

**T**50i  
**5-50x60i ED**  
EXTRA-LOW DISPERSION GLASS

## Features

- Wide angle optical system with wide and flat field of view, even at low magnification
- Expansive 10x zoom erector configuration with versatile 5-50 magnification range
- Robust 34mm tube design of single piece construction
- Fully multi coated lenses within an extra-low dispersion system (ED)
- Enhanced Competition Dot Reticle (Red Illuminated)
- Glass Etched reticle (fine) with MOA calibrator at 12.5x, 25x and 50x.
- 6 illumination settings with an "off" between each step
- +70.0MOA elevation travel range with 0.125MOA per click and 10.0MOA per turn
- Push/Pull locking turret caps
- Includes a throw lever for magnification ring
- Includes sunshade
- Nitrogen Purged, waterproof, fogproof, shockproof
- Each unit is hand tested in the United Kingdom before sale

## Specification

<b>MAGNIFICATION RANGE</b>	5-50x
<b>FIELD OF VIEW @ 100M</b>	7.9m-0.8m
<b>EYE RELIEF</b>	110mm - 92mm
<b>MAX ELEVATION ADJUSTMENT RANGE</b>	+70.0 MOA
<b>MAX WINDAGE ADJUSTMENT RANGE</b>	+30.0 MOA
<b>ADJUSTMENT VALUE PER CLICK</b>	0.125 MOA
<b>ADJUSTMENT PER TURN</b>	10.0MOA
<b>PARALLAX DISTANCE</b>	From 10M
<b>RETICLE CHOICES</b>	Enhanced Competition Dot (Red Illuminated)
<b>RETICLE INSTALL</b>	Second Focal
<b>TOTAL LENGTH</b>	408mm
<b>WEIGHT</b>	930g
<b>TUBE DIAMETER</b>	34mm
<b>CONSTRUCTION</b>	1 Piece Tube/Saddle
<b>OBJECTIVE LENS DIAMETER</b>	60.0mm
<b>OUTER OBJECTIVE DIAMETER</b>	68.5mm
<b>OUTER OCULAR DIAMETER</b>	44.5mm
<b>ADDITIONAL SUNSHADES</b>	1 Supplied
<b>BIKINI LENS COVERS</b>	Yes, Supplied
<b>CONFIGURATIONS AND ORDER CODES</b>	<b>T50iA</b> (E-CDi w 1/8MOA Adjustment)



## What's Included?

- Turret cap driver tool
- Sunshade
- Lens cleaning cloth
- Throw-Lever for magnification ring

## Basics

1 - Objective end. Contains the objective lens assembly and objective lens hood. The sunshade will thread into position here.

2 - Ocular end. This is threaded for adjustment, sometimes referred to as diopter correction or 'European style fast focus eyepiece'. See 'Guidance For Use' for instructions on how to adjust this to your eye.

3 - Eyepiece section. Houses the ocular lens assembly

4 - Magnification ring. This rotates to adjust the magnification setting. The throw lever can be installed here.

5 - Illuminated reticle switch. Settings 1-6 with an off setting between each step. 1 = Minimum, 6 = Maximum.

6 - Elevation and Windage turrets. These are used to adjust the position of the reticle and 'zero in'. Compensate for windage and adjust to engage targets at different ranges. Push/pull to lock and unlock

7 - Side parallax turret (Side Focus). This is used to bring targets in and out of focus.



## Guidance For Use

### Fast Focus Ocular Lens / Diopter Adjustment

- It's important that the reticle appears sharp and is correctly set to your eye.
- Use the fast focus eyepiece to adjust the sharpness of the reticle to suit your eyesight, by pointing the scope at a featureless bright area such as a wall or open sky. Do not look at the sun!
- Turn the fast focus eyepiece clockwise and anticlockwise until the reticle appears as sharp and defined as possible.
- If the above is not carried out correctly then parallax error may become a problem. Do this first, before the scope is even mounted.
- Once the eyepiece is set then don't adjust it.

### Mounting the riflescope

- CAUTION : Make sure the firearm is not loaded when mounting the riflescope.
- T50i 5-50x60i is built around a 34mm tube/saddle section of one-piece construction.
- Always use good quality mount rings. Poor quality mount rings may damage your scope and will almost certainly hinder performance.
- Be careful not to crush the scope tube by over tightening the mount rings. Refer to literature supplied with the mount rings to ensure the correct torque settings are used on both the top screws and base screws. Each set of mount rings and supplied screws should be built to a specific tolerance that will determine the correct torque setting. Typically this will be quoted in **inch/lbs**.
- Equally, under-torqued mount rings can also be an issue, especially in combination with heavy recoil. If the mount ring manufacturer does not identify any torque settings for ring and rail screws then consider a different brand that does.



## Windage / Elevation Turret Adjustment

- T50i has an adjustment value of 0.125MOA per click. This equates to just over 1/16" @ 50 Yards and 1/8" @ 100 Yards. The total elevation range is +70 MOA.

- The scope features windage and elevation turret caps with a push/pull locking mechanism. To adjust then pull gently to lift the turret cap to unlock. It should now rotate freely and give an audible click. To lock then simply push the turret cap back down and it should snap back into position. The cap is now locked.

- T50i will be preset to mechanical centre (midway point of adjustment range) out of the box. Try and keep both the windage and elevation turrets as close to mechanical centre as possible when zeroing. Optical standard and adjustment consistency may suffer at the extremes of any scopes adjustment range. This is why we recommend the use of a tapered base or adjustable mounts/rings to aid zeroing and ensure T50i gives the best possible performance. - You will feel a positive resistance 'stop' once the scope reaches the extreme of its elevation or windage adjustment. Don't be tempted to force the turret any further as this will damage the mechanism.

- T50i features elevation and windage turret caps that are secured using a single top mounted holding screw. The turret caps can be repositioned as required, normally to display '0'. To do this then slacken the holding screw using the driver tool provided in the box. Then disengage the turret cap by easing it off the internal shaft. A little upward force may be required to break the O-ring seal. Reposition the turret cap as desired, applying downward force to re-engage the turret with the spline and make the O-ring seal. Finally, retighten the holding screw to secure.

## Side Parallax Adjustment

- T50i has been designed to enable accurate range finding capability out to 55 yards via the use of the side parallax turret. Careful use of the side parallax turret will appear to bring targets in and out of focus.

- Generally speaking, the higher the magnification setting that is used, then the easier it will be to determine if the target and image is in or out of focus.

- To enable greater range finding precision then an additional side-wheel can be used with T50i. For the most accurate results when using an additional side-wheel then its very important that the ranging method remains consistent.

- The start position at the wheel before ranging should always be the same, pick either infinity or minimum parallax distance as the start point and stick to the location of your choosing.

- Adjust the side-wheel in a smooth continuous motion in one direction until the target snaps into sharp focus. If you go too far and the target slips out of focus again, then return to the start point and repeat the process. For the most accurate results then its important to eliminate any back and forth motion at the wheel. To range the next target then return to the start point you have chosen, then repeat the process.

## **Magnification Adjustment**

- T50i has a 10x zoom ratio optical system, adjustable from 5-50x power. There are indicator marks on the magnification ring at 12.5, 25 and 50 magnification. These correspond to the MOA accuracy of the reticle at those given magnification settings. For more information see the reticle diagram.

- To adjust the magnification simply rotate the ring by hand to the desired setting. Add the throw lever for extra leverage if you wish. There is an elevated ridge on the magnification ring, that is threaded to accept the throw lever.

- The zeroed point of impact (POI) should remain unchanged across the entire magnification range, but additional aim points that may be used for holdover/under and windage will change. This is because the reticle is installed in the second focal plane (SFP).

## **Illuminated Reticle**

- T50i features an Enhanced Competition Dot Reticle. This illuminates red using dual LED emitters with 1-6 levels of intensity. Its powered by a CR2032 coin battery which is located inside the third turret on the scope saddle. To access the battery compartment then simply rotate the cover that has the coin slot design. If T50i has needed to travel to you by Air, then the battery might not be included as standard.

- Unscrew the battery compartment cap counter-clockwise and insert the CR2032 3V battery with the + side facing outwards and the – side facing the scope body. Carefully screw the battery cap back into place, finger tight, taking care not to cross-thread it.

- T50i features 6 intensity settings. Simply turn the dial to the desired brightness level. Between each brightness level is an "OFF" setting indicated by a dot in between each number.

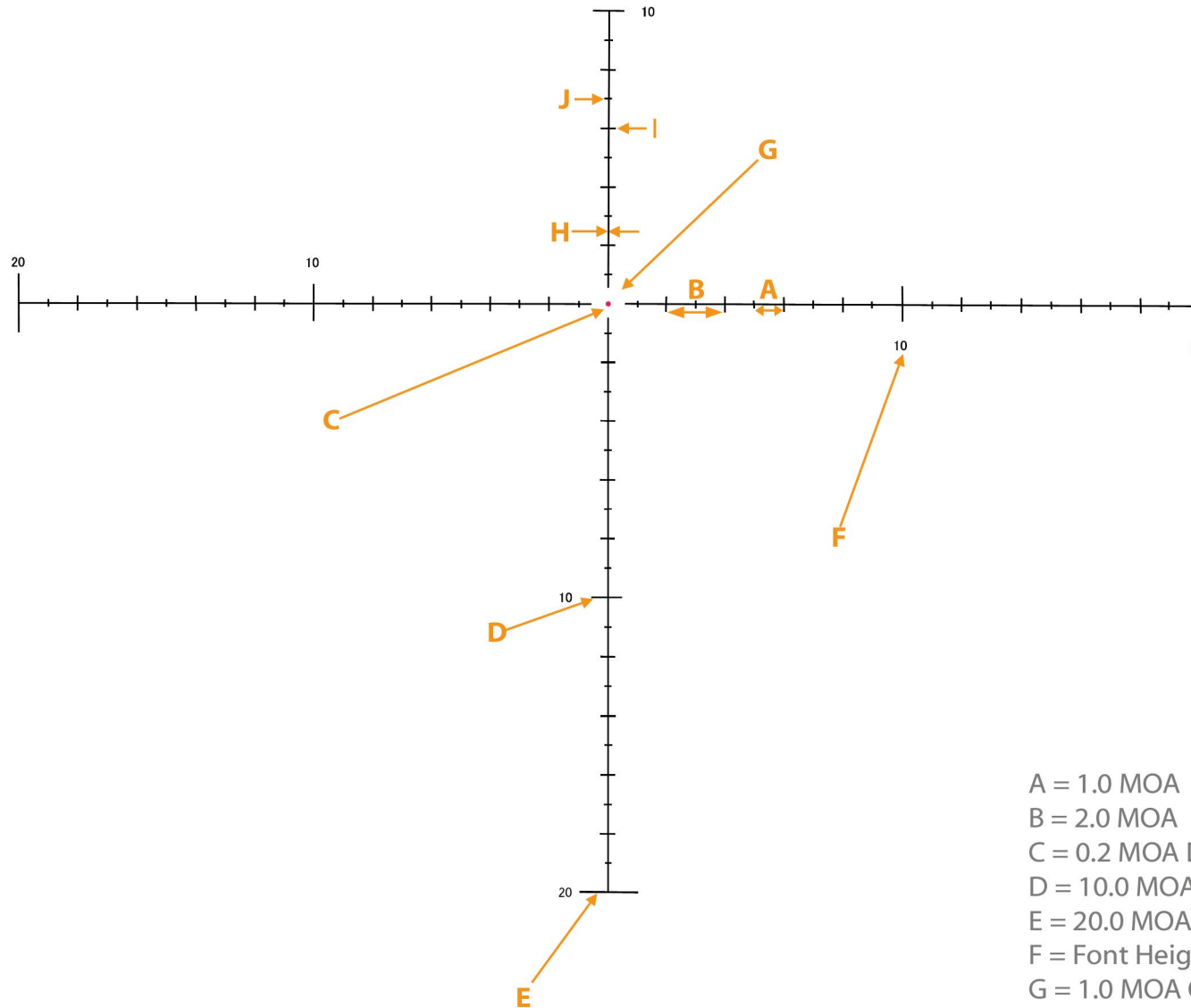
- Settings 5>6 are very bright. We don't always recommend these high settings for use during low light, dusk and dawn for example. The reticle could start to lose definition and you may also detect some unwanted stray light from the LED.

## **Sunshade**

- T50i is supplied with an additional sunshade. When shooting in low winter sun, or very sunny days then you may find this to be useful. To install then simply thread into the objective end of the scope.



**E-CDi Reticle - 25x MOA Accuracy**  
**Enhanced Competition Dot Reticle**  
**MOA Based**  
**Floating Red Dot**



- A = 1.0 MOA
- B = 2.0 MOA
- C = 0.2 MOA Diameter Floating Red Dot
- D = 10.0 MOA Indicator Line @ 1.0 MOA Width
- E = 20.0 MOA Indicator Line @ 2.0 MOA Width
- F = Font Height @ 0.35 MOA
- G = 1.0 MOA Open Centre
- H = Main Reticle Line Width @ 0.08 MOA
- I = 2.0 MOA Indicator Line @ 0.5 MOA Width
- J = 1.0 MOA Indicator Line @ 0.25 MOA Width

For reticle diagrams in greater detail please visit [www.falconoptics.com/resources](http://www.falconoptics.com/resources) where higher resolution pdf versions can be downloaded

## Care and Maintenance

- With the exception of repositioning the turret caps along with adding/removing throw lever then do not attempt to disassemble the scope.
- Do not tamper with the holding screw on the magnification ring, the coil spring cover underneath the side parallax turret, nor the nitrogen port screw on the base of the saddle.
- Do not attempt to 're-parallax' the scope by adjusting the position of the front lens assembly. In doing so you run the risk nitrogen loss and moisture ingress over time.
- You will feel a positive stop at the end of the travel ranges for the windage and elevation turrets, and focus eyepiece. Don't be tempted to apply more force once you reach the stop.
- When mounting the scope always be sure to check the torque settings for the mounts/rings that you plan to use.
- The external lens surfaces can be wiped clean with the lens cloth provided. Remove any noticeable particles of dirt or sand in advance using a lens blower or a very soft brush. Take care in doing this to ensure the outer lens coatings do not get scratched.
- Store the scope in a moisture free environment. Don't leave the scope in direct sunlight whereby the sun's rays can enter either the objective or ocular ends.
- Avoid storing the scope in areas that will reach very high temperatures for long periods of time.
- CAUTION : Never use the scope to look at the sun

## Troubleshooting

*Can't zero the scope, running out of windage and/or elevation adjustment?*

- Rule out common alignment issues such as: barrel alignment and shift, barrel threaded at an angle, rail/receiver install, rail alignment, mount/rings install and alignment
- It might be that a tapered (inclined) rail is necessary in order to gain the desired elevation adjustment.



*I'm seeing a dark shadow around the image edges, it seems to disappear at higher magnification but returns at lower magnification*

- Windage and/or elevation turrets are dialled to far from mechanical centre. Return them closer to mechanical centre and the shadow will ease.
- If you're having to dial in that much windage/elevation in order to zero then we would recommend the use of a tapered rail.

*My group size has opened up after shooting well in the past / Shift in point of impact*

- Change to focus eyepiece setting?
- Does the scope appear to be shifting in the mount/rings? Have ring/base screws worked loose?
- Play/movement between the rings/rail/receiver?
- Recent change of ammunition?
- Silencer/moderator alignment?
- Inconsistent head position?
- Windage and/or elevation turrets are dialled to far from mechanical centre? Loss of tension on erector spring. Return closer to mechanical centre.

*Optical standard suddenly seems noticeably poorer*

- Recent changes to zero and elevation/windage setting? Optical standard may suffer at the extremes of any scopes adjustment range.
- Check for changes to focus eyepiece setting and that parallax is being correctly dialled out.
- Head alignment consistent?
- Shooting in low sun? Use the sunshade.
- Check for any obstructions on exterior lens surfaces such as dust, dirt and condensation. See care and maintenance section.

## Online Resources

Web - [falconoptics.com](http://falconoptics.com)



Facebook - Search 'Falcon Optics'

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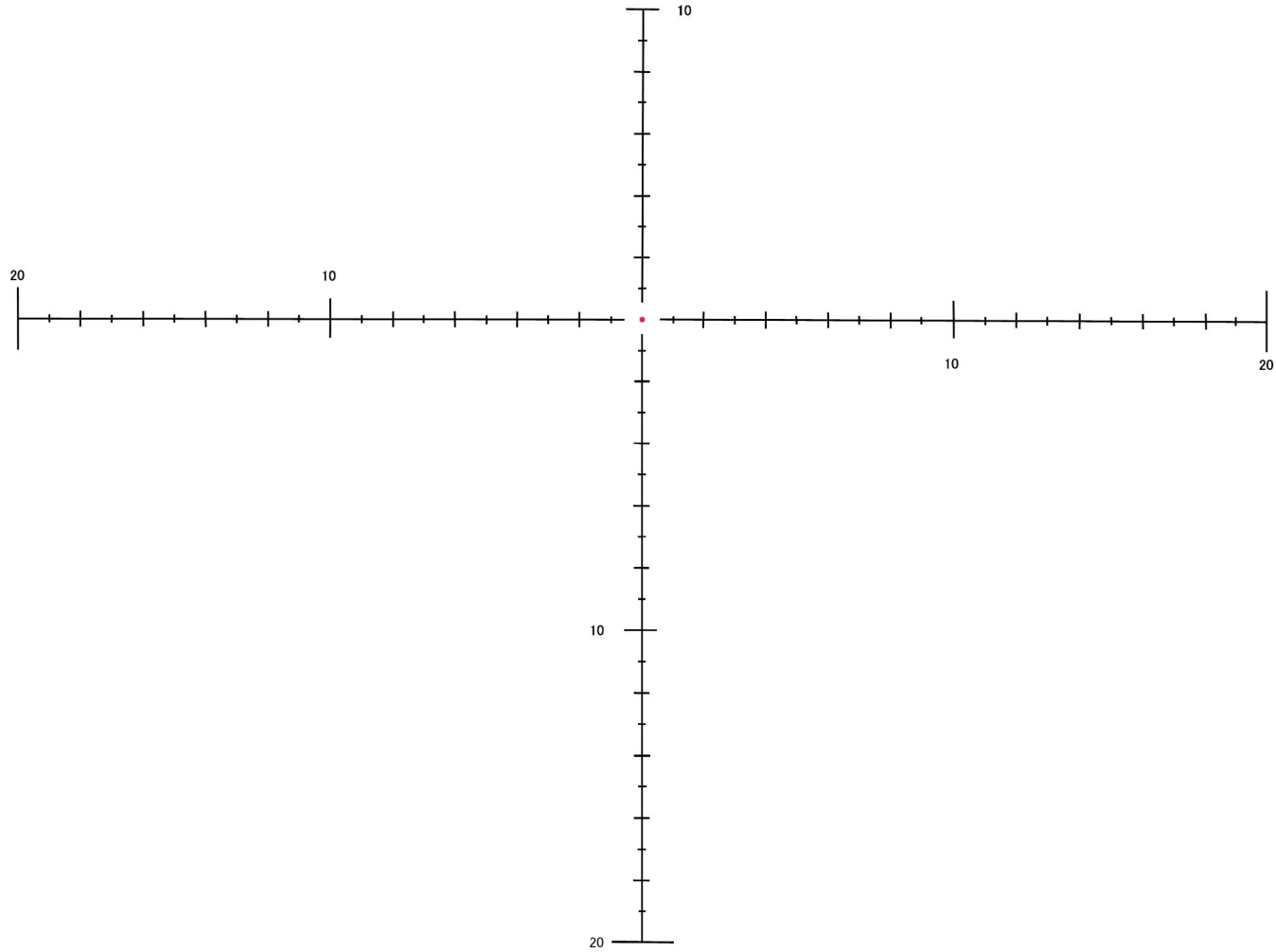


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T<sup>50i</sup>

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