



BURRIS THERMAL CLIP ON



BTC 35 / BTC 50

USER MANUAL



Burris®

FIND WHAT MATTERS

Congratulations on your purchase of a Burris Thermal Clip On Sight. Review this manual thoroughly before using and keep it available for future reference. This guide explains the operation of the BTC 35 and BTC 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.

ACCESSORIES

Standard Accessories



Carry Case



Blinder



USB power cable



Battery charger



User Manual

Optional Accessories



Remote
Controller
Item No.
626600



Adapter
Ring A
Item No.
626601



Adapter
Ring B
Item No.
626602



Adapter
Ring C
Item No.
626603



Video cable
Item No. 626605



Picatinny Rail
Item No. 626606



External Eyepiece
Item No. 626604

THERMAL SIGHT FEATURES



TECHNICAL SPECIFICATIONS

MODEL	BURRIS THERMAL CLIP ON	
	35mm	50mm
Detector		
Resolution	400×300	
Pixel Size	17µm	
Optical properties		
Focal length	35mm F1.2	50mm F1.2
Focusing	Manual Focus	
FOV	10.6°×8.0°	7.5°×5.6°
Imaging		
Frame Rate	50Hz	
Digital Zoom	2x, 4x	
Display		
Screen	1024×768 Color OLED	
Color Palletes	Black hot, white hot, red hot, green hot	
Optical Magnification	1x	
Power		
Battery Type	2x CR123/ICR 16340	
Working Time	≥3 hours	

MODEL	BURRIS THERMAL CLIP ON	
	35mm	50mm
Interface		
7-pin LEMO	for external USB power (included)	
Video Output	7-pin LEMO (optional)	
External Connection	Picatinny rail	

Lens

This guide is applicable to multiple lens series. The illustration shows only one of the lens models.

Focusing Ring

After the thermal imager is powered on, the image may be blurred when the distance to the observed target changes. The lens focusing ring should be turned to refocus until the target image is clear.

Lens Cover

Please cover the lens cap to protect the lens when the product is not in use!

External Interface

Through the external interface a USB cable can be connected to an external power source. The output specification of the external power supply should be 5V2A.

Video Cable

The external interface port can be used to attach a video cable providing output to an external monitor and external power at the same time.

Battery Cover

The cover provide access to the battery compartment. The thermal imager is powered by two (2) CR123 batteries.

Eyepiece

The eye mask, external eyepiece and adapter rings accessories are attached to the eyepiece.

Buttons

BUTTONS	DEVICE CURRENT STATUS		LONG PRESS
		SHORT PRESS	
Power Button	Power Off	/ /	Power On
	Power On	Calibration	Display Off/ Power Off
	Display Off	Display On	/
	No Display in Menu Bar	Switch to Zoom Mode	/
	Display in Menu Bar	Upward Switching Options	/
		Change Parameter Value	
	No Display in Menu Bar	Switch to Scene Mode	Enter Main Menu
	Display in Menu Bar	Enter the Sub-menu	Exit menu bar/ back to the previous menu
		Select Option/ Parameter Value	
	No Display in Menu Bar	Switch to Color Palettes Mode	/
	Display in Menu Bar	Downward Switching Options	/
		Change Parameter Value	

FUNCTION DESCRIPTION

Power Button

To start the thermal sight imager, press the Power Button until the start up image is displayed.

Power-Off

To manually power off the thermal imager, hold the Power Button down until you see the power-off progress bar and the unit is powered off.

Auto Power-Off

Time for auto power-off can be set and if no operation is carried out within the time, the thermal imager will be powered off.

Display off

Hold the Power Button down to display the shutdown progress bar. Before the progress bar is complete, release the power button to cancel the shutdown and turn the display off.

Display on

In display off mode, press any key to turn the display on.

Calibration

Press the power On/Off Button when power is on the menu screen is off, to complete the calibration (except the automatic calibration).

Zoom-In

When power is on and the menu is not called out, short press the Up Button to switch from 2X/4X zoom.

Scene Modes

When power is on and the menu screen is off, short press M Button in turn to switch the scene modes from Enhance to Highlight to Nature.




























Color Palette Modes

When power is on and the menu screen is off, press the Down Button to switch the pseudo-color modes of white hot, black hot, red hot, green hot.

- White hot - Objects at relatively high temperature are displayed as white or light grey.
- Black hot - Objects at relatively high temperature are displayed as black or dark grey.
- Red hot - Objects at relatively high temperature are displayed as red.
- Green hot - Displayed as a night vision image.

Menu

When power is on and the menu screen is off, press the M Button for two seconds to enter the main menu. When power is on and the menu is visible, press the M Button, to exit the menu bar or back to the previous menu.

ICON	FUNCTION	ICON	FUNCTION
	Exit		Automatic Calibration
	Screen Brightness		Scene Calibration
	Calibration model		Shutter Calibration
	Video Output		Brightness
	Video output is on		Position No.
	Hot point track		Screen movement
	Bluetooth		X-coordinate
	White hot		Y-coordinate
	Black Hot		Save and Exit
	Enhance		Red hot
	Highlight		Green hot
	Auto Stand-by		Nature
	Auto power-off		Contrast
	Restore default		

Icon Function

1. Exit - To exit the menu bar.
2. Screen brightness - To adjust the screen brightness from level 1 - 10.
3. Calibration model - To set one of three settings: automatic calibration, scene calibration or shutter calibration.
4. Video Output - To open/close video output. When the video output is on, the icon will be displayed in the lower right corner of screen.
5. Hot point track - When hot point track is on, the switch can be set so the cursor will track the point with the highest temperature in the scene.
6. Bluetooth - When Bluetooth is on, it will search and connect to a Bluetooth remote controller. Once connected, all the button functions (except power on/off function) on the thermal imager can be controlled by the Bluetooth remote controller.

- Bluetooth on - "Bluetooth is searching..." appears and then quickly disappears, while the Bluetooth icon flickers.
- Successful Bluetooth connection - "Bluetooth connection success" appears and then quickly disappears, while the Bluetooth icon displays all the time.
- Bluetooth connection failure - "Bluetooth connection failed" appears and then quickly disappears, and the Bluetooth icon disappears.

Note - Bluetooth remote controllers are optional accessories.

7. Auto stand-by - Time for auto stand-by can be set and if no operation is carried out, it will automatically enter stand-by mode .
8. Auto power-off - Time for auto power-off can be set and any operation will stop it from turning off automatically.
9. Restore default - To restore all the factory settings, select "Yes". Select "No" to keep all current settings.







Note - After the default values are restored, the device will power off automatically. A manual restart is required for the change to take effect.

10. Contrast - The image contrast can be adjusted from level 1 - 10.
11. Brightness - The image brightness can be adjusted from level 1 - 10
Note - The values of contrast and brightness adjustment are saved under the currently selected scene mode.
12. Position No. - Three groups of OLED screen position data can be saved. Each group of screen positions can be adjusted independently. Please select the position number to be adjusted before using the screen movement function.
13. Screen movement - The optical axis of the equipment has been calibrated before delivered, with screen center coordinates (0, 0). If the optical axis shifts during use, you can use this function to realign the image.

Note - The screen movement is an auxiliary function. Please use it when necessary.

BATTERY INDICATOR

When the thermal imager is powered on, the battery indicator will display in the upper right corner of the screen. The green bar on the battery indicator indicates the remaining capacity.

High capacity  Medium-high capacity 
Medium capacity  Medium-low capacity 
Low capacity  Scarce capacity 

- After the power is on and a real-time image appears, the previous battery capacity levels will be displayed in the upper right corner of the screen.

Note -

- **Replace the battery when the power is low!**
- **When using a rechargeable battery, the battery indicator will remain on the full level for a longer time.**

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 Clip On 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 <https://www.burrisoptics.com/sites/default/files/content/products/manuals/thermal/clipon>.



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