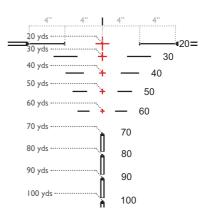


## **XB1 SR RETICLE**

Distance aim points are calibrated to match the crossbow ballistics. Adjust speed selector (magnification) to match bow speed.

4 inch aim points are correct when measured on 425 fps (5× magnification) only.

Illuminated aim points represent 1.5 inches across at their respective distances when on 425 fps (5× magnification) only.





#### MOUNTING THE SCOPE

Warning: Be sure that the crossbow is not loaded. Always practice safe handling.

- 1. Fix the rings to the mounting rail do not completely tighten.
- 2. Lay the scope into the rings. Before tightening the rings, look through the scope in your normal shooting position. Adjust the scope (forward or backward) until you find the furthest point forward (to ensure maximum eye relief) that allows you to see a full field of view.
- 3. Rotate the scope in the rings until the horizontal reticle markings are parallel with the crossbow limbs and the elevation turret is on top.
- 4. Tighten the screws evenly on each side.

Warning: Avoid over tightening the rings. This can damage the scope affecting performance or



rendering it inoperable. (16 in/lbs) (1.33 ft/lbs) (1.8 Nm) for ring cap screws and (30 in/lbs) (2.5 ft/lbs) (3.4 Nm) for ring base screws.

Warning: When installing a scope, always ensure that there is adequate eye relief. This will avoid eye injury.

#### OCULAR LENS ADJUSTMENT

All Hawke scopes are fitted with an adjustable ocular focus. To focus your eye characteristics to the scope, giving a crystal clear picture of the reticle, carry out the following adjustment.

I. Hold the scope about three or four inches from your eye and look through the eye piece at a blank, flatly lit, bright area such as a wall or open sky.



- 2. If the reticle is not sharply defined instantly, turn the eyepiece (either direction) a few turns. Quickly glance through the scope again. If the focus has improved, but is still not perfect, continue focusing.
- 3. If the focus became worse, turn it the opposite direction.

Warning: Never look at the sun with a scope, it may permanently damage your eyes.

### **ZEROING YOUR SCOPE**

Choose a place to shoot your crossbow with a safe backstop and ensure that no one can step unseen into or in front of the firing line.

Initially, place a target on the backstop at about 10 yards and take a shot at its center. Remove



the dust covers from the windage and elevation turrets and make suitable adjustments to bring the point of impact (POI) closer to the point of aim (POA). For example - if the arrow has landed lower than required; rotate the elevation turret counter clockwise to raise the point of impact. A high impact point requires a clockwise adjustment. Both turrets move the POA a  $\frac{1}{2}$  minute of angle per click – this is equal to  $\frac{1}{2}$  inch at 100 yards or  $\frac{1}{20}$  inch at 10 yards.

After achieving an approximate zero at 10 yards, move back to a measured 20 yards and continue adjusting the turrets until the top cross of the reticle and the point of impact are the same. At this range, each click equals  $^{1}/_{10}$  of an inch (10 clicks to move the impact 1 inch). When you are happy with the 20 yard zero, replace the turret covers.



## CALIBRATING YOUR SCOPE TO THE CROSSBOW

Adjusting the speed selector also adjusts the magnification. Start by setting it to the manufacturers advertised speed of your crossbow.

Move to a measured 30 yards from the target. Using the 30 yard marker in the scope, (the second crosswire down) shoot the crossbow at the target.

If the arrow impacts the target high, turn the speed selector higher and the next arrow fired will impact the target lower. If the arrow impacts the target lower, turn the speed selector lower and the next arrow fired will impact the target higher.

Once the 30 yard crosswire is sighted in the scope is now calibrated to your crossbow and all of



the other aiming points will be correct. At this time, the speed/magnification selector will need to remain in this position to keep the scope and the crossbow calibrated to each other.

Crossbows with speeds higher than maximum speed selection setting, or using a lighter arrow combination may require a main crosswire sight-in point of 30 yards instead of the normal 20 yards. This will require calibrating the scope at 40 yards to compensate for the flat trajectory of this combination of components.

# **MAGNIFICATION / FPS**

 $1.5 \times = 250$  fps,  $2 \times = 280$  fps,  $3 \times = 340$  fps,  $4 \times = 385$  fps,  $5 \times = 425$  fps.



#### RANGE FINDING WITH THE RETICLE

The XBI SR reticle can be used to bracket the target and calculate the range. Brackets of 4, 8, 12 and 16 inches can be achieved at 20 to 60 yards – only with the speed set at 425 fps (5x mag). The XBI SR reticle features illuminated aim points that represent an area of 1.5 inches across.

#### **III UMINATION**

The illumination rheostat is located on the side of the saddle.

High brightness settings are recommended for daytime use when ambient light is bright, this will allow the reticle to be visible against dark backgrounds. At times of low light such a dawn or dusk,



a lower brightness setting is recommended. The lower settings may not be visible during bright daylight. Reticles are black in the off position or if the battery is defective.

All Hawke illuminated scope models use a CR2032 coin style lithium battery. To insert a battery unscrew the battery compartment cap on the top of the rheostat adjustment turret and insert a new battery "+" side up.

Warning: Always hold onto the lower half of the rheostat when loosening or tightening the battery compartment cap to ensure no damage is done.



#### MAINTAINING YOUR SCOPE

Each Hawke scope is a precision instrument that deserves a high level of care. During manufacture the scope is purged with dry nitrogen and sealed to give a lifetime of reliability. Do not attempt to disassemble or clean the scope internally.

Keep the protective lens covers in place when the scope is not in use.

The external lens coatings should occasionally be wiped clean with the lens cloth provided or an optical quality lens paper. Remove any external dirt with a soft brush to avoid scratching the lens.

Note: Unnecessary rubbing or use of a coarse cloth may cause permanent damage to lens coatings. To clean the external surface of the scope it is recommended that a silicone impregnated cleaning



cloth is used to protect the scope against corrosion.

#### Tips for safe storage:

- Always store in a moisture-free environment.
- Never store the scope in places such as the passenger compartments of vehicles on hot days, the high temperatures could adversely affect the lubricants and sealants.
- Avoid direct sunlight that can enter the objective or the ocular lens, damage may result from the concentration (burning effect) of the sun's rays passing through the scope.



#### HAWKE LIFETIME WARRANTY

Subject to the limitations noted below, Hawke guarantees this product to be free of defects in materials and workmanship for the lifetime of the original owner (The warranty is legally limited to 10 years within Europe). If your Hawke product is found to have defects in materials or workmanship, we will repair or, if repair is not possible, replace the product with an equivalent. The warranty does not cover failure caused by abuse or excessive wear and tear even within the warranty period.

Please note your proof of purchase should accompany any warranty claim. You can register your purchase with us now at www.hawkeoptics.com/registration

For full warranty details or to make a claim please see www.hawkeoptics.com/warranty

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