BURRIS THERMAL

HAND HELD

BTH 25 / BTH 35 / BTH 50

USER MANUAL

Burris

FIND WHAT MATTERS

Congratulations on your purchase of a Burris Thermal Hand Held Sight. Review this manual thoroughly before using and keep it available for future reference. This guide explains the operation of the BTH 25, BTH 35 and BTH 50 models.

CAUTIONS

1. Do not directly expose the thermal imager to high intensity light sources such as the sun, carbon dioxide lasers and electric welding machines.
2. The thermal imager combines precision optical instruments and electrostatically sensitive electronics, any abuse of the thermal imager and its accessories can compromise performance and longevity and may void the warranty.

THERMAL SIGHT FEATURES

POWER INDICATOR

EYE PIECE

PHOTO/VIDEO BUTTON

DOWN BUTTON

MENU BUTTON

UP BUTTON

POWER BUTTON

DIOPTER KNOB

CHARGING INDICATOR

USB /TYPE C/ MICRO HDMI PORTS

FOCUSING RING

TECHNICAL SPECIFICATIONS

MODEL	BURRIS THERMAL HAND HELD		
	25mm	35mm	50mm
Detector			
Resolution	400×300		
Pixel Size	17µm		
Optical properties			
Focal length	25mm F1.2	35mm F1.2	50mm F1.2
Focusing	Manual Focus		
Visual angle	15.4×11.6	11.1×8.3	7.8×5.8
Imaging			
Frame Rate	50Hz		
Digital Zoom	1×–4×		
Display			
Eye lens	1280×960 color LCOS		
Visibility regulation	-4~+2		
Machine magnification	1.7–6.8×	2.3–9.2×	3.3–13.2×
Power			
Adapter	5V DC Special adapter charging		
Working hours	≥5 hours @25°C		
Interface			
USB	TYPE C, for Power In/ File Transfer		
Video Interface	Micro HDMI		
External Connection	Picatinny rail		

PRODUCT FUNCTION

MODEL	BURRIS THERMAL HAND HELD		
	25mm	35mm	50mm
Smooth zoom	YES		
Photo	YES		
Video	YES		
WIFI	YES		
Screen brightness	1~10 levels		
Image brightness	1~10 levels		
Image contrast	1~10 levels		
Image enhancement	YES		
Scene mode	Enhanced/Highlight/Nature		
Super energy saving	YES		
Color palettes	White hot/Black hot/Red hot/Iron/Blue hot		
Hot track	YES		

PRODUCT FUNCTION

MODEL	BURRIS THERMAL HAND HELD		
	25mm	35mm	50mm
Working indication	Adjustable		
Charging indication	Adjustable		
Calibration model	Automatic/Scene/Shutter		
Stadiametric rangefinder	YES		
Auto power-off	YES		
Auto Stand-by	YES		
Language settings	English/Russian/German/French/Chinese		
Time settings	YES		
Watermark settings	YES		
PIP	YES		
Restore default	YES		
Memory card formatting	YES		

BUTTON FUNCTION

BUTTON	DEVICE CURRENT STATUS	SHORT PRESS	LONG PRESS
Power Button	Power-off	/	Power on
	Power on	Calibration	Display off / Power-off
	Display off	Display on	/
Up Button	No display in the menu bar	Switch to scene mode	Zoom in
	Display in the menu bar	Upward switching options	/
		Change parameter value	
M Menu Button	No display in the menu bar	Enter the shortcut menu	Enter the main menu
	Display in the menu bar	Enter the sub-menu	Exit the menu bar / back to the previous menu
		Select Option Parameter Value	
Down Button	No display in the menu bar	Switch to color palettes mode	Zoom out
	Display in the menu bar	Downward switching options	/
		Change parameter value	

BUTTON FUNCTION

BUTTON	DEVICE CURRENT STATUS	SHORT PRESS	LONG PRESS
Photo / video	Photo mode	Photo	/
	Video mode	/	Start video recording
		/	Stop video recording

NOTE - Users can adjust the device language according to their needs, English/Russian/German/French/Chinese for choose.

SHORTCUT MENU
- Press the M button to enter the shortcut menu
- Press the Up/Down button to switch between PIP, Screen BRI, Stadiametric Rangefinder, Hot track and energy-saving modes

Picture In Picture (PIP)

- With the PIP window open, select the left / middle / right for placement
- The window image is 2X magnification of the main image

Screen Brightness
- Brightness levels can be adjusted from 10 to 100 percent

Stadiametric Rangefinder
The stadia metric rangefinder lets you estimate the distance of a target . There are three stadia available on the device – Rabbit (35 cm / 13.7 in.), Boar (35 cm / 13.7 in.), Deer (35 cm / 13.7 in.).
How to use the stadia:
- Align the lower horizontal line with the bottom of the target image, press the Up/Down button to change the width between the upper and lower horizontal lines until the upper horizontal line is aligned with the top of the target icon
- The distance can now be calculated and displayed automatically
- By comparing the target size with the three reference animal sizes, the user can roughly calculate the distance of the target

Hot Track
- When hot track is turned on, the active crosshair tracks the point with the highest temperature in the scene

Super Energy-Saving Mode
- In the super energy-saving mode, screen brightness is reduced to 30 percent and the WiFi is turned off
- When the Super energy-saving mode is off, the screen brightness and WiFi are restored to their original state

NOTE - If WiFi cannot be turned on, please check if the super energy-saving mode is off.

MAIN MENU
- Press and hold the M button to enter the main menu
- Press the Up/Down button to switch between Image quality adjustment, Calibration mode, WiFi, power saving settings, indication settings, general settings and other settings

Image Quality Adjustment
- Image enhancement - When the image enhancement is turned on, the image of the target can be enhanced
- Scene mode - Image brightness and contrast can be adjusted for each scene mode to achieve the best image

Color Palettes
- White hot - The objects with higher temperature show in white or light gray
- Black hot - The objects with higher temperature show in black or dark gray
- Red hot - The objects with higher temperature show in red
- Adjustable red hot - The objects with higher temperature show in red. Users can adjust the intensity of range of red heat from level 1 to 10

- Iron - The objects with higher temperature show in iron red
- Blue hot - The objects with lowest temperature show in blue or dark blue, and the object with higher temperature shows in red

Brightness
- Adjustable from level 1 to 10 level

Contrast
- Adjustable from level 1 to 10 level

Calibration Mode
- Automatic - The device automatically corrects the image quality without any action
- Scene - The user manually corrects the image quality as needed. For manual correction, the lens cover needs to be attached before calibration
- Shutter - The user manually corrects the image quality as needed and the device shutter closes for calibration.

WiFi
It can be connected to the mobile phone via WiFi and the thermal imager can be operated remotely via the mobile phone APP. When WiFi is turned on, but not connected, the WiFi icon flashes and the WiFi name is displayed at the top of the screen. When the WiFi is connected, the WiFi icon is always on
- Mobile phone APP - Search and download 'Burris Thermal' APP in the mobile phone app market. Open the app, and find the WiFi name of "Burris BTH" in your mobile phone WiFi settings, enter the password '12345678', then after the connection is successful, the user can operate remotely
- Android - Please search and download in Google play
- IOS - Please search and download in the APP store

Power Saving Settings
- Auto Stand-By - If there is no operation in the setting time, it enters Stand-by mode. If the work indicator is on before entering Standby mode, the work indicator will flash in Stand-by mode
- Auto Power - If there is no operation in the setting time, it will power off automatically

Note - Auto Stand-by and Auto power-off cannot be performed while WiFi is connected.

Indication Settings
- Charging indication - In the charging state, you can turn the charging indicator on or off
- Working indication - In the normal working state, you can turn the working indicator on or off

General Settings
- Time style - Select 12-hour or 24-hour style
- Date style - Choose different date styles according to your preference
- Time setup - Adjust the current date and time

Watermark Settings
- Users can choose the display style of date and time watermark on the screen

Language Settings
- Language choices include English/Russian/ German/French/Chinese.

Memory Card Formatting
- Allows the use to format and empty onboard storage

Restore Default
- This function restores the factory settings.

Other Settings (optional accessories feature settings)
- Ranging
- Ranging adjustment
- Pointer

• Pointer adjustment

These functions are used for auxiliary Optional accessories. There are differences between the individual models. For details, please refer to the accessory manual.

Charging

When using the thermal imager for the first time, use the USB charger to charge battery for at least four hours. When charging, insert the matching Type C USB charging cable and plug in the power.

Charging specifications: 5V, 2A.
Charging indicator is red during normal charging.
Charging indicator is green when charging is complete.
Do not charge the battery in an environment over 40°C or 104° F.

Note - Charging when the thermal imager is being used does not charge the battery. This icon indicates the unit is using the external power for normal operations.

This icon indicates that the external power supply is charging the battery.

Video Output

There is a video output port beside the USB inter-face on the side of the thermal imager, and is simply plug and play.

The screen image of the thermal imager can be output to an external screen through the matching HDMI video cable. There are two display modes, either the external screen or the screen of the device, but only one mode is active.

Note - When HDMI is used to connect the external display screen, the real-time screen can only be viewed by the external display. There is no screen display on the screen of this device. When the

HDMI cable is unplugged, the screen of the device is restored.

Storage and Maintenance
When the thermal imager will be not used for a long time, store in a dry, well-ventilated environment and charge the thermal imager at least four hours every two months during the storage

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 thermal imager, do not scrub with chemical solvents or cleaners. On exterior surfaces, wipe with a soft and dry microfiber cloth.

Warranty
The Burris Thermal Hand Held thermal products are covered by Limited Warranty and 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   International Warranty

This manual is available in German, French, Italian and Spanish translations at available at https://www.burrisoptics.com/sites/default/files/content/products/manuals/thermal/handheld

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