

Aircraft Cabin Audio Amplifier w/Custom EQ

AA-686DC



The AA-686DC is a 6 channel, 240 Watt RMS audio PA audio amplifier with integrated custom EQ for specific aircraft types. Utilizing proprietary acoustic measurement and design software, the aircraft interior is acoustically mapped and circuits are designed so that the effects of the interior are neutralized allowing the announcements to be heard with high intelligibility. Designed to be used in conjunction with Alto speakers, the amplifier will deliver 40 Watts per channel. Each channel contains a distortion limiter circuit which allows for full power operation without harsh distortion to overcome high noise environments. 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
- Integral EQ customized for each aircraft type for high intelligibility
- EQ optimized for voice clarity
- 6 channels, 40 Watts RMS per channel
- Proprietary SineWatch™ circuitry prevents audible distortion at full power without affecting audio signal integrity and helps overcome aircraft noise
- Operates on +28VDC power supply
- Aluminum case w/ forced air cooling from end mounted fan

SPECIFICATIONS

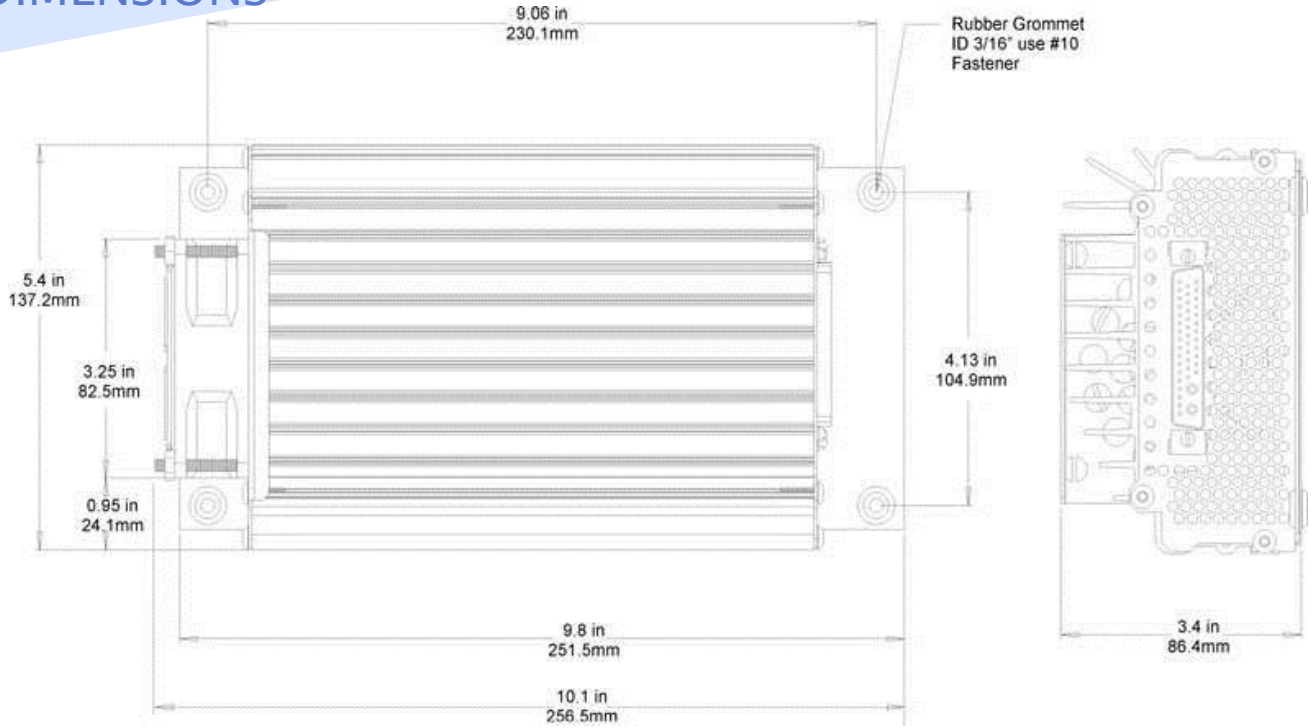
- Product Code 105660-XXXX -XXXX describes the EQ version/aircraft type
- Frequency Response 100Hz - 12KHz
- Power Supply 28 VDC
- Operating Current 3 A nominal (varies with volume setting and audio content)
16 A maximum (20 A breaker recommended)
- Idle Current (no signal) 800 mA
- Input Differential, 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, 3 ohm minimum,
Average impedance of all 6 channels must be >3.5 ohms
- 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/crossovers matched to aircraft type utilizing 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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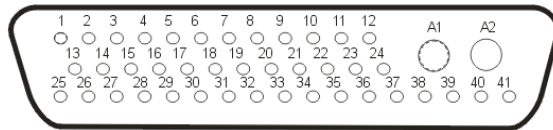
DIMENSIONS



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

Alto Aviation 86 Leominster Rd PO Box 399 Sterling, MA 01564
Phone: 978-466-5992 Toll Free 800-814-0123 Fax 978-466-5996

www.altoaviation.com