

Operation Manual



SIB 16x40 WP waterproof binocular with gyro image stabilization

In USA: 2331 Superior Ave. Cleveland, OH 44114 In Canada: 105 Sparks Ave., Toronto, ON M2H 2S5

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IMPORTANT INFORMATION Read prior to activation

You have just purchased a complicated electronic device. To operate it properly, please read this manual carefully. Here are some common precautions that must be noted.

- **NEVER** switch to the stabilization mode while the power supply control indicator is not glowing or less than 1 minute after activating the unit
- **NEVER** hit the unit while operating or being transported
- **NEVER** transport the unit without the case
- **NEVER** disassemble the unit. This device contains high speed rotating parts, which may be hazardous to you!
- **NEVER** turn off the unit while stabilizing mode is on
- **NEVER** reverse the polarity of the batteries
- ALWAYS remove batteries when not in use for a long period
- ALWAYS keep the objective lenses covered when not in use
- ALWAYS store in a warm dry place when not in use

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10. QUALITY CERTIFICATE

The SIB 16x40 WP has passed the quality inspection.

Production date _____

Serial number _____

Quality Inspector signature

Purchase date _____

Salesman _____

Quality assurance seal

9. CUSTOMER SUPPORT

Should you experience any difficulties with your Newcon OPTIK product, consult the enclosed manual. If the problem remains unresolved, contact our customer support department at (416) 663-6963 or Toll free at 1-877-368-6666. Our operating hours are 9am-5pm, Monday - Friday, Standard East Time.

At no time should equipment be sent back to Newcon without following the instructions of our technical support department. Newcon accepts no responsibility for unauthorized returns.

To locate NEWCON Authorized Dealer call: Tel: 1(416) 663-6963 Fax: 1(416) 663-9065 Email: newconsales@newcon-optik.com Web: www.newcon-optik.com The defective products should be shipped to: From USA only: 2331 Superior Ave. Cleveland, OH 44114 From all other countries: 105 Sparks Ave., Toronto, ON M2H 2S5, CANADA

Features of the SIB 16x40WP Gyro binocular

- Stabilized image
- Rigid construction
- Waterproof
- Surveillance in moving environment
- Alternative external power supply

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CAREFULLY READ ALL THE INSTRUCTIONS BEFORE USE! FAILURE TO OBEY THE INSTRUCTIONS WILL VOID THE WARRANTY!

<u>1. BRIEF DESCRIPTION</u>

SIB 16x40WP Gyro Stabilizing Binoculars is an ultimate instrument designed for long-range observation and tracking and surveillance. It is helpful for both amateur and professional users. The areas of application are:

- Observation aboard aircraft, land vehicles, boats or other moving platforms
- Law enforcement and security
- Search and rescue
- Military

The device incorporates gyro image stabilization technology, which enables the user to observe distant objects from moving and nonmoving platforms without degrading of the image resolution inherent for regular optics as a sequence of jolts or normal hand tremor. Being totally waterproof, this unit is invaluable for marine navigation, oil platform surveillance and other similar applications, where strong vibration is complemented by severe environment conditions.

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8. WARRANTY

NEWCON OPTIK warrants this product against defects in material and workmanship for one year from the date of the original date of consumer's purchase, but no more than 18 months from the date of manufacturing. Should your Newcon product prove defective during this period, please bring the product securely packaged in its original container or an equivalent together with proof of the date of original purchase to your Newcon Dealer. Newcon will repair (or at its option replace) the product or part thereof, which, on inspection by Newcon, is found to be defective in materials or workmanship.

What This Warranty Does Not Cover:

NEWCON is not responsible for warranty service should the product fail to be properly maintained or fail to function properly as a result of misuse, abuse, improper installation, neglect, damage caused by disasters such as fire, flood, lightning, improper electrical current, or service other than by a NEWCON Authorized Service. Postage, insurance, or shipping costs incurred in presenting your NEWCON product for warranty service are your responsibility. Please include a check or money order made out to NEWCON OPTIK for the amount of \$15.00 to cover shipping and handling. This covers products shipped in USA or Canada only.

7. TROUBLESHOOTING

2. APPEARANCE AND CONTROLS

The stabilization mode does not work.

Check that the batteries are installed properly. Check the charge of the batteries. Replace if they are weak. Do not use old batteries with new ones.

The image does not appear in focus.

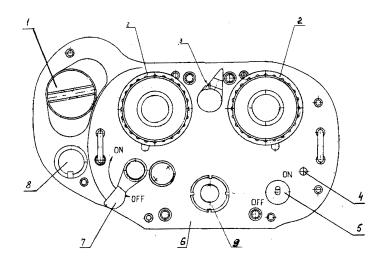
Bring the inspected object to the center of the image. Turning the eyepieces (2), adjust to achieve the clearest image on the screen. If the view still does not seem in focus, clean the lenses. They could be foggy or dusty. Check if there is no moisture inside the unit.

Image is 'waving' when stabilization mode has been engaged. This is a typical 'warming-up' effect that will last for no more than one minute after engaging the stabilization mode.

Condensation accumulates on the parts

In order to avoid misting of the eyepiece lens in cold time use special protective covers. Wait for several hours before use when you take the unit from heated premises outdoors in cold time. Check the silica gel color and replace the desiccant if needed. If nothing helps, dry the unit as described in the maintenance section.





1–Power unit cap; 2–Eyepieces; 3–Lever for interpupillary base changing; 4–Power supply indicator; 5–Power switch; 6–Device front panel; 7–'Stabilization on' lever; 8–Power supply socket; 9–Desiccant compartment

Fig. 1 – Front view

3. TECHNICAL CHARACTERISTICS

Magnification	16x
Angular field of view, no less	3°
Exit pupil diameter, mm	2.5
Minimum focus, m	30
Interpupillary adjustment, mm:	58 – 72
Resolution in the center, stabilization is on	10″
Dioptric adjustment, no less	±5
Transmission factor, not less	0.55
Power source (batteries)	6 (AA)
On-board power source, V DC	12
Angular velocity of panning in any direction, degree/sec:	0 - 6
Stabilization freedom, degrees	±5
Overall dimensions, mm:	230×190×120
Weight (w/o batteries), kg,	2.4
Relative humidity (at +25°C) %:	up to 98
Temperature range, °C	-25 ÷ +45
Temperature range during transportation, °C	-40 ÷ +70

- Prepare fresh silica gel. You should replace the powder indoors or, if in the field, in dry windless weather only.
- Unscrew the desiccant compartment cap with the supplied wrench.
- Pour the wet silica gel out off the compartment and fill it with fresh one. Close the cap.

The wet silica gel may be regenerated. To dry it, place the silica gel into metallic container and heat it to 120 °C until the color of the powder turns blue. Do not burn silica gel with the open fire. If the moisture penetrates inside the binocular and is condensed on the optics, dry the unit as described:

- Unscrew the desiccant compartment cap with the supplied wrench.
- Place the binocular in a dry warm place until the visible condensate drops disappear entirely.
- Fill the desiccant compartment with fresh silica gel. Close the cap.

The binocular long-term storage is allowed in a heated room with temperature no lower than 5 °C. The air in the premises must not contain acid vapor or other active chemical agents. It's allowed to transport binoculars in factory packaging at temperatures from -40 to +70 °C.

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Precautions: SIB 16x40 WP is a sophisticated precision optical instrument equipped with electronics. Therefore, it should be handled with due care.

- Keep your device away from direct sunlight, impacts, dust, moisture, and sudden changes of temperatures.
- Do not keep the device at temperatures higher than $50^{\circ}C$ (122°F).
- Do not touch the optical surfaces with fingers. Doing so may damage the anti-reflection coating.
- Avoid shocks and sharp jolts.
- Cleaning of optical surfaces is only allowed with professional camera lens cleaning supplies.
- To clean the exterior of the device, use a soft clean cloth.
- Keep the unit away from heating appliances and central heating.
- Make sure to switch off the unit during periods of non-operation.
- Remove the batteries when storing the device for long period of time.
- Do not apply superfluous efforts at work with lens assembly, agile elements and thread connections.
- All repair works must be performed by an authorized service only.

You should check the silica gel condition periodically. The color of the powder determines if it needs replacement or not. Fresh silica gel is blue, and if it becomes saturated with moisture, it turns pink. Then you should replace it with a fresh portion as described:

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4. SUPPLIED ACCESSORIES

SIB 16x40 WP is supplied in the following assembly:

-	Device	1 pc.
-	Objective lens caps	2 pc.
-	Carrying case	1 pc.
-	Neck strap	1 pc.
-	DC regulator with cable	1 pc.
-	Napkin	1 pc.
-	Wrench	1 pc.
-	Silica gel	50 grams
-	User's manual	1 pc.
-	Warranty card	1 pc.

5. OPERATION INSTRUCTIONS

5.1. Preparing the unit for operation without image stabilization

- 1. Remove the device from the case and adjust the neck strap.
- 2. Remove the protective caps from the objective lenses.
- 3. Aim the unit to distant objects (over 30 meters away) and adjust the interpupillary distance using lever (3).
- 4. Adjust the dioptric correction by rotating rings on the eyepieces (2).
- 5. Now the device can operate as a conventional 16^x magnification binocular.

5.2. Operation with image stabilization

- Extract the battery cartridge. To do this, rotate the compartment cover (1) counterclockwise at quarter of the circle. The battery cartridge turns loose and can be extracted easily from the body of the unit. **Note:** Don't apply extra strength to the handle!
- Insert six AA batteries into the cartridge observing correct polarity, which is marked on the cartridge bottom.
- Place the cartridge with batteries into the power supply unit and lock it with the cover (1), rotating it clockwise at quarter of the circle. **Note:** Don't apply extra strength to the handle!
- In order to power the unit from the car lighter socket, connect the supplied DC converter with the socket (8). The binocular will switch to the external power source automatically (the absence or presence of the battery cartridge does not tell on the unit workability).
- Turn on the device by setting supply voltage switch (5) to ON position and check the power supply unit for proper operation (the indicator (4) must glow brightly).
- In no less than a minute, pull with your thumb the lever (7) in the arrow indicated direction in order to engage the stabilizing mode and hold it in this position while observing.

ATTENTION! It is not allowed to engage the stabilizing mode of the device when the power supply control indicator is not glowing, or in less than a minute after device has been turned ON.

After you have finished the observation,

release the lever (7). The lever should return to the initial position. Now the stabilizing mode is switched off. Turn the power switch (5) into the OFF position.

6. STORAGE AND MAINTENANCE INSTRUCTIONS.

Warning! After transportation or keeping the device at temperature lower than $-25^{\circ}C$ ($-13^{\circ}F$), the device must be warmed up to ambient temperature for at least 6 hours before operating.

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