

Owner's Manual  
TS-80™ Hi-Def™  
TS-82™ Xtreme Hi-Def™  
Spotting Scopes



**NIGHTFORCE®**

2015 V1

## Contents

Nomenclature and features .....	3
Magnification settings .....	4
Retractable eyecup .....	4
Installing the eyepiece (TS-82™) .....	4
Removing the eyepiece (TS-82™) .....	5
Retractable sunshade.....	5
Mounting on a tripod .....	5
Focusing the image .....	6
Rotational axis collar.....	6
Caring for your spotting scope .....	6
Using the TS-82™ for photography .....	7
Warranty and service.....	8
Warranty registration card .....	9
Owner's comments.....	10
Accessories and other information .....	11

Record the spotting scope serial number here for future reference:



### WARNING!

*To avoid permanent eye damage or blindness, do not look directly at the sun or other extremely bright lights through the spotting scope.*



### WARNING!

*Nightforce Optics, Inc. does not authorize the export of these items outside of the United States of America. Riflescopes and accessories listed within, are controlled for export by the U.S. Department of State, under the International Traffic In Arms (ITAR) regulations (22 CFR, Parts 120-130), and/or the Department of Commerce under the Bureau of Industry and Security Export Administration Regulations (15 CFR, Parts 730-774). To export these products outside of the United States of America, you must comply with the regulatory agency's license and documentation requirements.*

*The serial number is located on the tripod mounting base, facing the eyepiece.*



Product specifications, features, appearances and information subject to change without notice. For the latest updates and information regarding our products, visit [www.NightforceOptics.com](http://www.NightforceOptics.com).

## Magnification settings



The standard TS-82™ eyepiece covers a magnification range of 20x–70x. An optional 30x–60x wide angle eyepiece is available. The TS-80™ has a non-removable 20x–60x eyepiece.

To change magnification, rotate the magnification ring clockwise (less magnification) or counter-clockwise (more magnification). The magnification power will be indicated on the numbered scale, aligned with the red index mark. The numbers are relative to what the unaided human eye sees; for example, a 20x setting will give the appearance of being 20 times closer to your chosen target.

## Retractable eyecup



The rubber eyecup adjusts inward by turning it clockwise, or outward by turning it counter-clockwise. The full inward position is designed for use while wearing glasses. The outer position is for use with the unobstructed eye.



### WARNING!

**To avoid permanent eye damage or blindness, do not look directly at the sun or other extremely bright lights through the spotting scope.**

## Installing the eyepiece (TS-82™ only)



To install the eyepiece, align the white dot of the eye piece with the dot on the scope body. This aligns the bayonet mount of the eyepiece with the proper slots on the spotting scope body. Gently insert the eyepiece into the scope body, and then rotate approximately 1/4 turn clockwise to lock the eyepiece in place. **Important: Do not change or remove the eyepiece in the rain, snow, or dusty environments, in order to keep foreign matter or debris from entering and possibly damaging the optical and mechanical system.**

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## Removing the eyepiece (TS-82™ only)



To change the eyepiece, press the Eyepiece Release Button located on the scope body, under the eyepiece. Hold the button down while grasping the scope body securely with one hand. Use your other hand to rotate the eyepiece approximately 1/4 turn counter-clockwise and gently pull it away from the spotting scope body.

## Retractable sunshade



Your spotting scope features a retractable sunshade at the objective end of the spotting scope. This can prevent glare and provide limited protection for the objective lens. Simply slide the sunshade to its fully extended position by grasping the sunshade and pulling gently. *Note: The sunshade is not*

*a filter. Using the eyeshade does not prevent potential damage to your eyes caused by looking directly at the sun or other bright lights.*

## Mounting the spotting scope on a tripod

The use of a sturdy tripod is recommended to prevent image shake and viewing fatigue. It is almost impossible to hold a spotting scope steady, especially at higher magnifications. The integral tripod base accepts the standard 1/4" 20-thread screw found on virtually every photographer's tripod. The screw should be tightened snugly when mounting the spotting scope, but do not tighten excessively to avoid stripping the threads. Some quick-release tripods allow direct mounting using the spotting scope's integral tripod mount, avoiding the need to use screws.



## Focusing the image



While looking through the eyepiece, slowly turn the focusing ring clockwise or counter-clockwise until the image is sharp and crisp. Closer images generally require a counter-clockwise turn, while extremely distant images generally require a clockwise turn. You may need to readjust your focus after changing magnification settings.

## Rotational axis collar



When your spotting scope is mounted on a tripod, there may be times when you want to rotate the spotting scope to achieve a more comfortable or suitable viewing position. Loosen the indexing knob on the rotational axis collar by turning it counter-clockwise. You can then grasp the spotting scope body and turn the entire scope up to 360 degrees. Tighten the knob to hold the spotting scope in the new position. *Do not overtighten the knob.* The rotational axis collar allows you to make adjustments in viewing position without having to remove the scope from the tripod.

## Caring for your spotting scope

All Nightforce spotting scopes are 100% water-proof, dust-proof, fog-proof and purged with inert nitrogen gas to prevent condensation from accumulating on optical surfaces. Nevertheless, like any fine optical instrument, it is necessary to carefully handle and protect all optical surfaces from damage. When the scope is not being used, the objective and eyepiece lenses should be covered by the protective caps which are provided.

*Never use gun cleaning solvents, aerosols, other harsh solvents or chemicals, cans of compressed air or insect repellants around your spotting scope or another other optics with coated lenses, as these can ruin the coatings applied to the glass surfaces.*

### Cleaning the spotting scope exterior

Clean the scope's body with a clean cloth lightly moistened with clean water or alcohol. Do not use strong solvents. While cleaning your scope, be sure to protect its lenses by installing the covers that came with it. Ammonia-based solvents can destroy the coating on the glass.

In the event of submersion in mud, sand, dirty or salt water, flush the outside of the scope with clean water to remove encrusted material and salt. Install the lens covers before flushing with water. Wipe the outside metal surfaces dry with a soft cloth then proceed to the step below.



### Cleaning Lenses

We recommend using the Nightforce Cleaning Kit A130 to care for the lenses on your spotting scope. The kit contains an ultrasoft brush, microfiber cloth and cleaning solution.

With the lens facing down to allow the debris to fall away from the surface, remove loose dirt and dust with a lens brush. Do NOT use high-pressure compressed air from cans (such as found in office supply stores). They have been known to destroy lens coatings. If there is grit stuck to the lens that won't come off with a brush, flushing the surface with alcohol or distilled water will prevent that grit from being rubbed into the glass by the cleaning swabs.

Using a soft, clean, lint-free cotton swab or lens cleaning cloth, and lens cleaning fluid applied to the swab, clean the lens starting in the center, working to the outside in a circular motion. Make only one pass to the edge where the glass meets the metal. Once you reach the edge of the lens, do not re-use that swab as it will often contain abrasive grit that will scratch the surface. Start over in the center with a new swab and repeat the process until the glass is clean. Use a very small amount of cleaning solution for the last pass to prevent streaks.

Store your spotting scope in a cool, dry, dust-free location.

## Using your spotting scope for photography

Nightforce spotting scopes can produce spectacular photography of distant objects. **TS-82™**: The optional A276 for the iPhone® 4/4S or A277 for the iPhone® 5 allow you to attach your iPhone to the eyepiece and capture excellent high-resolution images and/or videos. **TS-80™ and TS-82™**: There are third-party mounts available that will accept many point-and-shoot and DSLR cameras, and may fit your spotting scope. Visit [www.NightforceOptics.com](http://www.NightforceOptics.com) for more information.



iPhone® 4



iPhone® 5

*iPhone is a trademark of Apple Inc.*



We are proud to back up Nightforce spotting scopes with a transferable Limited 20-Year Warranty which covers mechanical defects in materials and workmanship in the optical and mechanical components of the spotting scope. In the event of a defect in materials or workmanship that is covered by this warranty, we will either repair the spotting scope or its defective parts, or replace it at no charge with a comparable product at our discretion.

Exclusions to this warranty include intentional or accidental damage, abuse, misuse and unauthorized modifications or repairs. This warranty does not cover, nor will Nightforce be responsible for, any consequential or incidental damages resulting from the inability to use the spotting scope. Any serial number obliteration or alteration on the product will void the warranty.

To ensure warranty coverage, please register online or fill out completely and mail in the provided warranty card found in the back of the owner's manual, along with a copy of the sales receipt. The warranty begins on the date the product was purchased by the original owner. The optical and mechanical components are covered for 20 years. Any electronic components are covered for a period of one year.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

### Service and Warranty Procedure

**Before sending a spotting scope in for service, please call Nightforce Optics, Inc. at the number below, to determine if the problem can be resolved without sending us the product. All returns must be accompanied by a Return Merchandise Authorization (RMA) number. Failure to do so can result in lost merchandise and/or severely delayed service time.**

- Remove any accessories other than lens covers.
- Record and keep on hand the serial number.
- Include with the spotting scope a detailed description of the defect(s), the RMA number, your name, phone number and the address you wish the spotting scope returned to.
- Place the boxed or protectively wrapped spotting scope in a well-padded outer box insured for replacement value and send it shipping prepaid, to the appropriate address below. **Write the RMA number on the outside of the package.**

**U.S.A. & Canada:**  
Nightforce Optics, Inc.  
Attention: Service Dept.  
336 Hazen Lane  
Orofino, Idaho 83544

tel 208.476.9814  
fax 208.476.9817  
www.NightforceOptics.com

**International:**  
Nightforce Optics  
Attention: Service Dept.  
11 Manton Street  
Hindmarsh, SA 5007 Australia

tel +61 (0)8 8440 0888  
fax +61 (0)8 8346 0504  
www.NightforceOptics.com

**Be sure to register your warranty at  
[www.NightforceOptics.com/WarrantyRegistration](http://www.NightforceOptics.com/WarrantyRegistration)**

## Nightforce Warranty Registration Card: Spotting Scopes

Activate your warranty at [www.NightforceOptics.com/WarrantyRegistration](http://www.NightforceOptics.com/WarrantyRegistration) and be eligible for product support, updates and additional Nightforce gear. If you do not have Internet access, please tear out, fill in and return this product registration card within 30 days of purchase. Return to the address below along with a copy of your purchase receipt. We retain this card for warranty eligibility.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone No.: \_\_\_\_\_ Email: \_\_\_\_\_

Model: \_\_\_\_\_ Serial No.: \_\_\_\_\_

The serial number can be found on the tripod mounting base, facing the eyepiece.

Date of Purchase: \_\_\_\_\_ Purchased From: \_\_\_\_\_

Please take a moment to provide your comments on the following page.

Attach a copy of your receipt and send to: **Nightforce Optics, Inc.  
Attn: Warranty Registration  
336 Hazen Lane  
Orofino, Idaho 83544**

**Register online at  
[www.NightforceOptics.com/WarrantyRegistration](http://www.NightforceOptics.com/WarrantyRegistration)**

Please detach here

## Nightforce Owner's Comments

Your feedback and suggestions will help us maintain the high level of quality and customer service Nightforce owners have come to expect. We encourage your input.

What changes or modifications would you recommend be made to improve this product? \_\_\_\_\_

What new products would you like to see offered by us? \_\_\_\_\_

What magazines do you normally read? \_\_\_\_\_

What outdoor-related television programs do you like to watch? \_\_\_\_\_

Do you participate in Internet forums or blogs? Which ones? \_\_\_\_\_

How did you hear about Nightforce products? \_\_\_\_\_

How do you plan to use your spotting scope?  Photography  Bird watching  Wildlife watching  Hunting  Shooting  
 Other (please explain) \_\_\_\_\_

Please share digital photos or videos you've taken with your spotting scope with us by emailing them to [PhotoSharing@NightforceOptics.com](mailto:PhotoSharing@NightforceOptics.com). Please note that by doing so, you are giving your consent to Nightforce to share them with the public and use them in Nightforce advertising, promotion, and other applications.

Please detach here

## Accessories

Nightforce accessories can enhance the flexibility, applications and protection of your spotting scopes. These include:



**Nightforce Cleaning Kit** includes an ultrasoft brush, microfiber cloth and cleaning solution. Highly recommended to allow proper cleaning of high-quality lenses. Part No. A130

**Carrying case** is sturdy, handsome and rugged. Plenty of room for your spotting scope (TS-80™ or TS-82™) and accessories. Part No. A290



**Heavy duty sleeves** add protection in the field without compromising functionality. Easy to install and remove. Available for both TS-80™ and TS-82™.

Visit [www.NightforceOptics.com](http://www.NightforceOptics.com) to stay up to date on the latest accessories and promotions available for your TS-80™ and TS-82™ spotting scopes.



**Mil-Std. 1913 Accessory Rail (TS-82 only)** allows the attachment of components that are Mil-Std. 1913 compatible to your spotting scope. Part No. A274



iPhone® 4



iPhone® 5

**iPhone® adapters (TS-82 only)** let you attach an iPhone® 4/4S (Part No. A276) or iPhone® 5 (Part No. A277) to the TS-82™ for spectacular photography or videos.



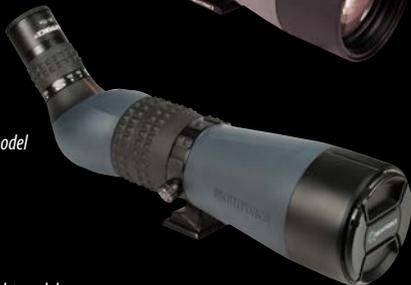
**30x-60x Wide Angle Eyepiece (TS-82 only)** interchanges with the standard TS-82™ eyepiece and provides a wider field of view. Highly useful for tracking moving and/or multiple targets over a broad expanse. Part No. A275



TS-80™



TS-82™ angled model



TS-82™ straight model



**Factory/Headquarters U.S.A.**

**Customer Service, Technical & Warranty:**

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dealersales@nightforceoptics.com

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Get the latest news, tech tips and good stories  
via our newsletter at  
[www.NightforceOptics.com/newsletter](http://www.NightforceOptics.com/newsletter)

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11 Manton Street  
Hindmarsh, SA 5007 Australia  
tel +61 (0)8 8440 0888  
fax +61 (0)8 8346 0504

**International Warranty & Service:**

Please contact your country's authorized Nightforce  
Optics distributor and/or retailer for instructions. A list  
of international distributors and dealers can be found at  
[www.NightforceOptics.com](http://www.NightforceOptics.com).



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