



# **Talion**

## **Manual**

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# Specifications

You can learn more about the main parameters [here](#).

## XQ38

Model	XQ38
SKU (without mount)	76561
SKU (with Weaver U mount)	76561U
SKU (with Weaver USQD mount)	76561S
SKU (with Weaver LQD mount)	76561L
Microbolometer	
Type	uncooled
Resolution, pixels	384x288
Pixel Pitch, $\mu\text{m}$	17
Sensor NETD, mK	< 40
System NETD, mK	< 20
Frame refresh rate, Hz	50
Optical Specifications	
Lens, mm	F38 F/1.2
Magnification, x	2.5-10
Eye relief, mm/inch	50/1.96
Field of view (H), $^{\circ}/\text{m}@100$	9.8/17.2
Diopter adjustment, D	-3/+4

Detection distance (Object of "deer" type), m/y	1350 / 1476
<b>Aiming Reticle</b>	
Click value, mm@100 m - when magnifying, x	17 mm - 2.5x 8.5 mm - 5x 4.25 mm - 10x
Click range (H/V), mm@100 m	3400/3400
<b>Display</b>	
Type	AMOLED
Resolution, pixels	1024x768
<b>Operating Features</b>	
Power Supply, V	3-4.2
Battery type / Capacity / Rated Output Voltage	Li-Ion Battery Pack APS 5T / 4900 mAh / DC 3.7 V (removable)
External Power Supply	5 V, 9 V (USB Type-C Power Delivery)
Battery Pack operating time at temp. = 22 °C, hrs**	9
Max. recoil power on rifled weapon, Joules	6000
Max. recoil power on smoothbore weapon, caliber	12
Compatible Pulsar mounts	Weaver U Mount Weaver USQD Mount Weaver LQD Mount
Degree of protection IP code (IEC60529)	IPX7
Operating temperature, °C / °F	-25 - +50 / -13 - +122

Dimensions with an eyecup, mm/inch	330x57x67 / 12.99x2.24x2.64
Weight (with removable battery, without mount), kg/oz	0.82 / 28.92
<b>Video Recorder</b>	
Photo / video resolution, pixels	1024x768
Video / photo format	.mp4 / .jpg
Built-in memory	16 GB
<b>Wi-FiChannel***</b>	
Frequency	2.4/5 GHz
Standard	IEEE 802.11 b/g/n/ac

\* Purchased separately.

\*\* Actual battery life may vary depending on the use of Wi-Fi and the built-in video recorder.

\*\*\* The reception range may vary depending on various factors: obstacles, other Wi-Fi networks.

## XG35

Model	XG35
SKU (without mount)	76563
SKU (with Weaver U mount)	76563U
SKU (with Weaver USQD mount)	76563S
SKU (with Weaver LQD mount)	76563L
<b>Microbolometer</b>	
Type	uncooled
Resolution, pixels	640x480
Pixel Pitch, $\mu\text{m}$	12
Sensor NETD, mK	< 40
System NETD, mK	< 20
Frame refresh rate, Hz	50
<b>Optical Specifications</b>	
Lens, mm	F35 F/1.0
Magnification, x	2-16
Eye relief, mm/inch	50/1.96
Field of view (H), $^{\circ}/\text{m}@100$	12.5 / 21.9
Diopter adjustment, D	-3/+4
Detection distance (Object of "deer" type), m/y	1750 / 1914
<b>Aiming Reticle</b>	



	21 mm – 2x 10.5 mm – 4x 5.25 mm – 8x 2.6 mm – 16x
Click value, mm@100 m – when magnifying, x	HW version PTV052.013 or higher: 15.2 mm – 2x 7.6 mm – 4x 3.8 mm – 8x 1.9 mm – 16x
Click range (H/V), mm@100 m	4200/4200
<b>Display</b>	
Type	AMOLED
Resolution, pixels	1024x768
<b>Operating Features</b>	
Power Supply, V	3-4.2
Battery type / Capacity / Rated Output Voltage	Li-Ion Battery Pack APS 5T / 4900 mAh / DC 3.7 V (removable)
External Power Supply	5 V, 9 V (USB Type-C Power Delivery)
Battery Pack operating time at temp. = 22 °C, hrs**	7
Max. recoil power on rifled weapon, Joules	6000
Max. recoil power on smoothbore weapon, caliber	12
Compatible Pulsar mounts	Weaver U Mount Weaver USQD Mount Weaver LQD Mount

Degree of protection IP code (IEC60529)	IPX7
Operating temperature, °C / °F	-25 - +50 / -13 - +122
Dimensions with an eyecup, mm/inch	330x57x67 / 12.99x2.24x2.64
Weight (with removable battery, without mount), kg/oz	0.82 / 28.92
<b>Video Recorder</b>	
Photo / video resolution, pixels	1024x768
Video / photo format	.mp4 / .jpg
Built-in memory	16 GB
<b>Wi-FiChannel***</b>	
Frequency	2.4/5 GHz
Standard	IEEE 802.11 b/g/n/ac

\* Purchased separately.

\*\* Actual battery life may vary depending on the use of Wi-Fi and the built-in video recorder.

\*\*\* The reception range may vary depending on various factors: obstacles, other Wi-Fi networks.

## XQ35 Pro

Model	XQ35 Pro
SKU (without mount)	76566
SKU (with Weaver U mount)	76566U
SKU (with Weaver USQD mount)	76566S
SKU (with Weaver LQD mount)	76566L
<b>Microbolometer</b>	
Type	uncooled
Resolution, pixels	384x288
Pixel Pitch, $\mu\text{m}$	17
Sensor NETD, mK	< 25
System NETD, mK	< 18
Frame refresh rate, Hz	50
<b>Optical Specifications</b>	
Lens, mm	F35 F/1.0
Magnification, x	2.5-10
Eye relief, mm/inch	50/1.96
Field of view (H), $^{\circ}/\text{m}@100$	10.7/18.7
Diopter adjustment, D	-3/+4
Detection distance (Object of "deer" type), m/y	1350 / 1476
<b>Aiming Reticle</b>	

	18 mm – 2.5x 9 mm – 5x 4.5 mm – 10x
Click value, mm@100 m – when magnifying, x	HW version PTV034.011 or higher: 12.9 mm – 2.5x 6.5 mm – 5x 3.2 mm – 10x
Click range (H/V), mm@100 m	3600/3600
<b>Display</b>	
Type	AMOLED
Resolution, pixels	1024x768
<b>Operating Features</b>	
Power Supply, V	3-4.2
Battery type / Capacity / Rated Output Voltage	Li-Ion Battery Pack APS 5T / 4900 mAh / DC 3.7 V (removable)
External Power Supply	5 V, 9 V (USB Type-C Power Delivery)
Battery Pack operating time at temp. = 22 °C, hrs**	9
Max. recoil power on rifled weapon, Joules	6000
Max. recoil power on smoothbore weapon, caliber	12
Compatible Pulsar mounts	Weaver U Mount Weaver USQD Mount Weaver LQD Mount
Degree of protection IP code (IEC60529)	IPX7
Operating temperature, °C / °F	-25 – +50 / -13 – +122

Dimensions with an eyecup, mm/inch	330x57x67 / 12.99x2.24x2.64
Weight (with removable battery, without mount), kg/oz	0.82 / 28.92
<b>Video Recorder</b>	
Photo / video resolution, pixels	1024x768
Video / photo format	.mp4 / .jpg
Built-in memory	16 GB
<b>Wi-FiChannel***</b>	
Frequency	2.4/5 GHz
Standard	IEEE 802.11 b/g/n/ac

\* Purchased separately.

\*\* Actual battery life may vary depending on the use of Wi-Fi and the built-in video recorder.

\*\*\* The reception range may vary depending on various factors: obstacles, other Wi-Fi networks.



# Description

[https://www.youtube.com/embed/m\\_3a5j75kKQ?si=cFDtIFqppD6cpno-](https://www.youtube.com/embed/m_3a5j75kKQ?si=cFDtIFqppD6cpno-)

<https://www.youtube.com/embed/feOD2H-w1VA>

<https://www.youtube.com/embed/5XpgXwOyL40>

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**Talion** thermal imaging riflescopes are designed for use both at night-time and during the day. They provide exceptional image quality even in adverse weather conditions such as fog, smog and rain without being hindered by obstacles like branches, tall grass, dense foliage, or other debris.

Unlike riflescopes based on electrical-to-optical converters, thermal imaging riflescopes do not require an external light source and are resistant to high levels of illumination.

These riflescopes are designed for hunting, target shooting and recreational shooting, observation and orientation.

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To get started, see the sections:

**[Battery Charging](#)**

**[Battery Installation](#)**

**[Mounting on the Rifle](#)**

**[Powering on and Image Setting](#)**

**[How to Zero](#)**

**[Stream Vision 2](#)**

**[Ballistic Calculator](#)**

# Package Contents

- Thermal imaging riflescope Talion
  - Mount\*
  - Mounting screws\*
  - Removable rubber eyecup
  - APS 5T Battery Pack (2 pcs.)
  - APS5 battery charger
  - Power adapter
  - USB Type-C cable with USB Type-A adapter
  - Carrying case
  - Lens-cleaning cloth
  - Quick User Manual
  - Warranty card
- 

\*Sold separately or included in the package. The type of the mount and screws depends on the device model.



# Features

- Built-in 3-axis accelerometer gyroscope (slope angle indication)
- 3 levels of sensitivity enhancement: Normal, High, Ultra
- 3 calibration modes: manual, semi-automatic and automatic
- Smooth Digital Zoom
- Multiple reticle options
- Scalable reticles (proportional to Zoom)
- 5 zeroing profiles (10 distances per profile)
- One-shot “Freeze-Zeroing” function
- Precise “Zoom zeroing” (reducing the MOA per click when zooming in)
- 8-color display palette
- Pixel repair function
- “Display-Off” function
- Display dimming function
- Auto shutdown function
- Integrated Wi-Fi for remote control and personal device connectivity
- Device firmware update using the free Stream Vision 2 App
- Recoil rated to .375H&H, 9.3x64 and 12-gauge
- Ballistic calculator
- Wireless Remote Control (purchased separately)

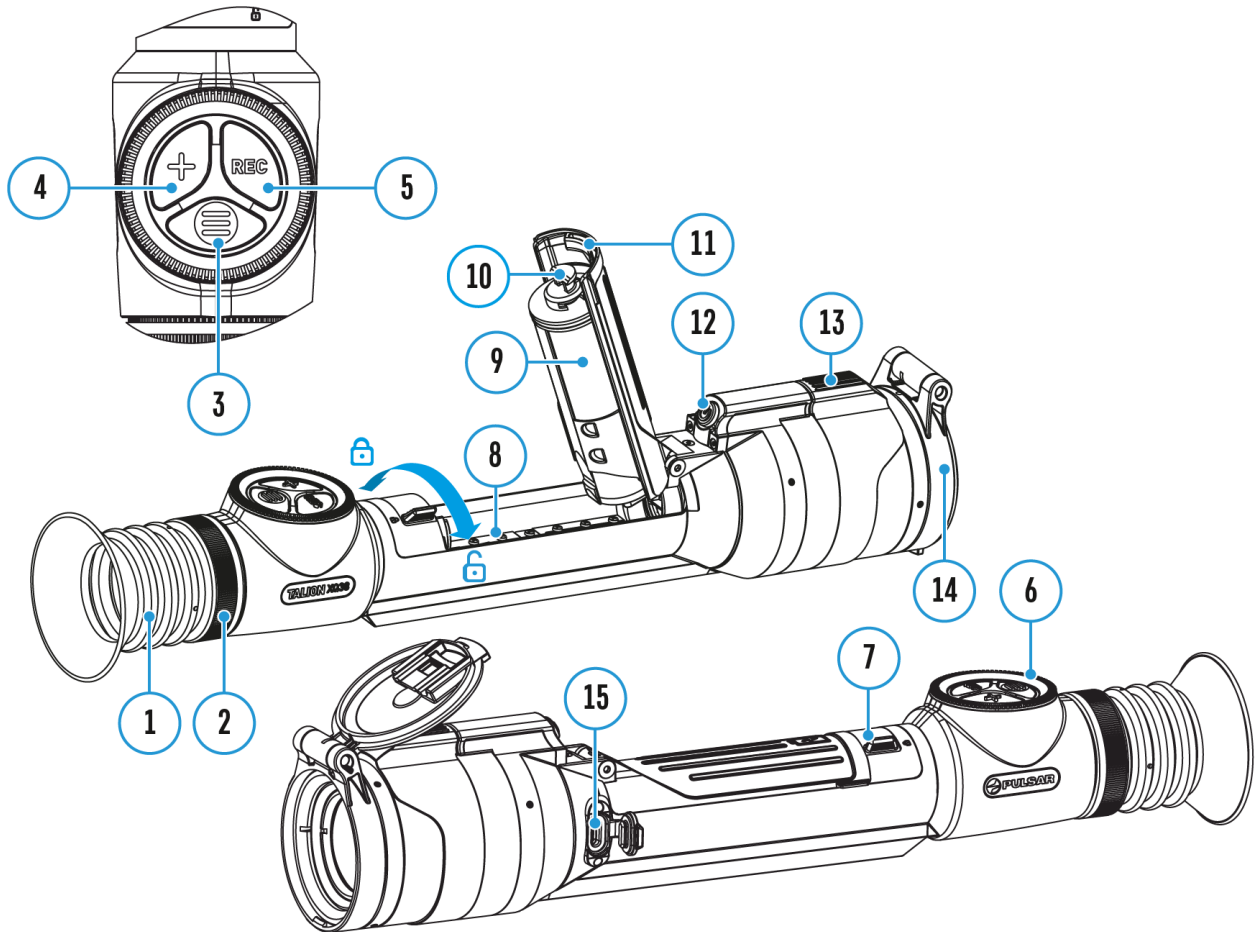
## Video Recording

- Built-in photo and video recorder with audio
- 16 GB internal memory
- iOS and Android compatible
- Storing photos and videos in Cloud when using the Stream Vision 2 App

## Battery Pack

- Quick-change rechargeable Li-Ion 4900 mAh Battery Pack APS 5T
- Charging via USB Type-C port

# Components and Controls



1. Eyecup
2. Eyepiece diopter adjustment ring
3. MENU button
4. ZOOM button
5. REC button
6. Controller
7. Battery compartment cover lock
8. Battery compartment
9. Battery APS 5T
10. Hook
11. Battery compartment cover
12. ON/OFF button

- 13. Lens focus control
- 14. Lens cap
- 15. USB Type-C port

# Precautions


- Always use the APS 5 charger supplied with the device (or purchased separately) to charge the APS 5T Battery Pack. The use of any other charger may irreparably damage the Battery Pack or the charger and may cause fire.
- Do not charge the Battery Pack immediately after bringing it from a cold environment to a warm one. Wait for 30-40 minutes for the Battery Pack to get warm.
- Do not leave the Battery Pack unattended while charging.
- Never use a modified or damaged charger.
- Do not leave the Battery Pack with a charger connected to the power adapter after charging is complete.
- Do not expose the Battery Pack to high temperatures or an open flame.
- Do not submerge the Battery Pack in water.
- Do not connect an external device with a current consumption that exceeds permitted levels.
- Do not dismantle or deform the Battery Pack.
- Do not drop or hit the Battery Pack.
- Keep the Battery Pack out of the reach of children.

# Recommendations for Battery Use

- The battery should be partially charged for long-term storage – 50 to 80 %.
- Charge the Battery Pack at a temperature from 0° C to +45° C (32° F to +113° F), otherwise the battery life will decrease significantly.
- When using the Battery Pack at sub-zero (sub 32° F) temperatures the battery capacity decreases. This is normal and is not a defect.
- Do not use the Battery Pack at temperatures above those shown in the table – this may decrease battery life.
- The Battery Pack is short circuit protected; however, any situation that may cause short-circuiting should be avoided.

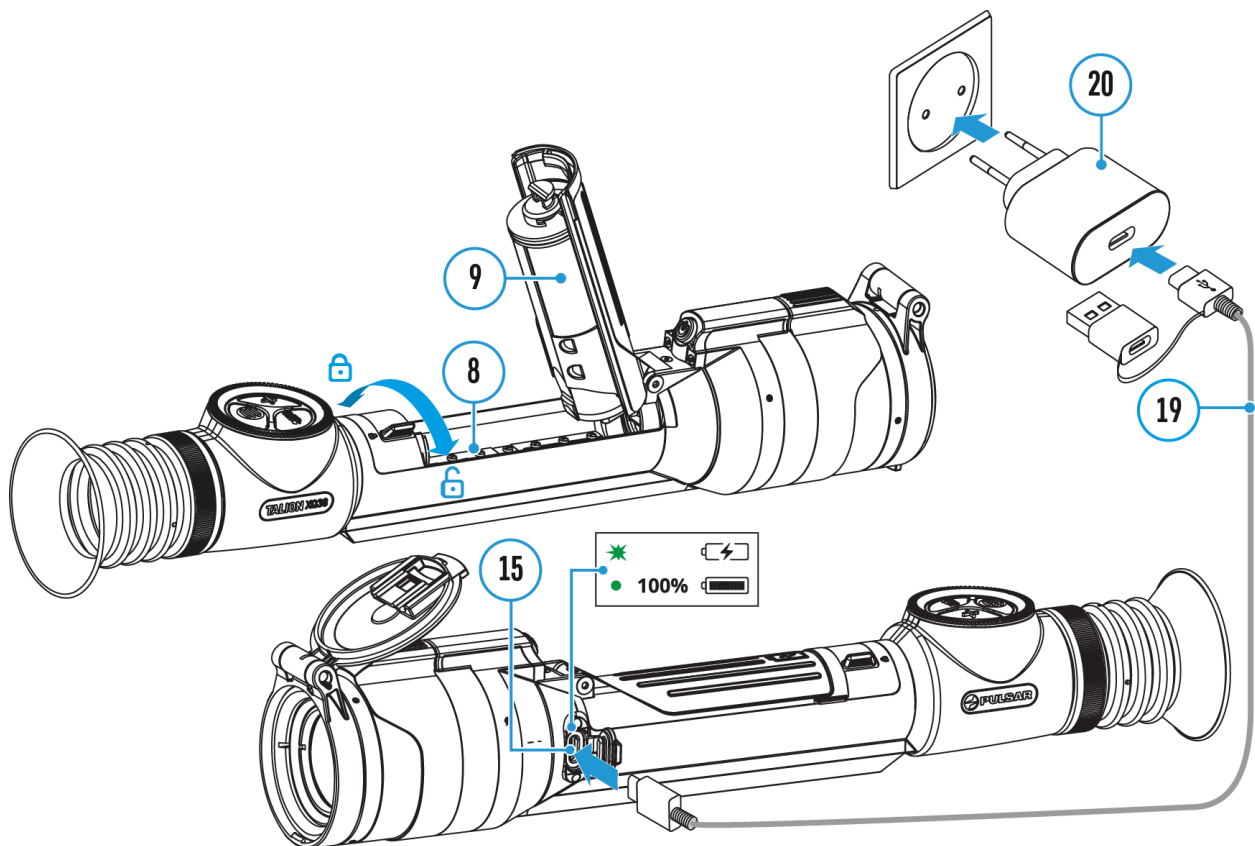
# Battery Charging

**Talion** thermal imaging riflescopes come with a rechargeable lithium-ion Battery Pack APS 5T. The battery should be charged before first use.

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

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## Option 1



1. **Install** the APS 5T battery **(9)** in the battery compartment **(8)** of the device.
2. Connect the USB Type-C cable **(19)** to the USB Type-C connector **(15)** of the device.
3. Connect the other end of the USB Type-C cable **(19)** to the Power Adapter **(20)** by removing the USB Type-A adapter.
4. Plug the Power Adapter **(19)** into a 100-240 V socket.

5. Wait until the battery is fully charged (indication in the status bar:

100

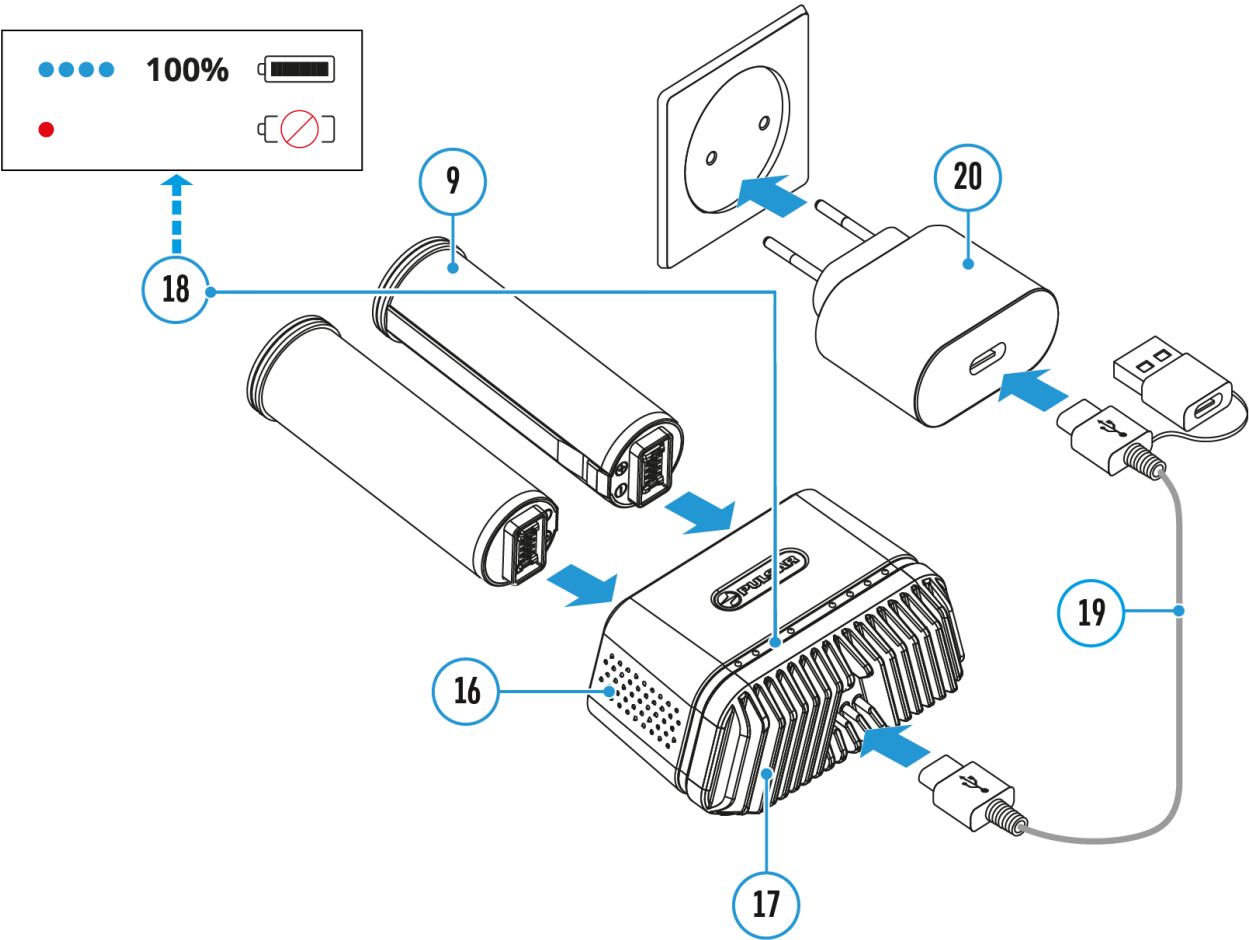
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If the device is off, the LED indicator will display the battery charge status:

LED indication	Battery charge status
	Battery is charging
	Battery is fully charged









Option 2







1. Insert the APS 5T battery (9) along the guide into the APS 5 charger\* (16) slot as far as it will go. The APS 5 charger is supplied with your device or purchased separately.
2. Connect the other end of the USB Type-C cable (19) to the Power

- Adapter **(20)** by removing the USB Type-A adapter.
3. Plug the Power Adapter **(20)** into a 100-240 V socket.
  4. Connect the other end of the USB Type-C cable **(19)** to the USB Type-C connector **(17)** of the charger.
  5. LED indicators **(18)** will display the battery charge level (see Table).
  6. Wait until the battery is fully charged (LED indication **(18)**:  ).

*Note:* Two batteries can be charged at the same time, a second slot is provided for it.

LED indication (18) in the battery charging mode	Battery Level
	Battery charge level is from 0% to 25%
	Battery charge level is from 26% to 50%
	Battery charge level is from 51% to 80%
	Battery charge level is from 81% to 99%
	Battery is fully charged. Charging will automatically stop. The battery can be disconnected from the charger.
	Defective battery. <b>Do not use the battery!</b>
LED indication (18) in the standby mode*	Battery Level
	Battery charge level is from 0% to 25%
	Battery charge level is from 26% to 50%



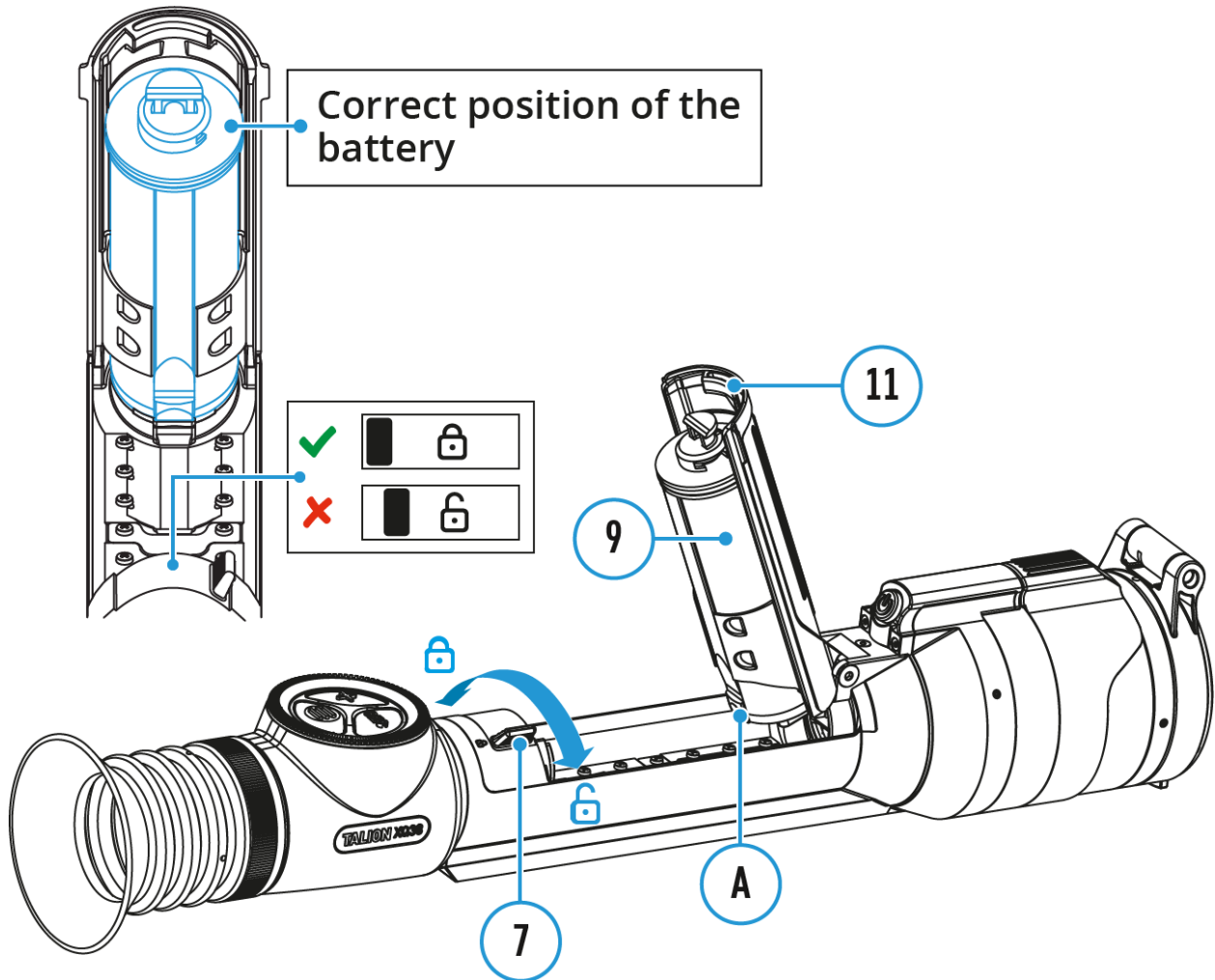
	Battery charge level is from 51% to 80%
	Battery charge level is from 81% to 99%
	Battery is fully charged. It can be disconnected from the charger.
	Defective battery. <b>Do not use the battery!</b>



\* Standby mode is when the batteries are in the charger but the Power Adapter is not connected. In this mode, the indicators are only on for 10 seconds.

**Attention!** When using a Power Adapter that does not support USB Power Delivery fast charging technology, the flicker frequency of the LED indicators decreases by a factor of 3 and the charge time increases.

**Attention!** The charger heats up during fast charging. Excess heat is removed through the radiator and does not affect the device operation.

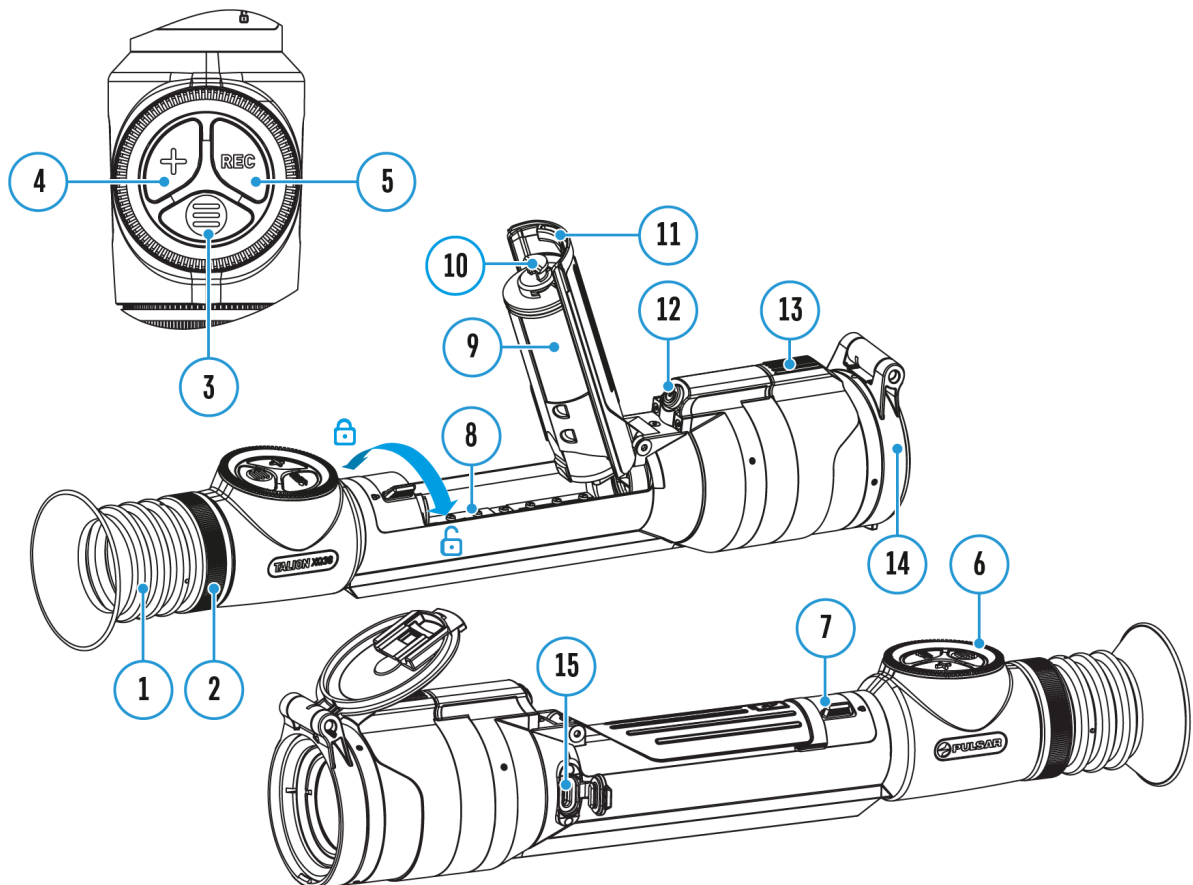
# Battery Installation





1. Set the battery compartment lock **(7)** to the far right position .
2. Open the battery compartment cover **(11)**.
3. Insert the APS 5T battery **(9)** under the battery compartment cover **(11)** as shown in the image. The protrusion **(A)** on the battery should fit into the groove between the fasteners under the battery compartment cover **(11)**.
4. Close the battery compartment cover **(11)**. The hook **(10)** must fit into the groove of the battery compartment cover lock **(7)**. Then move the lock **(7)** to the left as far as it will go into the fixed position until it clicks. The lug on the lock **(7)** must line up with the icon .

# External Power Supply

## Show device diagram



Power can be supplied from an external source such as a 5V or 9V power bank

1. Connect the external power supply to the micro USB Type-C port **(15)** of the riflescope.
2. The riflescope switches to external power source, while the APS 5T Battery Pack will gradually recharge.
3. A rechargeable battery icon  indicating a percentage of the battery life will appear in the status bar.
4. If the riflescope operates on external power supply but the Battery Pack APS 5T is not installed, an icon  is shown.
5. When external power supply is disconnected, the riflescope switches to

the APS 5T battery pack without powering off.

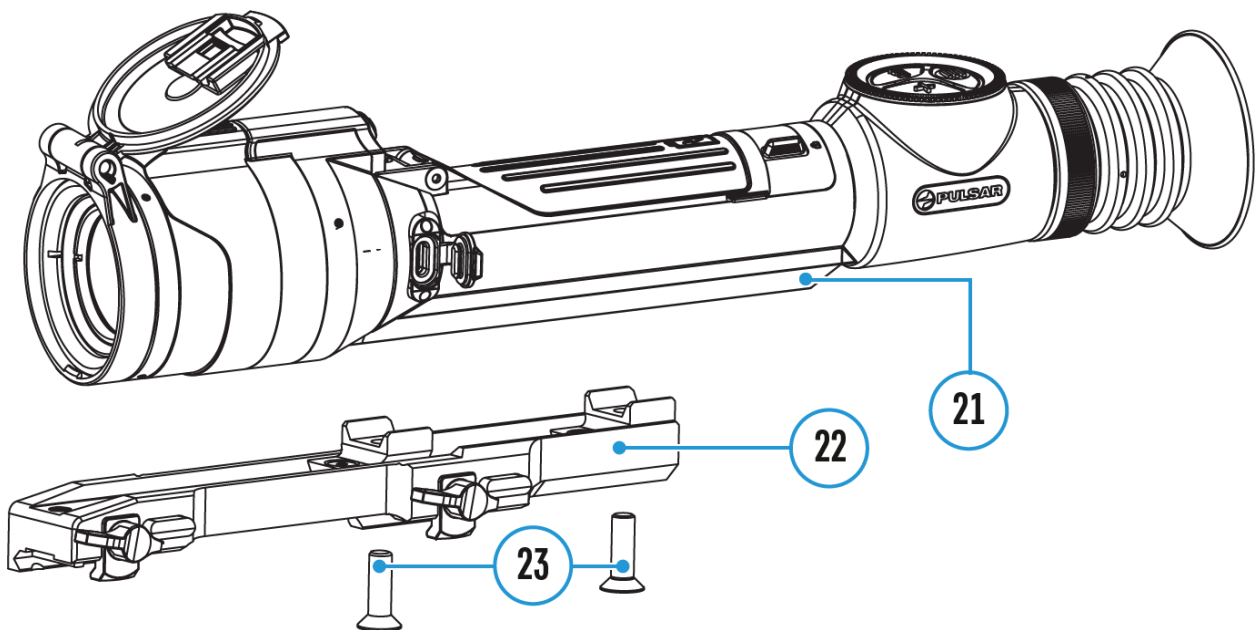
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**Warning!** Charging APS 5T batteries at air temperatures below 0° C (32° F) may reduce battery life. When using external power, connect the Power Bank to the device after it has been turned on and working for several minutes.

# Mounting on the Rifle

[https://e.issuu.com/embed.html?d=2020\\_pulsar\\_digital\\_and\\_thermal\\_riflescopes\\_mount](https://e.issuu.com/embed.html?d=2020_pulsar_digital_and_thermal_riflescopes_mount)

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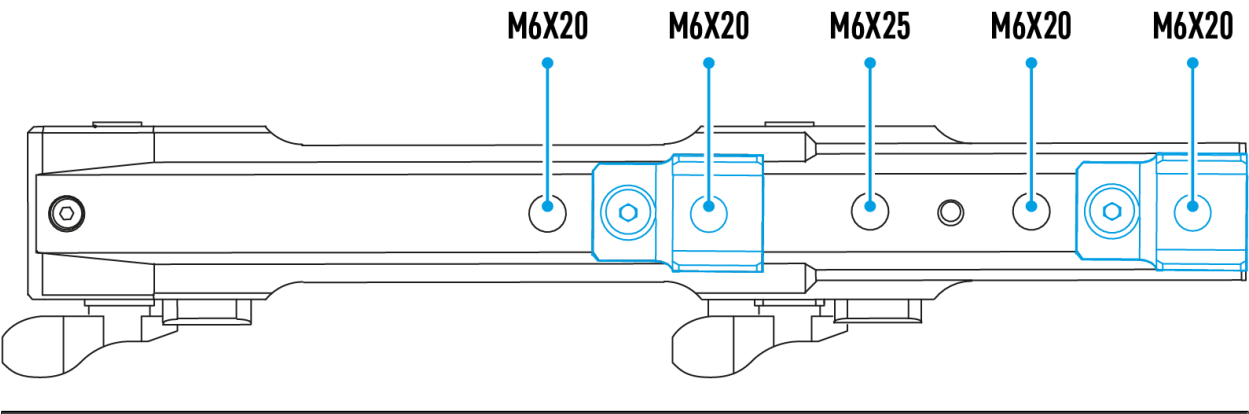


To ensure accurate shooting the **Talion** riflescope should be properly mounted on the rifle.

1. Secure the support\* (**22**) on the riflescope mount (**21**) using a Allen wrench/hex key\* and screws (**23**)\* (clamping force – 4 Nm/35.4 in-lbs).
  2. Choosing the position of the mount helps to ensure the correct eye relief, depending on the type of rifle.
  3. Install the riflescope with the mount on the rifle and check if the position is suitable for you, then remove it.
  4. Unscrew the screws (**23**) halfway, apply some thread sealant onto the thread of the screws (**23**) and tighten them fully (clamping force – 4 Nm/35.4 in-lbs). Let the sealant dry for the time specified in the instructions. The riflescope is ready to be installed on a rifle and to be zeroed.
  5. Before using the riflescope (especially for hunting), follow instructions in the **Zeroing** section.
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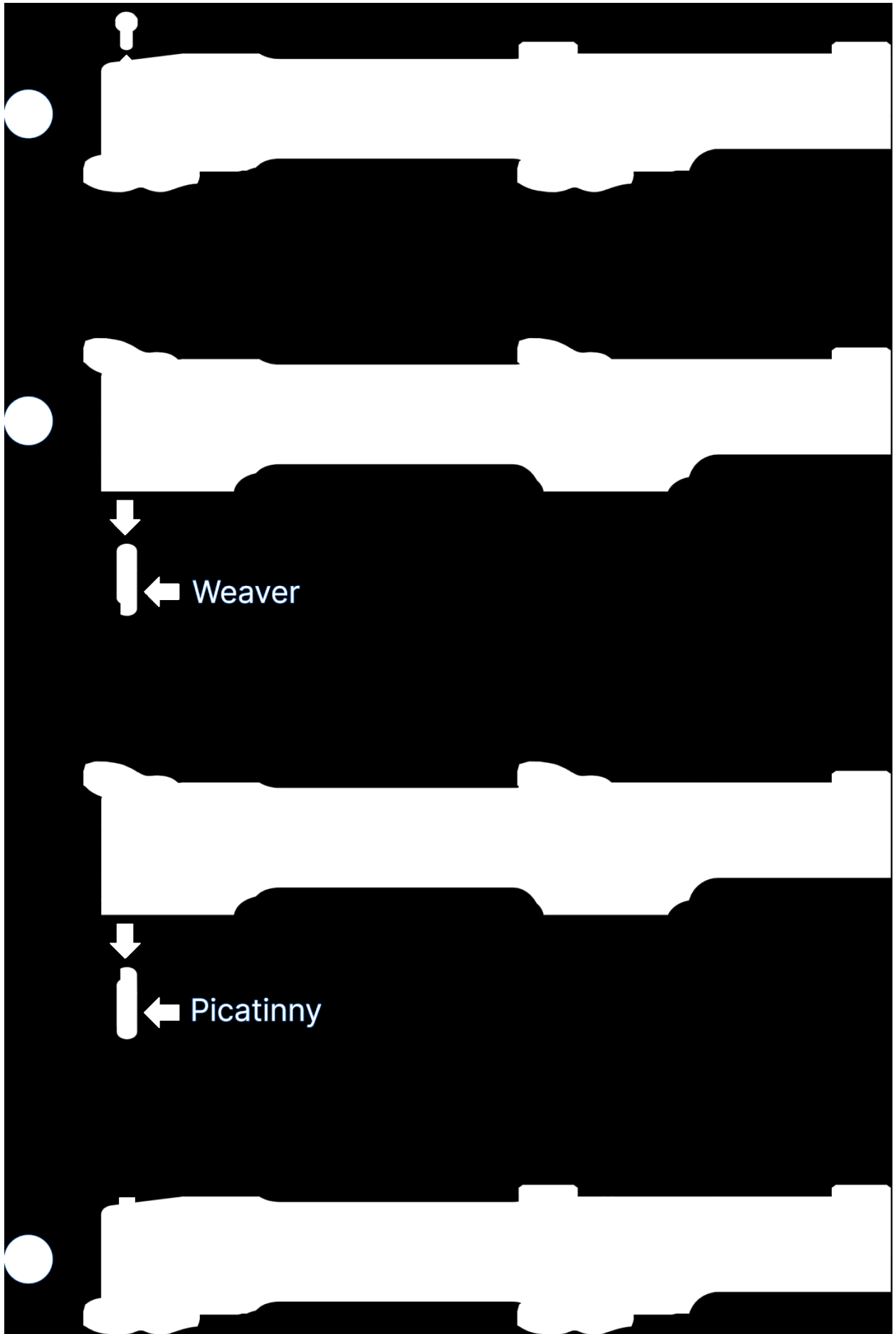
\*Sold separately or included in the package. The type of the mount and screws depends on the device model.

Mount	Screws
Weaver U	2 screws M6x18
Weaver LQD	3 screws M6X12
Weaver USQD	2 screws M6x20 or 1 screw M6x20 + 1 screw M6x25 (for the mount center bore)



**Adjustment for Weaver/Picatinny rail**

**Weaver USQD**



**Weaver U**



