

Review of Norma' Revo IPA-140 by Mark Gusew, 08/2020, on :

stereonetTM

NORMA AUDIO ELECTRONICS REVO IPA-140 INTEGRATED AMPLIFIER



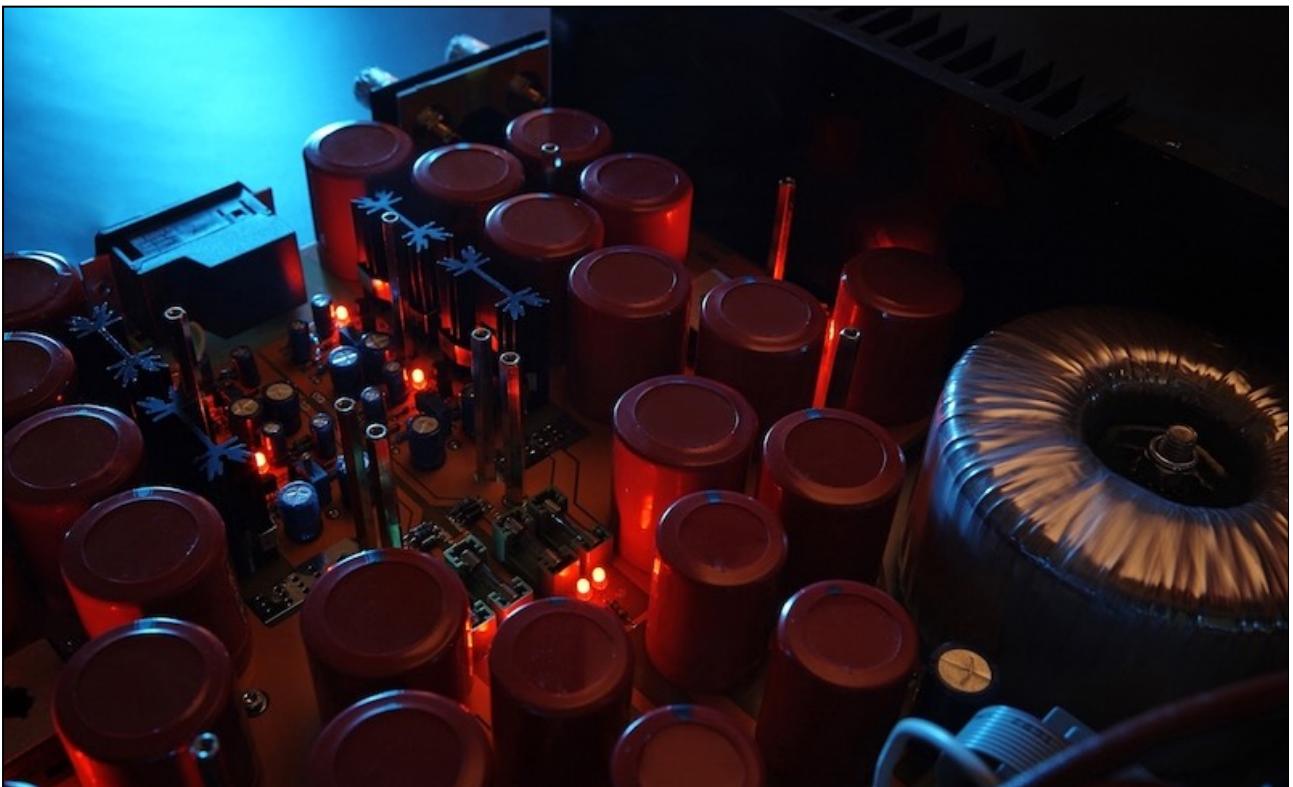
Mark Gusew thinks this exquisite Italian amplifier is almost a latter-day Stradivarius...



Back in 1991, Enrico Rossi embarked upon a seven-year research project to understand and quantify how hi-fi equipment compromises and degrades signal purity – asking what makes an amplifier sound the way it does? The results bore fruit when his company Opal began to manufacture Norma electronics in 1997.

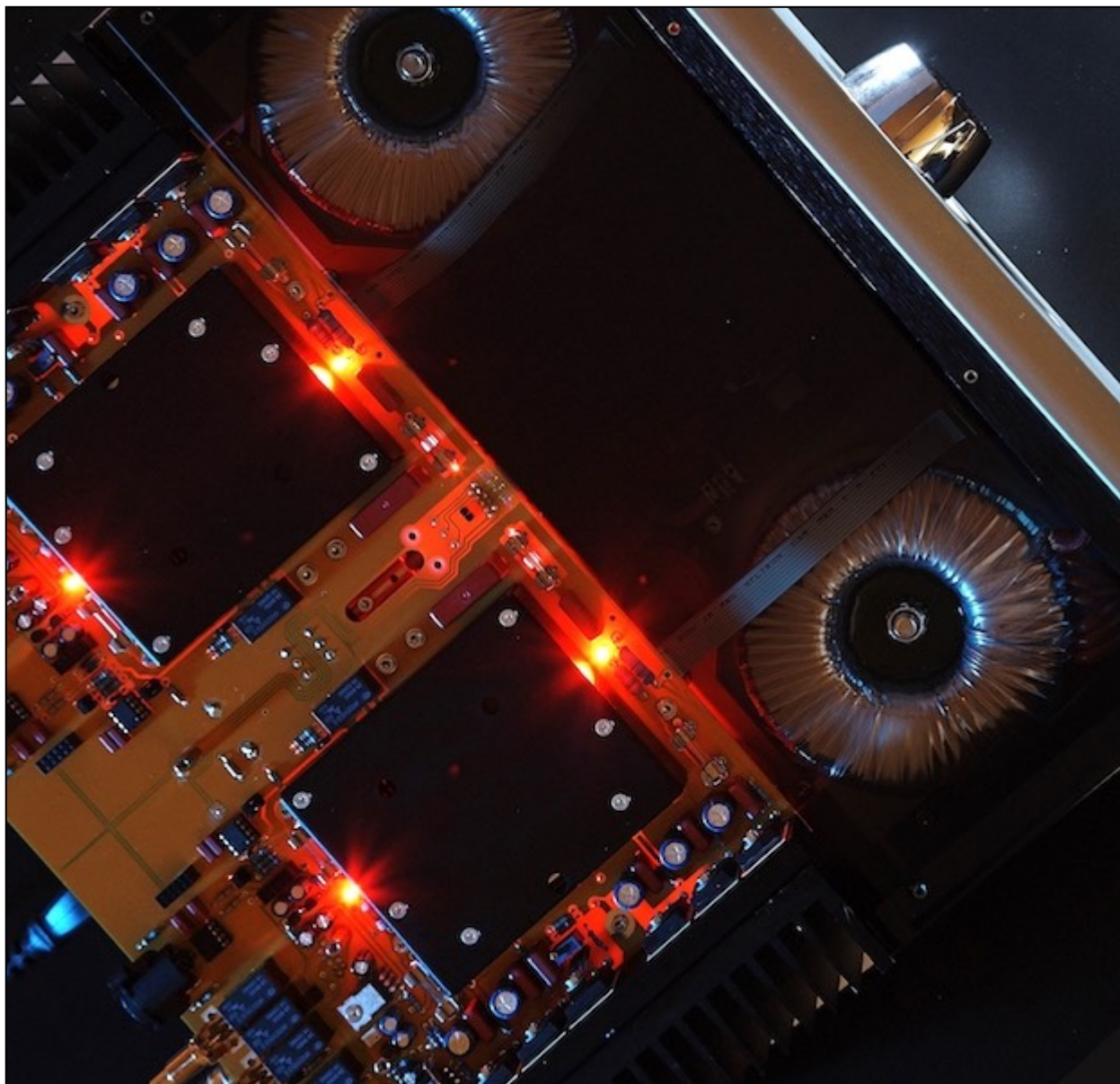
The company is based in Cremona, northern Italy, a city with a deep and distinguished musical heritage – think Monteverdi, Ponchielli and Giuseppe Verdi, and the master violin makers for Stradivarius, Amati and Guarneri. Enrico told me that, “the human voice and song are my greatest passions.” The fact that he owns some 30,000 LP records is testament to his love of music. His values, philosophy and deep understanding of electronics form part of every hi-fi product he makes.

The Revo IPA-140 is the top model in the Norma Audio Electronics integrated range, and currently on its fifth revision. He hasn't changed the model designation because he's against built-in obsolescence; instead, continuous small refinements occur whenever they are found. This integrated puts out a claimed 140W RMS per channel into 8 ohms and is said to double its power into 4 ohms. A conventional Class AB design, it sports twelve high current MOSFET power output devices.



A key company philosophy is ultra-wideband circuit topology. Although music is typically reproduced from 20Hz to 20kHz, it's argued that real world demands put upon amplifiers are such that their bandwidth should far exceed this. Rossi states that “this relates directly to overall circuit speed and its ability to supply instantaneous current. The scope of music's dynamic gradations has a crest factor of 1:100 which is a power scale of 1:10,000. From this it follows that bandwidth, speed and current can never be too high.” In the case of the IPA-140, the upshot is an extraordinary claimed bandwidth of over 2MHz, a slew rate of 175 V/ μ s and 150A peak current on each channel. Rossi says that there is an audible difference between 1MHz and 2MHz of bandwidth, so the effort delivers results.

Norma uses separate low noise regulated power supplies for the gain, driver and output stages. There are two specially selected 400VA toroidal transformers, one for each channel, with the design effectively creating two mono amplifiers in a symmetric layout within a single chassis. This is very well organised, with physical separation between the power supply and amplifier stages by layering the chassis, and also using full metal covers over segments of the amplifier that generate unwanted RF and EMF fields. Twenty four low impedance filter caps with 70,000 uF of filtration capacity feed the amplifiers, the company says.



UP CLOSE

Hand-built in Italy to the highest standards, the IPA-140 looks nicer in the flesh than you'd think by looking at photographs. The large chrome volume dial and simple controls on the front panel confer elegance. Each amplifier has the signature of the three testers involved with its assembly inscribed within the user manual. It's surprisingly heavy at 25kg, doubtless due to the twin transformers and the sheer amount of internal metal shielding. During its tenure with me, the amp stayed warm but didn't get hot even with heavy usage.

The amplifier has four configurable RCA inputs and a single balanced XLR. Input 1 is Phono, Input 2 is configurable as a regular input or as an output, with the output being either fixed or variable level for perhaps a pre-out to a power amplifier or a subwoofer. Input 3 can be configured as a standard input or as a direct input, perhaps for home theatre use. Input 4 is a regular input but has the shortest signal path, so is the preferred option for the best sound quality, and Input 5 is balanced XLR. Input 6 activates the USB type B input and onboard DAC if fitted to the amplifier. All these configurations are changed via internal jumpers, so the top cover must be removed for access to the top circuit board.



With the phono stage fitted, a small bank of dip switches on the dual mono circuit boards are used to configure the gain and loading to suit your cartridge. My unit came set for moving magnets, but as I use a moving coil, it also required swapping out two small supplied op-amps for extra gain.

There is provision for using custom loading resistors if the standard fare isn't correct, but buyers will have all of this sorted out by the retailer at the time of purchase, so there should be no need to do this yourself.

The remote control is a joy to use, being of metal construction with small but highly raised buttons that are easy to locate, and they press in a positive manner so you're not guessing. The range is excellent, and it has two sets of volume controls, one fast or course adjustment and another far slower with finer gradations.

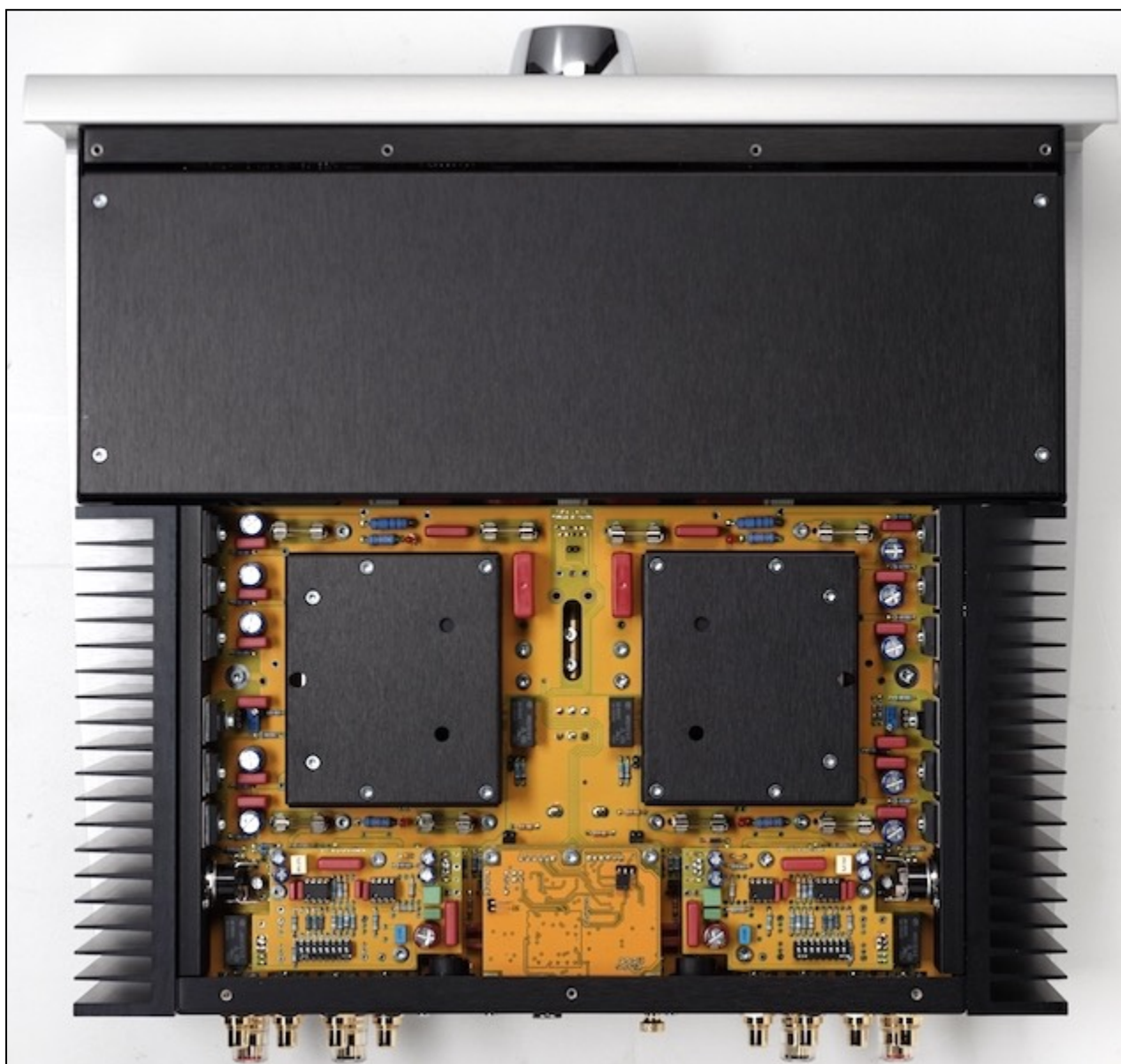


SOUND QUALITY

Straight out of the box and stone-cold, it was clear that the IPA-140 is an exceptional amplifier. What first hits you is the delicacy of its treble, followed by a crystalline midband that's devoid of artifice and artefacts. It delivered a purity that I hadn't before heard in my system. Enrico told me that it improves during the first few hundred hours and that in this period, there are stages where it seems to sound worse. I didn't experience any adverse effects, and the Norma just kept on improving like a fine wine.

I auditioned the IPA-140 through a range of loudspeakers but settled with the Bowers and Wilkins 705 Signature standmounters due to their speed and accuracy. I found they were well able to signpost this amplifier's immense quietness – it feels like the noise floor has been lowered further than I've ever heard from my system, in turn allowing more detail and nuance to flow from the music.

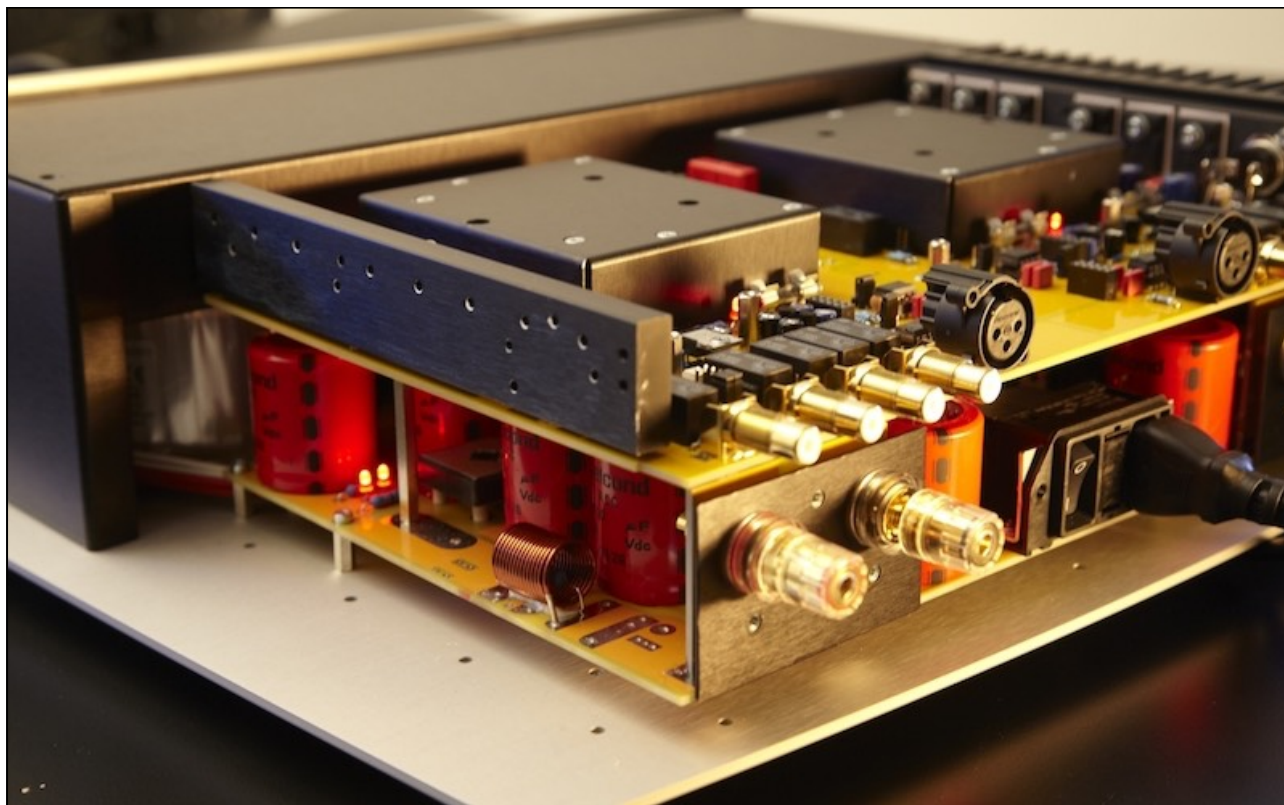
Tonally it proved balanced and even-handed from bottom to top – as well as being refined and smooth throughout the frequency range. The frequency extremes seemed open and unrestricted, yet the Norma never drew particular attention to them – just sounding whole and correct. It draws soundscapes with colour and texture, but unlike some valve amplifiers doesn't add any extra warmth, richness or exaggeration. It's a well organised and disciplined sound, without being analytical. It may not be for everyone because it is truthful in its presentation, but I enjoyed its honesty.



Take Junior Wells' Use Me for example, a song with a strong rhythmic foundation throughout the track. Focusing on the bass line through the IPA-140, and the separation between bass guitar and kick drum was superb, with each playing together so well – yet they had their own unique tone and character without becoming entangled with each other. This amplifier's natural turn of speed certainly helped here, making things feel effortless. Alongside this came accuracy of timing, with everything sounding organised and disciplined, and so easy to listen to.

There is absolutely no hardness, harshness, metallic edge or any nasties of any kind – in fact, it's the diametric opposite to all those things. Its tonal purity made Trittico: Allegro Maestoso by Vaclav Nelhybel and played by the Dallas Wind Symphony a seriously special listen. This is a dynamic and dense symphonic piece with large volume swings and crescendos that are impressive but can sound confused and constrained through the wrong equipment. Via the IPA-140 the recording made complete sense, with all the instruments having separation and clarity, being distinct from each other yet blending with the rest so well.

The amplifier's combination of transient speed and ultra-wide bandwidth played its part in the way that this track sounded. The seemingly endless treble extension of the amplifier helped keep things real, with sparkling harmonics from the horns, brass and cymbals – which came over as spectacularly realistic. It didn't sound squeezed or contained, rather it felt free to fully express itself, with dynamics and boundless energy. The snare drum was heard cleanly with good attack speed and decay detail, each hit being tangible while keeping the perfect tempo.



Just as impressive was the way the Norma amplifier organised the soundstage into a panorama where I could imagine looking at the orchestra from my seat in the audience. The size and depth of the stereo image were amongst the best I've heard in my system. The image was a good metre or so beyond the speaker plane and extended almost to the ceiling. The definition between instruments from front to back was clearly laid out and certainly added to the authenticity of the performance. The assembled orchestra had a majesty and presence that grabbed and firmly held my attention.

I decided to revisit my music collection and get myself reunited with my library, and it was as if I was listening with an altogether fresh perspective. Tracks that I'd previously found a little grating on the ears were suddenly easy listening with this calm and pure sounding high-end amplifier. Little Birdy's first album Bigbiglove has a biting treble at times, especially with the guitars, but was resolved cleanly by the Norma with far less irritation than with most other amplifiers. Jeff Buckley's Lilac Wine is a favourite of mine, so I chose this to put the IPA-140's sound into perspective.

This was done by bringing in two more large integrated amplifiers – the Ayre EX-8 and my own reference Cambridge Audio Edge A. All three proved great performers with this classic track, the Norma oozing grace, flair and control. The Ayre was probably the closest in character, but sounded somewhat thinner, with less meat on the bones throughout the midrange, making me feel like I wanted to up the volume to get the same articulation and emotional connection to Jeff's voice. Bass was not as uniform – especially in the upper echelons of this area – but had similar bass weight to the Norma. Treble had lots of detail and fine ambience, but not the same seemingly endless well-articulated extension.

The same song played through the Cambridge Audio sounded slightly grainy and without the silky smoothness of the Norma. It had the most bass weight, something that I would have previously applauded, but tended to draw attention to itself slightly. It didn't have the fine-grained treble that I was expecting, and sounded somehow artificial by comparison. Going to a more complex and busier track like Eternal Life from the same album, showed how the extended top end brought calm and definition to the cymbals and guitar.



One my favourite albums is Arcadie by Daniel Lanois. The Maker has a very complex bass line that I presume is created with the combination of a steel guitar and bass, with possibly an Omnichord to assist with its unusual tones, as it is in the album credits. I have always felt that the recording of the mid-bass region is confused and not distinct enough. Listening to the track through the Norma brought new levels of detail and resolution here, with much of that confusion removed. The track came together with great rhythmic integrity and timing, and with far more cohesion than I've heard before – it simply flows and makes more sense. As the bass line is the foundation of any track, once it is clearly heard everything becomes more musical. Both male and female vocals were reproduced with stunning clarity and realism. Mariza's voice has a lot of high-frequency content, and the Norma got things sounding just right. Poetas highlighted all the expression and detail in her voice, with all the subtle nuances of tone and dynamic accenting easily heard. Thanks to this amplifier's transparency and coherence, music just comes alive – witness the legendary Johnny Cash. I See a Darkness highlighted the fullness and rasp of his vocal chords – his expressiveness coming across so clearly that you could feel his angst and pain. All the emotion and humanity of virtuoso performers are conveyed through the Norma, and one never tires of it.



One nice little 'easter egg' in the IPA-140 is the phono stage – standard fitment on Australian-market amplifiers. It certainly didn't let the side down, showing similar sound characteristics to its line inputs. Music came across as engaging and dynamically punchy, with great speed, rhythm and timing. The lovely smooth and extended top end again was a highlight, remaining refined and natural at all times. Unless you already own a really expensive preamp or transformer, I doubt if anyone would be disappointed with this high-quality inclusion.

I also hooked up the Norma to my AV system and noticed almost subconsciously that when watching movies, there was no need to turn it up loud to hear spoken words – legibility of the human voice came through very well. Naturally, the soundtracks also sounded magnificent, with voices again being a highlight of the Norma. Enrico Rossi acknowledges that “the correct reproduction of the human voice is one of the most difficult tasks,” for audio equipment, “and unlike other musical instruments, the human voice is known to all.”

THE VERDICT

The Norma IPA-140 is like a beautiful musical instrument – it exudes texture, refinement, musicality, delicacy, ambience, scale and accuracy to a truly high standard. The sound is highly defined, retaining its composure even through difficult passages of music. I believe that you would have to spend considerably more money to obtain a better sounding amplifier, making the Norma extremely good value. It really should be at the top of your shortlist, even if you're intending to spend more.

