Harley-Davidson® 1996-up*

Touring Model 12 Strip RGB LED Lighting Kit

Visit MetraPowerSports.com for more detailed information about the product and up-to-date vehicle Specific applications

Product Features

- Plug n Play T-harnesses with OE Style Connections
- Trigger Controls for Brake and Turn signals pre-wired
- Independent On/Off switch included
- App controlled RGB Controller included
- 5050 LED Strips with Black background

Part Applications

- FITS Harley-Davidson® 1996-UP FLH and FLT with Tourpak

Part Components

- A) RGB Controller
- B) 12 5050 LED Strips
- C) 96-13 T-Harness, 11-13 T-Harness, 14-up T-Harness
- D) Prep Pads, Zip-ties and mounts

A

B

C

D

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TOOLS & INSTALLATION ACCESSORIES REQUIRED

- Philips screw driver
- T40 Torx driver
- Side cutters
- Pry tool
- Needle nose pliers
- Double sided tape
- Ballistic Mat or Heat resistive tap
- Kent cleaner

Attention! We recommend removing the main battery fuse prior to installation. When testing the after-market equipment, ensure that all factory equipment is connected before cyding the key to ignition.

Attention! This instruction manual references service manual information. A service manual for your year/model motorcycle is suggested for this installation. One is available from a Harley-Davidson dealer.

Attention! To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding.

From the kit locate the 3 included T-harnesses. Select the appropriate harness based upon the year range and connector style:

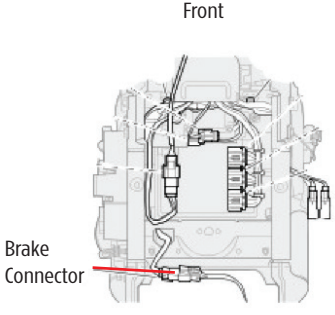
Plug-n-play rear lighting t-harnesses
Image 1 1996-2013 8-pin OE plug
Image 2 2010-2013 6-pin OE plug
Image 3 2014- UP* 6-pin OE plug

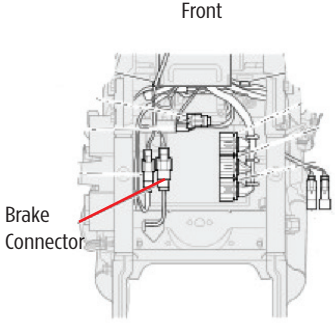
Image 1 Image 2 Image 3

Note: The RGB control box get it's accessory power, ground, brake , and turn signal connections from the three plugs above. You will only use one of the plugs from your installation. Discard the remaining two.

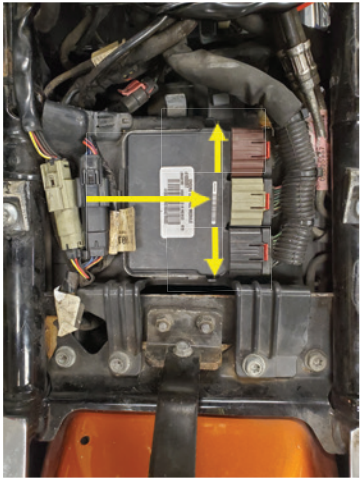
Start by removing the seat to gain access to the rear lighting connector as well as the motorcycle's battery. The rear lighting connector can be located on the clutch side of the seat pan or along the front side of the rear fender.

Note: To confirm you have the right connector unplug the suspect plug, turn the ignition on and pull the brake lever. If the rear brake lights do not activate you have the right plug.

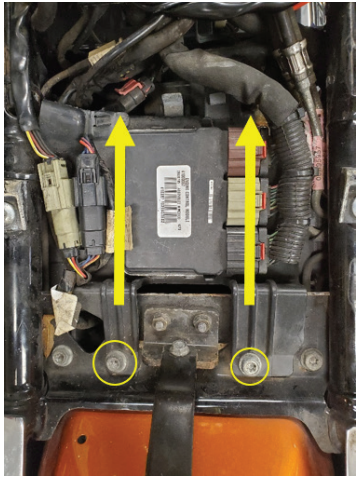




1: Release the control module by first pulling back on the 2 locking clips and lifting up on the connector side. Then side module toward the connector side and rotate out of the way.

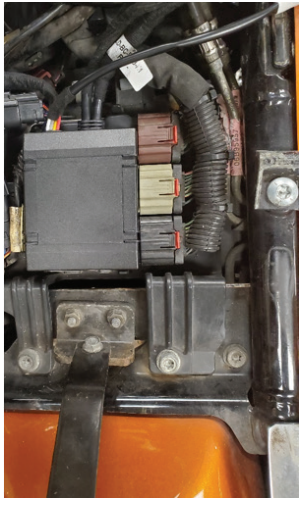


2: Locate the 2 battery cover retaining screws, remove using a T40 Torx driver. Then slide the battery cover towards the front of the bike and remove to gain access to the battery. Slide module toward the connector side and rotate out of the way.

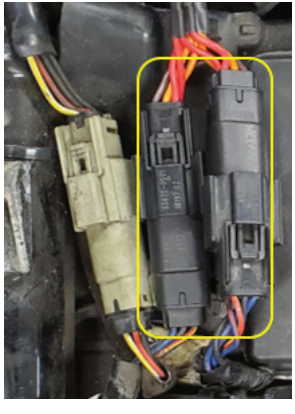


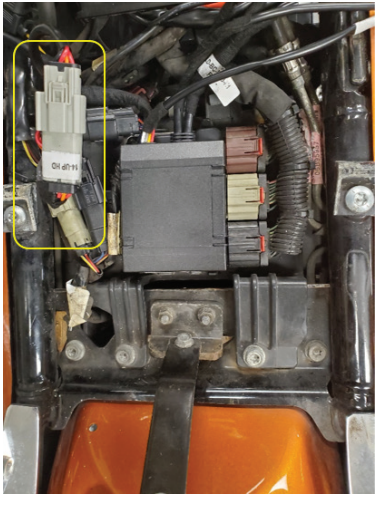
3: Locate the positive battery terminal and connect the fused yellow lead from the RGB controller. Reinstall battery cover in reverse order,

4: Clean the top of the control module with an alcohol pad. Orientate the RGB controller so that the cables exit the case toward the front of the bike, and stick the RGB controller to the top of the control module.



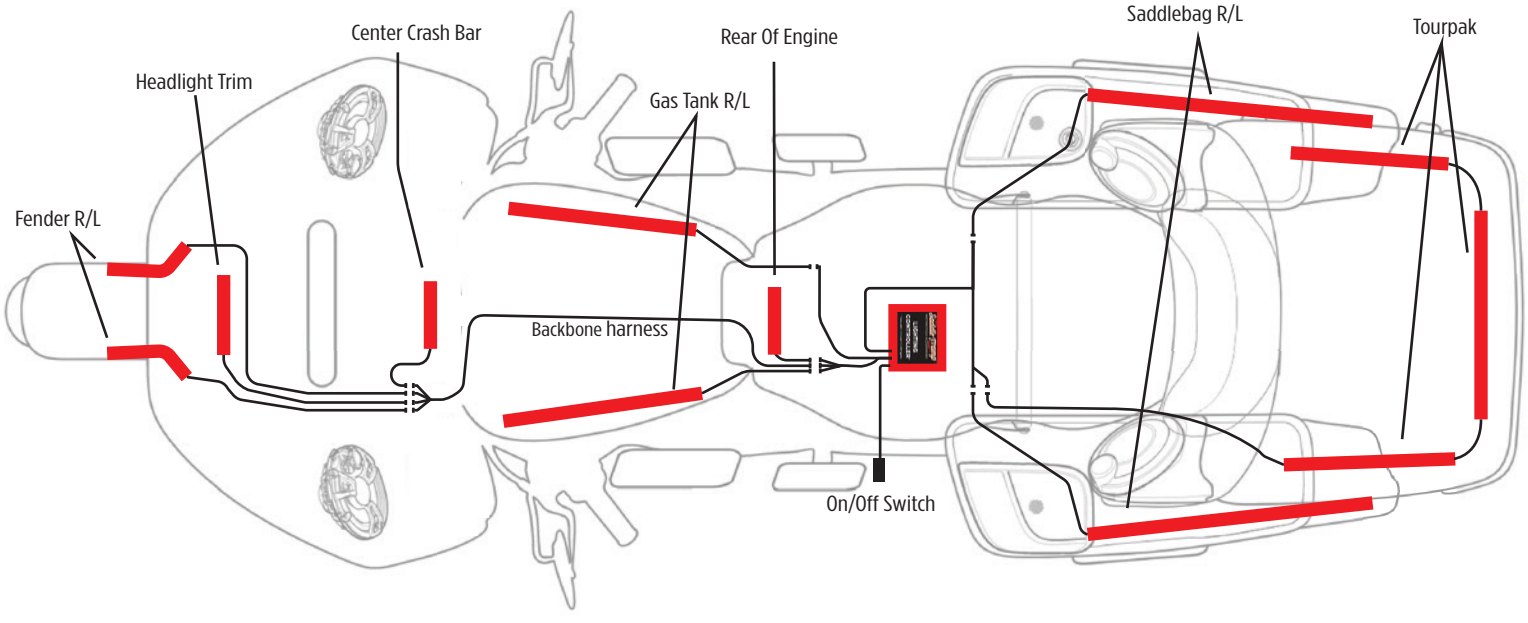
5: Using the provided T-Harnesses find the location of your brake plug and install. On the other end of each T-harness is a 4 pin connector that plugs into the installed control module.





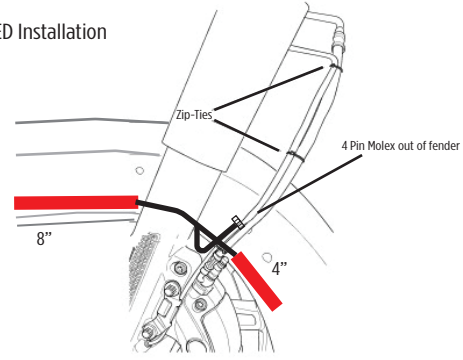
The LED strip are labeled with the mounting location. The RGB control box harness is also labeled with matching locations. Using the provided alcohol pad, zip-ties and 3M adhesive prep pads make sure to clean the area thoroughly before sticking lights into place. The diagram below will provide you with a layout of each LED strips location.

Note: The lengths of these lights and harnesses are designed to be routed in the exact locations shown below.



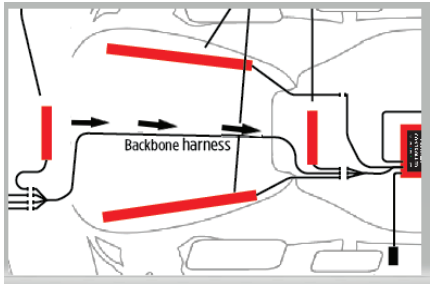
Installation Tips: Below are tips that will help your installation go smoother.

Fairing LED Installation

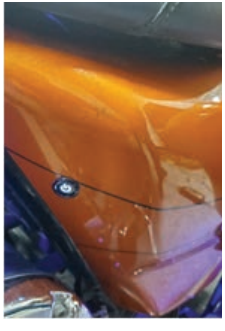


Backbone harness

The backbone harness for the BC-RGB-K1 will need to be installed in the plastic channel under the gas tank. This channel is for the OE wiring harness from the front fairing to under the seat. For this installation you MUST remove the gas tank to run the RGB wire in this channel from front to under the seat.



On/Off Switch



BC-RGB-K1 comes pre-wired with an on/off switch. This switch can be used to turn the RGB lights on while the ignition is off. This switch is a slave to the RGB app. If you turn the lights off within the app your manual switch will not function. You must go back into the app and turn the lights on.

Saddlebag LED Installation

BC-RGB-K1 kit comes with stick-on zip-tie bases that need to be secured to the front inside edge of the each saddlebag. Zip-tie the RGB wire so that the Molex connector meets the mating connector by the top of the rear fender. The LED strips are designed to allow the removal of the saddlebag. Unplug the 4 pin Molex plug before removing the locking clips inside the saddlebag.

RGBW APP
OPERATION INSTRUCTIONS

RGB AND RGBW LED LIGHT/S CONTROLLER APP WITH PROGRAMMABLE TRIGGERS

APP FEATURES

The RGB/W mobile app is customizable for each brand, allowing the user to select from three different backgrounds to reflect Heise, Metra PowerSports or Metra Marine's brand style. The app has a selectable color wheel with 16 million different RGB color options and a true white light color option, available with RGBW products. The app automatically updates via Bluetooth® and detects if a product connected to the control box is RGB or RGBW, allowing groups of both products to be used and controlled within the same mobile app.

Users can also select from built-in pre-programmed lighting transitions for rainbow, fire and water, with additional transitions that include blinking, fading or pulsing between a combination of any two colors. For accurate color matching to completely customize the LED lights, a camera color capture feature is also available in the app. The mobile app uses Bluetooth Low Energy (BLE) for wireless control that streams in the background, uses significantly less power and does not impact the user's ability to stream music via Bluetooth from the same mobile device.

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INTERFACE COMPONENTS

- RGBW interface
- RGB/RGBW specific harness

TOOLS & INSTALLATION ACCESSORIES REQUIRED

• Crimping tool and connectors, or solder gun, solder, and heat shrink • Tape • Wire cutter • Zip ties • Multimeter

Google Play Store

Apple App Store

RGBW APP Setup Instructions

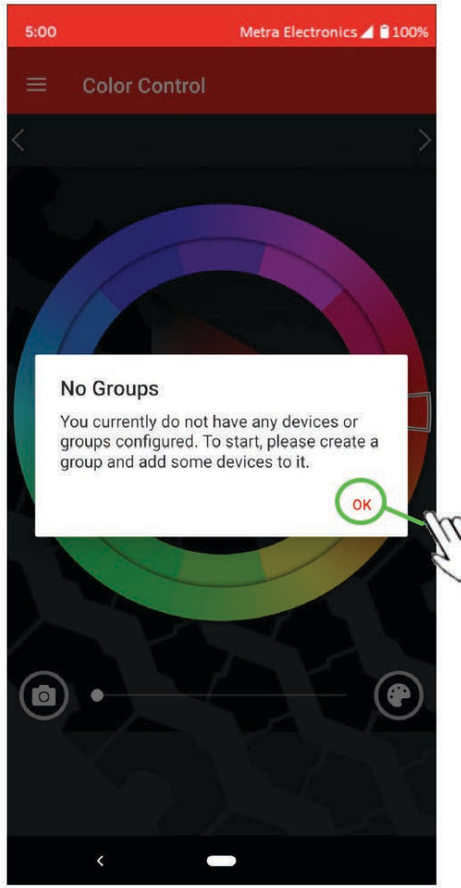
TIP: If no device is paired within 2 minutes the device will need to be powered off then back on.

Android and iOS

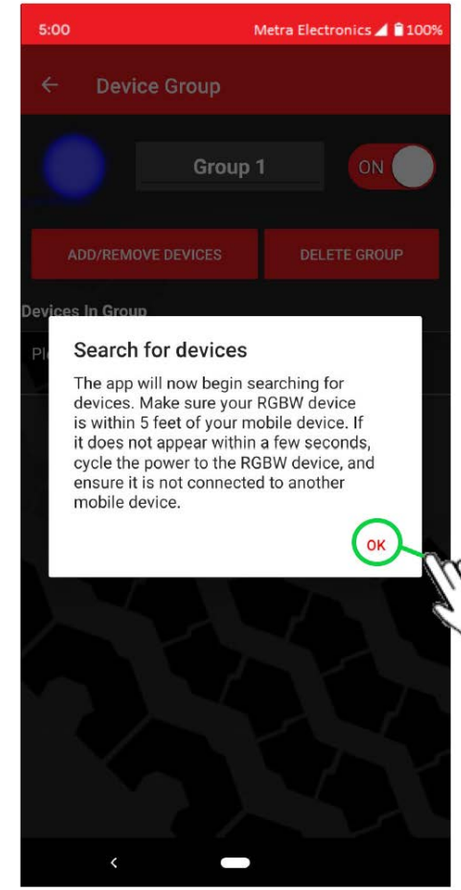
1. The first time opening the app the option of selecting the background theme. Choose from 3 selectable options.* (Figure A)
2. Once the theme is selected there will be a prompt to select the device. (Figure B)
3. At this point the control box should be powered up.
4. Next search for the device. (Figure C)

***Note: Can be changed anytime in the "Menu" –> "Theme" option.**

(*Figure A*)



(*Figure B*)



(*Figure C*)

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Android and iOS

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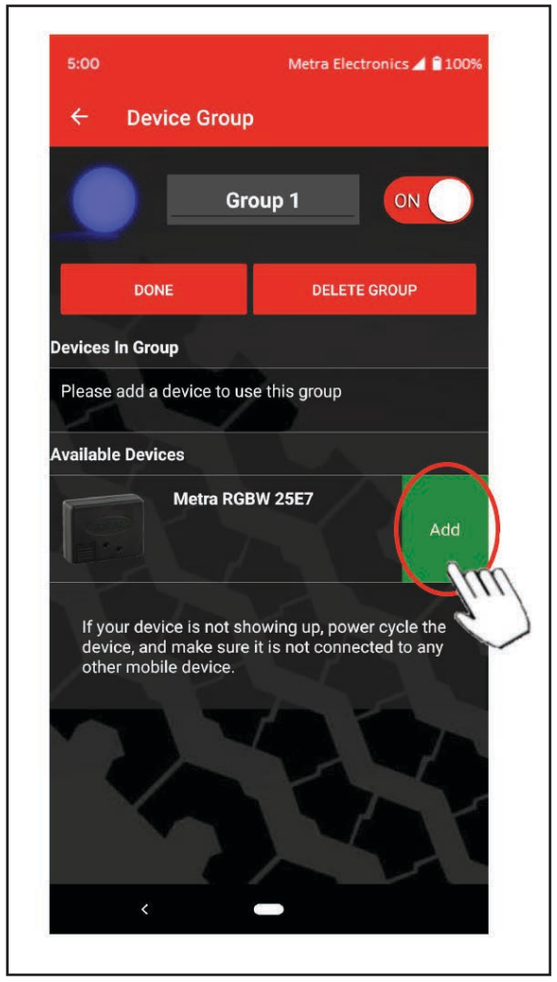
5. Add the desired control box. (Figure D)
6. Select “DONE” to exit the add/remove page. (Figure E)

Device Group

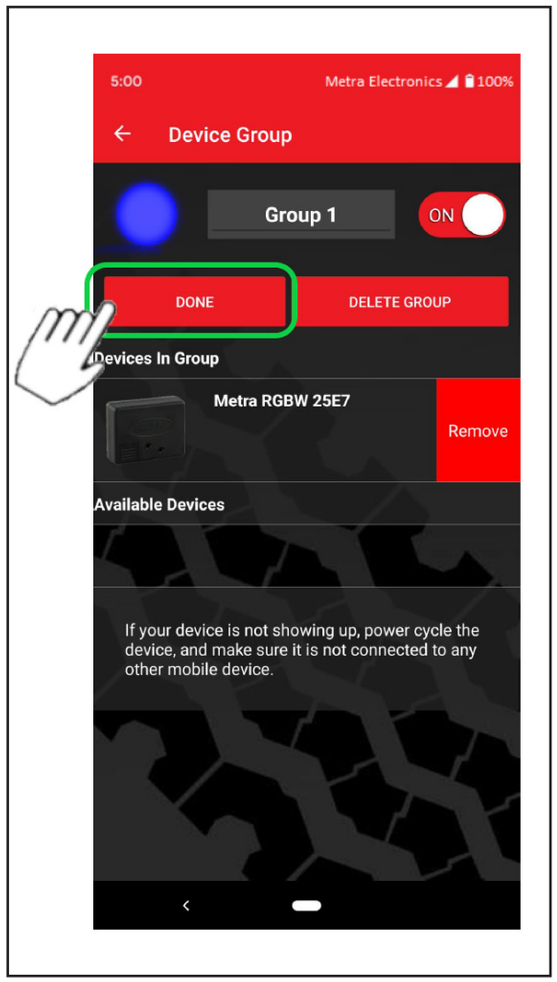
- After adding devices the “Group 1” name can be changed. (Figure F)

Android and iOS

- When set up completed select Menu “☰” then “Color Control”. (Figure H)



(*Figure D*)



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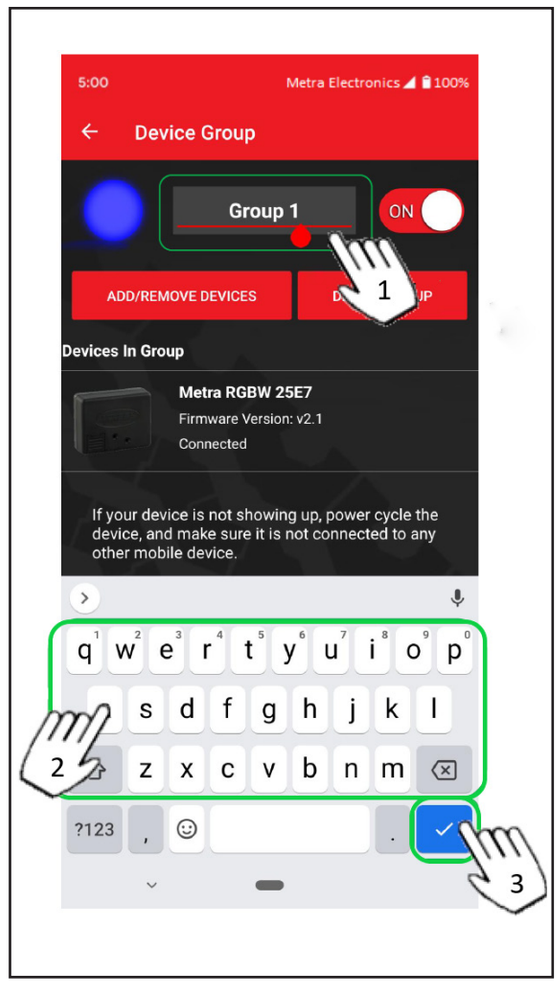

(*Figure F*)

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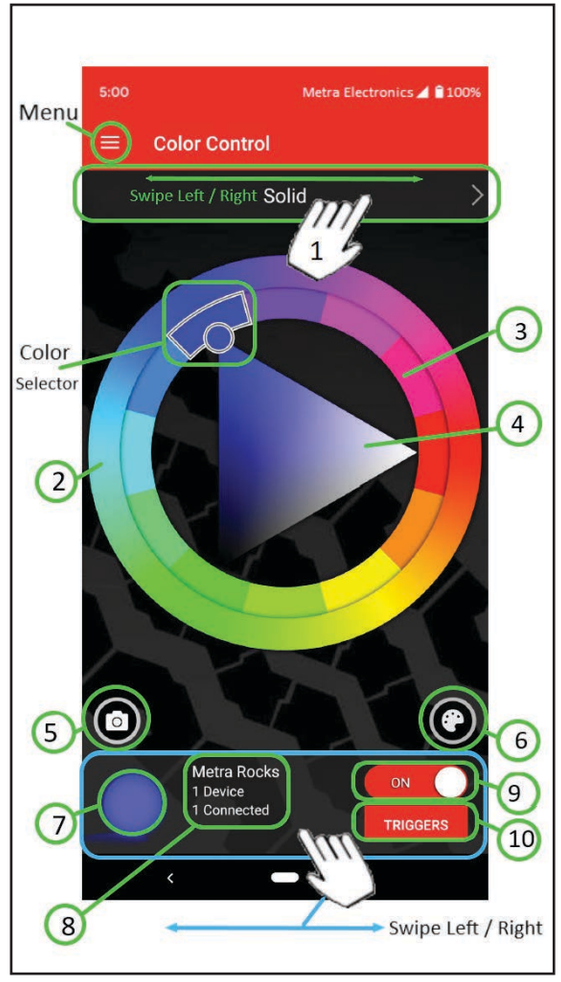
Controls

1. Transitions.
2. Infinite color wheel selection.
3. Primary color wheel selection.
4. Brightness control.
5. Camera color snap feature.
6. Pure White color mode.
   (Figure G)
7. Current color and pattern selection.
8. Connected Devices.
9. Trigger on/off control.
10. Trigger menu control.
    (Figure H)

(*Figure G*)



(*Figure H*)

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Trigger features

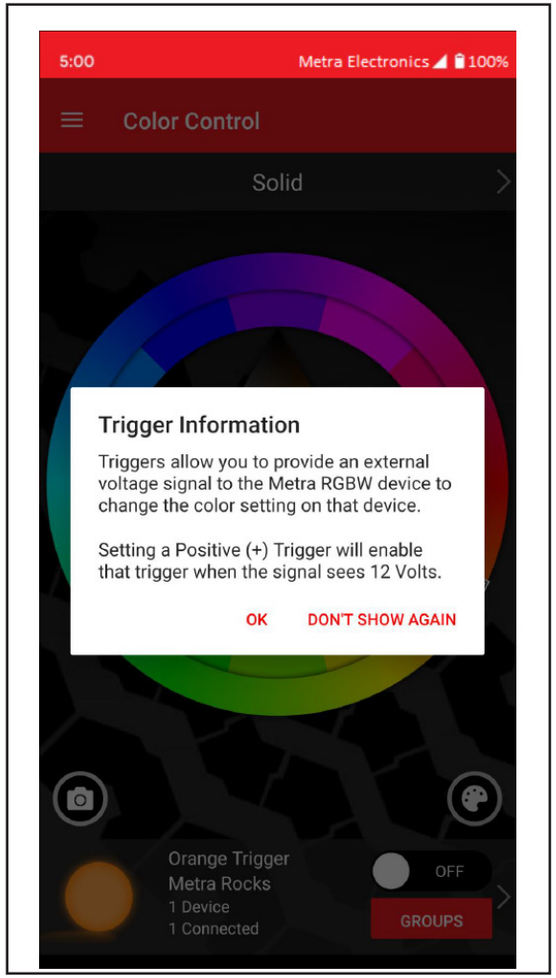
- 4 triggers activate with 12 volts
- Wires have hierarchy
- Orange has priority over all
- White has priority over red and gray
- Red has priority over gray
- Gray has no priority

(Figure I)

Operation examples:

1. Orange trigger used as a turn signal indicator.
2. White trigger used for reverse lighting.
3. Red trigger used for brake light indicator.
4. Grey trigger used for anything.

(Figure J)



(*Figure I*)

(*Figure J*)

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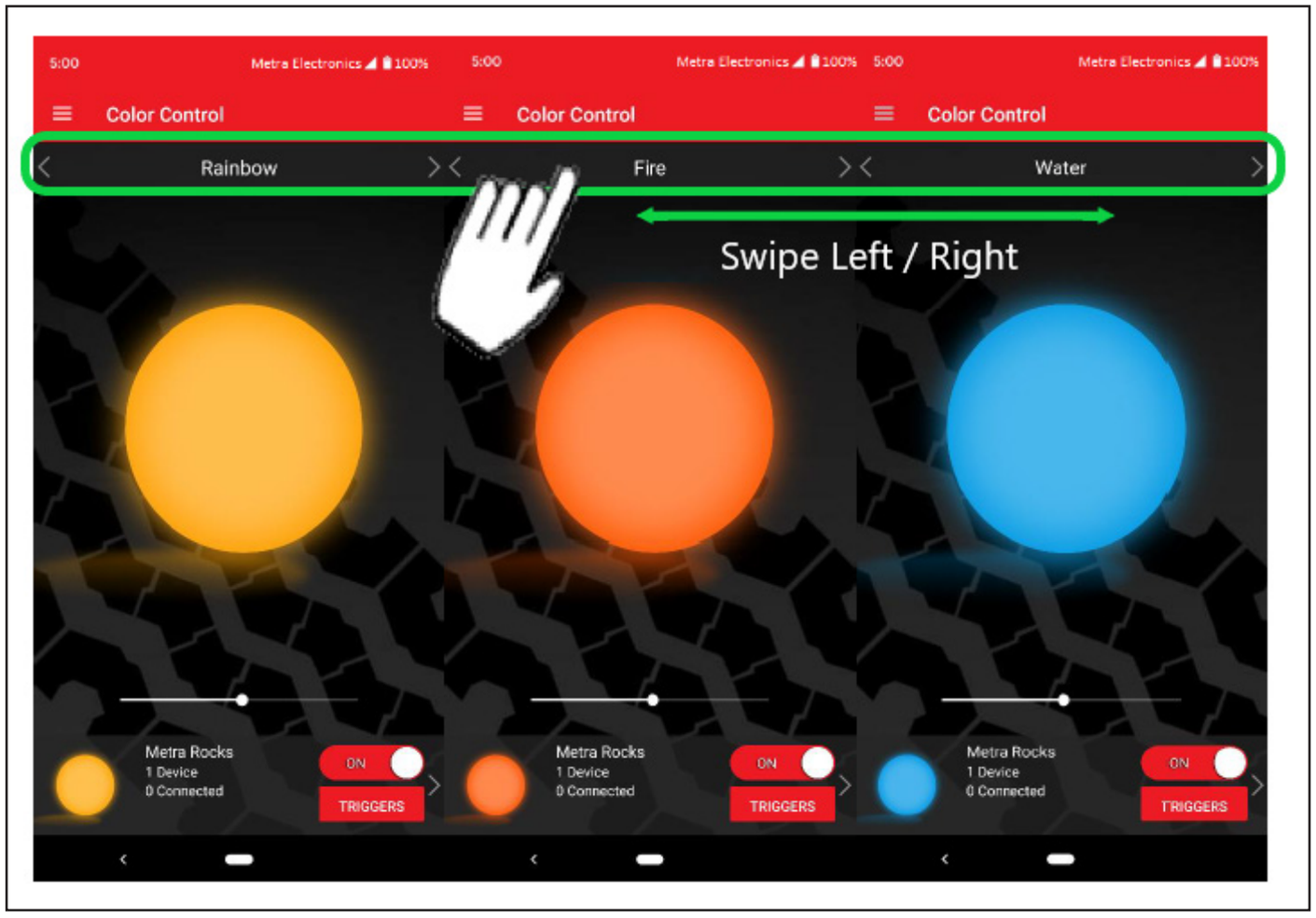
Transitions, pattern controls

Swiping Left and right at the top of the page will change patterns and transitions.

- Transitions
    1. Rainbow
    2. Fire
    3. Water
- Speed is the only adjustment, use the slide bar located below the color circle.
  (Figure K)



(*Figure K*)

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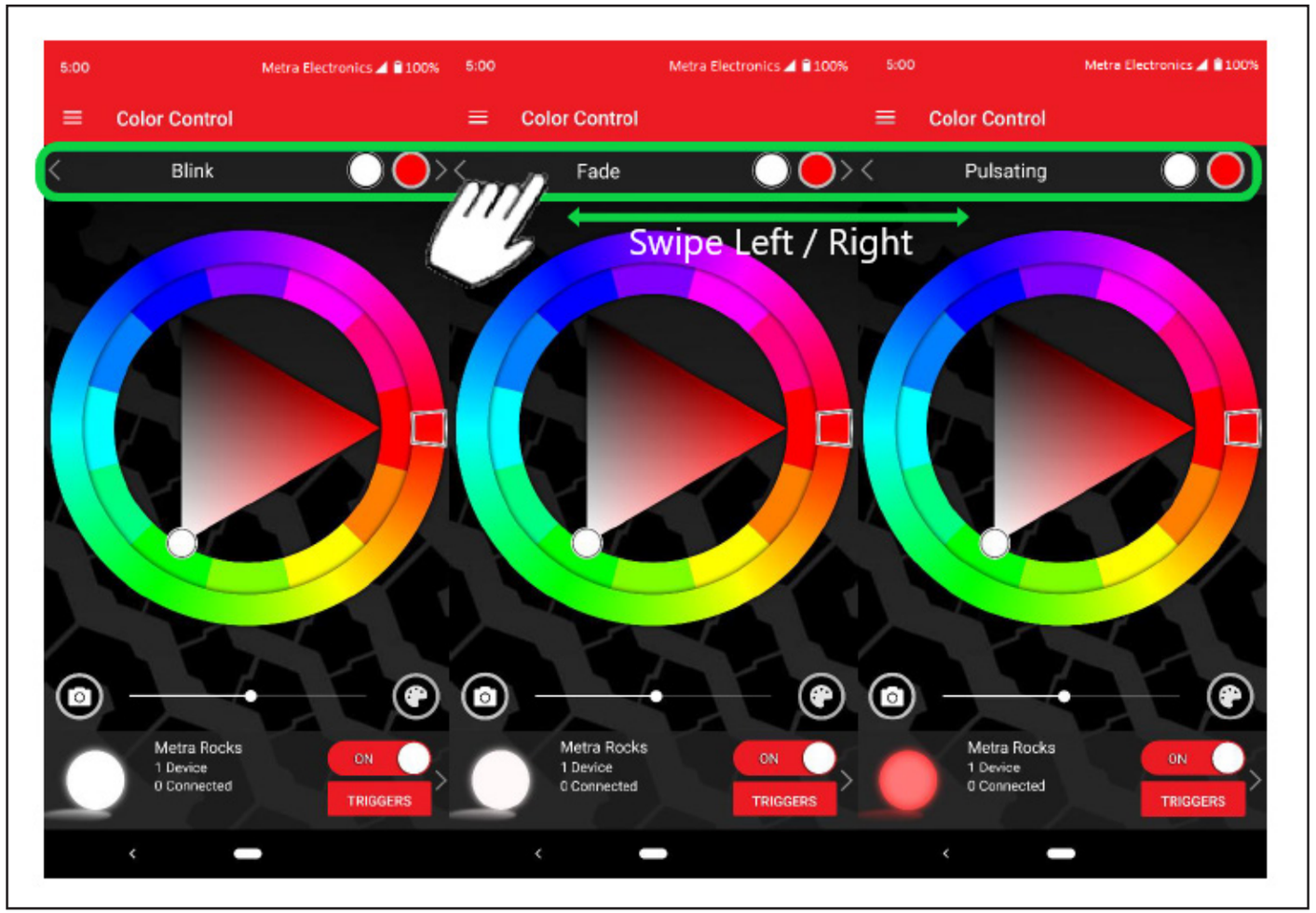
Transitions, pattern controls

Swiping Left and right at the top of the page will change patterns and transitions.

- Patterns
    1. Blink
    2. Fade
    3. Pulsating
- Colors selected by 2 dots adjacent to the pattern type
- Speed is adjusted with the slide bar located below the color circle.
  (Figure L)



(*Figure L*)

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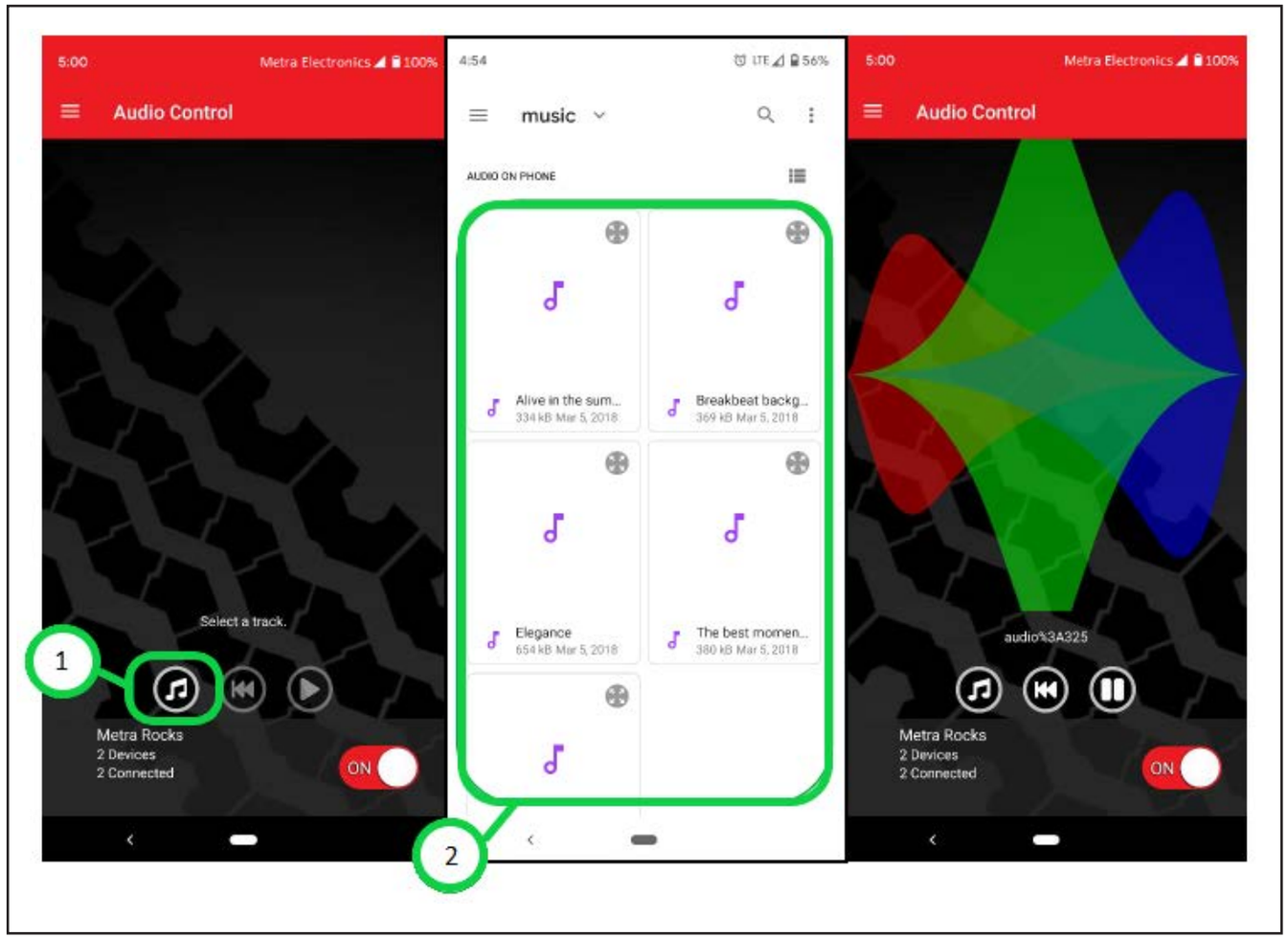
Audio Controls

- The app has an audio controller, music located on a phone can be played. The colors will dance to the beat. The intensity of the dancing lights will increase or decrease based on the volume level. (Figure M)

NOTE: Music files must be stored locally on the phone and will not work with streaming music services.



(*Figure M*)

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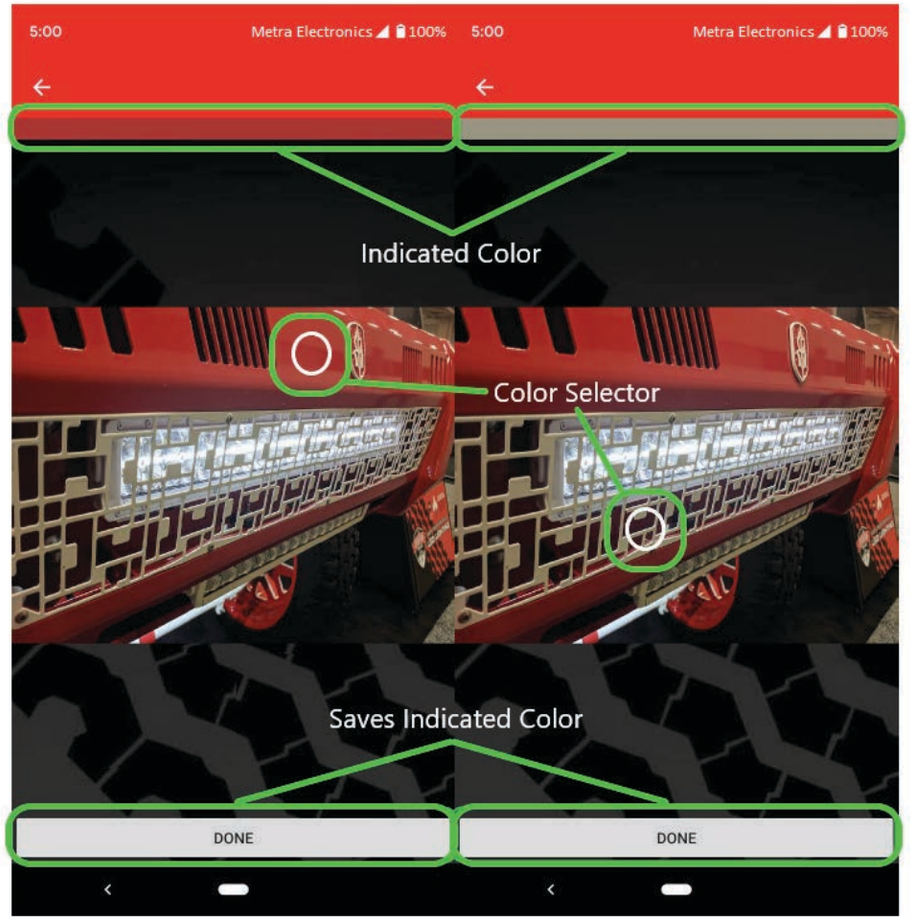
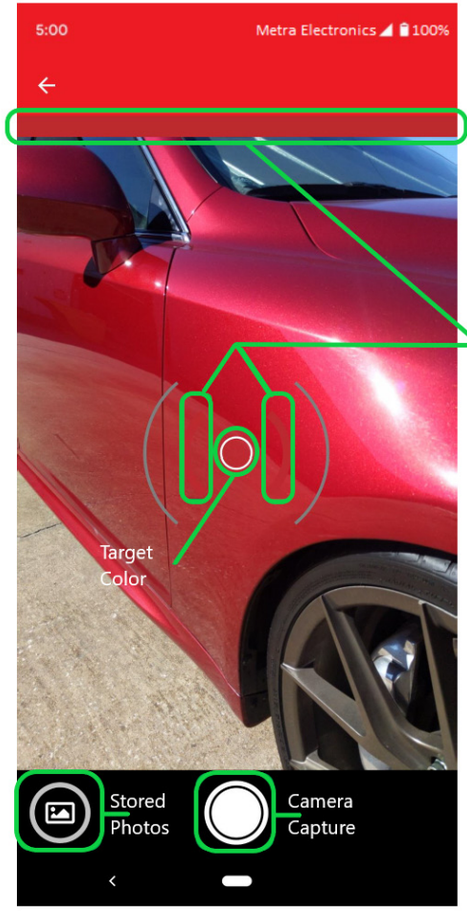
Camera Color Snap

- Use the devices camera to pick a specific color.
  (Figure N)
- Center the circle on the color of the choice and take the picture. To select a color from a photo already in the gallery select the icon in the bottom left corner of the screen. Use the finger to find the color. The bar at the top of the page will show the color selection. When finished hit done. The LED's will change to the selection.
  (Figure P)



(*Figure N*)



(*Figure P*)

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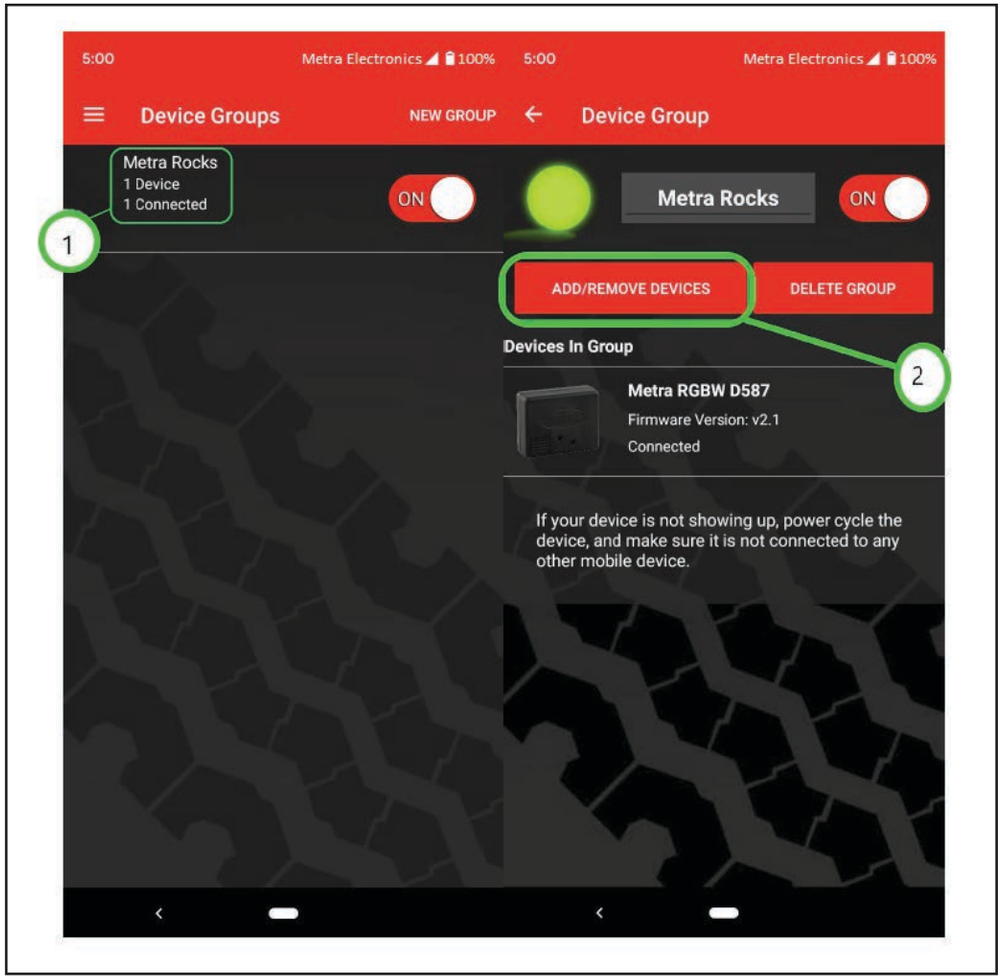
Group Controllers

- In Device Groups menu, select the controller to open that device group. (Figure Q)
- Select the Add/Remove Devices menu.
- Devices in the group will be displayed



(*Figure Q*)

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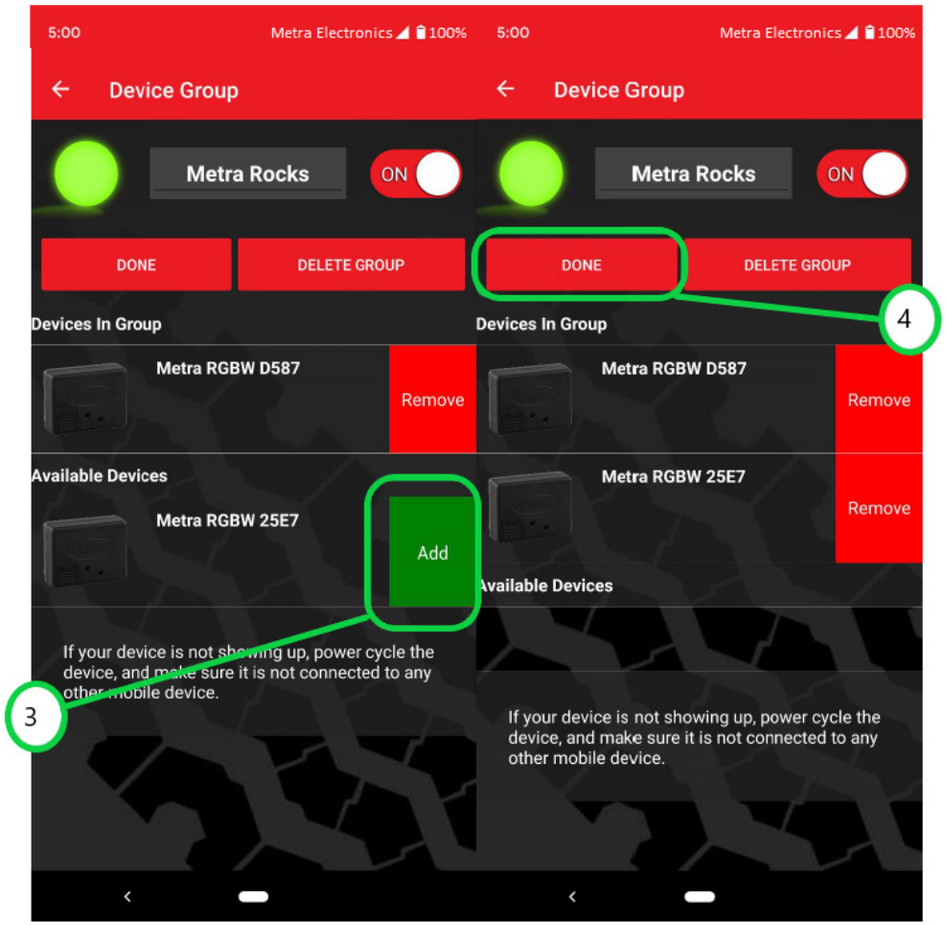
Group Controllers

- To add additional select the “Add” and the device will be added to the current group (Figure R)

All grouped controllers can now be controlled at the same time.

NOTE: Triggers colors will operate all control boxes within that group.
Learn how to have independent control of each control boxes trigger see the advanced trigger setup section.



(*Figure R*)

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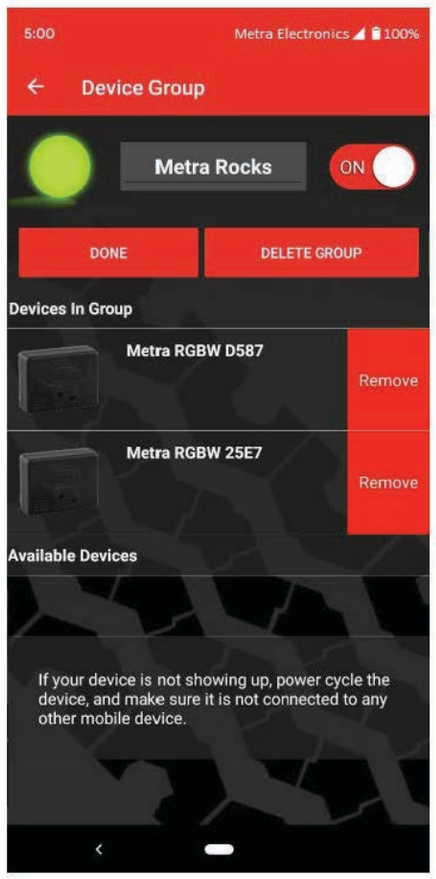
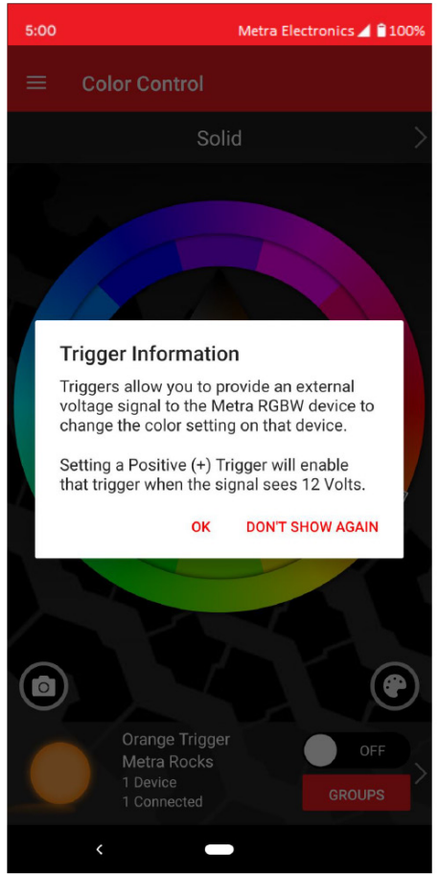
Advanced trigger setup

Following these steps to control multiple RGB, RGBW boxes.

1. Make sure each control box is in its own group. (Figure S)
2. From the Color Control Screen select the first devices trigger button. (Figure T)
3. Program the trigger colors.
4. Confirm the selections
5. Swipe left to the next controller
6. Program the trigger colors
7. Confirm the selections
8. Go into the Device Groups menu
9. Select one of the controllers
10. Delete Group, hit yes
11. Select the remaining controller and hit Add/Remove Devices
12. Add the deleted device to the primary group
13. Now the controllers are group with different trigger selections



(*Figure S*)



(*Figure T*)

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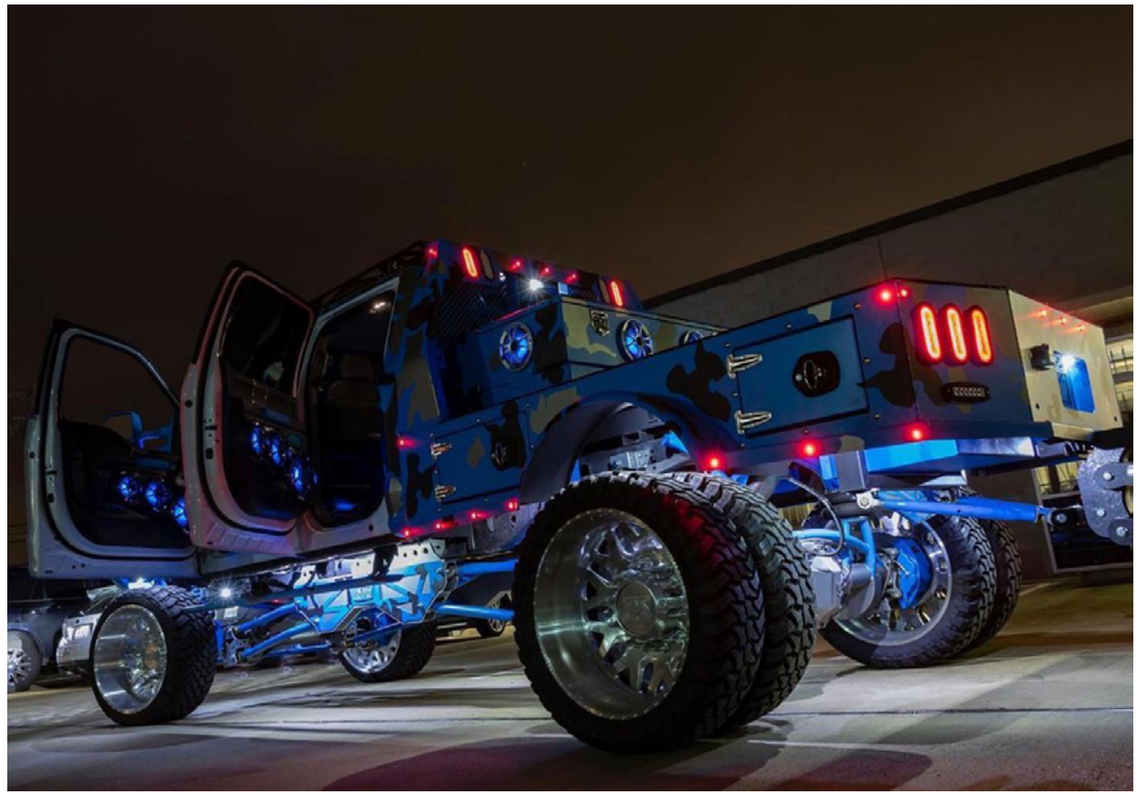
Advanced trigger setup

An example of when to use this type of setup is for independent control of the turn signals. Right Turn Signal - Right Rock lights change to amber & Left Turn Signal – Left Rock lights change to amber.

NOTE! Once Triggers are set this way the grouped triggers cannot be changed separately.

Tip: if the triggers get locked on preset colors clear the cache of the app in the bluetooth device.

Tip: If the controller has issues that can't seem to be fixed by closing the app, preform factory reset.



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RGBW APP Device Information

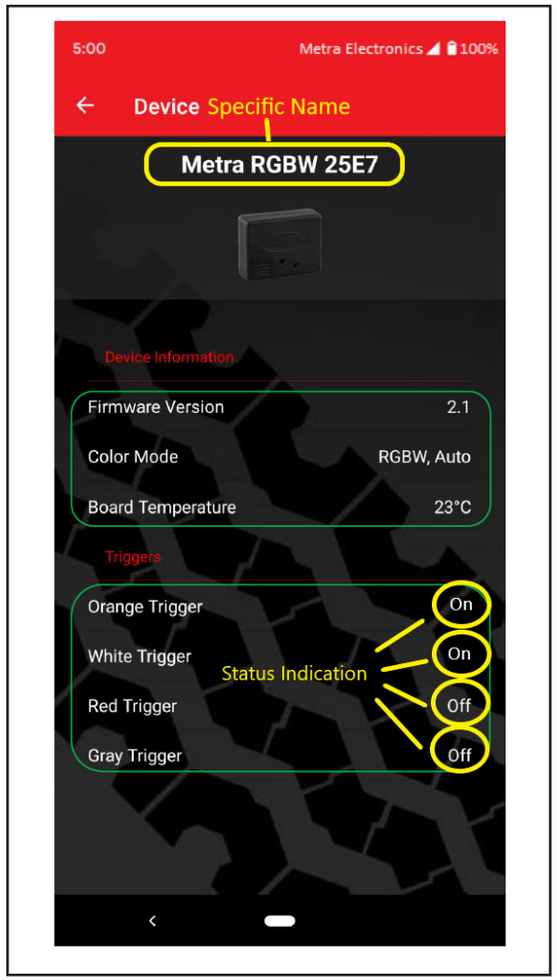
Additional information

Selecting a controller in the device menu will open a screen that will show additional information.

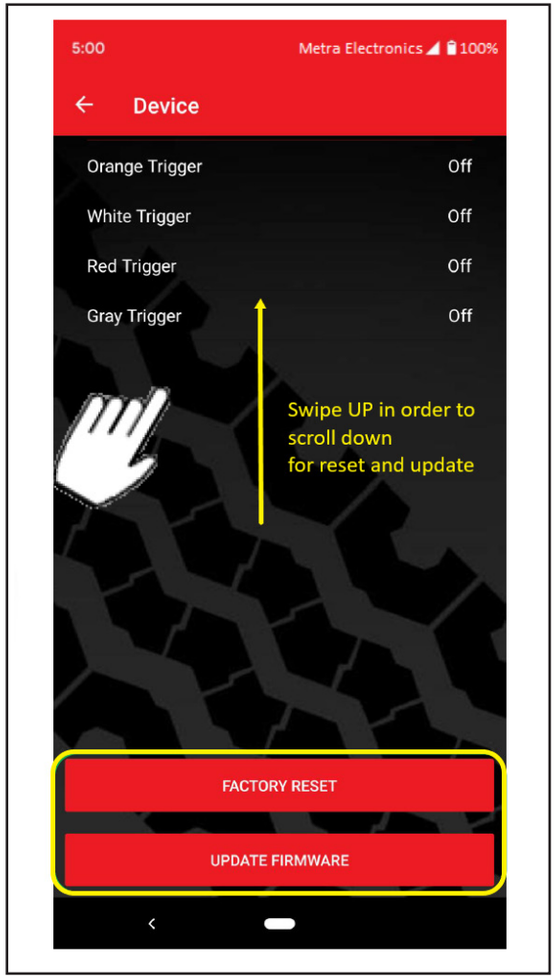
- Firmware version
- Type of RGB or RGBW lighting connected
- Temperature of the controller(s)
- Status of each trigger
  (Figure U)

Software

- Scrolling to the bottom of the page there will be update option, and factory reset (Figure V).



(*Figure U*)



(*Figure V*)

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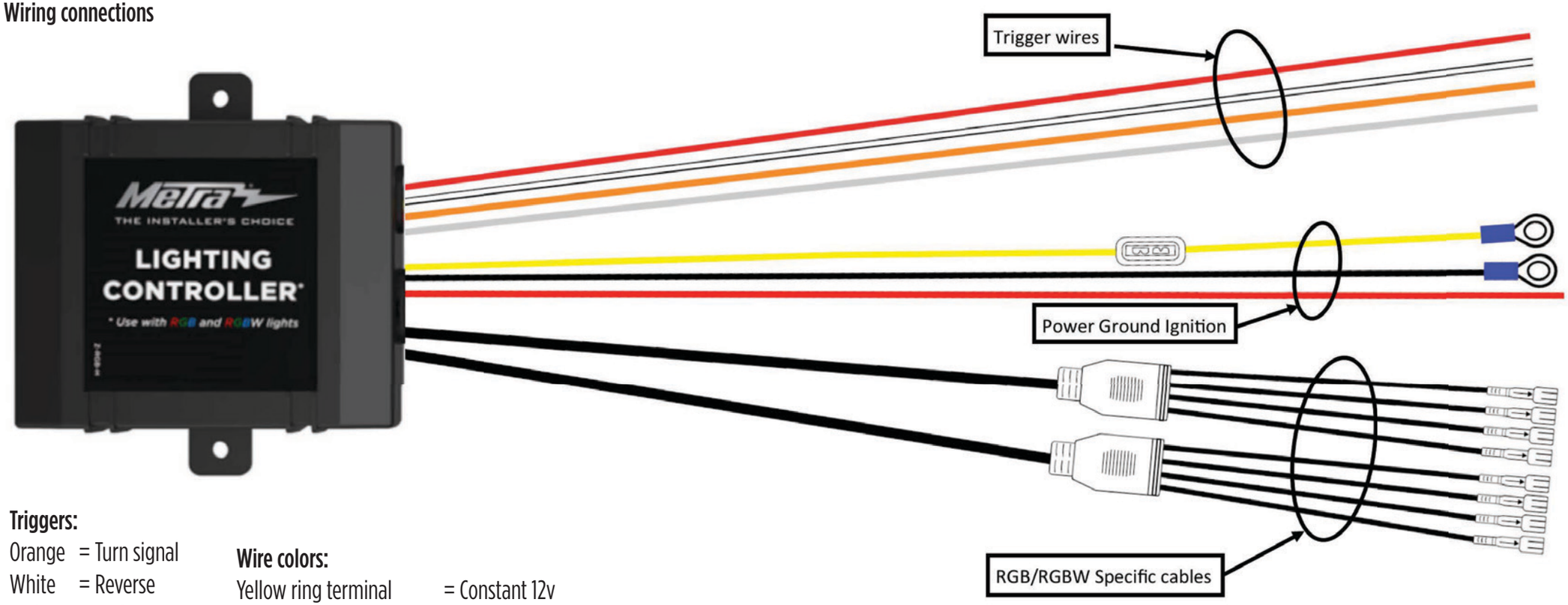
Wiring connections



Triggers:

Orange = Turn signal
White = Reverse
Red = Brake
Gray = Auxiliary

Wire colors:

Yellow ring terminal = Constant 12v
Black ring terminal = Ground
Red ring terminal = Accessory 12v

RGB / RGBW:

Specific light connectors

RGBW APP
OPERATION INSTRUCTIONS

Having difficulties? We're here to help.

Contact our Tech Support line at:
386-257-1187

Or via email at:
techsupport@metra-autosound.com

Tech Support Hours (Eastern Standard Time)
Monday - Friday: 9:00 AM - 7:00 PM
Saturday: 10:00 AM - 7:00 PM
Sunday: 10:00 AM - 4:00 PM