

VARIABLE POWER SUPPLY

BY

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PROJECT REPORT

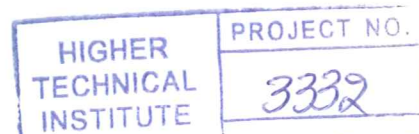
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Introduction...

A variable power supply, a soldering iron and a multimeter form the minimum basic equipment required in a small electronic workshop. Unfortunately for many, a commercial variable power unit is not exactly cheap, which is an excellent reason for building one from scratch.

The power source described in this article is ideal for that purpose. It has a number of preset facilities. Its design is straightforward and it has the facility to be connected to a digital voltmeter -dvm-module to display the output voltage and current.

Moreover apart from some power field effect transistors (FET's) it is constructed from readily available standard components. Finally it may be constructed to provide an output current of 2A. A variable power supply is described that in spite of its simple design has clear benefits in the first place it is built from discrete, readily available components, and in the second place it can be readily adapted to individual requirements.

The power supply is designed along fairly traditional lines, resulting in a unit whose output voltage as well as its current limiting is variable. In principle both can be varied from nothing, but in this design it was decided to make the peak values of voltage and current variable. This peak value can be varied from 2...v to 25.v and from 21.mA to 2A. This makes the supply suitable for use in a variety of applications.

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