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.

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 eq
- 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.)

- ![Image](image)

#### 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
- 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
I604VLZ4 DIMENSIONS

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

TSC = THEORETICAL SHARP CORNER
DIMENSIONS ACROSS CENTERLINES TO BE SYMMETRICAL.
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