



## -ARCHITECTURAL & ENGINEERING SPECIFICATIONS-

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### **CONNECT****SERIES** | **CS168D**

The LEA Professional **CONNECT****SERIES** CS168D power amplifier shall be a solid-state eight-channel amplifier.

The amplifier shall include eight balanced analog inputs and eight digital inputs via Dante. The amplifier shall utilize an Audinate Broadway module with support for eight receiver channels and eight transmitter channels with user definable sample rate of 48kHz or 96kHz. This module shall allow for both Dante and AES67 compatibility and shall include redundant gigabit network ports on the rear panel of the amplifier.

The amplifier shall deliver 80 Watts of output power at 2 ohms, and 160 Watts of output power at 4 ohms, 8 ohms, 70 volts, and 100 volts. The outputs shall be Class D with Proprietary Smart Power Bridge technology allowing bridged output functionality without sacrificing an amplifier channel. The amplifier shall possess a DC offset of + or – 3mV.

The amplifier shall include protection for AC Mains, overtemp, current limiting and fan faults. The output channels shall include protection for DC and VHF.

The Front-panel shall include no physical controls. The front panel display shall contain a shark fin power status indicator LED, Channel status indicators LEDs, and display with network status, IP address and amplifier ID.

Rear-mounted controls shall include a power button and Wi-Fi enabling button.

Front panel indicators shall include: a shark fin logo LED power indicator which shall turn green to show the amplifier is receiving AC power, blue to show the amplifier is powered on, or magenta to show the amplifier is actively updating firmware; a green channel ready indicator to show the channel is ready to pass audio; a green signal presence indicator to show that there is at least -60 dB of signal present on that output channel; a Clip indicator for each channel which shall turn Red when distortion of any type becomes audible in the amplifier output or will turn Amber which shows the channel is limiting; a red thermal fault indicator to show there is a channel thermal fault; a red Fault indicator for each channel which will activate when the amplifier channel is protecting itself. The output stage is non-operational in this mode.

The power amplifier shall meet or exceed the following performance criteria. Input sensitivity for rated output: 26dB and 34dB balanced analog inputs. Class D outputs with less than 0.1% THD+N (20Hz to 20kHz). Frequency response: +/- 0.5 dB at 4 ohms, 8 ohms, 70 volt, and 100 volt - -2.5 dB at 20kHz at 2 ohms. Damping factor: > 1500.

The amplifier shall be safe when driving any kind of load—even highly reactive ones.

The power requirements shall be 100 VAC - 240 VAC +/- 15% at 50 or 60 Hz. When no signal is present, the amplifier shall automatically go into auto-standby mode and draw 7 Watts. When signal is present again, the amplifier shall automatically wake up and pass audio.

The amplifier shall have a rugged steel chassis with environmentally friendly powder coat.

The dimensions of the amplifier shall allow for 19-inch (48.3 cm) EIA standard (RS-310-B) rack mounting. The amplifier shall be 1.75 inches (4.45 cm) tall and 14.25 inches (36.12 cm) deep behind the rack-mounting surface.

The amplifier shall weigh 13.4 pounds (6.09 kg).

The amplifier shall be designated the **CONNECT****SERIES** CS168D.

