

DOUBLE LION · MADE IN JAPAN



USER MANUAL

6x16

Professional quality optics designed for
everyday use and expeditions.

DL1 · EN

Thank you for choosing this instrument.

Every Double Lion instrument is machined, assembled and inspected in limited runs. If you have a question about setting up, using or servicing this product, contact your dealer or reach us directly.

01	Overview	05
02	Preparations	08
03	Operation	09
04	Care & maintenance	13
05	Technical data	16
06	Warranty & service	18
07	Notes	19

Your serial number is your record.

Registration is automatic with every purchase. The serial number is engraved on the underside of the right barrel, near the strap lug — record it on page 21 and keep this manual with your proof of purchase.

WARRANTY

Five-year international coverage against manufacturing defects.

TECHNICAL DATA

Full specifications for your instrument, page 16.

SAFETY

- Never look at the sun through these binoculars. Doing so will cause permanent eye injury.
- Do not leave the instrument uncapped in direct sunlight — concentrated light can damage the optics and ignite nearby material.
- Keep the strap clear of a child's neck.

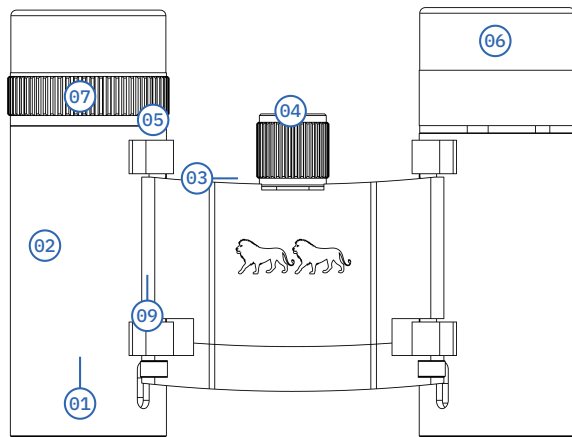
What ships with it

- 01 6×16 binoculars
- 02 Protective hard case
- 03 Carrying strap
- 05 Microfiber cloth
- 06 This owners Manual

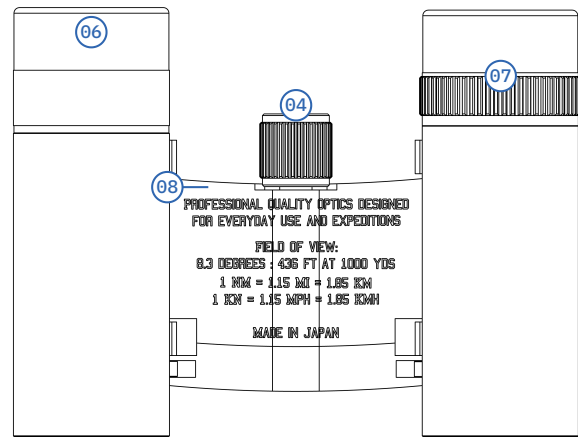
The instrument ships in a rugged hard case with a latching lid and a fitted foam interior. It is the recommended way to store and transport the binoculars.



The instrument



FRONT ELEVATION



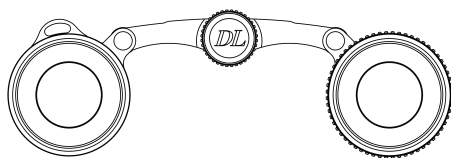
REAR ELEVATION

- | | | |
|-----------------------|-------------------|-------------------------|
| 01 Objective lens | 04 Focusing wheel | 07 Diopter ring, right |
| 02 Barrel | 05 Hinge post | 08 Rear bridge plate |
| 03 Front bridge plate | 06 Eyecup | 09 Strap/loop connector |

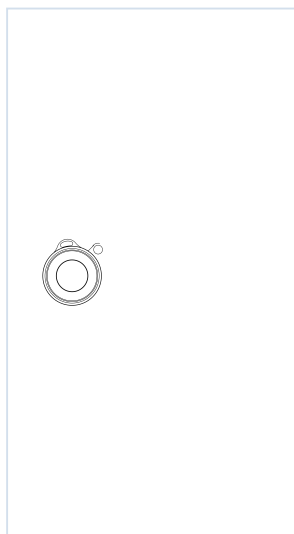
Machined aluminium housing, anodised finish. The serial number is engraved beneath the right barrel.

Four assemblies

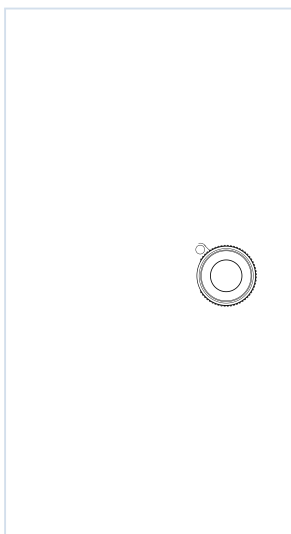
Seen from above. Each barrel swings on its own post; the bridge and the focusing wheel stay where your fingers left them.



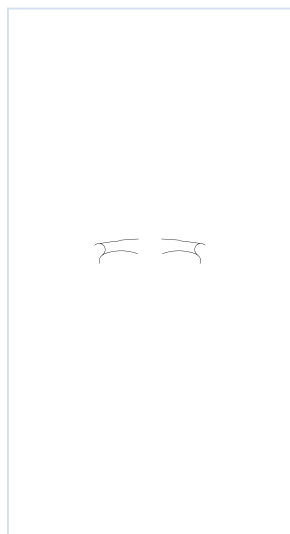
PLAN, ASSEMBLED



01 OCULAR L



02 OCULAR R

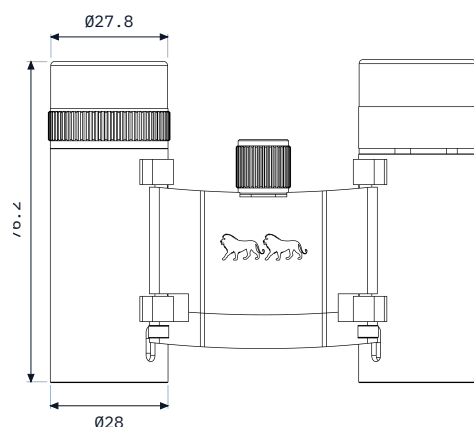


03 BRIDGE



04 WHEEL

Dimensions, as drawn



Ocular housing	Ø27.8
Overall length	76.2
Objective housing	Ø28

Taken from the external approval drawing, measured eyecup crown to objective face with the barrels parallel. All figures in millimetres. Nominal envelope figures are given on page 17.

Attaching the carrying strap

1.

Pass the strap end through the lug on the outside of the barrel.

2.

Feed it back through the buckle and pull tight against the lug.

3.

Repeat on the other barrel; check both sides under load.

Leave 15–20 mm of tail in the buckle. Set the length so the instrument sits at the sternum.

EYEPiece CAPS

Lift the caps clear before use and refit them whenever the binoculars are stowed — an uncapped eyepiece is the fastest way to scratch a coating.

EYEGlass WEARERS

The eyepieces suit spectacle wearers — 14 mm of eye relief. Set the diopter with your glasses on.

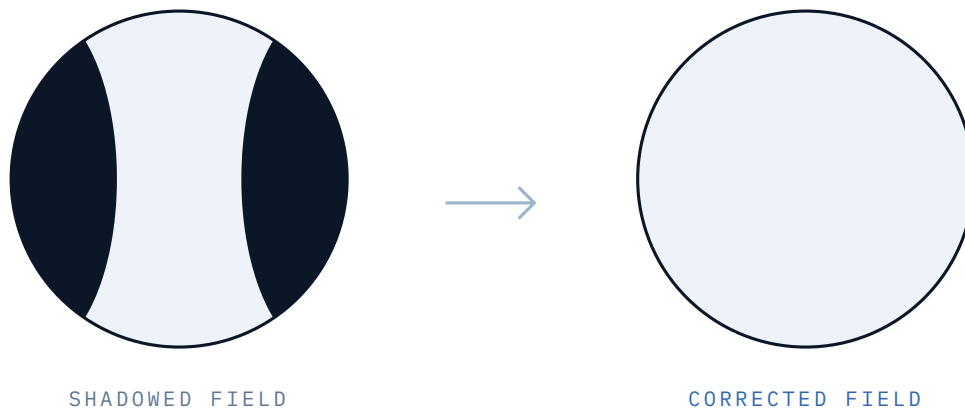
BEFORE FIRST USE

1. Attach the strap.
2. Set the interpupillary distance (3.1).
3. Focus on a subject (3.2).
4. Set the diopter once (3.3) — after that, focus with the wheel alone.

3.1

Adjusting the interpupillary distance

To see a single round image, pivot the two halves of the instrument about the bridge until no shadows remain at the edges of the field.



Your setting is repeatable: once found, the hinge holds it. Note the position so you can return to it after the instrument has been folded for storage. Interpupillary range is 30–82 mm.

3.2

Focusing

Turning the central focusing wheel brings any subject into focus, from the close focus limit of 3.2 m out to infinity.



FOCUSING WHEEL

WORKING THE WHEEL

Focus with the index finger of either hand; the thumbs support the barrels.

At 6×, depth of field is generous — small corrections cover most subjects.

FIELD NOTE

On a moving deck, brace your elbows against your ribs rather than gripping harder. A light hold and a braced frame steady the image more than force does.



3.3

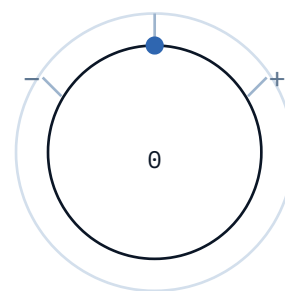
Diopter compensation

For optimal image quality, any difference in visual acuity between the left and right eye must be corrected at the diopter ring, on the right barrel.

EQUAL ACUITY IN BOTH EYES

Leave the diopter ring at the zero index — the marked dot centred between the minus and plus stops. Focus with the wheel alone.

The ring is detented; it holds its setting through normal handling and folding.



ZERO INDEX

If you wear corrective lenses and use the binoculars with them on, set the diopter with your glasses on. If you use the instrument both ways, set it without glasses and note the offset.

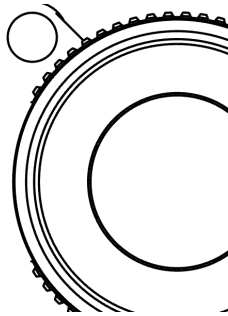
DIFFERING ACUITY BETWEEN EYES

1.

Look through the left eyepiece with your left eye and turn the focusing wheel until a selected subject is sharp.

2.

Now look at the same subject through the right eyepiece with your right eye and turn the diopter ring — not the wheel — until it is sharp.



DIOPTER RING, RIGHT



FOCUSING WHEEL

Both eyes are now corrected. From here, focus with the wheel only; the diopter setting stays where you left it.

Choose a high-contrast subject at middle distance for this procedure — a sign, a mast, a roofline. Avoid setting the diopter on a subject at infinity.

Designed to be used.

LENSES

Blow off loose grit first, then wipe with a clean microfiber cloth in light circular strokes from the centre outward. Use only lens fluid or breath — never solvents, alcohol wipes or paper.

STORAGE

Store capped and dry in the case, out of direct sun. Long storage with a damp cloth in a closed case invites fungus on internal glass.

HOUSING

Never spray the binoculars. Wipe the anodised body gently with a damp cloth and dry it. After coastal or marine use, wipe away salt residue the same way and dry the instrument fully before stowing.

DO NOT DISASSEMBLE

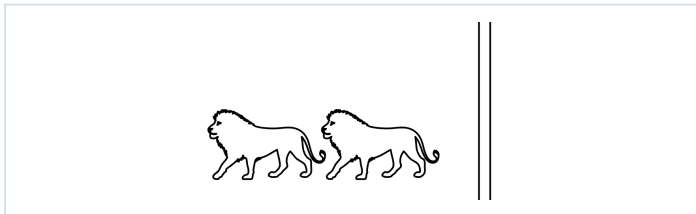
Opening the barrels breaks collimation and voids warranty coverage. Alignment and internal cleaning are service operations — see page 18.

WATER

Never submerge these binoculars. They will handle light rain and spray without harm — dry them promptly afterward and do not stow them wet.

MARKINGS

Everything it has to say



FRONT BRIDGE PLATE

Two lions, walking. The mark the brothers took for the house.



REAR BRIDGE PLATE

PROFESSIONAL QUALITY OPTICS
DESIGNED FOR EVERYDAY USE
AND EXPEDITIONS

6 X 16

8.3 DEGREES: 145M AT 1000M

145 GRAMS

1NM = 1.15 MI = 1.85 KM

MADE IN JAPAN

Model, field of view, weight, the conversion a navigator actually needs, and where it was made.

Three finishes



● Satin Black



● Matte Silver



● Matte Blue

Built small, measured precisely.

OPTICS

Type of build	Machined aluminium
Magnification	6×
Objective lens diameter	16 mm
Exit pupil	2.7 mm
Eye relief	14 mm
Optical system	BK-7 roof prism
Lens coating	Fully multi-coated
Focusing system	Central focusing
Diopter adjustment	Right side
Interpupillary distance	30–82 mm

FIELD OF VIEW

True field of view	8.3°
Apparent field of view	49.8°
Field of view at 1,000 m	145 m
Field of view at 1,000 yd	438 ft
Close focus limit	3.2 m
Light intensity	7.1
Twilight factor	9.8

GENERAL

Length	77 mm
Width	61 mm
Height	37 mm
Weight	145 g
Finish	Anodised matte or satin
Colours	Satin Black · Matte Silver · Matte Blue
Origin	Made in Japan

FEATURES

Eyepieces for spectacle wearers	Yes
Strap fitting	Loop connector, narrow
Carrying case	Included

WATER

Never submerge these binoculars. They will handle light rain and spray. See Care & maintenance, page 13.

All figures are typical values. Drawing-derived dimensions are given on page 07.

Five-year international warranty

Every Double Lion instrument is covered against manufacturing defects for five years from purchase. Registration is automatic — your serial number is your record.

COVERED

Optical defects in prisms, lenses and coatings

Mechanical failure of focus, diopter or hinge

Premature failure of seals

Defects in materials or assembly under normal use

NOT COVERED

Cosmetic wear from everyday use

Impact, drops or misuse

Unauthorised service or disassembly

Loss, theft or accessories sold separately

FILING A CLAIM

1.

Locate the serial number under the right barrel.

2.

Photograph the defect — two to four clear images.

3.

Submit your claim. We respond within three business days with next steps and a return label if one is needed.

Troubleshooting

SYMPTOM	CAUSE
Double image or shadows at the edge	Interpupillary distance not set — see 3.1
One side never comes sharp	Diopter not set for that eye — see 3.3
Image blacks out as you move	Eye position — hold the eyepieces at a steady distance
Haze that a wipe won't clear	Internal condensation or fungus — request service
Images that will not merge	Collimation — request service, do not disassemble

DISPOSAL

This instrument contains glass, aluminium and polymer components. Dispose of it through a local recycling facility rather than household waste.

STATEMENTS

All data are typical values. We reserve the right to make changes to design and delivery. We accept no liability for printing errors.

Notes

RECORD

Your instrument

Keep this page with your proof of purchase. The serial number is engraved on the underside of the right barrel, near the strap lug.

SERIAL NUMBER

MODEL / FINISH

DATE OF PURCHASE

DEALER



DOUBLE LION · MADE IN JAPAN

6×16

Limited crafted instruments · built for everyday use
and expeditions

DL1

DL00000000