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## Product Review

### Morel Octwin 5.2 Loudspeakers

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### Review Summary

#### Sound

"Big and warm (dare I say lush?); "well-recorded material and the Octwin always produced a deep and cavernous soundstage that transcended the walls of my room"; "female vocals are...reproduced with a remarkable level of elemental integrity."

#### Features

"Actually two pairs of [Morel's] Octave 5.2 speakers" mounted on special stands tweeter to tweeter; "the 5 1/2" woofer's voice coil is 3" in diameter and is said to enable high power handling and great excursion"; "the Morel 1" tweeter uses a soft dome with an unusually large radiating surface area...for high power handling and reproduction of a wider frequency response in the lower-midrange region."

#### Use

John "found that best image focus was obtained with the speakers set with almost no toe-in but located almost two feet closer" than usual; he "preferred the added 'life' afforded by a pair of Bryston 7B STs (the speakers didn't mind the added muscle either)."

#### Value

Certainly not inexpensive at \$8900 per pair with stands and necessary hardware, but not a "cookie-cutter speaker" either.

If you've had your fill of cookie-cutter speaker designs, you'll want to take a closer look at the Morel Octwin 5.2 loudspeaker. What Morel refers to as "music deco" styling only hints at what is different about the Octwin. Look a little closer and you will see that the Octwin is actually two pairs of the company's Octave 5.2 speakers. What Morel has done is take a second pair of these small yet *dense* monitors, turned them upside down, and mounted them, tweeter-to-tweeter, on top of the

original pair. Hence, the pair of Octaves becomes a single Octwin. Morel says that the single Octave is designed to be a modular system that can be upgraded at any time to create the Octwin system through the simple addition of the second Octave unit and after connecting each speaker in parallel to the same power-amplifier channel.

Another thing that sets the Octwin apart is that the enclosure is entirely constructed of half-inch-thick Corian. For those not familiar, Corian is a patented polymeric substance favored for its resemblance to marble. It's not cheap to buy and even less so to fabricate, but Morel claims that it outdistances most other substances, including MDF, when used for speaker enclosures. The speaker cabinets are said to be coated inside with a bitumen substance to damp resonance and internal standing waves, and a separate enclosure is used for each drive unit. The woofer's cabinet is vented through dual rear ports. Interestingly, Morel has recently introduced the Octave 5.2M and Octwin 5.2M, the difference being that the M series is constructed of MDF and priced substantially lower.

Morel may be a new name to many as a speaker maker, but the company has been manufacturing drivers in Israel since 1975. Morel woofers utilize over-sized voice coils and therefore physically resemble those produced by Dynaudio. I'll bet you've seen speakers utilizing Morel drivers and assumed that they were Dynaudios. What separates the Morel drivers is what the company calls External Voice Coil (EVC) technology. Morel says that in conventional speakers the coil moves within the magnet system that surrounds it, but the EVC design takes the magnet system and places it within the voice coil. This necessitates a powerful magnet system and is why the Octwin 5.2 uses hybrid double neodymium and ferrite magnets. The 5 1/2" woofer's voice coil is 3" in diameter and is said to enable high power handling and great excursion for successfully producing bass notes at the lowest octaves. Further, Morel uses a hexagonal-shaped wire (Hexatech, as Morel calls it), which

# SoundStage!™

## Product Review

winds tighter, leaves fewer air gaps, and is said to increase efficiency by up to 20%. The Morel 1" tweeter uses a soft dome with an unusually large radiating surface area. This combination is said to make the tweeter ideal for high power handling and reproduction of a wider frequency response in the lower-midrange region. The Octwin uses a first-order crossover at 1.4kHz.

Morel specifies the Octwin's frequency response as 42Hz-18kHz +/- 1.5dB, its nominal impedance as 4 ohms (+/- .5 ohms), and system sensitivity as 86dB at one meter with one-watt input. Power handling is said to be 400 watts. Each Octwin 5.2 speaker combo stands 25"H x 7"W x 13"D. The Octave speaker weighs in at 26 pounds, which means that the Octwin pair will push the scales to 52 pounds. A single pair of Octaves carries a suggested retail of \$4400 USD, and the Octwin 5.2 pair retails for \$8000. A pair of Morel's floor stands retail for \$600, and the top stand (required for double stacking) costs \$300. So the Octwin with complete stand complement sells for \$8900.

### Use and setup

The Morel Octwin shared space in my audio system with a wide array of gear. Preamplification duties went to the Herron VTSP-1a, while power-amplification responsibility fell to either Herron M150 or Bryston 7B ST monoblocks. The Octwin 5.2s replaced Silverline Sonata II, Magnepan MG3.6/R, and JMLab Mini Utopia loudspeakers. CDs were by way of the Pioneer DV-525 DVD player used as a transport to feed a Bel Canto DAC2, and SACD was via the Sony SCD-CE775. Interconnects and speaker cables were JPS Labs Ultra Conductor, and the digital cable was the DH Labs D-75. Power cords for the amplifiers were JPS Labs Kaptovators, with JPS Labs' Analog AC cord on the preamp and Digital AC on the DAC2. All analog pieces were plugged into an Audio Magic Stealth purifier, and Vibrapods were used extensively.

The Octwin 5.2 setup went without a hitch. Eventually I found that best image focus was obtained with the speakers set with almost no toe-in but located almost two feet closer together than where I usually situate my speakers. A bit closer to the front wall than usual put the speakers 35" into the room and firmed up the bass.

### The big picture

From the beginning, I was completely seduced by the Morel Octwin loudspeakers. They have a big and warm (dare I say lush?) sound that immediately appealed to me. As compared to the JMLab Mini Utopia—a speaker just begging for direct comparison—the Morel Octwin has a less up-front, more relaxed perspective on the music. The Octwin system does not throw into sharp relief the minute and musically unimportant detail as does the Mini Utopia—a real champ in this regard. While I never felt as though I was missing anything in the detail department in direct comparison to the JMLab speakers, I did find that listening to multi-tracked pop music was much more enjoyable via the Octwins. Where the Morel Octwin 5.2s

### The Octave 5.2

After months of using the stacked Octwin 5.2 system, removing the top speaker in order to revert to the single Octave 5.2 necessitated a brief adjustment period. The diminutive Octave sitting on Morel's 20" stands produced a total speaker height of less than 33", resulting in a very, shall we say, *petite* package, which isn't all bad. But it's been a while since I found myself looking *down* at a speaker from the listening position. Once the music began to play I was pleased to find that the image height varied little as compared to the Octwin system, which is to say that images seemed to center just above the level of the tweeters.

I did temporarily substitute a pair of very massive sand-and-lead-shot-filled 26" Platinum Audio stands and found that the speakers took a sonic step backward. Image height did not change much, but the bass response suffered. The speakers' formerly fast and incisive bottom end became slightly smeared and less convincingly authoritative. The Octave now sounded like a small speaker *trying* to sound big. I decided to go back to Morel's own stands.

The most important change made by backing off to a single Octave 5.2 is that, as a system, you lose a full 3dB of sensitivity, which means that twice the power is now needed in order to achieve the same output as the Octwin 5.2. Morel claims a low 83dB sensitivity for the single Octave 5.2. This was represented, roughly speaking, by a change in the setting on my preamp's volume control from the usual 9:30 to the 10:30 position. Also, as the Octwin system is wired in parallel for a system impedance of 4 ohms, a single Octave shows to the amplifier a reduced resistance, to what Morel claims is 8 ohms  $\pm$  .3 ohm. Still, an 8-ohm load and 83dB sensitivity don't invite use with your favorite SET amplifier.

But that's basically the end of the bad news. The good news is that the lion's share of everything that I enjoyed about the Octwin 5.2 system was still in evidence with the Octave 5.2. Stacking a pair of Octaves will cause a change in the *system's* radiation pattern. This will have the effect of limiting the speakers' vertical dispersion, thereby reducing reflections from the floor and ceiling. A single Octave will suffer more from those reflections, and this is to what I attribute a slight loss in image focus and density as compared to the Octwin system. That said, the Octave 5.2 possessed the same imaging and soundstaging magic that I enjoyed so much from the Octwin 5.2. Bass response, once I placed Morel's stands back in the system, was identical to what I had been hearing.

The Octave 5.2 speaker is both an excellent performer on its own and an interesting speaker to those seeking a clear and demonstrably progressive upgrade path. In that regard, the Octave 5.2 is unique to say the least.

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## Product Review

present heavily engineered music in a more coherent way, the JMLab speakers insist on dissecting the music into its individual components.

Another beguiling aspect of the Octwin system's performance is its soundstaging. While imaging and instrumental placement varied from recording to recording, well-recorded material and the Octwin always produced a deep and cavernous soundstage that transcended the walls of my room. When images appeared at the front of the stage, contrary to the arcing stage that some speakers create, the Octwins drew a chalk line across the front of my room, usually right in front of the speakers, that was stunningly vivid. Imaging was very good. Instrumental outlines were naturally presented—well delineated yet not supernaturally so. When called for, the Octwin system could place instruments well outside the speakers' physical locations—sometimes eerily so. Focus in the vertical plane was *very* good too, as voices seemed to emanate from a distinct point in space.

In terms of tonal balance, the Octwin 5.2s err from neutrality by occupying the warmer side of the tracks. They sounded very good with my ultra-neutral Herron M150 mono amplifiers, but in the end I preferred the added "life" afforded by a pair of Bryston 7B STs (the speakers didn't mind the added music either). Under no circumstances did the speakers ever sound dull or lifeless—don't misunderstand. I spent at least two months with the Morel/Herron combo, and I was quite pleased. But the Brystons introduced a little bit of upper-midrange sparkle that was the icing on what was a very tasty piece of cake.

Though the Octwin system's bass is developed through the use of dual vented 5 1/2" woofers, only those using the speakers in large rooms will likely crave a subwoofer. The speakers produced clean and room-energizing bass far in excess of my expectations. Performance throughout the midrange was seamless, and the midrange segued to the treble without a hitch, as the Octwin's overall character remained as sumptuous through the treble as it is elsewhere. Though certainly not lacking in either frequency extreme, the Octwin *excels* through its midrange.

With resolution to spare, the Octwin easily differentiated the two distinct acoustic settings on "Darkness" from Peter Gabriel's *Up* [Geffen 0694933882]—one very close and intimate and the other much deeper, larger, and wider, with the vocals set further back on the stage. The Octwin system did a superb job of constructing the soundstage as prescribed by the CD. Gabriel's voice had very good focus and presence, yet these were not artificial. Clean and natural shadings marked by only a very slight hint of extra warmth is how I would describe the Octwin 5.2s' portrayal of Gabriel's voice.

"Growing Up" exhibited a wide soundstage with neatly laid-out instruments—all in good focus. As many times as I've listened to this song, I'm still taken by surprise by the squeaky keyboard at the end, which appears to the extreme left of the left speaker. Not only is the tone of the keyboard a seeming contradiction

in the song's context, but its appearance at the extreme side of the stage always jolts me back from wherever my utterly relaxed mind has taken me. The opening bass event on "No Way Out" will have some looking around the room for the subwoofer. Ditto the bass lines throughout the cut, which are reproduced with excellent heft, power and definition completely belying the physical stature of the Octwin speakers. At my preferred mid-80s-dB listening level, I can't say that the Octwin 5.2s bathed me in tactile punch, but if I wanted to excite the room with true sensation, it was just a matter of cranking the volume a bit.

While the Octwins were in my system, I did a lot of listening to acoustic-guitar recordings such as Brooks Williams' CD *Little Lion* [Signature Sounds SIC 1255]. Over and over I found that the Morel speakers provided a nearly perfect combination of roundness of tone and incisive speed. The speakers reproduced Williams with a tone that was neither too rich nor thin, neither too subdued nor prominent. Even byproducts of the acoustic experience such as the pick-on-string "clicks" and the squeak of a finger sliding across a wound string came across in near-perfect balance and natural authenticity. Williams' guitar had a round three-dimensionality that just oozed believability. I've never heard guitar reproduced with a higher degree of "real" in my home.

Female vocals are also reproduced with a remarkable level of elemental integrity. Aimee Mann's *Lost In Space* [SuperEgo SE-007 ] has been in almost continuous rotation for the last several months, and the Octwins have served the CD very well. While decent enough, the recording here is not one of audiophile pretensions. It is a little gritty, a little noisy, and not as clean and open as it could be. But the Octwin 5.2s never covered up the imperfections or exacerbated them to such a degree as to diminish my enjoyment of the music. "Pavlov's Bell" has some of the least-delineated image outlines I've ever experienced. No speaker I've had in the house could unravel and make any sense of the soundstaging on this song, including the Octwins. Unlike some other speaker of the ultra-detailed genre, which will accentuate the problems in the recording making it almost impossible to enjoy, the detailed yet not unduly resolving Octwin 5.2s did not put the song under a sonic microscope. That's just not what these speakers are about. Instead, the Octwins just gave me everything on the recording, obscured little and exaggerated nothing.

Other than the musical content, what makes this CD enjoyable from an audiophile perspective are Mann's vocals and the deep and visceral bass lines. While still in possession of a touch of grain, Mann's voice is balanced, focused, and sweetly purposeful. Bass lines throughout the disc are balanced, fast, and physical. Once again, the Octwin speakers sounded much larger than they are. Simply put, the Octwin 5.2s did what they could to make this somewhat typical pop recording not just listenable but truly enjoyable.

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## Product Review

### More comparisons

I've already made mention of some important differences between the JMLab Mini Utopia loudspeakers and the Octwin 5.2s. Other important differences are in the areas of sensitivity and bass performance. While the \$7000 Mini Utopias are *very* strong down to their low-frequency limit, they can't energize a room with bass as the Octwins can—and neither do they reach as low. In a related issue, the Octwins will require considerably more in the way of amplifier power than the Mini Utopias, which are much more efficient speakers.

Compared to my \$6000-per-pair Silverline Sonata II loudspeakers, which are a horse of a *completely* different color, the Octwins can't duplicate the bass extension or dynamics offered by the Silverlines' dual 10" woofers and, again, the smaller Octwin 5.2 can't match the Sonata IIs' output per watt. However, the Silverline Sonata IIs are large and imposing speakers much less likely to find acceptance in rooms shared by a significant other. The Octwins' power-hungry nature is, therefore, a natural trade-off for a much more domestically acceptable speaker. Tonally, the Silverlines, like the JMLab speakers, are just a touch more forward than the Octwins, which are distinctly laid-back by comparison. Where the speakers are clearly on equal footing is in overall coherence—which is to say that this is an area where both speakers excel.

Where it comes to value for the dollar, both the Silverline and JMLab speakers make the going tough for the Morel Octwin 5.2. But those who value the added bass oomph of the Octwin system as well as its different kind of musicality will find it worth the premium over the Mini Utopia, and those who favor a powerful full-range experience from a small and domestically friendly speaker may find the Morel a high-tech alternative to a large floorstanding speaker like the Sonata II. Either way, such potential owners will have to spend extra cash in exchange for the added sonic or domestic bliss.

### Conclusion

The Morel Octwin 5.2 loudspeakers' greatest strengths are found in their subtle virtues. They are not loudspeakers for those looking to be bowled over by the nuts and bolts of the recording, but rather for those looking to be seduced by the music's essence.

The Octwins have a way of producing all the detail music lovers are looking for without assigning it undue prominence. They give the listener more than a sense that all the musically important nuance is accounted for with none of the supernatural and artificial depiction of unimportant minutia that some speakers can thrust forward. Naturally balanced, the Octwin system's midrange is neither opaque nor unduly micro-detailed. For me, this results in a most organic and musically natural presentation.

Shortly after receiving the Octwin loudspeakers, I noticed that a Morel print advertisement read, "For professionals only." Shortly thereafter, the ad was changed to read, "For audiophiles only." I guess someone tipped off Morel to the fact that as a rule audiophiles don't cotton to professional gear. But if it were up to me, the next iteration of the advertisement would read, "For music lovers only."

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### Company Info

#### **Morel Octwin 5.2 Loudspeakers**

**Price:** \$8900 USD per pair including stands.

**Warranty:** Five years parts and labor.

#### **Morel Co. Ltd.**

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## M e a s u r e m e n t s

## Morel Octwin 5.2 Loudspeakers

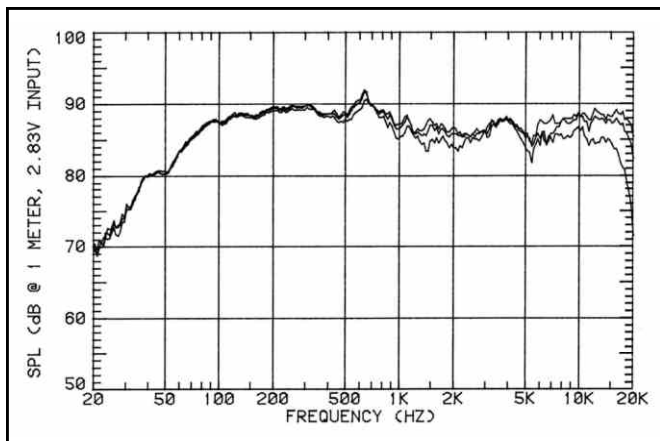
### Loudspeaker Measurements

Measurements taken in an anechoic chamber at Canada's National Research Council.

Microphone measuring position: midpoint between tweeters.

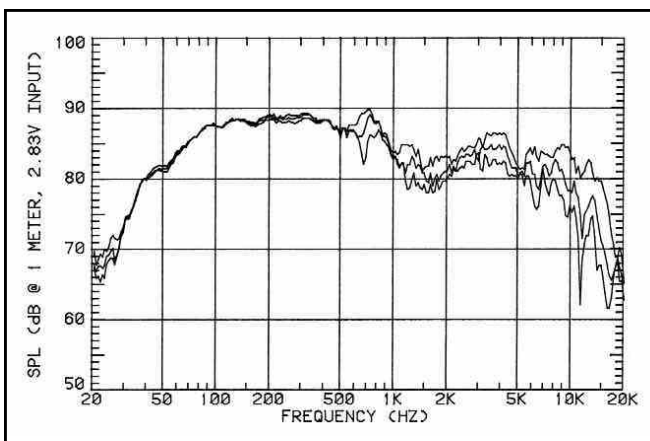
Sensitivity: 87.5dB (averaged 300Hz-3kHz, 2.83V/1m).

#### Frequency Response #1, 20Hz - 20kHz (measured @ 2m, plotted @ 1m)



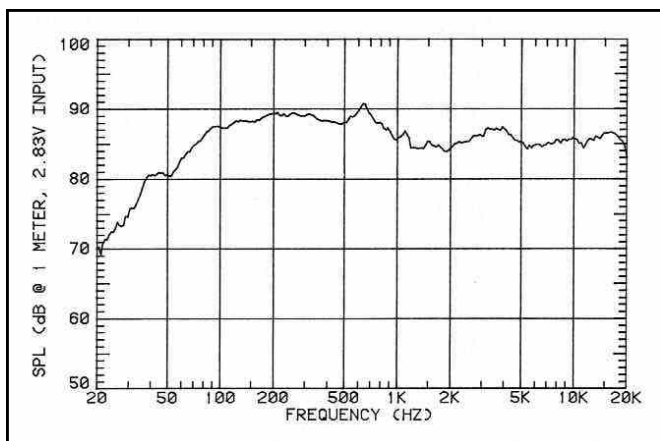
Top curve: on-axis response  
Middle curve: 15 degrees off-axis response  
Bottom curve: 30 degrees off-axis response

#### Frequency Response #2, 20Hz - 20kHz (measured @ 2m, plotted @ 1m)



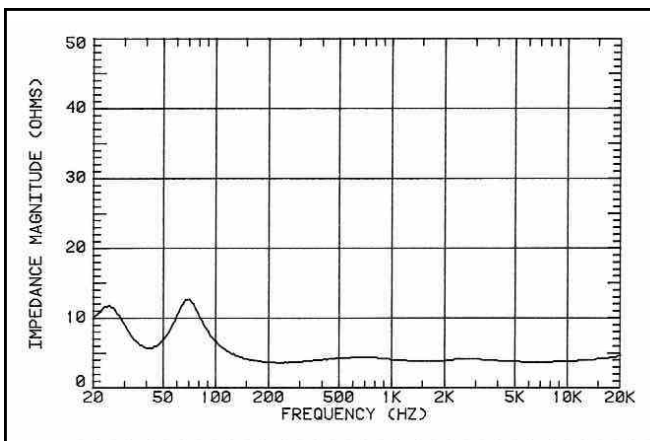
Top curve: 45 degrees off-axis response  
Middle curve: 60 degrees off-axis response  
Bottom curve: 75 degrees off-axis response

#### Listening Window (measured @ 2m, plotted @ 1m)



Response curve is an average of five measurements:  
on-axis, 15 degrees left and right off-axis,  
15 degrees up and down off-axis

#### Impedance Curve



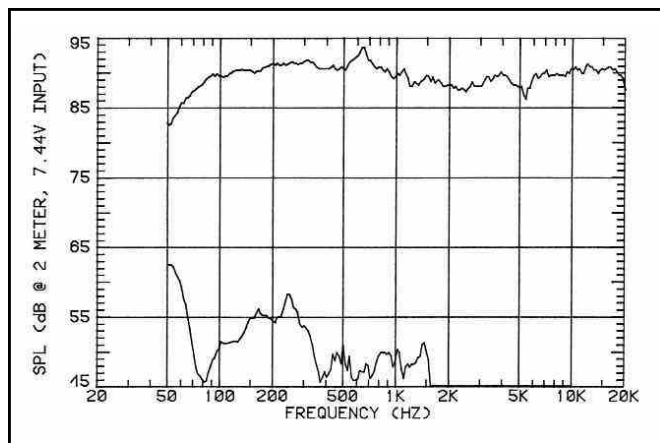
Vertical axis: impedance  
Horizontal axis: frequency

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## M e a s u r e m e n t s

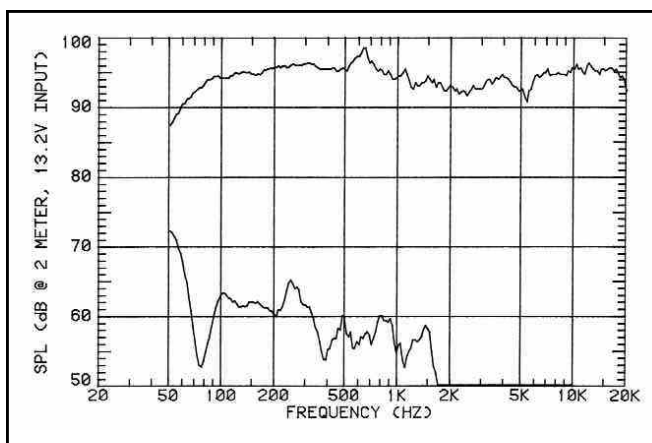
### Loudspeaker Measurements (cont'd)

**THD+N @ 90dB, 50Hz=10kHz**  
(measured @ 2m)



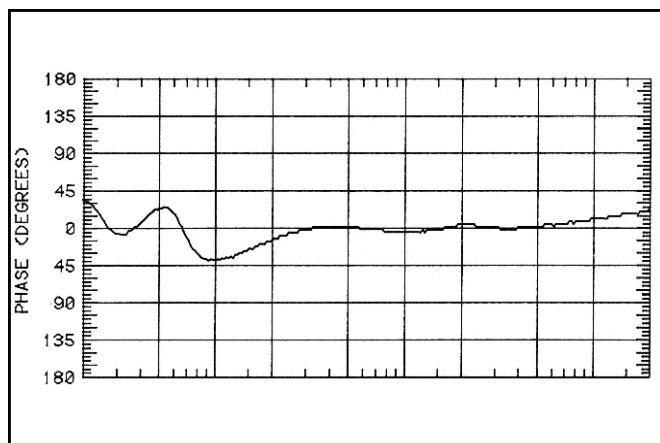
Top curve: frequency response @ 90dB SPL  
Bottom curve: THD+N @ 90dB (50Hz-10Hz)

**THD+N @ 95dB, 50Hz=10kHz**  
(measured @ 2m)



Top curve: frequency response @ 95dB SPL  
Bottom curve: THD+N @ 95dB (50Hz-10Hz)

### Electrical Phase



Vertical axis: phase  
Horizontal axis: frequency