

High Voltage Power Supply

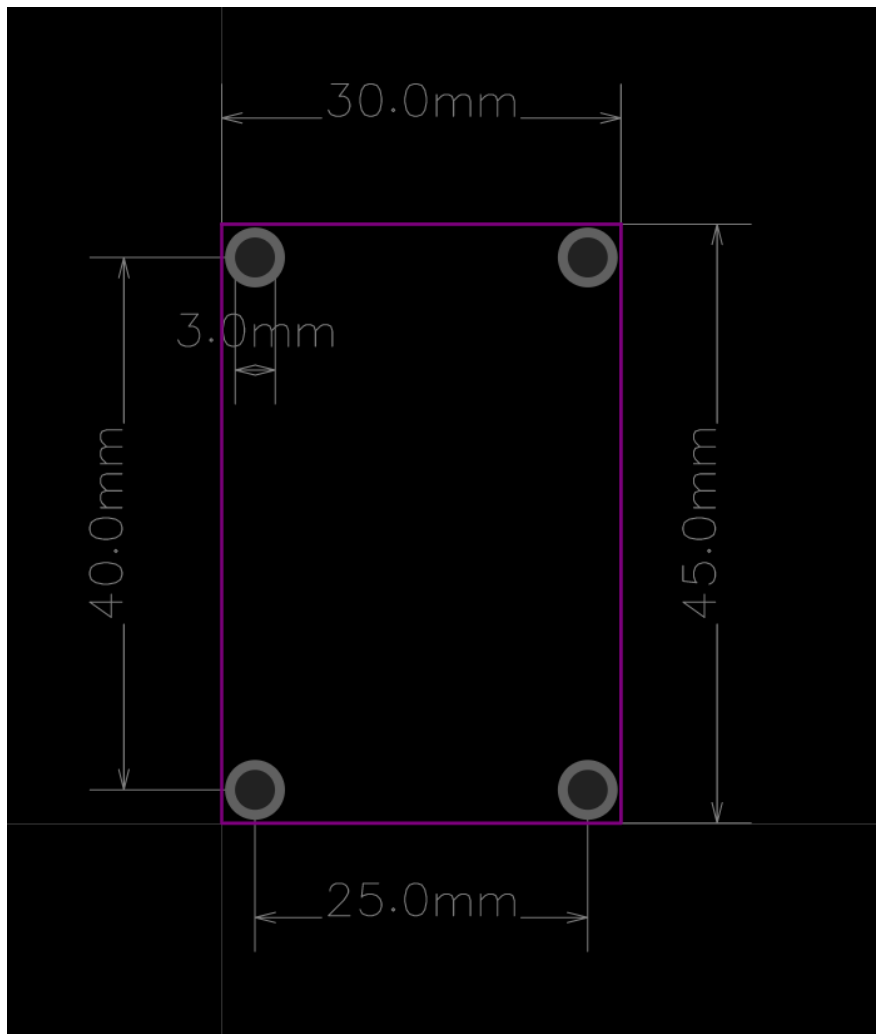
I do not provide the design of the HV power supply. You can build your own or buy a commercial one. Make sure you don't get a fake one!

The PSU must be able to deliver at least 45 mA at 170VDC with an input voltage of 12V DC without generating a lot of heat. The voltage should be stable for the entire current range. A calculator is not like a clock, the number of turned-on nixies is not constant. Also check the PSU for audible noise, you don't want to have a noisy device on your desk.

⚠ Add an appropriate fuse for the HV rail to protect your device from overcurrent!

You may need to change the firmware to correctly drive the enable/shutdown pin of your HV PSU. Currently the firmware sets the HVENABLE pin to HIGH (+3.3V) to enable the HV.

The picture shows the dimensions of the HV power supply I designed for this project. It fits into the case, and it is attached with 4 screws.



As already mentioned, for this project I use my own nixie power supply, but I designed this adapter for a popular commercial one of the same size. Maybe the adapter is useful for someone, it provides the missing mounting holes.

