

Pre-Amplifier Upgrade Manley Shrimp

In the final part of my report, I would like to sum up the general impressions of the use of high voltage stabilizers in tube amplifiers, but let's get it right.

1. The use of a separate stabilizer for the input and driver lamps.

To use this circuit, a board was designed, which is located in the side howling part of the amplifier. A single radiator was used to cool the transistors (regulating transistors are attached to the radiator through an insulating thermal pad), and the board elements themselves are located in such a way that the stabilizer board can be easily squeeze into the remaining free space under the amplifier cover.



As Eugene said at the very beginning of my idea, a radical change in the sound when changing the additional stabilizer does not give. But... by what measure can it be measured? Does a well-chosen \$20,000 system sound different than a \$100,000 system, for example? Yes, it is different, but those who have heard this difference can confirm that it is definitely not cardinal. The point here is that when a certain level in sound quality, improvements cannot go by leaps and bounds. Specifically, the inclusion of an additional stabilizer makes the sound more natural, more natural, less harsh, more gentle to the ear, the depth of the stage increases, the instruments are more clearly separated from each other. friend, but once again I emphasize - all changes are correct only in comparison with the option without additional stabilizer and in quantitative terms between very good and delicious.

2. Actually the result.

Over the past more than a year, 16 separate circuits have been implemented (including bias circuit stabilizers) and 13 separate boards have been manufactured for this purpose, a lot of time and nerves have been spent. But the result more than lives up to expectations. I confess honestly, at the very beginning I absolutely

I didn't imagine that the sound improvements could be so significant. The stabilizer circuit, which

ryu was suggested by Eugene, just a godsend to improve the sound quality, and I am absolutely not exaggerating here. There is absolutely no aspect of sound that hasn't changed for the better. side after applying the stabilizer. The result, I will not hide, I was simply amazed. And if you suddenly assembled a stabilizer and did not find significant improvements, I am one hundred percent sure - it is absolutely not in it. Look for a weak link that does not allow you to realize the potential of the stabilizer, this link may be in a place that you absolutely do not intend, and is not connected with power generally.

For lovers of exact numbers, I can immediately say that the output voltage of the stabilizer after switching on and after complete warming up of all elements of the circuit, depending on the magnitude of the load, the limit of changes will be different from six to twelve volts. However, if desired and with patience, the nominal value of the given output voltage can be set with an accuracy of half a volt by the selection method resistors with their subsequent testing after heating.

Some clarification is needed here. Severe thermal conditions of stabilizers (ustanovlenykh v zamykayemykh klyuchakh) require the use of highly stable resistors in the divider circuit and application of additional thermal compensation circuits. Without the use of additional measures, the instability of the output voltage with temperature does not exceed 0.05-0.08% per degree; in most cases, such instability of the anode voltage does not lead to a noticeable effect on the re

lamp clamps.

And yet, my most important observation: there cannot be many stabilizers of this circuit and the principle does not work here, the fewer elements and boards, the better. If you have a constructive the ability to install a separate stabilizer for each lamp, be sure to do this, the result may surprise and delight you.

And once again, I would like to say to Evgeny Thank you very much for your help in modernizing, for that in my system instruments and performers began to sound more clearly, and not high and low frequencies, and along with the notes, the emotions of the musicians became discernible.

Sergey.