

NIGHTHUNTER 535



Instruction Manual

2

INTRODUCTION

Thank you for choosing the Steiner Nighthunter S35 Thermal Scope. Please read this user manual first and keep it for further reference.

QUANTUM VISION™

THE HEART OF THE NIGHTHUNTER THERMAL SERIES

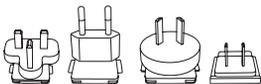
The perfect combination of the best possible THERMAL SENSOR, state-of-the-art DISPLAY and advanced SOFTWARE DEVELOPMENT, all this combined with great user-friendliness and the legendary STEINER robustness.

STEINER CONNECT APP

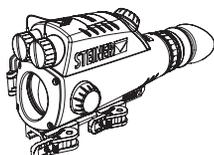
Download the Steiner Nighthunter S35 app from the App Store or the Google Play Store onto your mobile device (smartphone, tablet, etc.) to follow live streams, view photos and videos comfortably, change device settings, and more.



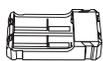
Scope of delivery:



Plug for US, EU, AU, UK standard



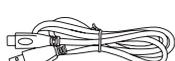
Thermographic camera



Charger

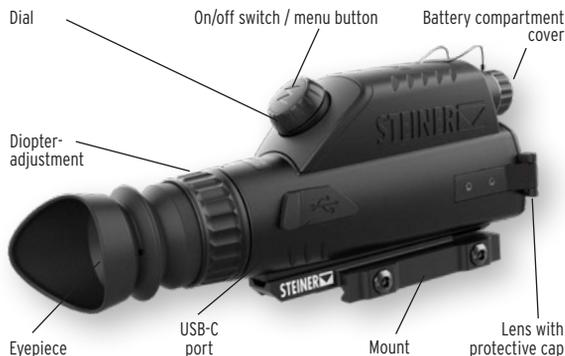


5V2A adaptor



Type-C connection cable

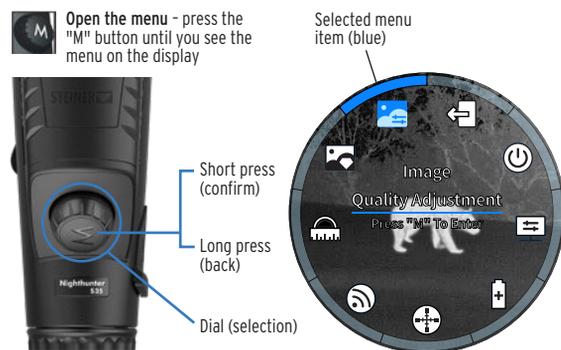
PRESENTATION OF PRODUCT COMPONENTS



Functions of the controls - before the menu



Functions of the controls - within the menu



MAIN MENU OVERVIEW

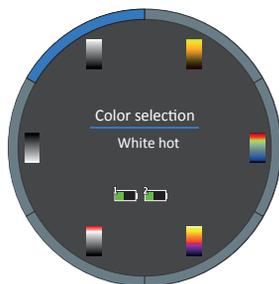
Symbol explanation



EXAMPLE OF A SUBMENU

Color selection

White hot
Black hot
Red hot
Iron Red
Fire
Amber



PRODUCT COMPONENTS

On/off switch / menu button

Switch on: Press and hold the menu button (M) until the Steiner logo appears on the display. Now you have successfully turned on the device.

Switch off: Manual power off: Long press and hold the menu button (M). A status circle appears in the eyepiece; after this is complete, the device switches off. You can now release the menu button (M).

Automatic shut-off: The user can set an automatic shut-off time from the menu. If set, the device will automatically turn off if no action is taken within the selected time period.

Menu Button: If the device is turned on and the menu is not displayed, press the menu button (M) until you see the menu on the display.

Confirm and return/exit: When you are in a menu, you can confirm the current selection by briefly pressing the menu button (M). When you are in a menu, you can exit the menu by long-pressing the menu button (M).

Dial

When you are in the menu, you can select between the menu items by turning the dial clockwise and counterclockwise.

Focus wheel

After switching on the device and aiming at the target, the optimum image sharpness can be set by turning the focus wheel. If the distance to the target changes, the image may become blurred. Therefore, it may be necessary to turn the focus wheel again to readjust focus and obtain a clear target image.

Lens

For protection, please always cover the lens when not in use (lens cap supplied).

USB-C port

The device can be connected to an external power source (power bank) via the included USB-C cable. In this case, the device is powered but does NOT charge the batteries in the battery compartment. To recharge, the batteries must be removed from the device and can be recharged using the charger provided.

Dual video cable

Media stored on the device's internal memory can be transferred to an external device using the included dual video cable.

Battery Compartment - Battery

Open the battery compartment covers counterclockwise and insert one **18650 battery** at a time. No tools are required for this process. Pay attention to the correct polarity, which is indicated on the bottom of the product. When closing the battery compartment cover, make sure to close it tightly.

⚠ **Please note: A battery length of 69 mm (max. +/- 1 mm) is mandatory.**

Battery power display

When the menu is activated, the current battery indicator is displayed in the middle of the display, showing the remaining power.

Note: If the reading is low, please replace the batteries in the device with charged batteries.

DESCRIPTION OF FEATURES

(outside the menu)

Enable stand-by mode

Long press the Menu button (M). The power off progress circle is shown on the display. If you release the button (M) before the status circuit is complete, the complete shutdown is interrupted and the "stand-by" mode is activated.

Disable standby mode

By briefly pressing the menu button (M) or turning the dial, the device is taken out of stand-by mode and is immediately ready for use.

Correction of irregularities (NUC)

During normal operation, the device occasionally and automatically performs a correction of irregularities (NUC). During this process, the shutter briefly lowers in front of the sensor, freezing the image and resetting any noise in the image. If excessive noise is detected in the image between the system's automatic NUC functions, perform a manual NUC. Please ensure that the lens is covered during this process (e.g. with the lens protection cap included in the scope of delivery). A quick press of the menu button (M) performs the manual NUC. The image is temporarily frozen and reset.

Photographing

If there is no menu on the display, turn the dial clockwise once to save a photo of the current scene. During internal storage, the image on the display may freeze for a short time.

Video recording

If you don't see a menu on the display, turn the dial counterclockwise once. Video recording will start. Another counterclockwise turn stops the recording. During the video recording, you can also take pictures with a clockwise rotation.

For further user customization, you can access the following key features from the menu:

IMAGE QUALITY SETTINGS

Ambient Mode: You can choose from three specially designed scene modes: Amplified, Detect or Standard.

Color selection: There are several color palettes: White hot, Black hot, Red hot, Iron Red, Fire, Amber.

Brightness: The scene brightness can be adjusted in increments of 10 from 10% to 100%.

Screen brightness: The brightness of the screen is adjustable in increments of 10 from 10% to 100%.

Contrast: The contrast is adjustable in increments of 10 from 10% to 100%.

ADVANCED IMAGE SETTINGS

Image optimization: Here the image optimization can be switched on or off. The image optimization shows the contrast of the temperature differences on the display even more clearly.

Picture in Picture (PiP): Select the desired placement of the PiP mode from the 3 left/center/right options. The PiP window is a 2x magnification of the main image.

Hotspot tracking: When hotspot tracking is turned on, the active reticle tracks the point with the highest heat radiation in the scene.

Calibration mode: Here you can choose between semi-automatic and manual calibration.

STADIAMETRIC DISTANCE MEASUREMENT

The distance to targets of known size is calculated based on the distance between the two stadium lines on the display. The position of the baseline remains unchanged. Use the dial to move the top line that encloses the target. The distance will be shown to you in the upper left corner of the screen.

WiFi

You can use the Steiner Connect app to access photos/videos on the device, stream live videos or change device settings.

ADJUSTING IMAGE SCALING

See page 9 - Zeroing of the Nighthunter S35.

RETICLE

See page 10 - Reticle options of the Nighthunter S35.

POWER SETTINGS

Stand-by settings: The automatic stand-by timer can be set to 5/10/15 minutes. If no action is taken within the preset time, the standby mode is activated. In stand-by mode, the display is switched off, but the device remains active in the background (consuming battery power) to ensure a quick restart by briefly pressing the menu button or turning the dial.

Shut-off settings: The automatic shut-off time can be set to 15/30/60 minutes. If no action is taken within the set time, the device automatically switches off completely.

Energy-saving mode: This mode can be activated if the user wants to extend the period of possible usage. When this feature is enabled, the internal microprocessor switches to an energy-saving mode, which can affect the speed of image processing. In addition, the brightness of the display remains set to 20% (it cannot be set higher even manually in this mode) and the WiFi is disabled.

SETTINGS

Watermark settings: In this menu item you can set whether you want to see only the time, only the date or both the time and the date on the display. The watermark (Steiner logo) on the display can be shown and hidden. OSD Mode: When OSD mode is activated, the menu circle shown on the display is recorded during a video recording.

Time format: You can choose between the two formats 12h and 24h.

Datumsformat: You can set the date format to one of the 3 options depending on your personal needs:

DD/MM/YYYY MM/DD/YYYY YYYY/MM/DD

Setting the time: You can set the time and date individually.

Language settings: German / English / French / Italian / Spanish.

Formatting the memory card: You can format the internal storage. ATTENTION: This process will delete all stored photos and videos from the device.

Reset to factory settings: This process resets all settings to default (saved photos/videos will not be deleted). Select "No" to cancel the process.

Device information: Here you will see general information about the device.

SWITCH OFF

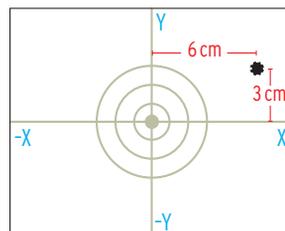
Here you can switch off the device manually.

ZEROING THE NIGHTHUNTER S35

The first step is to have a riflescope already in place with the appropriate rifle as a base. Now attach the mounting of the adapter to the riflescope (see section MOUNTING THE NIGHTHUNTER S35 ON YOUR RIFLESCOPE).

We recommend using a target at distances of 25 m, 50 m or 100 m when zeroing the Nighthunter S35. If necessary, the possible displacement of the point of impact on the target must be measured in cm in both vertical and horizontal directions.

See example of a 100 m shot at a target:



Now you need to access the: (M) Menu (↻) Image Scaling Adjustment

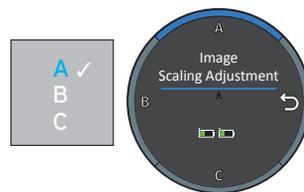
The display will show you 3 options to choose from. A, B, C gives you the option to store a different riflescope/rifle under each letter)

Example of the assignment of the 3 options A, B, C.

Letter A is Ranger 4

Letter B is Ranger 6

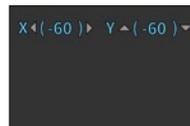
Letter C is Ranger 8



The display shows you a value for X and Y coordinates.

In our example:

X ◀ (7) ▶ Y ▲ (16) ▼



You can change these values if necessary by setting the X-coordinate (for left/right adjustments) and Y-coordinate (for up/down adjustments) with the dial (counterclockwise/clockwise).

Alternatively, these values can also be conveniently set via the Steiner Connect app.

Assuming that each rotation with the dial is equal to 1 MOA (that's 2.9 cm when shooting at 100 m and 1.45 cm when shooting at 50 m), in the case we used as an example, you need to use the X coordinate (counterclockwise rotation) 1 time and the Y coordinate (clockwise dial) 2 clicks.

Then press the menu button **M** again to save your settings.

Displayed values on the display after the changes made from our example:

X ◀ (5) ▶ Y ▲ (15) ▼



You must then fire a test shot at a target again to check whether the bullet hits the target as intended. If this is not the case, please repeat the process.

Visit our website www.steiner.de to discover the "How-to-Video" on the zeroing of the Nighthunter S35 and other helpful videos about our products.

RETICLES

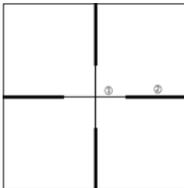
The reticle feature sizes in MIL and cm@100m

Reticle 1:

MIL	cm@100m
①	②
0.82	8.2

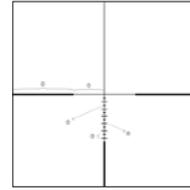
A point of 4*4 pixels

Reticle 2:



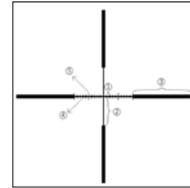
MIL		cm@100m	
①	②	①	②
10	20	100	200

Reticle 3:



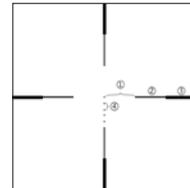
MIL					cm@100m				
①	②	③	④	⑤	①	②	③	④	⑤
10	20	1	2	1	100	200	10	20	10

Reticle 4:



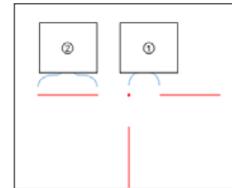
MIL					cm@100m				
①	②	③	④	⑤	①	②	③	④	⑤
1	10	20	1	2	10	100	200	10	20

Reticle 5:



MIL				cm@100m			
①	②	③	④	①	②	③	④
10	10	10	2	100	100	100	20

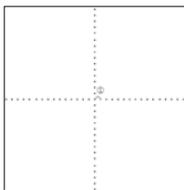
Reticle 6:



MIL		cm@100m	
①	②	①	②
15	15	150	150

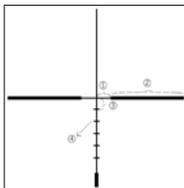
RETICLES

Reticle 7:



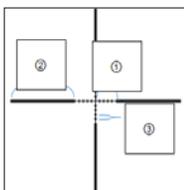
MIL	cm@100m
①	②
2	20

Reticle 8:



MIL				cm@100m			
①	②	③	④	①	②	③	④
5	25	5	2	50	250	50	20

Reticle 9:



MIL			cm@100m		
①	②	③	①	②	③
10	20	2	100	200	20

Reticle 10:

MIL	cm@100m
①	②
1.23	12.3

A point of 6*6 pixels

ASSISTANCE

1. Device won't turn on

Solution: Replace the batteries or connect the device to an external power supply.

2. The device can't record photos/videos

Solution: The device's internal storage space may be full. Delete unnecessary photos/videos or format the memory card. (All media on the memory card will be irrevocably deleted!)

3. Time/date of the device does not match the actual time/date

Solution: In the device's menu, update the time and date.

4. Screen goes black during use

Solution: Press the menu button  briefly or turn the dial to wake the device from stand-by mode. The display lights up.

5. Blurred image in the device during use

Solution: Check the diopter setting of the riflescope to ensure a clear view of the display through the eyepiece. Then rotate the focus wheel of the Nighthunter S35 until the image is in focus.

STORAGE AND TRANSPORT

Please store and/or transport the device in an environment that complies with the following information.

To avoid danger, property damage, etc., please read the user manual carefully before using the device.

Storage

- The packaged device should be stored in a well-ventilated room at a temperature between -40°C and +60°C and a relative humidity of no more than 95%.
- Never store the batteries inside the device.

Transport:

During transport, the device should be protected from rain, immersion in water, strong vibrations and shocks, among other things.

TECHNICAL SPECIFICATIONS

Steiner Nighthunter S35		Item no. 870000106
Optical characteristics	Magnification	1x
	Focal length	35mm F1.0
	Field of view @ 100m	12.5° x 10.03°
	System magnification	digital
	Resolution (Detector)	640 x 512 @ 12µm
	Display	OLED
	Resolution (Display)	1280 x 960 pixel
	Output frame rate	50Hz
	Max screen size	10,8 inch
NETD	< 30mk	
Function & features	WiFi	Yes
	Stadiametric Rangefinder	Yes
	Picture-in-Picture	Yes
	Color Palettes	White Hot, Black Hot, Iron Red, Fire, Red Hot, Amber
	Calibration	Automatic/Scene/Shutter
	Temperature Range	-10 to +50 °C
	Waterproofness	Waterproof
	Shockproof	up to 30G
	Stand-By Mode	Yes
	Video output format	mp4 / jpg
Memory capacity	32 GB	
Overall features & accessories	Dimensions	120 x 80 x 73 mm
	Weight	460 g
	Battery	2x 18650 (Please use batteries with a length of 67mm - 71mm) (Not included in the scope of delivery)
	Charging procedure	Multiple interchangeable plugs GB/AU/EU/CN/US
	Adaptors	Standard USB-C power adapter 5V DC, max 10W
	Working time	≥ 9 hours
Warranty	2 years	

STEINER



Nothing Escapes You

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