

# Hifi Pig

## EXTRA

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OUTSTANDING  
PRODUCTS OF  
2016



# CEC TL5 Belt Drive CD Transport

By Janine Elliot

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Japanese brand CEC's belt driven CD transports are legendary in audiophile circles but have had traditionally been out of the reach of most people. The £2600 CEC TL5 CD Transport, sold by Definitive Audio in the UK, puts this exotica much more within the grasp of more people and Janine Elliot couldn't wait to get her hands on it to review for Hifi Pig

# CEC TL5 BELT DRIVE TRANSPORT

But CEC's pedigree is as important to the CD as Stax is to electrostatic ear speakers, and people are buying them



CD is alive and, well, still going strong in some circles. Actually, the CD format is better than many would think with all the hype over the vinyl revival. I remember Russ Andrews last year writing a piece saying that we shouldn't be running the format down and that CD quality is still very good. It is, though often let down by bad mastering, performance, and bad CD players. Yes, there are limitations in the format, but I still do use my own Krell KPS20i CD player. With a CDM-Pro9 transport this is often considered one of the best. However, there is one make of CD transports that still has a great following, and when I was offered to review the CEC TL5 I put my hands up as quickly as my aged body would allow.

When I first heard about CEC producing belt drive CD transports in 1991 I had visions of analogue wow and flutter until I thought better of it. Why anyone would consider using an elastic band to revolve that silver disc seemed anathema to my limited brain intelligence and I wondered if it was merely an advertising ploy. But when I glimpsed their amazing looking CEC-TL 0-X in 1995 I realised that perhaps there really was something important in all this that other manufacturers hadn't grasped. Their new top model, the TL 0 3.0 doesn't look too far removed from this one and at €29500 and weighing in at 30kg works out at €1000 a kilogram and much more than you perhaps would like to spend. But CEC's pedigree is as important to the CD as Stax is to electrostatic ear speakers, and people are buying them. It is therefore much relief to see the TL5 coming in at a mere £2600.

CEC were the first company making turntables in Japan and their turntables and CD players have been supplied to major brands to be badged as their own including Grundig, Marantz, Teac, Sony, Sharp and many more. So from the first time I heard about CEC playing with elastic bands in 1991 I needed to understand their philosophy and hopefully try one out, which I did many years ago, and was duly impressed.

CEC's interest in belt drives actually goes back to 1954, the year the Japanese company was founded, being in fact the first manufacturer to use a belt drive on a turntable. Until then we were used to rubber idlers rotating our Thorens, BSR, Lenco, Collaro and Garrard (indeed, the legendary 301 was launched that same year). Whilst CEC's earliest work on CD players comes from 1983, they didn't actually introduce a belt driven model until 1991; the TL1. Their thinking with the turntable was that the belt decoupled the motor from the important audio source; the record, meaning vibrations and other hindrances didn't make their way to the record platter. In the CD it has the same intention, though where the turntable needed to keep a uniform speed, on the CD it uses Constant Linear Velocity (CLV) meaning the rotation speed is faster at the start of the CD (it starts at the centre) and slows down as it gets to the edge. A conventional direct drive CD system requires a motor with considerable torque to be able to quickly adjust speed as appropriate and because it is directly linked to the CD itself, placed directly under the CD, it will add vibrations and electromagnetic influences. With a belt drive system, as

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in the TL5, the much lower torque motor is now separated from the CD and consequently those vibrations and electromagnetic disturbances are much less. The motor still ensured that changes in the rotation speed happened as precisely as with a direct drive motor, and start-up of CDs from stationary wasn't noticeably slower even without this high torque. There isn't even a motor to open the top-loading tray on this entry-point CEC machine, though I actually really enjoyed opening up the top, placing inside a CD and holding it down with an oversize heavy washer, or "puck". The plastic lid, that makes a pleasing 'clunk' when fully closed to confirm the motor can start revolving, is opaque tinted black, allowing you to just make out your revolving plastic disc inside. Even the belt drive can be replaced by the user, not being hidden below the base plate, unlike other CEC machines. Having replaced broken and slipping belts on cassette decks and reel to reels which take many hours to do, this one is really well thought out.

Unlike your average CD player most of the CEC's machines, including the TL5, don't even have a DAC built in. This is not a money-saving ploy. This one is simply a CD transport with mains power. Not that CEC don't make their own DACs; indeed there will be a partnering DAC, the DA5, for this transport coming out soon at £3999. There is already a choice of 6 on their website, plus 6 CD players, 5 CD

transports and numerous amplifiers including a valve integrated. They just feel for the ultimate audio control they should be separate from the transport, just like the iconic 1986 Meridian MCD Pro that was a Philips transport with the DAC and power supply below, and the Cambridge Audio CD1 from the same year, for that matter. This was not a problem as I had several D2A converters I could use in this review. Indeed, I really like the idea of separate transport and decoder, as it allows the user to select and upgrade in a manner they like. It also can prevent resonances from the CD player affecting the electronics, and vice versa. However, it can sometimes introduce its own problems, such as jitter irregularities, though none of the three DACs I used for the review had that problem. Many amplifiers/preamplifiers hitting the market now have their own excellent built-in converters, so having a separate CD transport makes more sense now than it did when they first introduced the idea.

The puck, or "high precision CD Stabilizer" as it is called, is very heavy at 330g to ensure that not only does the CD play without any movements up or down, but to also create a higher flywheel effect without the need for lots of speed correction or a really high-torque motor which introduces electromagnetic noise. The puck also improves coupling to the spindle and also, of course, mechanical damping.

As mentioned above I decided to use three machines for the review; firstly the £8000 Taiwanese COS D1, then more reasonable Graham Slee 'Majestic' at £1600 which more matches the TL5 price point. Latterly I used my own DAC that I hadn't switched on for many years. I built this based on the Burr Brown PCM56's (the Krell KPS20i uses 4 PCM63's). Whilst it is a dated design, the warmth and analogue-esque sound I created in this device would be an excellent pairing with the CEC. Similarly, the Majestic has an excellent 16 bit/44.1kHz engine that through the Class A/B Propius mono-blocks gave a powerful and musical performance that was able to show off the CEC to the fore. The COS D1 was epic, a DAC that I have reviewed recently on HiFi Pig. This was the pinnacle of performance, giving a speedy and precise rendition of the music.

I was very surprised when I started to play music. I was surprised at just how musical this was and how relaxed the performance was. It was so un-naturally natural, if that makes sense. This didn't sound like a CD player. Everything was so easy flowing and fun. It wasn't that it was slow in any way, just that it was so very musical. The timing and flow of the music was so 'analogue', and I don't feel that is totally due to the DAC. Our ears can pick up things we don't knowingly observe; just like a single picture frame of a McDonald's burger



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hidden in a video clip might make you suddenly fancy a quick bite of food. I just sensed something was so right, and if it was related to the use of the belt it is just as well CEC copyrighted this drive philosophy, preventing other manufacturers trying it out. The TL5 just made me relax and enjoy the music; the timing was so good, and I forgot this was a CD.

Playing Mike Valentine's Big Band Spectacular was just so open and so detailed that I had to stop writing this review to listen to it. Everything was so well timed, so open and just so natural, each individual instrument positioned perfectly and it wasn't all down to my aged DAC, though I was impressed. Things were even better with the COS D1; the space between the instruments at 6'32" into track 6 "String of Pearls" had more space in the descending piano chords than I had heard them do before. Trying a different Sony transport that I had to hand just didn't give the same amount of space and musicality even if the detail was still all there; the CEC just wasn't clinical, it was more analogue, more real, and easier to listen to. The trombones in track 7 just sounded more like 24 bit than 16 in terms of their detail.

The TL5 has three digital outputs for AES/EBU XLR, RCA SPDIF, and Toslink. The off-on switch was just as I liked; at the front. I could quite easily cope with the manual loading of CDs, but my only gripe was the remote control. I just wouldn't want my neighbours to see it. It might be fully functional and feel nice to the hand, but it was boring and in a cheap black plastic. It included buttons to change brightness of the display as well as programming track playback and display elapsed or remaining time, but it also included buttons to select USB, COAX, TOS, CD and Filter, suggesting its multiple use with other CEC players and DACs (such as the equivalent CD5). But it still looked cheap and was too

lightweight. Today metal remotes are being made for machines considerably cheaper than this. Cambridge Audio's Azur 640C CD remote was iconic in its day and could be used with all their other products, a metal-fronted remote that started to dispel the theory that you had to spend mega bucks in order to get a good looking remote. Today Devialet show you that it can also be a work of art. Apart from this, there was nothing I could fault the machine with, being available in silver or black.

## The Music

Beethoven's Symphony No 7 with the Dresden Symphony Orchestra showed an immaculate positioning and timing of all the instruments with particular detail in space between the notes. The closing of the first movement displayed an extended reverb, even if perhaps it was aided by a Lexicon or other digital reverb unit. The second movement starts with the violas leading the melody. The space and depth of field was compelling, and I felt I was sitting in the audience listening to one of my favourite movements of all time.

The CD transport came complete with its own 19 track montage CD, including Mitchell Bomber B25 and DC3, 6 and 7 aeroplanes which flew across the soundstage with such ease and power that my cat had to run for shelter lest they crash on him.

Back to more mundane things like music. Patricia Barber's 'Café Blue' is an exceptionally well recorded album that the CEC gave a compelling performance. Shimmering cymbals heard in "What a Shame" were initially assumed to be hiss in the recording, but this transport and my choice DACs skewed out this decaying sound in a way I had never heard before; each time the decay was able to execute its rattle without being lost in other sounds in the music. This was so open. I actually found it hard to explain the magic that

this transport delivered. Whatever the music I played in each of the DACs it gave of itself in a way that left me short for words. Yes, you can spend €29500 on the twin-belt-driven TL 0 3.0, and boy, would I like to try that machine for myself, but at £2300 the unassuming TL5 was an all-absorbing player that had me surprised at just how human and magical CDs could be after all.

## Conclusion

My expectations on playing the TL5 left me overwhelmed. This was a CD transport on a grand scale but requiring minimum expenditure. If you have your own decent DAC, or don't mind purchasing (or building) your own, then this player is an excellent choice. The performance was exceptionally engrossing, though I couldn't quite put my fingers on why. I guess it must be that elastic band.

## AT A GLANCE

**Build Quality:** Solid construction with good mechanical sliding top mechanism. Only let down by a boring remote.

**Sound Quality:** Silky smoothness and a sound that is very addictive.

**Value For Money:** At £2600 this is an extremely good value offering, allowing you the freedom to choose the DAC or use inbuilt DACs in your amplifier, if you have that choice.

### Pros:

**Musical performance with silky smooth but precise and quick top end**  
**Gives you the choice of your own preferred DAC**  
**Easy replacement of belt, should that need ever arise**  
**Solidly built**

### Cons:

**Remote control is weakest link**

**Price: £2600 inc VAT**