

# SOUNDGIL Cube



Photo, Soundgil

We all spend time in front of our main system. And it's a bit of a song and dance to turn on each device, to let it warm up for a few minutes, to wait for the click of the relays that warn us that it is ready to play. We press buttons and turn controls.

Of course, it's the nobility of the thing that every convinced audiophile tries to retain, a sort of common heritage. And I like to imagine this European, Asian or American colleague who bends to this same ritual to launch his system, necessary preliminaries that are also part of the pleasure of this hobby.

This goes against a form of immediate music consumption. And this is also usually reserved for a room in the house.

Yet the pretence if settling down in front of my main system and turning on all these devices to use them runs up against reality.

Not the right time or not the right place are excuses that come up often. I would really like to have the peace or the stimulation of music at my workstation or in my room; and to choose the type of music according to my priorities.

Though there are many small and portable systems, like B&W Zeppelin, B&O Beoplay, JBL and others, none of these "soundbars" really manage to do anything for me except provide some background noise and if I have expectations, they are not met by these systems. It must be

admitted, however, that it is extremely practical even if not of high quality. To try the SONOS system for example is to experience a network integration model, which is very effective. Alas the sound quality is far from delivering what I'm looking for.

Since the Sound Blaster of my youth, my requirements have become more sophisticated although I remember the latter being better than the current proposals.

It should be noted that the next generation of music lovers are content with minimalist systems as they do not have the desire, the space or the expertise to stack boxes and link elements together. In this context, the companionship is of little effect as the users expect something else. There are but a few companies in this niche market. The public system soundbar genre do not fit. DEVIALET has chosen to explore this niche, NAIM with its Mu-So, FOCAL with its XS, perhaps we could still put the manufacturers of active speakers like Kii Audio in this list.



Photo, Soundgil

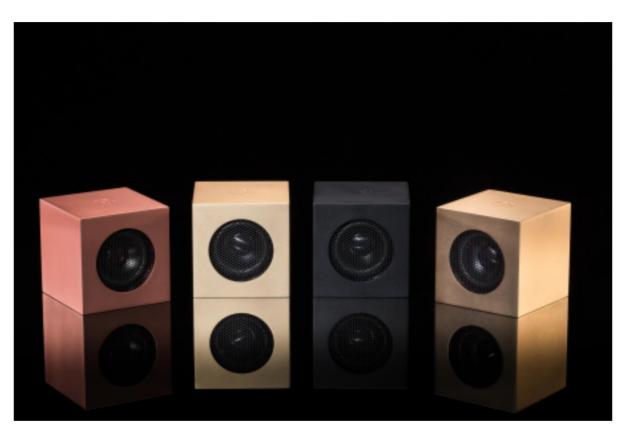


## Between the SOUNDGIL CUBE system.

If you followed our feedback from the High End Munich 2018, then you know that we (Joel Chevassus too) came across the demonstration of a tiny system called SOUNDGIL CUBE. One of the MOC atrium rooms mainly reserved for the ATOHM brand played this set of cubes, and the other system was off. Chance or experience, I leave you the choice, often leads to beautiful discoveries. As it is not the appearance of this minimalist set that caught our attention but the sound that came out of it that intrigued us, I must say we were indeed quickly seduced by the SOUNDGIL CUBE. We are familiar with these atrium rooms and they are not easy to implement such that the equipment installed plays well.

Here, I must say, the set up was reduced to its simplest expression, the cubes were on a display stand, a USB drive in the back of the central unit and that's it.

Yet there was something inexplicable that made the sound catch you. We got closer and there were qualities that we had not found in some larger and more ambitious systems in the previously visited rooms. A very detailed, direct sound, able to create a bubble in which it is quite simple to be immersed. We had to look at it more closely.





#### Who is behind SOUNDGIL

SOUNDGIL was born from the envy of its founder, Mark CHANG, long-time audiophile, and Chinese entrepreneur, to share his passion for music with a new generation of enthusiasts. For this, he imagined a system that was easy to use, with a modern and attractive look, and capable of such sound prowess that it would be put into the high-end category without hesitation. He imagined it as the first step toward the high-end range. The ambition of the CUBE is to be the entry ticket to the high-end range for a young generation eager for modern technology but without the expertise necessary to operate a traditional hi-fi system.

Surely Mark CHANG had more ambitious systems in mind when he imagined the SOUNDGIL CUBE. He himself owns an MBL Extreme system with its huge bass towers. His passion for high-end hi-fi systems and in particular, for MBL and its network brought him closer to audio engineer Peter PU (MBL, ONIX) and Korean designer J K KIM, who also specialised in audio systems. They are the two main engineers in charge of the realisation of the CUBE.

Note that the system has requested many prototypes but the motherboard in the central unit has been developed in competition by two companies. It was an American company that won the prize. The choice of coupling between the motherboard with the amplifiers, the cubes and their custom speakers have been the focus of all the attention. This is the genius of the thing because the implementation has really been done in detail with great expertise or craft, as desired.

Mark CHANG supervised all the steps of this prototyping by bringing his vision and his ear.

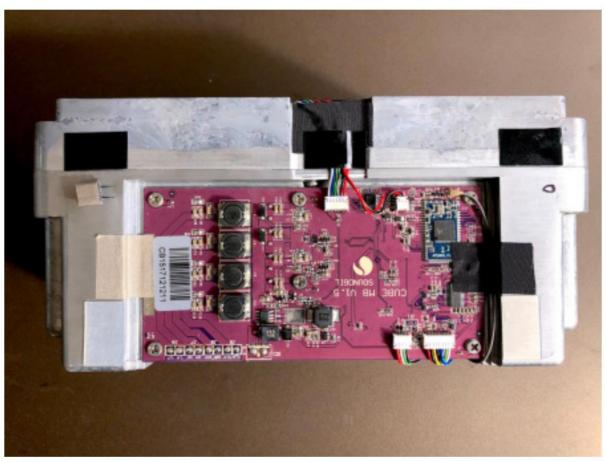
### **SOUNDGIL CUBE 2.1**

Visually, four aluminium cubes of 11.6 cm, with a full-range loudspeaker per cube. Two cubes are welded together and contain the electronics, two satellites are connected by black cables. Two pairs are provided, one short, to keep the four cubes together and one longer pair to be able to spread the satellites at a maximum distance of 90 cm, estimated by the designers as the ideal space for the system's sound expression.

In each cube, there is another moulded aluminium structure, very rigid and closed, which contains the loudspeaker(s) and that fit quite precisely into the outer cube. In the satellites, there is a small loudspeaker of about 7 cm (3 inches) in diameter and a very compact synthetic fibre wool that fills the entire closed load. In the central double cube, there are two loudspeakers identical to those of the satellites and a very compact electronic card that contains the receivers and the amplifiers. The system is supplied with an external power supply that plugs into the central module.

The system delivers 30 Watts RMS for each of the 4 loudspeakers in nominal mode and 50 Watts maximum on 4 Ohms. The system relies on class D amplifiers for this. With a distortion of 0.03% for 1W at 1kHz and a signal-to-noise ratio of 90dB for digital inputs and an intermodulation at -100dB.

The system is presented as a triphonic system with a filtering applied to the central module and to the satellites. Although the secret is not revealed, I think that the DSP does a little more than that and that it manufactures either a central channel or a form of cross-feed, and the stability of the image is indeed curious for the simple stereo. But it's in the DSP kitchen where it happens and I will not know more even from the interview I had with Mark CHANG when he told me that my intuition contained a share of the truth.



intérieur du module central avec la carte mère

To discuss the usefulness of a third route, we attended the demonstration of a Swiss system in Munich that recreated this third central channel in addition to supporting a compensation of the acoustics in the room. It is a very convincing system in A/B listening as the gain in density of the sound image and the general dynamics of the sound reproduction benefit from the contribution of this third route. It is possible to move in the listening room without loss of the sound stage and without the usual phase shifts that ruin the tone. Without going so far with the SOUNDGIL CUBE system, however, we gain at the same time on the stability, the development of the sound image and the size of the sound bubble coming out of these tiny cubes. In front of the system or slightly away from the axis, we retain a rather stable sound image. There is no collapse of the scene. The sources in the centre of the sound image do not shirk. We do not feel the blur present on several

systems that want to show that they are bigger than they are. We are dealing here with a Hi-Fi system that uses certain known Hi-Fi devices to produce a sound image that is certainly relatively compact and related to the size of the system but stable and especially with depth and height effects that I challenge you to find with the "soundbars".



Face Arrière

# A well worked sound formatting.

The risk with small systems is to want them to play louder than the physical limits allow. With amplified subwoofers, tuned case with previous event, anything is possible, and especially by using these subterfuges to end up with a tonal imbalance that is impossible to correct with placement. There is none of that here and I was especially struck by the tonal accuracy of the set. The sound shaping by engineer Peter PU is particularly successful on this point.

The SOUNDGIL app (available on iOS and Android) allows you to adjust the bass level and boost it to two positions, +1 and +2. Interesting if you want to party at home, but in reality, I mostly stayed on the neutral position "0".

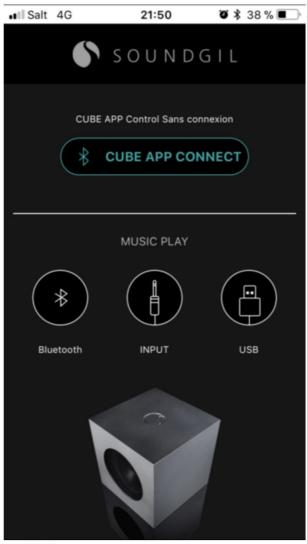
Similarly depending on the position of the system in the room, the DSP setting can play subtly on the stereo image. Here again, after many tests, I stayed on the bass position.

This app can be used as a player for the songs you have on your phone. Developments on this are currently in progress and it should improve in the next few months.



### The system is able to receive 4 types of signals:

- 1. Bluetooth V4.2 compatible with V4.1BLE/ V4.1/ V4.0/ V3.0/ V2.1 + VDR versions. Supports functions, pause, next track, previous track and volume control via the SOUNDGIL app and the remote control but also via third party applications. Therefore, jumping tracks, playing and pausing when streaming on QOBUZ via my iPhone are done perfectly from the CUBE remote control. The system also supports the phone hands free mode, which can be fun but also irritating when your message alerts play over the music. The channel supports 24-bit/ 48kHz signals over distances of less than 10 meters, but really about 6 meters for a stable signal with the phone.
- 2. S/pdif on electrical or optical signal carried by a 3-in-1 hybrid connector 3.5mm jack / Toslink supporting signals from 32 to 192 kHz up to 24 bit.
- 3. Analog via the same 3 in 1 hybrid connector 3.5mm jack
- 4. USB by the possibility of connecting a USB drive at the back. Supports MP3/ WMA/ APE/ WAV/ FLAC up to 48kHz 24 bit. Drive up to 64 Gb maximum.



Soundgil App iOS





# SOUNDGIL, first step towards the high end.

"First step to the high end" as they call it. This is probably the system's largest claim. That of satisfying the convinced audiophiles, that a small system could bring them satisfaction and be the entry ticket for a new generation of amateurs of good sound.

I offer you the opinion of the first population because I do not belong to the second clientele.

#### What the SOUNDGIL CUBE does:

First of all, it seems important to understand what can be expected or not of the CUBE system. The CUBE is not a "soundbar" that you put anywhere, in a room corner or on the edge of the bath. The CUBE is not able to fill large spaces with sound and for your "pool-party" it would be better is turn to a Devialet Phantom. Although in the same price range, the comparison stops here, because if the Phantom disperses a lot of energy, it is not able to produce the true three-dimensional sound scene expected by the amateur as the CUBE does.

The CUBE is not really a nearfield monitor. I think that the listening distance is rather in the order of 1.5 m to 2 m to enjoy it best and on your desk it may be a little too close.

The ideal situation for the CUBE is a room of up to 20 square meters, a bedroom, an office, a dining room, or placed on a console in front of your bed, or on the shelf in front of your office. Of course, you could also enjoy it in a more overall way in your kitchen, which can be the most ...

The CUBE needs care to be implemented, like any high-end system it reacts highly to its placement. Of course, you could always put it on its tiny soft material pads and place it carelessly. It will make music. But if you want to draw all of its potential then it requires a little more effort. In the box that was given to me I was provided small cylindrical carbon supports covered with a very fine velvet.

At the first encounter with the system in Munich the CUBE was placed on plastic decoupling cylinders. We found that the system was more expressive placed directly on the painted wooden stand of the presentation stand.

At home, I had to try various media. What I use as a desk is rather light wood and the decoupling provided, did not help to eliminate certain resonances. So I took out marble slabs on which I placed the CUBE. There the addition of the supports permitted a significant gain in the cleanliness of the message, the impact and the speed, particularly flagrant on the piano pieces.

On a low resonance medium, like plywood, the decoupling effect is less obvious.

I tried to put a thin layer of felt under the CUBE, but it did not work.

Finally, the best disposition has been to use the cylindrical supports provided but to arrange them not flat on the section edge but in contact with the circumference. 3 supports per unit to decouple and each support oriented so as to make a star with 3 branches, so the contact surface is the weakest and each unit of the CUBE is not likely to roll on the cylinders.

Placed in this way, the CUBE units are raised by 4 cm, yet I found the tonal balance very good with a disappearance of the mask effect of the high bass and a much better differentiation of the low notes.



Cubes sur les supports

The placement of the satellites is also important, and it was here that I felt that the DSP did more than manage an active filtering between the central unit and the satellites.

Indeed, with a listening proximity of 80 cm - 1 m and although I do not really advise, we find certain phase shifts depending on the position of satellites. The first intention is to arrange them in a half circle and to keep an equidistance between my head and each unit of the system. But in fact, we find ourselves in this configuration with a less stable sound scene and a slight decalibration in favour of the treble. Putting the 3 units back online is the solution and they are made to work like that. In a pinch, you can cross the satellites' axis for a little more definition. It is impossible to offset or hide the central unit without losing the strength of the system. This is not a classic triphonic system like BOSE where we could hide the subwoofer but a system with a complex filtering.



#### How it works.

I operated the SOUNDGIL Cube mainly via Bluetooth and USB.

I must say that my first USB tries ended in failure. It worked well with PCM, but it is not possible to send high res files and especially in comparison with Bluetooth, the sound seemed dull and flat, lacking life and relief.

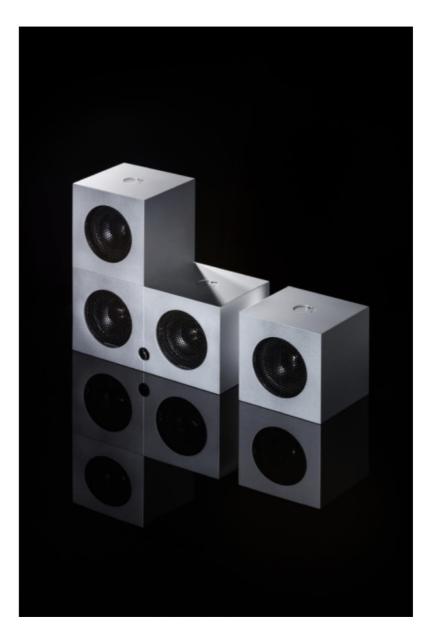
The complete opposite with Bluetooth which, with an equal definition of the file, shone with a collection of qualities that is often difficult to find on small and medium systems:

- -First of all, a sound stage capable of depth and height without the effect of flattening the outlines.
- A tone quality that really stands above the mark with a rich tone, colours and differences on nearby instruments that suggest that the transparency of this tiny system is really great.
- The sense of rhythm, the flow of the music is smooth with the pieces of tempos that we feel slowed and accelerations that really give complex pieces an unusual life.
- Very good microdynamic gradations and a good macrodynamics which is however limited by the overall power of the whole.
- -Finally, a sensation of direct contact, of reality, even if it is miniaturised.

The use of a high-end SANDISK Ultra Fit USB drive capable of 130 Mbit/s has solved the problem and in direct comparison with Bluetooth, SD, the sound is even cleaner with a slightly clearer

tonal balance. The SOUNDGIL app shows the contents of the USB drive and allows you to navigate whilst you control the volume and skip tracks. What you can't do on the app you can do with the remote control.

Having no currently available DAP (digital audio player) that is able to exit the SPDIF format, it remains in my opinion the margin to be gained by playing high res files. This will be followed up for sure.





# Listening notes:



On the Goldberg variations of Johann Sebastian Bach by Diego Ares at Harmonia Mundi, streaming.

We are immediately seduced by this interpretation at the harpsichord of this work at once known but which for me remains imbued with a mystery and which each time I have the impression of hearing for the first time. This time the tiny rhythmic variations that make up the character of this version are as much gifts for the listener as traps for the system in charge of reproducing them. And well, the "Cube" is able do it. They do it with some a certain ease and with a density on the harpsichord that is unusual.

Speed of the strings, vibrations of the instrument, sounds of the interpreter, nothing is missing. The atmosphere of the place where the sound was recorded is transcribed even if some fine details are forgotten.

The tones are superb, and we forget them quickly to enter the lively and surprising interpretation by the renewal it offers to this work. No frustration and that's the main thing.



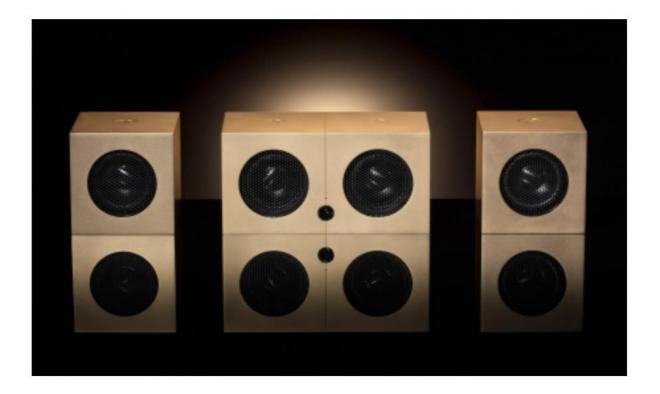
Soul Eyes by Candace Springs, Blue Note streaming Qobuz

The new darling of the blue note, with a controlled freshness. The mixing devices are audible with the "CUBE" as well as the choice of microphone or preamplifier from one track to another. The voice is well posed, reassuring in the centre. It never turns to too hot despite a sound which I think is very close. Sibilants are respected without special support. The singer's breath is endless. The instruments are on a superimposed mix but are all correctly separated. Finally, this works very well, on the title Soul Eyes, the tonal balance respects the bias of heat and proximity without turning toward coarse colouring. It is on points like these that we know that the tonal balance is really good with the "CUBE".



Catrin finch, USB and streaming Qobuz.

This is a piece that I use regularly because it is very difficult to pass as the gradations of the dynamic are essential to understand it. The speed of the Kora and the power of the concert harp with its range extended toward the grave. Here the CUBE manages to unravel the pinches of rope friction, and the colour of each instrument. The base of the harp passes without too much burr and never hides the Kora. A feat for such a small system. The final which rises gradually is perfectly well made. The version on the USB drive is noticeably cleaner than streaming from Qobuz.



I have definitely listened to more music with this system than with my main system in the past few months. Especially due to moving. And the SOUNDGIL CUBE was the first to follow me into my new home. I wish that SOUNDGIL would produce an adapted transport bag to bring it with me on holiday and when traveling. That's how much I like this little system.

Parallel with the Bonsai, sorry to the Penjing, to speak more appropriately about the art of miniaturising the trees which was born in China, comes to mind. The difference between these two arts is that the Chinese Penjing is more often representative of a more complex landscape. And that's what it's all about, the recreation of a sound stage in miniature. But when we listen more closely, we do not feel any limitation on the color, on the details, and the art of the reduction does not tire of surprising as the proportions are preserved and the direction of the scene is intact. Just as you might not get tired of your miniature trees, so it is the same with the SOUNDGIL CUBE.

It seems difficult if it is a first purchase to enter the hi-fi field and to not fall in love. The CUBE could give you an audiophile passion. And for those who already have this passion they will surely be as enthusiastic as I have been.

Yes, it is a mini stereo system with all its attributes and all the qualities that one is entitled to expect from the high end. It is not free of all complaint and I would have liked to be able to play songs in HD via the USB drive. The iPhone app probably needs some correction and development

(which the manufacturer has confirmed should happen), but the foundation is there and for an entry into the microsystems landscape, it is a great success. The amplifiers, specific loudspeakers and mechanical assembly ensemble is beyond reproach. When the base is this solid, the rest is only detail and the intrinsic musical qualities of the SOUNDGIL CUBE will surely make people happy.

To lend a little more weight to this, I have decided to keep the CUBE as permanent equipment at home and to award it my "Great Thrill of 2018".



#### Matériel Associé

iPhone 8plus, iPad 2, NAS Synology DS112+, Lumïn L1, DAC Luxman Ultimate series DA-07, Lumïn T1.

Préampli Luxman Control amplifier c-800f, préampli Kenwood 700C Suprême, préampli Silvaweld SWC 1000 BFA, Ampli JMF Audio HQS 6002,

Cables de modulation et enceinte Naturelle Audio et Grimm audio TPR, Cable numérique BNC TVC audio, Cable USB TotalDac D1, Enceintes Sony SS-A5 La Voce première série.

Stands faits sur mesure en multipli de bouleau finlandais.

Prix indicatif: 1500 euros

site web: <a href="https://www.soundgil.com">https://www.soundgil.com</a>

