



8x42
SOLITUDE XD BINOCULARS
SM12104



10x42
SOLITUDE XD BINOCULARS
SM12105

USER MANUAL

ABOUT SIGHTMARK®

Founded to meet the changing needs of the outdoor industry and its customers, Sightmark® was introduced at SHOT Show 2007 in response to the growing popularity of the modern shooting market. The goal was to provide state-of-the-art optics and accessories to make the modern sporting rifle, shotgun and pistol as accurate as possible. In addition, each product is designed for the core market, enabling shooters to purchase more high quality items to accessorize their firearm for hunting, home defense and competition shooting.

In 2011, the new 33,000 square-foot (3066 m²) headquarters was completed in Mansfield, Texas, combining the company's corporate offices and a large warehouse to handle the increase in sensitive material and technology being produced. The new facility provides more space for research and development, production, and distribution of defense-related products.

Best-selling products include red dot sights, riflescopes and chamber laser bore sights. More than one million Sightmark bore sights are in use since first released to the market. Sightmark has earned several patents and awards from industry associations and publications including Field & Stream, Optics Planet, Outdoor Life and Predator Xtreme. Numerous optics and accessories have been field tested and approved by prominent outdoor organizations such as the North American Hunting Club and the National Tactical Officers Association.

Currently, Sightmark represents leading markets growing in more than 55 countries and many quality retailers in every state. Products are sold by top retailers and national specialty chains such as: Academy Sports & Outdoors, Bass Pro Shops, Cabela's, Frankonia and many more.



SOLITUDE XD BINOCULARS

The Sightmark Solitude XD binoculars deliver superior clarity, durability, and low-light performance for serious hunters. Featuring premium XD glass and fully multi-coated lenses, they offer razor-sharp images with over 85% light transmission, ensuring crisp visibility at dawn and dusk. A wide field of view makes tracking game effortless, while the resettable diopter zero and large central focus dial provide fast, precise adjustments. Built for the toughest conditions, these IPX7 waterproof, nitrogen-purged binoculars resist fog and moisture while maintaining a lightweight, ergonomic design for all-day comfort, enabling its users to see farther and hunt smarter.

FEATURES:

SM12104, SM12105

- Phase Correction & Dielectric Prism Coating
- >85% Light Transmission
- Resettable Diopter Zero
- Wide Field of View
- Compact & Lightweight
- Extra-Low Dispersion (XD) Glass
- Fully Multi-Coated (FMC) Lenses
- Bak4 Roof Prisms
- Durable Magnesium Alloy Body
- IPX7 Waterproof & Nitrogen-Purged
- Twist-Up Eyecups
- Large central focus dial for fine adjustments

INCLUDES

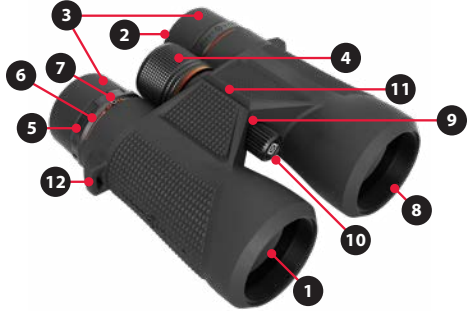
- Padded Neoprene Neck Strap
- Binocular Harness
- Carrying Case
- Wrist Lanyard
- Objective Lens Covers
- Eyepiece Lens Covers
- Tripod Adapter Mount
- Lens Cloth
- 1.5mm Hex Key

TECHNICAL SPECIFICATIONS	SM12104	SM12105
Magnification (x)	8	10
Objective lens diameter (mm)	42	42
Type of prism (type)	Bak4 Roof Prism	Bak4 Roof Prism
Prism coating (yes/no)	Yes	Yes
Prism coating	Phase Correction & Dielectric Coating	Phase Correction & Dielectric Coating
Lens type	XD	XD
Lens coating	FMC	FMC
Focus system (Cent. / Ind. / Fix)	Center	Center
Focusing lens (Eye. / Obj. / Int.)	Internal	Internal
Exit pupil diameter (mm)	5.25	4.2
Eye relief (in/mm)	0.7 / 18	0.6 / 15
Field of view (degrees)	8	6.5
Field of view (ft@1,000yds)	420	338
Field of view (m@1,000m)	140	113
Close focus distance (ft/m)	6.6 / 2	6.6 / 2
Light Transmission	> 85%	> 85%
Twilight index	18.3	20.5
Resolution	4.85"	4.85"
Diopter system (location)	Eyepiece	Eyepiece
Diopter range	+/- 3	+/- 3
Interpupillary distance (in/mm)	2.2-2.9 / 57-73	2.2-2.9 / 57-73
Nitrogen purged (yes/no)	Yes	Yes
IP Standard (water rating)	IPX7	IPX7
Eyecup system (type)	Twist extension	Twist extension
Body material	Magnesium Alloy	Magnesium Alloy

TECHNICAL SPECIFICATIONS	SM12104	SM12105
Operation temperature (°F/°C)	14° to 131°F / -10° to 55°C	14° to 131°F / -10° to 55°C
Length (in/mm)	5.5 / 141	5.5 / 141
Width (in/mm)	5.0 / 128	5.0 / 128
Height (in/mm)	2.0 / 52	2.0 / 52
Weight (oz/g)	24.0 / 682	23.5 / 668

DIAGRAM

1. Objective Lens
2. Eyepiece
3. Adjustable Eyecup
4. Focus Dial
5. Diopter Adjustment
6. Zero Reset Ring
7. Zero Reset Locking Screw
8. Threaded Objective
9. Tripod Adapter Port
10. Tripod Adapter Cover
11. IPD Adjustment
12. Strap Eyelet
13. Neck Strap (*not pictured*)
14. Harness (*not pictured*)
15. Carrying Case (*not pictured*)
16. Eyepiece Covers (*not pictured*)
17. Objective Lens Covers
18. Tripod Adapter Mount



INTERPUPILLARY DISTANCE (IPD) ADJUSTMENT

Interpupillary distance (IPD) is the distance between your eye's pupils. To obtain a single image through the binoculars, the center of the binoculars' eyepieces (2) must be set the same distance apart as your eye's pupils.

TO SET THE IPD:

1. Look through the binoculars with both eyes.
2. Holding the binoculars with one barrel in each hand, gradually rotate the barrels until the two images become one.



EYE RELIEF ADJUSTMENT

The Sightmark Solitude XD Binoculars eyepiece (2) is designed to rotate to adjust for eye relief. The rubber eyecups (3) twist out and lock in several positions to provide optimal eye relief for users with and without glasses.

TO ADJUST EYE RELIEF:

1. Hold the eyecup (3) loosely with your fingers and twist the eyecup clockwise or counterclockwise to adjust the position. Do not force the adjustment as this may damage the eyepiece.



FOCUS ADJUSTMENT

The Sightmark Solitude XD Binoculars have a centrally located focus adjustment that can be used right or left-handed. To adjust the focus of the binoculars, turn the focus adjustment dial left or right. The image through the binoculars will change what is in focus.

1. Turn the dial clockwise to adjust the focus to nearby objects.
2. Turn the dial counterclockwise to adjust the focus to distant objects. The focus dial is conveniently marked with this information.



DIOPTER ADJUSTMENT

The Sightmark Solitude XD Binoculars eyepiece (2) is also designed to rotate to adjust for diopter. Diopter is the measurement of the eye's curvature. By rotating the diopter adjustment ring (5), the diopter is adjusted to properly match each person's vision. The diopter adjustment is only located on the right barrel of the binoculars.

1. Look through only the left eyepiece and use the focus dial (4) to focus on an object nearby.
2. Closely look at surrounding objects to see how in or out of focus they appear.
3. Looking through the right eyepiece, twist the diopter adjustment ring (5) clockwise or counterclockwise until the focus matches what is seen through the left eyepiece. Do not force the diopter. This may damage the internal focusing mechanisms.



4. Check back and forth between the eyepieces until the image's focus matches, continuing to twist the diopter as necessary.

This adjustment should stay the same unless the binoculars' operator changes.

DIOPTER ZERO RESET

The Sightmark Solitude XD Binoculars come equipped with a zero reset for the diopter. The zero reset should be completed after the primary user has finished adjusting the diopter to their needs.

1. Located on the top side of the binoculars is a locking set screw (7) for the zero reset. Using a 1.5 mm hex key, loosen this screw ½ turn.
2. On the bottom side of the binoculars is an arrow marking on the diopter. This is your diopter's new "zero." Turn the zero-reset ring (6) until the main stadia aligns with the zero of the diopter.
3. Tighten the locking set screw (7) a ½ turn to lock the zero-reset ring in place. **Do not overtighten.** It takes very little pressure to hold the ring in place.

When using the binoculars with a secondary user, the diopter can be freely adjusted using the markings on the zero-reset ring. When the primary user needs to use the binoculars again, they twist the diopter back to the zero location found on the zero-reset ring and are ready to go again.



INSTALLING THE OBJECTIVE COVERS

The Sightmark Solitude XD Binoculars come with threaded objective lens covers. These lens covers mount to the objective lenses of the binoculars.

To mount the covers:

1. Gripping the lens cover (17) tightly by the base, carefully screw the threads into the threads found around the objective (8) of the binoculars, being careful not to cross the threads.
2. Tighten firmly but do not overtighten.
3. Once mounted, the flip up lens covers should be able to be rotated to any position.
4. If the lens covers unscrew rather than rotate, screw them back in and tighten further. Repeat as necessary until the covers can rotate without unmounting from the binoculars.



INSTALLING THE EYEPIECE COVERS

The Sightmark Solitude XD Binoculars come with rubber eyepiece covers.

To mount the eyepiece covers:

1. Place the eyepiece covers (16) over the eyecups (2).
2. If you are using a neck strap, route the strap through the lanyard hole on the side of the covers. This will ensure they are always connected to your binocular system.
3. The opposite side of the covers also has a split lanyard hole that allows you to disengage the covers rapidly from the strap for easy access to the binoculars.

MOUNTING ON A TRIPOD

The Sightmark Solitude XD Binoculars can be adapted to mount on a tripod using the tripod adapter port (9) and tripod adapter mount (18). The port uses a standard ¼-20 thread dimension for mounting.

To mount the binoculars on a tripod:

1. Remove the tripod adapter cover (10) by unscrewing it from the binoculars. Place this in a secure location so that you do not lose it.
2. Take your included tripod adapter mount (18) and screw the threaded portion into the tripod adapter port (9). Tighten firmly by hand. **Do not overtighten.**
3. The top screw will tighten the tripod adapter more securely to allow for a stable viewing experience. Screw the top adjustment in firmly to lock the binoculars in place. **Do not overtighten.**

The base of the tripod mount can be mounted in 2 ways onto a tripod.

1. There is a ¼-20 threaded hole in the bottom to mount to an Arca-Swiss adapter plate or ¼-20 direct thread. The base is also configured to mount to Arca-Swiss directly.
2. If you are using an adapter plate or direct mount, thread the mount on the tripod's ¼-20 threaded post until it is firmly in place. Then attach the adapter plate to your tripod head as needed.
3. If you are mounting directly to Arca-Swiss, just use the bottom of the tripod adapter in place of an Arca-Swiss adapter plate to mount to your tripod head.



MAINTENANCE

Proper maintenance of the Binoculars is recommended to ensure longevity. It is recommended that when the binoculars become dirty they are wiped down with a dry or slightly damp cloth. Blow dirt and debris off all optics and then clean lenses with a lens cleaning cloth. No further maintenance is required.

STORAGE

Make sure that your Sightmark Solitude XD Binoculars are clean before storing. Cover with the included lens covers and place in the provided carrying case. Place in a safe space that is low in humidity and climate controlled. Make sure the binoculars are protected from direct sunlight or exposure to damaging substances.

WARNING

Before handling the Sightmark Solitude XD Binoculars read and understand the contents of the Sightmark manual. Follow all standard safety precautions and procedures during use of the binoculars.

The binoculars are nitrogen purged and O-ring sealed. **DO NOT** disassemble the binoculars for any reason as this will void the warranty. Any internal work should be handled by the manufacturer. Any tampering with the assembly will void the warranty.

- Avoid hitting or dropping the unit
- Store in a secure area



Sightmark
2201 Heritage Parkway, Mansfield, TX 76063, USA
Manufactured for Sellmark Corporation
In EU, distributed by Sellmark OOD
104 A Akademik Ivan E. Geshov Blvd,
Floor 4, Office 6, 1612 Sofia, Bulgaria

SIGHTMARK WARRANTY

Please visit www.sightmark.com for warranty details and information.