

# H Two 33BD Opus II

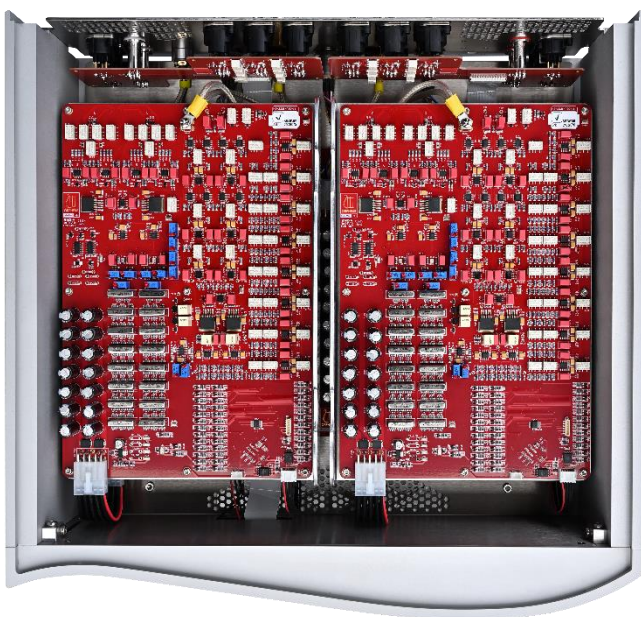
*Dual Monaural Analogue fully Balanced Discrete Preamplifier*

*The epitome of sonic refinement – our Preamplifier, a jewel in the crown of high-end audio craftsmanship.*

*From its immaculate design, meticulously sculpted to exude timeless beauty, to its exquisite internal circuitry, crafted with the utmost care, every facet of this marvel speaks to the artistry of audio engineering at its finest.*

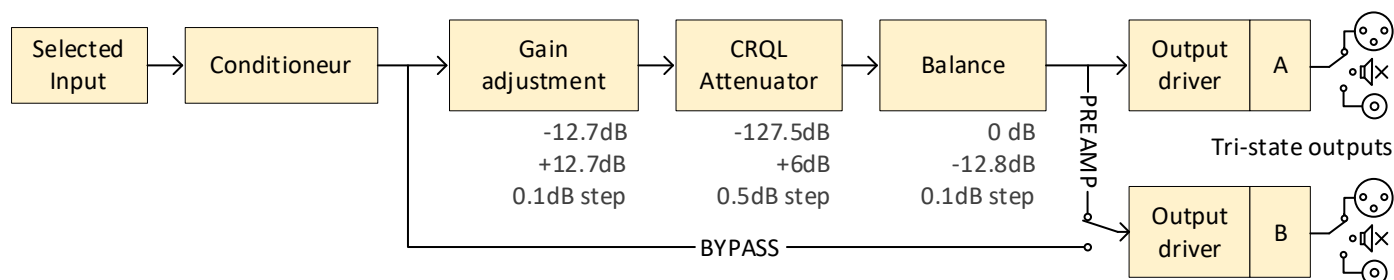
*As you immerse yourself in its celestial symphony, each note resonates with unparalleled clarity and richness, bringing out the true soul of the music, transporting you to a realm where only the purest sounds reign supreme.*

*Prepare to be enraptured as you surrender to the sublime purity of sound, elevated to new heights by the flawless performance of our Preamplifier, a testament to the relentless pursuit of perfection in the world of high-end audio.*



**The internal architecture consists of 6 levels**

1. Source selection
2. Conditioner stage
3. The gain adjusting stage of each input between -12.7dB and +12.7dB by 0.1dB step. It is also possible to balance the level Right/Left of each input
4. Volume adjustment between -127.5dB and +6dB by 0.5dB steps
5. Adjustment of the balance between left or right on a 12.8dB range by 0.1db step
6. Output driver with very high slew rate (2000V/us), capable of driving low impedances allowing a transfer of the audio signal to the power amplifier with no quality loss.

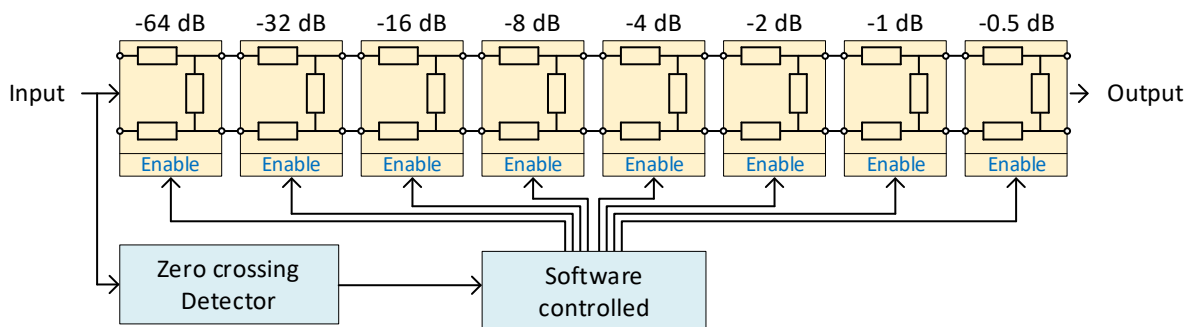


Output B can operate in two different modes:

- In the "PREAMP" mode, output B receives the same signal as output A. This configuration is recommended for bi-amplification installations using, for example, a pair of monoblocs per side.
- The "BYPASS" mode should only be used if the next component also has a volume control function (such as a headphone preamp).

The Tri-State outputs provide the option to select between the Inactive, Balanced, and Unbalanced modes. The Disabled mode allows for the output to be switched off when not in use, ensuring optimal and precise management of connections.

At the heart of the system is an attenuator based on CRQL technology, enabling precise adjustment to the desired output levels. CRQL stands for "Constant Resistive Quadrupoles with a Logarithmic distribution architecture". This internal circuit has the advantage of being inherently logarithmic, thus avoiding approximations like the more commonly used linear R-2R system in this type of application. The CRQL attenuator module uses quadrupoles composed solely of high-quality metal-film resistors with a tolerance of 0.1%. It allows volume adjustment between -127.5 dB and +6 dB in 0.5 dB steps. To guarantee maximum signal integrity, our CRQL module contains no semiconductor components in series with the signal. Additionally, volume changes occur within a maximum of 150 ns after an audio signal zero-crossing.



<b>INPUT general</b>	
Independent gain adjustment between left and right channels	$\pm 12.7$ dB (in steps of 0.1 dB)
Grounding (menu selection)	Grounded: Signal ground is connected to earth Lifted: Signal ground is decoupled from earth
<b>INPUT Balanced</b>	
Connections	XLR
Impedance	94 k $\Omega$
Maximum input voltage	18.4 V <sub>rms</sub>
<b>INPUT Unbalanced</b>	
Connections	RCA
Impedance	47 k $\Omega$
Maximum input voltage	9.2 V <sub>rms</sub>
<b>Volume control</b>	
Adjustment range	-127.5 dB to +6 dB (in steps of 0.5 dB)
Balance correction range	$\pm 12.8$ dB (in steps of 0.1 dB)
<b>OUTPUT</b>	
Frequency range (+0dB, -0.1dB)	5 Hz to 1.5 MHz
THD+N on a 600 $\Omega$ load (22Hz to 44kHz)	< 0.00063% @ 1kHz (-105dB)
Signal to Noise Ratio (input Balanced)	-132 dB
Signal to Noise Ratio (input Unbalanced)	-126 dB
Number of outputs	Output A: 1x Balanced or 1x Unbalanced Output B: 1x Balanced or 1x Unbalanced
<b>TECHNOLOGY USED</b>	
<ul style="list-style-type: none"> <li>- Dual monaural analogue fully BD (Balanced Discrete) preamplifier.</li> <li>- Constant Resistive Quadrapoles with a Logarithmic distribution architecture</li> <li>- Specificity of output B: Can be used in Bypass mode in order to connect, for example, one Headphone Amplifier with integrated volume control.</li> </ul>	
<b>POWER</b>	
Nominal line voltage	100, 115 or 230 Vac
Input voltage range	$\pm 8$ %
Maximum power consumption	60 W
Standby consumption	Less than 1 W
<b>SIZE &amp; WEIGHT</b>	
Height	Device alone: 146 mm Device + spikes: 175 mm Device + spikes + PSU: 301 mm
Depth	440 mm
Width	440 mm
Weight (Power supply included)	50 kg