

INSTALLATION AND CONFIGURATION MANUAL ABRAMS FLEX12 GRILLE LIGHT

MODEL# FG-1200

WARNING:

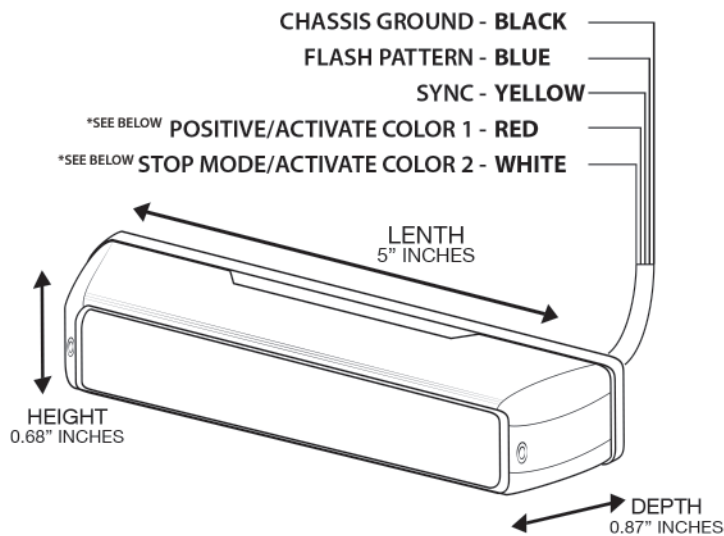
FAILURE TO INSTALL OR USE THIS PRODUCT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY RESULT IN PROPERTY DAMAGE, SERIOUS INJURY, AND/OR DEATH.

IMPORTANT:

PLEASE READ ALL OF THE FOLLOWING INSTRUCTIONS BEFORE INSTALLING YOUR NEW ABRAMS FLEX12 GRILLE LIGHT.

- 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



OPERATION FOR SINGLE COLOR LIGHTHEAD FUNCTION

BLACK	NEGATIVE/GROUND
BLUE	PATTERN SWITCH
YELLOW	SYNCHRONIZED FUNCTION
RED	POSITIVE (NEED TO ADD 2A FUSE)
WHITE	STOP/TURN/BRAKE (STEADY BURN OPTION)

OPERATION FOR DUAL COLOR LIGHTHEAD FUNCTION

BLACK	NEGATIVE/GROUND
BLUE	PATTERN SWITCH
YELLOW	SYNCHRONIZED FUNCTION
RED	POSITIVE/COLOR 1 (NEED TO ADD 2A FUSE)
WHITE	POSITIVE/COLOR 2
RED+WHITE	ACTIVATES DUAL COLOR FUNCTION

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
1-3 Seconds	Previous Pattern
3-5 Seconds	Factory Default
5+ Seconds	Turn off and Reset

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.

**For single color light head, apply white wire to power, (+12VDC) to activate steady burn feature.*

PACKAGE CONTENTS:

- FLEX12 GRILLE LIGHT
- MOUNTING GASKET
- SCREWS
- PRODUCT MANUAL

ABRAMS FLEX12 GRILLE LIGHT SPECIFICATIONS

INPUT VOLTAGE	10-30VDC
WORK CURRENT	12V - 2.0A (MAX) 24V - 1.2A (MAX)
WATERPROOF	IP67

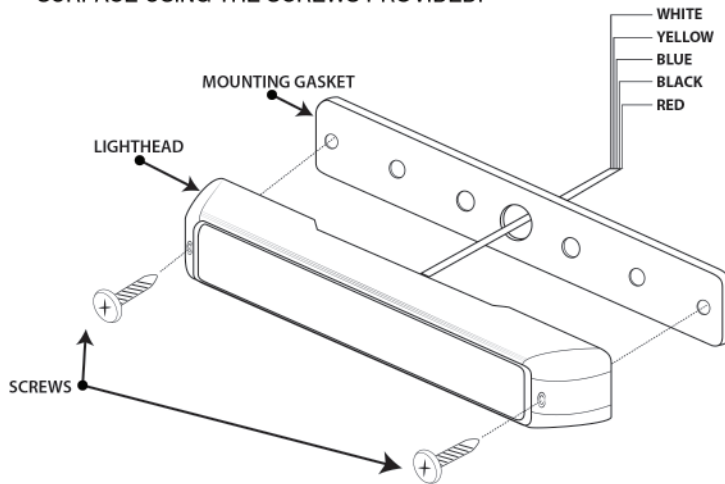
Recommend Operation Environment

Ambient Temperature: -30 to 50

Relative Humidity: 10 to 85% , non-condensing

SURFACE MOUNTING

1. PLACE THE UNIT AGAINST THE MOUNTING SURFACE.
2. MARK THE AREAS WHERE THE MOUNTING HOLES ARE TO BE DRILLED.
3. USING A BIT SIZED FOR A #6 SHEET METAL SCREW, DRILL TWO MOUNTING HOLES AND (0.4" DIA). WIRE PASSAGE HOLE(S) MUST ALSO BE DRILLED.
4. ROUTE THE WIRES THROUGH THE HOLE(S) IN THE GASKET AND THROUGH THE WIRE PASSAGE HOLE(S) IN THE MOUNTING SURFACE. SECURE THE LIGHT-HEAD TO THE MOUNTING SURFACE USING THE SCREWS PROVIDED.



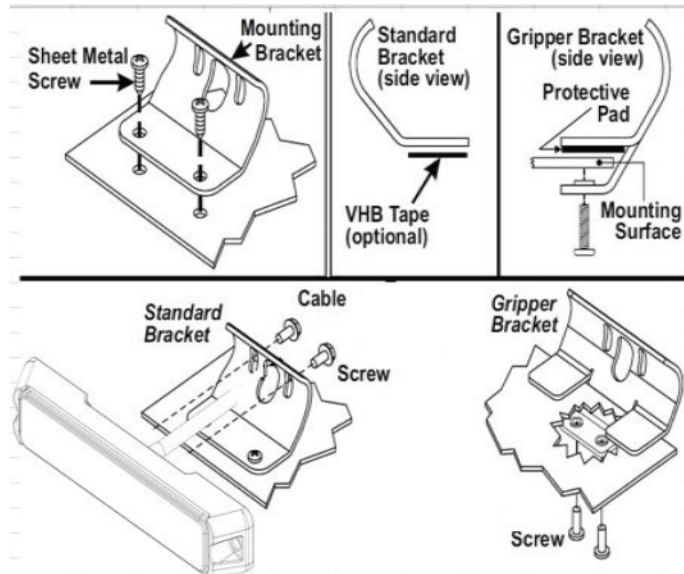
FLEX12 SERIES FLASH PATTERNS

PATTERNS FOR SOLID COLORS:

P1	SINGLE 75 PH1	P11	DOUBLE 120 PH2	P21	TRIPLE 75 ALT.
P2	SINGLE 75 PH2	P12	DOUBLE 120 ALT.	P22	QUINT 150 PH1
P3	SINGLE 75 ALT.	P13	QUAD 75 PH1	P23	QUINT 150 PH2
P4	SINGLE 120 PH1	P14	QUAD 75 PH2	P24	QUINT 150 ALT.
P5	SINGLE 120 PH2	P15	QUAD 75 ALT.	P25	STEADY - SINGLE
P6	SINGLE 120 ALT.	P16	QUAD 150 PH1	P26	STEADY BURN
P7	DOUBLE 75 PH1	P17	QUAD 150 PH2	P27	MODULATION
P8	DOUBLE 75 PH2	P18	QUAD 150 ALT.	P28	2 DOUBLE, 2 TRIPLE ALTER
P9	DOUBLE 75 ALT.	P19	TRIPLE 75 PH1	P29	4 SINGLE, 2 QUAD
P10	DOUBLE 120 PH1	P20	TRIPLE 75 PH2	P30	OFF

PATTERNS FOR DUAL COLORS:

<ul style="list-style-type: none"> • SINGLE 75 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 75 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 75 PH1 COLOR 1 ALTERNATELY COLOR 3 • SINGLE 75 PH2 COLOR 1 ALTERNATELY COLOR 3 • SINGLE 75 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 75 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 75 PH1 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 75 PH2 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 75 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • SINGLE 75 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • SINGLE 75 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) • SINGLE 375 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 375 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 375 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 375 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 375 PH1 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 375 PH2 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 375 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • SINGLE 375 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • SINGLE 375 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) • DOUBLE 75 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 75 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 75 PH1 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 75 PH2 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 75 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 75 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 75 PH1 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 75 PH2 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 75 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • DOUBLE 75 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • DOUBLE 75 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) • DOUBLE 120 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 120 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 120 PH1 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 120 PH2 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 120 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 120 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 120 PH1 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 120 PH2 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 120 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • DOUBLE 120 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • DOUBLE 120 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) 	<ul style="list-style-type: none"> • SINGLE 75 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 75 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 75 PH1 COLOR 1 ALTERNATELY COLOR 3 • SINGLE 75 PH2 COLOR 1 ALTERNATELY COLOR 3 • SINGLE 75 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 75 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 75 PH1 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 75 PH2 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 75 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • SINGLE 75 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • SINGLE 75 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) • SINGLE 375 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 375 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • SINGLE 375 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 375 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • SINGLE 375 PH1 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 375 PH2 COLOR 2 ALTERNATELY COLOR 4 • SINGLE 375 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • SINGLE 375 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • SINGLE 375 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) • DOUBLE 75 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 75 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 75 PH1 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 75 PH2 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 75 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 75 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 75 PH1 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 75 PH2 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 75 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • DOUBLE 75 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • DOUBLE 75 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4) • DOUBLE 120 PH1 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 120 PH2 COLOR 1 SYNCHRONOUS COLOR 3 • DOUBLE 120 PH1 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 120 PH2 COLOR 1 ALTERNATELY COLOR 3 • DOUBLE 120 PH1 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 120 PH2 COLOR 2 SYNCHRONOUS COLOR 4 • DOUBLE 120 PH1 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 120 PH2 COLOR 2 ALTERNATELY COLOR 4 • DOUBLE 120 (COLOR 1 SYNCHRONOUS COLOR 3) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 4) • DOUBLE 120 (COLOR 1 SYNCHRONOUS COLOR 4) ALTERNATELY (COLOR 2 SYNCHRONOUS COLOR 3) • DOUBLE 120 (COLOR 1 ALTERNATELY COLOR 2) ALTERNATELY (COLOR 3 ALTERNATELY COLOR 4)
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TROUBLESHOOTING:

THE STAREYE BEACON SERIES HAS BEEN FACTORY TESTED AND APPROVED. IF THE FUNCTIONS OF THE DEVICE FAIL, PLEASE CHECK THE FOLLOWING:

1. AFTER CONNECTING THE POWER SUPPLY, BE SURE THAT THE POWER SOURCE END IS JOINED IN THE CORRECT WAY AND THEN, ENSURE THAT THERE IS NO SHORT CIRCUIT POWER OCCURRING.
2. ENSURE POWER SWITCH IS TURNED TO "ON" POSITION.
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 LIGHT UP AGAIN WHEN THE BLUE WIRE TOUCHES THE BLACK WIRE FOR LESS THAN 1 SECOND.

**IF YOU REQUIRE ADDITIONAL INFORMATION AND/OR VIDEO AND USER GUIDES, PLEASE VISIT WWW.ABRAMSMFG.COM/SUPPORT OR CALL ABRAMS CUSTOMER SUPPORT 844.9.ABRAMS

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 THIS PRODUCT.

