



# 1-8X24RS 2-16X44RS RIFLESCOPES

**USER MANUAL** 

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If you have questions that are not covered in this manual, or need service, contact AGM Global Vision customer support for additional information prior to returning a product.

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# SAFETY SUMMARY

- · Read and follow all instructions
- Read all warnings
- · Only use the attachments/accessories specified by the manufacturer
- · All service must be provided by the manufacturer

#### CAUTION:

- DO NOT look at the sun through the riflescope as it could cause damage to your health.
- DO NOT use the sight as a substitute for binoculars or spotting scope. It could cause the pointing of the gun at another person.
- DO NOT change the batteries when the weapon is loaded.
- DO NOT rub the lens and DO NOT use coarse cloth for cleaning to avoid the damage of lens coating.
- Make sure that the scope is mounted forward enough (at least three inches) to avoid the injuring of the eye by the rifle recoils.

#### NOTES:

For the purpose of returning defective components, retain all packaging materials.

# **1 GENERAL INFORMATION**

### **1.1 SYSTEM DESCRIPTION**

The AGM series of professional riflescopes features illuminated reticles and the innovative optical design for extra wide zoom range providing unparalleled performance. Multicoated lenses and 30-mm tubes will provide amazing brightness, while glass-etched Mil-Dot reticle will keep you dead-on target. The riflescopes are equipped with positive click finger-adjustable turrets, a fast focus eyepiece and 36-mm ocular lens.



# 1.2 KEY FEATURES

- · Innovative optical design for extra-wide zoom range
- · Fully multi-surface to surface-coated lenses for sharpest and brightest image
- High precision CNC processed parts
- · Low profile and finger-adjustable turrets for positive click adjustments
- Glass etched Mil-dot reticle
- Fast focus eyepiece
- 30mm one-piece tube
- Hard anodized black matt finishing
- · Extra-low dispersion lens (ED) applied

# **2** OPERATING INSTRUCTIONS

# 2.1 INSTALLATION

#### WARNING:

Make sure the weapon is not loaded. Always use safe weapon handling procedures.

The AGM riflescopes can be mounted to the weapon utilizing 30mm mounting rings. Do not tighten the rings until the eye relief setting and reticle alignment has been performed. The riflescope should still be able to move fore and aft and rotate, until you tighten the scope rings.

To achieve maximum eye relief:

- 1. Set the highest magnification of riflescope.
- 2. Move the riflescope as far forward in the rings and then slowly move the riflescope closer to your eye. Stop moving the riflescope once a full field of view is visible.
- 3. Next, rotate the riflescope to align the crosshair.
- 4. Once alignment is complete, tighten the mounting ring screws evenly so the gap is even on both sides of the riflescope. Do not over tighten.

### 2.2 DIOPTER ADJUSTMENT

Diopter adjustment allows you to get a "sharp" adjustment of the riflescope for your eye.

Rotate the diopter adjustment ring until the reticle becomes clear and sharp.

Turning clockwise adjusts the diopter to the "-" range.

Turning anti-clockwise adjusts the diopter to the "+" range.

#### NOTE:

For correct utilization, it is important that you have good vision or a suitable visual correction, because the diopter compensation can only provide a maximum compensation of 2–3 diopters.



### 2.4 PARALLAX CORRECTION

The AGM 2-16x44RS riflescope is equipped with parallax correction that is used to eliminate parallax and finely focus the image. Parallax occurs when the image of the target does not focus at the same optical plane as the reticle inside the riflescope. When parallax is present, the reticle appears to move over the target when the shooter's eye is not centered to the eyepiece.

2.3 MAGNIFICATION ADJUSTMENT

The AGM riflescopes are equipped with variable magnification feature. The magnification levels are noted on the magnification ring. To set the magnification turn the ring until your required magnification lines up with the

Adjusting the objective lens properly will eliminate parallax.

- 1. Turn the parallax correction knob until the image of the target is as sharp as possible. Use the distance marks on the knob as a starting reference.
- 2. Check for parallax by moving your head back and forth while looking through the scope. If the reticle appears to shift slightly adjust the parallax correction knob until all shifting has been eliminated. Parallax is eliminated when there is no apparent shifting of the reticle.

#### 2.5 SIGHTING

marked dot.

The vertical and horizontal adjustments for the AGM riflescopes can be regulated by rotating the elevation and windage adjustment knobs.

The 1-8x24RS has 0.5 MOA click value. Each click moves the point of impact 0.5 inch at 100 vards. 1 MOA of movement would require 2 clicks.

The 2-16x44RS has 0.25 MOA click value. Each click moves the point of impact 0.25 inch at 100 vards. 1 MOA of movement would require 4 clicks.

Once the adjustment knob comes to a complete stop, avoid forcing it any further, as damage to the mechanism may occur.

#### Pre-zeroina:

1. Mount the sight on the weapon. Secure or hold the weapon in a steady position.

2. Activate the riflescope illuminated reticle by turning the brightness adjustment knob.

3. Take aim at the center of the target from 50 to 100 yards away using the weapon's iron sight.

4. Look into the AGM riflescopes evepiece. Turn the windage and elevation adjustments until the reticle moves into the center of the target. Turn the windage adjustment knob clockwise to move the point of impact right and counterclockwise to move the point of impact left. Turn the elevation adjustment knob clockwise to lower the point of impact and counterclockwise to raise the point of the impact.

(2-16X44 ONLY)

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#### Zeroing:

Use a ballistic drop chart for the ammo that is used. Use the hash mark closest in MOA for the distance of shooting indicated by the chart as adjusted point of aim.

If a ballistic chart is not available, follow the steps below:

1. Sight in at 100 yards, using the center dot as point of aim.

2. Set the scope magnification to the highest level. If the scope has parallax correction set it to the range to the target.

3. Fire a series of shots. Turn the windage and elevation adjustments to bring the point of aim to the desired relationship to the points of impact. For example, if shots are consistently hitting 4 MOA below point of aim as indicated by the scale on the reticle, turn elevation adjustment down 4 MOA.

4. Shoot another series of rounds to verify point of aim was improved. If necessary, repeat the procedure.

#### **Re-indexing of the Adjustment Knobs:**

When the zeroing of the rifle is completed, you can reindex the windage and elevation adjustment knobs to your zero.

1. Unscrew the top cap on the windage knob.

2. Using the Allen key unscrew the fixing screw.

3. Unlock the windage adjustment knob by pulling out it about 2-3 mm.

4. Realign the 0 on the knob with the adjustment indice on the scope body.

5. Push the knob down and screw the fixing screw on place.

6. Screw the cap.

Repeat these operations for the elevation adjustment knob.

# 2.6 RETICLE

The AGM riflescopes has based on a Mil-Radian reticle designed to determine distances to targets, establishing leads for moving targets, and for alternate aiming points for windage and elevation holds.

The AGM reticle is a second focal plane reticle. The size of the reticle will remain an ideal viewing size at any magnification. Ballistic holdovers, however, must be performed at a specific magnification. For the 1-8x24 and 2-16x44, the reticle's holdovers are true at 8x. Before firing with the holdover marks, adjust the magnification ring to the appropriate magnification.



Use the reticle scale for holdover reference rather than adjust the elevation, use the hash mark nearest to the place where shots actually hit as the new point of aim.

The 1-8x24 reticle has the marks spaced every 1 Mil increment. The 2-16x44 reticle has the marks spaced every .5 Mil increment. A single Mil is equal to 3.6 inch at 100 yards or 10 centimeters at 100 meters.

Distance to target can be easily calculated using the simple formula, that is based on the size of the object being targeted:

#### R = 1000 \* H / M

where R - range in yards, H - target size in yards, M - image size in Mil.

For distance in meters use the formula:

#### R = 10 \* H / M

R - range in meters, H - target size in centimeters, M - image size in Mil.

# 2.7 RETICLE ILLUMINATION

To activate the red reticle illumination, rotate the illumination adjustment knob from "0" marked position. The brightness setting ranging from 1 to 11. Setting 11 is best for bright, outdoor environments. Setting 1 is best for low light environments.

To turn the reticle illumination off, rotate the knob to the zero setting.

The reticle can be used without illumination and will appear black.

# 2.8 BATTERY REPLACEMENT

#### WARNING:

Make sure that the weapon is not loaded before replacement of the batteries.

The AGM riflescopes are powered by a CR2032 battery. Should the reticle illumination grow dim or not illuminate, the battery needs to be replaced. To install a new battery:

- 1. Unscrew the battery cap on the illumination knob counterclockwise with a coin or flathead screwdriver.
- 2. Insert the new battery with the positive (+) side facing up.
- 3. Screw the battery cap on clockwise until firmly secure. Do not over tighten.







# **3 MAINTENANCE**

## **3.1 MAINTENANCE**

#### CAUTION:

Unnecessary rubbing or use of a coarse cloth may cause permanent damage to lens coatings.

AGM Riflescopes is a precision instrument that requires cautious care.

1. Blow away any dry dirt and dust or use a soft lens brush.

2. Fingerprints and lubricants can be removed from the lens with the help of lens tissue or a soft clean cloth, moistened with lens cleaning fluid.

3. All moving parts of the sight are permanently lubricated. Do not lubricate them.

4. No maintenance is required for the outer surface, beside removing dirt and fingerprints with a soft cloth.

# 3.2 STORAGE

It is recommended to store the unit in the trunk of a vehicle, a gun cabinet or a closet. Avoid hot places as the high temperature could affect the lubricants and sealants. DO NOT leave the device in a place where direct sunlight can reach the objective or the eyepiece lens. It could cause damage to the lenses of the device. Use the lens cap when the device is not in use.

# **4 WARRANTY INFORMATION**

## 4.1 WARRANTY INFORMATION AND REGISTRATION

#### 4.1.1 WARRANTY INFORMATION

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of three (3) years from the date of purchase. In the event that a defect covered by the warranty below occurs during the applicable period stated above, AGM Global Vision, at its discretion, will either repair or replace the product; such action on the part of AGM Global Vision shall be the full extent of AGM Global Vision's liability, and the Customer's sole and exclusive reparation. This warranty does not cover a product if it has been (a) used in ways other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer or by any party other than AGM Global Vision without prior written consent of AGM Global Vision: (d) is the result of a special order or categorized as "close-out" merchandise or merchandise sold "as-is" by either AGM Global Vision or the AGM Global Vision dealer; or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of AGM Global Vision. AGM Global Vision shall not be responsible for any defects or damage that in AGM Global Vision's view are a result from the mishandling, abuse, misuse, improper storage or improper operation of the device, including use in conjunction with equipment that is electrically or mechanically incompatible with, or of inferior quality to, the product, as well as failure to maintain the environmental conditions specified by the manufacturer. This warranty is extended only to the original purchaser. Any breach of this warranty shall be enforced unless the customer notifies AGM Global Vision at the address noted below within the applicable warranty period.

The customer understands and agrees that except for the foregoing warranty, no other warranties written or oral, statutory, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, shall apply to the product. All such implied warranties are hereby and expressly disclaimed.

#### 4.1.2 LIMITATION OF LIABILITY

AGM Global Vision will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages, or liabilities arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. AGM Global Vision's sole undertaking is limited to providing the products and services outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by AGM Global Vision to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party of legal entity outside AGM Global Vision and the Customer; AGM Global Vision's obligations under this Agreement extend solely to the Customer. AGM Global Vision's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to AGM Global Vision by the customer or customer's dealer. AGM Global Vision shall not, in any event, be liable for special, indirect, incidental, or consequential damages, including, but not limited to, lost income, lost revenue, or lost profit, whether such damages were foreseeable or not at the time of purchase, and whether or not such damages arise out of a breach of warranty, a breach of agreement, negligence, strict liability, or any other theory of liability.

#### 4.1.3 PRODUCT REGISTRATION

In order to validate the warranty on your product, the customer must complete and submit AGM Global Vision PRODUCT REGISTRATION FORM on our website (www.agmglobalvision.com/ customer-support).

#### 4.1.4 OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, the End-user (Customer) must notify the AGM Global Vision service department via e-mail. Send any requests to support@agmglobalvision.com to receive a Return Merchandise Authorization number (RMA). When returning any device, please take the product to your retailer, or send the product, postage paid and with a copy of your sales receipt, to AGM Global Vision's service center at the address listed above. All merchandise must be fully insured with the correct postage; AGM Global Vision will not be responsible for improper postage or merchandise that becomes lost or damaged during shipment. When sending product back, please clearly write the RMA# on the outside of the shipping box. Please include a letter that indicates your RMA#, the Customer's Name, a Return Address, reason for the return, contact information (valid telephone numbers and/or an e-mail address), and proof of purchase that will help us to establish the valid start date of the warranty. Product merchandise returns that do not have an RMA# listed may be refused, or a significant delay in processing may occur. Estimated Warranty service time is 10-20 business days. The End-user/Customer is responsible for postage to AGM Global Vision for warranty service. AGM Global Vision will cover return postage/ shipping after warranty repair to the End-user/Customer only if the product is covered by the aforementioned warranty. AGM Global Vision will return the product after warranty service by domestic UPS Ground service and/or domestic mail. Should any other requested, required, or international shipping methods be necessary, the postage/shipping fee will be the responsibility of the End-user/Customer.

For service, repair or replacement, please contact:

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# **5** SPECIFICATIONS

ITEM	1-8X24RS	2-16X44RS
Magnification	1x~8x	2x~16x
Objective Lens Diameter	24 mm	44 mm
Ocular Lens Diameter	36 mm	36 mm
Eye Relief	91-88 mm	95-89 mm
Exit Pupil	8-3 mm	8.2-2.75 mm
Field of View (FOV)	21° ~ 2.63°	10.5° ~ 1.31°
Windage Adjustment Range	>60'	>30'
Elevation Adjustment Range	>60'	>30'
Click Value	1/2 MOA	1/4 MOA
Resolution (Enter Axis)	7"	4.1"
Resolution (Off Axis)	14"	8.2"
Side focus	No	Yes
Number of Lenses	15	14
Weight	550 g (1.2 lbs)	650 g (1.4 lbs)
Length	270 mm (10.6 in)	325 mm (12.8 in)

### NOTE:

All data subject to change without notice.



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