

## Clock Comparison

Each step up in the Clock range will provide improvements in width and depth of soundstage along with enhanced clarity and transparency. All of our Master Clocks are compatible with any of our DACs, but each have differing functionality and performance levels.

Feature	Lina Master Clock	Rossini Master Clock	Vivaldi Master Clock
<b>Oscillator Type</b>	Dual Crystal Oscillators  1 x Oven controlled 1 x Voltage controlled	Dual Crystal Oscillators  2 x Voltage Controlled  Calibrated in the dCS environmental chamber. Microcontroller-enhanced temperature correction	Dual Crystal Oscillators  2 x Voltage Controlled  Calibrated in the dCS environmental chamber. Characteristics are mapped and stored to a more powerful control board to allow extremely fine control of the oscillators giving even greater precision
<b>Outputs</b>	1 x 44.1kHz 1 x 48kHz	1 x 44.1kHz 1 x 48.1kHz 1 x 44.1kHz switchable to 48k via RS232	2 groups of 4. Each group can be set to a different clock frequency 44.1, 48, 88.2, 96, 176.4 or 192kHz
<b>Clock Accuracy</b>	Delivers clock signal accurate to > +/-1 ppm	Delivers clock signal accurate to > +/-1 ppm	Better than +/-1ppm when shipped. Typically +/-0.1ppm when shipped and stabilised
<b>Inputs</b>	None	None	External Reference Input. Accepts either Word Clock or AC coupled signals at 1MHz, 5MHz & 10MHz. Lock range is +/-300ppm
<b>Power Supply</b>	Hybrid power supply dedicated solely to ensuring a stable voltage is fed to the oscillators	Multi-stage regulation ensures sensitive clock and PLL circuitry is unaffected by digital interference	Improved power supplies give lower running temperature and improved tolerance to AC supply variation
<b>Mechanical Design</b>	Dedicated chassis and electronics minimises risk of clock signal interference	Aerospace-grade machined aluminium chassis fitted with tuned acoustic damping panels reduces magnetic effects and vibration	The Vivaldi platform offers a significantly improved mechanical environment over the Rossini Clock, reducing intrinsic jitter by further isolating the VCXO's
<b>User Type</b>	Has Lina or Bartók DAC as only source	Wants to clock a Bartók or Rossini DAC but can also clock a Transport	Has multiple devices to synchronise. Can clock a Vivaldi DAC, Upsampler and Transport