

# CA-215/CA-215A

**aero**  
series™



## DESCRIPTION

The D.A.S. CA-215 and CA-215A are high-performance vented sub-woofer systems in passive and self-powered versions, respectively.

The systems are intended as flyable subwoofers for the CA-28/CA-28B (passive) and CA-28A (self-powered) line array systems.

The A version incorporates a 1000 W class D switching amplifier, powering the low-frequency transducers.

The units utilize two high efficiency 15" low frequency speaker with 4" voice coil and a lightweight Neodymium based magnet structure. Pole piece, side slot and direct convection cooling provide high power handling and low power compression.

The rectangular enclosures are manufactured from Wisa® plywood and are finished with a catalyzed polyurethane paint that provides protection against the elements and abrasion.

The units have a fabric covered steel grille to protect the loudspeaker components. The fabric covering is resistant to wear and tear, provides protection from dust and dirt, and is both acoustically transparent and flame retardant.

Flying hardware is integral to the boxes and provides the ability to hang CA-28 (and derivatives) for an array of subwoofers as well as stacking the mid-high line array modules on top of CA-215/CA-215A units.

## FEATURES

- » Compact direct radiator line array subwoofer
- » 2 x 15" low frequency Neodymium cone speakers
- » Passive and self-powered versions
- » Integral line array rigging hardware

## SPECIFICATIONS

### CA-215/CA-215A

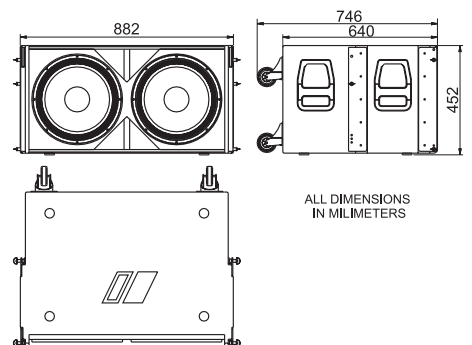
<b>Rated Maximum Peak SPL at 1m:</b>	135 dB SPL
<b>Nominal -6 dB Beamwidths:</b>	360° Horizontal
(100 Hz octave)	360° Vertical
<b>Enclosure Material and Finish:</b>	Wisa® Plywood, Black Catalyzed Polyurethane
<b>Transducers/Replacement Parts:</b>	LF: 2 x 15GN/GM 15G
<b>Dimensions (H x W x D):</b>	45.2 x 88.2 x 74.6 cm (17.8 x 34.7 x 29.4 in)

### CA-215

<b>Nominal On-axis Acoustical Frequency Range:</b>	35 - 300 Hz
<b>RMS (Average) Power Handling:</b>	1200 W
<b>Program Power Handling<sup>†</sup>:</b>	2400 W
<b>Peak Power Handling<sup>‡</sup>:</b>	4800 W
<b>Nominal Impedance:</b>	4 Ω
<b>Minimum Impedance<sup>§</sup>:</b>	4.2 Ω (160 Hz)
<b>Nominal On-axis Sensitivity 1W / 1 m:</b>	99 dB SPL
<b>Input Connection:</b>	2 x NL8 Speakon, wired to ±1,
<b>Weight:</b>	56.5 kg (124.6 lbs)

### CA-215A

<b>Nominal On-axis Acoustical Frequency Range:</b>	35 - 160 Hz
<b>Nominal Amplifier Power:</b>	1000W
<b>Input Type:</b>	Balanced Differential
<b>Sensitivity:</b>	0.88V (+1.1 dBu)
<b>Input Impedance:</b>	25 kΩ
<b>Connectors:</b>	INPUT: Female XLR LOOP THRU, SATELLITE: Male XLR AC INPUT: PowerCon NAC 3
<b>Weight:</b>	64.5 kg (142.2 lbs)



ALL DIMENSIONS  
IN MILLIMETERS

<sup>†</sup> Conventionally 3 dB higher than the RMS measure, although this already utilizes a program signal.

<sup>‡</sup> Corresponds to the signal crests.

<sup>§</sup> In practice cable and connector impedance has to be added to all impedance values.

**IMPEDANCE**

Figure 1 shows impedance with frequency for the CA-215 .

**DISTORTION**

Figure 2 shows the Second Harmonic Distortion (grey) and Third Harmonic Distortion (dotted) curves for a unit driven at 10% of its nominal power handling rating.

**AXIAL DIRECTIVITY Q(R<sub>θ</sub>) AND DI**

Figure 3 shows the above characteristics with frequency for a single box. Thin continuous and dashed lines show partial horizontal and vertical, respectively, characteristics.

**BEAMWIDTH**

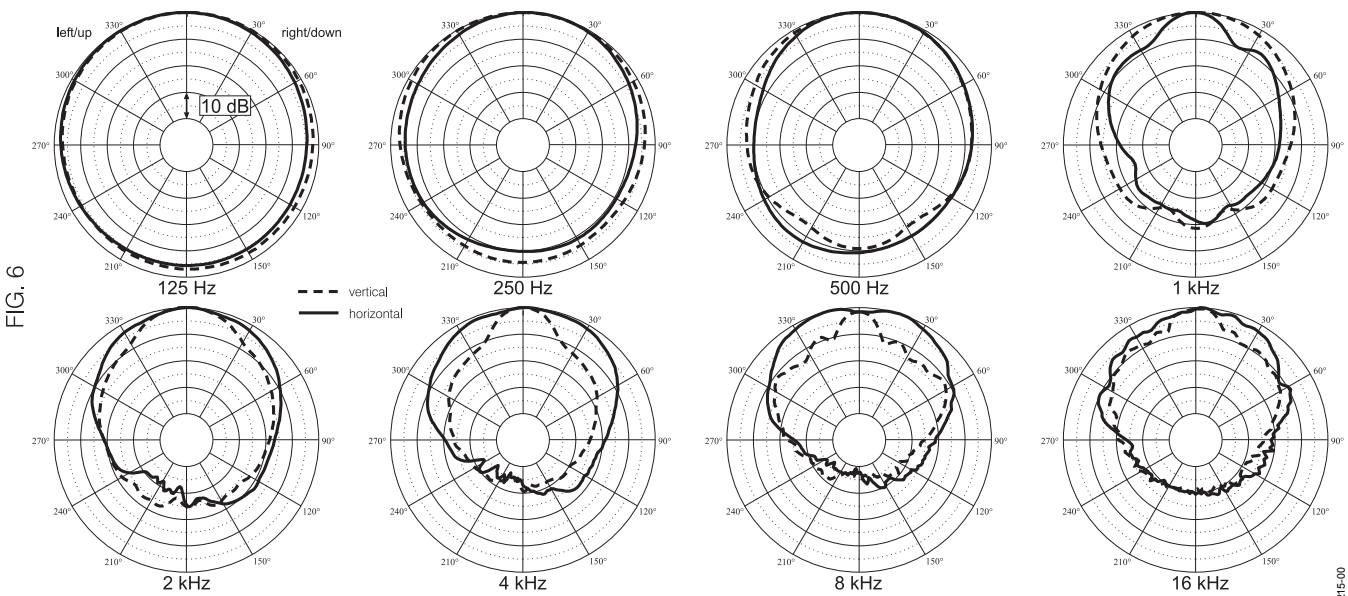
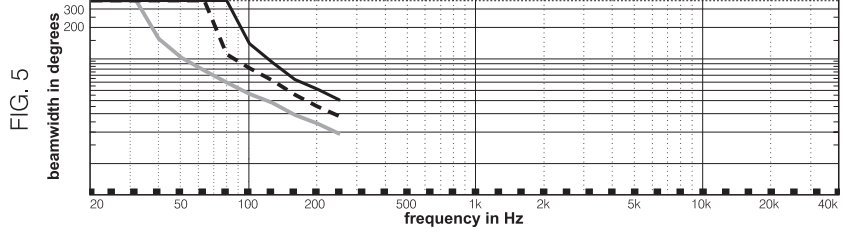
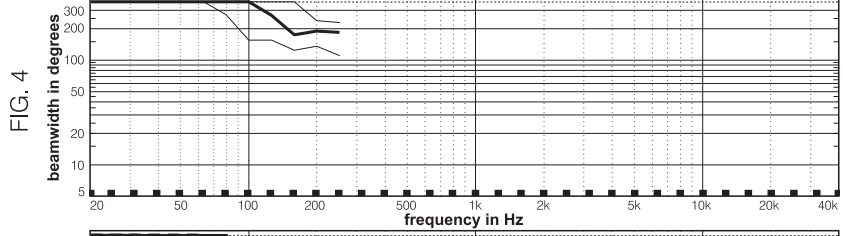
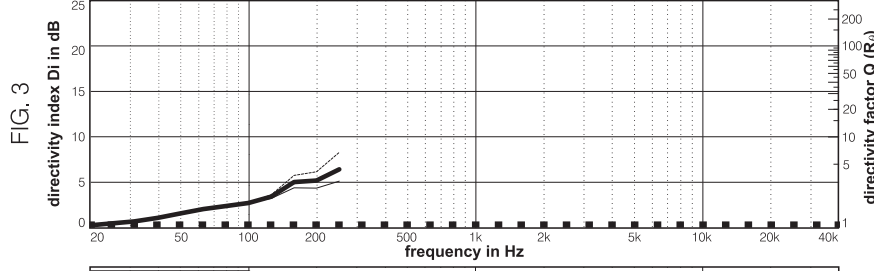
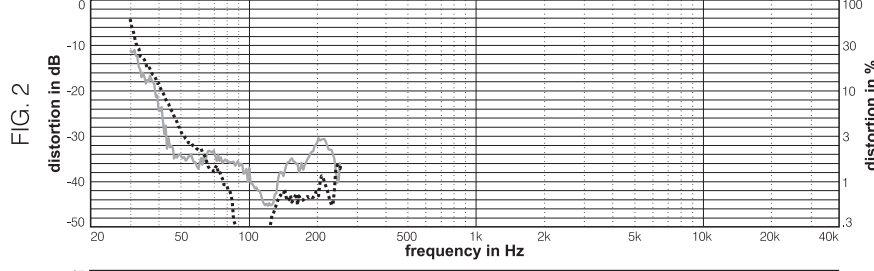
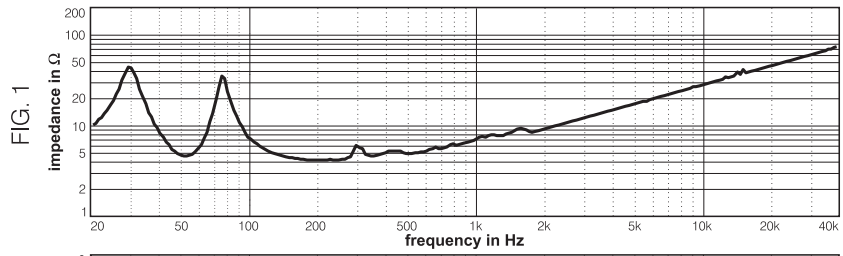
Figure 4 shows -3, -6 (thicker trace) and -10 dB horizontal (solid) beamwidth with frequency curves for a single box.

Figure 5 shows -6 vertical beamwidth with frequency curves for straight arrays of 2 (black), 4 (dashed) and 8 (grey) units.

**POLAR RESPONSE**

Figure 6 shows the one octave band horizontal (solid) and vertical (dashed) single box polars for the indicated frequencies. Full scale is 50 dB, 5 dB per division.

NOTES. Curves correspond to non-powered version with recommended controller unless specified. In practice, cable and connector impedance need to be added. Directivity characteristics plotted with respect to frequency are the average within the one-third octave bands of center frequencies noted by the marks at the bottom of the graphs, but are joined up for display purposes. All other characteristics plotted vs. frequency use 1/24th octave resolution. Regions of less than 1 dB below goal level and sharp notches may be ignored when calculating beamwidths. Enveloping may also be used. Beamwidths applicable to 25 metre distance. Directivity factor and index were computed from two degree resolution vertical and horizontal polars using sinusoidal weighting. Product improvement through research and development is a continuous process at D.A.S. Audio. All specifications subject to change without notice.



TE/cz215-00  
01/05