



## INTRODUCTION:

Proven at millions of gigs worldwide, the Mackie DL Series combines the power of a full-featured digital live sound mixer with the unmatched ease-of-use of an iPad.

The 16-channel DL1608 features premium hardware like 16 boutique-quality Onyx preamps and Cirrus Logic® converters deliver unparalleled sound quality.

Mackie's class-leading Master Fader control software provides seamless wired-to-wireless control over an amazing amount of professional-grade processing for all inputs and outputs.

Plus, you can control it all wirelessly from up to 20 iOS devices. Truly the ideal digital mixer for bands, rental houses and production/installation, you get all the benefits of a next-gen console and more at an incredible price with the Mackie DL1608.

## FEATURES:

- 16-Channel Digital Live Sound Mixer
  - 16 Onyx™ mic preamps
  - Eight balanced outputs
  - High-end Cirrus Logic® converters
  - Ultra low-noise, high-headroom design
  - Rugged, compact desktop design with iPad® dock
  - Rackmountable with optional kit

- Flexible Wireless or Docked Control
  - Mix wirelessly from anywhere in the venue from your iPad
    - o Unmatched wireless control over mix
    - o Supports up to 20 iOS devices at once
    - o Personal monitor mixing via iPhone® or iPod touch®
  - Dock your iPad for added features and security
    - o Creates an integrated, self-contained desktop mixer
    - o Total control over assignable 2-channel recordings for immediate playback and easy exporting
    - o Playback music from any iPad app and incorporate into the mix
    - o Always keep your iPad charged
    - o PadLock™ feature locks down iPad for security
    - o Industry standard Kensington lock secures mixer
    - o iPad Air 2, iPad Air and iPad (4th generation) docking compatibility
    - o Optional iPad mini docking tray available
- Master Fader Control App
  - Proven, intuitive workflow that's customizable for your application
    - o Create view groups and see only the channels you need
    - o Unique access limiting hides controls you aren't using
  - Export presets, shows and complete system backups via Dropbox, email and more using iOS system sharing
  - Quick setup with tons of factory and user-definable presets
  - Complete offline operation saves setup time at gig
  - The most frequently updated mixing app on the market
- Professional, Comprehensive DSP
  - Packed with more DSP processing than any other compact mixer
  - 18 input channels with 4-band PEQ + HPF, gate and compression
    - o 16 stereo-linkable input channels
    - o 2 stereo-linkable iPad return channels\*
  - 12 output busses with 4-band PEQ + HPF/LPF, 31-band GEQ, comp/limiter, alignment delay and RTA
    - o 6 stereo-linkable aux sends
    - o 4 stereo-linkable subgroups\*
    - o Main L/R busses
  - 4 VCAs and 4 mute groups
  - 2 stereo FX processors with dedicated sends and returns
  - Choice of powerful, touch-sensitive modern and vintage plug-ins



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*\*iPad return channels and subgroups feature PEQ and compression. Wi-Fi router required for wireless operation. Wi-Fi router and iPad, iPhone or iPod touch not included.*

*Master Fader available for free in the App Store. iOS 8.0 or later required for operation.*

*See Supported Devices on page 3 for complete compatibility information.*



# DL1608

Digital Live Sound Mixer  
with iPad® Control

## DL1608 SPECIFICATIONS

### General Digital

Sample Rate:	48 kHz
A/D/A Bit Depth:	24-bit
System Latency:	1.5 ms

### Frequency Response

All inputs to all outputs:	±0, -1 dB, 20 Hz to 20 kHz
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### Distortion (THD)

Mic input to main output, 1 kHz, -1 dBFS:	<0.005%
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### Noise / Dynamic Range / Signal-to-Noise Ratio

Equivalent Input Noise (EIN)	
150 Ω termination:	-128 dBu
Mic input to main output (A-weighted)	
Channel and main faders at unity:	-79 dBu
Faders down:	-90 dBu
Crosstalk	
Adjacent inputs:	<-120 dB @ 1 kHz
Outputs:	<-105 dB @ 1 kHz
Phones level pot feedthrough @ minimum travel:	<-75 dB
Signal-to-Noise Ratio (ref +4 dBu, one channel and main fader at unity, A-weighted):	
	92 dB
Dynamic Range (One channel and main fader at unity, A-weighted):	
	109 dB
CMRR:	>70 dB @ 1 kHz (60 dB gain)

### Analog Inputs 1-16

Connectors	
1-12:	XLR Balanced
13-16:	Combo XLR / TRS Balanced
XLR Mic Pre:	Onyx
Input Impedance	
1-12:	3 kΩ
13-16:	3 kΩ mic [XLR] 30 kΩ line [1/4"]
Max Input Level	
XLR:	+21 dBu
1/4":	+30 dBu
Gain	
XLR:	0 to 60 dB
1/4":	-20 to 40 dB
48V Phantom Power (XLR):	48 VDC, 10 mA max per mic, with up to eight simultaneously. 5 mA max per mic, with up to 16 simultaneously.

### Analog Main Out L/R

Connectors:	XLR Balanced
Output Impedance:	600 Ω
Max Output Level:	+21 dBu

### Analog Aux Sends 1-6

Connectors:	1/4" TRS Impedance Balanced (Supports balanced / unbalanced operation)
Output Impedance:	240 Ω Balanced 120 Ω Unbalanced
Max Output Level:	+21 dBu

### Analog Headphone Out

Connector:	1/4" TRS Stereo
Max Output Level:	+18 dBu into 600 Ω +19.5 dBu max into 100 Ω

### Networking

Connector:	100 MB Ethernet
Control:	Complete
Simultaneous Control:	20 iOS Devices

## DL1608 SPECIFICATIONS CONTINUED...

### Supported Devices

**iOS Version Requirement:** For optimal performance, we suggest using the latest iOS version [iOS 8.0 minimum]

#### iPad Version Requirement<sup>1</sup>

**Wired [Lightning Connector]:** iPad (4th generation)<sup>2</sup>, iPad mini<sup>3</sup>, iPad mini 2<sup>3</sup>, iPad mini 3<sup>3</sup>, iPad mini 4<sup>3</sup>, iPad Air<sup>4</sup> and iPad Air 2<sup>4</sup>

**Wired [30-pin Connector]:** iPad 2<sup>2</sup>, iPad (3rd generation)<sup>2</sup>

**Wireless:** All iPad models (except the original iPad), Future iPad devices<sup>5</sup>

#### iPhone / iPod touch Version Requirement

**Wireless:** iPhone 4, iPhone 4S, iPhone 5, iPhone 5s, iPhone 5c, iPhone 6, iPhone 6s, iPhone 6 Plus, iPhone 6s Plus, iPod touch (5th generation), Future iPhone and iPod touch devices<sup>5</sup>

**Control Application:** [Mackie Master Fader App<sup>6</sup>](#)

### DSP

18 input channels with 4-band PEQ + HPF, gate and compression  
16 stereo-linkable input channels  
2 stereo-linkable iPad channels (PEQ and compression only)

12 output busses with 4-band PEQ + HPF/LPF, 31-band GEQ, comp/limiter, alignment delay and RTA

6 stereo-linkable aux sends  
4 stereo-linkable subgroups (PEQ and compression only)  
Main L/R busses

4 VCAs and 4 mute groups

2 stereo FX processors (1 reverb, 1 delay) with dedicated sends and returns

Modern and Vintage options per processor

<sup>1</sup> The DL1608 also works with the original iPad (wired and wirelessly), BUT only with Master Fader V2.1.1 (or less).

<sup>2</sup> The iPad 2, iPad (3rd generation) and iPad (4th generation) require an iPad 2-3-4 tray for wired connections.

<sup>3</sup> The iPad mini requires an iPad mini tray for wired connections. iPad mini trays sold separately.

<sup>4</sup> The iPad Air and iPad Air 2 require an iPad Air tray for wired connections. iPad Air trays sold separately.

<sup>5</sup> This assumes, of course, that future iOS devices do not communicate via infrared, radiation, television, sparklers, hoagies, frickin' laser beams, or some other crazy, fandangled new contraption. Even then, we'll still give it the 'ol college try. After all, we do have sharks at the ready.

<sup>6</sup> <https://itunes.apple.com/us/app/mackie-master-fader/id511500747?mt=8>

### Power

<b>Power Consumption:</b>	48 watts max
<b>External Supply</b>	
Power Requirements:	100 VAC – 240 VAC, 50 – 60 Hz Universal Supply
Output Voltage:	12 VDC
Current:	4A
DC Connector:	5.5 mm x 2.5 mm barrel with locking ring
Line Cord:	User-replaceable IEC
Operating Temperature [extended ambient temperature]:	0 - 40 °C 32 - 104 °F

### Physical Properties (packaged product)

Height:	6.1 in / 155 mm
Depth:	18.9 in / 480 mm
Width:	18.1 in / 460 mm
Weight:	12.8 lb / 5.8 kg

### Physical Properties (product)

Height (Front):	1.6 in / 40 mm
Height (Rear):	3.7 in / 95 mm
Depth:	15.4 in / 391 mm
Width:	11.5 in / 291 mm
Weight:	7.9 lb / 3.6 kg
Rack:	Nine Rack Spaces [Needs an additional space or two above to allow for connections]

### Options

DL1608 Rackmount Kit:	P/N 2036840
DL1608 Mixer Bag:	P/N 2036809-16
DL1608 Mixer Cover:	P/N 2036809-17

### Ordering Information

<b>30-Pin Connector DL1608 Digital Live Sound Mixer with iPad Control</b>	
US:	P/N 2037372-00
EU:	P/N 2037372-01
CN:	P/N 2037372-05
BZ (~120V):	P/N 2037372-06

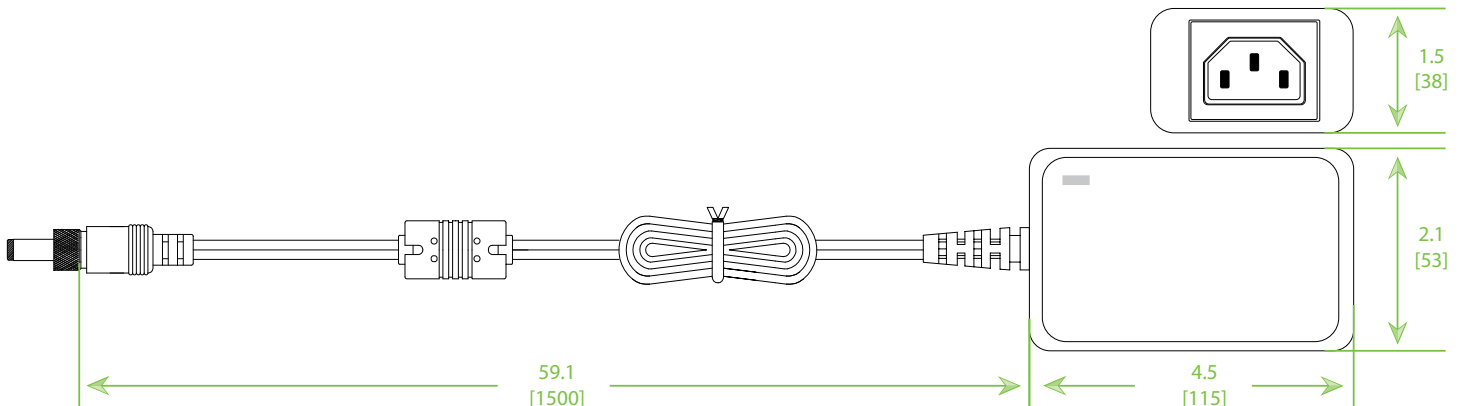
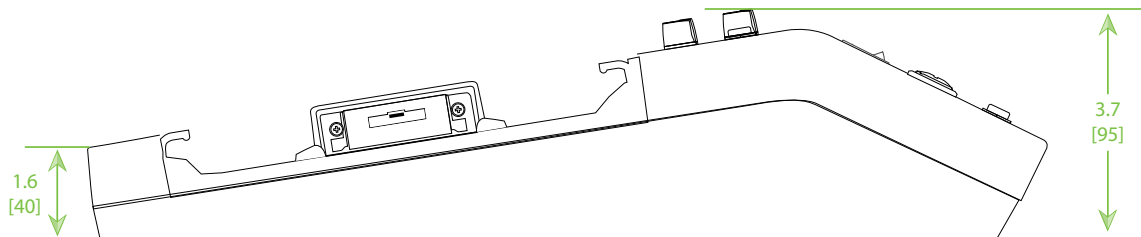
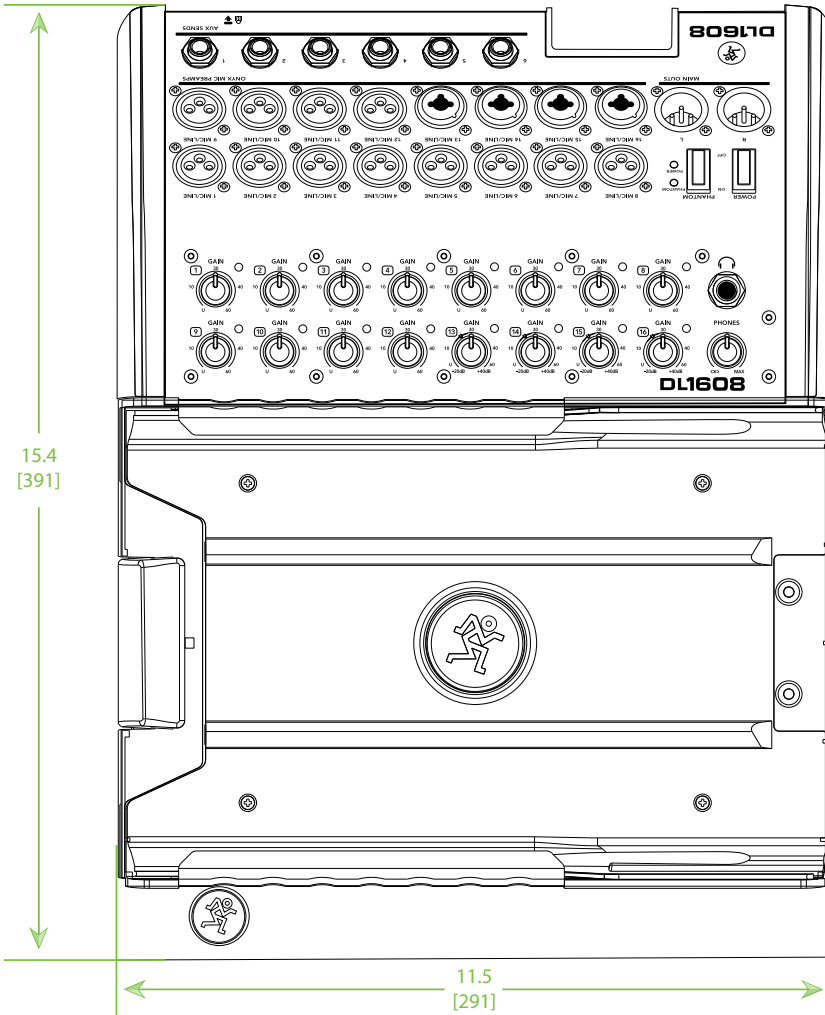
<b>Lightning Connector DL1608 Digital Live Sound Mixer with iPad Control</b>	
US:	P/N 2042505-00
EU:	P/N 2044387-01
UK:	P/N 2044387-03
CN:	P/N 2044387-05
BZ (~120V):	P/N 2044387-06

## DL1608 DIMENSIONS

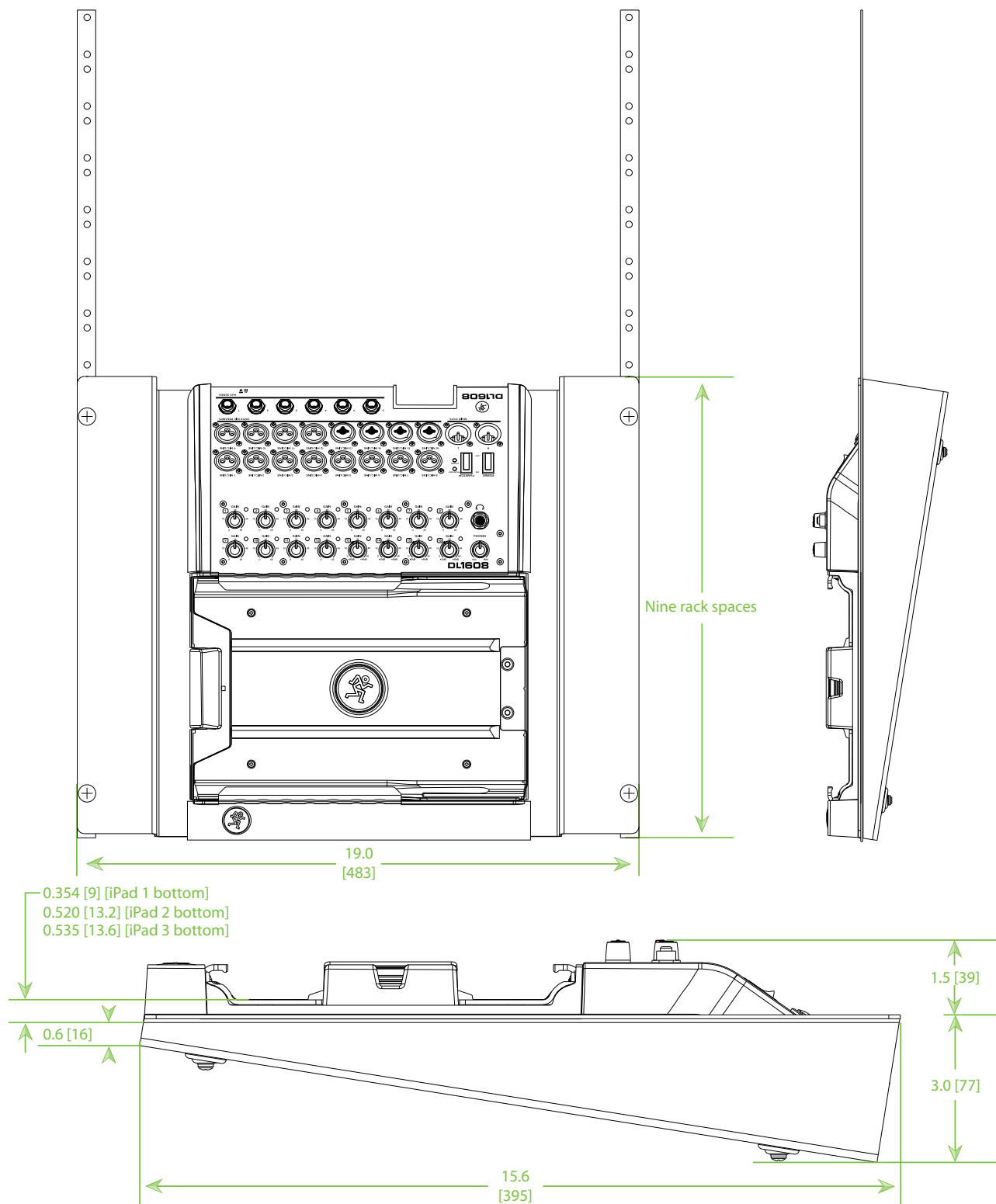
**NOTES:**

- 1. WEIGHT APPROX. 7.9 lb [3.6 kg].
- 2. SHIPPING WEIGHT APPROX. 12.8 lb [5.8 kg].

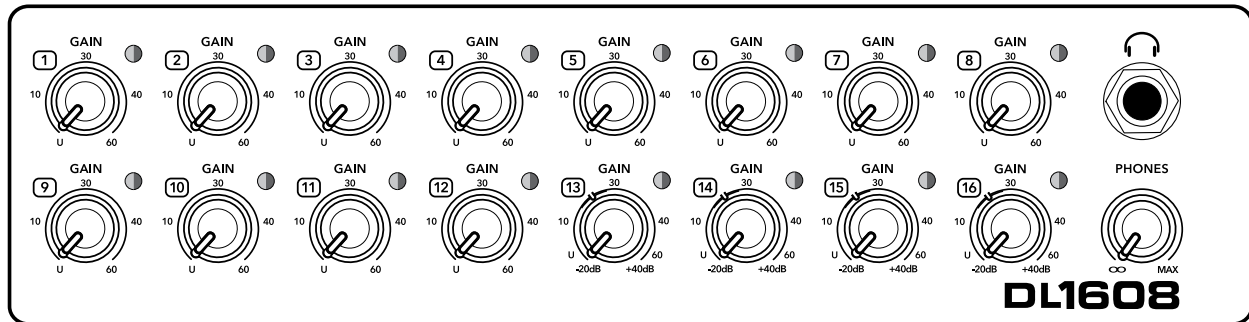
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES DUAL [MM] DIMENSIONS FOR REF ONLY



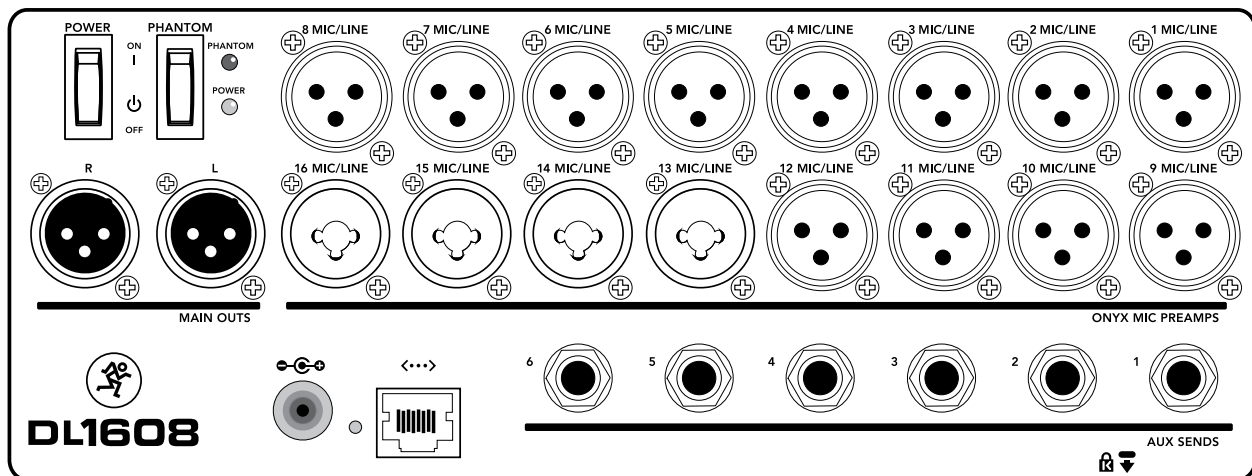
## DL1608 DIMENSIONS CONTINUED...



## DL1608 FRONT PANEL



## DL1608 REAR PANEL



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“Made for iPad” means that an electronic accessory has been designed to connect specifically to iPad and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPad may affect wireless performance.

LOUD Technologies Inc. is always striving to improve our products by incorporating new and improved materials, components, and manufacturing methods. Therefore, we reserve the right to change these specifications at any time without notice.

Electronic files for this product are available at:

[www.mackie.com](http://www.mackie.com)

Specification Sheet	DL1608_SS.PDF
Reference Guide	DLSeries_RG.PDF
Quick Start Guide	DLSeries_QS.PDF



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