

Night Scout



u s e r ` s g u i d e



APPLICATION

The Night vision Binocular is a complex optoelectronic system for individual use. The device consists of the objective lenses, eyepieces and the body. The body contains two 1st + Gen. image intensifier tubes assembled with an integrated high voltage power source and two three-volt battery housing. When installing the batteries one should keep in mind that the polarity of the batteries should coincide with the diagram on the body next to the battery housing cap.

Objective lens protective covers are intended to protect the objective lens from dust and scratches. They will also act as daylight filter allowing you to test the Binoculars in daylight or other bright light situations. The pin-holes in the center of the protective covers allow the user to check the operational capability of the device in daylight conditions.

NOTE: Do not test the scope in daylight conditions even with the daylight filter/lens caps on for more than ten (10) minutes.

SMART DIGITAL TECHNOLOGY

Smart Total darkness Technology finally provides the user total control in the hi-tech industry of night vision. The Smart Series night vision binoculars have been designed according to the latest computer technology. On board computer systems identify the users intention of looking through the Binoculars. When the binoculars are brought to the user's eyes, the binoculars will automatically turn on. When removed from the eyes the binoculars will turn off (you must engage the proximity sensor for this feature to work). The user will never have to worry about turning his or her binoculars on or off. Smart series binoculars automatically sense when they are no longer used and shut off and enter their sleep mode. Both the controls and buttons are digital. Even if your batteries are low don't worry the smart series will let you know.

Our Night Scout binoculars have a 3 button digital control panel that allows the user to easily engage the main power, Infra-red illuminator and the proximity sensor. Color coded LEDs let you know the mode of operation you are using.

1. ON/OFF indicator light - when power is ON, the LED is be green.
2. When the proximity sensor is activated the LED will change to red.
3. When IR is ON the LED is orange.

NOTE: You may notice a persistent green glow for up to five (5) minutes after you have turned the unit off. This is normal for the 1st Gen. light intensifier tube.

FOCUSING

To focus the Night Scout first you will need to adjust the diopters. Simply turn the diopters clockwise until they stop. Then, while looking through the diopters at an object, slowly turn the diopters back counter clockwise until the grain in the image is sharp.

NOTE: We suggest that you focus the diopters during, daylight with the daylight filters on.

INFRA-RED ILLUMINATION

Infra-red illuminators, or IR illuminators, are common in night vision. The IR light greatly enhances the performance of the Night Scout while remaining almost totally invisible to the naked eye. The IR illuminator on the Night Scout is located on the side of the unit. To turn the IR on, push the IR button and you will see an orange indicator light come on. 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 efficiency over a great distance.

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

IR LOW BATTERY INDICATOR

The low battery indicator is another feature that is programmed into your “Smart” binoculars. If the batteries start losing voltage, LED “B” will start to pulse, it is time to change your batteries.

USING THE CAMERA ADAPTER (OPTIONAL)

To use your Night Scout with a 35mm camera or camcorder you will need the following:

- 1) If you plan to use a camcorder then your camcorder must have a MACRO feature. Most modern camcorders today have a MACRO feature built in.
- 2) If you plan to use a 35mm camera you will need a MACRO lens. If you don't have one we advise that you contact your local camera store.
- 3) You may or may not need a STEP-UP or STEP-DOWN ring in order to adapt the camera adapter to your lens.

NOTE: The camera adapter comes with 37-mm and 52-mm threads. If you need other sizes your local camera store should be able to help.

- Screw the camera adapter onto the front of the lens on your Video camera's lens or your 35-mm camera's lens.
- Loosen the three set screws on the camera adapter.
- Place the camera adapter over the Night Scout's eyepiece.
- Tighten the three set screws to fit snugly to the Night Scout's eyepiece
- You may need to focus the 35mm camera or video camera in combination with the Night Scout in order to get the sharpest possible image.
- We suggest that you find an open space to work in. Focus the Night Scout so that the scene is at its sharpest. For the best results you should disable the auto focus (if any) on either the 35-mm camera or the video camera and manually focus the 35-mm camera or the video camera. Once the image is in sharp, then simply adjust the Night Scout's front lens to change the focus.
- An important part to remember is that you are not taking a picture of an object that is far away from you, but you are actually taking a picture of a phosphorous screen of the Night Scout that is only 2-3 inches away.



OPERATION

- Take the binoculars out of the case.
- Install the batteries into the housing with the polarity order as shown on the binoculars. Battery Type: 3 Volt Lithium, #CR123A
- Press the button marked -/O to turn unit on with the protective lens covers still attached to the lenses. **Do not turn unit on in the daytime without the protective lens caps on.** You should see a green glow in the eyepieces.
- Observe the scene, and adjust the diopters for the 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 caps/daylight filters and observe the scene. You should readjust the diopters for maximum clarity. Remember the focus range of the binocular is 20' to infinity.
- The unit will turn on and off automatically when you bring it to or take away from your eyes. This is done by activating the proximity sensor. To activate the proximity sensor push the digital control marked "A". You will notice the green LED change to red when the sensor is on.
- In order to assure the proper functioning of the proximity sensor, make sure that the protective glass surface of the sensor is always clean. Adjust the digital features as needed.
- To increase battery life the LED diodes will go off after 10 seconds.
- Take your time learning about your "smart" binoculars. It will take practice to properly use the device. As you use these binoculars you will be able to improve your speed of focusing, as well as sharpness of image.
- Have fun and enjoy.

CLEANING THE EYEPIECE

You may need to clean the eyepiece of the Night Scout from time to time in order to guarantee top performance. When you receive your Night Scout you should check for dust on the eyepiece of the unit. First you will need to remove the eyepiece. To remove the eyepiece you will need to initially loosen 2 set screws that can be found on the base. Then unscrew the eyepiece counter-clockwise to remove it.

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

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 may cause frozen propellant to exit the can, which can result in serious problems of the glass and phosphor screen.*

STORAGE AND CARE

- If the device is not to be used for an extended period of time (more than 10 days) remove the battery.
- Avoid touching lenses. If fingerprints or traces of dirt or dust appear, clean surface with a Photographic lens cleaning tissue.
- Keep the lens cap/daylight filter on when not in use.
- The Night Scout is not harmful to the user or the environment.
- Do not disassemble except to clean the front lens and eyepiece: **it will void your warranty.**
- Evaluate the binoculars 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.
- Never point the Night Scout at a bright light source.
- Adverse atmospheric conditions such as fog, smog or haze and a lack of ambient light (moon or starlight) may diminish the effective viewing distance.
- Remove the rubber eye-cup from the Night Scout

TROUBLE SHOOTING

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 for service instructions.

Q: Dark spots on screen.

S: These are either cosmetic blemishes in the intensifier tube or dust particles. Dust particles can be cleaned following instructions in "Cleaning Eyepiece" section.

Q: Screen becomes darker than in previous use.

S: Replace batteries. If the problem persists contact your dealer or other authorized service representative for service instructions.

Q: Image not clear.

S: Adjust objective lens and/or the eyepiece. Turn on IR.

FEATURES

- Great for hunting, camping, boating or surveillance
- Total darkness technology
- Automatic brightness control
- Built-in IR illuminator
- Manual focus
- Adjustable eyepiece
- High res. 1st+ Gen intensifier tube!
- Rugged and versatile design
- Light weight and comfortable
- Water and dust resistant
- Smart Technology - see description.
- Superb 5x lens system
- Soft case
- Two-year warranty (optional extended warranty).
- Camera Adaptability

SPECIFICATIONS

Magnification 5x
Intensifier Tube 1st+ Gen+; high res.
Lens System 6 (9) elements; F1. 2, 90mm
Field of View 20°
Resolution 40 lp/mm
Minimum Light Req 5×10^{-3} lux

Range of Focus 20' to ∞
Power Supply two 3 volt lithium
Battery Life 10-20 hours
Operating Temperatures -30°F to +110°F
Dimensions 225mm x 150mm x 60mm
Weight 1. 5kg.