

# **Axion F**

**Manual** 

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# **Specifications**

You can learn more about the main parameters **here**.

#### **XM30F**

Model	XM30F
SKU	77473
Microbolometer	
Туре	uncooled
Resolution, Pixels	320x240
Pixel Pitch, μm	12
Frame Rate, Hz	50
Optical Characteristics	
Optical Magnification, x	3
Smooth Digital Zoom	3-12
Digital Zoom, x	x1, x2, x4
Relative Aperture, D/f'	1.2
Minimum Observation Distance, m/y	3/3.28
Eye Relief Diameter, mm	5

Angular Field of View (Horizontal x Vertical), degree	7.8x5.9
Linear Field of View (Horizontal x Vertical), m at 100 m	13.7×10.3
Eyepiece Focus Range, Diopter	+4 / -5
Detection Distance for Deer- Sized Objects, m/y	1300/1421.7
Display	
Туре	AMOLED
Resolution, Pixels	640x400
Operational Characteristics	
Power Supply, V	3 - 4.2
Battery Type/Capacity/Nominal Output Voltage	APS 3 Li-ion Battery Pack / 3200 mAh / DC 3.7 V
External Power Supply	5 V (USB)
Battery Run Time at t=22°C, hours*	7
Degree of Protection, IP Code (IEC60529)	IPX7
Operating Temperature Range, °C / °F	-25 +40 / -13 - +104

Dimensions, mm/inch	144x40x69 / 5.67x1.46x2.72
Weight (without battery), kg/oz	0.25/8.81
Video Recorder	
Photo/Video Resolution, Pixels	528x400
Video/Photo Format	.mp4 / .jpg
Built-in Memory	16 GB
Wi-Fi Channel**	
Frequency	2.4/5 GHz
Standard	IEEE 802.11 b/g/n/ac

<sup>\*</sup>Actual operating time will depend to what extent the Wi-Fi and built-in video recorder is used.

<sup>\*\*</sup>Reception range may vary depending on various factors: obstacles, other Wi-Fi networks.

## **Description**

**Axion F**IR-matrix (microbolometer) based thermal imaging monoculars are represented by a number of models that differ in magnification and lens diameter.

These devices are designed for use both at night-time and during the day in difficult weather conditions (fog, smog, rain), as well as where obstacles are present that impede the detection of a target (branches, tall grass, dense shrubs etc.).

Unlike night-vision devices that are based on electron-optical converters, thermal vision monoculars do not require an external light source and are resistant to the effects of bright light.

**Axion F**monoculars can be used for night-time hunting, observation and terrain orientation, and carrying out rescue operations.

To get started, see the sections:

**Battery Charging** 

**Battery Installation** 

**Powering on and Image Setting** 

**Stream Vision 2** 

# **Package Contents**

- Axion F Thermal Imager
- APS 3 rechargeable battery
- Power Adapter
- USB Cable
- Carrying case
- Hand strap
- Quick User Manual
- Lens-cleaning cloth
- Warranty sheet

## **Features**

- Microbolometer pixel size is 12 microns
- 640x400 AMOLED display resolution
- Compact size and light weight
- Functional and ergonomic design
- Eight color modes
- Three calibration modes: Manual, Semi-Automatic, Automatic
- Three levels of sensitivity enhancement: Normal, High, Ultra
- Stadiametric Rangefinder
- Display Off function
- Defective pixel repair function
- Updatable firmware
- Wide operating temperature range (-25°C to +40°C / -13°F to +104°F)
- Fully waterproof (IPX7 rated)

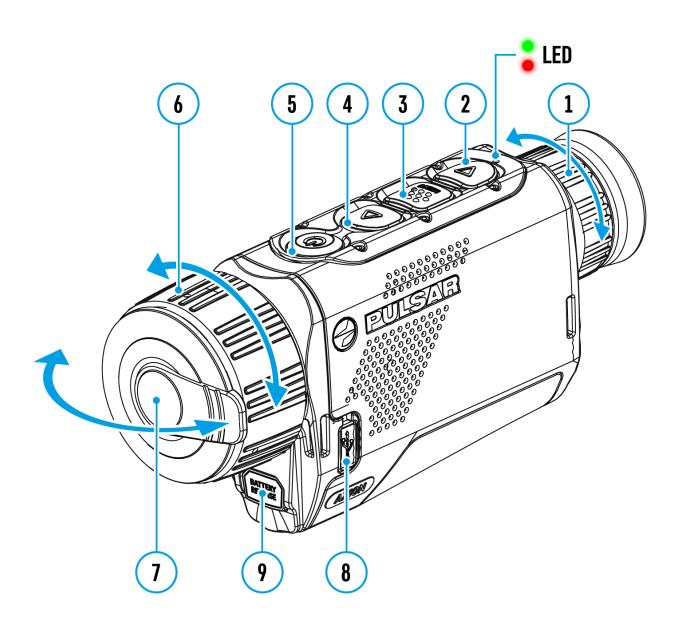
#### **Video/Audio Recording**

- Built-in video and sound recorder
- Integration with iOS and Android devices
- Wi-Fi remote control and viewing using a smartphone
- Storing photos and videos in Cloud when using the Stream Vision 2 App

#### **Battery Pack**

- Quick Change Li-Ion Battery Pack APS 3
- Charging from USB Power Bank

# **Components and Controls**



- 1. Eyepiece focus ring
- 2. DOWN/REC button
- 3. MENU button
- 4. UP/ZOOM button
- 5. Power ON/OFF/CALIBRATION button
- 6. Lens focus ring
- 7. Lens cover
- 8. MicroUSB connector

### 9. Battery release button

LED indicator displays the current status of the device:

LED Indicator	Operating Mode
•	Device is turned on
*	The device is turned on/video recording
•	The device is turned on/battery charge $< 10\%$
*	The device is turned on/video recording/battery charge < 10%

## **Precautions**

- Always use the APS charger to charge APS batteries. Using an unsuitable charger can cause irreparable damage to the battery and fire.
- Do not charge the battery immediately after bringing it from cold to warm. Wait at least 30 minutes for the battery to warm up.
- It is not recommended to charge the batteries with a charger connected to the USB port of a computer or laptop. It can damage the computer.
- Do not leave the battery unattended while charging.
- Do not use the charger if it has been modified or damaged.
- Do not leave the battery in a charger connected to the mains after charging is complete.
- Do not expose the battery to high temperatures or naked flames.
- Do not use the battery as a power source for devices that do not support APS batteries.
- Do not disassemble or deform the battery or charger.
- Do not drop or strike the battery or charger.
- The battery and charger must not be immersed in water.
- Keep the battery out of the reach of children.

# Recommendations for Battery Use

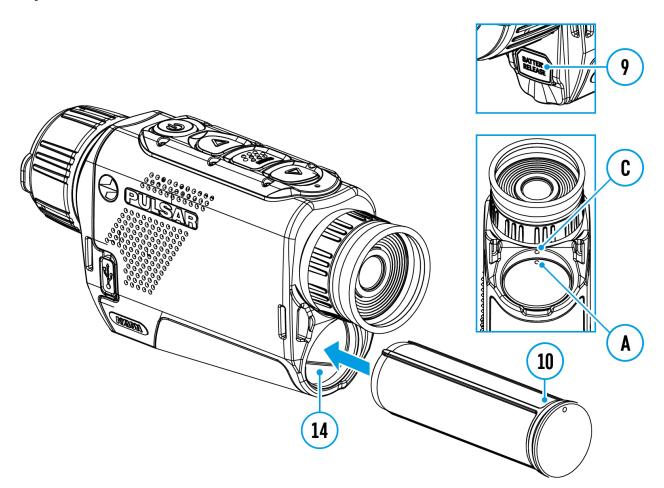
- The batteries should be partially charged (50 to 80 %) for long-term storage.
- The battery is to be charged at an ambient temperature of 0 °C to +35 °C or the lifespan of the battery will decrease significantly.
- When using the battery at sub-zero ambient temperatures, the battery capacity decreases. This is normal and not a defect.
- Do not use the battery at temperatures outside the range of -25 °C to +40 °C or it may reduce battery life.
- The battery is short circuit protected. However, any situation that may cause short-circuiting should be avoided.

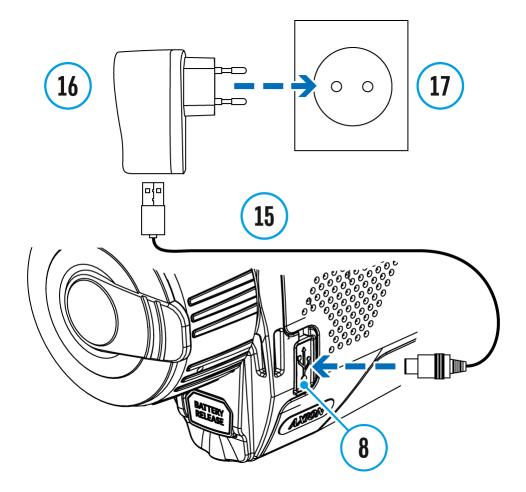
# **Battery Charging**

The **Axion F** thermal imager comes with an APS 3 rechargeable Lithium-ion battery. Before first use, make sure the battery is fully charged.

The icon in the status bar will flash when the battery is low. The battery needs to be charged.

#### Option 1

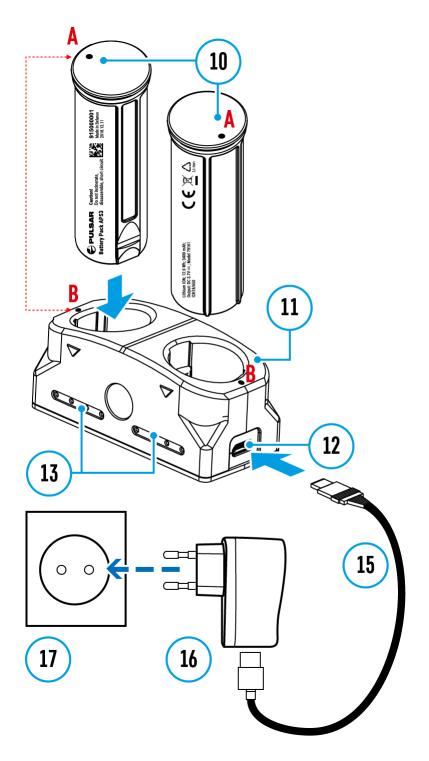




- 1. Install the battery **(10)** into its slot on the device case **(14)** by aligning the icons to form a 'dot' on the unit and the battery.
- 2. Attach a USB cable (15)to the microUSB connector (8) on the device.
- 3. Connect the other end of the USB cable (15) to the power adapter (16) or to a USB socket connected to another power sources with rated output of 5V or less.
- 4. Connect the power adapter (16) to the mains power supply (17).
- 5. Wait until the battery is fully charged (indication in the status bar:

Note: The PB8I Power Bank may be used as a charger.

#### Option 2



- 1. Insert the battery **(10)** fully along the guide rail into the APS\* charger slot **(11)**.
- 2. Point  ${\bf A}$  on the battery and Point  ${\bf B}$  on the charger should be aligned.
- 3. Two batteries\* can be charged at the same time a second slot is provided for this.
- 4. Attach the microUSB plug on the USB cable **(15)** to the microUSB connector on the power adapter **(16)**. Plug the device into a 100–240V power outlet **(17)**.
- 5. Attach the second plug of the microUSB cable to the socket (12) of the

charger (11).

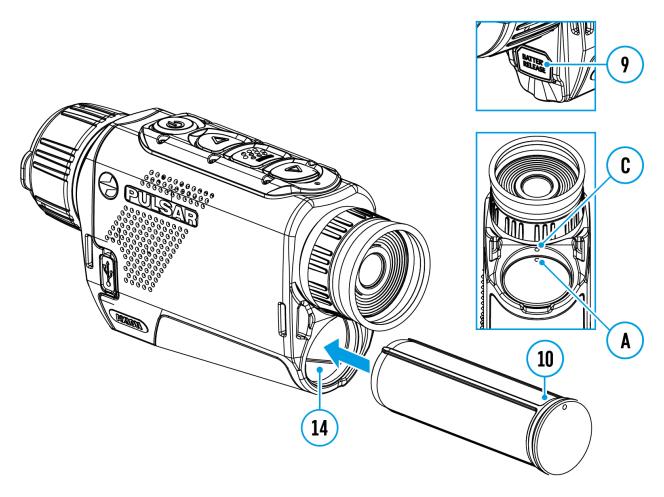
- 6. The LED indicator (13) will light up battery charge status (see table).
- 7. Wait until the battery is fully charged (LED indication (13): ••••).

(13) LED Indicator**	<b>Battery charge status</b>
•	Battery charge from 0 to 10%. Charger not connected to the mains power supply
•	Battery charge from 0 to 10%. Charger connected to the mains power supply
••••	Battery defective. <b>Do not use</b> the battery!
Image not found or type unknown	Battery charge from 10 to 20%
••	Battery charge from 20 to 60%
magelmageonuontdfountyperutynkeonunknown	Battery charge from 60 to 95%
Imag (Imag (Imag) Eon diploeculip kencing kenc	Battery completely charged. Charging will automatically stop. The battery can be disconnected from the charger

#### \* Available separately

\*\*The indicator displays the current level of charge of the battery for 30 seconds when the APS charger is not plugged in. When the power is connected, the display shows the current status of the battery constantly, the LEDs additionally flickering to indicate the battery charging process.

## **Battery Installation**

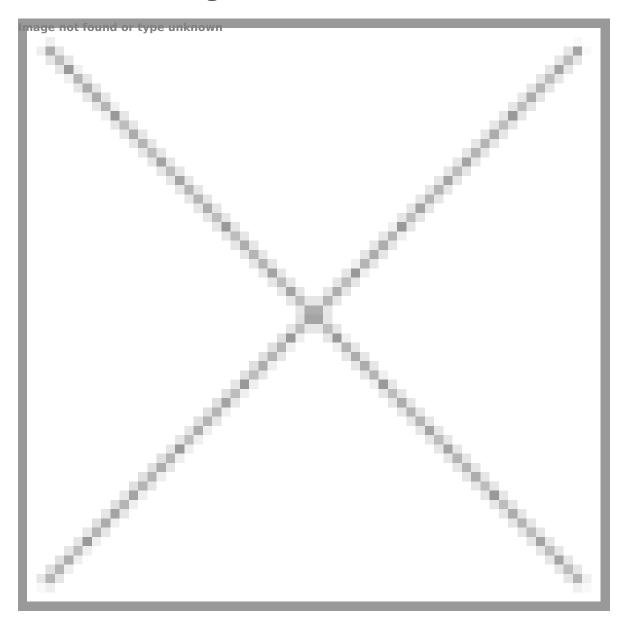


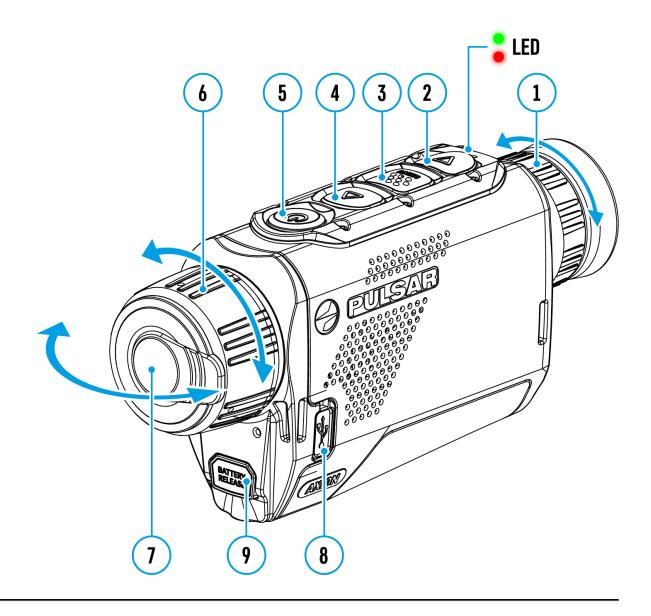
**Attention!** Before installing the battery, make sure that there is an undamaged rubber insulating ring on the battery. The ring is designed to protect your device from moisture getting inside. Damage to the device due to a missing ring is not covered by the warranty. To replace or purchase a ring, contact your **local distributor.** 

- Insert the battery (10) into the assigned slot on the device's casing (14), aligning the images to form a 'dot' on the instrument (C) and the battery (A).
- 2. When properly installed, the battery is locked into the slot with a special clip.
- 3. To remove the battery from the device, press the Battery Release button (9).

# **External Power Supply**

## **Show device diagram**





Power can be supplied from an external source such as a 5 V power bank.

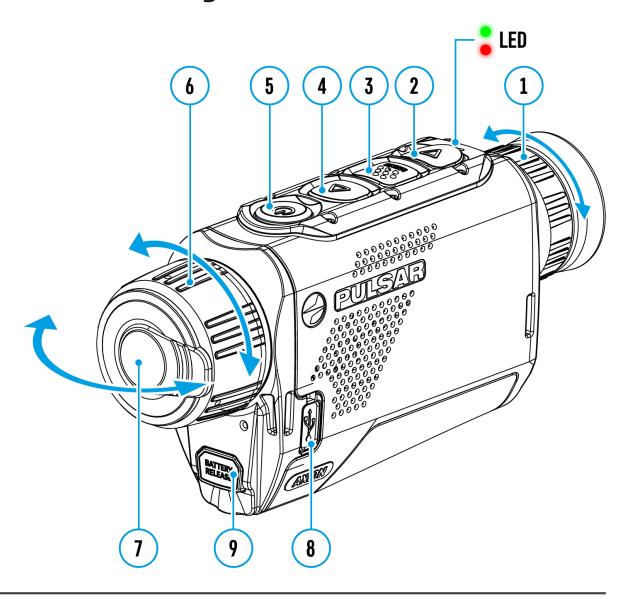
- 1. Attach the external power source to the device's USB connector (8).
- 2. The device will switch to operation from the external power source, while the APS3 battery will be gradually recharged.
- 3. An icon of a battery will appear on the display showing its charge as a percentage.
- 4. If the device is operated from an external power source and the APS3 battery is not connected, an icon —■= is displayed.
- 5. When the external power supply is disconnected, the device switches to the internal power supply without the device powering off.

**Important!** Power Bank must be connected to the device with the battery installed.

**Attention!** Charging Power Bank APS3 batteries at air temperatures below 0 °C can result in reduced battery life. When using external power, connect Power Bank to the switched-on riflescope, which have worked for several minutes. External power is supplied from an external source, such as a 5V Power Bank.

# Powering on and Image Settings

## **Show device diagram**



- 1. Remove the lens cover (7). Secure the cover to the strap using the magnet built into the cover.
- 2. Turn the device on with a short press of the ON/OFF (5)
- 3. Adjust the resolution of the icons on the display by rotating the diopter adjustment ring on the eyepiece (1).

- 4. To focus on the object under observation, rotate the lens focus ring (6).
- 5. Select the desired **calibration mode** in the main menu: Manual **(M)**, Semi-automatic **(SA)** or Automatic **(A)**.
- 6. Calibrate the image with a short press of the **ON/OFF** (5) button (where calibration mode **SA** or **M** has been selected). Close the lens cap before manual calibration.
- 7. Select the required **amplification level** ("Normal" N, "High", "Ultra" U) by briefly pressing the UP (4) button.
- 8. Activate the quick menu by briefly pressing the **MENU (3)** button to adjust the brightness, contrast and smooth digital zoom (for more details see the **Quick Menu** section).
- 9. Turn the device off with a long press of the **ON/OFF (5).**

Observation conditions: time of day, weather, different observation objects affect the image quality. Custom settings for brightness, display contrast as well as the function of adjusting the microbolometer sensitivity level will help to achieve the desired quality in a particular situation.

**Attention!** It is forbidden to point the riflescope lens at intensive energy sources, such as laser radiation emitting devices or the sun. It can disable the riflescope electronic components. Warranty does not cover damage arising from failure to comply with the operating rules.

# **Button Operation**

Operation	Button
Power device on	<b>U</b> short press
Power device off	U long press for 3 secs
Turn display off	<b>U</b> long press for less than 3
rain display on	secs
Turn display on	<b>υ</b> short press
Calibrate the microbolometer	<b>υ</b> short press
Switching amplification levels	Δ short press
Control discrete digital zoom	Δ long press
Video Recorder	Button
Start/pause/resume video recording	∇ short press
Stop video recording	∇ long press
Switch to video / photo	∇ long press
Capture a photo	∇ short press
Main Menu	Button
Enter main menu	long press
Navigation upwards/rightwards	Δ short press
Navigation downwards/leftwards	∇ short press
Confirm selection	short press
Exit submenu without confirming selection	long press
Exit menu (switch to viewing mode)	long press

Quick Menu	Button
Enter quick menu	short press
Switch between quick menu options	short press
Increase value	Δ short press
Decrease value	∇ short press
Exit quick menu	long press

## **Status Bar**

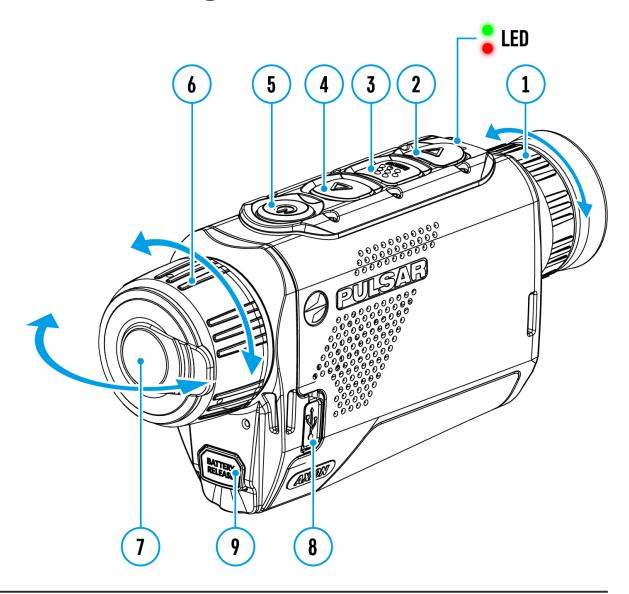


The status bar is at the bottom of the display and displays information on the actual operating status of the device, including:

- Color Mode:
- O White hot
- Black hot
  - Amplification level
  - Smoothing Filter (displayed when the function is on)
  - Calibration Mode (in Automatic calibration mode a countdown timer 00:03 will appear instead of the calibration mode icon 3 seconds before automatic calibration begins).
  - Microphone
  - Magnification
  - Wi-Fi Connection
  - Time
  - Power Indication:
- charge level if the device is powered by a battery
- 四 charge level if the device is charging and powered by a battery

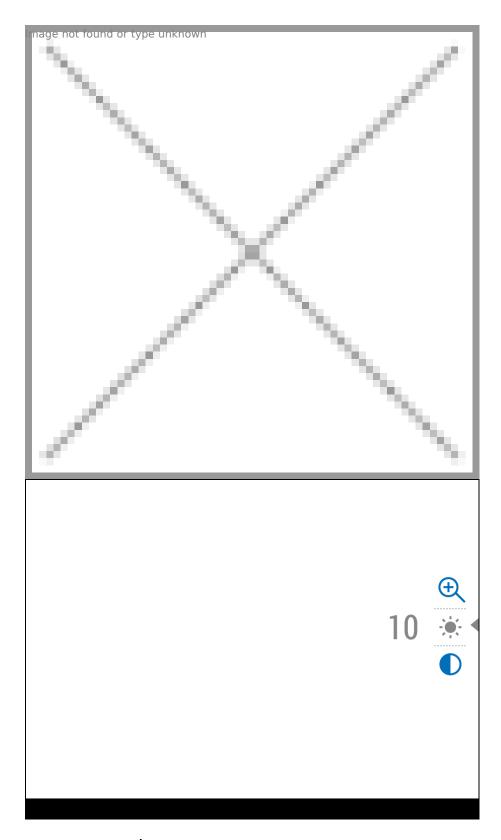
## **Quick Menu**

## **Show device diagram**



The basic settings (adjusting brightness and contrast, using the Stadiametric Rangefinder function) can be changed using the quick access menu.

- Enter the menu by briefly pressing the MENU (3).
- A short press of the **MENU (3)** button enables you to toggle between functions, as described below.



**Brightness** - press the **UP (4)/DOWN (2)** buttons to change display brightness from 0 to 20.

*Note:* display brightness and contrast settings are saved in the memory when the device is turned off.

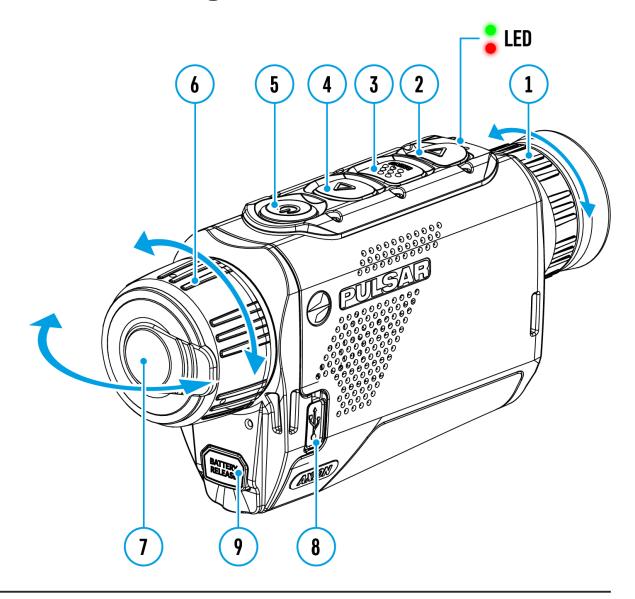
Stadiometric Rangefinder | - change the position of special marker lines to determine the distance to the object being observed by pressing the UP (4)/DOWN (2) buttons (for more details see the Stadiametric Rangefinder section).

Smooth Digital Zoom — - press the UP (4)/DOWN (2) button to change the value of the digital zoom from 3 to 12. The digital zoom changes in 0.1 increments.

• Press and hold the **MENU (3)** button to exit the menu or wait for 10 seconds to exit automatically.

# **Amplification Level**

## **Show device diagram**



Sensitivity enhancement levels (Normal N), High H), Ultra U) are software algorithms that enhance the quality of detection and recognition in various observation conditions. When the temperature contrast decreases (fog, precipitation, high humidity), it is recommended to increase the amplification level. To optimize the image, activate the Smoothing Filter in the main menu.

#### Normal



#### High



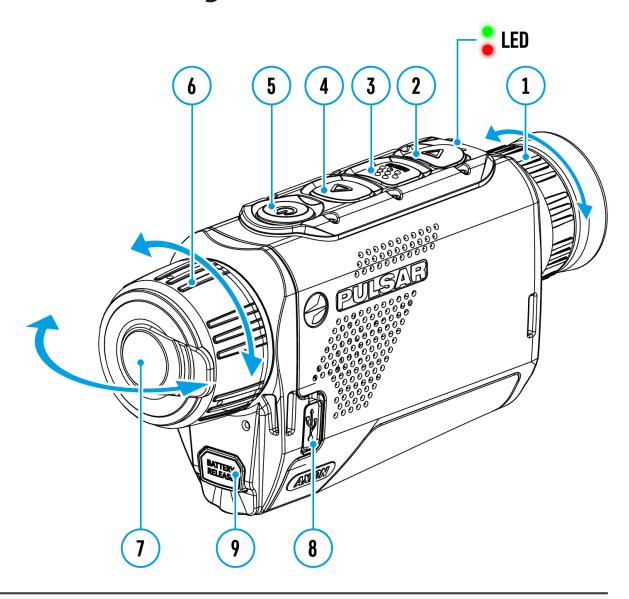
#### Ultra



Press the **UP**button **(4)** briefly to switch the amplification level.

# Video Recording and Photography

## **Show device diagram**

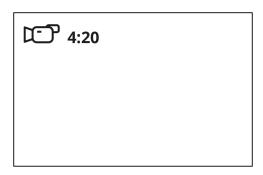


**Axion F**thermal imagers are capable of video recording and photography. Videos and images are saved on the built-in memory card.

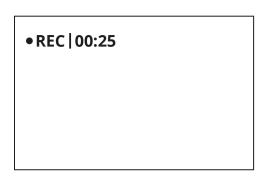
Before using this feature please set the **date** and **time** (see **General Settings** section).

The built-in recorder operates in two modes - Video and Photo.

#### Video mode. Video recording



- **1.** Switch to **Video** mode by pressing and holding the **DOWN/REC (2)** button.
- 2. The corn and the remaining recording time in HH:MM (Hours:Minutes) format are displayed in the upper left corner, for example 4:20.
- 3. Press the DOWN/REC (2) button briefly to start video recording.
- **4.** When the video recording starts, the icon will disappear and the REC icon and timer in MM:SS (Minutes:Seconds) format will appear •REC | 00:25.

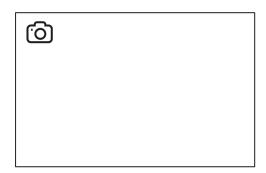


- 5. Pause and resume recording video with a short press of the DOWN/REC(2) button.
- 6. Stop recording video with a long press of the DOWN/REC (2)button.
- **7.** Video files are saved to the built-in memory card after the video

recording has been stopped.

**8.** Press and hold the**DOWN/REC (2)** button to switch between the **Video** and **Photo**modes (Video-> Photo-> Video...)

#### Photo Mode. Capturing an image



- **1.** Switch to the **Photo**mode by pressing and holding the **DOWN/REC (2)** button.
- 2. Press the **DOWN/REC** (2) button briefly to take a photo. The icon flashes the photo file is being saved to the built-in SD card.

#### Notes:

- You can enter and operate the menu during video recording.
- Recorded videos and photos are saved to the internal memory card in the format img xxx.jpg (photos), video xxx.mp4 (videos).
- Videos are recorded in clips with a maximum duration of 5 minutes. The number of recorded files is limited by the capacity of unit's internal memory.
- Regularly check the free capacity of the internal memory and move recorded footage to other storage media to free up space on the internal memory card.
- In case of a memory card error, you can use the format function in the **General Settings** section of the main menu.
- When the Display Off function is activated, video recording continues to run in the background.

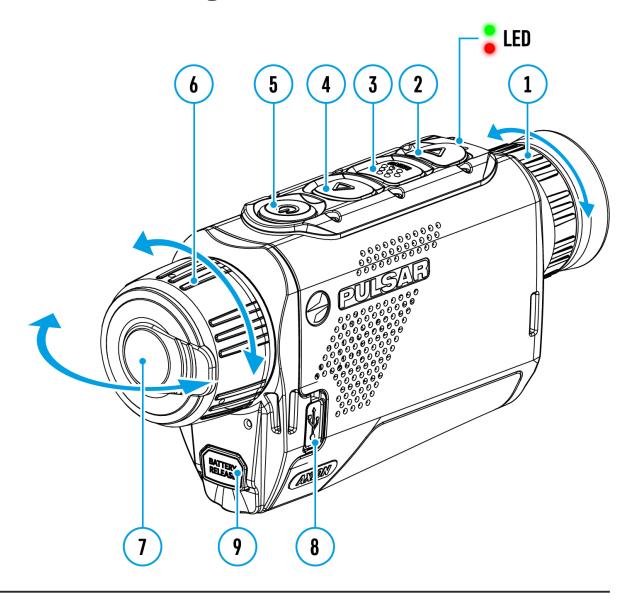
# **Discrete Digital Zoom**

The device functionality allows you to quickly increase the base magnification (see **Optical Magnification** line in the table of **Technical Specifications**) by 2 or 4 times as well as return to the base magnification.

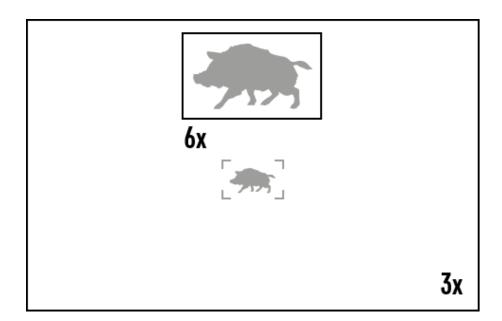
Press and hold the **UP/ZOOM (4)** button to change the digital zoom.

## **PiP Function**

#### **Show device diagram**



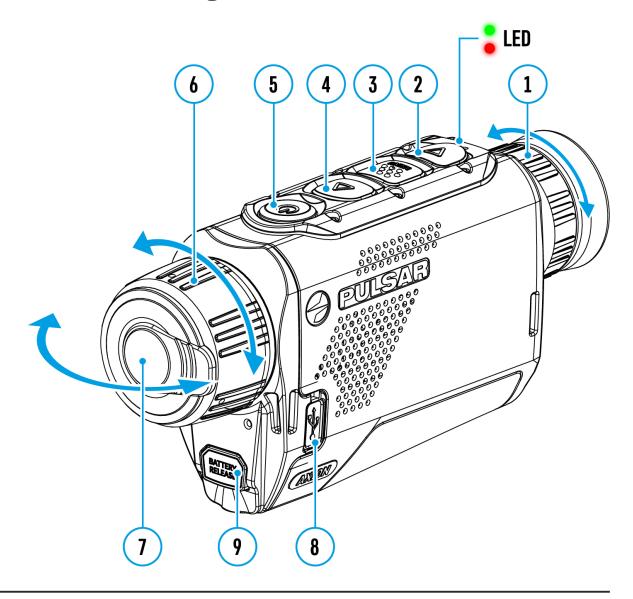
The **PiP** (Picture-in-Picture) function allows you to see both the main image and a magnified image in a dedicated window.



- To turn on and off the PiP function see the PiP Mode section.
- Press and hold the **UP (4)** button to change the magnification ratio in the **PiP**window.
- The zoomed image is displayed in a dedicated window, while the image in the rest of the screen is displayed at base magnification 3x.
- When the **PiP** is turned on you can control both the discrete and smooth digital zoom. In this case the zoom value changes only take place in the dedicated window.
- When the **PiP** function is turned off, the screen will display at the magnification that was set in **PiP**mode.

# **Display-Off Function**

#### **Show device diagram**



This function darkens the screen, which aids the user's concealment. However, the device stays on.

When this function is in use, the device switches to the standby mode, which allows it to be switched on quickly if necessary.



- 1. When the device is on, press and hold the **ON/OFF** (5) button. The display will turn off, the current time and the "**Display off**"icon will appear.
- 2. Turn the display back on with a short press of the **ON/OFF (5)** button.
- 3. When you press and hold the **ON/OFF (5)** button, the display shows the "**Display off**"icon with a countdown. Pressing & holding the button down for the duration of the countdown will power the device off completely.

### **Wi-Fi Function**

The device has a function enabling wireless communication with external devices (smartphone or tablet) via Wi-Fi.

• Turn on the wireless module in the WI-Fi Activation menu option.

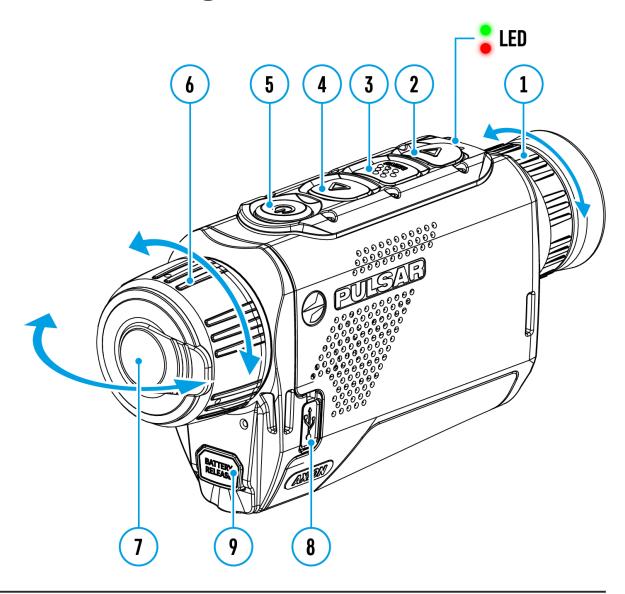
Wi-Fi is displayed in the status bar as follows:

Indication on the status bar	<b>Connection Status</b>
*	Wi-Fi is switched off
.:?	Wi-Fi connection is in progress
<b>¶</b> ?	Wi-Fi is switched on, no connection with device
<b>Q</b>	Wi-Fi is switched on, device connected

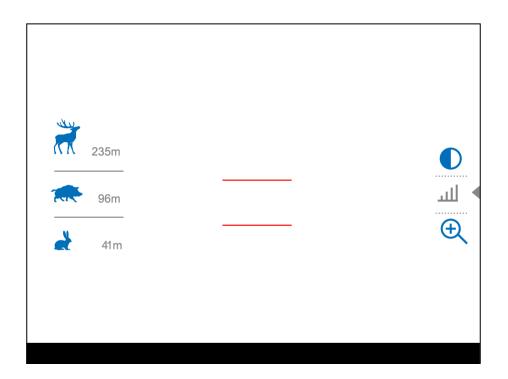
- The device is recognized by an external device as AXION\_XXXX where XXXX are the four last digits of the serial number.
- After entering the password (default: **12345678**) on a mobile device (see **Password Setup** subsection of the **Wi-Fi Settings** section for more information on setting a password) and setting up a connection, the icon in the status bar will change to .
- The Wi-Fi function will turn off automatically if there is not enough battery power for Wi-Fi. The battery icon will turn red and flash. To use the Wi-Fi function again, you need to charge the battery.

# **Stadiametric Rangefinder**

#### **Show device diagram**



**Axion F**thermal imagers are equipped with a stadiametric rangefinder which allows the user to determine the approximate distance to an object of a known size with reasonable accuracy.



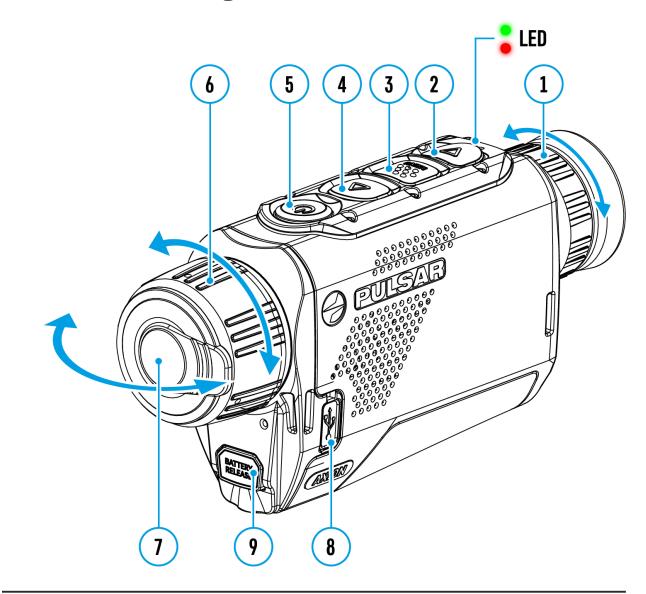
- 1. Select the **Stadiametric Rangefinder** function with short presses of the **MENU (3)** button until the icon | | is selected.
- 2. You will see on the display: measurement bars, icons of three reference objects and respective distances for the three objects.
- 3. Position the lower fixed bar under the object being ranged.
- 4. By pressing the **UP (4)/DOWN (2)** buttons, move the upper horizontal bar relative to the lower fixed bar until the object fits entirely between the two bars. The distance to the object is automatically recalculated as you move the upper line.
- 5. Exit the rangefinder mode with a long press of the **MENU (3)**button or wait 10 seconds to exit automatically.

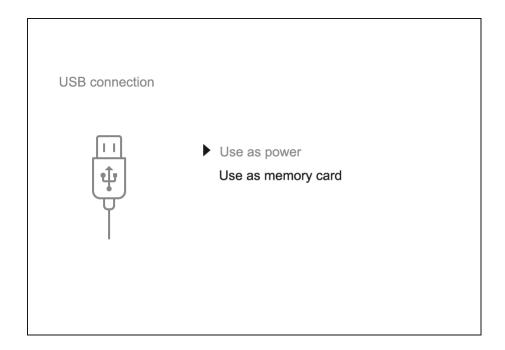
#### Notes:

- There are three predefined values for the reference objects: Hare 0.3 m height, Boar 0.7 m height, Deer 1.7 m height.
- Before it appears on the display, a measured distance value is rounded up to 5m for larger values and rounded down to 1m for smaller values.
- To select the unit of measurement (Meters or Yards), go to the **General**Settings The menu item support found or type unknown of Measure submenu.

## **USB** Connection

### **Show device diagram**





- 1. Connect one end of the USB cable to the Micro-USB (9) port of your device and the other end to the USB port of your PC / laptop.
- 2. Turn the device on with a short press of the **ON/OFF(5)** button (a device that has been turned off cannot be detected by your computer).
- 3. Your device will be detected by the computer automatically; no drivers need to be installed.
- 4. Two connection modes will appear on the display: **Power** and **Memory Card**(external storage device).
- 5. Select the connection mode with the **UP (4)/DOWN (2)** buttons.
- 6. Confirm the selection with a short press of the **MENU (3)** button.

#### **Power**

- In this mode, a PC/laptop is used as an external power supply. The status bar shows the icon —■=. The device continues operating and all functions are available.
- The Battery Pack installed in the device is not being charged.
- When the USB is disconnected from the device when in the **Power** mode, the device keeps operating with the Battery Pack if it is available and sufficiently charged.

#### **Memory Card**

- In this mode the device is detected by the computer as a flash card. This mode is designed for work with the files saved in the device's memory. The device's functions are not available in this mode; the device turns off automatically.
- If video recording was in progress when the connection was made, recording stops and the video is saved.
- If the device is in **Memory Card** mode and is disconnected from USB, the device will remain on.

### **Stream Vision 2**



Install the Stream Vision 2 application to download files, update firmware, control the device by remote control and broadcast images from your device to a smartphone or a tablet via WiFi.

We recommend using the latest version – Stream Vision 2.



You can find further guidelines on Stream Vision 2 here.

**Download** from Google Play

**Download** from App Store

Find answers to frequently asked questions about using Stream Vision 2 **here**.

#### **Stream Vision 2 Manual**

#### Android

https://e.issuu.com/embed.html?d=stream\_vision\_2\_quick\_guide\_for\_android\_en&hidels

#### iOS

https://e.issuu.com/embed.html?d=stream\_vision\_2\_quick\_guide\_for\_ios\_en&hidelssuuL

## Firmware Update

- 1. Download the free Stream Vision 2 App in Google Play or App Store.
- 2. Connect your Pulsar device to your mobile device (smartphone or tablet).
- 3. Launch Stream Vision 2 and go to section "Settings".
- 4. Select your Pulsar device and press "Check firmware update".
- 5. Wait for the update to download and install. Pulsar device will reboot and will be ready to operate.

#### Important:

- if your Pulsar device is connected to a phone or mobile device, please turn on mobile data transfer (GPRS/3G/4G) to download update;
- if your Pulsar device is not connected to your phone or mobile device but is already listed in "Settings" > "My devices" section, you may use Wi-Fi to download update.

Find answers to frequently asked questions about using Stream Vision 2 **here**.

#### Is your firmware up to date?

Click **here**to check the latest firmware for your device.

# **Technical Inspection**

It is recommended to inspect your riflescope before each use. Check the following:

- The device should be free of any cracks or deformations.
- The lenses should be free of cracks, grease, dirt or debris.
- The battery level of the device should be full. Electrical sockets should be free of salts, oxidation, or other debris.
- All controls should be responsive.

# Technical Maintenance and Storage

Maintenance should be carried out at least twice a year and should include the following steps:

- Wipe the exterior surfaces of metal and plastic parts with a cotton cloth.
   Do not use chemically active substances, solvents, etc. as these will damage the paint.
- Clean the electric contacts of the Battery Pack and the device's battery slot using a non-greasy organic solvent.
- Check the objective and eyepiece lenses and if required, remove dust and sand from the optics (it is preferable to use a non-contact method). Cleaning of the exterior surfaces of the optics should be done with cleaners designed especially for this purpose.
- Store the device in a carrying case. Remove the Battery Pack for longterm storage.

# **Troubleshooting**

For technical support please contact support@pulsar-vision.com.

Answers to frequently asked questions about the devices can also be found in the **FAQ** section.

#### The device does not turn on

#### **Possible cause**

Battery Pack is discharged.

#### **Solution**

Charge the Battery Pack.

# The device does not operate from an external power source

#### **Possible cause**

The USB cable is damaged.

#### Solution

Replace the USB cable.

#### **Possible cause**

The external power supply is discharged.

#### Solution

Charge the external power supply (if necessary).

# The image is blurry, with vertical stripes or an uneven background

#### **Possible cause**

Calibration is required.

#### Solution

Perform the calibration according to **Calibration Mode** section.

#### Black screen after calibration

#### Solution

If the image does not clear after calibration, you need to recalibrate.

#### The image is too dark

#### **Possible cause**

Brightness or contrast level is too low.

#### Solution

Adjust the brightness or contrast level in the Quick Menu.

#### Poor image quality / Detection range reduced

#### **Possible cause**

These problems may occur during observation in adverse weather conditions (snow, rain, fog, etc.).

# Smartphone or tablet PC cannot be connected to the device

#### Possible cause

Device password has been changed.

#### Solution

Delete the network and connect again using the password saved in the device.

#### Possible cause

The device is in an area with too many Wi-Fi networks that may be causing signal interference.

#### Solution

To ensure a stable Wi-Fi connection, relocate the device to an area with fewer or no Wi-Fi networks.

#### **Possible cause**

The device has a 5 GHz network enabled, but the smartphone only supports 2.4 GHz.

#### Solution

**Switch** the device's Wi-Fi bandwidth to 2.4 GHz.

More information on solving problems with connection to Stream Vision 2 by following the **link**.

#### Wi-Fi signal is missing or interrupted

#### Possible cause

Smartphone or tablet is out of range of a strong Wi-Fi signal. There are obstacles between the device and the smartphone or tablet (e.g., concrete walls).

#### Solution

Relocate smartphone or tablet into the Wi-Fi signal line of sight.

More information on solving problems with connection to Stream Vision 2 by following the **link**.

### Color bars appear on the display or the image disappears

#### **Possible cause**

The device was exposed to static electricity during operation.

#### Solution

After exposure to static electricity, the device may either reboot automatically or require turning off and on again.

# The image quality during the device operation at below zero temperatures is worse than at positive temperatures

#### Possible cause

In warm climates, objects in the background of a thermal image heat up differently because of thermal conductivity, generating a high temperature contrast and a sharper thermal image.

In cold climates, objects in the background of a thermal image will cool down to roughly the same temperature, which leads to a greatly reduced temperature contrast and a degraded image quality. This is normal for all thermal imaging devices.

# The image of the object being observed is missing

#### **Possible cause**

The object is behind glass, which obstructs thermal vision.

#### Solution

Remove the glass.

#### The supplied USB cable is broken

#### Solution

To replace the USB cable, contact your local distributor.

Self-repair of the cable is prohibited.

The ability to use a USB cable from other manufacturers with the device may be limited.

# Legal Compliances and Disclaimers

**Attention!** A license is required for Axion Thermal Imager when exporting outside your country.

**Electromagnetic compatibility.** This product complies with the requirements of European standard EN 55032: 2015, Class A.

**Caution!**Operation of this equipment in a residential environment could cause radio interference.

The manufacturer reserves the right at any time, without mandatory notice, to make changes to the package contents, design and characteristics that do not impair the quality of the product.

Repair of the device is possible within 5 years.

