

# T+A Cala CDR

This ultra-compact system comes with built-in illumination that's certainly eye-catching, but don't let that distract you from a package as comprehensive as it is entertaining  
 Review: **Andrew Everard** Lab: **Paul Miller**

Don't let the model name confuse you, for whatever CDR (or CD-R) may mean in common parlance, the new all-in-one from German company T+A doesn't record music onto blank discs. Rather the T+A Cala CDR designation indicates that this £3242 model is actually a CD receiver, as opposed to the £2313 Cala SR, which lacks CD playback functionality.

However, even then 'CDR' doesn't tell the whole story for while the SR model is fairly self-explanatory – it stands for 'streaming receiver' – the Cala CDR retains all that network capability as well as its built-in disc playback. What's more, it does so in a rather compact form. So the Cala CDR may stand 9.5cm tall, giving a pleasing proportional balance with its 'three thirds' 30cm width, but a good part of that stature is taken up by the integral stand/light tunnel, through which shines an LED lighting system mounted in the rear panel [see boxout, p53].

## FEATURES GALORE

Distracting though this somewhat gimmicky lighting may be, one shouldn't let it divert attention away from the good stuff the Cala CDR does – as well as that CD transport, it can play music from both network storage and Internet streaming services via both wired and Wi-Fi connections, with Deezer, Qobuz and Tidal available, subject to appropriate subscriptions. It can also access Internet radio, using the Airable platform, in addition to having built-in FM and DAB/DAB+ radio reception.

Inputs are provided on two sets of RCA phonos, with adjustable sensitivity, the option of renaming inputs, a fixed-level setting when used with an AV receiver, for example, and the option of reconfiguring the 'Aux 2' input into a MM phono stage

**RIGHT:** Highly compact design leverages the power of a Raspberry Pi computing module [centre] with a CD drive [left], 'Airable' radio module [top right], switchmode power supplies and Class D amplifier stage [right]

– which brief experimentation with my trusty, but seriously underused, Rega suggests is well up to the standard of the rest of the system. There's also an analogue preamplifier output, its level controlled by the main volume, a single set of terminals for each speaker and, unusually, a rear-mounted 3.5mm headphone socket.

The digital inputs extend to two optical and one digital (accepting file formats up to 192kHz/32-bit), two USB Type A sockets for playback from storage devices, and Bluetooth, while a coaxial digital output is also provided. And the flexibility doesn't end there: as well as tone controls – for bass/mid/treble – buried in the menus, the Cala CDR also has a range of other adjustments, including bass management for various speaker positions and use with a subwoofer, and even a virtual surround system made possible by the onboard (Raspberry Pi) DSP.

Operation is via the supplied FM1000 remote handset [pictured, p55], which is both chunky and remarkably comprehensive, albeit requiring some familiarisation, or T+A's Control 2 app, the latter being a prerequisite if you are to

have a sensible relationship with the unit's streaming – or SCL – operation. Meanwhile the view under the lid reveals that, while the Cala CDR does have analogue inputs, these are digitised at the earliest opportunity and then handled in the digital domain, allowing all the tone controls, streaming and so on to be implemented in the customised DSP. The integral Class D amplifiers are rated at 100W/4ohm, or almost twice the output of the less expensive (and CD-less) Cala SR model [but see PM's Lab Report, p55].

## NOT A CONTROL IN SIGHT

This latest design builds on the success of the original Cala as the entry-point for the pretty extensive T+A range, all of which is handbuilt in Herford, Germany – where, incidentally the company has been making receivers of this kind since 1995, when its K1 combined CD playback, a tuner and an amplifier. And while T+A may be best known for its massive power and integrated amplifiers, such as the PA 3100 HV [HFN May '17], it sets out its stall for the Cala models pretty clearly, when the company says that 'A large number of





highly demanding music enthusiasts still exist who insist on more than just top-quality sound from their stereo system – they also require sophisticated design, excellence of craftsmanship, simplicity of operation and compactness’.

And the Cala CDR certainly shows that commitment to style as well as performance. Quite apart from the lighting, it’s been built with not a single control in sight, so even opening the disc drawer requires a press on a button on the remote control, as does powering the system on and off. One side-effect of this is that, for a supposedly simple system, the Cala CDR’s manual is quite chunky – it runs to 70 pages, with lots of mentions of menu sub-points – and without it the operation isn’t immediately intuitive.

For all that, the system is simple and logical to use once you get it set up to suit your tastes, although I’d swerve the slightly cheesy virtual surround, and also concentrate on getting your speakers correctly placed in the listening room

rather than relying on the adjustments built-in here, which can be a little crude in their effect.

### RICH AND IMPRESSIVE

Having reviewed the original Cala some five years ago, I almost immediately recognised the sonic balance of this new version – and it’s one I have encountered in other similar

systems from the same part of the world of late. The Cala CDR sounds big, rich and impressive, but trades some absolute detail and a little insight for a sound that’s supremely easy to enjoy.

It’s worth noting from the off that if you’re looking for a system to play ultra-high-resolution files, this one is out of contention as the internal sampling rate tops out at 48kHz, and DSD is firmly off the menu. However, I suspect for much of the target audience that won’t be a problem – such files are very much in the minority, even in today’s burgeoning hi-resolution music market.

**This little package can pound out music without losing its details’**

### STRIKE A LIGHT

It’s certainly the most eye-catching feature of T+A’s Cala CDR system... You can choose between white, blue, red and green ‘ambient lighting’ which floods the lower portion of the CDR’s U-shaped chassis and sets the mood for your listening. It’s possible to adjust the brightness in ten steps – which is no bad thing, since as delivered with green lighting activated, the Cala CDR bathed the room with a rather sickly glow, and called attention to itself on the equipment rack. And that was with the black version of the system – I suspect that if you specced it in silver [see inset picture], which would make the ‘tunnel’ more reflective, the light might be eyeball-searing.

You can also choose a ‘flowing’ setting, in which the system cycles through the four colours on offer at a user-selectable rate. Or you can turn the lighting off, which I have to admit I fairly quickly adopted as my preferred setting, with ‘lit but very dim’ as a distant second choice – probably in green to match the display colour, but then I do use Naim equipment!



**ABOVE:** A comprehensive display lies behind the CDR’s dark acrylic fascia but all its functions must be accessed via the FM1000 remote [p55] or T+A Control app. The slot drive is for CDs only

Within that limitation, the Cala CDR never sounds anything less than impressive. Its sound isn’t overtly tailored to the point of making music uninteresting, but just nicely balanced on the ‘easy to enjoy but still highly involving’ scale, while the power on offer makes it possible to drive even demanding speakers without any signs of stress or strain setting in. OK, so these days there’s no real correlation between the size of a piece of equipment and the speakers it can drive, and there are plenty of compact systems able to punch way above their apparent weight. Even so, to hear this little German system driving everything from compact Wharfedale Diamond 11.1s [see p68] through to big PMC loudspeakers is pretty impressive.

Playing Trichotomy’s *Live With String Quartet* set, which sees the Brisbane jazzers doing just what the title suggests at the Declassified Music Festival [Bandcamp download; 44.1kHz/16-bit], the Cala CDR displays its warmth and generosity to good effect in the scale of Sean Foran’s piano, while Samuel Vincent’s bass has suitably rumblesome snap and drive, and John Parker’s drums display all his usual subtlety and crispness. This is a band I have seen live on several occasions, and the spirit of the tight trio comes over exceptionally well. The opener, ‘Dancing About Architecture’, has excellent pace and drive, while ‘State Of Change’ sets the band against taut, well-resolved pizzicato strings to fine effect.

Switch to a more upfront jazz recording, in the form of the latest set by bass-player Kyle Eastwood, *In Transit* [Jazz ↪

## ALL-IN-ONE SOLUTION



**ABOVE:** Coaxial, optical (x2) and USB digital inputs are joined by wired and wireless LAN, two USB-A (HDD), FM/DAB radio and two RCA/XLR line inputs. A coax digital out joins preamp/sub line outs, a 3.5mm headphone port and 4mm speaker terminals

Village JV570146; 44.1kHz/24-bit download], and that combination of richness with speed and definition is much in evidence as Eastwood matches the agility of Andrew McCormack's piano, and the familiar brass section of Quentin Collins and Brando Allen plays with real attack and pace.

Yes, the feel is somewhat mellow in places than some past Eastwood outings – for example in the solo bass opening of 'Love Theme' from *Cinema Paradiso* – but the hard bop style of his last album, *Time Pieces* from 2015, is maintained in other tracks, and the Cala CDR proves adept with either style. It's a lovely recording, and that comes through deliciously.

### WHIP-CRACK PRECISION

If that doesn't prove that the little T+A system can rock, a workout with John Mayall's no-nonsense 2011 *Live In London* [Private Stash Records StashCD06], which has a wonderfully direct sound, makes the point. This little package can pound out the music without ever losing sight of details of the performances, including the epic 'Room To Move' – all 15+ minutes of it. It may be big-boned, but it's also whip-crack tight and precise, making the most of all the soloing that's going on. What's more, the sense of power in reserve is hard not to like with sets like this – the Cala CDR maintaining control however busy the music gets, and however far you choose to push its volume control.

True, some may wish for more of a raw edge to the sound, a bit more spit and sawdust rather than the slightly polite balance on offer, but

what it lacks in grit and gravel this little system more than makes up for with its refinement and control, and provided that's what you're after you'll have little cause for complaint. That's as true whether you spin CDs or play digital files, as comparing the two showed there was nothing to choose between the physical and the virtual.

It even sounded rather fine when playing a weekend of Radio 3 via Internet radio, FM and DAB, an impression confirmed with Anne Sofie von Otter's recent album of Sibelius with the Finnish Radio Symphony Orchestra under Hannu Lintu [Ondine ODE 1289-5; 48kHz/24-bit], which was treated to fine orchestral sound in *Tapiola*, and a glorious view of the mezzo's voice in the six songs running through the set. Yes, the recording has a little more to give in terms of ambience and absolute detail when played through an even more accomplished system, and where the nuances of the singer's technique are more apparent, but the Cala CDR leaves the listener with no feeling of being short-changed, so mature and enjoyable is its presentation. ☺

### HI-FI NEWS VERDICT

Compact, solidly put together and stylish – well, once you tame the lightshow – this little system takes the qualities of past T+A Cala models and ups the game with an excellent mix of performance and flexibility. True, it's not the most hard-charging sound in the world but the well-judged balance here will please more listeners than it frustrates, delivering as it does a rich, powerful view of CD and all manner of streamed media.

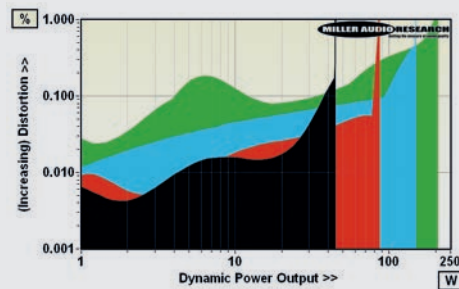
Sound Quality: 83%



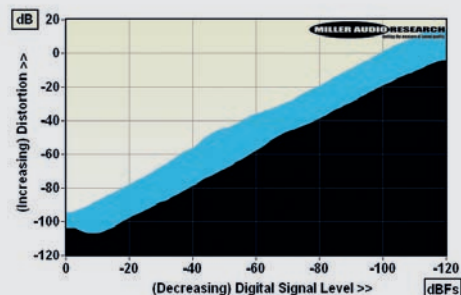
### T+A CALA CDR

In common with T+A's PA 1000 E integrated [HFN Mar '17], the Cala CDR hosts a Class D amplifier module that, like many other bridged networks, has a rising output impedance (over 1ohm at 20kHz) and rising distortion at high frequencies with a frequency response that varies with loudspeaker load impedance. In practice the analogue response of the Class D amp is limited to ~24kHz because all inputs are digitised at 48kHz, but into 8ohm it is +1.3dB/20kHz, falling to +0.5dB/20kHz into 4ohm and -0.9dB/20kHz into 2ohm loads. Distortion increases gently with output and more markedly with frequency, from 0.008%/1W to 0.015%/10W and 0.03%/40W (all at 1kHz) to 0.63%/10W at 20kHz. Neither does the Cala CDR quite meet its 100W/4ohm power specification, yielding closer to 46W/8ohm and 87W/4ohm with 45W, 87W, 150W and 200W available under dynamic conditions into 8, 4, 2 and 1ohm loads [see Graph 1, below]. This type of amplifier has no 'dynamic headroom' as such but it does exhibit a good tolerance of difficult loudspeaker loads – response notwithstanding – with its 14A current reservoir.

While this Class D amplifier rather dominates the overall technical and subjective performance of the Cala CDR, its CD/DAC section is accomplished, offering a standard 1.97V from its preamp outputs at 0.0007-0.0016% distortion (20Hz-20kHz). Distortion falls as low as 0.0002% over the top 30dB of its dynamic range through bass and midrange with a minimum of 0.0011% at 20kHz [see Graph 2, below]. A linear phase digital filter is employed but with a gentle roll-off, so stopband rejection is just 40dB, but jitter is very low at 94psec. The A-wtd S/N of 95dB is sufficient for the ensuing Class D amp stage. PM



**ABOVE:** Dynamic power output versus distortion into 8ohm (black trace), 4ohm (red), 2ohm (blue) and 1ohm (green) speaker loads. Max. current is 14.1A



**ABOVE:** Distortion versus 24-bit digital signal level over a 120dB range at 1kHz (black) and 20kHz (blue)

### HI-FI NEWS SPECIFICATIONS

Continuous power (<1% THD, 8/4ohm)	46W / 87W
Dynamic power (<1% THD, 8/4/2/1ohm)	45W / 87W / 150W / 200W
Output impedance (20Hz-20kHz)	0.045-1.02ohm (46ohm, pre)
Freq. resp. (20Hz-20kHz, amp/dig)	-0.8 to +1.3dB / +0.0 to -0.9dB
Digital jitter (S/PDIF at 48kHz)	94psec
A-wtd S/N ratio (re. 0dBW/0dBFS)	84.9dB (Analogue) / 94.8dB (Dig)
Distortion (20Hz-20kHz; 0dBW/0dBFS)	0.008-0.25%/0.0007-0.0016%
Power consumption (idle/rated o/p)	21W / 125W (4W standby)
Dimensions (WHD) / Weight	370x105x245mm / 6kg

