EQUIPMENT REVIEW

Robert Koda Takumi K-160 mono power amplifier

Alan Sircom



he Robert Koda Takumi K-160, designed by a South African called Robert Koch who made his home in Japan, is the best and most powerful Single-Ended Triode valve power amplifier ever made. It just happens not to use any sort of triodes in its construction and is a completely solid-state design. That might read like a lot of cognitive dissonance for an opening paragraph, but the more I listened to the Takumi K-160, the more I thought that statement is right, and the rest of the review unpacks that.

There are a lot of hand-made product in high-end audio, but even by those lofty standards, Robert Koda stands at the apex. There are just three products currently in production at Robert Koda; the excellent Takumi K-15 EX line preamp tested in Issue 196, the Takumi MC-ONE phono equaliser and – most recently – the Takumi K-160 mono power amplifier.

'Production' isn't the right word. These made to order products are made to order in extremely small number due to the painstaking approach of Robert Koch. If, at the end of this review, you decide that you would like a pair of Takumi

EQUIPMENT REVIEW Robert Koda Takumi K-160



In the Takumi K-160, that uncompromising approach is in things like it only uses N-type (or NPN) transistors; no Positive-Negative-Positive transistors are allowed.

X-160 and have sufficient funds and the right system to realise that dream, settle in and prepare for a long wait; the company is said to build just five pairs of Takumi K-160 per year and already has a healthy order book.

What's so special?

To understand what's so special about Robert Koda amplifiers, you need to understand a little of the background of Robert Koch himself. He's devoted his life to the construction and building of the best audio electronics, both in his country of birth and especially of adoption. He spent many years sitting at the feet of the master, in this case the late Kondo Hiroyasu, the founder and design genius behind the original Japanese Audio Note brand. Kondo-san (and his protégé Ashizawa-san) were a profound influence on the way Koch designed and manufactured the products that carry the Robert Koda brand. According to Robert Koch himself, working with Kondo-san taught him the key elements of design are "Perseverance and patience first. Materials and technique second. Then perseverance and patience again - Completing the task, you set out upon without any loss of interest or focus." Of course, spending every day from your teenage learning about amplifier design helps too!

Like Kondo-san's products, Robert Koda designs are not marketing exercises, with a brief life cycle before the next New Big Thing replaces it. If you need a concrete example of why this is the case, look to the Takumi K-160 itself; this replaced the three-box, dual mono Takumi K-70 and it took 11 years of painstaking development and testing to do so. You could say the same for the glacial development cycle of all three products in the line.

Specifically in the development of the Takumi K-160, Robert Koch says, "Throughout the process, we began to fully understand fundamental limitations inherent to both tube and transistor devices. The breakthrough in performance we sought could only be achieved by creating new and novel solutions designed ingeniously to sidestep those limitations. In fact, it took a combination of multiple, brand new inventions discovered and honed over a decade of intensive research, to reach this goal."

To this end, Robert Koch produced a wholly new gain stage for what would become the Takumi K-160. He also developed a double single-ended power architecture, running in pure Class A. This not only delivers 150W per channel into an eight-ohm loudspeaker load but allows a product to act with all the sublime qualities of a single-

ended amplifier while also affording the amplifier the option of balanced or even floating inputs.

Almost any mention of Robert Koda products includes the word 'uncompromising' and this one is no exception. In the Takumi K-160, that uncompromising approach is in things like it only uses N-type (or NPN) transistors; no Positive-Negative-Positive transistor are allowed into the Koda Clubhouse. Of course, with all those years learning from Kondo-san the Takumi K-160 has no negative feedback (local or global). There are also no servos in the Takumi K-160 and no modulation on the power supply at all. All of which is very at odds with the logic-controlled powerhouses that dominate much of today's high-end.

'Uncompromising' also applies to its partnership with upstream amplifier electronics. I'd bet that the number of Takumi K-160 amplifier pairs that are not connected to a Takumi K-15 EX preamplifier will likely be 'zero', but if there are those willing to try other amplifier options, this is not an amplifier for the casual system builder. There are a number of top-end digital audio brands that argue – in fairness, often with some success – that their variable output stage removes the need for a line preamp. That might be so on the nursery slopes, but the Takumi K-160 is an audio black run.

You may find your ideal partner through the choice of inputs, but even here Robert Koda products tend to converge in performance; running Takumi K-15 EX into the Takumi K-160s in the 'floating' setting sounded better than any other preamplifier-style product and any other input.

Floating should sound better. Koda's floating bias system puts the preamp in control of the power amplifier's bias: the amount of class-A power is governed by the preamp's volume setting, obviating the need for any manual adjustment. This puts it head and shoulders above any other preamp options.

However, when it comes to loudspeakers, things get a lot easier. As I said at the outset, this is the best and most powerful single-ended triode amplifier (that just happens not to use triodes) and loudspeakers that would benefit from such a system – which is most of them – sound exceptionally good in the company of Robert Koda electronics. However, if you are using some kind of loudspeaker that punishes its amplifier, one with a crushingly low impedance and all the sensitivity of concrete loudspeaker drivers, the subtlety of the Robert Koda is not for you. Fortunately, those loudspeakers largely went away around the time JR Ewing took a bullet for ratings.

>>

EQUIPMENT REVIEW Robert Koda Takumi K-160



My audio vocabulary runs out of road here, although I can describe the usual elements of performance quickly because it's at the acme of all of them.

On a personal note, having met and interviewed Robert Koch relatively recently, it's interesting that 'uncompromising' doesn't extend to his personality. He's a charming, soft-spoken and infinitely polite man, who clearly directs all that sturdiness of vision into his products. Which is exactly how things should be.

Fit and finish

Naturally, when you are paying a substantial amount of money for a pair of power amplifiers, you expect them to be finished to a high standard. And, in fairness to the top-end of high-end, the standard of fit and finish is often exemplary... but the Robert Koda amps push even those standards of finish to new levels. I'll be honest; there's always a bit of a worry when you encounter the words 'hand-built'; does it mean 'bespoke' like a pair of John Lobb shoes made to a standard few others could achieve, or does it mean 'knocked together in a shed'?

Robert Koda is very much in the 'bespoke' camp, the champagne finish with gold flash along the front panel manages to look 'timeless', the panels are extremely solid and even the knobs and buttons feel substantial.

I'm saving the best until last; how it sounds. In part because I'm a little apprehensive of exactly how to approach the sound of the Robert Koda Takumi K-160. Not because the sound isn't good (it's great), not because I don't like it (I do), but because it's placing me far outside of my reviewer happy place. My audio vocabulary runs out of road here, although I can describe all the usual elements of performance quickly because it's at the acme of all of them. At the very least, it matches the best in each category, and is without parallel in terms of sonic realism or its ability to project a coherent and extremely intelligible voice into the room. But that gets you into the 'very good' category of power amps. That all these elements combine in a manner that makes the whole greater than the sum of the (already



Reproduced from hi-fi+ Issue 216 hifiplus.com

EQUIPMENT REVIEW Robert Koda Takumi K-160



Elvis isn't in the room with you, you are in the room with Elvis! This is hard to describe, easy to hear, and truly wonderful to experience.

excellent) parts places the amps in the top tier, but this still doesn't get you on the same planet as the Robert Koda amps.

What makes the Takumi K-160 stand out from the crowd is its uncanny ability to project *you* into the midst of the music rather than the other way round. And it is uncanny; the best amps I've heard thus far project a recreation of that smoky 1950s jazz club or that cocaine-filled studio of the 1970s. The Robert Koda Takumi K-160 goes way beyond that point, and it's as if the amp teleports your listening room into the club or studio as and when the album was being made. Listening to those golden out-takes from the 1950s (such as the many times Elvis 'corpses' in front of a microphone during those early sessions) and you are there. Elvis isn't in the room with you, you are in the room with Elvis! This is hard to describe, easy to hear, and truly wonderful to experience.

Skulls and spiders

This trans-location effect has a profound influence on your musical listening experience. You soon crave the emotional tracks. Not like some early 2000s whiny emo kid; you also delve into your past, long before you signed up as an audiophile. I played 'A Forest' from Seventeen Seconds [Fiction] by The Cure on Tidal. Moments into the track, I was an angry teenager again, desperate to paint my bedroom black and have a bed made of skulls and spiders. Depending on your musical development, you will find your own track that transports you across time and space.

All of this comes from a sound that is quicksilver fast when it needs be, slow and majestic in other times. Unlike that best single-ended triode amp claim, it can be sharp and angular when it the music calls for it. It can be cavernous or claustrophobic, poppy and beat-oriented or cerebral, windswept and interesting. It can do all these things and more, leaving its rivals in the dust. Of course, you would expect nothing else from amps of the Robert Koda's provenance and magnitude, but beyond that, this amplifier is important as the next step in the punctuated equilibrium of audio. Audio Research was first; it made brands want to make something similar. Mark Levinson, Electrocompaniet, Krell and Audio Note followed suit. Not just with me-too products but with better products at all points from the cheapest to the most 'spendy'. The Robert Koda Takumi K-160 should have the same evolutionary pump effect.

Angry Audiophile ahoy

An amplifier like the K-160s was always going to shake the 'angry audiophile' tree, but in fact it exposes one of the biggest lies in audio. There are a lot of gatekeepers in audio who think that because they feel they are someone of culture, means and discernment, anyone who spends more is a spendthrift who is buying audio for showing off rather than for pure sound quality. And yet, the Koda has comparatively modest power output, comes from a brand with no 'big name' bragging rights and is the kind of amplifier that is all about sound quality.

In so many respects, the Robert Koda Takumi K-160 is as close to a perfect amplifier as it's possible to make at this time. And, if your musical requirements cohere with the Takumi K-160's performance, there is no more perfect amp choice. This is a remarkable device, combining Zen-like calm with absolute musical finesse. It's a discerning choice for the audiophile who is fed up with swapping last year's model for this year's and doesn't need zingy immediacy. This is music for grown-ups, and grown-ups willing to put their name down on a waiting list. Ask yourself the big question, honestly; are you sophisticated enough for the Robert Koda Takumi K-160? If so, this might just be the last amplifier you ever buy.

Technical specifications

Type Solid-state, mono power amplifier

Power output 150W/8 Ω , 230W/4 Ω , 120W/2 Ω

Inputs XLR (balanced), RCA (single-ended)

Gain 26dB (single-ended, balanced or floating)

Input impedance $>10k\Omega$ (single-ended, balanced or floating)

Output impedance 0.05Ω at 1kHz

Damping factor 160

Signal to noise ratio 105.5dB (A weighted) at 1W into 8 Ω ; 125.5dB at 100W into 8 Ω

Distortion (at 1kHz) 0.0009% at 5W into 8Ω ; 0.005% at 50W into 8Ω

Weight 45kg per unit

Price £160,000 per pair

Manufacturer Robert Koda @ www.robert-koda.com

UK distributor Ten Collection