AXTON
ILLUMINATE THE NIGHT

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Thank you for choosing AXTON Lights.

AXTON is a specialist manufacturer of state-of-the-art infrared (IR), visible, and hybrid lighting solutions. Vast experience in the design and manufacturing of electro-optical equipment allows us to produce the most functional and cost-effective lights that also meet the requirements of the most discriminating professional. Utilizing the latest advancements in LED and power supply technologies, our lights are designed to substantially enhance the nighttime performance of your surveillance systems.

Proudly Made in the USA our products feature superior quality, reliability and performance. They are rated for indoor and outdoor application. Rugged design with waterproof construction makes it possible to use AXTON lights in the most adverse environments. They are easy to integrate and are maintenance-free throughout their lifetime.

Green Technology

Built around LED technology AXTON lights consume less energy than standard incandescent light bulbs and deliver the same level of illumination, resulting in lower carbon footprint, and less light pollution making it an eco-friendly lighting solution.

Custom-Tailored Solutions

At AXTON, we pride ourselves on helping our clients to find solutions to their most challenging lighting needs.

GENERAL INSTALLATION

Please refer to the light's Quick Set-Up Guide for detailed product features and set-up instructions.

Connecting and Testing Your Light

To power the light, connect it to an appropriate power source *per unit specifications.*

⚠ **DO NOT connect the IR illuminator directly to an outlet or apply the incorrect voltage.**

All lights are equipped with a built-in regulated power supply with over voltage and under voltage protection when connected to a power source with the correct voltage*. The built-in regulated power supply delivers consistent current to the light thus increasing its useful life.

If testing a light equipped with an Automatic Day/Night Switch in a well-lit environment, you will need to temporarily disable the photocell by covering it. To permanently disable the photocell refer to the Quick Set-Up Guide for the specific device. There is a 15-20 second delay before the light is automatically switched off by the photocell.

Mounting and Installation

Always mount the light with the heat sink fins vertically oriented. Allow enough clearance space for unobstructed air circulation and cooling. Most lights come with a Pan/Tilt U bracket and are equipped with at least one ¼"-20 standard tripod socket located on the back and one on each side panel. Larger units have two ¼"-20 tripod sockets on the back and one on each side panel. Standardized mounting sockets allow you to use your own mounting solutions. Please check our website and/or Product Catalog for additional custom mounting options for AXTON lights.
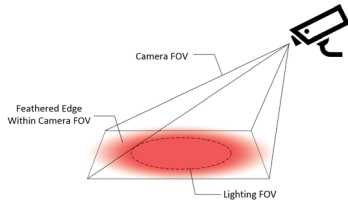
* Please check you products Set-Up Guide or specifications, for the specific voltage required for your light. Applying the incorrect voltage may damage the light and void the warranty.
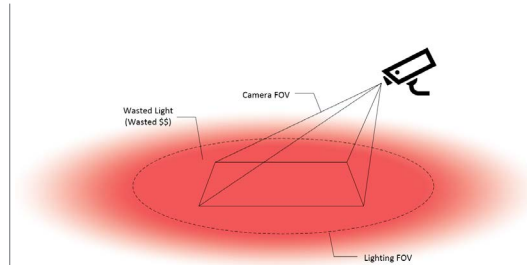
Match Your Camera's Field of View

If the light is attached to a camera, make sure the light is co-aligned with cameras field of view (FOV).

To set up the light, simply point it in the same direction as camera. Adjust the horizontal and vertical positions to align the light beam within the camera's field of view.
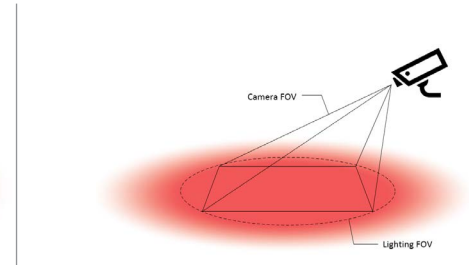
Ideally you have selected a light with an illumination angle that matches your camera's field of view. Please see the figures below for the reference. Be sure to tighten all mounting screws to hold the light in the correct position.

Camera FOV

Feathered Edge
Within Camera FOV

Lighting FOV

INCORRECT
Beam too Narrow

Wasted Light
(Wasted $$)

Camera FOV

Lighting FOV

INCORRECT
Beam too Wide

Camera FOV

Lighting FOV

CORRECT
Beam and camera FOV match

PRECAUTIONS

⚠ Do not view the Infrared light with optical instruments (magnifiers) or stare directly into the lamp at a close distance.

✂ Avoid installing the lights in areas that are exposed to direct sunlight.

✂ Do not install the lights near heat-producing devices, such as radiators, heaters and amplifiers.

✂ Always mount the light in an upright position with <u>heat sink fins vertically oriented.</u>

✂ Allow enough clearance space for unobstructed air circulation and cooling.

▤ AXTON lights that are rated for outdoor applications and carry an IP-67 protection rating against moving dust particles and direct water sprays.

⎍ While our devices are designed for maximum durability in harsh environments, they should be handled with the same care as any sensitive electro-optical device.

⚠ Do not attempt to open or modify the light as this will void the warranty*.

* If there is a specific modification, electric or physical, you need to make to better suit your application, please contact us directly.
 Our knowledgeable technical support team will evaluate your request and advise if it can be accomplished. **All changes MUST be made at our factory.**

TROUBLESHOOTING & MAINTENANCE

If the light does not power on, follow the troubleshooting steps and procedures below:

1. Make sure the light is properly connected to a power source.

2. Check the power source to ensure it provides the appropriate voltage and current, according to unit specifications.

3. Lights with a built-in automatic day/night switch (photocell) will automatically turn ON at low light (~20 lux) and turn OFF with hysteresis at daytime. The switch ON is momentary, and switch OFF is delayed 15-20 seconds.

If testing in a well-lit environment, make sure the photocell is covered to simulate low light level.
To permanently disable the photocell follow the instructions in the in the Quick Set-Up Guide for the specific light.

If the light powers on but, the desired performance is not achieved, try the following:

1. Make sure the light is properly aligned within the camera's field of view.

2. If using with Day/Night camera, make sure the camera is in night mode and the IR filter has moved out of the way.

3. Make sure that the camera's lens diaphragm is fully opened.

4. Megapixel cameras require more illumination to achieve quality images when compared to analog cameras. In this case, additional illumination may be the only solution.

5.   Ambient light (street lights, headlights, window lights) can reduce the range of the light.

6   Not all cameras are equally sensitive to IR light, therefore the performance of the same IR illuminator will vary with different cameras and may deviate from our specifications.

7.   Image may appear out of focus when the IR light is turned on, this is called focus shift. A regular objective lens focuses the light of different wavelengths in different points. To avoid a focus shift, use an IR corrected objective lenses in conjunction with IR lights.

If the problem cannot be resolved, please call us for further technical assistance. To better assist you, please have the following information ready:

1.   Model of you light and product ID number.

2.   Camera/lens make and model paired with the light.

3.   Detailed description of the project such as: required range, ambient light presence, and the desired results (detection/recognition, etc.).

Maintenance

Your AXTON light is a self-sufficient electro-optical device that requires no maintenance. Depending on the place of installation, you may occasionally clean the front cover with optical quality tissue and optical surface cleaning solution. Occasionally clean the back part (heat sink) of the illuminator with a regular cleaning brush. No other maintenance is required.

CERTIFICATIONS

CE This product complies with European Directive 89/336/EEC and 73/23/EEC Low Voltage Directive meeting the following standards:

Safety

Electrical Safety:	IEC/EN60598-2-5
	C22.2 No. 250.0-08
	UL 1598
	2108
Eye Safety:	IEC/EN60825-1

EMC

	Radiated and Conducted Emissions:
	EN55022 :1998
	ICES-003 Issue 4:2004
Immunity	EN50130-4:1995
FCC	CFR 47:2007 Part 15.107& 15.109 CLASS B LIMIT

IP Ingress Protection: IP 67 in accordance with BS EN60529:1992

ISO Certified 9001:2015

WARRANTY

a. Warranty. AXTON represents and warrants that the products sold by AXTON will be free from defects in materials and workmanship from the time of delivery and for lifetime of product thereafter (the "Warranty Period") when properly installed and operated under normal conditions according to AXTON's instructions. The exclusive remedy for breach of the warranty shall be, at AXTON's option, to either repair or replace the defective product or refund to purchaser amount paid for such defective Product. The Reseller shall have the purchaser return the alleged defective product to AXTON's factory, transportation charges prepaid, within one year after the date of delivery by AXTON. AXTON shall only have liability under this warranty if AXTON is satisfied, upon examination of the alleged defective product, that the products were originally shipped in defective state. Any repair service performed by AXTON after the Warranty Period will be performed for a reasonable service charge.

b. Exclusions from Warranty. The warranty in Section 10(a) above does not apply to any Product that has been subject to misuse, negligence, or accident or which has been repaired or altered outside of AXTON's factor. This warranty is void if any housing or cover on the Product is removed. This warranty does not cover accessories or components manufactured by persons or entities other than AXTON. AXTON shall assign any rights it may have in warranties provided by the manufacturers of such components or accessories.

c. Disclaimer of Warranty. EXCEPT AS EXPRESSLY PROVIDED IN THE WARRANTY SET FORTH IN SECTION (a) and (b) ABOVE, AXTON MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OR TRADE OR ANY OTHER MATTER. No employee, representative or agent of AXTON has any authority to bind AXTON to any affirmation, representation or warranty except as stated in this written warranty.