

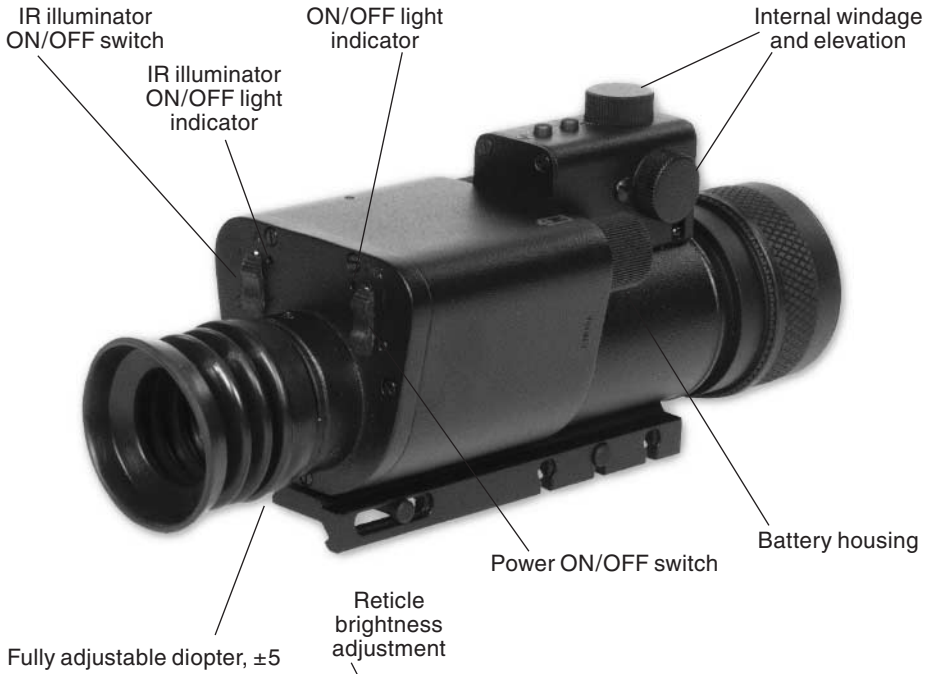
# Aries Mk 208

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# 238



*u s e r ` s   g u i d e*



# APPLICATION

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The Aries 208/238 night vision weapon scope is a complex optoelectronic system for the observation of objects at low light levels (less than 1.0 lux.)

The Aries 208/238 consists of (see figure) the objective lens assembly, ocular lens assembly and the body. The body contains the image intensifier tube assembly with the integrated high voltage power source. The body also houses the electronics for the reticule as well as the battery compartment and the infra-red illuminator, located on the opposite side from the battery compartment.

The objective lens protective cover (not shown) is designed to protect the lens from scratches and abrasions. This cover is also aimed at image intensifier tube protection from high-level illumination. The protective cover acts as a daylight filter, note the pinhole in the center of the lens cap.

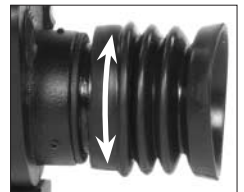
**NOTE:** Please refrain from testing in the daylight for more than ten (10) minutes at a time.

The on/off switch is to be found on the back of the unit. Next to this switch you will find the switch to operate the built in infra-red illuminator.

Adjustments for windage and elevation are covered inside screw top caps. The caps keep the fine reticle adjustment screws from getting clogged with debris.

To focus the Aries 208/238, first you will need to adjust the diopter.

Simply turn the diopter clockwise until it stops. Then, while looking through the diopter at a subject, slowly turn the diopter back counter clockwise until the grain the image is sharp.



**NOTE:** You will need to focus the diopter during daylight with the filter on. Next focus the front lens until the image and the grain are both sharp. When you are in low-light conditions and the daylight filter is off, you may focus the front lens to receive a sharp image, the diopter should not be adjusted.

**NOTE:** The front lens should be readjusted as you view objects at different distances.

For your mounting convenience the Aries 208/238 is supplied with the standard U.S. Weaver mount. This is a standard 7/8" system. Mounting the Aries 208 should be no different than mounting any scope to a Weaver style rail.

# PREPARATION FOR OPERATION

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Before getting started make sure to follow these steps:

- Take the Aries 208/238 out of the case.
- Install the battery into its housing with the polarity order shown on the main body of the unit.
- Switch on the Aries 208/238 with the protective lens cover still attached to the lens.
- Make sure that the green luminance of the light intensifier tube is present.
- Observe the scene, and adjust the diopter and/or lens for optimal image clarity.
- You may now enter a dark environment or simply shut the lights off in order to darken the room.
- Next, remove the lens cap/daylight filter.
- Observe the scene, and adjust the front lens for ideal focus.
- Finally, you may want to turn the infra red (IR) illuminator on. Notice the ability of the Aries 208/238 to see in total darkness with the aid of the IR illuminator.
- You may need to clean the eyepiece and of the unit you have purchased from time to time in order to guarantee top performance. When you receive your Aries 208/238 you should check for dust on the eyepiece of the unit.

The eyepiece is attached to the body of the unit by three small set screws. By loosening the set screws you can easily slide out the eyepiece section of the unit. If there is resistance when you slide out the eyepiece stop and make positive that the set screws are sufficiently loosened.

**NOTE:** You do not have to remove the set screws completely, they are very small and easy to misplace.

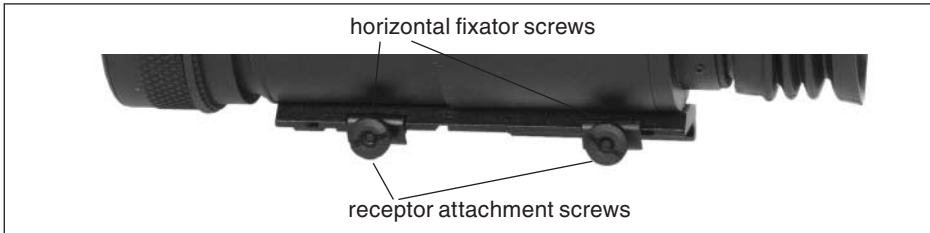
Once the eyepiece section has been removed from your Aries 208/238, you may now clean the dust off the glass surfaces as well as the phosphor screen of the light intensifier tube.

**CAUTION:** Use only Photographic lens cleaning tissue on these surfaces. Be careful not to scratch or smudge any of these surfaces. When using compressed air to blow dust away, make sure to avoid inverting the can while spraying. This can cause frozen propellant to exit the can, which can cause problems with the glass and phosphor screen.

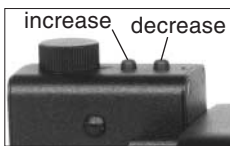
## MOUNTING YOUR WEAPON SCOPE

1. Slightly loosen horizontal and vertical fixator screws on the dove tail clamps, allowing the clamps to slide on the rail.
2. Place the scope on dovetail mount, making certain that the mount aligns with the receptor attachment screw groove. Adjust as necessary.
3. Tighten horizontal fixator screws.
4. Remove Aries 208/238 with entire mounting mechanism. Tighten vertical and horizontal fixator screws.
5. Remount **ARIES** 208/238 and tighten receptor attachment screws.

**NOTE:** Receptor attachment screws may need to be tightened after continuous shooting.



## RETICLE BRIGHTNESS ADJUSTMENT (OPTIONAL)



To adjust the brightness of the reticle or to turn it off all together, use the buttons located on top of the unit near the windage adjustments. The wide end of the triangle represents maximum reticle brightness. The small end of the triangle represents low brightness and the OFF position. Press and hold the button while looking through the scope to see the change in brightness. When desired brightness is reached, release the button.

## WINDAGE AND ELEVATION

The vertical and horizontal adjustments for the Aries 208/238 can be achieved by turning the elevation and windage adjustment mechanisms. Each click is equal .5 inch at 100 yards. When reaching the maximum of the rotation, do not use force.

## INFRA-RED ILLUMINATION (OPTIONAL)



Infra-red (IR) illuminators are common to night vision. The IR light greatly enhances the performance of Aries 208/238. While remaining almost totally invisible to the naked eye. The IR illuminator on the Aries 208/238 is located near the windage and elevation adjustments. The switch to operate the IR is located on the back of the unit next to the main power switch.



In a dark environment, power up the Aries 208/238. Now, find a scene and examine it without the IR on, and with the IR on. Note the difference in illumination. It is important to remember that the IR illuminator is simply an infra-red light source,

and like any light source, it may lose its effectiveness over a great distance.

You may desire a different field of coverage from the IR illuminator, if so the beam is focusable. By turning the lens of the IR illuminator you will change the beam width slightly.

**NOTE:** The IR will automatically turn off when the unit's main power switch is turned to the "off" position, so you don't have to worry about leaving it on.

## OPERATING

The objective lens gathers the image of the observed picture (object, landscape, etc.) to the image intensifier tube photocathode. The intensified image is then formed on the phosphor screen. Next, the image is magnified by the ocular lens (eyepiece) giving you the intensified image.

## TROUBLESHOOTING

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**Q:** Flashes, flickers or clicking occur while operating

**S:** If it occurs within the first five minutes of inserting new batteries, it is normal and the device will resume normal operation soon thereafter. If it occurs for more than 10 minutes, contact your dealer or other authorized service representative for service instructions.

**Q:** Dark spots on screen.

**S:** These are cosmetic blemishes in the intensifier tube. They are a by-product of the process of manufacturing night vision tubes. They will not impede your viewing ability.

**Q:** Fixed-pattern noise in a honeycomb shape.

**S:** Usually a cosmetic blemish characterized by a faint honeycomb-type pattern. This usually occurs when viewing very bright lights. Adjust the potentiometer, to reduce brightness.

**Q:** A pattern of dark thin lines which look like chicken wire.

**S:** Turn on illuminator, if purchased. If illuminator doesn't brighten image, replace batteries. If problem persists, contact your dealer or other authorized service representative for service instructions.

**Q:** Image not clear.

**S:** Adjust focus ring. If problem persists, increase viewing distance from object.

# STORAGE AND CARE

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- **Always remember to turn off the Aries 208/238 when it is not in use. If you do not plan on using the Aries 208/238 for a period of more than 10 days, you should remove the batteries.**
- Avoid touching lenses. If fingerprints or traces of dirt or dust appear, clean surface with photographic lens cleaning tissue.
- Keep lens cap/daylight filter on when not in use.
- Avoid contact with dust, steam, and gas.
- The Aries 208/238 is not harmful to the user or the environment.
- Do not disassemble except to clean the front lens and the eyepiece: **it will void your warranty.**
- Evaluate the scopes function by looking through it in a lit environment with the daylight filter lens cap on. Never use in daylight without the daylight filter lens cap on. **Do not surpass ten minutes of testing.**
- Never point the Aries 208/238 at a bright light source. If the scope shuts off automatically after directing it at a bright light source, turn the unit off and wait 1 - 2 minutes before turning the unit back on.
- Adverse atmospheric conditions such as fog, smog or haze and a lack of ambient light (moon or starlight) may diminish the effective viewing distance. All technical data for this unit was compiled in a controlled environment, therefor it may be difficult to recreate the conditions this scope was tested in.

# FEATURES

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- Great for hunting, camping or surveillance
- Starlight technology.
- Automatic brightness control.
- Optional IR illuminator.
- Lit reticule
- Internally adjustable lit reticule for windage and elevation.
- Mounts to standard U.S. weaver.
- Recoil & flash resistant intensifier tube.
- Rugged and versatile.
- Water resistant.
- Superb multi-coated 6 element lens system.
- Daylight filter.
- Two year warranty (optional extended warranty).
- Assembled in U.S.A.

# SPECIFICATIONS

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Magnification ..... 2.6x  
Intensifier Tube ..... First gen. high res.  
Lens System ..... 6 element 50 mm; F1.2  
Field of View ..... 15"  
Resolution ..... 30 lp/mm  
Minimum Light Req. .... 3X10<sup>-3</sup> lux

Range of Focus..... 2' to ∞  
Power Supply ..... 3 volt  
Battery Life ..... 8 hours  
Operating Temperatures -40°F to +110°F  
Dimensions..... 200mm x75mm x100mm  
Weight..... 1.75 lbs