

SOUND or NOISE?

There are many ways and point of view define the Sound and the Noise.... Listening to everybody we risk to follow or not wrong theories.

The Science in fact define exactly what the real meaning of Sound is, objectively and subjectively.

Objectively: It is based on the technical way:

- The Sound is the sum of vibration in the elastic environment (the air in example) that are multiple of the “*Fundamental Sound*”.
- The Noise is the sum of vibration in the elastic environment that are not multiple of the “*Fundamental Sound*”.

Subjectively: It is something the single person likes though not everybody agrees. In example a car enthusiast will find the Ferrari engine noise enjoyable but even though we are talking about a concept drastically different from what an audio enthusiast may feel.

What do we like to say with that?

As a speaker manufacturer we believe that everything recorded to be listened is a “*Fundamental Sound*” while the Noise that should not be recorded at all (including vibrations of racks, cabinets...).

Our mission is not to improve the quality of anything but enable the recorded signals to be reproduced as they are, manufacturing something sounds as most neutral as possible.

Neutral is not a word that sound so good but it is the only one can define exactly what we look for designing a new audio component. The perfect audio component actually must reproduce the sound as it is even though it is not perfect eventually let feel the listener not comfortable with it.

To do that we have to make what the driver manufacturers would love too: making a speaker where only the drivers work; where the cabinets and anything of speaker does not moves at all. We remind you that the wood speed transmission is 10 times higher than the air so our designs are made to manufacture something stop our cabinets and driver magnets vibrating let the driver express themselves how their designers really would like to.

R.S.System

The project R.S.System is just what above described: making the “*Fundamental Sound*” reproduced by the drivers only where the cabinet is only the box tuned with the drivers themselves.

It is the reason why we decouple the driver from the front baffle enabling it to reproduce the Music with all its natural power and dynamic virtues it has got thru a drastic reduction of inertial and vectorial movement the drivers has.

To design our ideas we inverted the logical building of the driver itself that normally has the magnet kept by the gasket that is the reason why many hi-quality driver manufacturers make it very strong, so it can keep the magnet easier though the weight of it is out of axis on the body of the driver, (very dynamic weight!).

The RSS enable the driver’s magnet keeps the gasket having a much longer decadence time and/or natural wear (that’s the natural consequence).

In the lower drawing we show how we wrap the driver’s magnet thru a anti-magnetic rod fixing it thru a spherical knob to the hardest baffle of the speaker cabinet discharging its energy thru a sort of spike able to erase the unwanted transmission. Also we center the core of the driver with a neoprene elastic suspension unabling the acoustical short-circuit.

The vectorial weight is kept by specially designed spikes positioned into the pseudo-gasket hold into the baffle section of the cabinet and not on the front one. Such solution allows the vibration spark (eventually) in the vectorial sense in the deafest side of the front baffle; the eventual vibration would be discharged from the pseudo-spikes put on the bottom of the speaker cabinet.

A concrete example of that is comparing a gun shoot used normally by a person bear it on his shoulder or solidly coupled to a brick wall, what will be the longer parabola?

We would like to spend other two words on the drivers... The most important drivers today manufactured are made with a very strong gasket as per reasons above said.

Anyway such solution does not guarantee the blocking of the magnet inertial loosing the realistic dynamic anyway.

With the RSS we approximate the perfect driver blocking taking out part of the work the gasket must make because it can't move at all.

This allow the driver to have even a much longer life that means anyway even a longer breaking in...

We are sorry but you must listen more...☺

R.S.System

Reflex Suspension System

