

# DLC-250.4d Loudspeaker Controller (4-ch with Dante & AES67)



#### **KEY FEATURES:**

- Half Rack 4-channel Amplified Loudspeaker Controller with Dante & AES67
- 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 16 Theory 16-ohm Speakers from 1/2 Rack Space at Low-Z or up to 64 in 70V/100V Operation

#### **OVERVIEW:**

The DLC-250.4d is small but mighty. 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 little 6.5lb., half rack loudspeaker controller packs new levels of power into minimal rack space. If that weren't enough, the DLC-250.4d can drive 70V/100V hi-Z loudspeakers direct - no internal transformer is required.

The DLC-250.4d is equipped with Dante / AES67 audio-over-IP digital I/O making setting up and deploying even complex distributed audio systems painless and bullet-proof. No bulky analog audio cables are required.

The DLC-250.4d can drive up to 16 Theory 16-ohm loudspeakers in Lo-Z mode, or up to 64 in Hi-Z mode.

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 and a surface mount kit is optional. Full API and control modules for AMX, Control4. Crestron, Crestron Home, ELAN, Q-SYS and RTI are available.

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, 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-250.4d** Specifications

Description:	4-Channel Amplified Loudspeaker Controller with Dante & AES67 Half-Rack Chassis IP Control via Ethernet or Built-in WiFi Access Point
	Power Sharing Between Neighboring Channels
Operation:	
Inputs:	•
	4 x RCA Unbalanced Analog Audio
	1 x S/PDIF Digital Audio (Stereo)
	4 x Dante / AES67 Digital Audio
Outputs:	_
	S/PDIF Digital Audio (Stereo)
	4 x Dante / AES67 Digital Audio
Trigger:	_
Audio Operation:	48kHz/24-bit
On-Board DSP:	48kHz/32-bit
DSP Features:	Loudspeaker Processing For All Theory Models, plus:
	Input Matric 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:	
Input Sensitivity (selectable):	+14dBu
	+4dBu
	-10dBV (Unbalanced RCA)
	Microphone
Power Requirements:	•
	(1/8 power, all ch. driven): 70W
Idle Noise:	78dBV



## **DLC-250.4d** Specifications (Continued)

Signal to Noise Ratio: >106dB

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

AC Operation: 100V-240VAC, 50-60Hz

Terminals: Euroblock Connectors

Outdoor Capability: Indoor Use Only

Mounting Points: Surface or Rack Mount (with included/optional accessories)

Finish: Matte Black

Dimensions: 1.75" H x 8.7" W x 11.7" D (44mm H x 221mm W x 297mm D)

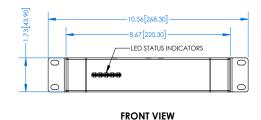
Net Weight: 6.5 lbs. (2.95 kg)

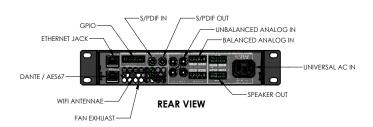
Included Accessories: Single and Dual Unit Rack Mount Kit

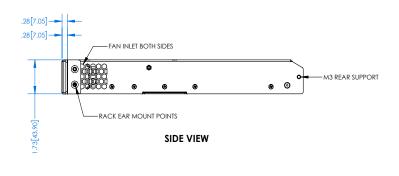
Optional Accessories: Surface Mount Kit



### **DLC-250.4d** Dimensions







## **DLC-250.4d** Architectural Specifications

The power amplifier, being of four 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, of the S/PDIF digital type via RCA coaxial connectors, and Dante / AES67 Digital Audio. 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, one-half (1/2) rack space wide, and no more than 11.7" (297mm) deep. The amplifier shall be internally fan-cooled. The weight of the unit shall be 6.2 lbs. (2.8 kg). The amplifier shall be the model DLC-250.4d manufactured by Theory Audio Design, LLC.

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