

REVIEWS

SB Acoustics Rinjani BE Loudspeaker Kit

Edgar Kramer 01 May 2020



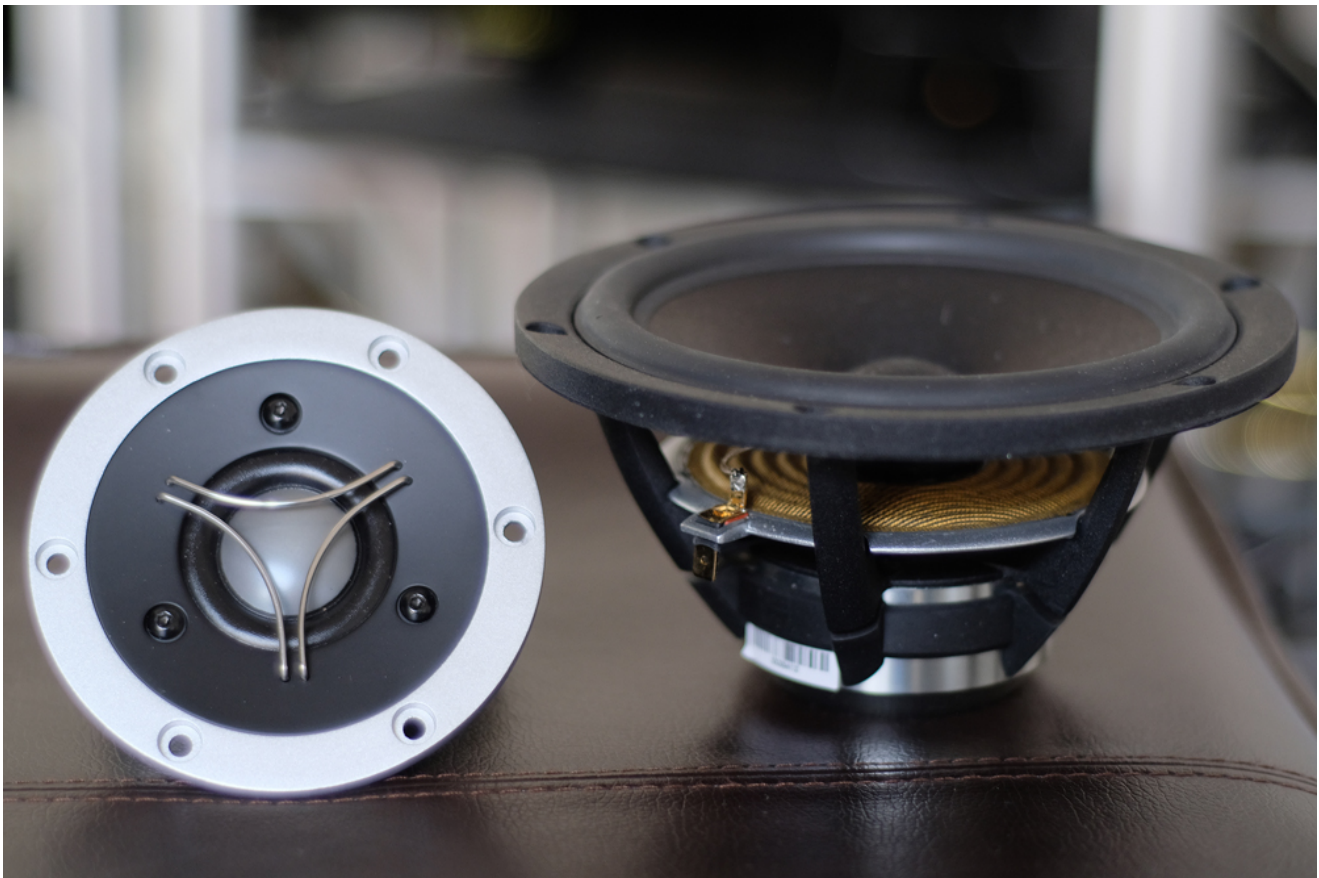
It's been my experience that audio sees very rare *true* bargains. Yes, there's gear that presents varying degrees of value-for-money for different reasons. It may be due to an unexpectedly high build and parts quality at the asking price. Sometimes, components may be widely perceived to perform beyond expectations. There may be reasons attached to a company's reputation or a given product's legacy which may automatically bestow added worth. But a genuine bargain from a product that offers most of the above, and considerably more in a number of important areas, is akin to the sighting of Bigfoot... or if in the Aussie bush, the spotting of the mythical Yowie. The SB Acoustics Rinjani BE debunks the myth – Yowies do exist after all.

Footprint Discovered

What justifies such a waffle re the SB Acoustics Rinjani BE loudspeakers? Well, let's start by saying this review heralds a first for *SoundStage! Australia*... and it's also a new experience for this writer. The Rinjani BE are the first ever speakers which I've had to assemble myself! Yes, this is a DIY kit... but like no other.

Let's take-off by illustrating the arrival of Rinjani BE. A pallet was delivered with three boxes atop. Two contained the pair of preassembled speaker cabinets and a third smaller box housed the crossovers, the drivers, metal binding posts panel and all the required mounting hardware (all good quality Allen-head bolts). Yes, for the first time, I was going to actually assemble, from scratch, the speakers which were in for review. Well, not entirely from scratch; but read on.

For starters, the Rinjani BE's drivers are, to put it frankly... simply superb. SB Acoustics manufactures these Danish-designed drivers at its Indonesian factory. From all reports, this is a world-class facility producing a massive OEM and self-branded driver output. All Rinjani BE's drivers come from SB Acoustics' Satori flagship range, a highly-acclaimed line of high-end transducers using exceptional materials and evolved technologies resulting from development by ex-ScanSpeak engineers.



The Rinjani BE's tweeters are SB Acoustics' top TW29BN 29mm beryllium units featuring a massively powerful neodymium magnet system (hence the BE lettering, there is a non-beryllium-tweeter version employing the excellent TW29R). The tweeters' also feature a T-shaped pole piece which is claimed to provide very low distortion, dual copper caps for minimum voice coil inductance and "minimum phase shift" and a claimed improved dynamic range via damped cast aluminium dual balanced compression chambers. While on the subject of the drivers, protection is provided via circular MDF-framed grilles with embedded magnets which align with concealed magnets in the baffle.

Equal advanced and clever engineering are featured in the mid/bass drivers. Again from the Satori line, the Rinjani uses two MW16P-8 165mm drivers. The driver diaphragm/cone is manufactured from a proprietary composite material impregnated with Egyptian papyrus. They are beautifully constructed and highly engineered drivers featuring cast aluminium chassis, vented pole pieces, 'BIMAX' spiders, fibreglass voice coils, large and powerful neodymium motor systems and more. Handling these exquisite drivers provides a clear illustration of the overall quality. This transducer has been adopted by many high-end loudspeaker designs and there are obvious similarities between it and the drivers used in my own Wilson Alexia Series 2.

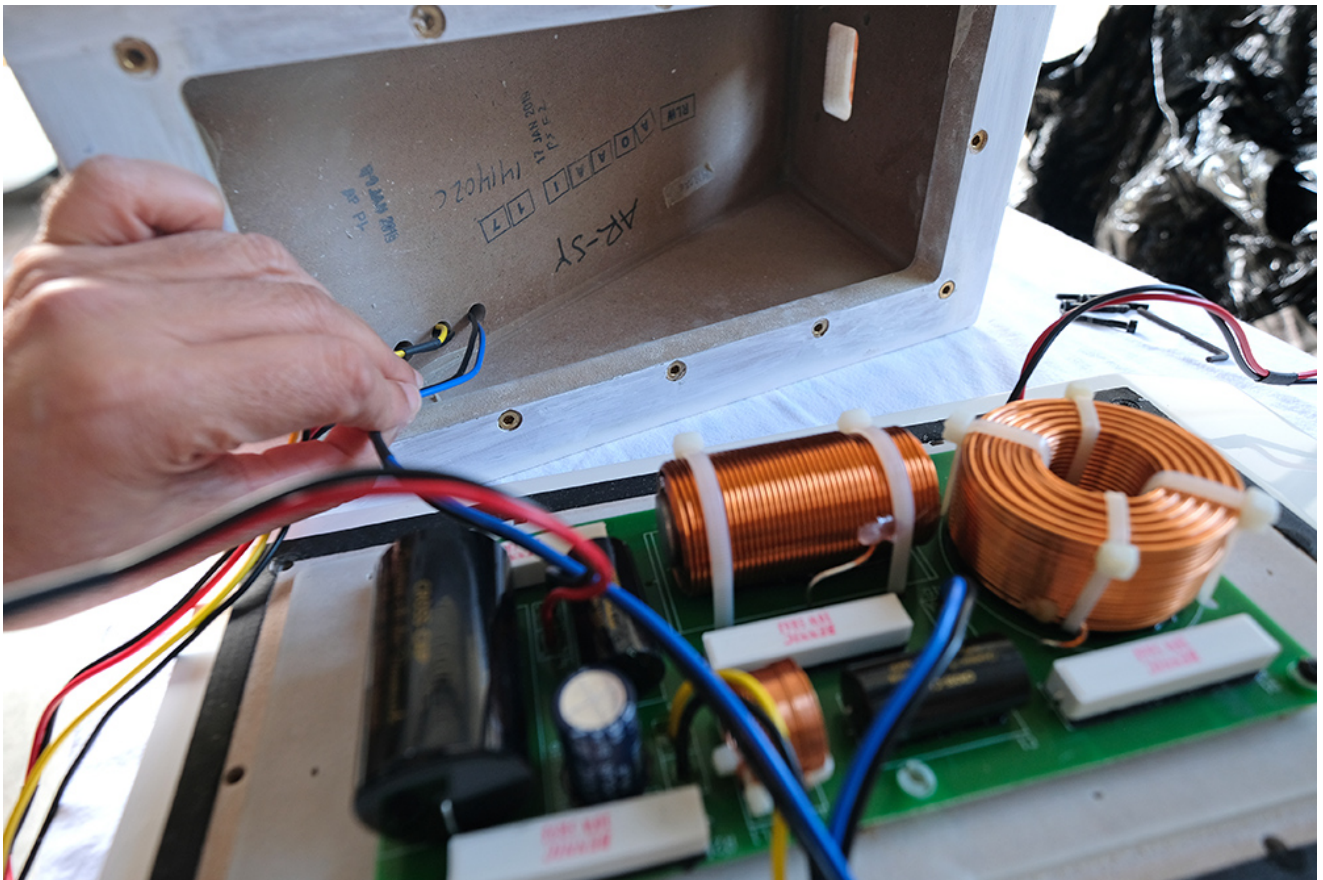
Assembly – Easy as...



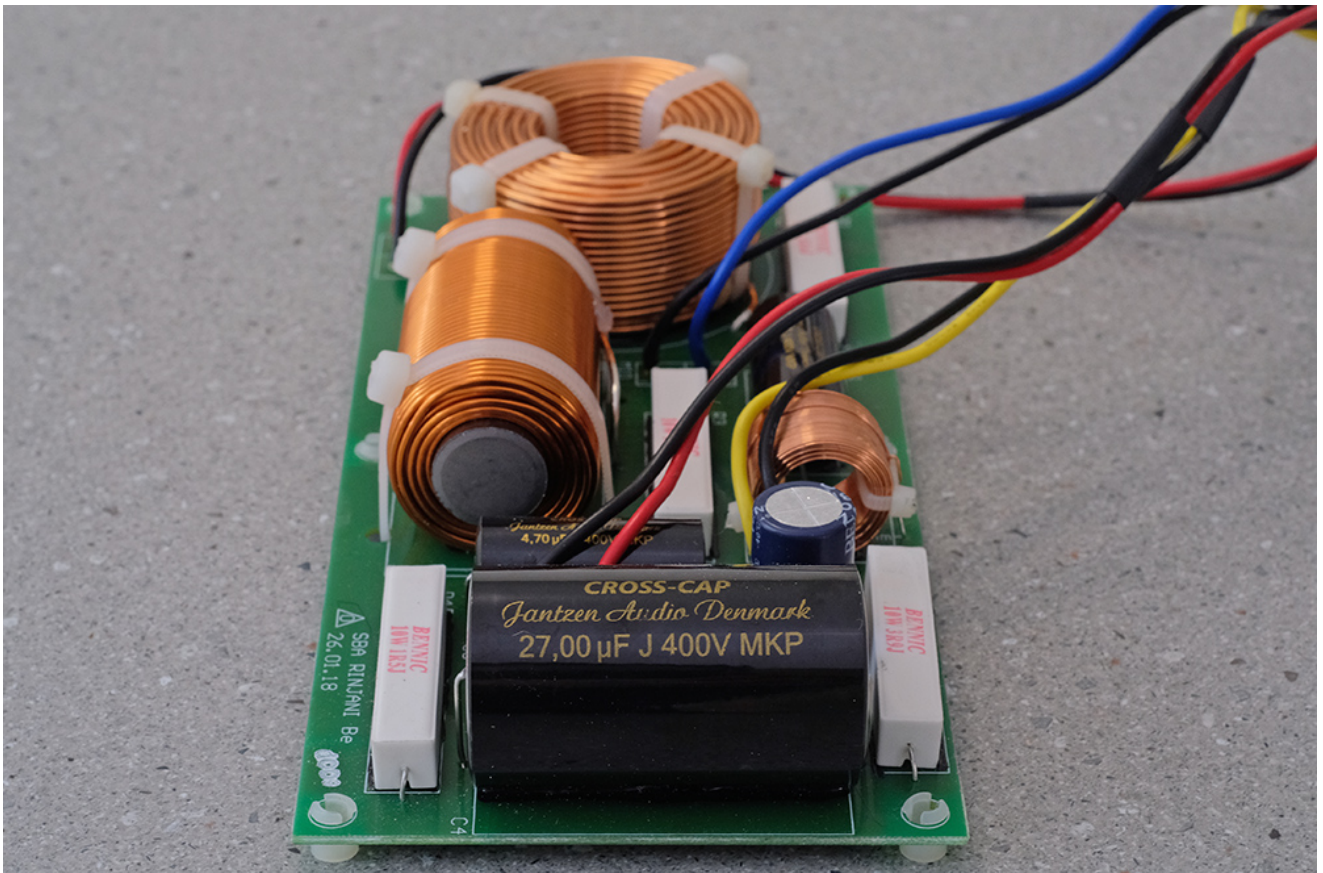
The Rinjani BE cabinets come pre-assembled. These are well made 18mm-MDF enclosures with multiple bracing schemes and separate chambers. The old knuckle wrap test (a crude but effective methodology) shows a solid cabinet with little likelihood of low frequency structural distortion. Rinjani BE is a beautifully styled loudspeaker. The perfectly seamless cabinet joints, the asymmetrical chiselled top corners and the backwards-slanting stance make Rinjani extremely attractive to the eye. So does the finish – a high quality gloss white, in the case of my samples. Rinjani is available in a number of paint finishes to suit any environment (there's even a gloss orange which would be stunning in many homes).

So, to start the assembly process... Tools-wise all you need is a Philips-head screw driver and a couple of Allen keys (3mm and 2.5mm) – that's it. Beneficial but not essential is a hot glue gun should you desire to fully seal the crossover sub-enclosure and to more securely adhere the supplied Dacron damping material to the cabinet internal panels.

STEP 1. The high quality crossovers are ready to go, all you need to do is to fasten them (four small screws each) to the Rinjani BE's bottom plate. This crossover platform serves as both the sealing panel for the crossover compartment and as an extension plinth for the speaker as a whole. The former is a good thing for isolating the crossover from the rest of the cabinet internals and the driver-induced forces within while the latter provides added stability for the speakers. From there, clearly marked wiring looms are fed through small perforations on the top panel of the crossover compartment and into the cabinet proper. Said cabinet is well-braced and, as mentioned above, compartmentalised into sections for optimum driver operation. Oh, also stemming from the crossover, an additional cable set screws on to the binding posts which are mounted on a small nicely machined silver steel plate.



STEP 2. Once all the cable looms are channelled through into the enclosure proper, the bottom plate (remember the crossover has been screwed on to it by now) should be bolted back. Connection to each driver is as simple as hooking the lug-terminated wires to the appropriate driver terminal and the speaker binding post inputs (in other words, signal terminals from the amplifier). If you prefer – and are adept at swinging a soldering iron – you could lop the lugs off and silver-solder the bare wires to all the terminals, however, the lugs make it, literally, a snap to wire-up. Observe polarity; this is crucial obviously.



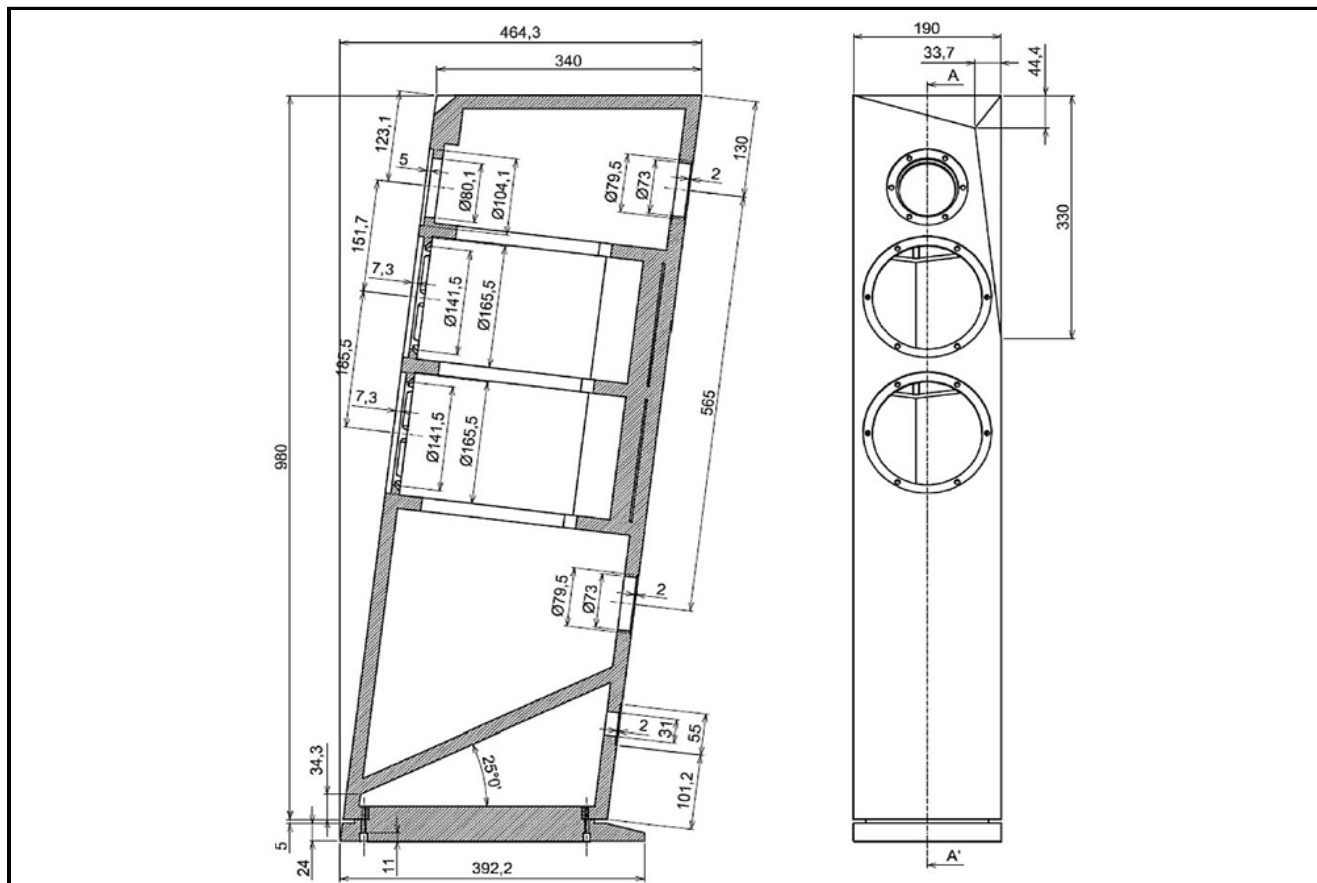
STEP 3. This last step involves bolting all of the drivers and the binding posts panel on to their rebated receptacles. All Allen head bolts are provided. All bolt sockets align perfectly and I encountered zero issues. In fact, the entire exercise – assembling a stereo pair – was rather enjoyable and took me less than two hours. And I'm no Jim the Handyman.



FINAL TOUCH. A stick-on 'SB Acoustics' badge/plate is provided and you're free to place that wherever you please. Lastly, carry to your listening room, put in place, hook-up to your amplifier of choice, micro-fibre polish the gorgeous finish... and enjoy.

Spicks and Specs

I've already described the superb driver compliment, but to succinctly recap, we have the TW29BN 29mm beryllium tweeter accompanied by twin MW16P-8 165mm papyrus composite drivers in a 2.5-way bass-reflex configuration with a 2nd order Linkwitz–Riley crossover design. On the rear panel you'll find two plastic-lined flared reflex ports with hard cardboard tubing, one in the upper tweeter compartment and the other one towards the bottom of the panel for the bass drivers. The bass port is tuned down to 35.5Hz.

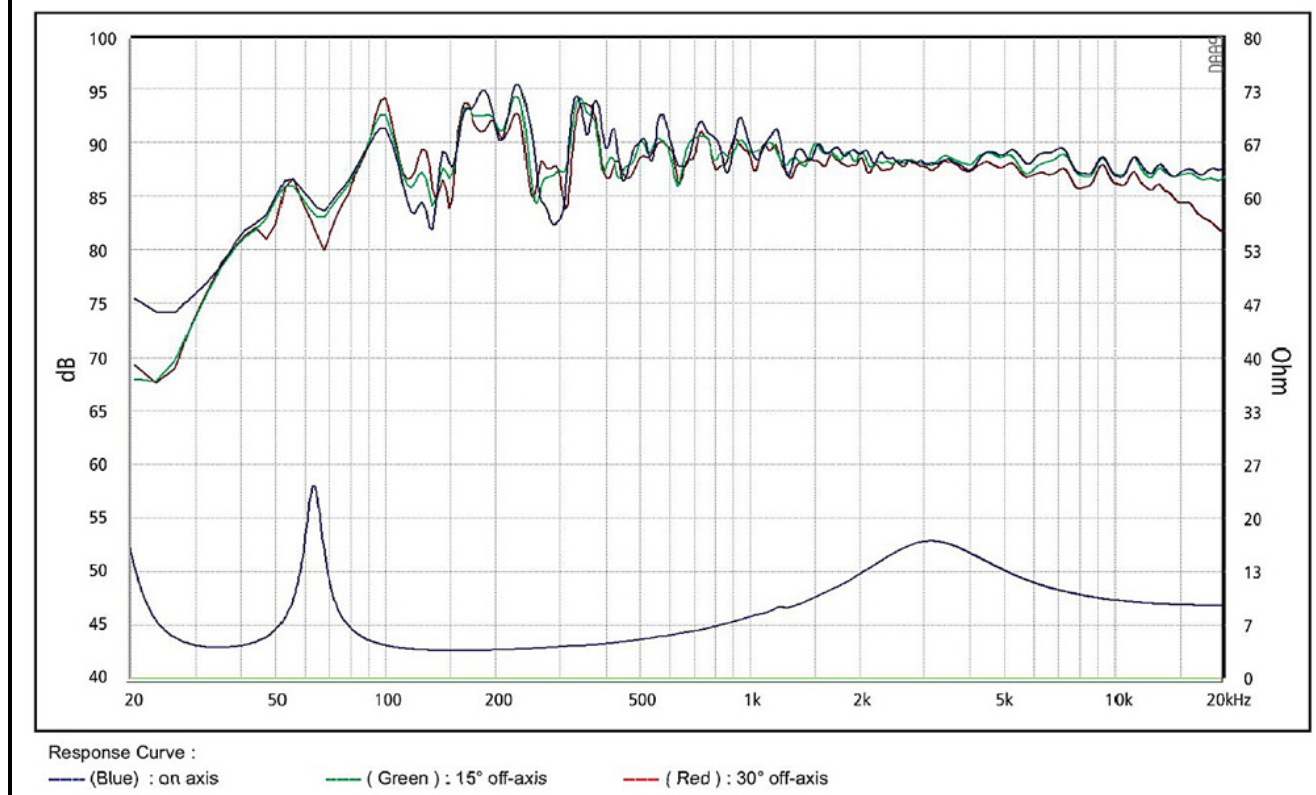


The sturdy cabinet features a single-sided multi-faceted scalloped chamfered edge which will serve to improve dispersion and ameliorate diffraction issues. This also promises good soundstaging dimensions and accurate imaging properties. Rinjani BE slants backwards and SB Acoustics claims the angled baffle arrays the drivers for time alignment. Perhaps a more accurate description would be *acoustic* alignment (drivers' acoustic centres are aligned) as, AFAIK, proper time alignment is usually tied-in with 1st order crossover designs in conjunction with carefully-manipulated arrival times at the listening position.

The Rinjani BE's frequency range specification is quoted as 42Hz to 30kHz +/-3dB while the efficiency and impedance are 89dB (2.83V/1m) and 4 ohms nominal respectively. The crossover point is 2300Hz. Said crossover features high quality MKP 'Cross-Cap' metallised polypropylene film capacitors from Denmark's Jantzen Audio and large air coils for the high frequencies. Recommended amplifier power is ranged between 50 and 200 watts.

I tried Rinjani BEs with the chamfered sides on both outside and inside configurations. In the end I settled on scalloped side facing the outside for a wider soundstage with near-equal image accuracy as the inverse configuration. My placement also provided 1.3m of space behind the speakers for a more neutral, better balanced low-frequency range. Stage 1 of the new room's Vicoustics acoustic treatment (main and biggest stage of the installation) had just been finalised by the time I commenced the Rinjani BE testing, so the environment was suitable for reference-level listening/auditioning.

Frequency response (Rinjani-Be)



Rinjani BEs' tweeters really shine here – this is one excellent transducer of high frequencies. It's delicate, smooth yet super-resolving (I found this to also be the case when I listened to the superb M8audio Sweet Maxwell which shares the same driver types). In fact, that last descriptor is the standout feature among the many of TW29BN's many considerable strengths. Expect to hear everything, and I mean *everything*, your music and recordings have to offer.

But the Rinjani BE's tweeter does not overtly lob torrents of detail right in your face – it's not a forward design that exclaims "Hey! Look at me! You see what I'm doing for you with all that detail?" No, Rinjani BE handles a high level of information communication which embeds its resolving powers within the context of the music. It's a natural presentation of detail. And it blends in nicely with the midrange – those papyrus midrange drivers are something else too...

Take PJ Harvey's "O Stella" or "Dress" from her sometimes delicately beautiful, sometimes concussively and aggressively punchy *Dry* album. Rinjani BE has a way with Harvey's vocal range, presenting it clearly separated from the mass of guitars and drums (Producer Rob Ellis thumps hard here, both in terms of production and through his power on the drums). It's a low-level recording that needs the volume wick turned up to reap its full authority, but doing so via Rinjani BE rewards you with vocal presence, powerful guitars, slamming drums and an overall rocking presentation.

As superb as *Dry* is, it's a studio manifestation that provides little in the way of a natural soundfield reproduction, or the facsimile of space. So I Roon-played Ani DiFranco's "Amazing Grace" from her live *Living in Clip* (DiFranco is yet another one of my favourite female rock artists). On the track's intro, DiFranco's solo voice rings and carries across a large auditorium. Rinjani BE replicates the large space with a massive lateral soundfield – if not the ultimate in depth – where the brilliance of that tweeter, once again, extends the 'airiness' of the venue's ambience with uncanny realism. From the same artist, "Light of Some Kind" from the *Not a Pretty Girl* album, has all the speed and transient attack you'd hear from electrostatic designs. Rinjani BE's tweeter and midrange combo power through challenging material and comfortably meets the demands of that track's frantically dynamic guitar plucks and explicit vocals.



The two MW16P-8 drivers work strongly in the bass department too while keeping their signature speed and transient integrity. The Rinjani BE's low-end power is true and punchy in the mid-bass and dips down to round-about the high 30Hz range. If you want high amplitude low bass below that mark, you'll need a subwoofer of appropriate quality (read solid tight bass for a good match).

Ian Moss' "Heaven" from his *Petrol Head* album has a rumbling, growling low note underpinning the track. While Rinjani BE recreated most of the rumble, the lowest peaks were there but at a reduced level. This track can shake the chandeliers. Through the Rinjani BE I got good bass strength down to that rough 30Hz or so – not super deep but good and enjoyable nonetheless. But that's being somewhat hard on Rinjani BE... after all, this is a small-sized 2.5-way floorstander with 165mm drivers – for its stature, it performed quite admirably in this respect, no doubt again due to the quality drivers and intelligent acoustic design.

For a trial with large orchestral music, I whipped into the CD tray Sting's *Symphonicities*. The big production here, while not the ultimate in audiophile-level quality, is respectively competent. "You Will Be My Ain True Love" sounded superbly spacious while the various sections of the Royal Philharmonic Concert Orchestra under the baton of Steven Mercurio were spread across a big soundstage. The percussion was punchy and Sting's and Jo Lawry's vocals sounded pure and present. The same sense of wide lateral spread and scale came across a number of my 'reference' orchestral works by a variety of orchestras, conductors and concert halls.

Through Chris Jones' *Roadhouses & Automobiles*' ubiquitous audio show piece "No Sanctuary Here" I noted a minor lightness in the lower midrange. Jones' and his accompanying singers' humming, or umming (if you know the track you'll know what I'm referring to), sounded a bit lighter, less weighty. However, all else throughout the track – and indeed across the entire beautifully-produced album – sounded rather spectacular. Oodles of detail, superb separation of instrumental lines, accurate tonality, good dynamic expression and a generously-dimensioned soundfield. I should reiterate here that this is a speaker in the AU\$4K range... outstanding.

Conclusion

This *SoundStage! Australia* 'first' was a super-cool project. I was pleased with the Rinjani BE's ease of assembly and by the fact that so little is demanded in terms of tools and handyman skills. Impressive too was the close tolerances designed across the Rinjani BE's cabinet and drivers interface. Said cabinets are well constructed, attractively styled and beautifully finished.

But the most impressive aspect is the generosity of the drivers selected by SB Acoustics. The company's flagship Satori range has deservedly accomplished a very high reputation, continuing to attract an increasing number of high-end loudspeaker makers. The adoption of these excellent transducers spans across a variety of designs from renowned manufacturers.



Which brings me to yet another of Rinjani BE's superpowers – value for money. I struggle to think of a floorstander anywhere near this price point offering a mix of such high quality drivers and which is built to this level of integrity and finish. Add to that, most importantly, the fact that Rinjani BE *performs*, presenting music to very high standards. Think towards double its value and you'd be in the ball park.

Mount Rinjani is the second largest active volcano in Indonesia. As a fitting reflection of the sheer might of a volcanic event, the SB Acoustics Rinjani BE is a force-of-nature erupting on to the quality loudspeaker space. Yes, I'm convinced the Rinjani BE is a compelling, genuine high-end audio bargain.

... Edgar Kramer

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Associated Equipment

- **Speakers** — Wilson Audio Alexia Series 2 (</index.php/reviews/84-wilson-audio-specialties-alexia-series-2-loudspeakers>), Axis Loudspeakers VoiceBox S (</index.php/reviews/1-axis-voicebox-s-monitor-and-ebs-extended-bass-system>) (nearfield monitor), Vermouth Audio Little Luccas Mk.II (</index.php/reviews/29-vermouth-audio-little-luccas-mkii-limited-edition-loudspeakers>)
- **Amplifier** — Gryphon Audio Antileon EVO
- **Preamplifier** — Supratek Cortese, Lightspeed Attenuator LDR passive
- **Sources** — **Digital:** 432EVO High-End Music Server, Yamaha CD-S2100 transport, Chord Electronics Hugo M Scaler (</index.php/reviews/255-chord-electronics-hugo-m-scaler-digital-upscaler>), Totaldac d1-core DAC, Asus PC as Roon Core. **Analogue:** Michell Engineering Orbe with Gert Pedersen Level 3 modifications and Origin Live Ultra upgraded motor, Trans-Fi Terminator air bearing linear-tracking arm, Shelter Harmony cartridge (</index.php/reviews/195-shelter-audio-harmony-moving-coil-cartridge>), Supratek Cortese & REDGUM Audio RGPH2 phono stages (</index.php/reviews/119-redgum-audio-rgph2enr-signature-series-phono-stage>)
- **Processor** — DEQX PreMate
- **Cables** — sILENzIO loom (</index.php/reviews/147-silenzio-interconnect-loudspeaker-usb-ac-power-cables>), Vermouth Audio Reference loom, (</index.php/reviews/378-vermouth-audio-reference-cables>) Vermouth Audio Black Pearl Mk.II loom (</index.php/reviews/96-vermouth-audio-black-pearl-mkii-interconnect-speaker-ac-power-cables>),
- **Audio Rack** — SGR Audio Statement Model V (</index.php/reviews/192-sgr-audio-model-v-statement-hifi-equipment-rack>)
- **Acoustic Treatment** — Vicoustic Multifuser Wood, Wavewood Ultra, Cinema Round Premium and Super Bass Extreme
- **Miscellaneous** — Les Davis Audio Viscoelastic CLD discs, VRC Vinyl Record Cleaning system (</index.php/ed-comment/132-spin-the-black-circle-clean>)

SB Acoustics Rinjani BE Loudspeakers

Price: AU\$3999

Warranty: Two Years

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