

**NIGHTFORCE**  
NIGHTFORCE CFS 6-36x50  
Configurable Field Spotting Scope



# NIGHTFORCE CFS 6-36x50 Configurable Field Spotting Scope Owner's Manual

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**NIGHTFORCE**

**NIGHTFORCE CFS 6-36x50 Configurable Field Spotting Scope**



## Specifications

- Model: Configurable Field Spotting Scope (CFS) 6-36x50mm F1
- Magnification Range: 6-36x
- Objective Lens Diameter: 50mm
- Focus System: Rapid Focus Ring
- Diopter Adjustment: User adjustable

## Product Usage Instructions

### Focusing the Image

The CFS 6-36 includes a Rapid Focus Ring that requires 120 degrees of rotation to cover the full focus range. To focus the image, follow these steps

1. Look through the eyepiece and turn the Rapid Focus Ring clockwise or counter-clockwise until the image is sharp and crisp.
2. For closer images, turn the ring counter-clockwise; for distant ones, turn it clockwise.
3. Adjust focus as needed after changing magnification settings.

### Magnification Settings

The magnification range of the CFS is 6-36. To change magnification Rotate the magnification ring clockwise for more magnification or counter-clockwise for less magnification.

### Diopter Adjustment

To adjust the diopter setting on the CFS 6-36

1. Set Rapid Focus Ring to the infinity setting and spotting scope to highest magnification.
2. Look at a light-colored background to determine if the reticle is clear and in focus.
3. If needed, adjust the eyepiece inward until slightly blurred, then outward for sharp focus.

## FAQ

- **Q: How do I prevent eye damage while using the spotting scope?**

- **A:** Avoid looking directly at the sun or extremely bright lights through the spotting scope to prevent permanent eye damage or blindness.

- **Q: How do I change the magnification on the spotting scope?**

- **A:** Rotate the magnification ring clockwise for more magnification or counter-clockwise for less magnification.

- **Q: How do I adjust the diopter on the spotting scope?**

- **A:** Set the Rapid Focus Ring to infinity, spot scope to highest magnification, and adjust the eyepiece until achieving a sharp focus.

### 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 does not authorize the export of these items outside of the United States of America. Optics 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.

## Nomenclature and Features



- A: Body
- B: Eyepiece (Diopter)
- C: Adjustable Eyecup
- D: Eyepiece Lens Cap
- E: Magnification Ring
- F: Rapid Focus Ring
- G: Integrated 1.5in Dovetail Base (\*RRS™ Standard and Arca-Swiss Compatible)
- H: Objective Lens Cap
- I: Cage Mounting Locations with 10-24 flat head screws (x6)

- J: Stop Screw Mounting Locations
- K: Stop Screw Storage
- L: Spotting Scope Accessory Cage (Optional Accessory)
- M. Spotting Scope Rail Accessory Platform (s-RAP) (Optional Accessory)

Really Right Stuff™ (RRS™)

## What's Included in the Box

- Configurable Field Spotting Scope (CFS) 6-36x50mm F1
- Padded Field Case
- Adjustable eyecup – installed
- (x2) Lens Caps- eyepiece and objective -installed
- T15 Torx Wrench
- Fob Lens Cloth
- Owner's Manual
- Spotting Scope Accessory Cage (when purchased as a kit)
- (x2) M-LOK® picatinny rail segments (when purchased as a kit)
- 1/8 in Hex Wrench (when purchased as a kit)



## Focusing the Image

The CFS 6-36 includes a Rapid Focus Ring that requires only 120 degrees of rotation to cover the full focus range. In order to focus the image, turn the Rapid Focus Ring clockwise or counter-clockwise while looking through the eyepiece until the image is sharp and crisp. Closer images generally require a counter-clockwise turn, while distant ones generally require a clockwise turn. The user may need to adjust the focus after changing magnification settings.

**NOTE:** The CFS 6-36 eyepiece will move slightly in and out with changes to the focus ring and is part of the normal operation.



### Magnification Settings

The Configurable Field Spotting Scope (CFS) has a magnification range of 6-36. The magnification ring is the adjustment closest to the eyepiece and will be indicated with a numbered scale and include a raised section on the rubber grip. To change magnification, rotate the magnification ring clockwise (more magnification) or counter-clockwise (less magnification).



### Diopter Adjustment

One user adjustable optical setting on the CFS 6-36 is the diopter adjustment. The diopter adjustment changes reticle focus to match the user's eye prescription. If you wear vision correction when shooting, set this focus while wearing your corrective lenses. On the CFS 6-36 the whole eyepiece rotates as part of the diopter adjustment.

**NOTE:** Nightforce® optics are factory set (-3/4 diopter), so adjustment may not be necessary. If the reticle fades in and out of focus, or if the user experiences eye strain with extended viewing sessions, it is an indicator that the diopter may be out of focus.

1. Set Rapid Focus Ring to the infinity setting ( $\infty$ ) and set spotting scope to highest magnification for best results.
2. Look through the spotting scope at a light-colored background such as a white wall or overcast sky to eliminate background clutter that will distract your eye. Determine if the reticle is clear and in focus at the instant you look through the eyepiece and see the reticle. Look away for a few seconds and then retry repeatedly for best results.
3. If the reticle is not crisp and well defined, look away and move the eyepiece then re-check for focus. Best results are obtained by turning the eyepiece inward until the reticle is slightly blurred, then moving it outward until a sharp focus is obtained.

**NOTE:** Staring at the reticle for more than a second will cause your eye to focus on the reticle, falsely indicating proper reticle focus.



### Using Adjustable Eyecup

The CFS 6-36 comes equipped with a twist-out adjustable eyecup that is Tenebraex® lens cap compatible. The eyecup threads into the eyepiece and can be adjusted to allow a reference at the proper eye relief for each individual's face. Rotate counter-clockwise to extend the eyepiece and clockwise to retract it. To set the eyecup, move it all the way in and then extend out until there is a full sight picture. It is recommended to set the eyecup with the lens cap installed.

**NOTE:** To use the adjustable eyecup with the lens cap installed, it may be necessary to squeeze the lens cap slightly while rotating.



**Fully retracted**



**Fully extended**

### Using Lens Caps

The CFS 6-36 comes with Tenebraex® lens caps for both the objective and eyepiece. They snap over the adjustable eyecup and objective adapter. The lens caps can be rotated separately from the eyepiece and objective. The lens caps should be rotated to avoid interference with attached accessories.



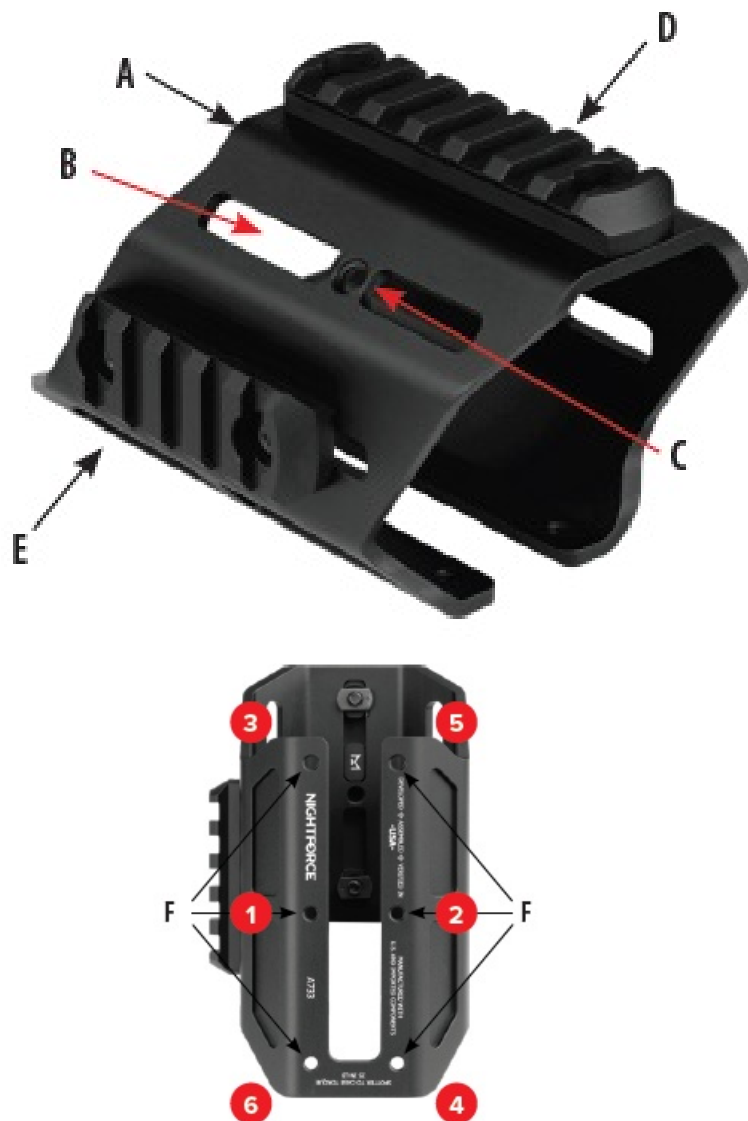
## Mounting on a Tripod

- While spotting scopes can be handheld or supported by a bag, mounting to a high-quality tripod will reduce vibration, thereby improving image quality and reducing eye fatigue. The CFS 6-36 comes equipped with an integrated
- ARCA-Swiss compatible, 1.5 in dovetail base designed to the RRS™ Dovetail Standard. The RRS™ Dovetail Standard works with most Arca-Swiss compatible clamps though care should be taken to ensure the fit is secure as some Arca-Swiss clamps are designed to different levels of precision.
- The CFS 6-36 integrated base also comes with three locations to mount standard 1/4-20 thread adapters for attachment to tripods not equipped with a 1.5 in dovetail clamp. When using the 1/4-20 thread screw, tighten snugly but avoid excessive tightening, which can damage the threads.

**NOTE:** It is recommended to use the stop screws when attaching the CFS 6-36 to a tripod. Stop screws can be installed to prevent the CFS 6-36 from sliding in one, or both, directions or for repeatable mounting.



## Spotting Scope Accessory Cage



- A: Accessory Cage Body
- B: M-LOK® Mounting Slots (x5)
- C: 1/4-20 Accessory Mounting Locations (x5)
- D: 7 Slot M-LOK® Picatinny Rail
- E: 5 Slot M-LOK® Picatinny Rail
- F: Cage Mounting Locations- 10-24 Thread (x6)
- 1-6: Tightening Sequence

## Installation Instructions

To install the accessory cage, remove the lens cap from the eyepiece and slide the cage over the eyepiece with the horseshoe opening facing forward toward the objective. The accessory cage will slide on and fit between the body tube and the integrated base.





On the bottom, align the 6 holes of the cage with the corresponding holes on the integrated base and lightly secure a screw on either side to hold the cage in place. Continue to place screws in the other holes and tighten until they are flush with the base but not torqued to spec. Once all are in place, gradually tighten the screws to 35 in-lb using the tightening sequence shown to the left. If no torque driver is available, tighten 1/8 turn past initial resistance using the provided hex wrench.

**NOTE:** If the CFS 6-36 is purchased as a kit, the accessory cage will come installed from the factory. The M-LOK® picatinny rails can be installed by the user.

### Accessory Cage Mounting Points

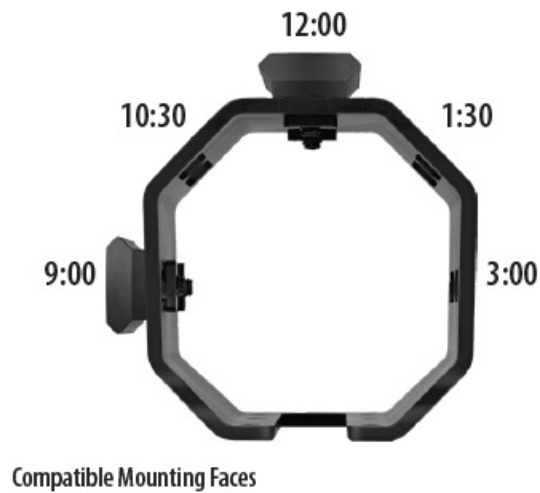
The CFS 6-36 spotting scope accessory cage has mounting faces at 12 o'clock, 1:30, 3:00, 9:00 and 10:30. Each face is equipped with mounting locations for either an M-LOK® picatinny rail or 1/4-20 threaded accessories.

Mount Type	Compatible Mounting Faces	Torque
7 slot M-LOK® picatinny rail	12 o'clock	Aluminum – 35 in-lb, Polymer – 15 in-lb
5 slot M-LOK® picatinny rail	12 o'clock, 1:30, 3:00, 9:00, 10:30	Aluminum – 35 in-lb, Polymer – 15 in-lb
1/4 – 20 threaded	All	Per accessory instructions

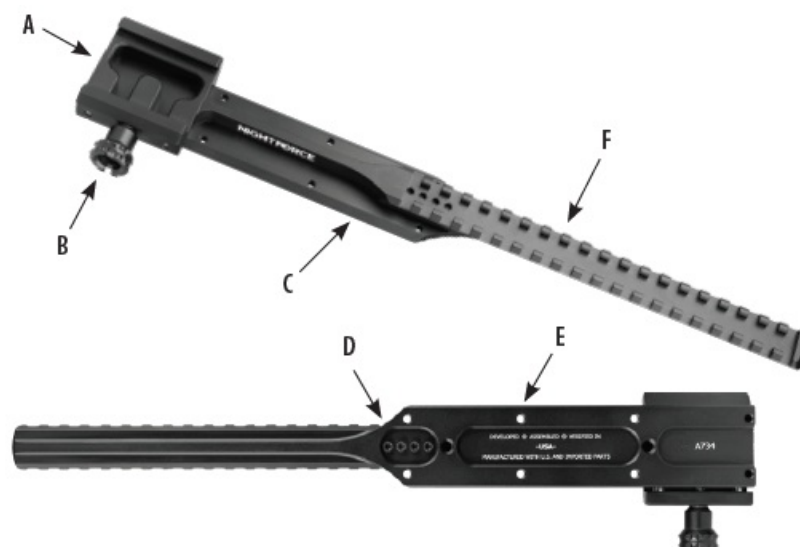
**NOTE:** Use only M-LOK® mounting system with Magpul® recommended torque values and attachment method. See [magpul.com/instructions](https://magpul.com/instructions) for more detailed installation instructions.



Mounting slot locations



### Spotting Scope Rail Accessory Platform (s-RAP)



- A: Integrated 1.5 in Dovetail Clamp
- B: Tightening Knob
- C: Integrated 1.5 in Dovetail Base (RRS™ Standard and Arca-Swiss Compatible)
- D: Stop Screw Storage
- E: Stop Screw Mounting Locations
- F: Picatinny Rail

For the latest updates and information regarding our products, visit [www.NightforceOptics.com](http://www.NightforceOptics.com).

### Installation Instructions

The s-RAP can be mounted facing forward or rearward on the CFS 6-36. To install, loosen the clamp and slide the s-RAP onto the integrated dovetail. Ensure the clamp has fully engaged the dovetail as partial installation can result in unsecured equipment. Tighten the clamp knob to hand tight.



Correct



Incorrect

### Attaching / Optimizing Accessories

When attaching accessories to the Spotting Scope Accessory Cage and the s-RAP, be sure to follow the accessory manufacturer's installation instructions for best results. The distance from the top of the rail to the optical center of the CFS 6-36 is 1.5 in. This allows for seamless integration of many of the most popular clip-on visual augmentation systems.

When attaching accessories to the s-RAP the use of stop screws on both the CFS 6-36 base and the s-RAP base is recommended for the most secure mounting.



### Specifications



- A. Overall Length 14.1 in / 358 mm
- B. Objective Outer Diameter 65 mm

- C. Eyepiece Outer Diameter 52 mm
- D. Dovetail Base Length 3.6 in / 94 mm
- E. Cage Length 5.1 in / 130 mm
- F. Rail Length 14 in / 356 mm
- G. Rail to Optical Center 1.5 in / 38 mm
- Spotting Scope Weight 33.7 oz / 955 g
- Field of View @ 100 yd/m 6x – 37.2 ft / 12.4 m, 36x – 7.2 ft / 2.4 m
- Exit Pupil 6x – 5.8 mm, 36x – 1.3 mm
- Eye Relief 50 mm
- Close Focus 21.9 yd / 20m
- Cage Weight 5.1 oz / 144 g
- Rail Weight 7.2 oz / 203 g

### **Torque Specifications**

- Cage Mounting Fasteners 35 in-lb
- M-LOK® 7 Slot and 5 Slot Picatinny Rails Aluminum 35 in-lb, Polymer 15 in-lb
- Stop Screws 25 in-lb

### **Maintenance**

With proper care, a Nightforce® spotting scope will provide many years of dependable service. Be sure to use lens covers whenever you are not using your spotting scope.

#### **Cleaning Spotting Scope Exterior**

Clean the spotting scope with a clean cloth, lightly moistened, with clean water or rubbing alcohol. Do not use strong solvents or gun cleaner as they can destroy lens coatings. In the event of submersion in mud, sand, dirt or salt water; irrigate the outside of the spotter with clean water to remove encrusted material and salt. Wipe the outside metal surfaces dry with a soft cloth.

#### **Cleaning Spotting Scope Lenses**

We recommend using a Nightforce® cleaning kit for lens cleaning. The kit contains a lens brush, microfiber cloth and cleaning solution. With the lens facing down, to allow debris to fall away, remove loose dirt and dust with lens brush. If there is grit stuck to the lens, irrigate the surface with distilled water and rub off with cleaning swabs. Using a soft, clean, lint-free cotton swab or lens cleaning cloth, clean the lens starting in the center and 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 contain abrasive grit that can 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 if necessary and to prevent streaks.

#### **Long Term Storage**

If the spotting scope will not be used for an extended period, store it in the provided soft case and place in a cool, dry, dust-free location with lens caps closed.

#### **Immersion**

Water, mud, snow: Ensure that accessories are properly installed and screws are properly torqued. When the optic is not in use, keep protective caps closed over glass lenses. Clean and dry the optic as soon as possible after exposure.

### **Limited Lifetime Warranty**

- We are proud to back this Nightforce optics product with a transferable Limited Lifetime Warranty. The warranty covers mechanical defects in materials and workmanship in the optical and mechanical components of Nightforce optics. In the event of a defect in materials or workmanship that is covered by this warranty, we will either repair or replace the product at no charge, with a comparable product at our discretion. Exclusions to this warranty include intentional or accidental damage, abuse, misuse, unauthorized modifications or repairs, and improper mounting. This warranty does not cover any consequential or incidental damages resulting from the inability to use the product. Any serial number obliteration or alteration on the product will void the warranty.
- The warranty begins on the date the product was purchased by the original owner. The optical and mechanical components are covered without time limitations. The optics electronic components, if any, are covered for a period of three years.
- 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.
- Before sending an optic in for service, please call Nightforce Optics, Inc. at the number on the back page, to determine if the problem can be resolved without returning the physical product. If deemed necessary, the customer service rep will provide an Return Merchandise Authorization (RMA) which must accompany the return. Failure to do so can result in lost merchandise and/or severely delayed service time.
- For the latest updates and information regarding our products, visit [www.NightforceOptics.com](http://www.NightforceOptics.com).
- Remove any mounting rings, mounts and accessories except for dust covers, lens caps, and the original sunshade.
- Record and keep on hand the serial number.
- Provide with the optic a detailed description of the defect(s), the RMA number, your name, phone number and the return shipping address.
- Place the boxed or protectively wrapped optic in a well-padded outer box, insured for replacement value and send it to the appropriate address provided by Nightforce Optics.

Write the RMA number on the outside of the package.

Be sure to register your warranty using the QR code below or at:

[www.NightforceOptics.com/WarrantyRegistration](http://www.NightforceOptics.com/WarrantyRegistration)



Factory/Headquarters U.S.A.

- Customer Service, Technical & Warranty: Nightforce Optics  
336 Hazen Lane

Orofino, ID 83544

tel 208.476.9814 • fax 208.476.9817

[info@nightforceoptics.com](mailto:info@nightforceoptics.com)

- North American Dealer Sales:

tel 706.460.5500

[dealersales@nightforceoptics.com](mailto:dealersales@nightforceoptics.com)

Military, Government & Law Enforcement

- tel 706.460.5515

[militaryinfo@nightforceoptics.com](mailto:militaryinfo@nightforceoptics.com)

### European, Asian & African Sales:

- tel 706.460.5511

- [intlsales@nightforceoptics.com](mailto:intlsales@nightforceoptics.com)

- Australian & South Pacific Sales

Nightforce Optics

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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### Documents / Resources



[NIGHTFORCE CFS 6-36x50 Configurable Field Spotting Scope](#) [pdf] Owner's Manual  
CFS 6-36x50, CFS 6-36x50 Configurable Field Spotting Scope, CFS 6-36x50, Configurable Field Spotting Scope, Field Spotting Scope, Spotting Scope, Scope

### References

- [Nightforce Optics | Rugged, Reliable, Repeatable, Optics](#)
- [Warranty Information](#)
- [User Manual](#)

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