



# How-To Install a 200-FT RGB+ Roofline with MeshTek Control



*Intelligent Illumination  
from the Minleon Group*

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Pictured: MeshTek 4-Port  
RGB+Controller

# Parts List

Parts may vary depending on your vendor or installation:

1. MeshTek 4-port controller
2. MeshTek 2-pin Power Supply (8A/24V)
3. 4-wire Adapter(s)
4. 4-wire Pebble Lights
5. 4-Wire Pebble Mounting Track
6. Spacer Cables
7. Basic T-Way 4-pin (to split a run downstream)



# MeshTek 4-Port RGB+Controller

Wireless BLE Bluetooth Mesh technology provides stable connectivity we can rely on

1. Addresses 400 lights with on-board power supply, or up to 800 with power injections
2. Internal antenna wireless range up to 200-meters open air
3. Control with “Blueroots” app & your smart device on both iOS and Android platforms
4. Install with “BR Installer” app with exclusive backend admin features
5. IP-65 outdoor-rated
6. Drives both 12V and 24V pixels; 3-wire and 4-wire compatible
7. Expandable—group your roofline lights with other landscape & holiday lighting displays such as RGB trees, canopies & up lighting



# Powering your Lights & Controller



The 24Vdc, 8-Amp power supply will power up to 400 Pebble Lights

1. Connect the 8-Amp, 24Vdc power supply to the unique 2-pin female power connect on the 4-port controller.
2. Connect a 4-Wire Adapter to all of the output ports you plan to use.
3. Connect your lights to the 4-Wire Adapter
4. Plug your transformer into power grid



# Power Limitations

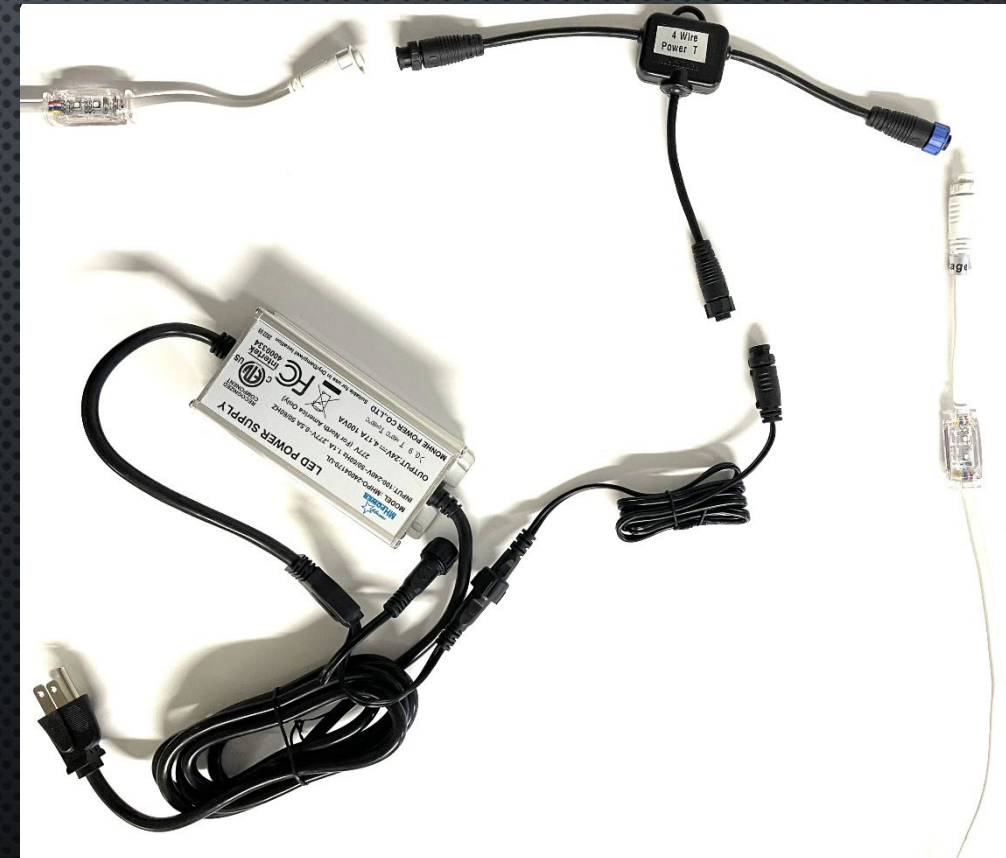
On any given port, we can power up to  
200 Pebble Lights

1. With the on-board 8-Amp power supply we can power 200L on Output 1 and 200L on Output 2, but we cannot power 400L on a single output without a power injection.
2. If we need to power more than 200 lights on a single run/port, we need to add a second (3- or 4-Amp) power supply, with a Power T (pictured)
3. Overuse of Spacer Cables can induce voltage drop. Try to limit the use of Spacer Cable to about 40 total feet on a 200-FT linear install/per power supply. If you need extra cabling, you may need to inject power before 200-lights to account for voltage drop.

**PRO TIP:** Power T's only send power forward, through its female connector. Basic T's will send power in both directions. We need the Basic T to send power back to a single-port controller, but we do not want to back feed power mid-run, as this can deteriorate the life span of the LEDs over time.



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# Connecting your RGB+Lights



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1. Light strings are connectable and will maintain 12" pixel spacing when connecting the 6" leads and tails
2. Light strings are supplied in the following lengths: 25-lights/25-foot; 10-lights/10-foot; 5-lights/5-foot and 2-lights/2-foot
3. Different lengths allow us to meet the unique lengths of different installations without having to cut or hide bulbs
4. Splicing or cutting the light strings is unsupported and will void the manufacture's warranty.
5. Wire color is manufactured in black, white, clear & sand
6. [Click here](#) for full specifications



# Spacer Cable Limitations

Cable runs of 20-FT or longer may affect the controller's Data Signal

1. Spacer Cables are provided in lengths of 10-feet, 5-feet and 2-feet. If we need a 15-foot spacer cable, connect the 5-FT cable with the 10-FT cable.
2. For simplicity, keep all cable runs at 17-foot max
3. If you absolutely need to make a jump between lights, or between the controller and first light, greater than 20-FT then Data Boosters will be needed.



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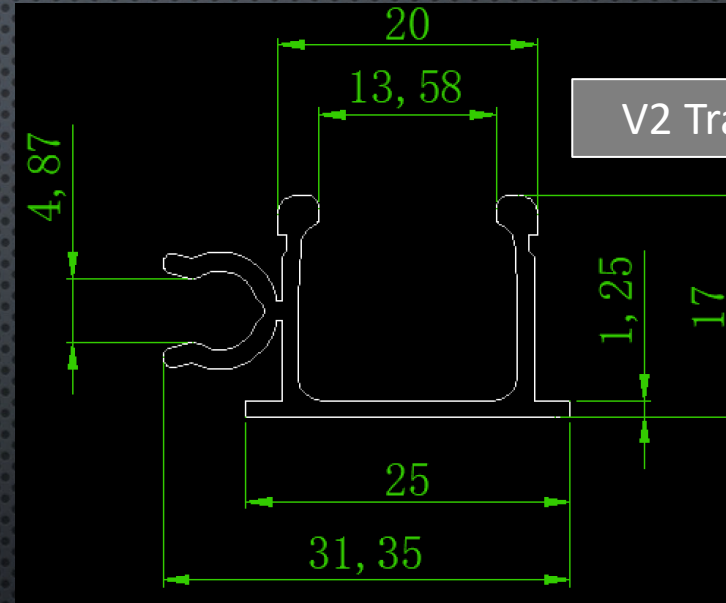
# The 4-wire Pebble Mounting Track

PVC, UV coated track is provided in 3-foot lengths in black, white, brown, sand & gray colors.

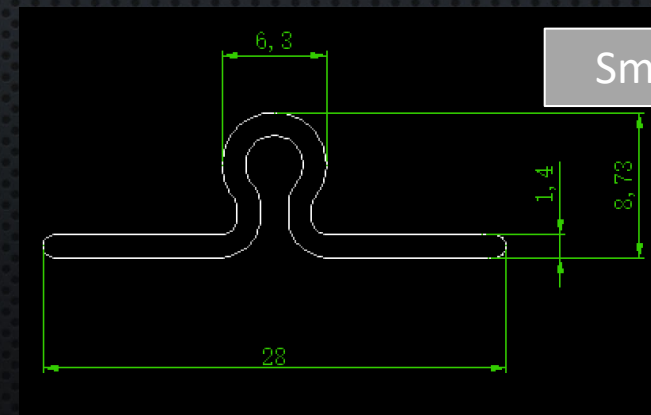
1. Our latest Version 2 track comes with a Smart Base clip for multiple installation options.
2. V2 Track can be mounted with Minleon's Smart Base with 3M Tape pre-applied, or directly to your display.
3. Installers typically use 3M double-sided tape, Liquid Nails, or screw fasteners to install the track or base. Different installations may require different techniques.
4. Individual mounting clips for Pebble Lights are also available, if preferred over the track mounting option.



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V2 Track/U-channel



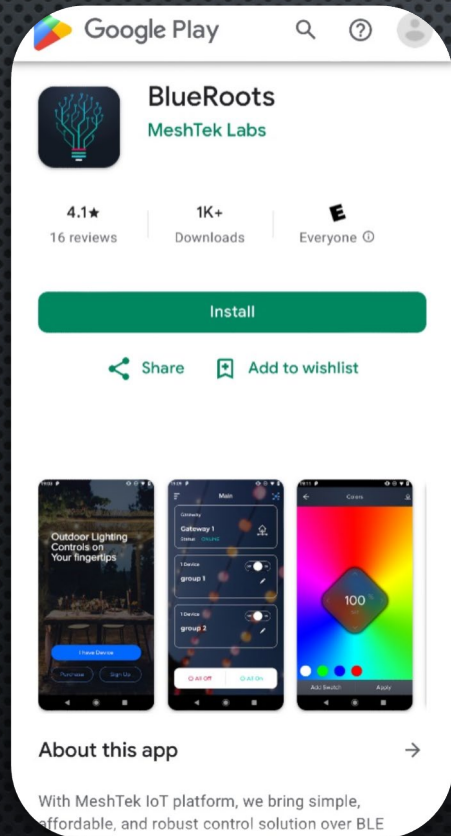
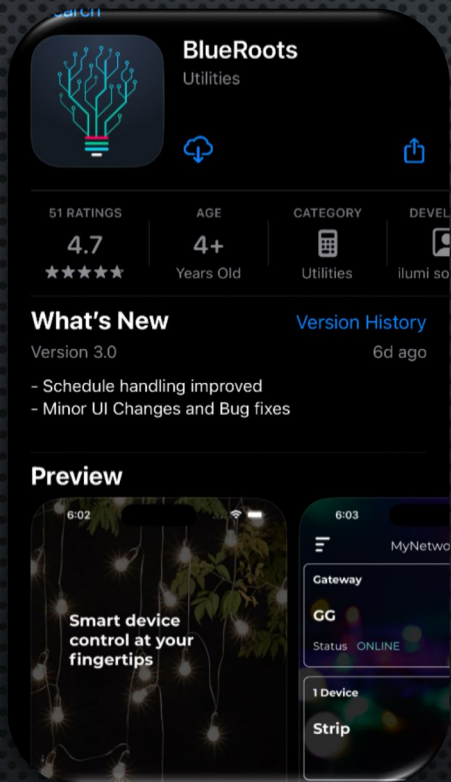
Smart Base



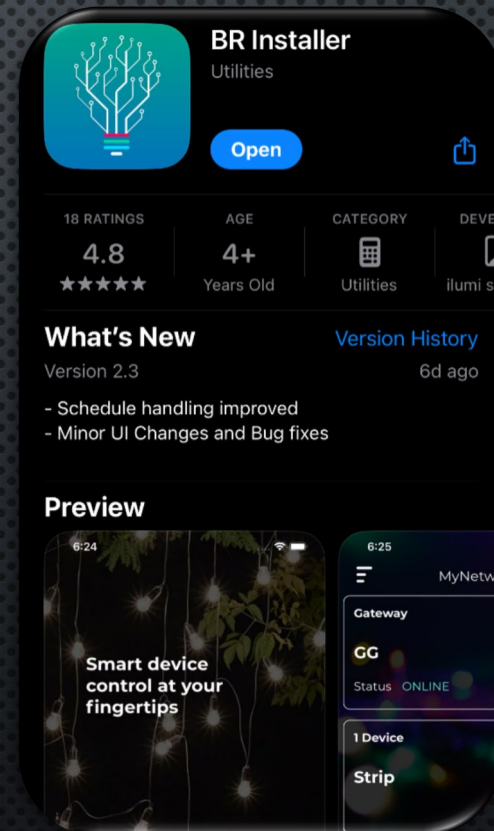
# Two Apps for Two Uses

## “Blueroots” End-USER APP:

Available for both Android & iOS Devices, schedule & control lights, but no configuration access or ability to ADD new devices.



“BR Installer”  
INSTALLER APP:  
Available only on iOS platform. ADD Devices, configure fixture types & string lengths. Will house updates appealing to contractors & installers, that end-user clients cannot access or mis-use.



**Pro Tip:** You might be familiar with the “RGB+Installer” & “RGB+Mesh” apps. These have the same functionality as the BR Apps, but will not have any of the 2024 enhancements & bug fixes. Minleon & MeshTek are encouraging all users to switch to the BR Apps. All sign-in credentials are the same & all Light Schedules will migrate for a smooth transition.



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Use Distributor Code: **Minleon112**

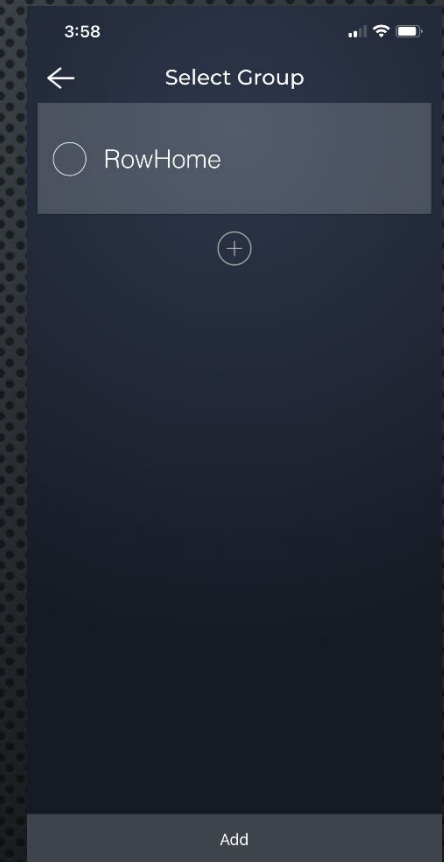
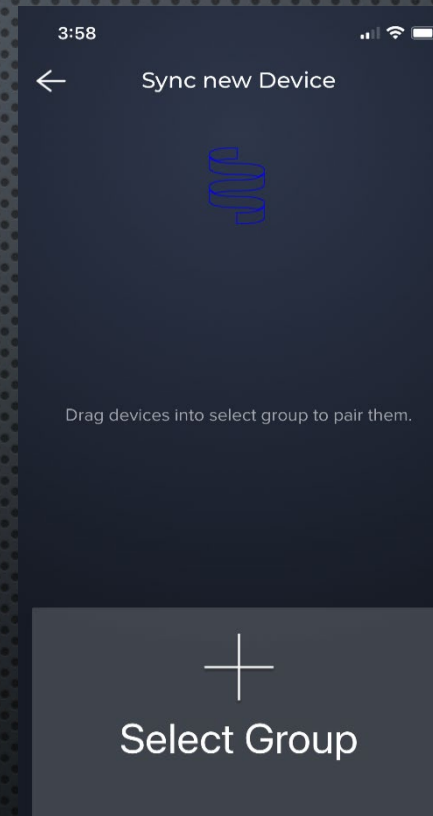
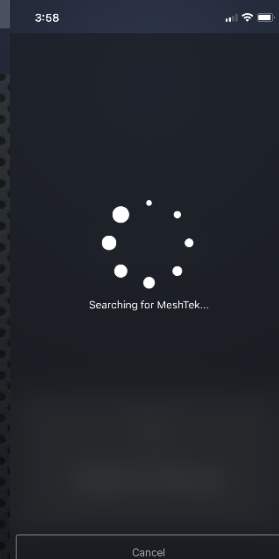
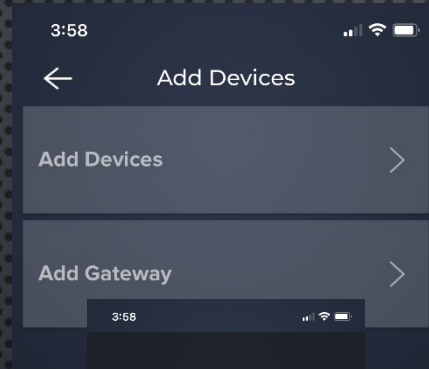
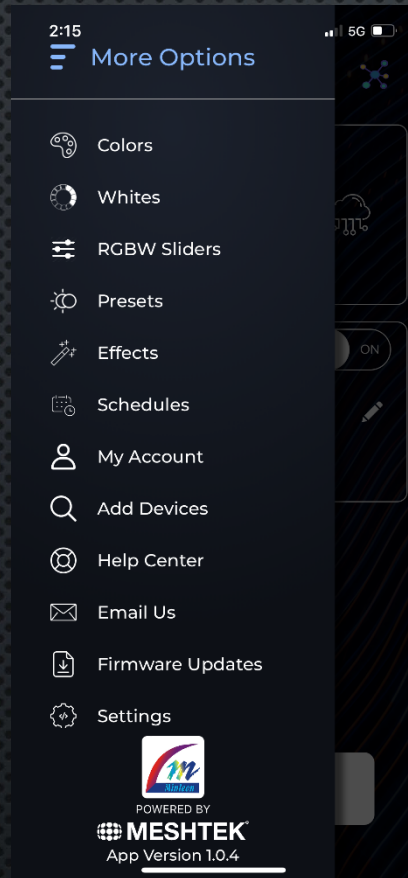
# Add your Device

Tap the 3-bar Menu at the top, left corner in the BR INSTALLER app & select “Add Devices”.

Device = MeshTek controller



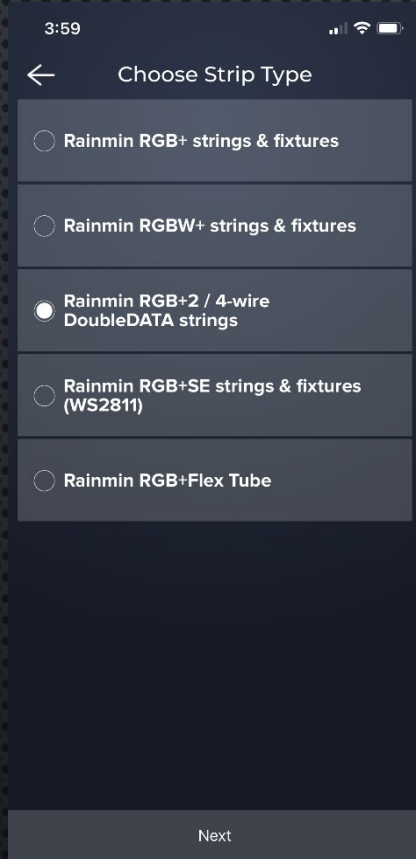
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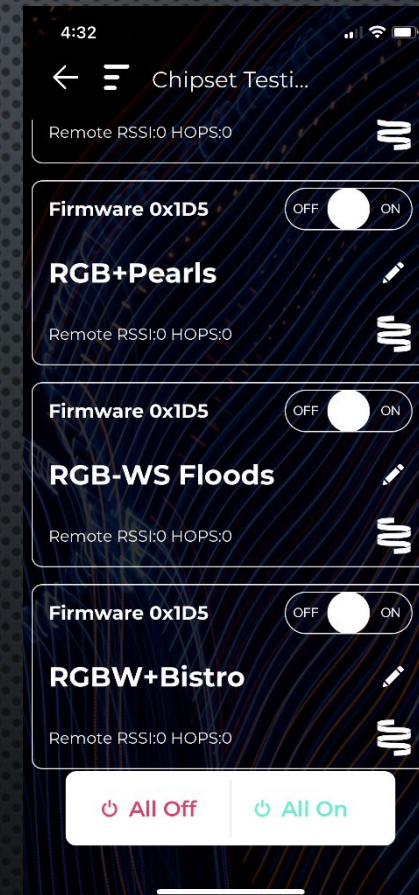
NOTE: We no longer will be able to ADD DEVICES with the “RGB+MESH” USER APP.

# Select your Fixture Type

If your colors display wrong, or if you get no light output, we likely need to change the “Strip Type” to match the lights connected to the controller. This needs to be done in the BR INSTALLER App.



**Note:** Minleon-Rainmin 4-wire Pebbles are the only light string to fit snugly in the supplied track. If you are installing 3-wire Pebbles (which are slightly smaller) with mounting clips, select **Rainmin RGB+**.



**Pro Tip:** If we enter the incorrect values or desire to add more lights to our display, we can click the pencil icon next to the controller’s name, to edit its configuration.

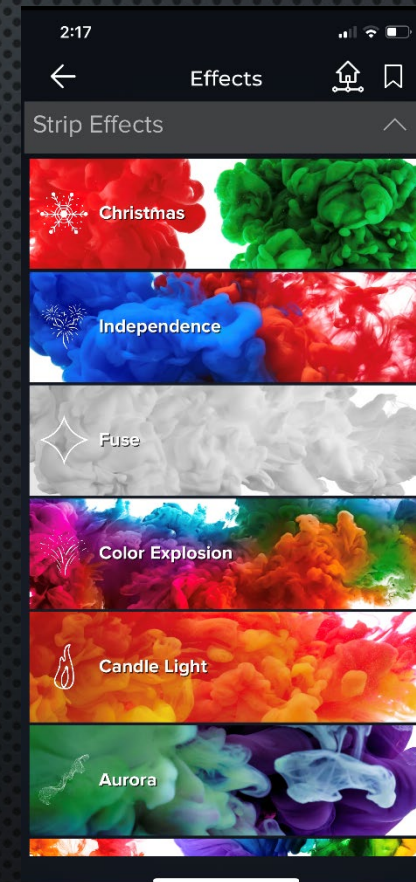
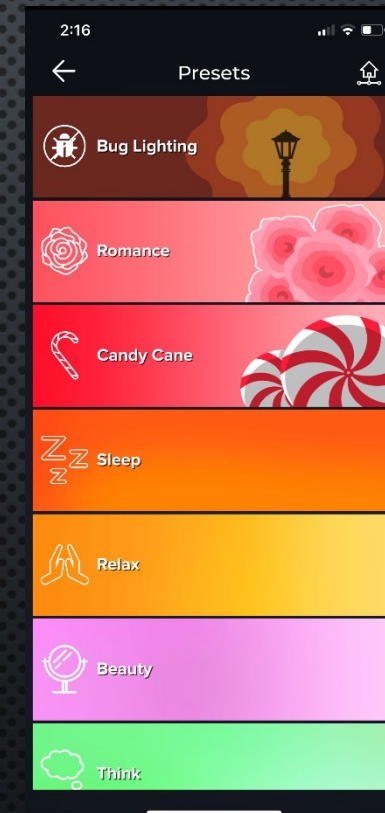
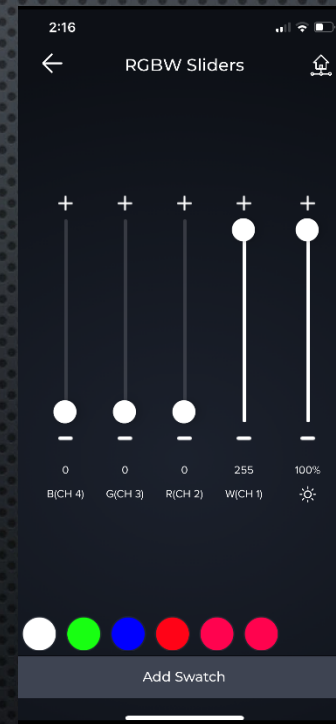
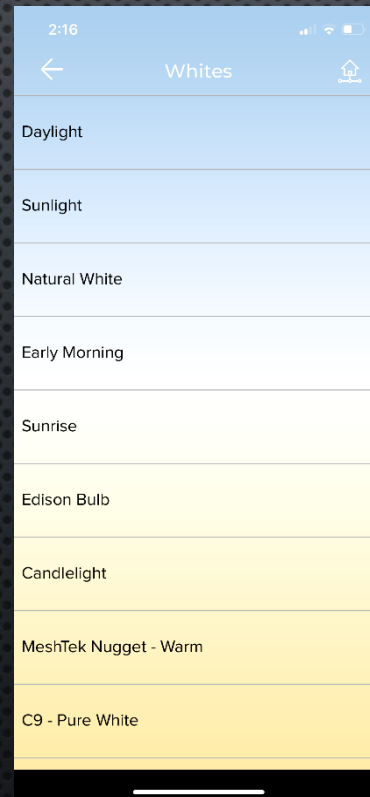
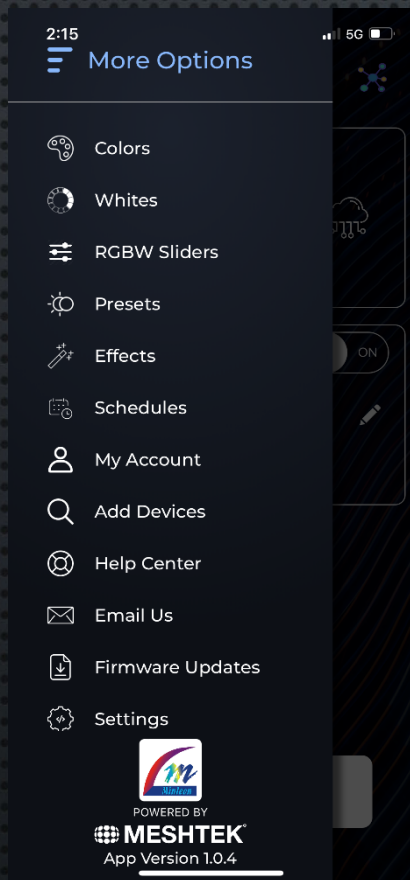
NOTE: We cannot change the Fixture Type with the “Blueroots” USER APP.

# Animate your Lights

Once you have Added your Device, tap the 3-bar Menu at the top, left corner in the app



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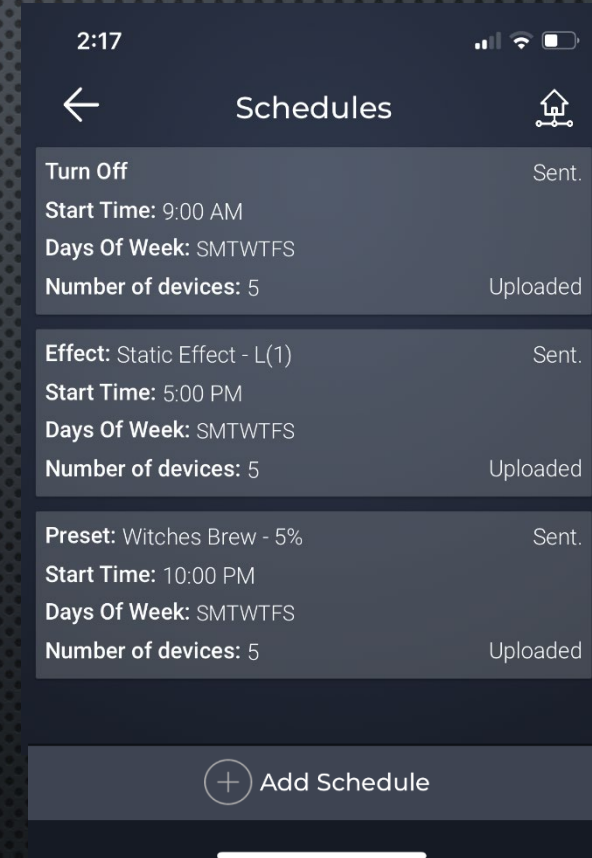
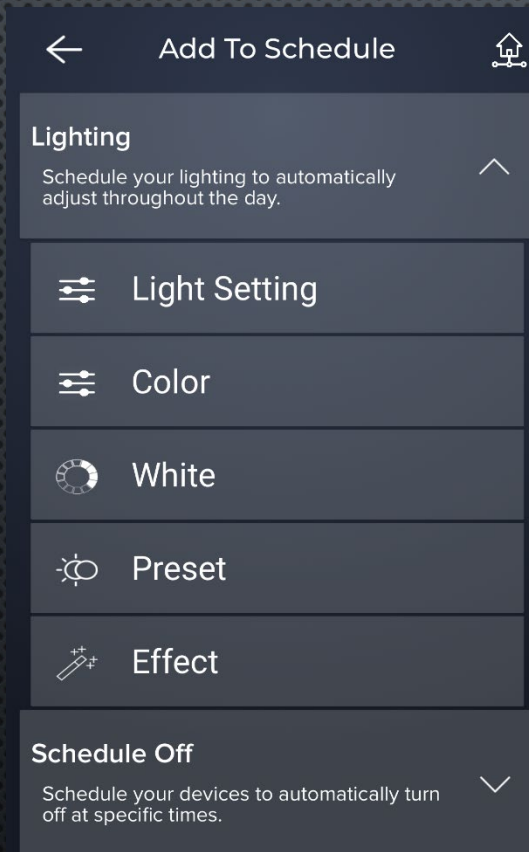
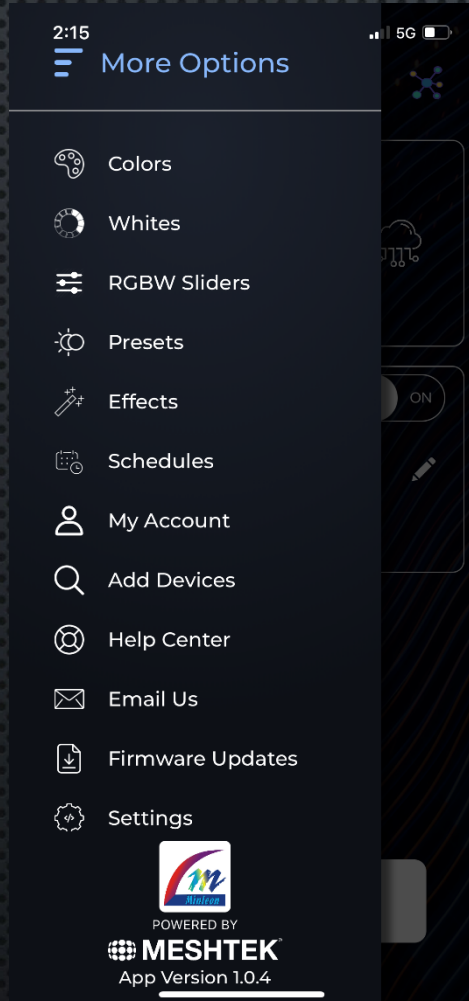
NOTE: This can be done with either APP.

# Schedule your Lights

Tap the 3-bar Menu, select "Schedules"



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NOTE: This can be done with either APP.

# Troubleshooting Resources & Support



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- 1. *If you cannot connect to your controller via the BR Installer or Blueroots App***, then your controller may need a hard reset. While your controller is powered, press the white button on the side of your device 5 times across 5 seconds. Connected lights will flash white (if in the correct Fixture mode), and the green LED should blink on the MeshTek controller—telling us it is ready to be paired.
  - If your controller was previously paired in the App, delete the controller in your App before performing a hard reset.
  - Please Remember, a *hard reset will delete any Schedules or Saved Settings* that you have created.
- 2. *If your lights do not turn on*** – be sure you selected the correct Fixture Type in the App: “4-Wire Rainmin Light Strings”. If the Fixture Type in the App does not match the lights in the field, lights may display different colors, or show no output at all.
- 3. Online resources:**
  - <https://minleonusa.com/support/?meshtek>
  - <https://minleonusa.com/support/?rainminRGB> *Power & Data Management & RGB+Accessory Guide* tutorials are a good place to start for those new to Minleon-Rainmin RGB+Line Light Strings & Fixtures.
  - For questions on these resources, or if you cannot find the answer you are looking for, write us at [support@minleonusa.com](mailto:support@minleonusa.com)