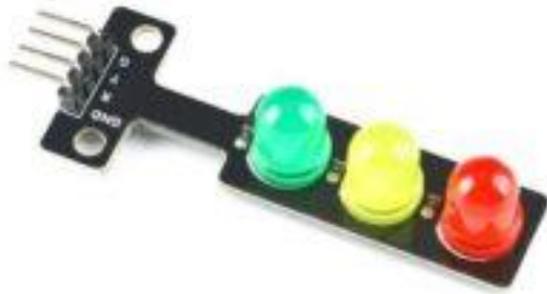


Mini 5V Traffic Light LED Display Module for Arduino – Red, Yellow, Green 5mm LED

If you are looking for a practical, compact, and easy-to-use component for your Arduino projects, the **Mini 5V Traffic Light LED Display Module** is the perfect solution. This module is designed with three high-quality 5mm LEDs (Red, Yellow, and Green) arranged vertically to simulate a real traffic light system. It operates on a standard **5V power supply**, making it highly compatible with **Arduino boards, Raspberry Pi, microcontrollers, and other DIY electronics platforms**.

Whether you are a **student, hobbyist, or professional engineer**, this module offers an excellent way to learn about electronics, build traffic control systems, create educational demonstrations, or design interactive projects.



Key Features of the Mini 5V Traffic Light LED Display Module

1. **Realistic Traffic Light Simulation**

- The module comes with three 5mm LEDs in the traditional traffic light arrangement: **Red at the top, Yellow in the middle, and Green at the bottom.** This makes it an ideal tool for building realistic traffic control systems, classroom demonstrations, or robotics projects that require traffic signaling.

2. **5V Operating Voltage**

- Designed to work with a standard **DC 5V supply**, the module is perfectly suited for **Arduino Uno, Arduino Mega, Raspberry Pi, ESP8266, ESP32**, and many other microcontroller platforms.

3. **Easy Integration with Arduino**

- The module can be directly connected to your development board using jumper wires or breadboards. With simple coding, you can control the LEDs individually to create traffic light sequences, warning systems, or timing projects.

4. **Durable and Compact Design**

- The **miniature PCB board** ensures long-lasting performance, while the **5mm LEDs** are bright, efficient, and clearly visible even in indoor classroom demonstrations.

5. **Educational and Practical Applications**

- Ideal for **STEM education, prototyping, and electronics learning**, this module helps beginners understand **digital outputs, timing cycles, and sequencing.** Teachers and students can use it in lessons about automation, transportation systems, and embedded electronics.

Voltage:5V

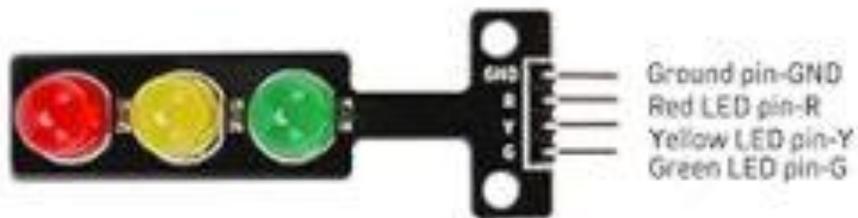
Input:Digital signal output.

It can work with 3.3V and 5V

Red: 13mA;

Yellow: 13mA;

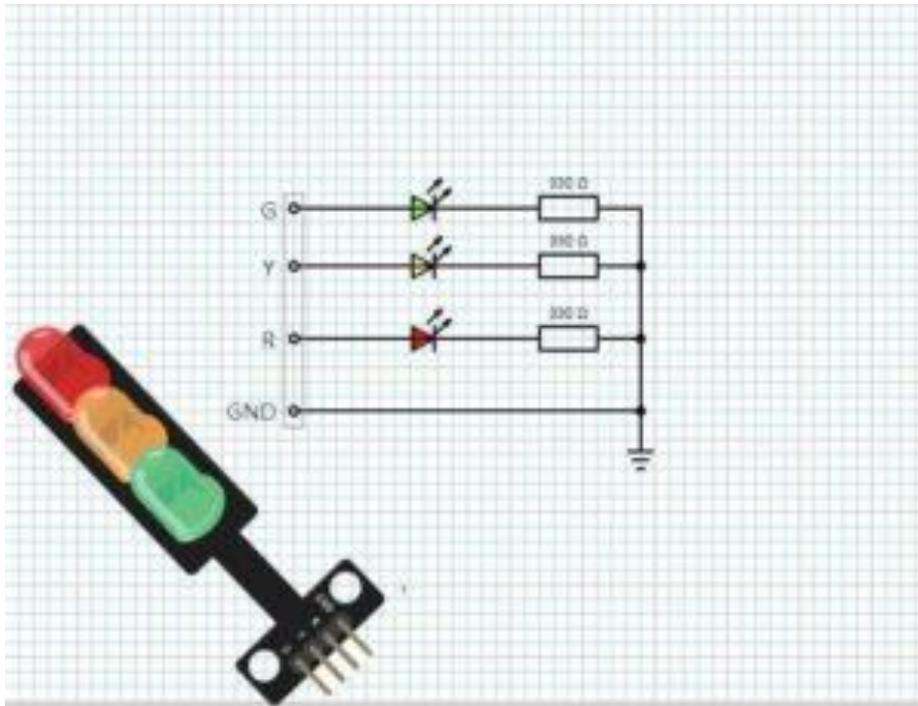
Green:25mA.



Technical Specifications

- **Operating Voltage:** 5V DC
- **LED Size:** 5mm (Red, Yellow, Green)
- **LED Arrangement:** Vertical (Red–Yellow–Green)
- **Module Type:** Mini traffic light LED display module
- **Connection:** Standard pins for easy wiring with Arduino or breadboards
- **Compatibility:** Arduino, Raspberry Pi, ESP32, ESP8266, STM32, and other microcontrollers
- **Application Areas:** Traffic light simulation, robotics, automation, educational projects, and DIY electronics experiments

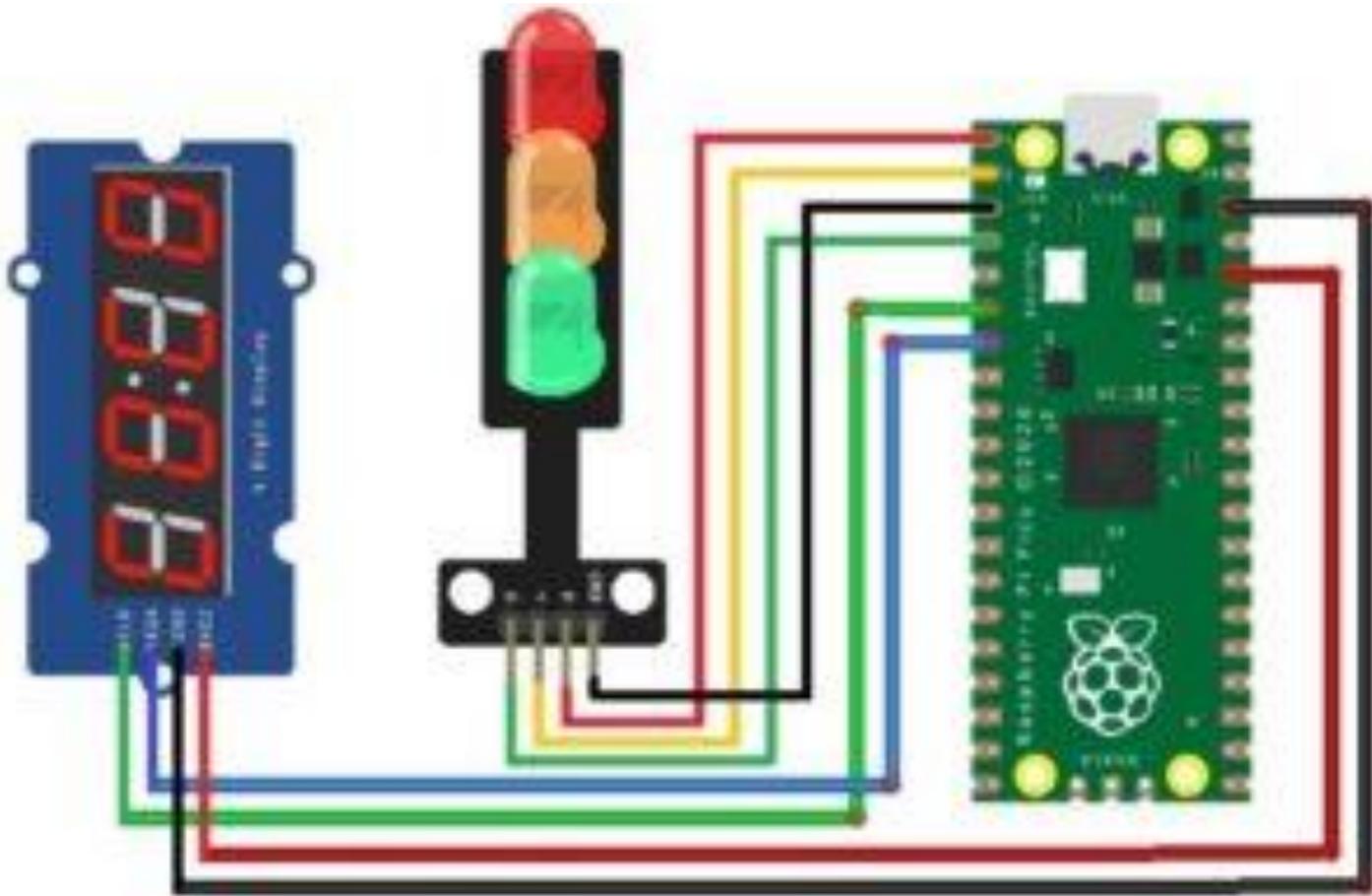




Applications of the Traffic Light LED Module

The **Mini 5V Traffic Light LED Display Module** has a wide range of applications, making it a versatile component for multiple projects:

- 1. Educational Demonstrations**
 - Perfect for **classroom experiments** where students can learn how traffic light systems work. Teachers can use it to explain real-world applications of timing circuits and logic control.
- 2. Arduino Projects**
 - Easily programmable with Arduino, this module can be used to build **traffic management systems, pedestrian crossing signals, or countdown timers**.
- 3. Robotics and Automation**
 - Integrate the module into a robot car project to simulate **road safety rules**, helping in competitions or educational robotics programs.
- 4. DIY Hobby Projects**
 - Makers and hobbyists can use it for creative projects, such as **model cities, train stations, or interactive games**.
- 5. Simulation of Real-Life Systems**
 - Provides an affordable way to simulate and test **real traffic light behavior** before implementing larger-scale systems.



Why Choose the Mini 5V Traffic Light LED Display Module?

- **Beginner-Friendly:** Simple wiring and coding make it ideal for electronics beginners.
- **Highly Compatible:** Works with a wide range of platforms and microcontrollers.
- **Cost-Effective:** Affordable module with multiple educational and practical uses.
- **Reliable Performance:** Bright LEDs and sturdy PCB construction ensure durability.
- **STEM Learning Support:** Helps students and enthusiasts understand sequencing, logic, and automation systems.

If you are searching for **Arduino traffic light projects**, **DIY traffic signal kits**, **traffic light LED modules**, or **STEM electronics learning kits**, this product fits all those needs. It is an essential component for:

- Arduino beginners looking for simple projects
- STEM educators designing electronics lessons
- DIY hobbyists creating model city projects
- Robotics teams working on competitions
- Engineers testing traffic control prototypes

Conclusion

The **Mini 5V Traffic Light LED Display Module for Arduino** is more than just a simple LED board – it is a powerful learning and prototyping tool. With its **5V operating voltage, easy integration, and realistic design**, it offers endless possibilities for **education, DIY projects, robotics, and automation experiments**.

Whether you are a beginner learning Arduino programming or a professional designing model systems, this traffic light LED module is a reliable and cost-effective addition to your electronics toolkit.

Bring your **Arduino and Raspberry Pi projects to life** with this **Mini 5V Traffic Light LED Display Module** and take your creativity to the next level.