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Bryston BP 26/4B SST

Price: from 3500/3900 Euro Text: Roland Craft, Photography: Rolf Winter

Product change at Bryston is approximately as hectic, as one could paint the Eiffel Tower with a small paint-brush. Therefore a new preamp/ amplifier combination is reason enough for us to once again occupy our time with the Canadians.



Bryston 4B SST C-Series

Both of the products introduced here are new. Although this should be qualified by noting that the 4B SST stereo power amplifier emanates from the 4B series which has been produced by Bryston since 1964 as an on-going best seller which has never left the product line. But nevertheless the 26 Kilogram (60 pounds) heavy power amplifier was thoroughly and completely revised, not in the least in order to accurately match a new preamplifier. This new preamp embodies an excitingly styled appearance for

Bryston state of affairs, which simply means that the massive front panels look much more attractive than one would expect from the previous ones which were especially designed with emphasis for studio use. But surely Sun Audio in Munich was not the only Bryston distributor world-wide which occasionally urged the Canadians not too treat the optical requirements of the high enders so stepmotherly ... additionally the BP 26 preamp is now a two-part component with an external power supply, with the latter being precisely the same size as the actual preamp. In reference to the standardized 43 centimeter (17 inch) width it should be crystal clear that the power supply is darned voluptiously designed, and can surely far exceed the requirements of a Bryston preamp, even one equipped with a phono-stage.



BRYSTON BP26-MC

This is also certainly highlighted by the 200-Watt transformer as well as the number of outputs which are embodied in the MPS-2 power supply. Additionally no less than 80,000 Mfd. filter capacity assure proverbially stable performance. But also other important details were not overlooked:- With a small, in itself not complex, "circuit scheme" the Bryston power supply compensates right at its input for the direct current parts which could negatively affect the characteristics of the transformers and lead to mechanical hum. The BP 26 preamp is available as a line level unit alone, or with an incorporated phono-stage, or with an incorporated D to A converter, which is based upon 24 bit technology. However, our test unit came equipped with the MM/MC module, and must be specifically ordered in this configuration because in reference to the phono module a later update is not possible. The included phono module is already evident because of the incorporated MM/MC toggle switch on the front panel. The phono module itself is an elaborate discrete (no operational amplifiers are used) built-up RIAA stage, and for the MC pre-preamplification shielded encapsulated transformers, manufactured by the renowned Hammond Company, are utilized. These transformers

provide an additional 20 dB amplification and match all conventional MC phono cartridges. With merely .05 dB deviation from the ideal RIAA curve the partially active and partially passive phono stage can certainly be considered to be highly precise.



BRYSTON DAC

A further claim to fame of the Canadian preamp is the heavy totally metallic remote control which incorporates volume adjustment, a mute switch and a phase switch, thus this control is not extremely profuse but exceptionally practical. The high end user however benefits even more by the elimination of the normally used quartz digital technology for the remote control and its attendant sound distortion. The incorporated Alps potentiometer performs the volume adjustment duties, and incidentally runs at a comfortable slow speed. A further important configuration feature is of course the absolute phase reversal switch. The absolute phase of the audio signal can be completely reversed here, which is especially important with some CDs. Moreover the presence of the frequently omitted balance control for reasons of falsely understood purism, speaks for the practical development of this impressive preamp. The preamp furthermore includes two pairs of balanced (XLR) inputs, and a pair of balanced (XLR) outputs. Additionally it incorporates two pairs of unbalanced (RCA) outputs, and even a headphone input jack. The latter, in order to prevent any distortion, even includes its own little amplifier. The single point of contention:- the diameter of the outside ground connection of the unusually long RCA jacks appears to be slightly smaller than usual, i.e. a few plugs don't fit quite as tightly as usual. And - this is absolutely not a criticism - one must definitely allow the Bryston preamp a few hours of warm-up time because right after it is turned on it sounds somewhat uninspired, but then it completely changes its tune.

What's really inside the 4B SST power amplifier can only be determined after the top cover has been removed:- The completely modular concept, in case of the improbable need for service, facilitates lightning fast disassembly, a carry over from the professional side of Bryston's business. Additionally the 4B SST amp benefits from genuine dual mono construction, and only a few electronic components share the field between the 117 Volt line plug and the two power transformers between the right and left channels. Two transformers? Indeed quite true:- because the amp is "fired up" by means of two 600 Watt toroidal transformers and 75,000 Mfd. worth of filter capacitors, which have a certified long life contrary to the types frequently found in older amplifiers, which is indeed noteworthy in reference to the 20 year warranty. In addition to the triacs, which "softly" connect the transformers to the current source (line), there is an additional small transformer for the stand-by function. Interestingly the 4B SST amp no longer incorporates common fuses for protection, this job is now full-filled in the most modern manner by the main switch, which is simultaneously a circuit breaker. Apropos switches:- the recessed Bryston logo – one must merely press it – turns the amp on.

In the signal path, which is built up entirely discretely, the power amp incorporates a unique output stage topology, which makes exclusive use of bipolar semi-conductors in a special circuit configuration. The so-called quad-complimentary current amplifying output stage represents a Bryston specialty, which eliminates distortion by means of an "erasing" effect. The end result is an amplifier, which is "clean" up to the third place behind the decimal point, which could indeed represent a solitary record. With more than 500 Watts supplied by 16 output transistors (newly developed 250 Watt types with plastic housings) – into 4 ohms – one does not "fool around", inasmuch as a bridged 4B SST amp would supply a ridiculous total of 1000 Watts.

She/he who now speculates about the comprehensively filled connection area of the amp is correct:- Apart from the bridged extremely high output mode, there is a very practical switch for choosing between balanced and unbalanced input. Additionally the amplifier accepts, the very important for studio use, ¼" phone plugs. Furthermore, as is very important in the more advanced "Home Automation" in the USA, the 4B SST amp

offers remote turn-on. What else is offered? Quite a comprehensive and rather clever protection circuit, which however operates without any relays (in the signal path) and without additional fuses (for instance between the filter capacitors and the output transistors). By use of a few clever, small integrated circuits one can for example nowadays compare the input and output signal (corrected by the amplification factor), watch over the line voltage, control the DC voltage at the input and output, as well as monitor excessive current, and also the temperature at the heat sinks. The friendly Bryston protection circuitry looks after all these matters, and if necessary disconnects the amp from the line and thus hopefully prevents worse consequences. But if one goes too far – which should hardly ever happen in light of the available output – she/he is informed by means of an indicator light that enough is enough.

Thanks to the not less than 100 hours "burn-in" at the manufacturer, a brand new Bryston owner can be assured that his amplifier is truly "ready-to-go." Despite that, as already mentioned, a multi-hour warm-up phase, especially for the preamp, is really quite useful. The upshot in regard to this matter is simple:- Leave at least the preamp connected to the line, i.e. "On", and it will always be optimally ready. The power amp is not quite so capricious, because after only 15 minutes warm-up time it performs at its peak, and thus prevents boredom. But as always the Canadians prefer to leave vast tonal experiments to the competition. By the same token exaggerated analysis is just as little to be expected as false restraint when midrange or upper range reproduction is involved. In fact the combination (preamp and amp) balances with admirable confidence precisely the narrow ridge between gentleness and joy in detail, i.e. it likes to please everyone and hurt no one. Can it be done better? Hardly. Much further down, on the bottom of the scale, it truly should be no great surprise that the immense power of the 4B SST amp reaches unmistakably into the happening. Even notorious "current hogs" without appreciable decibels per Watt must admit defeat here, as well as even electrostatics or heavy woofer chassis. Obstreperousness is not tolerated - case closed. It's no wonder that control and bass precision stand right at the top of the obligations of the preamp/amp combination, the amp pushes like a house on fire, even forces pigheaded subwoofers into an imaginary vise, and reacts to high volume sound orgies with provocative nonchalance.

In the wide (frequency) field above, neither one nor the other constituent of the duo deliver any kind of faux pas. Thus everything that can be arranged, let's say under 500

Hz., conforms completely seamlessly, welded into a happening in which it is practically impossible to detect eccentricities. In the middle ranges the combination acts swiftly and uncolored, barely above there it always remains crystal clear, and on top of that it does not penny-pinch with details nor with a graspable representation. That one cannot accuse the Brystons of any noteworthy transgression, is surely the result of a symmetry which is free of mannerisms and which does not include much spectacularity. Religious wars about this or that sound simply don't take place, irritations remain outside, risks are plainly avoided, and the final result is simply concentration upon the significant essentials. From the slogan "No Experiments" **the result is quite simply "Truth in Reproduction."** And if one would have to "boil down" the Bryston duo with a few buzzwords, then one might say that the combination functions neither too slow or, if this were even plausible, too fast, neither too conservatively nor too aggressively, doesn't emphasize nor skimp with bass, and in reference to spaciality simply transports the contents of the music like a dilligent worker bee.

There are those components, according to my taste in my assignment as a nitpicker, which possibly exhibit a trace more presence and impertinence than the Brystons, but then perform perhaps not so continuously, so sinuously, so untouchably inconspicuously, and a sophisticated mature public certainly knows how to be grateful for that. Before I forget it:- There are, typically Bryston, no peculiarities with hands-on use, i.e. no switch or transformer noises, no other noises, and no hum. This is also true for phono use, in which the phono module, i.e. the phono circuitry, verifies that vinyl is neither obsolete nor is the necessary RIAA equalisation plus amplification to be considered merely a rudimental stopgap solution.



BP26 MC Phono Stage

The fact is that both MC transformers are top-notch, and that the RIAA stage itself is among the first-rate representatives of this genre. I might be wrong but the

connection of record players to the Bryston BP 26 Phono preamp might please a smidgeon more than the CD signals, and this results in a very strong recommendation to all vinyl record fans for the preamp.

Translated from the German by Peter Ullman