Subject: Modular Build Aids

Posted by gofar99 on Sun, 26 Nov 2023 02:14:19 GMT

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If you are like me when you design a project there are several sections that are similar or even the same. I tend to think in a modular fashion during the design process. First what is the device supposed to do and second how to make it happen. The actual device function requires thought and sometimes trial and error often but the second part the power supply is usually straight forward. This is where modular thinking comes into play. I found that with slight variations many projects use rather similar power supplies. To speed up the prototype they do not actually have be part of the initial build. So, what I have done is make about 10 modules that can be used in numerous combinations externally to the new project. Sort of like electronic Legos. This simplifies the design process, reduces the time needed, reduces last minute changes in the "boiler plate" portions and best of all saves components that get damaged or otherwise made unusable during the build. I do grant that on occasion the final layout will force some changes, but about 90% of the time the modules work out well. The various modules are actual power supplies (3), filter and rectifier modules, one for heater lift voltages, one for FET capacitor multiplier filtering and one for use with LR8 regulators for filtering. The number of combinations is quite high and the order of use can be varied to get the best results. I have two bigger "modules". One for a tube phono preamp and one for a solid-state combination linear amplifier and phono preamp. These two modules allow for comparison with new similar builds as they have known properties.

File Attachments

1) Parts.jpg, downloaded 117 times