DialedN, LLC

LED Underglow

Please note that these axillary lights are for offroad use only! We are not responsible for any violations or tickets you are issued for using these lights while operating a vehicle.

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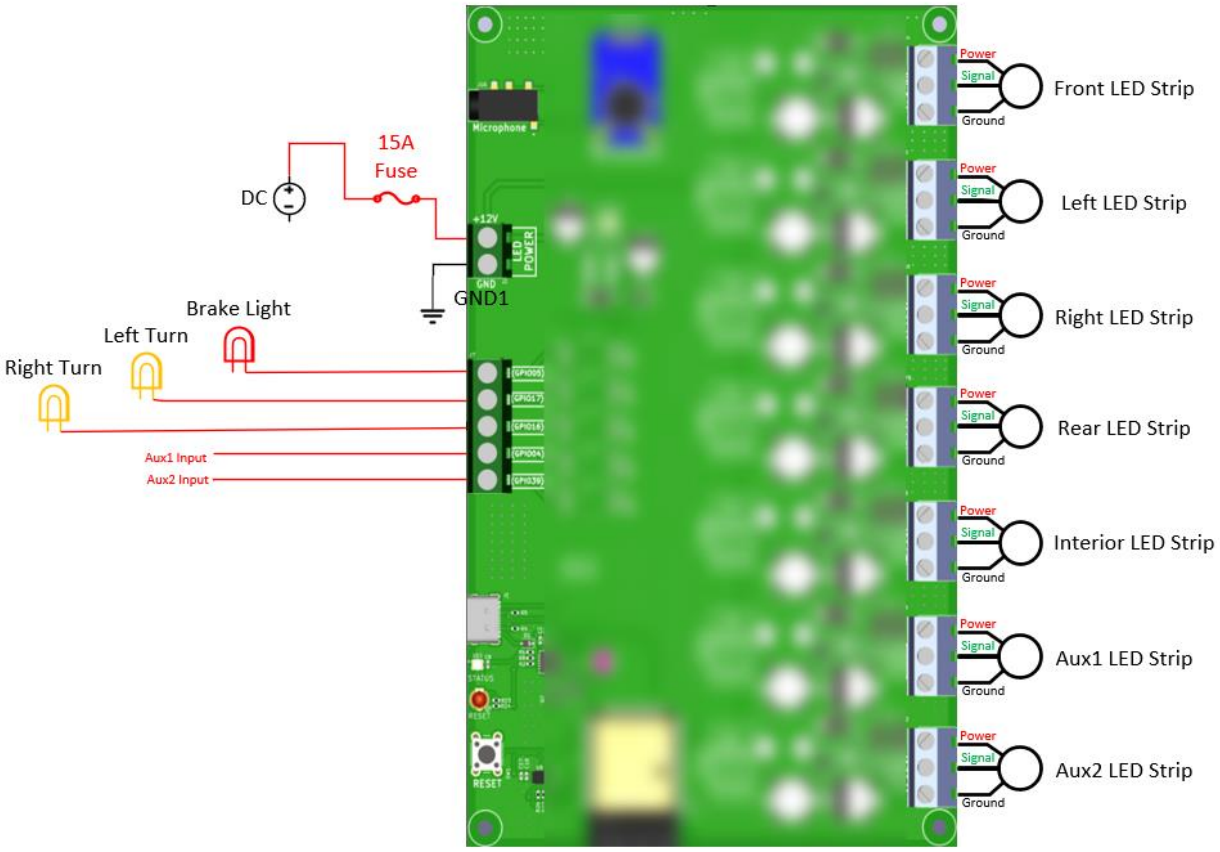
Setup / Installation

Congratulations on your purchase of DialedN's LED controller! It's time to make your vehicle beautifully illuminated. To start, let's first familiarize you with the wiring schematic on how exactly to install this into your vehicle.



Power Input

To supply power to the control board and the LED strips, input 12V from the vehicle into the top terminal and ground the bottom terminal. We recommend using an in-line fuse and either used switched voltage, such as ignition voltage (power when key is on), OR put a switch after the fuse.

If using ignition voltage, once the vehicle is turned off, the LEDs will shut off. While this is ideal for preventing battery draw, it also prevents you from having the LEDs on while the vehicle is off.

If using constant battery power to the board, this will allow you to have the LEDs on while the vehicle is off. We recommend putting a switch after the fuse so you can turn the control board off while the LEDs are not in use.

Input Sensing Wires

From top to bottom, the input wires are brake light, left turn signal, right turn signal, auxiliary 1, and auxiliary 2. These inputs expect positive voltage to detect when those inputs are active. A common practice is to "T" into the switched power for those lights. This way, when the light is on, the control board knows which light(s) is on and illuminates/animates the output appropriately.

Brake Light

When detected, the control board will illuminate full-bright red color on the rear LED strip.

Left Turn

When detected, the control board will illuminate full-brightness amber color on the left LED strip based on the Turn Signal Animation mode you have selected.

Right Turn

When detected, the control board will illuminate full-brightness amber color on the right LED strip based on the Turn Signal Animation mode you have selected.

Aux1 Input

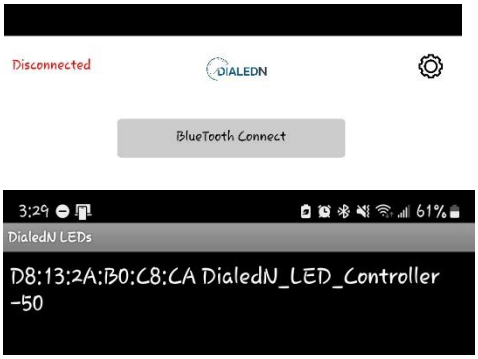
When detected, the control board will illuminate the LED strips based on your configuration settings of the aux1 input. Please see "Setting Up Auxiliary Configuration".

Aux2 Input

When detected, the control board will illuminate the LED strips based on your configuration settings of the aux2 input. Please see "Setting Up Auxiliary Configuration".

Bluetooth Pairing and Mobile App

Currently, the mobile app only works with Android. Navigate to the Google Play Store and search for "DIN LED". Install the app.



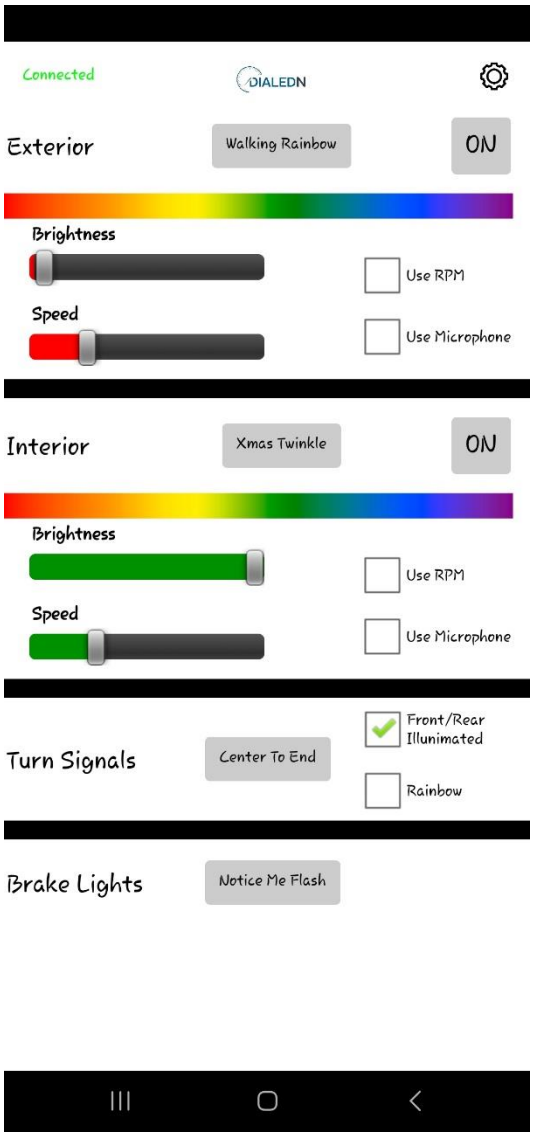
1. Make sure the control board is powered up.
2. Open the app and at the top of the screen, click the BlueTooth Connect button. When detected, you will see the MAC address of the control board and DialedN_LED_Controller as the Bluetooth name. Tap the name at the top to connect to the control board.
3. You will be prompted for the BlueTooth PIN. **The BlueTooth PIN number is 123456.**

Settings & Initial Setup

1. Once connected to BlueTooth, tap the settings "gear" icon in the top right corner.
2. Because different cars are different lengths and you will cut the LEDs to size, the settings allow you to define the number of LEDs in each of your strips.
3. Count the number of LEDs in each strip and populate the settings with those counts. The application assumes that both the left and right sides are the same length.
4. Use the Save button at the bottom of the screen to save the settings.

5. **Please note, if you have purchased the OmniGauge Alpha, you can enable the setting titled "Control LEDs with OmniGauge".**

Main Screen



On the main screen you will find buttons, sliders, and toggles that control the display of the LEDs. Once you have completed all the LED strip wiring into the control unit, you're ready to turn them on and begin adjusting the color and animation to fit your unique taste.

Exterior & Interior Settings

- Style button
  - Controls the LED animation. There are 24 different animations to choose from. Some are solid colors, other rotate colors, and others are animations.
- ON/OFF button
  - Toggles the LEDs on or off

- Color Bar
    - Tap and drag across the color bar to change the color of the animation. Please note that some animations don't use the color selection (such as "Red White & Blue").
- Brightness Slider
    - Controls the brightness of the LED strand
- Speed Slider
    - Controls the speed of the animation. Please note that some style selections do not use the speed input (such as "Solid Color").
- Use RPM
    - If you have purchased the OmniGauge Alpha, then when "Use RPM" is checked, the animation speed will vary based on the vehicle's engine RPM and max RPM settings. The faster the engine is revving, the faster the animation will appear.
- Use Microphone
    - If you have purchased the microphone input, then, when the microphone is plugged into the controller, when this box is checked, the animation speed will vary based on the beat of the music.
    - Please note that the microphone sensitivity setting is located on the settings screen when you tap the settings gear icon in the top-right corner.

Turn Signals

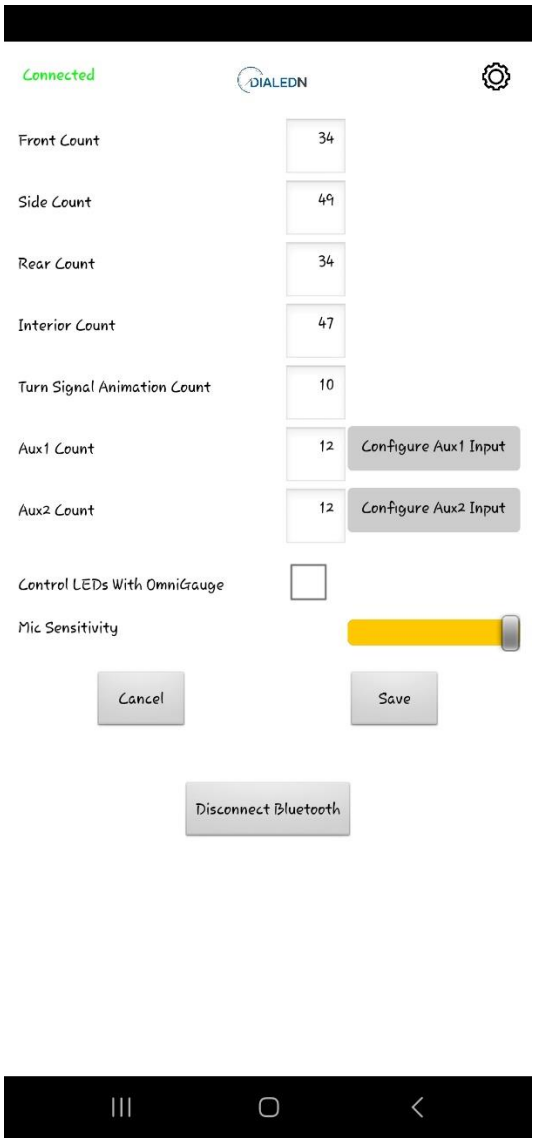
- Style button
    - Controls the LED animation type when the turn signal input is high (detects +12V).
- Front/Rear Illuminated
    - This setting determines whether or not to illuminate a few LEDs on the ends of the LED strands in the front and rear of the vehicle when the turn signal input is detected. When unchecked, only the left, right, or both sides will illuminate. When checked, a small number of LEDs in the front and rear strips will illuminate in addition to the side(s).
- Rainbow
    - By default, the turn signal LED color is amber to comply with federal, state, and local regulations. However, when checked, this setting will change the turn signal animations from a solid amber color to a rainbow gradient

Brake Lights

- Style button
    - Controls the LED animation type when the brake input signal is high (detects +12V).

Once any changes have been made, a Save button will appear in the top-right corner. Tap the save button to save the settings.

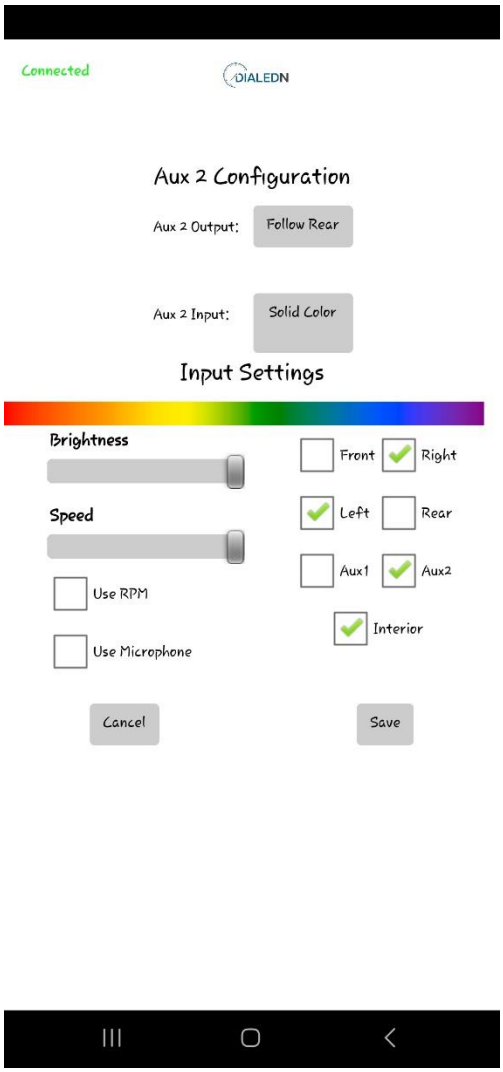
Settings Screen (Gear Icon)



- Front Count
  - Number of LEDs in the front strip
- Side Count
  - Number of LEDs in each side of the vehicle. For example, if you have 50 LEDs on the right side and 50 LEDs on the left side, you will put “50” in this box. Remember, the app assumes the right and left sides have the same number of LEDs.
- Rear Count
  - Number of LEDs in the rear strip
- Interior Count
  - Number of LEDs in the interior strip
- Turn Signal Animation Count

    - Number of LEDs that will illuminate during turn signal animations. For example, let's say your turn signal style is "Front to Back". If the Turn Signal Illumination Count is set to "15", then when the control module detects +12V on one of the turn signal inputs, it will illuminate 15 LEDs at the front of the strip and then run those 15 LEDs all the way down to the end of the strip.
- Aux1 Count
    - Number of LEDs in the aux1 strip
- Aux2 Count
    - Number of LEDs in the aux2 strip
- Control LEDs with OmniGauge
    - If you have purchased the OmniGauge and want to be able to control the LEDs from the gauge (in addition to the mobile app), then check this box.
- Mic Sensitivity
    - Determines how sensitive the external microphone is for picking up music sounds
- Save button
    - Saves the settings
- Configure Aux1 Input button
    - Please see "Configuring Auxiliary Inputs"
- Configure Aux2 Input button
    - Please see "Configuring Auxiliary Inputs"

Configuring Auxiliary Inputs



The auxiliary LED strips can act as stand-alone LED strips, or they can be configured to mimic other strips. Using the auxiliary inputs, you can completely customize how these LEDs act.

- Auxiliary Output mode
    - This determines if the LEDs are going to mimic another LED strip or if they are stand-alone and will only illuminate during auxiliary inputs.
    - For example, the customer has a truck and they want the rear LEDs to glow under the truck, but they also want LEDs on the tailgate facing backwards like you see on many trucks today. This customer would install the tailgate LEDs, count them, update the Aux1 LED Count, and then configure the Aux1 Output Mode to “Follow Rear”. This way, when the brake input detects +12V, not only is the rear LED illuminated, but then so will the Aux1 LED strip.
- Auxiliary Input mode

    - This determines what to do when the controller detects +12V on the auxiliary input wire. For example:
    - For example, the customer has a truck and has some LEDs in the bed of the truck wired into the Aux2 strip. When the customer opens their door, they want the interior, both sides of the truck, and the Aux2 LEDs in the bed to light up full brightness in white. The customer would configure this by entering the Aux 2 Configuration, setting the aux 2 Input to “Solid Color”, use the color selector to select white, then check the boxes to pick which LEDs are going to be controlled by this input. In this case that would be left, right, interior, and aux2.
- Front / Right / Left / Rear / Aux1 / Aux2 / Interior check boxes
    - These determine which LEDs to include in the selected animation when the auxiliary input detects +12V
- Color Bar
    - Tap and drag across the color bar to change the color of the animation. Please note that some animations don’t use the color selection (such as “Red White & Blue”).
- Brightness Slider
    - Controls the brightness of the LED strand(s)
- Speed Slider
    - Controls the speed of the animation. Please note that some style selections do not use the speed input (such as “Solid Color”).
- Use RPM
    - If you have purchased the OmniGauge Alpha, then when “Use RPM” is checked, the animation speed will vary based on the vehicle’s engine RPM and max RPM settings. The faster the engine is revving, the faster the animation will appear.
- Use Microphone
    - If you have purchased the microphone input, then, when the microphone is plugged into the controller, when this box is checked, the animation speed will vary based on the beat of the music.
- Please note that the microphone sensitivity setting is located on the settings screen when you tap the settings gear icon in the top-right corner.

The priority of the inputs is setup like this:

1. Brake input and turn signal input.
    - Regardless of the exterior being on or off and regardless of any auxiliary inputs, when the brake input is detected, the rear LEDs will illuminate red. When the left or right turn signal is detected, it will animate those appropriately.
2. Interior and exterior ON/OFF
3. Auxiliary inputs