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The simple man's Spectrum Analyser Power Supply

{gallery}sapsu/1{/gallery}

The first thing to build is the power supply, obviously a prerequisite for operating any of the other modules. This PSU supplies regulated voltages of +12V, +6V, +5V and -5V. The design is fairly standard, using 78xx-series regulators. The transformer has two 15V secondaries rated 250mA each. I bolted the regulators to a piece of single-sided PCB stock which is in turn bolted to the back wall of the case. Holes drilled in the back wall provide a degree of ventilation.

{gallery}sapsu/2{/gallery}

Alternative circuit

