

SpectraDAQ-200 is a precision data acquisition sound card optimized for test and measurement applications. Designed specifically for use with SpectraPLUS it features fixed gain steps for easy calibration to the transducer sensitivity, IEPE power for accelerometers or microphones, and standard BNC connectors. It is housed in a rugged metal case and powered by USB 3.0.

Excellent Performance

The A/D and D/A converters are state of the art and provide incredible dynamic range and extremely low distortion.

Direct Calibration

The input channels provide 4 fixed gain steps. This allows SpectraPLUS to be calibrated directly to volts, millivolts or to the transducer sensitivity providing quick and accurate calibration for microphones, accelerometers and other sensors.



IEPE Power

Accelerometers, microphones and hydrophones often use IEPE powered sensors; IEPE power is a 4ma constant current supply that is built-in to the input circuitry of the module. It is enabled via the SpectraPLUS software. IEPE is also known as ICP (trademarked by PCB electronics).

Sampling Rate Up to 192kHz Sampling Precision 24 bit Input Channels and connectors 2 input channels, 2 BNC (single ended) Input Impedance 1 Meg Ohm IEPE power (software selectable) 4 ma constant current Frequency Response – Inputs 4 Hz to 92 kHz (-1dB) Frequency Response – Outputs 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) Low Frequency cutoff 2 Hz (-3dB) Total Harmonic Distortion (THD) < 0.002% (0.5 Vrms signal level, 2.5 V gain) Spurious Free Dynamic Range > 95 dB Noise Floor (terminated inputs) < -110 dBVrms Channel Separation > 90 dB Output Voltage +/-1.4 V (1 Vrms) Output Channels and connectors 2 output channels (1 BNC mono, 1 3.5 mm stereo jack) Digital I/O 3 Input, 3 Output (RJ45 connectors) Drivers (Vista/Win7/8/10, x32 and x64) MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output) PC Interface USB 3.0 (cable included) Operating Power USB 3.0 (650ma at 5V) Input voltage protection >+/-30 V Operating Temperature range 0 to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight 9 oz (250 grams) Warranty I year	Input Voltage Ranges (software selectable)	+/-10V, +/-2.5, +/-625mV, +/-156mV
Input Channels and connectors Input Impedance IEPE power (software selectable) Frequency Response – Inputs Frequency Response – Outputs Low Frequency cutoff Total Harmonic Distortion (THD) Spurious Free Dynamic Range Noise Floor (terminated inputs) Channel Separation Output Voltage Output Channels and connectors Digital I/O Drivers (Vista/Win7/8/10, x32 and x64) PC Interface Operating Power Input voltage rotection Operating Temperature range Other (Software selectable) A Hz to 92 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 4 Hz to 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 29 kHz (-1dB) 4 Hz to 29 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 5 90 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 4 Hz to 92 kHz (-1dB) 5 90 kHz (-1dB) 5 90 kHz (-1dB) 5 90 kHz (-1dB) 6 vell (-	Sampling Rate	Up to 192kHz
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Frequency Response – Inputs Frequency Response - Outputs 4 Hz to 92 kHz (-1dB) Frequency Response - Outputs 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) Low Frequency cutoff 2 Hz (-3dB) Total Harmonic Distortion (THD) Spurious Free Dynamic Range > 95 dB Noise Floor (terminated inputs) Channel Separation Output Voltage Output Voltage +/-1.4 V (1 Vrms) Output Channels and connectors 2 output channels (1 BNC mono, 1 3.5 mm stereo jack) Digital I/O 3 Input, 3 Output (RJ45 connectors) Drivers (Vista/Win7/8/10, x32 and x64) MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output) PC Interface USB 3.0 (cable included) Operating Power USB 3.0 (650ma at 5V) Input voltage protection > +/-30 V Operating Temperature range O to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight	Input Impedance	1 Meg Ohm
Frequency Response - Outputs Low Frequency cutoff 2 Hz (-3dB) Total Harmonic Distortion (THD) Spurious Free Dynamic Range Noise Floor (terminated inputs) Channel Separation Output Voltage Output Channels and connectors Digital I/O Drivers (Vista/Win7/8/10, x32 and x64) PC Interface USB 3.0 (cable included) Operating Power Input voltage Temperature range Dimensions 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 2 Hz (-3dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 2 Hz (-2dB) 3 Hz (-3dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 2 Hz (-3dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 2 Hz (-3dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 25 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz (-1dB), 25 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz to 80 kHz (+/-4dB) 4 Hz to 22 kHz to 80 kHz (+/-4dB) 5 90 dB Output (Park) (-1dB), 25 vice (1dB), 25 vice (1dB	IEPE power (software selectable)	4ma constant current
Low Frequency cutoff Total Harmonic Distortion (THD) Spurious Free Dynamic Range > 95 dB Noise Floor (terminated inputs) Channel Separation Output Voltage Output Channels and connectors Digital I/O Drivers (Vista/Win7/8/10, x32 and x64) PC Interface Operating Power Input voltage protection Operating Temperature range Dimensions 2 Hz (-3dB) < 0.002% (0.5 Vrms signal level, 2.5 V gain) > 90 dB - 110 dBVrms - 110 dBV	Frequency Response – Inputs	4 Hz to 92 kHz (-1dB)
Total Harmonic Distortion (THD) < 0.002% (0.5 Vrms signal level, 2.5 V gain) Spurious Free Dynamic Range > 95 dB Noise Floor (terminated inputs) < -110 dBVrms Channel Separation > 90 dB Output Voltage +/-1.4 V (1 Vrms) Output Channels and connectors 2 output channels (1 BNC mono, 1 3.5 mm stereo jack) Digital I/O 3 Input, 3 Output (RJ45 connectors) Drivers (Vista/Win7/8/10, x32 and x64) MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output) PC Interface USB 3.0 (cable included) Operating Power USB 3.0 (650ma at 5V) Input voltage protection > +/-30 V Operating Temperature range 0 to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight	Frequency Response - Outputs	4 Hz to 22 kHz (-1dB), 22 kHz to 80 kHz (+/-4dB)
Spurious Free Dynamic Range> 95 dBNoise Floor (terminated inputs)< -110 dBVrms	Low Frequency cutoff	2 Hz (-3dB)
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Channel Separation> 90 dBOutput Voltage+/-1.4 V (1 Vrms)Output Channels and connectors2 output channels (1 BNC mono, 1 3.5 mm stereo jack)Digital I/O3 Input, 3 Output (RJ45 connectors)Drivers (Vista/Win7/8/10, x32 and x64)MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output)PC InterfaceUSB 3.0 (cable included)Operating PowerUSB 3.0 (650ma at 5V)Input voltage protection> +/-30 VOperating Temperature range0 to 50 CDimensions5.5 x 3 x 1 in (140 x 77 x 26 mm)Weight9 oz (250 grams)	Spurious Free Dynamic Range	> 95 dB
Output Voltage +/-1.4 V (1 Vrms) Output Channels and connectors 2 output channels (1 BNC mono, 1 3.5 mm stereo jack) Digital I/O 3 Input, 3 Output (RJ45 connectors) Drivers (Vista/Win7/8/10, x32 and x64) MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output) PC Interface USB 3.0 (cable included) Operating Power USB 3.0 (650ma at 5V) Input voltage protection >+/-30 V Operating Temperature range 0 to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight 9 oz (250 grams)	Noise Floor (terminated inputs)	< -110 dBVrms
Output Channels and connectors2 output channels (1 BNC mono, 1 3.5 mm stereo jack)Digital I/O3 Input, 3 Output (RJ45 connectors)Drivers (Vista/Win7/8/10, x32 and x64)MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output)PC InterfaceUSB 3.0 (cable included)Operating PowerUSB 3.0 (650ma at 5V)Input voltage protection> +/-30 VOperating Temperature range0 to 50 CDimensions5.5 x 3 x 1 in (140 x 77 x 26 mm)Weight9 oz (250 grams)	Channel Separation	> 90 dB
Digital I/O Drivers (Vista/Win7/8/10, x32 and x64) PC Interface Operating Power Input voltage protection Operating Temperature range Digital I/O 3 Input, 3 Output (RJ45 connectors) MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output) USB 3.0 (cable included) VSB 3.0 (650ma at 5V) > +/-30 V Operating Temperature range O to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight 9 oz (250 grams)	Output Voltage	+/-1.4 V (1 Vrms)
Drivers (Vista/Win7/8/10, x32 and x64) MME (Windows Multimedia Extensions) ASIO (Steinberg Audio Stream Input/Output) PC Interface USB 3.0 (cable included) USB 3.0 (650ma at 5V) Input voltage protection > +/-30 V Operating Temperature range 0 to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight 9 oz (250 grams)	Output Channels and connectors	2 output channels (1 BNC mono, 1 3.5 mm stereo jack)
ASIO (Steinberg Audio Stream Input/Output) PC Interface USB 3.0 (cable included) Operating Power USB 3.0 (650ma at 5V) Input voltage protection > +/-30 V Operating Temperature range 0 to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight 9 oz (250 grams)	Digital I/O	3 Input, 3 Output (RJ45 connectors)
PC Interface USB 3.0 (cable included) Operating Power USB 3.0 (650ma at 5V) Input voltage protection > +/-30 V Operating Temperature range 0 to 50 C Dimensions 5.5 x 3 x 1 in (140 x 77 x 26 mm) Weight 9 oz (250 grams)	Drivers (Vista/Win7/8/10, x32 and x64)	MME (Windows Multimedia Extensions)
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Weight 9 oz (250 grams)	Operating Temperature range	0 to 50 C
	Dimensions	5.5 x 3 x 1 in (140 x 77 x 26 mm)
Warranty I year	Weight	9 oz (250 grams)
	Warranty	l year

For more information, please visit Pioneer Hill Software at <u>www.spectraplus.com</u> Pricing, availability and specifications are subject to change without notice