

Listening Notes:

We know well that listening notes written by the authors of a project can raise some skepticism, but we will seek to be as impartial as we've been when listening to amplifiers constructed by others. Besides, our long cohabitation with these amplifiers means that we really know their personality.

The first version we listened to has the biplate 2A3 as final tube. We then compared it to the 2A3 single plate. We used this amplifier full range with homemade monitors using JBL components. These speakers have a 95 dB per watt efficiency at one meter and a linear frequency response 3 dB down at 25 Hz. The listening impressions are reported separately for each of the listeners.

Ciro

Version with 2A3 biplate output tube: The midrange is airy and natural, with a good sense of presence and a remarkable musicality. The delivery of the voice is very good, lacking strain or roughness of any kind. The highs are present and pleasant but not overly detailed. Even the bass has good presence and articulation but at times one would want a bit more control. The dynamics and the microcontrast are remarkable even at low listening levels. Despite the reduced output power, considerable listening volumes are reached. Small groups are rendered with good image and detail, although there is some difficulty in distinguishing single instruments of large orchestras, especially in passages with greater dynamic impact.

The musicality of harmony is maintained on a level superior to average. In biampification service on the mid/high range, the results are better yet. When the amplifier is freed from the task of reproducing the full range, it conveys musicality and naturalness playing the large orchestras and portrays the most demanding passages of the harmonic structure with ease.

Version with 2A3 monoplete: Its as if a veil were lifted and the sound stage, previously already refined and of high quality, reveals details and colors that at first were hidden to perception. The focus of the images is clear, the instruments have well delineated contrast and almost material consistency. The mid and high range are scintillatingly transparent, while the delivery of the lower parts of the spectrum is solid and responsive.

Maybe the bass is not quite as controlled and defined as your better "solid state" amplifiers but this unit offers articulation, a richness of timbre, a truly exceptional naturalness, not far from the fabulous low end performance of tubes like the 300B, the 845 or the 211. Percussion and winds are of a dazzling fidelity and naturalness. The musicians are alive and present on the stage, one feels their breath and movements. The dynamics and the microcontrast are at exceptional levels and the volume of sound is remarkable and apparently slightly greater than with the biplate version.

The large orchestras are naturally reproduced, with remarkable introspection and great rendering of perspective: not only are the instruments arranged on a profound and extensive stage even beyond the speakers, the empty spaces between one instrument and the next are respected. One single caveat: the power is not always sufficient to guarantee a realistic listening level with the most imposing organs. Obviously with high efficiency speakers, such as Klipschorns, this would not be a problem.

In biampification things improve, elegantly overcoming the problems of power and those minor failings of impact and authority

in the low range. The result obtained is of true realism and exceptional enjoyment.

Cristiano

The thing which strikes me the most in this amplifier is its extreme musicality. Hours and hours of listening, with whatever type of music, don't tire one's ears the slightest bit. The stereophonic image is extremely solid and the monoplete 2A3 abundantly extends the scene outside the speakers, reconstructing a stage that is very ample and deep. From this point of view the 2A3 biplate is a little less good.

The introspective capacity is exceptional: I've discovered on some particularly "unheard of" recordings that one notices that the musicians are alive, in fact breathe, the pianist from time to time uses the pedals while the contra bassist delicately runs his fingertips over the strings. How to describe with words the emotions felt? More than once, listening with closed eyes, I opened my eyes and was disappointed to find myself not in front of the orchestra, but in front of the stereo. This is something which had never happened to me during listening sessions with notable amplifiers, such as the Audio Research Classic 60.

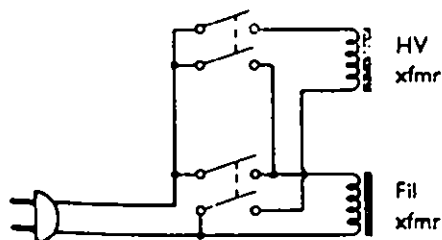
AUDIO TIPS

Delayed B+ with two switches

In order to maximize the useful life of vacuum tubes, it is desirable to delay application of plate voltage until the cathodes have reached proper operating temperature.

Slow turn-on rectifier tubes such as the GZ34/SAR4 and 5V4 provide some insurance against premature B+ syndrome. In situations where solid state rectifiers are employed or where controlled warm up is essential, thermistors, relays, and thermal time delay switches can be used to control the application of plate voltage.

Slow turn-on is an important consideration in direct coupled amplifiers such as the Loftin-White design. Because operating voltages in the circuit are interdependent, tube-endangering conditions can exist if full B+ hits before the filaments are cooking. You sure don't want to fry any Five 2A3s!



A simple but effective way to stagger turn-on is to provide separate switches for plate and filament supplies as proposed in the accompanying article. Turn on the heaters, wait a minute or so, then fire up the B+. Easy enough, but it is not impossible to reverse the desired switching order. It is definitely not a sound practice to switch off the filament supply while the amp is playing!

Shown above is a foolproof method for wiring two switches to two transformers such that the filament or heater supply will be switched first on/last off regardless of the order in which switches are thrown. All that is required are two DPST switches and you'll be ready to fire it up gradually.