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## Operator's Manual

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# **Big Eye Binoculars**

## **20x40x100**

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105 Sparks Ave., Toronto, ON, M2H 2S5, Canada



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# 1. BRIEF DESCRIPTION

The Big Eye Binoculars (hereinafter referred to as Big Eye) features high optical and technical characteristics. It is designed and intended for viewing distant objects under all climatic conditions.

Two types of interchangeable eyepieces, 20x and 40x, provide different magnification depending on observer's preferences. This model works in wide range of temperatures and humidity up to 98%.

**Caution:**

**The binoculars should never be used to directly observe bright sources of light, such as welding arc light, sunlight, etc to prevent damage to eyes or skin.**

## 2. SPECIFICATIONS

Magnification	20x	40x
Field of view, degrees	2.4	1.5
Apparent field of view, degrees	48	60
Exit pupil diameter, mm	5	2.5
Eye relief, mm	23	13
Eyepiece dioptr setting range, dioptr	-5...+20	
Interpupillary distance setting, mm	58-72	
Light transmission (directed), min	70%	
Twilight index	44.72	63.25
Relative brightness	25	6.25
Resolution, angular seconds	2.45	2.76
Dimensions, binoculars only, mm	420x257x125	
Net weight (without tripod), kg, max	7	
Focusing distance, m	20-∞	
Surveying angle, degrees	50	
Elevation, degrees	85	

### **3. ASSEMBLY**

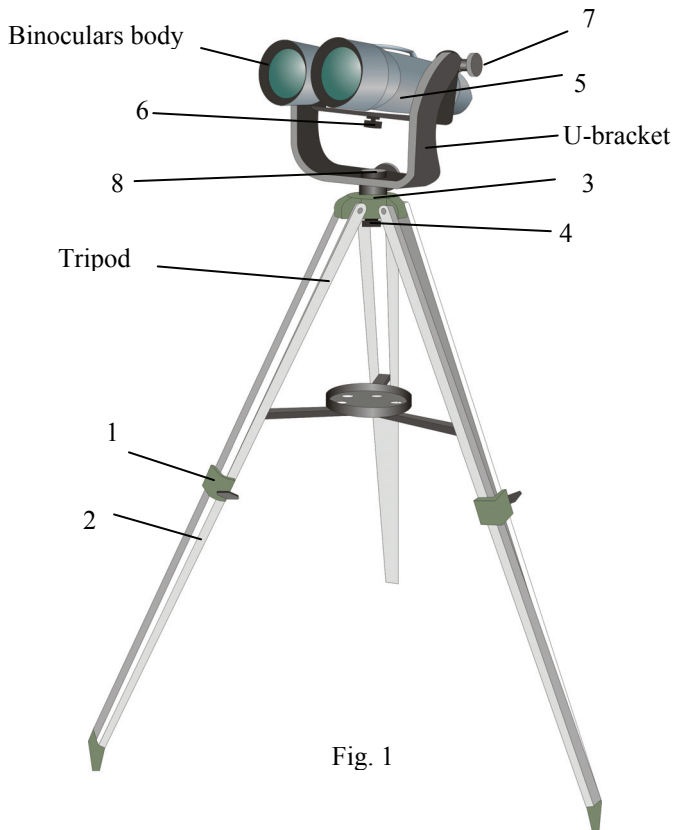
The binoculars appearance is shown on the Figure 1. It consists of the binocular itself, U-mount and tripod.

#### **1. How to adjust the tripod**

The tripod height can be adjusted by locknuts (1). Loosen the locknuts (1) and pull out the legs (2) to get the desired height, and then tighten the locknuts. The locknuts should be reliably secured to mount the U bracket on the tripod.

#### **2. How to mount the U bracket**

Put the model U bracket on platform of the tripod (3), and then fasten the locknut (4). The model U bracket must be firmly fixed on the tripod.



### **3. How to mount the binoculars on the U bracket**

Place the bottom of the binoculars (5) on the U bracket and tighten the locknut (6). Tighten left and right locknuts (7) of the U bracket.

### **4. How to use the align the binoculars with the target**

Loosen the U bracket locknut (8) and rotate the binoculars around vertical axle. Aim the binoculars towards your target. Loosen locknuts (7) and adjust the vertical viewing angle respectively. Tighten back the locknuts (7) and (8).

### **5. How to replace eyepieces with different magnification**

Eyepieces are mounted in eccentric holders and secured in body by means of threaded rings. Place the supplied rubbers into the grooves on the eyepiece body and secure the eyepieces in the eyepiece holders.

### **6. How to adjust interpupillary distance**

The adjustment is performed by rotating of two eccentrics (9) (Figure 2). The observer is supposed to find the distance suitable for his individual normal viewing.



## 7. How to adjust the dioptres

The diopter adjustment is performed by the knobs 10. The observer is supposed to find the diopter position suitable for his individual normal viewing.

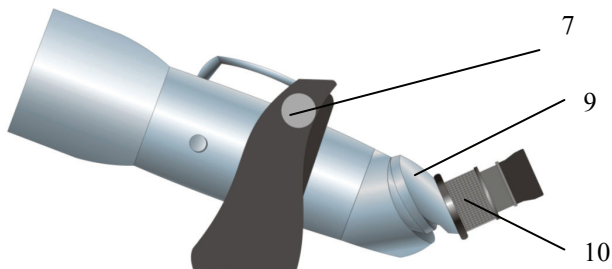


Fig. 2

## 8. STORAGE AND MAINTENANCE

Big Eye 20(40) x 100 high magnification binoculars are a precision optical instrument. It should be handled with utmost care when in operation, storage and transportation. When using and storing, the binoculars should be kept clean. If dust, grease or dirt is found on the glass surface, gently wipe it off with a piece of clean cloth or lens paper. It's forbidden to wipe lens off with fingers, ordinary paper or dirty cloth.

In case of any malfunction, please contact the manufacturer; never disassemble the binoculars yourself.

Inspect the condition of the cartridge with desiccant. During the seasons when relative humidity tends to increase (specifically in fall and in spring) proceed with drying the binocular twice a month.

During the colder season of the year, when the ambient temperature drops below zero, be sure to periodically rotate the mechanisms, so as to protect them against freezing.

The binoculars should be stored at temperature range between +5°C and + 35°C and relative humidity not more than 70%. The premises should be well ventilated. It's not permissible to store the binoculars with chemicals, such as acids, alkalis, salts and batteries etc. The binoculars cannot be exposed to open heat closer than 1.5 meters from the heat source.

## 9. WARRANTY

**NEWCON** warrants this product against defects in material and workmanship for one year from the date of the original purchase. Longer warranty is available, subject to the terms of the specific sales contract. Should your Newcon product prove to be defective during this period, please deliver the product securely packaged in its original container or an equivalent, along with the proof of the original purchase date to your Newcon Dealer.

Newcon will repair (or at its option replace with the same or comparable model), 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 as a result of improper maintenance, misuse, abuse, improper installation, neglect, damage caused by disasters such as fire, flooding, lightning, improper power supply, or service other than by a NEWCON Authorized Service.

Postage, insurance, and shipping costs incurred while presenting your NEWCON product for warranty service are your responsibility.

## 10. CUSTOMER SUPPORT

Should you experience any difficulties with your NEWCON OPTIK product, consult this manual first. 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, Eastern Standard Time. At no time should equipment be sent back to Newcon without following the instructions of our technical support department.

NEWCON OPTIK accepts no responsibility for unauthorized returns.

To locate NEWCON Authorized Dealer

call: +1(416) 663-6963 or

fax: (416) 663-9065 or

email: [newconsales@newcon-optik.com](mailto:newconsales@newcon-optik.com),

Web: [www.newcon-optik.com](http://www.newcon-optik.com)

Defective products should be shipped to:

**US customers:**

2498 Superior Ave. Cleveland, OH 44114

**From all other countries:**

105 Sparks Ave., Toronto, ON, M2H 2S5, CANADA



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