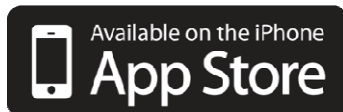




# lueGhozt App v1.1 User's Guide





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## Getting Started

The BlueGhozt app can run on both iOS and Android devices. To get started, first download and install the app from the Apple App Store or the Google Play for free. You can find it easily by searching for “BlueGhozt”.

Once installed, supply power to +5V pin on the the BlueGhozt device (see the BlueGhozt Installation Guide for details). Next, ensure that Bluetooth connections are enabled on your phone or tablet. You can then open the BlueGhozt App to connect to the device via Bluetooth.

## Connecting via Bluetooth

When you open the BlueGhozt App, you will first encounter the Bluetooth connection screen (see Figure 1). The app will begin searching Bluetooth immediately and will typically find any BlueGhozt devices that are within range very quickly. The scan will continue for a few seconds or until you select a device by tapping the device that you would like to connect to. The searching indicator indicates that the app is still searching.

Once a device is selected, the app will begin connecting and synchronizing data with the Blueghozt module. This typically takes a few seconds and the status is indicated by the status message in the lower right.

If your device is not found, ensure that power is supplied to the module and that you are within range. Tap the scan again button to initiate a new scan if needed.

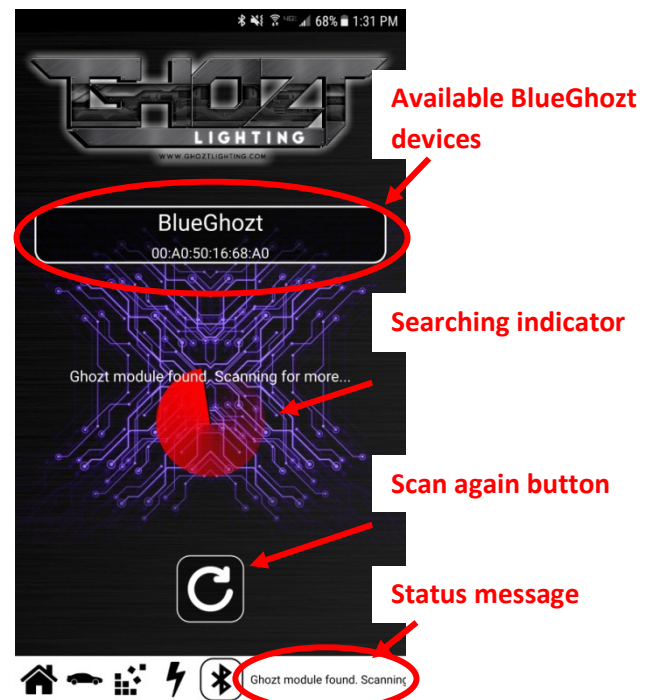


Figure 1 Bluetooth connection Screen

## The Home Panel

Once the Blueghozt is connected, you will be brought to the home panel (see Figure 2). This page lists all of the showmodes that you have created. This panel allows you to create, edit, delete, and toggle any showmode that you have created.

## Navigating the App

The navigation bar at the bottom of the screen allows for navigating between the various setup tabs in the app. The current tab is highlighted with a black outline. Tap any icon to navigate to another tab.

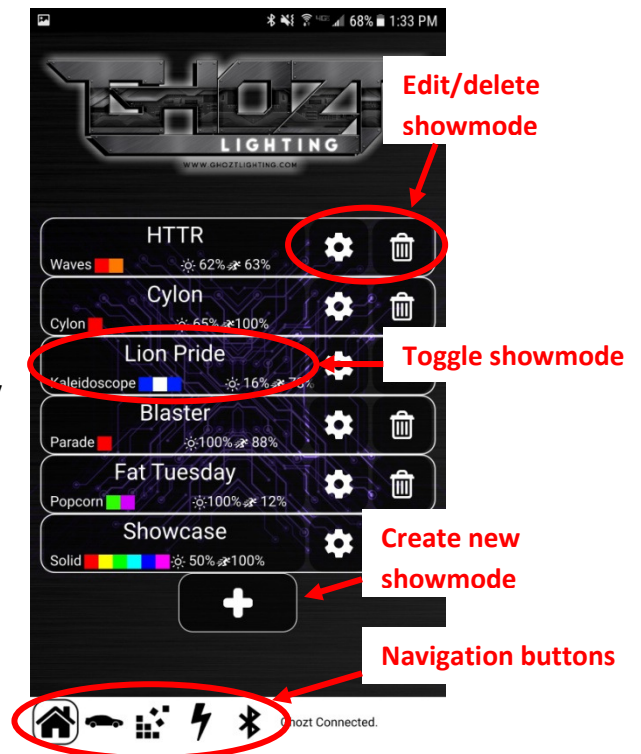


Figure 2: The home panel

## Neopixel Arrangement Panel

The first thing you should do when installing the Blueghozt device is setup its neopixel device arrangement. This allows BlueGhozt to properly tailor the animations to suit your setup.

To get started, swipe the side selector to select a side and click the add device button. Then select the device type and tap the +/- key on the device size field to indicate the number of LEDs on the device. Lastly, with a showmode enabled, slide the adjustment slider to adjust the direction to your liking. Repeat these steps for each device in the chain and then repeat for the opposite side.

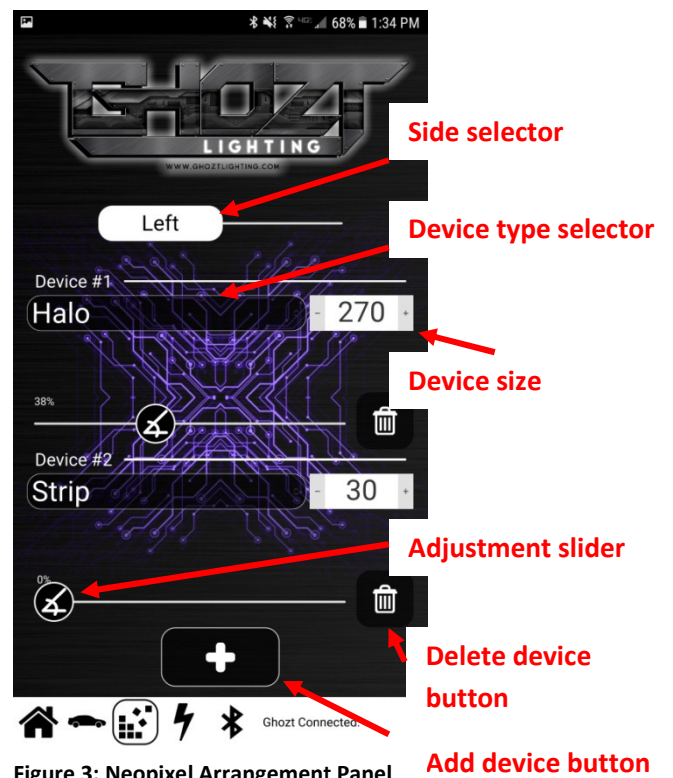


Figure 3: Neopixel Arrangement Panel

## Vehicle Signaling Panel

The vehicle signaling panel allows customization of the BlueGhozt's vehicle signals. In this panel, there is a section for Turn Signal, Parking Lights, and Brake Lights. Each function has a unique set of styles to select from as well as sliders for adjusting the intensity and speed.

The best way to learn to use this panel is to experiment. Do so by activating each signaling function on the vehicle and selecting each style to find the one you like best. Then select a color by tapping the color selector. The intensity and speed sliders have different meanings for each animation so the best way to decide how to set them is to experiment with them.

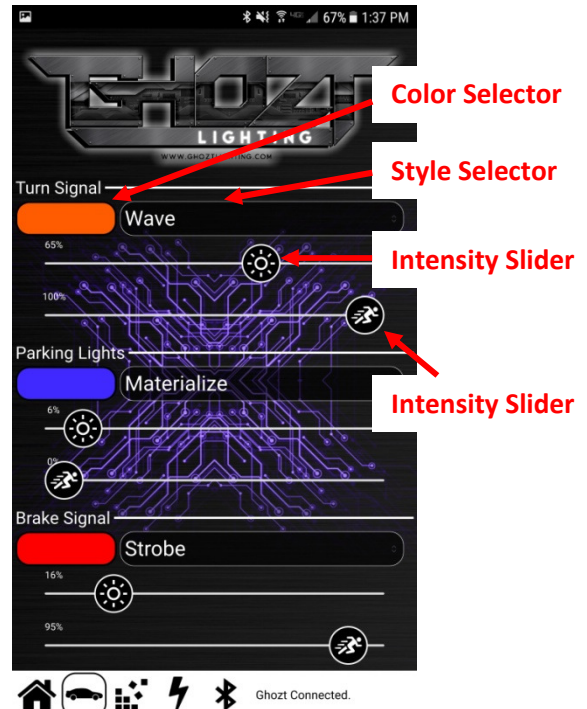


Figure 5: Vehicle signaling panel

## Power Switch Panel

The functionality of the four power switch outputs is configured on this panel. To get started, choose a mode using the mode selector. Each mode functions differently and is described below.

### RGBW Mode

This mode uses Pulse-Width Modulation (PWM) to control a set of RGBW LEDs. Colors and timing will be coordinated with the neopixels as a function of showmodes and vehicle signaling.

#### RGBW Switch Assignments

- 1 – White
- 2 – Blue
- 3 – Green
- 4 – Red

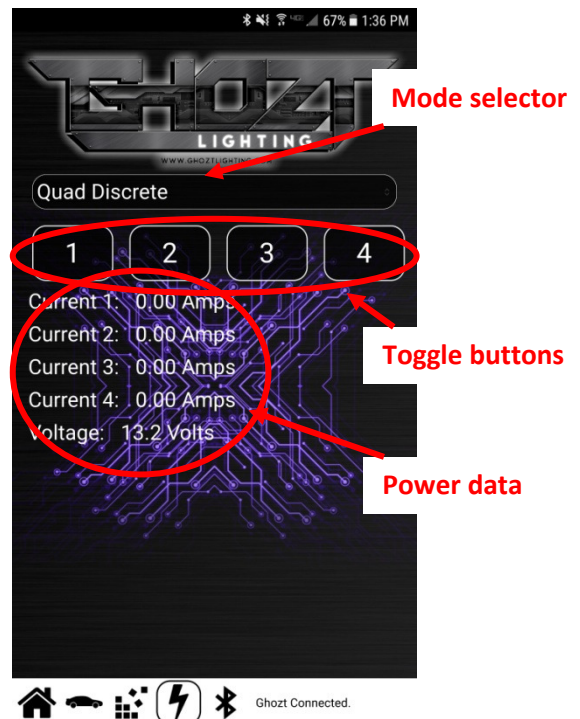


Figure 6: Power switch panel



## **RGB + Discrete Mode**

This mode works like the RGBW mode, except in place of a white channel, switch #1 can be toggled via the toggle buttons on the power switch panel.

### RGB + Discrete Switch Assignments

- 1 – Discrete
- 2 – Blue
- 3 – Green
- 4 – Red

## **Dual Switchback**

This mode uses PWM to control a set of white & amber LEDs for switchback turn signal operation.

### Dual Switchback Switch Assignments

- 1 – Left White
- 2 – Left Amber
- 3 – Right White
- 4 – Right Amber

## **Quad Discrete**

This mode uses the four switches as simple on-off switches that can be toggled via the toggle buttons on the power switch panel.



## Showmodes

The home panel lists all of the showmodes that you have created. This panel is a launching point for toggling, creating, editing, and deleting showmodes. Each showmode button displays a summary of its properties.

To toggle a showmode, simply tap the showmode button. The showmode will be highlighted until it is disabled by tapping it again.

To edit a showmode, tap the edit showmode button corresponding to the showmode you want to edit. This will bring up the showmode editor panel.

To delete a showmode, tap the corresponding delete showmode button.

To create a new showmode, tap the new showmode button.

## Editing Showmodes

Tapping the new showmode or edit showmode buttons will bring you to the showmode editor panel. While on this panel, your showmode will animate and update in real time as you edit.

Each showmode can have between one and six colors selected. Add or delete colors with the respective add/delete buttons. To change a color, tap the color you want to change and select a new color.

The intensity and speed sliders have different affect for each showmode style. Try experimenting with them to tweak the show to your liking.

By default, the showmode will be animated in a simple linear fashion. Use the arrangement toggle to have the animation take into account your LED arrangement data.

When finished editing, tap one of the navigation buttons on the navigation bar at the bottom of the screen.

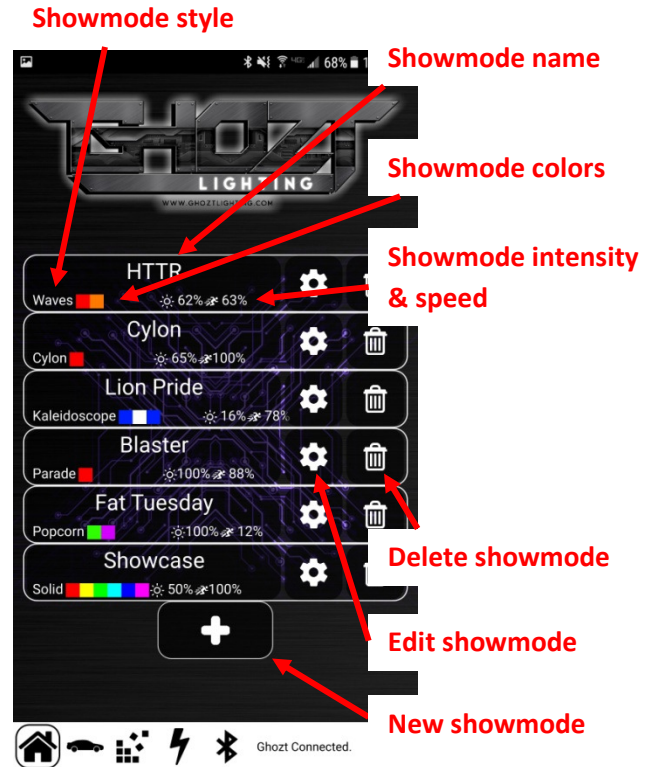


Figure 7: Showmode properties

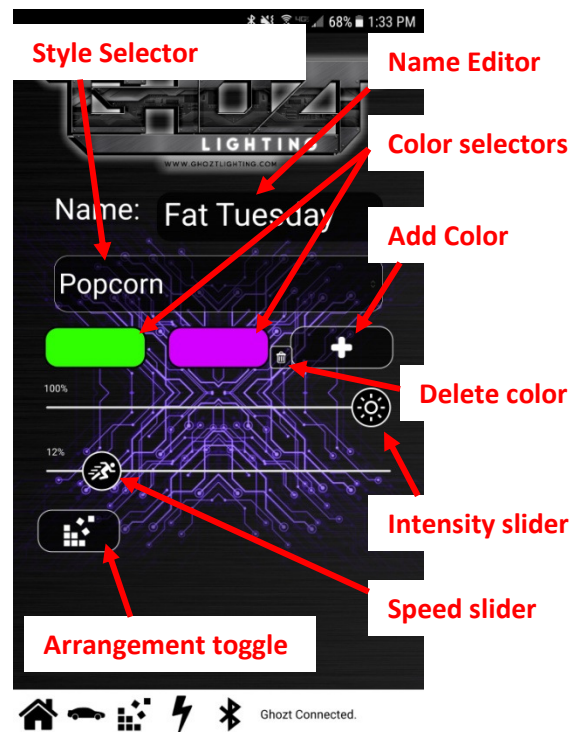


Figure 8: Showmode editor panel



## **Saving Data with BlueGhozt**

The BlueGhozt module will save all of your configuration data local to a non-volatile memory. This means that if you disconnect power from your module, it will still have your settings the next time it boots up. Saving occurs after the Bluetooth connection is terminated. Therefore, you need to ensure that Bluetooth has been disconnected prior to removing power from the device in order to ensure that your settings have been saved.

The only data that is saved to your phone is your showmode data. This means that if you connect to your Bluetooth from a different phone or tablet, then you will see a different set of showmodes. Showmodes are saved as soon as you exit the showmode editor.