PHAZER TECH
LED Controller
User Guide

When the device is first turned on it will start in mode 1. There are 8 different modes. Tap (not hold) the button to switch to the next mode. The default LED count is 30. This can be changed in the settings (see page 2). Addressable LED strips with a single data line and strips with a clock + data line are both supported. By default both protocols are active, but if you plan to use only one protocol it's recommended to disable the other one in the settings.

Modes

1. Always on: Not sound reactive. Use the control knob to select your desired color.

2. Single color: Only lights up when sound is detected. Use the control knob to select the color.

3. Dynamic color: The LEDs change color depending on the frequencies it hears. Use the control knob to modify the sensitivity. Higher sensitivity results in flashier effects.

4. Moving dynamic color: Similar to mode 3 but now the colors move across the strip from one end to the other. The control knob determines how quickly they move.

5. Reverse dynamic color: Same as mode 4 but the LEDs move in the opposite direction.

6. Middle to ends: Same modes 4/5 except the LEDs start from the middle of the strip and move to both ends.

7. Ends to middle: Same as mode 6 except the LEDs start from the ends and move towards the middle.

8. Cycle: Automatically cycles between modes 4 and 7. The control knob not only determines how quickly the LEDs move, but it also affects how long each mode lasts before it automatically switches to the next one.

Settings

To access the settings, first go to mode 1. Next hold the button for 5 seconds and let go.

The first setting only affects LED strips with a single data line. Some of these strips have the red and green channels reversed, so this setting allows you to choose the correct one for your strip. The entire strip should be solid red. If it's green, move the control knob until the strip becomes red. Then hold the button for 2 seconds and let go to continue. The strip will quickly blink several times to confirm the setting.

Now enter how many LEDs your strip has. Maximum is 512. First you'll need to enter the hundredths digit, then the tens digit, then the ones digit. Turn the knob to select the value of the digit. Turning it all the way down sets it to 0, and turning it all the way up sets it to 9. Any value between 0 and 9 can be chosen. Tap the button (not hold) to confirm the current digit and to move onto the next digit. So for example, if your strip has 65 LEDs then the first thing you would do is turn the knob all the way down to set the hundredths digit to 0, then tap the button. Next set the tens digit to 6 and tap the button. Finally set the ones digit to 5. If you entered something wrong you can tap the button to return to the hundredths digit, or if everything is correct then hold the button for 2 seconds and let go to continue.

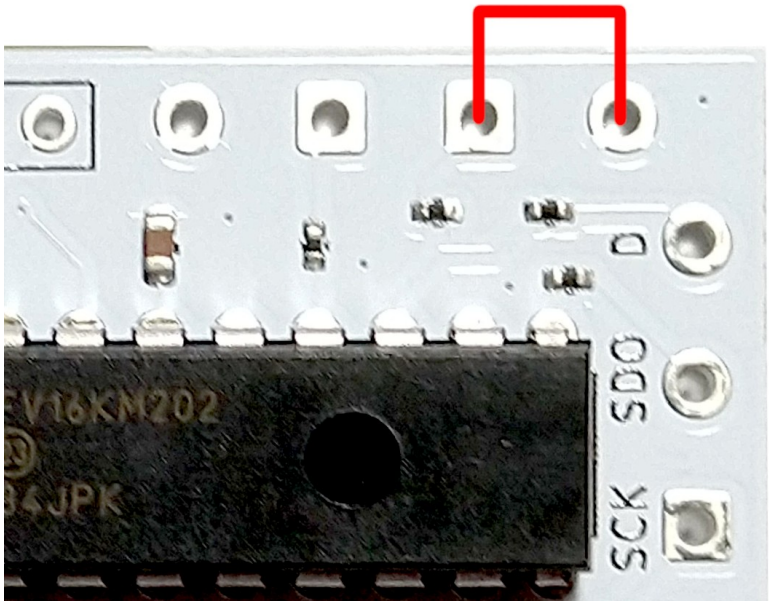
Next you can set the global maximum brightness. This will limit the brightness in all modes. Turn the knob all the way up to set it to maximum brightness, turn the knob all the way down to set it to the minimum brightness, or set it somewhere in the middle. Hold the button down for 2 seconds and let go to continue.

Now you can set the power mode by moving the control knob. Green indicates low power mode and blue is regular power mode. Low power mode is recommended for battery operation. Hold the button for 2 seconds and let go to continue.

The last setting controls which LED protocol will be active. Turn the knob all the way down to only enable the single data line strip, turn the knob to the middle to only enable the data and clock strip, or turn the knob all the way up to enable both. Then hold the button for 2 seconds and let go to exit the settings.

Reset

If you accidentally set the wrong protocol then you might end up in a situation where you need to reset it. For example, if you have a single data line LED strip and accidentally set the protocol to turn that off, then you need to reset the device. This can be done by bridging two pins together shown in the picture below. Temporarily solder a connection between them, turn on the device, set the correct settings, turn it off, and then de-solder the temporary connection.



Mode Save

For all the sound reactive modes, you have the ability to “freeze” the effect simply by holding down the button. This is a simple and fun way to interact with the effects. But if you hold down the button for 10 seconds, this will save the current mode you’re in. When the device is turned off and then turned on again, it will automatically start in your saved mode.