

# BOARMASTER 40 PRO

Thermal Imaging Riflescope

Model: TRS101

## Operator's Manual



**FUSION THERMAL**<sup>®</sup>  
INFRARED HUNTING OPTICS

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## DESCRIPTION

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The Boarmaster 40 PRO is a state-of-the-art precision infrared rifle scope. The technology offered in the scope delivers best-in-class performance in a compact 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. As the name implies the Boarmaster 40 PRO was built for hunting, but it may also be used as an observation device for a variety of applications including security, general observation, navigation, and search and rescue. The unit has been equipped with an exceptionally high-quality quick release scope mount, so we encourage you to remove it from your gun whenever and wherever you have an alternative use.

## EXCLUSIVE TECHNOLOGY

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### **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



### **FAST™ Compatible QD Mount**

Easy Integrated Mounting of Available Offset Red Dot Mount



### **RAZR**

Recoil Activated Zoom Reduction

# TECHNICAL SPECIFICATIONS

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<b>Thermal Sensor</b>	384 x 288, VOx Uncooled (WAVE12)
<b>Sensor Pixel Size</b>	12 micron
<b>Objective Lens Diameter</b>	40mm (Arclight)
<b>Frame Refresh Rate</b>	50 Hz
<b>Field-of-View</b>	360' at 1000 yds (3.0x optical magnification)
<b>Base Level Magnification</b>	3.0x (before any digital zoom)
<b>Digital Magnification</b>	6x & 12x (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, predator)
<b>Reticle Design Options</b>	7 (plus a "no reticle" 8th option)
<b>Reticle Color Options</b>	5 (white, black, red, green, blue)
<b>Multiple Gun Profiles</b>	Yes (save up to 5 different zeros)
<b>Detection Range</b>	Up to 1900 yds
<b>Recognition &amp; Identification Range</b>	None published (see below) *
<b>NETD (Noise Equivalent Temperature Difference)</b>	<20mK
<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 (30 min. turn off with no use)
<b>On Board Video Record</b>	No
<b>Video Output</b>	No
<b>WIFI Equipped</b>	No
<b>Battery Type</b>	(2x) 18500 Rechargeable – Protected Type Only
<b>Expected Battery Life</b>	7+ 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>	49.7mm (lens cover interface)
<b>Length</b>	6.5" (housing front to housing back)
<b>Weight</b>	19.22oz (without mount or batteries)
<b>UPC</b>	850030459336

\*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 take the liberty of publishing numbers that only serve to mislead shoppers who are doing good faith research. We do not participate in this practice.

\*\*Verified by Fusion Thermal internal laboratory tests with supplied batteries in new condition that were fully charged at 68 degrees Fahrenheit.

# BUTTONS, COMPONENTS, AND CONTROLS

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# OPERATING THE BOARMASTER 40 PRO

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## Inserting Batteries and Turning the Unit On/Off

Unscrew the battery lid enclosure and insert two (2) protected type 18500 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 also has an important secondary function of activating the Power Saving mode, explained later in this manual.*

**Caution:** *Use protected 18500 batteries only! Protected 18500 batteries have a small electronic circuit integrated into the cell packaging and are a safer alternative to non-protected variants. Protected 18500 batteries are the only types authorized for use.*

## Getting Into Focus

**Display Focus:** With the unit powered on you are now ready to set it up for your personal use, and this begins with the Display Focus located on the eyepiece. Properly adjusting the Display Focus is critical for the best performance as you will want the reticle and information written on the internal display screen to look perfect for your vision. Every user will need to make this adjustment as the strength of everyone's vision is different. Here's how to do it: With the unit powered on, push your eye against the rubber eye cup far enough so you can see the entire display screen and the information displayed. Next twist the eyepiece back and forth until the reticle and other information displayed on the display screen comes into sharp focus.

**Helpful Tip:** *If you leave the front objective lens cover in place when adjusting the Display Focus you will not be distracted by images created by the thermal, so keep it covered until you've completed the task of setting the Display Focus.*

**Target Focus:** The Boarmaster 40 PRO 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 this system to be vastly superior. It is 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.

**Special Note:** *The Boarmaster 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.*

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

The Boarmaster 40 PRO features our acclaimed T3 - Three Button Control System, a highly intuitive three button design with a central tower that makes operating 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 (see page 8).

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



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

As a Smart Button, the **Up Button** has two assignments:

- 1. Quick Press:** Give the **Up Button** a **quick press** and you will initiate the digital zoom feature. The first **quick press** will double your base level optical magnification from 3x to 6x digital. The next **quick press** will double the 6x digital to 12x digital. The next **quick press** will bring you back to your 3x base level optical magnification.
- 2. Long Press:** If you **long press** the **Up Button** it changes the current **Color Palette** setting. The options are: White Hot, Black Hot, Red Hot, and Predator. Successive **long presses** will rotate thru each color palette option.



### **Menu Button (center tower)**

As a Smart Button, the **Menu Button** has two assignments:

- 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 Boarmaster 40 PRO has an Automatic NUC feature that when turned on (menu option) will cause the unit to automatically NUC the system when required (see page 12). 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.
- 2. Long Press:** If you **long press** and hold the **Menu Button** you will enter the **Main Menu** which is your access point for the full complement of Boarmaster 40 PRO 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 two assignments:

- 1. Quick Press:** Give the **Down Button** a *quick press* and it changes the current **Reticle Type** setting. Successive *quick presses* will rotate thru each of the seven available **Reticle Type** options and the eighth no reticle option.
- 2. Long Press:** If you *long press* and hold the **Down Button** it changes the current Reticle Color. The options are Red, Green, Blue, White and Black. Successive *long presses* will rotate thru each reticle color option.



## Power Button

While the **Power Button** is not part of our control system it does have 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 the device is placed in Power Saver mode battery consumption is reduced, 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 OPERATORS MENU

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You're going to love how easy the Boarmaster 40 PRO 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 five master categories, **Image Mode**, **Color Palette**, **Sighting**, **Video Recording** and **Settings**. Under each of these master categories reside sub menus, each of which leads to functions that accomplish specific tasks.

### Main Menu > Image Mode

The **Image Mode** section of the menu is where you go to control all your sensor settings, namely **Brightness**, **Contrast**, **Sensitivity**, and **Detailing**. 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. To create your unique profile, go to the **User Defined** menu option under the **Image Mode** section of the menu. There you will find the three profile options, **User 1**, **User 2**, and **User 3**. You can enter each of them, one at a time, and adjust the four available sensor parameters as desired. The sensor parameters available are **Brightness**, **Contrast**, **Sensitivity**, and **Detailing**. To create a unique profile simply navigate to each of the parameters and use the **Up Button** and/or **Down Button** to adjust. Press the **Menu Button** to save your adjustment. Move from one parameter to the next. When you are done simply exit the menu and the device will save your adjustments.

***Helpful Tip:** For easy reference, the Boarmaster 40 PRO will display the current Image Mode setting in the upper left-hand corner of the display screen, 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:** The default setting for each User Defined image mode is the same as the Standard image mode. If you want to return any User Defined Image Mode back to its default, there is a Yes/No menu option labeled Reset Image Mode for this purpose. Using this feature will only reset the current User Defined profile to default settings.*

## Main Menu > Color Palette

The Boarmaster 40 PRO offers four different **Color Palette** options: **White Hot**, **Black Hot**, **Red Hot**, and **Predator**. 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. **Predator** is helpful when there are many competing sources of heat in the same scene. When this happens the Predator color palette will assign a unique color to 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 long press the **Up Button** during normal operation.*

## Main Menu > Sighting

The **Sighting** section of the **Main Menu** is where you go to set and control all subjects related to shooting. The options are **Select a Gun**, **Zero the Scope**, **Reticle Type**, **Reticle Color**, and **Reticle Brightness**.

### Select a Gun Profile

When you start the zeroing process the first step is to select a **Gun Profile**.

The Boarmaster 40 PRO 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 Boarmaster 40 PRO on multiple guns as it creates an easy way to save your zero settings for each gun under its own unique profile. Profiles may also be used to save zero settings when you want to shoot a different ammunition out of the same gun or have multiple zero distances for the same gun. In addition to zero settings, the selected reticle type, reticle color and reticle brightness will be saved under your gun profile.

**Helpful Tip:** For easy reference, the Boarmaster 40 PRO will display the current gun profile in the upper left-hand corner of the display screen.

## Zeroing the Scope

With the Boarmaster 40 PRO zeroing the scope is very easy. To make things simple and straight forward we split the vertical (Up-Down) adjustment from the horizontal (Left-Right) adjustment. When you sight in your scope you start with one type of adjustment and then move to the other. After each adjustment a quick or long press of the Menu Button will save your current adjustment and bring you up one level in the menu so you can continue with additional adjustments if needed. There is another menu option called Back to Center if you want to bring all adjustments back to 0.00 and start over.

Digital zoom MAY be used during the sighting in process but will change the adjustment value per button press, refer to the chart below. Digital zoom must be engaged prior to entering the Zeroing the Scope menu.

<b>Boarmaster 40 PRO Adjustment Values</b>	
3x Base Level Magnification	<b>.20"</b> @ 50 yds per button press
6x Digital Zoom	<b>.10"</b> @ 50 yds per button press
12x Digital Zoom	<b>.05"</b> @ 50 yds per button press

**Up-Down:** To make a vertical point-of-impact adjustment enter the **Up-Down** adjustment function by quick pressing the **Up-Down** menu option.

**Special Note:** When you enter this area, you will notice two sets of red numbers in the center of the top status bar, one at the very top and one just below. The numerical display at the very top shows your current session adjustment, it displays the adjustments you are making now. The second set of numbers, the lower set, displays the cumulative result of all adjustments.

From this screen aim at your target and fire a shot. Note the point-of-impact as compared to your original aiming point. If your bullet struck the target above your original aiming point you will need to lower the bullets point-of-impact. To accomplish this simply **quick press** the Down Button while taking note of the adjustment amount in the top status bar. You will also notice that a downward pointing directional arrow will appear on the top status bar that confirms the direction you are moving the bullets point-of-impact. Make your adjustments as needed, and when you are finished **quick press** the Menu Button to save and exit up to the next level. If you need to go back and tweak an adjustment you will notice that the software will restore your current session values to 0.00 while keeping your cumulative adjustment values exactly as you left it during your last session. This feature is very helpful so you can keep up with your overall cumulative adjustments, while observing your current adjustments.

**Left-Right:** The process of sighting-in for **Left-Right** point-of-impact errors is the same as described above for **Up-Down** with expected substitutions. The Up Button is used to move the bullet point-of-impact to the right, and the Down Button is used to move the bullet point-of-impact to the left.

**Back to Center:** This **Sighting** menu option acts like a reset button and if selected will bring the sight-in adjustments for both **Up-Down** and **Left-Right** back to 0.00. The reset only applies to the currently selected gun profile and will only reset sight-in adjustments. It will not reset reticle type, reticle color, or reticle brightness. Nor will it reset any information in other gun profiles.

***Helpful Tip:** While our system will allow you to sight-in at any distance, we highly recommend sighting-in for a 50 yard zero. Why? The Boarmaster 40 PRO mounting system was optimized for the AR Style Weapon platform and as such a 50 yard zero will provide a Point-Blank-Range (PBR) for a 5" target radius up to and beyond 300 yards for many common AR cartridges. (PBR denotes the distance over which a certain firearm can hit a given size target without the need to compensate for bullet drop.) Additionally, all thermal scopes, as compared to traditional day scopes, are handicapped by limited target resolution, and a 50-yard sight-in distance makes things easy.*

## Reticle Type

The Boarmaster 40 PRO offers seven different reticle options and an eighth “no reticle” option. The “no reticle” feature is helpful when the Boarmaster 40 PRO is used as an observation device. The reticle options are **Mil-Hash, Plex Solid, Plex-Open, Fine Cross, German 4 Dot, Dot,** and **Pro Hunter**.

***Smart Button Accessible:** While the Reticle Type may be adjusted from the Main Menu it is easily adjusted by **quick press** the Down Button during normal operation.*

## Reticle Color

The Boarmaster 40 PRO offers five different **Reticle Color** options: **Red, Green, Blue, White,** and **Black**. The best color selection often depends upon the color palette selected and individual vision considerations. The variety of reticle color options assures that a high contrast reticle color will always be available.

***Smart Button Accessible:** While the Reticle Color may be adjusted from the Main Menu it is easily adjusted by **long press** the Down Button during normal operation.*

## Reticle Brightness

The Boarmaster 40 PRO offers five different **Reticle Brightness** settings with **Bright 1** being the lowest level of brightness and **Bright 5** being the highest. The operator simply needs to select the brightness level best suited to their needs.

## Main Menu > Settings

The **Settings** section of the **Main Menu** is where you go to set and control many of the operational features of the Boarmaster 40 PRO, namely **Automatic NUC, RAZR, Blind Pixel Correction, Auto Power Off, Menu Transparency, Status Bar Display, On Off Power Button, Zoom Value Image and Date, Time, Device Factory Reset.**

## 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 Boarmaster 40 PRO 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.

***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.*

***Helpful Tip:** A manual NUC can be performed at any time with a quick press of the Menu Button.*

## RAZR (Recoil Activated Zoom Reduction)

When the RAZR function is turned on your scope will activate a sensor that will detect the vibration associated with the recoil of your firearm. When recoil vibration is detected, any digital zoom currently activated will immediately be eliminated and the scope will return to lowest “base level” magnification. This is very helpful when higher magnification is desired on the first shot, but a wider field of view is desired for follow up shots. Patent pending.

## 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, causing a white or black dot to suddenly appear 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, you can fix this with our built-in correction feature. First, 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. Second, move the flashing dot so that it is directly over the blind pixel using the **Up Button** and **Down Button**. A quick press of the Menu Button will toggle between horizontal and vertical movement. Third, once the flashing dot is directly over the blind pixel **long press** the **Menu Button** to recalibrate the pixel 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 in steps, while a **quick press** will allow you to slowly fine tune the position.*

## Auto Power Off

To preserve battery life the software includes an automatic turn-off feature. When set to the “On” position the Boarmaster 40 PRO will automatically power down if no device use has been detected for 30 minutes.

## Menu Transparency

To keep the top **Status Bar** and **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, go to the **Settings** section of the **Main Menu** and navigate to **Menu Transparency**. Setting 1 makes the menu background dark black (non-transparent) and setting 5 makes the menu more “see thru” or (transparent).

## Zoom Value Image

The traditional way to express magnification levels in thermal scopes is in steps. For example, the first “base” level magnification would be 1x, the next step would be 2x and the next step would be 4x, each step doubling the magnification of the prior. In the Boarmaster 40 PRO we would call this traditional view “Digital (Thermal Core)”. For those users who would prefer a display of magnification level more in line with what is actually being experienced while viewing the scene, we have added a second option. We call this option Total (Digital + Optical) and this is the devices’ default setting. If this option were selected for the Boarmaster 40 PRO, the displayed levels of magnification would be 3x, 6x and 12x.

## Device Factory Reset

**The Device Factory Reset** is a quick and easy way to restore device menu settings back to the original default factory configuration. This function **does not** reset saved user settings such as User Image Mode adjustments, Gun profiles, or Sight-In adjustments.

## About the Device

This section of the menu contains specific information about the device including the software version.

# OTHER FUNCTIONAL AND OPERATIONAL CONSIDERATIONS

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## Digital Zoom

The Boarmaster 40 PRO has a base level magnification of 3x. It also has two additional digital magnification steps that can be accessed by a **quick press** of the **Up Button**. The first **quick press** will double your base level optical magnification from 3x to 6x. The next **quick press** will double the 6x to 12x. The next **quick press** will bring you back to your 3X base level optical magnification.

***Helpful Tip:** We are often asked if digital zoom may be used during the sighting in process and the answer is yes. The software will keep up with all adjustments necessary to keep everything aligned. However, you will need to engage the digital zoom before entering the Zeroing the Scope menu section and UP-Down or Left-Right adjustment areas.*

## Status Bar

When the unit is powered on you will notice a small **Status Bar** across the top of the viewing screen. The status bar is there to provide constant communication of important information about the unit’s operation.

The status bar displays the following information:

**Currently Selected Gun Profile** (top left corner – first line, left corner)

**Color Palette** (top left corner – first line, second from left)

**Automatic NUC Icon** (if activated) – first line, third from left)

**RAZR** (if activated) – first line, fourth from left)

**Image Profile** (top left corner – second line)

**Magnification Level** (top right corner – first line, second from right)

**Battery Status Icon** (top right corner - first line, right corner)

## 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 the 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

There are two methods to power your device. First, the Boarmaster 40 PRO is powered by two (2) **protected type** 18500 rechargeable lithium batteries. This is the simplest and most direct way to power the device and is the most desired. Unprotected 18500 batteries should never be used.

The second method of powering your device is with the use of a Fusion Thermal sourced external battery pack connected to the USB-C interface. These external battery packs can be used alone (no 18500 batteries installed), or in conjunction with installed 18500 batteries. If you use both, the device will utilize the power from the external battery source first, and once depleted, rely on the on board 18500 batteries. When the device is pulling its power from an external battery source a green icon with the letters USB will appear in the upper right-hand corner of the status bar. Never use external battery packs not sourced directly from Fusion Thermal. Unapproved battery packs may damage your device and this damage is not covered by warranty.

***Helpful Tip:** Keep your batteries in lifetime pairs. Never mix old and new batteries, damaged batteries, or batteries with different states of charge.*

## Battery Charging

A high quality standalone battery charging cradle was provided with your device. This is the only way you should attempt to charge your batteries. Do not plug your device into a wall outlet!

***Special Note:** Do not attempt to charge your batteries by plugging your unit into wall power via the USB port. The device has no provision for on board charging. All battery charging should be performed with the batteries having been removed from the device and in the provided charging cradle.*

## Battery Status Indicator

When two fully charged 18500 batteries are inserted into the device the Battery Status Indicator will show a solid blue icon in the top right corner of the status bar. When the batteries are fully depleted, the unit will flash a “Change Batteries” message in red letters on the status bar just prior to shutting down. If the device is using an external battery source, it will display “USB”.

**Helpful Tip:** ALWAYS remove batteries before storing, even if the storage is short-term. Leaving batteries inside the unit while not in use may deplete them and potentially cause corrosion and damage to the unit. Please know this type of damage is 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 Boarmaster 40 PRO is a precision infrared electro optical device that was designed and constructed to the highest industry standards. It will provide decades 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 manufacturers that are purchased from reliable sources.
- Never knowingly use counterfeit or off-branded batteries.
- Never intentionally expose the germanium lens to direct sunlight or other high intensity light sources. Keep front lens cover closed when not using.
- After powering down wait a minimum of five seconds before turning it back on.
- Protect the device from strong side impacts.
- Only use high grade lens cleaning cloths to clean lens surfaces.
- Never intentionally expose the device to water or other liquids.

## 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.



## Warranty Registration

To register your warranty please visit <https://www.fusionthermal.com/support/warranty-registration/> 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 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 located in the United States and available Monday thru Friday 8:30 AM to 6:00 PM CST.

Please call us at 985-375-1185.