

NIGHT VISION MODULE

COT NM 80



u s e r ' s g u i d e

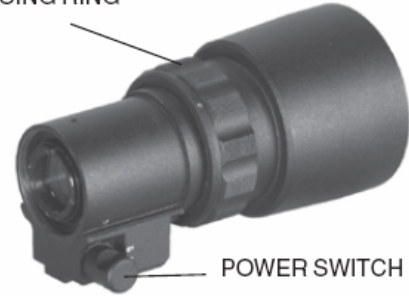


Modern Optical Technologies

FAST CATADIOPTIC
FRONT LENS
SYSTEM WITH
MULTI-COATED ALL
GLASS OPTICS



FOCUSING RING



BATTERY CAP

POWER SWITCH



FRONT LENS CAP



LIGHT SCREEN



7/8" WEAVER MOUNT



BACK CAP



ADAPTER



FILTER
(OPTIONAL)



PICATINNY RAIL
(OPTIONAL)



RING ADAPTER WITH INSERT
(OPTIONAL)



(with using the 7/8" weaver mount
and platform ring for IR450)



(with using the ring adapter and picatinny
rail for IR illuminator)

Application

The NM 80 is the attachment for daytime riflescopes with 1x-6x (2.55x-4x are optimal) magnification that converts a scope into a high quality, very accurate night vision weapon sight.

The NM 80 mounts in front of the daytime scope. Re-zeroing of the scope is not required. The NM 80 comes with standard 7/8" weaver mount. There is also adapter for ARMS quick release mount. Optional Ring Adapters allow mounting the unit onto the objective of the day scope (25...58mm diameter). The IR illuminator can be mounted onto the optional Picatinny Rail.

The NM 80 utilizes a 2nd Gen.+ Image Intensifier Tube. This ingenious setup allows the shooter to go from day to night in less then 30 seconds without tools, without changes in eye relief and remain zeroed all around the clock.

The NM 80 is a complex optical-electronic system. The device contains an image intensifier tube assembly with an integrated high voltage power source and the 3V battery housing. Objective lens protective cover is intended to protect objective lens from dust, scratches and high-level illumination. The pinhole in cover allows the user to check the operation ability of the device in highlight conditions.

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

Features

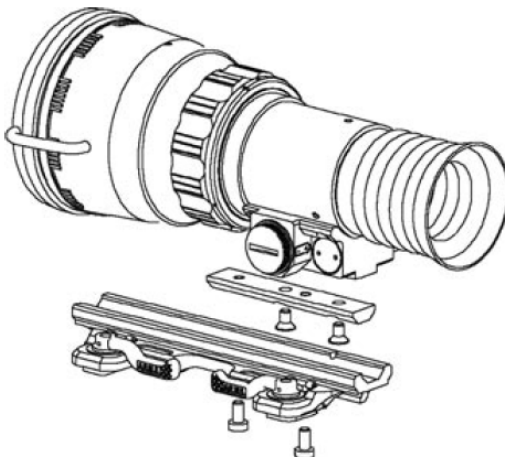
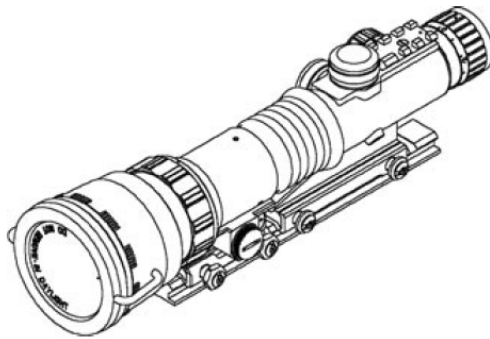
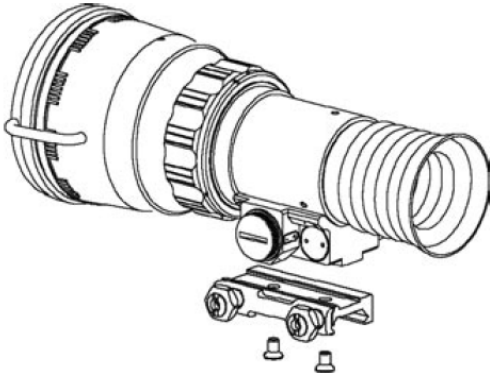
- . • Easily changes daytime scope to Night Vision
- . • Mounts in front of daytime scope, no re-zeroing required
- . • Multi-coated all glass optics
- . • Fast cathadioptic front lens system
- . • Light weight and rugged
- . • Comes with standard 7/8" weaver mount
- . • Optional adapters for mounting onto the objective of the day scope (25...58mm diameter)

Specifications

Magnification.....	1X
Intensifier Tube.....	2nd Gen.+
Lens System.....	F1:1.44, 80mm
FOV.....	13°
Power Supply	one 3 Volt Battery (CR123A)
Range of Focus	10m to Infinity
Battery Life.....	50 hours
Operating Temperature.....	-40°C to +50°C
Waterproof.....	10m for 30min.
Dimensions	139mm X 80mm X 72mm
Weight.....	0.6 kg.

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Mounting



Mounting onto the Weaver rail with 7/8" Weaver Mount

- 1) Mount the 7/8" Weaver Mount onto the body of the NM 80 with 2 screws M4x7 from the set.
- 2) Unscrew the protective back cap from the NM 80.
- 3) Screw the Light Screen into the thread in back side of the unit.
- 4) Slightly loosen the fixing screws of the mount.
- 5) Place the NM 80 on the weaver rail of the fire arm before objective of daytime scope on the minimal distance from it. The optical axes of the NM 80 and the daytime scope must have divergence not more than 3mm. Height of optical axe of the NM 80 under the weaver rail is 40mm with a standard mount and corresponded scope.
- 6) Tighten the fixing screws.

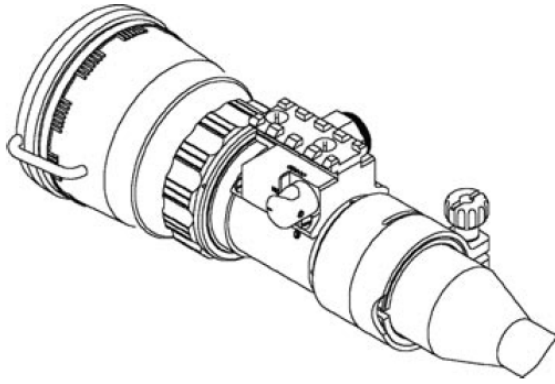
NOTE: Fixing screws may need to be tightened after continuous shooting.

Mounting onto the Weaver rail with A.R.M.S. Mount

- 1) Mount the Adapter onto the body of the NM 80 with 2 screws M4x7 from the set.
- 2) Mount the NM 80 with Adapter onto the A.R.M.S.#10 or A.R.M.S.#19 ACOG with 2 screws M5x8.
- 3) Unscrew the protective back cap from the NM 80.
- 4) Screw the Light Screen into the thread in back side of unit.
- 5) Slightly loosen the fixing screws or levers of the mount.
- 6) Place the NM 80 on the weaver rail of the fire arm before objective of the daytime scope on the minimal distance from it. The optical axes of the NM 80 and the daytime scope must have divergence not more than 3mm. Height of optical axe of the the NM 80 under weaver rail is 49mm with A.R.M.S.#19 ACOG.
- 7) Tighten the fixing screws or levers of the mount.

NOTE: Fixing screws may need to be tightened after continuous shooting.

Mounting onto the objective of the day scope with



Optional Ring Adapters

- 1) Unscrew the protective back cap from the NM 80.
- 2) Screw the Ring Adapter into the thread in back side of the unit.
- 3) Slightly loosen the fixing screws of the Ring Adapter.
- 4) Put the Insert into the Adapter.
- 5) Slide the NM 80 with the Adapter onto the objective of the day scope.
- 6) Tighten hard the fixing screws of the Ring Adapter.
- 7) Mount the Picatinny Rail Adapter onto the body of the NM 80 with 2 screws M4x7 from the set.
- 8) Place the IR Illuminator onto the Picatinny Rail.

**Optional ring Adapters allow to mount unit onto the objective of the day scope
(25...58mm diameter)**

Ring Adapter #	Diameter of scope lens (insert size)	Examples of scopes
1	25.4	Leupold 1,5-5x20 PR
	30	Leupold 1,5-5x20 MR/T M2, Zeiss 1,1-4x24 T
2	38	Meopta Artemis 2000 4x32
	42	Leupold 3-9x36, Kahles 4x36
3	46.5	Leupold 3,5-10x40
	48	Zeiss 1,5-6x42, Swarovski PV-N 2,5-10x42
	from 48.7 to 49.0	Meopta Artemis 3000 3-9x42
	49.5	Meopta Artemis 3000 4-12x40
	50	Schmidt@Bender 10x42 PMII
4	56	Zeiss 2,5-10x50
	57	Schmidt@Bender 3-12x50
	58.4	Leupold 4,4-14x50

Operation

- Place the NM 80 before the objective of the daytime scope.
- Put power switch in OFF-position.
- Install the battery into the housing with the polarity order as shown on the devices body.
- The battery is 3 volt lithium battery (CR123A).
- Turn the device on by rotation of the power switch into the ON-position. The greenish-lit screen of the image tube (when looking through the eyepiece) means that the image tube is powered.
- Do not turn the unit on in the daytime without the protective lens cap on.

- Next, remove the lens cap.
- Observe the scene and adjust the focusing of the NM 80 by rotation of the focusing ring. Also focusing the daytime scope for optimal clarity.
- Turn on the illumination of the day scope reticle (if there is one) and adjust the brightness.
- Put power switch in OFF-position for turn the NM 80 off.

Warnings and cautions

- Always remember to turn off the NM 80 when it is not in use. If you do not plan to use your unit 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 NM 80 is not harmful to the user or the environment.
- Do not disassemble: **it will void your warranty.**
- Never use in daylight without the lens cap on.
- **Never point the NM 80 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.

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 for service instructions.

Q: Dark spots on screen.

S: These are either cosmetic blemish in the intensifier tube or dust particles.

Q: Screen becomes darker than at previous use.

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

Q: Image is not clear.

S: Adjust objective lens, and/or the eyepiece.

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