



AUDIO TEST

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excellent
(90%)

Soltanus Acoustics ESL Virtuoso

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Electrostatics: the new generation

Something really special, the ESL Virtuoso of Soltanus Acoustics, found its way into our auditioning laboratory. According to the maker, the ESL Virtuoso is the world's first multi-panel electrostatic unit that requires no crossover, thus the full-range design was in order. In Montreal, the Serbian team and the lead designer Zoltan Mikovity were awarded the "Best of Salon Son & Image 2015" award.

Tobias Hecklau

The ESL Virtuoso belongs to the rare species of the full range electrostatic that can play frequencies over the entire range of human hearing. These devices are very rare because the electrostatic operating principle

has difficulty playing the bass range and are therefore usually combined with conventional (electro-dynamic) woofers.

The Virtuoso however, is designed as a full-range solution, which brings a further advantage - there are no disturbing

frequency dips or overlays in the transition frequencies.

Electrostatics

The speakers consist of two charged stators surrounding the conductive membrane. Music signal applied to the

stators produces an electrical field, which attracts or repels the membrane. As a result, it stimulates the air to vibrate, thus producing sound waves. Since the membrane is 8 to 28 times thinner than human hair, it operates extremely fast and can perform even the smallest movements correctly. This enables a direct and accurate representation of the played material.

However, the membrane often has difficulty reproducing large amplitudes undistorted. Due to the all-around open construction, low frequencies can be diminished causing an acoustic short-circuit. The problems in the bass range can only be compensated by a sufficiently large radiating surface, which was obviously attempted in Virtuoso. The loudspeaker measures no less than 153 centimeters (cm) in height and incredible 68cm in width, it reaches a membrane area of about one square meter.

With a depth of 33 cm at the base and 5 cm at the upper end, typical of electrostatics, it is quite thin. Nevertheless, it comes in at 26 kg, a decent weight for this speaker genre, and it should be installed with the help of a second person. The design can be best described as classic and clean, which was a good decision because of the lush proportions of the speaker. The front and rear sides are covered with black fabric, the side rails come optional in black or wood veneer finish. The speaker stands on a massive metal base, equipped with three spikes.

On the rear side of the speaker, above its power socket we could admire some adjustment possibilities. There are terminals for amps with a damping factor of less than 25 and for amps



Using the upper rotary switch, the Virtuoso can be optimally adapted to the damping factor of the supply amplifier, the lower control affects the treble

with higher value. For amps with a damping factor of less than 25, there is a rotary switch for adapting the Virtuoso to them. This nice feature, unfortunately, often falls flat because the damping factor of many amps is not specified in their respective data sheet. In that case, the best is to try and trust your own ears. Unlike many other electrostatics, Virtuoso is not picky when it comes to amplifier and I understand dazzling results can be achieved with tube amplifiers. Another rotary knob called "Tweeter bias" is for raising or lowering of the highs to adapt to the room or personal taste.

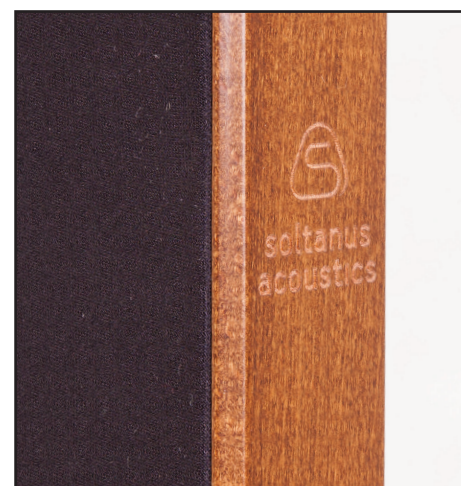
Sound and placement

For the speakers to deliver their full potential, it is recommended to break them in for about 200 hours (this is eight days and eight hours). The manufacturer provides a burn-in CD for this. According to the manual, it is recommended to let the speaker continuously run for about 24 hours as it could sound a bit thin otherwise. Also, fully broken-in speakers should be given a ten minute warm-up period, in which the stators can charge. You should also invest enough time in the placement. Since the Virtu-

oso is firing as much to the back as it does to the front, this could lead to undesired interference between the direct sound and the wall-reflected signal. In addition, it is well known that electrostatics have smaller sweet spot than electro-dynamic loudspeaker, which, in our experience, also applies to the Virtuoso. (Warning: do not sit too close to the speakers set).

Sound Test

When the right placement is found, one is rewarded with a special impression of the finest quality. The phantom mids are also modeled out like any other sound events, which are spread across the entire stereo width.



Elegantly engraved Soltanus Acoustics company logo adorns the electrostatic

It is striking - the distinction between the individual instruments works particularly well. This is a great advantage of electrostatics, which can be explained by the great fidelity in general. The special feature of the Virtuoso is razor sharp lower frequency range, which cannot be said for most other electrostatics.

There are songs with electronic bass and bass drum that are difficult to disentangle. We have never been able, until now, to hear these two instruments delineated so clearly in Lenny Kravitz song "Are you gonna go my way". There were also discoveries of previously unheard subtleties in many other well-known pieces. It's like re-discovering your favorite music all over again and this time properly! ESL Virtuoso delivers hugely in the mid-range and treble range.

Typically Electrostatic: the Virtuoso comes with a shallow depth of only 3 to 5cm

For example, we have rarely heard pianos and harpsichords so vividly, freshly and naturally. Modern mixed (recorded) singing which is provided for generating psychoacoustic closeness with artificial overtones, from our test samples, appears incredibly close, almost as if the singer was a few centimeters in front of us. This is a result of the precise reproduction of small and micro vibrations, that a conventional, electro-dynamic speaker cannot reproduce, due to its relatively heavy membrane.

The Virtuoso delivers each overtone so precisely, giving us impression that we are right in front of the sound source. The psychological effect lies in the fact that such micro vibrations in nature are lost after only a few centimeters. As a result, the speaker carves out the important mid range („voices“) exemplary even if it is recorded („mixed at the recording studio“) at lower levels. Intimacy is increased to the utmost, particularly beautifully recognizable with Norah Jones' Grammy winning "Don't know why" song.

By the way, it does not matter if you increase or reduce highs using the control dial. The change happens so skillfully and unobtrusively that the speakers never miss a beat.

CONCLUSION

With the ESL Virtuoso, Serbian maker, Soltanus Acoustics, succeeds in extending the benefits of electrostatic speakers - like unique directness, clarity and transparency up to and including the bass region. They are a high-tech at discount rates! Musical fine spirits, for those with sufficient space in the listening room, these special speakers are highly recommended.

SPECIAL FEATURES

- the world's first multi-panel electrostatic loudspeaker without crossover

Advantages:	+ Transparency of the bass region + Discreet design + Optimum adaptation to amplifier
Disadvantages:	- Large size - Doesn't play particularly loud

If I have anything to complain about, that would be that the level below 100 hertz drops significantly. This could perhaps affect pop and rock listeners, in which case we recommend the subtle use of a subwoofer.

The Virtuoso doesn't play as loud compared to electro-dynamic transducers, so please handle the speakers carefully - the ESL Virtuoso is more for sophisticated listener than for electronic DJs. With moderate volume, fans of genres such as classical, jazz and folk will get their money's worth and will be able to enjoy their favorite music in unexpected quality.

The best is yet to come: Serbian tech speaker does not cost EUR 20 000, nor EUR 10 000. The MSRP is listed at only 9 950 Euros. And this price is not for a single unit, but for the pair. Although not inexpensive, they are well worth it.

SPECIFICATION:

General	
Device class	Tower speaker
Price level	Superclass
Producer	Soltanus Acoustics
Model	ESL Virtuoso
Price (MSRP)	9950 Euro (pair)
Dimensions (W/H/D)	68 x 153 x 5 / 33cm
Weight	26kg
Information	www.ibex.audio.de

Technical data (acc. Manufacturer)

Functioning	electrostatic
Type	1-Wegebox, open
Frequency response	40 Hz - 20 kHz
Power	25-300W
Connection	Banana
Space recomm.	15 m2 to 30 m2
Sound setting	Tweeter bias to adjust the treble
Inputs	Banana

REVIEW

Bass reproduction	<input type="checkbox"/> 17/20
Midrange reproduction	<input type="checkbox"/> 19/20
Treble	<input type="checkbox"/> 19/20
Spatiality	<input type="checkbox"/> 9/10
Playback quality	<input type="checkbox"/> 64/70
Amenities	<input type="checkbox"/> 9/10
User friendliness	<input type="checkbox"/> 8/10
Up/devaluation	+1 (transparency)
Interim Result	82 of 90 points
Price/performance	good 8/10
Result awarded	<input type="checkbox"/> 90
OVERALL RESULT	EXCELLENT