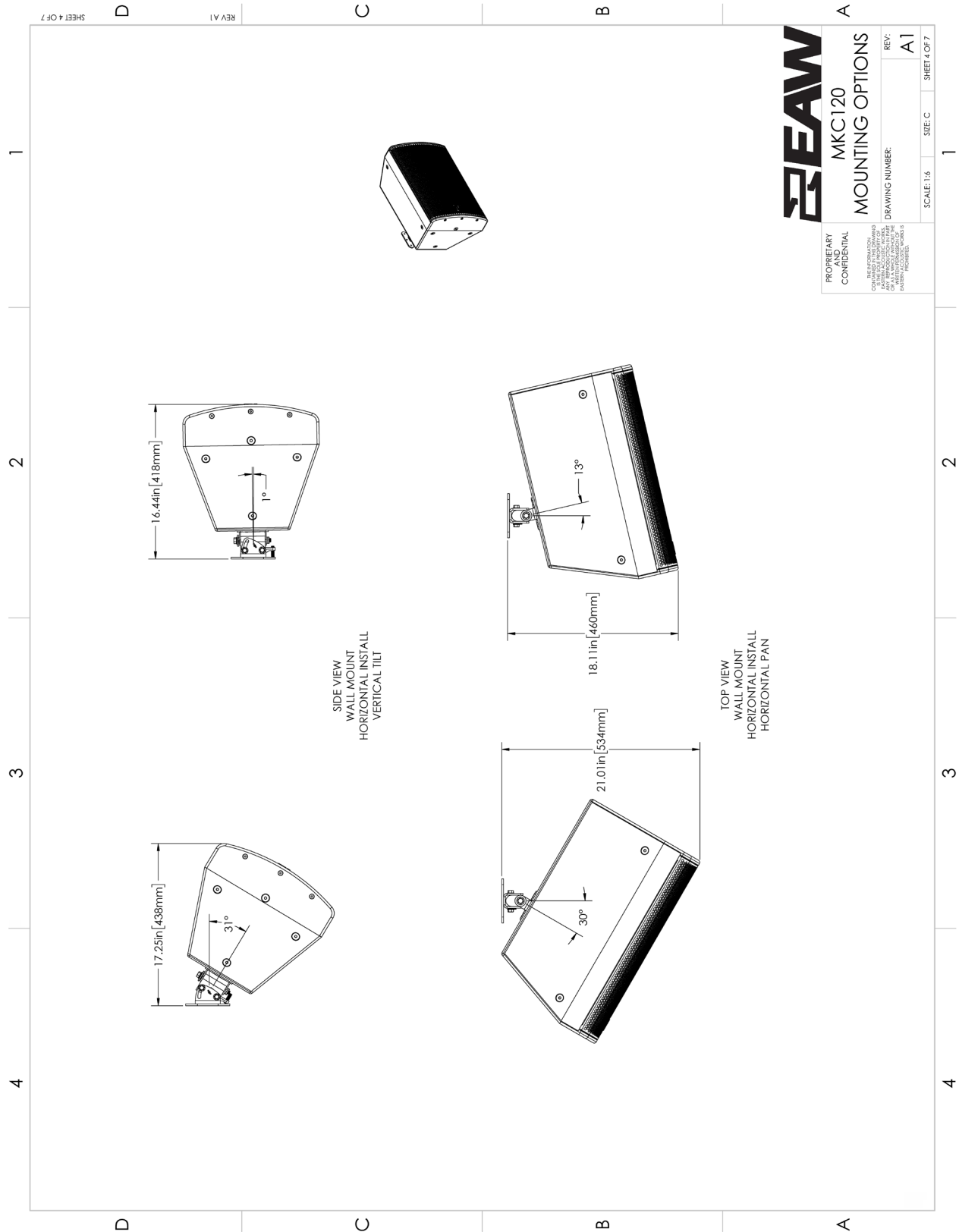
METAL WALL MOUNT

Mounted to MKC120 in vertical orientation
Maximum aim & tilt angle illustrated



METAL WALL MOUNT

Mounted to MKC120 in horizontal orientation
Maximum aim & tilt illustrated



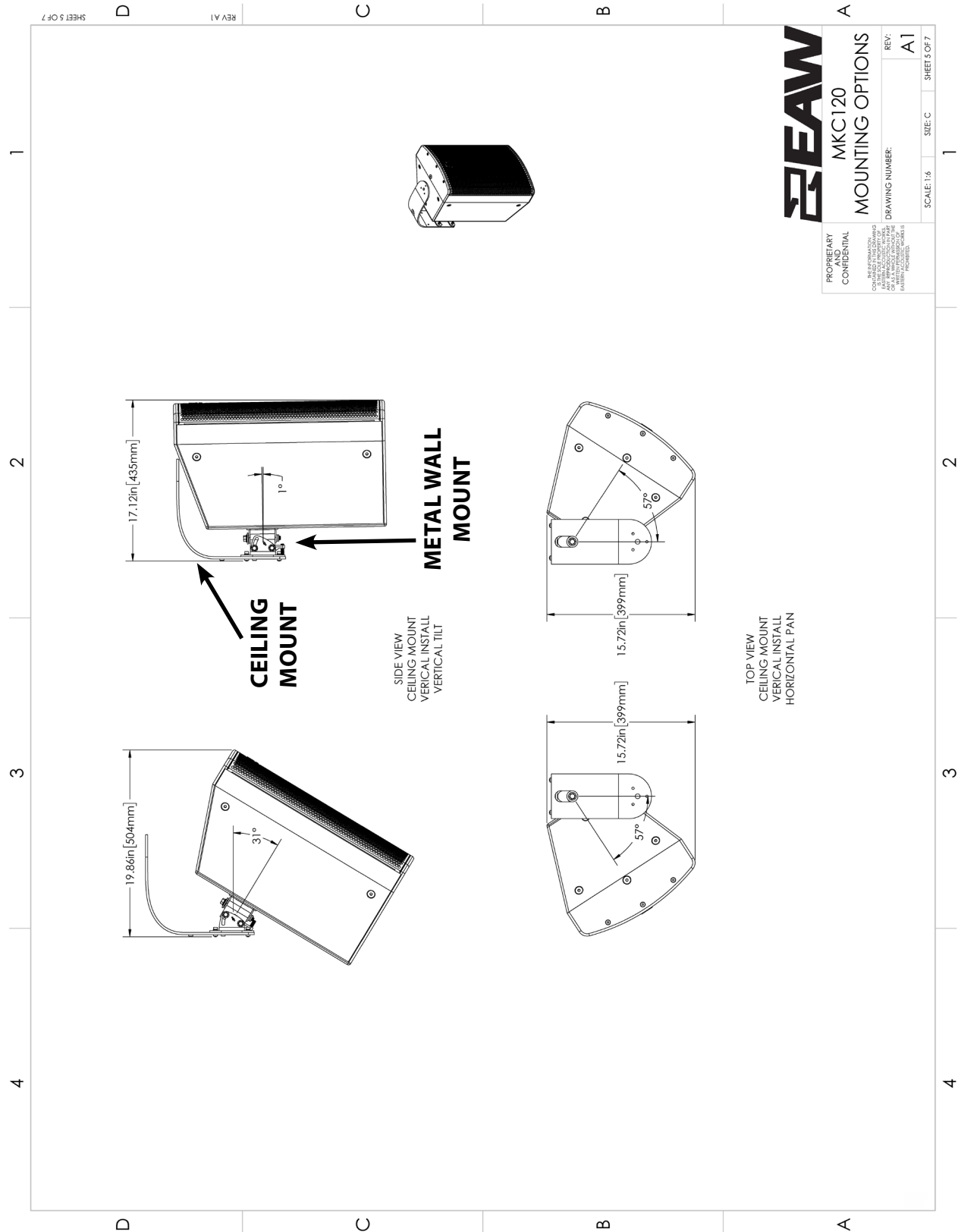
EAW

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MKC120 MOUNTING OPTIONS	
DRAWING NUMBER:	REV: A1
SCALE: 1:16	SIZE: C
SHEET 4 OF 7	

CEILING MOUNT USING METAL WALL MOUNT

Mounted to MKC120 in vertical orientation

Maximum aim & tilt angle illustrated



Maximum aim & tilt angle illustrated



MKC120

MOUNTING OPTIONS

REV:	
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DRAWING NUMBER:	REV:
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Al

SCALE: 1:6	SIZE: C	SHEET 6 OF 7
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U-BRACKET

Mounted to MKC120 in horizontal orientation
Maximum downward and upward tilt angle illustrated

