

AUDIO ESOTERICA

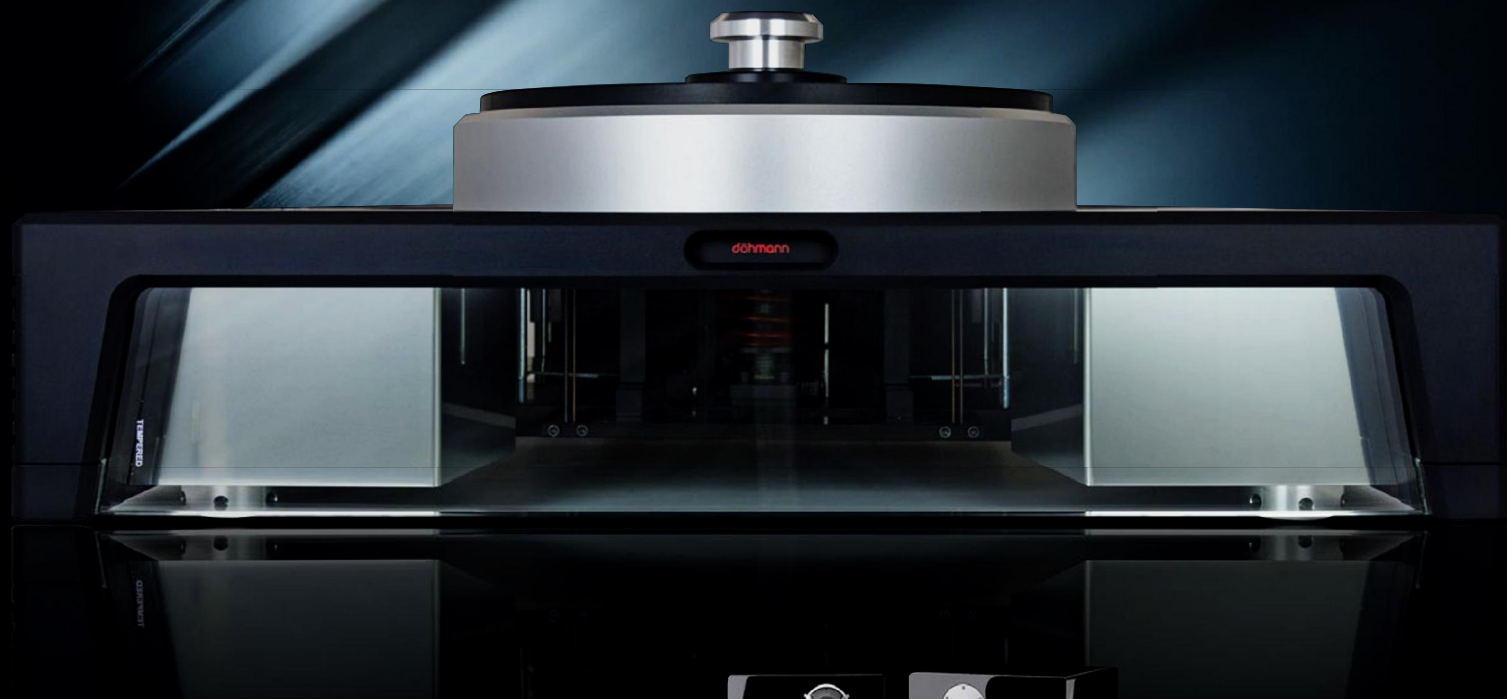
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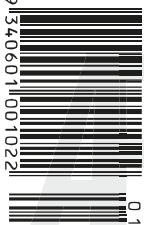
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REVIEW

BRYSTON 14B³

POWER AMPLIFIER

Reviewer Edgar Kramer



BRYSTON 14B³ ■ POWER AMPLIFIER

Canada's Bryston Ltd. has been designing high-unbreakable amplification for a number of decades. Such is the reliability rep built by the company that many recording and broadcast studios around the world have adopted its products – Bryston's stable now includes a full suite of electronics and, more recently, a selection of high quality speaker systems too. The company

confidently offers an industry-leading 20-year warranty on its amplifiers, and the new 'Cubed' series amplification certainly oozes longevity from the superb build quality on display – the handcrafted 14B³ on review here is built like a tank, and weighs in at a chiropractor-friendly 42kg.

EQUIPMENT

Bryston's electronics have traditionally been rather conservatively styled. The new Cubed amps may



BRYSTON 14B³ POWER AMPLIFIER



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not leave industrial design fashionista mouths agape, but noticeable aesthetic improvements over the previous 'Squared' generation give them a more attractive presence. The amplifiers now feature a central plate attached to the thick aluminium fascia, with suitable three-dimensionality provided by a rounded trench-cut and deep etchings for company logo and model number, the fascia nicely machined to a curved chamfer edge.

The subject of our review is the 14B³ top-of-the-line stereo offering, while the 28B³ monos are the flagships. The amplifiers are offered in either a black or natural aluminium high-quality front fascia in 17- or 19-inch widths, with front handles on the 19-incher (all feature handy rear handles).

For this new 'Cubed' series, Bryston's Chief Engineer Christopher Russell teamed up with amplifier designer Dr Alexandru Salomie (sadly now the late Dr Salomie), jointly developing improvements over the previous generation. Circuit refinements are claimed to provide lower distortion in the input stages, increased overall bandwidth, reduced EMI and RFI noise, and improved overall CMR (Common Mode Rejection), all improvements with real potential for elevated sonics. A reduction in standby power takes that now down to 500mW.

The 14B³ is a high power amplifier specified as offering 600 watts RMS into 8 ohms, and 900 watts into 4 ohms, with a very low THD (Total Harmonic Distortion) of 0.005 percent from 20Hz to 20kHz at full power (no 1kHz measurement at half power here). The solid power supply features twin 850VA transformers supported by a bank of 88,000 micro-farads of capacitance per channel (total 176,000 micro-farads). High current bipolar output devices total 32 (16 per channel) with each being rated at 16-amps/250V. The power supply is not a limitation with the 14B³; this amp will drive anything both in terms of power and current. The damping factor is quite high at 500, promising good speaker cone control.

The real panel features switchable settings for either 23dB or 29dB of gain making, allowing wider compatibility with preamplifiers of varying voltage sensitivity – the 23dB gain setting will be ideal with the large proportion of high-gain preamps. A 12V terminal allows for either remote or local turn-on options via a small switch, and there's a mains circuit-breaker style switch at

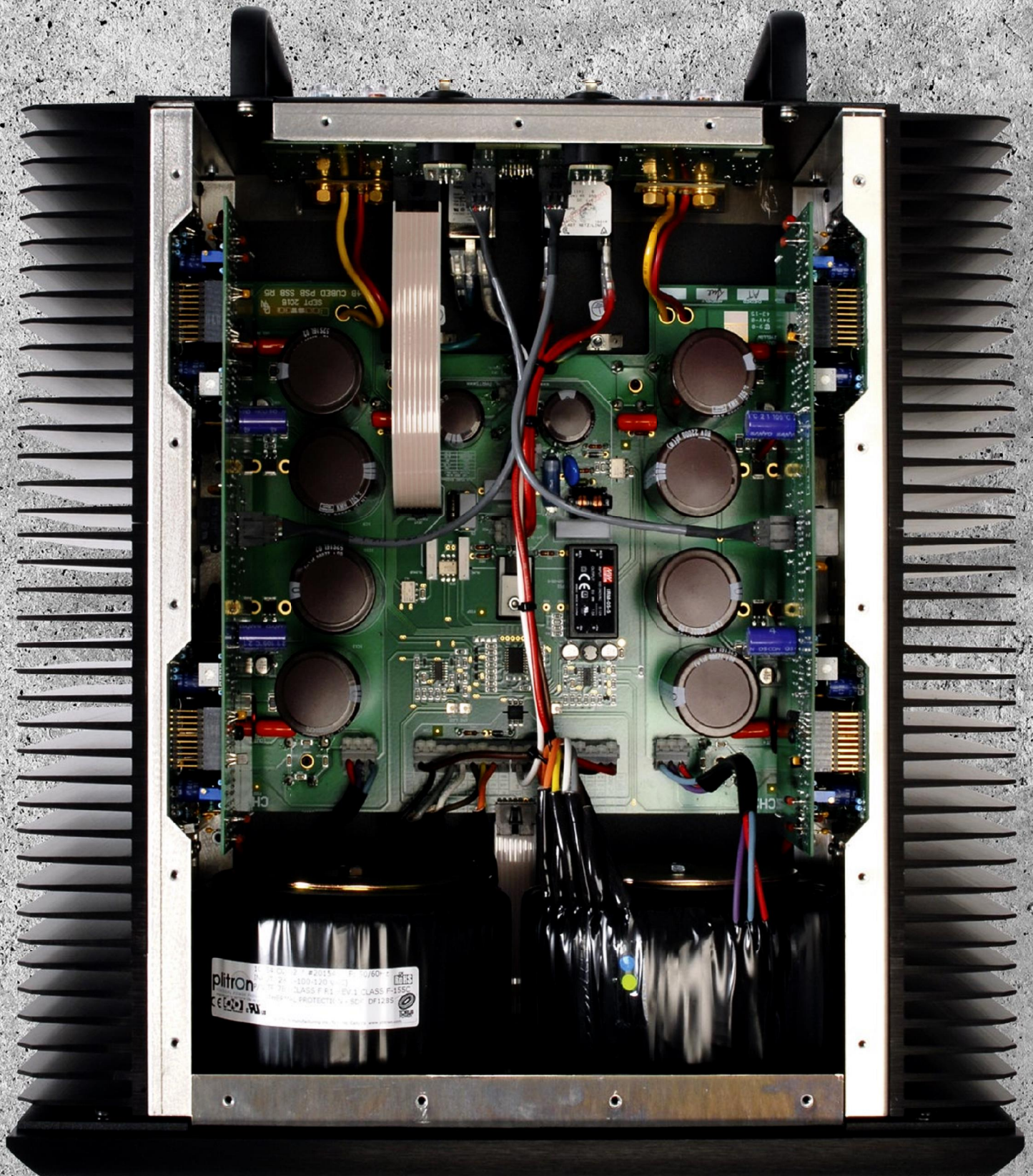


△ THE 14B³ IS A CLASS-A/B DESIGN. SUBSTANTIAL HEATSINKING KEEPS THE AMP RUNNING COOL WHILE THE ROUNDED EDGES PREVENT THE 'CUT CHIN' SYNDROME.

▽ BALANCED & UNBALANCED CONNECTIVITY IS PROVIDED. HIGH QUALITY SPEAKER BINDING POSTS ACCEPT BANANA PLUGS WHILE ONLY ALLOWING TOP INSERTION FOR SPADES OR BARE WIRE.



BRYSTON 14B³ ■ POWER AMPLIFIER



BRYSTON 14B³ ■ POWER AMPLIFIER

the rear, with the on-standby button being in the front central panel. Connectivity is via your switchable choice of RCA or XLR, and while the speaker posts are of high quality and accept both banana plugs and spade connectors, the latter can only be fitted from the top (no opening on the bottom of the plastic post insulator), a relatively impractical and unsightly option.

BASS TRAPS

Given our fairly demanding speakers have a very low impedance and high phase angle in the area roughly between 80Hz and 120Hz (and not much easier an octave below either), this was a sensible place to start in order to test the control of the 14B³. One of the torture tests in this respect is the soundtrack from *American Beauty*. The title track features a swelling subterranean bass that ebbs and flows across other musical textures. The 14B³ lapped up the challenge, delivering tremendous control, power and detail. The leading edge of bass notes were highly defined, while the notes properly exhibited a forceful tightness. It proved unshakeable in the toughest tests it was subjected to, such as the *Blade Runner* soundtrack, "Sergio Leone" from Jackson Browne's *The Naked Ride Home*, and many more. Not a bead of sweat...

At the other end of the scale, the highs are pristine in terms of tonal colour, while being a tad laid back. Cymbals and bells, for example, are beautifully rendered with fine detail and air, while being somewhat layered back into the soundstage/mix – this also equating to an impressively deep soundstage. And if your metal tweeter is on the bright side the 14B³ will tame it somewhat and still preserve high frequency detail.

Conversely, the midrange spectrum is subtly forward and ever-so-slightly brilliant, providing oodles of detail and scalpel-like instrumental separation. This last trait is most evident with female vocals, as with Tracy Chapman's "Give Me One Reason" from her *New Beginnings* album or Patti Larkin's "Helen" from *Angels Running* – both singers are projected somewhat forward of the speaker plane.

These two recordings are superb productions, but the Bryston will not lie about any that are less well-recorded – expose it to deficiency, be it from mediocrity in component or recording – and the sonics will reflect those poor decisions from designer or audio engineer. And that's as any accurate amplifier should do.

◀ A SOLID POWER SUPPLY FEATURES DUAL TRANSFORMERS AND TWO LARGE CAPACITOR BANKS.



Should you want colorations, feel free to add them at either source or preamplifier stages... the amp will tell the truth.

The Russell/Salomie circuit redesign has certainly lived up to the claim in terms of noise and distortion reduction. I equate those as having an influence on the background levels of self-noise, and this is where the 14B³ displays an extremely quiet "black" background. Such silence allows very good low-level and micro-dynamic information to be relayed unpolluted by circuit noise. This is also helpful in allowing the superb level of frequency-wide detail and instrumental separation the amplifier is generously capable of. And it's not just in the low-level stuff either – the Bryston amplifier is a bit of a dynamic weapon, along similar levels as other very expensive amplifiers that have graced the listening room.

CONCLUSION

What should be the expectation from a high power solid-state amplifier? Well for starters, you'd demand accuracy and faithfulness of reproduction in both the recording and the sonic signature (if any) of the preceding componentry. Plus total control of whatever speaker is being driven, excellent tonality and timbral balance – all mandatory. And of course, wide electrical compatibility with preamplification, teamed with unbreakable reliability via the application of highly-skilled engineering. Knead the above with a sprinkle of styling flair and a squeeze of solid casework – and you have a magnificent blend, right there, all ingredients fused, in the essence of the superb Bryston 14B³...**■**

SPECIFICATIONS

BRYSTON 14B³

POWER CAPABILITIES:

600 watts into 8 ohms,
900 watts into 4 ohms

HARMONIC DISTORTION:

≤ 0.005% from 20Hz to 20kHz
at 600W

NOISE BELOW FULL

OUTPUT: -119dB single
ended, -120dB balanced

SLEW RATE: > 60V/μS

POWER BANDWIDTH:

0.5Hz to >100kHz

DAMPING FACTOR:

>500 at 20Hz (8 ohms)

SWITCHABLE GAIN:

23dB or 29dB

DIMENSIONS (WHD):

432 × 206 × 427mm

WEIGHT: 41.3kg

PRICE: \$13,999

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