PixelPlay LED Wifi Controller
Part No. pixel-play

The PixelPlay LED Wifi Controller allows you to control LED PixelPro lighting from your iPhone, iPad or Android device! Customizing PixelPro lighting has never been easier. Simply plug in your PixelPro lights and apply the corresponding required voltage to the controller. The mobile application allows you to define custom colors and create chasing scenes within seconds. This Wifi router is compatible with the entire PixelPro family:

5VDC Products

- RGB PixelPro LED Strip Light (RGB-pixelpro-reel-12)
- RGB PixelPro LED Bullet (RGB-pixelpro-bullet-8)
- RGB PixelPro LED Bullet (Square Base) (RGB-pixelpro-bullet-sq-8)
- Waterproof RGB PixelPro LED Strip Light (RGB-pixelpro-wp-reel-12)

12VDC Products

- RGB PixelPro LED Square Module (RGB-pixelpro-sq-40)
- RGB PixelPro LED Circle Module (RGB-pixelpro-cir-30)
- RGB PixelPro LED Mini Dome Module (RGB-pixelpro-minidome-30)
- RGB PixelPro LED Dome Module (RGB-pixelpro-dome-50)
- Waterproof RGB PixelPro LED Rectangle Module (RGB-pixelpro-module-3)

No decoder is necessary when using PixelPro lighting with this all inclusive controller! Simply use the included connector to plug in your lights and get started. Up to 500 pixels can be controlled by a single unit, allowing for incredible lighting displays.
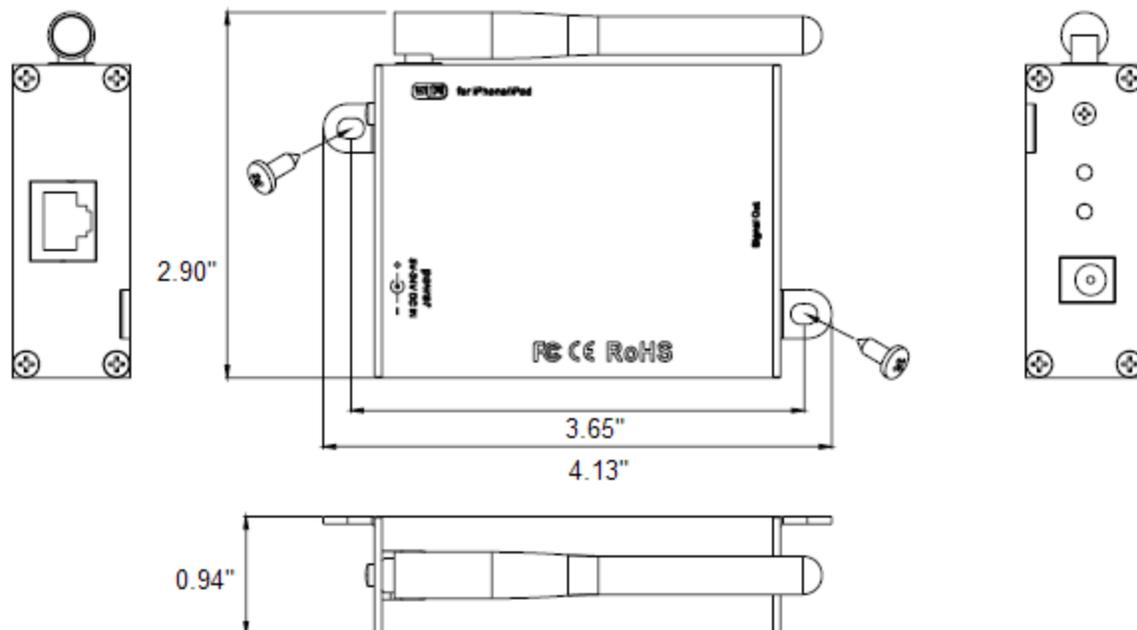
Features

- Easily control up to 500 pixels (over 50 feet of PixelPro LED strip).
- Free app available for download online via the Apple iTunes store or from our website (Android version).
- Save your favorite modes for easy access.
- Includes cable connector to connect to your PixelPro lights.
- Power adapter sold separately.

Applications

- Create incredible pixel lighting displays from your mobile device.
- Hotels, restaurants, office buildings, homes and casinos, wine cellars, bars, home entertainment centers.
- Perfect for custom chasing scenes.
- If your pixel installation requires matrices other forms of non-linear control, we recommend using an alternative DMX controller such as the MADRIX PLEXUS.

Specifications

Dimensions: 4.13" x 2.90" x 0.94" (105 mm x 74 mm x 24 mm)
Input Voltage: 5, 12 or 24 VDC
Wifi Range: 65 feet (20 m)

Operation

Apply 5, 12, or 24 VDC to the PixelPlay LED Wifi Controller, depending on the requirements of the lights you will be controlling. Voltage applied to the PixelPlay controller is applied directly to the PixelPro lights, so be sure to use the correct input voltage. Applying the incorrect voltage to your PixelPro lights will damage the IC chips. **Power adapter and PixelPro lights are not included with your PixelPlay controller.**
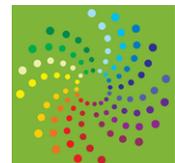

Output from PixelPlay Controller

Input to PixelPro Lights

Signal Output from PixelPlay Controller

Power Input to PixelPlay Controller

Use the included connector cable to plug your PixelPro lights into the "Signal Out" port of the PixelPlay controller. Up to 500 pixels can be connected, although it is necessary to inject power as listed below in order to avoid voltage drop and discoloration or dimming of your lights.

Product Name	Power Injection Length
RGB PixelPro LED Strip Light	Every 100 LEDs
Waterproof RGB PixelPro LED Strip Light	Every 100 LEDs
RGB PixelPro LED Bullet	Every 50 modules
RGB PixelPro LED Bullet (Square Base)	Every 50 modules
RGB PixelPro LED Dome Module	Every 20 modules
RGB PixelPro LED Circle Module	Every 20 modules
RGB PixelPro LED Square Module	Every 20 modules
RGB PixelPro LED Mini Dome Module	Every 20 modules
Waterproof RGB PixelPro LED Rectangle Module	Every 20 modules
Waterproof Warm White PixelPro LED Rectangle Module	Every 20 modules
Waterproof Daylight White PixelPro LED Recangle Module	Every 20 modules

Download the PixelPlay App to your mobile device and then connect to the wifi network "PlayLED".

- Apple Device: Download the app from the iTunes Store at
  https://itunes.apple.com/us/app/pixel-play/id662800560?ls=1&mt=8

- Android Device: Download the app from the Environmental Lights website.

Anytime you wish to control the lights you must be connected to the wifi network (default name PlayLED) and have the application running. Please note that you can only control one PixelPlay LED Wifi Controller at a time.
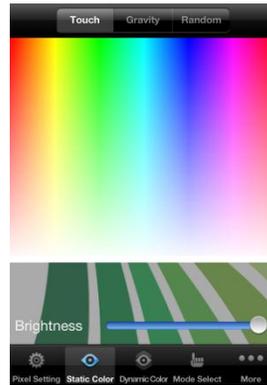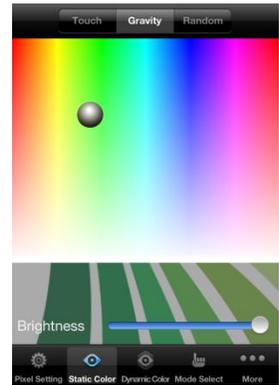
App Control Screens

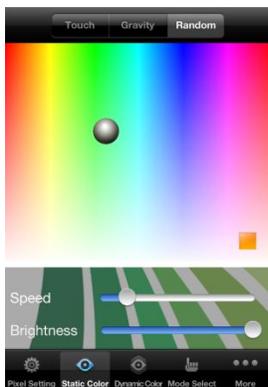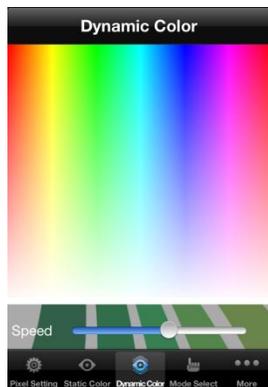| 1: Pixel Setting | 2: Pixel Setting (Confirm) | 3: Static Color (Touch) | 4: Static Color (Gravity) |

The first screen to appear when you open the app is the Pixel Setting screen, as shown in image 1. Here you will select the number of pixels you will be controlling. When you select a number (from 0 to 500 pixels) you will be prompted to confirm your selection, as shown in image 2. Please note that although the pixel setting allows you to input a number as large as 999 pixels, due to signal limitations you should not control more than 500 pixels with a PixelPlay controller.

The next screen selection listed at the bottom of the pages is Static Color. Within Static Color, three options are presented at the top of the page: Touch, Gravity, and Random. All three options control all pixels synchronously, with a single static color. Within the Touch screen (image 3), you can press anywhere on the rainbow and that color will be output to the lights.
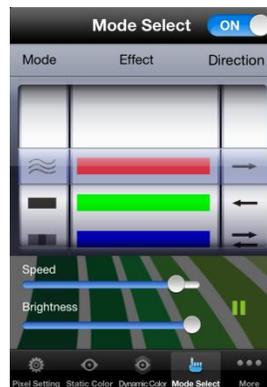
Both the Gravity (image 4) and Random (image 5) screens display a ball. Within the Gravity screen you can turn your phone, and the ball will drift downward, with the lights displaying each color as the ball tracks across it. The Random function acts similarly, but the ball bounces through the rainbow of its own accord, rather than being affected by the angle of the mobile device. Brightness can be adjusted in all Static Color screens, and speed in Random only.

| 5: Static Color (Random) | 6: Dynamic Color | 7: Mode Select | 8: More (Options) |

The Dynamic Color tab (image 6) takes you to another screen with a rainbow. Here you can drag lines across the rainbow with your finger, and the controller will create chasing modes with the colors you touch. The speed of the chasing mode can be adjusted using the slide bar at the bottom of the screen.

Mode Select, shown in image 7, gives you further control over the pixel display. The first column of options is Mode, with the following five options:
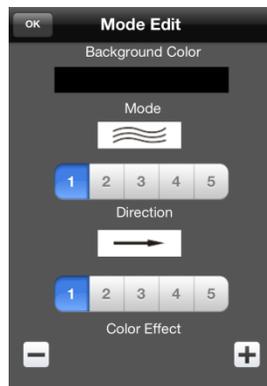
- Gradual change of all pixels.
- Chasing light fills all pixels, all pixels at same brightness level.
- One segment chasing light, all pixels at same brightness level.
- One segment chasing light, pixels are brightest at front of segment and most dim at the tail.
- Two segments chasing light, pixels are brightest at front of segment and most dim at the tail.

Effect allows you to select the color or series of colors used in the pixel chase. The flow direction of light can be selected from the column Direction, with the following five options:
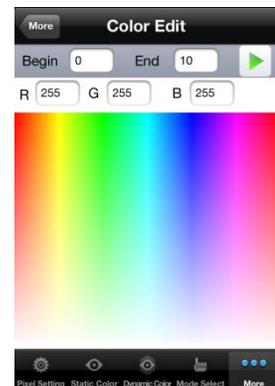
- Move to right.
- Move to left.
- Chase back and forth.
- Chase in from both sides.
- Chase out from the center, then in from both sides.

9: Customize Mode

10: Mode Edit

11: Color Edit

Selecting More on the bottom of the screen give you the options Customize Mode and Color Edit (image 8). Selecting Customize Mode brings you to the screen shown in image 9. Highlight where it says Undefined, and press Customize in the top right corner and you will be taken to the Mode Edit page (image 10).

Within this page you can create your own mode. Select a background color (default is black), mode and direction (as listed above), and a color effect. Once you select Okay your new mode will show up in the Customize Mode page. Custom modes can be accessed and edited at any time.

Using the Color Edit function (image 11) you can select specific LEDs by number (using the Begin and End inputs) and choose any color for them on the rainbow screen. Press the triangle button on the top right to make your edits take effect. This function allows you to customize every single LED to the precise color you desire.

Instructions

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.