

# **Digex**

**Manual** 

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# **Specifications**

#### N450

Model	N450
SKU	76641
Optical Specifications	
Lens Focus, mm	50
Focal Ratio, D/f'	1:1.2
Magnification, x	4-16 (digital zoom)
Field of View, (horizontal, @4x magnification), °	6.5
Field of View, (horizontal, @4x magnification), m@100m	11.4
Eye Relief, mm	50
Minimum Focusing Distance, m / y	5 / 5.47
Diopter Adjustment, D	-3/+5
Range of Detection, (Deer Type Object), m / y	550 / 601.49
Aiming Reticle	
Click value (H/V), mm@100 m – when magnifying, x	10 mm - 4x 5 mm - 8x 2.5 mm - 16x
Click Range (H/V), mm@100m	2000 (± 100 clicks)
<b>Electronic Characteristics</b>	
Sensor Type/Resolution	HD CMOS/1280x720

Model	N450	
Display Type/Resolution	AMOLED/1024x768	
Video Recorder		
Video/Photo Resolution, Pixels	1024x768	
Video Recording/Photo Format	.mp4 / .jpg	
Built-In Memory	16 GB	
Wi-Fi Channel*		
Frequency	2.4 GHz	
Standard	802.11b/g	
Operating Features		
Tube Diameter (for mounting rings), mm	30	
Battery Operating Time (built- in APS3 and removable APS2) at t = 22 °C, h (Wi-Fi off)**	5.5	
Power Supply, V	3.0-4.2	
Battery Type / Capacity / Rated Output Voltage	Li-lon Battery Pack APS2 / 2000mAh / DC 3.7V (removable)*** APS3 / 3200mAh / DC 3.7V (built-in)	
External Power Supply	MicroUSB type B (5V)	
Maximum Recoil Power on Rifled Weapons, Joules	6000	
Maximum Recoil Power on Smooth-Bore Weapons, Caliber	12	
Degree of Protection, IP code (IEC60529)	IPX7	
Operating Temperature, °C (°F)	-25 - +50 (-13 - +122)	

Model	N450		
Dimensions (LxHxW), mm / inch	388x78x78 / 15.26x3.07x3.07		
Weight (with batteries, without IR illuminator), kg / oz	0.95 / 33.51		
Detachable IR Illuminator			
Туре	LED		
Wavelength, nm	850		
Lens Diameter, mm	26		
Optical Power of the IR Illuminator, mW	up to 300		
Power Supply, V	3 - 4.2		
Average Operating Time, Hours	7		
Operating Temperature, °C (°F)	-25 - +50 (-13 - +122)		
Riflescope Compatibility	Digex		
Dimensions (LxHxW), mm / inch	129x84x75 / 5.08x3.31x2.95		
Weight (with battery), kg/oz	0.14 / 4.94		

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

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

<sup>\*\*\*</sup> APS3 Battery Pack can be used (sold separately)

### N455

Optical Specifications  Lens Focus, mm 50  Focal Ratio, D/f' 1:1.2  Magnification, x 4-16 (digital zoom)  Field of View, (horizontal, @4x magnification), ° 6.5  Field of View, (horizontal, @4x magnification), m@100m  Eye Relief, mm 50  Minimum Focusing Distance, m / y 5 / 5.47  Diopter Adjustment, D -3/+5  Range of Detection, (Deer Type Object), m / y 500 / 546.81  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x 2.5 mm - 16x  Click Range (H/V), mm@100m 2000 (± 100 clicks)  Electronic Characteristics  Sensor Type/Resolution HD CMOS/1280x720  Display Type/Resolution AMOLED/1024x768  Video Recorder  Video Recording/Photo Format .mp4 / .jpg	Model	N455
Lens Focus, mm  Focal Ratio, D/f'  Focal Ratio, D/f'  1:1.2  Magnification, x  4-16 (digital zoom)  Field of View, (horizontal, @4x magnification), °  Field of View, (horizontal, @4x magnification), m@100m  Eye Relief, mm  50  Minimum Focusing Distance, m /y  Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video/Photo Resolution, Pixels  1:1.2  4-16 (digital zoom)  11.4  11.	SKU	76642
Focal Ratio, D/f'  Magnification, x  4-16 (digital zoom)  Field of View, (horizontal, @4x magnification), °  Field of View, (horizontal, @4x magnification), m@100m  Eye Relief, mm  50  Minimum Focusing Distance, m / y  Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m	Optical Specifications	
Magnification, x  Field of View, (horizontal, @4x magnification), °  Field of View, (horizontal, @4x magnification), m@100m  Eye Relief, mm  50  Minimum Focusing Distance, m /y  Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  HD CMOS/1280x720  Display Type/Resolution, Pixels  1024x768	Lens Focus, mm	50
Field of View, (horizontal, @4x magnification), °  Field of View, (horizontal, @4x magnification), m@100m  Eye Relief, mm  50  Minimum Focusing Distance, m /y  Diopter Adjustment, D -3/+5  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  - when magnifying and because the companient of the companie	Focal Ratio, D/f'	1:1.2
magnification), °  Field of View, (horizontal, @4x magnification), m@100m  Eye Relief, mm  50  Minimum Focusing Distance, m / y  Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Video Recorder  Video/Photo Resolution, Pixels  11.4  11.4  11.4  11.4  10.4  10.4  10.4  10.4  10.4  10.4  10.5  10.	Magnification, x	4-16 (digital zoom)
Eye Relief, mm  So  Minimum Focusing Distance, m / y  Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video/Photo Resolution, Pixels  10. mm - 4x 5 mm - 4x 5 mm - 8x 2.5 mm - 16x 2000 (± 100 clicks)  HD CMOS/1280x720  AMOLED/1024x768	_	6.5
Minimum Focusing Distance, m / y  Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video/Photo Resolution, Pixels  5 / 5.47  5 / 5.47  500 / 546.81  10 mm - 4x 5 mm - 8x 2.5 mm - 16x 2.5 mm - 16x 4.5 mm - 16x 4.7 mm		11.4
Diopter Adjustment, D  Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video/Photo Resolution, Pixels  - 3/+5  - 3/+5  500 / 546.81  10 mm - 4x 5 mm - 8x 2.5 mm - 16x  2000 (± 100 clicks)  HD CMOS/1280x720  AMOLED/1024x768	Eye Relief, mm	50
Range of Detection, (Deer Type Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video Recorder  Video/Photo Resolution, Pixels  500 / 546.81  10 mm - 4x 5 mm - 8x 2.5 mm - 16x 2000 (± 100 clicks)  HD CMOS/1280x720  AMOLED/1024x768	•	5 / 5.47
Object), m / y  Aiming Reticle  Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video Recorder  Video/Photo Resolution, Pixels  10 mm - 4x 5 mm - 8x 2.5 mm - 16x 2000 (± 100 clicks)  HD CMOS/1280x720  AMOLED/1024x768	Diopter Adjustment, D	-3/+5
Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video Recorder  Video/Photo Resolution, Pixels  10 mm - 4x 5 mm - 8x 2.5 mm - 16x 2000 (± 100 clicks)  HD CMOS/1280x720  AMOLED/1024x768		500 / 546.81
Click value (H/V), mm@100 m - when magnifying, x  Click Range (H/V), mm@100m  Electronic Characteristics  Sensor Type/Resolution  Display Type/Resolution  Video Recorder  Video/Photo Resolution, Pixels  5 mm - 8x 2.5 mm - 16x  2000 (± 100 clicks)  HD CMOS/1280x720  AMOLED/1024x768	Aiming Reticle	
Electronic Characteristics  Sensor Type/Resolution HD CMOS/1280x720  Display Type/Resolution AMOLED/1024x768  Video Recorder  Video/Photo Resolution, Pixels 1024x768	, , , , , , , , , , , , , , , , , , ,	5 mm - 8x
Sensor Type/Resolution HD CMOS/1280x720  Display Type/Resolution AMOLED/1024x768  Video Recorder  Video/Photo Resolution, Pixels 1024x768	Click Range (H/V), mm@100m	2000 (± 100 clicks)
Display Type/Resolution AMOLED/1024x768  Video Recorder  Video/Photo Resolution, Pixels 1024x768	<b>Electronic Characteristics</b>	
Video Recorder  Video/Photo Resolution, Pixels 1024x768	Sensor Type/Resolution	HD CMOS/1280x720
Video/Photo Resolution, Pixels 1024x768	Display Type/Resolution	AMOLED/1024x768
	Video Recorder	
Video Recording/Photo Format .mp4 / .jpg	Video/Photo Resolution, Pixels	1024x768
	Video Recording/Photo Format	.mp4 / .jpg

Model	N455		
Built-In Memory	16 GB		
Wi-Fi Channel*			
Frequency	2.4 GHz		
Standard	802.11b/g		
Operating Features			
Tube Diameter (for mounting rings), mm	30		
Battery Operating Time (built- in APS3 and removable APS2) at t = 22 °C, h (Wi-Fi off)**	5.5		
Power Supply, V	3.0-4.2		
Battery Type / Capacity / Rated Output Voltage	Li-Ion Battery Pack APS2 / 2000mAh / DC 3.7V (removable)*** APS3 / 3200mAh / DC 3.7V (built-in)		
External Power Supply	MicroUSB type B (5V)		
Maximum Recoil Power on Rifled Weapons, Joules	6000		
Maximum Recoil Power on Smooth-Bore Weapons, Caliber	12		
Degree of Protection, IP code (IEC60529)	IPX7		
Operating Temperature, °C (°F)	-25 - +50 (-13 - +122)		
Dimensions (LxHxW), mm / inch	388x78x78 / 15.26x3.07x3.07		
Weight (with batteries, without IR illuminator), kg / oz	0.95 / 33.51		
Detachable IR Illuminator			
Туре	LED		

Model	N455
Wavelength, nm	940
Lens Diameter, mm	26
Optical Power of the IR Illuminator, mW	up to 250
Power Supply, V	3 - 4.2
Average Operating Time, Hours	7
Operating Temperature, °C (°F)	-25 - +50 (-13 - +122)
Riflescope Compatibility	Digex
Dimensions (LxHxW), mm / inch	129x84x75 / 5.08x3.31x2.95
Weight (with battery), kg/oz	0.14 / 4.94

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

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

<sup>\*\*\*</sup> APS3 Battery Pack can be used (sold separately)

## **Description**

**Digex** night vision digital riflescopes are designed for use with hunting rifles both at night and in the daytime.

In low light conditions (no light from stars and the moon) it is recommended to use an infrared illuminator with a wavelength of 850 nm or 940 nm.

Areas of application of the riflescopes are as follows: hunting, observation and orientation under conditions of limited visibility.

# **Package Contents**

- Digex night vision digital riflescope
- Allen wrench
- APS2 battery pack (3 pcs.)
- Carrying case
- APS battery charger
- Lens-cleaning cloth
- Mains charger
- Quick User Manual
- USB cable
- Warranty card
- IR illuminator
- APS3 battery cover

## **Features**

- Long detection range
- High resolution imaging
- SumLight<sup>™</sup> program algorithm for additional sensitivity improvement
- High-strength aluminum alloy housing
- Heavy caliber shock resistance: 12-gauge, 9.3x64, .375H&H
- Mounting with standard 30mm rings
- Instant start
- Completely waterproof IPX7
- Customizable reticles
- HD AMOLED color display
- Picture in Picture function
- Stream Vision App support
- Advanced features (enabled by future riflescope firmware updates using free Stream Vision App)
- B-Pack mini combined power system
- Wide operating temperature range (-25 °C +50°C)

# Useful Functions and Modes

- Stadiametric rangefinder (to estimate distance to object)
- Built-in 3-axis accelerometer gyroscope (slope angle indication)
- Smooth digital zoom
- Large selection of electronic reticles
- Scalable reticles (reticle graduation changes proportional to zoom)
- 5 zeroing profiles (10 distances per profile)
- One-shot zero function
- Precise "Zoom Zeroing" (reducing the minute of angle click value when zeroing at high magnification)
- "Freeze Zeroing" function
- Display Off function
- Wi-Fi. Remote control and observation with a smartphone

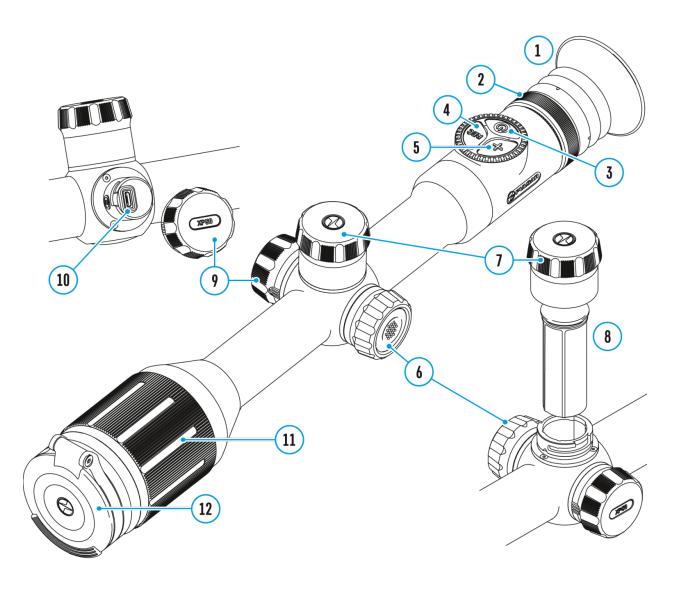
#### **Video Recording**

- Built-in photo and video recorder with sound recording
- 16GB internal memory
- Integration with iOS and Android devices.

#### **Batteries**

- Built-in 3200mAh battery pack APS3
- Quick change Li-Ion batteries APS2/APS3
- Built-in and external batteries APS2/APS3 can be charged via micro USB

# **Components and Controls**



- 1. Eyecup
- 2. Eyepiece diopter adjustment ring
- 3. ON/OFF button
- 4. REC button
- 5. ZOOM button
- 6. Controller
- 7. Battery compartment cover
- 8. Battery APS2
- 9. MicroUSB cover

- 10. MicroUSB port
- 11. Objective lens focus ring
- 12. Lens cap

# **Button Operation**

Operation	Button
Power riflescope on	<b>U</b> short press
Power riflescope off	<b>U</b> long press for 3 secs
Turn display off	<b>U</b> long press for less than 3
	secs
Turn display on	<b>ψ</b> short press
SumLight™ on/off	<b>ψ</b> short press
Changes magnification (zoom)	short press
Smooth Zooming	o rotation
PiP on/off	long press
Video Recorder	Button
Start/pause/resume video recording	short press
Stop video recording	REC long press
Switch to video / photo mode	REC long press
Capture Photo	short press
Main Menu	Button
Enter main menu	long press
Navigation through menu	o rotation
Enter menu items	Short press
Confirm value	Short press
Exit menu items	O long press
Exit main menu	O long press
Quick Menu	Button

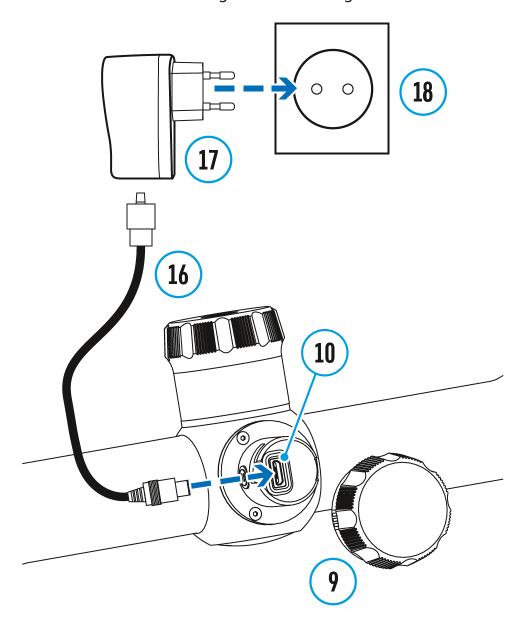
Operation	Button		
Enter quick menu	short press		
Switch between quick menu options	short press		
Parameter change	o rotation		
Exit quick menu	O long press		

## **Precautions**

- When charging, always use the charger supplied with the scope of supply. The use of any other charger may irreparably damage the battery or the charger.
- The batteries should be partially charged (50 to 80 %) for long-term storage.
- Do not charge the battery immediately after bringing it from cold to warm. Wait for 30-40 minutes so that the battery may 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.
- After being stored for a long time, the batteries should be partially charged: it should not be completely charged or completely discharged.
- Do not charge the battery immediately after bringing it from cold to warm. Wait for 30-40 minutes so that the battery may warm up.
- Do not leave the battery unattended while charging.
- Do not use the charger if it has been modified or damaged.
- The battery should be charged at an air temperature of 0 °C ... + 45 °C. Otherwise, lifespan of the battery will decrease significantly.
- Do not leave the charger with the battery connected to power supply for more than 24 hours after it has been completely charged.
- Do not expose the battery to high temperatures and naked flame.
- Do not submerge the battery.
- Do not connect external device with a current consumption that exceeds permitted levels.
- The battery has a short-circuit protection. However, any situation that may cause short-circuiting should be avoided.
- Do not disassemble or deform the battery.
- Do not drop or strike the battery.
- When using the battery at low temperatures, the battery capacity decreases, this is normal and not a defect.
- Do not use the battery at the temperatures above those shown in the Table this may decrease battery's life.
- Keep the battery out of the reach of children.

## **Battery Charging**

**Digex** night vision digital riflescopes come with a built-in rechargeable Lithium-Ion APS3 battery pack with a capacity of 3200mAh and a removable rechargeable Lithium-Ion APS2 battery pack with a capacity of 2000mAh. Batteries should be charged before using.

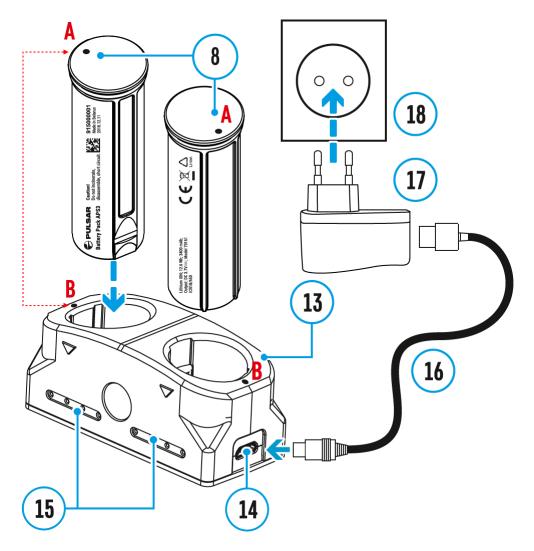


### **Charging**

- 1. Open the micro USB cover (9) by turning it counterclockwise.
- 2. Connect the micro USB plug of the USB cable (16) to the micro USB

- port (10) in the body of the riflescope.
- 3. Connect the second micro USB plug of the USB cable (16) to the micro USB port on the DC adapter (17).
- 4. Plug the device into a 100-240 V socket (18).

**Attention!** When charging batteries via the micro USB port(**10**), the built-in APS3 Battery Pack is the first to be charged. When it is completely charged, the removable APS2 Battery Pack starts charging. When the device is in use, power consumption occurs in reverse sequence.



- Insert the APS2\*\* Battery Pack (8) along the rail into the APS charger (13) slot as far as it will go. The APS charger is supplied with your device.
- 2. Point **A** on the battery and point **B** on the charger should match.
- 3. Two batteries can be charged at the same time: the second slot is designed for it.
- 4. Connect the MicroUSB plug of the USB cable (16) to the port (14) of

- the charger (13).
- 5. Connect the second plug of the USB cable (16) to the USB port on the mains adapter (17).
- 6. Plug the device into a 100-240V socket (18).

#### The LED indicator (15) will display battery charge status:

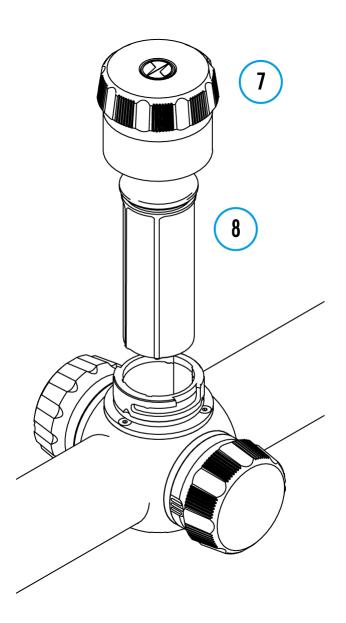
LED Indicator***	<b>Battery Charge Status</b>		
Image•not found or type unknown	Battery level is from 0% to 10%. Charger is not connected to a power supply.		
*	Battery level is from 0% to 10%. Charger is connected to power supply.		
••••	Defective battery. Do not use the battery.		
•	Battery level is from 10% to 20%.		
••	Battery level is from 20% to 60%.		
Image mat connort four try per uty ke own known	Battery level is from 60% to 95%.		
magelmageonontdfountglperutglkeouwknown	Battery completely charged. Charging will automatically stop. The battery can be disconnected from the charge		

<sup>\*</sup> Supplied as part of package.

\*\*\* LED indicator displays the current battery charge status for 30 seconds when the APS charger is not plugged in. When the power is being supplied, the indicator is constantly displaying the current battery charge status, the LEDs are additionally flickering to display the battery charging process.

<sup>\*\*</sup> APS3 Battery Pack is available (sold separately).

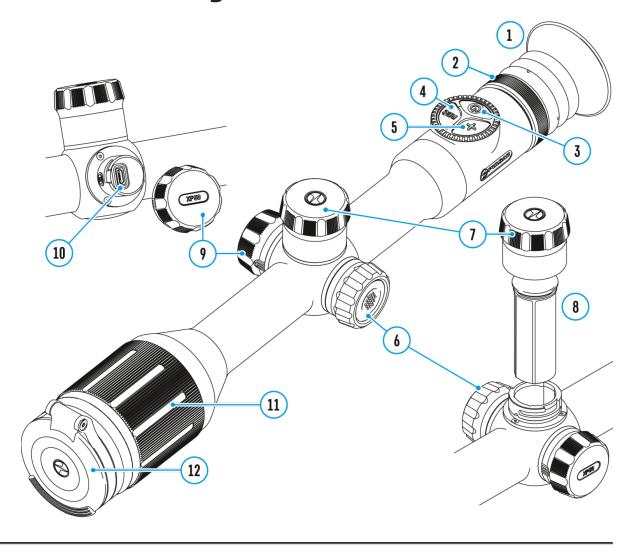
## **Battery Installation**



- 1. Turn the battery cover (7) counterclockwise and remove it.
- 2. Install the battery **(8)** into the battery compartment along the special guides in the device body designed for it.
- 3. When properly installed, the battery is fixed in the battery compartment of the device.
- 4. Close the battery cover(7) by turning it clockwise.

# Switching and Changing the Batteries

## **Show device diagram**



**Digex** riflescopes are powered by 2 batteries: built-in Battery Pack APS3 and removable Battery Pack APS3/APS2.

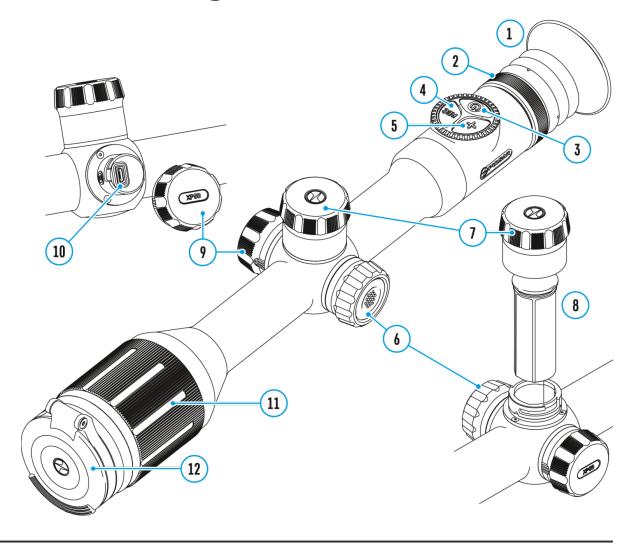


- 1. If there are two batteries in the device, two battery icons are displayed in the status bar (1 built-in battery, 2 removable battery). The battery from which the device is powered is displayed in blue, inactive in gray.
- 2. If there is no removable battery in the device, only one blue icon of the internal battery is displayed in the status bar.
- 3. When both batteries are fully charged, the device is powered by the removable battery. If there is low removable battery level, the device will switch to the built-in battery.
- 4. When charging the batteries using the micro USB port (10), the built-in battery is charged first. When the built-in battery charge level reaches 100%, the device switches to charging the removable battery. The battery level is displayed in percentage above the icons in the status bar.
- 5. It is possible to replace removable battery with device turned on when it is powered by built-in battery (the device will continue to work properly).

**Attention!** When removing the removable battery from the device, if the device is powered by it, the device will reboot and switch to operation from the built-in battery. When installing a removable battery with a sufficient charge level, the device will automatically switch to it.

# **External Power Supply**

## **Show device diagram**



External power can be supplied from an external source, such as a Power Bank (5 V).

- 1. Connect the external power supply to the micro USB port **(10)** of the riflescope.
- 2. The riflescope switches to external power source, while built-in Battery Pack APS3 and removable Battery Pack APS2 (or APS3\*) will gradually recharge.

4. When you turn off external power source, the riflescope switches over to the removable battery without turning off. When there is no removable battery or low power level the device switches to the built-in battery.

**Attention!** Charging Power Bank APS2 / 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.

\*Optional.

## Mounting on the Rifle

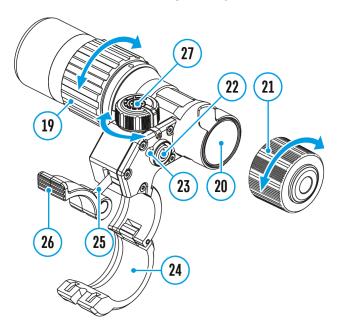
To ensure accurate shooting the **Digex** riflescope should be properly mounted on the rifle.

- The riflescope is fixed using the mount, which is purchased separately. Use only high-quality mounts and rings that are designed especially for your rifle. Follow the mounting manufacturer's recommendations on the installation procedure and use the proper tool.
- When mounting the riflescope, adjust the position on the rifle so that proper (comfortable) holding of rifle ensures the distance between the riflescope and eye (eye relief) specified by the **Technical Specifications**. Failure to comply with this recommendation may result in injury to the shooter by the parts of the riflescope eyepiece when shooting.
- It is recommended to install the riflescope as low as possible, at the same time it should not be in contact with barrel or receiver.
- In order to avoid pinching the riflescope body, a tightening torque for the screws of the mounting rings must be not more than 2.5 Nm (22.1 Pound-force inches). A torque wrench is recommended to control the tightening torque.
- Before using the riflescope when hunting, follow instructions in the Zeroing section.
- It is recommended to use an eyecup while using the riflescope in the dark in order to avoid detection of camouflage. Mounting the eyecup on the riflescope eyepiece is carried out using built-in magnets.

## **IR Illuminator**

The IR illuminator for the **Digex** riflescope is powered by an APS2 battery pack.

- To install the battery in the IR illuminator, turn the battery cover (21) counterclockwise and remove it.
- Install the battery into the battery compartment (20) using the special guides in the IR illuminator body designed for it.
- When properly installed, the battery is fixed in the battery compartment (20).
- Close the battery compartment (19), turning the cover clockwise.



- Open the mount ring of the IR illuminator(24).
- Put the mount on the riflescope body so that the mount half rings encircle the riflescope body.
- Raising the eccentric lever(26), move it to the left. Align the eccentric axis with the groove of the moving half ring. The eccentric lever (26) shall take its seat.
- Lock the eccentric lever (26) position by lowering it down.
- The IR illuminator mount should be as close as possible to body of the riflescope lens.
- Tighten the screw in the eccentric pin (25) using an Allen wrench.
- If the lever loosens during operation, tighten the screw with an Allen key.

Use the IR illuminator to improve the quality of observation in lowlight conditions at night.

- Turn on the IR illuminator by pressing the button(22) on the side of the light housing.
- Turn the knob(27) of the IR illuminator to control the illuminator power.
- To adjust the IR light position in the riflescopes field of view, loosen the ring (19) of the IR illuminator by turning it in the direction of the arrow.
- Adjust the IR illuminator lens using its hinge system to align the IR illumination in the riflescopes field of view. Once adjusted, tighten the IR illuminator ring (19).
- Press the IR button(22) to turn off the IR illuminator.

The illuminator is equipped with an LED indicator (23) making it possible to monitor the battery level. Indication modes are in the table below:

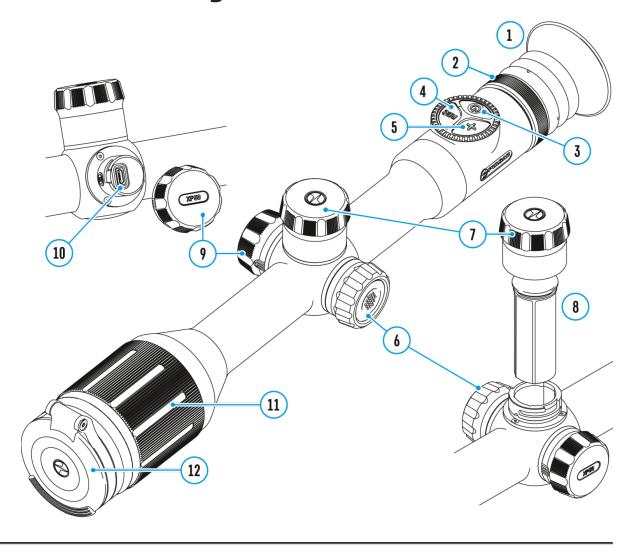
IR OPERATING MODE	INDICATOR COLOR
The IR illuminator is on, power supply 3.2-4.2V	•
The IR illuminator is on, power	
supply less than 3.2V.	
Approximate operating time	•
before the IR illuminator turns	
off is 30 minutes	
The IR illuminator is off	-

Note: when using an IR illuminator on a weapon with a silencer installed,

light flare may appear on the display.

# Powering on and Image Settings

## **Show device diagram**

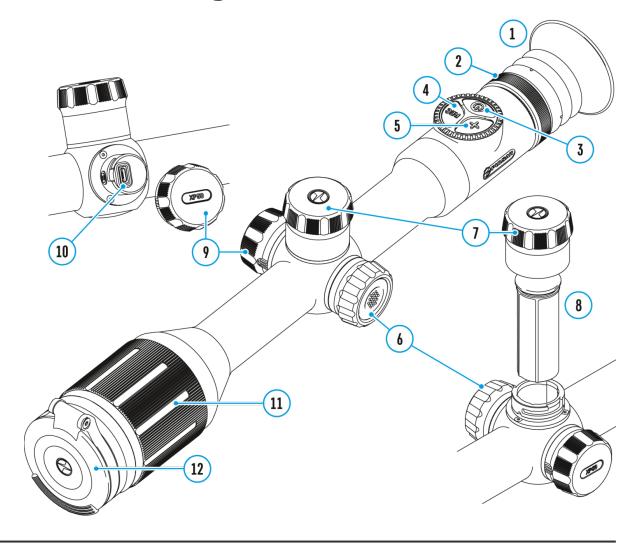


- 1. Open the lens cap (12).
- 2. Press the **ON/OFF** button **(3)** briefly to power the riflescope on.
- 3. Adjust the resolution of the symbols on the display by rotating the diopter adjustment ring of the eyepiece (2).
- 4. Rotate the lens focus ring(11) to focus on the object being observed.
- 5. Adjust the brightness, contrast of the display using the controller **(6)** (for more details, see the **Quick Menu Functions** section).

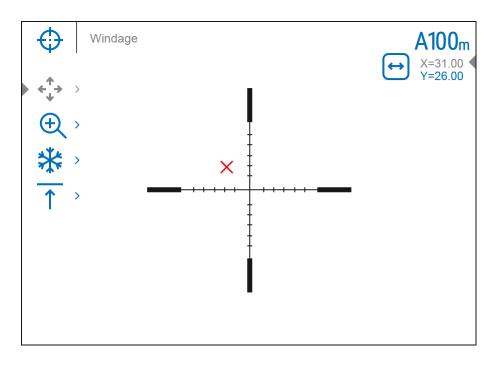
6.	After use,	turn off the	riflescope	by long pi	ressing the	<b>ON/OFF</b> button	

## How to zero

## **Show device diagram**



Zeroing is recommended to be done at the temperature close to the riflescope operating temperature.



#### Step 1. Make a shot

- 1. Mount the rifle with the riflescope installed on a bench rest.
- 2. Set a target at a certain distance.
- Adjust the riflescope according to the Powering On and Image Setting section.
- 4. Select the zeroing profile (see**Zeroing Profile** main menu item)
- 5. Point a rifle at the center of the target and shoot.

#### Step 2. Align the reticle with the impact point

- 1. If the impact point does not match the aiming point (center of the riflescope's reticle), press and hold down the controller button **(6)** to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Zeroing** mage that typediak typed
- 3. Set the zeroing distance value (see **Zeroing** mage menu item > menu item >
- 4. Confirm the selected zeroing distance value by long pressing the controller button **(6)**.
- 5. The **Zeroing Parameters Settings** additional menu will appear on the screen.
- 6. Cross hairs appear in the center of the display  $\times$  . X and Y coordinates of the cross hairs are in the upper right corner.

- 7. Rotate the controller ring (6) to select the icon found or type unknown.
- 8. Press the controller button (6) briefly.
- 9. Holding the reticle in the aiming point, move the cross hairs by rotating the controller ring **(6)** until the cross hairs match the point of impact. To switch the direction, briefly press the controller button **(6)**.

#### **Zoom Zeroing function:**

To improve the accuracy of zeroing, you can change the magnification in the menu  $\bigoplus$ . The larger the magnification, the smaller the step of shifting the reticle on the display relative to the image from the sensor.

#### Freeze zeroing:

Not to hold the reticle at the aiming point, you can use the **Freeze** function - freezing the zeroing screen (refer to **Zeroing** menu item => **Distance** submenu => **Zeroing Parameters Settings** - - submenu => **Freeze** submenu su

#### Step 3. Save the coordinates

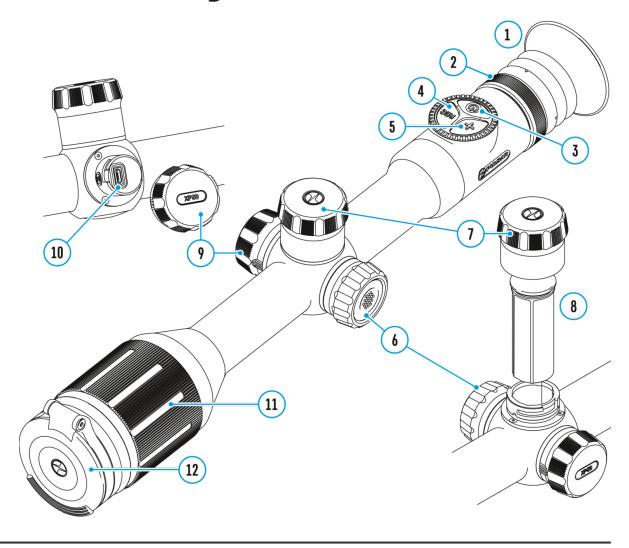
- To save the new reticle position, press and hold the controller button
   (6). The reticle is aligned with the point of impact and the submenu
- 2. Press and hold the controller button **(6)** again to exit the zeroing settings menu the message "Zeroing coordinates saved" appears, confirming the successful operation.
- 3. Fire a second shot now the point of impact and the aiming point must be matched.

Notes:

- After zeroing, the reticle may not be in the center of the display.
- The range of movement of the riflescope reticle allows you to successfully zero the riflescope, even on mounts that are far from ideal, minimizing the possible disadvantages of the mounts. The better the mount is installed, the less you have to move the reticle. We recommend mounting the riflescope as low as possible.

## **Add New Distance**

#### **Show device diagram**



To zero your riflescope, you need to set a zeroing distance first in the range of 1 to 910 m (955 yards).

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring to select a menu item � and enter by briefly pressing the controller button.
- 3. Press the controller button **(6)** briefly to enter the **Add New Distance** + submenu.
- 4. Rotate the controller ring to select a value for each digit. Press the controller button (6) briefly to switch between digits  $\bigcirc$  150 m.

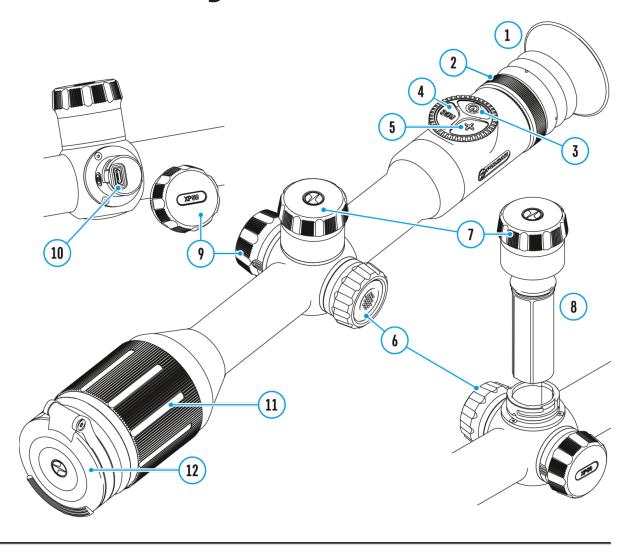
5. Having set the desired distance, press and hold the controller button **(6)** to save it.

The distance you set first becomes a **primary distance** – shown with icon  ${}^{\blacktriangleright}0^{\blacktriangleleft}$  on the right to the distance value.

**Note:** Maximum number of zeroing distances is ten for each profile.

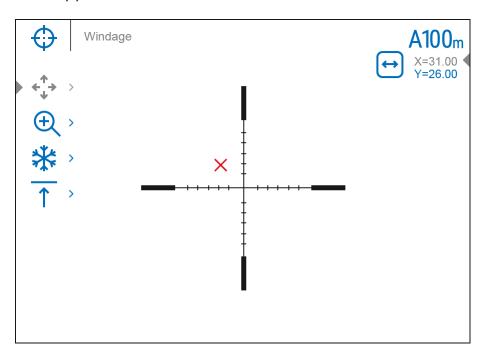
# Zeroing Parameters Settings

#### **Show device diagram**



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Zeroing** menu item and enter by briefly pressing the controller button**(6)** the zeroed distances are displayed.
- 3. The values (e.g., +7.0) shown on the right of the distance values, stand for the number of clicks along the Y axis, at which the reticle position at other distances differs from the reticle position in the primary distance.

- 4. To zero at any distance again, rotate the controller ring **(6)** to select the required distance and briefly press the controller button **(6)**.
- 5. Rotate the controller ring **(6)** to select the **Zeroing Parameters**Settings and enter by briefly pressing the controller button **(6)**.
- 6. **Zeroing** screen, which allows the change of zeroing coordinates, will appear.



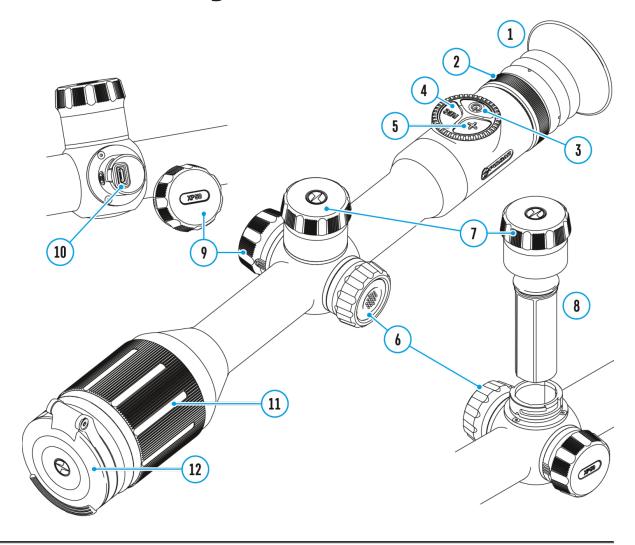
# Windage/Elevation

The **Windage/Elevation** additional menu item in the **Zeroing**Parameters Settings — menu allows you to adjust the reticle position.

For a detailed description of the reticle adjusting, refer to the **Zeroing** section.

# Magnification (when Zeroing)

#### **Show device diagram**



Magnification allows you to magnify a digital zoom of the riflescope when zeroing, which reduces the minute of angle click. It improves the zeroing accuracy.

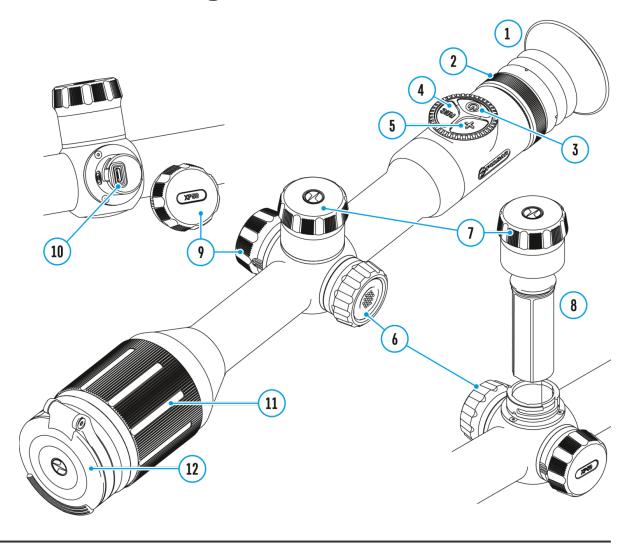
1. In the **Zeroing Parameters Settings**—— menu, rotate the controller ring(6) to select the **Magnification** submenu item and enter by briefly pressing the controller button (6).

- 2. Rotate the controller ring **(6)** to select a digital magnification value of the riflescope (e.g., x4).
- 3. Press the controller button **(6)** briefly to confirm your selection.

The minute of angle click when using the Magnification function is indicated in the Table of **Technical Specifications**.

## **Freeze**

#### **Show device diagram**



The feature of the function is that there is no need to constantly keep the riflescope at the point of aiming.

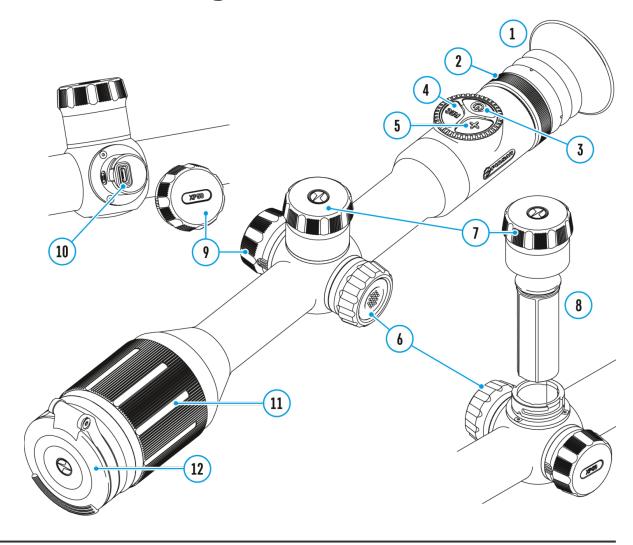
- 1. In the **Zeroing Parameters Settings** menu, rotate the controller ring(6) to move the cursor to the **Freeze** to the function.
- 2. Align the reticle with the point of aiming and press the controller (6) or **ON/OFF** (3) button. A screenshot will be taken, an icon will or type unknown appear.
- 3. Go to the additional **Windage/Elevation** submenu and adjust

the position of the reticle (see the **Zeroing**section).

4. Select the **Freeze** submenu item again and briefly press the controller (6) or **ON/OFF** (3) button - the image will "unfreeze".

## **Name Distance**

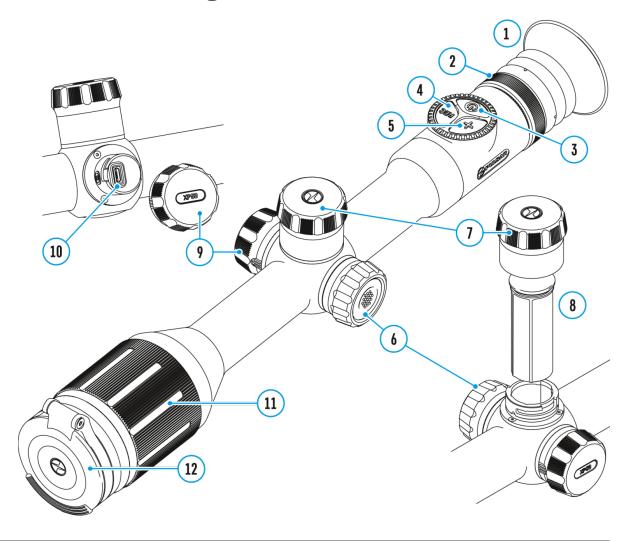
#### **Show device diagram**



- 1. In the **Zeroing Parameters Settings**—— menu, rotate the controller ring **(6)** to select the **Name Distance** mage not found or type unknown it by briefly pressing the controller button **(6)**.
- 2. Rotate the controller ring(6) to select a value for each digit. Press the controller button (6) briefly to switch between digits.
- 3. Press and hold the controller button (6) to confirm the selection.

# **Change Primary Distance**

#### **Show device diagram**



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Zeroing** menu item and enter by briefly pressing the controller button **(6)** the zeroed distances are displayed.
- 3. Select a non-primary distance and enter the submenu for operating the distance with a brief press of the controller button(6).
- 4. Select Change Primary Distance ▶ 0 

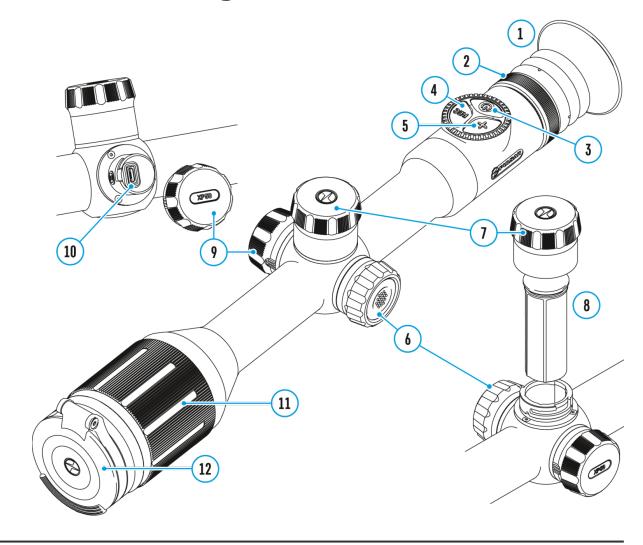
  | mage not found or type unknown litem.
- 5. Press the controller button (6) briefly.
- 6. Icon ▶0 Inage next to the selected distance confirms the change of

primary distance.

The differences of other distances from the new primary distance are recalculated as per clicks.

## **Delete Distance**

### **Show device diagram**



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Zeroing** man enter by briefly pressing the controller button **(6)** the zeroed distances are displayed.
- 3. Select the distance you wish to delete and enter the submenu for operating the distances with a brief press of the controller button (6).
- 4. Select **Delete Distance** in mage not found or type unknown
- 5. Select "Yes" in the appeared dialog box to delete a distance. "No" to cancel deletion.

**Attention!** If the primary distance is deleted, the first distance on the list automatically becomes the new primary distance.

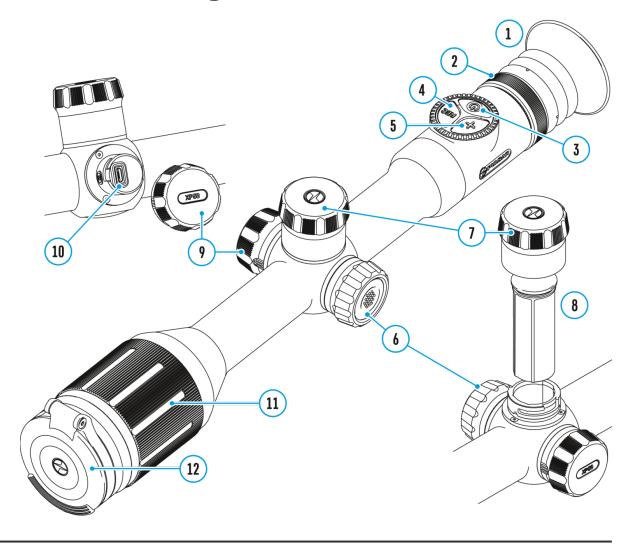
## **Smart Reticle Function**

When changing the riflescope digital magnification, the reticle that appears on the display is scaled; the reticle appearance will change (enlarge or reduce) proportionally to the magnification. It allows the use of the rangefinder reticles with any digital magnification.

\*Only for scalable reticles X51Fi-300, M56Fi, M57Fi

# **Discrete Digital Zoom**

#### **Show device diagram**



The riflescope functionality allows you to quickly increase the basic magnification (see **Magnification** line in the table of **Technical Specifications**) by 2 and 4 times, as well as to return to the basic magnification.

- Press the **ZOOM (5)** button successively to change the magnification ratio of the riflescope.
- While the icon  $\bigoplus$  is visible on the screen, rotate the controller ring (6) for smooth digital zooming from the current magnification.

### **Status Bar**

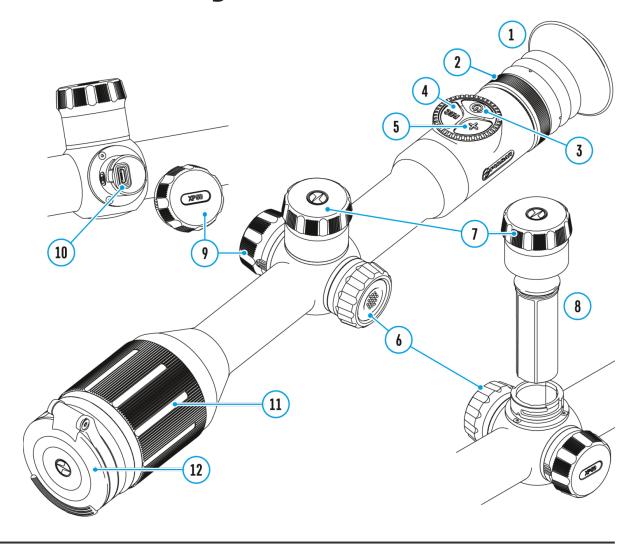
The status bar is at the bottom of the display and shows information on the actual operating status of the riflescope, including:



- 1. Actual zeroing profile (e.g., A)
- 2. Zeroing distance (e.g., 100 m)
- 3. SumLight™ (on/off)
- 4. Current magnification
- 5. Microphone (on or off)
- 6. Wi-Fi connection
- 7. Auto Shutdown function (e.g., 5 minutes)
- 8. Clock
- 9. Power supply:
- Battery discharge level 1 (when riflescope is powered by a builtin or removable battery).
- External battery power indicator —== (if the riflescope is powered by an external power supply).
- Battery indicator ♥️ with current percentage of charge (when charging from an external power source).

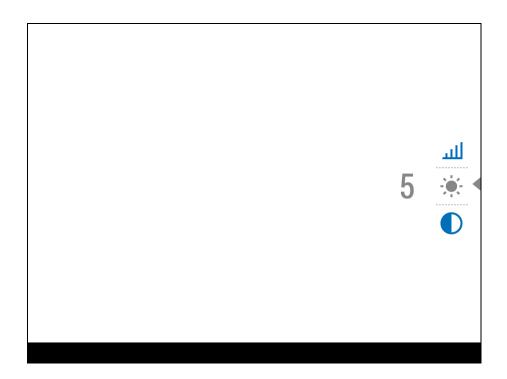
# **Quick Menu Functions**

#### **Show device diagram**



The basic settings (adjusting brightness and contrast, smooth digital zoom function, stadiametric rangefinder, current profile and distance information) can be changed using the quick menu.

- Press the controller button (6) briefly to enter the quick menu.
- A short press of the controller button (6) enables you to switch between functions, as described below.



**Brightness** - rotate the controller ring **(6)** to change the display brightness value from 00 to 20.

**Contrast** - rotate the controller ring(6) to change the image contrast value from 00 to 20.

**A100** ↑ - information on the current profile and zeroing distance in this profile (e.g., profile A, zeroing distance of 100 m). This information is always displayed in the status bar. Rotate the controller ring(6) to switch between the zeroing distances in the adjusted profile. This function is available if there are two or more distances in the profile.

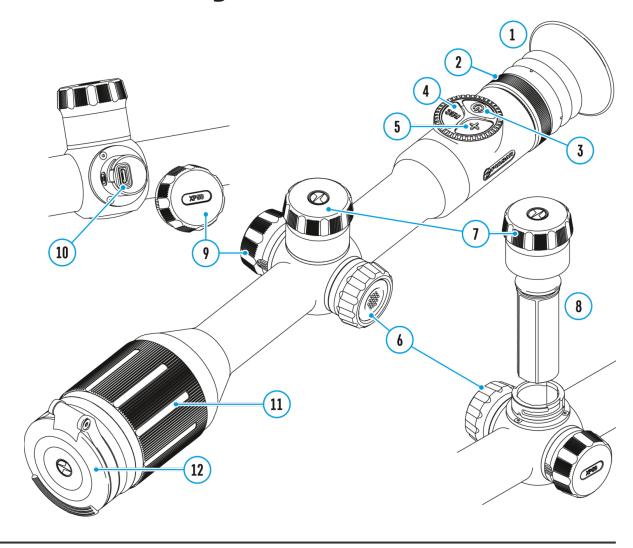
*Tip:*To quickly switch between distances while hunting, leave the Zeroing Distance option selected before exiting the quick menu. The menu item will be saved, and the next time you enter the quick menu, you can quickly switch the zeroing distances by turning the controller **(6)** (for example, 100 m, 150 m, 200 m).

Stadiametric Rangefinder \_\_\_\_\_ - rotating the controller ring (6), change the distance between the special mark points to determine the distance to the observed object (for more details on the rangefinder, see the Stadiametric Rangefinder section).

• Press and hold the controller button(6) to exit the menu or wait 10 seconds to exit automatically.

## **Enter the Main Menu**

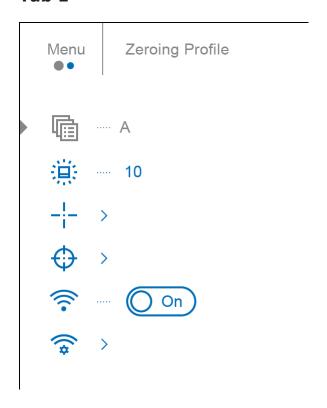
#### **Show device diagram**



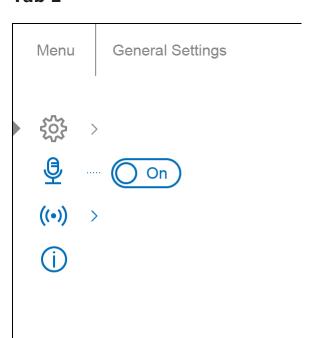
- 1. Enter the main menu with a long press of the controller button (6).
- 2. To move through the main menu items, rotate the controller ring (6).
- 3. Press the controller button **(6)** briefly to open subitems of the main menu.
- 4. Press and hold the controller button(6) to exit from a subitem of the main menu.
- 5. Automatic exit from the main menu occurs after 10 seconds of inactivity.

#### **General View of the Menu**

Tab 1

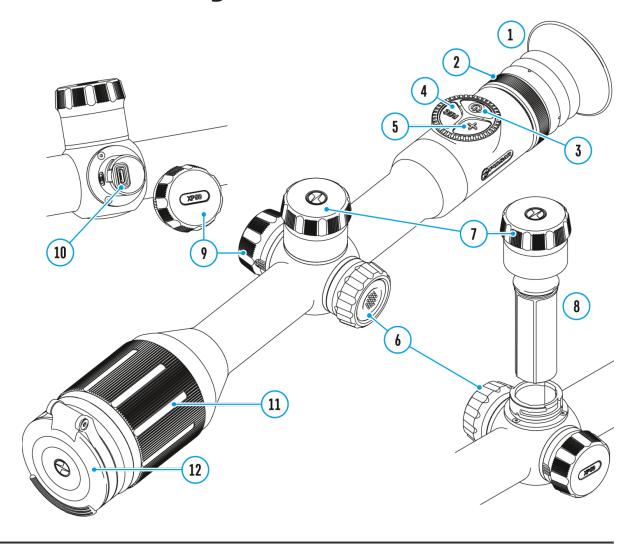


Tab 2



# **Zeroing Profile**

#### **Show device diagram**



This item of the main menu allows you to select one of five profiles (A, B, C, D, E) to use. Each profile includes the following parameters:

- A set of zeroed distances
- Reticle color
- Reticle type

Different profiles can be used when using the riflescope on different rifles or when shooting with different bullets.

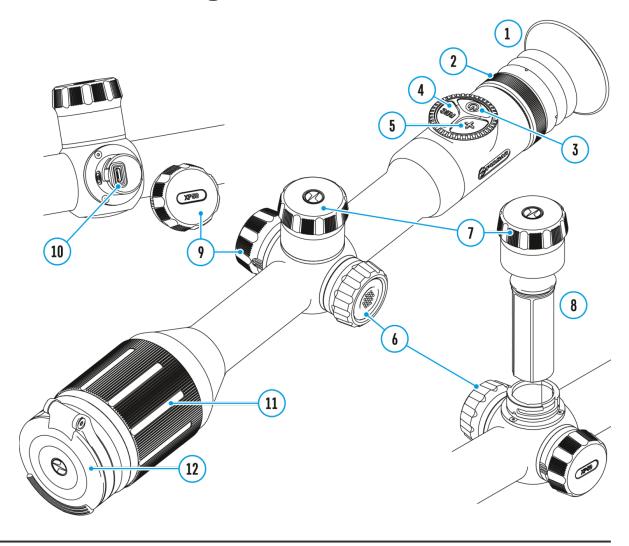
Zeroing profiles cannot be deleted. You can change the parameters of

zeroing distances or delete distances within a profile.

- 1. Press and hold the controller button(6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Zeroing Profile** menu item.
- 3. Press the controller button **(6)** briefly to enter the **Zeroing Profile** submenu.
- 4. Rotate the controller ring **(6)** to select one of the zeroing profiles (marked with the letters A, B, C, D, E).
- 5. Confirm your selection with a short press of the controller button (6).
- 6. The name of the selected profile appears in the status bar at the bottom of the display.

# **Icon Brightness**

#### **Show device diagram**



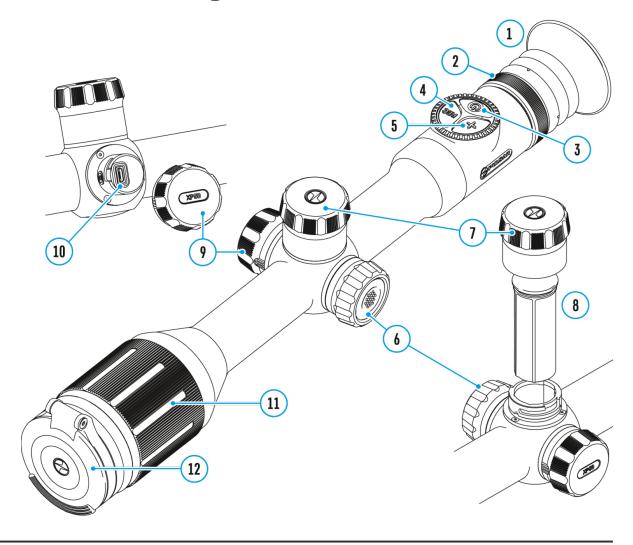
Adjust the brightness level of the icons and screensavers (Pulsar, Display off) on the display.

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Icon Brightness** menu item.
- 3. Press the controller button **(6)** briefly to enter the **Icon Brightness** submenu.
- 4. Rotate the controller ring **(6)** to set the desired brightness level (1 to 10).

5. Press the controller button (6) briefly to confirm the selection.	

# **Reticle Setup**

#### **Show device diagram**



This main menu item allows you to select the reticle shape, color and brightness.

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Reticle Setup** i menu item.
- 3. Press the controller button **(6)** briefly to enter the **Reticle Setup** submenu.

#### **Reticle Type**

Selection of the aiming reticle shape.

- 1. Rotate the controller ring (6) to select the **Reticle Type** − is submenu.
- 2. Press the controller button(6) briefly to enter the **Reticle Type** submenu.
- 3. Rotate the controller ring **(6)** to select the desired aiming reticle shape from the list that appears. The reticle type changes as the cursor goes down the reticle list.
- 4. Press the controller button (6) briefly to confirm the selection.

*Note*: the riflescope supports **scalable reticles**.

#### **Reticle Color**

Selection of reticle color.

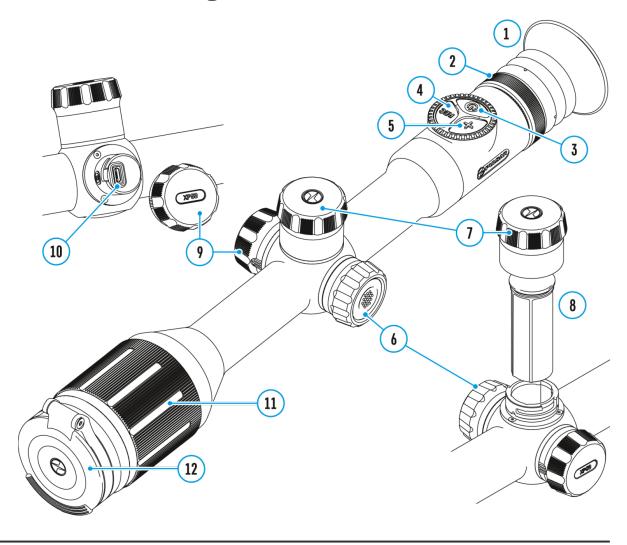
- 1. Rotate the controller ring (6) to select the **Reticle Color**  $\vdots$  submenu.
- 2. Press the controller button **(6)** briefly to enter the**Reticle Color** submenu.
- 3. Rotate the controller ring(6) to select one of the color options for the reticle: Black/Red, White/Red, Black/Green, White/Green, Red, Green, Yellow, Blue, Orange.
- 4. Press the controller button (6) briefly to confirm the selection.

#### **Reticle Brightness**

- 1. Adjust the brightness level of the aiming reticle.
- 2. Rotate the controller ring **(6)** to select the **Reticle Brightness** submenu.
- 3. Press the controller button **(6)** briefly to enter the **Reticle Brightness** submenu.
- 4. Rotate the controller ring **(6)** to set the desired brightness level (1 to 10).
- 5. Press the controller button (6) briefly to confirm the selection.

## Wi-Fi Activation

#### **Show device diagram**



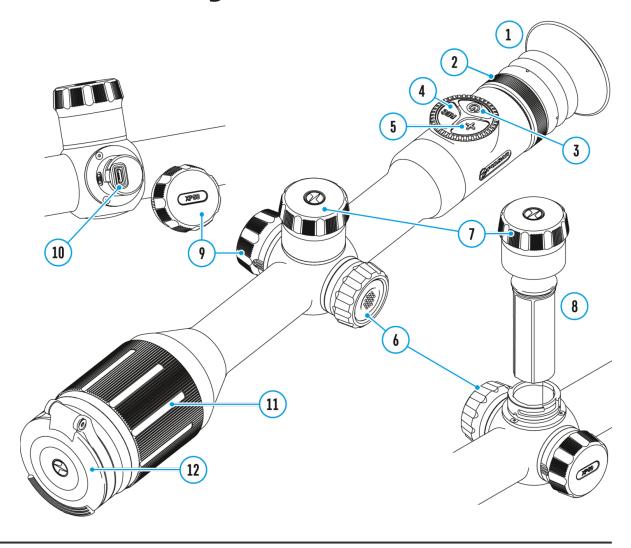
#### Turn on/off Wi-Fi

- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the Wi-Fi Activation found or type unknow menu item.

3. To turn Wi-Fi on or off, briefly press the controller button (6).

# **Wi-Fi Settings**

#### **Show device diagram**



This item enables you to set up your riflescope for operation in a Wi-Fi network.

- 1. Press and hold the controller button (6) to enter the main  $\underline{\text{menu}}$ .
- 2. Rotate the controller ring **(6)** to select the **Wi-Fi Settings** mag to found or type unknow submenu.
- 3. Press the controller button (6) briefly to enter the submenu
- 4. Rotate the controller ring (6) to select the desired menu item.

#### **Password Setup**

This item enables you to set a password to access the riflescope from an external device. The password is used to connect an external device (i.e. smartphone) to the riflescope.

- 1. Press the controller button **(6)** to enter the **Password Setup** PAS submenu.
- 2. The default password(12345678) will appear on the screen.
- 3. Rotate the controller ring **(6)** to set the desired password. Press the controller button **(6)** to toggle through the digits.
- 4. Press and hold the controller button **(6)** to save the password and exit from the submenu.

#### **Access Level Setup**

This sub-function enables you to configure the appropriate level of access to your device made available to the Stream Vision application.

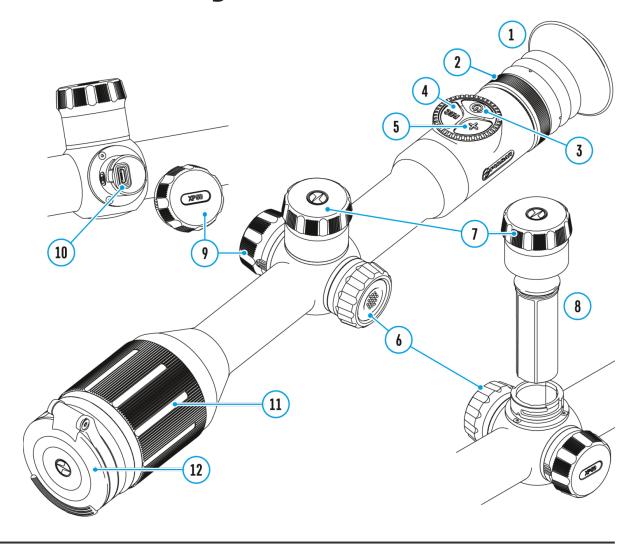
**Owner level.** A Stream Vision user has full access to all the device's functions.

**Guest level.** A Stream Vision user can only view video footage from the device in real time.

- 1. Press the controller button **(6)** to enter the **Access Level Setup** submenu.
- 2. Rotate the controller ring **(6)** to select the access level.
- 3. Press and hold the controller button **(6)** to confirm your selection and exit from the submenu.

# **General Settings**

#### **Show device diagram**



This menu item allows you to configure the following settings:

- 1. Press and hold the controller button(6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **General settings** the select the **General settings** menu item.
- 3. Press the controller button **(6)** briefly to enter the **General settings** submenu.
- 4. Rotate the controller ring **(6)** to select the desired menu item.

#### Language

#### Language selection:

- 1. Press the controller button **(6)** briefly to enter the **Language** submenu.
- 2. Rotate the controller ring **(6)** to select one of the available interface languages: English, German, Spanish, French, Russian, Italian, Portuguese, Dutch, Danish, Norwegian, Swedish, Polish, Czech, Hungarian.
- 3. Confirm your selection with a short press of the controller button (6).
- 4. Press and hold the controller button **(6)** to save your selection and exit from the submenu.

#### **Date**

#### **Date Setting:**

- 1. Press the controller button (6) briefly to enter the **Date** submenu.
- 2. The date is displayed in dd/mm/yyyy format.
- 3. Rotate the controller ring **(6)** to select the desired year, month and date. Press the controller button **(6)** briefly to switch between digits.
- 4. Press and hold the controller button **(6)** to save your selected date and exit from the submenu.

#### **Time**

#### Time Setting:

- 1. Press the controller button (6) briefly to enter the **Time** (-) submenu.
- 2. Rotate the controller ring (6) to select the time format 24 or AM/PM.
- 3. Press the controller button(6) to proceed to the hour setting.
- 4. Rotate the controller ring (6) to select the hour value.
- 5. Press the controller button (6) to proceed to the minute setting.
- 6. Rotate the controller ring (6) to select the minutes value.
- 7. Press and hold the controller button **(6)** to save your selected time and exit from the submenu.

#### **Units of Measure**

#### Units of measurement selection:

- 1. Press the controller button (6) briefly to enter the **Units of Measure** Imaged of typediaktypenunknown Submenu.
- 2. Rotate the controller ring **(6)** to select the unit of measurement meters or yards, press the controller button **(6)**.
- 3. Return to submenu will happen automatically.

#### **Default Settings**

- 1. Press the controller button(6) briefly to enter the **Default Settings** submenu.
- 2. Rotate the controller ring(6) to select "Yes" to restore default settings or "No" to cancel the action.
- 3. Confirm your selection with a short press of the controller button (6).
- If "Yes" is selected, display will show "Do you want to restore default settings?" and "Yes" and "No" options. Select "Yes" to restore default settings.
- If"No" option is selected: the action will be aborted and you will return to the submenu.

The following settings will be returned to their defaults:

- Video Recorder Mode Video
- Interface language English
- Wi-Fi Off (default password)

- Magnification initial value
- PiP Off
- Unit of Measurement Metric
- Side Incline On
- Zeroing Profile A
- Reticle selection from the riflescope's memory 1

**Attention!** After factory reset the date and time as well as the zeroing profiles data entered by the user is saved.

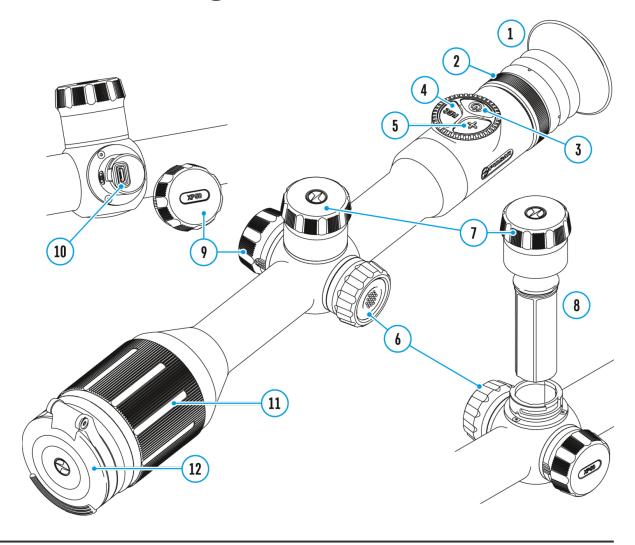
#### **Format**

This function enables formatting the memory card (delete all files).

- 1. Press the controller button(6) briefly to enter the **Format** submenu.
- 2. Rotate the controller ring **(6)** to select **"Yes"** to format the memory card, or **"No"** to return to the submenu.
- 3. Confirm your selection by pressing the controller button (6).
- If the "Yes" option has been selected, the "Do you want to format memory?" message and "Yes" and "No" options will appear on the display. Select "Yes" to format the memory card.
- If "No" option is selected: formatting is cancelled and return to the submenu.

# Microphone

#### **Show device diagram**



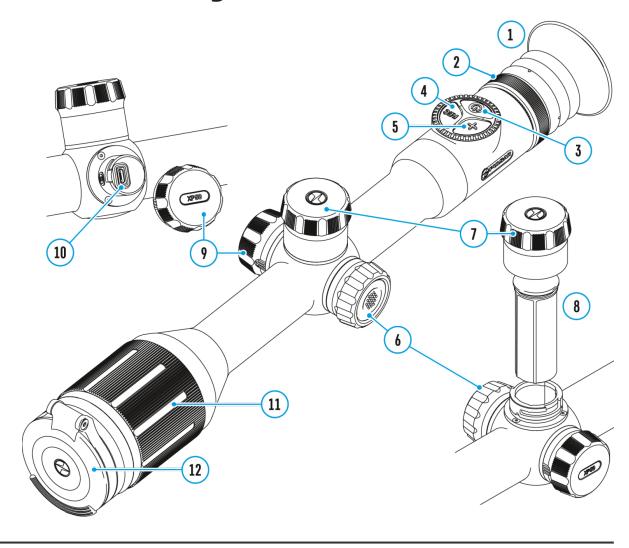
#### Turning on/off Microphone

This item allows you to enable (or disable) the microphone for recording sound during video recording.

- 1. Press and hold the controller button(6) to enter the main menu.
- 2. Rotate the controller ring (6) to select the **Microphone**  $\Phi$  menu item.
- 3. To turn the microphone on or off, briefly press the controller button (6).

## **Device Information**

#### **Show device diagram**



- 1. Press and hold the controller button (6) to enter the main menu.
- 2. Rotate the controller ring **(6)** to select the **Device Information (j)** menu item.
- 3. Press the controller button **(6)** briefly to enter the **Device Information** submenu.

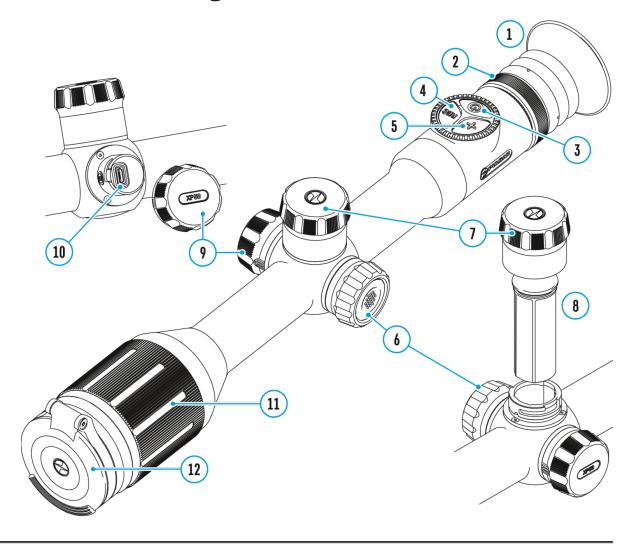
This item allows the user to view the following information about the riflescope:

- Full name of the riflescope
- SKU number

- Serial number of the riflescope
- Riflescope firmware version
- Hardware version
- Service information
- Battery information

## Video Recording and Photography

### **Show device diagram**



The riflescope is equipped with a function for video recording (photography) of the observed image that is saved on the built-in memory card.

Before using the photo and video functions, read the **Date**and **Time** subsections of the **General Settings** section.

For information on how to watch recorded photos and videos, see the Stream Vision 2 user manual: **Android**, **iOS**.

#### **Built-in recorder operates in two modes:**

- **Photo** (photography; the icon is displayed in the upper left corner of the display).
- **Video** (video recording; the icon is displayed in the upper right corner of the display, the total remaining recording time is given taking into account the current resolution in the HH:MM format (hours:minutes).

Toggle (switch) between the riflescope operating modes with a long press of the **REC (4)** button. Switching between the modes is cyclical (**Video**-> **Photo**-> **Video**...).

#### Photo mode. Capturing an image

- 1. Switch to the **Photo**mode with a long press of the **REC (4)** button.
- 2. Press the **REC (4)** button briefly to capture a photo. The image freezes for 0.5 sec a photo is saved to the internal memory.

#### Video mode. Recording a video

- 1. Switch to the **Video** mode with a long press of the **REC (4)** button.
- 2. Press the **REC (4)** button briefly to start video recording.
- 3. When the video recording starts, the icon will disappear, instead of it the **REC** icon as well as the video recording timer displayed in the MM:SS (minutes:seconds) format will appear;
- 4. Pause/continue recording by briefly pressing the **REC (4)** button.
- 5. Press and hold the **REC (4)** button to stop video recording.
- 6. Video files are stored in the built-in memory card:
- After turning off the video recording;
- Upon powering the riflescope off if recording was on;
- When the memory card is overfilled during recording (Memory Full message appears on the display).

#### **Notes:**

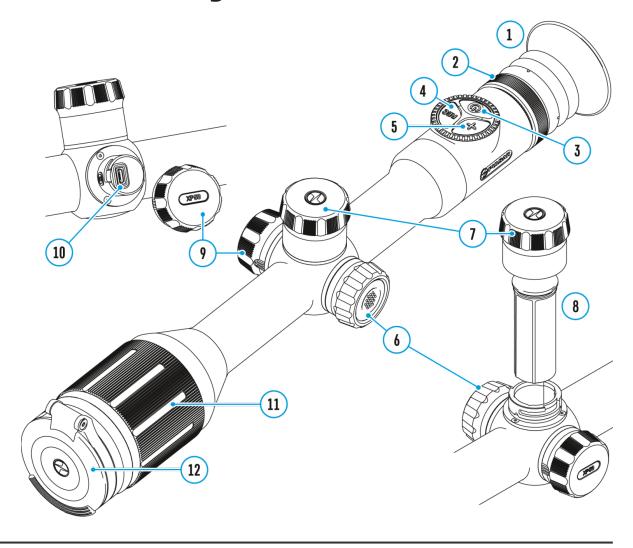
- You can enter and navigate the menu during video recording.
- Recorded videos and photos are saved to the built-in memory card of the riflescope in the format img xxx. jpg (for photos); video xxx. mp4

(for video). xxx - three-digit counter (for videos and photos);

- The counter used for the names of multimedia files cannot be reset;
- If a file is deleted from the middle of the list, its number is not taken by the other file;
- When the counter is full, a new folder is created: img\_xxxx; xxxx being a file counter;
- Maximum duration of a recorded video file is 5 minutes. After this time expires, the video is recorded to a new file. The number of recorded files is limited by the capacity of unit's internal memory.
- Regularly check free memory within the built-in memory card and move the footage to other storage media to free up the memory card space.
- When the Display Off function is activated, video recording is paused.

### **Wi-Fi Function**

#### **Show device diagram**



The riflescope has a function for wireless communication with mobile devices (smartphone or tablet) via Wi-Fi.

- 1. To enable the wireless module, enter the main menu by long pressing the controller button (6).
- 2. Rotate the controller ring **(6)** to select the **Wi-Fi Activation**  $\widehat{\boldsymbol{r}}$  menu item.
- 3. Press the controller button(6) briefly to turn on/off Wi-Fi module.

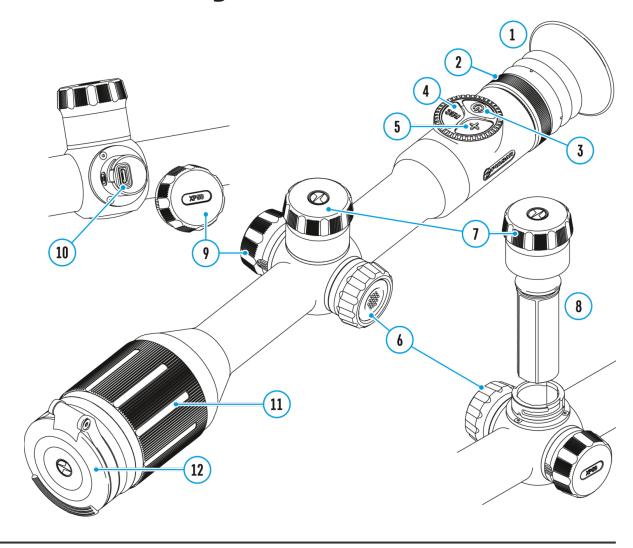
#### Wi-Fi is displayed in the status bar as follows:

Indication in the Status Bar
*
. <del>০</del>
<b>4</b> ?
<b>•</b>

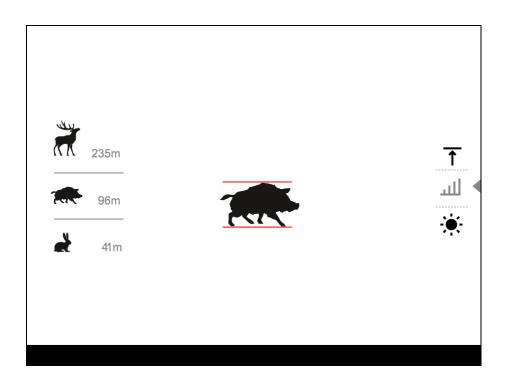
- An external device recognizes the riflescope under the name
   Digex XXXX, where XXXX are the four last digits of the serial number.
- After entering the password (default: 12345678) on a mobile (see Password Setup subsection of the Wi-Fi Settings section for more information on setting a password) and setting up a connection, the icon in the riflescope status bar changes to found or type unknown
- Launch Stream Vision 2 application on your mobile device (see the **Stream Vision 2** section).
- Video broadcasting on a mobile screen starts after the viewfinder button on the mobile screen is activated.

## **Stadiametric Rangefinder**

### **Show device diagram**



**Digex** night vision digital riflescope is equipped with a stadiametric rangefinder, allowing you to determine the approximate distance to an object if its size is known.



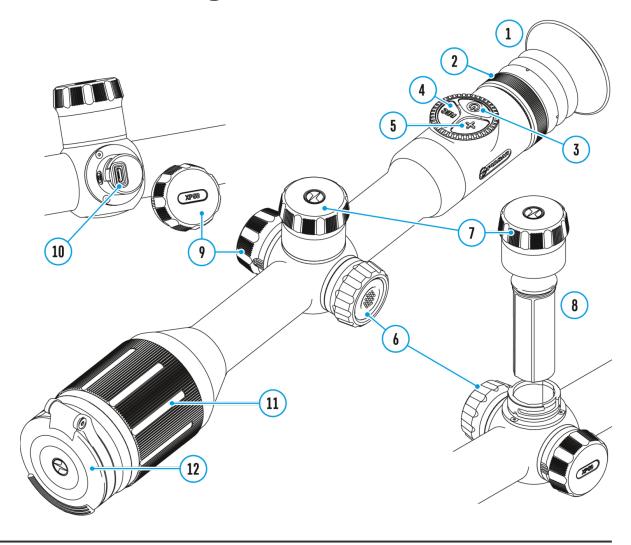
- To select the Stadiametric Rangefinder function, enter the Quick Menu by briefly pressing the controller button (6).
- 2. Press the controller button (6) briefly to select the icon found or type unknown
- 3. The display will show the lines for measurements, the icons and numbers of the measured distance for three objects.
- 4. Place the bottom fixed line under the object.
- 5. Rotate the controller ring **(6)**to move the upper line relative to the lower horizontal fixed line so that the object is located directly between the lines. A target range automatically recalculated along with movement.
- 6. To exit the rangefinder mode, briefly press the controller button(6) or wait 10 seconds to exit automatically.

#### Notes:

- There are three predefined values for objects: Hare 0.3 m high, Boar 0.7 m high, Deer 1.7 m high.
- The measured range value is rounded off before being displayed for large range values up to 5 m, for shorter range up to 1 m.
- To select a unit of measurement (meters or yards), go to the **General**Settings (Market and or type unknown of Measure when united menusion item) submenu.

## **Display-Off Function**

### **Show device diagram**



This function deactivates the image transmission to the display by minimizing its brightness. This helps prevent accidental disclosure. However, the device stays on.





00:03

Display off

#### Options for operating with the Display Off function:

**Option 1.** Riflescope off. It is necessary to power the riflescope on and activate the Display-Off function.

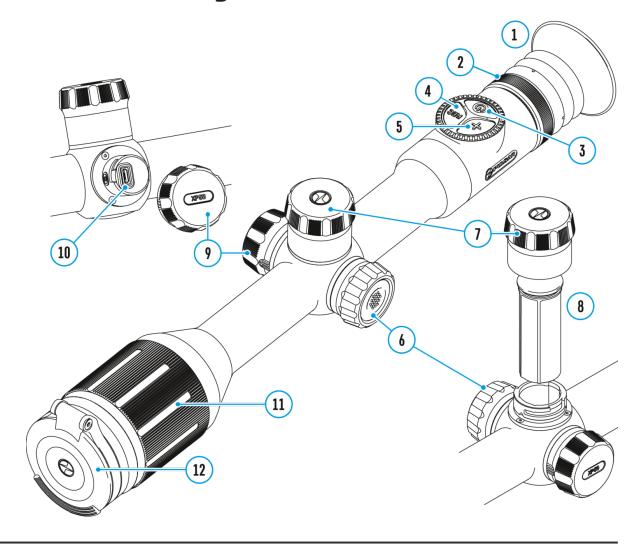
- 1. Press the **ON/OFF (3)** button briefly to power the riflescope on.
- 2. Activate the Display-Off function: press and hold the **ON/OFF (3)** button. The "Display off" message with a countdown will appear on the screen.
- 3. Release the **ON/OFF (3)** button.
- 4. Press the **ON/OFF (3)** button briefly to deactivate the Display-Off function (to activate the display).

**Option 2.** The Display-Off function is activated; the riflescope should be turned off.

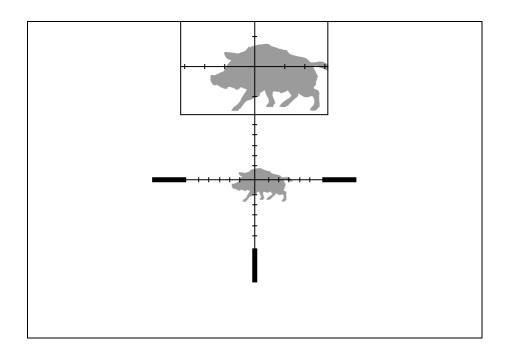
- 1. Press and hold the **ON/OFF (3)** button. "Display off" message with 3, 2, 1 countdown will appear on the screen.
- 2. Hold the **ON/OFF (3)** button until the riflescope turns off (the riflescope turns off after counting up to 1).

## **PiP Function**

### **Show device diagram**



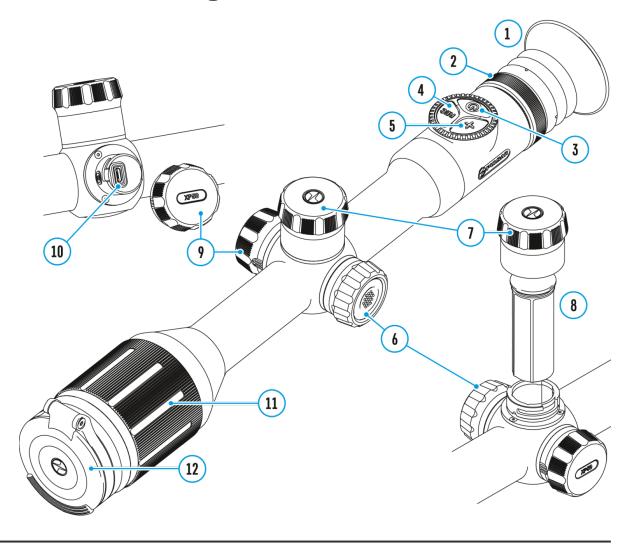
The PiP function (Picture-in-Picture) allows you to see both a magnified image in a particular dialog box and the main image.



- 1. Press and hold the **ZOOM (5)** button to turn on/off the PiP function.
- 2. To change digital magnification in the PiP window, rotate the controller ring (6), while the icon + is visible on the screen.
- 3. The magnified image is displayed in a particular dialog box, with the full magnification being used.
- 4. The rest of the image is displayed only with the optical zoom (digital zoom is off).
- 5. When PiP is turned off, the display shows the full magnification set for the PiP mode.

## **SumLight™ Function**

#### **Show device diagram**



The SumLight ™ function substantially increases sensitivity of the CMOS array in lowlight conditions thus enabling observation in low light without using the IR Illuminator.

- Activate the SumLight<sup>™</sup> function by short pressing the ON/OFF (3) button.
- By short pressing the **ON/OFF (3)** button, deactivate this function.
- "SumLight" icon (on  $\mathbf{S}$  or off  $\mathbf{S}$ ) is shown in the status bar.

**Attention!** Upon activation of the SumLight™ function, noise level in the

picture increases, frame rate lowers, image slows down - if the riflescope rapidly moves from one side to the other, the picture may be blurred; such effects are not defects. On the riflescope display glowing white dots (pixels) can be seen, the number of dots may increase when SumLight  $^{\text{TM}}$  is turned on. This is due to the operating peculiarities of the function and is not a flaw.

**Attention!** Due to peculiarities of AMOLED display technology, after switching between various reticles, you may notice on the riflescope's display semitransparent white lines of the previous reticle. They may appear if a new reticle does not contain elements (such as lines, circles, bars etc.) of the previous reticle. After a while, the "ghost image" becomes less noticeable. The appearance of "ghost images" on the display after repeatedly changing the reticle is not a defect and is not considered as a warranty case.

### **Stream Vision 2**



**Digex**night vision digital riflescopes support Stream Vision and Stream Vision 2 mobile apps that allow you to stream real-time image from your thermal imager to your smartphone or tablet via Wi-Fi. We recommend using the latest version of Stream Vision 2.

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**.



You can find further guidelines on Stream Vision here.

**Download** from Google Play

**Download** from App Store

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

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

**Android** 

iOS

## Firmware Update

#### **Stream Vision 2**

- 1. Download 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 phone, please turn on mobile data transfer (GPRS/3G/4G) to download update;
- if your Pulsar device is not connected to your phone 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**.

#### **Stream Vision**

#### https://www.youtube.com/embed/0Blu4rr-8IY

- 1. Download free of charge Stream Vision App on Google Play or App Store
- 2. Connect your Pulsar device to your mobile device (smartphone or tablet).
- 3. Launch Stream Vision and go to section "My Devices".
- 4. Select your Pulsar device and press "Check Updates".
- 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 phone, please turn on mobile data transfer (GPRS/3G/4G) to download update;
- if your Pulsar device is not connected to your phone but it's already in the "My Devices" section, you may use Wi-Fi to download update.

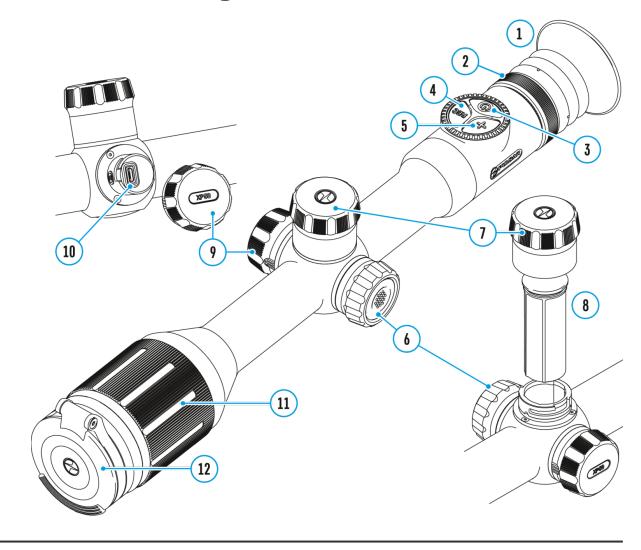
Find answers to frequently asked questions about using Stream Vision here.

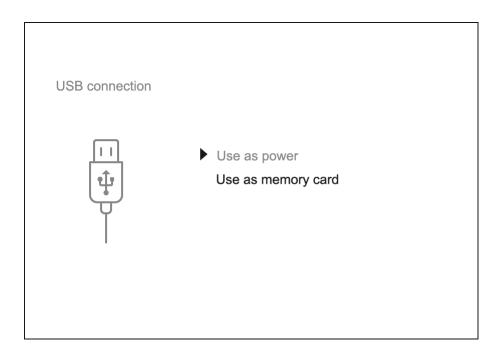
#### Is your firmware up to date?

Click hereto check the latest firmware for your device.

## **USB** Connection

### **Show device diagram**





- 1. Press the **ON/OFF (3)** button briefly to power the riflescope on (the computer will not detect the riflescope if it is turned off).
- 2. Connect one end of the USB cable to the riflescope micro USB port (10) and the other one to the port on your computer.
- 3. The riflescope is detected by the computer automatically and no installation of drivers is required.
- 4. After a few seconds, two connection options appear on the display: **Power** and **Memory card**.
- 5. Rotate the controller ring(6) to select the connection mode.
- 6. Press the controller button(6) briefly to confirm your selection.

#### **Connection Options:**

#### **Power**

- Upon choosing this mode, your PC is used as an external power supply.
   An icon will appear in the status bar.
- The riflescope continues operating and all functions are accessible.
- The Battery Packs installed in the riflescope are not charged.

#### **Memory Card**

- When selecting this mode, the computer recognizes the riflescope as a memory card. This mode is designed to manage the files saved in riflescope's memory.
- The riflescope's functions are not available in this mode; the riflescope turns on. The device continues to operate after being disconnected from

- the computer.
- If a video was being recorded at the moment of connection, the recording will stop and will be saved.

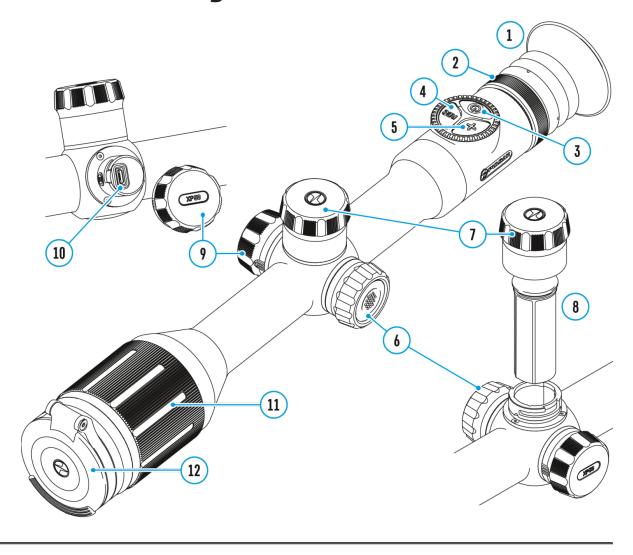
#### **USB Disconnection:**

- When the USB is disconnected from the riflescope connected in the **Power** mode, the riflescope continues to operate on battery packs when they are sufficiently charged.
- When the USB is disconnected from the riflescope connected in the
   Memory Card mode, the riflescope remains switched on.

## **Scalable Reticles**

http:///e.issuu.com/embed.html?d=digex-n450-n455-reticle-catalogue&hidelssuuLogo=true&u=yukon2

#### **Show device diagram**



This function is designed to preserve ballistic properties of the scalable reticles for all magnifications.

- 1. Enter the main menu with a long press of the controller button (6).
- 2. Enter submenu **Reticle Setup** with a short press of the controller button **(6)**.

- 3. Enter submenu **Reticle Type** in the controller button (6).
- 4. Select the reticle (please check available Scalable reticles in the Reticles catalogue in Downloads section on our **web page**).

#### Notes:

- When zooming in and out the image, the selected reticle on the display and in the recorded video changes its geometrical size according to the magnification selected.
- The reticle scale changes both on the main display and in the PiP mode.

## **Technical Inspection**

It is recommended to carry out a technical inspection each time before using the riflescope. Check the following:

- The riflescope appearance (there should be no cracks on the body).
- The condition of the lens and eyepiece (there should be no cracks, greasy spots, dirt or other deposits).
- The state of the battery pack (must be charged to a level of 50-70%) and the electric contacts within it (there should be no signs of salts or oxidation).
- The controls should be in working order.

### **Technical Maintenance**

The maintenance should be carried out at least twice a year and includes the following steps:

- Wipe the exterior surfaces of metal and plastic parts off dust and dirt with a cotton cloth. To avoid damage to the paint coating, do not use chemically active substances, solvents, etc.
- Clean the electric contacts of the battery pack and battery slots on the riflescoepe using a non-greasy organic solvent.
- Check the optics of the eyepiece and the lens. If necessary, 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.

## **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 riflescope will not turn on

#### **Possible cause**

The Battery Pack is empty.

#### Solution

Charge the battery pack.

#### **Device malfunction**

#### **Solution**

In case of any malfunctions during operation, try resetting the device by long pressing the ON/OFF button for 10 seconds.

## The riflescope will not operate on external power supply

#### **Possible cause**

USB cable is damaged.

#### **Solution**

Replace USB cable.

#### **Possible cause**

The external power supply is discharged.

#### **Solution**

Charge the external power supply.

## The reticle is blurred and cannot be focused with the dioptre ring

#### **Possible cause**

The diopter adjustment range is not enough for your eyesight.

#### Solution

If you wear glasses with a range of -3/+5, keep glasses on when looking through the eyepiece.

#### **Possible cause**

Condensation on the external surface of the eyepiece lens.

#### Solution

Wipe the lens with a cloth.

## Coloured lines appeared on display or image has disappeared

#### **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 is too dark

#### **Possible cause**

Brightness or contrast level is too low.

#### Solution

Adjust the brightness or contrast level.

# With a crisp image of the reticle, the image of the observed target that is at least 30 m away is blurred

#### **Possible cause**

Dust and condensate are covering the outside or inside optical surfaces.

#### Solution

Wipe the outside optical surfaces with a soft cotton cloth. Let the riflescope dry by leaving it in a warm environment for 4 hours.

#### **Possible cause**

The lens is not focused.

#### **Solution**

Adjust the image sharpness by rotating the lens adjuster.

#### The point of impact shifts after firing rounds

#### **Possible cause**

The riflescope is not mounted securely or the mount was not fixed with thread sealant.

#### Solution

Check that the riflescope has been securely mounted.

Make sure that the same type and calibre bullets are being used as when the scope was initially zeroed.

If your riflescope was zeroed during the summer, and is now being used in the winter (or the other way round), in the day or night, a slight shift of the aiming point is possible.

#### The riflescope will not focus

#### **Possible cause**

Wrong settings.

#### Solution

Adjust the riflescope according to the **Powering On and Image Setting** section. Check the outer surfaces of the objective lenses and eyepiece and, where necessary, wipe them from dust, condensation, frost, etc. In cold weather, you can use special anti-fogging coatings (e.g., the same as for corrective glasses).

## Smartphone or tablet cannot be connected to the riflescope

#### **Possible cause**

Password in the riflescope was changed.

#### Solution

Delete network and connect again inserting the password saved in the

riflescope.

#### **Possible cause**

There are too many Wi-Fi networks in the area where the riflescope is located which may cause signal interference. Problems described may arise in adverse weather conditions (snow, rain, fog etc.).

#### Solution

To ensure stable Wi-Fi performance, move the riflescope to an area with few or no Wi-Fi networks.

More information on solving problems with connection by following the links: **Stream Vision FAQ**, **Stream Vision 2 FAQ**.

#### 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 by following the links: **Stream Vision FAQ**, **Stream Vision 2 FAQ**.

## Poor image quality/ Reduced detection distance

#### **Possible cause**

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

## There are several light or black dots (pixels) on riflescope's display or sensor

#### **Solution**

Presence of dots is caused by peculiarities of sensor or display production technology and is not a defect.

## After zeroing, the aiming reticle moves relative to the centre of the display

#### **Possible cause**

After shooting, the aiming reticle may not be in the centre of the display. This is normal and is not a defect.

# Legal Compliances and Disclaimers

**Attention!** Digex night vision digital riflescopes require a license when exported outside your country.

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

**Caution:** Operating this product in a residential area may cause radio interference.

**Updates of the Product.** The manufacturer reserves the right at any time, without mandatory prior notice to the Customer, to make changes to the package contents (subject to the applicable laws, if any), design and characteristics that do not impair the quality of the Product.

**Repair**. Repair of the product is available within 5 years after purchase of the product.

Limitation of Liability. Subject to mandatory applicable laws and regulations: manufacturer will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages or liabilities (if any), arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. Manufacturer's sole undertaking is limited to providing the product(s) and related services in accordance with the terms and conditions of concluded transactions, including provisions established in warranty. The provision of products sold and services performed by Manufacturer to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party (other than Distributor, Dealer, Buyer). Manufacturer's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to Manufacturer for the product(s) and/or service(s).

MANUFACTURER WILL NOT BE LIABLE FOR LOST REVENUES OR INDIRECT,

SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, OR PUNITIVE DAMAGES, EVEN IF THE MANUFACTURER KNEW OR SHOULD HAVE KNOWN THAT SUCH DAMAGES WERE POSSIBLE AND EVEN IF DIRECT DAMAGES DO NOT SATISFY A REMEDY.

