

XS- Pre 2 technical description

Lets start with the power supply on this new unit. It is dual mono with three double shielded transformers with lower radiated and mechanical noise. They also have an electrostatic shield that also keeps more RFI out. One transformer for left, one for the right and then a digital one. The external power supply uses more capacitance and some pre regulators that the previous XS didn't have. The DC power cable is also improved and uses some very secure military grade connectors. This is all contained in a new chassis with dual organic LED type displays.

The XS Pre 2 has a new gain circuit that offers higher bias and better stability and lower noise. Noise is the most prominent part of THD+N at low levels. By lowering noise we get better resolution and dynamics. The circuitry is on plug in circuit boards specific to the XS. These boards are ceramic based and gold plated, it makes a difference. The transistors used are Toshiba FETS on the input and MOSFETS on the output. We have a nice stash of these purchased before they where discontinued. There are other parts that could be used but for the signal path these are the gold standard and our favorite.

The output stage runs a higher class A bias with auto bias and lower output impedance. After all why would anybody make a pre that wasn't class A. The XS Pre 2 can drive long cable runs and low input impedance easily. A servo controls DC offset after it is set by hand and balance adjusted. With the new circuit configuration it does very little work.

The volume control is single stage with no active gain. It offers 100 dB of range in .5 dB steps. The entire audio path is six transistors total. We don't want to muck it up with added circuitry.

With regard to the noise question lower is always better. While the new XS is only a bit better by measurement than the last one it seems to have a greater effect while actually listening to music. I think our brains tell us more than this especially the lower level in the signal chain.

Sonically the XS pre 2 VS the older one is quieter and more dynamic. It resolves better in part to the new power supply and gain circuitry. It also recreates space more accurately for better realism. I attribute this to the new gain stage and power supply upgrades. If I walked into a room with one of our pre amps playing I could live with any of them but when you can hear them side by side I really like this one. It is the best work I have done in 35 years of doing this. I certainly didn't do it alone. Mike Jaynes did a tremendous amount of work with me on this. He dates back to the Threshold days with Nelson and myself. Sydney and Desmond Harrington did the aesthetics and mechanicals. Kent English, Anastasia Protopappas and others all contributed to this piece with listening test and critical input. Of course none of it would be possible without Nelson.

Wayne Colburn

