# Technik Lebensart STARS

ISSN 1867-5166

Jubiläums-Ausgabe 40 September 2018 – November 2018



CEC belt drive TL 0 3.0 and CEC D/A converter DA 0 3.0

## Simply the Best!

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Review from HIFI STARS - 2018





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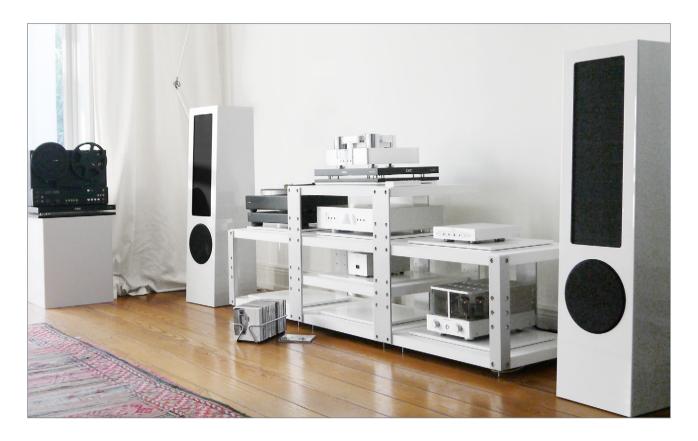
CEC CD Transport TL 0 3.0 and CEC D/A converter DA 0 3.0

# Simply the Best!

I always come up with the title first when I write an article even though many of my writer colleagues do the exact opposite. However, I hesitated for a moment on this occasion given that this title is actually quite a strong statement. On the other hand, why should I hold back if this is what I truly believe? Quite frankly, my readers have the right to know!

A great deal has already been written about CEC in HIFI-STARS and elsewhere, including the fact that this Japanese company developed belt drives that have been used in analogue record players since the beginning of the 1950s to the present day and that 27 years ago the company brought out the CEC TL 1 which was the first ever belt-driven CD drive. This all makes sense as in both cases the objective was to minimise vibration and resonance.

My writer colleagues Alexander Aschenbrunner and Ansgar Hatscher have had the chance to take a close look at the current TL 0 3.0 version. Their account was published in HIFI-STARS no. 24. The drive together with its power supply unit is now ensconced in my listening room in the rack on the uppermost storage area. It looks absolutely sensational in this position – even my critical-eyed spouse has to agree. The CEC TL 0 3.0 includes a threepart chassis which counteracts vibration and resonance. The combination of the double belt drive and the revolutionary three-part chassis reduces distortion caused by jitter. The laser motor and CD drive are separated electronically, magnetically and mechanically from the laser pick up and an extremely heavy stabiliser minimises vibration, centres the CD and provides shade to prevent stray light



from entering. I will keep this brief: CEC engineers have packed in everything that is technically feasible into this drive in order to perfect CD playback performance and have thus demonstrated their utterly uncompromising approach to music playback via CD. One hundred per cent of each device is produced by hand in Japan which is then tested in every way imaginable and carefully run in before it is despatched.

## The CEC TL 0 3.0 and CEC DA 0 3.0 make perfect companions

My fellow journalists ran this impressive CD drive together with the proprietary DA 3N D/A converter which incidentally also used to be installed in my listening room. This is undoubtedly a very good device; however, experts have raised the following question: can this DAC really be on a par with this drive based on the complexity of its design alone? CEC's response to this question is the new DA 0 3.0. The name alone suggests that this DAC has been

conceived to work as the perfect companion to the CEC TL 0 3.0 drive. I have already seen the prototype at High End in Munich. And now the CEC DA 0 3.0 and the CEC TL 0 3.0 are positioned next to each other on the rack in my listening room — let's see what the "Dreamteam" can do.

Allow me to describe a few technical details first. The priority for the development team was to meet the highest acoustic standards. For example, as it was not possible to reach the target level with the chips that are available on the market, the converter now had to be based on a discrete design. This has been achieved with its multi-bit converter design with up to 25-bit resolution and sampling rates of up to 32 bit/384 kHz. Re-clocking, two upsampling algorithms and no less than four digital filters are included for sound optimisation. R/2R resistor ladders have also been discretely built into the CEC DA 0 0.3 which are used to generate the various output levels.

# The numerous innovative features boasted by the DA 0 make it stand out head and shoulders above the rest

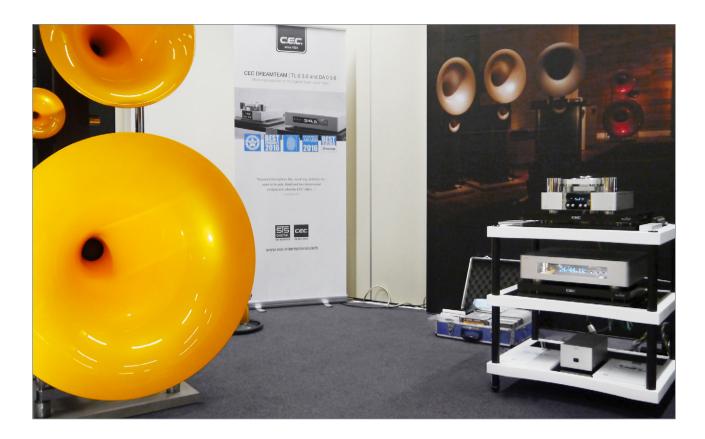
The CEC DA 0 3.0 processes the incoming CD data (16 Bit/44.1 kHz) to data in a 32 Bit/352.8 kHz format and only converts these into analogue signals thereafter. This significantly improves sound quality and also enhances the spatial experience. Citing all the innovative solutions in turn would go beyond the scope of this article, however, I just want to mention that the power supply used with the DA 0 3.0 is equipped with four (!) toroidal transformers which are shielded in an extremely elaborate way and which serve the transformer area, the clock, the digital signal processor (DSP) and the control unit. Both units can obviously be connected using a proprietary superlink connector. The music, synchronisation and clock signals run through four cables instead of one cable which is the norm. The coaxial and optical digital outputs generally transmit both the music signal and the clock signal via the one cable which requires a coding and decoding process for data transmission which results in interference and jitter — this problem is avoided with the superlink connector.

However, as you would expect, the DA. 0 3.0 naturally offers all conceivable digital connectors, whether it be XLR to AES/EBU, Coax/RCA, Toslink (duplicated in each case) and a USB connection. The analogue output is provided in the balanced (XLR) version plus the unbalanced (RCA/Cinch) version. The power supply socket and the power switch are located on the right-hand side on the back of the device. This ensures that the front of the device boasts a minimalistic design which is typical of CEC products. There are three push buttons to the left and the right for standby, mute and menu selection. And not forgetting the weighty metal remote control which also controls the TL 0 3.0 drive. I can sum up the quality of the workmanship on both devices in two words: unfailingly flawless!

### It is hard to believe that these sounds are actually produced from a CD ...

The drive and the D/A converter have already been run in, but I allow the Duo a few moments to warm up. I then randomly grab a CD from the shelf. My hand rests upon Quincy Jones and his Big Band which is a digitalised version of the 1962 recording issued by the Mercury label (*Verve SR-60751*).





The Bossa Nova hits on this album are guaranteed to get me in the mood. When I close my eyes, it is as if the Big Band is actually performing right in front of me in the room. The individual instruments on this fantastic recording by legendary producer Phil Ramone, such as the trumpet played by Clark Terry and the saxophone played by Paul Consalves, have never sounded this spectacular. For example, in the piece "Serenata", drummer José Paula is positioned on the far right and beats the rhythm gently with his drum brush. I have never heard this so clearly before and I have never been able to identify the location of each musician in the recording studio with this level of clarity. This was such an amazing experience! Next in line is an epic Steinway concert grand piano played by the virtuoso pianist Vladimir Horowitz. It is the acclaimed pianist's final recording which was made a few months before his death in 1989. (CD Horowitz/The last recording, Sony Classical SK 45818) The track list is rather like a biopic of his musical career. The pianist did not focus on technically impressive pieces for his final album; instead he chose to play pieces by composers such as Haydn, Chopin and Liszt whose music clearly moved him especially deeply which is demonstrated in his wonderfully sensitive interpretation. Certain passages totally send shivers all down my spine. The powerful presence of the concert grand (Horowitz always played his own instrument) manifested in my mind's eye so that I completely forgot the four walls that were surrounding me. This is piano recording at its absolute finest and is comparable only with the very best analogue heavyweight turntables I have encountered. Respect! It is hard to believe that these sounds are actually produced from a CD ...

#### Music from a CD of analogue quality

Lifting the highly polished stabiliser on the CEC TL 0 3.0 and inserting a silver disc is like putting on a vinyl LP. And this is not the only thing there is in common! I compared two identical recordings;

one on CD and one on LP. The result: in my opinion, playback produced by the CEC Dreamteam is clearly more than capable of holding its own when set against sound reproduction produced by the highest quality analogue equipment. Whichever option is preferred is merely a question of taste.

The superb recording of Requiem Opus 48 by Gabriel Fauré, performed by the Rotterdam Philharmonic Orchestra with Jean Fournet and the Dutch Radio Choir, allows me to judge how voices are reproduced (Philips 446 201-2). It is fascinating how the CEC duo splits up the voices of the large choir enabling the listener to determine the exact position of the sublime voice of Dutch soprano Elly Ameling in the concert hall. This is truly sensational! The Austrian baroque music ensemble Concentus Musicus Wien and Nikolaus Harnoncourt rank among the very best when it comes to interpreting the works of the greatest German composers. (Bach - Brandenburg Concertos Nos. 3, 5 & 6/Concentus Musicus Wien/Harnoncourt/Teldec 4509-97985-2). The recording made in Vienna in 1981 descended like a thickly woven carpet of sound in the listening room without stripping back any of the finest

nuances within the structure of the pieces. The strings caress the eardrums, the trumpets blare loudly and are then punctuated suddenly by a second of absolute silence. It is fascinating to hear this silence and complete tranquility during playback.

## Sound potential is lost without the CEC Superlink connector

And before I forget to mention, it is very important to use the superlink connector's four cables if you operate the CEC Duo together. This is by no means a trivial matter because failing to do so will mean that you will forfeit a huge amount of sound potential. I know what I am talking about as I discovered this during many listening sessions. As I write, a CD with Joscho Stephan's Acoustic Rhythm Formation (MGL/inakustik CD 029130) is spinning in the CEC TL 0 0.3. The guitar chords tear straight out of the middle of the stereo like an explosion, accompanied by the highest notes on the flute and the staccato of the drum. If money were no object, I would snap up the CEC Duo without question and continue investing in my CD collection. However, as there is no spare cash at the ready,



CEC DA 0 3.0 - Universal DSP controlled discrete resistor ladder 32bit/384kHz Audio DAC



I have no option but to hope that sooner or later the level of technical innovation demonstrated in these two absolutely exceptional devices will be available in a lower price bracket. With this in mind, I would now like to take my hat off to this CD playback dream team which is indisputably in a complete class of its own!

#### In a nutshell

Are you currently thinking about buying your dream car next year? We often tell ourselves that we should spoil ourselves every now and again, however, I have another suggestion: perhaps you could delay this purchase for time being as a new car doesn't really do much more than take you from A to B. On the other hand, the new Dreamteam by CEC will enable you to spend every spare moment you have truly enjoying your favourite music in the best quality you have ever heard. I guarantee that you will not recognise your own CD collection.

#### more Information:

web: www.cec-international.com mail: info@cec-international.com







#### Specification

#### CEC DA 0 3.0 - D/A Converter

DAC	Universal DSP controlled resistor ladder 32bit/384kHz Audio DAC
Power Supply	AC 120-230V / 50-60Hz
Digital Input	<ul> <li>SUPERLINK: (BNC x 4) 2.5Vp-p/75Ω</li> <li>Coaxial (SPDIF): 0.5Vp-p/75Ω</li> <li>TOS (optical): -21~-15dBm EIAJ</li> <li>AES/EBU (Balanced XLR; HOT=2):</li> <li>USB 2.0: PCM 32bit/32-384kHz, DSD 64/2.8224-128/5.6448MHz</li> </ul>
Analog Output	balanced XLR connectors     unbalanced RCA connectors
Digital Filter	Selection of 4 digital filters
Consumption	30 W
Dimensions	432 (W) x 400 (D) x 120 (H) mm
Weight	21 kg
Color	Silver

#### Specification

#### CEC TL 0 3.0 - CD Transport

CD Drive System	Double Belt Drive // Spindle & Pick-up
Playable Discs	Audio CDs & finalized CD-R/RW
Power Supply	AC 120-230V / 50-60Hz
Suspension	D.R.T.S. (Double Rubbers-Triple Springs)
Floating Chassis	Hexagonal two layers structure
CD Stabilizer	brass, plating (ø 125 mm, weight: 460 g)
Digital Input	Word Clock (BNC x1): 44,1kHz
Digital Output	<ul> <li>SUPERLINK: (BNC x 4) 2.5Vp-p/75Ω</li> <li>Coaxial (SPDIF): 0.5Vp-p/75Ω</li> <li>TOS (optical): -21~-15dBm EIAJ</li> <li>AES/EBU (Balanced XLR; HOT=2): 2.5Vp-p/110Ω</li> </ul>
Dimensions	300 (W) x 317 (D) x 158 (H) mm
Power Supply	128(W) × 260(D) × 103(H) mm
Weight	21 kg with Power Supply

Notice: Specifications and design are subject to change without notice. CEC International GmbH | Wacholderweg 16 | 22335 Hamburg | Germany Mail: info@cec-international.com | Web: www.cec-international.com







"The CEC's combo possesses an uncanny ability to combine openness, transparency, and resolution with weight and solidity and it sounded like I was listening to an analog system."

Stereo Times - Award 2016 - Most wanted components

"The CEC source (TL 0 3.0 and DA 0 3.0) presents music in a way that makes it close to an analog master tape. It shows everything in an incredibly attractive way, without attempting to change the musical message." *Fidelity - Statement Award 2016* 

"The way that CEC system presents the physicality of drums, bass, trumpet, vocals finally, is simply incredible. In this respect, this performance was very close to the sound of an analog master tape.

GOLD Fingerprint Award 2016

"CEC's top-of-the range model pushes everything to the max in analog technology terms, so much so that it completely blurs the lines with the best record players. In short, the transport looks simply gorgeous and radiates much more analog flair than any other digital machine." *Fidelity - 2016* 

"From the mechanics to the smallest detail for the noise immunity of the well-constructed massive TL 0 3.0 from CEC, all provides for the foundations of an extraordinarily, monumental, natural musical experience - to pack more into this product is unimaginable."

Hifi Stars - 2015

## CEC The Drive | since 1954

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