



DARK STRIDER

Night Vision Binoculars



USER'S MANUAL

Important Export Restrictions! Commodities, products, technologies and services of this manual are controlled by the U.S. Department of State Office of Defense Trade Controls, in accordance with International Traffic in Arms (ITAR), Title 22, Code of Federal Regulations Part 120-130 and/or by the Export Administration Regulations (EAR) of U.S. Department of Commerce. At any time when a license or a written approval of the U.S. Government is applicable to it, it is illegal and strictly forbidden to export, intend to export, transfer in any other manner whatsoever, sell any hardware or technical data, provide any associated service to any non-U.S. resident, beyond or within the United States territory, until the valid license or written approval has been issued by the Departments of the U.S. Government having jurisdiction. Additionally U.S. law prohibits the sale, transfer, or export of items to certain restricted parties, destinations, and embargoed countries, as identified on lists maintained by the U.S. Department of State, the U.S. Department of Commerce, and the U.S. Department of Treasury. It is the responsibility of the Customer to be aware of these lists. The sale, transfer, transportation, or shipment outside of the U.S. of any product prohibited or restricted for export without complying with U.S. export control laws and regulations, including proper export licensing, documentation or authorization, is unlawful and may result in civil and/or criminal penalties and/or constitute a federal crime. Diversion contrary to U.S. law is strictly prohibited.



PARTS OF THE BINOCULARS



WARNING:

This product contains natural rubber latex, which may cause allergic reactions! The FDA has reported an increase in the number of deaths associated with sensitivity to natural latex proteins. If you are allergic to latex, learn which products contain it and strictly avoid exposure to those products.

The information provided in this manual is for familiarization purposes only. The contents may undergo further changes with no commitment by Armasight® to notify customers of any updates.

Armasight® assumes no responsibility for any misprints or other errors that this manual may contain.

© Armasight Inc. 2015

1. DESCRIPTION AND DATA

DESCRIPTION

With appearance, size and weight very similar to common daytime binoculars, the Armasight Dark Strider Gen. 1 night vision binoculars offer superb night vision performance in a form familiar to consumers. Binocular night vision is better for sustained viewing periods and improved depth perception. Dark Strider is equipped with two high-quality Gen. 1 image tubes, multi-coated glass lenses and a fitted, rubber-armored aluminum housing.

A built-in, adjustable infrared illuminator ensures operation even in total darkness. Using the Dark Strider is easy due to its simple control buttons and eyepiece-only focusing optics.

Powerful, tough and practical – that’s the Armasight Dark Strider!

FEATURES

- Easy to operate
- Powerful 5x magnification
- Rubberized for extra protection
- High resolution Gen. 1+ Image Intensifier Tube
- Multi-coated all-glass optics
- Build-In Long-Range Infrared Illuminator
- Water and fog resistant
- Limited Two-Year Warranty

SPECIFICATIONS *

Generation	1+
Magnification	5x
Objective lens diameter (mm)	50
Lens system	80mm; F/1.7
Field of view (°)	14
Focus range (m)	10 to infinity
Exit pupil diameter (mm)	5
Eye relief (mm)	15
Power Supply	CR-123 Lithium (1) 3V
Battery life IR On (hour)	up to 12
Battery life IR Off (hour)	up to 58
Body material	Glass-fiber reinforced composite
Lens material/type	Multicoated heavy glass
Operating temperature (°C)	-30 to +45
Tripod mount	Yes
Dimensions (LxWxH, mm/in)	225 x 150 x 60 / 8.9 x 5.9 x 2.3
Weight (kg/lbs)	1.4 / 3

* Armasight© reserves the right to modify these specifications at any time without notice.

STANDARD COMPONENTS DESCRIPTION

1) Armasight Dark Strider Binoculars

Night vision binoculars with 5x magnification.

2) Objective Lens Caps

The objective lens caps are designed to protect the objective lens from physical damage, as well as allow the testing of the device's operation in daylight.

3) Eye Cups

The rubber eye cups are designed to protect the eyepieces and to provide comfort of use for the use.

4) CR123A Lithium Battery

3V CR123A lithium batteries are used to supply power to the unit.

5) Neck Strap

The neck strap allows the Dark Strider Binoculars to hang comfortably around your neck during periods of non-observation.

6) User Manual

The user manual contains a full description of the device and accessories, information about controls, installation, maintenance and troubleshooting procedures.

7) Carrying Case

The carrying case is used to store and carry the Dark Strider binocular and accessories.

OPTIONAL EQUIPMENT

1) XLR-IR850 Detachable Wide Angle Adjustable X-Long-Range Infrared Illuminator (Part# ANKIXLR023)

A detachable LED long-range infrared illuminator with a wide, adjustable beam angle. Compatible with night vision devices that rely on CCD or image intensifier technology. Should be used when there is little to no ambient light. Comes fully assembled with a dedicated mount in order to be installed on a Picatinny/Weaver rail. The IRDS Adapter #115, 18650 rechargeable battery, and Charger are included.

2) XLR-IR Afocal Doubler (Part# ANAF18XXLR)

Doubles the distance of XLR-IR850 IR Illuminator beam. Comes complete with a thread adapter #174.

2. PREPARATIONS FOR OPERATION



WARNING:

The Dark Strider night vision binoculars are designed for several years of reliable service. To ensure trouble-free performance, please observe the following instructions:

- Do not activate the device in daylight unless the protective lens cover is fitted securely over the lens. If the device is ON, do not direct the device at bright light sources, such as car headlights, camp fires, street lights, etc., as this will cause damage to the device.
- Do not check the device operation in daylight unless the front lens cap is fitted securely over the lens, and even then, the device should only be ON for the few seconds it takes to establish correct operation.
- Do not open the body of the device or otherwise disassemble it.
- Avoid dropping or otherwise impacting the device.
- Do not expose the device to moisture or extreme temperatures.
- Do not touch the lenses. Clean optical parts with a clean, soft cloth, and only use professional lens cleaners designed for use with optics.
- Do not forget to remove the battery from the battery compartment if the device is to be stored for **more than 3 days**.
- Do not forget to turn the device OFF during periods of non-operation.



WARNING:

Take into consideration the following information and restrictions in order to avoid damaging the device and to ensure a long service life and failure-free operation:

- Performance of the device in nighttime conditions depends on the level of ambient light in the environment. Some light (moonlight, starlight, etc.) is required for the device to provide an image.
- Ambient light level is reduced by the presence of clouds, shade, or objects that block natural light (buildings, trees, etc.).
- The device loses its effectiveness when operated in shadowed areas.
- The effectiveness of the device is adversely affected by weather conditions such as rain, snow, sleet, or fog, and environmental conditions such as smoke or dust.
- The device resolution level is reduced in environments with very low light sources. The visibility will degrade significantly under starlit conditions, particularly in low contrast environments such as deserts, large areas of uniform vegetation, etc.
- The device is equipped with a protection system that will automatically disable the image intensifier tube when the illuminance level stays above 40 lux for over 10 seconds.

BATTERY INSTALLATION

- 1) Unscrew the battery compartment cap on the front side of the binoculars' body.
- 2) Insert the CR123A battery into the battery compartment in accordance with polarity markings.
- 3) Screw the cap into place.

TRIPOD INSTALLATION

The Dark Strider can be connected to a tripod. To mount the tripod with the Dark Strider device, screw the tripod into the 1/4" threaded socket located on the tripod adapter of the Dark Strider.

NOTE:

The unit may be badly damaged if the tripod collapses or falls over. Remove the unit from the tripod if it is not within your reach.

3. OPERATION INSTRUCTIONS

CONTROLS

The Dark Strider is designed to meet the needs and requirements of various users. Each user can individually set the unit to the most effective and desirable position with the help of the controls. The Dark Strider unit controls and indicators are shown and detailed further, below:

PWR Button. This controls the power supply to the unit. Use this button to turn the unit on and off.

IR Button. This button controls the power supply to the built-in infrared illuminator. Use this button to turn the IR illuminator on and off.

Diopter Adjustment. This control focuses the eyepieces. Use it to get the clearest image possible on the IIT screen.

IR Illuminator Focus Adjustment. This control focuses the IR beam. To adjust the IR beam, rotate the IR illuminator lens.

Power Indicator. A green indicator PWR light will turn on when the unit is on and ready for operation.
IR Activity Indicator. A red indicator IR light will turn on when the IR illuminator is turned on and ready.

FOCUSING

To focus your Dark Strider Binoculars, perform the following steps:

1) Adjust the eye pieces (diopters). Turn the diopter adjustment rings clockwise until they stop. While looking through the eyepieces, observe the scene and slowly begin turning the diopter adjustment rings counterclockwise until the image becomes clear and sharp.

SETTING-UP PROCEDURES

To check device operation in daylight or in an illuminated room, observe the following procedures:

- 1) Verify that the battery is inserted into the battery compartment in accordance with polarity markings on the binoculars' body.
- 2) Verify that the objective lenses and light sensor caps are securely closed.
- 3) Activate the unit by pushing the PWR button, but **without** removing the protective caps. While looking through the eyepieces of your Dark Strider, observe the scene. Verify whether or not the green light is indicating that correct IIT operation is occurring.
- 4) Adjust the interpupillary distance by putting the binocular in both hands and adjusting the binocular until you basically see one round image.
- 5) Adjust the eyepiece diopter rings until the images become clear and sharp.
- 6) Turn the unit OFF by pushing the PWR button. The green glow will disappear from the eyepieces.
- 7) Replace the objective lens caps securely over the objective lenses.

OPERATION IN NIGHTTIME CONDITIONS

CAUTION:

Avoid exposing the binoculars to bright light sources. Bright light emitted by fires, automobile headlights, lanterns, projectors, etc. will cause serious damage to your Dark Strider.

- 1) Visually estimate the illuminance level in the viewing area. Operation with the objective lens caps off is safe when the illuminance level is less than 1 lux; at an illuminance level of 1 lux, you will barely be able to read a newspaper, even after your eyes have adjusted to the low light conditions.
- 2) Remove the front lens caps.
- 3) Activate the unit by pushing the PWR button. A green light indicating correct IIT operation will appear after a momentary delay.
- 4) Observe the scene and focus your Dark Strider.

IR ILLUMINATOR OPERATION

CAUTION:

Do not forget that light emitted from the IR illuminator is invisible to the naked eye; however, it can be easily detected when using night vision devices.

Infrared illuminators are used in areas where the level of light is not sufficient for surveillance. An IR illuminator can provide an extra source of infrared light which, although invisible to the naked eye, can greatly enhance the performance of night vision devices. Turn on the IR illuminator when working in total darkness. Please remember that the beam emitted by your IR illuminator will lose its brightness over distance.

You can activate the IR illuminator of your binoculars by pushing the IR button. A red indicator light will appear when the IR illuminator is turned on.

You can change the field of coverage by adjusting the IR beam. To focus the beam, rotate the IR illuminator lens until the desired field of coverage is reached.

NOTE:

The IR will automatically turn off when the unit's main power is turned OFF.

4. MAINTENANCE PROCEDURES

The Dark Strider should always be stored in the supplied packaging, particularly in heated and ventilated rooms. To keep the device operational, please follow the instructions listed previously regarding preparations for storage. The battery should be stored separately from the unit and be inserted into the battery compartment **only** when the device is being prepared for use. The presence of both acids and alkalis near the binoculars is not recommended.

When stored, your Dark Strider should be protected from exposure to direct sunlight or extreme temperatures.

DARK STRIDER CLEANING PROCEDURES

- 1) Gently remove any dirt from the binoculars' body using a clean, soft cloth.
- 2) Wipe external surfaces down (with the exception of optical surfaces) with a clean cloth moistened with pure water.
- 3) Dry all wet surfaces with a different clean, dry cloth.
- 4) Carefully remove any dirt from the optical surfaces using a lens brush.
- 5) To avoid scratches, optical surfaces must be cleaned using a clean cotton swab that has been slightly dampened with pure alcohol. The glass should be wiped in circular motions starting from the center and moving out towards the edge, without touching the barrel. Change the cotton swab as soon as it becomes dirty.

PREPARATION FOR STORAGE

When preparing your Dark Strider for storage, perform the following steps:

- 1) Verify that the binoculars are operating in accordance with all previously specified procedures.
- 2) Remove the battery from the battery compartment.
- 3) Clean the binoculars and all accessories.
- 4) Place all components into the storage case.

CAUTION:

Each component of the unit should be thoroughly dried before placing them into the storage case.

5. TROUBLESHOOTING

Common problems that may occur with your binoculars or the detection and viewing tests, as well as actions you can take to correct them, are listed in Troubleshooting Table, below. **This table does not list all of the malfunctions that may occur with your device.** If you experience a malfunction of the device that is **not** listed in this table, please contact Armasight or your Dark Strider retailer.

NOTE:

Before you use this table, be sure you have performed all normal operational safety, care and handling checks and procedures. If your device malfunctions in a way not listed in this table, contact Armasight or your Dark Strider retailer.

Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	ACTION
The binoculars do not turn on	Press the PWR button.	Press the PWR button repeatedly.
	Inspect for a missing, defective or improperly installed battery.	Replace the battery or install it properly.
<i>If these actions fail, submit the device for unit level maintenance.</i>		
Poor image quality	Check if the eyepieces are focused.	Focus the oculars.
	Check if the lenses are greasy, fogged or dirty.	Thoroughly clean the surface of each lens.
<i>If the problem persists, contact your service center.</i>		
Light visible through the eyecups	Check the exit pupil distance value.	Press the eyecups to your face.
	Check the resilience of each eyepiece.	If the eyecups are defective, contact your service center.
Diopter adjustment cannot be performed	Check to see if the diopter adjustment rings are deformed or broken.	If the diopter adjustment rings are damaged, contact your service center.
IR illuminator does not switch on	Turn the IR illuminator on in dark area with the binoculars on. Visually estimate, if the observed scene is properly lighted.	If the IR illuminator does not turn on, contact your service center.

6. WARRANTY INFORMATION

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of two (2) years from the date of purchase. This warranty does not cover the battery or damage caused by leaking batteries, nor does it protect against damage due to loss, misuse or mishandling.

In the event a defect that is covered by the warranty occurs during the 2 year period stated above, Armasight, at its option, will either repair or replace the product, and such action on the part of Armasight shall be the full extent of Armasight's liability, and the Customer's sole and exclusive remedy. This warranty does not cover a product (a) used in other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer or by any party other than Armasight without prior written consent of Armasight; (d) special order or "close-out" merchandise or merchandise sold "as-is" by either Armasight or the Armasight dealer; or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of Armasight. Armasight shall not be responsible for any defects or damage that in, Armasight's opinion, is a result from the mishandling, abuse, misuse, improper storage or improper operation, including use in conjunction with equipment which is electrically or mechanically incompatible with or of inferior quality to the product, as well as failure to maintain the environmental conditions specified by the manufacturer.

This warranty is extended only to the original purchaser. Any breach of this warranty shall be waived unless the customer notifies Armasight at the address noted below within the applicable warranty period.

The customer understands and agrees that except for the foregoing warranty, no other warranties written or oral, statutory, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, shall apply to the product. All such implied warranties are hereby and expressly disclaimed.

LIMITATION OF LIABILITY

Armasight will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages or liabilities arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. Armasight's sole undertaking is limited to providing the products and services outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by Armasight to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party or legal entity outside Armasight and the Customer. Armasight's obligations under this Agreement extend solely to the Customer.

Armasight's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to Armasight by the customer or customer's dealer. Armasight shall not, in any event, be liable for special, indirect, incidental, or consequential damages, including, but not limited to, lost income, lost revenue, or lost profit, whether such damages were foreseeable or not at the time of purchase, and whether or not such damages arise out of a breach of warranty, a breach of agreement, negligence, strict liability or any other theory of liability.

PRODUCT WARRANTY REGISTRATION

In order to validate the warranty on your product, Armasight must receive a completed Product Warranty Registration Card for each unit, or the Customer can complete a warranty registration on our website at www.armsight.com. Please complete the included form and immediately mail it to our Service Center:

Armasight Inc.
815 Dubuque Avenue
South San Francisco, CA 94080
USA

OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, the End-user must notify the Armasight’s service department in order to receive a Return Merchandise Authorization number (RMA#). The customer can do this by sending an email to service@armsight.com.

When returning any product, please take or send the product, postage paid, with a copy of your sales receipt, to our service center, Armasight Inc. at the address noted above. All merchandise must be fully insured with the correct postage; Armasight will not be responsible for improper postage or missing or damaged merchandise during shipment.

When sending merchandise back, please write the RMA# clearly on the outside of the shipping box. Please include a letter that indicates your RMA#, Name, Return Address, reason for service return, Contact information (such as a valid telephone number and/or e-mail address), as well as proof of your purchases that will help us to establish the valid start date of the warranty. Product merchandise returns that do not have an RMA listed may be refused or be subject to a significant delay in processing.

Estimated Warranty service time is 10-20 business days. The End-user/Customer is responsible for postage to Armasight for any warranty service. Armasight will cover return postage/shipping to continental USA End-users/Customers after warranty repair only if product is covered by the aforementioned warranty. Armasight will return the product after warranty service via domestic ground service and/or domestic mail. The postage and shipping fees for any other requested, required or international shipping methods will be the responsibility of the End-user/Customer.

ARMASIGHT PRODUCT WARRANTY REGISTRATION CARD

PRODUCT INFORMATION

Product Name _____ Purchased From _____

Purchase Date _____ Product Serial # _____

CUSTOMER INFORMATION

Name _____

Address _____

City _____ Country _____ Zip _____

Day Phone # _____ Home Phone # _____

E-mail address _____

.....
Customer Signature Required



Armasight Inc.

815 Dubuque Avenue,
South San Francisco,
CA 94080, USA

Phone: (650) 589-8181

Fax: (650) 589-8811



WARNING!

This product contains natural rubber latex which may cause allergic reactions! The FDA has reported an increase in the number of deaths that are associated with an apparent sensitivity to natural latex proteins. If you are allergic to latex, it is a good idea to learn which products contain it and strictly avoid exposure to those products.

www.armsight.com