

Bryston Mini T

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Bryston's expertise in designing and manufacturing dependable and reliably musical pre- and power-amplifiers, digital sources and digital-to-analog converters needs no introduction. To that list you can now add their new T line of three-way speakers that may just set the market on its ear, so to speak. But what exactly does Bryston bring to the table to distinguish itself amongst the abundance of well established brands?

DESIGN

The Mini T is a bass-reflex design using the same bass, mid and treble drivers as the Model T, but a little more modestly, just one of each. The drivers are custom made by Axiom according to Bryston's specifications. The design brief for the Mini T was to provide high sound pressure levels without distortion or compression and ensure wide dispersion, allowing a satisfactory auditory experience regardless of the listening position. The Mini T presents a fairly low sensitivity (86 dBA), a nominal impedance of 4 ohms and can be driven with amplifiers from 10 to 250 watts. If the low sensitivity gives you pause, note that the Middle T and the Model T are specified at 88 and 89 dBA, respectively. The Mini T is well specified in its frequency response. The 8" inch driver and enclosure alignment allow the Mini T to comfortably reach 33 Hz at - 3 dB without dynamic compression. At the opposite end of the spectrum, the titanium dome tweeter tails off high-frequency response at 20 KHz (- 3 dB).

A lot of attention to detail went into the designing and the manufacturing of the Mini T. At the design stage, detailed analysis of vibration modes allowed optimal placement of reinforcements to disperse resonances to benign levels. The speaker's side panels are non-parallel, to minimize standing waves at the source. Like all models in the T series, the Mini T was subjected to more than 200 measurements in Axiom's anechoic chamber during the design phase to characterize the speaker's dispersion in all axes. The purpose was to ensure that the frequency responses on and off the listening axis are as linear as possible. When listening to music in a room we hear a mixture of direct sound from the speaker and reflected sound from room surfaces. If the frequency response curves of the direct and reflected sounds are dissimilar, the listening experience will not be optimal. Ensuring the similarity of the two response curves heightens the perception of a balanced sound and a wide soundstage. At the manufacturing stage, tight matching between each speaker of a pair ensures that soundstage accuracy is carried through to the user's listening room.



DID YOU SAY MINI?

Although the Mini T is the smallest model in the T series, there is nothing miniature about them, either in size or in their way of portraying music. Measuring 22.5" tall and weighing 42 lbs, Bryston call these "bookshelf" speakers. To better understand the name, it helps to compare them with the top speaker in the series, the Model T which, in a 52.5" tall column, houses three 8" bass drivers, two 5.25" midrange drivers and two 1" tweeters ... but that's another story (see sidebar).

The front of the Mini T is necessarily wide (10.5") to accommodate the frame of the 8" bass driver, but the width is softened by the chamfered edges which also act to reduce diffraction of sound waves by the corners of the enclosure. The side panels converge towards the rear of the speakers to a width of 7 inches, which also helps to alleviate the massiveness of the speaker. The speakers are veneered in a high-quality vinyl finish with a realistic wood grain aspect. Real wood veneer finishes are available for an additional \$500. Two magnetically attached grilles (a simple and elegant solution) cover the drivers for a more discrete look. I tried several listening tests with and without the grilles, and I think I might have noticed a slightly clearer presentation without the grilles, but I'm not betting that I could reliably pick them out in a blind test. The reflex tuning port is located on the back of the speaker and features a puckered surface to break up port resonances. The speakers are equipped with two pairs of binding posts, allowing for bi-wiring or bi-amping.

LISTENING SYSTEM

The listening session took place over a two-week period, with the Mini T's powered by a Naim UnitiLite, itself fed by a Naim UnitiServe or the CD drive of the UnitiLite. For speaker cables, I settled on the Vivat from BIS Audio as opposed to the NAC A5 from Naim, as I felt they brought a useful degree of refinement to the upper treble, without sacrificing timing. The listening room is fairly small (10' wide, 14.5' long and 9.5' high), which meant close-field listening at 6' from the speakers, with the speakers 6' apart on 15" stands (which positions the tweeters at ear level). Due to the room, I could not move the speakers more than 12" away from the front wall to investigate the Mini T's abilities in the area of soundstage depth. The speakers were received run-in, but I noticed nonetheless an improvement after the first week.



IMAGING

The first audition of a three-way speaker can be something of a revelation if you are used to two-way speakers. In my experience, the transition between midbass driver and tweeter is rarely completely transparent, even in the best designs. A certain discontinuity shows up as confusion or hardness in the crossover region, especially noticeable in female voice, piano and violin. With a three-way design, a separate driver can be dedicated to each band of the frequency spectrum, with a single driver covering the all-important midrange. The approach presents its share of technical challenges, as two crossovers are required instead of one. But when expertly executed, a three-way design can surprise by the realism of voices and instruments that regain not only their original fullness of timbre but also their scale, and this is the case here.

From the first notes of Peter Cincotti singing «I Changed the Rules», it was clear that the voice and the backing instruments had recovered quite realistic proportions, while being presented on a much more open soundstage. This was the first observation with the Mini T's. There is a wonderful sense of space, with instruments taking back their rightful place, both in the sound stage but also in their musical expression. In my listening room, the soundstage appeared slightly behind the plane of the speakers, but there was just so much happening back there. Even when placed only 12" from the front wall, there was a good sense of depth that clearly portrayed multi-layering in recordings.

TONE

The general tone of the Mini T is to my ears very similar to what I hear at live acoustic concerts. There is a lot of detail yet with a sense of softness and warmth. There is nothing hyper-detailed or clinical about the presentation. Raising the volume doesn't alter the tonal balance; there is no discernable distortion or compression. Mid-range is delivered naturally and the integration with the bass and treble drivers is very well executed. None of the music I listened over the two weeks reminded me that I was listening to three drivers.

EMOTION

For emotion, a good place to start is Tori Amos and her version of Leonard Cohen's «Famous Blue Raincoat». What a delight! The Mini T brought a density and naturalness to piano and voice that simply cannot go unnoticed. There was no hint of compression during the harder strikes on the piano keyboard. The intensity of Tori Amos' playing came through unequivocally. But I kept returning to her voice, fascinated by its cohesion and truth, which led me to wonder how the Webb sisters' voices in «If It Be Your Will» from Leonard Cohen's *Live in London* would fare on the Mini T. Once again I was treated to an intense succession of goosebumps, the Webb sisters' voices were simply bewitching on these speakers. If you're an amateur of the soprano voice, but fed up with a certain aggressiveness and lack of coherence, you're in for a treat with the Mini T.

THE STORY OF BRYSTON'S T SERIES

The T series began as a personal project of James Tanner, Vice President of Sales at Bryston, who wanted to build a pair of reference monitors which would do justice to his reference electronics (Bryston, of course). James approached several speaker manufacturers to work with him on this model, but Axiom is the only one who responded in the affirmative. The physical proximity of the business, their expertise in research and development, and their anechoic chamber were significant advantages for Bryston. Axiom built the drivers according to James Tanner's needs and specifications, to finally arrive at the Model T. A year passed before James could convince Bryston's president, Brian Russell, to market the speaker as a Bryston product.

Note that Axiom worked with Bryston in the design phase, but manufacturing, quality assurance and quality control are handled entirely by Bryston. The finished product is a true Bryston speaker and not a rebadged Axiom product.

The Model T does not go unnoticed with its three 8" bass drivers, two 5.25" midrange drivers and two 1" tweeters. Are they all really necessary? According to James Tanner : «Listen and you'll understand.»

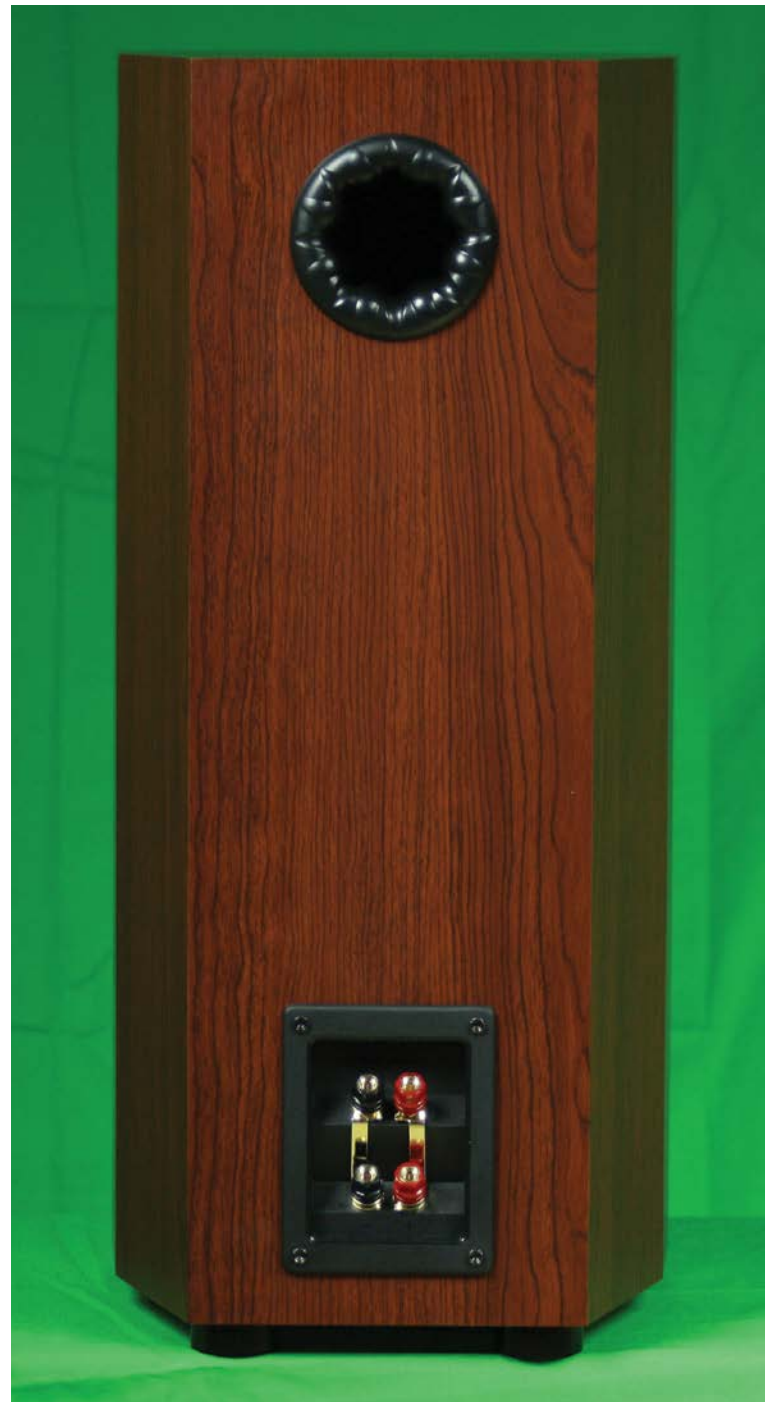
The Model T comes in three versions. The passive version (\$6,495) has internal passive crossovers. The active version (\$7,495) has external crossovers for triamplification, whereas the digital active version (\$9,495) uses external digital crossovers operating at a 24-bit resolution. Digital-domain signal processing allows sharp cut-offs to be used to completely isolate each driver in its optimum frequency band while simultaneously preserving signal phase. This is a speaker designer's dream, and only really achievable in the digital domain. It is an exciting direction for speakers and it's very encouraging to see a Canadian company of Bryston's stature and technical know-how offering it at such a reasonable price.

Given the very favourable response to the Model T, the series was expanded to include smaller models, the Middle T (\$4,600 per pair), the Mini T reviewed here (\$2,695 per pair), a centre speaker - TC1 center (\$3,200 each), a mini centre speaker - Mini TC1 center (\$2,200 each), a subwoofer - T Sub (\$4,195 each), a built-in speaker - TIW in-wall (\$560 each) and a wall mounted model - TOW on-wall (\$560 each).

And the "T"? It's for Tanner.

LOW VOLUME LISTENING

In their promotional material, Bryston emphasise the merits of their speakers for high-volume listening due to the lack of dynamic compression at high levels. But what about listening at low volume, for example 45 to 50 dBA, which is often necessary to preserve family harmony and hearing? To be satisfactory at these levels, a speaker must remain communicative and maintain interest. In other words, it shouldn't lose balance or dynamics. At low volumes, the Mini T may lack a bit of sparkle. For example,



when listening to the *Sonate a 2, 3, 4 è 5 stromenti, da arco & altri* by the German composer Johann Rosenmüller (Ensemble Masques under the direction of Olivier Fortin), Rosenmüller's unusual melodies still capture the atten-

tion, but less than with my reference speakers. Depending on the material, the Mini T can seem a little reticent at low volumes, but in their defence, this kind of listening is not their *raison-d'être*.

SOUND DISPERSION

The dispersion of these speakers is as described by Bryston, as the sound does not change character when listening outside of the primary axis. This is good news if you live in an open plan home, or if you simply want to do something else in the house while enjoying your music.

BASS... AND MORE

For bass, I turned to Gregg Howard and his Chapman stick to test the capabilities of the Mini T. I discovered this talented musician at the Montreal Jazz Festival a few years ago. The disc *Stick Figures* nicely captures the sound and energy of his performances. For those unfamiliar with the Chapman stick, Wikipedia to the rescue: *"A Stick looks like a wide version of the fretboard of an electric guitar, but with 8, 10 or 12 strings. It is, however, considerably longer and wider than a guitar fretboard. Unlike the electric guitar, it is usually played by tapping or fretting the strings, rather than plucking them. Instead of one hand fretting and the other hand plucking, both hands sound notes by striking the strings against the fingerboard just behind the appropriate frets for the desired notes."*

The sound of this instrument is warm and powerful, and the Mini T proved amply capable of doing it justice. The track "Sunday" is the best example, with the Mini T perfectly capturing the articulation of Gregg Howard's playing as much as the strength and solidity of the Chapman stick's bass. With the Mini T, there was no fear of wicking up the volume to the point where listening becomes visceral, the speakers just giving more and more of the music with no sign of compression or distortion. The Mini T stayed on course and simply relayed with clarity and conviction whatever was going on in the bass department. What more can you ask for? For the infra-bass diehards, Bryston also offers a subwoofer suitable for the Mini T. For my needs though, I found the Mini T sufficiently well extended and articulate that I didn't feel the need to seek out a few more hertz below the 33 Hz on offer, but I'm always open to a good demonstration.

I reserved one last test for bass and soundstage precision: Amon Tobin's album *Isam*. The Mini T was waiting for me and had more to show me that the sonic fireworks of Mr. Tobin. Thanks to the Mini T's, I reconnected with the genius of this artist. Is it music or sound? This is debatable, but the Mini T showed me more of the artist's musical talents and more of his sense of humour. His moments of pure sonic madness were rendered even more delusional than I've heard before. I hope that at the next Salon Son & Image in Montreal, Bryston will present its flagship speaker, the Model T Signature, fitted with the external digital crossover. I'm keeping my fingers crossed, and I'm bringing this album!

MUSICAL INSIGHT

Last year, I attended the memorable Baboon Moon concert by Nils Petter Molvaer at the Astral theatre in Montreal. Since this event, the *Baboon Moon* disc had never quite captivated me. However, through the Mini T's, there was a clear unravelling of the elements of this dense and complex music, which I had previously ascribed to a less than stellar recording. With my son one evening, we sat completely enthralled by the performance unfolding in front of us, to the point that we both failed to notice that we were listening to several tracks more than once (I had inadvertently pressed the "Repeat" button on the UnitiLite's remote...). This disc finally revealed its secrets, and that it is to the credit of the Mini T.

VERDICT

It's pointless to try to describe these speakers by their sound, as they are perfectly at ease no matter the part of the spectrum we choose to examine. It is more instructive to examine our own reactions to the music the Mini T portrays. Where do these speakers take us? What do they tell us about the artists that we thought we knew well, the music that we thought we understood? The Mini T's talents are at this level. Call it musical clarity, insight, or simply good design. Regardless, if this is the fundamental nature of the T series, this bodes well for the rest of the range. The Mini T introduces the listener to another vision of music, a wide-screen vision where imaging plays its role perfectly in the transmission of the musical message and musical emotion. James Tanner is to be congratulated for his vision of music as is Bryston for having believed in it. A reference in its class, the Mini T can be compared comfortably with speakers costing two or even three times the asking price. You have to hear these.

FOR

- a wonderful balance between warmth and detail
- natural texture and scale of instruments
- the magic of three-way speakers
- affordable

AGAINST

- la touch reticent at low volumes
- availability; it is not easy to introduce a new line of speakers to resellers who already have well-established brands. Contact Bryston for availability in your area.

Bryston Mini T

Dimensions: 571 mm H x 267 mm W x 250 mm D
(22.5 x 10.5 x 10 inches)

Weight: 19 kg (42 lb)

Finishes: vinyl - black ash, natural cherry, Boston cherry. Real wood finishes in the customer's choice:

\$500 extra

Price: \$2,695

Warranty: 5 years

www.bryston.com