

Musical Fidelity Titan (£20,000)

A distillation of 30 years' design and manufacturing experience, this limited edition 1kW power amplifier lives up to its name in every respect: size, weight, performance
Review: **Richard Stevenson** Lab: **Paul Miller**

I have always been a fan of Musical Fidelity amplifiers... from my old A1 that doubled as a room heater in my university digs to the frightening kW Superchargers that rather infamously melted the tweeters in a pair of KEF Reference floorstanders during a particularly raucous party.

They are products of intent, often taking brand owner Antony Michaelson's design concepts to their ultimate engineering conclusion. The A1 for its pure Class A operation irrespective of heat and associated issues. The kW series for its delivery of lots and lots of very clean power. So when I had the opportunity to review the company's flagship Titan power amp, I came over all unnecessary.

Leading from the top of this amplifier's trump card specification sheet is the £20,000 price tag, followed closely by the innovative two-box design and claimed delivery of 1kW into an 8ohm load. Into my large Tannoy floorstanders' near 4ohm load that might be 2kW. The glassy-eyed hint of excited madness that comes over me at times like this is probably why KEF doesn't let me borrow speakers anymore.

FOR 'PRETTY' READ 'PRETTY BIG'

Reading the spec-sheet alone does little to prepare you for the sheer size, weight and physical presence of the two-box Titan. Antony himself bought the beast to the Stevenson homestead, the back of his estate car sagging under the load. It is massive, with a combined weight over 110kg and each unit boasting a footprint the size of a small chest of drawers. Sitting side-by-side you have two enormous works of art in milled aluminium – low, wide and deep. Along with the fins that run the full length of all four cheeks, the styling aids cooling through a half dozen grilled ports in the top of each case. I would argue that the Titan is the prettiest high-end power

amp on the market. I was clearly in love, and I hadn't even turned them on yet.

The Titan is a pure dual-mono design in two cases, but rather than go down the route of two self-contained monoblocks, one of the Titan cases houses two discrete power supplies of epic proportion. The twin 15A power connectors hint at what this beast can suck from the National Grid under load. We hooked these directly to the mains, bypassing my PS Audio PPP mains regenerators which would probably go into meltdown trying to supply that much current.

Power for the control circuitry is supplied to the second box via a dedicated 230V link lead. In addition, two leads are supplied with locking Neutrik terminals at both ends to carry the power supply output to the amplifier modules. The amplifier box is about two-thirds the weight of the power supply and contains four power stages configured in discrete bridged pairs. It is equally extravagantly finished with balanced XLR and RCA inputs and dual locking speaker terminals that are beefy

enough to tether a small ship. Everything is massive, solid and feels like it would last a lifetime of abuse, perhaps even two or three.

Powering up the supply box is achieved by the smallest of aluminium buttons and understated blue LED indicators. A second later the transformers charge up with a low 'bungggg' sound like a Star Trek warp drive coming on line. The amplifier is powered up with a similar discreet button press followed by the case fans whirring quietly to life. A second later, relays thump home to let you know this is an amplifier ready to boldly go where no amplifier has gone before. Just living with the Titan is an experience and, in my opinion, all part of the involvement and theatre of owning a super-amp of such a kind.

HUMMING ALONG TO THE MUSIC

There was one immediate gripe, and that was the mechanical noise encountered. Those huge transformers got very upset with my mucky mains and, at peak neighbourhood demand, the power supply



RIGHT: The massive aluminium top plate of the Titan amplifier section is ported to aid cooling. We would have shown you more of the case but it was just too big to fit on the page...



box hummed like a week-old kipper. This, combined with the faintest of whines from one of the fans – possibly an issue with our well travelled review sample – served to raise the actual in-room noise floor and reduce the overall perceived dynamic range by quite a margin.

I called my power guru, Paul McGowan of PS Audio in the US, who is familiar with my supply issues and voltage fluctuations of a staggering $\pm 15\%$ off 230V. He said that devices that use half-wave rectification in their power supplies (a lot of flat panel TVs and UPS devices for PCs for example) can put a deal of DC onto the mains circuit, so are very likely to cause transformer hum. Add to this a house full of wireless transmitters and airwaves full of RF, and it is little surprise that my mains is dirtier than a Channel 4 movie after midnight.

FLOORED FROM THE START

Just before Antony had left, we sat the Titan on a parquet floor, hooked up with some inexpensive speaker cables, connected my Sony SCD1 player via a balanced input and powered it up from stone cold. I was hooked from the first notes. 'Blood Red River' from Beth Orton's

Central Reservation CD was etched into the room with breathtaking clarity, neatly crafting the subtle string-bass lines in a way that few other amplifiers manage to reveal. The Titan immediately presents itself as nimble, incisive and blessed with a top end of remarkable sweetness and resolution. Ms Orton's quite ragged vocal is portrayed as rich with emotion, caressing with an enticing and deeply sexual quality.

By the end of the week, the Titan now fully warm and cables swapped for some more exotic metal, I was smitten. Smitten in the way where you start calculating how much your current power amps might realise on eBay and taking a peek at moneysupermarket.com to see which bank currently boasts favourable loan rates.

The pivotal moment in this relationship, the point where you start singing 'Easy Like A Sunday Morning' on the way to work on a wet Tuesday and smiling inanely at strangers in the street, was playing Antimatter's recent live CD *Live @ An Club*.

'The black disc's charms and top-end dynamic are so well presented...'

ABOVE: MF's milled fascia features the most understated power button in amplifier history. At only 4mm in diameter it unleashes the Titan's 1kW/channel into 8ohm or 2kW into 4ohm

This intense recording of acoustic guitar and Mike Moss' intriguing vocal has an amazing rawness and natural vitality that flies against the current trend for dynamic compression on modern recordings. Playing this CD through the Titan is an instantaneous transportation to the date, time and place. It is being there in the

crowd with the full ambience of the venue filling the room around you, the music imaging with sublime precision.

Alongside acoustic versions of material from the band's four studio albums is the

cover version to end all cover versions of Lennon's 'Working Class Hero'. The passion and angst in the song is conveyed perfectly by Moss, the Titan's supremely lucid midband allowing the song to scale into the room with dynamics and detail of breathtaking proportions. The track is simply recorded with two direct inputs (DIs) and a vocal mic (I had to contact the band to find out – it really is that good) and the Titan ekes out every last nuance.

Head to toe in goosebumps, lost in the music, I am in very real danger of stating that the Titan is the best power amp I have ever heard. There, said it! In fact, such is the Titan's lucidity and separation of instruments through the midband, I was overcome with a strange urge to reconnect and set-up my favourite hi-fi ornament, a 1988 vintage Michell Gyrodek. Oh good grief, I have rediscovered vinyl. The black ↻

TWO BETTER THAN FOUR

Rather than creating a traditional two box stereo power amplifier in monoblock fashion, the Titan places massive transformers in one enclosure and keeps the sensitive amplifier sections for both channels in the other. So why not take this to the logical conclusion and create a four-box stereo power amplifier? Michaelson argues that the two-box approach allows both left and right channels to share the same zero voltage point across a unified ground. This leads to much closer channel matching, which in itself may go some way to explain why integrated amps can often sound a whole lot better than pre-power combos of roughly the same price. The amp is intended to be the ultimate expression of what Musical Fidelity can do: you only have to take a look at the spectacular Lab Results [see p55] to see this is no idle boast.

POWER AMPLIFIER



ABOVE: The Titan power supply (bottom) has twin 15amp power inputs and connects to the amplifier via dedicated Neutrik leads. The amplifier section (top) has balanced XLR and RCA inputs and pylon-sized locking speaker terminals

disc's charms and top-end dynamic are so well presented by the Titan I found myself scheduling vinyl evenings into the diary before the amp's inevitable return to MF.

Whitesnake's bluesy rifts on the live album of *In The Heart of The City* are carved into the room with sweeping scale and the Titan neatly recreates all the atmosphere and ambience of a packed Hammersmith Odeon. As the track plays out on an epic solo, any diehard rock fan would have to sit on his hands not to pick up an air guitar and squeeze out those last few chords with an authentically pained expression. Absolute magic. Twelve-inch singles fared even better, with Frankie Goes To Hollywood's seminal *Relax* brought back to life with jaw-dropping bass tautness and a top end sparkle that I had all but forgotten existed.

I knew the Gyrodek/Titan pairing was hitting all the right notes when the wife danced into the room and promptly boogied along to the entire extended remix. Certainly a change from telling me to 'turn that bloody noise down'.

FORGIVE AND FORGET?

Never have I heard an amplifier which does everything quite so well. From the tightest of bottom-end notes right up into its sweet and extended top-end it is quite magical. It offers a soundstage so breathy and open that it even relieved much

of the mild mid-bass congestion I suffer in my listening room as the projector screen limits speaker placement. It also has a stunning signal to noise ratio, and I do mean stunning. Playing digital silence at three-quarters volume there was barely a hiss from the speakers.

Yet the fact remains the Titan did make more of a meal of my supply issue than most, and at £20,000 I would have expected it to ride roughshod over such a problem.

Of course, your power supply will almost be certainly cleaner than mine, and once a CD or vinyl record is playing you absolutely cannot hear this faint hum anyway. Moreover, when the Titan is working its magic with your favourite music you will forgive it anything. ☺

HI-FI NEWS VERDICT

Polished, sophisticated and technically accomplished, the Titan has every right to revel in the cliché of being an open window on music. Frankly stunning midrange lucidity and a potent yet always sprightly balance make for wonderful musicality and hi-fi magic of the highest order. Notwithstanding dirty mains causing an annoying hum, the Titan is, I would say, the best power amplifier I've used.

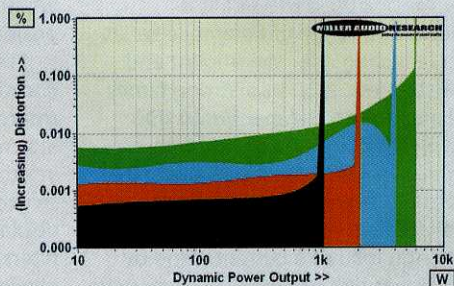
Sound Quality: 86%



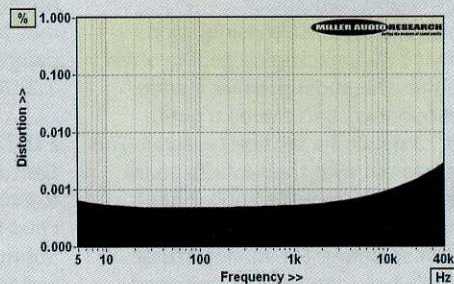
MUSICAL FIDELITY TITAN (E20K)

A 'Titan' in both name, weight and performance, this amplifier can trace its legacy right back to MF's Tri-Vista kW power amp [*HFN*, Aug '03]. Both amplifiers are/were rated at 1kW/8ohm and both shared a pair of 2kW toroidal power transformers, although the Titan is a more evolved design with alternative SAP output transistors, a lower impedance supply and very subtle over-current protection. Frankly the Titan is not as 'extreme' an amplifier as the kW which could deliver 104A into loads as low as 0.6ohm. Just don't go thinking the Titan is a shrinking violet, however, for it matches the kW with massive power outputs of 1050W and 1996W into 8/4ohm loads, its supremely 'stiff' power supply recording a near-perfect doubling of 1060W to 2100W to 4100W into 8 then 4 and 2ohm loads under dynamic conditions [see Graph 1, below]. Achieving a further doubling to 8kW into 1ohm is just not possible (even a 2kW transformer has its limits) but a full 5896W/1ohm (76.8A) will still be sufficient to drive any loudspeaker into oblivion.

Importantly, the new Titan offers a lower 0.0005% bass/midrange distortion from 5W-900W/8ohm [see Graph 2, below], a wider 95dB A-wtd S/N ratio (re. 0dBW), wider 5Hz-100kHz response (+0dB to -2.1dB) and a lower 0.03ohm output impedance than its forebear. It is simply tighter, faster, cleaner – the veritable jack hammer sheathed in a velvet glove and, until demonstrated otherwise, the most powerful, load-tolerant amplifier currently available. Readers are invited to view a comprehensive QC Suite test report for Musical Fidelity's Titan power amp by navigating to www.hifinews.co.uk and clicking on the red 'download' button. PM



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



ABOVE: Distortion vs. frequency from 5Hz to 40kHz (10W/8ohm). Distortion is very low indeed

HI-FI NEWS SPECIFICATIONS

Power output (<1% THD, 8/4ohm)	1050W / 1996W
Dynamic power (<1% THD, 8/4/2/1ohm)	1060W / 2.1kW / 4.1kW / 5.9kW
Output impedance (20Hz-20kHz)	0.029-0.17ohm
Frequency response (20Hz-100kHz)	+0.0dB to -2.07dB
Input sensitivity (for 0dBW/1000W)	88mV / 2810mV (balanced)
A-wtd S/N ratio (re. 0dBW/1000W)	95.5dB / 125.5dB
Distortion (20Hz-20kHz, 10W/8ohm)	0.00046-0.0017%
Power consumption (Idle/Rated o/p)	110W/1600W (per channel)
Dimensions (WHD, amp/PSU)	483x185x635/615mm