FUJIFILM

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FUJIFILM

FUJINON TECHNO-STABI 14x40

Fujinon's Third Generation
Image Stabilizing Binocular

Operation Manual

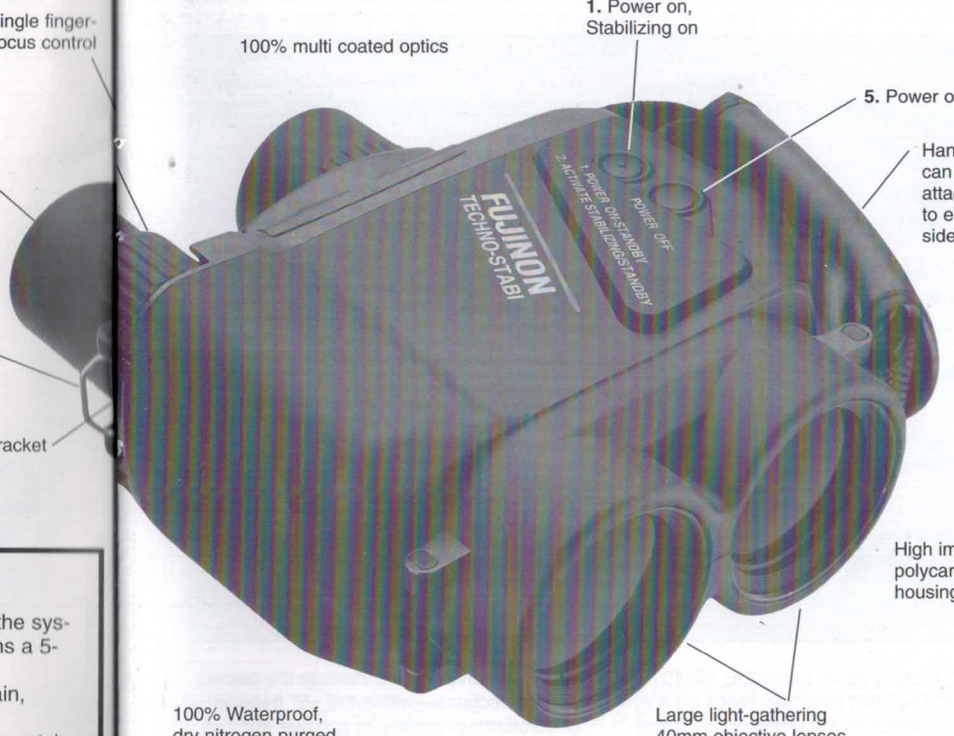
Congratulations

Your new Fujinon TECHNO-STABI binocular represents an outstanding combination of advanced design and technology in optics, electronics, ergonomics and control features. It is the first to combine the most advanced image stabilizing system with a totally waterproof design.

Until now, being able to use a pair of binoculars with power as high as 14X meant either holding them for only for a few seconds at a time or steadying them with a tripod or pedestal. It was literally impossible to use such powerful binoculars aboard a moving vehicle, such as a sailboat or power yacht, car, plane or helicopter without investing many thousands of dollars in exotic equipment. Fujinon has changed that.

Here is a binocular you can take and use anywhere to enjoy clear, bright, sharp images that are rock steady. Every lens is multicoated and the prisms are phase coated, a feature shared with the world's costliest roof prism binoculars.

While the TECHNO-STABI is waterproof, fogproof, and robust enough to deliver many years of dependable performance, it is also a sophisticated electro-optical instrument that deserves proper care in its use and storage. Please read this manual carefully and follow the instructions in order to derive the maximum performance from your TECHNO-STABI binocular.

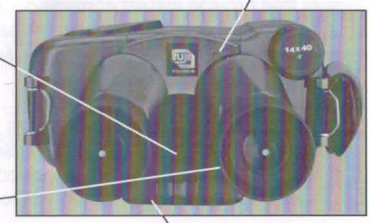


Fast Start

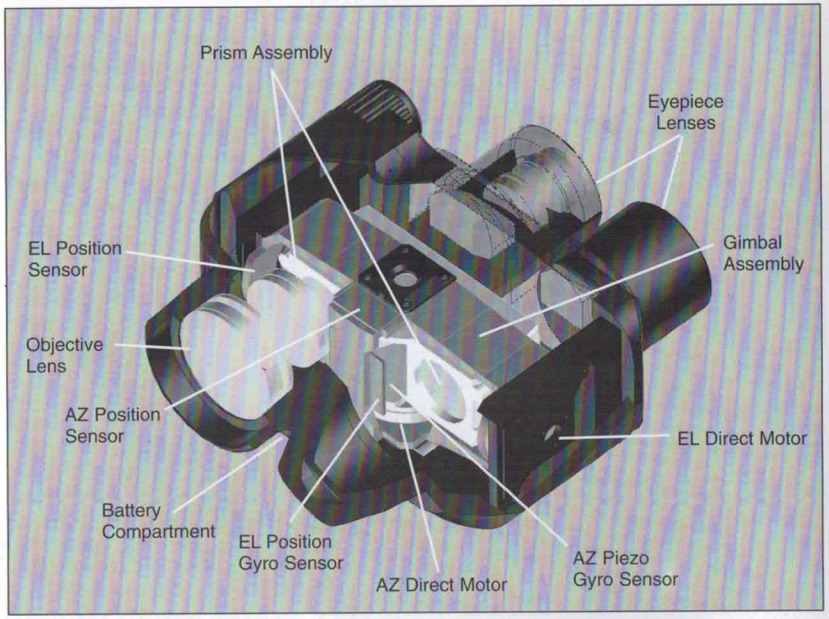
- Press the ON button (1) — the system powers up and performs a 5-second system check
- Press the ON button (1) again, stabilization is activated
- Adjust the eye-pieces (2) to match the distance between your eyes (until you see a single round image)
- Focus left eye using focus control knob (3)
- Twist the right eyepiece (4) for any necessary diopter correction
- Check focus again using only the control knob (3)

When finished, press the OFF button (5), replace the lens caps, and return the TECHNO-STABI to its waterproof, impact-resistant Pelican case.

Getting Acquainted



TECHNO-STABI Digital Image Stabilizing — Here's How It Works



The microprocessor controlled 14x40 TECHNO-STABI binocular relies on a system that includes the following: a gimbaled assembly with erecting prisms, sensors that detect vibration and motion vertically and horizontally, and direct drive motors that provide instant correction.

AZ (azimuth) and EL (elevation) Piezo Gyro Vibration Sensors detect any cyclical and repetitive motion, such as that encountered on a boat (or any moving platform); the AZ and EL Gyro Sensors detect the direction in which the binocular is aimed. All four inputs are are received by the microprocessor; output signals to the direct drive motors institute the necessary corrections—within the ±5° freedom of stabilization angle—to achieve ±0° accuracy.

In operation, the system is silent. The motors operate only when correction is called for thus conserving power and extending component operating life.

Compared to other binocular image stabilizing schemes, the TECHNO-STABI not only eliminates jittery images due to muscle tremor, it corrects for vibration as well as the kinds of movements encountered on aircraft, sea and land vehicles.

How to Use and Focus

If you wear glasses or sunglasses when using binoculars, fold back the rubber eyecup on each eyepiece (ocular lens) so you can view complete images. Next, grasp either eyepiece and rotate it towards or away from the center of the binocular (the other eyepiece will move equally in the opposite direction).

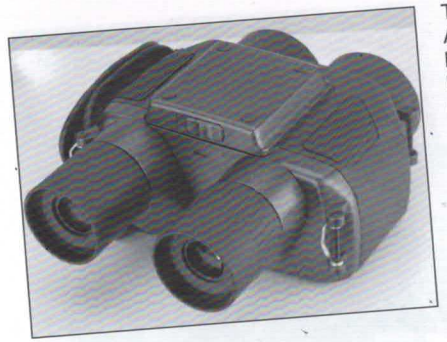
Adjust the interpupillary distance to match the distance between your two eyes until you see just one perfectly round image.

There are two steps to focusing: 1. Close your right eye and use only your left eye as you adjust the focus control knob (3). When the image is sharp, close your left eye and open your right eye. Twist the right eyepiece, to focus for the right eye. Now open both eyes and the binocular should be perfectly focused. You can do this with the TECHNO-STABI turned on with stabilizing activated or with the power off completely.

The TECHNO-STABI power on/off sequence is actually more flexible than that may sound. When you press the power ON button (1) the first time, the binocular goes through an internal system check. During this period, the LED (located between the two eyepieces) glows orange. When you press the power ON button a second time, stabilization is activated. And the LED turns green.

If you press the same button a third time, the TECHNO-STABI goes on standby (orange LED again). Press it again, stabilization is reactivated. You may repeat this process as often as you wish. Reverting to "standby" conserves battery power. On the other hand, if you leave the TECHNO-STABI in either standby or stabilization mode for one minute without using it, it will shut itself off automatically.

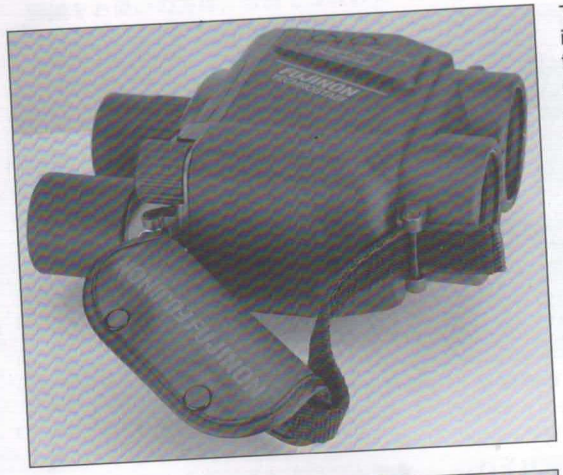
Battery Installation



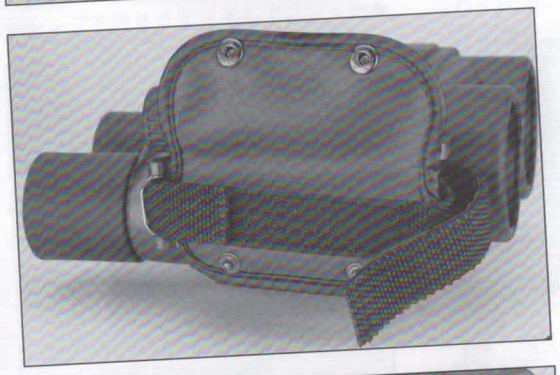
The TECHNO-STABI operates on 4 AA batteries. To install a fresh set of batteries, turn the binocular on its back, and slide the lock to the open position.

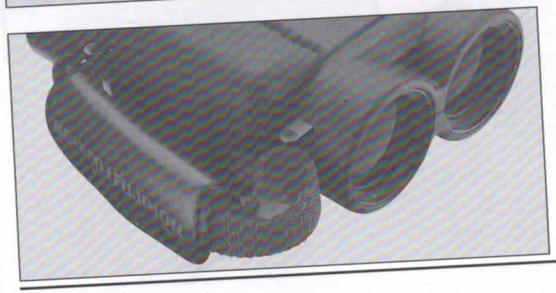
Remove the battery holder and insert the batteries. When returning the battery holder to the binocular, be certain to seat it properly, with the O-ring in place and move the slide to the locked position. This seals the binocular to help keep it waterproof.

Installing the Handstrap



The handstrap may be installed on either side of the TECHNO-STABI. First, open the two snap closures on the handstrap cushion and open both ends of the hook-and-loop strap. As you will see, the strap is permanently attached to the handstrap cushion. Insert one strap through the bracket on the binocular and press it against itself. Then do the same with the other end of the strap. Close the cover, snap the closures and the handstrap is ready to use.



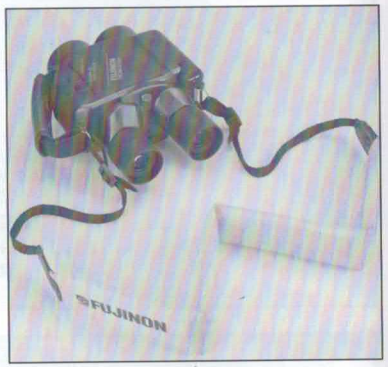


Installing the Neckstrap

1. Make a large loop at each end of the neckstrap

2. Insert strap through neckstrap bracket

3. Lead the strap inside the loop and through the buckle and pull tight. Do the same with the outer loop. Repeat on the other side of the binocular.



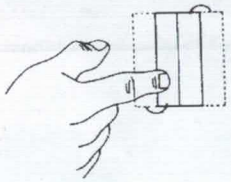
Completed

Keep Your Lenses Clean

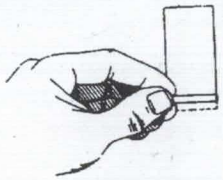
Dust, salt and oil left from fingerprint smudges should never be allowed to remain on the lenses because they can harm the coatings applied to lens sufaces.

Use lens cleaning tissues and a good lens cleaning fluid. Both are usually available wherever cameras, binoculars or eye glasses are sold. For best results, when you need to clean one lens, clean all four.

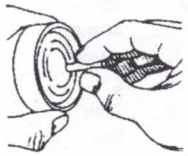
Start by blowing off any dust that may be on the lenses. Then, follow these steps...



Take a single lens tissue and fold it twice as shown.



Roll the tissue into a cylinder and moisten only one tip with lens cleaning fluid.



Starting in the center of the lens, gently rub in a circular motion from the center to the outside.

Use each tissue only once. Sometimes, it may be necessary to repeat the process.

Optional Accessories

Two optional systems are offered to permit the TECHNO-STABI to operate under external power.

Voltage Regulator Kit for use with onboard 12~28 volt DC power sources. Kit includes power adapter to replace battery holder, remote voltage regular with belt clip, coiled connector cable and power cable. Waterproof.

AC to DC Conversion Kit provides a waterproof power adapter to replace battery holder, cables and converter for 120V AC.

Other accessories include lens filters. Contact Fujinon for more information.

Specifications

Magnification	14X
Compensation Angle (Stabilization Freedom)	±5°
Objective Lens Diameter	40mm
Eye Relief	13mm
Apparent Field of View	4°
Field of View at 1000m	70m
Minimum Focusing Distance	5m
Exit Pupil	2.86mm
Relative Brightness	8.18
Interpupillary Adjustment Distance	60~70mm
Dimensions: WxHxD (mm)	186 x148 x86
Weight	1300g
Battery Operating Life	3 hours
Safe Ambient Temperature Range	-10°C to 50°C
	(14°F to122°F)

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

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.

⚠ **DANGER:** Never look directly at the sun or any bright light through the binocular. Serious harm, including loss of vision, can result.

⚠ **WARNING**

- The TECHNO-STABI binocular is waterproof. But it can be damaged if water or other foreign material (dust, sand, etc.) gain entry. Do not open the battery compartment in a marine, high humidity or dusty environment, the interior of the binocular can be compromised. Whether using internal batteries or external power, make sure the O-ring and battery holder or adapter are firmly seated, and locked in position.
- Do not change batteries or power connections in wet or dusty conditions.
- To help prevent impact damage from dropping or falling, do not place the TECHNO-STABI on slippery or unstable surfaces. Also, be aware that damage arising from abuse or misuse can void the TECHNO-STABI warranty.
- If you plan to leave the binocular stored for long periods of time, keep it in a cool, dry location and remove the batteries or damage could result from leakage.
- When batteries must be replaced, replace all four (4) at the same time, using the same type and brand.
- Never attempt to burn batteries in a fire. An explosion could result.
- While NiCad batteries are rechargeable, never attempt to recharge ordinary batteries. Never short circuit the batteries.
- Avoid extreme hot and cold temperatures and rapid changes. (For example, if the binocular has been used in very cold conditions, bringing it into a heated environment could cause condensation to build up. Allow time for a gradual adjustment.)
- If you use the TECHNO-STABI at sea, Fujinon recommends that you flush it with fresh water following exposure to salt spray/salt air.
- Avoid leaving the binocular unattended and exposed to direct sunlight. Sun light rays passing through the lenses could cause a fire.
- Never try to walk and use the binocular at the same time; accident and injury 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.
- Please dispose of any plastic bags that may come with the TECHNO-STABI; such bags could suffocate or choke a small child.
- Prolonged use with contact of the rubber eyepieces against the skin can cause irritation. If such a condition persists, consult your doctor.
- If you experience any problem with your TECHNO-STABI binocular, never attempt to repair it yourself or have it repaired by anyone other than Fujinon. Return it directly to Fujinon.