



# Installation and Operation Instructions

## 358118581 QUAD LED SLIM Warning Light Head



**OPTICAL  
SELECT**  
L: Linear

**LED COLORS:**  
A:Amber  
B:Blue  
C:White  
R:Red

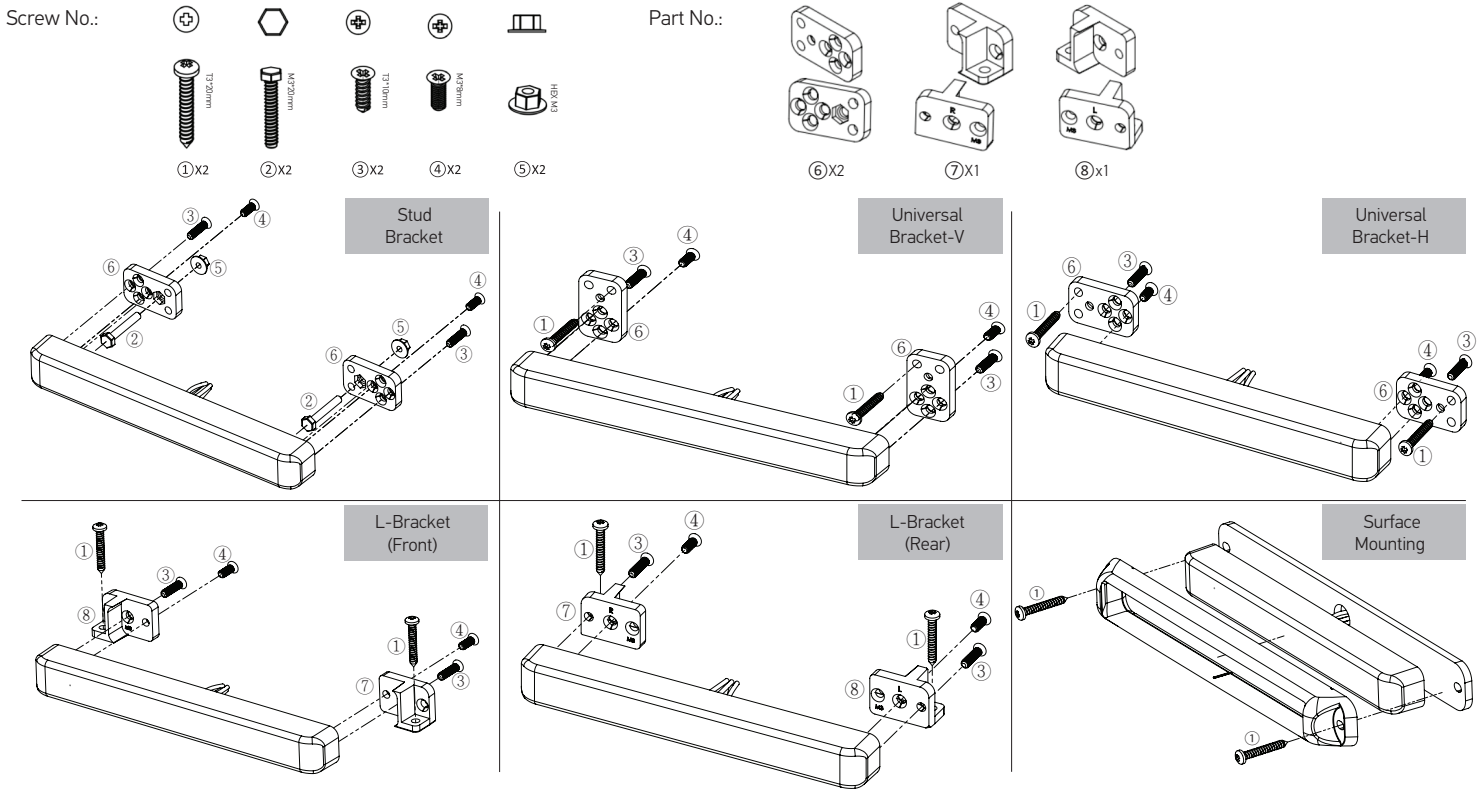
**IMPORTANT:** Please read all of the following instructions before installing your new **HELLA QUAD LED SLIM WARNING LIGHT HEAD**.

**WARNING!!!**

Failure to install or use this product according to manufacturer's recommendations may result in property damage, serious injury, and/or death to those you seek to protect!

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems, and procedures.
- This product contains high-intensity LEDs. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.
- Use only soap and water to clean the outer lens.
- 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 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.
- If mounting this product requires 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.
- Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.
- For this product to operate at optimum efficiency, a good electrical connection to the chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post.
- It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.
- Failure To Follow These Safety Precautions And Instructions Could Result In Damage To The Product Or Vehicle And/Or Serious Injury To You And Your Passengers!

**MOUNTING:**



**OPERATION INSTRUCTION**

1) Connections:

	Quad Color						
Wire :	Group1	Group2	Group3	Group4	Group5	Group6	Group7
Red :	Positive			Positive	Positive		Positive
White :		Positive		Positive		Positive	Positive
Orange :			Positive		Positive	Positive	Positive
Black :	Negative						
Blue :	Apply to Negative For Pattern Switch / Apply To Postive For Dim						
Yellow :	Synchronized Function						
Green :	Apply To Negative For Mode Switch						



2) Mode Switch Operation: Apply Green Wire To Negative.

Quad Color			
Mode1	Color1	Mode9	Color2&4
Mode2	Color2	Mode10	Color3&4
Mode3	Color3	Mode11	Color1&2&3
Mode4	Color4	Mode12	Color1&2&4
Mode5	Color1&2	Mode13	Color1&3&4
Mode6	Color1&3	Mode14	Color2&3&4
Mode7	Color1&4	Mode15	Color1&2&3&4
Mode8	Color2&3		

3) Pattern Switch Operation:

Blue wire applies to Negative to Switch Flash Pattern

- Less than 1 second: Next Pattern
- Between 1-3 seconds: Previous Pattern
- Between 3-5 seconds: Factory Default Pattern
- More than 5 seconds: Last Pattern

5) Phase Operation:

- Phase 1 (Ph1) flashes simultaneously with Phase 1 (Ph1).
- Phase 2 (Ph2) flashes simultaneously with Phase 2 (Ph2).
- Phase 1 (Ph1) flashes alternates with Phase 2 (Ph2).

7) Setting Synchronization

- To synchronise multiple lighthoods, set all lighthoods to the same flash pattern type (see flash patterns below), the connect the yello wire together.
- To alternate multiple lighthoods, set one module to Ph1 flash pattern (see flash patterns below) and one module to Ph2 flash pattern, then connect the yellow wires together. Repeat for additional modules.

4) Specification:

Input Voltage	10~30VDC@2A Fuse
Input Current	1 Module : 0.8Amps Max
Output Power	LEDs*12/16
Waterproof	IP67

6) Recommend Operation Environment:

Ambient Temperature : -30 to 50°C  
Relative Humidity : 10 to 85%, non-condensing.

FLASH PATTERN

Type	Quad Color																Pattern	Sync
	Mode	Color1	Color2	Color3	Color4	Color 1 & 2	Color 1 & 3	Color 1 & 4	Color 2 & 3	Color 2 & 4	Color 3 & 4	Color 1 & 2 & 3	Color 1 & 2 & 4	Color 1 & 3 & 4	Color 2 & 3 & 4	Color 1 & 2 & 3 & 4		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Single 75FPM Ph1 - Default	Yes
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	Single 75FPM Ph2	Yes
2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	Single 120FPM Ph1	Yes
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Single 120FPM Ph2	Yes
3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	Single 375FPM Ph1	Yes
	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	Single 375FPM Ph2	Yes
4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	Double 75FPM Ph1	Yes
	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	Double 75FPM Ph2	Yes
5	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	Double 120FPM Ph1	Yes
	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	Double 120FPM Ph2	Yes
6	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	Triple 75FPM Ph1	Yes
	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	Triple 75FPM Ph2	Yes
7	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	Single 375FPM Ph1	Yes
	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	Single 375FPM Ph2	Yes
8	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	Double 375FPM Ph1	Yes
	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	Double 375FPM Ph2	Yes
9	17	17	17	17													NFPA-Quad Flash 90FPM	No
10	18	18	18	18	17	17	17	17	17	17	17	17	17	17	17	17	ModuFlash sim.	No
11	19	19	19	19													2 Double Flash, 2 Quad Flash	No
12	20	20	20	20													4 Single Flash , 2 Triple Flash	No
13	21	21	21	21	18	18	18	18	18	18	18	18	18	18	18	18	Autorun	No
14	22	22	22	22													steady burn	No

Mode Color Dual & Tri & Quad = Alternate

TROUBLE SHOOTING

The Light Head has been factory tested and approved. If the functions of the device fail, please check the following:

1. After connecting with the power supply, be sure that the power source end is joined in correct way. And then, make sure that there is no short-circuited power occurred. Plug device ensures the power switch which has LED is "on" state.
2. Ensure the Power switch is turned to the "ON" Position.

WARRANTY

This product was tested and found to be operational at the time of manufacture. Provided this product is installed and operated in accordance with the manufacturer's recommendations, We guarantee the Light for a period of 2 years from the day of purchase or delivery, whichever is later. Units demonstrated to be defective within the warranty period will be replaced. Improper installation or use of inappropriate or inadequate wiring or circuit protection causes the warranty to be void. Failure or destruction of the product resulting from abuse or unusual use and/or accidents is not covered by this warranty. We shall in no way be liable for other damages including consequential, indirect, or special damages whether the loss is due to negligence or breach of warranty.

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