

Kit Timer 12V DC – LED Automatic Control Switch Relay Module

The **Kit Timer 12V DC – LED Automatic Control Switch Relay Module** is a versatile electronic module designed for automation projects, DIY electronics, and smart control applications. This compact yet powerful module offers precise timing functions, reliable relay switching, and efficient LED automatic control, making it ideal for both beginners and advanced electronic enthusiasts.

Whether you are building a smart home project, automating lighting systems, or controlling external electrical devices, this **12V timer relay module** provides a simple and efficient solution. It is engineered for low power consumption, long service life, and stable performance under continuous operation.



Key Features of the Kit Timer 12V DC – LED Automatic Control Switch Relay Module

1. **Operating Voltage: 12V DC**

Designed to run on a standard 12V power supply, this timer module is highly compatible with various electronic and electrical systems.

2. **Relay Control Output**

Equipped with a high-quality relay, the module allows you to control devices such as lights, fans, motors, and other electrical loads with ease.

3. **Adjustable Timing Function**

The built-in timer function enables automatic switching ON and OFF after a set period, which is useful for automation, power-saving, and safety applications.

4. **LED Indicator**

The module includes an LED status indicator that makes it easy to monitor its working condition in real time.

5. **Compact and Durable Design**

The board is designed with high-quality electronic components, ensuring durability, heat resistance, and long-term reliability.



Applications of the Kit Timer 12V DC Relay Module

The **Kit Timer 12V DC – LED Automatic Control Switch Relay Module** can be used in a wide range of projects and applications:

- **LED Lighting Automation** – Automatically turn ON/OFF LED strips, lamps, or decorative lights at a preset time.
- **Smart Home Projects** – Control fans, water pumps, or other household devices without manual intervention.
- **DIY Electronics Projects** – Perfect for students, makers, and hobbyists who want to learn more about relay modules and timing circuits.
- **Industrial Automation** – Useful in controlling machinery, production lines, or devices that require scheduled operation.
- **Battery-Powered Systems** – Works efficiently with 12V battery setups, making it ideal for portable or off-grid applications.

Why Choose This Timer Relay Module?

- **Easy to Use** – No complex programming is required; just connect power and load, set the timer, and let the module do the work.
- **Energy Efficient** – Saves power by automatically shutting down devices after a preset time.

- **Reliable Performance** – Built with a stable circuit design to ensure precise timing and consistent relay switching.
- **Affordable Solution** – Provides professional-level automation at a low cost, making it accessible for hobbyists and professionals alike.

Technical Specifications

- **Operating Voltage:** 12V DC
- **Relay Type:** SPDT (Single Pole Double Throw)
- **Output Capacity:** Supports loads up to several amps (depending on relay rating)
- **Timing Range:** Adjustable delay settings (varies based on configuration)
- **Indicator:** LED for power and relay status
- **Size:** Compact PCB module suitable for small enclosures and DIY setups

How the Kit Timer 12V DC Works

The working principle of this **12V LED automatic control relay module** is simple yet effective. When powered on, the user can set a time delay through the module's adjustable control. Once the set delay is reached, the relay automatically switches to either turn ON or turn OFF the connected device. The LED indicator provides visual feedback of the relay's status.

This makes it an excellent learning tool for understanding how relays, timers, and automation circuits work together in real-life applications.

Perfect for DIY and Professional Use

Whether you're a student learning electronics, a DIY enthusiast working on automation projects, or a professional engineer looking for a cost-effective relay timer, this **12V DC Timer Module with LED Automatic Control** is the right choice. Its simplicity, durability, and flexibility make it suitable for a wide variety of automation tasks.

Conclusion

The **Kit Timer 12V DC – LED Automatic Control Switch Relay Module** is a must-have component for anyone interested in electronics, automation, or smart control systems. With its adjustable timing, reliable relay, and LED indication, it delivers both performance and convenience. Use it to automate your lighting, control appliances, or explore exciting DIY projects with ease.

Upgrade your electronic toolkit today with this reliable and affordable **12V Timer Relay Module**, and bring automation to your projects effortlessly.

