

Thermal Scope Thunder Pro Series

Version: V5.5.36 build 211119

Release Notes

(2021-11-23)

General Information

Main Firmware Version	V5.5.36 build 211119
FPGA Firmware Version	V0.0.1 build 211018

Supported Product List

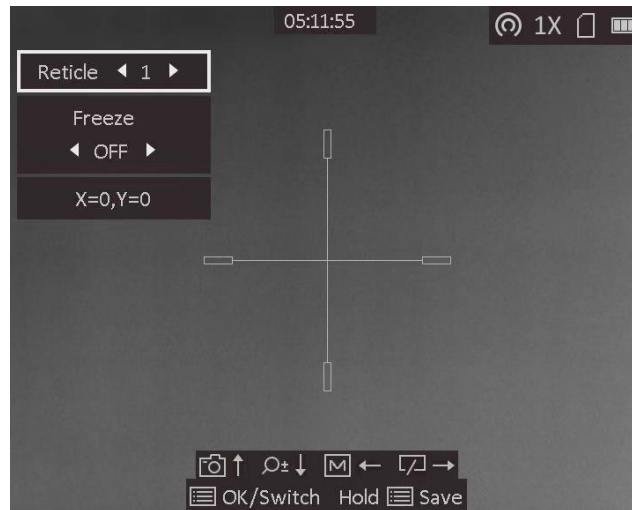
HM-TR12-19XG/W-TE19
HM-TR12-25XG/W-TE25
HM-TR12-19XG/W-TE19C
HM-TR12-19XG/CW-TE19C

Key Features: Thunder Pro (TE19, TE25&TE19C) V5.5.36

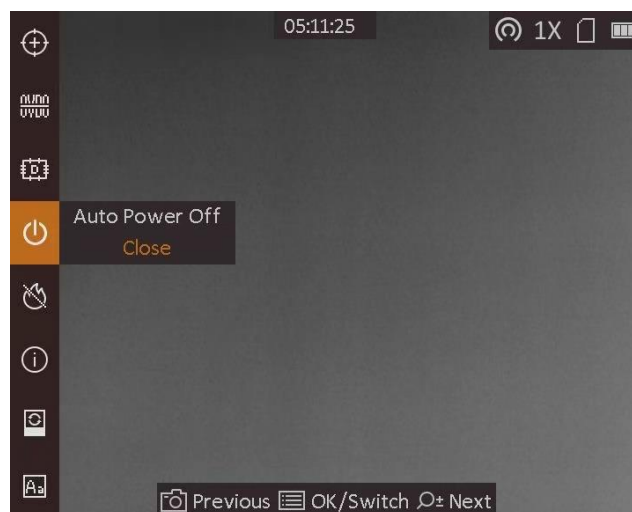
➤ **Features applicable to scope TE19&TE25:**

1. Support **Reticle**.
2. Support **digital zoom 1x, 2x, 4x, 8x**.
3. Support **PIP function**.

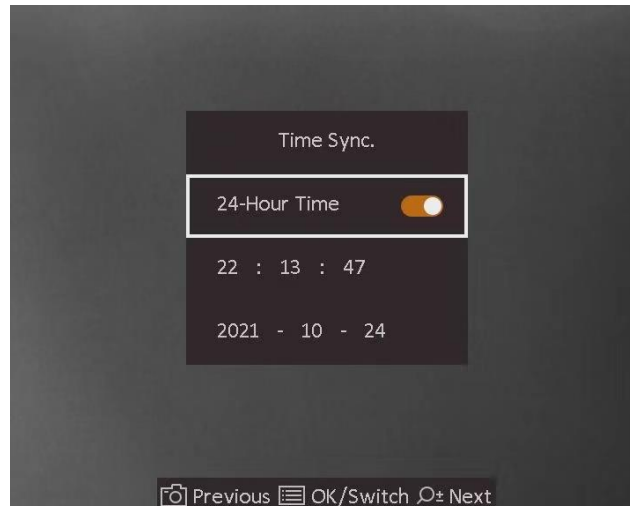
4. Support **showing different styles of reticle on HIKMICRO Sight synchronously.**
5. Support **image freeze when adjust reticle position in Reticle submenu.**



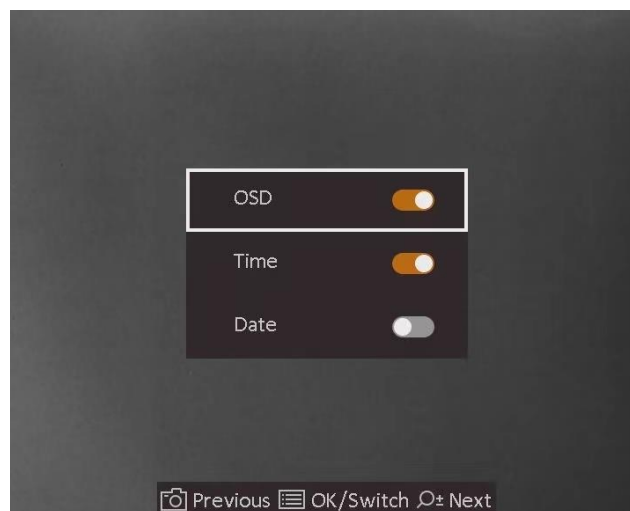
6. Support **Trajectory.**
7. Support **Auto Power Off in standby mode: close, 30min, 45min. (Function status default to be Close)**



8. Support **Real Time Clock** to be displayed on the live image.



9. Support **OSD/Time/Date** to be separately turned ON/OFF on display.

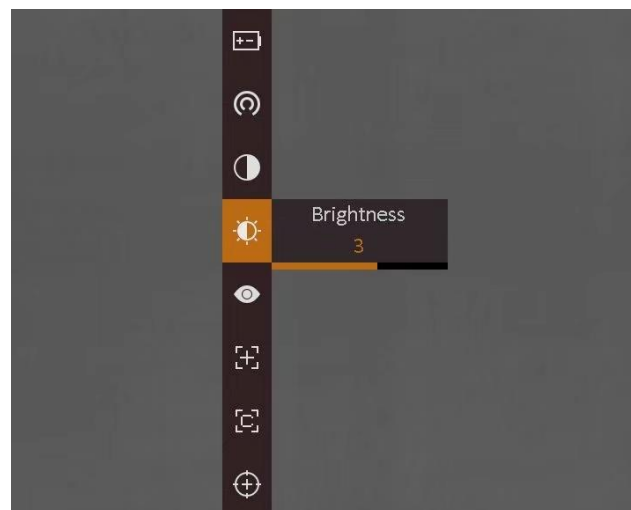


10. Support **the function position unchanged when returning to the menu.**
11. Support 4 kinds of image modes: **White Hot, Black Hot, Fusion, Red Hot**
12. Support **Hot Tracking** function.
13. Support **DPC** function
14. Support **Hotspot** function
15. Support **Recognition** and **Jungle** mode
16. Support 3 kinds of Image Calibration: **Auto FFC, Manual FFC, External**
17. Support **Brightness** and **Contrast** adjustment
18. Support multi-language (English, German, Russian, Czech, French, Spanish, Danish, Hungarian, Norwegian, Swedish, Finnish, Polish, Dutch, Romanian, Slovak, Japanese, Korean, Italian, Portuguese)
19. Support capture picture and record video
20. Support **Restore**

21. Support using **HIKMICRO Sight** to view, filter, download, and delete pictures and videos stored on the device SD card
22. Support **Burn-Prevention** function to protect detector.
 - After the function is turned on, the device will slide shutter which in front of detector down and keep 10 seconds when device is facing the sun directly.
 - Function status default to be OFF.

➤ **Features applicable to clip-on TE19C:**

1. Adjust the menu to display in the center in the Clip-on mode.



2. Support **Image Calibration**.

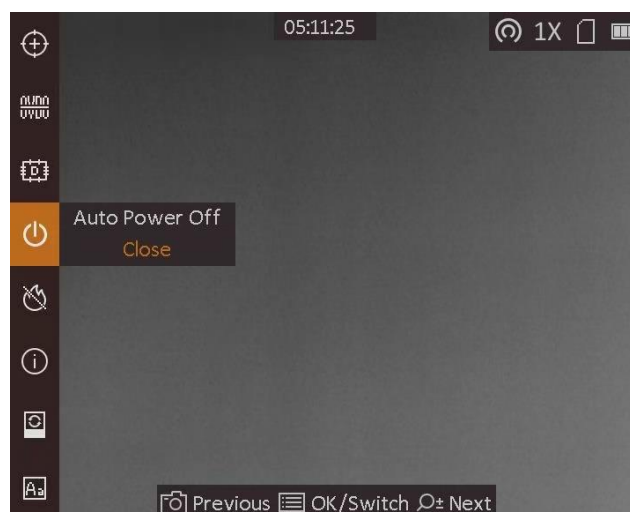


3. Support **manual switching eyepiece type. (This function is only applicable to clip-on TE19C)**

- Switch eyepiece type as Clip-on, device has clip-on functions; switch eyepiece type as Scope, device has scope functions. Make it consistent with the type of eyepiece actually installed before normal use.
- Only clip-on support flexible transformation: clip-on, scope, monocular.
- The reason why scope don't support flexible transformation, is that the eyepiece of clipon need to do calibration together with the body device in factory. If combine the eyepiece of clipon (HM-THUNDER-EC) with scope randomly, it may have parallax, this need to be repaired by RMA. To avoid this, manual switching eyepiece type function has been cancelled in the firmware of scope TE19 so that it can't be transformed into clipon TE19C.

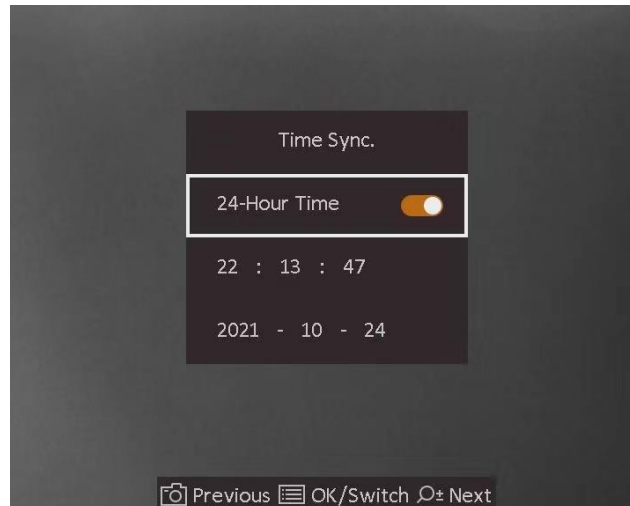


4. Support **Auto Power Off** in standby mode: close, 30min, 45min. (Function status default to be Close)

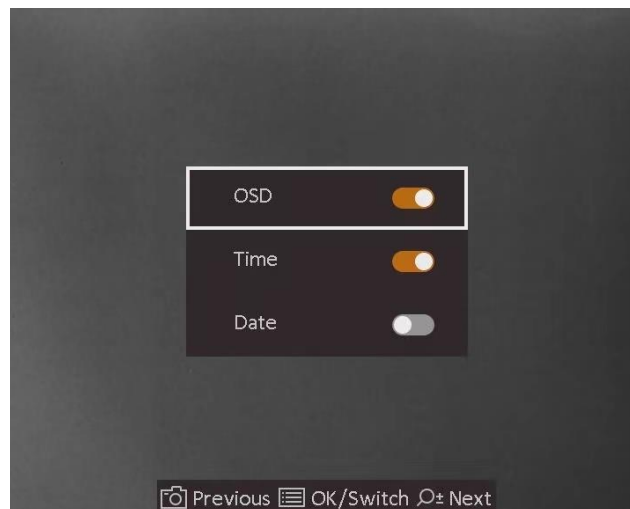


5. Support **Reticle**. (This function is only applicable to HM-TR12-19XG/W-TE19C)

6. Support **showing different styles of reticle on HIKMICRO Sight synchronously.**
(This function is only applicable to HM-TR12-19XG/W-TE19C)
7. Support **image freeze when adjust reticle position in reticle submenu.** **(This function is only applicable to HM-TR12-19XG/W-TE19C)**
8. Support **Real Time Clock** to be displayed on the live image.



9. Support **OSD/Time/Date** to be separately turned ON/OFF on display.



10. Support **the function position unchanged when returning to the menu.**
11. Support 4 kinds of image modes: **White Hot, Black Hot, Fusion, Red Hot**
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19. Support capture picture and record video
20. Support **Restore**
21. Support using **HIKMICRO Sight** to view, filter, download, and delete pictures and videos stored on the device SD card
22. Support **Burn-Prevention** function to protect detector.
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 - Function status default to be OFF.

Comparison of TE19C&TE19

	Flexible transformation	Reticle	Trajectory	PIP	Zoom	Image Calibration	Automatic switching mode between clip-on and scope
HM-TR12-19XG/W-TE19C	With clip-on eyepiece	√	X	X	X	√	X
	With scope eyepiece	√	√	√	√	X	X
HM-TR12-19XG/CW-TE19C	With clip-on eyepiece	X	X	X	X	√	X
	With scope eyepiece	X	X	√	√	X	X
HM-TR12-19XG/W-TE19	With clip-on eyepiece	NA	NA	NA	NA	NA	NA
	With scope eyepiece	√	√	√	√	X	NA

Upgrade Guide

The following firmware need to be upgraded:

ID	Firmware Type	Version
1	Main	V5.5.36 build 211119
2	FPGA	V0.0.1 build 211018

Upgrade Steps are shown as follow:

- 1) Disable hotspot function then connect the device to your PC with cable.
- 2) Turn on the device and open the detected disk, copy the unzipped **.dav** file and paste it to the root directory of the device.
- 3) Hold power button to reboot the device, and the device upgrades automatically. The upgrading process will be displayed in the main interface.
During the upgrade, make sure the device is connected to the computer. Otherwise, it will cause unnecessary upgrade failure, firmware damage, etc.
- 4) Repeat steps 1 to 3 to upgrade all firmware one by one (no order requirement for package upgrade). The upgrading process of FPGA firmware would be continued for over 15 minutes, so please be patient during the upgrading.

Notes

1. After the upgrade, the device cannot be downgrade to the previous versions.
2. Due to some default parameters have been changed, please restore your device after upgrading, to make sure that every function is working well.
3. After upgrading the FPGA firmware, some defective pixels may be released due to the change of image algorithm. This is a normal phenomenon and please use the built-in DPC function to eliminate them. For specific guide about DPC function, please refer to the user manual.

Remarks:

- Please use this Document with the guidance and assistance of professionals trained in supporting the Product.
- Pictures, charts, images and all other information hereinafter are for description and explanation only.
- HIKMICRO reserves the right to change, alter or withdraw the above notification without prior notice.
- Product design and specifications are subject to change without prior notice.
- The HIKMICRO firmware may contain errors known as errata, which may cause the product to deviate from published specifications. Current characterized errata are available on request.
- HIKMICRO is not liable for any typing or printing errors.

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