# **Operating Instructions**

# **Boogey Lights® GEN2 Bluetooth App**

Assuming you've already downloaded the BOOGEY LIGHTS® APP (Android® version from the Google Play Store or the iOS® version from the APP Store), these instructions explain how to use the APP with your Boogey Lights® GEN2 Bluetooth LED Controller. We urge you to read all of the information contained in this document first. It answers just about every question we've received from customers who call us telling us their lights don't work with the APP.

IMPORTANT! This APP will only work with our GEN2 family of LED Controllers. If you have a GEN1 LED Controller, download our GEN1 APP.

For this manual we are using images from the Android version of the APP. While the IOS version is substantially the same, there are slight differences in screen layouts. Those differences however should be obvious and not change functionality.



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# 800.847.1359 www.BoogeyLights.com

# **IMPORTANT OPERATIONAL & VERSION NOTES**

The GEN2 smartphone APP is designed to work with the following four Boogey Lights® GEN2 LED Controllers.

MODEL	SKU	NAME	DESCRIPTION	RGB LED Capacity (3 channels)	xx LED Capacity (2 channels)
BLRC-G2P-KF	PGU-RC-G2-PLUS-KF	G2 PLUS	RGB, Bluetooth, RF wireless Key Fob, Brake Flash	300 6A max, 2A*3	0
BLRC-G2S	PGU-RC-G2-SUPER	G2 SUPER	RGBxx, Bluetooth, RF wireless G2 M7, Quick Switch	900 9A max, 3A *3	600 3A max per X channel
BLRC-G2HD	PGU-RC-G2-HD	G2 HEAVY DUTY (single zone)	RGBxx, Bluetooth, RF wireless G2 M7, Quick Switch, Stubby + Long Range External Antenna, Single Zone	1800 18A max, 6A*3	1200 5A max per X channel
BLRC-G2DZ	PGU-RC-G2-DZ	G2 HEAVY DUTY DUAL ZONE	RGBxx, Bluetooth, RF wireless G2 M7, Quick Switch, Stubby + Long Range External Antenna, Dual Zone	3000 (1500 / zone) 15A max, 5A*3	2400 (1200 / zone) 4A max per X channel (per zone)

All GEN2 LED Controllers offer BOTH Bluetooth + RF wireless control. The PLUS version is offered in RGB only (3 channels output). The remaining three versions are RGBxx capable with up to 5 channels of output. The 'xx' refers to the ability to power up to 2 additional color channels or diodes ('xx' is in lower case to indicate it's a variable). Example: RGBA = RGB + Amber. RGBW = RGB + White (2400k). RGBWW = RGB + White(2400k) + White(4500k). You do not have to use all color output channels. Just make sure you cap off any of the color channels you aren't using.

If your lighting system doesn't have one of both 'xx' channels connected, the 'X' controls on the APP will do nothing. You can ignore that functionality.

This APP will support both BOOGEY LIGHTS<sup>®</sup> SINGLE and DUAL ZONE LED Controllers. If you have a single zone controller, keep the ZONE selector set on 1 & 2  $\rightarrow$  1 2

Before launching the APP, make sure you have location services (GPS) ENABLED on your phone. This is a requirement for Bluetooth services to work. Without location services enabled, the APP will not "find" any controllers when you perform a scan.

It's important to understand you do not "pair" the controller with your smartphone as with some Bluetooth devices. Instead, when you want to control your Boogey Lights<sup>®</sup> with your phone APP, connect to the controller with the APP running on your smartphone. When finished, disconnect using the APP.

The effective Bluetooth range of our GEN2 LED Controllers is in the 100' to 200' range. The range you get will be impacted by both the strength of your smartphone Bluetooth signal along with where the LED Controller is installed. Controllers that are installed in areas surrounded by lots of metal will have reduced range.

# **START UP**

When first launching the APP, most of the screen will appear to be 'greyed' out. This is because you haven't yet connected to a Boogey Lights<sup>®</sup> LED Controller. You have to be connected to a Boogey Lights<sup>®</sup> GEN2 LED controller for all buttons to be active. Here's what that screen looks like.



#### CONNECTING TO A BOOGEY LIGHTS® GEN2 LED CONTROLLER

It's important to understand you **do not "pair" the controller with your smartphone.** Instead, when you want to use it you connect to the controller with the APP running on your smartphone. When finished, you'll disconnect the APP from the controller (or, simply close the APP). Note: The controller is not designed to be connected to Bluetooth all the time. If you don't disconnect after a period of inactivity, the APP and Controller will disconnect.

To connect to your controller, first make sure your Boogey Lights® GEN2 LED controller is powered up (green light will be lit on the face of the LED controller). Assuming the controller is powered up, click the SETUP ICON (top right) to enter the **SETTINGS MENU**. Once in the SETTINGS MENU, click the **SCAN** button to search for your LED Controller. A list of all Boogey Lights® LED Controllers in range will show up on the settings menu screen. If you have assigned a nickname to your controller, that nickname too will show up (more on this further along in this guide). To connect to a controller in the list, click on the controller JD / name in the list. You'll see a LOADING icon popup advising you that the APP is connecting to the controller you selected. Once connected, the LINK icon will appear to the left of the controller name/id. See screen shots on the next page. At that point click DONE (top left) to return to the operating screen. You will see the LINK NOTIFICATION icon lit up (top left corner of main screen) indicating the APP is connected to the LED controller. See screen shots below for reference. Once the APP is connected to the LED controller. See screen shots below for reference. Once the APP from the LED Controller, you can control your LEDs from the APP until such time as you disconnect the APP from the LED Controller (or, close the APP on your phone).



### CONNECTING TO A BOOGEY LIGHTS® GEN2 LED CONTROLLER (continued)

Screen shots of the connecting process are below. As soon as you press the CONTROLLER ID/NAME, the 'LOADING' icon will appear alerting you that the APP is connecting to the controller you selected. If you do not see this 'LOADING' icon, it means the APP did not detect your pressing of the Controller ID in the list. Press the Controller ID again until you see the 'LOADING' icon appear. When the APP has successfully connected to the LED Controller, the LINK ICON will appear immediately to the left of the CONTROLLER ID/NAME (screen shot below). Click the DONE button (top left) to return to operating mode. You're ready to use your Boogey Lights!





when this LINK ICON appears here, the APP is connected to the controller. Click the DONE button to return to the operating mode.

# CONTROLLING YOUR LEDS USING THE APP

The APP is setup to function much like the GEN2 M7 wireless remote functions. The APP has to be LINKED to the controller for these functions to work.

#### Master On/Off (RED = off, GREEN = on)

Use this button to restore the LED Controller's last used settings. Pressing this button RESTORES the last used operating state for all LEDs connected to the controller. This is an important concept to understand. If for example the last used setting had the RGB diodes ON displaying a color rotation program of red, white and blue and the X diodes OFF, when you press this red button the controller will load those exact same Master ON/OFF Restores Last Used Settings



settings. Think of this button as a RESTORE LAST USED SETTINGS button. This button will also turn all lights OFF if they are on. The MASTER ON/OFF has two modes: OFF (red) and ON (green). Note that this button won't do anything until the APP is connected to the LED Controller and the link established.

### **OPERATING MODES**

There are two OPERATING MODES: RGB and X. You can toggle between these two operating modes by pressing the OPERATING MODE button located at the top of the screen.

When in RGB MODE, the APP will control the RGB LEDs wired to the controller.

When in X MODE, the APP will control the LEDs wired to the X output wires on the controller. The diodes connected to the X outputs are typically any of these three: rgb**A**, rgb**W**, rgb**WW**. How these are XX outputs are wired will determine the functionality you'll have when using the APP in the X Operating Mode.



RGB Mode = Controls the RGB LEDs.

# OPERATING MODE: X



X Mode = Controls LEDs connected to XX channels.

You'll notice that the RGB operating mode has one

screen with one set of operating functions specific to RGB LEDs and the X operating mode has another screen with different operating functions for up to two X diodes. The next page has images of these screens and a discussion of each. Which operating mode you're in (RGB or X) is displayed at the top of the screen as shown here.

# **OPERATING MODE: RGB**

RGB ON: Turn ON your RGB LEDs by pressing this button.

<u>RGB OFF</u>: Turn OFF your RGB LEDs by pressing this button.

<u>Color Selection Sliders:</u> Allows you to adjust the mixture of RED, GREEN and BLUE you want to display. There are 255 possible settings for each color. It's the mixing of these three colors that can create up to 16 million different colors (255 x 255 x 255). If you know the numeric value of the color you want, you can manually enter that number on the right of each color slider.

<u>Color Square:</u> Clicking on the color square toggle at the bottom of the screen will bring up a color square where you can select the color you want instead of using the sliders.

<u>Brightness Dimmer</u>: Adjusts the brightness of the LEDs. Note that if when you turn on your LEDs, they don't appear to be on; check this setting. If the brightness dimmer level is all the way down, the LEDs will be effectively off (even though they're really on).

<u>Speed Control:</u> Adjusts the speed of the effect you have selected using the RGB Function Buttons across the bottom. Note that the Speed Control slider is available with Function Buttons F2 thru F7. It's not available in F1. See Function Button details below.

<u>Preset Buttons</u>: Allows you to save up to 3 favorite color and function combinations for the RGB LEDs. To use, simply press the SAVE button and when you do, a screen will pop up prompting you to select which preset (1, 2 or 3) you want to assign to that specific color/function combination. To recall, press the preset button you saved.

### **RGB FUNCTION BUTTONS**

- F1 steady on (default)
- F2 single color strobe w/speed control.
- F3 7-color strobe cycles through each color w/speed control.
- F4 7-color switching cycles through each color w/speed control
- F5 single color breathing w/speed control
- F6 7-color breathing w/speed control
- F7 7 color morphing w/speed control



OPERATING MODE: RGB



# **OPERATING MODE: X**

The diodes connected to the X outputs are typically any of these three: rgb**A**, rgb**W**, rgb**WW**. How these XX LEDs are wired to the controller will determine the functionality you'll have when using the APP in the X Operating Mode.

X ON: Turn ON the X diodes by pressing this button.

<u>X OFF</u>: Turn OFF the X diodes by pressing this button.

<u>Temperature/Blending Control:</u> This slider allows you to shift the mix from one X diode to another X diode. Most commonly used with RGBWW LEDs where the two 'W' diodes are connected to the X outputs. For RGBA or RGBW, if the controller is wired as recommended, this slider will not have much effect on the LEDs since both outputs are wired to the same X diode.

Brightness Dimmer: Adjust the brightness of the LEDs attached to the XX outputs of the controller.

<u>Speed Control</u>: Adjusts the speed of the feature when using Function F2 or F5. This speed control slider is not active on F1, F3, F4, F6 and F7.

<u>Preset Buttons</u>: Allows you to save up to 3 favorite color and function combinations for the X LEDs. To use, simply press the SAVE button and when you do, a screen will pop up prompting you to select which preset (1, 2 or 3) you want to assign to that specific color/function combination. To recall, press the preset button you saved.

### **X FUNCTION BUTTONS**

- F1 steady on (default)
- F2 single color strobe w/speed control.
- F3 not used
- F4 not used
- F5 single color breathing w/speed control
- F6 not used
- F7 not used





#### OPERATING MODE: X DIODES



[BLBTAPP-GEN2 7 April 2024]

# TIMER FUNCTIONS

The GEN2 APP and GEN2 LED Controller has two TIMER functions: **ON/OFF Timer** and **COUNT DOWN** Timer.

The APP must be connected to the LED controller for these timers to work. Keep in mind too the controller pulls the time from your phone and uses that for all timing functions. The controller doesn't have a 'memory'. If power is interrupted to the controller for any reason, the controller will lose it's time reference and any timers previously set will be disabled.

If when you first connect the APP to the controller the TIMER FUNCTION ICON is lit (see below), it's an indication that the controller has a timing function running. Before you can do anything, you must cancel that timing function. The controller cannot be used until the timing function is cancelled.

When connecting to a controller that has an active TIMER engaged, the timer icon at the top of the screen will be lit as shown in this image. The APP cannot be used with the controller until the timer is cancelled.





OPERATING MODE: CLOCK - ON/OFF TIMER

#### **ON/OFF TIMER**

Allows you to program your LEDs to turn on and off at pre-set times every 24 hours. Will work for either operating mode: RGB or X (but not both at the same time).

When setting the ON/OFF Timer, you first have to turn the lights on and have them set the way you want them to look when using the timer.

Once you have the lights setup up the way you want them, click on the TIMING FUNCTIONS button at the top of the main screen to enter the TIMER FUNCTIONS page.

Make sure you have the ON/OFF Timer button selected (see screen shot) and then press 'ON TIME' button. A screen will pop up prompting you to enter the ON TIME. Do the same for the 'OFF TIME' button. When you press SAVE, the lights will turn off. You can then disconnect and close the APP. The lights will turn on and off at the times you set. Note: The ON TIME must be at least 5 minutes in the future.



#### COUNT DOWN TIMER

Allows you to program your LEDs to turn OFF in X Hours and Y Minutes from now (a 'count down'). Will work for RGB or X mode.

When setting the COUNT DOWN Timer, you first have to turn the lights on and have them set the way you want them to look when using the timer. Then, press the time button on the Count Down timer to set your count down time (hours and/or minutes). A screen will pop up prompting you to enter the count down time.

When you press START, the count down timer will begin. You can then disconnect and close the APP. Your lights will turn off when the count down timer reaches 0.





**OPERATING MODE: COUNTDOWN TIMER** 

# **ZONE CONTROL**

The ZONE CONTROL feature will only work with Boogey Lights GEN2 DUAL ZONE LED Controllers. If you don't have a GEN2 Dual Zone LED Controller, always keep the Zone Control indicator in the '1 2' position.



### **Using Zone Control**

If you have a Dual Zone LED Controller, pressing the ZONE CONTROL indicator button at the top of the screen will toggle between ZONE 1 & 2, ZONE 1 and ZONE 2. Whichever zone you have selected is the zone that will be adjusted based on your APP settings.

For example, if you have ZONE 1 selected, whichever color or function adjustments you make elsewhere in the APP will only apply to the LEDs attached to ZONE 1. The LEDs attached to Zone 2 will be unaffected. This works for all features regardless of whether you're in RGB mode or X mode.



**ZONES 1 & 2** 

# **PROGRAMMABLE COLOR ROTATION MODE**

This feature provides access to the 2 or 3 color programmable rotation mode. You can access this mode from the main screen by pressing the Programmable Color Rotation icon at the top of the screen. This feature works with RGB LEDs only.

# So what exactly is PROGRAMMABLE COLOR ROTATION?

It allows you to configure your LED Controller to display a sequence of any two or three colors in rotation at a speed you set. For example, let's say it's Fourth of July and you want your lights to rotate through a color sequence of RED, WHITE and BLUE. Or, perhaps your favorite sports team's colors are White and Blue and you want your lights to continually rotate through a color sequence of White and Blue. You can also for instance vary the speed of the sequence as well as the brightness. You can also choose from one of two different sequencing effect modes: BREATHING or ROLLING. Additionally, you can save these configurations in up to 3 presets such that you're able to recall the lighting configuration with a press of a button. This feature will work with Zone 1. Zone 2 or both Zones 1 & 2.

To use this feature, go to the Programmable Color Rotation screen. If you have a Dual Zone controller, you can specify which zone you want the program to run on. Next, select whether or not you want a 2 or 3 color sequence by clicking on the ROTATION # TOGGLE (see screen shot).

Now, set the colors you want for each color (2 or 3). You do this by clicking on the COLOR 1, COLOR 2 or COLOR 3 button. Then, adjust the color you want for each setting using the color sliders. You can set the brightness too if you want.



**3 COLOR ROTATION MODE SCREEN** 



OPERATING MODE: COLOR ROTATION PROGRAMMING

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Once you have the colors you want set, move on to setting the Feature set: Rolling or Breathing. Rolling means you want the colors you've programmed to roll from one to the other (at the speed you set). Breathing means you want the colors to fade in/out from one color to the next (at the speed you set) which gives the illusion that the lights are 'breathing'.

When you have the colors set the way you want them, press the ACTIVATE button to send the program instructions to the controller. When you do, the LEDs will flash momentarily while the instruction set is downloaded and then the sequence you set up will start to play. At this point you can disconnect the controller from the APP or simply close the APP.

Note that the APP offers 3 PRESETS for this feature as well. If you have a favorite programmed color sequence, you can save up to three of them. To recall a sequence, simply press the number associated with the preset key (Preset1, Preset2, Preset3).





#### **OPERATING MODE: COLOR ROTATION PROGRAMMING**

# **SETUP MENU**

The SETUP menu is where you scan for available in-range Boogey Lights® LED controllers as well as setup Auto-Connect, Set a Password and Set a Nickname. To access this menu, click the SETUP gear icon in the top right of the screen.

Link

Except for the SCAN functionality, you need to be connected (LINKED) to a controller to use these features. <u>SCAN</u>: Press the SCAN button to scan the area for available Boogey Lights LED Controllers. Available in-range controllers will show up in the area on the screen as shown in the screen shot.

STOP SCAN: Stops an active scan.

<u>DISCONNECT</u>: Disconnects the APP from a linked controller.

<u>AUTO CONNECT</u>: Automatically connect to this controller every time the APP is launched. This is a handy feature if you are always going to be connecting to the same LED Controller. To set this feature you have to be connected (linked) to the controller you want to auto-connect to.

MANUAL CONNECT: Turn off a previously set AUTO-CONNECT. In this mode you have to scan and select the LED controller you wish to connect to every time the APP is launched.

<u>SETTING</u>: The setting button brings a pop-up menu up where you can Set a Nickname for your controller and Set a Password to connect to it (highly recommend).

<u>CHANGE COLOR MODE</u>: Takes you directly to either the RGB or X Modes. Similar to pressing the DONE button.



SETTINGS MENU

# SETTINGS MENU OPTIONS

The SETTINGS MENU allows you to give your controller a Nickname (or reset it if already issued).

<u>NICKNAME</u>: A Nickname is especially helpful in situations where you have more than one controller and you need to know which one is which. EG: MyUnderGlow and MyAwningLight. Instead of having to remember the cryptic MAC address, assigning a Nickname makes it much easier. Plus, if you ever happen to be in an area where there are other Boogey Lights®controllers in use, it makes it easy to know which one is yours.

<u>PASSWORD</u>: We highly recommend setting a 4 digit password for your controller. This is particularly true if you happen to be in areas where there may be other Boogey Lights<sup>®</sup> customers (e.g.



camp grounds). With our GEN2 LED Controllers, the Bluetooth 5 chip set significantly increases the Bluetooth range so it's more important than ever to use a password to stop someone else from connecting to your LED controller and controlling your lighting.

	Nickname Input and Save reconnect device						
Please enter your Nickname							
	Cancel	Save	=				
Scan	scan	stop	Disconneo	ct			

	Change		
	Cancel	ОК	
Sca	an sca	n stop	Disconnect

# **OPERATIONAL TIPS & LIMITATIONS**

- The Boogey Lights<sup>®</sup> Bluetooth controller can only be connected to one smartphone at a time.
- If you forget the password you assigned to the controller, press and hold the RESET button on the face of the LED controller for 3 seconds. You'll see the light on the face of the controller flash quickly. Doing so will erase the password settings and you can re-assign.
- Before launching the APP, make sure you have location services (GPS) ENABLED on your phone. This is a requirement for Bluetooth services to work. Without location services enabled, the APP will not "find" any controllers when you perform a scan.
- It's important to understand you do not "pair" the controller with your smartphone as with some Bluetooth devices. Instead, when you want to control your Boogey Lights with your phone APP, connect to the controller with the APP running on your smartphone. When finished, disconnect using the APP. The controller and the Bluetooth APP are not designed to remain connected all the time as with the case with some Bluetooth devices. Use the APP to control your lights and then disconnect.
- Interrupting the power to the LED controller for any reason will cause the controller to lose it's time reference. Any timers set will be disabled. The controller gets it's time reference from the phone when connecting via the Bluetooth APP. The controller does not have a 'memory'.
- The effective Bluetooth range of our GEN2 LED Controllers is in the 100' to 200' range. The range you get will be impacted by both the strength of your smartphone Bluetooth signal along with where the LED Controller is installed. Controllers that are installed in areas surrounded by lots of metal will have reduced range.
- If when you first connect the APP to the controller the TIMER FUNCTION ICON is lit it's an indication that the controller has a timing function running. Before you can do anything, you must cancel that timing function. The LED controller cannot be used until the timing function is cancelled.
- If when first turning on your LED controller with this APP (pressing the red MASTER ON/OFF button) the lights do not react as you are expecting, check your BRIGHTNESS and/or FUNCTION KEY settings. The LED controller will turn on with the LAST USED SETTINGS regardless of which device (Bluetooth APP or G2 M7 RF remote) was last used to operate the lights.

### TROUBLESHOOTING

Visit our website for additional troubleshooting information here: <u>https://www.boogeylights.com/trouble-shooting-guide/.</u> If you need technical support, you can submit a support ticket here: <u>https://www.boogeylights.com/contact-us/</u>



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