

CELESTRON ULTIMA 80 ANGLED SPOTTING SCOPE



## Celestron Ultima 80 Angled Spotting Scope User Manual

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**Celestron Ultima 80 Angled Spotting Scope**



Congratulations on your purchase of a Celestron Ultima Series spotting scope! Whether your interest is in sports, bird watching, nature or wildlife, hunting, or other activities these spotting scopes offer the finest optical quality to allow you years of viewing pleasure.

## Description

The Ultima 80 mm features a 45° viewing angle and offers a step up in aperture from the 65 mm, offering 50% brighter images.

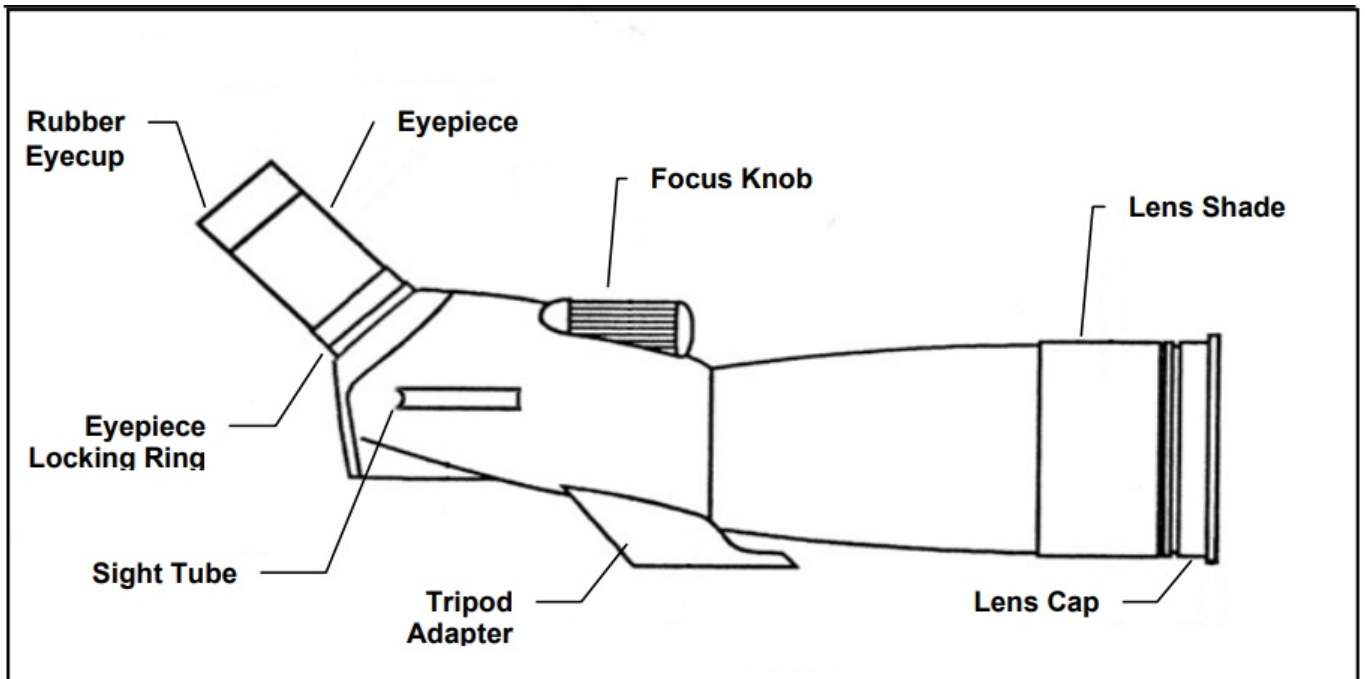
The 80 mm refractor features excellent multi-coated optics packed into a portable and durable refractor design and it comes standard with a 20-60x zoom eyepiece.

This series was designed to perform well in a range of viewing situations, making it a great all-around optical instrument. You'll love it for observing nature and long-distance spotting and since it is completely waterproof you can feel comfortable using it in extreme weather. The green rubber optical tube allows for subtle observation in any natural environment. Ultima spotters are a great companion for any nature or outdoor enthusiast. Soft carrying case included.

## ULTIMA SPOTTING SCOPE

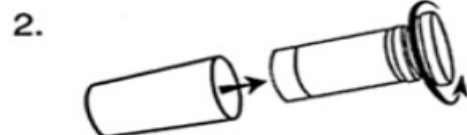
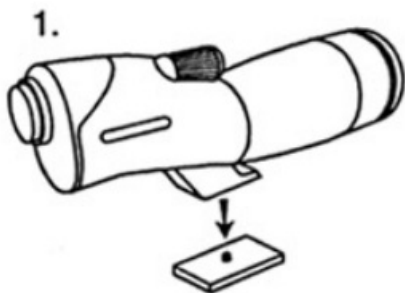
- Rubber Eyecup
- Eyepiece
- Focus Knob
- Lens Shade

- Eyepiece Locking Ring
- Sight Tube
- Tripod Adapter
- Lens Cap

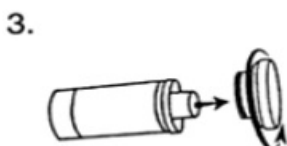


## ASSEMBLY

- Attach the tripod adapter to your camera tripod head.
- Remove the eyepiece from the container by turning the cap counterclockwise.



- Remove the cap from the eyepiece by turning the cap counterclockwise while holding onto the locking ring.
- Remove the cover from the eyepiece adapter. Insert the Zoom eyepiece with the power indicator facing up. Secure the eyepiece by turning the locking ring clockwise.



**Warning Note:** Never look directly at the Sun with the naked eye or with your spotting scope. Permanent eye

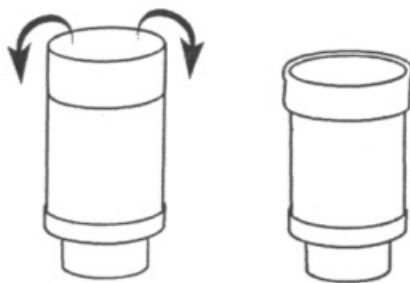
damage may result.

## Before Observing

- Attach your spotting scope to a photo/video tripod before trying to observe as the size and power of the spotting scope requires a solid tripod to be able to see sharp and steady views. For the Ultima 100 models a Tripod Balancing Platform should be installed for optimum balancing on a tripod (see information below).
- Make sure to remove the lens cap prior to observing. You can use the sight tube to locate the object you want to look at and then look through the eyepiece.

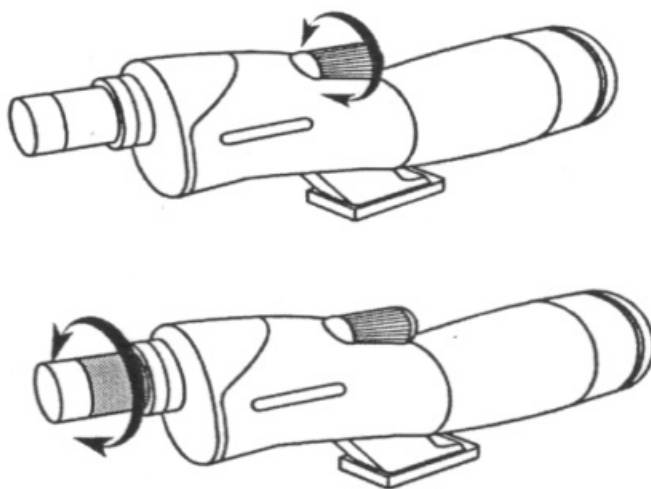
## Using the Rubber Eyecup

The zoom eyepiece includes a soft rubber eyecup for eyeglass wearers. Fold down the rubber eyecups to observe the full field of view when wearing eyeglasses. If you do not use eyeglasses, leave the rubber eyecup in the up position.



## Focusing

To focus slowly rotate the focuser knob until the image in the eyepiece is clear and sharp. Refocusing is usually required if the power is changed. If you feel the focus knob no longer moves any further (in either direction), then you have reached the end of the travel range — don't try to force it to go further but you should refocus by turning in the opposite direction. Once an image is in focus, turn the knob clockwise to focus on a closer object and counterclockwise for a more distant object.



## Changing the Magnification (Power)

Rotate the magnification ring around the zoom eyepiece to change the power level of the spotting scope. Refocus

as needed. The brightest and widest field of view will always be at the lowest power.

## Photography

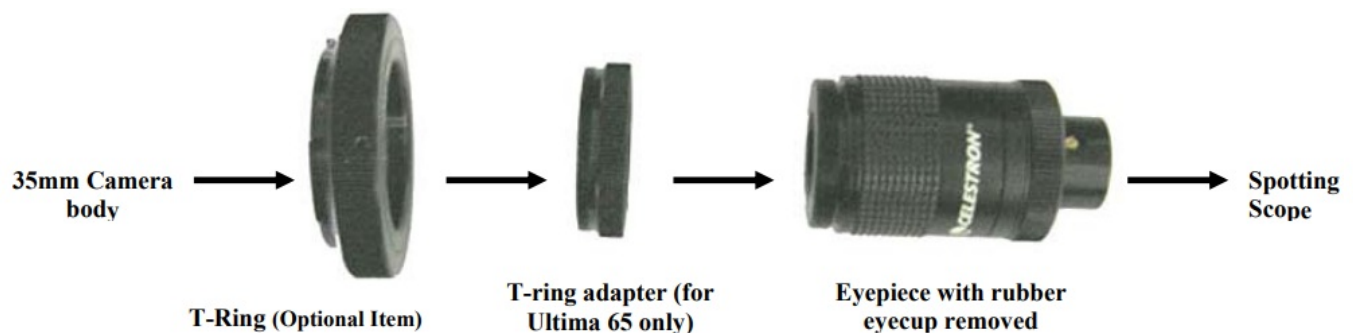
### With 35mm SLR Cameras:

To use your spotting scope as a telephoto lens, remove the rubber eyecup from the top of the eyepiece. You will shoot through the spotting scope with the eyepiece attached. Thread an optional T-Ring for your make and model of 35mm camera onto the T-threads located at the top of the eyepiece. For Ultima 65 models, thread the T-ring adapter (included with your model) onto the eyepiece threads, and then you thread a T-ring onto the eyepiece. Attach your 35mm camera body to the T-Ring. Ultima spotting scopes have fixed apertures and, as a result, fixed f/ratios. To properly expose your subjects photographically, you need to set your shutter speed accordingly. Most 35mm SLR cameras offer through-the-lens metering which lets you know if your picture is under or overexposed. Adjustments for proper exposures are made by changing the shutter speed. Consult your camera manual for specific information on metering and changing shutter speeds.

**Hint:** Most photos will be the sharpest and brightest when using the lowest power on the zoom eyepiece.

### 35mm Camera body → Spotting Scope

- T-Ring (Optional Item)
- T-ring adapter (for Ultima 65 only)
- Eyepiece with rubber eyecup removed

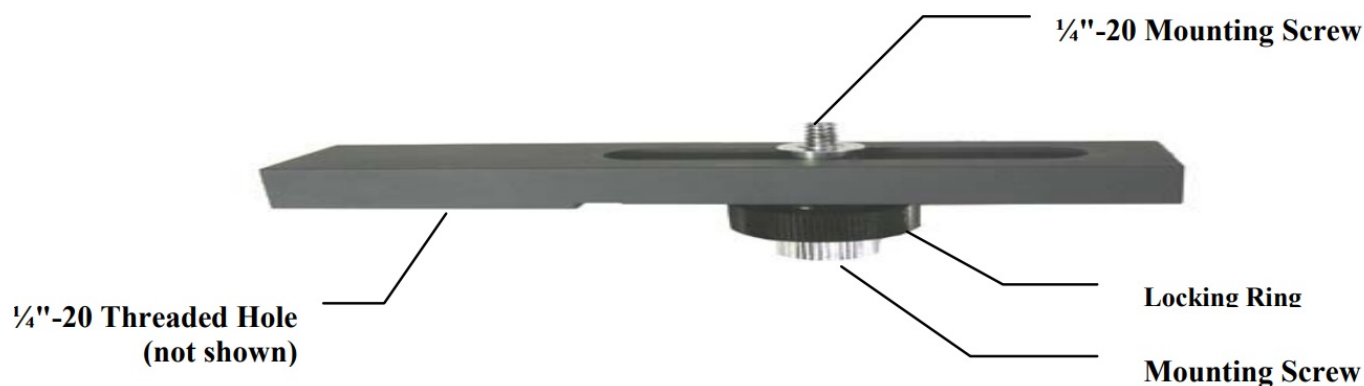


### With Digital Cameras:

Since digital cameras (not digital SLR cameras) do not use the T-system to mount cameras to lenses, spotting scopes, telescopes, etc. you need a different way to be able to use them to take photos. Celestron offers a Universal Digital Camera Adapter (Model # 93626) which makes it easy to attach a digital camera to your Ultima spotting scope.

### Tripod Balancing Platform (for Ultima 100 models)

This is used on Ultima 100 models to properly balance your spotting scope on top of a photo/video tripod.



#### To use the tripod balancing platform:

- Mount the platform to the top of your photo tripod using the 1/4"-20 threaded hole on the bottom side of the platform.
- Attach your spotting scope to the platform using the 1/4"-20 mounting screw located on the top side of the platform. Thread the mounting screw in as far as it will go. Slide the attached spotting scope along the slotted cutout until your spotting scope is balanced on the tripod.
- Tighten the locking ring to hold the spotting scope in place.

#### Maintenance

To protect your spotting scope when not being used, put on all lens covers and the lens cap to keep the optics clean and then put the scope in the soft carrying case. If your optics could use cleaning, use an optics cleaning kit and follow the instructions.

#### Specifications

				Specifications					
Model	52248	52249	52247	52250	52254	52251	52252	52257	52253
Description	Ultima 65	Ultima 65	Ultima 65ED	Ultima 80	Ultima 80	Ultima 80ED	Ultima 100	Ultima 100	Ultima 100 ED
Viewing Position	45° Angled	Straight	45° Angled	45° Angled	Straight	45° Angled	45° Angled	Straight	45° Angled
Aperture – mm	65	65	65	80	80	80	100	100	100
Focal Length – mm	386	386	386	480	480	480	540	540	540
Magnification	18x-55x	18x-55x	16x-48x	20x-60x	20x-60x	20x-60x	22x-66x	22x-66x	22x-66x
Eyepiece – Zoom	7-21mm	7-21mm	8-24mm	8-24mm	8-24mm	8-24mm	8-24mm	8-24mm	8-24mm
Angular Field	1.7° @ 18x	1.7° @ 18x	2.5° @ 16x	2.0° @ 20x	2.0° @ 20x	2.0° @ 20x	1.8° @ 22x	1.8° @ 22x	1.8° @ 22x

<b>of View</b>	0.7° @ 55x	0.7° @ 55x	1.3° @ 48x	1.0° @ 60x	1.0° @ 60x	1.0° @ 60x	1.0° @ 66x	1.0° @ 66x	1.0° @ 66x
<b>Linear Field of View</b>	89 @ 18x	89 @ 18x	131 @ 16x	105 @ 20x	105 @ 20x	105 @ 20x	95 @ 22x	95 @ 22x	95 @ 22x
<b>– feet @ 1000 yds.</b>	38 @ 55x	38 @ 55x	66 @ 48x	53 @ 60x	53 @ 60x	53 @ 60x	53 @ 66x	53 @ 66x	53 @ 66x
<b>Eye Relief</b>	18mm @ 18x	18mm @ 18x	18mm @ 16x	18mm @ 20x	18mm @ 20x	18mm @ 20x	18mm @ 22x	18mm @ 22x	18mm @ 22x
<b>Near Focus</b>	20ft @ 18x	20ft @ 18x	20ft @ 16x	27ft @ 20x	27ft @ 20x	27ft @ 20x	33ft @ 22x	33ft @ 22x	33ft @ 22x
	6.1m @ 18x	6.1m @ 18x	6.1m @ 18x	8.2m @ 20x	8.2m @ 20x	8.2m @ 20x	10.0m @ 22x	10.0m @ 22x	10.0m @ 22x
<b>Prisms – BaK – 4</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Optical Coatings</b>	Multi- Coated	Multi- Coated	Multi- Coated	Multi- Coated	Multi- Coated	Multi- Coated	Multi- Coated	Multi- Coated	Multi- Coated
<b>Waterproof</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Length</b>	13" – 330mm	16" – 406mm	13" – 330mm	16" – 406mm	19" 483mm	16" – 406mm	19" – 483mm	22" – 559mm	19" – 483mm
<b>Weight</b>	37oz. – 1.1kg	37oz. – 1.1kg	37oz. – 1.1kg	57oz. – 1.6kg	57oz. – 1.6kg	57oz. – 1.6kg	72oz. – 2.0kg	72oz. – 2.0kg	72oz. – 2.0kg
	<b>Note: All specifications are subject to change without notice.</b>								

## Warranty

Ultima Spotting Scopes have the Celestron No Fault Limited Lifetime Warranty for the U.S.A. and Canadian customers. For complete details of eligibility and for warranty information on customers in other countries visit the Celestron website.

2835 Columbia St. Torrance, California 90503 U.S.A. [www.celestron.com](http://www.celestron.com)

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## Frequently Asked Questions

What is the Celestron Ultima 80 Angled Spotting Scope?

The Celestron Ultima 80 Angled Spotting Scope is a high-quality optical instrument designed for various viewing situations, including birdwatching and astronomy. It features a 45° viewing angle, 20-60x zoom eyepiece, and multi-coated optics for bright and sharp images

Who manufactures the Celestron Ultima 80 Angled Spotting Scope?

Celestron manufactures the Ultima 80 Angled Spotting Scope

What are the key features of the Celestron Ultima 80 Angled Spotting Scope?

The key features of the Celestron Ultima 80 Angled Spotting Scope include a 45° viewing angle, 20-60x zoom eyepiece, multi-coated optics, and a durable, portable design

What is the magnification range of the Celestron Ultima 80 Angled Spotting Scope?

The magnification range of the Celestron Ultima 80 Angled Spotting Scope is 20-60x

What is the objective lens diameter of the Celestron Ultima 80 Angled Spotting Scope?

The objective lens diameter of the Celestron Ultima 80 Angled Spotting Scope is 80mm (3.15 inches)

What is the field of view of the Celestron Ultima 80 Angled Spotting Scope?

The field of view of the Celestron Ultima 80 Angled Spotting Scope is 2.0° - 1.0°

What accessories are included with the Celestron Ultima 80 Angled Spotting Scope?

Included accessories with the Celestron Ultima 80 Angled Spotting Scope are a zoom eyepiece with integrated T-adapter, carrying case, eyepiece lens cap, eyepiece port cover, eyepiece carrying case, eyepiece pouch, lens cloth, and instrument manual

Can the Celestron Ultima 80 Angled Spotting Scope be used for birdwatching?

Yes, the Celestron Ultima 80 Angled Spotting Scope is suitable for birdwatching due to its 45° viewing angle and excellent multi-coated optics

Can the Celestron Ultima 80 Angled Spotting Scope be used for astronomy?

Yes, the Celestron Ultima 80 Angled Spotting Scope can be used for astronomy, as it is designed to perform well in various viewing situations



Why is my Celestron Ultima 80 Angled Spotting Scope not focusing properly?

If your Celestron Ultima 80 Angled Spotting Scope is not focusing correctly, ensure that the eyepiece is properly inserted and adjusted. Check for any dirt or debris on the lenses that may be affecting the focus. Additionally, make sure the zoom ring is functioning smoothly and not causing any issue

Why is my Celestron Ultima 80 Angled Spotting Scope not producing clear images?

If your Celestron Ultima 80 Angled Spotting Scope is not providing clear images, clean the lenses with a soft, lint-free cloth to remove any smudges or dirt that could be affecting the clarity. Ensure that the optics are aligned correctly and adjust the focus to improve image sharpness.

Why is my Celestron Ultima 80 Angled Spotting Scope not waterproof?

The Celestron Ultima 80 Angled Spotting Scope is not fully waterproof but is water-resistant. Avoid exposing it to heavy rain or submerging it in water to prevent damage to the internal components

### Video- Product Overview



[Download the PDF Celestron Ultima 80s 2024 OS Optics Guide Use 80 Angled Spotting-Scope-video.mp4](#)

Reference: [Celestron Ultima 80 Angled Spotting Scope User Manual-device.report](#)

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## References

- [User Manual](#)

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