

### Ballistic Reticule Calculator Software and the 1.5-5x32 reticle

The 1.5-5x32 MAP reticle is included in the free Hawke BRC software. This software is available for PC, MAC and iPhone. It can be downloaded from www.hawkeoptics.com or the Appstore. The software allows the user to determine the aim points when shooting crossbows with speeds from 250fps-425fps



### Maintaining your scope:

Your scope is a precision instrument that deserves a high level of care. **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 optical surfaces should be wiped clean occasionally with the lens cloth provided or an optical quality lens paper. Remove any external dirt or sand with high pressure air and a soft brush to avoid scratching the lens finish.

Wipe the scope with a damp cloth, then with a dry cloth, then go over the metal section of the scope with a silicone cloth in order to protect the scope against corrosion.

Always store the scope in a moisture-free environment. Avoid storing the scope in places such as the passenger compartments of vehicles on hot days as the high temperatures could adversely affect the lubricants and sealants. Never leave the scope where direct sunlight can enter either the objective or the eyepiece lens as damage may result from the concentration (burning effect) of the suns rays.

## WARNING: UNNECESSARY RUBBING OR USE OF A COARSE CLOTH MAY CAUSE PERMANENT DAMAGE TO LENS COATINGS

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Congratulations on the purchase of your new HAWKE Crossbow scope.

Your new scope is a high performance optical product designed to give years of service.

Please read these instructions carefully before use.

Hawke 1.5-5x32 MAP Crossbow scope Reference guide



# 1.5-5x32MAP



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# INSTRUCTIONS FOR USE

WARNING: NEVER LOOK AT THE SUN WITH THIS SCOPE - IT MAY PERMANENTLY DAMAGE YOUR EYES.

CAUTION: BE SURE THAT THE CROSSBOW IS  $\underline{\text{NOT}}$  LOADED WHEN MOUNTING THE SCOPE . ALWAYS PRACTICE SAFE CROSSBOW HANDLING

CAUTION: ALL SHOOTING SHOULD BE CARRIED OUT AT AN APPROVED RANGE OR OTHER SAFE AREA.

CAUTION: BE SURE THAT THE SCOPE IS MOUNTED FAR ENOUGH FORWARD - ITS REARWARD MOTION MAY INJURE THE SHOOTER WHEN THE CROSSBOW RECOILS.

## Fitting the scope and mount to your crossbow

Support your un-cocked crossbow on a sturdy surface and position a good quality set of ring mounts on the crossbows scope rail. Tighten up the side bolts.

Determine the best eye relief. This is achieved when the crossbow is held in your normal shooting position and a full sight picture is viewed without straining or stretching your head or neck. This optimum adjustment may also require the mount to be moved along the scope rail.

With the top ring screws still loosened slightly, rotate the scope so that the horizontal crosswire is parallel with the crossbow string and limbs, when viewed through the scope. Next, tighten the top ring screws and double check that the scope hasn't moved from its optimum position.

## Adjusting the ocular lens

The ocular lens housing has a fast focus thread that quickly adjusts to make the reticle as sharp as possible when viewed through the scope.

Set the focus of the reticle in similar light conditions and at the approximate range at which you expect to use your scope. Try not to stare at the reticle to get it in focus; it should be sharp the moment you glance through the 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 paper 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 of the scope and make a suitable adjustment to the turret 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 1/2 minute of angle per click – this is equal to a 1/2 inch at 100 yards or a 1/20th of an 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 1/10th of an inch.

When you are happy with the 20 yard zero, replace the turret covers.

## Calibrating the scope to the crossbow

Adjust the Speed selector 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 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 selector will need to remain in this position to keep the scope and the crossbow calibrated to each other.

Crossbows with speeds over 410 fps and 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.