

# Aircraft Cabin Surround Sound Amplifier SA-600DC



The SA-600DC is a 6 channel, 240 Watt RMS surround sound amplifier with integrated proprietary surround sound processing designed specifically for aircraft cabins. The unique custom surround processing allows surround sound to be experienced in all seats in the cabin, not just 1 or 2. Integral custom equalization specifically designed for aircraft cabins to be used in conjunction with Alto surround sound speakers. Each channel contains a distortion limiter circuit which allows for full power operation without harsh distortion. The low weight (3 lbs) and small size (5.4"W x 3.4"H x 10.1"D) allow for convenient mounting and flexible system configuration. Powered from Aircraft 28 VDC supply.

## FEATURES

- Weighs only 3 lbs
- Small package 5.4"W x 3.4"H x 10.1"D
- Proprietary integral surround processing designed specifically for aircraft cabins
- Proprietary SineWatch™ circuitry prevents audible distortion at full power without affecting audio signal integrity and helps overcome aircraft noise.
- Operates on +28VDC power supply
- Gain adjustable in channel pairs to balance surround speaker levels for different seating locations
- Aluminum case w/ forced air cooling from end mounted fan
- Integral part of the Alto Aviation Entertainment System (AES)

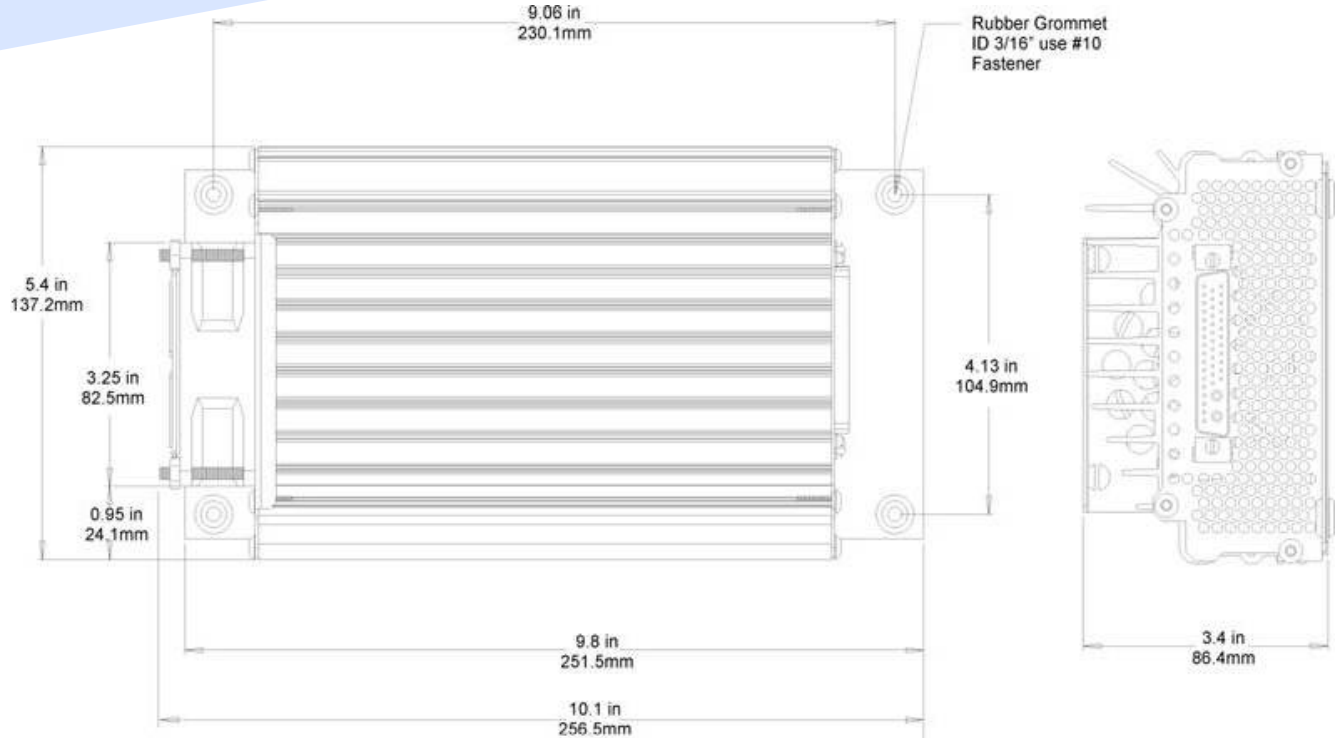
## SPECIFICATIONS

- Product Code 106125-1000 (refer to specific data sheets for other dash numbers)
- Frequency Response 20Hz - 20KHz
- Power Supply 28 VDC
- Operating Current 3 A nominal (varies with volume setting and music content)  
10 A maximum (15 A breaker recommended)
- Idle Current (no signal) 800 mA
- Input Differential, 10K ohm input impedance
- Input Level 600 mV RMS to 6 V RMS, Nominal 2V RMS
- Output Power 40 Watts RMS/channel (240W) total
- Output Load 4 - 8 Ohm recommended, 8 ohm surround speakers can be paralleled on all channels
- Distortion <0.1% THD @ 50% rated power, maximum 3% (distortion limiter active)
- Output Noise (no signal) < 200 uV A-Wgt
- Gain Adjustable in channel pairs, , 0 to +18 dB in 2dB steps
- Equalizers Custom designed EQ matched to surround sound speakers from the Alto Aviation Entertainment System (AES)
- Connector 43W2 Combo D Male
- Dimensions 5.4" W (138mm) X 3.4" H (87mm) X 10.1"D (257mm)
- Weight 3 lbs (1.4 kg)

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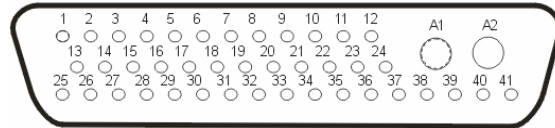
## DIMENSIONS



If the dimension, weight, and connector specifications of this product do not meet your requirements, Alto can custom design a product for your application.

## CONNECTOR PINOUTS

43 Pin Combo-D D-sub Male connector  
(Positronic # CBD43W2M55B1000X)



PIN#	FUNCTION	PIN#	FUNCTION
1	Zone 1 Left Surround Speaker Out +	23	Zone 3 Right Input +
2	Zone 1 Left Surround Speaker Out -	24	Zone 3 Right Input -
3	Zone 1 Right Surround Speaker Out +	25	N/C
4	Zone 1 Right Surround Speaker Out -	26	N/C
5	Zone 2 Left Surround Speaker Out +	27	N/C
6	Zone 2 Left Surround Speaker Out -	28	N/C
7	Zone 2 Right Surround Speaker Out +	29	N/C
8	Zone 2 Right Surround Speaker Out -	30	N/C
9	Zone 3 Left Surround Speaker Out +	31	N/C
10	Zone 3 Left Surround Speaker Out -	32	N/C
11	Zone 3 Right Surround Speaker Out +	33	N/C
12	Zone 3 Right Surround Speaker Out -	34	N/C
13	Zone 1 Left Input +	35	N/C
14	Zone 1 Left Input -	36	DC Chassis Ground
15	Zone 1 Right Input +	37	N/C
16	Zone 1 Right Input -	38	N/C
17	Zone 2 Left Input +	39	N/C
18	Zone 2 Left Input -	40	N/C
19	Zone 2 Right Input +	41	N/C
20	Zone 2 Right Input -	A1	+ 28 VDC
21	Zone 3 Left Input +	A2	Ground
22	Zone 3 Left Input -		

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