

# NIGHT VISION SIGHTS

## COTX4 PRO COTX6 PRO

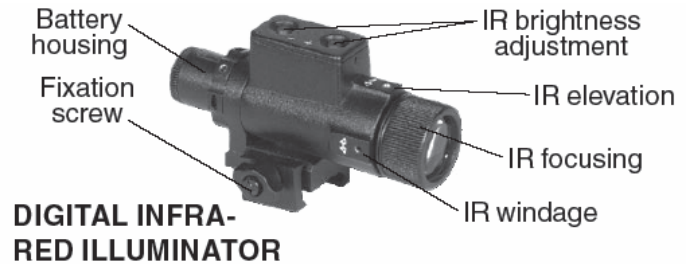
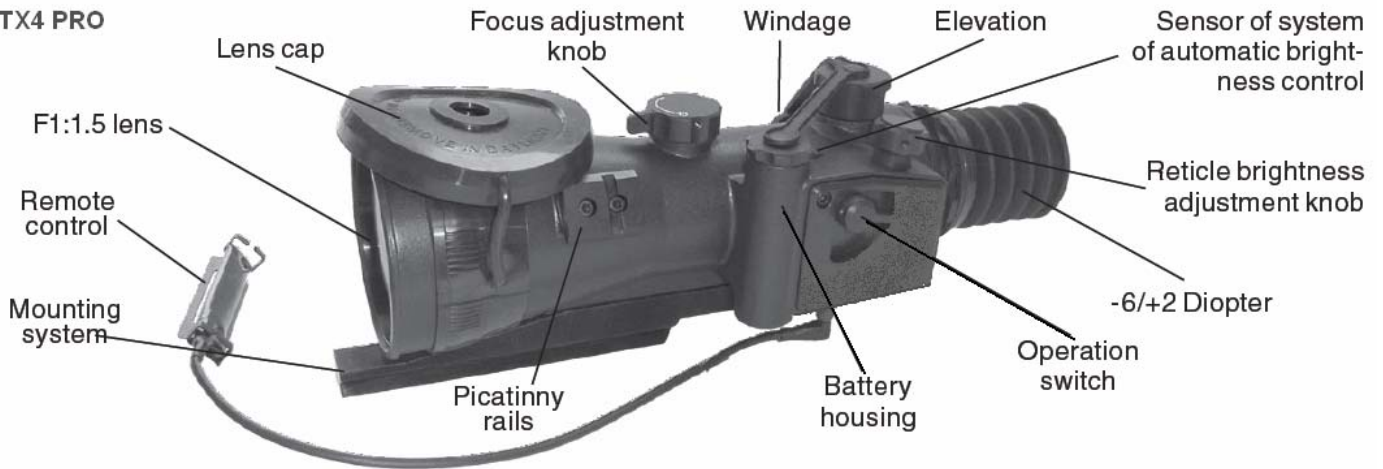


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Modern Optical Technologies

## COTX4 PRO



## FEATURES

- Powerful 4x and 6x magnification
- Superior quality multi-coated all glass optics
- “Single-element” adjustable front focus
- Nitrogen-purged for resistance to internal fogging
- Mil-Dot reticle
- Crisp-click precision windage and elevation adjustments
- Target turrets
- Automatic brightness control
- Tactical rail enabling mounting of IR illuminator or IR laser
- Low battery indicator
- Tactical digital remote control
- Waterproof and submersible to 1m for 30 min
- Day time cover with IR filter
- Limited lifetime warranty

## APPLICATION

New line of COT night vision riflescopes represents the absolute latest in the world of night vision equipment. Similar to another COT night vision sights these new ones feature only the purest grades of heavy glass and computer-aided optical designs to create multi-element, high-speed, multi-coated lenses for ultra-fast light transmission and resolution beyond current standards in night vision technologies. All optical lenses on the COT Pro scopes are individually fitted and calibrated to achieve optimum performance.

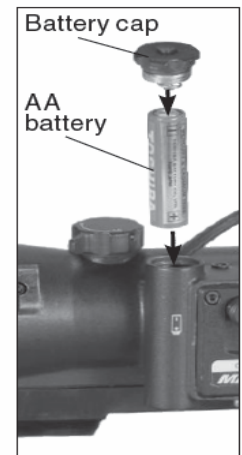
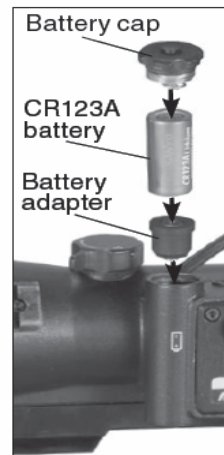
## SPECIFICATIONS

MODEL	COT X 4 PRO	COT X 6 PRO
Intensifier tube	Gen 2 +	Gen 2 +
Magnification	4X	6X
Lens system	F1:1.5, 108 mm	F1:2.0, 162 mm
Objective lens diameter	70 mm	80 mm
FOV	9 deg.	6 deg.
Range of focus	from 10 m to $\infty$	from 25 m to $\infty$
Eye relief distance	45 mm	
Exit pupil diameter	7 mm	
Diopter adjustment	От -6 до +2	
Windage & elevation adjustment range	120 MOA	80 MOA
Click value	1/4	1/6
Reticle Type	Mil-Dot or Duplex	
Voltage	3V (CR123A battery type)	
Battery life	40 hours	
Dimensions	275x90x95 mm	335x95x100 mm
Weight	1.34 kg.	1.55 kg.

## PREPARATION FOR OPERATION

Before getting started make sure to follow these steps:

- Install the battery into its housing with the polarity order shown on the main body of the unit. The CR123A battery is used with adapter. Install adapter first, then the CR123A battery. AA battery is used without adapter.
- Switch on the scope 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.



## OPERATING

### Control

To turn the device on, rotate the Operation Switch from the OFF position to the desired operation mode.

Operation Switch has following positions/modes:

OFF -the device is off;

ON – the device is on;

STB -the device can be used with the Remote Control.



### Focusing

To focus the scope you need to adjust the diopter first. Simply turn the diopter clockwise until it stops. Then concentrate on any object and slowly turn the diopter back counter clockwise until the grain in the image is sharp.

You scope has ability to focus either long range or short.

Focus the front lens by rotating the knob until the image and the gain are both sharp. When you are in the 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 for viewing objects at different distances.

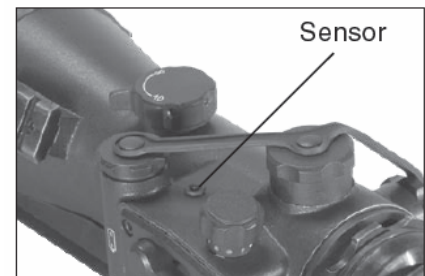
## AUTOMATIC BRIGHTNESS CONTROL SYSTEM

The device has a built in Automatic Brightness Control. This control automatically adjusts the brightness of the Image Intensifier Tube to the optimal level.

## PROTECTIVE SYSTEM

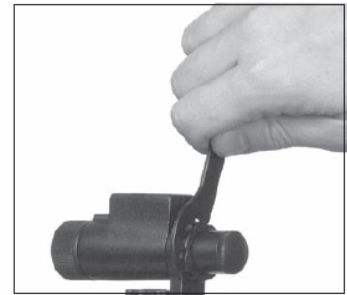
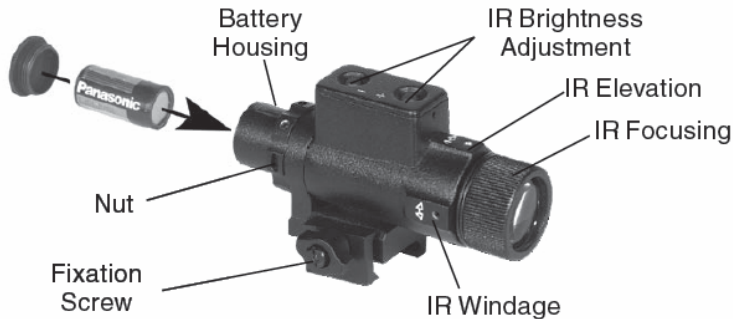
The automatic highlight protective system analyzes light exposure with the sensor. If the level of the light exposure exceeds allowable the red indicator will lights on. If high light exposure is kept more than 10 seconds the device automatically will off.

**NOTE:** The automatic highlight protective system and brightness control system do not protect a sight from damage by bright light sources (a fire, headlights of the automobile, lanterns, etc.). Do not point the device at a bright light source.



## IR ILLUMINATION

Infra-red (IR) Illuminators are common for night vision technology. The IR light greatly enhances the performance of your scope, while remaining almost totally invisible to the naked eye. In dark environment, power up the scope. Now, find a scene and examine it without the IR on then with IR powered up. 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.



To fix the IR illuminator to the riflescope use the Picatinny rail of the scope.

The IR illuminator control buttons are located on its side. To switch the Digital IR illuminator on/off press “+” and “-” buttons simultaneously. When the IR illuminator is switched on you can see the green LED lit. By pushing the buttons “+” and “-” you may adjust the IR brightness.

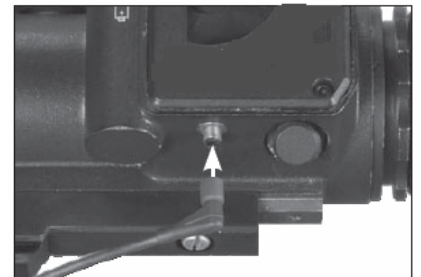
The IR beam is focusable to change the field of coverage. To change the beam width slightly turn the IR lens.

You could change the IR control panel fitting your needs. The wrench included into the set should be used for weakening the fixing nut located on the IR. Rotate the IR placing it in the most convenient position. Tighten the nut with the wrench to fix the new position.

## REMOTE CONTROL

Attach the Remote Control cable to connector on the bottom of the body of device. Place the Remote Control on the weapon, suiting your shooting style best and grip. Fix the Remote Control in this position with a montage strap.

To turn the scope on push the button of remote control. Keep pressed button when observing scene. The scope is turned off immediately after releasing remote control button.



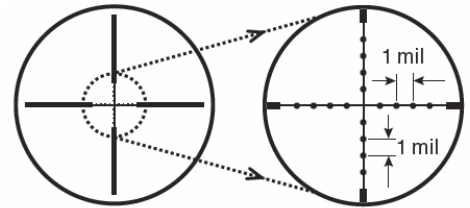
## LOW BATTERY INDICATOR

When red LED on left side of the field of view starts blinking it is time to change your battery.

## RETICLE

Your scope has an Electronic reticle with two color and 5 degrees of brightness of illumination for each color. The knob of brightness adjustment reticle and color select is located on the top of the body of the scope. On the knob there are marking with color of illumination of reticle.

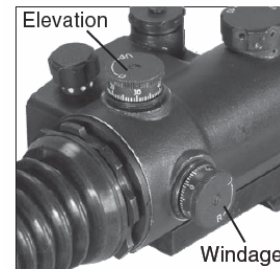
Mil-Dot reticle is a reliable means of determining distances to targets, establishing leads for moving targets, and for alternate aiming points for windage and elevation holds. Dots are spaced in one mil (milliradian) increments on the crosshair. A distance to target can be calculated using the mil formula that is based on the size of the object being targeted.



Look through the scope, and bracket the object between dots. The space between dot centers subtends one milliradian (mil). One mil. subtends 3.6 inches at 100 yards or 36 inches at 1,000 yards. To use this system effectively you must know the size of the target. By measuring the height or width of a known (or approximately known target size) in mil-radians using the reticles, the target distance can be calculated as follows.  $R = \text{range in meters}$ ,  $H = \text{target size in meters}$ ,  $M = \text{mil-radians of the image size}$ :  $R = 1000 * h / m$ . Military shooters are trained to know that the common male torso is 39 inches from crotch to top of head. This is very close to exactly one meter. This formula then becomes  $R = 1000 / m$  for a one meter target size. All of the following formulae are equivalent to the one above for estimating range.  $R = \text{range in meters}$ ,  $H = \text{target size in inches}$ ,  $M = \text{mil-radians of the image}$ :  $R = 25.4 * h / m$   $R = \text{range in yards}$ ,  $H = \text{target size in inches}$ ,  $M = \text{mil-radians of the image}$ :  $R = 27.78 * h / m$   $R = \text{range in yards}$ ,  $H = \text{target size in feet}$ ,  $M = \text{mil-radians of the image}$ :  $R = 333.3 * h / m$ .

## WINDAGE AND ELEVATION

The vertical and horizontal adjustments for the scope can be achieved by turning the elevation and windage adjustment mechanisms (remove dust caps first). Each click equals 1/4 inch at 100 yards (COTX4 PRO) or 1/6 inch at 100 yards (COTX6 PRO). When reaching the maximum range of rotation do not use force.



## WARNINGS AND CAUTIONS

- Always remember to turn off the scope when it is not in use. If you do not plan on using your scope for a period of more than 10 days, you should remove the batteries.
- Keep lens cap on when not in use.
- Avoid contact with dust, steam, and gas.
- The scope is not harmful to the user or the environment.
- Do not disassemble: **it will void your warranty.**
- Evaluate the scopes function by looking through it in a lit environment with the lens cap put on. Never use in daylight without the daylight filter lens cap on. Do not surpass ten minutes of testing.

- Never point the scope 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. All technical data for this unit was compiled in a controlled environment.
- If you use the rubber eye caps for a long period of time, you may suffer skin inflammation. If you develop any symptoms, consult a doctor immediately.

## **TROUBLESHOOTING**

**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:** This may be dust on the lens, please clean according to instructions. They may also be Cosmetic blemishes in the intensifier tube which are a by-product of the manufacturing process. This is normal and will not affect the life or performance of the unit.

**Q:** Image not clear.

**S:** Adjust diopter ring. If problem persists, increase viewing distance

**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.

**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 COT for service instructions.

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