M1400 EMR
Owner's Manual

Important! Read all instructions and warnings in this manual and your firearm's manual before using your RapidLok™ Precision Guided Firearm

Thank you for purchasing a TrackingPoint Precision Guided Firearm. The Precision Guided Firearm (PGF) developed by TrackingPoint is the most accurate shooting system in the world. The RapidLok™ technology solves multiple problems that long-range shooters face. RapidLok ensures repeatable performance and accuracy even at extended ranges.

This manual covers bolt-action Precision Guided Firearm's and the following Accessories:

M1400 EMR
.338 Lapua Magnum
24" Barrel
3-21x Zoom
Lock range to 1400 yards

Night Vision Kit
Long-Range Infrared Illuminator

Vivid™
Night Vision

Torrid™
Thermal Imaging

Note: The Precision Guided Firearm has been designed and built to be water-resistant and handle all reasonable and foreseeable hunting conditions. Never submerge the unit in water. If the unit becomes exposed to excessive moisture, wipe it dry immediately.

Warning! No user maintenance or service is required inside the product. If service is required, return the product to the manufacturer. Disassembly of the unit may cause exposure to hazardous laser radiation, leading to personal injury.

Warning! Discharging firearms in poorly ventilated areas, cleaning firearm and firearm components, or handling ammunition may result in exposure to lead and other substances known to the State of California to cause birth defects, reproductive harm, cancer and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

NO USER MAINTENANCE OR SERVICEABLE PART OR REQUIRED OPERATIONS INSIDE PRODUCT. IN CASE OF REPAIR RETURN PRODUCT TO MANUFACTURER.

CAUTION- USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

- Make sure to protect yourself and others from exposure to laser radiation.

- Never look into optical outputs of laser devices.

Firearm Safety Rules

All firearm safety rules apply to this Precision Guided Firearm. Handle your PGF like any other conventional firearm.

1. Treat every firearm as if it were loaded.

2. Never point a firearm at anything you do not intend to shoot.

3. Always be sure of your target and what is beyond it.

4. Keep your finger off of the trigger until you intend to fire.

5. Keep the safety engaged until you intend to fire.

6. Only use the correct XactShot™ ammunition.

   This rifle system is designed for a specific cartridge. The ammunition that this rifle is chambered for is engraved on the magazine well. Use of ammunition other than the type it was designed for could result in serious injury, death, or suboptimal performance. Use only XactShot ammunition.

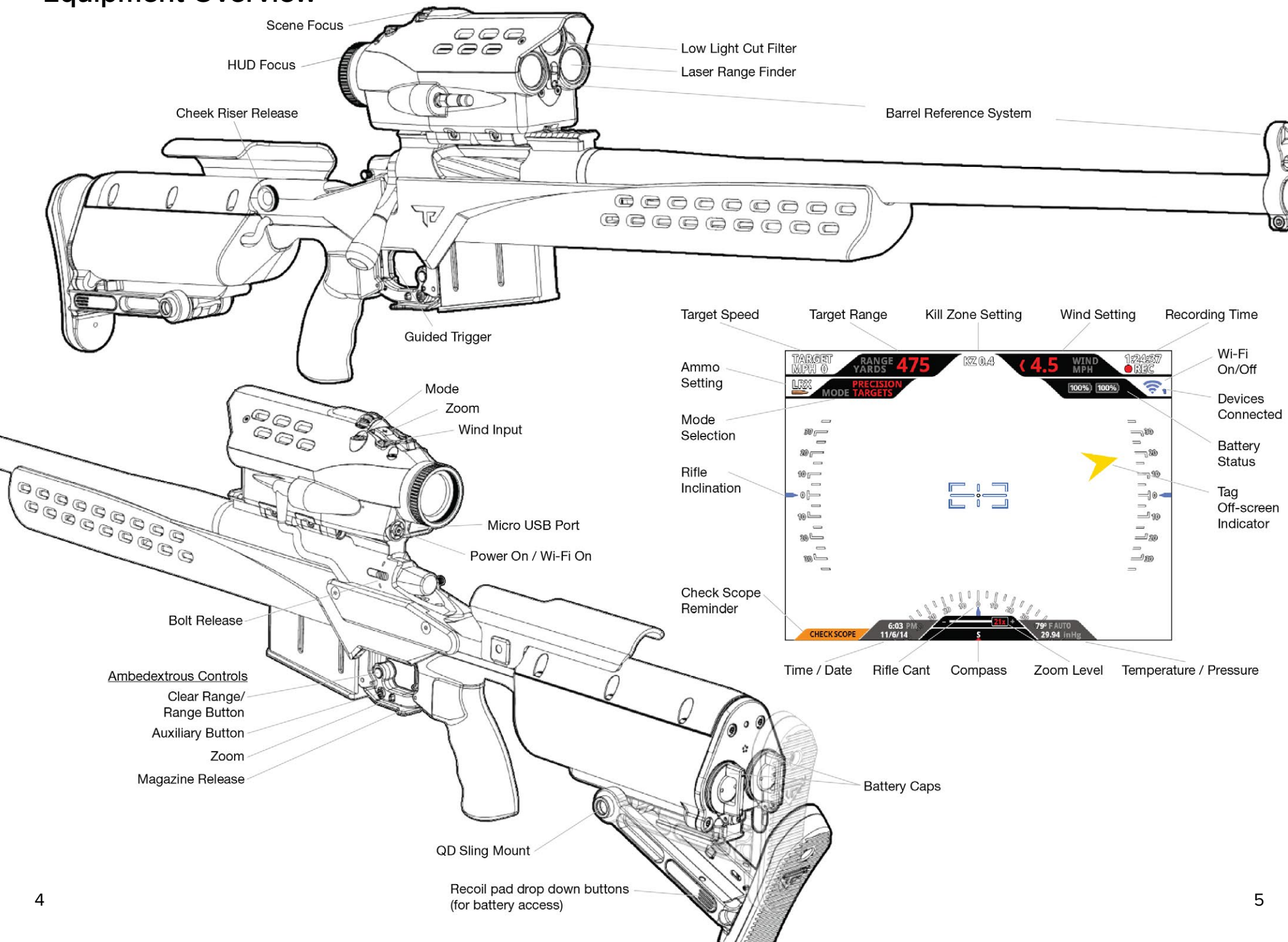**7. Do not alter your Precision Guided Firearm.**

   Any unauthorized modifications to the RapidLok system, including rifle, networked tracking optic, and/or Guided Trigger could have serious safety repercussions and will void warranty.

8. This firearm will fire when powered off if the trigger is pulled.

   Warning! The Guided Trigger is NOT a Safety.

Warning! Be sure of your target and what is beyond it. Never fire unless you know exactly where your shot is going and what it will strike. Never fire at a sound, a movement or a patch of color. A hunter in camouflage can easily be mistaken for a target by an impulsive shooter. Before you pull the trigger, be absolutely sure of your target and what's behind it. Make sure the shot has a backstop such as a hillside or dense material like sand. Remember, bullets can travel great distances with tremendous velocity. Know how far your shot will go if you miss your target or the bullet ricochets. A misplaced shot may cause property damage, personal injury and/or death.

Equipment Overview

Scene Focus

HUD Focus

Cheek Riser Release

Low Light Cut Filter

Laser Range Finder

Barrel Reference System

Guided Trigger

Mode

Zoom

Wind Input

Micro USB Port

Power On / Wi-Fi On

Bolt Release

Ambedextrous Controls

Clear Range/ Range Button

Auxiliary Button

Zoom

Magazine Release

QD Sling Mount

Recoil pad drop down buttons (for battery access)

Battery Caps

Target Speed

Target Range

Kill Zone Setting

Wind Setting

Recording Time

Ammo Setting

Mode Selection

Rifle Inclination

Check Scope Reminder

Wi-Fi On/Off

Devices Connected

Battery Status

Tag Off-screen Indicator

Time / Date

Rifle Cant

Compass

Zoom Level

Temperature / Pressure

TARGET MPH 0

RANGE YARDS 475

KZ 0.4

‹ 4.5

WIND MPH

1:24:37 REC

LRX MODE

PRECISION TARGETS

100% 100%

CHECK SCOPE

6:03 PM 11/6/14

21x

S

79° F AUTO 29.94 inHg

Batteries

Charging batteries

Fully charge batteries before first use.

Under normal use your PGF will operate for 3.5 hours with two batteries installed.

Note: Battery life of the system while in use depends on several factors including frequency of ranging, taking Tag-and-Shoot shots, streaming video with Wi-Fi on, and environmental temperature.

Charging time is approximately 3 hours depending on power level remaining.

1. Plug the charging cradle into a wall outlet.
2. Insert batteries and make sure they securely lock into place.
3. The LED corresponding to the battery will turn on when the battery is properly inserted. LEDs indicate battery charging status as follows:

   - Charging = flashing green LED
   - Fully Charged = solid green LED
   - Error = rapid flashing LED

4. To remove battery, press corresponding button on top of the charger.

Installing batteries

The buttstock can hold two batteries but is only powered by one at any time.

1. To allow access for batteries to be installed, you must first lower the buttstock pad by pressing the buttons on both sides of the buttstock pad support using thumb and index finger.
2. Remove battery caps by rotating counterclockwise.
3. Insert a fully charged battery and replace cap.
4. Insert battery cap, rotate clockwise while firmly pressing until it clicks. The battery caps have a built-in ratcheting mechanism to indicate when properly closed.

IMPORTANT! The battery cap threads and O-ring are lubricated at the factory to ensure a water tight seal when closed. If battery cap threads become contaminated with dirt, it is possible that the caps may not fully seat when ratchet mechanism clicks. If caps become difficult to close simply wipe the threads clean with a cloth and periodically re-apply a light silicon lubricant.

Replacing batteries

Make sure you do not unplug the battery that is currently powering the scope.

The battery actively powering the scope will be displayed in BLUE under normal use and will turn RED as a reminder to check that your alternate battery is fully charged.

Batteries displayed in the HUD correspond with the batteries location in the stock, left and right.

It is okay to replace a low or dead battery while scope is powered on.

If you happen to remove the battery powering the scope, it will simply power down and you will need to install a charged battery and press the power button to restart.

PGF Modes

Your Precision Guided Firearm has four standard modes of operation - Suppressive Fire, Precision Targets, Precision Movers, and Auto-Acquire with an optional NIGHT mode on specific models. Each mode is designed for optimal performance for various shooting requirements. The Mode button on top of scope, sequentially toggles between all modes to allow for quick mode changes. The mode currently set is displayed in the HUD.

Suppressive Fire

Suppressive mode is useful for conventional shooting at short ranges where a precision guided shot is not required.

A duplex reticle is presented and set to a 100 yard zero. The Range button is used to range a target and calculate a ballistic solution for that range, updating and displaying the correct reticle position in real time. (see Firing Procedure)

This mode is active within 2 seconds of powering the system on for rapid engagement.

Precision Fire Targets

Precision Target mode is optimized for Tag-and-Shoot shots on stationary targets or game that are typically harvested while grazing.

All Precision mode HUD elements are displayed to provide sensor readings, and most importantly, confirmation of correct system configurations including the following:

- Wind Setting, which must be correctly input.
- Ammunition selected, which must be correctly configured in the scope.
- Desired kill zone.

The Tracking optics Inertial Measurement Unit and ballistics engine handle everything else so you can focus on tag placement. The cant and inclination of the PGF are displayed in the HUD, however the system automatically compensates by updating the firing solution in real time.

Precision Fire Movers

Precision Movers mode is optimized for Tag-and-Shoot shots on moving targets or game that are active or typically moving when harvested up to speeds of 20mph depending on model.

Tracking and shooting moving targets can be challenging. Depending on range and target velocity, the amount of target lead can be 20 feet or more. The RapidLok system knows the target velocity (displayed in the HUD) and takes care of the target lead when it sets the ballistics for the moving target. With the RapidLok system, you engage a mover just as you would engage a static target. Even though the HUD gives the appearance of aiming directly at the target, the gun barrel is actually pointing in front of the target to provide the proper lead.

Tagging a mover – A moving target can be tagged either while the target is stationary or while it is moving.

Firing at a mover – The shooter uses the standard RapidLok procedure to fire on a mover by aligning the reticle with the tag while squeezing the trigger. In general, TrackingPoint recommends only shooting at movers that are crossing relative to the shooter location.

Recommended kill zone for shooting movers – TrackingPoint recommends a kill zone setting of 0.5MOA for movers. This setting will make it easier to get a shot off while slewing the gun to the target as it moves.

Tracking movers – As moving targets move behind brush or other obstacles, track will be lost. If a moving target turns or changes orientation, the tag may drift off of the original tag point requiring the shooter to reset the tag. If your target is in a herd of animals, it is possible for the tag to jump to another animal requiring the shooter to reset the tag point.

Auto-Acquire

Auto-Acquire mode allows you to automatically tag previous tag location for subsequent shots.

Night mode

Night mode allows for quick short-range shots. On targets that are too close or difficult to range, the rifle can compute a Point Blank Range (PBR) firing solution. Night functions identically to Precision targets otherwise.   Night mode is designed to be used with TrackingPoint Night Vision attachments.

See pages 28-35 for details.

Operating your PGF

Important: Read all instructions and warnings in this manual and your firearm's manual before using your TrackingPoint RapidLok™ System.

Power Button

Press the Power button to turn on the scope.

The power button LED and HUD will turn on.

Note: The scope will boot up in Suppressive mode within 2 seconds. It may take up to 15 seconds before all buttons are active and the Precision modes can be selected.

Power Off
Press and hold the Power button for 3 seconds to turn off the scope.

Power On/ Wi-Fi On

When the scope is powered on, click the Power button to turn on the Wi-Fi function. The Wi-Fi icon will appear in the HUD.

To turn off the Wi-Fi function, click the Power button. The Wi-Fi icon will turn off in the HUD.

The number of connected smart devices is displayed next to the Wi-Fi icon.   A maximum of 5 devices can be connected simultaneously.

Mode Button

Press to toggle between Suppressive, Precision Targets, Precision Movers, and Auto-Acquire modes. The scope will always power up in Suppressive mode.

Zoom Rocker

There are two sets of zoom control for the users preference, one on top of the scope and one on the trigger guard.

Press the Zoom button forward to zoom in.
Press the Zoom button backward to zoom out.

Current zoom level is displayed at the bottom center of the HUD.

HUD Focus

The Head Up Display must be focused prior to adjusting scene focus to obtain maximum clarity. Rotate focus ring at the back of scope while looking at the smallest text elements within the Head Up Display. Once they are in focus to your vision, no further HUD focus adjustments should be required.

Scene Focus

Once the HUD Focus has been set, the Scene Focus knob should be the only focus adjustment needed while using your PGF.

Rotate the Scene Focus knob clockwise or counterclockwise after zooming in or out to adjust image clarity.

Wind Button

Shooter MUST assess wind conditions, and input if necessary prior to making a precision shot.

Press to set wind to current conditions in half mile per hour increments right or left relative to the orientation of the barrel. For example if the wind is blowing right to left, setting should show arrow pointing left.

Current wind setting will be displayed in the HUD.

Clear Range/ Range Button

Suppressive Mode

1.   Press the Range button once in Suppressive mode to display the LRF reticle.
2.   Press the Range button a second time to Range a target and set the reticle center to the ballistic solution for that range. This feature enables the shooter to simply aim and shoot for a set range opposed to requiring holdover.
3.   Press the Range button a third time to cancel range and reset reticle to 100yrd zero.

It is very important to ensure the range to target is correct for any Suppressive shots. Always check the range that is displayed in the HUD before making a shot.

Precision Modes

1.   Press the Clear Range button to cancel the current range in Precision modes.

In Precision modes the system will range target automatically when the trigger is partially pulled. You will see the range appear in the HUD and next to the reticle. The range is set to automatically timeout and clear by default if tracking tag is lost or after a shot is fired, in which case the Clear Range button may not be required. The range timeout time can be adjusted or disabled in the HUD Console. If timeout is disabled, then the Clear Range button is required to clear current range and reset for re-ranging.

Auxiliary Button

The auxiliary button located on the trigger guard is an alternate Mode button.

Guided Trigger

Never pull the trigger unless you are on target and intend to fire!

Do not attempt to modify the trigger in any way, shape, or form. Doing so will void warranty and could result in serious safety repercussions, including injury or death.

Suppressive Mode

In Suppressive Mode, the trigger is not guided and will not block. When the trigger is pulled and Safety selector is set to "Fire" the gun will fire as a normal bolt-action rifle.

Precision Modes

The Guided Trigger is not a safety. Do not squeeze the trigger until you are aiming at the intended target.

In Precision Modes the Guided Trigger is blocked from firing until the tag you place and the reticle are re-aligned. When the Guided Trigger is partially pulled, the system will range the target and stabilize the image, continuing with a full pull of the trigger a tag will be placed and begin tracking. When trigger is fully pulled and the reticle is perfectly aligned with tag the Guided Trigger will unblock releasing the round.   The system cannot fire by itself. 100% of the force required to launch a round comes from the shooter.

Temperature Sensor

When the scope is powered on, it automatically reads the temperature used for calculating ballistics.

Temperature can also be manually set using the HUD Console, in cases where solar radiation cause the temperature sensor to provide an inaccurate reading.   (See HUD Console)

Eye Guard

The eye guard is designed primarily to shield the shooters pupil from the sun allowing clear visibility of the display.

The eye guard is also designed as a stand-off from the scope and should remain attached to the scope to lower the probability of injury.

The eye guard is a safety device and is not a guarantee against injury.

Installing and removing the eye guard

To install, carefully align threads of the eye guard to the eye piece and rotate clockwise until it seats. Do not over tighten.

To remove, hold the eye piece focus ring in one hand and the eye guard in the other. Rotate the eye guard counterclockwise, making sure the eye piece focus ring does not rotate, until it disassembles from the scope.

Cut Filter

The objective lens contains a flip down cut filter, that when lowered, will enhance visibility in very low light conditions, generally around dawn and dusk.

If the HUD image becomes RED after lowering the cut filter, conditions are too bright and the cut filter should be placed back in the normal closed position.

Note: The TrackingPoint system will generally provide adequate imaging starting at dawn and ending at dusk. In some states it is allowable to hunt for brief periods before dawn and after dusk. Depending on topography and direction you may or may not have adequate light before dawn and after dusk for hunting.

USB Port

The Micro USB port has been designed to interact only with future approved TrackingPoint accessories. Do not insert anything in to the USB port that is not an approved TrackingPoint accessory.

Barrel Reference System (BRS)

No Zeroing Required.

The Barrel Reference System is designed to keep the scope zeroed with the barrel at all times by tracking any mechanical or thermal movement during operation.

Buttstock

The buttstock has 2 positions to adjust the length of pull. To adjust, remove the four (4) screws as shown, position in the new location and reassemble.

Video/Audio Recording

In Precision modes the tracking optic automatically records video and audio and takes snapshots of all of your shots. You can download videos at any time using the TrackingPoint App.

Every time the trigger is partially pulled in Precision modes, a video starts recording.

Video recording automatically stops 15 seconds after each shot is fired. A sequence of rapid Tag-and-Shoot shots will result in a longer video.

Available recording storage capacity on the scope is displayed in the HUD as recording time remaining.

A "Video Full" message is displayed in the HUD when storage capacity is full. You will need to download or delete videos before additional recording can continue.

The video recording settings can be adjusted and turned off using the TrackingPoint App.

HUD Console

The HUD Console allows user preferences to be set and adjusted within the scopes HUD.
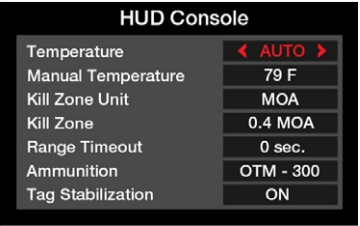
To Enter the HUD Console:
1. Press and HOLD the Mode button on scope for 2 seconds to bring up the HUD Console.
2. Press the Zoom button [Up/Down] to select the function you want to change.
3. Press the Wind button [Right/Left] to modify current setting.
4. Press the Mode button again to save changes and exit the console.

Temperature - Manual Setting

When the scope is first powered on, it is set to automatically read temperature. Temperature can also be manually overridden using the HUD Console in cases where the temperature of the air along the bullet's flight path is different from that at the shooter's position.

Temperature is displayed in the advanced mode HUD and indicates if it has been Automatically or Manually set.

Examples of when temperature may need to be manually set.
- If shooting from a hunting blind where the temperature in the blind is significantly different than the target's location.
- Solar radiation from direct sunlight onto the scope can cause the temperature sensor to provide an inaccurate reading.
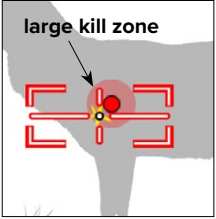
Kill Zone

The kill zone is the point of impact tolerance the shooter sets for when a Tag-and-Shoot shot is released. The shot is released (fired) at the closest point to center of the tag during reticle and tag alignment.
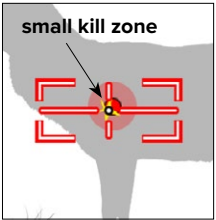
small kill zone

Example 1 - Small kill zone as the armed firing solution's path intersects the tag.

A smaller kill zone can result in a more precise shot but may take longer to align the firing solution with the tag, resulting in a slower time to fire shot.

large kill zone

Example 2 - Large kill zone as the armed firing solution's path intersects the tag.

A larger kill zone can still result in a precise shot depending on how close the shooter aligns with the center of the tag. If the shooter aligns anywhere within the kill zone the system will fire.

A larger kill zone will allow for faster alignment of the firing solution with the tag, resulting in faster time to fire shot.

Note: A larger kill zone setting does not necessarily cause a more inaccurate shot. The TrackingPoint scope uses a "Closest Approach" algorithm. If you are aligned perfectly or moving toward perfect alignment, the trigger remains blocked until you reach the closest point to the center of the kill zone.

Kill zone setting is displayed at the top center of the HUD.

When to change kill zone setting

The size of the kill zone effects the precision and time it takes to make a tagged shot as described in previous examples. General guidelines are below, however the skill of the shooter will also affect ability to quickly make tagged shots at various kill zone sizes. The system's kill zone can be set between 0.1 MOA up to 4.0 MOA

Advanced Targets mode - 0.2 MOA kill zone size is recommended for shooting static targets that allow more time to align firing solution and tag.

Advanced Movers mode - 0.5 MOA kill zone size is recommended for shooting moving targets. This setting will make it easier to get a shot off while slewing the gun to the target as it moves.

MOA to Inches

Rule of thumb: 1 MOA is about 1" for every 100 yards.

1 MOA equals approximately 1 Inch at 100 yards
1 MOA equals approximately 5 Inches at 500 yards

Range Timeout

The Range timeout is the time it takes for the current range to automatically cancel in Precision Modes. By default the timeout is set to 0 seconds.   If a tag is repositioned, a tracked tag is lost, or a shot is fired, the range will automatically reset to "- - - ".

If timeout is set to several seconds or disabled it will allow shooter to reposition a tag from the reticles ballistic solution for that range. This is useful for multiple Tag-and-Shoot shots at the same range.   If Range timeout is disabled the Cancel Range button is required to reset and range a new target.

Ammunition

You MUST configure the scope to the correct XactShot ammunition you are using at all times. Ammunition is set using the HUD Console or the Settings feature in the TrackingPoint App.

Only use XactShot ammo in your Precision Guided Firearm. The ammunition that your rifle is chambered for is engraved on the lower receivers magazine well. Use of ammunition other than the type it was designed for could result in suboptimal performance, serious injury, or death. All XactShot ammo and RapidLok systems have been designed, characterized, and life cycle tested as a complete integrated Precision Guided Firearm.

The current ammunition setting for the system is displayed in the HUD.

You MUST clean the bore when changing between OTM and TSX/TAC-TX ammunition. Dissimilar bullet materials will scar the barrel reducing accuracy and shortening the barrel life.

XactShot Ammunition

Target Shooting - OTM

Open Tip Match bullets are ideal for serious rifle competition. The hollow point boat tail design provides that extra margin of ballistic performance match shooters need to engage the target accurately at long ranges under suboptimal conditions.

Long Range Hunting - LRX

Barnes TSX bullets have been developed to match the advancements in rifle accuracy and extended-range optics. The TSX features a long profile boat tail design that delivers match-grade accuracy at long range with an incredibly high ballistic coefficient and terminal performance that delivers the quick, clean, ethical kills you've come to expect from Barnes.

Ammunition - Specifications

XactShot ammunition is manufactured to a precision standard by Barnes Bullets. The specifications below are for reference only since your PGF's ballistics engine handles all of the math for the life of the system.

Type	HUD Name	.338 Lapua Magnum
OTM Sierra® MatchKing®	OTM	300 gr
LRX® Barnes®	LRX	280 gr

Barnes, LRX is a trademark of Barnes Bullets, LLC. Sierra and MatchKing are trademarks of Sierra Bullets, L.P.

Tag Stabilization

When shooter presses the tag button, the target image and reticle are auto-stabilized allowing the shooter to quickly and accurately tag a target.

Tag stabilization is turned on by default and can be turned off in the HUD console.

Range Unit

Allows the user to change measuring distances between yards, meters and miles.

TOTP Offset

Tag on Trigger Pull Offset - The distance in Minutes of Angle that the reticle will move after a tag has been set on the target.

Auto Low Power

Period of time after which the unmoved scope will go into a lower power mode, saving battery. Any button presses will awaken it until it goes into auto power off.

Auto Power Off

Length of time in low power mode to enable the scope to automatically shut down.

Firing Procedure

Overview – TrackingPoints new line of semi-automatic Precision Guided Firearms change the way you tag and engage targets from previous systems now called Tag-and-ShootTM. The primary difference is that you now tag targets with a partial squeeze of the trigger rather than with a Tag button. The red button on the trigger guard is no longer used for tagging targets. This new tagging mode allows you to tag and acquire targets more quickly. Another primary difference is a feature called Auto-Acquire. Auto-Acquire is a new firing mode that allows you to re-engage and shoot a target without having to re-tag the exact point-of-impact you desire. Once you tag a certain spot on a target the PGF will automatically re-tag that exact spot as you initiate a subsequent partial trigger pull. There are four firing modes; Suppressive Fire, Precision Targets, Precision Movers, and Auto-Acquire.

Guided Trigger Interface

Trigger travel is exaggerated for illustration

Clear Range/ Range

Mode

Zoom
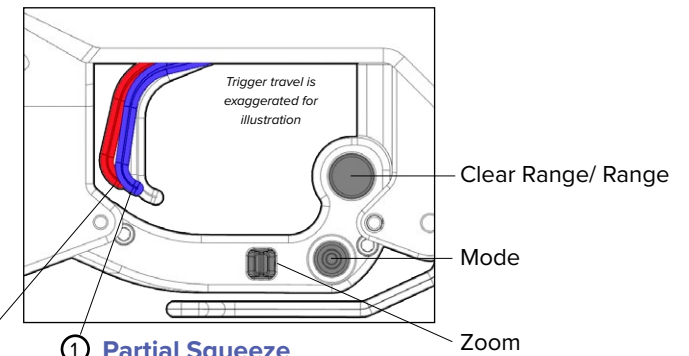
① **Partial Squeeze**
- Range to target is read
- Image stabilization is activated
- Tag is displayed for placing on target

② **Full Squeeze / Fire**
- Trigger is blocked in Precision modes only!
- Tag is placed on target and begins tracking
- Reticle adjusts to ballistic solution
- Shot will fire when reticle and tag are optimally aligned and user is in full control of squeezing trigger.

Precision Targets/Movers Firing Procedure
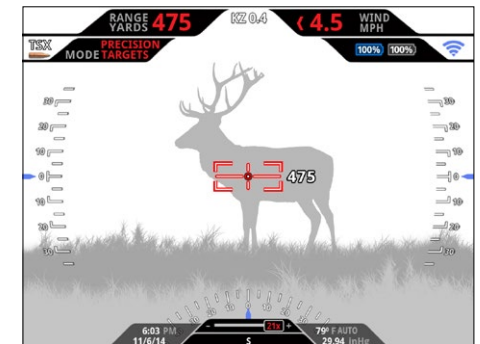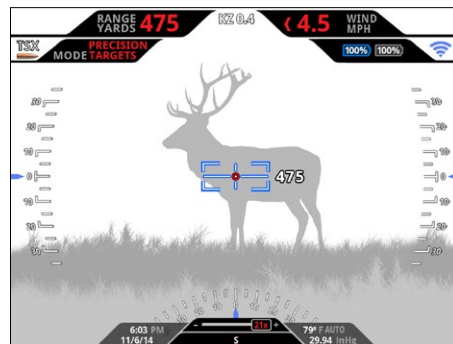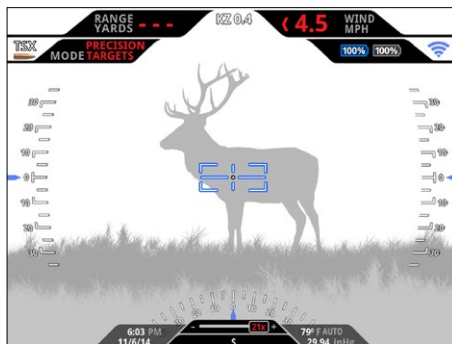
Assess Wind Conditions. Input Wind setting if necessary. This is very important for correctly calculating ballistics for tagged shots.

1. Press the Wind button to set windage to current conditions. Current wind setting is displayed in the HUD. In this example wind is blowing 4.5mph right to left.

Trigger control is very important. DO NOT squeeze trigger quickly to avoid unintentional tag placement.

2. Aiming at the desired point-of-impact, partially squeeze trigger to range target and start image stabilization.

   The range to target will appear next to the reticle and a Red tag (dot) will appear at the center of the reticle.

3. Fully squeeze trigger to place tag on target and begin tracking. Reticle turns Red when system is armed and tracking.

   To reposition tag, release trigger and repeat partial to full squeeze procedure.

4. Once the firing solution and the tag are optimally aligned, and the trigger is fully engaged by the user, the guided trigger will unblock allowing the shot to fire.
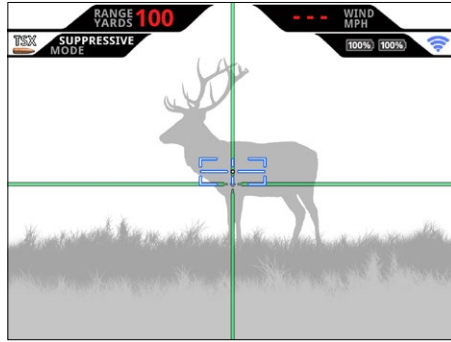
Suppressive Fire Procedure

In Suppressive Mode the Guided Trigger is disabled and the firearm should be treated like any other traditional semi-automatic rifle. The gun will fire the moment you squeeze the trigger.
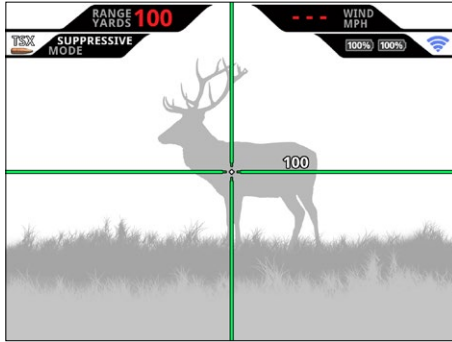

Suppressive mode displays a duplex reticle zeroed at 100 yards by default.

Example: Target is at an unknown distance.

1. If you press and release the Range button, a bracket reticle will appear along with the 100 yard duplex reticle.

2. Aim the bracket reticle at the target you wish to range.

Note: The laser range finder reticle may not be displayed inline with the duplex reticle. This is due to the laser optics not being co-aligned with the rifles bore. This is normal.
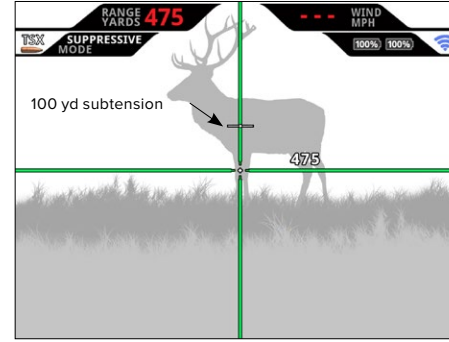
3. Press and release the Range button again to range the target and calculate a new ballistic solution.

The duplex reticle is now set for the new range. The current range (475yds) is also displayed next to the reticle to clearly indicate what the current ballistic solution is set to.

A 100yd subtension is always displayed when the duplex reticle is set to a different range.
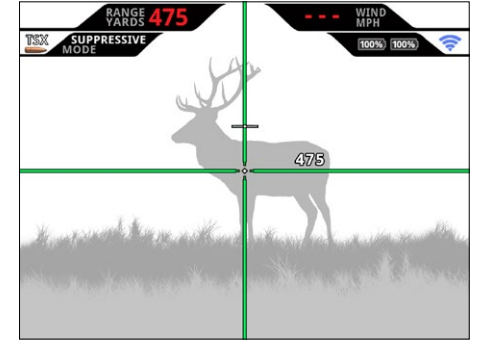

4. Adjust point-of-aim with correct ballistic solution and fire at will.

5. Press and release the Range button again to return to the default 100 yard zero.

# Auto-Acquire Firing Procedure
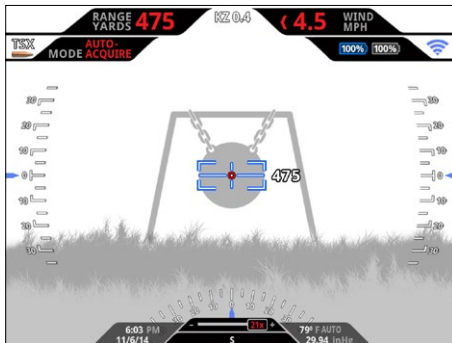
1. Press the Wind button to set windage to current conditions. Current wind setting is displayed in the HUD.

2. Aiming at the desired point-of-impact, partially squeeze trigger to range target and start image stabilization.
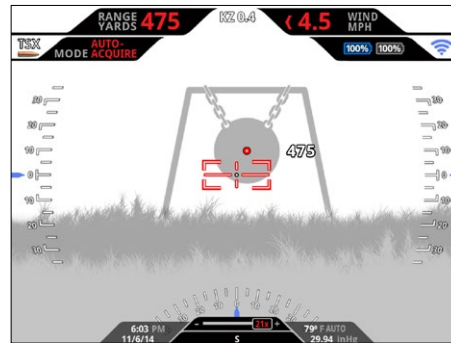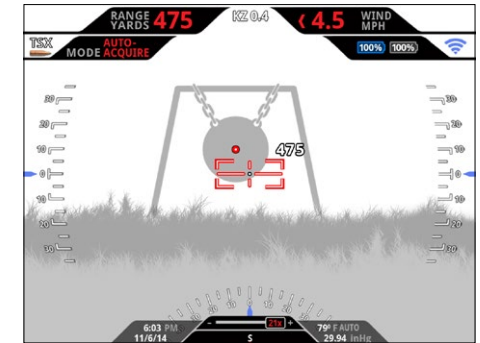

3. Fully squeeze trigger to tag target and begin tracking.

To reposition tag, simply release trigger and repeat partial squeeze to full pull.

To reset range, press Clear Range button.
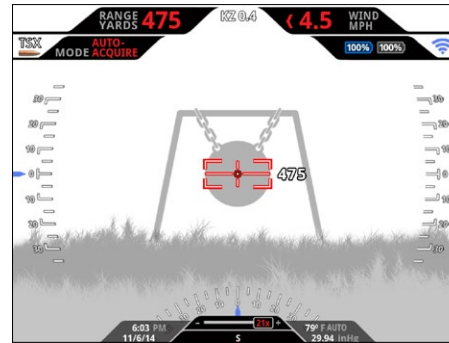
4. Once the firing solution and the tag are optimally aligned, and the trigger is fully engaged by the user, the guided trigger will unblock allowing the shot to fire.

5. Repeat full trigger pull to Auto-Acquire target with same tag position for consecutive precision shots.

HUD Messages

No Target Found

You may see this message if your target is camouflaged by surrounding area or laser cannot return range due to environmental conditions.

Off Screen Indicator Arrow

If the Tag moves outside of HUD view, a yellow arrow will appear pointing in the direction of the tagged target.

If the target is at an extreme range, the ballistic drop at max zoom when tagging a target may also cause arrow to appear.

Tracking Lost

You will temporarily see this message due to following conditions:

If the target moves outside of the systems field of view.

If the target moves behind another object.

If the target rotates and intended tag location is no longer identifiable.

Target Too Close

You will see this message if your target is less than 50 yards away.

Target Too Far

You will see this message if your target is beyond the maximum range for your RapidLok rifle and ammunition setting.

TrackingPoint Apps

The TrackingPoint App is the primary tool for communicating with and configuring your Tracking optic. New features may be released that are not covered in this owner's manual.

My Media

Use this button to enter the media manager where you can download Shot and Tag videos from your scope and then view and share through email and social media.

Note: Videos and photos are automatically deleted from the scope after downloading.

When you first connect to a scope, the number of videos and photos currently recorded in the scope's memory will display below the My Media button.

Settings

Use this button to enter settings menu to set various features of your scope including the following:

Manual Temperature

When the scope is first powered on it is set to automatically read temperature. Temperature can also be manually set using the HUD Console in cases where the temperature along the bullet's flight path is different from that at the shooters position. [See HUD Console section for details]

Impact Zone (Kill Zone) Setting

Use to set the kill zone size for Tag-and-Shoot fire control when taking precision guided shots. [See Kill Zone section for details]

Ammunition Setting

You MUST configure your scope to the correct ammunition being used.

Always check HUD for correct ammo configuration.

Tag Stabilization

Use to turn tag stabilization On or Off.

Record Videos Settings

Use to turn video recording On or Off.

Wind Calculator

This tool estimates and sets a baseline wind call setting on your scope, used for calculating the ballistic solution.

Advanced (Precision Mode) Unlock

Use this to lock Precision modes from unauthorized use. Suppressive mode is always active, even if system is locked.

A 4-digit passcode is required to lock Precision modes.

Once locked, the same 4-digit passcode is required to access Precision modes. The passcode to unlock a Precision mode can be entered by two different methods:

A) Enter passcode using Advanced Mode Lock in the TrackingPoint App.

B) Enter passcode in the HUD using the buttons on the scope. If user presses Mode button to enter Advanced mode and it has been locked the display will prompt user to enter a 4-digit code.

1. Press Zoom button up/down to change number.

2. Press Wind button right/left to select which number you want to change.

3. Press Mode button when you are finished entering correct code to access Advanced mode.

Your PGF will still function as a conventional firearm when locked or powered off. All firearm safety rules apply.
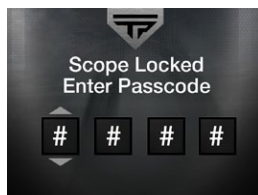
Software Updates

Use this to check for software updates for your specific tracking optic. The TrackingPoint App will lead you through the installation process.

Support

Customer Service

In the event that the scope encounters technical issues, this feature allows you to easily contact customer service to help diagnose the issue and guide you through corrective action.

NOTE: Connect the TrackingPoint App to your scope when changing continents or time zones to update the time, date, and Coriolis calibration of your PGF. This process automatically runs in the background once connected and will only take a few seconds to complete. You can confirm by looking at the time displayed in the HUD.

ShotView

ShotView enables anyone to share and collaborate in the shooting experience in real time by live streaming everything the shooter sees in the Heads Up Display to a smart device.

This App is very useful in a 'guided hunt' situation where the professional hunter can use the App to guide the shooter on to the proper animal and even to ensure proper shot placement.

It can also be used in a teaching and/or mentoring situation to allow a novice hunter to have a more experienced hunter more effectively 'look over the shoulder' of the shooter.

How to use ShotView
Connecting a Smart Device to your Tracking optic

1. After the scope is turned on, click the Power button again to turn Wi-Fi On. A Wi-Fi icon will appear in the HUD when Wi-Fi is ON.

2. Go to your smart device's Wi-Fi settings and select the TrackingPoint System you wish to connect to.

   Note: If a password is required to connect to Wi-Fi network, it can be found on the inside back cover of this owner's manual.

3. Open the ShotView app after exiting your device's settings menu.

Wi-Fi Range

The Wi-Fi range between a smart device running ShotView and the Tracking optic is approximately 100 feet.

Troubleshooting Video Streaming

Streaming may get interrupted if too many devices are simultaneously running ShotView while connected to one scope. Limit to 2 devices.

- If ShotView loses connection with scope and does not automatically reconnect, check to make sure your device hasn't reverted to a previously connected network. You may need to re-select scope network in your device settings.

Downloading Apps to a New Device

Devices supported

You will need either an Apple iOS or Android device to use TrackingPoint Apps.

Apple iOS

1. Access the App Store on your mobile device or through iTunes.

2. Search the App Store for the desired application - TrackingPoint App, ShotView, or Precision Hunter.

3. Follow installation procedure from device or web site.

Android

1. Access the Google Play Store.

2. Search Android Apps for the desired Application - TrackingPoint App, ShotView, or Precision Hunter.

3. Follow installation procedure from device or web site.

Connecting Smart Device to your Tracking optic

[Required for TrackingPoint and ShotView Apps]

1. After the scope is turned on, click the Power button again to turn Wi-Fi On. A Wi-Fi icon will appear in the HUD when Wi-Fi is ON.

2. Go to your smart device's Wi-Fi settings and select the TrackingPoint System you wish to connect to.

   Note: If a password is required to connect to Wi-Fi network, it can be found on the inside back cover of this owner's manual.

3. Open the TrackingPoint app after exiting your device's settings menu.

Troubleshooting Connection

Common Problems:

- TrackingPoint App - The TrackingPoint App will not launch without a network connection to a tracking optic.

- ShotView - Video does not stream when App is launched.

Check the following:

1. Check if Wi-Fi icon appears in the HUD. If not, click power button to turn scope Wi-Fi on.
2. Check if correct TrackingPoint System is selected in your device's network settings.

Cleaning Your PGF

- **You MUST clean barrel after every 60 rounds to ensure accuracy of precision shots.**

- **You MUST clean the bore when changing between ammunition. Dissimilar bullet materials will scar the barrel reducing accuracy and shortening the barrel life.**

- **Do not use cleaning solvents that are not specifically designed for firearm's. Some solvents can damage parts on your firearm.**

What you will need

- Cleaning Rod
- Jag
- Bore Brush (Nylon)
- Bore Guide

- Copper Remover (CR-10)
- Bore Cleaner (Hoppe's 9)
- Cleaning patches
- Link (Supports upper for cleaning)

Note: Cleaning kits can be purchased at: www.tracking-point.com

Prepare for Cleaning

1. Ensure firearm is empty and all ammunition is removed from the area.
2. Remove the magazine, bolt, and cheek riser from the firearm.
3. Insert bore guide thru back of receiver.
4. Place a rag under the entrance to the bore guide to prevent cleaning fluids from getting on the stock.

Cleaning the Bore

1. With jag attached to the cleaning rod, attach a patch and wet with BORE CLEANER (Hoppe's With jag attached to cleaning rod, wet a patch with BORE CLEANER, place on jag and run thru the bore guide, the bore and out the muzzle.

DO NOT PULL ROD with patch attached while in the bore.

2. Remove patch from the jag at the muzzle. Then remove rod from bore and wipe clean.

3. Repeat 1-2 until patch comes out clean.

4. With jag attached to cleaning rod, wet a patch with COPPER REMOVER (CR-10), place on a jag and run thru the bore guide, the bore, and out the muzzle.

Do Not let COPPER REMOVER stay in the bore longer than 15 minutes. Neutralize with BORE CLEANER to avoid damage to the bore. Note time of initial application.

5. Remove patch from jag at the muzzle then remove rod from bore and wipe clean.

6. Let COPPER REMOVER stand in bore for 5 minutes.

7. Run a wet patch of COPPER REMOVER through the bore.

8. Attach nylon brush to cleaning rod, add COPPER REMOVER to brush bristles and push through the bore guide, the bore and the muzzle.

9. While brush is outside of the muzzle end of barrel, dowse brush bristles with COPPER REMOVER and pull brush back through the muzzle and chamber.

10. Continue to brush the bore until your 15 minutes are reached since first application insuring that you do not reverse direction while the brush is in the bore - ALWAYS exit the muzzle or chamber completely before changing direction.

11. With jag attached to cleaning rod, wet a patch with COPPER REMOVER, place on a jag and run thru the bore guide, the bore and out the muzzle. Repeat until patch comes out clean.

12. With jag attached to cleaning rod, wet a patch with BORE CLEANER, place on jag and run thru the bore guide, the bore and out the muzzle.

13. With jag attached to cleaning rod, attach dry patch and run thru the bore guide, the bore and out the muzzle.

14. Remove patch from jag at the muzzle then remove rod from bore and wipe clean.

15. Repeat 13-14 two additional times.

16. Insert bolt back into the firearm and attach cheek riser after cleaning and lubricating.

Lubrication

Over-lubrication should be avoided at all times. A thin coat is all that is needed to prevent the possibility of corrosion.

Regular maintenance

1. Lubricate bolt lugs with grease to prevent wear.

Preparing for storage

When firearm is to be stored it should be carefully cleaned and oiled.

1. Coat the bolt face, extractor, ejector, bore, and chamber with FP-10 lubricant.

Important! All lubricant must be removed from chamber and bore after storing before reuse.

Lubricating the Battery Caps

Periodically wipe threads on battery caps and stock housing to remove any accumulated dirt.

Apply small amount of silicon lubricant to the threads and "O" ring to maintain a good water tight seal and ease of opening and closing.

Troubleshooting

Issue	Action
HUD text is blurry.	Rotate HUD focus ring on the back of the scope.
Image is Red.	Ensure cut filter is in the UP position.
Cannot connect apps to the system.	Turn scope Wi-Fi on. Make sure your smart device Wi-Fi is connected to the scope.
Difficulty ranging target in tall grass.	Tall grass and vegetation in front of target may return incorrect range due to reflection off of the grass rather than the target. Try making several pre-tags around target to verify correct range.
Difficulty ranging target in fog.	Fog can affect range due to laser reflecting off of the moisture in the air. Wait until fog clears to ensure correct range and clear path to the target.
Missing high or low.	Surrounding terrain may be returning inaccurate range. Make several pre-tags around target to verify correct range.
Missing right or left.	Verify correct wind setting and adjust as needed. Crosswind can vary along bullets flight path.

Tracking optic System Errors

Below is a brief explanation of errors and level of severity that may occur while using your Precision Guided Firearm. If any of these errors occur you will be instructed with a message in the HUD as to the procedure to resolve.

Level 1

Level 1 are minor system faults where it is still safe to operate the PGF. A 'check' scope indicator will be visible in the HUD to indicate an error condition.

Level 2

Level 2 are major system errors that impair the ability of the Tracking optic to operate in Advanced Mode. A 'check' scope indicator will be visible in the HUD to indicate the error condition. The scope is limited to operating only in the Traditional mode.

Note: At the first instance of 'Check' scope indicator appearing, try rebooting to clear. If indicator persists, call Customer Service.

Level 3

Level 3 are catastrophic faults that indicate the PGF is not safe to use. These errors will be displayed in HUD during boot and cannot be cleared by the user. All functions are disabled.Call Customer Service.

Warranty Terms and Conditions

TrackingPoint, Inc. shall warrant that the product purchased from TrackingPoint™, which will include the firearm as well as the tracking optic and smart trigger (the "Precision Guided Firearm", or "PGF"), shall be free from defects in material and workmanship for 1 year from the date of purchase.

During this period if the PGF is found to be defective in material or workmanship, TrackingPoint or one of its authorized service facilities will at its option, either repair or replace this product without charge, subject to the following conditions, limitations and exclusions:

1. This warranty extends to the original consumer purchaser only and is not assignable or transferable.
2. This warranty shall not apply to any product that has been subjected to misuse, abuse, abnormal use, negligence, alteration or accident, or has had its serial number altered or removed. An example of a product that has been subjected to misuse, etc. may include, but is not limited to, full submersion, dropping of the product, etc.
3. This warranty does not apply to the batteries that accompany this product.
4. This warranty does not apply to a product that has been modified to alter its functionality or capability without the written permission of TrackingPoint.
5. This warranty does not apply to cosmetic damage to the product, including, but not limited to, scratches and dents that do not otherwise affect the functionality of the product.
6. This warranty does not apply to defects caused by normal wear and tear or which are otherwise due to normal aging of the system.

Obtaining Service

For warranty service, the original purchaser must contact TrackingPoint using the steps listed below.

1. Call TrackingPoint at (512) 222-0501 or contact sales@tracking-point.com. The customer service representative will discuss the issues with you and determine whether problems encountered with the PGF can be remedied remotely or whether the PGF must be returned to TrackingPoint for further service.
2. If TrackingPoint determines that your PGF is eligible for direct mail-in service, ship your product to TrackingPoint's repair service location in accordance with TrackingPoint's instructions. TrackingPoint will provide prepaid waybill and packaging instructions. Once service is complete, the TrackingPoint repair service location will return the repaired product or provide a replacement product to you.

General Terms

1. In servicing your product, TrackingPoint may use parts or products that are new or refurbished. TrackingPoint will retain the replaced part or product that is exchanged during service as its property, and the replacement part or product will become your property.
2. TrackingPoint reserves the right to change terms and conditions, as it determines in its sole discretion.
3. TrackingPoint products are available for purchase only by authorized individuals in compliance with federal and local law.
4. TrackingPoint is not responsible for any failures or delays in performance under this warranty that are due to events outside TrackingPoint's reasonable control.
5. Except where prohibited by law, the laws of Texas shall apply to these terms and conditions, without regard to its conflict-of-laws provisions.

Customer's Responsibilities

1. You must provide information to a TrackingPoint representative about the symptoms and causes of the issues with the product.
2. You must follow shipping and packing instructions provided by TrackingPoint. You will be responsible for products or parts that are lost or damaged as a result of failure to follow instructions.
3. We recommend that you try to save your personal information including but not limited to videos before shipping. TrackingPoint will make every effort to recover personal information including but not limited to videos on a damaged scope but this may not always be possible.

What is NOT Covered

1. The warranty does not apply to operating the product outside the permitted or intended uses described by TrackingPoint, as the manufacturer.
2. The warranty does not apply to a product with a serial number that has been altered, defaced or removed, or to a product that has been modified to alter its functionality or capability without the written permission of TrackingPoint.
3. The warranty does not apply to a product that has been lost or stolen. This warranty only covers a product that is returned to TrackingPoint in its entirety. The warranty only applies to a PGF that is submitted by the original purchaser.
4. The warranty does not apply to cosmetic damage to the product, including, but not limited to, scratches and dents that do not otherwise affect the functionality of the product.
5. The warranty does not apply to defects caused by normal wear and tear or which are otherwise due to normal aging of the product.
6. The warranty does not apply to damage to the PGF caused by ammunition other than XactShot™ ammunition sold by TrackingPoint for use in Precision Guided Firearms.
7. The warranty does not apply to damage to the PGF caused by a barrel obstruction.

Limitation of Liability

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, TRACKINGPOINT AND ITS EMPLOYEES AND AGENTS WILL UNDER NO CIRCUMSTANCES BE LIABLE TO YOU OR ANY SUBSEQUENT OWNER OF THE PRODUCT FOR ANY INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, COSTS OF RECOVERING, REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA OR THE FAILURE TO MAINTAIN THE CONFIDENTIALITY OF DATA, ANY LOSS OF BUSINESS, PROFITS, REVENUE OR ANTICIPATED SAVINGS, RESULTING FROM TRACKINGPOINT'S OBLIGATIONS UNDER THIS WARRANTY. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE LIMIT OF TRACKINGPOINT AND ITS EMPLOYEES AND AGENT'S LIABILITY TO YOU AND ANY SUBSEQUENT OWNER ARISING UNDER ALL PRODUCTS PURCHASED BY YOU FROM TRACKINGPOINT SHALL NOT EXCEED THE ORIGINAL PRICE PAID FOR THE WARRANTY.

TRACKINGPOINT SPECIFICALLY DOES NOT WARRANT THAT (I) IT WILL BE ABLE TO REPAIR OR REPLACE THE PRODUCT WITHOUT RISK TO OR LOSS OF PROGRAMS OR DATA (II) IT WILL MAINTAIN THE CONFIDENTIALITY OF DATA, OR (III) THAT THE OPERATION OF THE PRODUCT WILL BE UNINTERRUPTED OR ERROR-FREE.

FOR CONSUMERS IN JURISDICTIONS WHO HAVE THE BENEFIT OF CONSUMER PROTECTION LAWS OR REGULATIONS, THE BENEFITS CONFERRED BY THIS WARRANTY ARE IN ADDITION TO ALL RIGHTS AND REMEDIES PROVIDED UNDER SUCH LAWS AND REGULATIONS. TO THE EXTENT THAT LIABILITY UNDER SUCH LAWS AND REGULATIONS MAY BE LIMITED, TRACKINGPOINT'S LIABILITY IS LIMITED, AT ITS SOLE OPTION, TO REPLACE OR REPAIR OF THE PRODUCT OR SUPPLY OF THE SERVICE. SOME STATES OR PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO SOME OR ALL OF THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Disclaimer of Warranty

ALTHOUGH TRACKINGPOINT CANNOT GUARANTEE THAT A SUPPORT INCIDENT WILL BE RESOLVED, TRACKINGPOINT WILL MAKE REASONABLE EFFORTS TO PERFORM SUPPORT SERVICES UNDER THE SERVICE WARRANTY IN A PROFESSIONAL MANNER. TO THE EXTENT PERMITTED BY LAW, THE EXPRESS WARRANTY AND REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. AS PERMITTED BY APPLICABLE LAW, TRACKINGPOINT AND ITS LICENSORS SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, RELATED TO OR ARISING IN ANY WAY OUT OF THESE TERMS AND CONDITIONS, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Night Vision Kit [GEN2] Installation

If you purchased a Night Vision Kit separately from your TrackingPoint Precision-Guided Firearm follow these instructions.

Updating software
Important! Make sure battery is fully charged before updating.

1. With the scope powered on, attach USB thumbdrive to the USB-to-Micro USB adapter and plug into the Micro USB port on the back of the scope.
2. Scope MUST be set to Traditional (Suppressive) Mode in the HUD.
3. A message will appear in the scope prompting you to accept update.
4. Press the MODE button located on the top of scope to start update process. Update will take approximately 10-15 minutes.
5. Scope will restart once update is complete.
6. Remove USB drive.

Attach IR illuminator
We recommend attaching IR illuminator to the right or left side of hand guard. Do not attach to the top rail as it will interfere with the laser range finder.

1. Attach illuminator mount to the picatinny rail.
2. Slide illuminator into the mount and secure with socket head screw.

Night Vision Operation

Operating Night Vision Mode

1. Turn On the scope.
2. Turn On the IR illuminator.
3. Flip down and secure the cut filter.

4. Select NIGHT mode in the scopes HUD by pressing the mode button.
5. Firing procedure is the same as in Precision modes with the exception of Point Blank Range ballistic solution when a range can not be detected.
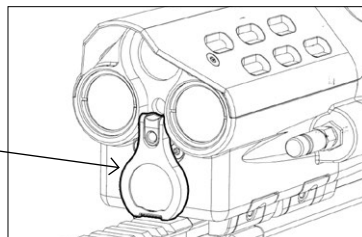
Vivid™ [Gen3 NV] Installation

If you purchased the Vivid night vision device (NVD) separately from your TrackingPoint Precision-Guided Firearm follow these instructions.

Updating software

Important! Make sure battery is fully charged before updating.

1. With the scope powered on, attach USB thumbdrive to the USB-to-Micro USB adapter and plug into the Micro USB port on the back of the scope.
2. Scope MUST be set to Traditional (Suppressive) Mode in the HUD.
3. A message will appear in the scope prompting you to accept update.
4. Press the MODE button located on the top of scope to start update process. Update will take approximately 10-15 minutes.
5. Scope will restart once update is complete.
6. Remove USB drive.

Vivid installation

1. Attach night vision device to the picatinny rail close to the tracking scope without direct contact. Exact location is not critical. See Fig. 1
2. Install a single CR123 battery that shipped with the product.

Fig. 1

Operation

Operating the Vivid night vision device

1. Turn On the tracking scope.
2. Enable NIGHTVISION feature in the tracking scope. See Fig. 2
   • Press and hold Mode button for 3 seconds to pull up HUD Console menu.
   • Press zoom "-" button to scroll down to NIGHTVISION.
   • Press Wind button right/left to turn NIGHTVISION to ON.
   • Press Mode button again to save and exit.
3. Turn-Push button to turn On the night vision device.
4. Select NIGHT mode in the scopes HUD by pressing the mode button.
   • The firing procedure is the same as in Precision modes with the exception of additional Point Blank Range ballistic solution.
5. Adjust brightness of image as needed by slowly turning the Gain dial on the night vision device. There may be some delay before HUD image adjustment is updated.

Fig. 2
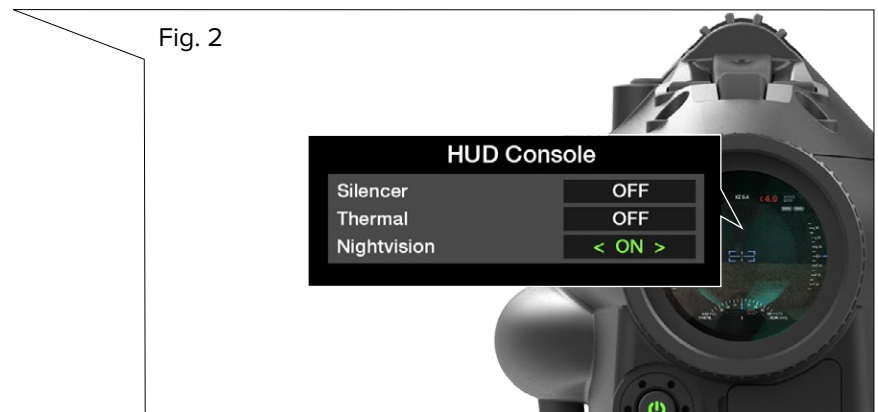
Torrid™ [Thermal NV] Installation

If you purchased the Torrid thermal imaging device separately from your TrackingPoint Precision-Guided Firearm follow these instructions.

Updating software

Important! Make sure battery is fully charged before updating.

1. With the scope powered on, attach USB thumbdrive to the USB-to-Micro USB adapter and plug into the Micro USB port on the back of the scope.
2. Scope MUST be set to Traditional (Suppressive) Mode in the HUD.
3. A message will appear in the scope prompting you to accept update.
4. Press the MODE button located on the top of scope to start update process. Update will take approximately 10-15 minutes.
5. Scope will restart once update is complete.
6. Remove USB drive.

Torrid installation

1. Attach Torrid thermal device to the picatinny rail close to the tracking scope without direct contact. Exact location is not critical. See Fig. 1
2. Install a battery that shipped with the product.   Thermal device works with CR123 or a 16650 rechargeable battery with screw on adapter.

Operation

Operating the Torrid thermal imaging device

1. Turn On the tracking scope.
2. Enable THERMAL feature in the tracking scope. See Fig. 2
   • Press and hold Mode button for 3 seconds to pull up HUD Console menu.
   • Press zoom "-" button to scroll down to THERMAL.
   • Press Wind button right/left to turn THERMAL to ON.
   • Press Mode button again to save and exit.
3. Press the middle button for 3 sec. to turn On the thermal device.
4. Select NIGHT mode in the scopes HUD by pressing the mode button.
   • The firing procedure is the same as in Precision modes with the exception of additional Point Blank Range ballistic solution.
5. To turn OFF the thermal device, press and hold middle button for 15 sec.

IMPORTANT! - WHITE HOT color setting on thermal device is recommended for optimal target tracking performance.
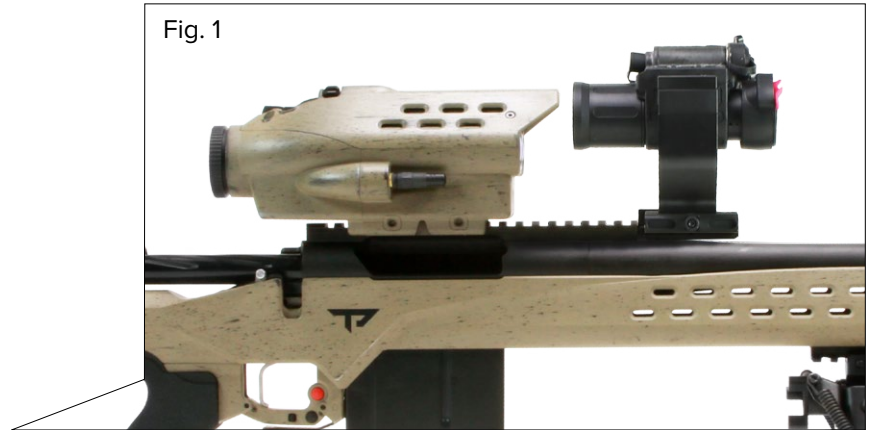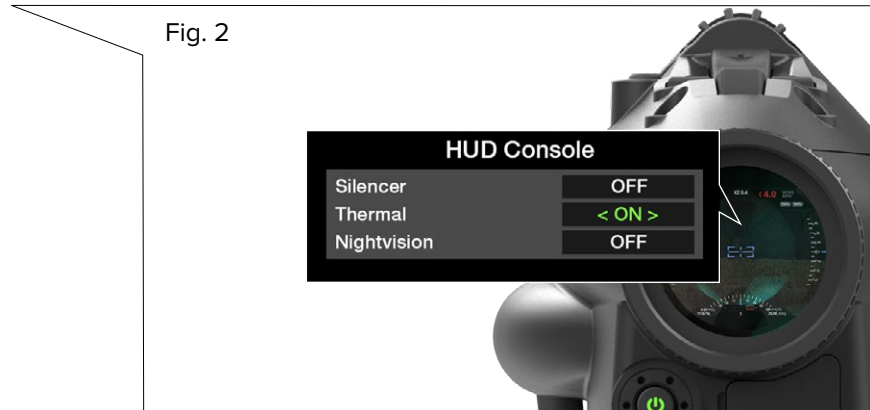

Fig. 1

Fig. 2

Night Mode Firing Procedure

1. Press the Wind button to set windage to current conditions.

2. Aiming at the desired point-of-impact, partially squeeze trigger to range target and start image stabilization. Red Tag will appear at the center of reticle.

3. Fully squeeze trigger to tag target and begin tracking. Reticle turns Red when system is armed.

   To reposition tag, release trigger and repeat partial squeeze to full pull.

   To reset range, press Clear Range button.

4. Once the firing solution and the tag are optimally aligned the Trigger will unblock allowing the gun to fire.
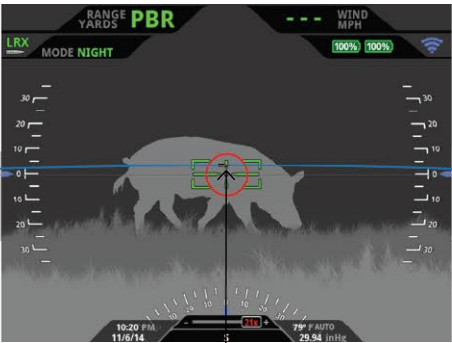
Point Blank Range

NOTE: In some cases, when range to target can not be detected due to environmental conditions, system will default to Point Blank Range.

In NIGHT mode if range can not be detected, the system will automatically set ballistic solution to the Point Blank Range of selected ammo.
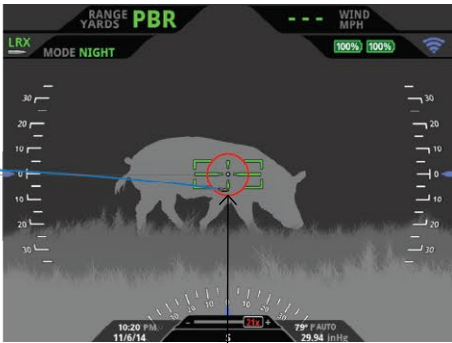
PBR will be displayed in the HUD next to Range.

Line of sight

Trajectory

Example - 75 yds

125yds

Max Range - 250 yds   (depending on ammo)

When target is within Point Blank Range, point of impact will hit within vital kill zone.
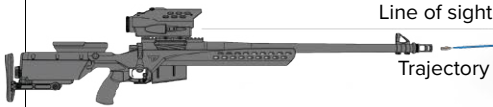
Diagram is for illustration only and is not to scale.

Network Password: trackingpoint

Customer Support

Please call 512-222-0501 between 8:00 AM and 5:00 PM Central
time and we will be happy to help you with any of your PGF issues.

3813 Helios Way Bldg B Suite 290 Pflugerville, Texas 78660