

# RECON 55XR

Thermal Imaging Clip-On

Model: TC605

## Operator's Manual



**FUSION THERMAL**  
INFRARED HUNTING OPTICS

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## DESCRIPTION

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The Recon 55XR is a military grade infrared clip-on (day scope converter). The technology offered in the device delivers state-of-the-art performance in a rugged lightweight design. It was purpose built for simplicity and ease of operation, so while this user manual explains everything in detail it is likely you will never need to read it more than once. The Recon 55XR was built specifically for the purpose of turning your traditional day rifle scope into a thermal scope. All that's needed to deploy is to attach it to your day scope by sliding it over your scope's objective lens bell. It can all be done in a matter of seconds. You just need the right adapter for your scope, and with our large assortment of adapter sizes it's likely we have exactly what you need. The Recon 55XR may also be used as a handheld observation device for countless uses including scouting, security, general observation, navigation, and search/rescue operations.

The unit was built exclusively for the American outdoorsman and was purposefully built for simplicity and ease of operation. While this manual explains everything in detail it is likely you will never need to read it more than once.

## EXCLUSIVE TECHNOLOGY

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### **MORE**

Magnification Optimizing Range Enhancement



### **WAVE12 Premium IR Thermal Sensor**

Enhanced Sensor for Best-In-Class Image Resolution



### **Arclight Ultra HD Germanium Lens**

High Purity Objective for Maximum IR Transmission



### **T3 Three Button Control System w/Center Tower**

Three Buttons Control Everything



### **KISS Menu "Keep It Simple Stupid"**

Simplified English Language Operating Menu



### **Micro Click Focus**

Click-by-Click Precision Target Focus



### **XGEN Next Generation Armor**

Body Armor & Heat Dissipating Body Housing

# TECHNICAL SPECIFICATIONS

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<b>Thermal Sensor</b>	640 x 512, VOx Uncooled (WAVE12)
<b>Sensor Pixel Size</b>	12 micron
<b>Objective Lens Diameter</b>	55mm (Arclight)
<b>Frame Refresh Rate</b>	50 Hz
<b>Field-of-View</b>	460' at 1000 yards
<b>Base Level Magnification Clip-On</b>	1x (before any digital zoom)
<b>Digital Magnification Clip-On Mode</b>	None
<b>Base Level Mag. Monocular Mode</b>	1x (before any digital zoom)
<b>Digital Mag. Monocular Mode</b>	2x & 4x (2-step digital zoom)
<b>Display Type/Resolution</b>	Super HD OLED RGBW / 3.2 Million Dots
<b>Color Palette Modes</b>	4 (white hot, black hot, red hot, rainbow)
<b>Reticle Design Options</b>	N/A
<b>Reticle Color Options</b>	N/A
<b>Multiple Gun Profiles</b>	Yes (save up to 5 different zeros)
<b>Detection Range</b>	Up to 2600 yds
<b>Recognition &amp; Identification Range</b>	None published (see below)*
<b>Start-Up Time/Cold Start</b>	5 Seconds (logo appearance to functional use)
<b>Start-Up Time/Power Saver Mode</b>	Instant (button press to functional use)
<b>Auto Shutdown Battery Saver</b>	Yes, user time is selectable
<b>On Board Video Record</b>	No (external recording possible)
<b>Video Output</b>	Yes (output video signal via USB-C port)
<b>WIFI Equipped</b>	No
<b>Battery Type</b>	(2x) CR123A 3V Batteries or 3.7V Rechargeable
<b>Expected Battery Life</b>	3.5 hours (typical operation)
<b>External Power Supply Capable</b>	Yes (via USB-C port)
<b>Recoil Rating</b>	300 Win Mag
<b>Nitrogen Purged</b>	Yes
<b>Front Lens Housing Outside Diameter</b>	59.1mm
<b>Length</b>	7.75" (housing front to housing back)
<b>Weight</b>	19.7oz (without batteries or lens cover)
<b>UPC</b>	850030459091

\*There is no industry standardized test to determine a Recognition and/or Identification Range, thus they are meaningless specifications for comparative shopping. Unfortunately, many companies publish unconfirmed numbers that only mislead shoppers who are doing good faith research. We do not to participate in this practice.

# BUTTONS, COMPONENTS, AND CONTROLS

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# OPERATING THE RECON 55XR

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## Inserting Batteries and Turning the Unit On/Off

Unscrew the battery lid enclosure and insert (2) two CR123 batteries into the battery compartment. Make note of the correct polarity as the unit will not operate if the polarity is incorrect.

To turn the unit on, press and hold the Power Button until the Fusion Thermal logo appears, about two seconds, and then release. To turn the unit off press and hold the Power Button until the Power Off countdown appears and then release it.

***Special Note:** The Power Button also has an important secondary function of activating the Power Saving mode, explained later in this manual.*

## Getting into Focus

The Recon 55XR is equipped with our top-end Micro Click Focus, the most advanced and precise focus system in the thermal industry. If you've used other thermal scopes, especially ones with a collar focus design, you'll soon find that this is a total game changer. It's exceptionally easy to use and was designed with a large focus knob, so you won't have trouble finding it in complete darkness or have difficulty using it with a gloved hand. Simple and easy to use, just twist directionally until your viewed subject comes into sharp focus.

We offer two variations of the Recon 55XR, one for right hand shooters and one for left hand shooters. Since the clip-on design requires use in front of the day scope an extended reach is required to use the focus knob. To make this task as easy as possible and to maximize comfort we placed the focus knob on the side of the objective lens. Left side for right-handed shooters and right side for left-handed shooters. You will find this to be a significant advantage of the Recon over competitive designs.

***Special Note:** The Recon optical system was designed to provide an outstanding depth of field. After initial focus you will find that near to far target focus will be achieved with only a few micro clicks.*

## Operating Mode

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The Recon 55XR has two operating modes, Clip-On mode and Monocular mode. The operating mode is easily changed by quick menu selection, and the firmware for each mode has been uniquely designed so that both are optimized for maximum performance.

### Clip-On Mode

When the Recon 55XR is operated in Clip-On mode the unit is optimized for the task of turning your day scope into a thermal scope. The display screen size is minimized, the size of the menu is reduced, and the menu location is moved to the center of the display screen. This is done to maximize the use of your day scopes optical zoom, and since all of the zooming is done with your day scope the digital zoom feature is disabled when the unit is operated in clip-on mode.

### Monocular Mode

When the Recon is placed into Monocular Mode all shooting related firmware options are removed from the menu. You will notice that the screen expands out to its maximum and the menu increases in size and repositions itself making it easy to read.



A digital zoom feature is also enabled. Everything is perfectly optimized for handheld observation. Additionally, to make the device comfortable to use a rubber eye boot is included for monocular mode use.

**Helpful Tip:** We placed operating mode selection as the very first item on the menu so that switching between the two modes could be accomplished quickly and easily. To change simply perform the following sequence: 1. Long press the Menu Button. 2. Quick press the Menu Button. 3. Quick press the Up -Button. 4. Quick press the Menu Button. 5. Long press the Menu Button to exit the menu or wait for the menu will disappear.

## T3 – 3 BUTTON CONTROL SYSTEM W/ CENTER TOWER

The Recon 55XR features our acclaimed T3 - Three Button Control System, a highly intuitive three button design with a center tower that makes using your thermal simple and easy. Every command you need is right at your fingertips, and the **Menu Button** (center tower) evenly splits the button control panel, so you always know where your fingers are even in the dark. It's also the perfect complement to our KISS (Keep it Simple Stupid) Simplified Operators Menu.

In addition to assisting your menu navigation each of our T3 buttons have Smart Button assignments, which allow you to quickly execute important commands without the need to enter the **Main Menu**.

**Special Note:** Smart Button functions change based on the selected operating mode



### Up Button (button closest to the objective lens)

As a Smart Button, the **Up Button** has changing assignments based on the mode selected:

#### Clip-On Mode

- 1. Quick Press:** Give the **Up Button** a **quick press** and it changes the current **Color Palette** setting. The options are: White Hot, Black Hot, Red Hot, and Rainbow. Successive **quick presses** will rotate thru each color palette option.
- 2. Long Press:** No function assigned.

#### Monocular Mode

- 1. Quick Press:** Give the **Up Button** a **quick press** and it changes the current **Color Palette** setting. The options are: White Hot, Black Hot, Red Hot, and Rainbow. Successive **quick presses** will rotate thru each color palette option.
- 2. Long Press:** If you press and hold the **Up Button** you will initiate the digital zoom feature. The first **long press** will double your base level optical magnification of 1X to 2X digital. The next **long press** and hold will double the 2X digital to 5X digital. The next **long press** and hold will bring you back to your 1X base level optical magnification.



### Menu Button – Center Tower

As a Smart Button the **Menu Button** has two assignments and are identical for both modes:

- 1. Quick Press:** Give the **Menu Button** a **quick press** and it will manually NUC the sensor. NUC (Non-Uniformity Correction) is a process of sensor recalibration that keeps the thermal system

operating at peak performance. The Recon 55XR has an Automatic NUC feature that when turned on (menu option) will cause the unit to automatically NUC the system when required (see page 17). The manual NUC feature is provided so you can NUC the sensor anytime you want, or if you would prefer not to utilize the Automatic NUC feature and do it manually when required.

**2. Long Press:** If you press and hold the **Menu Button** you will enter the **Main Menu** which is your access point for the full complement of Recon 55XR features and settings.

***Special Note:** When a NUC occurs, you will hear a clicking noise and observe a momentary screen freeze caused by the activation of the internal shutter. This is completely normal and an indication that everything is operating properly.*



## **Down Button (button closest to the eyepiece)**

As a Smart Button the **Down Button** has one assignment and is identical for both modes:

**1. Quick Press:** Give the **Down Button** a **quick press** and it changes the current **Image Mode** setting. Successive **quick presses** will rotate thru each of the six available **Image Mode** options, read full explanation in Main Menu > Image Mode section of this manual.



## **Power Button**

While the **Power Button** is not part of our control system it does have a Smart Button assignment. If you give the **Power Button** a **quick press** the unit will enter a Power Saving mode and turn off the display and other non-critical functions. A second **quick press** instantly brings the unit back to full operational status. This feature is not only helpful for extending battery life but also keeps the display from illuminating your surrounding environment while not being held to your eye.

***Special Note:** When device is placed in Power Saver mode battery consumption is minimized but some electronics are still operating and thus the device will completely drain the batteries if not turned off prior to storing.*

## **KISS (KEEP IT SIMPLE STUPID) SIMPLIFIED MENU**

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You're going to love how easy the Recon 55XR is to operate. Our simplified layered menu system uses words, not icons, and was written in English, for Americans by Americans. It is so simple to use you could easily operate it without reading this manual. For access to everything press and hold the **Menu Button** (Center Tower) until the **Main Menu** appears. You will note that the **Main Menu** has a number of settings and features at your disposal so you may get the best experience from your thermal. Feel free to explore everything as there is nothing that you can break. Full explanations of each feature to follow.

The structure of the menu will change based on the currently selected operating mode. A menu layout is given below with explanations for everything to follow.



## **Menu - Clip-On Mode**

Device Use  
Gun Profile  
POI Fine Tuning @ 50 Yards  
Color Palette  
Manual NUC  
Automatic NUC  
Automatic Power Off, minutes  
Image Mode  
Thermal Image Gain (GN)  
Display Brightness (BR)  
Thermal Sensitivity (SN)  
Image Detail Enhancement (DE)  
Video Output  
Menu Transparency  
Menu Display Position  
Blind Pixel Correction  
Restore Position Settings  
Device Factory Reset  
Software Version

## **Menu - Monocular Mode**

Device Use  
Color Palette  
Manual NUC  
Automatic NUC  
Automatic Power Off, minutes  
Image Mode  
Thermal Image Gain (GN)  
Display Brightness (BR)  
Thermal Sensitivity (SN)  
Image Detail Enhancement (DE)  
Video Output  
Menu Transparency  
Menu Display Position  
Blind Pixel Correction  
Status Bar Position  
Status Bar Display  
Device Factory Reset  
Software Version

## **Device Use**

The Device Use menu option is where you select the desired operating mode. There are two options Clip-On and Monocular. You will note that the main menu options change based on which operating mode is selected.

## Gun Profile – (Clip-On Mode Only)

When using your Recon 55XR as a clip-on the first step is to select a **Gun Profile**.

The Recon 55XR allows you to select and save up to five different **Gun Profiles**. Each of the profiles are designated as a G number: G1, G2, G3, G4 and G5. Having multiple profiles is very helpful for anyone wanting to use their Recon 55XR on multiple guns as it creates an easy way to save any point-of-impact fine tuning adjustments that were required to align the device with the zero of a particular day scope.

***Helpful Tip:** For easy reference, the Recon 55XR will display the current gun profile in the upper left-hand corner of the display screen (clip-on mode only).*

## POI Fine Tuning @ 50 Yards – (Clip-On Mode Only)

Thermal clip-on devices do not have a direct optical path to the target. If you look through your day scope with a thermal clip-on attached what you'll see is a video image of the target on a display screen, and not the actual target. Thus, it is impossible to expect that no POI (point-of-impact) shift will ever occur when using any thermal clip-on with a day scope. Fortunately, it's an easy one-shot fix to correct any error with our **POI Fine Tuning @ 50 Yards** menu feature. Simply attach your thermal to your day scope and fire one round at a target set at 50 yards distance. It does not matter at what distance your day scope is zeroed at. Measure any deviation from where the bullet impacted and where it should have impacted given your day scopes zero. If any significant POI shift has occurred enter the **POI Fine Tuning @ 50 Yards** menu and make any needed adjustments. Use the **Menu Button** to toggle between the UP/Down Left/Right adjustment areas, indicated by yellow arrows, and use the **UP Button** and **Down Button** to enter the corrective inputs. When adjusting you will notice that the display will show you a letter to indicate the direction you are moving the bullets point-of-impact, L=left, R=right, U=up, D=down. Adjust accordingly to the nearest measurement as indicated on the display. After making a correction press and hold the Menu Button to save and exit. The system will save this correction and remember it under the selected gun profile. Simply remember to use this gun profile anytime you want to use the Recon 55XR on that particular scope.

*As an example: If your bullet is impacting 3" to right you will want to move it 3" to the left. Press the **Down Button** and an L will appear in the display indicating you are moving the point-of-impact left. In this example the correction variable you would want to select would display as:*

*<-> -11 L  
2.97 in.*

As you can see in the example above the adjustment function displays four pieces of information. The first is a set of arrows that indicate what direction of adjustment you are making, left/right or up/down. The second is a correction variable that can be obtained from the included **POI Correction Instructions**. Using the correction variable is the simplest and fastest way to make a POI error corrections. It is an alternative to using the displayed number in inches, discussed below. The third is the direction you are moving the bullets point-of-impact for the correction. L for left, as shown in this example. The fourth piece of information is how many inches you have moved to correct the POI error, the adjustment in inches selected would be the nearest measurement available in the device to the observed POI error. In the example above we were striking the target 3" to the right, the closest variable available

in the device is 2.97” so this is the variable we would choose. To make things as simple as possible a complete guide called **POI Correction Instructions** can be found at the end of this manual or in the Downloads tab on the Recon 55XR product page found at [www.fusionthermal.com](http://www.fusionthermal.com).

**Special Note:** When entering the POI Fine Tuning @ 50 Yards function the unit will display for five seconds the following message: “Press and Hold the “Menu” Button to Save. This message is a simple reminder of how to save your adjustments and exit the function.

**Helpful Tip:** All POI fine tuning is done via the thermal device; you should never adjust your day scope to correct any observed POI shift.

## Color Palette

The Recon 55XR offers four different **Color Palette** options: **White Hot**, **Black Hot**, **Red Hot** and **Rainbow**. A color palette choice determines how hot and cold subjects appear when you are using your thermal device. Which color palette works best for you is a personal choice and something you will determine over time from using the device. However, we can offer a few hints from our experience. **White Hot** and **Red Hot** (red hot is white hot with the hottest subjects displayed in red) are generally best for detecting the presence of heat generating subjects. These are the best choices for finding things quickly. **Black Hot** generally offers the greatest resolution potential and may be helpful when you want to see the maximum amount of detail on an observed target. **Rainbow** is helpful when there are many competing sources of heat in the same scene. When this happens the Rainbow color palette will assign a unique color to the fine details of each object with a temperature differential.

**Smart Button Accessible:** While Color Palette may be adjusted from the Main Menu it is also easily adjusted by **quick press** the **Up Button** during normal operation.

## Manual NUC and Automatic NUC

To maintain peak performance thermal devices occasionally need to perform a sensor temperature recalibration commonly referred to as **NUC (Non-Uniformity Correction)** – pronounced “nuke”. This required function maintains top performance and eliminates image defects such as vertical bars and phantom images. When the **Automatic NUC** feature is set to the “On” position the Recon 55XR software will detect when a NUC is required and automatically perform the calibration for you, no user action will be required. Keeping the Automatic NUC setting in the “On” position is the factory default and highly recommended.

A user may also manually NUC the device at any time by selecting **Manual NUC** from the menu or by a **quick press** of the **Menu Button**.

**Special Note:** When a NUC occurs, you will hear a clicking noise when the internal shutter deploys, and the user may observe a momentary screen freeze. This is completely normal and an indication that everything is operating properly.

## Automatic Power Off, Minutes

To preserve battery life the firmware includes an automatic power-off feature. This menu feature allows the operator to disable this feature, selecting “off”, or select the automatic power-off countdown time. When a countdown time is selected the device will automatically power-off if no user input is detected for the specified period of time. The auto power-off time options available are 10, 20, 30, 40, 50, and 60 minutes.

## Image Mode

The **Image Mode** section of the menu is where you go to control all your sensor settings, namely **Thermal Image Gain**, **Display Brightness**, **Thermal Sensitivity**, and **Image Detail Enhancement**. Our extensive testing and experience have led us to develop three preset sensor settings that will cover virtually all operational situations you may encounter. They are **Standard**, **Enhanced**, and **Search/Track/Rescue**. We also offer a **User Defined** option that will allow you, the thermal operator, to adjust and save up to three different combinations of sensor settings that may be required for your unique situations.

**Standard:** As expected the **Standard** image mode is perfect for most observation requirements. Use this as your regular image mode as it offers the near perfect balance of all sensor settings and results in maximum battery life.

**Enhanced:** The **Enhanced** image mode brings additional brightness to the scene and may be helpful under adverse observation conditions such as rain, fog, or high humidity.

**Search/Track/Rescue:** This Fusion Thermal exclusive provides the thermal operator with a super contrast mode that dramatically reduces the observation of noncritical items in favor of displaying more important targets of interest. When you want to maximize your chances of finding something important to you, **Search/Track/Rescue** is how you get it done.

**User Defined:** Our operating system allows you to create your own personalized **Image Mode** profiles to meet your unique operating requirements. Each of these user defined image modes may be adjusted directly from the main menu. First, select the user mode you want to modify, **User 1**, **User 2** or **User 3**. After a user mode has been selected scroll down directly below in the menu and modify one or more of the four available sensor settings, **Thermal Image Gain**, **Display Brightness**, **Thermal Sensitivity**, and **Image Detail Enhancement**. When finished with your modifications quick press Menu Button to save and navigate away, the system will remember these settings for both Clip-On Mode and Monocular Mode.

***Helpful Tip:** For easy reference, the Recon 55XR will display the current Image Mode setting in the upper right-hand corner of the display screen, monocular mode only, designated by an S for Standard, E for Enhanced, STR for Search/Track/Rescue or U1, U2 or U3 for the User Defined settings*

***Special Note:** Utilization of the Device Factory Rest menu feature will return all Image Mode settings back to factory default settings.*

## Video Output

While the Recon 55XR has no onboard video storage capabilities it does have the ability to export a video signal and may be connected to an external video display/recorder. If exporting a video signal is desired simply turn this feature to the “On” position. To minimize power consumption, it is recommended that the setting remain in the “Off” position when not being used.

## Menu Transparency

To keep the **Main Menu** as unobtrusive as possible the user can change the transparency of the menu background from very dark to nearly transparent. To make a transparency adjustment select the **Menu Transparency** menu option and select the setting of your preference.

The options are 0 through 5. With setting 0 offering a dark black (non-transparent) background, and setting 5 more of a transparent or “see thru” option.

## **Menu Display Position – (Clip-On Mode Only)**

When the device is set to clip-on mode the menu is reduced in size and centered in the display screen. The size and position are appropriate for this application as your scope’s magnification will magnify the image appropriately. Occasionally after making a POI adjustment the menu can be slightly off-center while being used as a clip-on. If the situation should arise you may use this function to better center the menu. Simply enter the **Menu Display Position** menu option via a long press of the **Menu Button**, and use the **Up Button** or **Down Button** to make the appropriate adjustment to the display position. Use the **Menu Button** to toggle between the up/down and left/right adjustment feature, see indicating arrows. **Long press** the **Menu Button** to save and exit.

## **Menu Display Position – Monocular Mode**

When the device is set to monocular mode the menu options for **Menu Display Position** are Up, Center, and Down. Choose your desired position and press the **Menu Button** to save the selection.

## **Blind Pixel Correction**

There are hundreds of thousands of pixels of the face of every thermal sensor. Occasionally one or more of these pixels strays out of calibration and needs to be corrected, you’ll know this has occurred when a white or black dot suddenly appears on your screen that cannot be removed by performing a NUC. These small dots (blind pixels) are normal, harmless, and are to be expected with all thermal devices. Fortunately, they are easily fixed with our built-in correction feature. Here is how you fix it: Go to the **Blind Pixel Correction** section of the **Settings** menu and enter the function. A small targeting reticle will appear with a flashing dot in the middle. Move the flashing dot so that it is directly over the blind pixel using the **Up Button** and **Down Button** to move the reticle, **quick pressing** the **Menu Button** to change between horizontal and vertical movement. Once the flashing dot is directly over the blind pixel **long press** the **Menu Button** to recalibrate and exit the function. You will get a message in the status bar that confirms the system is saving your recalibration.

***Special Note:** While moving the reticle into position holding the Up or Down button will move the reticle quickly, while quick pressing will allow you to slowly fine tune the position.*

## **Status Bar Position – (Monocular Mode Only)**

When the device is in Monocular mode there is a status bar visible to the user. The position of this status bar in the display may be set to appear at the top or the bottom of the display depending on the menu selection chosen under this menu feature.

## **Status Bar Display – (Monocular Mode Only)**

Some users occasionally want to use their device with as clean and unobstructed view as possible. If this is appealing to you the **Status Bar Display** menu feature is available. This function allows you to set the number of seconds the monocular mode status bar will display after powering on the unit before disappearing from view. When active the only time the status

bar will reappear is when the digital zoom is used. To keep the status bar visible at all times, choose the menu option “off”.

## Restore Position Settings – (Clip-On Mode Only)

This feature is used to erase any adjustments for a selected gun profile that you made to the settings under POI Fine Tuning @ 50 Yards. It only resets the information for the currently selected gun profile, it does not reset information for all gun profiles.

## Device Factory Reset

As the name implies this feature will completely reset all software settings back to their factory default positions. This includes all modified user preferences and sighting adjustments. Be sure you want to reset everything before you use this feature. If you do navigate to this feature and select “Yes”.

## Software Version

Positioned to the right of this menu option is the current software version of the device.

## OTHER FUNCTIONAL AND OPERATIONAL CONSIDERATIONS

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### Digital Zoom

The Recon 55XR has a base level magnification of 1X. When in monocular mode it also has two additional digital magnification steps that can be accessed by a **long press** of the Up Button. The first **long press** will double your base level optical magnification of 1X to 2X and the next **long press** will double it again from 2X to 4X. The next **long press** will bring you back to your 1X base level optical magnification.

### Power Saving Mode

This device is equipped with a special **Power Saving** feature that allows the operator to turn off non-essential device operations during periods of inactivity without completely shutting down the unit. This has the advantage of saving power with the ability to instantaneously return the unit to full operating function with a single **quick press** of the Power Button. This feature is not only helpful for extending battery life but also keeps the display from illuminating your surrounding environment while not being held to your eye.

***Special Note:** Please familiarize yourself with this feature as sometimes operators mistakenly think their device is off when it is in Power Saver mode. When device is placed in Power Saver mode battery consumption is minimized but some electronics are still operating, and thus will completely drain the batteries if not turned off prior to storing.*

### Battery Power Requirements

The Recon 55XR is typically powered by (2) two disposable CR123A 3-volt lithium batteries or two rechargeable 3.7-volt lithium batteries. This is the simplest and most direct way to power the device, providing an average run time of 3.5 hours from each set of good quality fully charged quality batteries. A longer run time may be achieved by diligent use of the **Power Saving** mode. When two new 3-volt CR123 disposable batteries are inserted into the device the battery status indicator will show a solid green battery icon in the top right corner of the status bar. If rechargeable 3.7-volt batteries are used the unit will display the icon in blue. If the



batteries fully deplete the unit will flash a red message, Change Batteries, on the status bar just prior to shutting down.

An alternative method is with the use a Fusion Thermal sourced external battery pack connected to the USB-C interface. These external battery packs can be used alone (no CR123 batteries installed), or in conjunction with installed CR123 batteries. If you use both the device will utilize the power from the external battery source first, and once depleted, rely on the internal CR123 batteries. When the device is pulling its power from an external battery source the battery indicator icon in the right corner of the status bar will change to USB displayed in green which is your indicator that the unit is pulling power from an alternative source.

**Helpful Tip:** *Never mix old and new CR123A batteries, or batteries from different manufacturers as this will result in diminished run time and potentially damage the unit. ALWAYS remove batteries before storing, even if the storage is short-term. Leaving batteries inside the unit while not in use will completely deplete them in short order and potentially cause corrosion and damage to the unit not covered by warranty. All user settings will be retained even if batteries are removed.*

## **Storage and Transportation**

The device should be stored in a dark, dry, and well-ventilated environment. Always utilize the objective lens cover when not in use.

**Helpful Tip:** *Store this unit as you would your firearms.*

## IMPORTANT NOTES & WARNINGS

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The Recon 55XR is a precision infrared electro optical device that was designed and constructed to the highest industry standards. It will provide years of reliable service if properly cared for and maintained. Below are important notes and warnings that should be observed to achieve the longest and most productive useful life.

- Never attempt to modify, alter, or repair your device.
- Only use batteries from known manufactures that are purchased from reliable sources.
- Never knowingly use counterfeit or off-branded batteries.
- Never intentionally expose to direct sunlight or other high intensity light sources.
- After turning off wait five seconds before turning back on.
- Protect the device from strong side impacts.
- Only use high grade lens cleaning cloths to clean lens surfaces.

### Warranty Registration

To register your warranty please visit <https://www.fusionthermal.com/support/warranty-registration/> or scan the QR Code directly below.



### Warranty Information

For complete information about our Fusion Thermal Qualified Thermal Products/Devices Consumer Warranty please visit <https://www.fusionthermal.com/support/warranty/> or scan the QR Code directly below.



## ITAR Control Statement

*This product is subject to the International Traffic in Arms Regulations (ITAR). You may not export, re-export, resell, transfer, or otherwise dispose of this product to any other country or prohibited person without first obtaining approval from the U.S. Department of State, Directorate of Defense Trade in accordance with the ITAR, Title 22, and Code of Federal Regulations Part 120-130. Diversion contrary to U.S. law is prohibited.*

For complete information about our *Export Restrictions Policy* please visit <https://www.fusionthermal.com/export-policy/> or scan the QR Code directly below.



## Technical Support

Questions about your unit? Need technical support? We're ready to help. We are United States based and available Monday thru Friday 8:30 AM to 6:00 PM CST.

Please call us at 985-375-1185.

