



## USB dac32. The quality of technology

USB dac32 is the response of North Star Design for those that for music, streaming or not, want a reproduction without compromise. The first DAC in absolutely to combine the management of streaming audio up to 192kHz and 32bit via USB high-speed signals and perform upsampling to 192kHz-32bit before the digital-to-analog conversion. This makes it an ideal unit for the playback of high resolution files from your computer and a perfect companion for traditional sources.

And it is very easy to use.

### Let's analyze in detail the USB dac32.

As for its use with conventional sources presents maximum flexibility in interfacing with four digital inputs (coaxial, optical, balanced, I2S) capable of handling signals up to 192kHz-24bit. The unit is equipped with an anti-jitter and an upsampler that, regardless of the frequency and resolution of the input signal, rises it up to 192kHz-32bit. The digital section is completed by a pair of converters in balanced mono configuration that can handle digital streams up to 192kHz-32bit. These important resources in the digital section are complemented by a refined and silent analog section with intrinsically balanced output. The excellence of the DAC is confirmed by two separate power supplies; one dedicated to the digital section and one dedicated to the analog section.

But what makes this converter so special and like no other is the ability to reproduce audio files with frequencies up to 192kHz and resolution up to 32 bits. It's equipped with an USB2.0 high-speed port (i.e. capable of transferring data at 480Mbit/sec) which overcome the limit of 96/24 common to other converters.

By connecting a PC or a Mac to the USB2.0 port you will be able to play audio files in high resolution beyond the limits imposed by the previous technology on USB ports. Appropriate drivers have been developed for different operating systems, thus ensuring a proper timing and a no-compromise reproduction quality.

But all this would not be enough to get an audiophile reproduction. One of the big challenges in the reproduction of streaming music is the (negative) influence of the computer on the quality of reproduction. Many audiophiles have the experience that for playing music from a PC or Mac via a dedicated sound cards, also of great quality, one often faces limitations related to noise generated by power supplies and not to mention the noisy fans needed to cool down the computer, which are limiting the pleasure of listening. Forget about all that. Today you can get the most from these sources by designing the converter to make it independent of the computer used for playback.

Two are the devices used: data resynchronization and magnetic separation of the ground.

The first solution allows different methods to release from the transmission on USB, using on-board reference oscillator with low jitter of the DAC is capable of re-clocking of incoming data from the computer with absolute precision.

The second solution allows to completely decouple the ground of the computer from that of the DAC, allowing the transmission of signals at high speed but without the noise generated by the computer.

We can say that, whatever the computer, the playback quality will always be at the highest levels.

Whether it's music from a PC, MAC or traditional source such as a CD player, DAT, satellite receiver 's USB dac32 represent the heart of your system, capable of dialoguing with each type of source always at the highest levels.

**USB dac32 ... the future is already in your hands.**

