

ASCENDO

ELEVATE YOUR SOUND

DSP4-10K2



DATA SHEET

AUDIO

Table 1. **Inputs**

Channels	4
Signal-to-Noise Ratio	111 dB

Table 1. **Outputs**

Output Power	230 V @ 2 Ω	230 V @ 4 Ω	230 V @ 8 Ω
* IEC filtered pink noise signal (40Hz-5kHz, 12dB crest factor), 230V AC mains.	4 x 2500 W	4 x 2500 W	4 x 1250 W
Bridged: Output Power	230 V @ 4 Ω		230 V @ 8 Ω
	2 x 5000 W (5 kW)		2 x 5000 W (5 kW)
Max Output Voltage	150 V _{peak}		
Max Output Current	50 A _{peak}		
Frequency response	20 Hz – 20 kHz		
Protection	Soft-start, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™ and PCM™.		
Total Harmonic Distortion	<0.05 %		
Crosstalk 20Hz – 1kHz	>70 dB		
Voltage Gain	26 dB to 44 dB (1 dB Step)		

AC MAINS POWER

Operating Voltage (50Hz-60Hz)	90 - 265 VAC	
Power On Idling (@230V)	0.7 A / 85 W	
1/8 Rated Power	230 VAC @ 4 Ω	130 VAC @ 4 Ω
	7.3 A / 1634 W	14 A / 1634 W

DSP

Architecture	64-bit double-precision DSP at 96kHz
Inputs (Channels)	4x analog inputs + optional digital inputs (AES3, Dante™, AES67)
Level Control	Gain, Mute, Phase Inversion per input
User-Strip Filter	16 input EQ filters per channel: Parametric, Shelving, LP, HP, Bandpass, All-pass, Notch
Filter types (Output)	
IIR EQ section (4x)	Crossover Filters: (up to 48 dB / oct, Butterw./LR/Bessel), 12 filters per channel (Param., Shel, LP, HP, BP, SB, AP)
FIR EQ section (4x)	Crossover Filters: (up to 48 dB / oct, Butterw./LR/Bessel), 20 filters per channel (Param., Shel, LP, HP, BP, SB, AP) or Custrom. Up to 1000 taps
High-/Low-pass types	Butterworth, Linkwitz-Riley, Bessel; up to 48dB/octave
Input Delay	Up to 333 ms (≈114 m) per input channel
Output Delay	0 to 31 meters (90ms) per channel
Converters	24-bit / 96 kHz AD/DA
Process Latency	0.85 ms minimum

CONNECTORS



Figure 1. DSP4-10K2 MKII connectors

Control input connectors	USB 2.0 Type B port, Two ports Ethernet switch for daisy chain connection
Audio signal input connectors	Neutrik XLR - Dante AES67 (Dante, AES67 and AES3 input versions)
Speaker connector	Neutrik® speakON®
AC mains	Fixed mains cable

THERMAL

Thermal dissipation	Temperature controlled, front to back cooling fan
1/8 rated power @ 4Ω	1310 BTU/h

USER INTERFACES

Hardware	Large IPS display - capacitive touch panel user interface, Potentiometers, Power button
Software	RAM Audio OCS™ (Optimized Control Suite)

DIMENSIONS / WEIGHT

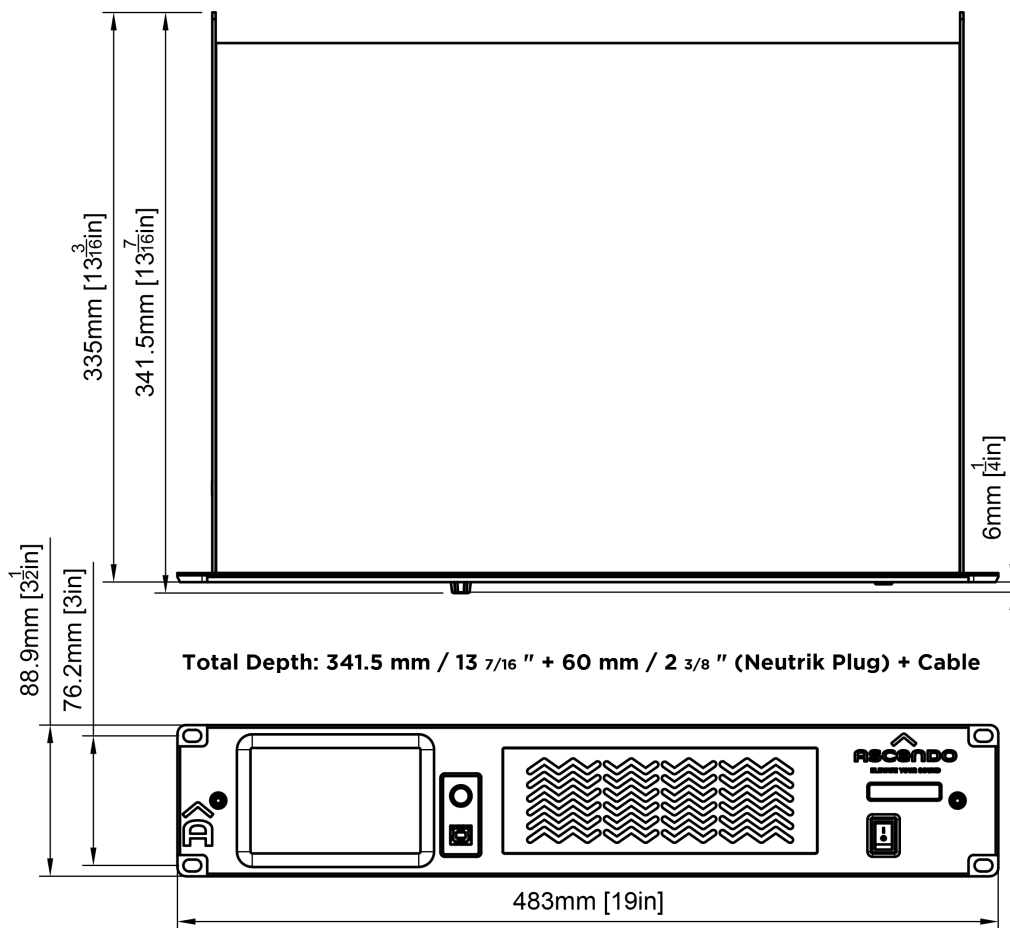


Figure 2. DSP4-10K2 MKII dimensions

Dimensions (W/H/D) mm	483 89 355 (2RU)
Dimensions (W/H/D) Inch	19 3 1/2 13 3/16 (2RU)
Packing Dimensions W/H/D) mm	650 270 600
Packing Dimensions (W/H/D) inch	25 9/16 10 5/8 23 5/8
Weight	18.74 lbs 8.5 kg
Gross Weight	27.56 lbs 12.5 kg



CE



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