

FMT/MT Series

Instruction Manual
Notice d'utilisation
Gebrauchsanweisung
Manual de Instrucciones
取扱説明書



8x30 FMTR-SX
7x50 MT-SX
7x50 MTR-SX
7x50 FMT-SX
7x50 FMTR-SX
7x50 MTRC-SX
7x50 FMTRC-SX
10x50 FMT-SX
10x50 FMTR-SX
10x70 MT-SX
10x70 FMT-SX
16x70 FMT-SX

FUJIFILMグループ
フジノン株式会社

FUJIFILM Group
FUJINON Corporation

FUJIFILM

FUJIFILMグループ

フジノン株式会社

〒331-9624 埼玉県さいたま市北区植竹町1-324
営業部特殊機器課
TEL: 048(668)2149 FAX: 048(651)8517
E-mail: sales@mvs.fujinon.co.jp
URL: <http://www.fujinon.co.jp/>

FUJIFILM Group

FUJINON Corporation

1-324 UETAKE, KITA-KU, SAITAMA CITY, SAITAMA
331-9624, JAPAN
TEL: 81-48-668-2149 FAX: 81-48-651-8517
<http://www.fujinon.co.jp/>

FUJINON INC.

10 HIGH POINT DRIVE, WAYNE, NJ 07470, U.S.A.
TEL: 1-973-633-5600 FAX: 1-973-633-5216
E-mail: lens.sales@fujinon.com
<http://www.fujinon.com/>

FUJINON (EUROPE) GmbH

HALSKESTRASSE 4, 47877 WILlich, GERMANY
TEL: 49-2154-924-0 FAX: 49-2154-924-250
E-mail: fujinon@fujinon.de
<http://www.fujinon.de/>

FUJINON SINGAPORE PTE. LTD.

BLK 211 HENDERSON ROAD, #10-04 HENDERSON
INDUSTRIAL PARK, SINGAPORE, 159552
TEL: 65-6276-4988 FAX: 65-6276-6911
E-mail: fujinon@fujinon.com.sg

FUJINON AUSTRALIA PTY. LTD.

UNIT-18, 52 HOLKER STREET, SILVERWATER
N.S.W. 2128, AUSTRALIA
TEL: 61-2-9748-2744 FAX: 61-2-9748-2428
E-mail: sales@fujinon.com.au

FUJINON HONG KONG LTD.

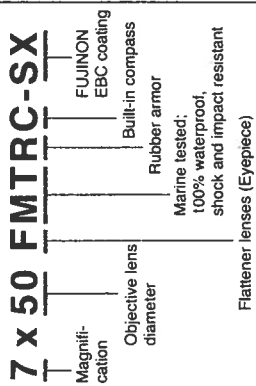
UNIT 2605-2607, LEVEL 26, METROPLAZA, TOWER 1,
223 HING FONG ROAD, KWAI FONG N.T., HONG KONG
TEL: 852-2311-1228 FAX: 852-2724-1118
E-mail: enquiry@fujinon.com.hk

■ Congratulations

We appreciate your purchase of our FUJINON FMT/MT series which represent the highest quality in optical performance coupled with legendary strength and durability. Absolutely waterproof, light alloy construction, these binoculars are built to deliver a lifetime of use.

Before using your new FMT/MT binocular, please read this manual carefully and follow the instructions to assure correct use and care. Keep this manual handy for future reference.

[Symbols]

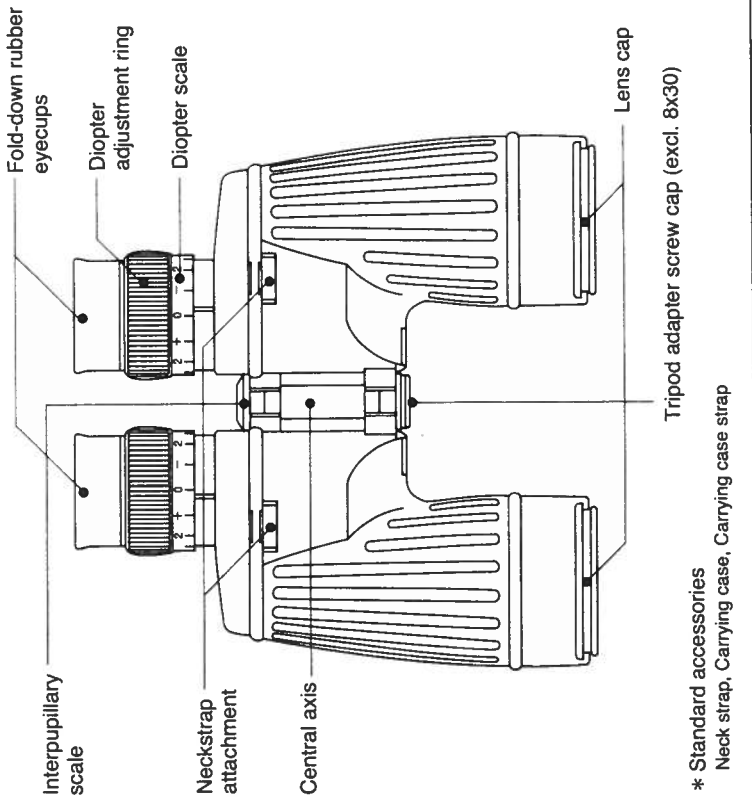


■ Characteristics

The FUJINON FMT/MT series high performance binoculars are designed for use in marine environments where maximum light transmission, crystal clear images, and waterproof construction are essential. And also for astronomical viewing where high power and freedom from distortion are critically important. Large objective lenses and Fujinon's patented multi-layer EBC (electron beam coating) applied to every optical surface, make these the brightest of binoculars. The dry-nitrogen purged, cast, light-alloy housings employ advanced ergonomics for comfortable use with the strength associated with meeting and exceeding military specifications.

FMTRC-SX and MTRC-SX models have a built-in compass for navigating support. A reticle is provided (visible through the left eyepiece) for measuring distances and object sizes.

■ Parts



* Standard accessories
Neck strap, Carrying case, Carrying case strap

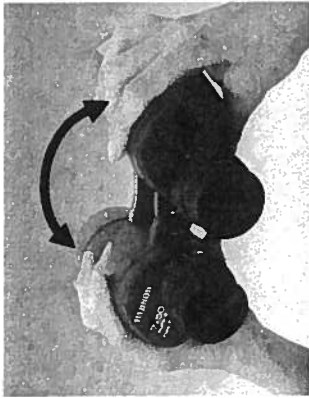
■ Specifications

Item	Model	8x30 FMTR-SX	7x50 MT-SX	7x50 MTR-SX	7x50 FMT-SX	7x50 FMTR-SX	7x50 MTRC-SX	7x50 FMTRC-SX	10x50 FMT-SX	10x50 FMTR-SX	10x70 MT-SX	10x70 FMTR-SX	16x70 FMT-SX
Magnification		8	7	7	7	7	7	7	10	10	10	10	16
Objective lens diameter (mm)		30	50	50	50	50	50	50	50	50	70	70	70
Eye relief (mm)		16.6	12	12	23	23	12	19.8	19.8	19.8	12	23	15.5
Apparent field of view (m)		7°30'	7°30'	7°30'	7°30'	7°30'	7°30'	6°30'	6°30'	6°30'	5°18'	5°18'	4°
Field of view at 1000m (m)		131	131	131	131	131	131	113	113	113	93	93	70
Exit pupil (mm)		3.75	7.14	7.14	7.14	7.14	7.14	5	5	5	7	7	4.38
Relative brightness		14.1	51	51	51	51	51	25	25	25	49	49	19.1
Interpupillary adjustment distance (mm)		56-74	56-74	56-74	56-74	56-74	56-74	56-74	56-74	56-74	56-74	56-74	56-74
Height (mm)		130	185	187	196	198	187	191	191	191	269	280	270
Width (mm)		170	218	218	218	218	218	218	218	218	238	238	238
Mass (kg)		0.72	1.22	1.30	1.38	1.41	1.36	1.40	1.40	1.43	1.80	1.93	1.92

1 Due to a process of continuous product improvements, specifications are subject to change without notice.

How to Use

Adjusting the interpupillary distance



- 1) If you do not wear glasses, be sure the rubber eyecups are fully extended out from the binocular. If you wear glasses, fold the rubber eyecups back towards the binocular. This assures that you will see the complete field of view and enjoy maximum eye relief.
- 2) Look through the binocular and adjust the interpupillary distance (the distance between the eyes) by narrowing or widening the two barrels until you see a single, perfectly round image. If others will be using your binocular, you should note the setting shown on the interpupillary scale.

*When adjusting the interpupillary distance, never attempt to force the binoculars into an impossible position.

Adjusting focus



- 1) In the event that the user has normal eyesight, distant objects are clearly visible when the diopter adjustment ring scale is set to 0.
- 2) Users who are near- or farsighted, in either or both eyes, should adjust each eyepiece until each eye sees a sharp, perfectly focused distant image. Most people will find that the vision in each of their eyes is not exactly the same. Individual eyepiece focusing compensates for that.

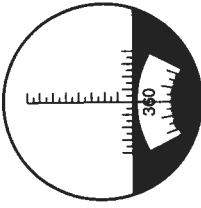


Attaching Tripod

- 1) When attaching the binoculars to a tripod, remove the tripod attachment screw cap by turning it to the left.
- 2) Attach a tripod adapter (sold separately) to the tripod attachment screw hole.

Using the Compass (7X50 MTRC-SX / FMTRC-SX only)

Compasses include a scale as shown in the diagram. Focus on a far object and the scale will appear clear in the field of view (left side). The scale located on the top half of the field of view measures distance or the size of the object; the compass reading located on the bottom half of the field of view, indicates the direction in which the object is facing. Scale is measured in units called "mil". One mil is equal to the angle needed to view a 1-meter object at a distance of 1000 meters. The binoculars feature a scale of up to 70 mils vertically and 80 mils horizontally, at intervals of 5 mils.



[Direction] 90 = east
180 = south
270 = west
360 = north

Reading the Scale

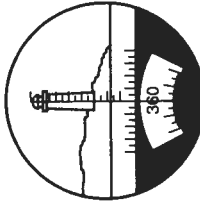
Measuring distance

In order to measure distances, it is necessary to know the size of the object.

$$\text{Distance} = \frac{\text{Object size}}{\text{Reading on scale}} \times 1000$$

Example:

Object size : 10 m
Scale reading : 50 mils
Distance A = $10 \div 50 \times 1000 = 200$ m



Calculating Object Size

In order to measure size, it is necessary to know the distance to the object.

$$\text{Size} = \frac{\text{Distance} \times \text{Reading on scale}}{1000}$$

Example:

Distance : 200 m
Scale reading : 50 mils
Object size = $200 \times 50 \div 1000 = 10$ m

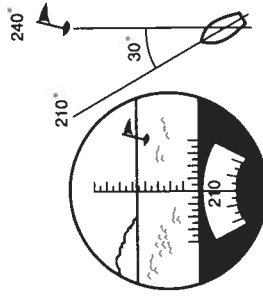
Calculating Object Direction

First, read the number displayed when looking in the direction of the bow, then the number when looking in the direction of the object; this gives the direction of travel in relation to the object.

(Keep the binoculars horizontal and adjust the object to the vertical scale).

Example:

When looking in direction of bow: 210°
When looking at buoy: 240°
Direction of travel: 30° in relation to the buoy



7X50 MTRC-SX and FMTRC-SX models include a compass usable in the Northern Hemisphere, including the U.S., Europe and Japan. We recommend replacing compasses for use in the Southern Hemisphere.

■ Maintenance and storage

1. Cleaning the lenses

Dirt and fingerprints on the surface of the lenses diminish visibility considerably, and, in the event that they are "baked on" by sunlight and left for days without treatment, can become permanent. When the lenses are soiled, remove dust with a soft, dry brush, and wipe dirt and fingerprints off with a small amount of alcohol soaked into a soft, clean cloth. Wipe using a circular motion, from the center outwards.

2. Cleaning the body

If the outer surface of the binocular becomes soiled or wet, wipe with a dry cloth, be sure the binoculars are completely dry before replacing them in the case. When the binoculars are used in a salt-air/ocean environment, they should be rinsed in fresh water before being stowed away.

3. Storage

The binocular can be used in temperatures between -20° and $+50^{\circ}$. However, never leave the binocular in particularly hot or cold places, such as cars, summer or winter. When not using the binocular for any considerable length of time, store it in a cool dry place.

■ Options

● Filters



● Contoured Eyecup





● Compass illuminator



* Enquire about optional accessories at the time of purchase.

Precautions and Warnings

 DANGER	High level warning against severe personal harm or serious product damage.
 WARNING	Precautions that should be followed in order to prevent damage to the product or injury to those using it.



Never look directly at the sun loss of vision, can result.



- Do not leave the binocular on any unstable surface. In the event that the binoculars fall, injury may result.
- Never try to walk and use the binocular at the same time; accidents and injuries could result.
- Do not swing the binoculars by the neck strap; the binoculars might strike and injure someone or be damaged by hitting a solid object.
- Be careful not to get fingers caught or jammed during interpupillary adjustment; injury may result. Pay particular attention when children are using the binoculars.
- Avoid leaving the binoculars unattended and exposed to direct sunlight. Sun light rays passing through the lenses could cause a fire.
- Prolonged use with contact of the rubber eyepieces against the skin can cause irritation. If such a condition persists, consult your doctor.
- Ensure that children do not swallow caps, small parts, etc. In such case, consult a physician immediately.
- Do not leave plastic bags, etc., where they can be reached by children. Suffocation may result.
- Never disassemble the binoculars. Repair of disassembled binoculars is subject to fees, even during the warranty period. In the event of a malfunction, contact the place of purchase.