

SPECIFICATIONS

	R150S	R200SS	
Optical Specifications	Mirror Type	Parabolic, multi-coated	Parabolic, multi-coated
	Aperture Size	150mm	200mm
	Focal Length	750mm	800mm
	Speed	f5.0	f4.0
	Light Gathering	459x	816x
	Resolving Power	0.77 arc seconds	0.58 arc seconds
	Limiting Magnitude	12.7	13.3
Visual Back	Tube Thread	36.4mm	60mm
	Adapter Threads	42mm for T-mount	42mm for T-mount
	Eyepiece Insert	31.7mm	31.7mm
Dimensions	Length	715mm	700mm
	External Diameter	176mm	232mm
	Weight	4.8kg	5.3kg
Options	Finderscope 7x50	No	Yes
	Red Dot Finder	Yes	No
Imaging	Prime Focus	Yes	Yes
	Eyepiece Projection	Yes	Yes

COLLIMATION

The diagrams below show how collimation errors will affect the image of a star. If your telescope appears to be poorly collimated, contact your supplier for information on how to have the instrument re-collimated.



Well collimated

Poorly collimated

The diagram on the left shows an in focus star (far left) and an out of focus star (right). The out of focus image should show many concentric rings with a central spot.

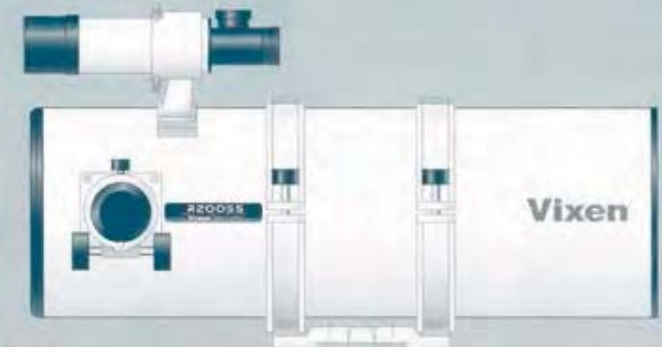
On the right, the in focus image does not highlight the collimation error as clearly but when out of focus, there is no central spot.

Vixen

Vixen

R150S and R200SS Instruction Manual

NEWTONIAN REFLECTORS



INTRODUCTION

This manual applies to the R150S and R200SS Newtonian reflector telescopes. It should be read in conjunction with the manual for your mount in order to get the best performance from your new astronomy set-up.

WARNING

NEVER LOOK DIRECTLY AT THE SUN WITH THE TELESCOPE OR ITS FINDER OR GUIDE SCOPE. PERMANENT EYE DAMAGE MAY OCCUR.

Caution - please note the following:

- ⊘ Do not leave the cap off the end of the optical tube in daylight. Sunlight passing through the telescope or finderscope may cause fire.
- ⊘ Do not use the product while walking.
- ⊘ Keep small parts and all plastic packaging away from children.
- ⊘ Do not use the product in rain or snow.

Handling and Storage

- Do not leave the product inside a vehicle in bright sunlight or in other hot places.
- Do not use solvents or similar products to clean the product.
- Avoid touching lens and mirror surfaces with bare hands.
- If lens or mirror surfaces do get marked with fingerprints or other dirt, use a microfibre cloth to gently remove the mark. If in doubt contact your supplier.
- Dust can be removed from lens and mirror surfaces using a conventional dust blower.
- Store the product in a cool, dry place and do not expose to direct sunlight.

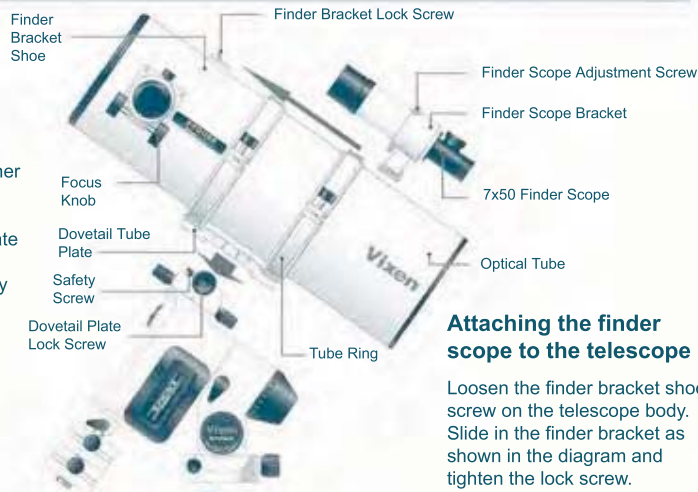
SET UP

Mounting the telescope

Loosen both the dovetail plate lock screw and safety screw until the tips are no longer extended into the inner part of the dovetail block.

Slide the dovetail mount plate of the telescope into the mounting block as shown by the arrow on the diagram. The notch in the dovetail should be centred in the mounting block.

Tighten the dovetail lock screw and then tighten the chrome safety screw.



Attaching the finder scope to the telescope

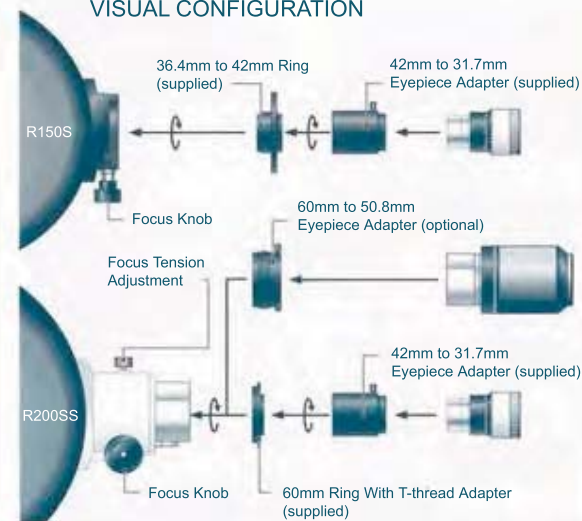
Loosen the finder bracket shoe screw on the telescope body. Slide in the finder bracket as shown in the diagram and tighten the lock screw.

ACCESSORIES

The following diagrams show how to attach eyepieces and adapters for different observation and imaging applications. All eyepieces and photography adapters are sold separately.

CONFIGURATION

VISUAL CONFIGURATION



Telescope Magnification

When using an eyepiece with short focal length, the image may be dim and the range of sharp focus will be small. As a result, finding and then focussing on objects will be more difficult. Make sure to choose a wide selection of eyepieces and locate your target using a low magnification eyepiece e.g. 30mm or 40mm.

Once the target is centred, increase the magnification by carefully changing the eyepiece. Re-focus and re-centre the image as you increase the magnification.

Eyepiece Size	Focal Length	Magnification
NLV 20mm	800mm divided by 20mm =	40x
NLV 5mm	800mm divided by 5mm =	160x

PHOTO CONFIGURATION

The chart shows a selection of optional accessories needed for various types of astrophotography and imaging.

