

### CA 163 Column Array Loudspeaker

#### Audio/acoustic and electrical

|                                                |                                                                                       |
|------------------------------------------------|---------------------------------------------------------------------------------------|
| Speaker type.....                              | Columnar line array speaker in extruded aluminum enclosure                            |
| Frequency range.....                           | 105 Hz to 20 kHz, -10 dB, full space (per IEC 60268-5)                                |
| Frequency response .....                       | 200 Hz to 16 kHz, -3 dB, full space                                                   |
| Power capacity.....                            | 240 W (rms) continuous pink noise (per IEC 60268-5)<br>480 W (rms) continuous program |
| Maximum SPL                                    |                                                                                       |
| Low-impedance version .....                    | 118 dB, 1 m, full space                                                               |
| High-impedance version                         |                                                                                       |
| 70 V .....                                     | 91 dB, 1 m, full space                                                                |
| 100 V .....                                    | 94 dB, 1 m, full space                                                                |
| Nominal sensitivity                            |                                                                                       |
| Low-impedance version .....                    | 93 dB SPL, 1 W, 1 m, 6.5 ohms direct, full space (per IEC 60268-5)                    |
| High-impedance version.....                    | 83 dB SPL, 1 W, 1 m, 50 ohms direct, full space (per IEC 60268-5)                     |
| Nominal coverage angle (-6 dB, 1/3 octave, 4m) |                                                                                       |
| 500 Hz .....                                   | 180° H x 38° V                                                                        |
| 1000 Hz .....                                  | 180° H x 20° V                                                                        |
| 2000 Hz .....                                  | 155° H x 14° V                                                                        |
| 4000 Hz .....                                  | 178° H x 18° V                                                                        |
| Nominal impedance                              |                                                                                       |
| Low-impedance version .....                    | 6.5 ohms                                                                              |
| High-impedance version .....                   | 50 ohms                                                                               |
| Drivers .....                                  | (16) 3" (76 mm) paper cone                                                            |
| Input connector .....                          | (1) 5 mm captive screw connector, 4 pole for 1 input and 1 loop-through               |

#### General

|                              |                                                                                            |
|------------------------------|--------------------------------------------------------------------------------------------|
| Package .....                | 1 speaker                                                                                  |
| Temperature/humidity         |                                                                                            |
| Storage.....                 | -40 to +158°F (-40 to +70°C) / 10% to 90%, noncondensing                                   |
| Operating .....              | +32 to +122°F (0 to +50°C) / 10% to 90%, noncondensing                                     |
| Mounting .....               | SMK PT CA Pan-Tilt mount or SMK LP CA Low-Profile mount<br>(Ships separately from speaker) |
| Adjustment range – SMK PT CA |                                                                                            |
| Mount at bottom position:    |                                                                                            |
| Pan                          |                                                                                            |
| At 15° tilt .....            | +/- 53.5°, horizontal                                                                      |
| At 0° tilt .....             | +/- 73.5°, horizontal                                                                      |
| Tilt .....                   | 0 to -15°, vertical                                                                        |
| Mount at center position:    |                                                                                            |
| Pan                          |                                                                                            |
| At 5° tilt .....             | +/- 63°, horizontal                                                                        |
| At 0° tilt .....             | +/- 73.5°, horizontal                                                                      |
| Tilt .....                   | 0 to -5°, vertical                                                                         |
| Adjustment range – SMK LP CA |                                                                                            |
| Tilt .....                   | +/-5°, vertical                                                                            |
| Enclosure type .....         | Powder-coated aluminum extrusion with zinc die-cast endcaps and powder-coated steel grille |

# Specifications • CA 163 (Continued)

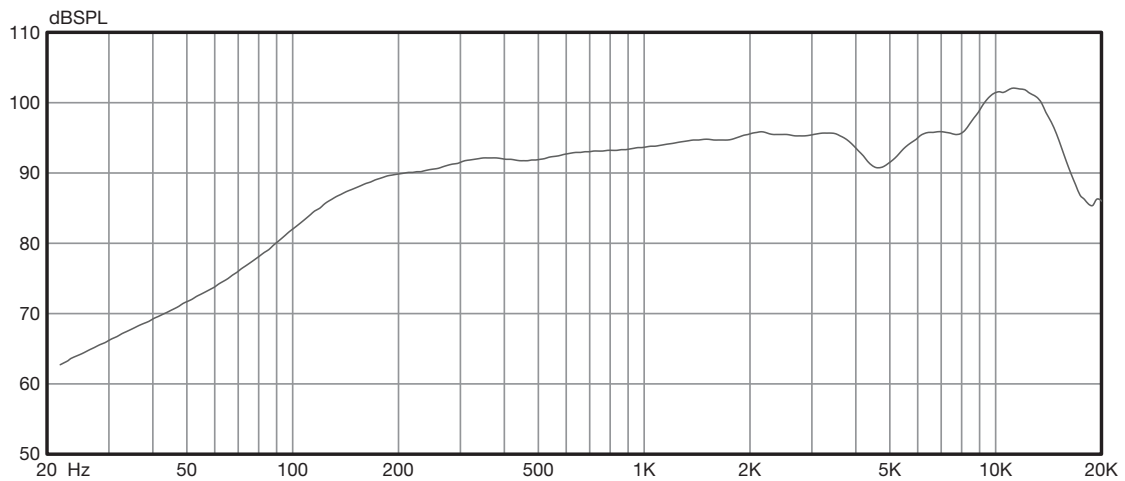
|                                 |                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Enclosure Finish                |                                                                                                                        |
| Black speaker .....             | Powder coat, RAL 9011 (chassis), RAL 9017 (endcaps & grille)                                                           |
| White speaker .....             | Powder coat, RAL 9003 (chassis, endcaps, & grille)                                                                     |
| Enclosure outer dimensions..... | 51.9" H x 5.0" D x 4.5" W<br>(1318 mm x 127 mm x 114 mm)                                                               |
| Product weight                  |                                                                                                                        |
| Speaker .....                   | 27.6 lbs (12.5 kg)                                                                                                     |
| SMK PT CA mount .....           | 4.5 lbs (2.0 kg)                                                                                                       |
| SMK LP CA mount.....            | 1.2 lbs (0.5 kg)                                                                                                       |
| Regulatory compliance .....     | CE, FCC Class B, ICES, RoHS, WEEE<br>Designed to Meet UL1480A and CSA C22.2 No. 205<br>Designed to Meet IEC/EN 62368-1 |
| Warranty .....                  | 5 years parts and labor                                                                                                |

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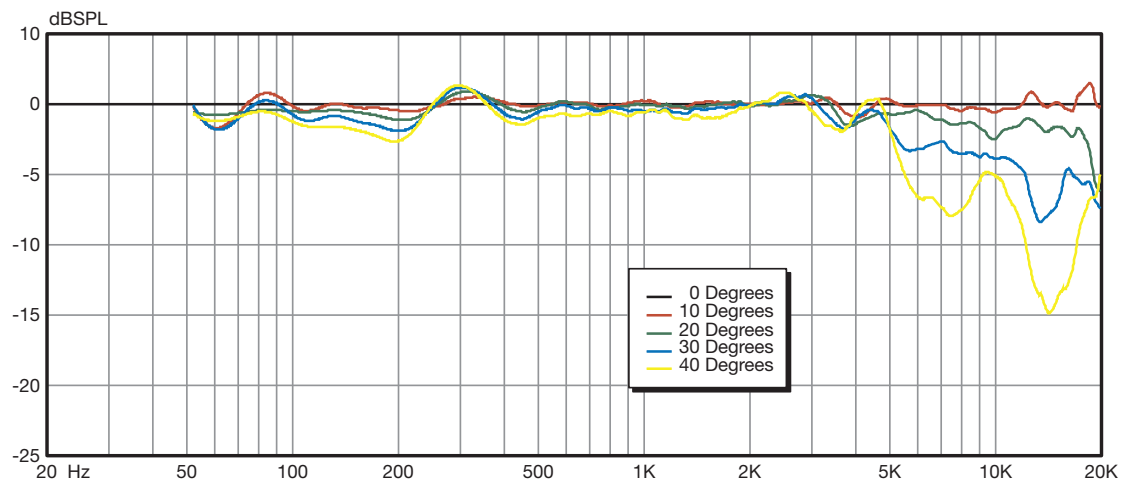
# Specifications • CA 163 (Continued)

## CA 163 RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

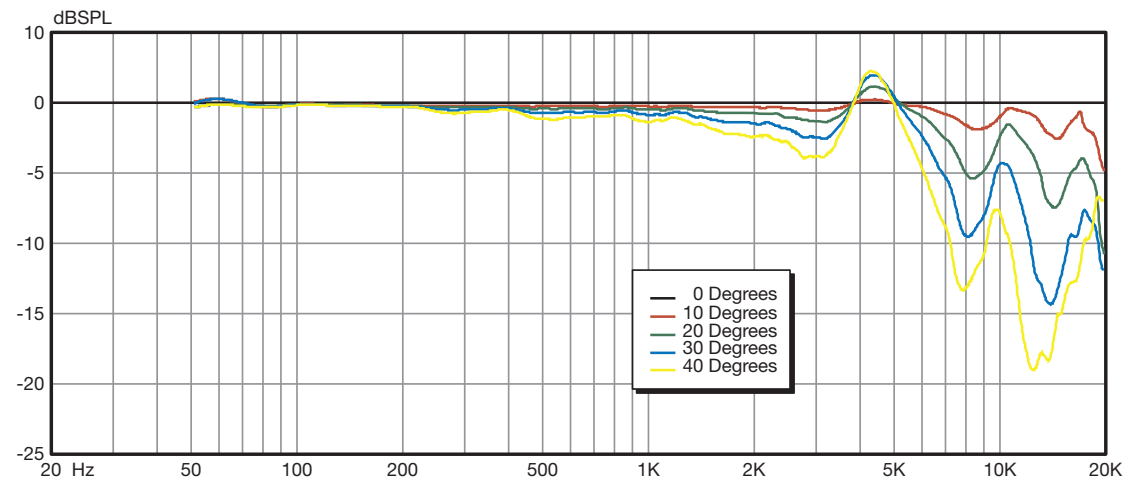
SPL vs. FREQUENCY – 1 WATT @ 1 METER RESPONSE, FULL SPACE (4 $\pi$ )



HORIZONTAL OFF-AXIS FREQUENCY RESPONSE, 1/3 OCTAVE, NORMALIZED ON-AXIS



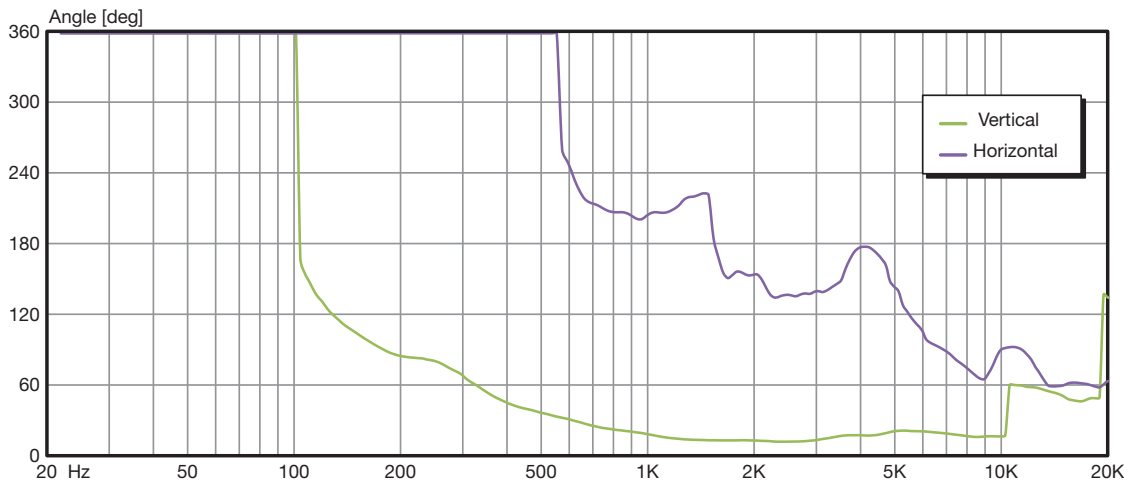
VERTICAL OFF-AXIS FREQUENCY RESPONSE, 1/3 OCTAVE, NORMALIZED ON-AXIS



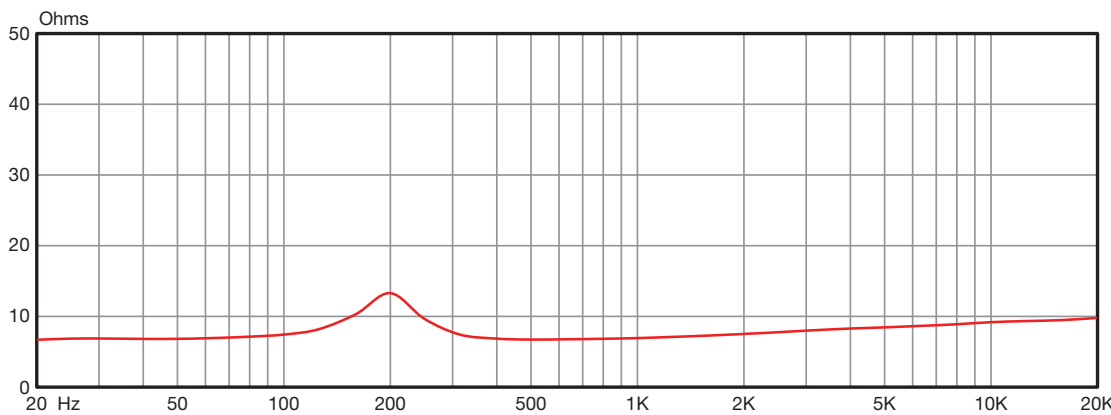
# Specifications • CA 163 (Continued)

## CA 163 RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

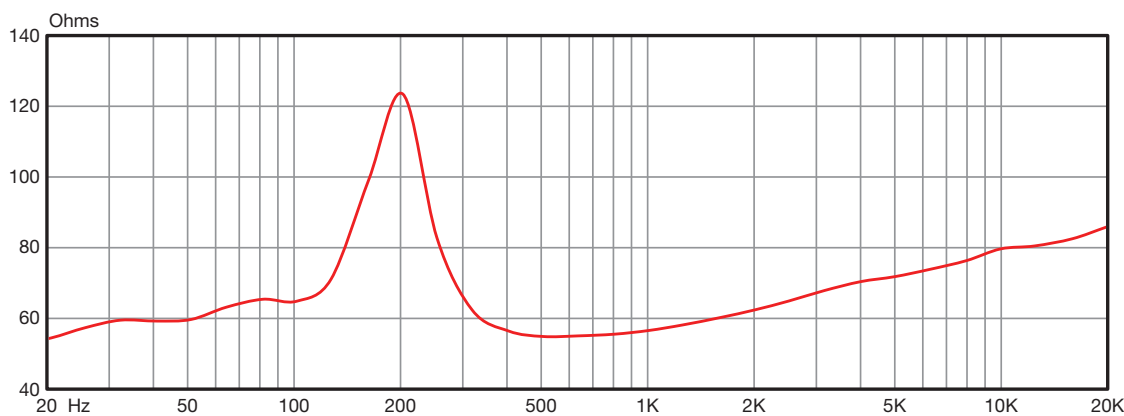
BEAM WIDTH vs. FREQUENCY – COMBINED HORIZONTAL and VERTICAL, -6 dB, 1/3 OCTAVE, 4 m



IMPEDANCE vs. FREQUENCY (LOW IMPEDANCE VERSION)



IMPEDANCE vs. FREQUENCY (HIGH IMPEDANCE VERSION)



# Specifications • CA 163 (Continued)

## CA 163 RESPONSE GRAPHS – FREQUENCY AND IMPEDANCE

VERTICAL MAP, 1/3 OCTAVE, 4 m

