



A distinctive two-box CD transport and DAC, Stello's CD-T100/DA100 Signature is a digital delicacy you won't want to miss, says David Price...

Spice World

Here in the West, it's all too easy to think of all Far East (Japanese, Chinese, Korean, Malaysian) audio electronics as fairly generic and faceless. This is understandable - the massive success of Japanese hi-fi in the seventies and eighties made much mass-market audio look very homogenous indeed. But having lived and worked in that part of the world for a good long time, first hand experience tells me it's simply not true - and one country that's going its own way is South Korea...

In terms of electronics, we've

all now heard of (or indeed bought) Samsung and Lucky Goldstar (LG) - but move 'up' the evolutionary scale to high end hi-fi and South Korean names don't exactly roll off the tongue. But the country's big enough and rich enough to support a thriving audiophile scene, and one of its greatest exponents is April Music. A quirky but fascinating company, it's different to your average Japanese giant in that it specialises in 'affordable audiophile' products. Having met MD Simon Lee and daughters EJ and Claudia several years ago at the Las Vegas Consumer Electronics Show, I came

away impressed by the fact that they were focusing on high performance, high value two-channel kit - and not jumping Lemming-like into AV like all the Japanese companies at the time...

The dynamic duo you see here epitomises their approach. There's very little that's superfluous on the T100 transport - including a disc drawer. Being a top-loader (something becoming increasingly fashionable right now), it does away with a costly and rather unnatural feeling disc tray. Disc trays can be nice - as Yamaha's new CD-S2000 proves - but this is the exception rather than the rule, as most are

plasticky tat with all the finesse of wrecking ball. Stello's decision to do things this way makes a lot of sense then – save money and give the user a more 'hands on' user experience. The only downside is you have to manually fit the magnetic puck (not a chore if you've ever used a turntable with a record clamp) and place the smoked acrylic top cover on yourself – although the unit will play CDs without it fitted perfectly happily.

"a delightful combination of sweetness and strength.."

A half-width affair, the T100 is satisfyingly compact at 212x55x290mm, so when sat next to the DA100S it's the same size as a conventional CD player. You can of course site the T100 on top of the DA100, making a miniature stack. Its fascia has only the basics – transport controls plus a large red LED display, which I personally love – it's bright and bold like a nineteen seventies clock-radio (or a bomb, as my other half put it)! Round the back, there's a simple power on-off switch, plus a host of digital outputs, including AES/EBU, coaxial and TOSLINK, plus an i2s via a mini DIN socket [see BOX] and an IEC power input.

As you might expect, the matching DA100 Signature digital-to-analogue converter duplicates these digital connectors, with the exception of course of RCA phono and balanced analogue outputs, and a USB digital input. Although the UK audiophile market, shall we say, hasn't been persuaded of the benefits of audio from computers, much of the Far East has – hence the ability for the DA100S to act as a USB audio output device, whereupon you can pipe your iTunes songs out to the Stello in all their direct digital glory. The front panel has power on-off and input source selection, plus an Upsampling button – alluding to the circuitry inside...

Yes, the DA100 Signature is indeed a true 24bit, 192kHz upsampling design, said to have a jitter-free timing circuit and 6th-order digital filter, plus a fully discrete Class A analogue output stage. The unit features 1% tolerance metal film resistors, WIMA polypropylene capacitors, Cardas RCA connectors, and Neutrik balanced connectors, plus an impressively sized (for a DAC) 25VA toroidal transformer, while the voltage regulation circuit is said to have very low output impedance. Overall, both units are very tidily finished; not lavish in the

Japanese high end sense, but very crisp to the touch and purposeful all the same.

SOUND QUALITY

Starting with the T100, I chose to audition it against a favourite high end reference transport, the Sony CDP-R1. The little Stello was no match for the massively more expensive classic Sony of course, but the comparison showed me it was

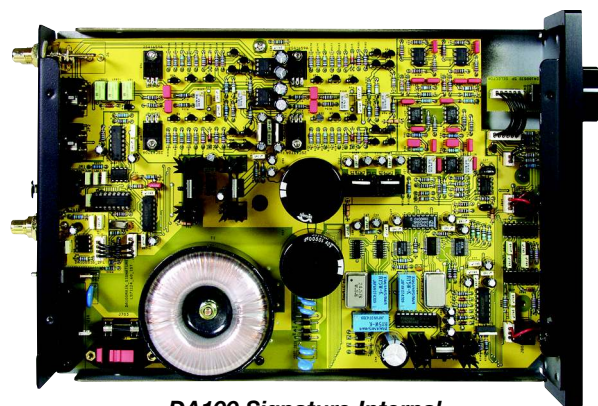
getting the basics very right indeed. Very fast access times told me that this little transport very likely has a bespoke CD mechanism in it, which can only be a good thing. Through the Stello DA100 via coaxial digital in, both transports showed a strong, confident sound with plenty of focus, dynamics and detail. Listening to Supertramp's 'Breakfast in America', I could hear the Sony adding a little more finesse and a stronger bottom end, but certainly didn't sound like its original selling price had been ten times more. Indeed, I found that placing Foculpods beneath the Stello T100 gave noticeably improved bottom end weight, plus a more expansive soundstage.

Next, I concentrated on the sound coming from the DA100S via the reference Sony transport – to assess the Stello DAC in outright terms. Impressed as I'd been with the CD transport, I wasn't expecting such a heroic performance from the convertor. With upsampling switched off, it was an enjoyable, detailed and musical device with song bass, a smooth treble, oodles of midband detail and a satisfyingly musical gait. 808 State's 'Ancodia' sounded punchy and dynamic, but with real finesse.

Stepping up to full oversampling via the front panel button made a difference to almost every aspect of the DA100S's performance. Most noticeable was the treble, which 'moved back' slightly in the mix – those Supertramp ride cymbals sounding less grainy, silkier and more atmospheric. These improvements went down to the midband, with the sense of more space around instruments in the mix, slightly greater dynamics and a sweeter, more natural tonality. Notes seemed to stop and start more explicitly, and sound less of a blur. In the bass, there was a fraction more warmth, and a more natural, easy demeanour.

Next it was time to listen to the Stello combination together in full-

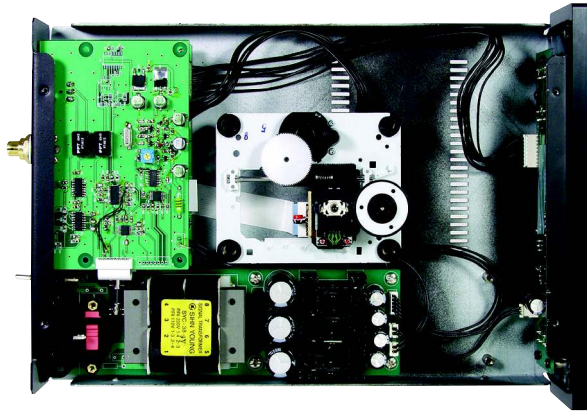
on i2s linked mode, as a £1,270 CD player. At this point I wheeled in – yes, you've guessed it – our reference integrated player at this price point, the Astintrew AT3500... Starting with this mid-price fave, Supertramp's 'Oh Darling' sounded beguiling, as I'd expected. We got the (now customary) capacious soundstage, fulsome bass and silky treble. Moving the Stello raised an eyebrow, as the soundstage didn't shrink back as I'd expected. Instead it stayed just as vast, instantly marking this Korean combo out as special in this respect. But there was more; within the mix, instruments were more precisely located, the Stello duo singling out the placement of Rick Davies's vocals



DA100 Signature Internal.

with riflebolt precision. Moving back to the AT3500, and I could hear the player 'obfuscating somewhat', as if it was saying, "maybe he's over here, or maybe he isn't". Back to the Stello and again, instruments seemed to click back into their rightful places.

Although this was the most obvious difference, it was by no means the only one. The Stello's midband seemed more dynamic, with more space between the notes, as if the studio engineer had switched the sustain pedal off. Rhythmically, this made the T100/DA100S combo snappier sounding, at the same time giving it a more relaxed gait – you could 'listen in' to what was going on in the mix between the drum



CDT100 internal

beats. In this respect, the combo reminded me of the Prima Luna ProLogue Eight CD player I reviewed last month – although it didn't quite match its sublime timing, it came close.

Crisp, classy nineties pop such as Prefab Sprout's 'Carnival 2000' was another pleasure. The opening guitar part sounded snappier through the Stello, more clearly imparting the sound of Paddy McAloon's hand on the body of guitar. His voice was quite different in texture – sounding a little grittier and more natural than the Astintrew, which 'airbrushed' the grain out and removed some of the studio reverb. The complex mix was better 'explained' by the Stello, revealing as it did its many strands with greater clarity, yet hanging everything together convincingly and enjoyably.

Where up to now it had been at least a points win to the Stello, moving to Aphex Twin's 'Pulsewidth' showcased the essential differences between the two players more starkly still. A classic slice of early ambient electronica (as NME would invariably describe it), the warm analogue synth pads and Roland MC505 percussion came across more enjoyably via the Astintrew. Its more laid-back, louche nature suited the mood of the music, whereas the Stello combo went, Rottweiler-

like, for the rhythmic jugular vein. Hi-hats and snare sounds were more explicit, snappier and stronger, as was the recording's original tape hiss, and all the other warts too. It was an enjoyable listen, but not quite as soulful as via the Astintrew.

The Stello CD-T100/DA100S is an astonishingly capable pairing at the price. It majors on detail and dynamics, but is by no means hard or biting – in fact it has a delightful combination of sweetness and strength. Although musically very enjoyable, it's less romantic sounding than either the Astintrew or my reference integrated CD player, the Marantz CD63KI DP (whose ability to turn any combination of notes on a score into gushing, heartrending music remains unsurpassed, in my system at least) – so don't buy it you want an emotionally 'over the top' source.

Via i2s especially, it's a great combination; the CD transport is the more rigid and cerebral sounding of the two boxes, imposing a taut, tight discipline on its

partnering DAC. (Using the Marantz or Astintrew as transports made the DA100S sound a little more fluid, if less punchy). For me though, the DAC is the star – via the CD-T100 it makes a very nice noise indeed, but absolutely flies with a high end transport from the likes of Sony or Esoteric. It's very neutral, yet subtle and musical too – with brilliantly implemented upsampling. I can see it upgrading ageing £300 CD players, or working as a brilliant stopgap until you've bought your dream DAC to match your £5,000 transport. Whereas some Japanese CD players can sound rather mechanical but technically brilliant, while British ones often are over smooth but sweet – here we have the best of both worlds. Just like Korean kimchi fermented vegetables, it will spice up your life.

HI-FI WORLD

VERDICT

Superbly designed, well built but characterful CD transport/DAC combination with svelte but snappy sound.

STELLO CDT100	£595
STELLO DA100	
SIGNATURE	£675
Select Audio	
+44(0)1900 813 064	
www.selectaudio.co.uk	

- FOR**
- pin-point midband precision
 - sweet, finessed treble
 - punchy dynamics
 - build, styling, connectivity

- AGAINST**
- nothing at the price

REFERENCE SYSTEM:

- Marantz CD63KI DP CD player
- Astintrew AT3500 CD player
- Sony CDP-R1 CD transport
- Sugden IM4 integrated amplifier
- German Physiks HRS120 loudspeakers
- Monitor Audio PL100 loudspeakers

MEASURED PERFORMANCE

Frequency response of the CDT100 and DA100 Signature combination was level across the range, with just a gentle drop down towards 20kHz which will ensure a smooth top end, and extension down to 2Hz at the low end. Distortion levels were low across the board, with a more than acceptable figure of 0.24% at -60dB.

The EIAJ dynamic range figure was again a respectable value of 109dB; a little short of the best at 112dB but perfectly acceptable nonetheless. Channel separation was good at 88dB and the noise levels from the player were very good, measuring -105dB. Results were consistent across both balanced and unbalanced outputs, the former also giving an output level figure double that of the unbalanced, as is common.

Measuring jitter from the output of the transport gave a Random jitter figure of 8pS with program related elements reaching up to 40pS with a -80dB signal. Changing to the AES balanced output dropped the random figure to around 5pS and almost completely removed the program related components, so this is the output gives excellent results. We were unable to test the I2S data link.

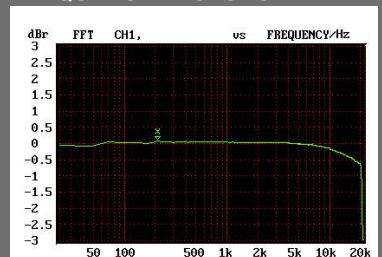
Engaging upsampling on the DA100 Signature DAC did not affect frequency response, but lowered the noise floor of the unit further - removing a noise peak at 39kHz and dropping the level at this point by 15dB. All in all, the Stello pairing measure well and should

turn in a fine performance together. AS

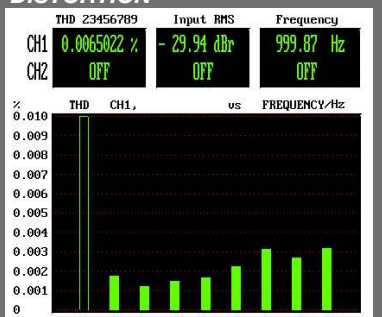
Frequency response (-1dB)
CD 2Hz - 20.4kHz

Distortion (%)	
0dB	0.05
-6dB	0.022
-60dB	0.24
-80dB	2.9
Separation (1kHz)	88dB
Noise (IEC A)	-105dB
Dynamic range	109dB
Output (unbalanced/balanced)	2.4/5.2V

FREQUENCY RESPONSE



DISTORTION



INTER IC-SOUND

Although relatively rare on audiophile CD transports, the i2s system is reckoned by many to be the most accurate digital audio transmission protocol. A mini DIN connector from the transport sends five separate channels of information serially down the cable to the DAC, comprising the Word Clock sync, the Bit Clock synch, the digital audio datastream itself, the master clock and a de-emphasis flag. Because it handles audio data separately from clock signals, and yet has extensive clocking information, it eliminates the need for anti-jitter reclocking devices. Confusingly, there doesn't seem to be any standard between different manufacturers' implementations of i2s – one can see various terminations, such as Cat5 (RJ45) and others – so the Stello transport and DAC's i2s link should be regarded as designed for one another only. We found it really worked, offering subtle but useful gains in clarity, dynamic articulation and bass power over the coaxial digital input. As such, whenever the two Stello boxes were used together, i2s became the default setting.