

REVIEWS

Eldrisio 'Dino' Pelissero: *musician, flutist, multi-instrumentalist, composer, teacher of Nada Yoga (yoga of sound) and researcher in the field of 'other' music.*

"Binel, is a n acoustic reflector. At first sight I found it nothing less than amazing!

Standing in front of this device, I set up the focal point about 40 cm away from the center of Binel, and played my transverse flute. The feeling is similar to what you feel in a great recording studio with a good pair of stereo headphones and a professional microphone... but everything happens without any of these accessories!

The general perception is an increase in volume, sharpness of harmonics and a very tidy pitch - in short, a dive into the sound.

I then tested Binel by playing a simple wind chorus and sampled the resulting waveforms, comparing them to those sampled without the device. The result was exceptional: I wasn't wrong!

In my opinion its applications can be several:

1. Excellent support for the study of the technique on flute, voice and other instruments whose output occurs at the level of the mouth.
2. The biofeedback that could follow the use of Binel prototype is very interesting. I suppose that in the future studies might discover its therapeutic peculiarities (autism, hearing problems, music therapy, etc.).
3. The unique ability of Binel to enhance harmonics can be greatly enhance audio recordings via microphones.
4. It allows a progressive improvement of the musical ear (improvements that remain even after the use of Binel).

I think Binel is an invention capable of transforming the world of music and psychoacoustic sciences in a decisive way."

Monica Genesio: *professional singer, Jazz and contemporary singing teacher . Experimentations in music and theatre performances.*

"I tested Binel and I found it extraordinary.

For a singer it represents a great opportunity to study the dynamics of re-entry and propagation of sounds. This allows to deepen the personal notions of acoustics.

The most curious part is listening's one's voice, reflexed amplified by the device. Depending on the setting angle of the subject, the phonation in front of Binel, changes the intensity of the sound emitted, as well as the points of return of the sound that the audience can hear.

One has the impression of being in a cathedral, in a recording studio with headphones, in a vast Alpine plateau, in a large amphitheatre. It's a must try!

It would be very useful in for someone studying or for those who learning singing and/or deepening the voice instrument.

It would be useful for music schools to have one, so that singing teachers would make their students more aware of the concept and practice of sounds."

Donata Guerci: *vocalist and jazz/folk singer*

“As a singer I think that using Binel can improve the vocal pitch immediately, due to increased acoustic perception of the sum of the naturally present harmonics in the voice instrument. This opens up the possibility of improving the vocal posture during the repertoire study.

From an educational point of view, I therefore believe that the effect Binel creates could be used to improve the diaphragmatic thrust by finding the correct position in the shortest time. This allows the memorization of the right position to favor the automatism in live or studio performances.”

Umberto Cariota: *sound engineer*

“The structure of the BINEL, calculated mathematically, allows the sound source positioned in front of it to reacquire and enhance harmonics that would otherwise be lost in a normal performance (voice or instrument). Moreover, there is an improvement of the timbre and a general amplification of the sound, all in a purely acoustic domain. As a sound engineer I clearly think of the application in the studio: this structure could make the recording of vocal tracks or of acoustic instruments in general more crystalline and rich. In LIVE I would like that the BINEL could be further studied for those critical situations; such as choir, acoustic ensemble and sound for the public.”

Henry Barbin: *acoustic surveyor, technical physics scholar, musician*

“The first measurements concerning the recording of the microphone in the studio, have confirmed that with two Binels, the shooting must be taken in the focus of the additional Binel. This second Binel can be on top of the other, or on the side, depending on whether you have a singer or a more or less cumbersome instrument.

With only one Binel, the microphone shooting point is behind the head of the singer, since the concentrated acoustic field is rather oval. The measurements indicate precisely where the positions of the singer or musician are with respect to the microphone and to Binel.

The Binel does not contain first, second or third reflections, but only the primary sound source, making it similar to recording in a semianechoic chamber. It produces a short circuit between emission and sound recording, without any environmental interference and with the original harmonic content basically intact.”

This is what we can hear: an effect similar to that obtained by the singers when they put their hands to the ears to look for a better pitch. Here, however, we are completely immersed in the primary acoustic field. It is very important to underline that it is not a parabola which - although it also amplifies it - is not at all selective, and brings with it all the reflections of the fundamental (the echo) and in short captures any sounds of the surrounding environment. Here, on the contrary, the surrounding environment disappears. Binel is therefore extremely selective in relation to noises and other sounds present in the surrounding environment, that almost disappears. At the same time the sounds produced in the Binel fires are amplified, purified and enriched with harmonics: so they are, when they return to the ears of those who produced them.

One could define the Binel as an "acoustic mirror". I would also say that it is the only lectern that returns the voice. Now, hearing to yourself, has never been so clear!”