



## **ABS1LW - ABS1H - ABS1LHC** **AUXILIARY LIGHT USER MANUAL**

First and foremost we would like to thank you for choosing CyronMotor products! We know you have many choices when it comes to lighting and we truly appreciate you choosing our brand. Our goal is to gain your full satisfaction.

### **TOOLS AND ACCESSORIES NEEDED**

Some basic metric tools are included but additional ones can facilitate the process. Installing auxiliary lights on motorcycles and vehicles has many possibilities. Tools needed are dependent on complexity of the job. Although several types of hardware are included, in some cases additional hardware could be helpful in the installation process.



**CAUTION: HOT SURFACES. DO NOT TOUCH THE METAL SURFACES OF THE LIGHT. THEY CAN BE EXTREMELY HOT.**

**CAUTION:** Local laws vary regarding additional light and/or utilizing auxiliary lights. Make yourself familiar with such laws before adding or deciding on how to utilize such lights.

**READ ALL INSTRUCTIONS BEFORE STARTING THE INSTALLATION.** We know it is exciting to get a new product and jump right into it. We all have been guilty of that. 😊  
**In this case trust us when we say you really should.**

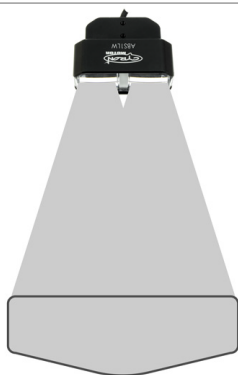
### **INSTRUCTIONS**

ABS1 lights are designed to produce the maximum controlled light output from the smallest possible form factor. Controlled light beam means the light illuminates where it is intended to, and no place else. It is crucial to minimize "blinding" other drivers and keeping the road safe for everyone.

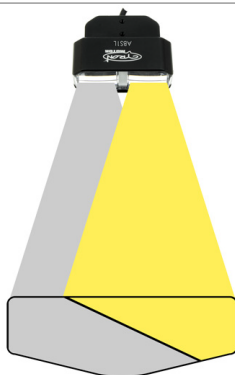
ABS1 is available in three models each serving a different purpose. They can be mixed and matched to offer the optimum solution for your application. See Figure 1.

# **VISIBILITY - SAFETY - STYLE**

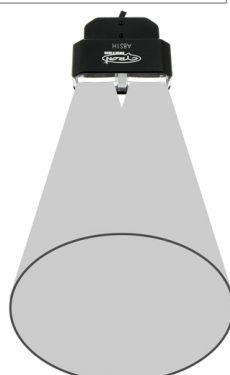
PART#	ABS1LW	ABS1L	ABS1H
BEAM PATTERN	LINEAR	LINEAR	FLOOD
BEAM COLOR	WHITE	WHITE+YELLOW	WHITE
PEAK POWER	50W	25W+25W	50W



LINEAR BEAM PATTERN WITH A PRECISION UPPER CUT OFF RESULTS IN SUPERIOR PERFORMANCE FOR USING ON THE ROAD AS A SUPPLIMENT TO LOW BEAM LIGHTS.



LINEAR BEAM PATTERN WITH ABILITY TO PRODUCE WHITE, YELLOW OR BOTH. YELLOW WILL ADD DAYTIME COLOR CONTRAST AND HELP TO BE SEEN. ALSO IMPROVES VISIBILITY IN FOG.



CIRCULAR FLOOD BEAM PATTERN IDEAL AS A SUPPLEMENT TO HIGH BEAM LIGHTS. ILLUMINATES WIDE AND TALL.

Figure 1

NOTE: ABS1L may only be available as a combo set in ABS1LHC.

## **INSTALLATION**

As an overall plan we recommend on deciding the approximate location of the lights first. Do wiring per instructions below and have the wire plugs reach the mounting area. Then securely mount the light. Plug the lights to the power cords. Finally tighten up the wires and cords.

The installation varies depending the light and how you wish to control it.

**Controlling Option A – Ignition:** Connection to an ignition-controlled wire. This will turn on the lights every time ignition is turned on. Use an inline fuse if the supply wire is not fused. Fuse rating must be 5A for each ABS1 installed. ie. Two ABS1 require a 10A fuse.

**Controlling Option B – Headlight:** Direct connection to headlight wire harness. Connected to low beam or high beam will turn on the ABS1 at the same time as the headlight. Whether you choose low beam or high beam depends if you are intending to improve low beam or high beam visibility. On some vehicles/bikes low beam stays on all the time therefore if connected to low beam the aux lights will remain on all the time.

**IMPORTANT:** For each ABS1 4A or approximately 50W of power will be drawn. Consult with your vehicle manufacturer specifications if this additional power can be handled by the headlight harness. Never exceed the ratings.

**SUGGESTION:** First step in upgrading your night time visibility should be converting low/high beam bulbs to LED technology. Most LEDs have a lower power draw than stock lights which will free up some power draw from your factory harness. ie. if you replaced a

65W halogen bulbs with a 25W LED, you can draw additional 40W . If unsure, draw power directly from battery.

**Controlling Option C – Fog Light:** Connection to fog/passing lights. This option gives you control to turn on/off the auxiliary lights with fog/passing lamp switch. Local laws vary on usage of fog lights.

Power should be drawn straight from the battery if supply power to the lights is less than 4A or not sure about the rating capacity. ABS1CRD Multifunction Cable (included with ABS1LHC kit) facilitates such setup. See Figure 3. Alternatively a 12V relay can be used.

## MODEL# ABS1H, ABS1LW

ABS1H and ABS1LW are supplied with power wires that can be connected directly to 12VDC following any of the controlling options A, B, or C. The source of power must be capable of supplying 4A per light. Use an inline fuse if the source of power is not fused. Two lights can be combined into one 10A inline fuse, or individually fused with 5A per light.

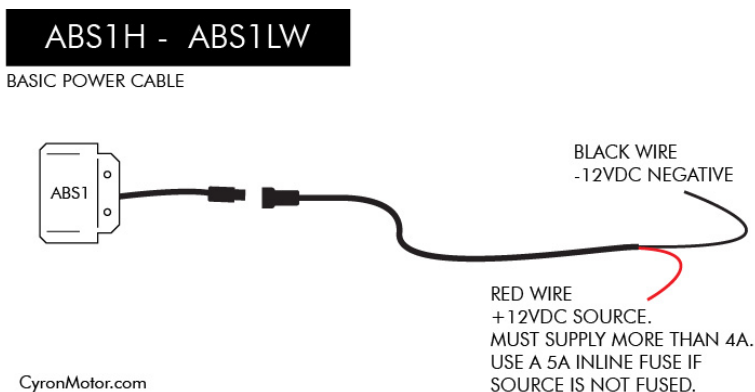
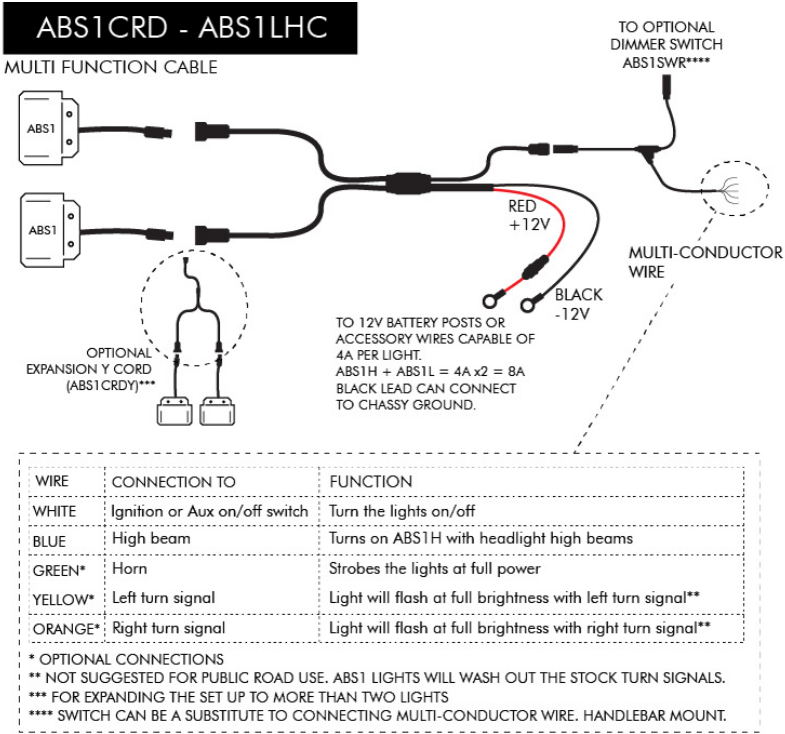


Figure 1

# MODEL# ABS1LHC

Figure 3 shows the wiring diagram for combo set ABS1LHC. Multifunction cable can be used for wiring two to four ABS1 lights of any style.

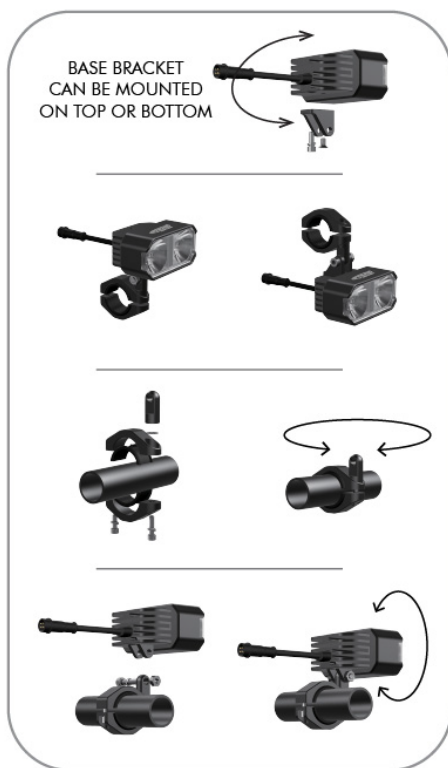


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Figure 2

## MOUNTING:

1. Choose the mounting location for the lights. Versatile clamp brackets are included. Please ask your dealer or visit [CyronMotor.com](http://CyronMotor.com) for other mounting bracket styles if the supplied bracket does not fit your application.
2. Connect the wires before mounting the light in place. Account for moving parts such as handlebar or shocks in determining the length of wire to each light. If needed extend the wires with 16AWG wires. Do not secure the wires yet. Leave some slack in the wires for final adjustments of the light.



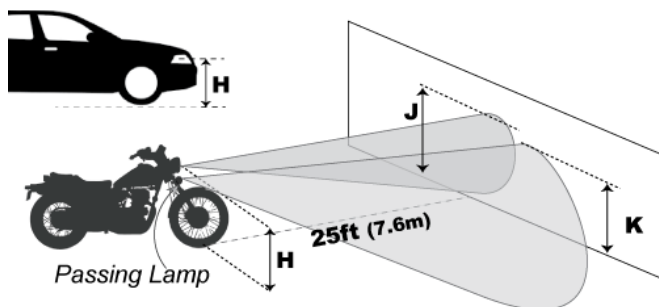
3. Secure the light in place. Do not tighten the adjustment screws until the lights have been aligned.
4. Align the light. For proper operation it is vital to check the aim of the light. Use Figure 4 as a starting guide.

During testing make sure:

- a. The vehicle/bike is on level surface
- b. There are no excessive loads affecting its leveling
- c. For motorcycles it is a good idea to align with the rider on the bike
- d. After alignment do a road test to assure proper visibility has been achieved. Further adjustment may be necessary to get the optimum performance.



## HEADLIGHT AND PASSING LAMP AIMING RECOMMENDATIONS BY CYRON MOTOR



H = Ground to the center of the headlight

$J = H \times 0.9$

$H \times 0.6 < K < J$

If light beams do not have a well defined beam cut-off keep the hot spot of the beam below J and K. Ensuring undisturbed visibility of other drivers is vital to your safety. Drive/Ride Safe!

CY0418A1

**Figure 3**

NOTE: For low beam applications the goal is to keep the light on the road as far forward as possible without disturbing the oncoming traffic.

5. Secure the wires with zip ties. If mounted to lower forks or other moving parts avoid leaving too much slack in the wires which could fray or get caught to other objects. Leave just enough to clear the max extension of the moving parts.
6. Tighten all the screws. Thread-lock liquid has been provided to prevent screws from coming loose overtime.

HINT: Check the alignment of the light again after a few hours on the road. To facilitate mark the position of the light beam on garage wall after the initial alignment. Compare at a later point to make sure the lights have remained aligned.

### **OPERATION:**

#### **Basic Power Cable:**

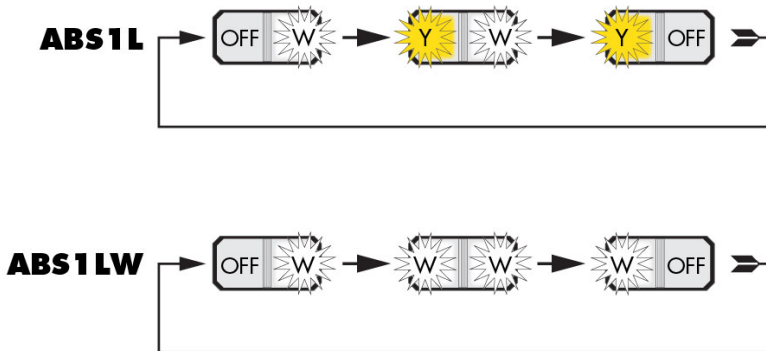
Operation of the lights are based on your connection methods you have chosen. If lights are connected using basic power cable as shown in Figure1 then lights can be turned on with the appropriate switch per controlling options A, B or C.

#### **Multifunction Cable:**

Low beam aux light turns on when ignition is on. Hi beam aux light (ABS1H) turns on with headlight hi beam switch. Low beam can be switched from yellow to white light by turning the high beam light on and off in three flash speeds FAST-FAST-SLOW sequence.

Note: High beam must be off before starting the three flashes of on/off. See Figure 5.

## USING ABS1CRD MULTIFUNCTION CABLE THREE HIGH BEAM FLASHES WILL CHANGE LOW BEAM LIGHT



HIGH BEAM FLASH SEQUENCES MUST BE FAST-FAST-SLOW

**Figure 4**

### TROUBLESHOOTING:

Q. I am using the Basic Power Cable connected directly to headlight wire harness. Control Option B. The Headlight flashes on and immediately goes off.

A. Headlight harness is not able to handle the extra power draw of ABS1. Try Control Option A or C. If not possible use ABS1CRD multifunction cable or a traditional relay to draw power from battery.

Q. Using Multifunction cable. ABS1H turns on but cannot switch ABS1L from white to yellow.

A. Starting with the high beam off, turn on high beam in two quick bursts followed by a ~1.5 second on time.

Q. Does ABS1LW also switch from white to yellow?

A. No, it only illuminates white. However, using ABS1CRD you have the option of running the light at half power by the same sequence of high beam bursts.

Q. I am not sure if my fog light wires are fused. Should I add an inline fuse?

A. Almost all the standard wire harnesses in automobiles and powersports are fused. When in doubt you should add an inline fuse.

Q. I would like to have two ABS1 on my bike. And for symmetry I would like to have both on at the same time, all the time. My goal is to improve my visibility of low beam. What are my choices?

A. A pair of ABS1LW along with ABS1CRD is your best choice. Both lights will stay on with low beam all the time.

## **WARRANTY**

Cyron warrants this product against any defects in materials or workmanship for a period of 1 year from the date of purchase. The warranty covers normal usage as intended by the factory and does not cover misuse, abuse, accidents, or damages caused due to the acts of God. Proof of purchase is required.

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Some LED products are not DOT/SAE approved. Although efforts have been made to maximize road visibility and safety, all risks are sole responsibility of the user. For warranty claims please visit [cyronmotor.com](http://cyronmotor.com) Support link or email [warranty@cyron.com](mailto:warranty@cyron.com). Thank you.

## **SPECIFICATIONS**

	ABS1H	ABS1LW	ABS1LHC
Operating Voltage	12-13.8VDC	12-13.8VDC	12-13.8VDC
Peak LED Power	50	50 (25 in dim mode)	100W
Nominal Power	41	42 (21 in dim mode)	79W
Max Current Draw	4.1A	4.1A	8.2A
EMI Interference	NONE	NONE	NONE

**ENSURING UNDISTURBED VISIBILITY OF OTHER DRIVERS IS VITAL  
TO YOUR SAFETY. DRIVE & RIDE SAFE!**

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