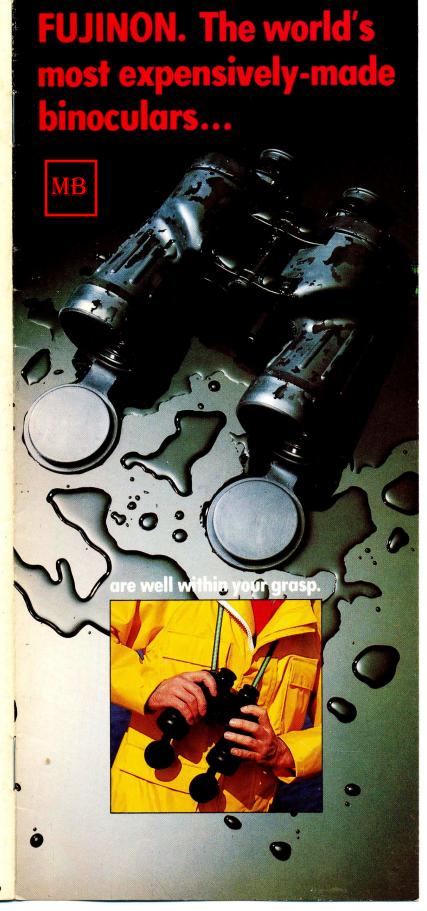


**Fujinon Optical Inc.** 672 White Plains Road Scarsdale, New York 10583 (914) 472-9800

### **West Coast Distributor:**

F.P. Optical Inc. 3333 Bowers Avenue Santa Clara, California 95051 (408) 727-2757



## FUJINON invites comparison. In fact, we demand it!

For your sake, never buy a pair of binoculars without first comparing it to others.

For the same reasons you test drive cars and listen to many stereo systems before deciding, you owe it to yourself to compare FUJINON with the least expensive <u>and</u> the most expensive binoculars available today.

Clearly superior to inexpensive binoculars which can subject you to optical distortion, flare—even discomfort when used for prolonged periods—FUJINON binoculars are also equal, if not superior to—the most expensively-priced binoculars costing twice as much as FUJINON.



All the things you have come to expect from a precision instrument you'll find when you first experience the feel, balance and features FUJINON gives you.

Whatever model you examine, you will immediately note the work-manship, maneuverability and ease of operation.

But the FUJINON story goes far beyond pleasing esthetics.

Our binoculars are the world's most expensively built because we put more technology into them.



## FUJINON binoculars... results of a grand tradition of optical excellence.

FUJINON Optical is part of the dynamic Fuji Photo Film group known throughout the world for the finest in cameras, film and audio tapes. FUJINON advanced design products include binoculars, medical fiberoptic instruments, and television lenses and systems for broadcast and closed circuit cameras. Many of the news events, entertainment and sports broadcasts you watch are the result of FUJINON leadership in tv lens technology. (In fact, the 1980 Summer Olympics telecast from Moscow will depend heavily on the super zoom FUJINON lenses on NBC's cameras.)



### What makes FUJINON binoculars better?

Test FUJINON. Compare FUJINON. Dollar for dollar, FUJINON is the best investment you can make in binoculars...because we put more money into making them.

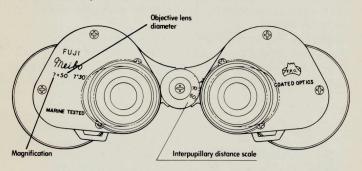
While other glass manufacturers may use clay crucibles to melt glass, we use platinum crucibles to reduce the possibility of contamination from impurities.

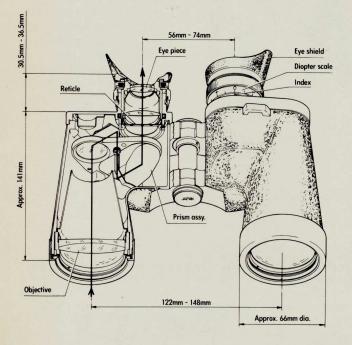
Because advanced design optics require mathematical skills of the highest order, we maintain an elaborate computer center to assist our optical engineers every step along the way—with total quality control checks in-between.

Another expense which insures our reputation for quality is our exclusive and patented Electron Beam Coating (EBC) process. While costly, it pays for itself by virtually eliminating flare while providing maximum brightness possible; a lens with EBC transmits 99.8% of the light; only 0.2% is reflected. In addition, the FUJINON EBC zirconium oxide process (applied at 2700 C) improves color transmission across the spectrum and is uniformly thin edge to edge.

## A short course in binocular optics

An understanding of the following items will help you discuss binoculars with your Authorized FUJINON Dealer...





Terms such as 7x50 are used to indicate binocular performance. The "7" refers to the magnification; the "50" is the diameter in mm of •the objective lenses.

**Magnification (x):** This indicates how many times a viewed object is enlarged compared to the naked eye. In terms of distance, at 7x an object 700 yards away will appear 100 yards away.

**Objective lens effective diameter (mm):** The brightness of a scene is based upon the size (diameter) of the objective lens. The larger the diameter of the objective lens, the greater the quantity of gathered light. This means a brighter and higher resolution image can be obtained.

**Field of view (in yards, meters or degrees):** This refers to the portion of the whole scene that can be viewed in binoculars at one time. It is determined by the distance from the objective lens to the viewed object. The width of the viewable portion is usually expressed in degrees. Higher magnification results in a narrower field of view. **Exit pupil:** This figure is the objective lens effective diameter divided by the magnification. Example: in the case of 7x50, 50mm divided by 7 equals 7.14 exit pupil. Thus, a large diameter objective lens will have a larger diameter exit pupil. The same diameter lens with high magnification will have a smaller diameter exit pupil. The higher the exit pupil number, the greater the brightness—an important consideration when binoculars will be used in foggy conditions or at night.

Note:

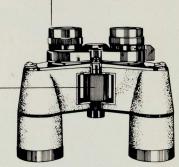
When examining a new pair of binoculars, hold them at arms length and look for the bright round circles in the ocular lenses. These circles are the exit pupils and on high quality binoculars they should always be perfectly round.

**Brightness:** This is equal to the square of the exit pupil diameter. In the case of 7x50, the exit pupil is 7.14 and the brightness is 50.4 (7.14x7.14). The brightness increases greatly with increased objective lens diameter due to the large light gathering ability.



### **Focusing Methods:**

Adjustable diopter scale on one ocular lens to permit compensations for differences in vision between right and left eyes.

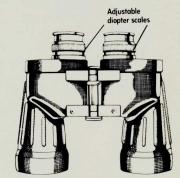


Center focus

Center Focus (CF):

Both eyepieces are focused simultaneously by a single — focusing ring. This system is most widely used for general purpose binoculars.

Individual Focus (IF): Each eye piece is focused separately. This construction is more rigid and airtight making it suitable for use in severe conditions. This type is widely used for professional and special applications. It is the only focusing system which can be made totally waterproof.



(Individual focus)

### **FUJINON binocular specifications**

	7x50MT 7x50MTR	8x30MT 8x30MTR	10x70 MT	14x70 MT	15x80	25x150	4x25	7x24HCF 7x24RB	7x28 HCF	9x24 HCF	9x28 HCF	10x32 HCF	12x36 HCF	8-16x40	10-20x50
							4	7	7	9	9	10	12	8-16	10-20
Magnification	7	8	10	14	15	25		3.4	4	2.7	3.1	3.2	3	5~2.5	5~2.5
Exit Pupil Diameter (mm)	7.1	3.75	7	5	5.3	6	25	24	28	24	28	32	36	40	50
Objective Lens Diameter (mm)	50	30	70	70	80	150	50	7°5'	7°30′	60	60	5°30′	4°35′	5°-3°-45'	4°10′~
Field of View	7°30′	7°30′	5°73′	4°	40	2°42'		b .							2°40'~
								131	131	105	105	96	80	87-58	73~47
Field at 1,000 (yards)	131	131	91	70	70	38	•	11.7	16	7.3	9.6	10.2	9	25-6.2	25~6.25
Brightness	50.4	14.1	49	25	28.1	36	67	108	114	100	112	124	150	149	185
Length (mm)	178	123	260	255	499	865	64	85	70	85	70	76	84	153	164
Width (mm) Minimum	157	163	210	210	233	480	102	103	108		108	116	120	186	198
Maximum	203	176	238	238	233	480	4 oz.	8 oz.	12 oz.	10 oz.	12 oz.	14 oz.	16 oz.	2	2.4
Weight (lbs.)	2.7	1.5	4.1	4.2	16.1	60.5									

# Outside they are distinctively beautiful. Inside they look even better.

Built to military specifications, here are the favorites of professionals and serious sportsmen involved in yachting, commercial shipping, aviation and competitive sailing. Tested by Japan's defense agency, FUJINON binoculars were immersed in 2 meters of salt water for 2 weeks. At the conclusion of the test, the binoculars were examined and found to be totally intact. The only thing that can get inside is light. (Note: Packed in with every FUJINON Marine Tested binocular is an instruction booklet that recommends washing our binoculars with fresh water after any exposure to salt spray or water.)



