

Project Name – “Sparky”- A bench power supply

Problem Statement- To make a bench power supply which supplies power up to 18Volts 2 Amperes.

Project Budget- INR 5000

Description-

Making any project itself is a task and I always had trouble powering the circuits for testing. I had to use bad 12v adapters and it was not effective. I looked how much power supplies cost, and the prices blew my mind.

I used an old power stabilizer for an AC as a frame. Mounted a 30Amps SMPS inside and connected two buck converters. The potentiometer on the converters were very small so I sourced and got bigger ones with custom knobs. The front panel had digital readouts for voltage and current and I made wires with speaker jack connectors and alligator clips which became my most used tool on the desk .

Materials Consumed-

1. Power Stabilizer Body
2. 30Amps 12v SMPS
3. 12V-18V Buck Converter 2 Amps
4. 10K Multiturn Pots
5. Digital Am/Voltmeter
6. Speaker Jacks (Male/Female)
7. Wires
8. Alligator Clips
9. Switches