

# FUSION<sup>®</sup>

BRIGHT MADE BRIGHTER



## FN-1116 & FN-1116D INSTRUCTION MANUAL



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# SAFETY REGULATIONS & WARRANTY



## 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 & 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 & 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 & 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 & workmanship for 5 years from the date of purchase for all LED products. Feniex Industries warranties speakers, sirens, flashers, & controllers for 2 years.

If warranty service is needed, please contact customer support:

**Phone:** 1.800.615.8350

**Web Site:** [www.Feniex.com/support](http://www.Feniex.com/support)

**Email:** [techsupport@feniex.com](mailto:techsupport@feniex.com)

If the product needs to be returned for repair or replacement, contact our customer service team (using any method listed above) to receive a Return Merchandise Authorization (RMA) number. Operational times are from 9 a.m. to 6 p.m. central time, Monday through Friday.

 Please do not send in product without contacting support first for a Return Merchandise Authorization (RMA) number.

## CONDITIONS

Feniex Industries, Inc. will not be held responsible for any costs associated with equipment removal and/or re-installation resulting from a warranty claim. It is the sole responsibility of the party initiating a warranty claim to pay shipping charges associated with returning a product to Feniex Industries for repair or replacement.

## 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.



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

## COPYRIGHT

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# BOX CONTENTS, SPECIFICATIONS, & DIMENSIONS



COMPONENTS	QUANTITY
1. Fusion 1X	1
2. Cable w/Cigarette Switch	1



COMPONENTS	QUANTITY
1. Fusion 2X	1
2. Cable w/Cigarette Switch	1



## SYSTEM SPECIFICATIONS

Input Power	12 VDC
1X Current Draw	0.75 Amp
2X Current Draw	1.5 Amps
External Fuse	125% of Circuit Load
Colors	R, A, B, W, G, RW, BW, AW, RB, RA, BA
SAE Certification	J595, CT13, SAE J1113-11
Flash Patterns	11 [Single Color ], 40 [Dual Color]
1X Dimensions	1.72" H x 4.97" W x 9.71" L
2X Dimensions	1.73" H x 5.21" W x 13.8" L
Warranty	5 Years

## FLASH PATTERNS: SINGLE COLOR

Single Slow	Triple Slow
Single Fast	Triple Fast
Single Combo	Triple Combo
Double Slow	Brake Pop
Double Fast	Steady Burn
Double Combo	

## FLASH PATTERNS: DUAL COLOR

Color 1: Single Slow	
Color 1: Single Fast	
Color 1: Single Combo	
Color 1: Double Slow	
Color 1: Double Fast	
Color 1: Double Combo	
Color 1: Triple Slow	
Color 1: Triple Fast	
Color 1: Triple Combo	
Color 2: Single Slow	
Color 2: Single Fast	
Color 2: Single Combo	
Color 2: Double Slow	
Color 2: Double Fast	
Color 2: Double Combo	
Color 2: Triple Slow	
Color 2: Triple Fast	
Color 2: Triple Combo	
Colors 1&2: Single Slow	No Off Time
Colors 1&2: Single Fast	No Off Time
Colors 1&2: Single Combo	No Off Time
Colors 1&2: Double Slow	No Off Time
Colors 1&2: Double Fast	No Off Time
Colors 1&2: Double Combo	No Off Time
Colors 1&2: Triple Slow	No Off Time
Colors 1&2: Triple Fast	No Off Time
Colors 1&2: Triple Combo	No Off Time
Colors 1&2: Single Slow	Off Time
Colors 1&2: Single Fast	Off Time
Colors 1&2: Single Combo	Off Time
Colors 1&2: Double Slow	Off Time
Colors 1&2: Double Fast	Off Time
Colors 1&2: Double Combo	Off Time
Colors 1&2: Triple Slow	Off Time
Colors 1&2: Triple Fast	Off Time
Colors 1&2: Triple Combo	Off Time
Color 1: Brake Pop	
Color 2: Brake Pop	
Color 1: Steady on	
Color 2: Steady on	

# WIRING, CONFIGURATION, & MOUNTING INSTRUCTIONS

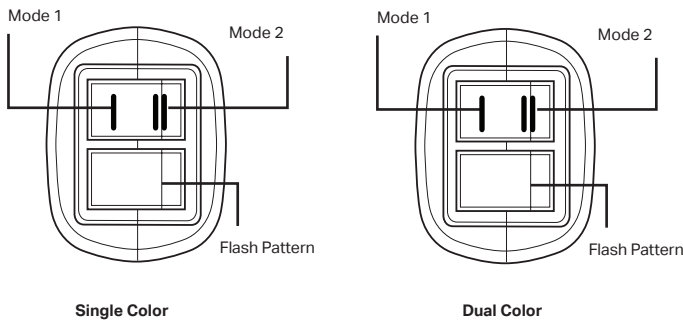


## WIRING DIAGRAM

COLOR	FUNCTION	POLARITY	CONNECTION
Red	Mode 1	12v (+)	Latching Switch
Black	Mode 2	12v (+)	Chassis Ground
Green	Mode 3	12v (+)	Latching Switch
White	Pattern	12v (-)	Momentary Switch

## POWER

To operate the cigarette plug option, plug in the provided lighter plug into the vehicle's cigarette lighter plug outlet. Turn the unit on with the On/Off switch and change patterns with the momentary flash pattern changer.



**!** To achieve synchronization, the patterns must match on all products connected to the synchronzation circuit.

## SETTING MASTER/SLAVE

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.

**!** Each time the master/slave mode is set, the pattern will reset to the default setting (Single Flash [Slow]). This simplifies the process of synchronizing two or more compatible products.

**!** The Fusion 1X & 2X can be synchronized with other compatible products with matching patterns (single color). Consult the instruction manual of each product as the process may differ by model.

## PATTERNS & SYNCHRONIZATION

1) Momentarily tap the blue wire to a ground 12v (-) source to cycle through the flash patterns.

2) Synchronization: To synchronize two or more Fusions (or compatible products) together:

- A) Choose the desired flash pattern for each unit.
- B) Connect the blue wires of the light heads together.

## MOUNTING INSTRUCTIONS:

### SUCTION CUP:

Make sure the suction cups have been cleaned with alcohol to remove all residue.

Stick lights onto the interior of the vehicle dash window.

### PERMANENT MOUNT:

#### Cleaning Instructions:

1. To obtain optimum adhesion, use a non-amonia based de-greaser to clean the surface you will adhere the mount to.
2. Place tape inside the surface mount and press onto back of Fusion 1X or 2X with 15 psi's of pressure. Full adhesion is reached after 72 hours.

Refer to 3M Surface preparation document for detailed instructions.

#### Surface Prep:

<http://multimedia.3m.com/mws/media/660190/vhbtm-tape-surface-preparation-technical-bulletin.pdf?&fn=87015.pdf>

Tape Product Description:  
<https://multimedia.3m.com/mws/media/671000/3mtm-vhb-tapes.pdf>