THEORY AUDIO DESIGN

DLC-250.8 Loudspeaker Controller (8-ch)

KEY FEATURES:

- 1U 8-channel Amplified Loudspeaker Controller
- 250W per Channel @ 4, 8, 16-ohms and 70V/100V
- 125W per Channel @ 4, 8, 16-ohms All Channels Driven
- Power Sharing Between Neighboring Channels
- Drives up to 32 Theory 16-ohm Speakers from 1U Rack Space at Low-Z or up to 128 in 70V/100V Operation

OVERVIEW:

The DLC-250.8 is an 8-channel amplifier capable of delivering 250W into 4, 8, and 16-ohms from any channel pair, or 125W into 4, 8 or 16-ohms all channels driven; this 1U loudspeaker controller packs new levels of power into minimal rack space. If that weren't enough, the DLC-250.8 can drive 70V/100V hi-Z loudspeakers direct - no internal transformer is required.

The DLC-250.8 can drive up to 32 Theory 16-ohm loudspeakers in Lo-Z mode, or up to 128 in Hi-Z mode - all from a 1U chassis!

The DLC loudspeaker controllers from Theory can be configured via its on-board web interface accessible via wired Ethernet, or via its on-board WiFi access point and includes parametric EQ, delay, gain and limiter DSP objects to make system optimization easy.

Rack ears are included. Full API and control modules for AMX, Control4. Crestron, Crestron Home, ELAN, Q-SYS and RTI are available.

The performance and versatility of the DLC-250.8 must be experienced to be believed. Book a visit to the Theory Southern California Experience Center today to learn just how valuable this little loudspeaker controller will be in your system design toolbox.

APPLICATIONS:

Background and Foreground Business Audio Systems

Bars and sports bars, restaurants, retail stores, hotels, houses of worship, corporate conference, screening rooms, lobbies, casinos, etc.

Distributed Audio

Residential and commercial distributed audio systems, airports, higher-ed campuses, and education facilities.

High Output Surround Sound Systems

Residential and commercial media rooms, gaming systems, executive boardrooms, etc.

Music and Video Post Production

Surround and Dolby Atmos mix rooms where maximum output in compact depth is required, music post production.

Two-channel Music Systems

Premium residential and corporate stereo music systems, music and performance higher education.

DLC-250.8 Specifications

Description: 8-Channel Amplified Loudspeaker Controller
1U Chassis
IP Control via Ethernet or Built-in WiFi Access Point
Power Sharing Between Neighboring Channels

Operation: LoZ and HiZ (70V/100V) Operation

Inputs: 8 x Balanced Analog Audio
8 x RCA Unbalanced Analog Audio
1 x S/PDIF Digital Audio (Stereo, Coax)

Outputs: 8 x Speaker Outputs
S/PDIF Digital Audio (Loop)

Trigger: +12VDC

Audio Operation: 48kHz/24-bit

On-Board DSP: 48kHz/32-bit

DSP Features: Loudspeaker Processing For All Theory Models, plus:
- Input Matrix Mixer
- 5 Parametric Input EQ Filters
- Input Trim
- Stereo/Mono Inputs and Zones
- Signal Routing Including Priority Automatic Routing
- Audio Ducking
- 10 Parametric Output EQ Filters
- Crossovers
- Gain
- Delay
- Polarity
- Peak and RMS Limiters

Frequency Response: 20Hz-20kHz, +/-0.25dB

Power Output: 250W per channel @ 4, 8, 16-ohms and 70V/100V
125W per channel @ 4, 8, 16-ohms all channels driven

Voltage Gain: Variable

Input Sensitivity (selectable): +14dBu
+4dBu
-10dBV (Unbalanced RCA)
Microphone

Power Requirements: Standby: <1W
(1/8 power, all ch. driven): 70W

Idle Noise: -78dBV

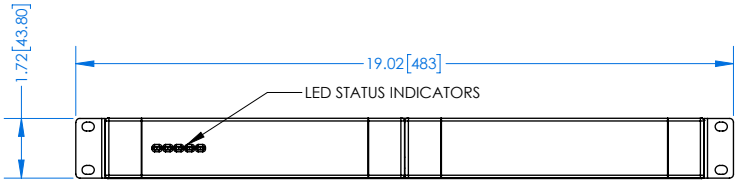
Signal to Noise Ratio: >106dB

Distortion (1kHz, 1dB below max output): <0.02%

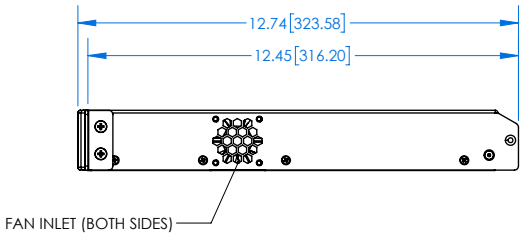
DLC-250.8 Specifications (Continued)

AC Operation: 100V-240VAC, 50-60Hz
Terminals: ..... Euroblock Connectors
Outdoor Capability: ..... Indoor Use Only
Mounting Points: ..... Rack Mount (with included accessories)
Finish: ..... Matte Black
Dimensions: ..... 1.75" H x 19.0" W x 12.6" D (44mm H x 483mm W x 319mm D)
Net Weight: ..... 7.7 lbs. (3.5 kg)
Included Accessories: ..... Rack Ears

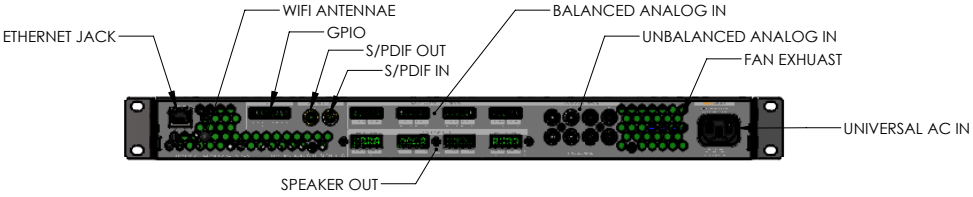
DLC-250.8 Dimensions



FRONT VIEW



SIDE VIEW



REAR VIEW

DLC-250.8 Architectural Specifications

The power amplifier, being of eight channels, shall deliver a minimum power of 125 watts RMS per channel into 4, 8 or 16 ohm "low-z" loads and 125 watts RMS per channel into 70V/100V, "hi-z" systems. The amplifier shall include on-board independent digital signal processing (DSP) for each audio channel. The amplifier shall be immune to damage from shorted, open, or mismatched loads and shall include independent thermal protection. The amplifier shall have user-selectable variable input sensitivity settings for microphone, -10dBV, +4dBu and +14dBu input signal levels. Frequency response shall be 20Hz to 20kHz +/- 0.25dB. Idle noise shall be no more than -78dBV with signal-to-noise ratio of at least 106dB. THD at 1dB below maximum output shall be less than 0.02%. The amplifier shall have rear panel audio inputs of balanced analog type via multi-pin Euro block connectors, unbalanced analog type via RCA connectors, and of the S/PDIF digital type via RCA coaxial connectors. The amplifier hardware and on-board DSP shall be programmed and controlled using embedded web interface over TCP/IP via back-panel Ethernet port or wirelessly via on-board WiFi access point. The unit shall operate on any AC Mains voltage between 100V and 240VAC at 50Hz or 60Hz. The unit shall be one (1) rack space high, (1) rack space wide, and no more than 12.6" (319mm) deep. The amplifier shall be internally fan-cooled. The weight of the unit shall be 7.7 lbs. (3.5 kg). The amplifier shall be the model DLC-250.8 manufactured by Theory Audio Design, LLC.

THEORY AUDIO DESIGN, LLC dba THEORY PROFESSIONAL
25741 Atlantic Ocean Drive, Suite B
Lake Forest, CA 92630

Tel: 949-245-0505
www.theoryaudiodesign.com