

## ONE YEAR LIMITED WARRANTY

Metra Electronics Corporation warrants the original owner that this product will be free of defects in material or workmanship for the period of one year from the date of original purchase, if (i) the allegedly defective product has not been abused, misused or improperly maintained and or repaired during the warranty period, (ii) the defect is not caused by flooding, fire, explosion, earthquakes or similar phenomenon, and (iii) the defect is not caused by improper use, in order to obtain warranty service, contact your Metra Powersports Authorized Retailer.

Metra Electronics Corporation will, at its option, repair or replace the product free of charge.

To the full extent allowed by law, Metra Electronics Corporation excludes and disclaims liability, whether based in contract or tort (including negligence for any consequential, indirect incidental or special damages of any nature arising out of the sale, maintenance, use or failure of this product, even if Metra Electronics Corporation has been advised of the possibility of such damages in advance, and Metra Electronics Corporation limits its liability to replacement, repair or refund of the purchase price paid, at Metra's option.)

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation on implied warranty and incidental or consequential damages may not apply to you. This warranty gives you specific legal rights you may have other rights, which vary from state to state.

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[www.MetraPowerSports.com](http://www.MetraPowerSports.com)



# MPS-WHIPS

## UTV/ATV LED WHIP INSTALLATION GUIDE

## USER MANUAL

# INSTALL GUIDE:

**IMPORTANT: READ CAREFULLY BEFORE ASSEMBLY AND USE.**

- For Proper installation of this product the installer must have a good understanding of automotive electronics, systems, and wiring procedures.
- Mounting this product may require drilling holes, the installer **MUST** be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr any holes and remove any metal shards or remnants. Install grommets into all wire passage holes.
- Do not attempt to activate or control this device in a hazardous driving situation.
- Do not install this product or route any wires in the deployment area of your air bag equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owner's manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.
- This product contains either strobe light(s), halogen light(s), high-intensity LEDs and/or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.

# MPS-RGBC-4 LED CONTROLLER PHONE APP

Click to show the controller list

Click to display settings list

Pick up a color from the picture

Switch the color wheel

Adjust the color

Frequent used color (can be changed)

Click square icon to adjust the color

Classic colors

Click to shift the Functions

Controller list

Previous Track

Next Track

Random Mode

Pause or play

Color change according to the music via device play list

Color change according to the surrounding music via your device microphone

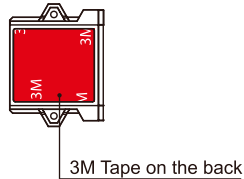
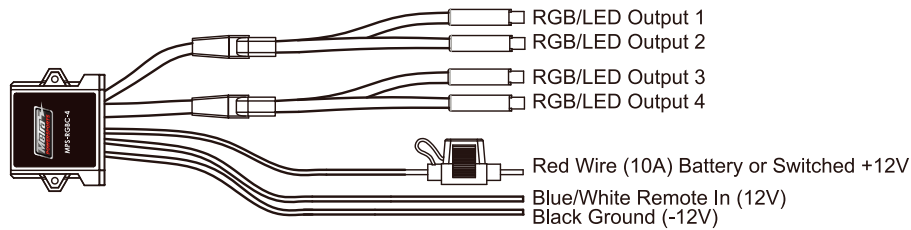
Rolling selection mode

Adjust the speed

# LED CONTROLLER INTRODUCTION/SETUP

## MPS-RGBC-4 (sold separately)

### RGB/LED 4 OUTPUT CONTROLLER



**NOTE: the MPS-RGBC-4 must operate at 11-14VDC. This controller can ONLY output 10A total current! Make sure to calculate LED current draw**

## INTRODUCTION

The MPS-RGBC-4 Mobile RGB LED Controller uses advanced PWM (Pulse Width Modulation) digital control technology for precise and accurate color control and management. The controller can ONLY be operated using the RGB MPS phone app. This app is available for both IOS and Android:



NOTE: The MPS-RGBC-4 must operate at 11-14VDC - Ensure you are using LED strips, OR speakers with LEDs which matches the output voltage/current of the controller.

# INSTALL GUIDE:

## FULL RGB

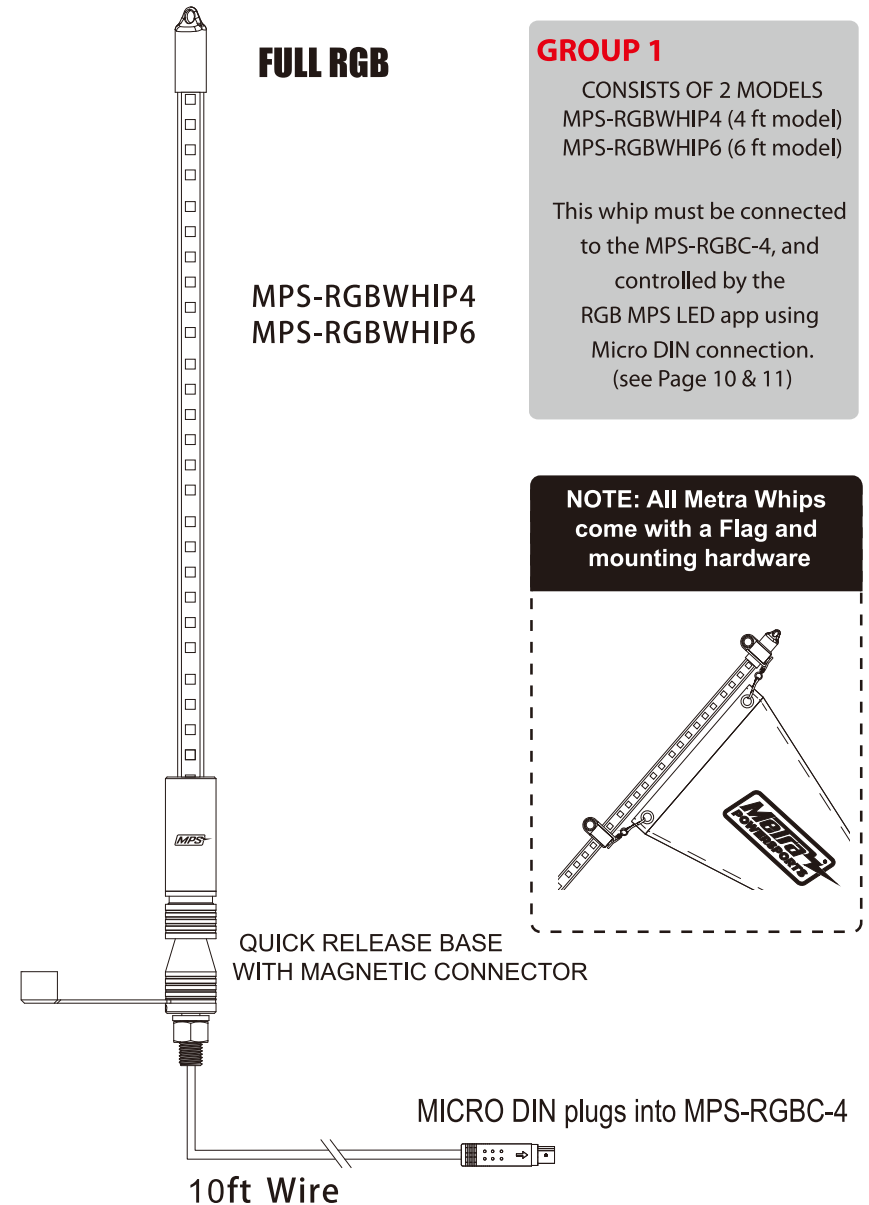
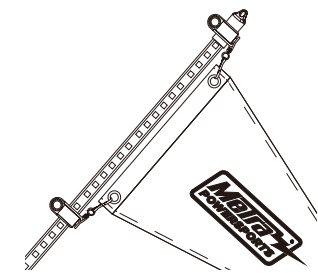
MPS-RGBWHIP4  
MPS-RGBWHIP6

### GROUP 1

CONSISTS OF 2 MODELS  
MPS-RGBWHIP4 (4 ft model)  
MPS-RGBWHIP6 (6 ft model)

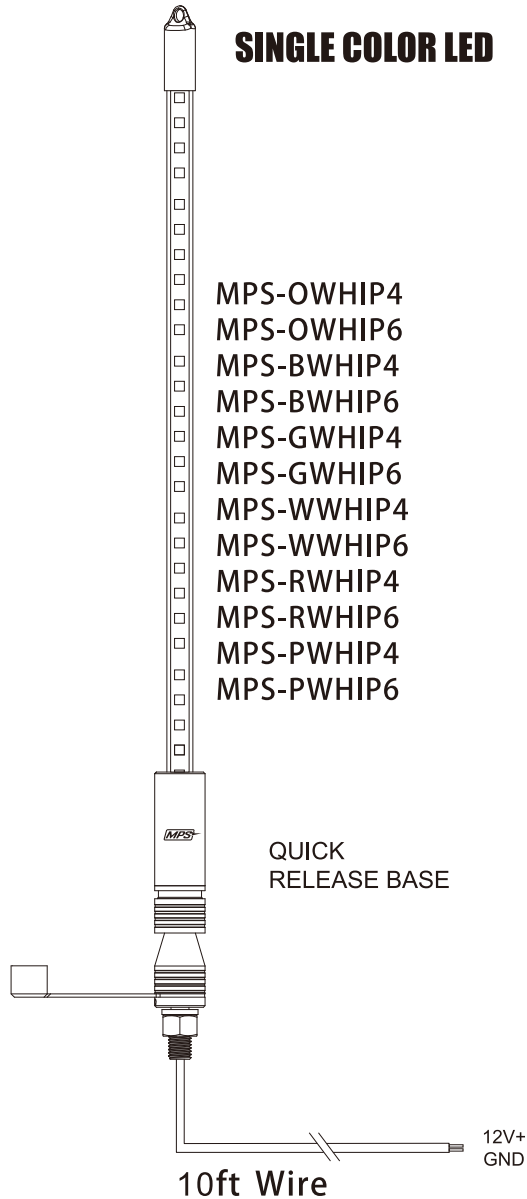
This whip must be connected to the MPS-RGBC-4, and controlled by the RGB MPS LED app using Micro DIN connection. (see Page 10 & 11)

**NOTE: All Metra Whips come with a Flag and mounting hardware**



# INSTALL GUIDE:

# INSTALL GUIDE:



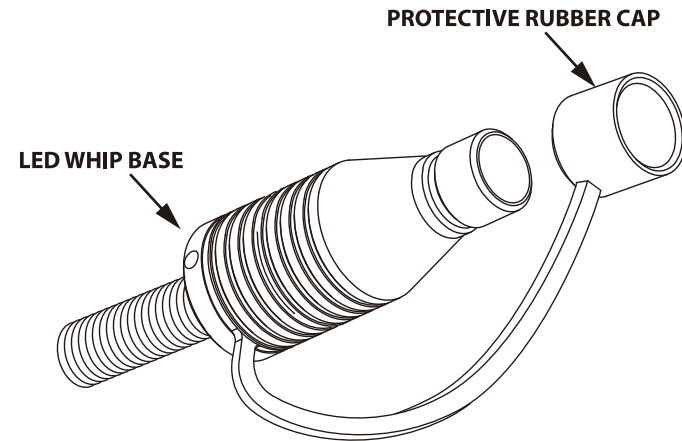
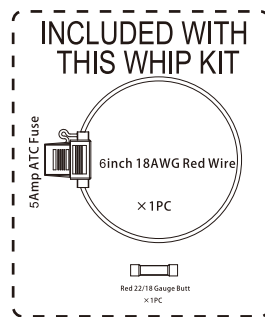
- MPS-OWhIP4
- MPS-OWhIP6
- MPS-BWhIP4
- MPS-BWhIP6
- MPS-GWhIP4
- MPS-GWhIP6
- MPS-WWhIP4
- MPS-WWhIP6
- MPS-RWhIP4
- MPS-RWhIP6
- MPS-PWhIP4
- MPS-PWhIP6

## GROUP 2

CONSISTS OF 12 MODELS  
 MPS-#WHIP4 (4 ft model)  
 MPS-#WHIP6 (6 ft model)

Single color LED whip connects to 12VDC positive (Red) and negative (Black) either thru the ignition or a switch for power on/off.

**IMPORTANT:** Use the supplied ATC fuse holder with the red butt connector, between on the 12VDC red wire connection to fuse the power to the LED light whip.



When not using the LED whip always place the supplied rubber cap over the output for the whip to protect the electrical connection from sand, dirt and water.

### Wiring:

**WARNING!** All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and FUSED at the battery to carry that load.

RED - To 12V DC Power Source

BLACK - To Chassis Ground

## SPECIFICATIONS

Input Voltage:

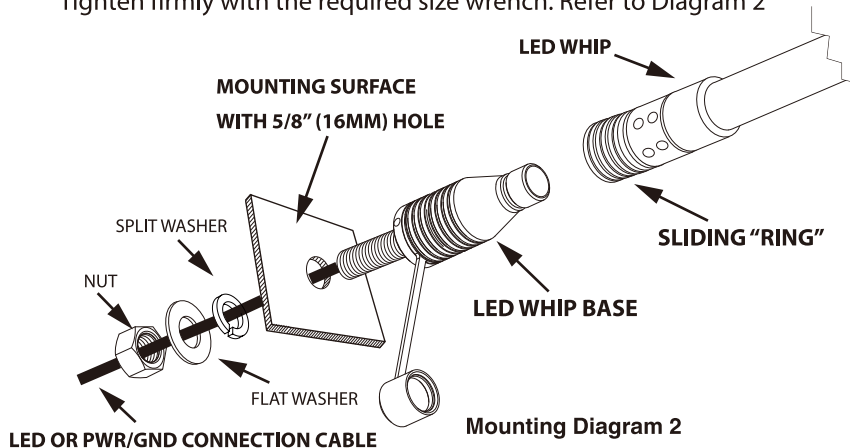
- 11 - 14V DC

Input Current:

- 1.2m Whip Light: Green, Red, Orange: Current 3A, Power@ 13.8VdDC . 41.4 W
- 1.2m Whip Light: Pink, White, Blue: Current 4A, Power@ 13.8VdDC . 55.2 W
- 1.8m Whip Light: Blue, Green, White, Pink: Current 2.2A, Power@ 13.8VdDC . 30.3W
- 1.8m Whip Light: BRed, Orange: Current 2A, Power@ 13.8VdDC . 27.6W

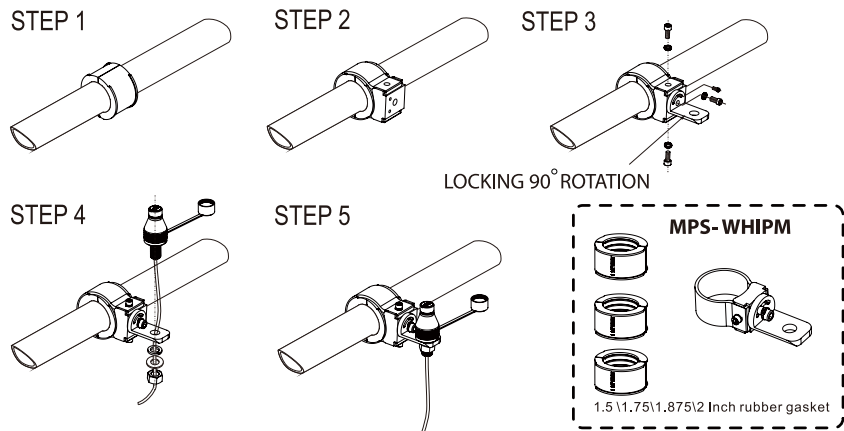
# INSTALL GUIDE:

- Pull the power or connection wires through the hole, then replace the flat washer, split washer and threaded nut back onto the threaded base. Tighten firmly with the required size wrench. Refer to Diagram 2



- Reconnect the light whip by pulling up on the locking slide ring on the whip, reinsert the whip, on certain models the whip bases are "Keyed" and you might need to turn slightly right or left to match the keys and have the whip drop onto the electrical connection.
- Attach the included "Warning Flag" to the whip using the included hardware. This flag is required in California and Arizona.

### OPTIONAL LED "WHIP" MOUNT - MPS-WHIP (sold seperately)



# INSTALL GUIDE:

## SINGLE COLOR OPTIC FIBER

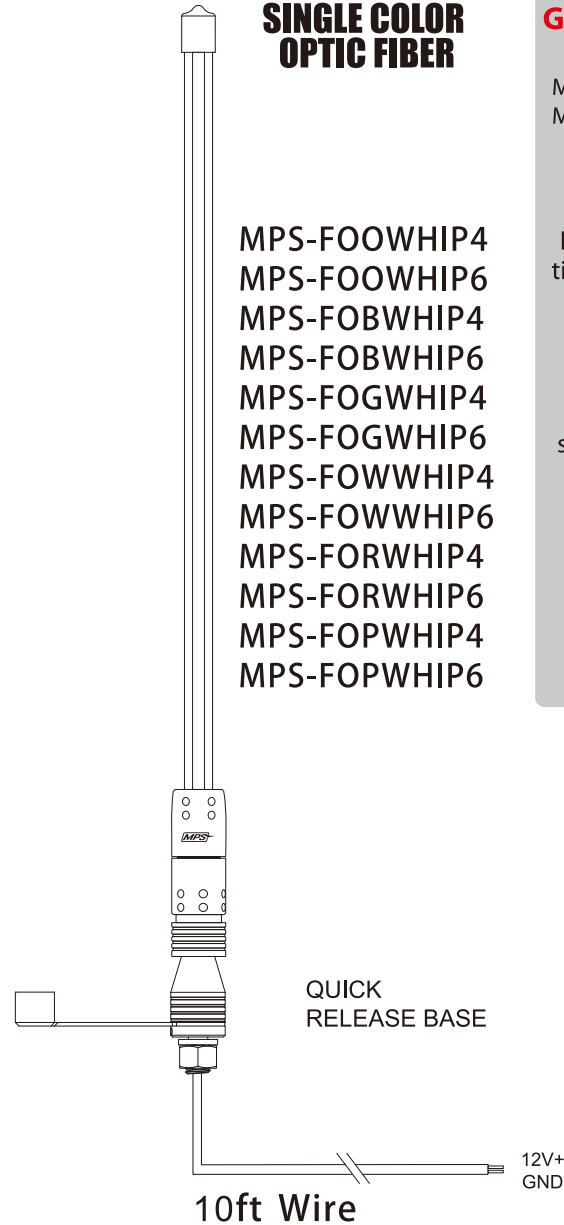
- MPS-FOOWHIP4
- MPS-FOOWHIP6
- MPS-FOBWHIP4
- MPS-FOBWHIP6
- MPS-FOGWHIP4
- MPS-FOGWHIP6
- MPS-FOWWHIP4
- MPS-FOWWHIP6
- MPS-FORWHIP4
- MPS-FORWHIP6
- MPS-FOPWHIP4
- MPS-FOPWHIP6

### GROUP 3

CONSISTS OF 12 MODELS  
MPS-####WHIP4 (4 ft model)  
MPS-####WHIP6 (6 ft model)

Single color fiber optic whip connect to 12VDC positive (Red) and negative (Black) either thru the ignition or a switch for power on/off.

**IMPORTANT:** Use the supplied ATC fuse holder with the red butt connector, between on the 12VDC red wire connection to fuse the power to the LED light whip.



## INSTALL GUIDE:

### FULL RGB WITH CONTROLLER BUILT-IN

MPS-CRGBWHIP4  
MPS-CRGBWHIP6

#### GROUP 4

CONSISTS OF 2 MODELS  
MPS-CRGBWHIP4 (4 ft model)  
MPS-CRGBWHIP6 (6 ft model)

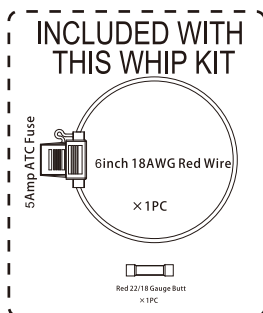
These RGB LED whips come with lighting controller built-in the base, connect to 12VDC positive (Red) and negative (Black) either thru the ignition or a switch for power on/off.

**IMPORTANT:** Use the supplied ATC fuse holder with the red butt connector between on the 12VDC red wire connection to fuse the power to the LED light whip.

QUICK RELEASE BASE WITH MAGNETIC CONNECTOR

10ft Wire

12V+  
Gnd  
Remote In



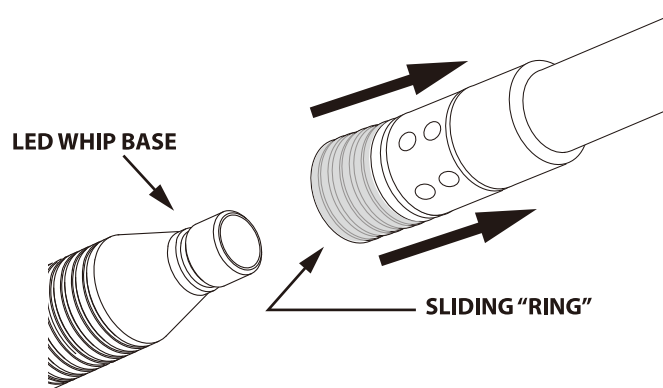
## INSTALL GUIDE:

### MOUNTING TO CHASSIS FRAME:

**CAUTION!** Permanent mounting of this product could require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged while performing this process. Like other wiring, brake lines, gas tanks, etc.

Check both sides of the mounting surface for obstruction visually before starting. If damage to other components is likely, select a different mounting location/position.

1. Remove the LED whip from the mounting base by sliding the locking ring up on the whip, releasing the locking mechanism, and pull the whip straight up. Refer to Diagram 1 (below)



Mounting Diagram 1

2. Remove the nut, washer and split washer from the threaded post on the base. Refer to Diagram 2
3. Select the desired mounting surface.
4. Place the threaded base over the desired mounting surface, mark the area where the mounting hole is to be drilled. Confirm that no vehicle parts could be damaged by the drilling process.
5. Using a 5/8" (16mm) drill bit, drill the mounting hole, thoroughly de-burr the hole.

