



**"Sometimes we're magic":**  
Flashing back with the  
Grateful Dead

**Connected!**  
Meze Audio Alba  
wired in-ears



# Hi-Fi Choice

**PASSION FOR SOUND**

Issue No. 520

November 2024

## LOUD & PROUD

**GROUP TEST**

**Six standmount speakers:  
which is the ultimate upgrade?**

**IN  
COMMAND!**

The T+A R 2500 R  
all-in-one receiver/  
CD transport will  
boss your system

**"SUPER  
SOUND"**

NuPrime Audio's  
DAC-9X is a high-  
end treat for your  
headphones



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GUIDE**  
100+ Essential  
Components  
p107

**NEWS  
SPECIAL:**  
Launches from  
Monitor Audio,  
FiiO, Pro-Ject,  
Marantz,  
Q Acoustics,  
Degritter,  
Bowers & Wilkins  
& more...

**GOING  
GREEN**  
How Massive  
Attack are  
kickstarting  
eco-touring

**Bargain of the month**

Loewe's We. HEAR pro compact Bluetooth speaker

**EVOLUTIONARY**



Viorelectric's awesome PPA  
V790 MM/MC phono stage

**STUDIO SUPERSTARS**



All hail the brilliance of  
Booker T & The M.G.'s

**BE SPHERE NOW!**



Elipson's Planet L Gold Ed.  
standmount orbital speaker

£5.75



NOVEMBER 2024

PRINTED IN THE UK



**DETAILS**  
**PRODUCT**  
 T+A R 2500 R  
**ORIGIN**  
 Germany  
**TYPE**  
 All-in-one receiver with CD transport  
**WEIGHT**  
 14kg  
**DIMENSIONS**  
 (WxHxD)  
 460 x 165 x 405mm  
**FEATURES**  
 • Output power (RMS) per channel: 250W(4ohm) 140W(8ohm)  
 • Inputs: XLR; 2x RCA; coaxial; 2x optical; 2x HDMI (1x ARC); USB-B computer audio; USB-A storage; LAN; WLAN  
 • CD-drive; FM, FM HD, DAB+ tuner; Bluetooth streaming  
**DISTRIBUTOR**  
 Kog Audio  
**WEBSITE**  
 taelektroakustik.de kogaudio.com

# Gratefully received!



Conceived as the 'command centre' of a modern high-end system, T+A's powerful brand new all-in-one embraces CD and streamed audio in all its flavours... oh and radio

Looking for a simple, no-frills, 'straight wire with gain' amplification solution? If so, it's a case of 'move right along, please – nothing to see here' – as T+A's R 2500 R is a prime example of large-scale integration in the quest for one of those 'just add speakers' systems. Available in black or silver, you can connect other source components to it, thanks to a choice of analogue and digital inputs – but why would you want to?

In practice, the R 2500 R has you covered for streamed audio of all flavours – be it from local storage or online sources – offers power amplification of sufficient shove to drive just about any loudspeakers you could hope to pair it with and has all your legacy listening covered via its built-in CD drive and FM/DAB+ radio tuner. Furthermore, to compound the 'new meets old' vibe of this hi-tech, high-end 'music centre', it even has a pair of VU meters on its otherwise

somewhat austere modernist fascia. All bases covered? Yep, pretty much. Actually, maybe that should be 'retro-modernist', given that the looks here date back more than three decades. First launched back in 1992, the R-Series was the first major product group from the still-family-owned, still-making-everything-in-

## The R 2500 R really draws the listener deep into the intricate playing

Germany company. And it's still at the core of T+A's offering, with the R-Series 2000, of which the R 2500 R is the flagship, making its debut in 2015 at Munich's High End Show.

Described as a: "Multi-Source Receiver", it brings together the best parts of the rest of the series in one substantial 14kg housing. It's so

complete that the only real decision to make here is whether to go for the MM or MC phono modules, factory-fitted internally in their own shielded housing and replacing one of the two sets of RCA unbalanced line inputs (there is, of course, also a single set of balanced XLRs).

Considering the massive capabilities of the R 2500 R, the face it presents to the world is appealingly simple, with little more than a couple of rotary controls. There's volume to the right, multifunction source/track selection/menu navigation to the left, and a couple of handfulls of buttons for functions such as speaker A/B selection, tone on/bypass and to enable or disable the unit's preamplifier output.

The CD player uses a slot-loading mechanism, there's a USB-A port on the front for quick hook-up of storage devices, and there's a balanced 4.4mm Pentaconn headphone socket to match the company's Solitaire

models, with adapters available from T+A – and third-party sources – for other cans. Oh, and the amp's relatively simple display can be dimmed or turned off, as can the illumination for the meters, which come in a choice of white or blue/green/red lighting.

A very comprehensive remote control handset is provided, covering not just basic operation but extremely deep dives into the R 2500 R's menu system. However, many owners will doubtless opt for the latest G3 version of T+A's MusicNavigator app. This offers a clear and easily configurable portal to access all of the unit's setup options and operations, and is pretty much a must-have if you're going to use all the streaming functionality.

Frankly, swiping and clicking content on the app using your smart device of choice is a much more satisfying experience than trying to navigate music files while prodding at the remote handset and peering at the unit's display.

The R Series is positioned below the company's range-topping HV (High Voltage) lineup, but the HV technology is still trickled down here – improving the linearity of the preamp stage while the power amp matches its rated 140W/8ohm output with impressive dynamic headroom, speed and slam. Also present, in an enclosure pretty well packed with PCBs is T+A's twin DAC solution – which handles both PCM and 1-bit DSD data in their native form, with no format conversion, by using separate paths for the two kinds of stream. DSD is handled by T+A's 'True 1-Bit converter', with two filter



More than a few brands employ the phrase 'all-in-one' to describe their feature-rich products. Typically these are network-connected amps – 'just add a NAS drive and speakers' solutions. Very few offer all this and a disc drive to boot in the fashion of T+A's R 2500 R. Musical Fidelity's 500W-rated M8 Encore 500 integrated was one of the few (and is still showing on the brand's website), offering a CD drive in addition to app-control and streaming over Spotify, Tidal and Qobuz services. Otherwise AVM – another premium German brand – is arguably the prime contender in this field. It offers no fewer than five 'CD receivers with streaming', priced from £3,500 to £14,500 and typically available in silver or black colourways, some even come with a bright chrome fascia option!

options, while PCM is passed to an array of four Burr-Brown converter chips per channel, with six digital filter and oversampling modes.

Streaming is placed in the capable hands of the company's latest platform. This accesses a wide range of services, and in this generation adds the Connect versions of Spotify and Tidal alongside AirPlay, in audiophile quality; playback of uncompressed FLAC files via aptX HD Bluetooth; and native network playback of DSD files. In addition to the Wi-Fi/Ethernet network, the unit can play music files from a USB-B 'computer audio' input, USB-A storage and one coaxial and two

## The T+A architecture is even-handed across all of its many capabilities

optical digital inputs. Separate power supplies are used for the digital and analogue sections of the R 2500 R, with galvanic isolation between the digital platform and the analogue amplification to keep any unwelcome noise out of the picture.

### Sound quality

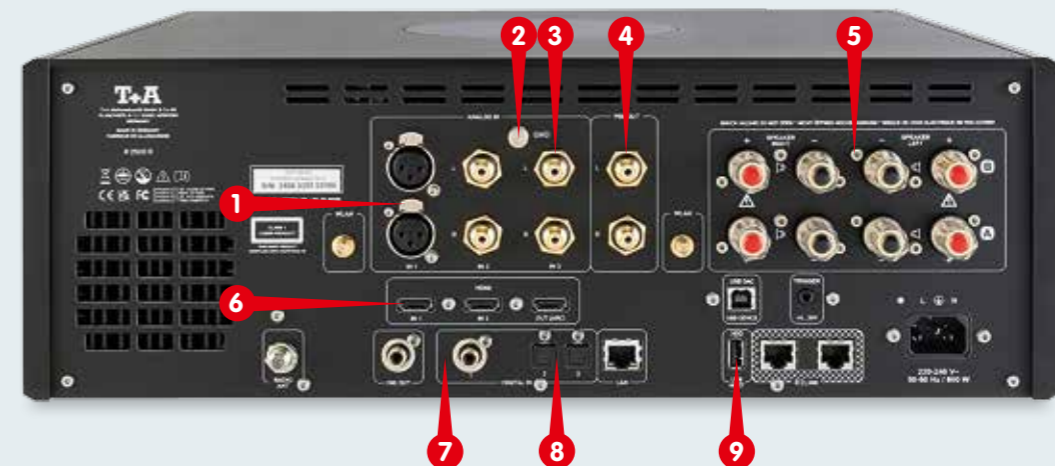
Enjoying a journey in nostalgia, the arrival of the R 2500 R coincides with the BBC Proms season. Via a roof-mounted aerial, all the clarity and dynamic power offered by a stirring performance of Elgar's *Second Symphony* by the BBC Scottish Symphony Orchestra conducted by Ryan Wigglesworth, and many other musical delights from both the Royal

Albert Hall and elsewhere are available. Switching between analogue and digital radio, streamed files and CD perfectly highlights just how even-handed the T+A architecture is across all of its capabilities.

Listening to music from *The Trondheim Concertos* – where the sheer definition on offer gives fine insight into the meticulous playing – to the opposite end of the musical scale and that old barnstormer, Frankie Goes To Hollywood's *Welcome To The Pleasuredome*, proves hugely rewarding. With the latter, the R 2500 R sounds as dramatic and hard-hitting as any previously tested streamer/amplification combination, finding new strengths in the little PMC prodigy5 (HFC 512) floorstanding speakers that we opt to partner it with. They sound huge beyond their relatively compact size, the bass both extended, tight and impactful. Layered above that, all the intricacies of Trevor Horn's immaculate production are laid out for inspection, from the nuances of Holly Johnson's voice to the sometimes-complex percussion, all to striking effect.

It's noticeable that the choice of filter and oversampling mode seems to have more effect when playing CDs than with the R 2500 R's other onboard sources. The 'Bezier/IIR' setting seems to offer the best effect with some very early CD releases and their often-brash sound. Experimentation can also be worthwhile with flat-sounding lossy Internet radio streams. But the best setting for your listening will, of course, be as much a matter of taste as any notion of correctness.

## CONNECTIONS



- 1 XLR inputs
- 2 Earthing post
- 3 2x RCA inputs
- 4 Single-ended preamp output
- 5 Switchable A+B 4mm speaker outputs
- 6 2x HDMI inputs and one output (ARC)
- 7 Coaxial in and outs
- 8 2x optical inputs
- 9 USB-A (HDD) and USB-B (computer), both to 24-bit/768kHz and DSD512



**POWER PLAY**

There's a lot of technology squeezed into this enclosure, but not at the expense of raw speaker-wrestling power. Rated at 140W/8ohm and 250W/4ohm, the R 2500 R actually delivers closer to 2x 145W and 2x 270W into 8 and 4ohm, respectively, with enough in the tank to support 150W, 275W, 475W and 355W into 8, 4, 2 and 1ohm loads (<1 percent THD) under dynamic conditions. Overall gain is a sensible +33.1dB and the A-wtd S/N ratio clocks-in at a spectacularly wide 100dB (re. 0dBW). Distortion holds true to 0.003-0.004 percent over the rated 140W power bandwidth (all 1kHz/8ohm), but tracks higher - to 0.02 percent/100W - under dynamic conditions, with decreasing load impedance and with increasing frequency (0.014 percent/20kHz/10W). Output

impedance is a low 0.02ohm, the response is flat to ±1dB from 1Hz-47kHz, and channel separation a wide 100dB through the midrange.

Digital inputs (and CD) are handled by four PCM1795 DACs with the flattest response achieved by the 'FIR Long' filter at -0.3dB/20kHz, -1.9dB/45kHz and -5.1dB/90kHz with 48kHz, 96kHz and 192kHz digital files, respectively. The NOS filters are best used with high (96kHz+) sample rate media. Tested at 2V output (vol = 77) from the preamp RCAs, T+A's R 2500 R offers an above-average 108.1dB A-wtd S/N and low <10psec jitter (all sample rates). Distortion falls to a minimum of 0.00025 percent/1kHz over the top 30dB of its dynamic range and low-level resolution is good to ±0.4dB over a full 100dB dynamic range.

with the one-microphone recording of Julie Adams' *Land Of My Early Childhood: Bartók Piano Works*. Played in the DSD256 in which it was recorded - the R 2500 R can handle up to DSD512 and 32-bit/768kHz PCM - this release has a truly breathtaking sense of the piano being before the listener, while the playing - at turns limpid and gentle, and sprightly in its dancing rhythms - is totally captivating and enchanting.

**Considering its massive capabilities, the R 2500 R is appealingly simple**

Towards the end of the listening sessions, some kind of devilment leads to the *Punk Me Up - A Tribute To The Rolling Stones* compilation on Cleopatra Records. Anything that starts with a Jah Wobble version of *Start Me Up*, has a bass-driven take on *Sympathy For The Devil* by Anti-Nowhere League and ends with a chaotic, thrashing *Street Fighting Man* - well, it can't be too bad, can it?

It may not be what the dedicated engineers at T+A had in mind when they brought all their digital and analogue knowhow to bear on the R 2500 R, but not to be bushwhacked, it comes across as a thundering, snarling riot. Which is, of course, exactly as it should be.

**Conclusion**

In a changing network world, there's an argument for not putting all your audio eggs in one basket, but T+A's R 2500 R has both the futureproofing and performance to challenge and dispel such thinking. Superbly built, generously equipped, technically and musically impressive, it will slot into even very high-end systems, drive just about any sensitive speakers and deliver with minimum fuss ●

On, then, to a network storage stream of this year's four-disc Super Deluxe edition of The Police's 1983 *Synchronicity* album, packed with out-takes, demos and live recordings. The R 2500 R gives a fine account of their reggae-influenced sound, and a wide-open view of the contribution of each of the trio, from *Every Breath You Take* and *Don't Stand So Close To Me* (among the live tracks), to the exuberance of the early material and the way the title track is broken down in multiple demos and outtakes.

There are times, with re-releases like this, that one feels every last scrap of material has been swept up from the metaphorical cutting-room floor, but here each bit adds rich enlightenment to the story of the LP

The R 2500 R doesn't require big and bold recordings to show how well it deploys its combination of digital excellence and gutsy amplification, though. Pat Metheny's recent *MoonDial* is described as a: "solo guitar recording of a Linda Manzer baritone nylon string guitar using an AEA R88 ribbon mic with a Go Acoustic Audio pickup".

Either way, the sheer impact and presence of the instrument is at first startling and then thrilling, from the extension of the lower strings to the fine detail of the touch and resonances further up the fretboard.

This album is extremely gentle and soothing, but no less interesting for that, and the R 2500 R really draws the listener deep into the intricate playing. And it does the same thing

**Hi-Fi Choice**

**OUR VERDICT**

**SOUND QUALITY** ★★★★★ **LIKE:** Sound quality; quantity of options

**VALUE FOR MONEY** ★★★★★ **DISLIKE:** Nothing of note at the price

**BUILD QUALITY** ★★★★★ **WE SAY:** It's pretty much got the lot!

**FEATURES** ★★★★★

**OVERALL** ★★★★★