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Setting the Quiescent Current on NEXUS Hex Fet Amplifiers

To include all models in series 2 - DPX600,DPX800, QPX1200, DPX1500 & NEXUS 1.5

A digital meter capable of resolving to 1mv is required.

Setting the quiescent current is best done with small fuses in the power supply lines - 250ma QB type for safety. **Do not connect the amplifier to a load**

Before switching on set the quiescent current potentiometers on both channels to zero, by reading across the nearby 22K Ω resistors.

Connect one probe of the DC volt meter to the common output point on one of the source resistors for the output FET's in the channel to be set up.

Switch on and carefully check there is no significant voltage across all source resistors(below 1mv)

Connect the other probe of the volt meter to one source resistor and very carefully adjust the quiescent current pot to give about 3mV across the resistor.

This voltage may not appear for quite a lot of adjustment, but suddenly increase, so be very careful - otherwise the channel fuses will blow.

This adjustment is particularly critical on older models fitted with the single turn pots.

Check the voltages across all the other source resistors and connect the volt meter to the resistor with the highest voltage across it after switching off.

Depending on the date of manufacture, older boards have 0.22Ω resistors in all FET sources, later boards have 0.33Ω in the +ve supply and 0.39Ω in the -ve ones.

In the unlikely event that the largest voltage is > than10mV for 0.22Ω, 15mV for 0.33Ω, or 18mV for 0.39Ω adjust the pot to reduce the voltage to this value(+or - mV)

Switch off and once the supply volts have died away, repeat the process for the other channel.

After setting up replace the supply fuses with the correct value for the amplifier in question.
Enjoy!