

## **4-in-1 Pixel Controller**

Part number: **4in1-pixelcontrol**



The 4-in-1 Pixel Controller provides a wide array of color changing and chasing effects specifically designed for 4-in-1 PixelControl LED Strip. The controller features 100 different pre-programmed modes as well as the ability to call up static red, green, blue and white. Each mode can be adjusted for speed and brightness. The control signal from this tiny controller is able to run up to 2048 RGBW pixels, so it can even be used in larger installations. Power handling of the 4-in-1 Pixel Controller is limited to one reel, so power should be injected for any additional reels (see wiring section for details).

The RF remote operates without requiring line-of-sight, so the controller can be hidden away. The interface is simple, effective and easy to use. There are dedicated buttons for power, mode, brightness, speed and more. Remotes can also be paired with multiple controllers.

### **Features**

- 100 pre-programmed effects give flexibility without any programming needed.
- Controls up to 2048 pixels, which is equivalent to 16 DMX universes.
- Effects can easily be adjusted for speed and brightness.
- “Auto” mode automatically cycles through all available modes.
- Power-Off memory, it will return to the last setting when powered back on.
- Supports up to 6A of current through the controller.
- No power limit if the power supply connects directly to the LEDs (see wiring diagrams)
- RF remote has a 33-foot (10-meter) range.
- Multiple receivers can be paired to the same remote together for larger installations.
- Compact receiver size allows it to fit in tight spaces and be mounted out of sight.
- 2-year warranty on the controller

### **Applications**

- Small to medium sized LED pixel installations in homes, hotels, restaurants and other businesses.

# Specifications

Part Number	<b>4in1-pixelcontrol</b> (Receiver)
Dimensions	2.36" x 0.43" x 0.3"
	60mm x 11.5mm x 7.5mm
Channels	1
Output	SPI - PixelControl
Input Voltage	5 VDC
Max. Current Load	1x 4-in-1-pixelcontrol-reel
Max. Pixels	2048 RGBW Pixels



Part Number	<b>4in1-pixelcontrol</b> (Remote)
Dimensions	3.39" x 1.57" x 0.26"
	86mm x 40mm x 6.5mm
Zones	1
Output	RF
Power Supply	CR2025 battery (included)

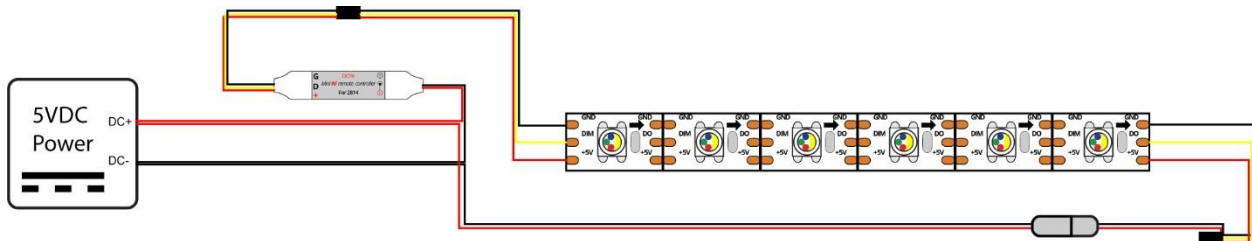


## Setup

- The controller and remote come paired together out of the box. Instructions for modifying pairings can be found after the wiring diagrams.
- The output signal is compatible with all PixelControl LED lighting, but the programmed modes are configured for 4-color pixels. Using the controller with 3-color pixels is not recommended.

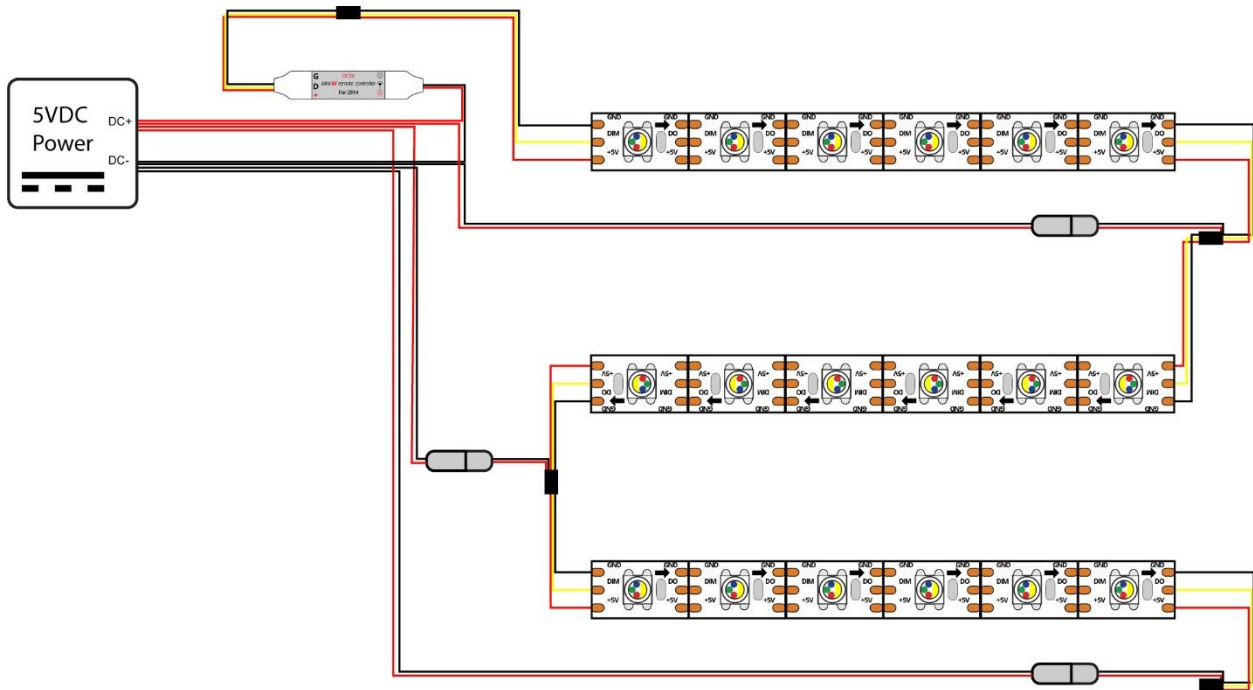
### Wiring (Single Reel):

1. Plug the output connector of the 4-in-1 Pixel Controller into the input connector of the 4-in-1 PixelControl LED strip. Make sure that the arrows on the LED strip agree with the direction of data flow.
2. **IMPORTANT:** Make sure that you are using a 5V power supply to power the 4-in-1 Pixel Controller and that it is turned off.
3. Connect the positive and negative terminals of the DC power supply to the red and black wires of the 4-in-1 Pixel Controller respectively.
4. Connect the power supply to the power injection barrel connector at the end of the LED strip (optional, but recommended).
5. Turn power supply on.



## Wiring (Multiple Reels):

1. Plug the output connector of the 4-in-1 Pixel Controller into the input connector of the 4-in-1 PixelControl LED strip. Make sure that the arrows on the LED strip agree with the direction of data flow.
2. Connect additional reels to the end of the first, making sure that the arrows on each strip agree with the direction of data flow.
3. **IMPORTANT:** Make sure that you are using a 5V power supply to power the 4-in-1 Pixel Controller and that it is turned off.
4. Connect the positive and negative terminals of the DC power supply to the red and black wires of the 4-in-1 Pixel Controller respectively.
5. Connect the power supply to the power injection barrel connector at the end of each LED strip.
6. Turn power supply on.



## Operation

- Remove the plastic tab from the battery tray on the remote before use. The remote uses a replaceable CR2025 battery (included).



- The power button turns the LEDs on and off.



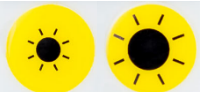
- The “Auto” button causes the controller to cycle through all modes on repeat. Hold down and release the auto button until a solid color appears to enter test mode. Test mode will cycle through red, green, blue, yellow, magenta, cyan and white static colors.



- The mode buttons cycle through pre-programmed modes manually.



- The speed buttons adjust the running speed of the current mode



- The brightness buttons decrease or increase the brightness of the LEDs.



- The R, G, B and W buttons set all LEDs to the corresponding color (static modes).



- The “Match” key is used to pair/un-pair remotes and controllers. Hold down and release the key to match the remote with all powered-on controllers (connected LEDs will quickly flash white/amber). Hold the button down again to un-pair the remote from all powered-on controllers (LEDs will slowly flash white/amber). Pressing the Match key during “Auto” mode will hold the current mode.



- The “Set” button is used to select the R-G-B order and adjust the number of pixels. Hold down and release the set button to enter settings mode, connected LEDs will flash once and go to steady white/amber. In settings mode, press Mode + or Mode – to increase or decrease the total number of pixels. Each press increases or decreases the number by 60. The number can range from 300-2,046 pixels and the default is 600. Press the set button to save and exit. To change the R-G-B order in settings mode, press the R key repeatedly until the LEDs are red. Do the same for green and blue with the G and B keys. Press the set button to save and exit.

## **Safety Precautions**

Please take the following precautions:

1. This equipment, like all electrical equipment, should be installed by a qualified person.
2. Do not expose these LEDs, dimmers or power supplies to intense electro-magnetic fields, including lightning.
3. The controllers and power supplies are not waterproof. Keep them dry.
4. Always observe proper polarity.

When installing LED lighting, it is a good idea to follow this “dry-run” procedure:

1. Be sure you have everything you need before you start.
2. Lay out your lights and power supply on the floor or table.
3. There is some resistance in the LED lighting. If you see any color fading or dimming at the end of a long run, you may have too many LEDs for your power supply and you might need a bigger supply or shorter runs. Use a bus structure as described in [rgb\\_manual.pdf](#). Call if you need assistance with larger projects.
4. Connect everything and test it to be sure it works and you have it connected properly. It is unlikely, but possible, that some part of your system is defective or was damaged during shipment. If that is the case, it will be very helpful to you to know that before you do all the work involved in installing custom LED lighting systems. You will also know if you damage anything during installation, which is really helpful in trouble-shooting because manufacturing defects and installation damage typically have very different solutions.

Once you have tested the system successfully, you are ready to install it. We recommend you install LEDs, electronic controls and dimmers in such a way that you have access to them in case they fail. All electrical components can fail.