

Only one of the LED modules is lit



Overview

A loose wire or connection in your LED circuit can cause only part of the lights to illuminate. Another reason for this issue could be an insufficient power supply. Modern LED strips are engineered with redundancy, unlike old-fashioned series circuits. Each strip is composed of many tiny, independent electrical units wired in parallel to the main power line that runs the length of the strip. Here are the most frequent reasons: 1. Voltage Drop One of the most common causes for half of your LED strip not lighting. LED (Light Emitting Diode) modules are the fundamental display units of an LED screen system. They typically consist of LED chips, driver integrated circuits (ICs), printed circuit boards (PCBs), connectors, power supply, and signal lines. Each module is responsible for displaying a specific pixel. LED module failures typically manifest through three primary symptoms: A 2023 LED failure analysis found that 62% of persistent issues originate from broken solder joints or moisture ingress, while 28% stem from voltage irregularities in driver circuits. In this article, Simon Johnson, Country Manager at Theben Automation, shares two of the most common questions that the brand fields from installers, and what you can do to solve the most frustrating issues. LED lights require a certain voltage.

Article Content

Why LED Modules Fail: Engineer-Level Troubleshooting Guide

Learn why LED modules fail and how engineers diagnose flickering, black screens, and brightness issues with proven troubleshooting and maintenance methods.

How to Replace or Repair LED Modules

Safely Removing and Replacing Faulty LED Display Modules Start off by making sure the LED display is totally powered down and unplugging everything from the back.

Half of LED Lights Not Working? Check 4 Common Causes

Are you frustrated because only half of your LED lights are working? It's a common issue that can stem from various causes. Let's delve into the probable reasons so you can find a solution. ...

LED Module Repair: Fix Common LED Screen Issues ...

LED module repair guide — diagnose dead pixels, dark screens, color faults and IC failures. Fix it yourself, no factory return needed.

Common LED dimming-related issues and what you can do to solve ...

One of the most common reasons why an LED bulb may stay faintly lit is the presence of residual currents in the circuit. LEDs require far less current than traditional lamps, which means ...

Why Is Only One Side of My LED Lights Working?

When only one side lights up, power is successfully reaching the beginning but is interrupted somewhere along the flexible circuit board. This localized failure is almost always ...

Troubleshooting LED Strip Problems

If you have an entire LED strip segment illuminated but notice a section of 3 LEDs (or 6 LEDs for 24V) that remain dark, you may have an "open circuit" in one of the sections.

How to Fix LED Light: Common Problems Solved

This guide will walk you through diagnosing and resolving issues like LED bulb flickering, an LED light not working, and other prevalent problems. We'll cover everything from simple checks to ...

Why Is Only Half Of My LED Strip Lights Working?

In the realm of lighting, a seemingly minor issue like half-lit LED strip lights can cast a shadow on the entire ambiance. However, armed with knowledge and proactive measures, you have ...

Why Are Only Half of My LED Lights Working?

Is half of your LED strip not working? Discover the common causes behind partial LED failures, how to fix them, and when to replace your strip. Learn more with our step-by-step guide.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://automationauthoritiesolar.co.za>

Email: info@automationauthoritiesolar.co.za

Phone: +27 82 547 3961

Address: 15 Quantum Street, Technopark, Centurion, 0157, South Africa

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