lavardin
TECHNOLOGIES

LAVARDIN FAQ

On this page, we don't teach how to make good amplifiers nor what makes Lavardin Technologies amplifiers sound so good: we never do. We just give some advice on how to improve a setup and also give some replies about our amplifier's behaviour.

Are Lavardin Technologies amplifiers capable to drive difficult loads?

Thanks to their unique circuit design, our amplifiers are certainly the less load sensitive amplifiers ever made. This does not mean one could drive 1ohm speakers at max power for a techno music party all night. It means that the amplifier handles load, voltage, current and phase changes versus frequency better than any other design. This is the most crucial factor for quality.
Thus driving non-linear or low impedances even in the critical treble area is not a problem at all. (recommended speaker impedance remains 4-8ohm).

What kind of speakers is the best match?

Any GOOD speaker will suit. But don't expect the amplifier to balance any defect of the speakers. Bright speakers will remain or appear bright, just the way they are, and they always were. From our point of view, choosing speakers and/or amplifiers to balance their defects is certainly not the best way to quality: "when the Pizza has too much salt, putting sugar in it will not really "improve"...
Our experience showed us that good speakers can be small or large, expensive or not, full band floorstanders or bookshelf : exactly like the ones that should not be bought. Meanwhile, two things seem constant: extremely high or low-efficiency speakers seem to have gained these characteristics for other reasons than ultimate sound quality. This also applies to shallow impedance speakers using classical round drive units...
Lavardin Technologies amplifiers is the natural choice when it is about driving very demanding transparent and revealing speakers like QUAD ESL, Magnepan, Orthophase, ...
Incredible results are also obtained when driving classical reference speakers like Avalon OPUS (non-ceramic), Rogers LS3/5A, Sonus Faber Guarnery Homage, JMLab UTOPIA series, ASA Monitor and many others ..... From amazingly low to blasting high levels the unique fluidity and lucidity our technology allow is delivered, from the deapest Bass to the highest treble. If any, this is the only Lavardin Technologies "signature".

My speakers are too bright, what can I do?

This is one of the big problems of today's speakers. A brighter speaker will appear "more clear", "more open", and "more detailed" than its competitors. Thus it will sell more. More and more customers have dull amplifiers (poor design tube amplifiers) : bright speakers will help to balance the sound. Now,

whatever the reason, if is it too bright, something has to be done to improve the situation. You can try these suggestions, one by one to identify the most interesting ones in your particular context.
ELECTRICAL :
- remove all filtering devices on the mains (power conditioner, high tech mains lead...)
- use regular mains lead.
- check the live mains polarity of each component and select the best sounding polarity.
- remove as much mains prolongation as possible
- unplug the computer, the TV, the DVD player and all the light variator.
CABLING
- remove any "ADDITIONAL" speaker cable connector (added spades, big banana adapters...) and connect the speaker cable the simplest way as possible (or bare wires)
- replace straps for good ones (see other Faq) to join the double binding post of the speakers (if double)
- connect the speaker (single wiring) through the treble or the bass binding post: depending on the context, the best result can be obtained on treble or Bass or across minus on Bass and trebles or reverse
SPEAKERS
- if the floor is not made of natural wood, remove the spikes under the speakers
- put the speakers on a thick base of plywood (see other Faq)
- put some felt or cloth around the tweeter: a simple ring of one inch of material can make significant changes
COMPONENTS
- see Faq concerning racks and stands
If none of this helps, it is time to reconsider the nature of the cabling, the balance of the room, the choice of some component, or change the speakers.

Model IT, Model C42 & C62 make some little noise even after switching off
When switching on, temporization relays produce a clicking noise and then sound appears: this is normal; the amplifier requires these few seconds to stabilize.
The relays are completely inactive 10 to 20 seconds after switching off. They produce some little clicking noise that is absolutely normal.

How long does it take to burn in a Lavardin Technologies amplifier?

There is no need to burn in a Lavardin Technologies amplifier once it has completed the final factory test.
Most of the time, burn-in period seems to be more a required period to get used to some defects or an excuse to justify poor results.

How long does it take to warm up a Lavardin Technologies amplifier?

Thanks to our exclusive technologies, the warm-up period is very short, where classical designs (tubes and solid-state) require a very long period of several days to reach their maximum.
At ambient domestic temperature (around 20C), Lavardin Technologies amplifiers reach 80% of what they could gain by being kept switched on permanently in only 10 minutes.
Meanwhile, the quality of the complete hifi system can greatly be improved after a few days when the amplifier is kept switched on: this is due to the warm-up period of speakers and classical speaker cables that is much longer than for Lavardin amplifiers.

Mains live polarity / redpoint.
Mains live polarity, which means the pin of the IEC socket on the amplifier where they live is connected, makes a huge difference in the sound quality.
To simplify the setup of Lavardin amplifiers, a red point indicate the side of the IEC socket on the rear of the amplifier where the live should be connected.
Check with a tester for best results.

Should I use a power conditioner and high tech mains lead?

Most of the power conditioners and other "filtering" devices are designed to provide a certain immunity to adverse signals, voltage and current. Manufacturers are happy to demonstrate the effectiveness of their filters. This kind of protection is more than necessary when it is about dental surgery electrical appliance !!!! Concerning your HiFi system, unfortunately, most of what they do is the reverse of what could be beneficial for the sound. A Hifi system is not a piece of hospital electronic gear. This comes from a wrong understanding of the problems that should be solved. Now, when this kind of equipment is used with traditional HiFi gear, it brings some effects and sometimes it is not worth anything else: it makes some changes. But does it improve the sound? If you own a Lavardin technologies amplifier, use our given with mains lead or our Model CMR150 mains lead and remove (unplug) ALL of these snakes out of the setup: the result will be obvious to your ears. "No one chooses a Ferrari because it can pull a Traylor".

Is it worth bi-cabling speakers?
Bi-cabling speakers imply using a double quantity of cable. Now, if one pays attention to cabling, one is aware that cabling can reduce musical quality.
To be logical, if one want to, everything must be done to reduce the quantity and the length of cable between amplifier and speakers.
Cables manufacturer's marketing now explains that if two cables are used instead of one, each one will see a lower charge, thus will behave a better way. We do not share this point of view. From our point of view, the signal will receive two times more pollution.
In a very high-quality system, doubling the cables doubles the problems and can be heard: loss of details, nuances, micro-dynamic ...Thus the sound will appear more punchy but also more deficient...

How to optimize the single cabling of the speakers?

With speakers having one pair of binding posts per drive unit, one binding post is used to connect the cable to the amplifier; then straps send the signal to the others.
Most of the time, "given with" straps are of very poor sounding quality, made of solid metal plates or bars. They should be replaced by bared twisted multistrand copper bits of cables for better results.
The difference in sound quality is huge. One can think the only justification for multi cabling is the simple fact that inferior straps are removed...

What is the best rack to put the amplifier?

The supporting board of audio components intends first to connect the component to a static and steady physical reference and second to be itself as neutral as possible.
Thus, putting components on resonating materials seems really a bad idea. Meanwhile, some materials at first non suspected for resonating do in fact, much more than expected: glass, marble, even granisetron and all minerals and metals have very poor self-damping modulus and allow vibrations to stay in, be amplified and sent back to component.
The ultimate material is wood. Wood made of oriented fibres that conduct energy and reduce it when energy has to pass from one fiber to an other. More, plywood behave much better than solid wood because of its thin cross layers that allow a maximum spreading of energy. Pressed wood and "medite" powder wood do not spread energy because they lost the fibre structure of real wood.
For these reasons, avoid any stand made completely or partially with :
- Minerals, glass, marble, granite, ceramic: dry sound, many trebles, loss of nuances
- Carbon fibre, compounds, polyester, etc.: like above
- Metal, steel, aluminium, ..: loss of nuances, aggressive sound
- Pressed wood and medite: loss of detail and nuances
- Solid wood: expensive and not worth small plywood tears from far: simplified music, loss of nuances
- Springs, rubbers, magnets, air chamber: loss of trebles, detail and nuances

From our point of view, combination of minerals with metal with rubber and with everything else passing by is not a demonstration of know-how...
As soon as the life is killed by poor sounding audio racks, tonal balance remains the only thing that can be discussed, unfortunately...
Eventually, if you have a solid, well build a heavy and steady wood piece of furniture that could receive your equipment, it has many chances to sound far better than most of the Super High Tech Space or Formula One technology (!) stands out there.
And still, you can add a thick board of plywood under each component for even better results....

The new and improved version of Lavardin Technologies hi-fi racks is now available under the brand name K-rak
K-rak by Lavardin Technologies K-rak UNO et K-rak DUO
These racks are hand made for us by the best woodwork experts in the "Pays Basque" and the "Anjou". Nothing exotic. They weigh much, 38Kg for 4 tears, they are made of true high quality materials and cost more than traditional hightech hifi stands using glass, metal tubes, carbon fiber, aluminimum or assembled solid wood bits ...
They look simple, in the purest form, Follows Function tradition, and there is no mad science behind them; they are the result of 15 years of experience and hundreds of experiments to make any good components sound at their best.
Ask for a trial and compare with the HiFi racks around: results are amazing!

Should I use cones, rubber feet or springs under components?

It seems everybody has forgotten about the story. In the late '70s, when Gilles Millot (famous speaker and driver designer) first presented spikes under speakers, the tip was facing a wooden floor... The spike is only one part of the system: the part that is easy to sell and ship .... Spikes and cones tips must face a damping/spreading material like plywood. Then, only can the spikes behave as a "large bandwidth" and

"omnidirectional emitter" of energy in the dissipating material, thus allowing minimum energy return to the component through the spikes. Only if you have a thick plywood plinth under components it is worth to try what happens with cones or spikes. Most of the rubber feet, springs or inflating devices are no useless for quality: mostly good enough to provide a less disturbing sound balance in a poor sounding system.

Does plywood also improve the speaker's balance and micro-dynamic?

The problem is very much the same as with components. The difference is that some parts of the speakers generate vibrations. For the same reasons, decoupling materials should be rigid and damping to spread the vibration's energy. Again the best material is plywood... A suitable thick plinth of plywood was to spike a floorstander speaker is a must.
Additionally, spikes won't scratch the floor anymore. The same applies understands bookshelf speakers. Further, one can put plinths on top of each stand. If speakers are also on spikes, it can also be interesting to keep them under the speakers ....

There are only 3 feet under Lavardin Technologies amplifiers. Why?

Three feet is the guaranty that each foot will receive constant pressure, whatever is the flatness of the support. With 4 feet and a non perfectly flat support, one foot can remain unloaded. They are made of specific hard neoprene rubber to allow good results even in the most adverse environment.