2404VLZ4 and 3204VLZ4

In pursuit of the ultimate “do-it-all” Live Sound Mixer, we threw in the kitchen sink and packed this bad boy with a full set of processors allowing you to travel “rack free” while still making professional sounding mixes.

For starters, we added not one, but TWO, of our patented Running Man FX processors (RMFX+™) featuring 24 “gig-ready” effects right into the board. This does not include useless effects such as “the warbler” or the “insanity delay”, but rather a suite of quickly accessible and usable reverbs, choruses and delays that make coloring your mix a breeze.

Additionally, both FX processors feature a tap delay, typically only available on an outboard rack. Delays may easily be sync’d with the song at the tap of a finger. And because we love flexible routing (hehe), the processed signal may be sent direct to the mains and monitors from the effects section or re-routed to the two stereo channels to bring them through the EQ and aux section, utilizing the 60mm fader to draw them into the mix.

But wait, there’s more! The VLZ4 4•Bus has eight (yes, eight!) single knob compressors to stop the dynamic signals from poking out of the mix. Four compressors are located on the last four mic inputs so that the most critical signals (such as vocals, snare drum, the occasional jaw harp or mountain goats) may be addressed. Plus, there are single knob compressors on each of the four subgroups so that grouped signals (such as a drum set or a choir of didgeridoos) may be blended together for paramount smoothness.

The VLZ4 4•Bus Series Mixers also feature a 4x2 USB recording and playback function. This means that up to four signals may be recorded simultaneously and a stereo mix returned to the mixer for playback.

Bottom line? You have an awesome mixer with VLZ4 sound quality, “built-like-a-tank” build quality and a recording and processing feature set that is unparalleled. Congratulations... and happy 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.
**FEATURES:**

- 4•Bus mixer featuring our signature high-headroom, low-noise design
- 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
- Dedicated inline channel compression for critical inputs
- High-headroom line inputs with dedicated inserts
- 3 dB EQ with sweepable midrange
- 18 dB/oct 100 Hz low-cut filter on mic input channels
- Level, pan, solo and overload/mute LEDs on each channel
- Four subgroups featuring dedicated inline compressors for total dynamic control
- Six aux sends with inserts, pre/post fader and internal/external FX send options
- Two stereo returns and four group outs with inserts
- Dual 32-bit RMFX+™ processors featuring 24 “Gig Ready” reverb delay echo and tap delay for live applications
- Integrated 4x2 24-bit USB interface
  - Stream subgroups or master L/R to your PC or Mac for recording
  - Use your favorite plug-in live via auxes 5/6
  - Convenient stereo return to mains for music playback or return to channel to implement EQ, auxes and more
- PFL/AFL solo modes
- 60 mm long-wearing log-taper faders
- 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
- Universal power supply for worldwide use

**VLZ4 4•Bus 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.)

<table>
<thead>
<tr>
<th>Description</th>
<th>2404VLZ4 Noise</th>
<th>3204VLZ4 Noise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main mix fader unity, channel faders down:</td>
<td>–87.0 dBu [–91.0 dB Signal to Noise Ratio, ref +4 dBu]</td>
<td>–84.5 dBu [–88.5 dB Signal to Noise Ratio, ref +4 dBu]</td>
</tr>
<tr>
<td>Main mix fader @ unity, channel faders @ unity:</td>
<td>–81.5 dBu</td>
<td>–80.0 dBu</td>
</tr>
</tbody>
</table>

**Total Harmonic Distortion (THD)**

(1 kHz @ 15 dB gain, 20 Hz–20 kHz bandwidth)

<table>
<thead>
<tr>
<th>Description</th>
<th>2404VLZ4 THD</th>
<th>3204VLZ4 THD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mic in to insert send</td>
<td>&lt;0.001%</td>
<td>&lt;0.001%</td>
</tr>
<tr>
<td>Mic in to main out</td>
<td>&lt;0.005%</td>
<td>&lt;0.005%</td>
</tr>
</tbody>
</table>

**Attenuation / Crosstalk**

(1 kHz relative to +10 dBu, 20 Hz–20 kHz bandwidth, mic in, 1/4” main out, gain @ unity)

<table>
<thead>
<tr>
<th>Description</th>
<th>2404VLZ4 Crosstalk</th>
<th>3204VLZ4 Crosstalk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channel mute switch engaged</td>
<td>–90 dBu</td>
<td>–90 dBu</td>
</tr>
<tr>
<td>Channel fader down</td>
<td>–88 dBu</td>
<td>–88 dBu</td>
</tr>
</tbody>
</table>

**Frequency Response**

(Mic input to main output (gain @ unity))

<table>
<thead>
<tr>
<th>Description</th>
<th>2404VLZ4 Response</th>
<th>3204VLZ4 Response</th>
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</thead>
<tbody>
<tr>
<td>+0, –1 dB, 20 Hz to 50 kHz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+0, –3 dB, &lt;10 Hz to &gt;100 kHz</td>
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</tbody>
</table>

**Equivalent Input Noise (EIN)**

(Mic input to insert send out, max gain)

<table>
<thead>
<tr>
<th>Description</th>
<th>2404VLZ4 EIN</th>
<th>3204VLZ4 EIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 Ω termination</td>
<td>–128.5 dBu</td>
<td>–128.5 dBu</td>
</tr>
</tbody>
</table>

| 20 Hz–20 kHz | | |
### Maximum Levels
- **Mic in**: +21 dBu
- **All other inputs**: +21 dBu
- **Main mix XLR out**: +27 dBu
- **All other outputs**: +21 dBu

### Impedances
- **Mic in**: 2.7 kΩ
- **Channel insert return**: 2.5 kΩ
- **All other inputs**: 10 kΩ or greater
- **Tape out**: <10 Ω
- **All other outputs**: 120 Ω

### 3-Band EQ (mono channels)
- **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 @ 100 Hz

### 4-Band EQ (stereo channels)
- **High Shelving**: ±15 dB @ 12 kHz
- **Hi Mid Peaking**: ±15 dB @ 2.5 kHz
- **Low Mid Peaking**: ±15 dB @ 400 Hz
- **Low Shelving**: ±15 dB @ 80 Hz

### USB
- **Format**: USB 1.1
- **I/O**: Stereo Input, 4 Channel Output
- **A/D/A**: 24 bit, 44.1 kHz / 48 kHz

### Physical Properties (product)
- **Front Height**: 1.8 in / 46.3 mm [Both]
- **Rear Height**: 6.0 in / 153 mm [Both]
- **Depth**: 19.1 in / 486 mm [Both]
- **Width**: 29.4 in / 748 mm [2404VLZ4]
  - 38.0 in / 964 mm [3204VLZ4]
- **Weight**: 31.0 lb / 14.1 kg [2404VLZ4]
  - 39.0 lb / 17.7 kg [3204VLZ4]

### Physical Properties (packaged product)
- **Height**: 10.6 in / 269 mm [Both]
- **Depth**: 23.0 in / 584 mm [Both]
- **Width**: 33.9 in / 861 mm [2404VLZ4]
  - 42.5 in / 1080 mm [3204VLZ4]
- **Weight**: 37.0 lb / 16.8 kg [2404VLZ4]
  - 44.0 lb / 20.0 kg [3204VLZ4]

### Options
- **2404VLZ4 Mixer Cover**
  - P/N 093-008-00
- **3204VLZ4 Mixer Cover**
  - P/N 093-008-01

### Ordering Information
- **2404VLZ4 24-Channel 4•Bus FX Mixer with USB**, US
  - P/N 2040769-00
- **2404VLZ4 24-Channel 4•Bus FX Mixer with USB**, EU
  - P/N 2040769-01
- **2404VLZ4 24-Channel 4•Bus FX Mixer with USB**, AU
  - P/N 2040769-04
- **2404VLZ4 24-Channel 4•Bus FX Mixer with USB**, CN
  - P/N 2040769-05
- **2404VLZ4 24-Channel 4•Bus FX Mixer with USB**, BZ
  - P/N 2040769-06
- **3204VLZ4 32-Channel 4•Bus FX Mixer with USB**, US
  - P/N 2040770-00
- **3204VLZ4 32-Channel 4•Bus FX Mixer with USB**, EU
  - P/N 2040770-01
- **3204VLZ4 32-Channel 4•Bus FX Mixer with USB**, AU
  - P/N 2040770-04
- **3204VLZ4 32-Channel 4•Bus FX Mixer with USB**, CN
  - P/N 2040770-05
- **3204VLZ4 32-Channel 4•Bus FX Mixer with USB**, BZ
  - P/N 2040770-06

### AC Power Requirements
- **Power Consumption**: 55 watts [2404VLZ4]
  - 65 watts [3204VLZ4]
- **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
VLZ4 4•Bus DIMENSIONS

3204VLZ4 NOTES:
1. WEIGHT APPROX. 39.0 lb [17.7 kg]
2. SHIPPING WEIGHT APPROX. 44.0 lb [20.0 kg]

2404VLZ4 NOTES:
1. WEIGHT APPROX. 31.0 lb [14.1 kg]
2. SHIPPING WEIGHT APPROX. 37.0 lb [16.8 kg]
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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