TALON

5-25x56 FIRST FOCAL PLANE RIFLESCOPE

D.O.P.E.LESS RETICLE SYSTEM

OWNER'S MANUAL

PROJECT FALCON
OPTICS

READ BEFORE MOUNTING OR USING THE OPTIC

SAFETY + IMPORTANT NOTICES

READ FIRST

FIREARM SAFETY

- Keep every firearm pointed in a safe direction and keep your finger off the trigger until ready to fire.
- Unload the firearm, open the action, and verify the chamber and magazine are empty before installing or adjusting the scope.
- Know the target, foreground, and backstop. Follow all range rules and applicable laws.
- Wear appropriate eye and hearing protection during live fire.

OPTICAL WARNING

- Never look at the sun or another intense light source through the riflescope. Permanent eye injury may result.

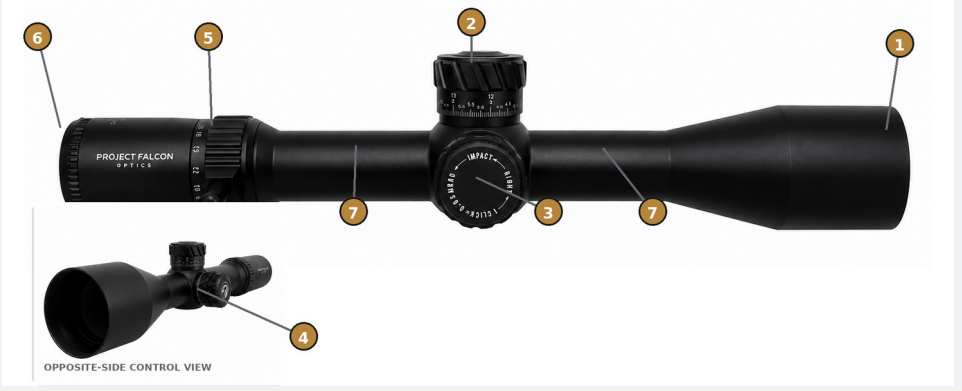
USE RESPONSIBLY

- This manual supplements the firearm, ammunition, base, and ring manufacturers' instructions. It does not replace them.
- Use only compatible 34 mm mounting hardware. Do not modify or disassemble the optic.
- Never force a turret, zero stop, battery cap, or adjustment beyond its normal travel.
- Confirm zero and actual impacts before relying on the BDC, wind references, or any ballistic correction.
- Conditions, ammunition, barrel, rifle setup, and shooter input can change point of impact.

STOP If the scope is damaged, loose, obstructed, or behaving abnormally, stop using it and inspect the rifle, mount, and optic before firing again.

SCOPE CONTROLS

OVERVIEW



CONTROL KEY

1 56 mm objective lens
2 Elevation turret
3 Windage turret
4 Side parallax / illumination control
5 Magnification ring
6 Eyepiece / diopter focus
7 34 mm main tube and ring-safe zones

NOTE Mount rings only on straight portions of the 34 mm main tube. Keep rings clear of turret housing, bells, and moving controls.

BEFORE TIGHTENING

1. Confirm the rifle is unloaded and stable in a cradle or rest.
2. Install the base or one-piece mount according to its manufacturer's instructions.
3. Place the Talon in compatible 34 mm rings. Keep the ring halves loose enough to position the scope.
4. Set magnification to 25x and establish safe eye relief from the normal shooting position.
5. Rotate the scope until the reticle is level with the rifle.

FINAL INSTALLATION

- Keep ring spacing balanced and place rings only on the straight 34 mm tube sections.
- Confirm the 56 mm objective clears the barrel, rail, and accessories throughout normal use.
- Tighten base and ring screws gradually in an even pattern using only the mount manufacturer's torque specification.
- A 20-MOA mount may preserve long-range elevation, but confirm the rifle can still obtain a 100-yard zero.
- After installation, verify eye relief, reticle level, control access, and bolt/action clearance.

DO NOT Do not publish or use a universal ring-screw torque value for this optic. Torque is controlled by the selected ring or mount manufacturer.

EYE RELIEF + DIOPTER

INITIAL SETUP

SET EYE RELIEF

1. Set the scope to 25x, where the usable eye box is least forgiving.
2. Assume the normal shooting position with eyes closed and a natural cheek weld.
3. Open the shooting eye. Move the scope forward or rearward until the full field of view appears immediately without crawling the stock.
4. Check prone, bench, and positional use before final ring torque.

FOCUS THE RETICLE

1. Set parallax near infinity and aim at a plain bright background. Do not aim at the sun.
2. Glance through the optic briefly and rotate the eyepiece until the etched reticle appears instantly sharp.
3. Look away between adjustments so the eye does not compensate for an incorrect setting.
4. Once the reticle is sharp, leave the diopter setting alone unless the user's eyesight changes.

CAUTION Insufficient eye relief can cause scope impact injury under recoil. Recheck eye relief whenever the rifle, stock position, mount, or primary shooting position changes.

MAGNIFICATION, PARALLAX + LIGHT

CONTROLS

MAGNIFICATION 5x-25x

- Lower power provides a wider field of view and faster target acquisition.
- Higher power provides more visual detail but reduces field of view and makes head position more critical.
- Because the reticle is first focal plane, MRAD subtensions and BDC references remain valid at every magnification.

PARALLAX

- Set the side-focus marking near target distance, then fine-tune while viewing the target.
- Move the eye slightly behind the scope. Continue adjusting until the reticle no longer appears to move across the target.

ILLUMINATION

- The illumination system uses one CR2032 battery.
- Install the battery according to the polarity mark inside the battery compartment.
- Use the lowest intensity that remains visible. Excess brightness can obscure fine aiming detail.
- Turn illumination off after use and remove the battery before long-term storage.
- Keep the cap seal clean and tighten the cap only until secure. Do not overtighten.

REMEMBER The parallax distance markings are a starting reference. Final adjustment is determined through the image and apparent-reticle-movement check.

TALON TURRET SYSTEM

Click value: 0.05 MRAD
Clicks per MRAD: 20
Elevation per revolution: 7 MRAD / 140 clicks
Usable elevation above a 100-yd zero: approximately 22 MRAD

- Track turret revolutions during large corrections.
- Approach any mechanical limit gently and never force adjustment.

LINEAR MOVEMENT PER 0.05-MRAD CLICK

Distance	1 click	5 clicks	20 clicks / 1 MRAD
100 yd	0.18 in	0.90 in	3.60 in
200 yd	0.36 in	1.80 in	7.20 in
500 yd	0.90 in	4.50 in	18.00 in
1,000 yd	1.80 in	9.00 in	36.00 in
100 m	0.50 cm	2.50 cm	10.00 cm

MRAD is angular measurement: the same correction represents greater linear movement as distance increases.

ESTABLISH A 100-YARD ZERO

ZEROING

ZEROING SEQUENCE

1. Boresight or fire at short range to ensure rounds will land safely on the target.
2. Move to 100 yd, set a stable position, and adjust parallax for the target.
3. Fire a careful 3-shot group and measure from point of aim to the center of the group.
4. Convert the measured error to clicks and adjust elevation and windage in the marked directions.
5. Fire another group. Repeat until centered, then confirm with a final 5-shot group.

100-YARD EXAMPLE

Group center is 1.8 in low and 0.9 in left.

At 100 yd, each 0.05-MRAD click moves impact 0.18 in.

Correction	Math	Dial
Elevation	1.8 / 0.18	10 clicks UP
Windage	0.9 / 0.18	5 clicks RIGHT

CONFIRMATION

- Let a hot barrel cool before accepting a final zero.
- Record ammunition lot, muzzle velocity, temperature, and location.

REQUIRED The D.O.P.E.LESS BDC assumes a verified 100-yard center-dot zero. Do not use the yardage tree until this zero has been confirmed.

MECHANICAL ZERO STOP

SET STOP 1.0 MRAD BELOW ZERO

SUPPLIED TOOLS

REMOVE RETAINER + DIAL

LOOSEN 3 SCREWS + TURN COLLAR

REINSTALL AT "6" (-1.0 MRAD)

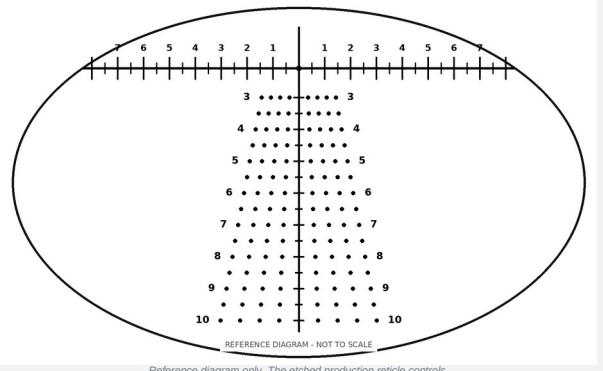
POSITION + EXPOSE

1. Unload the rifle and confirm the final 100-yard zero.
2. Dial elevation DOWN 1.0 MRAD (20 clicks). This reserve permits a downward correction if environmental conditions cause D.O.P.E.LESS holds to impact high.
3. Hold the dial steady. Use the supplied plastic wrench to remove the top retaining cap, then lift the outer elevation dial straight up.
4. Using the supplied driver, loosen each of the three tiny locking-collar set screws only enough for the collar to rotate. Do not remove the screws.

SET + VERIFY

5. Rotate the black locking collar clockwise, viewed from above, until it reaches a gentle mechanical stop. Do not force it.
6. Lightly and evenly snug all three set screws against the exposed silver knurled turret section.
7. Reinstall the outer dial with mark 6 aligned to the index line, then secure the retaining cap. Dial UP 1.0 MRAD to 0 and confirm zero. During the function-check, the turret should stop at 6, one MRAD below zero.

CAUTION Tighten the three locking-collar set screws only until mildly snug. Overtightening can strip the tiny set screws or damage their threads. Do not use excessive leverage.



Reference diagram only. The etched production reticle controls.

RETICLE MAP

- Center dot: primary 100-yard zero and precision aiming point.
- Horizontal crosshair: MRAD/MIL windage and correction scale.
- Numbered rows 3-10: 300 through 1,000 yd.
- Intermediate rows: 50-yard holds between labeled distances.
- Wind dots: 5, 10, 15, and 20 mph full-value references from center outward.
- Where shown, the reference outside the 20-mph dot adds 0.4 MRAD.

FFP First focal plane construction keeps reticle subtensions valid throughout the 5x-25x magnification range.

USING THE BDC HOLDS

300-1,000 YARDS

ENGAGEMENT SEQUENCE

1. Confirm the correct cartridge-specific reticle and a verified 100-yard zero.
2. Determine target distance with a reliable rangefinder or confirmed range data.
3. Locate the corresponding numbered yardage row in the reticle.
4. Place the center of that row on the intended point of impact.
5. Apply the appropriate wind reference, maintain a stable position, and fire a controlled shot.

READING THE TREE

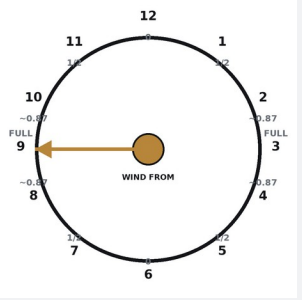
Reticle mark	Nominal distance
Center dot	100 yd
3	300 yd
Between 3 and 4	350 yd
7	700 yd
Between 9 and 10	950 yd
10	1,000 yd

For distances between 50-yard references, interpolate only after confirming actual impacts and target size permits it.

VERIFY A BDC is a fast aiming reference, not a guarantee. Ammunition, velocity, altitude, temperature, firing angle, barrel condition, and rifle setup can shift impact.

USING THE WIND DOTS

FULL + PARTIAL VALUE WIND



Clock values describe the crosswind component. Wind direction and speed can vary between shooter and target.

WIND-DOT ORDER

From the vertical centerline outward: 5, 10, 15, then 20 mph

- Wind dots represent a 90-degree full-value crosswind for the matched ballistic setup.
- Hold on the upwind side of the reticle to oppose predicted bullet drift.
- Reduce the selected wind reference for a partial-value wind.

EXAMPLE

Target: 700 yd. Wind: 10 mph from 9 o'clock. Use the 700-yard row and the second wind dot on the 9-o'clock (left/upwind) side.

LIMITATIONS

- Wind can change with terrain, distance, gusts, and mirage. Use observed impacts to refine the hold.
- Spin drift, aerodynamic jump, and large firing angles are not represented by the simple MPH labels.

CARTRIDGE-SPECIFIC SETUP

MATCHED BDC ENVELOPES

Requirement	.308 Winchester version	6.5 Creedmoor version	6mm ARC version
Reticle	Dedicated .308 D.O.P.E.LESS	Dedicated 6.5 CM D.O.P.E.LESS	Dedicated 6mm ARC D.O.P.E.LESS
Nominal barrel	20 in	22 in	18 in
Acceptable barrel envelope	18-22 in	20-24 in	16-20 in
Primary zero	100 yd center dot	100 yd center dot	100 yd center dot
BDC labeled range	300-1,000 yd	300-1,000 yd	300-1,000 yd
Best alignment	Project Falcon matched ammunition	Project Falcon matched ammunition	Project Falcon matched ammunition

DO NOT INTERCHANGE

- The .308 Winchester reticle must not be interchanged with either the 6.5 Creedmoor or 6mm ARC reticle. Each uses different vertical ballistic values.
- Confirm the cartridge marking before mounting, zeroing, or validating the BDC.

ALTERNATE AMMUNITION

- Other ammunition may be used, but BDC alignment must be confirmed through chronograph data and live-fire impacts.
- Record deviations at multiple distances and use the online ballistic guidance when available.

DEPENDENCY Matched ammunition is intended to provide the closest BDC alignment. It is not the only ammunition that can be fired through an otherwise compatible rifle.

ENVIRONMENT + FIELD VALIDATION

CONFIRM ACTUAL IMPACTS

WHAT MOVES IMPACT

- Altitude or station pressure changes air density and long-range drop.
- Temperature affects air density, ammunition velocity, and equipment.
- Muzzle velocity, ammunition lot, barrel length, barrel wear, and suppressor use can change trajectory.
- A hot barrel can shift point of impact during extended strings.
- Firing angle and target distance error become increasingly important at long range.

VALIDATION PRACTICE

1. Confirm 100-yard zero.
2. Shoot from near to far and record group-center error.
3. Use observed corrections to build a rifle-specific field card.

FIELD RECORD

Distance	Observed vertical	Observed wind	Conditions
300 yd	_____	_____	_____
500 yd	_____	_____	_____
700 yd	_____	_____	_____
900 yd	_____	_____	_____
1,000 yd	_____	_____	_____

Record temperature, station pressure or altitude, ammunition lot, muzzle velocity, barrel condition, and suppressor status.

ONLINE Updated ballistic and environmental guidance will be published at projectfalconoptics.com/manuals/talon.

CARE + TROUBLESHOOTING

MAINTENANCE

CARE

- Remove loose dust with a blower or clean lens brush before wiping.
- Use lens-safe cleaner and a clean microfiber cloth. Work gently from the center outward.
- Wipe the exterior with a lightly dampened cloth and dry before storage.
- Keep turret, battery-cap, and control seals clean. Do not apply firearm solvent to lenses or seals.
- Remove the battery for long-term storage and store the optic in a cool, dry location.
- Do not disassemble the scope. Internal service must be performed by an authorized service provider.

TROUBLESHOOTING

Symptom	First checks
Reticle looks blurry	Reset diopter using a plain background; verify eyesight correction.
Target and reticle shift	Refine parallax and center the eye behind the scope.
Zero will not hold	Check base/rings, fasteners, rifle, ammunition, and turret position.
Illumination is absent	Check CR2032 charge, polarity, cap seating, and control position.
Turret stops early	Check zero stop or mechanical limit; never force adjustment.
BDC misses at range	Verify reticle version, 100-yd zero, ammo, velocity, barrel, and conditions.

CONFIRMED MANUAL SPECIFICATIONS

Feature	Specification
Model	Talon 5-25x56 FFP
Main tube	34 mm
Objective lens	56 mm
Reticle	D.O.P.E.LESS BDC
Turret unit	MRAD; 0.05 MRAD per click
Elevation per revolution	7 MRAD
Usable elevation above 100-yd zero	Approximately 22 MRAD
Zero stop	Mechanical; non-locking turret; three-set-screw collar; recommended stop at -1.0 MRAD
Illumination battery	CR2032

Specifications are subject to change without notice.

UPDATED MANUAL + SUPPORT

projectfalconoptics.com/manuals/talon

projectfalconoptics.com/support

Model / SKU: _____

Serial number: _____

Purchase date: _____

Current warranty terms and service instructions on the Project Falcon Optics website control.