

# avant 12A

Powered, bi-amplified  
multipurpose system



- » **Bi-amplified 2-way system**
- » **500 W low frequency 3rd Generation Class D power amplifier**
- » **100 W high frequency 3rd Generation Class D power amplifier**
- » **12" speaker (3" voice coil)**
- » **2" diaphragm neodymium compression driver**

The Avant 12A is designed for use as a multipurpose portable system. Its multiangle design permits use as a standard box or floor monitor.

The loudspeaker components of the Avant 12A include a 12AV4, high efficiency 12" cone transducer with 3" voice coil and one M-50N neodymium compression driver with 2" titanium diaphragm. The driver is attached to a 80° x 50° rotatable horn.

The two-way 3rd Generation Class D amplifier offers 500 W for the low frequency transducers and 100 W for the high frequency section. The amplifier provides extended bandwidth, improved dynamic range and exceptionally low distortion.

The efficiency of the Avant amplifiers measures more than 90%. This ensures cool operation so that no fans or bulky heatsinks are needed. The low idle consumption also offers an easy way to reduce overall power use.

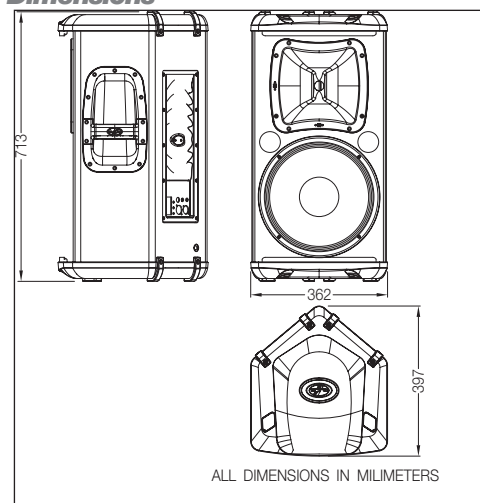
Signal processing is accomplished by way of a powerful 24 bit DSP providing unparalleled control over critical signal parameters.

The Avant 12A is protected by two types of limiters—an instantaneous peak limiter to safeguard the systems against spikes and a sonically transparent RMS limiter that controls excessive overpowering and thermal damage to components.

### Technical Specifications

<b>Low Frequency Power Amplifier</b> <sup>1</sup>	1000 W <sub>peak</sub> - 500 W <sub>continuous</sub>
<b>High Frequency Power Amplifier</b> <sup>1</sup>	200 W <sub>peak</sub> - 100 W <sub>continuous</sub>
<b>Input Type</b>	Balanced Differential Line
<b>Input Impedance</b>	Line: 20 kohms Mic: 20 kohms
<b>Sensitivity</b> <sup>2</sup>	Line: 1.95 V (+8 dBu) Mic: 20 mV (-32 dBu)
<b>On-axis Frequency Range (-10 dB)</b>	60 Hz - 20 kHz (EQ Main)
<b>Maximum Peak SPL at 1 meter</b> <sup>3</sup>	133 dB
<b>HF Horn Coverage Angles (-6 dB)</b>	80° x 50° (Rotatable)
<b>Enclosure Material</b>	Birch Plywood
<b>Finish</b>	Black Paint with ABS Plastic Endcaps
<b>Transducers/Replacement Parts</b>	LF: 1 x 12AV4/GM 12P4 HF: 1 x M-50N/GM M-50
<b>Connectors</b>	INPUT: Female XLR-Jack LOOP THRU: Male XLR AC INPUT: Male IEC
<b>AC Power Requirements</b>	115 V, 50 Hz/60 Hz 230 V, 50 Hz/60 Hz
<b>Dimensions (H x W x D)</b>	71.3 x 36.2 x 39.7 cm (28 x 14.3 x 15.6 in)
<b>Weight</b>	22 kg (48 lb)
<b>Accessories (optional)</b>	ANL-5 TRD-5 TRD-2

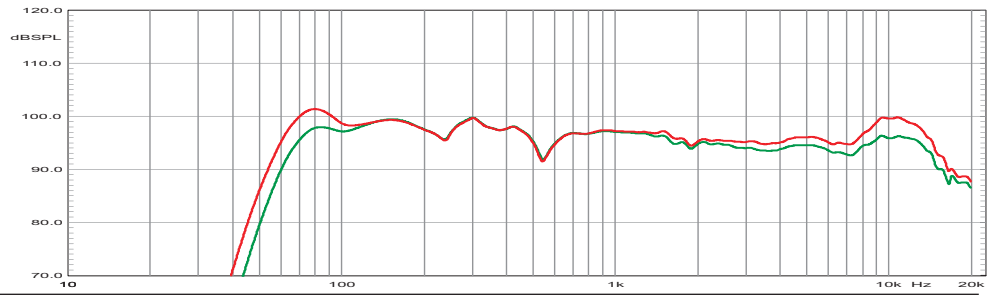
### Dimensions



1. Continuous power at driver impedance.
2. Level control at maximum.
3. Measured maximum peak level.

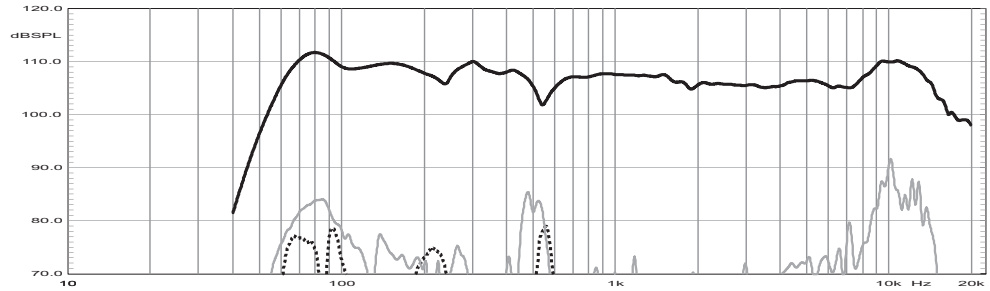
**Frequency Response**

Shows the frequency response at 1 m of a unit radiating to an anechoic environment and driven by a swept sine wave signal (-20 dBu input). Green: Monitor EQ. Red: Main EQ



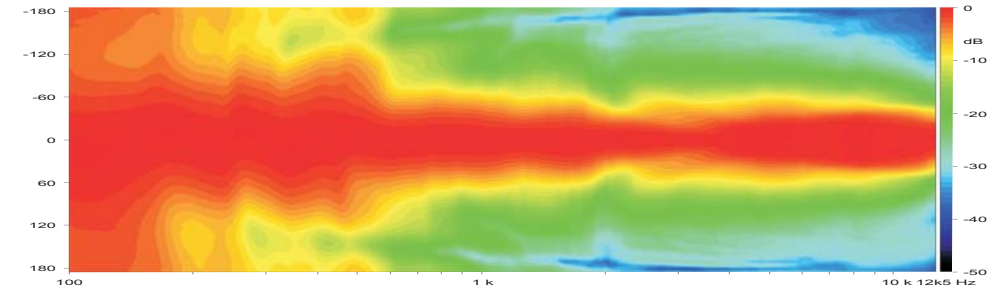
**Distortion**

Shows the Second Harmonic Distortion (grey) and Third Harmonic Distortion (dotted) curves for a unit driven by a swept sine wave signal (-10 dBu input).



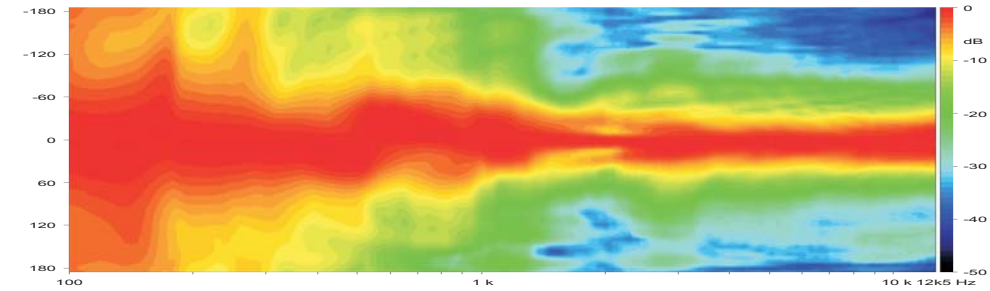
**Horizontal Directivity**

Shows normalized horizontal isobar plot.



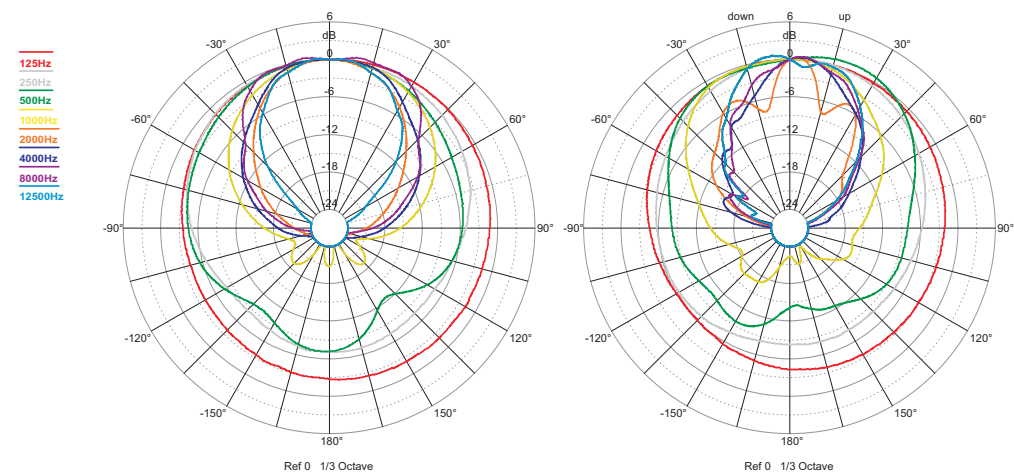
**Vertical Directivity**

Shows normalized vertical isobar plot.



**Polar Response**

Shows the 1/3 octave band horizontal (left) and vertical (right) polars for the indicated frequencies. Full scale is 30 dB, 6 dB per division.



NOTES. 1.Frequency response: referred to 1 m; low end obtained through the use of near field techniques; one-third octave smoothed for correlation with human hearing. 5.Polars were acquired by placing the unit on a computer controlled turntable inside our anechoic chamber. Measurement distance was 4 m.

Product improvement through research and development is a continuous process at D.A.S. Audio. All specifications subject to change without notice.