

C 12

TECHNICAL SPECIFICATIONS



C Series





ACOUSTICAL SPECIFICATIONS

| | | |
|---------------------------------------|----------------|---|
| Amplitude linearity (± 3 dB) (*) | 78 - 20 000 Hz | (*) with #HPF 55 Preset |
| Operating frequency range (- 6dB) | 70 - 20 000 Hz | |
| Cut off frequencies (- 10dB) | 62 - 20 000 Hz | |
| Number of ways | 2 | |
| Sensitivity | 98 dB | |
| Maximum SPL (*) | 131 dB | (*) Peak level at 1-meter under free field conditions using 12 dB crest factor pink noise |
| Horizontal coverage | 80° | |
| Vertical coverage | 60° | |

TECHNICAL SPECIFICATIONS

| | | |
|------------------------|--|-------------------------|
| Nominal impedance | 8 Ω | |
| AES power handling | 500 W | |
| Program power handling | 1 000 W | |
| Peak power handling | 2 000 W | |
| Transducer (LF) | 1 x 12" driver with neodymium magnet | |
| Transducer (HF) | 1 x 1.75" neodymium compression driver (*) | (*) Voice Coil Diameter |
| Enclosure type | Bass-Reflex | |
| Crossover type | Passive | |

PHYSICAL SPECIFICATIONS

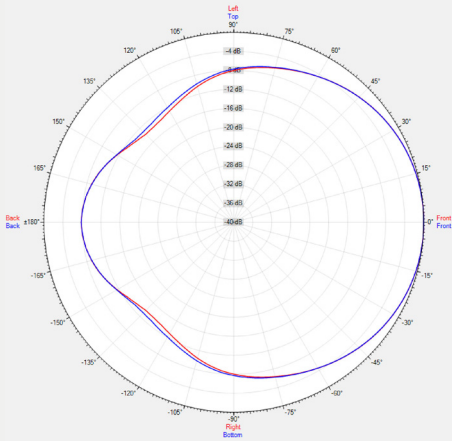
| | |
|------------|---|
| Height | 15.27 in (388 mm) |
| Width | 15.27 in (388 mm) |
| Depth | 10.43 in (265 mm) |
| Weight | 30.86 lbs (14 kg) |
| Connectors | 1 x speakON NL4MP |
| Handles | 2 |
| Rigging | 4 x M8 threaded inserts for optional U-Bracket 2 x M8 threaded inserts for optional mounting adapter |

REFERENCES

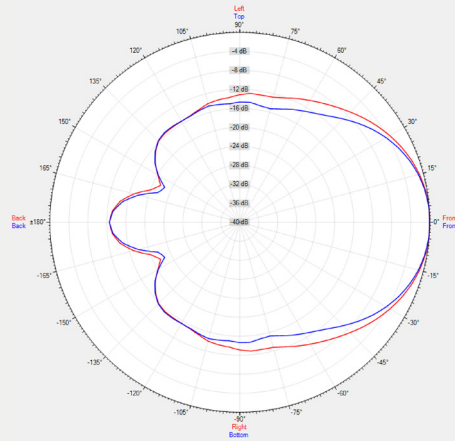
| | |
|-----------|---|
| C 12-80 | High-power 2-way passive loudspeaker with 80° x 60° elliptical dispersion (1 x 12" LF ; 1 x 1.75" HF) |
| LYRE C 12 | U-Bracket for C 12 and C 12 B |
| FA2C12 | Flight Case featuring casters with brakes for two Amadeus C 12 |
| 195/8 | Slip-on adapter for speaker stands with tube diameter of 35 mm |
| 24281 | Slip-on adapter for speaker stands with tube diameter of 35 mm |
| 9005 | Jet Black finish for cabinet, based on RAL 9005 color |
| 9010 | Pure White finish for cabinet, based on RAL 9010 color |
| 1013 | Oyster White finish for cabinet, based on RAL 1013 color |
| 7040 | Window Grey finish for cabinet, based on RAL 7040 color |
| 7030 | Stone Grey finish for cabinet, based on RAL 7030 color |
| 5011 | Steel Blue finish for cabinet, based on RAL 5011 color |
| 9005 | Jet Black color for Airtex [®] acoustical fabric, based on RAL 9005 color |
| 9006 | White Aluminium color for Airtex [®] acoustical fabric, based on RAL 9006 color |
| 9010 | Pure White color for Airtex [®] acoustical fabric, based on RAL 9010 color |
| 1035 | Pearl Beige color for Airtex [®] acoustical fabric, based on RAL 1035 color |
| 1036 | Pearl Gold color for Airtex [®] acoustical fabric, based on RAL 1036 color |

2D POLAR RADIATION PATTERNS

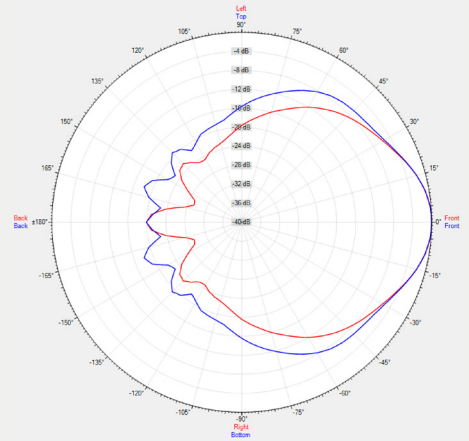
The following patterns show the SPL radiated by the source as a function of angle in the horizontal (—) and vertical (—) planes. The horizontal and vertical plots are each normalized, separately, to the highest level within that plane.



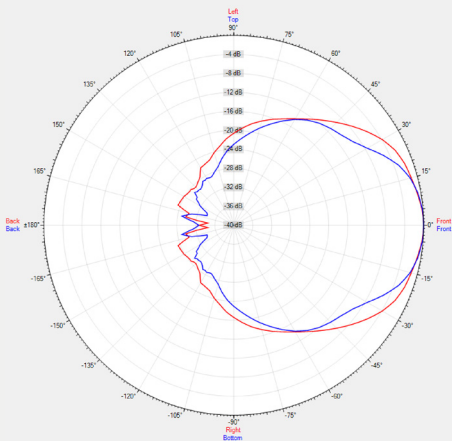
Bandwidth : 1/3 Octave
Frequency : 500 Hz



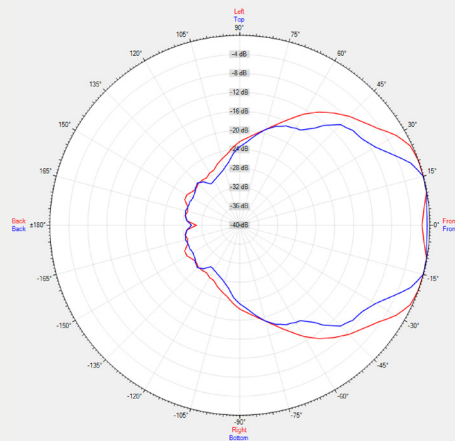
Bandwidth : 1/3 Octave
Frequency : 1 000 Hz



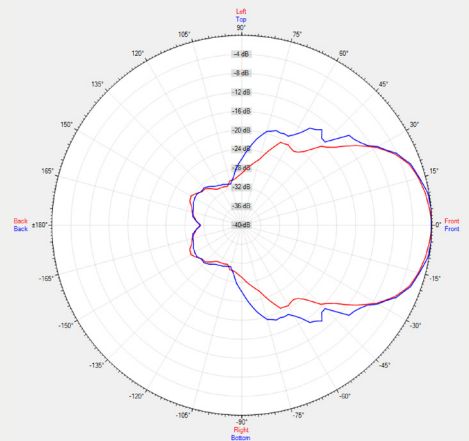
Bandwidth : 1/3 Octave
Frequency : 2 000 Hz



Bandwidth : 1/3 Octave
Frequency : 4 000 Hz



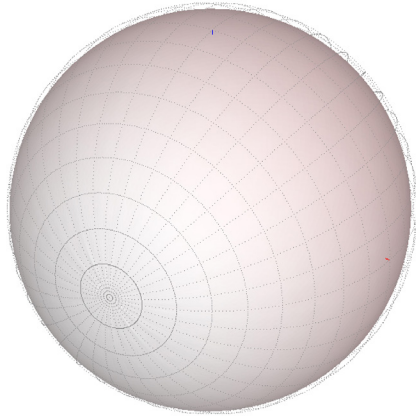
Bandwidth : 1/3 Octave
Frequency : 8 000 Hz



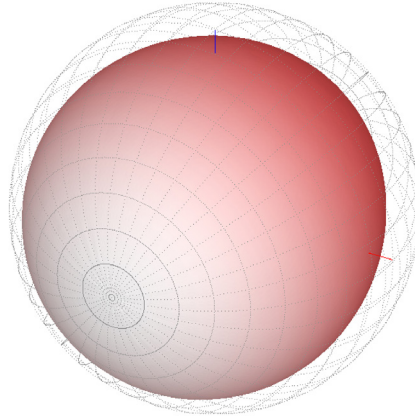
Bandwidth : 1/3 Octave
Frequency : 16 000 Hz

ATTENUATION BALLOON

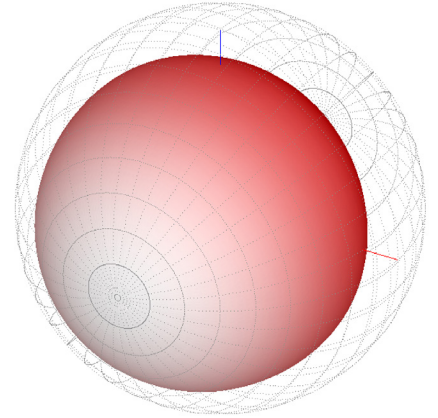
The attenuation balloon shows a 3D balloon denoting level attenuation with respect to the on-axis level at the frequency displayed. This is done since all of the directivity data is normalized to the on-axis SPL.



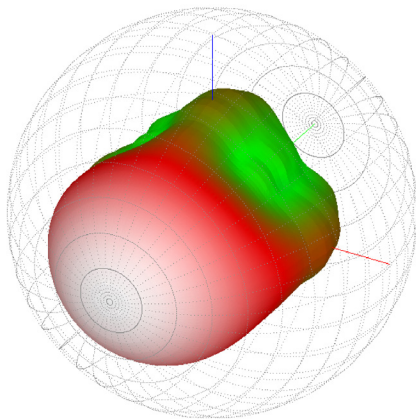
Bandwidth : 1/3 Octave
Frequency : 125 Hz



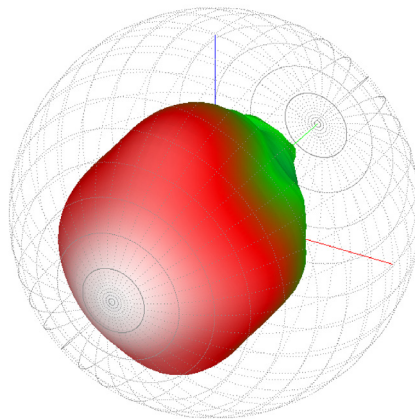
Bandwidth : 1/3 Octave
Frequency : 250 Hz



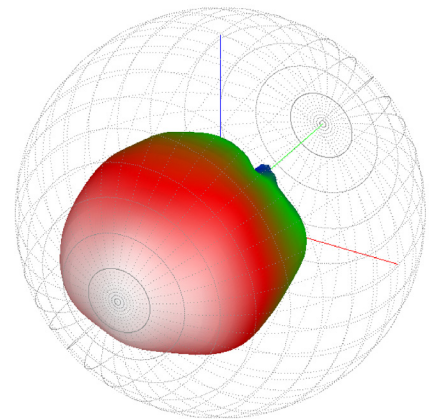
Bandwidth : 1/3 Octave
Frequency : 500 Hz



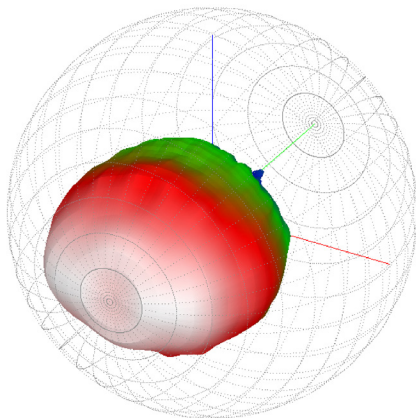
Bandwidth : 1/3 Octave
Frequency : 1 000 Hz



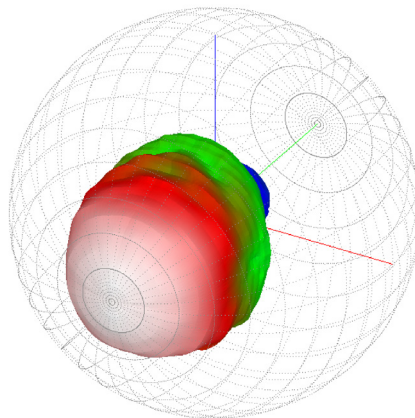
Bandwidth : 1/3 Octave
Frequency : 2 000 Hz



Bandwidth : 1/3 Octave
Frequency : 4 000 Hz



Bandwidth : 1/3 Octave
Frequency : 8 000 Hz

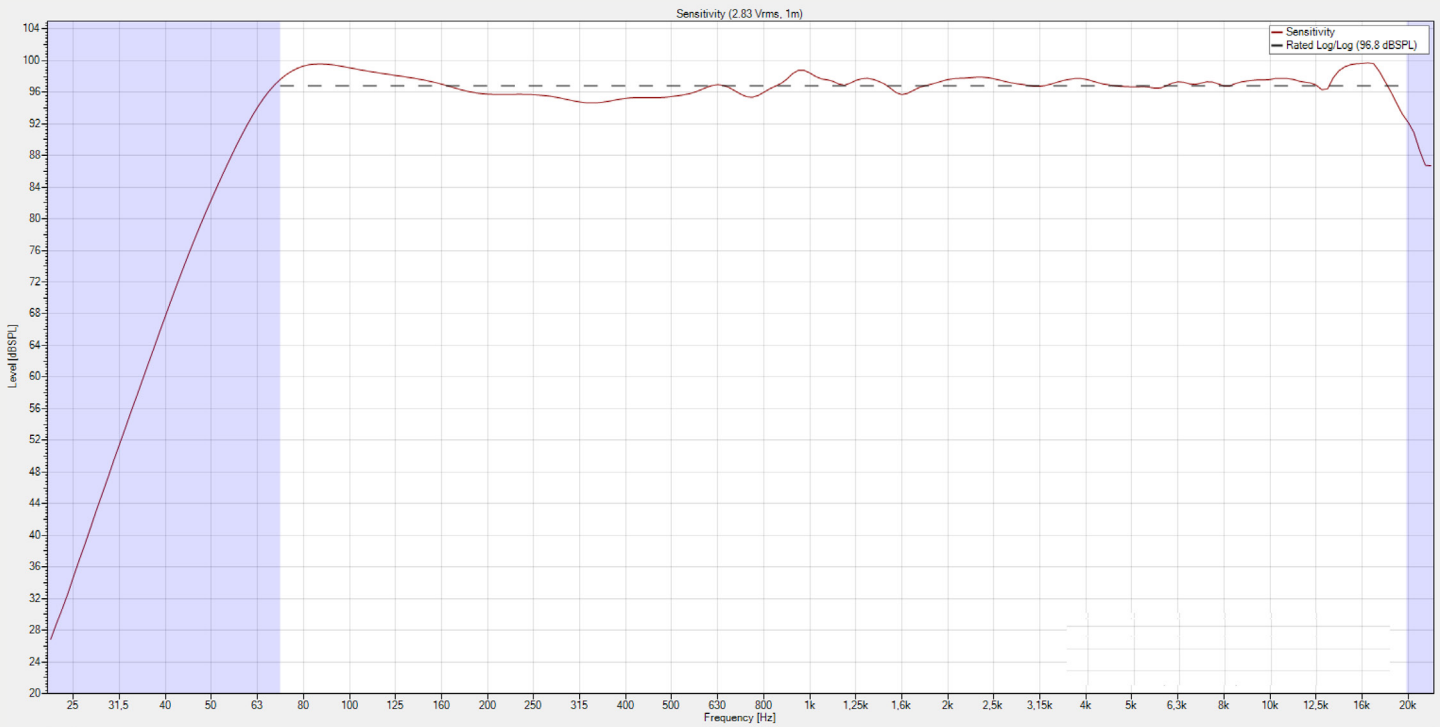


Bandwidth : 1/3 Octave
Frequency : 16 000 Hz



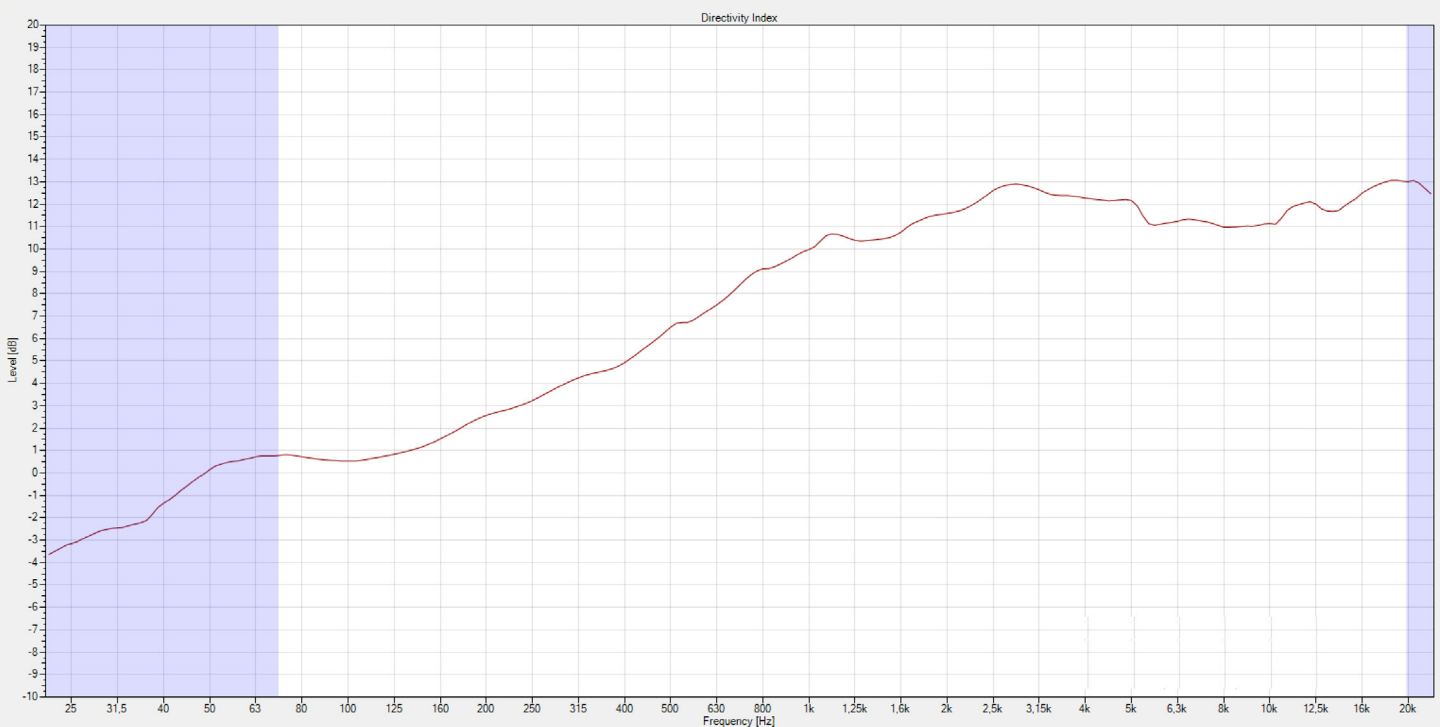
SENSITIVITY GRAPH

The sensitivity graph is identical to the transfer function graph for the on-axis location with two exceptions. First is that the display is of magnitude only. There is no phase data to be shown on this graph. The second is that the level is referenced to 1-meter and an RMS input voltage of 2.83 V. The sensitivity value is calculated over the bandwidth defined by the upper and lower frequency limits entered for the rated frequency bandwidth. This is in keeping with the definition of sensitivity in IEC 60268-5 for an RMS input of 2.83 V.



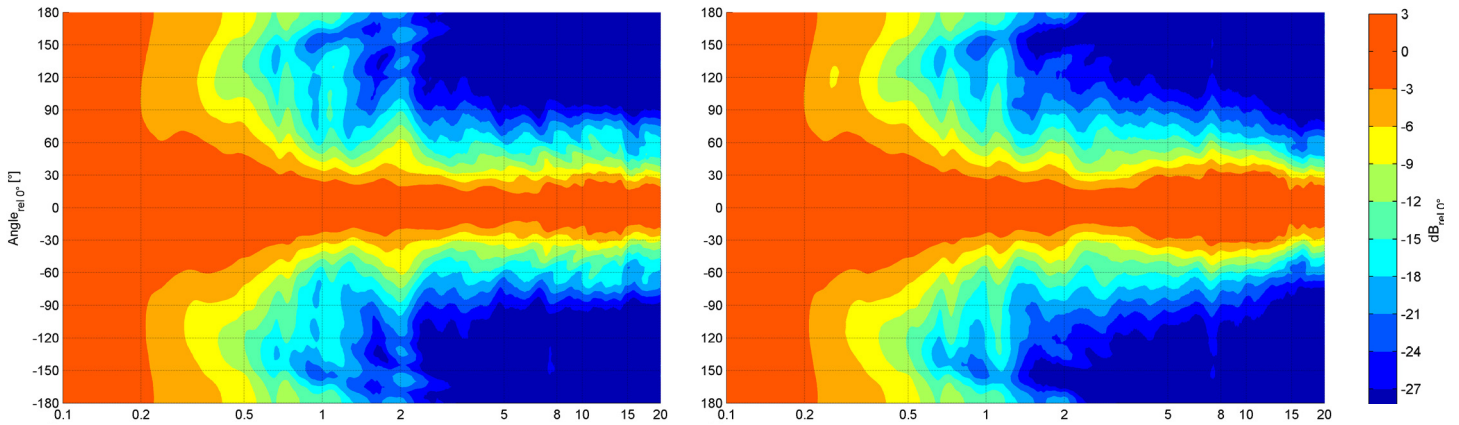
DIRECTIVITY INDEX

The directivity index graph shows the directivity index of the source as a function of frequency. Here the bandwidth can be selected to provide smoothing or averaging of the displayed data. The directivity index is a metric of how directional a sound source is in the way it radiates sound. The higher the value of the directivity index is the more directional the source is at radiating its sound. The directivity index is the logarithmic representation (expressed in dB) of the directivity factor, or Q.



ISOBAR DIAGRAMS

The following graphs show dispersion angle diagram of a single cabinet in vertical (on the left) and horizontal (on the right) plane, plotted using lines of equal sound pressure (isobars) from 3 dB to -30 dB.



STANDARD COLOR CODES

Amadeus systems offer a standard 'Jet Black' finish, based on RAL 9005 color. The following codes allow you to select separately the colors associated with the different external elements that Amadeus systems are composed of.

REFERENCE / **** 1 / **** 2

**** 1 RAL COLOR CODES FOR CABINETS AND MECHANICAL ELEMENTS

**** 2 RAL COLOR CODE FOR AIRTEX[®] ACOUSTICAL FABRIC

For example, a two-color PMX 5 MKII system with 'Jet Black' cabinet (RAL 9005) and 'White Aluminium' Airtex[®] fabric in front of the protection grid (RAL 9006) gets the code PMX5MKII/9005/9006. Another example, a single-color DIVA XS system, made with a 'Pure White' (RAL 9010) cabinet and mechanical elements and a 'Pure White' (RAL 9010) acoustical fabric Airtex[®] covering the protection grid gets the code DIVAXS/9010/9010.

Please contact us if you want to order any specific color.

HIGHLY RESISTANT FINISH (HRF)

Amadeus recently invested in a new painting area featuring new painting machines able to produce a high-resistance resin-based finish, making the speakers highly resistant to scratches, shocks and water projections.

This new optional finish, increasing the systems' durability as well as the degree of protection provided by enclosures against intrusion, dust, accidental contact, and water up to IP55 (EN 60 529) is now available available on-demand.

Please contact us if you want to order any specific finish.

ACCESSORIES TO MEET YOUR NEEDS

Accessories are often the forgotten detail. They are, however, a vital component in a complex speaker setup.

To compliment our core product offering, we also provide an extensive range of accessories.

The selection of accessories includes a huge number of mounting and connecting accessories, available to accommodate any configuration of installation.

The key to our success is to remain flexible. We have a unique manufacturing programme which allows us to efficiently produce anything from small batches to an automated production process for large scale manufacturing.

Please contact us if you want to order any specific accessory.

