

## Prism Sound LYRA 2 - Zvučna kartica

Šifra: 16930

Kategorija proizvoda: USB Zvučne kartice

Proizvođač: Prism Sound

**Cena: 5.290,00 KM**

includes RCA coaxial for S/PDIF or AES3, TOSLINK optical for S/PDIF or ADAT, and BNC for word clock. An RJ45 port is present for future AVB integration.

The Lyra 2 is compatible with Mac OS X and Windows systems via its class-compliant USB 2.0 connectivity. An IEC power cable, USB cable, and XLR to RCA adapters are included.

### Signal Path

Analog and digital input channels are available as inputs for your audio workstation software through the host computer's audio driver. Similarly, analog and digital outputs, and stereo headphone outputs can be played independently. For low-latency monitoring to headphone or main outputs, each output pair can optionally be driven from the built-in DSP mixer with an individual local mix of any selection of inputs through the controller applet. All analog inputs are electronically balanced with automatic unbalanced operation. Analog outputs are electronically balanced with bootstrapping (level is maintained if one leg is grounded).

### Verifile Technology

Verifile is a radical new proprietary technology exclusive to Prism Sound, which allows computer audio streams and recorded files to be quickly checked for a wide range of clicks, errors, and dropouts, without any compromise in the audio content or any additional metadata. Verifile is a fragile steganographic process, which embeds derivative data within the dither of the ADC, containing a rolling hash code which allows the audio data to be thoroughly and continuously checked. Recovery of this data from the audio stream or file enables verification that the stream or file contains exactly the audio data that was produced by the ADC at the time of recording. Any incorrect samples, missing or repeated audio segments or any other audio errors in the resulting files can be reliably detected, providing complete confidence that the recorded file is error-free. Processing such as EQ, level changes, additional redithering, or sample-rate conversion done to a Verifile recording will result in a failure to decode the rolling hash code in the dither and hence indicate that the recording is not an original.

### Reliable Quality

Prism Sound uses precise software calibration techniques in its converters to avoid the unreliability of pots and tweaks. Minimizing noise, interference, and hum was a priority in the design. All the analog circuits have galvanic isolation, while the unit's electronically balanced I/O allows it to handle common mode interference sources and trouble-free connection to unbalanced equipment.

### USB 2.0 Compatibility

The Lyra 2 is easy to connect to your computer and to your outboard gear. For both Mac and Windows platforms, there is a controller application to configure the unit and control its built-in mixer and various functions. Aside from the monitor and headphone level controls, everything else is operated solely from the Lyra controller application. The controller software opens on-screen as a separate panel alongside your existing editing software. Since the Lyra 2 is UAC2 compliant, it will also work with recent Linux and Android builds, although no control panel is provided.

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Line,

instrument, or microphone sources can be connected via the stereo 1/4" TRS inputs, two 1/4" instrument inputs, and two XLR 3-pin inputs. Phantom power is selectable as are the input pads and built-in limiters. The four 1/4" line outputs are ideal for connecting to speakers and power amps, while the front-panel 1/4" jack offers dedicated level and mix controls for independent headphone monitoring. Additionally, digital connectivity

### **Flexible I/O**

Utilizing the same mic amps as Orpheus, the Lyra offers software-controlled gain in 1 dB steps, switchable phantom power, 20 dB pads, and low noise and distortion. The inputs are auto-sensing with software override. Inputs one and two can be microphone, instrument, or line. Analog inputs have individually-selectable Prism Sound Overkiller peak limiters built in—just as on the ADA-8XR and Orpheus—to catch those fast transients. The Overkiller threshold automatically follows the operating line-level selection (+4 dBu or -10 dBV). Overkillers are ideal for percussive sounds, particularly drums, where headroom can be a problem.

The coaxial digital I/O can be switched in the Lyra 2 controller applet between S/PDIF and AES3 formats. This control changes the operating voltage and the channel status format and is complemented by two supplied adapters that provide external XLR connections for AES3 devices. The optical digital I/O ports on Lyra 2 can also be configured as ADAT I/O. Other connections include word clock sync I/O on BNC connectors.

### **Low-Latency Digital Mixer**

A built-in digital mixer can be configured from the host computer to provide foldback feeds to performers, each with their own stereo mix of workstation playback and any of the inputs. This provides console quality local mixing—each output has its own independent mixer, with channel strips for all inputs and workstation feeds, complete with fader, pan/balance pot, solo and mute buttons, and full metering. Strips can be stereo or mono, and the mixes are dithered with filtered coefficients, just as in a top-end digital mixer. With the Prism Sound DSP mixer, the latency is as low as 0.08 ms at a 192 kHz sampling rate.

### **Sample Rate Conversion & Noise Shaping**

Prism Sound's renowned synchronous sample-rate conversion allows outputting to various external devices at other sampling rates. The sample rate converter can be used at the outputs as well as the inputs, so as well as dealing with unsynchronised or wrong-rate digital inputs, Lyra can also generate, say, a live 44.1 kHz output from a 96 kHz session. The digital output is equipped with the four Prism Sound SNS noise-shaping curves, allowing you to reduce to 16-bits for CD at mastering-house quality.

### **Stable Clocking**

State-of-the-art clock generation with proprietary hybrid 2-stage DPLL keeps jitter to a minimum. The sample rate can be sourced from the local clock, BNC word clock, or digital input stream.

### **Prism Sound Lyra 2 Specs**

Form Factor Desktop

Channels of I/O 6 Input / 4 Output

Maximum Sampling Rate 192 kHz / 24-Bit

Number of Microphone Preamps 2 Preamps

Built-In Microphone None

Expansion Slots None

Signal Processing

Pad Mic:

-20 dB (Switchable per Channel)

Hi-Z:

-18 dB

Gain/Trim Range Mic Inputs:

+10 dB to +65 dB (in 1 dB Steps)

Hi-Z Inputs:

+10 dB to +65 dB (in 1 dB Steps)

High-Pass Filter Line Input:

80 Hz, 12 dB/Octave (-3 dB, on 2 Channels)

Solo/Mute None

Connectivity

Analog Audio I/O 2 x XLR 3-Pin Balanced Mic Input

2 x 1/4" TS Unbalanced Hi-Z Input

2 x 1/4" TRS Balanced/Unbalanced Line Input

4 x 1/4" TRS Balanced/Unbalanced Line Output

1 x 1/4" TRS Unbalanced Headphone Output

Phantom Power 48 V, Selectable On/Off

Digital Audio I/O 1 x TOSLINK Optical ADAT / S/PDIF Output

1 x RCA Coaxial AES3 / S/PDIF Output  
1 x TOSLINK Optical ADAT / S/PDIF Input  
1 x RCA Coaxial AES3 / S/PDIF Input  
Host Connection / USB 1 x USB-B  
Host Connection Protocol Not Specified by Manufacturer  
Sync I/O 1 x BNC Word Clock Input  
1 x BNC Word Clock Output  
Network I/O 1 x RJ45 AVB / Ethernet  
MIDI I/O None  
Wireless Connectivity None  
Performance  
Impedance Line Inputs:  
14.5 Kilohms  
Mic Inputs:  
5.5 Kilohms  
Hi-Z Inputs:  
1 Megohm  
Outputs:  
100 Ohms (Balanced)  
50 Ohms (Unbalanced)  
Dynamic Range Line Inputs:  
116 dB (-60 dBFS)  
Analog Outputs:  
115 dB (-60 dBFS)  
Sample Rate Converter:  
138 dB (-60 dBFS)  
THD Line Inputs:  
-117 dB / 0.00014% (at -0.1 dBFS)  
Mic Inputs:  
-116 dB / 0.00016% (+10 dB Gain, at -0.1 dBFS)  
-110 dB / 0.00032% (+40 dB Gain, at -0.1 dBFS)  
Analog Outputs:  
-107 dB / 0.00045% (at -1 dBFS)  
THD+N Line Inputs:  
-111 dB / 0.00028% (at -0.1 dBFS)  
Mic Inputs:  
-108 dB / 0.0004% (+10 dB Gain, at -0.1 dBFS)  
Analog Outputs:  
-106 dB / 0.0005% (at -0.1 dBFS)  
Crosstalk Line Inputs:  
< -140 dB (1 kHz)  
< -120 dB (20 Hz to 20 kHz)  
Analog Outputs:  
< -135 dB (1 kHz)  
< -120 dB (20 Hz to 20 kHz)  
EIN Mic Inputs:  
-128.5 dBu (0-Ohm Source, +30 dB Gain)  
-126.3 dBu (150-Ohm Source, +30 dB Gain)  
-130.9 dBu (0-Ohm Source, +40 dB Gain)  
-127.6 dBu (150-Ohm Source, +40 dB Gain)  
-131.2 dBu (0-Ohm Source, +50 dB Gain)  
-127.7 dBu (150-Ohm Source, +50 dB Gain)  
-131.4 dBu (0-Ohm Source, +60 dB Gain)  
-127.8 dBu (150-Ohm Source, +60 dB Gain)  
CMRR Line Inputs:  
> 70 dB (20 Hz to 20 kHz)  
Mic Inputs:  
> 110 dB (50/60 Hz)  
> 100 dB (1 kHz)  
> 90 dB (20 kHz)  
Digital Audio

Sample Rates Up to 192 kHz  
Sample Rate Conversion On S/PDIF I/O (Any Sample Rate)  
Bit Depths 24-Bit (A/D Conversion)  
16 / 24-Bit (D/A Conversion)  
Latency 0.57 ms at 44.1 kHz  
0.52 ms at 48 kHz  
0.2 ms at 88.2 kHz  
0.18 ms at 96 kHz  
0.09 ms at 176.4 kHz  
0.08 ms at 192 kHz  
Sync Sources ADAT, Internal, S/PDIF, Word Clock  
Clocking Accuracy:  $\pm 50$  ppm  
Jitter Suppression: > 60 dB (above 100 Hz)  
Audio Storage & Playback  
Memory Card Slot None  
Compatibility  
OS Compatibility macOS 10.5 or Later  
Windows Vista or Later (32/64-Bit)  
\*As of November, 2021: Check with manufacturer for the most up-to-date compatibility  
Included Software None  
Included Plug-Ins None  
Supported Drivers/API & Plug-Ins Core Audio (Mac)  
ASIO  
Mobile Device Compatibility None  
Power  
Power Requirements USB Bus Power  
AC Input Power 90 to 250 VAC, 50 / 60 Hz  
Power Consumption 15 W  
Physical  
Operating Humidity 0 to 85%  
Operating Temperature 32 to 95°F / 0 to 35°C  
Dimensions 11.2 x 9.5 x 2" / 285 x 242 x 50 mm (with Feet)  
Weight 4.6 lb / 2.1 kg  
Packaging Info  
Package Weight 6.75 lb  
Box Dimensions (LxWxH) 17.5 x 12.25 x 5.5"