

Specifications

Input Sockets

Mic Inputs 1-2: XLR
Line Inputs 1-4: 6,3mm TRS
Instrument Inputs 3-4: 6,3mm TRS
Source 1 Input: 6,3mm TRS
Source 2 Input: RCA
Source 3 Input: 3,5mm TRS
Midi Input: DIN (5 pins)
SPDIF Input: RCA

Output Sockets

Speaker A Output: XLR
Speaker B Output: 6,3mm TRS
Midi Output: DIN (5 pins)
SPDIF Output: coax
Headphone Outputs: 6,3mm TRS

Input Impedances

Mic Preamps: 10kOhm
Line Inputs: 10kOhm unbalanced, 20kOhm balanced
Instrument Inputs: 1,1 Mohm
Source 1 Input: 10kOhm unbalanced, 20kOhm balanced
Source 2 and 3 Input: 10kOhm
SPDIF Input: 75 Ohm

Output Impedances

Speaker A and B Outputs: 75 Ohm unbalanced, 150 Ohm balanced
Headphone Outputs: 33 Ohm

Maximum Input Levels

Mic Inputs: +14,5 dBu (Gain fully left)
Line Inputs: +22,5 dBu
Instrument Inputs: +24,0 dBu (Gain fully left)
Source 1, 2 and 3 Inputs: +22,5 dBu

Maximum Output Levels

Speaker A and B Outputs: +22,5 dBu

Volume Control Range

-∞ to +7 dB

Values of LED Indicators

Signal (SIG): -37dBFS (-22dBu)
-6dB: -6dBFS (+9dBu)
Overload = OVL: 0dBFS (+15dBu)

Mic Preamplifier (balanced, XLR)

Gain Control: +8dB - +60dB
Frequency Response: 10Hz - >200kHz
Noise (unweighted, 30dB gain, input termination 150 Ohm): -90 dBu
Equivalent Input Noise: -128 dBu
Common Mode Rejection Ratio: < -70 dBu
THD+N Ratio@1kHz (30dB gain, input termination 150 Ohm): 0,003 %
High Pass Filter: fg = 80Hz, 6dB/Oct.
Phantom Power: 48Volt

Instrument Input (unbalanced, 6,3mm TRS)

Gain Control: -6dB - +31dB
Frequency Response: 10Hz - >200kHz
Noise (unweighted, unity gain, input termination 100 kOhm): -85 dBu
THD+N Ratio@1kHz (unity gain, input termination 100 kOhm): 0,005 %

Line Input (balanced, 6,3mm TRS)

Frequency Response: 10Hz - 200kHz

Noise (unweighted, unity gain, input termination 600 Ohm): -95 dBu

Common Mode Rejection ratio: > -60 dBu

THD+N Ratio@1kHz (unity gain, input termination 600 Ohm): 0,002 %

Source 1 Input (balanced, 6,3mm TRS)

Frequency Response: 10Hz - 200kHz

Noise (unweighted, unity gain, input termination 600 Ohm): -95 dBu

Common Mode Rejection ratio: > -60 dBu

THD+N Ratio@1kHz (unity gain, input termination 600 Ohm): 0,002%

Source 2 Input (unbalanced, RCA)

Frequency Response: 10Hz - 200kHz

Noise (unweighted, unity gain, input termination 600 Ohm): -90 dBu

Noise (unweighted, -10dBV, input termination 600 Ohm): -85 dBu

THD+N Ratio@1kHz (unity gain, input termination 600 Ohm): 0,003 %

THD+N Ratio@1kHz (-10dBV, input termination 600 Ohm): 0,003 %

Source 3 Input (unbalanced, 3,5mm TRS)

Frequency Response: 10Hz - 200kHz

Noise (unweighted, unity gain, input termination 600 Ohm): -88 dBu

Noise (unweighted, +15dB gain, input termination 600 Ohm): -76 dBu

THD+N Ratio@1kHz (unity gain, input termination 600 Ohm): 0,003 %

THD+N Ratio@1kHz (+15dB gain, input termination 600 Ohm): 0,005 %

Headphone Outputs (stereo, 6,3mm TRS)

Frequency Response: 10Hz - 200kHz

Power@0dBu: 47 Ohm load: 13 mW/300 Ohm load: 1,7 mW/600 Ohm load: 1,0 mW

Power max: 47 Ohm load: 670 mW/300 Ohm load: 265 mW/600 Ohm load: 150 mW

THD+N Ratio@1kHz (Power@0dBu): 47 Ohm: 0,0026 %/300 Ohm: 0,002 %/600 Ohm: 0,002 %

AD Conversion

Sample Rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz

Dynamic Range (Line Input > AD Converter > DAW > SPDIF Output):

44.1kHz: 110dB (unweighted), 48kHz: 110dB (unweighted), 96kHz: 107dB (unweighted)

THD+N ratio @ 1kHz (-1dBFS): 44.1kHz: 0,01 %; 48kHz: 0,01 %; 96kHz: 0,01 %

0dBFS = +15 dBu

DA Conversion

Dynamic Range (SPDIF Input > DAW > DA Converter > Speaker Output):

44,1kHz: 106dB (unweighted), 48kHz: 106dB (unweighted), 96kHz: 104dB (unweighted)

THD+N ratio @ 1kHz (-1dBFS): 44,1kHz: 0,006 %; 48kHz: 0,006 %; 96kHz: 0,007 %

Power Supply

External Power Supply, Input 100–240V AC/50–60 Hz; Output 12V DC/1,5A

Internal Power Supplies

Audio: +/-17V, Digital: +5V and +3,3V

Power Consumption

16,8 Watt

Dimensions and Weight

Housing (H x W x D in mm): 60 x 330 x 207 (BxT=bottom panel w/o sockets, H w/o controls)

Weight: 2,7 kg

Notes: 0dBu = 0,775 V. Specifications are subject to change without notice.

Specifications USB-Interface

Hardware

- USB2 audio/MIDI system
- High-performance, 32 bit microcontroller
- 24 bit audio processing
- 6 input and 6 output channels up to 192 kHz
- Sample rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz or 192kHz
- Fixed master clock for lowest jitter
- True 1:1 audio, no sample rate conversion or clock recovery
- SPDIF and MIDI I/Os

Software

- Windows XP/Vista/7/8 (32 and 64 bit), Mac OS X 10.4 or higher
- Multi-application mode, simultaneous ASIO and/or WDM playback
- Low-latency Mac OS X (ASIO-like) HAL plug-in driver
- Low-latency Windows ASIO and WDM driver
- Driver feedback synchronization to hardware clock
- ASIO control panel for Windows and Mac
- USB Audio Class 2.0 compliance (asynchronous mode)

Note: Firmware updates via USB.