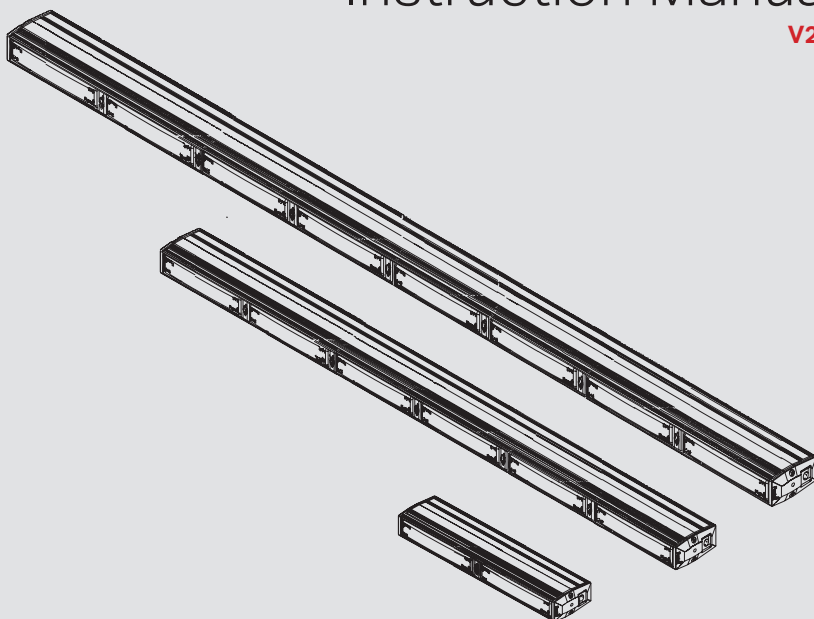


# FUSION LIGHT STICKS

## Instruction Manual

**V2.0**



# FUSION

**Model #** - FN-0116, FN-0216,  
FN-0416, FN-0616, FN-0816,  
FN-8816, FN-0117, FN-0217, FN-0417,  
FN-0617, FN-0817.

This instruction manual serves as a guide for the **Fusion Series**.

**IMPORTANT!** Please read through all provided instructions and any listed warnings in regards to product use.



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## Safety Regulations

The following provides all the information necessary to safely operate the previously listed products of Feniex Industries, Inc. Please read this manual thoroughly before installing or operating your new product in order to prevent any damage or injury. Failure to follow the listed instructions in this manual may result in damage to your products or personal injury.

- Proper installation of this product requires good knowledge of automotive systems, electronics and procedures.
- Please guarantee all vital components of the vehicle are not in danger of being damaged by drilling holes necessary for installation. Check all sides of the mounting surface before drilling any holes into the vehicle.
- Do not install this product in any way that interferes with the deployment of the air bag. Doing so may damage the effectiveness of the air bag and can lead to serious personal and vehicle injury. The installer will assume full responsibility of proper installation of the new unit.
- Please clean the mounting surface before installation of the unit when using tape, brackets, magnet, Velcro or suction cups.
- The product's ground wire must be connected directly to the Negative (-) battery post for effective use of the unit. Please follow all wiring guidelines provided to guarantee long lifespan and productivity. Failing to follow these instructions may result in damage to the product.

## Warranty

Feniex Industries, Inc. warrants to the original purchaser that the product shall be free from defects in material and workmanship for 5 years from the date of purchase for all LED products. Feniex Industries warranties speakers, sirens, flashers, and controllers for 2 years.

If a warranty problem occurs, please contact customer support at 1.800.615.8350 or visit the web site at [www.Feniex.com](http://www.Feniex.com). If the product needs to be returned for repair or replacement, call our customer support line to receive a return merchandise authorization number.

Operational times are from 10 a.m. to 5 p.m. central time, Monday through Friday. Please do not send in product without contacting support first for a RMA number.

## Service After Expiration

Feniex Industries will still provide service for all products after expiration of the warranty. For any issues, call the customer support line. In some instances it may be necessary for the product to be shipped, freight prepaid and insured for loss or damage to Feniex headquarters.

**Warning!** Utilizing non-factory screws and mounting brackets may result in loss of warranty coverage.

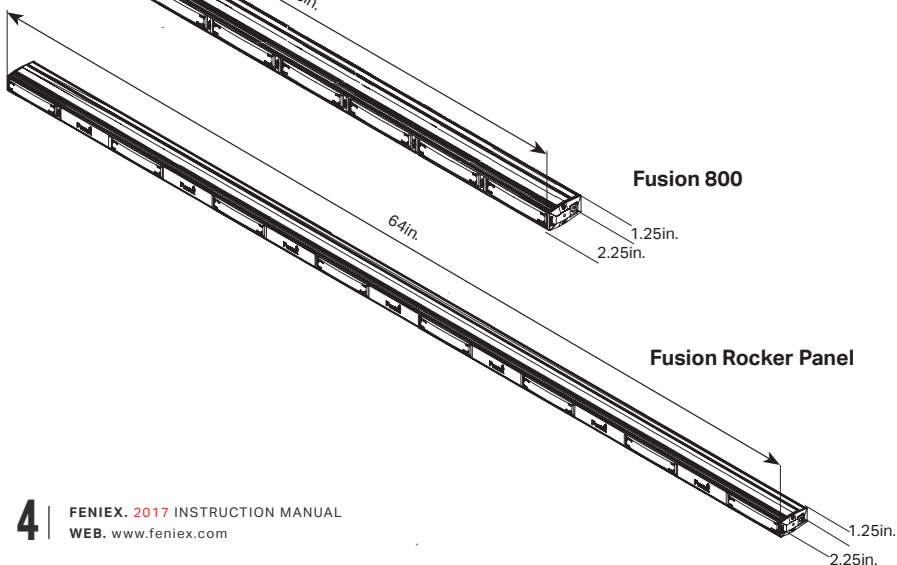
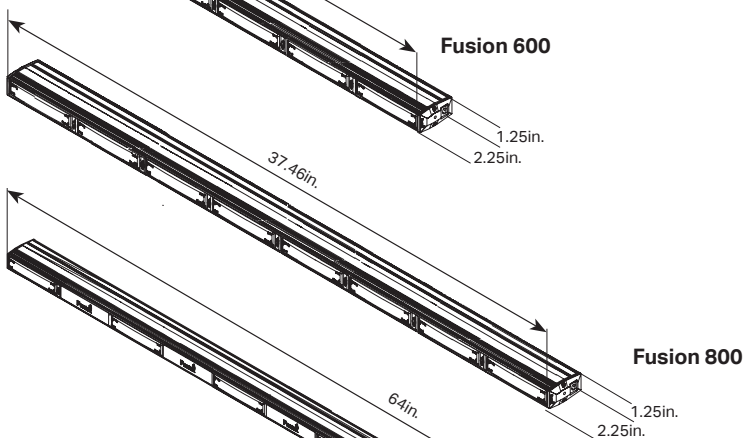
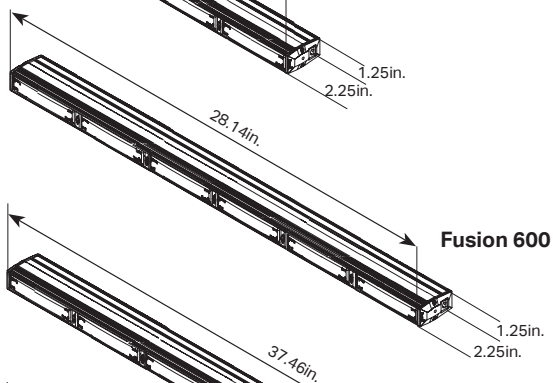
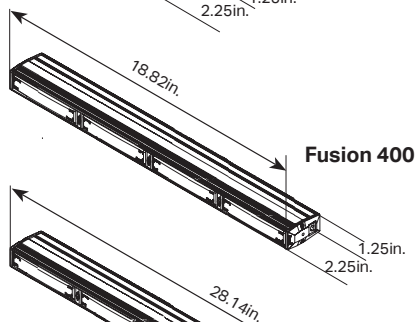
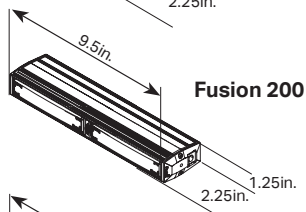
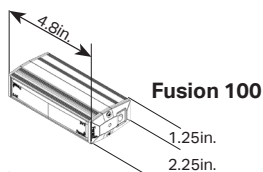
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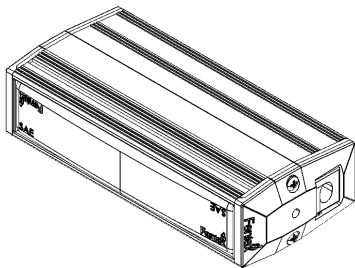
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# EQUIPMENT DIMENSIONS



Fusion 100 Wiring



Fusion 100 Wiring Diagram

Wire Color:    Function:

■ Black	12V (-)
■ Red	12V (+) Mode 1
□ White	Mode 2
■ Green	Pattern/Sync

Fusion 100 Work Light Wiring Diagram

Wire Color:    Function:

■ Black	12V (-)
■ Red	12V (+) Mode 1

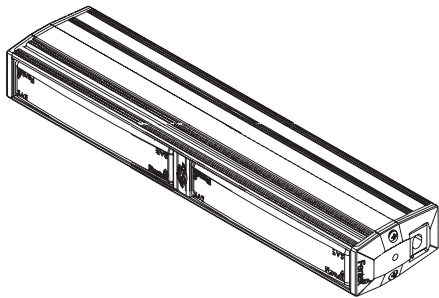
Alternate Light Heads:

For the light heads to alternate, one light head must be set as master and the other as slave on the mode wire intended for use. To do so, hold the blue (flash pattern changer) wire to ground for 3 seconds.

- **For Single color:** if all LEDS turn on this indicates master mode. If no LEDS turn on this indicates slave mode.
- **For Dual color:** if all LEDS turn on this indicates master mode. If half of the LEDs turn on this indicates slave mode.

**Please Note!** The Fusion 100 features four wires: Red [12V+], Black [12V-], Yellow [12V+], and Blue [Flash Pattern Changer]. To change patterns, momentarily connect the blue wire to the activated Black [12V-] wire. Note that Mode 2 will override Mode 1.

## Fusion 200 Wiring



### Fusion 200 Wiring Diagram

Wire Color:	Function:
Black	12V (-)
Red	12V (+) Mode 1
White	Mode 2
Green	Pattern/Sync 12V (-)

### Fusion 200 Work Light Wiring Diagram

Wire Color:	Function:
Black	12V (-)
Red	12V (+) Mode 1

### Alternate Light Heads:

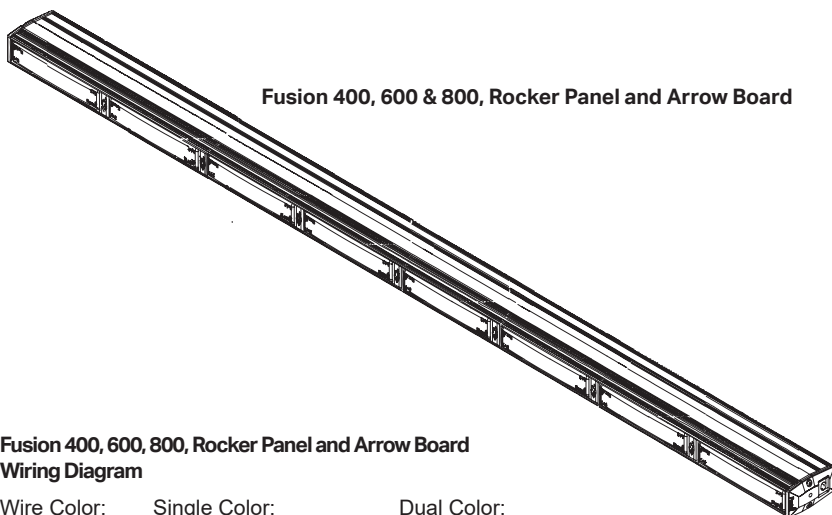
For the light heads to alternate, one light head must be set as master and the other as slave on the mode wire intended for use. To do so, hold the blue (flash pattern changer) wire to ground for 3 seconds.

- **For Single color:** if all LEDS turn on this indicates master mode. If no LEDS turn on this indicates slave mode.
- **For Dual color:** if all LEDS turn on this indicates master mode. If half of the LEDs turn on this indicates slave mode.

**Please Note!** The Fusion 100 features four wires: Red [12V+], Black [12V-], Yellow [12V+], and Blue [Flash Pattern Changer]. To change patterns, momentarily connect the blue wire to the activated Black [12V-] wire. Note that Mode 2 will override Mode 1.

# 400, 600, 800, ROCKER & ARROW BOARD

## WIRING DIAGRAM



### Fusion 400, 600, 800, Rocker Panel and Arrow Board Wiring Diagram

Wire Color:	Single Color:	Dual Color:
Black	12V (-)	12V (-)
Red	12V (+)	12V (+)
White	Takedown*	Takedown*/Flood
Yellow	Pattern Change 12V (+)	Pattern Change
Green	Takedown Flashing*	Mode Two
Blue	Left Arrow	Left Arrow
Brown	Mode One	Mode One
Gray	Right Arrow	Right Arrow

### Fusion 400, 600, 800 Work Light Wiring Diagram

Wire Color:

Black	12V (-)
Red	12V (+)

**\*Please Note!** These modes only function when the unit has takedowns in the assembly.

# 400, 600, 800 & ROCKER & ARROW BOARD

## WIRING INSTRUCTIONS

**Step 1:** In order to power the unit, extend the red, 12V(+) wire to the 12V(+) post of the vehicle's battery. Extend the black 12V(-) wire to the ground post of the vehicle's battery.

**Step 2:** To turn the lightstick on, connect the brown wire to a 12V(+) source.

**Step 3:** Momentarily connect the yellow wire on a 12V(+) source to change flash patterns.

**Step 4:** For left arrow function, connect the blue wire to a 12V(+) post (switch). There are 2 different left arrow flash patterns. To select a pattern, engage the blue wire to a 12V(+) source and momentarily connect the yellow wire on a 12V(+) source to select the desired pattern.

**Step 5:** For right arrow function, connect the gray wire to a 12V(+) post (switch). There are 2 different right arrow flash patterns. To select a pattern, engage the gray wire a 12V(+) source and momentarily connect the yellow wire on a 12V(+) source to select the desired pattern.

**Step 6:** In order to achieve a center out directional pattern, connect both the gray and blue wires to a 12V(+) post (switch). There are 2 different center out flash patterns. To select a pattern, engage the blue and gray wire to a 12V(+) source and momentarily connect the yellow wire on a 12V(+) source to select the desired pattern.

**Step 7:** For takedown steady functionality, connect the white wire to a 12V(+) post (switch).

**Step 8:** For takedown flashing, connect the green wire to a 12V+ (post). Please note that for dual color bars, the green wire will activate mode 2, unless otherwise programmed.

.....

////////////////////////////////////  
**Important Note!** *Takedown steady overrides  
takedown flashing*  
////////////////////////////////////

### Activate Takedown Flashing for Dual Color:

**Step 1:** Connect the black wire to the battery's 12V(-) ground.

**Step 2:** Select the wire that will be set as the takedown flashing mode wire, either the green or brown wire.

**Step 3:** Twist the selected mode (green or brown), red, white, and yellow wires together.

**Step 4:** Power the lightbar on by connecting the twisted wires to the battery's positive (+). Once activated, the takedown steady function will engage. To verify takedowns are flashing, disconnect Takedown Steady (white) wire from power.

**Step 5:** Repeat steps 1 through 3 to deactivate Takedown Flashing.



The flash patterns are listed in consecutive order of appearance. To select a certain flash

## Flash Patterns Single Color: Fusion 100 & 200

1. Single Slow
2. Single Fast
3. Single Combo
4. Double Slow
5. Double Fast
6. Double Combo
7. Triple Slow
8. Triple Fast
9. Triple Combo
10. Brake Pop
11. Steady On

## Flash Patterns Dual Color: Fusion 100 & 200

1. Color 1- Single Slow
2. Color 1- Single Fast
3. Color 1- Single Combo
4. Color 1- Double Slow
5. Color 1- Double Fast
6. Color 1- Double Combo
7. Color 1- Triple Slow
8. Color 1- Triple Fast
9. Color 1- Triple Combo
10. Color 2- Single Slow
11. Color 2- Single Fast
12. Color 2- Single Combo
13. Color 2- Double Slow
14. Color 2- Double Fast
15. Color 2- Double Combo
16. Color 2- Triple Slow
17. Color 2- TripleFast
18. Color 2- Triple Combo
19. Color 1&2 / No Off Time- Single Slow
20. Color 1&2 / No Off Time- Single Fast
21. Color 1&2 / No Off Time- Single Combo
22. Color 1&2 / No Off Time- Double Slow
23. Color 1&2 / No Off Time- Double Fast
24. Color 1&2 / No Off Time- Double Combo
25. Color 1&2 / No Off Time- Triple Slow
26. Color 1&2 / No Off Time- Triple Fast

The flash patterns are listed in consecutive order of appearance. To select a certain flash

**Flash Patterns Dual Color:  
Fusion 100 & 200**

27. Color 1&2 / No Off Time- Triple Fast

28. Color 1&2 / No Off Time- Triple Combo

29. Color 1&2 /Off Time- Single Slow

30. Color 1&2 /Off Time- Single Fast

31. Color 1&2 /Off Time- Single Combo

32. Color 1&2 /Off Time- Double Slow

33. Color 1&2 /Off Time- Double Fast

34. Color 1&2 /Off Time- Double Combo

35. Color 1&2 /Off Time- Triple Slow

36. Color 1&2 /Off Time- Triple Fast

37. Color 1&2 /Off Time- Triple Combo

38. Color 1- Brake Pop

39. Color 2- Brake Pop

40. Color 1- Steady On

41. Color 2- Steady On

The flash patterns are listed in consecutive order of appearance. To select a certain flash

## Flash Patterns Single Color: Fusion 400, 600, 800 & Rocker Panel

1.	Cluster
2.	Attack
3.	Night Ride
4.	Combo Slow-Fast
5.	Combo Slow
6.	Combo Fast
7.	Half Half Slow
8.	Half Half Fast
9.	One One Slow
10.	One One Fast
11.	Two Two Slow
12.	Two Two Fast
13.	All On Slow
14.	All On Fast
15.	In Out Slow
16.	In Out Fast
+ Directional Patterns	

## Flash Patterns Dual Color: Fusion 400, 600, 800 & Rocker Panel

1.	Color 1-Cluster
2.	Color 1-Attack
3.	Color 1-Night Ride
4.	Color 1-Half Half Slow
5.	Color 1-Half Half Fast
6.	Color 1-One One Slow
7.	Color 1-One One Fast
8.	Color 1-Two Two Slow
9.	Color 1-Two Two Fast
10.	Color 1-All On Slow
11.	Color 1-All On Fast
12.	Color 1-In Out Slow
13.	Color 1-In Out Fast
14.	Color 1-Combo Slow
15.	Color 1-Combo Fast
16.	Color 1-Combo Slow-Fast
17.	Color 2-Cluster
18.	Color 2-Attack
19.	Color 2-Night Ride
20.	Color 2-Combo Slow
21.	Color 2-Combo Fast
22.	Color 2-Combo Slow-Fast
23.	Color 2-Half Half Slow
24.	Color 2-Half Half Fast
25.	Color 2-One One Slow
26.	Color 2-One One Fast
27.	Color 2-Two Two Slow
28.	Color 2-Two Two Fast
29.	Color 2-All On Slow
30.	Color 2-All On Fast
31.	Color 2-In Out Slow
32.	Color 2-In Out Fast

## Flash Patterns Dual Color: Fusion 400, 600, 800 & Rocker Panel

- |     |                           |
|-----|---------------------------|
| 33. | Color 1&2-Cluster         |
| 34. | Color 1&2-Attack          |
| 35. | Color 1&2-Night Ride      |
| 36. | Color 1&2-Half Half Slow  |
| 37. | Color 1&2-Half Half Fast  |
| 38. | Color 1&2-One One Slow    |
| 39. | Color 1&2-One One Fast    |
| 40. | Color 1&2-Two Two Slow    |
| 41. | Color 1&2-Two Two Fast    |
| 42. | Color 1&2-All On Slow     |
| 43. | Color 1&2-All On Fast     |
| 44. | Color 1&2-In Out Slow     |
| 45. | Color 1&2-In Out Fast     |
| 46. | Color 1&2-Combo Slow      |
| 47. | Color 1&2-Combo Fast      |
| 48. | Color 1&2-Combo Slow-Fast |
|     | + Directional Patterns    |

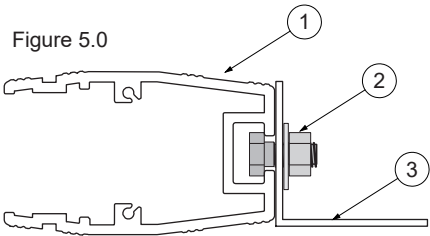
**Step 1:** To mount to bracketry, remove the flat endcap and slide in provided bolts in the back of the frame. Screw the flat endcap back into the aluminum extrusion with the original screws and attach bolts and nuts with the brackets.

**Step 2:** Mark the areas where the mounting holes will be drilled. If mounting surface is part of the vehicle, make sure no vital components could be damaged by the drilling process.

**Step 3:** Drill two mounting holes in the marked surface. If wires need to pass through vehicle, drill a 0.5" diameter hole for wire passage. Make sure to deburr holes thoroughly.

**Step 4:** Pass the wires through the 0.5" diameter hole, and secure the lighthead to the mounting surface with the provided hardware.

Figure 5.0



Item #:	Description:
1.	Fusion Extrusion
2.	Mounting Hardware
3.	Mounting Bracket (Sold separately)

