BTC35 v3

Burris

USER MANUAL

OVERVIEW:

Congratulations on your purchase of a Burris Thermal Clip-on. Please review this manual prior to operation and save it for future reference. This guide explains the operation of the BTC35 v3.

CAUTION:

Do not point thermal imaging devices at high-intensity energy sources such as the sun or laser emitters as they can permanently damage the infrared detector!
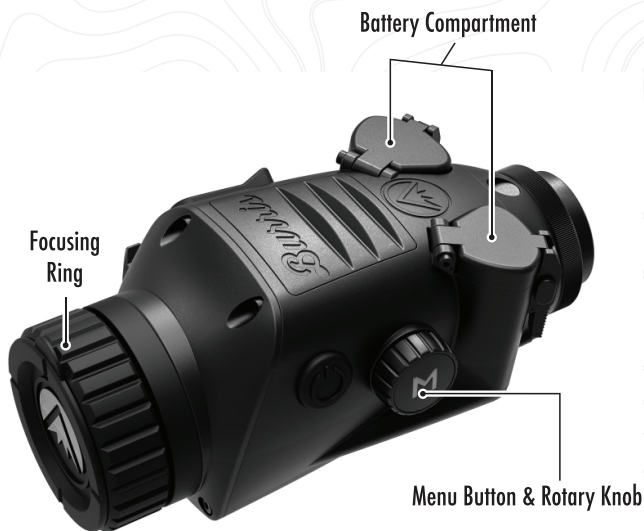
ACCESSORIES:

USB-C To USB-A Cable
USB-C To RCA Cable

BURRIS THERMAL HANDHELD
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* For US MODLES ONLY

BURRIS THERMAL CLIP-ON
PRODUCT MAP

Battery Compartment

Focusing Ring

Menu Button & Rotary Knob

Power Button

Eyepiece

USB-C Port

M1913 Accessory Rail

BURRIS THERMAL CLIP-ON
TECHNICAL SPECIFCATIONS

Model	BTC35 v3
Detector	
Detector Type	VOx
Resolution and Pitch	400 x 300 - 12 μm
Spectral Range	8-14 μm
NETD	≤ 35 mk @ F1 25 °C
Detection Distance	(Deer) 1000 m | 1100 yd (Car) 2400 m | 2624.67 yd
Optical Properties	
Focal Length	35 mm F1.0
Focusing	Manual Focus
Field of View (DEG)	7.8 x 5.9°
Imaging	
Frame Rate	50 Hz
Optical Zoom	3.2X
Digital Zoom	1x, 2x, 4x
Display	
Display Type	OLED
Resolution	1024 x 768
Eyepiece	Eye Relief ≥ 10 mm, Exit pupil diameter ≥ 18 mm
Power	
Battery Type	2X 16340 (RCR123) Rechargeable
Battery Life	≥ 2 hours @ 25 °C

Model	BTC35 v3
Interface	
USB-C	Power | Video
Video Interface	BurrisConnect App (live video streaming) Analog video (USB-C to RCA)
Mounting Interface	M33.5 x 0.75 threaded eyepiece (SmartClip) 1/4-20 interface for M1913 QD Mount
Environmental	
Operating Temperature	- 4 °F to 122 °F - 20 °C to 50 °C
Waterproof	IP67
Recoil	800 G/1 ms
Physical Attributes	
Operational Weight	≤ 460 g | ≤ 16.2 oz
Dimension (LxWxH)	152 mm x 75 mm x 64 mm 5.9 in. x 2.9 in. x 2.5 in.

BURRIS THERMAL CLIP-ON
PRODUCT FUNCTION

| Model	BTC35 v3
WI-FI	YES
Photo	BurrisConnect
Video	BurrisConnect
Screen Brightness	Slider Scale
Thermal Intensity	Slider Scale
Image Contrast	Slider Scale
Image Enhancement	YES
Scene Mode	Enhanced/Highlight/Nature
Super Energy Saving Mode	YES
Color Palettes	White Hot / Black Hot / Red Hot (1,2,3) / Green Hot / Blue Hot /Amber / Sepia / Iron / Inferno
Hot Track	YES
Calibration Model	Manual
Stadiametric Rangefinder	YES
Auto Power-off	Off/15 min/30 min/60 min
Auto Stand-by	Off/15 min/30 min/60 min
Language Settings	English, Spanish, Italian, French, German, Russian, Finnish, Swedish, Danish, Polish
PIP	Upper Left, Upper Middle, Upper Right, OFF
Restore Default	Restores Factory Settings

BURRIS THERMAL CLIP-ON
BUTTON FUNCTION

| Model	BTC35 v3
Not In Menu Button Function SHORTCUT MENU	
Rotary Knob Clockwise	Decreases Zoom
Rotary Knob Counterclockwise	Increases Zoom
In Menu Button Function	
M Button	Press to display menu options/ make selections
Calibration	
Power Button	Execute Shutter Calibration

BATTERY INSTALLATION AND REMOVAL

The BTC is equipped to use (2) 16340 rechargeable batteries. The batteries are independently changeable, allowing for hot-swapping. While one of the batteries has sufficient charge, the other battery port can be opened and that battery can be replaced without cutting power to the imager. If both battery ports are open, the imager will shut down.
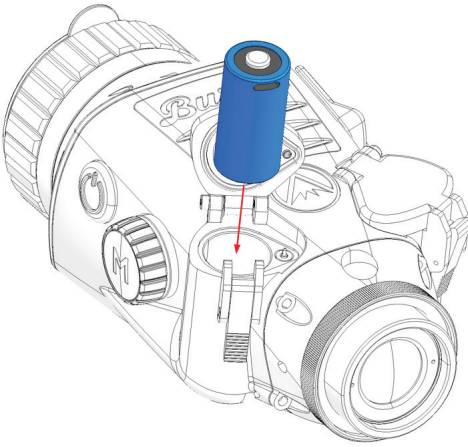
NOTE: The BTC is specifically designed to use 3.7v 16340 rechargeable batteries. Non-rechargeable, 3v CR123A batteries can be used in the BTC, but it is not recommended as working time, and performance will be reduced, especially in cold weather.

NOTE: Ensure that the battery cover latches are fully engaged after closing the battery port lids.
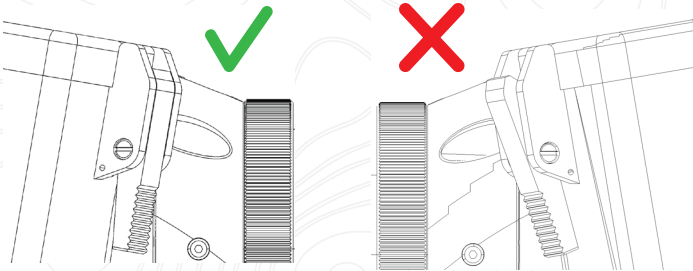
USB-C PORT

USB-C TO USB-A
The power cable provided is a USB-C to USB-A cord. Operating the device while plugged in will not charge the batteries. Utilizing an external battery pack during operation will significantly increase working time.

BATTERY STATUS
Battery state of charge (SoC) icons are located in the bottom center of the menu wheel. (1) indicates the SoC of the left battery and (2) indicates the SoC of the right battery.
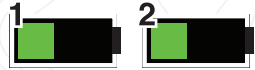
If you notice overheating, odors or discoloration, or deformation of the battery, discontinue use immediately.

USB-C TO RCA
The BTC is provided with a USB-C to RCA cable so the BTC display can be seen on a larger screen or captured on a DVR device.
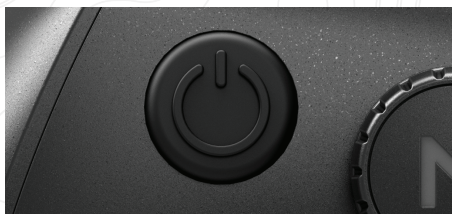
POWER BUTTON FUNCTION

POWER OFF
To fully power off the BTC, hold the Power button down until you see the power off progress bar is complete and the unit is powered off.

To cancel the shutdown process, simply release the Power button before the progress bar is full. This operation will manually trigger Stand-by mode.

STAND-BY MODE
To place the BTC into Stand-by mode, press and hold the Power button, then release it before the power off progress bar completes. Stand-by mode deactivates the display and places the processor into a lower power consumption state. The BTC can be quickly turned back on with the press of the Power button. While in Stand-by, the unit stays connected to the app via Wi-Fi.

AUTO POWER OFF
The BTC includes an auto shutdown function if no activity has been detected. Inactivity duration can be changed in the power settings (see page 20). Pressing any button will restart the inactivity duration timer.

AUTO STAND-BY
The BTC includes an auto Stand-by function if no activity has been detected. Inactivity duration can be changed in the power settings (see page 20). Pressing any button will restart the inactivity duration timer.

NOTE: Quick press the Power button to the hide menu screen

FOCUSING THE BURRIS THERMAL CLIP-ON

THE DIOPTER
The BTC has a fixed, non-adjustable diopter. The diopter of the daylight scope must be adjusted in order to focus the BTC display.

ADJUSTING THE OBJECTIVE LENS
The Focusing Ring is located on the objective end of the BTC and is used to fine-tune focus. Frequent focusing on objects at different distances will ensure a crisp image.
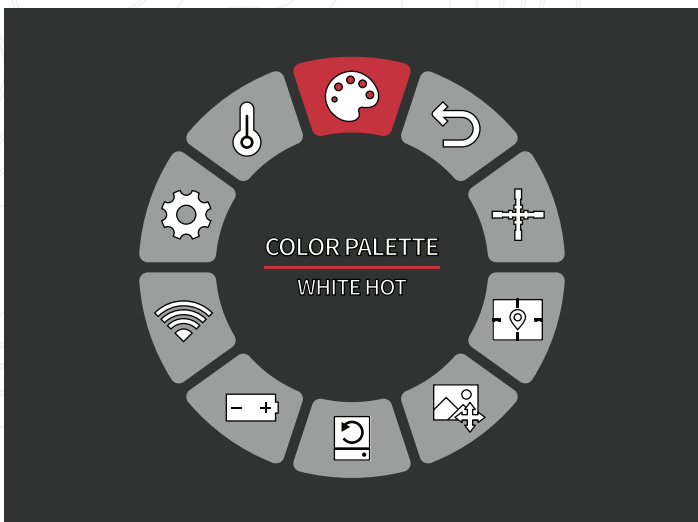Min. Focus Distance: BTC - 2 ft

LENS COVER
We suggest covering the Germanium lens with the provided lens cover to protect the lens when the product is not in use.

MAGNIFICATION, ZOOM
When the screen does not display menu settings, use the rotary knob to adjust the magnification. Magnification can be adjusted to 1x, 2x, and 4x.

COLOR PALETTE
WHITE HOT

COLOR PALETTE

THERMAL SETTINGS

GENERAL SETTINGS

WI-FI SETTINGS

POWER SETTINGS

RESTORE FACTORY SETTINGS

SCREEN POSITION

SCREEN ADJUSTMENT

EXIT MAIN MENU

COLOR PALETTE

WHITE HOT - Objects with higher temperatures are shown in white or light gray.

BLACK HOT – Objects with higher temperatures are shown in black or dark gray.

RED HOT – Objects with higher temperatures are shown in red. Users can adjust the intensity of the red in the color profile under the Thermal Settings dropdown, then Thermal Intensity.

**GREEN HOT –** Objects with higher temperatures are shown in lighter green.

BLUE HOT - Objects with lower temperatures are shown in blue or dark blue and higher temperatures are shown in red and yellow.

AMBER - Objects with higher temperatures are shown in a bright amber color.

SEPIA - Objects with higher temperatures are shown in a bright reddish-brown color.

IRON - Objects with higher temperatures are shown in a bright yellow color while objects with lower temperatures are shown in purple and blue, matching the incandescence of iron has it is heated in a forge.

INFERNO - Objects with higher temperatures are shown in bright yellow while cooler objects are shown in black and dark red.
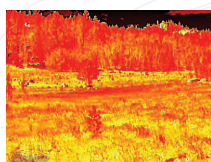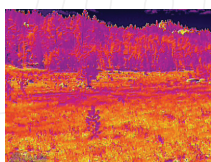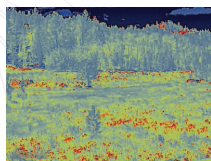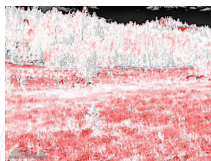
# THERMAL SETTINGS

IMAGE ENHANCEMENT
ON/OFF SETTING
Image enhancement automatically adjusts the image output to best see all thermal details within the scene.

CONTRAST
Contrast of the image can be adjusted using the rotary knob. A slider bar will display on the right side of the screen.

SCENE MODES
Burris thermal devices can be programmed to operate using three different Scene Modes that use a built-in algorithm to improve image quality and thermal detection capabilities in various environments. Depending on your environmental conditions, choose which scene mode works best for you.
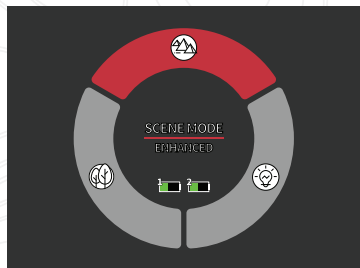
Nature Mode
Provides the highest amount of thermal differentiation on screen by employing the most color scales. This mode is most useful in environments where objects in the field of view are at similar temperatures.

Enhanced Mode
Highlights the hottest objects in the field of view by significantly increasing their intensity.

Highlight Mode
Creates significant contrast between the hottest and coldest objects in the field of view by increasing the intensity of the hottest objects and decreasing the intensity of the coldest objects.
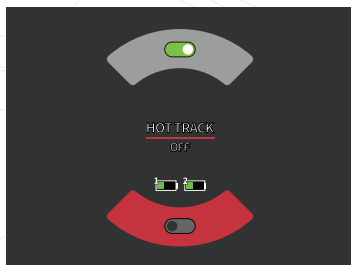
THERMAL INTENSITY
Changes the range of color towards either end of the temperature scale for the active color palette. Hotter objects can be made to appear hotter or colder using this setting.
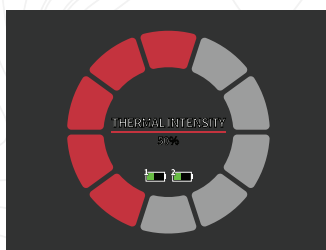
HOT TRACK
ON/OFF SETTING
When Hot Track is turned on, the active red crosshairs track the point with the highest temperature in the scene.

GENERAL SETTINGS

PRESS "M" TO ENTER

GENERAL SETTINGS

SCREEN BRIGHTNESS
Brightness levels can be adjusted using the rotary knob. A slider bar will display on the right side of the screen.
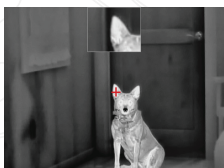
PIP - (PICTURE IN PICTURE)
When the PIP window image is on a 2x magnification of the main image is in the display.

The user has the option to place the PIP window in the upper left/middle/right area of the display.
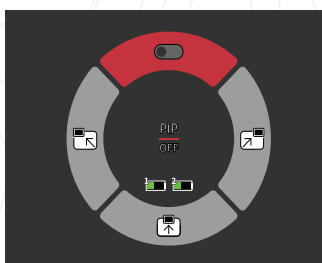
| LEFT | MIDDLE | RIGHT |

IMAGE OUTLINING
When Image Outlining is turned on, object edges are highlighted.
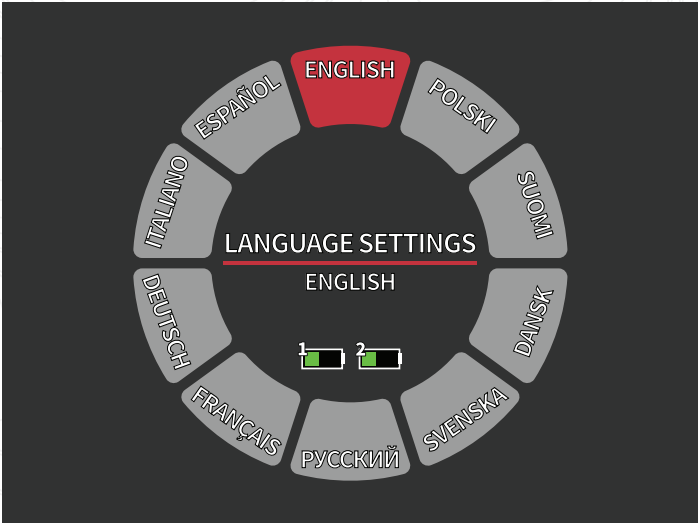
UNITS
The BTC can display in standard or metric units.
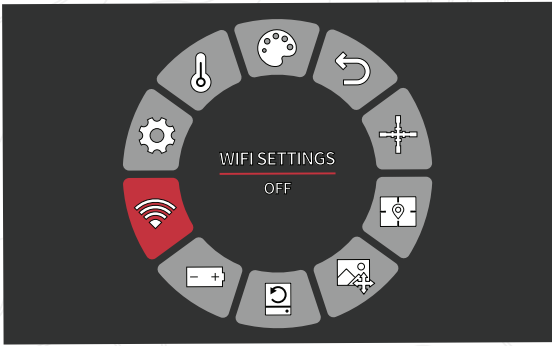
LANGUAGE SETTINGS
Users can select between 10 languages: English, Spanish, Italian, French, German, Russian, Finnish, Swedish, Danish, and Polish.

ON SCREEN DISPLAY ICONS
Users have the option to turn off the Super Energy Saving Mode, Battery SoC, and USB icons if the icons are blocking the field of view. All icons will still appear while the Main Menu is open.
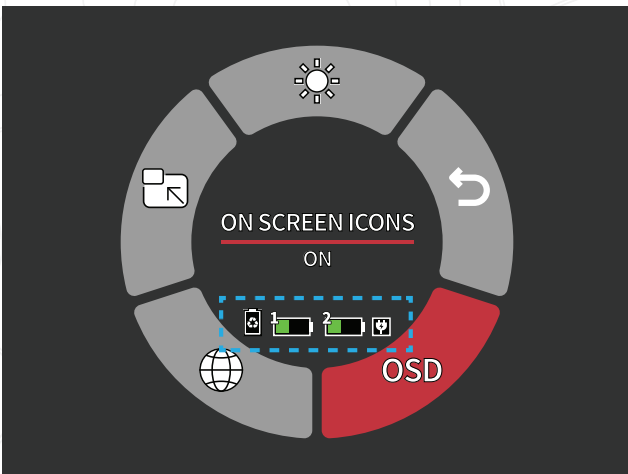
WI-FI SETTINGS

The BTC can be connected to the BurrisConnect app via Wi-Fi and certain functions and viewing can be operated remotely.

DOWNLOAD BURRISCONNECT

On a mobile device, search and download 'BurrisConnect' from the mobile phone app market.

Turn on BTC Wi-Fi under the Wi-Fi settings option in the menu.

Find and connect to the the Wi-Fi network name **BTC-XXXX** in your mobile phone's Wi-Fi settings. Open BurrisConnect and go to devices.

When Wi-Fi is turned on, but not connected, the Wi-Fi icon will flash.When the Wi-Fi is connected, the Wi-Fi icon is always on.

DEVICE NAME: BTC-XXXX
PASSWORD: 12345678

After the connection is successful, the user can operate remotely.

- Android – Download in Google Play
- IOS – Download in the Apple App Store
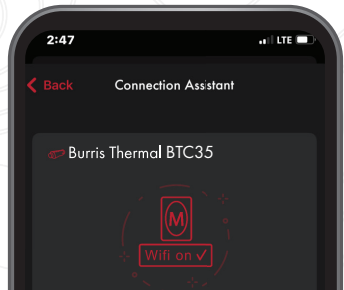
PHOTO AND VIDEO RECORDING

Photo and video can be recorded from your BTC via the BurrisConnect app. To record a video select video mode and hit the red record button on the mobile app.

To take a photo select photo mode and hit the red button on the mobile app.

Photos and videos are stored on your mobile device.

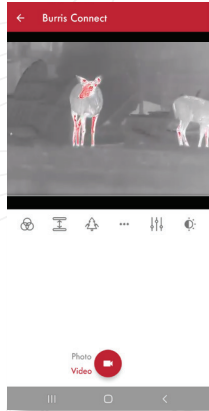**NOTE:** Recording function can only be operated from the mobile app.

BURRISCONNECT FUNCTIONALITY
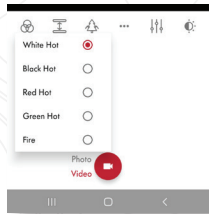Below are the settings that can be changed remotely.
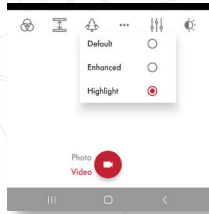
COLOR PALETTE
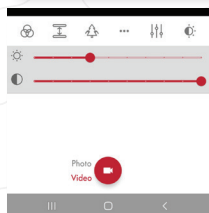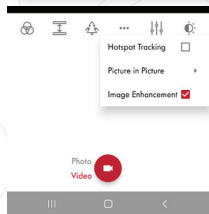(See page 14)
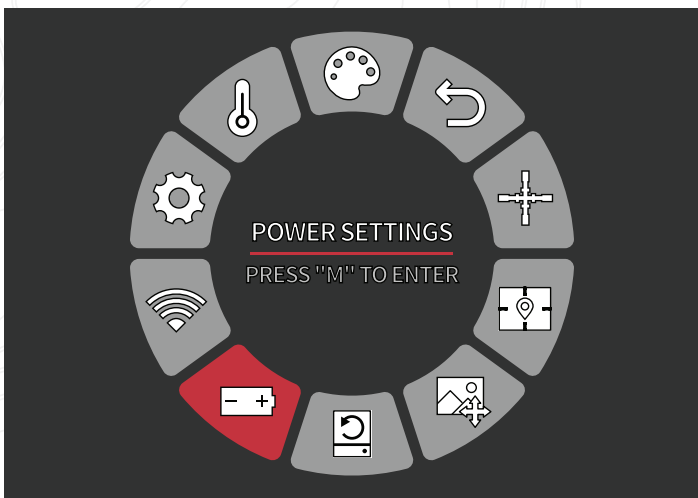
SCENE MODES
(See page 15-16)

GENERAL SETTINGS
(See page 17)

BRIGHTNESS & CONTRAST
(See page 15 & 17)

POWER SETTINGS

AUTO STAND-BY
If there is no operation in the setting time, the BTC enters Stand-by mode.

 • Auto Stand-by Timeout Options
OFF | 5 MIN | 10 MIN | 15 MIN

AUTO POWER
If there is no operation in the setting time, the BTC will power off automatically.

 • Auto Power Timeout Options
OFF | 5 MIN | 30 MIN | 60 MIN

SUPER ENERGY SAVING MODE
The Super Energy Saving Mode icon will display in the bottom left-hand corner, next to the battery indicator, when the mode is turned on. While the mode is activated, Wi-Fi and Screen Brightness settings are disabled.
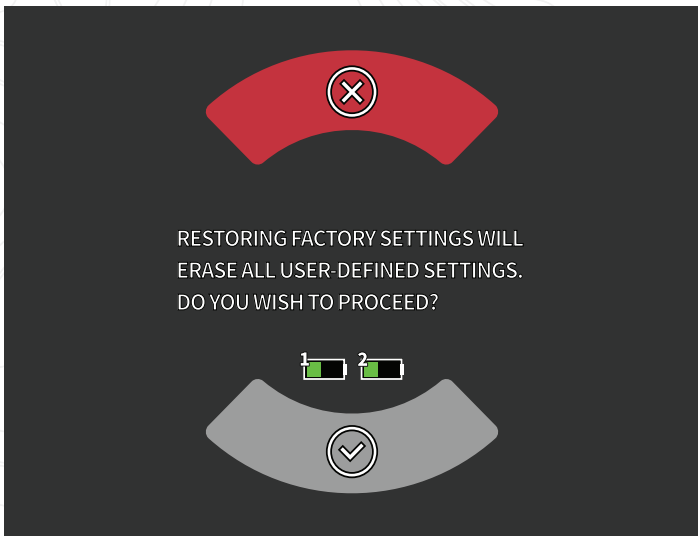
 • Super Energy Saving Mode
OFF /ON

NOTE: Auto Stand-by and Auto Power-off cannot be performed while Wi-Fi is connected.
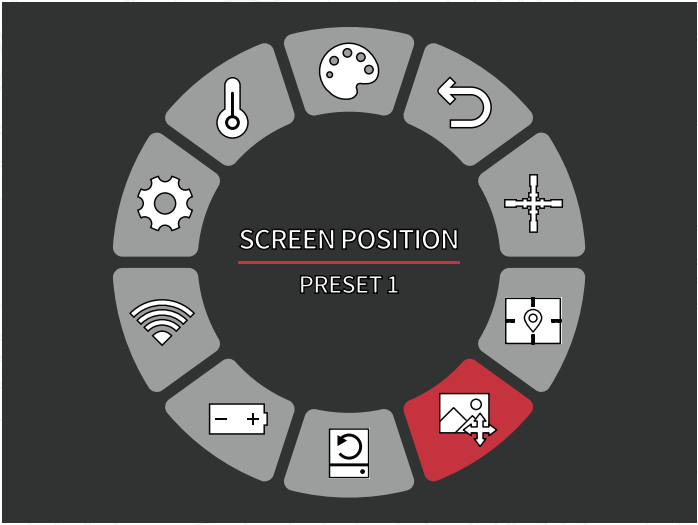
RESTORE FACTORY SETTINGS

This function restores the factory settings.

NOTE: RESTORING FACTORY SETTINGS WILL ERASE ALL USER-DEFINED SETTINGS. DO YOU WISH TO PROCEED?

SCREEN POSITION

The BTC can store up to three preset screen positions, allowing the user to maintain zero for multiple setups. The SCREEN POSITIONS can be adjusted within the SCREEN ADJUSTMENT menu.

SCREEN ADJUSTMENT

PRESS "M" TO ENTER
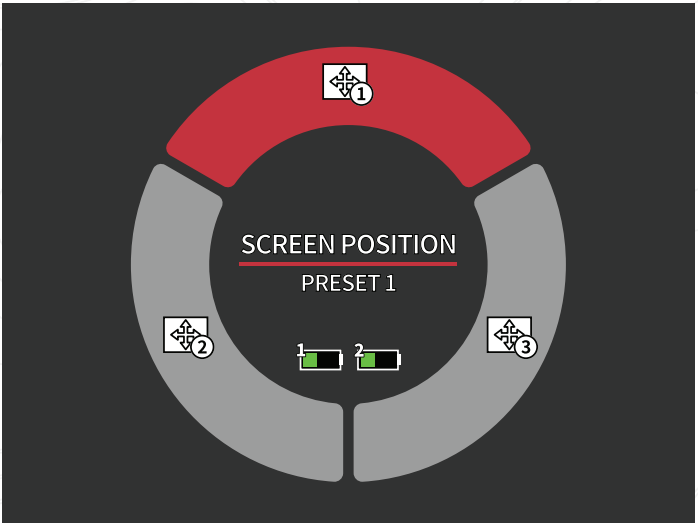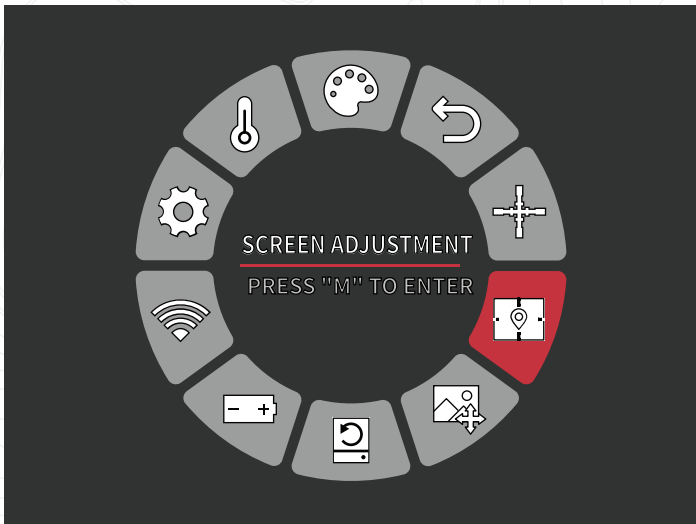
SCREEN ADJUSTMENT

The BTC v3 display is factory aligned to the device's central axis. After installation, the Clip-on display must be aligned to the optical axis of the daylight scope to ensure alignment of the Point of Aim (POA) to the projectile's Point of Impact (POI). On the BTC, this alignment is achieved digitally using the new SCREEN ADJUSTMENT tool in the MAIN MENU.

Follow the step-by-step instructions below to zero your BTC.

1. Ensure that the daylight optic is zeroed at an appropriate distance.

2. Install the BTC onto the rifle system using either the Burris Clip-on Mount (626607) or a SmartClip Adapter system.

3. Open the MAIN MENU by pressing the Menu button inwards.

4. Navigate to and open SCREEN ADJUSTMENT.

5. Shot Distance. You can choose between 50, 100, 200, 300, and 400 yards/meters to match your target distance .
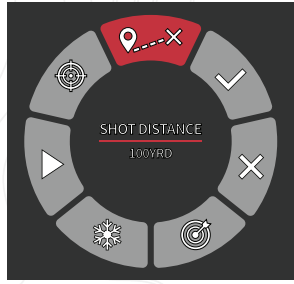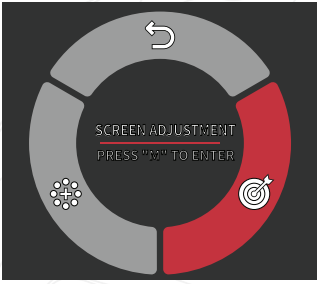
6. Daylight Scope POA. Program your daylight scope's Point of Aim (POA) in the BTC v3 by adjusting the cursor X and Y position to match the daylight scope reticle center point. Use the rotary wheel to highlight and select EXIT when complete.

7. Shoot. Aim directly at the center of the target and fire a shot. Make note of the Point of Impact (POI) versus the center of the target.

8. Freeze. While aiming directly at the center of the target, enable freeze mode. The screen image will freeze. This is useful in the next step, Shot Placement.

9. Shot Placement. Adjust the cursor X and Y position to align with the bullet POI. Use the rotary wheel to highlight and select EXIT AND SAVE when complete.

10. Exit and Save. Selecting this option will allow the BTC v3 to automatically adjust the screen position to best align with daylight scope POA and the bullet POI.
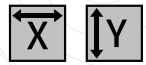
UI OFFSET
Adjust the X and Y position of the UI menu wheel to best align with your daylight scope's FOV

RETICLE CONFIGURATION

RETICLE TYPE   > 6

RETICLE COLOR > WHITE

ILLUMINATION > CROSS

ILLUM COLOR   > RED

EXIT AND SAVE

EXIT WITHOUT SAVING

PROFILE 1
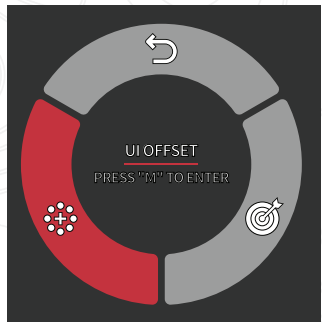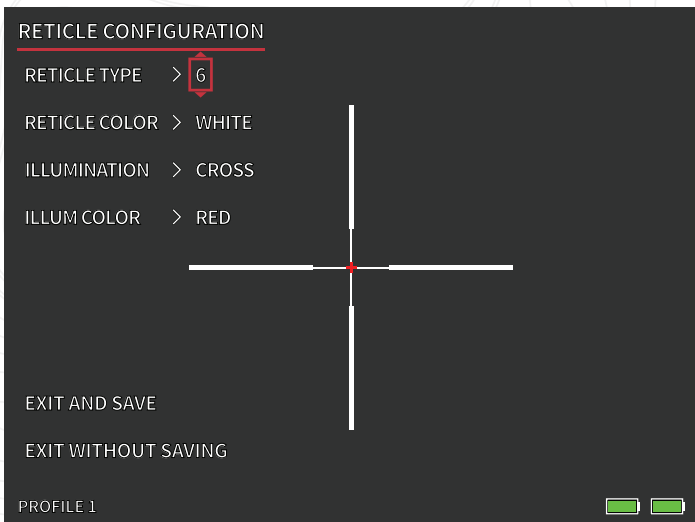
RETICLE CONFIGURATION

FOR US MODELS ONLY

RETICLE CONFIGURATION
The BTC includes a Reticle Configuration tool that allows the user to select between 10 reticle types, adjust reticle color, and adjust reticle illumination. This tool allows users to customize a reticle that best fits their application and thermal color palette.

RETICLE TYPE
The BTC is equipped with a selection of 10 reticles. Reticle number 1 is shown by default. Reticles 2 – 10 can be selected within the Reticle Configuration window. For complete reticle maps, visit www.burrisoptics.com.

RETICLE COLOR
Users can change the base color of the reticle to be Red, Green, Blue, Black, White, and Yellow. Red is default.

ILLUMINATION
Users select between a center Dot and a center Cross illumination point that is separate from the base reticle. Illumination can be set to OFF if desired.

ILLUMINATION COLOR
The color of the Dot and/or Cross can be changed to Red, Green, Blue, Black, White, or Yellow.

EXIT AND SAVE
To save changes made within the Reticle Configuration window, make sure you select EXIT AND SAVE. This will save changes to the active PROFILE.

EXIT WITHOUT SAVING
This gives users the option to exit the Reticle Configuration window without making any changes to the active PROFILE. A quick press of the Power button will also exit the Reticle Configuration window without saving.

ILLUMINATION / RETICLE COLORS

RETICLE 1
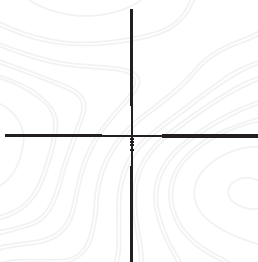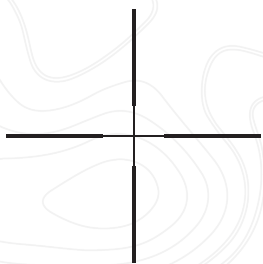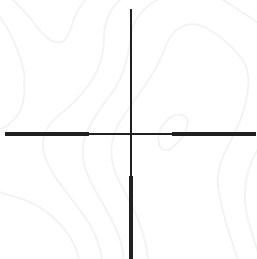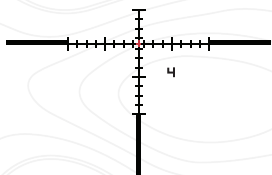
RETICLE 2

RETICLE 3

RETICLE 4

RETICLE 5

RETICLE 6
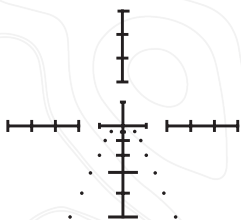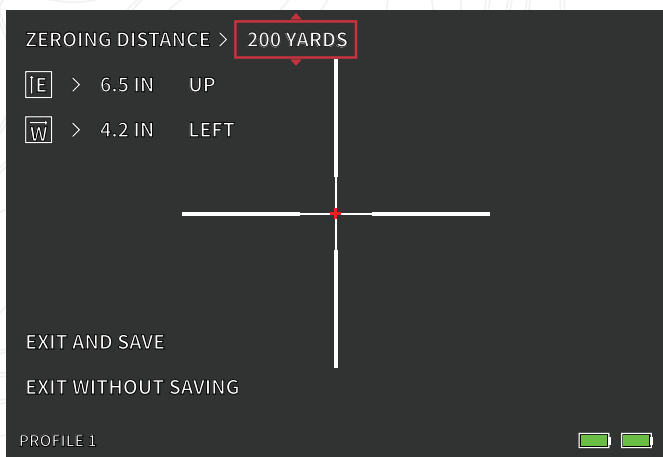

RETICLE 7

RETICLE 8

RETICLE 9

RETICLE 10

ZEROING DISTANCE ＞ 200 YARDS

E ＞ 6.5 IN   UP
W ＞ 4.2 IN   LEFT

EXIT AND SAVE
EXIT WITHOUT SAVING

PROFILE 1

ZEROING

The BTS v3 is equipped with the new RapidZero tool that makes zeroing your thermal riflescope easier than ever. Follow this step by step process to zero the BTS v3:

1. Open the Reticle and Zeroing menu and select Zeroing

2. Zeroing Distance. Select Zeroing Distance in the onscreen menu. Use the Rotary Knob to cycle through the zeroing distances. Select the distance at which the sight-in target is located. 50 meters/yards is a good starting point.

3. Zoom. Select the desired level of magnification for the zeroing process.

4. Aim directly at the center of the target and fire a shot. Make note of the Point of Impact (POI) versus the center of the target.

5. Freeze. While aiming directly at the center of the target, select the freeze icon (Snowflake). A secondary, stationary reticle will appear at the original Point of Aim (POA). With the image frozen, you can easily adjust elevation and windage POA.

6. Elevation Adjustment. Use the Rotary Knob to adjust the POA UP or DOWN from the center of the screen. You will see that the actual reticle will now move away from the stationary reticle mentioned in Step 6. You can now simply move the reticle so that it will match the vertical position of your initial shot. The amount of POA adjustment and direction are displayed on screen. The amount of adjustment per click (mm/in) will change with the Zeroing Distance value.

7. Windage Adjustment. Use the Rotary Knob to adjust the POA LEFT or RIGHT from the center of the screen. You will see that the actual reticle will now move away from the stationary reticle mentioned in Step 6. You can now simply move the reticle so that it will match the horizontal position of your initial shot. The amount of POA adjustment and direction are displayed on screen. The amount of adjustment per click (mm/in) will change with the Zeroing Distance value.

8. Unfreeze. After POA adjustments are made, select the unfreeze icon (Open Padlock).

9. Confirm Zero. Aim directly at the center of the target again and fire additional shots to confirm your zero. Repeat this process until you are satisfied with your zero.

10. Repeat this process at further distances to fine tune your zero to best fit your application.
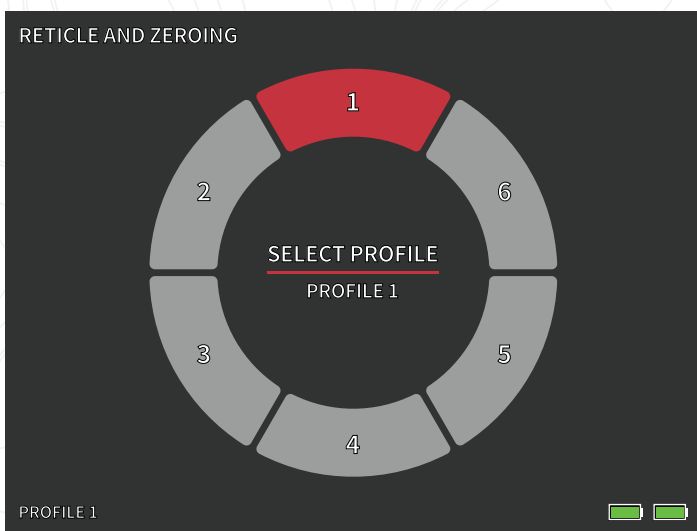
SELECT PROFILE
FOR US MODELS ONLY

The BTS allows users to store up to six Reticle Configuration/Zeroing profiles. All Reticle Configuration and Zeroing data will be saved to the active Profile. Restore Factory Settings will delete all Profile data.

STORAGE AND MAINTENANCE

When the BTC will be not used for a long time, store it in a dry, well-ventilated environment. The infrared lens of the thermal imager is coated with an anti-reflection film. Clean the lens only when dirt or smudges are present. Frequent scrubbing may damage the lens coating. To clean non-optical surfaces of the BTC, do not scrub with chemical solvents or cleaners. On exterior surfaces, wipe with a soft and dry microfiber cloth.

Coarse dirt/debris must be removed from the lens surface. The most convenient way to clean a lens surface is to use a Lens Pen. Position the scope so particles will fall away from the lens, and then use the Lens Pen or soft brush to gently whisk away the debris while blowing on the lens to dislodge the particles. Canned air or an air compressor will help clear off any dust particles. For heavy dirt, like dried mud, use a spray of clean water or lens cleaning fluid to remove the dirt.

COMMON FAULT ICONS AND TROUBLESHOOTING

If your BTC has performance issues, the troubleshooting chart on the next page will solve most problems. If these suggestions do not solve the problem, contact Burris Company for service or repair.

IMAGE CALIBRATION COMPLETE

WI-FI IS ON AND DEVICE IS CONNECTED

WI-FI IS ON AND DEVICE IS NOT CONNECTED

WI-FI DISABLED
SUPER ENERGY SAVING MODE ACTIVATED

SCREEN BRIGHTNESS ADJUSTMENT DISABLED
SUPER ENERGY SAVING MODE ACTIVATED

EXTREMELY LOW BATTERY WARNING
SHUTDOWN IMMINENT

WARRANTY

The Burris Thermal Handheld products are covered by Limited Warranty. Burris will repair or replace your product if it is defective. Do not disassemble the thermal imager as this will void the warranty. Contact your nearest Burris dealer for assistance.

For detailed warranty information scan the QR codes below.

**US WARRANTY
3 YEAR**

**INT WARRANTY
3 YEAR**

TRANSLATIONS

This manual is available in English, Spanish, Italian, French, German, Russian, Finnish, Swedish, Danish, and Polish; scan the QR code or visit www.burrisoptics.com/customer-service/manuals to see translations.

**SCAN FOR
TRANSLATIONS**

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