
Subject: Re: Some questions on Power supplies
Posted by [2wo](#) on Tue, 29 Nov 2005 02:14:52 GMT

[View Forum Message](#) <> [Reply to Message](#)

There may be no best way. If you make a design decision, to use a cap input or choke input, (which is best to use in a given application, I will leave that to Mr. Jones) Then you must work backwards. Do you have a bit of iron that you want to use, an off the shelf item, or will you have something custom wound. If I were to start with a clean sheet of paper I would use a CT full wave rectifier as my first choice, one tube, most of the time or two SS diodes. clean and simple. And buy the transformer that supply's, the needed voltage. There are some good multiple tap transformers such as the Angela universal or the DIY lady day that can fill many applications. If I have a given transformer and a full wave bridge, will get me the voltage I need, then that is what I will use. As to what rectifier to pick, well this gets personal. Of course there is tube versus SS. Let's keep it to tube for now. First any tube we choose must be able to supply the current and voltage we need. Next, are we constrained to 5V or 6.3V heaters? Or not. That's the easy part. Next we can divide the remaining tubes, into directly heated, such as the 5U4 and 5Y3. Or indirectly such as the 5V4 or 5AR4. One advantage of the indirectly heated rectifier is a slower ramp up of the B+. How much this matters is up for debate. Next up Voltage drop. Depending on the tube 20V to more than 70V, more or less. This can be useful when you need a bit more or less voltage. From here on it's my tube is better than your tube. So let your ears and your wallet be you guide...John
