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Markaudio-Sota Viotti One Stand-Mounted Speaker

Beauty for the eyes and ears!

Review By Clive Meakins

Back in November 2015 I pre-viewed the Markaudio-Sota Viotti One the loudspeakers I'm now reviewing in full. The Markaudio-Sota Viotti One is one of the lead products from this new company. Markaudio-Sota may be new but the designers involved have been around the audio industry for more years than it's polite to mention. You can check out the pre-view to find out more about the team behind Markaudio-Sota. In brief Markaudio-Sota comprises a multinational team from Hong Kong, UK and Italy, China and Japan; their base and funding is Hong Kong centered.

Markaudio-Sota are not a UK-style cottage industry type of business, they are a specialist startup with big ambitions. They are not aiming to scale to the size of KEF or Bowers & Wilkins but they do aim to entice some of their customers. What is really important to appreciate is that Markaudio-Sota design and build their own drivers so their speakers are highly individual. For instance, Mark Fenlon creates his innovative designs from the ground up whereas most other small to medium sized speaker manufacturers select drive units from the open market and build them into a box. If I were being unkind I could say that some mass market speakers are designed by accountants using spreadsheets to select the lowest cost parts to make the highest possible margins. Here we have polar opposite, Markaudio-Sota are 100% an audio company with their own design principles to uphold. My view of these principles are that they cover – gentle crossover slopes, wideband driver technology, wide dispersion, lightweight moving parts, ease of drive, high quality cabinetry. Note I say wideband drivers rather than full-range; full-range drivers tend to have compromises making them unsuitable for the more general market, wideband drivers are a far more fruitful approach. Wide dispersion is another characteristic; the in-room listening position is not critical and therefore several people can hear a top quality performance at one time.



VIOTTI ONE

I already mentioned ease of drive and low order (i.e. shallow) crossovers; the idea is to get the drivers to operate flawlessly over a wide frequency range and consequently there's no need correct for limitations with a complex power and life sucking dynamics destroying amplifier unfriendly crossover. This ethos culminates in Markaudio-Sota designing and building their own drive units from the ground up. Markaudio-Sota is striving to ensure they produce products suited to their target market. I expect most of us are familiar with crowd-funded products coming to market; the Viotti One aren't crowd-funded but they are crowd-tested. When I say "tested" what I mean are the final finishing touches to the Viotti One result from independent input from a good number of people right across the globe; this has influenced the balance of the speaker. Markaudio-Sota have gone out of their way to bring a product to market which will have very broad interest and match many peoples' requirements based on feedback from across the world.

Creation

The Viotti One design was created by Andrea Ponti. Andrea is Italian who has worked both in Italy and Japan so he is adept at styling which works both in the East and West. The speakers have what I would describe as an *Italianate curved rear*; now that I've written this I can see a related second meaning which is probably quite apt. Joking part, the speakers are very pleasing to the eye, the design is very far from being a boring rectangular box. The cabinet is CNC high density fiber board e-section (similar to ply) combination bottom, front and top panel. The side/rear panel is a laminated five layer moulded heat formed panel. The baffle is a moulded part which required significant investment in tooling, lesser companies might have taken a lower cost cheap and cheerful route. There are several finishes available, many are wood veneer. The veneer quality is beautiful, it's not some artificial mirror imaged veneer, it's the real thing with natural variation in the wood grain.

The veneer is lacquered to a deep gloss which is incredibly hard to photograph without a studio. The lacquer is robust; I've not managed to create any swirl marks when dusting the speakers. The drivers are Sota 11 and Sota 5, the number denotes the diameter of the drivers in centimeters. Both drivers are used well within their extremely wide frequency capability; this means gently sloping crossovers can be used which I usually prefer. The Sota 11 and 5 are available with silver or gold/copper colored aluminum cones. The drivers normally reside behind fine grill material, there is a plastic former to shape the grill cloth, the grill assembly is held on with magnets and can be slid off should you prefer nude listening. The semi see-through grill cloth makes the drivers seem like forbidden fruit, rather like a lady wearing a semi see-through top. I don't know whether I should be looking at the drivers or whether it's rude to stare! I like the implementation of the grill as there's no cumbersome frame or plastic studs to hold it in place.

The Viotti One have a sensitivity of 88.5dB/W/m which is reasonably sensitive for speakers of their size. Their frequency range is quoted as 40Hz to 25kHz. The extended the upper frequency response is an excellent specification. The bass/mid driver is a custom designed in-house built Sota 11 ultra-wide range wide dispersion driver employing a 150 micron aerospace grade mixed alloy ultra-low mass cone. The mid/high driver is uses similar techniques to the bass/mid and employs a 90 micron cone. The moving mass of these drivers is about half of what is usual so you'd expect a fast, detailed yet controlled sound. The cones are identical in profile so that their dispersion characteristics match, this should aid excellent integration along with their gentle crossover slope. When you think about typical speakers with cone bass/mid and dome tweeters they are always going to struggle to integrate well with their polar opposite radiation patterns, along with their likely very different cone materials.

The crossover is care of Dr. Scott Lindgren, it may seem easy to design a second order crossover with five components, but there's a heck of a lot more to it than you'd imagine! The work that went into the crossover design puts my amateur DIY attempts to great shame. The Viotti One crossover is an offset second order acoustic Bessel / Butterworth at 2.4kHz, voiced in accordance with the feedback of listening panels around the globe. Not only was Scott responsible for the crossover but he also did a lot of work on the reflex port and resonant frequency characteristics. The crossover is designed to exhibit a slight mid-range dip; this is sometimes called BBC or Gundry dip. This well-known technique is utilized to make voices sound more realistic.



The Viotti One is in effect a largish bookshelf speaker with dedicated stands. The stands are in piano black gloss – again there is hard wearing lacquer – the stands are two piece affairs which the Viotti One drop onto and are then bolted in place. The base of the stands have four coned metal feet which can optionally sit on the supplied metal cups with rubber undersides, this is majorly useful for wooden floors. The coned feet include knurled washers so the cones can be made tight. The cones are not vicious spikes; they are blunter and safer than carpet piercing spikes. They are thoughtfully not made from ferrous metal so they won't rust and stain your carpet.

Putting The Viotti One Through Their Paces

Being one of several folks involved with feeding back views on voicing and tweaking the sound of these speakers means I've been using the Viotti One for several months. In that time I've got to understand the final stages of their development and the effort put in by Markaudio-Sota to perfect the speaker. All the beta testers have likewise put in a lot of effort, it's been fun but also time consuming. The areas where I've been involved with prototypes and pre-production versions have been:

- 1) Unboxing process, assembly, quality
- 2) Aesthetics (stand, grill)
- 3) Tweeter preference (two subtly different specifications)
- 4) Effects of crossover tweaks
- 5) Effects of various internal damping materials

What follows are my views of the sound of the final production Viotti One speakers.

I have heard the Viotti One in four rooms, three of which have been in my home. I've tried a few amplifiers, as you'd expect with 88.5dB/W/m sensitivity and second order filter slopes pretty much any amplifier will be fine. My 2W single-ended tube amp was naturally somewhat under-powered so there are limits! I settled on the Temple Audio 40W **Bantam One** as being an ideal partner for the Viotti One.

The rooms were relatively typical UK rooms, around 18' x 15' and 24' x 15'. I'd have no qualms with using the Viotti Ones in rooms just 12' wide. The room types were:

- 1) A dedicated listening room
- 2) The living room
- 3) A dedicated AV room
- 4) A friend's living room

The speakers were not at all problematic to place; I achieved good quality sound with close to rear wall placement and free-space. The front firing reflex port no doubt aids this easy placement. The sources I used were two record decks and a laptop with external DAC. These were the Trans-Fi Salvation rim-drive record deck with London Reference cartridge; Garrard 301 with Ortofon 2M Mono SE cartridge; laptop with iFi iDAC2 and Metrum Octave DACs.

The initial burn-in of the Viotti One is to be performed with care. The first few hours running should be at low and gradually increasing volume. These are not PA speakers made for brutal use, they use sophisticated high performance drivers deserving of respect. My experience with Mark Felon's drivers is that after about 10 hours you hear much of what they can do but you should wait for 100 hours before drawing full conclusions and 500 hours will potentially be when you reach maximum performance.

Initial impressions often mean a lot; listening over longer periods is invaluable but in that time we adapt to what we're hearing so I like to give credence to both initial and long-term impressions. Being an Open Baffle fiend I often find box speakers a bit of a shock to listen to until I adapt. A big open sound is what my Open Baffles deliver, most box speakers I find sound boxy in direct comparison to Open Baffles. I therefore was concerned about the Viotti Ones; would I get on with them? As it turns out I was needlessly concerned.

I left the Viotti Ones playing in my music room whilst I worked in my study; I only sat down for a serious listen once the speakers had hit the 100 hours mark. My biggest fear of a boxy slightly closed in sound was gloriously dispelled. Probably it is due to rigid cabinet, wideband drivers, gentle crossover slopes and a narrow baffle... but whatever the reason; I was greeted with an open and palpable sound. Over the weeks and months I challenged the Viotti One with a lot of music and even AV material. Much of the music I played may not be latest fashion but I'll have to ask you to bear with my preferences.

Nanci Griffith / Lone Star State of Mind – this is an album which can sound stunning but when vocals jar it falls apart. Nanci's soaring voice was handled with aplomb; there was great "you are there" presence, no trace of edginess, which is vital. On Beacon Street the bass guitar is delivered with surprising power and less surprisingly great definition (less surprising as I expected this).



Art Blakey & The Jazz Messengers / Moanin' – The "Drum Thunder Suite" was portrayed with fast and tight drums / tom tom notes which then led well into impressive trumpet and sax. The sound was very live, up tempo and realistic. On 'Come Rain or Come Shine' piano was reproduced very well, it's always a tough test and one that my live sounding room doesn't help. The double bass provided a good bass underpin demonstrating that the 40Hz lower frequency specification of the Viotti One doesn't hold it back, it some ways it probably helps as problematic rooms typically sound better without the deepest bass – and many rooms are problematic with deep bass.

Jennifer Warnes / Famous Blue Raincoat – "Bird On A Wire" is a track with strong impactful bass, tinkly subtle treble and palpable vocals which are imitate yet powerful. Again the Viotti One did not disappoint. Sure the occasional bass note didn't have the level of impact my 18" basses driven by 400 Watts can deliver but the Viotti One did an impressive job.

Now for an AV diversion. The Viotti One is clearly aimed at purist audio use. Not everyone is fortunate enough to have both audio and AV setups so for some potential purchasers the hi-fi speakers may need to double up for AV use. I used the Viotti One with our 65" TV, there was no centre channel and it was not missed. This AV application brought home the success of the wide dispersion characteristic of the speakers. Everyone in the room had a great listening experience. One program I was keen to try was Happy Valley, a BBC production. This excellent series had been slated for unintelligible diction; I can bear this out as I'd been one of the many frustrated complainers. I cannot begin to describe how well the diction came across with the Viotti One. For film use where there are lots bang, crash and thud sounds I powered up a subwoofer, I only needed gentle bass reinforcement and frankly any floorstanders I use for the same duties also need the subwoofer so the Viotti One did as at least as well as expected. If your primary use is AV then the Viotti One are probably not the speaker you should look at; instead Markaudio-Sota have their Cesti range for VA / Home Theater.



I must confess to using the Viotti One in a totally unsuitable situation – my son's recent 21st party. Ok I laid down the rules about the volume control but the Viotti One survived and delivered great sounds. I was being reckless but I got away with it.

My remaining musical examples come from my "Viotti Sessions" playlist. This is a playlist I put together for assessing the speakers with friends and fellow audio nerds. Here's how I heard these tracks with the Viotti One.

Ben Harper / Whipping Boy – percussive, great separation, fabulous fingering of guitar strings, very expressive vocals, tight bass. This was a standout track.

America / Horse With No Name – Pleasing bass underpinning the song, overall there was a delightful lift to the music, very enjoyable.

Annie Lennox – Legend In My Living Room – The start of the track has a pulsing bass, the Sota 11s dealt with this very well. Annie's vocals were delivered with excellent presence.

Chet Atkins & Mark Knopfler / There'll Be Some Changes Made – this is a fun knock-about, foot-tapping duet for both vocals and guitar. The character was as it should be. Great fun.

Karen Mok / While My Guitar Gently Weeps – this is powerfully produced, with a lovely subtle top-end; great vocals.

Rosie Vela / Magic Smile – infectious, it's hard not to sing along, great rhythmic driving bass.

The Oscar Peterson Trio / You Look Good to me – this is gentle at the start with clean treble and flowing piano leading to great percussion and double bass. Beautifully rendered with rock solid piano and great double bass.

Sonny Rollins / Moritat – again the treble balance and quality was just right, the sax simply oozes and is very sexy, there's great double bass too.

Wynton Marsalis & Eric Clapton / Corrine, Corrina – trumpet, guitar, tambourine and much more; this is a live and energetic recording which comes across as wonderfully vibrant. There's a lot happening with this track, I love the way Marsalis makes the trumpet almost "talk". A great track replayed with huge aplomb.

Buyers Of The Viotti One

I always like to think about who will be typical buyers for a product. Of course it's only my opinion and the market I suggest for the Viotti One may be totally wrong. The finish and styling of the Viotti One is so good that they will attract those who appreciate such looks and don't want large speakers dominating their room. There are various finishes available from piano black through dark wood to light wood. There are also options for silver or gold colored driver cones. From a sonic point of view of the Viotti One performed really well. As can be expected they do not extend down to the very deepest bass notes and they cannot be expected to thump out Drum and Bass at high volumes; the Viotti One suit other genres rather better, though there's no denying their ability to play rock. I would suggest that someone who plays a large proportion of rock loudly would not be too likely to be a customer, ultimately the laws of physics come into play; the 11cm bass/mid driver can only shift so much air. Music that is nuanced and subtle is perfect but don't let me give the impression these speakers cannot do scale, they can and they do. It's just that if you want to run amok and be brutal with your 250W amplifier in a very large room you're likely to be disappointed.

For most of us however the Viotti One are very easy to live with and when you sit down a really listen to what they can do you realize they are smooth but also incredibly atmospheric. Their abilities transcended my expectations. I like to listen via speakers which allow my music to wash over me and be heard in a way that tricks me into almost believing there is a band in my room. To achieve this, a loudspeaker needs to be very open sounding, detailed, throw a wonderful soundstage, and be very well balanced across the frequency range as well as go reasonably loud or what I'd call realistically loud. They must also not scream at you. Lightweight and electrically efficient drivers should also be able to play well quietly, not needing to be running hard before you get the impression of dynamics. The Viotti One do all of this.



Another point I'd like to make is that the Viotti One give credence to the idea that you don't need to spend huge amounts on the rest of your system. The Viotti One are not budget speakers but they are not high-end priced either. Source components and amplification need to be good but do not need to be at the same price level. The **Temple Audio Bantam One** retails at around a third the price of the Viotti One. Yes it can be argued the Bantam One is bargain and that's true but it's not as simple as that. What we have here is the benefit of an easy to drive speaker which doesn't need an amplifier suitable to run an arc welder. This to my mind is sensible design. Getting the design of the loudspeaker drivers right results in an amplifier friendly crossover being suitable. Am not quite sure how we as an industry got into the vicious circle of hard-to-drive speakers needing ever more powerful amplifiers. Oh I've said enough, I'd better get off my hobby horse. You can tell that the Markaudio-Sota Viotti One deliver to many of my hi-fi principles. If you share my principles then strongly consider the Viotti One.

Specifications

Type: Two-way stand-mounted loudspeaker
Frequency Response: 40Hz to 25kHz
Impedance: 8 Ohms
Crossover: Second-order crossover in stand to isolate vibrations
Amplifier Power: 5W to 100W
Cabinet: Curved Italian-styled with wood veneer and dual-core panels
Size Including Stands: 101 x 24.6 x 33.9 (HxWxD in cm)
Weight (one speaker and stand): 31.25 lbs each
Price: \$3000 per pair.

Company Information

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