

4-Input Digital Amplifier with High Level Interface

DZ-290



The Alto DZ-290 is a TSO-C139a certified 4 X 40W / channel Class D audio amplifier for aircraft cabin loudspeakers. This amp is specifically designed to interface with existing PA/Entertainment amplifiers having high level speaker outputs. Entertainment audio sources can be wired directly to the line inputs of the DZ-290 thereby bypassing the legacy PA/Ent amplifier, substantially improving audio quality and reducing noise and interference.

The amplifier supports discrete logic control and is compatible with the Alto line of keypads, or any discrete control switches.

A PA Bypass feature allows the legacy PA system to override the entertainment during PA or Page/Chime events, making use of the same loudspeakers for PA and entertainment.

FEATURES

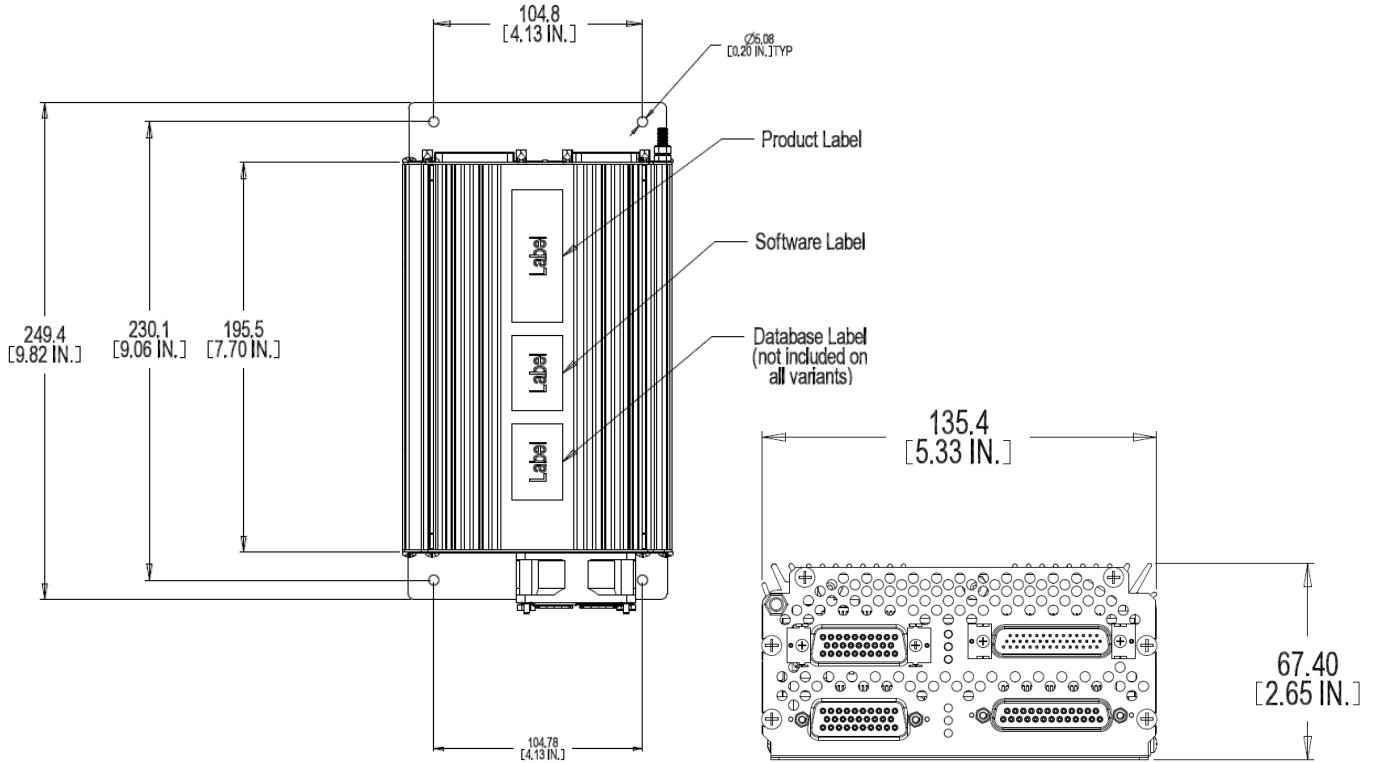
- Unit certified to TSO-C139a
- 4 channels, 40 Watts RMS per channel Class D for very high efficiency with low heat output
- Integral EQ customized for each aircraft interior
- Advanced DSP including dynamic bass management, signal compression, spatial enhancement, Sinewatch™ distortion elimination
- Supports up to 4 inputs with selection, volume control and speaker on/off via discrete logic
- PA Override feature (via PA Key or Ordinance Chimes)
- Operates on 28VDC power supply
- Weighs less than 3.2 lbs. (1.4 kg)
- Small enclosure with forced air cooling for flexible mounting
- Failsafe to PA/High Level input mode

SPECIFICATIONS

- Product Code 106450-0290
- Frequency Response 20Hz - 20KHz custom contoured to specific aircraft cabin
- Power Supply 28VDC
- Operating Current 500 mA idle, 1 A nominal, 6 A maximum
- Audio Input 4 stereo analog inputs, diff 44kohm input plus one Mic configurable as Ground biased
- Output Power All inputs accept line signal between 600mV and 4V RMS nominal
40 Watts RMS/channel (160W) total
- Output Load Loudspeaker: 4 - 8 Ohm recommended
Average impedance of all 4 channels must be >3.5 ohms
- Distortion <0.1% THD @ 50% rated power, maximum 3% (distortion limiter active)
- Equalizers Custom designed EQ/crossovers matched to aircraft cabin utilizing loudspeakers from the Alto Aviation Entertainment System (AES) catalog
- Dimensions 5.3"W x 2.65"H x 9.8"D (135mmW x 67mmH x 249mmD)
- Weight < 3.2 lbs / 1.4 kg
- DO-160G Env. Cat. [A2X]CAB[(SC)(HR)]EXXXXXZ[Z(XX)]AZ[AC][TT]M[XXE3XX][XXXX]XAX

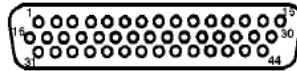
DZ-290

DIMENSIONS



CONNECTORS

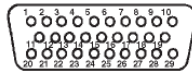
Signal Connector J1



44 pin Male Hi-Density D-Sub Mating connector

Positronic # ODD44M5B100V5X
Positronic # ODD44F10JVLX

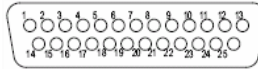
Power Connector J2



29 pin Male Standard Density D-Sub Mating connector

Positronic # MD29M5B100V5X
Positronic # RD29F10JVLX

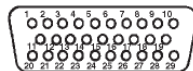
Interface Connector J4



25 pin Male Standard Density D-Sub Mating connector

Positronic # MD25M5B10T2X
Positronic # RD25S10JEX

Interface Connector J5



29 pin Male Standard Density D-Sub Mating connector

Positronic # MD29M5B100T2X
Positronic # RD29S10JEX