SIGHT MARK®

USER MANUAL

MTS MINI SOLAR 1x22 REFLEX SIGHT

SM26061

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 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 40 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.

SIGHTMARK®

MAKE YOUR MARK

MTS MINI SOLAR 1x22 REFLEX SIGHT

The Sightmark MTS Mini Solar red dot provides dependability on the highest level, allowing for continuous use from reliable battery or solar power. With up to 200,000 hours of battery life from a single CR2032 and the ability to run off top-mounted solar cells, the dual-power MTS Mini Solar's 3-MOA red dot reticle stays on in virtually any environment. When tactical situations get intense, don't fumble with buttons to adjust brightness. The MTS features an innovative Eclipse Light Management System, which automatically adjusts reticle brightness based on the light of your surroundings. Taking innovation a step further, the MTS has a hinged battery door and protected adjustment caps that double as adjustment tools for the windage and elevation. All MTS Mini Solar red dots come standard with flip-up lens caps, a low Picatinny mount for shotguns and certain rifles, an absolute cowitness mount for AR firearms and Sightmark's Lifetime Warranty.

FEATURES:

- Dual power ability
- Hinged battery door
- Digital switch brightness controls
- Scratch resistant, anti-reflective lens coating
- 22mm objective lens
- Protected adjustment caps that also function as adjustment tools

*Eclipse light management system

INCLUDED:

- Flip Caps
- Low Picatinny mount
- Absolute cowitness Mount

Technical Specifications:	SM26061		
Reticle type	3 MOA Dot	Fog proof (yes/no)	yes
Reticle color	Red	Lens coatings	AR red
Illuminated reticle (yes/no)	yes	Mount type	picatinny
Brightness settings	1-10	Battery type	CR2032
Magnification (x)	1	Battery life (hours)	400 on High, 200,000 on Low
Objective aperture (mm)	22	Battery voltage (V)	3
Window material	glass	Operating temperature (oF)	-4 to 140 / -20 to 60
Eye relief (mm)	unlimited	Length (in/mm)	2.96/75
Elevation adjustment (MOA)	120	Width (in/mm)	1.64/41
Windage adjustment (MOA)	160	Height (in/mm)	2.71/69
MOA adjustment (one click)	1	Weight (oz/g)	5.5/156
Finish/color	Matte black		
Body material	Aluminum 6061-T6 / plastic		
Maximum recoil (G's)	.338 Win Mag		
IP rating (waterproof)	IP67		

DIAGRAM

1. Objective lens
2. Elevation adjustment
3. Windage adjustment
4. Eyepiece
5. Battery Door
6. Solar panel
7. Brightness controls
8. Mounting screw
9. Low mount
10. Co-witness mount

INSTALLING THE BATTERY

The Sightmark MTS 1x22 Solar Red Dot Sight is powered by a single CR2032 battery. Should the reticle illumination grow dim or fail to illuminate, the battery needs to be replaced.

To install a new battery:

1. Unscrew the battery screw (5) counterclockwise.
2. Insert the new battery into the battery compartment (5) with the positive (+) side up.
3. Screw the battery screw on clockwise until firmly secure. Do not over tighten.

ON/OFF ACTIVATION

To turn the unit on:

1. Press and release the up arrow on the brightness controls (7).

To switch to solar mode:

1. Press and hold the up arrow for five seconds.
2. Press and hold the up arrow for five seconds to switch back to battery mode

Note: The unit will always be on if in solar mode and there is a strong enough light source that is illuminating the solar panel

BRIGHTNESS CONTROLS

The MTS Solar Red Dot offers 11 brightness settings. Each Brightness setting will auto adjust depending on the brightness of the environment.
When in Solar Mode the unit will automatically adjust based on the light illuminating the solar panel.

To adjust the brightness:

1. Press the appropriate up or down arrow to adjust the brightness of the dot.
2. To increase brightness press the up arrow.
3. To decrease brightness press the down arrow.

MOUNT HEIGHTS

The Sightmark MTS Solar Red Dot includes a Low Profile Mount (9) and a Cowitness Mount (10) for absolute co-witness. If mounting on a bolt action hunting rifle or shotgun, the low profile mount would be preferable. If mounting on flat top AR-15 rifles, it is recommended the cowitness mount be installed for an absolute co-witness with iron sights.

To remove the base:

1. Use the included hex key to loosen and unscrew the four screws attaching the mount to the MTS Solar Red Dot.
2. Select the desired mounting setup. If the low profile mount height is desired, the four smaller screws must be used to attach the base to the MTS Solar Red Dot. If the co-witness mount height is desired, the cowitness mount should be installed.
3. For a semi-permanent fixture, a small amount of blue Loctite® may be applied to the threading of the four screws. Tighten and secure the four screws by applying 20 inch pounds (2,2 Nm) of torque. Do not overtighten.

AR Riser/Cowitness Mount

Low Profile Mount

MOUNTING

The MTS Solar Red Dot is designed to mount to Picatinny rails. For safety it is best to have at least three to four inches of eye relief.

To mount:

1. Loosen the mounting screw (8) on the mount. Attach the MTS Solar Red Dot to the firearm's rail with the objective lens facing toward the muzzle and the eyepiece toward the user.
2. Make sure the recoil bolt is positioned in the groove of the rail and the unit is fully seated on the rail.
3. Tighten the screw to 35 to 45 in/lbs (4-5 Nm) of torque. Do not overtighten.

OPERATING THE WINDAGE AND ELEVATION ADJUSTMENTS

The Sightmark MTS Solar Red Dot has built- in windage and elevation adjustments (2, 3) with audible clicks. The MTS Solar Red Dot has 1 MOA clicks meaning each click moves the point of impact 1" at 100 yards (2,91cm at 100m). In order to make windage and elevation adjustments:

1. Unscrew the dial covers.
2. Use the reverse side of the cap as a hand adjustment tool to make adjustments or "clicks"
3. urn the adjustments in the appropriate direction needed to change the point-of-impact as indicated by the "UP" and "R" marked on the adjustments.
4. For elevation adjustment, turn the adjustment clockwise to adjust the bullet's point of impact up. Turn the adjustment counter-clockwise to adjust the bullet's point of impact down. For windage adjustments, turn the adjustment clockwise to adjust the bullet's point of impact right. Turn the adjustment counter-clockwise to adjust the bullet's point of impact left.

BORESIGHTING and SIGHTING IN

Boresighting and test firing should be performed safely on a firing range. Laser boresights are a quick and accurate method for sighting in. Below is listed the traditional method of boresighting and works best when the unit is mounted on a rest.

1. When mounting the sight on a bolt action rifle, remove the bolt; or when mounting to a semi-automatic rifle, disassemble the rifle until there is a straight line of sight through the bore.
2. Use a target at least twenty yards to fifty yards away when sighting in the sight. Look through the bore of the weapon and locate the bull's-eye of the target.
3. Sight in the target through the bore and then make windage and elevation adjustments (see "Operating Windage and Elevation Adjustments" for instructions) to the red dot until the reticle is centered on the bull's-eye.

To verify the reflex sight is accurately sighted in, always fire a three-shot test group at 50 or 100 meters (50 or 100 yards) preferably using the same ammo manufacturer, grain, and lot number.

4. After firing a group use the center of this grouping and make the necessary amount of adjustments to the elevation and windage adjustments to move your firearm's grouping to the center of the target.
5. Again fire a three-shot test group to confirm the adjustments. Use the center of the new group to determine final adjustments.

MAINTENANCE

Proper maintenance of the Sightmark MTS Solar Red Dot is recommended to ensure longevity. It is recommended that when the sight 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 denatured 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. No further maintenance is required. Do not attempt to disassemble any components of the red dot.

STORAGE

Make sure that your Sightmark MTS Solar Red Dot sight is securely attached to your rifle before storing, and be sure that the reticle illumination is turned off. Cover with the included lens covers. Remove the batteries if the unit will be stored for an extended period of time.

WARNING

Before handling the Sightmark MTS Solar Red Dot sight read and understand the contents of your firearm's manual, and the Sightmark manual. Follow all standard safety precautions and procedures during firearm operation, even when the reflex sight is not in use.

- Avoid hitting or dropping the unit
- ALWAYS check that the chamber of your weapon is clear before mounting or dismounting the reflex sight.

• The reticle illumination should be tested during periods of non-use to make sure it is still operating properly. Failure to follow standard firearm safety precautions and procedures, as well as the above warnings, is dangerous and may result in serious injury, damage to property, or death.

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.

If the MTS Solar Red Dot does not hold zero:

1. Verify the sight is mounted securely to the rifle. If the sight can be shifted in any direction, re-tighten the mounting hex nut according to the mounting instructions but do not over tighten. The sight will need to be re-zeroed afterwards.
2. Be sure to use factory-loaded ammunition of the same bullet type, weight, and, preferably lot number when sighting in.

The reticle does not illuminate:

1. Check that the battery is in working order and that the polarity of the battery is correct.
2. Check that there is no residue, film, or corrosion on the battery contacts that may be preventing the reticle from illuminating.
3. Make sure the unit is not set on a night vision mode.

The reticle is blurry and not in focus:

1. Decrease the brightness level of the reticle. The halo or fuzzy appearance is caused by excess illumination than is required for the current environment the sight is being used in.
2. Make sure the eyepiece lens is clean and does not have any film, fingerprints, or debris covering the

TROUBLESHOOTING (CONTINUED)

surface. Blow off any debris or dirt covering the lens. Use a lens cloth or q-tip dipped in alcohol to remove any film or fingerprints.

3. If you are testing the product at a close range, 5 yards/meters or less, to verify its on/off operation the eye will accommodate and focus either on the sight's reticle or the target you are observing not both. Test the product beyond 5 yards/meters and focus your eye on the target, then the reticle and target should be in focus.

The reticle illumination turns off while firing:

1. Tighten the battery cap with a coin or flathead screw driver so the cap is fully seated.

SIGHTMARK WARRANTY

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

ADDITIONAL LANGUAGES

Please visit www.sightmark.eu for additional languages of this manual.

NOTES

SIGHT MARK®

www.sightmark.eu