



# Leona<sup>®</sup> Digital Signal Amplifier

Product Data Sheet





# Leona® Digital Signal Amplifier

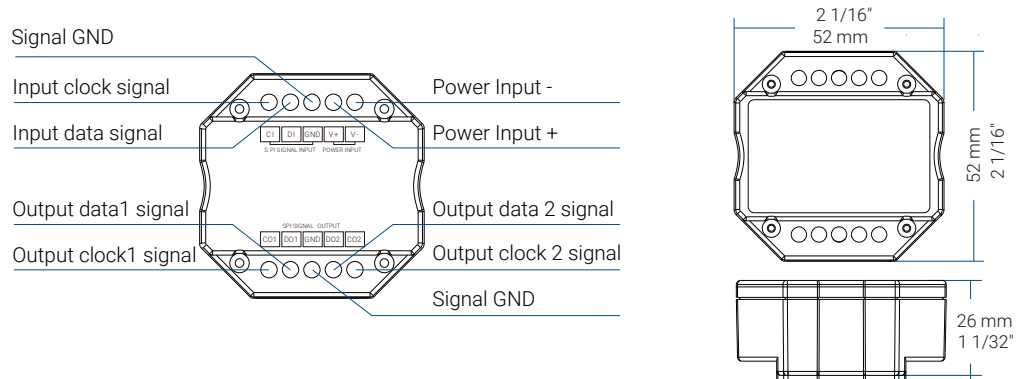


## Product Data Sheet

### Features

- Control multiple SPI digital RGB or RGBW LED strips simultaneously.
- Screw terminals for ease of installation.
- Compact and lightweight.
- For use with single-wire (data) control or two-wire (clock + data) controlled SPI systems.

### Mechanical Drawing



### System Wiring

Ensure that the number of pixels connected to the system does not exceed the maximum supported by your SPI controller. Overloading the system may result in performance issues or damage to the equipment. When using our ColorBright™ RGB Digital Pixel LED Strip Light, you can connect up to two 16-foot reels (32 ft total) per amplifier. For our Leona® Digital Controller, the maximum total number of pixels is 1000. This means you can connect a maximum of 10 amplifiers with 32 feet of strip light per amplifier.

**WARNING:**

Ensure that the power supply's voltage matches the input voltage of the LED strip light. Make sure that the polarities are correct before turning the power on. **Do NOT make or break any connections to the digital LED strip light while power is applied. Make all connections before applying power. Failure to follow this step can result in damage to your strip.**

**Note:**

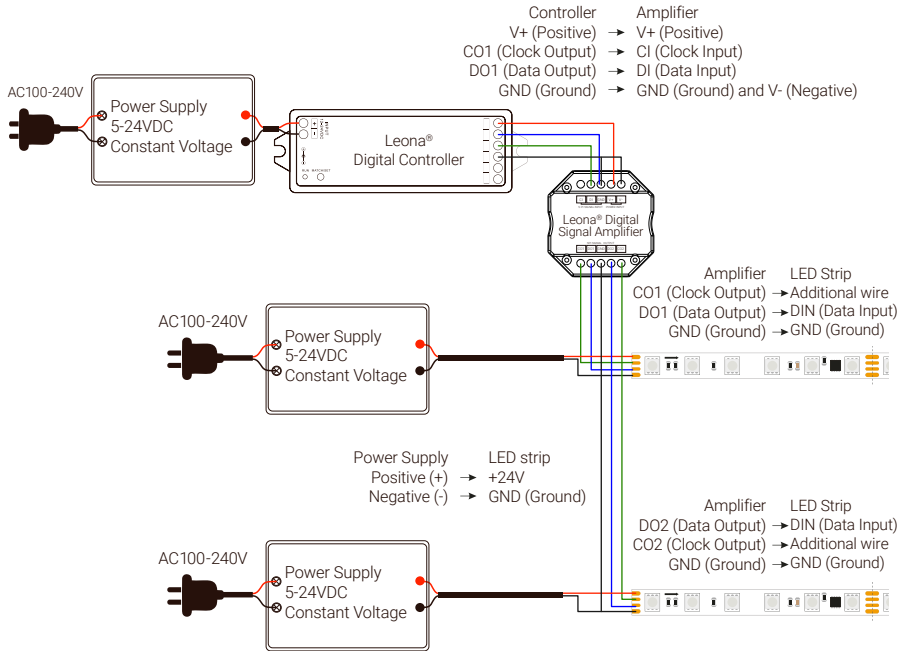
- If the SPI LED pixel strip is single-wire control, the DATA and CLK output is the same, each Leona® Digital Signal Amplifier can connect up to 4 LED strips.
- If the SPI LED pixel strip is two-wire control, each Leona® Digital Signal Amplifier can connect up to 2 LED strips.

### Specifications

Input Voltage	Input Current	Input Signal	Output Signal	Operating Temperature	IP Rating
5-24V DC	0.5A Max.	1 group SPI (TTL)	SPI (TTL) x 2	-22°F to 149°F (-30°C to 65°C)	IP20

## System wiring with one Leona® Digital Signal Amplifier

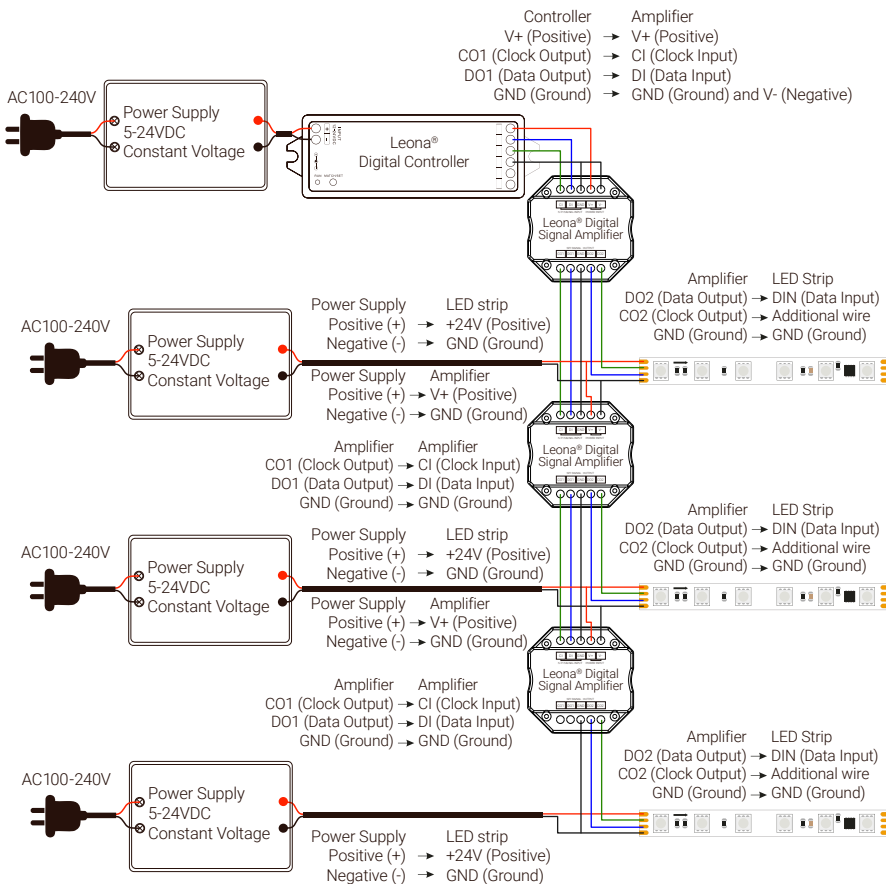
Follow this system wiring if you would like to have 2 strips follow the same pattern.



**\*NOTE:** The wire colors may differ from manufacturer to manufacturer, please refer to the actual solder pad pinout on the LED strip light you are using.

## System wiring with multiple Leona® Digital Signal Amplifiers

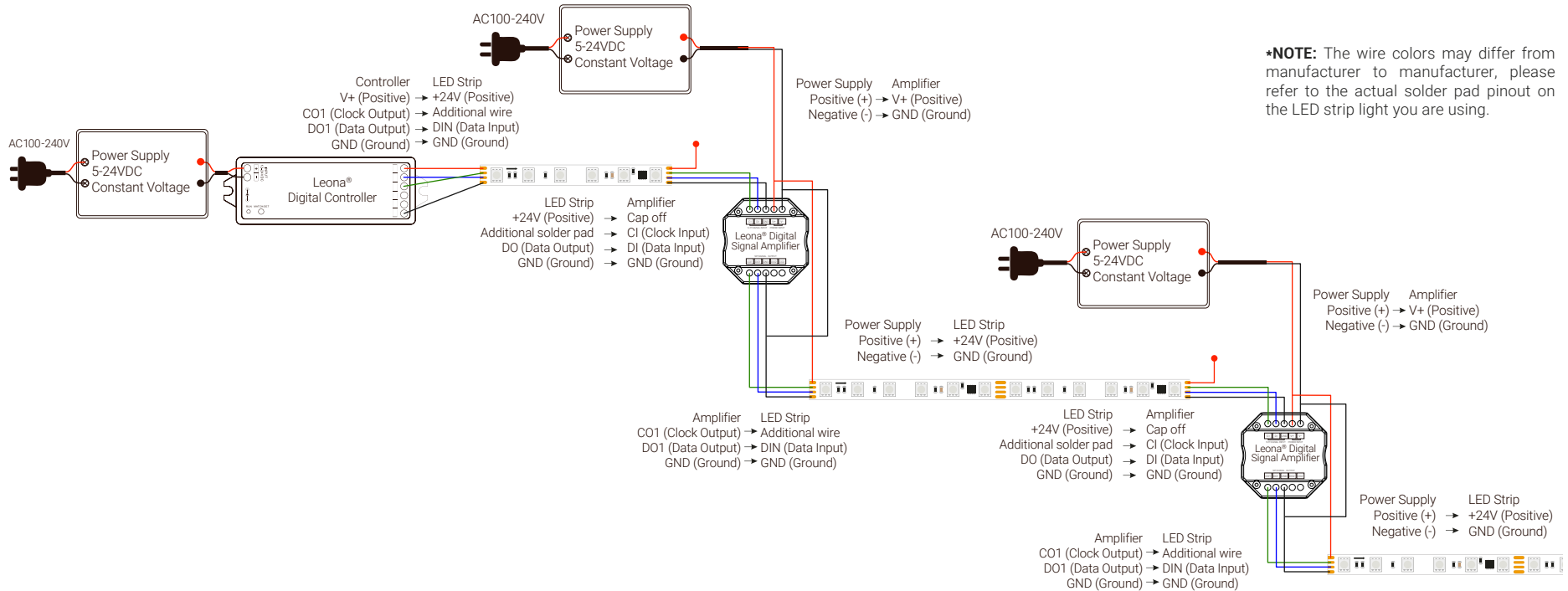
Follow this system wiring if you would like to have more than 2 strips follow the same pattern.



**\*NOTE:** The wire colors may differ from manufacturer to manufacturer, please refer to the actual solder pad pinout on the LED strip light you are using.

## System wiring with one Leona® Digital Signal Amplifier

Follow this system wiring if you would like the signal to continue through to multiple LED strip lights.



## Warranty Information

This product has a 5-year limited warranty from the date of shipment. This warranty only includes the main product outlined in this specification sheet and does not include the additional accessories that are used as a reference. Complete warranty details for fixtures and additional accessories are available at: <https://www.flexfireleds.com/warranties/> within the Policies section. For warranty-related questions please contact the product support team at [support@flexfireleds.com](mailto:support@flexfireleds.com)

### Consumer's Acknowledgement

Flexfire LEDs, Inc. stands behind its products when they are used properly and according to our specifications. When you purchase our products, you are agreeing to the terms and conditions outlined in our warranty section. We try our best to make recommendations, but the burden of proper installation, design, and maintenance relies on the purchaser. This limited warranty does not include product failures that are the result of: Not using a voltage-regulated power supply to connect the LED product or controls; Connecting LED products to the wrong output voltage; Improper connection of power supplies, LED products,

or controls; Connecting LED products or controls directly to any AC power source if they are stated for DC only input; Connecting power supplies backwards to an AC power source; Products used in an inappropriate location or in environmental conditions (temperature, humidity, moisture, etc.) outside the normal specified range; Water damage to products not specifically sold as waterproof products; Electrical power surges and spikes; Damage from hail, flooding, tornado, fire, wind, earthquake, lightning, electrical storm, or any other natural disasters or "force majeure" incidences; Damage caused by a vehicle or other accident; Damage caused when transporting the item; Damage to any products that were modified by the user, used for purposes other than as intended or directed, or connected to LED systems or components not purchased from Flexfire LEDs; Products that have been subjected to misuse, mishandling, misapplication or accident. Products used in connection with any components, devices or systems other than those explicitly approved as compatible with Company's products and listed on Company's website. Excessive wear and tear and/or physical or accidental abuse, loss, or theft. Improper repairs or warranty services performed by someone other than Flexfire LEDs will void this warranty.