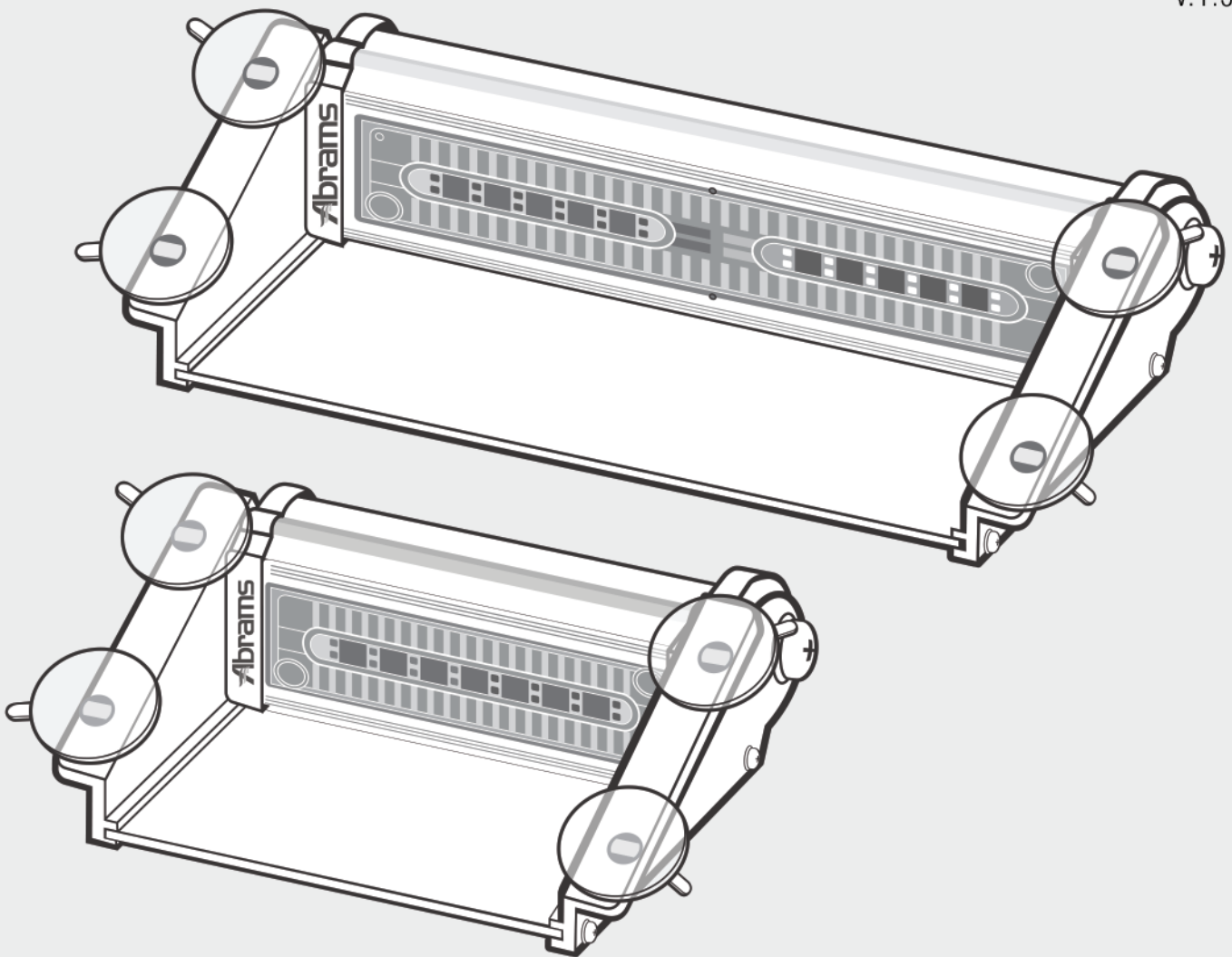




ABRAMS INSTRUCTION MANUAL
WWW.ABRAMSMFG.COM

INSTALLATION AND CONFIGURATION MANUAL
ABRAMS FOCUS 1X / 2X DASH & DECK LIGHT

V.1.3



FOCUS 1X / 2X DASH & DECK LIGHT

IMPORTANT! PLEASE READ THROUGH ALL PROVIDED INSTRUCTIONS AND ANY LISTED WARNINGS IN REGARDS TO PRODUCT USE.

MODEL#: FD-6100
FD-6200

INSTALLATION AND CONFIGURATION MANUAL
ABRAMS FOCUS 1X / 2 X DASH & DECK LIGHT

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WARNING:

FAILURE TO INSTALL OR USE THIS PRODUCT ACCORDING TO MANUFACTURER’S RECOMMENDATIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY, AND/OR DEATH.

IMPORTANT:

PLEASE READ ALL OF THE FOLLOWING INSTRUCTIONS BEFORE INSTALLING YOUR NEW ABRAMS PRODUCT.

- 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.
- 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 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!
- IF THIS PRODUCT USES A REMOTE DEVICE TO ACTIVATE OR CONTROL THIS PRODUCT, MAKE SURE THAT THIS CONTROL IS LOCATED IN AN AREA THAT ALLOWS BOTH THE VEHICLE AND THE CONTROL TO BE OPERATED SAFELY IN ANY DRIVING CONDITION.
- DO NOT ATTEMPT TO ACTIVATE OR CONTROL THIS DEVICE IN A HAZARDOUS DRIVING SITUATION.

WARRANTY (5 YEAR WARRANTY)

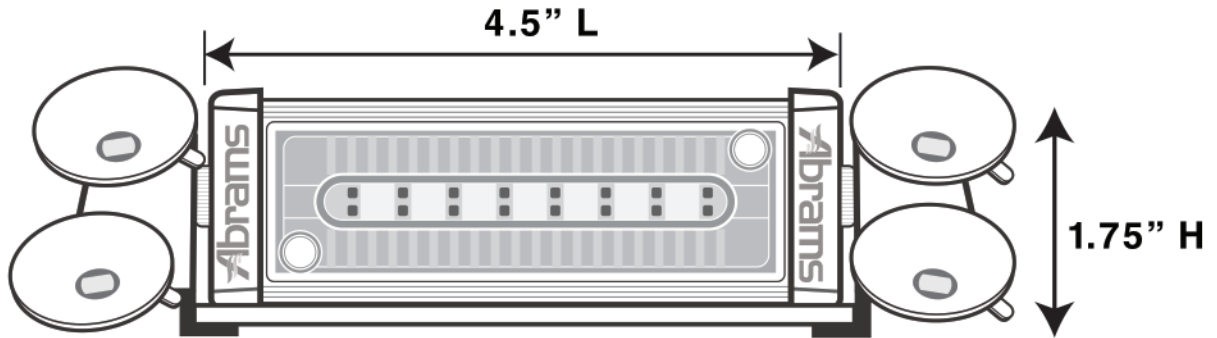
THIS PRODUCT WAS TESTED AND FOUND TO BE OPERATIONAL AT THE TIME OF MANUFACTURE. PROVIDED THIS PRODUCT IS INSTALLED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER’S RECOMMENDATIONS, ABRAMS GUARANTEES THIS PRODUCT FOR A PERIOD OF 5 YEARS FROM THE DAY OF PURCHASE OR DELIVERY, WHICH EVER IS LATER. UNITS 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. ABRAMS SHALL IN NO WAY BE LIABLE FOR OTHER DAMAGES INCLUDING CONSEQUENTIAL, INDIRECT OR SPECIAL DAMAGES WHETHER LOSS IS DUE TO NEGLIGENCE OR BREACH OF WARRANTY. ABRAMS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY INCLUDING, WITHOUT LIMITATION, WARRANTIES OF FITNESS OR MERCHANTABILITY, WITH RESPECT TO THIS PRODUCT.



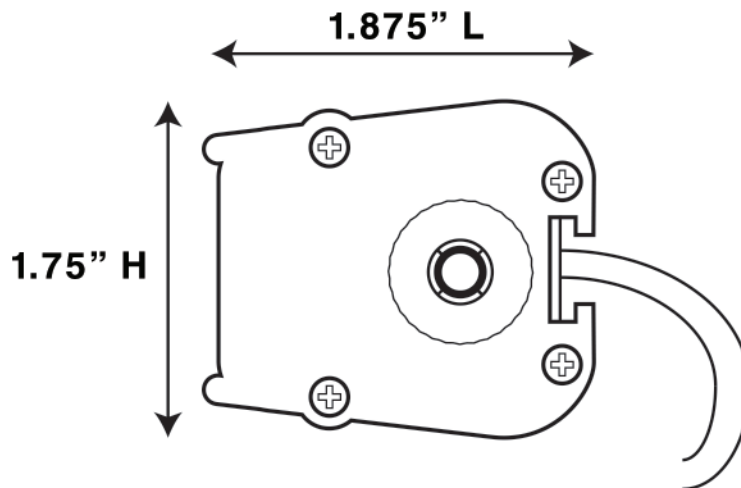
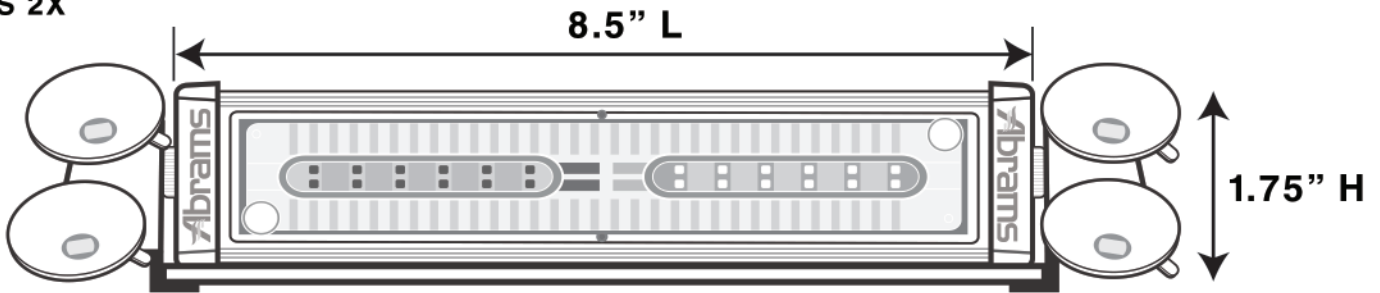
INSTALLATION AND CONFIGURATION MANUAL ABRAMS FOCUS 1X / 2 X DASH & DECK LIGHT

EQUIPMENT AND DIMENSIONS

FOCUS 1X



FOCUS 2X



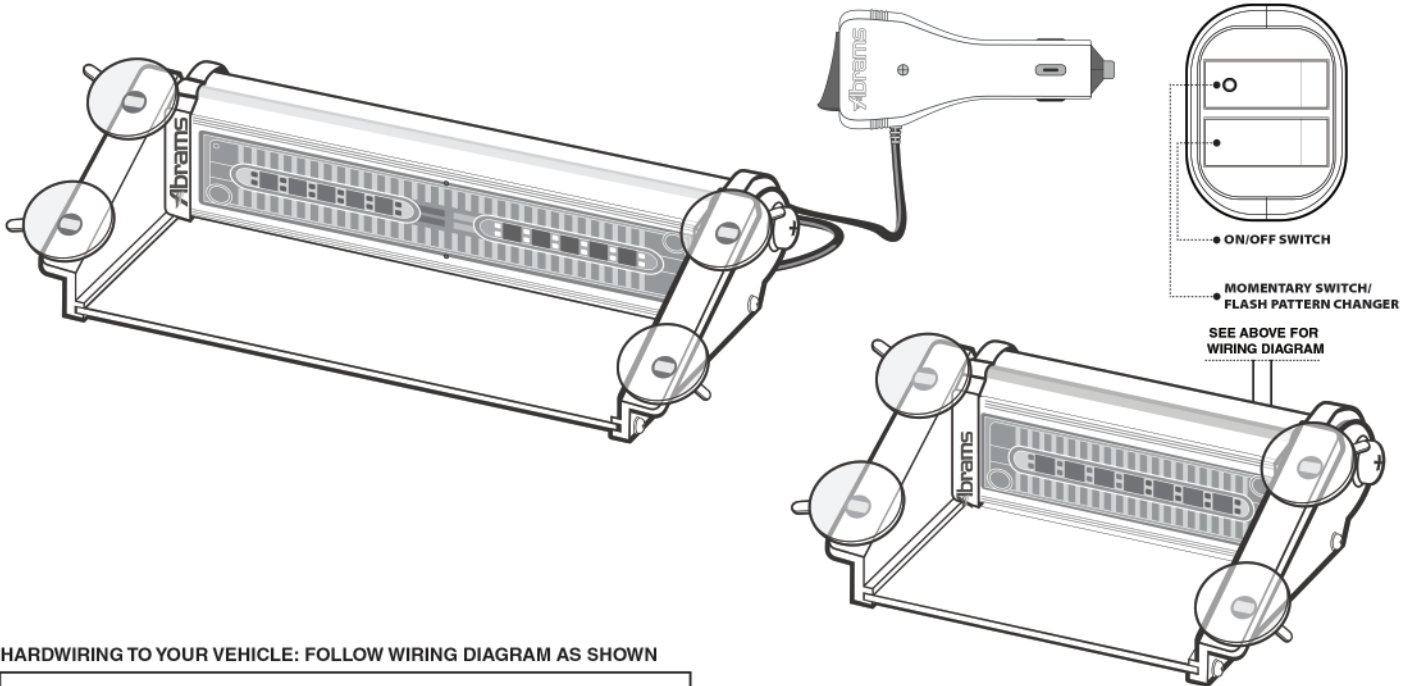
PACKAGE CONTENTS:

- FOCUS DASH LIGHT
- CIGARETTE LIGHTER ADAPTER
- L-SHAPED BRACKET
- FLASHBACK GUARD
- U-SHAPE BRACKET
- MOUNTING ACCESSORIE KIT
- PRODUCT USER MANUAL

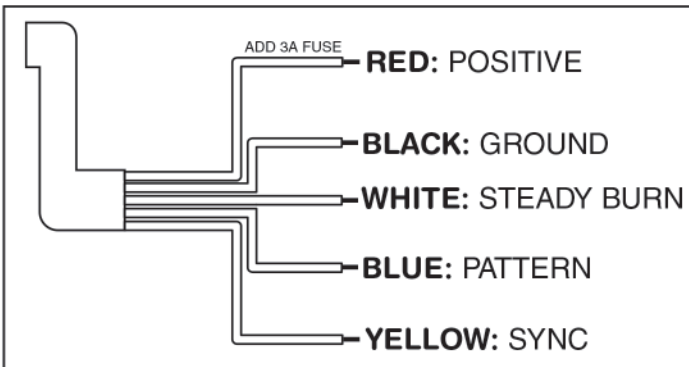
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INSTALLATION AND CONFIGURATION MANUAL ABRAMS FOCUS 1X / 2 X DASH & DECK LIGHT

WIRING AND FUNCTION



HARDWIRING TO YOUR VEHICLE: FOLLOW WIRING DIAGRAM AS SHOWN



1. Changing Patterns: Patterns can be changed by momentarily connecting the blue wire to the ground of your vehicle's battery.

Less than 1 Second	Next Pattern / On
1-3 Seconds	Previous Pattern
3-5 Seconds	Steady Burn
5-10 Seconds	Off
10+ Seconds	Factory Default (Pattern 1)

OPERATION FOR HARDWIRING TO YOUR VEHICLE

BLACK	NEGATIVE/GROUND
BLUE	PATTERN SWITCH
YELLOW	SYNCHRONIZED FUNCTION
RED	POSITIVE (NEED TO ADD 3A FUSE)
WHITE	STOP/TURN/BRAKE (STEADY BURN OPTION)

ABRAMS FOCUS DASH LIGHT SPECIFICATIONS

	FOCUS 1X	FOCUS 2X
WORK CURRENT	12V - 1.0A (MAX) 24V - 0.6A (MAX)	12V - 1.8A (MAX) 24V - 1.0A (MAX)
INPUT VOLTAGE	10-30VDC	10-30VDC
WATERPROOF	IP67	IP67

2. Syncing Instructions: Configure both intensity light heads to the same pattern in Phase 1 and connect the yellow wires from each light head together.

3. Alternating Light Heads: Set every other light to the same pattern in Phase 2 and connect the blue wires. To better understand how this feature works, each lighthouse coming from the factory will display Phase 1. In order to have one Intensity light head alternate with another, every other light needs to be advanced to the current pattern's Phase 2.

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WARNING:

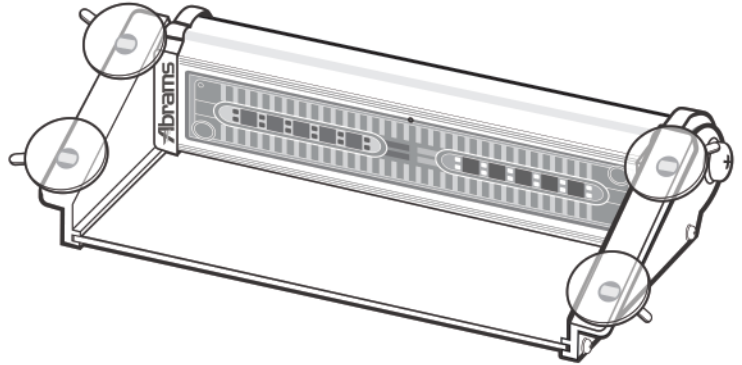
PLEASE UNDERSTAND THAT THE USER AND INSTALLER ASSUME ULTIMATE, COMPLETE AND FULL RESPONSIBILITY IN DETERMINING PROPER MOUNTING LOCATION AND POSITIONING. WHEN INSTALLING, CONSIDER A LOCATION BASED ON ITS ABILITY TO PROVIDE TOTAL SAFETY TO ALL PASSENGERS.

INSTALLATION AND CONFIGURATION MANUAL ABRAMS FOCUS 1X / 2 X DASH & DECK LIGHT

INSTALLING BRACKETS

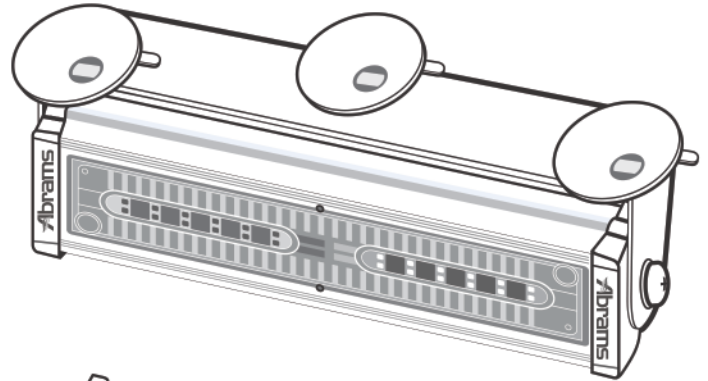
Mounting with Flashback Shield:

1. Attach four suction cups to the flashback shield.
2. Unscrew the two screws from the end caps and affix the flashback shield to your vanity dash light.
3. Place the light on your windshield and adjust to the desired angle. Tighten the two side screws.



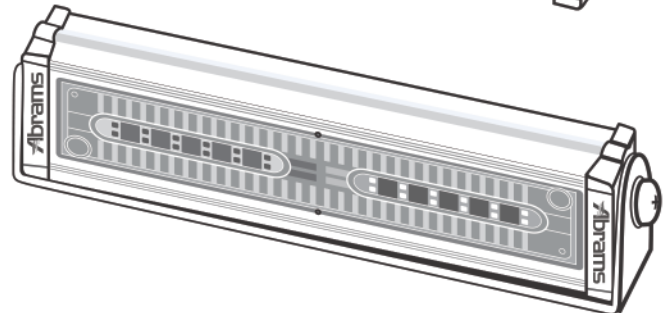
Mounting Using the Bracket with Suction Cups:

1. Attach three suction cups to the bracket.
2. Unscrew the two screws from the end caps and affix the bracket to your vanity dash light.
3. Place the light on your windshield and adjust it to your desired angle. Tighten the two side screws.



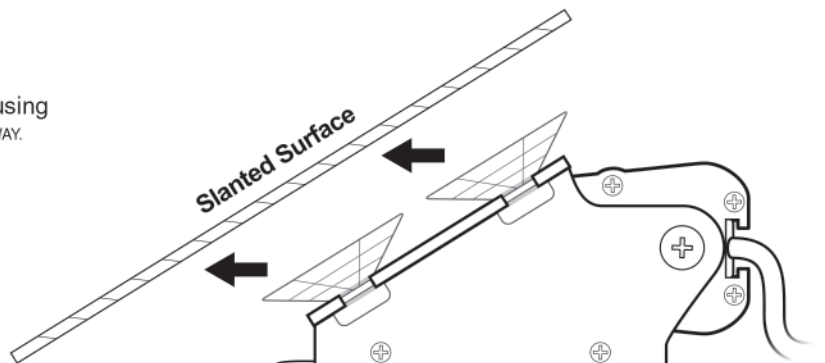
Permanent Mounting Using Brackets:

1. Position the bracket on your desired location and mark three holes with a pencil.
2. Drill the three holes and a wire passage hole if needed.
3. Affix the vanity dash light to the bracket and tighten the two side screws.



MOUNTING WITH FLASHBACK GUARD

1. Install suction cups onto the flashback guard.
2. Secure the flashback guard onto the strobe light unit by using the hardware provided. **DO NOT TIGHTEN THE HARDWARE ALL THE WAY.*
3. Adjust the tilt angle of the lightbar prior to tightening the hardware, securing the flashback guard to the lightbar.



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INSTALLATION AND CONFIGURATION MANUAL ABRAMS FOCUS 1X / 2 X DASH & DECK LIGHT

FOCUS 1X / 2X FLASH PATTERNS

P1. SINGLE FLASH 75FPM SOLID PH1	P27. DOUBLE FLASH 120FPM RIGHT/LEFT PH2
P2. SINGLE FLASH 75FPM SOLID PH2	P28. TRIPLE FLASH 75FPM SOLID PH1
P3. SINGLE FLASH 75FPM RIGHT/LEFT PH1	P29. TRIPLE FLASH 75FPM RIGHT/LEFT PH1
P4. SINGLE FLASH 75FPM RIGHT/LEFT PH2	P30. QUAD FLASH 75FPM SOLID PH1
P5. SINGLE FLASH 75FPM SOLID+ RIGHT/LEFT	P31. QUAD FLASH 75FPM SOLID PH2
P6. SINGLE FLASH 120FPM SOLID PH1	P32. QUAD FLASH 75FPM RIGHT/LEFT PH1
P7. SINGLE FLASH 120FPM SOLID PH2	P33. QUAD FLASH 75FPM RIGHT/LEFT PH2
P8. SINGLE FLASH 120FPM RIGHT/LEFT PH1	P34. QUAD FLASH 75FPM SOLID+ RIGHT/LEFT
P9. SINGLE FLASH 120FPM RIGHT/LEFT PH2	P35. QUAD FLASH 150FPM SOLID PH1
P10. SINGLE FLASH 120FPM SOLID+ RIGHT/LEFT	P36. QUAD FLASH 150FPM SOLID PH2
P11. SINGLE FLASH 150FPM SOLID PH1	P37. QUAD FLASH 150FPM RIGHT/LEFT PH1
P12. SINGLE FLASH 150FPM SOLID PH2	P38. QUAD FLASH 150FPM RIGHT/LEFT PH2
P13. SINGLE FLASH 150FPM RIGHT/LEFT PH1	P39. QUINT FLASH 75FPM SOLID PH1
P14. SINGLE FLASH 150FPM RIGHT/LEFT PH2	P40. QUINT FLASH 75FPM RIGHT/LEFT PH1
P15. SINGLE FLASH 300FPM SOLID PH1	P41. DOUBLE 75 FPM*2 + QUAD 120 FPM*4
P16. SINGLE FLASH 300FPM SOLID PH2	P42. DOUBLE 75 FPM*2 (SOLID) + QUAD 120 FPM*4 (RIGHT/LEFT)
P17. SINGLE FLASH 300FPM RIGHT/LEFT PH1	P43. SINGLE 75 FPM*4 + QUINT 120 FPM*4
P18. SINGLE FLASH 300FPM RIGHT/LEFT PH2	P44. SINGLE 75 FPM*4 (SOLID) + QUINT 120 FPM*4 (RIGHT/LEFT)
P19. SINGLE FLASH 300FPM SOLID+ RIGHT/LEFT	P45. AUTORUN
P20. DOUBLE FLASH 75FPM SOLID PH1	P46. ACCELERATOR SIMULTANEOUS
P21. DOUBLE FLASH 75FPM SOLID PH2	P47. ACCELERATOR ALTERNATING
P22. DOUBLE FLASH 75FPM RIGHT/LEFT PH1	P48. CALIFORNIA STEADY SINGLE 75 FPM
P23. DOUBLE FLASH 75FPM RIGHT/LEFT PH2	P49. CALIFORNIA STEADY SINGLE 120 FPM
P24. DOUBLE FLASH 120FPM SOLID PH1	P50. CALIFORNIA STEADY QUAD 75 FPM
P25. DOUBLE FLASH 120FPM SOLID PH2	P51. STEADY
P26. DOUBLE FLASH 120FPM RIGHT/LEFT PH1	P52. OFF

TROUBLE SHOOTING?

THE ABRAMS FOCUS SERIES HAS BEEN FACTORY TESTED AND APPROVED. IF THE FUNCTIONS OF DEVICE FAIL, PLEASE CHECK THE FOLLOWINGS:

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.
2. PLUG DEVICE ENSURE THE POWER SWITCH WHICH HAVE LED IS "ON" STATE.
3. PRESS THE PATTERN SWITCH TO BE SURE THE "OFF" PATTERN IS NOT SELECTED. IF THE BLUE WIRE TOUCHES BLACK WIRE OVER 5 SECONDS, IT WOULD SWITCH TO OFF PATTERN. IT WOULD BE LIGHTED UP

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