

# **Design and Construction of a Fixed Regulated Power Supply, a Variable Regulated Power Supply and a Dual Regulated Power Supply**

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## **Abstract**

A Fixed Regulated Power Supply, a Variable Regulated Power Supply and a Dual Regulated Power Supply are constructed by using transformers ( INPUT 220V AC, OUTPUT 12V AC, OUTPUT 24V AC), 1N 4001 Diodes, Capacitors, ICs (7805 IC, LM 337 IC, LM 317 IC) and Variable resistors. The regulated power supply can be used with circuits containing linear integrated circuit elements. The DC voltage produced by a power supply is used to power all types of electronic circuits, such as television receivers, stereo systems, VCRs, CD players and laboratory equipment. A dual-polarity power supply is to be used for FM receiver. Two regulators, one positive and the other negative, provide the positive voltage required for the receiver circuits and dual-polarity voltages from the op-amp circuits.

**Key words:** Power Supply, Transformers, Diodes, Capacitors, Variable resistors

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