



# **Digex S IR illuminator**

## **Manual**

# Content

[Specifications](#)

[Description](#)

[Package Contents](#)

[Installing Battery Pack in the IR Illuminator](#)

[Installing the IR Illuminator on Riflescope](#)

[Powering on and Adjusting the IR Illuminator](#)

[Maintenance](#)

[Precautions](#)

[Troubleshooting](#)

[Legal Compliances and Disclaimers](#)

# Specifications

## X850S

Model	X850S
SKU	79197
Type	LED
Wavelength, nm	850
Lens diameter, mm	28
Optical power of IR illuminator, mW	Up to 800
Beam divergence angle, degrees	13
Power supply, V	3 – 4.2
Average operating time, h	3 (APS2 Battery Pack) or 4.5 (APS3* Battery Pack)
The possibility of spot alignment in the field of view	Yes
Operating temperature range, °C (°F)	-25 ...+50 (-13...+122)
Riflescope compatibility	Digex N450/N455/C50
Dimensions (L/H/W), mm (inch)	129/84/75 (5.08x3.31x2.95)

Weight (with  
battery), g (oz)

195 (6.88)

---

\* Sold separately

## X940S

Model	X940S
SKU	79198
Type	LED
Wavelength, nm	940
Lens diameter, mm	28
Optical power of IR illuminator, mW	Up to 700
Beam divergence angle, degrees	13
Power supply, V	3 – 4.2
Average operating time, h	3 (APS2 Battery Pack) or 4.5 (APS3* Battery Pack)
The possibility of spot alignment in the field of view	Yes
Operating temperature range, °C (°F)	-25 ...+50 (-13...+122)
Riflescope compatibility	Digex N450/N455/C50
Dimensions (L/H/W), mm (inch)	129/84/75 (5.08x3.31x2.95)
Weight (with battery), g (oz)	195 (6.88)

\* Sold separately



# Description

**Pulsar Digex S** attachable infrared illuminators are designed for use with **Digex** digital riflescopes.

Infrared illuminators provide additional illumination of observed objects when using digital night vision devices in low light conditions (no moon, heavy cloud cover, etc.) or in complete darkness.

The special design of the illuminator helps to provide a clear and clean image across the entire field of view.

The **Digex - X940S** IR illuminator operates in an invisible range providing covert observation.

---

Using **Pulsar Digex S** IR illuminators you can:

- identify the observed object more accurately;
  - see the selected object in detail;
  - increase the observation range;
  - adjust the spot position within the riflescope field of view.
- 

**Pulsar Digex S** illuminators have a high-power IR diode providing a greater viewing range.

# Package Contents

- Digex S IR illuminator
- APS2 battery pack
- User Manual
- Allen wrench
- APS3 battery cover
- Cloth
- Carrying case





This diagram illustrates the exploded view of a camera lens assembly. The components are numbered as follows:

- 1**: Lens barrel (shown separately with a blue arrow indicating its direction of travel).
- 2**: Lens mount flange.
- 3**: Mounting bracket or flange.
- 4**: Lens mount housing.
- 5**: Lens mount flange (bottom view).
- 6**: Lens mount flange (side view).
- 7**: Lens mount flange (top view).
- 8**: Lens mount flange (bottom view).
- 9**: Lens mount flange (side view).
- 10**: Lens mount flange (bottom view).

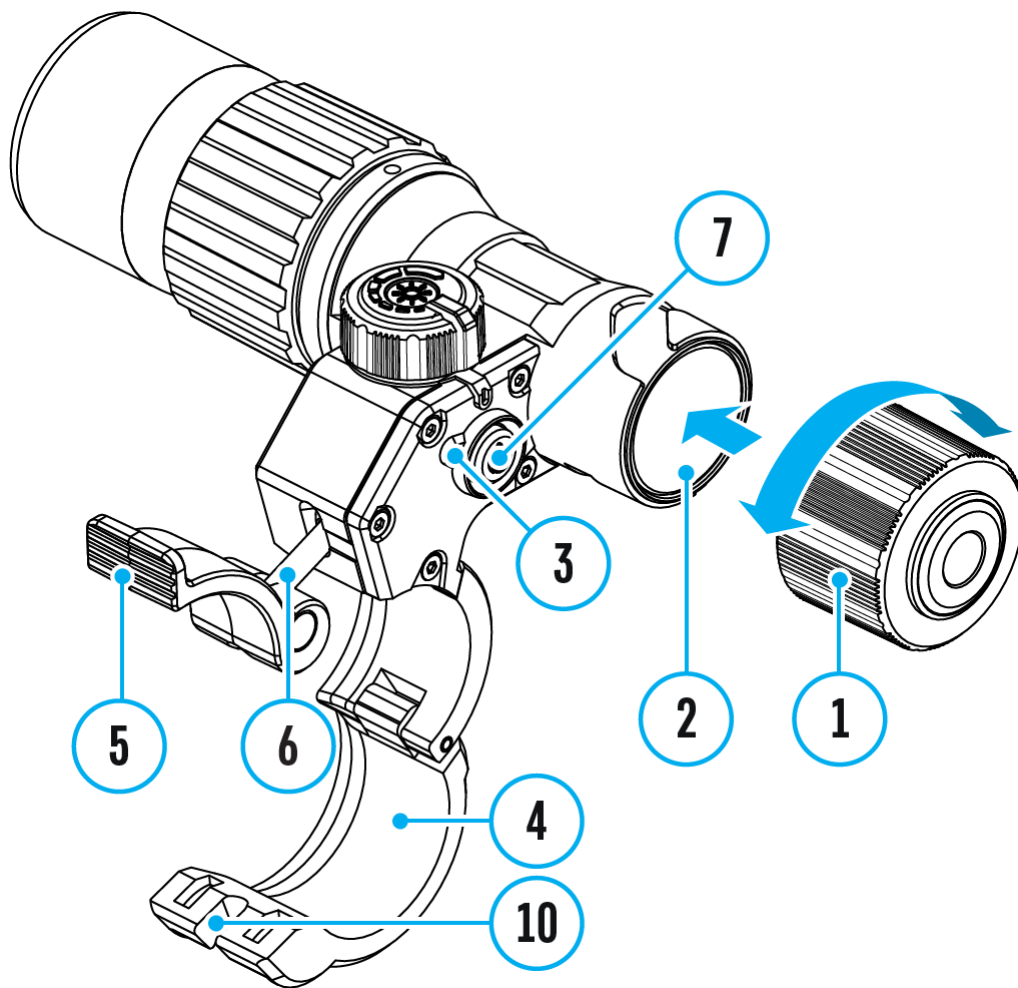
1. To install the battery in the IR illuminator, turn the battery cover **(1)** counterclockwise and remove it.
2. Install the battery into the battery compartment **(2)** along the special guides in the IR illuminator body designed for it.
3. When properly installed, the battery is fixed in the battery compartment **(2)**.
4. Close the battery compartment cover, turning it clockwise.

The illuminator is equipped with LED indicator **(3)** making possible the current battery level monitoring. Indication modes are in the table below:

Indicator color(3)	IR Operating Mode
	The illuminator is on, power supply 3.2 - 4.2 V
	The illuminator is on, power supply <3.2 V, an approximate operating time before the IR illuminator turns off is 30 minutes
-	The illuminator is off

\*Sold separately

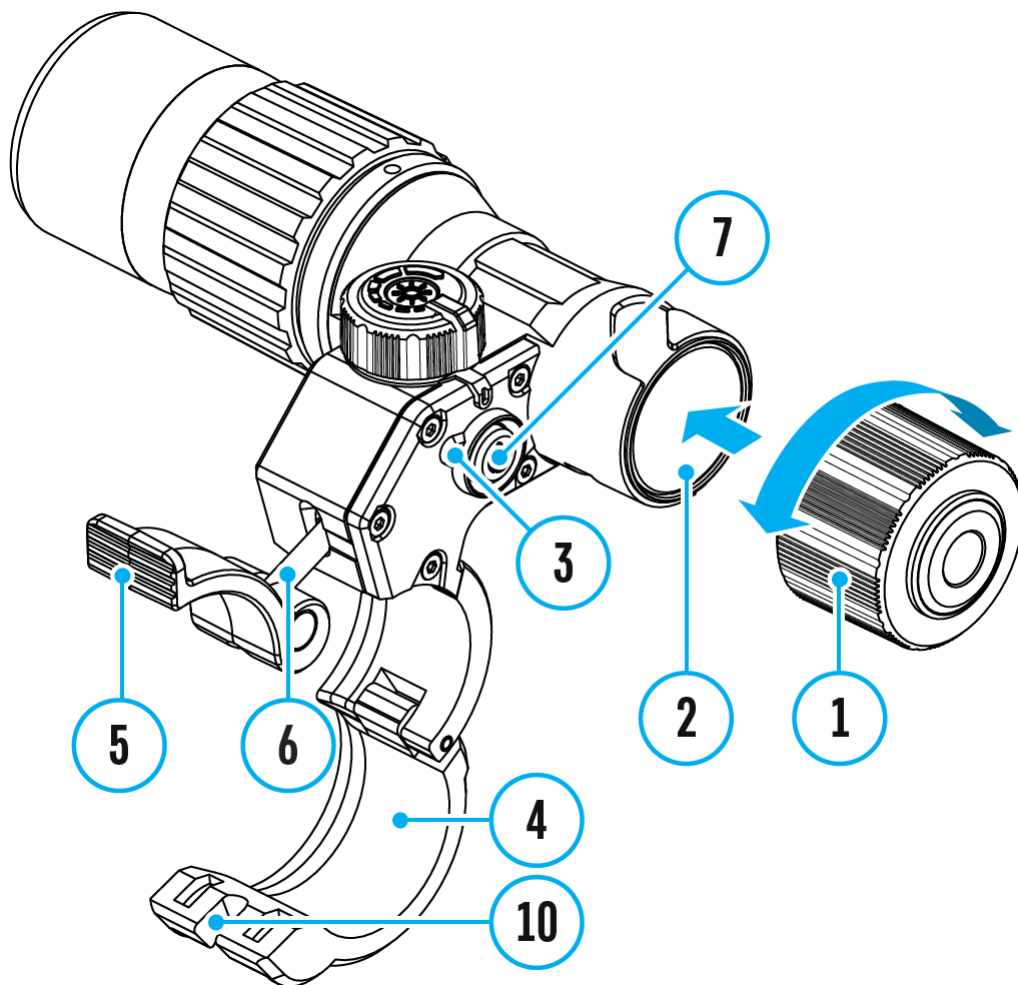
# Installing the IR Illuminator on Riflescope

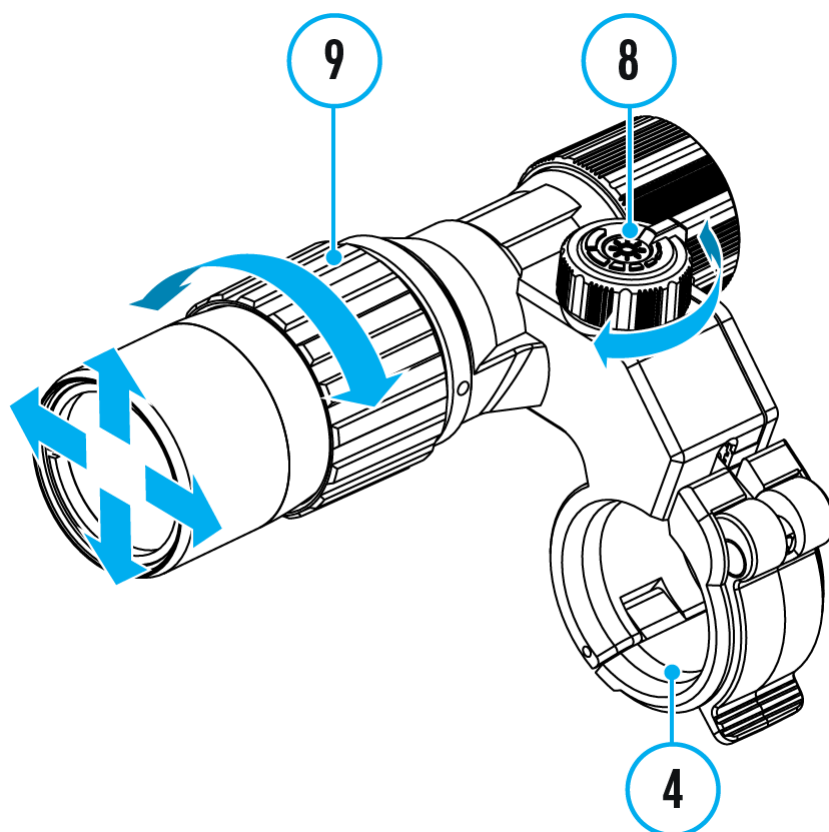


1. Open the mount ring **(4)** of the IR illuminator.
2. Raise the eccentric lever **(5)** and put the mount on the riflescope body so that the mount half rings encircle the riflescope body.
3. Align the eccentric axis **(6)** with the groove **(10)** of the moving half ring.
4. Lock the eccentric lever **(5)** position by lowering it down.
5. The mount with the IR illuminator should be located as close as possible to the body of the riflescope lens.
6. In case of loosening or insufficient fixing of the IR-illuminator on the riflescope, raise the eccentric lever **(5)**. Tighten the eccentric axis **(6)** 1-2 turns using the supplied Allen key. Then lower the lever and check

the fixation of the IR-illuminator on the riflescope. If necessary, repeat the above steps until the required degree of fixation of the IR-illuminator is achieved.

# Powering on and Adjusting the IR Illuminator





1. Turn on the IR illuminator by pressing the button **(7)** on the side of the illuminator housing.
2. Turn the knob **(8)** of the IR illuminator to adjust the lighting power.
3. To adjust the light spot position in the riflescope field of view, loosen the ring **(9)** of the IR illuminator by turning it in the direction of the arrow, see Fig. 2.
4. Turn on the riflescope to control the position of the light spot on the display. Use the hinge system of the IR illuminator lens, to achieve the required position of the light spot in the riflescope field of view. Once well adjusted, fix the IR illuminator ring **(9)**.
5. Turn off the IR illuminator by pressing the IR button.

# Maintenance

- Clean the outer surface with a cloth slightly soaked in synthetic detergent.
- Flick the dust off the lenses with a soft brush.
- If necessary, clean the lens with a soft cotton cloth moistened with ethyl alcohol or special multi-layer lens liquid.
- Condensation may form on optical surfaces when moving the illuminator from cold to warm. It is a common occurrence and the condensate should disappear within an hour.

# Precautions

- Do not allow water to enter the illuminator body. This can disable it.
- Independent alterations or repairs of the illuminator are prohibited. Contact the manufacturer for qualified support if any issues arise.
- When using the battery at sub-zero temperature, the battery capacity decreases, this is normal and not a defect.
- Do not charge the battery immediately after bringing it from cold to warm place. Wait for 30-40 minutes so that the battery may warm up.
- To charge the battery, always use the unit supplied with your device (may not be included in the package contents). The use of any other charger may irreparably damage the battery pack or the charger and may cause fire.
- Do not leave the battery unattended while it is being charged.
- After being stored for a long time, the battery should be partially charged: it should not be completely charged or completely discharged.
- Do not submerge the battery.
- Do not dismantle or deform the battery. Do not drop or strike the battery.



# Troubleshooting

For technical support please contact [support@pulsar-vision.com](mailto:support@pulsar-vision.com).

Answers to frequently asked questions about the devices can also be found in the [FAQ](#) section.

## Uneven light emission of IR spot

### Possible cause

Dirty lens.

### Solution

Clean the lens as described in the [Maintenance](#) section.

---

## Illuminator does not turn on by pressing the power button

### Possible cause

Discharged battery.

### Solution

Insert a charged battery.

### Possible cause

Dirty contacts.

### Solution

Check for debris and dirt on the terminals in the battery compartment.

---

# Low light emission of IR spot

## Possible cause

Dirty lens.

## Solution

Clean the lens as described in the [Maintenance](#) section.

## Possible cause

The IR illuminator knob **(8)** is in the position of a minimum transmission power.

## Solution

Set the optimum power by turning the IR illuminator knob **(8)**.

---

# Legal Compliances and Disclaimers

**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.

