

SIGHT MARK[®]

USER MANUAL



**Latitude
Spotting Scopes**

SM11033, SM11033T
SM11034, SM11034T

ABOUT SIGHTMARK®

Sightmark offers a wide range of products that include red dot scopes, reflex sights, rangefinders, riflescopes, laser sights, night vision, binoculars and award-winning flashlights and boresights. Sightmark products are inspired by military and law enforcement applications. All products are designed to be the most effective weapon accessories possible.

MAKE YOUR MARK



www.sightmark.com

ABOUT

Shooting, hunting, tactical observation or simply glassing for wildlife, Sightmark's feature-rich Latitude Spotting Scopes keep your objective in focus. While a precision engineered, dielectric-coated mirror system utilizes mid- to long-range variable magnification, the Latitude's advanced, fully multi-coated, scratch-resistant lenses deliver uncompromising, razor-sharp clarity and robust, distortion-free field of view. Whether your outdoor adventures take you to a shooting range or a canyon rim on the hunt of a lifetime, Sightmark Latitude spotting scopes boast a rugged rubber-armored body and IP67 waterproof, dustproof and fogproof protection for worry-free, dusk-to-dawn performance. Latitude Spotting Scopes include accessory rails, lens covers and a convenient carrying case. Sightmark Latitude Spotting Scope models include 15-45x60 (SM11033 and SM11033T) and 20-60x80 XD (SM11034 and SM11034T).

TECHNICAL SPECIFICATIONS

	SM11033/33T	SM11034/34T
Magnification (x)	15-45	20-60
Objective Lens Diameter (mm)	60	80
Exit Pupil Diameter (mm)	4.2 - 1.3	4.2 - 1.3
Eye Relief (in/mm)	1.06 - 1.02 / 27 - 26	1.06 - 1.02 / 27 - 26
Field of View (degrees)	3.36 - 1.1	2.5 - .84
Field of View (ft/1,000yds)	177 - 60	131.1 - 14.5
Field of View (m/1,000yds)	59 - 20	43.7 - 14.5
Close Focus Distance (ft/m)	27/8	39/12
Waterproof/nitrogen purged	yes	yes
IP Rating	IP67 - waterproof to 1m/3ft for 1 hour	IP76 - waterproof to 1m/3ft for 1 hour
Tripod mount (in)	1/4	1/4
Operating temperature (°F/°C)	-4 to 122 / -20 to 50	-4 to 122 / -20 to 50
Length (in/mm)	11/279	15.5/394
Width (in/mm)	3/76	3.76/95
Height (in/mm)	5.7/145	5.75/146
Weight (oz)	45.7	67.7

INCLUDED ACCESSORIES:

- Accessory rails
- Lens covers
- Carry case

Features

- Fully multi-coated optics
- Dielectric mirror coatings
- Folded light path
- Rubber armored housing
- Straight eyepiece design
- Compact design
- Picatinny accessory rails
- Twist-up eyecup
- Built-in double tripod adapters
- Waterproof and fogproof
- First focal plane mil-radian reticle*

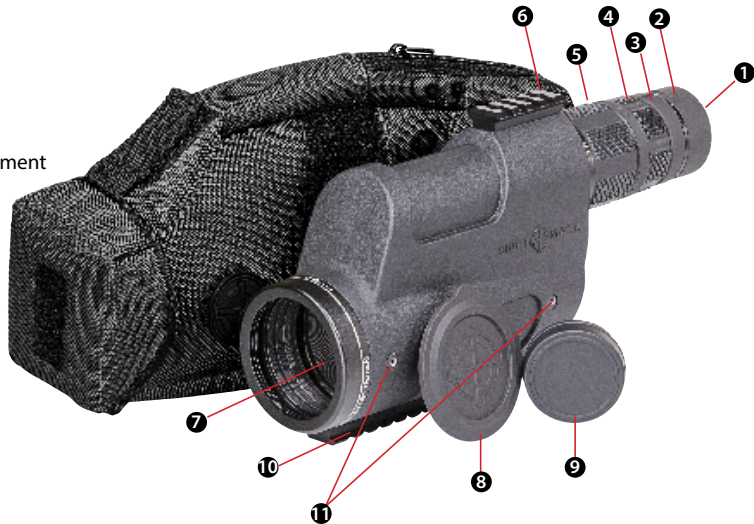
SM11033T and SM11034T

- Extra-low dispersion glass **

SM11034 and SM11034T

DIAGRAM

1. Eyepiece
2. Twist-up eyecup
3. Diopter adjustment
4. Focus adjustment
5. Magnification adjustment
6. Tripod mount
7. Objective lens
8. Objective lens cap
9. Eyepiece cap
10. Accessory rail
11. Rail sockets



VARIABLE POWER ADJUSTMENT

All Latitude Spotting Scopes are equipped with an eyepiece cover (9) and objective lens cover (8). First remove the covers before operating the spotting scope. Each spotting scope model is equipped with variable magnification. The low magnification of the Latitude Spotting scopes provides a wide field of view making it easy to spot or track targets. The high magnification makes it possible to observe details on distant targets. To change magnification:

1. Turn the magnification adjustment ring (5) to the desired level of power.
2. To increase magnification, turn the adjustment ring in a clockwise direction.
3. To decrease magnification, turn the adjustment ring in a counter-clockwise direction.



FOCUS ADJUSTMENT

The focus dial allows the Latitude Spotting scopes to deliver a clear, sharp image. Anytime magnification is changed, generally the image must be refocused. To focus the image:

1. Turn the focus dial (4) until the image is focused. Make sure the image is always well focused as this will prevent eye fatigue



ADJUSTING THE EYECUP

Prior to using the Latitude spotting scopes, it is best to adjust the twist up eyecup to your preference. The twist-up eyecups allow you to properly observe the full field of view of the image without any vignette effect or darkened edges. Even if you wear eyeglasses you can use the Latitude spotting scopes effectively. If you wear glasses, keep the eyecup in the down position. Twist the eyecup to the up position if you do not wear glasses. To twist the eye cups:

1. Rotate the eye cup (2) counter-clockwise to raise the eyecup.
2. Rotate the eye cup clockwise to lower the eyecup.



ACCESSORY RAILS

All Sightmark Latitude Spotting scopes include two accessory rails (9) and attach to the rail sockets on the top and bottom (10). The short accessory rail attaches to the top of the spotting scope. This accessory rail is ideal for attaching a compact red dot or reflex sight. The use of a sight allows the spotting scope's field of view to be quickly aligned with the target. This prevents wasting time trying to find your target while looking through the high magnification of the spotting scope. Also included is a long accessory that attaches to the bottom only. This allows attachment of laser devices or flashlights. The bottom rail is equipped with a tripod socket so that the rail can remain attached to the spotting scope and a tripod can also be attached.

MOUNTING A TRIPOD

All Sightmark Latitude Spotting scopes include two built-in tripod mounts. The built-in tripod mount works with most aftermarket tripods and window mounts. The built-in tripod mount can be used with any tripod or window mount that uses a standard 1/4-20 UNC tripod screw. To mount a tripod:

1. Align the tripod's mounting screw with the socket on the tripod mount (6).
2. Screw the tripod's mounting screw so that the tripod and the tripod mount are completely connected and firmly secured.

USING THE CARRY CASE

All Sightmark Latitude Spotting scopes include a protective carrying case. The case is designed so the spotting scope can be used with a tripod while still inside the carrying case. To use the spotting scope while in the case, unzip the back and open the front end of the case. Fold the front ocular cover down and underneath the case making sure the Velcro secures it in the open position. Unzip the back of the case so that the eyepiece and focus dial are easily accessible. Next, fold the left and right side of the case back and secure them in position by attaching the pieces of Velcro together.

USING THE RETICLE

The Sightmark Latitude Tactical Spotting Scopes are equipped with a range finding reticle. The reticle can be used to determine range to target and calling shots to compensate for bullet drop and wind deflection. The reticle is based on a mil-radian design. Mil-radian is a measurement of angle. A single mil is equal to 1cm at 100 meters or 3.6" at 100 yards. Next, the MR reticle is a first focal plane reticle. The advantage of a first focal plane reticle is that the dimensions of the reticle will be true at any magnification. Therefore, using the reticle for ranging can be done at any point in the magnification range.

The top vertical and left horizontal scales are scaled in 1 mil increments. The bottom and right scales are scaled in .5 mil increments, while after 11 mils the scale is marked in 5 mil increments. Both can be used for range finding and calling shots. Below the horizontal scale, between the 10 mil and 20 mil increments, is a series of horizontal lines that can be used for ranging shoulder width of IPSC or similar silhouette targets. These lines allow for quick target ranging by matching the shoulder width of the target to the corresponding line. The numbers indicate the distance in meters, 3 is 300 meters, 4 is 400 meters, etc.

Ranging with the reticle

To determine an estimated range to target, one of the following formulas should be used. The height of the target must be known. For best results, range the target in quarter mil increments. The spacing between each half increment would be .25 mils.

Height of Target (yards) x 1000 = Distance to Target (yards)
mils

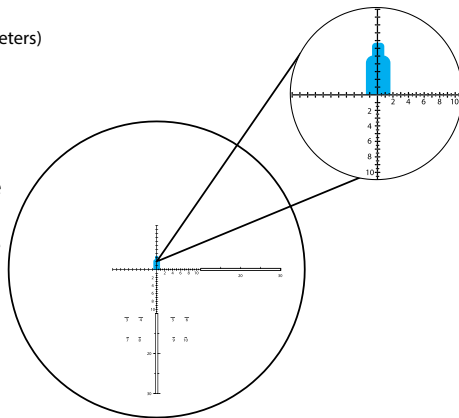
Height of Target (inches) x 27.78 = Distance to Target (yards)
mils

Height of Target (meters) x 1000 = Distance to Target (meters)
mils

Height of Target (cm) x 10 = Distance to Target (meters)
Mils

For example, in the image to the right, a silhouette target is 45 inches tall and reads 3.5 Mils tall. Using second formula above we get the estimated range to target.

$$45 \times 27.78 / 3.5 \text{ mils} = 357 \text{ yards}$$



MAINTENANCE

Proper maintenance of the Sightmark Latitude spotting scopes is recommended to ensure longevity. It is recommended that when the spotting scope becomes dirty that it is 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. To remove oils or dried water spots, apply a small amount of denature alcohol to a lens cloth or cotton swab. Clean the surface of the lens and let dry. Finally use your breath to clean the lens once more. To protect the spotting scope use it at all times in the protective padded case. No further maintenance is required. Do not attempt to disassemble any components of the spotting scope.

STORAGE

Cover with the objective lens and the eyepiece with the included lens covers. For long-term storage, place the spotting scope in a cool, dry and ventilated area

WARNING

Before handling the Sightmark Latitude spotting scope read and understand the contents of the Sightmark manual.

- Avoid hitting or dropping the unit
- NEVER look directly into the sun or at other bright light sources with the spotting scope as this could damage your eye and cause blindness.

TROUBLESHOOTING

Proper authorization is required before shipping any product back to Sightmark. Failure to obtain authorization could result in your product being returned to the wrong address, lost, or damaged. Sightmark is not liable for products returned without authorization.

The image is blurry and not in focus:

1. Rotate the focus dial until the image becomes clear and sharp.
2. Remove any dust or oil off the objective lens or eyepiece.

SIGHTMARK WARRANTY

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

NOTES:

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