

How-To Install a 200-FT RGB+ Perimeter Lighting Kit



MESHTEK RANK

Intelligent Illumination from the Minleon Group

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Pictured: MeshTek Single-Port RGB+Controller

Parts List



Parts may vary depending on your vendor or installation:

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



MeshTek Single-Port RGB+Controller

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

- 1. Addresses 400 lights with individual control
- 2. External antenna extends wireless range up to 200-meters open air
- 3. Pairs with "RGB+Mesh" app & your smart device on both iOS and Android platforms
- 4. IP-65 outdoor-rated
- 5. Drives both 12V and 24V pixels
- 6. Expandable—group your roofline lights with other landscape lighting displays such as RGB trees, canopies & up lighting



Powering your Lights & Controller



- 1. Connect the 24Vdc power supply to the bottom of the 3-pin Basic T
- 2. Connect the MeshTek controller to one side of the Basic T
- 3. Connect the 4-Wire Adapter the other side of the Basic T
- 4. Connect your lights to the 4-Wire Adapter





Power Limitations

The 24Vdc, 4-Amp power supply will power up to 200 Pebble Lights



- 1. If we need to power more than 200 lights, we need to add a second power supply, with a Power T (pictured)
- Overuse of Spacer Cables can induce voltage drop. <u>Try</u> 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 the controller, but we do not want to back feed power midrun, as this can deteriorate the life span of the LEDs over time.



Connecting your RGB+Lights



- Light strings are connectable and will maintain 12" pixel spacing when connecting the 6" leads and tails
- 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
- 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 options
- 6. <u>Click here</u> for full specifications



Spacer Cable Limitations

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

- 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 17feet max
- If you absolutely need to make a jump between lights, or between the controller and first light, greater than 20-FT then <u>Data Boosters</u> will be needed.





The 4-wire Pebble Mounting Track

PVC, UV coated track is provided in 3-foot lengths in white, brown colors. Black, tan and gray options coming in 2023.

- 1. Our latest Version 2 track comes with a gutter clip for multiple installation options.
- 2. V2 Track can be mounted with the Smart Base, 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.





Two Apps for Two Uses Look for the Minleon logo ...

"RGB+Mesh" End-USER APP: Available for both Android & iOS Devices, schedule & control lights, but no configuration access or ability to ADD new devices.



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Pro Tip: You might notice the "Blueroots" app also controls some Minleon RGB+ strings. But future enhancements and bug fixes for Minleon RGB+ strings might only be available & unique to the "RGB+Mesh" app. This is the app Minleon will be supporting, as it will be tailored for the specific needs of our client base.

"RGB+Mesh" User App Available for both Android & iOS Devices

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Add your Device Tap the 3-bar Menu at the top, left corner in the RGB+INSTALLER app & select "Add Devices". Device = MeshTek controller





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 RGB+INSTALLER App.

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3:59 Choose Strip Type Note: Minleon-Set Strip Length Rainmin 4-wire Rainmin RGB+ strings & fixtures Increase or decrease the number of Pebbles are the only seaments until the last two LEDs on the end of your strip are blue **Rainmin RGBW+ strings & fixtures** light string to fit Rainmin RGB+2 / 4-wire snuggly in the DoubleDATA strings supplied track. If you **Rainmin RGB+SE strings & fixtures** (WS2811) are installing 3-wire Rainmin RGB+Flex Tube Pebbles (which are slightly smaller) with mounting clips, 200 Light(s) select Rainmin 630.00 cm RGB+. Direction: O Controller to End End to Controller Next

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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 "RGB+MESH" USER APP.

Animate your Lights

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





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



- If you cannot connect to your controller via the RGB+Mesh 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:
 - <u>https://minleonusa.com/support/?meshtek</u> The *Blueroots* app videos are useful, as functionality is nearly identical to the *RGB+Mesh* app. New videos featuring *RGB+Mesh* app coming soon.
 - <u>https://minleonusa.com/support/?rainminRGB</u> *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