

Presonus StudioLive 16.0.2 Digital Recording Mixer Specifications

Microphone Preamp

- **Type:** XLR Female, Balanced
- **Frequency Response to Direct Output (at unity gain):** 20 Hz-40 kHz, 0 / -0.5 dBu
- **Frequency Response to Main Output (at unity gain):** 20 Hz-20 kHz, ± 0.5 dBu
- **Input Impedance (Balanced):** 1 k Ω
- **THD to Direct Output (1 kHz at unity gain) :** <0.005%, +4 dBu, 20 Hz-20 kHz, unity gain, unwt'd
- **THD to Main Output (1 kHz at unity gain):** 0.005%, +4 dBu, 20 Hz-20 kHz, unity gain, unwt'd
- **EIN to Direct Output:** +125 dB unwt'd, +130 dB A-wtd
- **S/N Ratio to Direct Output (Ref = +4 dB, 20 kHz BW, unity gain, A-wtd):** -97 dB
- **S/N Ratio to Main Output (Ref = +4 dB, 20 kHz BW, unity gain, A-wtd):** -94 dB
- **Common Mode Rejection Ratio (1 kHz at unity gain):** +65 dB
- **Gain Control Range (± 1 dB):** -16 dB to +67 dB
- **Maximum Input Level (unity gain):** +16 dBu
- **Phantom Power (± 2 VDC):** +48 VDC

Line Inputs, Balanced

- **Type:** 1/4" TRS Female, balanced mono
- **Frequency Response to Direct Outputs (at unity gain):** 10 Hz-40 kHz, 0 / -0.5 dBu
- **Frequency Response to Main Outputs (at unity gain):** 20 Hz-20 kHz, 0/-0.5 dBu
- **Input Impedance:** 10 k Ω
- **THD to Direct Output (1 kHz at unity gain) :** <0.0007%, +4 dBu, 20 Hz-20 kHz, unity gain, unwt'd
- **THD to Main Output (1 kHz at unity gain):** <0.005%, +4 dBu, 20 Hz-20 kHz, unity gain, unwt'd
- **S/N Ratio to Direct Output (Ref = +4 dBu, 20 kHz BW, unity gain, A-wtd):** -105 dB
- **S/N Ratio to Main Output (Ref = +4 dBu, 20 kHz BW, unity gain, A-wtd):** -94 dB
- **Gain Control Range (± 1 dB):** -20 dB to +20 dB
- **Maximum Input level (unity gain):** +22 dBu

Line Inputs, Unbalanced

- **Type:** RCA Female, unbalanced (stereo pair)
- **Maximum Input Level:** +22 dBu

Main Outputs

- **Type:** XLR Male, balanced (stereo pair); 1/4" TRS Female, balanced (stereo pair)
- **Rated Output Level:** +24 dBu
- **Output Impedance:** 100 Ω

Aux Outputs

- **Type:** 1/4" TRS Female, balanced (mono)
- **Rated Output Level:** +18 dBu
- **Output Impedance:** 100 Ω

Monitor Outputs

- **Type:** 1/4" TRS Female, balanced (stereo pair)
- **Rated Output Level z:** +18 dBu
- **Output Impedance:** 100 Ω

System Crosstalk

- **Input to Output (Ref = +4 dBu, 20 Hz-20 kHz, unwt'd):** -90 dBu
- **Adjacent Channels (Ref = +4 dBu, 20 Hz-20 kHz, unwt'd):** -87 dBu

Noise Gate (Expander)

- **Threshold Range:** -84 dB to 0 dB
- **Attack Time:** Adaptive (0.2 - 2.5 ms)
- **Release Time:** 70 ms
- **Expander Attenuation Range:** 2:1

Compressor

- **Threshold Range:** -56 dB to 0 dB
- **Ratio:** 1:1 to 14:1
- **Response Time (Attack/Release):** 0.2 ms / 1.0s ("Tight") to 180 ms / 1.0s ("Smooth")
- **Auto Attack and Release:** Attack = 10 ms, Release = 150 ms
- **Curve Types:** hard and soft knee

EQ

- **Type:** 2nd-order shelving filter (Q = 0.55)
- **Low (Low-pass or Bandpass):** 36 to 465 Hz, ± 15 dB
- **Mid:** 260 Hz to 3.5 kHz, ± 15 dB
- **High (High-pass or Bandpass):** 1.4 kHz to 18 kHz, ± 15 dB

Digital Audio

- **ADC Dynamic Range (A-wtd, 48 kHz):** 118 dB
- **DAC Dynamic Range (A-wtd, 48 kHz):** 118 dB
- **FireWire:** S400, 400 Mb/s
- **Internal Processing:** 32-bit, floating point
- **Sampling Rate:** 44.1, 48 kHz
- **A/D/A Bit Depth:** 24 bits
- **Reference Level for 0 dBFS:** -18 dBu

Clock

- **Jitter:** <20 ps rms (20 Hz - 20 kHz)
- **Jitter Attenuation :** >60 dB (1 ns in \approx 1 ps out)

Power

- **Connector:** IEC
- **Input-Voltage Range:** 100 to 240 VAC (factory-configured for country of destination)
- **Power Requirements (continuous):** 100W

Physical Specs

- **Length:** 15.56 inches (397 mm)
- **Width:** 16 inches (406 mm)
- **Maximum Height:** 5.5 inches (140 mm)
- **Weight:** 20 lbs.