



## 1604VLZ4

A legend in compact mixer design, the 1604VLZ4 now combines the proven performance of Onyx preamps with the no-compromise high-headroom/low-noise design that has made the 1604 an industry mainstay.

All 16 channels feature an Onyx mic pre, line input and insert in a compact 4-bus design built for application flexibility and professional performance. Plus, it is truly “Built-Like-A-Tank” with a ridiculously rugged solid-steel chassis that includes high-contrast controls for ultimate tactile control.

Found in countless professional broadcast and post facilities and easily the most proven band-friendly analog mixer ever, the 1604 stands alone in the world of compact mixing.

### APPLICATIONS:

Live sound mixing, houses of worship, clubs, gymnasiums, banquet halls, conference rooms, boardrooms, multitrack studio and field recording, video post-production, multimedia applications, broadcast and many, many more.



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### FEATURES:

- 16-channel mixer featuring our signature high-headroom, low-noise design
- 16 boutique-quality Onyx mic preamps
  - Ultra-wide 60 dB gain range
  - 128.5 dB dynamic range
  - +22 dBu line input handling
  - Extended frequency response
  - Distortion under 0.0007% [20 Hz – 50 kHz]
- Improved RF rejection, perfect for broadcast applications
- Phantom power for condenser mics
- 16 high-headroom line inputs with +4/–10 operation control
- 16 balanced inserts perfect for integrating outboard gear
- 3-band EQ with sweepable midrange
- 18 dB/oct 75 Hz low-cut filter on mic input channels
- Four aux sends, level, pan and solo and overload/mute LEDs on each channel
- Four stereo returns, eight direct outs and four group/bus outputs
- 60 mm long-wearing log-taper faders
- Control room / phones multi-input source matrix
- High-resolution 12-segment stereo meters
- Sealed rotary controls resist dust and grime
- “Built-Like-A-Tank” rugged steel chassis with powder-coat finish
- High-visibility, high-contrast controls deliver convenient “at-a-glance” visual feedback
- Rack-mountable design with three physical configurations via Rotopod accessory (sold separately)
- Multi-voltage power supply for worldwide use

### 1604VLZ4 SPECIFICATIONS

#### Main Mix Noise

(20 Hz–20 kHz bandwidth, 1/4" main out, channel gains @ unity, channel EQs flat, all channels assigned to main mix, odd channels panned left, even channels panned right.)

Main mix fader unity, channel faders down: -88.5 dBu

(92 dB Signal to Noise Ratio, ref +4 dBu)

Main mix fader @ unity, channel faders @ unity: -82.5 dBu

#### Total Harmonic Distortion (THD)

(1 kHz @ 35 dB gain, 20 Hz–20 kHz bandwidth)

Mic in to insert send <0.0007%

Mic in to main out <0.005%

#### Attenuation / Crosstalk

(1 kHz relative to 0 dBu, 20 Hz–20 kHz bandwidth, line in, 1/4" main out, gain @ unity)

Channel mute switch engaged -84 dBu

Channel gain knob down -84 dBu

#### Frequency Response

Mic input to main output (gain @ unity)

+0, -1 dB, 20 Hz to 50 kHz

+0, -3 dB, <10 Hz to >100 kHz

#### Equivalent Input Noise (EIN)

(Mic input to insert send out, max gain)

150 Ω termination -128.5 dBu  
20 Hz–20 kHz

#### Common Mode Rejection Ratio (CMRR)

1 kHz better than -70 dB

#### Maximum Levels

Mic in +22 dBu

All other inputs +22 dBu

Main mix TRS out +28 dBu

All other outputs +22 dBu

#### Impedances

Mic in 2.5 kΩ

Channel insert return 2.5 kΩ

All other inputs 10 kΩ or greater

Tape out 1.1 kΩ

All other outputs 120 Ω

#### EQ

High Shelving ±15 dB @ 12 kHz

Mid Peaking ±15 dB sweep 100 Hz – 8 kHz

Low Shelving ±15 dB @ 80 Hz

Low Cut Filter 18 dB/octave, -3 dB @ 75 Hz

#### AC Power Requirements

Power Consumption 50 watts

US, JP 100 – 120 VAC, 50 – 60 Hz

EU, UK, AU, CN 200 – 240 VAC, 50 – 60 Hz

Operating Temperature 0° – 40°C  
32° – 104°F

#### Fuse Rating

100-120V 1A slo blo, 5 x 20 mm

220-240V 0.5A slo blo, 5 x 20 mm

#### Physical Properties (product)

Height 17.0 in / 433 mm

Depth 5.1 in / 129 mm

Width 17.3 in / 440 mm

Weight 20.0 lb / 9.1 kg

#### Physical Properties (packaged product)

Height 9.3 in / 236 mm

Depth 20.7 in / 526 mm

Width 21.3 in / 541 mm

Weight 24.0 lb / 10.9 kg

#### Options

1604VLZ4 Mixer Bag P/N 093-004-02

1604VLZ4 Mixer Cover P/N 093-009-00

#### Ordering Information

1604VLZ4 16-Channel Compact 4-Bus Mixer, US P/N 2040765-00

1604VLZ4 16-Channel Compact 4-Bus Mixer, EU P/N 2040765-01

1604VLZ4 16-Channel Compact 4-Bus Mixer, AU P/N 2040765-04

1604VLZ4 16-Channel Compact 4-Bus Mixer, CN P/N 2040765-05

1604VLZ4 16-Channel Compact 4-Bus Mixer, BZ P/N 2040765-06

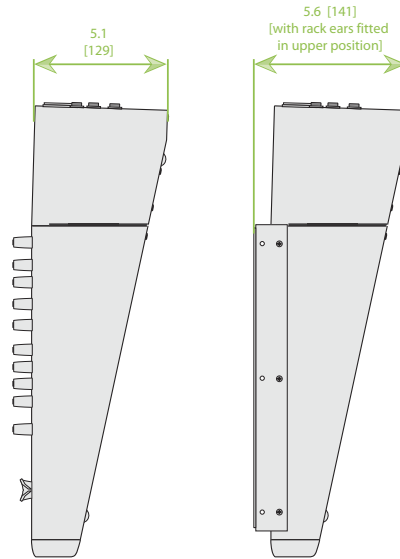
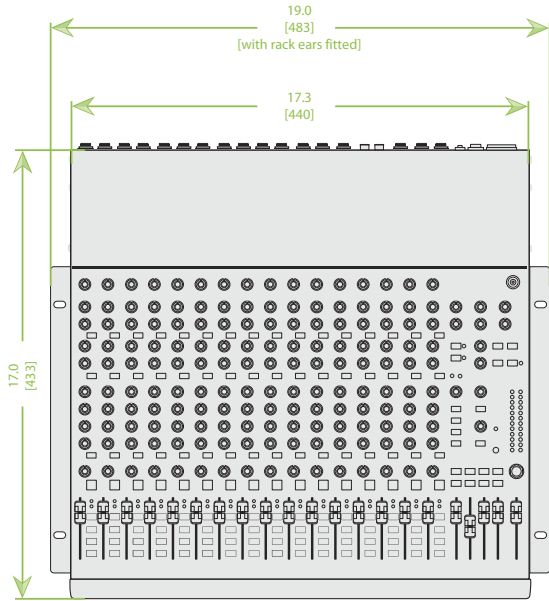


# MACKIE®

# 1604VLZ4

## 16-Channel 4-Bus Compact Mixer

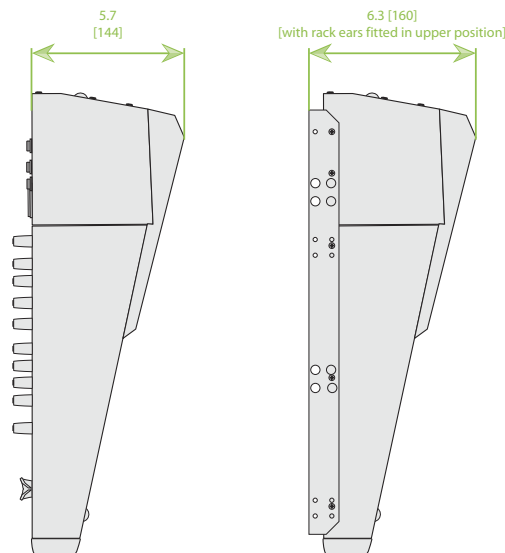
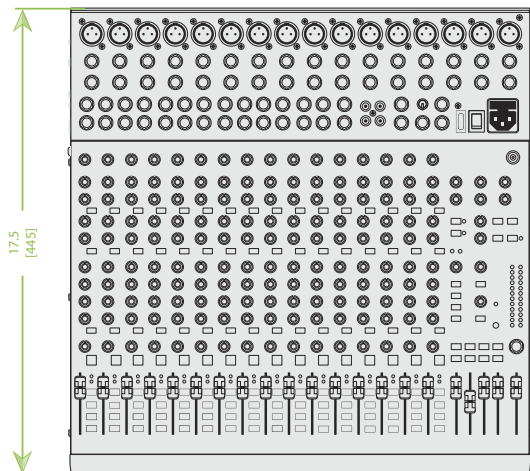
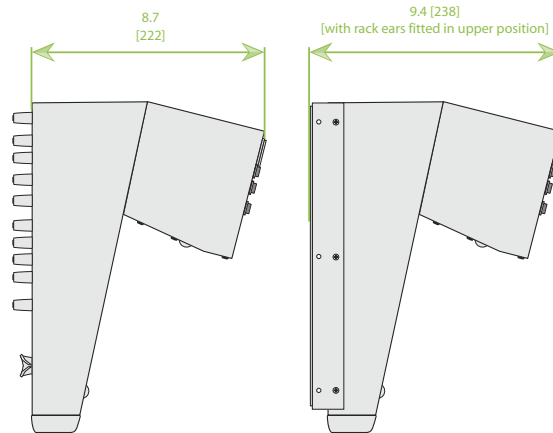
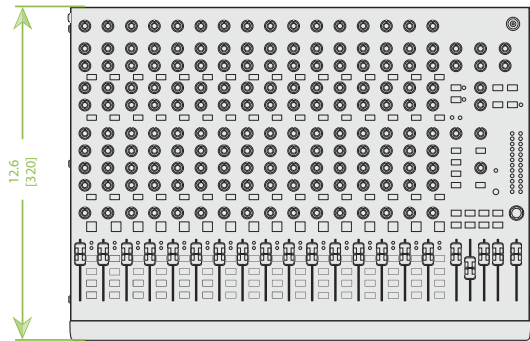
### 1604VLZ4 DIMENSIONS



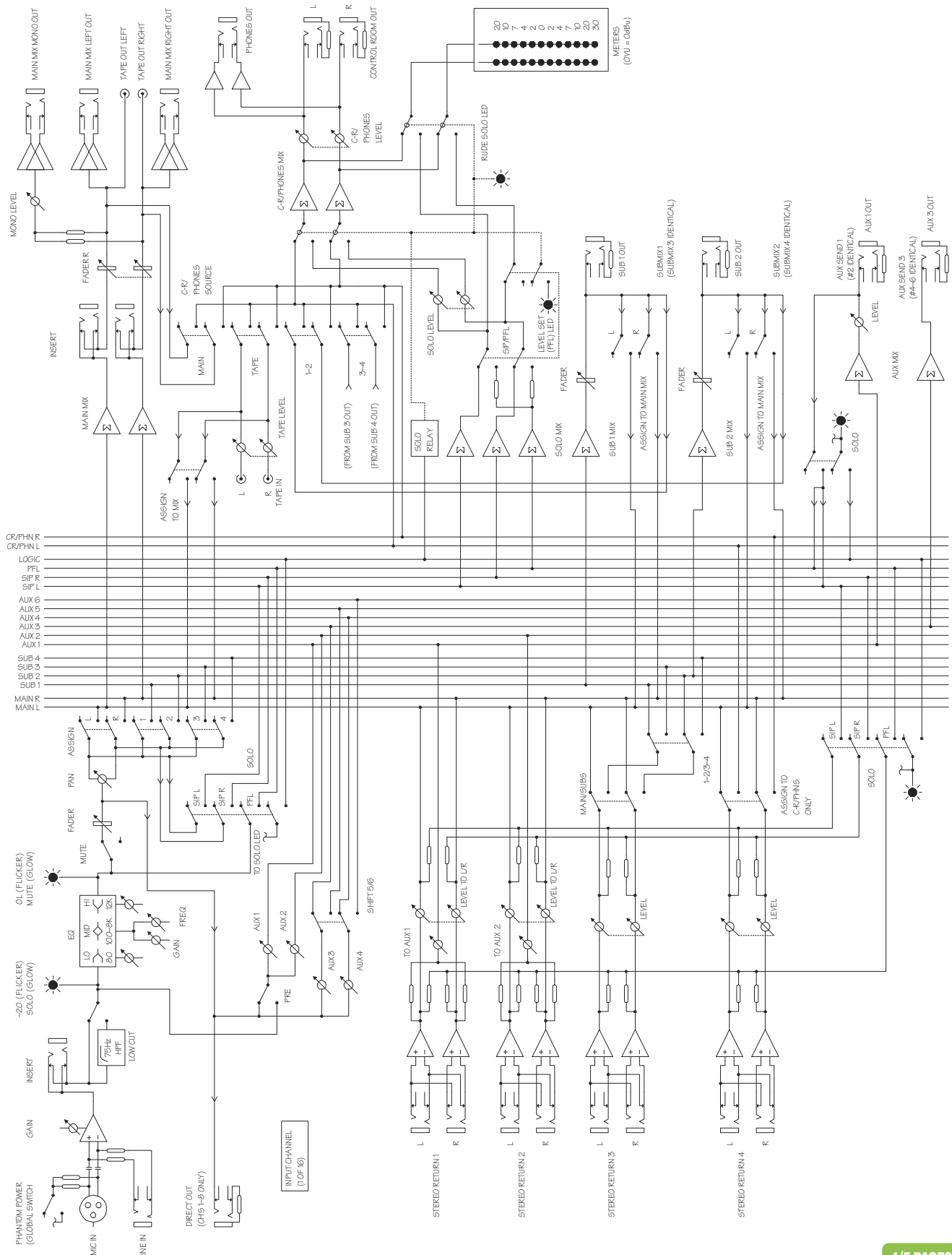
#### NOTES:

1. WEIGHT APPROX. 20.0 lb [9.1 kg]
2. SHIPPING WEIGHT APPROX. 24.0 lb [10.9 kg]

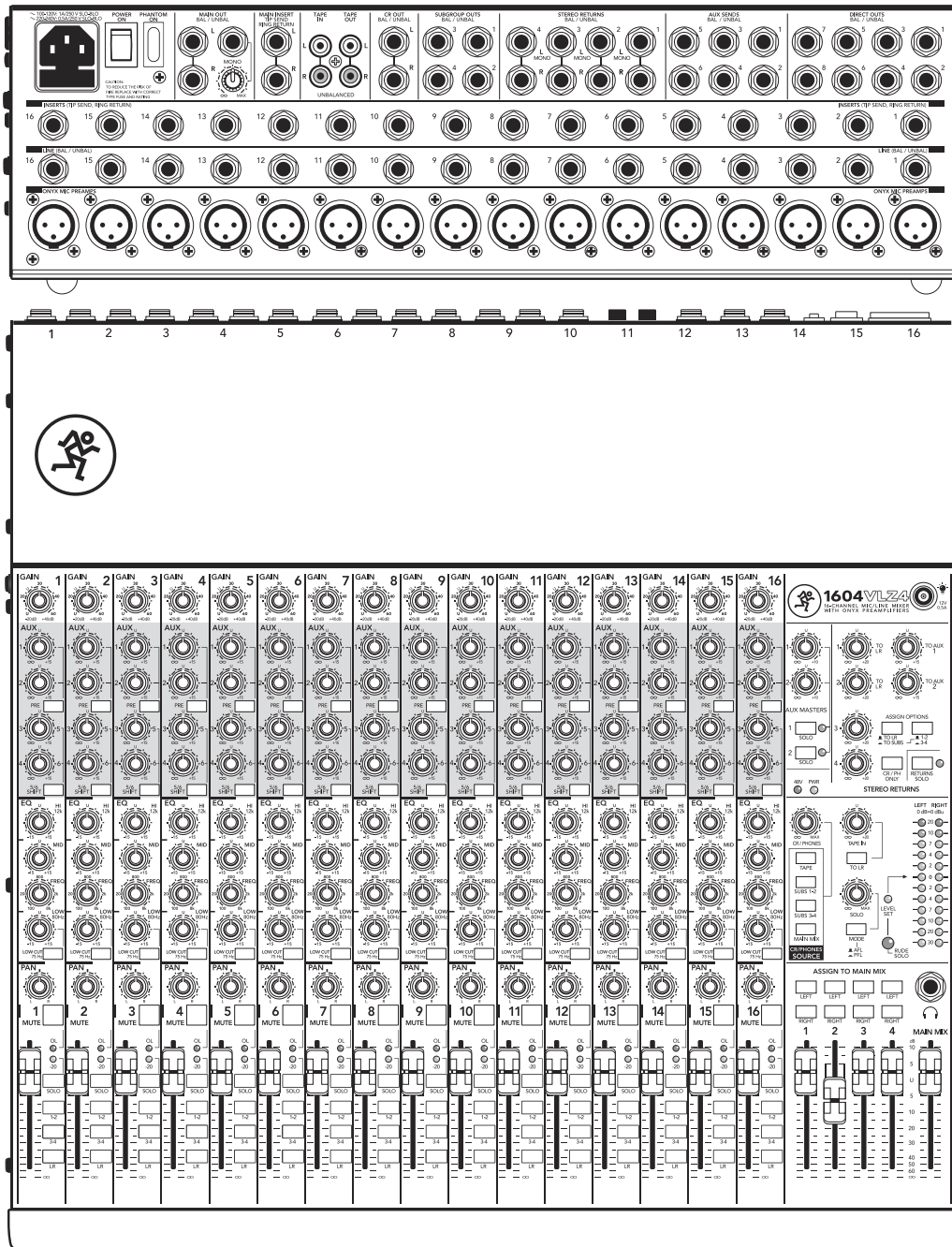
<p>THIRD ANGLE PROJECTION</p>	<p>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES DUAL [MM] DIMENSIONS FOR REF ONLY</p> <p>TOLERANCE IN INCHES LINEAR ± 0.13 in / ± 3.3 mm ANGLES ± 1°</p>
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### 1604VLZ4 BLOCK DIAGRAM



### 1604VLZ4 FRONT AND REAR PANEL



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.

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Electronic files for this product are available at:  
[www.mackie.com](http://www.mackie.com)

Specification Sheet

1604VLZ4\_SS.PDF

Owner's Manual

1604VLZ4\_OM.PDF



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