

LM338K Rectifier Power Board – Adjustable Linear Regulator + Rectifier Filter

The **LM338K Rectifier Power Board Adjustable Linear Regulator with Rectifier Filter** is a high-performance, versatile power supply solution designed for hobbyists, engineers, and professionals who need a reliable and stable adjustable DC output. Built around the **LM338K linear regulator IC**, this power module combines voltage regulation with a rectifier and filter circuit, making it suitable for powering a wide range of electronic devices and DIY projects.

If you are working on a project that requires smooth, stable, and adjustable DC voltage, the **LM338K power supply board** offers the performance and flexibility you need. With its robust design, high current handling capability, and integrated rectifier filter, it delivers excellent efficiency and output stability.



Key Features

1. **High Current Output**
 - The LM338K regulator can deliver up to **5A of continuous current**, making it suitable for medium to high-power applications.
2. **Adjustable Output Voltage**

- Provides a wide **adjustable range of 1.25V to 32V DC** (depending on input voltage and transformer used).
- Perfect for powering circuits with different voltage requirements.
- 3. **Integrated Rectifier & Filter**
 - Equipped with a **rectifier bridge** and **filter capacitors** to convert AC input into smooth DC output.
 - Eliminates the need for additional rectifier boards.
- 4. **Robust & Reliable Design**
 - Built with high-quality components for long-term performance.
 - Excellent thermal stability and protection.
- 5. **Wide Application Range**
 - Can be used as a **laboratory bench power supply**, charger, amplifier power source, or in DIY electronics projects.

Technical Specifications

- **Regulator IC:** LM338K Adjustable Linear Regulator
- **Input Voltage:** AC (via transformer) or DC
- **Output Voltage:** Adjustable 1.25V to 32V DC
- **Output Current:** Up to 5A continuous
- **Circuit Components:** Rectifier bridge + filter capacitors + regulator

- **Cooling:** Heat sink required for high current loads
- **Board Type:** Pre-assembled power supply module



How It Works

The **LM338K Rectifier Power Board** integrates three essential functions:

1. **Rectification** – Converts AC input voltage (from a transformer) into DC using the onboard rectifier bridge.
2. **Filtering** – Smooths out the rectified DC with large filter capacitors to reduce ripple.
3. **Regulation** – The LM338K linear regulator adjusts the output voltage and maintains stability, even under varying load conditions.

This combination ensures a **stable, adjustable, and noise-free DC power supply** for sensitive electronic circuits.

Applications

The **LM338K Adjustable Regulator Board with Rectifier Filter** is ideal for:

- **Electronics Labs & DIY Projects** – Build your own bench power supply.
- **Battery Charging** – Adjustable voltage makes it suitable for different battery types.
- **Audio Amplifiers** – Provides clean and stable DC for Hi-Fi and DIY amplifiers.
- **Arduino, Raspberry Pi & Microcontrollers** – Power development boards and sensors with regulated voltage.
- **General Electronics** – Any project that requires a variable and stable DC supply.

Advantages of Choosing LM338K Rectifier Power Board

- **All-in-One Solution** – Combines rectification, filtering, and regulation in one board.
- **Adjustable & Versatile** – One module can power different devices with varying voltage needs.

- **Cost-Effective** – Saves time and money compared to building a regulator + rectifier circuit separately.
- **High Reliability** – LM338K IC is widely trusted for stable and durable voltage regulation.
- **Beginner Friendly** – Easy to use for students and hobbyists, yet powerful enough for professional applications.

Why This Board is Popular Among Makers

Electronics enthusiasts prefer the **LM338K regulator board** because it simplifies the process of building a stable power supply. Instead of connecting separate rectifiers, capacitors, and regulators, this module provides a **ready-to-use solution**. Just connect a transformer to the AC input, and you instantly get a **regulated, adjustable DC output** for your circuits.

For beginners, it reduces the risk of wiring errors. For professionals, it saves time and ensures consistent performance in prototypes and final projects.

Conclusion

The **LM338K Rectifier Power Board Adjustable Linear Regulator + Rectifier Filter** is a must-have tool for anyone who works with electronics. Its combination of **high current capability, adjustable output, integrated rectifier, and filter circuit** makes it an excellent choice for a wide range of applications.

Whether you are powering microcontrollers, charging batteries, running audio amplifiers, or experimenting with DIY projects, this board ensures you always have a **stable and reliable DC power source**.

☞ Upgrade your electronics lab today with the **LM338K Rectifier Power Board** – the smart and practical choice for engineers, students, and makers.