



Mic/Inst
Input

Mic/Inst
Input

Headphone
Outputs



Power Input

FireWire
connections

MIDI
In/Out

Digital
S/PDIF

Line Outputs

Line Inputs

Digital Inputs and Outputs

Connector (S/PDIF)	RCA Phono, 75 Ohm
Formats (S/PDIF)	S/PDIF (24 bit), IEC 958, Pro-status bits
Firewire	IEEE 1394a, S400, IEC 61883
Digital IO Engine	TC DICE II, handling all IO formats

Clock and Jitter

Internal/External Sample Rates	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz and 192 kHz / 43 to 193 kHz, jitter rejection at all rates
Jitter Rejection Engine	JET™ technology in TC DICE II
Jitter Rejection Filter	<-3 dB @ 10 Hz, < -100 dB @ 600 Hz
DIO Interface Jitter	< 1 ns peak, BW: 700 Hz to 100 kHz
AD/DA Conversion Jitter	< 42 ps RMS, BW: 100 Hz to 40 kHz
Digital Output Phase	< 0.5 % of sample period
(stand alone and across network)	
Input Slip Sample Tolerance (all DIs)	+50 % to -50 % of sample period
Processing Delay DIO @ 96/48 kHz	0.15/0.3 ms
Frequency Response DIO	DC to 23.9 kHz ± 0.01 dB @ 48 kHz

Line Inputs Channel 1, 2, 3, 4

(Line 1+2 recordable + AUX 1+2)

Connectors	1/4" Phone Jack (balanced)
Impedance, Bal/Unbal	20 kOhm/25 kOhm
Full Scale Input Level @ 0 dBFS	+13 dBu
THD+N	< -100 dB (0.001%) @ 1 kHz, -1 dBFS
SNR	>111 dB(A), >108 dB, 20 Hz to 20 kHz
Freq. Response	+0/-0.5 dB, 20 Hz to 20 kHz
Crosstalk	< -100 dB, 20 Hz to 20 kHz

ADC

A to D Conversion	24 bit, 128 x oversampling bitstream
A to D Delay	0.68 ms / 0.63 ms @ 44.1 kHz / 48 kHz

Mic. Inputs Channel 1, 2

Connectors	Neutrik Combo (XLR)
Sensitivity Full Range Pad on/off	-10/+10 dBu <> -52/ -32 dBu
Total Preamp gain	62 dB
Impedance, Pad on/off	2000/1300 ohm
NF @ Rg = 150 ohm, Max. Gain	< 4 dB
EIN @ Rg = 150 ohm, Max. Gain	< -127 dBu
THD+N, Min. Gain	< -100 dB (0.001%) @ 1 kHz, -1 dBFS
SNR, Min. Gain	>109 dB(A), >106 dB, 20 Hz to 20 kHz

Inst. Inputs Ch. 1, 2

Connectors	Neutrik Combo (1/4" Phone Jack)
Sensitivity Range	-25 dBu <> +17 dBu
Total Preamp gain	42 dB
Impedance	1 Mohm
THD+N, Min. Gain	< -100 dB (0.001%) @ 1 kHz, -1 dBFS
SNR, Min. Gain	>107 dB(A), >104 dB, 20 Hz to 20 kHz
Crosstalk	< -100 dB, 20 Hz to 20 kHz

Monitor/Line Outputs Ch. 1, 2

Connectors	1/4" Phone Jack. Ground sensing design.
Impedance	100 Ohm
Level Range (Ch. 1,2)	-40 dBu <> +12 dBu (analog gain scale)
Fixed Full Scale Range	+12 dBu
(Ch. 3,4)	< -94 dB (0.002%) @ 1 kHz, -1 dBFS
THD+N	>111 dB(A), >108 dB, 20 Hz to 20 kHz
SNR	+0/-0.1 dB, 20 Hz to 20 kHz
Freq. Response	< -100 dB, 20 Hz to 20 kHz
Crosstalk	

DAC

D to A Conversion	24 bit, 128 x oversampling bitstream
D to A Delay	0.70 ms / 0.65 ms @ 44.1 kHz / 48 kHz

Headphones Output Ch. 1, 2

Connectors	2 x 1/4" Phone Jack (Stereo)
Impedance	80 Ohm
Gain Level Range	-80 dBu <> +16 dBu @ 300 ohms (analog gain scale)
THD+N	< -94 dB (0.002%) @ 1 kHz, -1 dBFS
SNR	>103 dB(A), > 100 dB, 20 Hz to 20 kHz
Freq. Response	+0/-0.1 dB, 20 Hz to 20 kHz
Crosstalk	< -100 dB, 20 Hz to 20 kHz
Power @ 40 Ohm Load	200mW
Power @ 600 Ohm Load	93mW

EMC

Complies With	EN 55103-1 and EN 55103-2, FCC part 15, Class B, CISPR 22, Class B
---------------	--

Safety

Certified To	IEC 60065, EN 60065, UL6500 and CSA E60065 CSA FILE #LR108093
--------------	---

Environment

Operating Temperature	32° F to 122° F (0° C to 50° C)
Storage Temperature	-22° F to 167° F (-30° C to 70° C)
Humidity	Max. 90 % non-condensing

Control Interface

MIDI	In/Out: 5 Pin DIN
Firewire (DAW)	IEEE 1394a, IEC 61883

General

Dimensions	9.5" x 1.75" x 9" (241.5 x 44 x 226 mm)
Weight	3.3 lb. (1.5 kg)
Finish	Acrylic front panel. Plated and coated steel back plate. Anodized aluminum cover.
PPM Meter (Ch. 1,2)	3 LED's pr. channel
Power Supply (Included)	12V DC, Adapter for 90 to 240 VAC, 50 to 60 Hz (auto select)
Firewire Bus Powered	8 to 30 VDC
Power Consumption	<14 W
Warranty Parts and labor	1 year