



# MBL CADENZA C41 NETWORK PLAYER

# Masterfully

# digital

To better match its amplifiers and loudspeakers of great musical value, MBL has now set out to demonstrate its expertise in network playback, by applying its own concepts. But the C41 is not only reserved for the MBL microcosm, as it controls with authority all your digital sources with talent and ease.

he C41 is part of the Cadenza line, MBL's most affordablerange yet with all the hallmarks of a superior class, such as a sumptuous lacquered finish. The C41 features a volume control that doesn't degrade the sound, having been musically designed to dispense with the need for a preamplifier. Technically speaking, it is very similar to its big brother Noble Line N31 (HF 267), which requires one. The C41 also features True Peak technology, extending the dynamic range by 3 dB. The C41 is compatible with Qobuz Connect, Tidal Connect and Spotify Connect, which will soon be available.

and is Roon Ready, for which it has been finely optimized. Its UPnP architecture also makes it compatible with other applications such as Audirvana and JRiver.

#### LOSSLESS VOLUME

The MBL features a high-performance balanced analog output stage with wide bandwidth, low noise and low distortion. In the C41, volume is controlled internally without loss of quality, as the digital data stream is not affected. Level control takes place after the oversampling filter in the modulator, i.e. precisely at the point where the digital signal is converted to analog. The full bit width is always transmitted to the DAC chip.

The interior is neat and tidy, and the size of the shielded transformer enormous. For Jürgen Reis, even the specially chosen color of the printed circuit board is audible!

guaranteeing optimum resolution, whatever the source or playback protocol. Whether in Roon, iTunes. UPnP in JRiver or Audirvana, each will access only the volume control built into the C41's modulator. Like the Noble N31, the DAC integrates an ESS Sabre chip in a complex symmetrical architecture. incorporating inter-sample overload margin. The D/A converter uses 4 different conversion paths per channel, mixing Delta-Sigma for its smooth treble response and natural fade, plus Multi-bit for better bass, but without crossover distortion in between. Psychoacoustic-adjusted digital and analog filters guarantee more naturalness and better spatial presentation.

#### **OPTIMIZED FOR ROON**

Chief engineer Jürgen Reis has considered Roon to be the benchmark for 10 years, especially in offline mode and in its latest version. He has therefore designed the C41's Roon module to integrate control functions, while isolating it from the network as much as possible. It comprises two separate boards : the first adds network playback via Roon, with improvements in ease of use, while the second optimizes audio quality during streaming. For a more userfriendly interface, Roon detects network playback inputs and keeps the volume control at the same level. But the key to sound improvement is the design of the master clock, and its power supply.



The Roon card uses asynchronous transmission and adds a digital buffer, with the musical information being recalibrated using the module's master clock, then sent to the DAC for decoding. The clock's power supply is totally independent of the other functions, all of which explains the superior sound quality of the module optimized for the C41, which is adjusted to perform musically without a preamp. This also applies to the USB input.

WHY SHAIRPORT? The C41 supports Shairport for wireless music streaming from portable devices. According to Jürgen Reis, Shairport is unique in that it offers absolute jitter-free performance, which can be measured. This is because the Shairport input receives its signal using an adaptive protocol, and the device transmits it using an asynchronous, jitter-free protocol from an iPhone, iPad or MacBook. Jitter is thus reduced, as it is on all the C41's other inputs, which explains its sonic superiority. MBL's Shairport supports 44.1K at 24 bit, with open-source software enabling various enhancements. The measurements certainly shows the difference, but it is clearly audible when compared with other solutions.

# FINE-TUNING ACCORDING TO JÜRGEN REIS

For MBL's chief engineer, finetuning the sound has nothing to do with adjustments to distortion or frequency response,





and everything to do with the components used. His working method at MBL when designing a new product is to draw up the schematic, make measurements until he's satisfied, then listen to the device blindly, adjusting the sound through the choice of components. According to him, « substituting one capacitor for another doesn't change the frequency response, but it does change the sound ». To accompany the C41, the best solution is to add a server such as the Innuos, on which Roon Core will be installed, and then use Roon as the device control. Note that Roon takes priority over other applications when in use.

# LISTENING

**Timbres:** With the C41, high-resolution streaming takes on its full meaning, as it admirably exploits its possibilities. The MBL lineage of the Noble N31 can be found in the freshness, accuracy and realism of the timbres, over a very wide bandwidth, where legibility is extreme, without opacity or softness.

No typical coloration, but an omnipresent sense of nuance, which makes you forget about digital listening and concentrate on the music. Just listen to beautiful voices such as Kurt Elling's on The Walking, with its deep tessitura, soft and low at the same time, whose unique grain expresses itself clearly, with enormous presence. And what about the coloratura soprano Patricia Petibon, sparkling in Mozart's Le Nozze di Figaro (DG Arkiv), whose extraordinary voice shines brightly. In another register, on an organ piece for example, the C41 highlights phenomenal extension when the speakers allow it; it is certainly not the one that will restrict the system.

Dynamic: A flamenco passage with Pepe Romero on guitar immediately makes us feel that the MBL does not allow itself to be intimidated, with frank and formidable attacks, with bottom octaves always remarkable, which allows us to hear the vast and lively space in the recording, even when streaming. In fact, the differences felt are essentially to do with the quality of the recording, and the result is very convincing even on a 16 bit/44 kHz file.

The substantial format of the C41 matches that of the MBL Cadenza line, which includes the C31 CD-**DAC, C11** preamplifier, C51 integrated, C21 stereo amplifier and C15 mono blocks. The C41 handles all digital inputs, but has no analog input.

#### TECHNICAL DATA

Origin: Germany Price: 8,960 euros Dimensions ( $W \times H \times D$ ):  $450 \times 145 \times 445 \text{ mm}$ Poids: 15,5 kg Cadenza Remote Control Fluorescent VFD display Digital inputs: Toslink, S/PDIF, AES, USB/ B, LAN RJ45 Roon, UPnP, Shairport Digital output: S/PDIF Analog outputs: RCA & XLR Others: MBL SmartLink 1.0 SD card update Resolution/sampling: 16-24 bit 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz DSD64 (via DoP)

But the C41 will clearly make you feel the full benefit of high resolution, especially on tracks downloaded from a server like Innuos. Streaming on Qobuz thanks to the latest Roon is also top-notch, which is an advantage as you can navigate from one source to another without frustration, the C41 will make the most of it every time.

#### BANC D'ESSAI

## MBL CADENZA C41

Black Sabbath playing the mythical Paranoïd will reassure you of the MBL's talent for dynamics and energy - enough to take you by storm!

**Soundstage:** Roon broadcast on the C41 shows great possibilities, such as the way it installs a wide, high and deep image, which by its scale recalls the great American spaces, without the sometimes narrow and flat side of digital sound. In addition, the firmness and depth of the bass are striking, which is beneficial precisely to the extension of the soundstage, particularly on symphonic works, which are much more credible and majestic. But a good old recording like Gene Ammons' Boss Tenor conveys liveliness and presence; the grain and texture of this musician of impressive stature emerge with elegance, accompanied by Ray Barretto on congas and Tommy Flanagan on piano. On the C41, high-quality digital also delivers when it comes to a good analog tape recording from 1960, even in 16-bit, albeit remastered, with no particular frustration.

### Value for money:

The budget cost to pay for this luxurious and high-performance

network player is €8,960. Its appearance sets it apart quite clearly from other devices of its kind, highlighting its high-end status, "Made in Germany". The interior is revealed by opening the two side covers, showing extreme meticulousness and controlled, perfectly ordered complexity. Nothing is too good for this MBL.

# VERDICT

The style of the C41 MBL is truly distinctive in its distinguished presentation, blending to your tastes depending on the finish you choose, which does not prevent it from exploiting all your digital sources to extract the best from them. Jürgen Reis added his talented touch to raise it to the high standards of the brand. It succeeds brilliantly, as the C41 can be integrated into the very topof-the-range MBL, but also into any other up-to-date system. It's a high-class device, masterfully conducting your digital sources.

Bruno Castelluzzo

TIMBRES	
DYNAMICS	
SOUNDSTAGE	
VALUE FOR MONEY	













This changes everything!

Digitally connected at the highest level.



C41
Network Player
More information at mbl.de

