



APC 50

**USER MANUAL**

ENG

## APC STABILIZED BINOCULARS

### MANUAL AND WARRANTY

We thank you for purchasing a KITE OPTICS instrument.

1. Ocular lenses
2. Twist-up eyecup
3. Diopter ring
4. Eyepieces
5. Neck-strap passage way
6. On-off switch
7. Focus wheel
8. Objective lenses
9. Status LED light
10. Hand-strap passage way

### SCOPE OF DELIVERY

- Neoprene Neck-strap
- Softcase with strap
- Ocular lens protection cover
- Objective lens protection cover
- Hand-strap
- USB-C charging cable (APC - Li-ion only)

### **GET SPARE PARTS**

<https://parts.kiteoptics.com>



## SAFETY

- Never look at the sun or an intense light source with this product. It will damage your eyes.
- Avoid using the device while walking to prevent overlooking obstacles.
- Protect the device from impacts.
- Do not use this product in a location where a flammable gas or explosive gas may be present in the air. It may lead to inflammation or an explosion.
- Do not use or store this product in a high-temperature location or in a car in mid-summer, at a window, next to a heating appliance.
- Do not leave exposed to direct sunlight. The lens may concentrate the sun's ray and cause internal heating of the instrument or fire.
- Be sure to read the instruction manual.
- Avoid using the device near powerful magnetic, electrostatic, or electromagnetic fields to prevent interference.
- Repairs must be conducted solely at authorized service centers, and attempts to dismantle or modify the device may cause damage, injury, or electric shock.
- Avoid exposing the device to insect repellents or aggressive chemicals; use only recommended cleaning agents.
- Keep the device out of reach of small children.
- Avoid touching glass surfaces with fingers, especially if hand creams or insect repellents have been applied, as these substances may contain chemicals harmful to coatings.
- Keep a record of the device's serial number for loss prevention.

## BATTERY INSTRUCTION AND SAFETY

### APC AA MODEL :

11. Battery covers
12. AA battery compartment

### INSERTING THE BATTERIES (batteries not included)

Remove the battery covers on the left and right side by turning them anti-clockwise.  
Insert 1 AA battery on each side. '-' side goes in first. close the battery covers by turning them clockwise.

- Always use AA or AAA Alkaline or Lithium batteries.
- Rechargeable batteries are not supported and may void the warranty, except for rechargeable batteries supplied or explicitly recommended by KITE OPTICS.
- KITE OPTICS advises the use of Lithium AA batteries over Alkaline batteries, for best battery life and low risk of battery leakage.
- Always turn off the switch after use. If you do not use the device for a long period of time, please remove and store the battery.
- In the unlikely event that liquid leaked from the battery gets into your eye, immediately wash it out with a plentiful amount of water and consult a doctor.  
If it gets on your skin or clothes, wash them with water.
- Do not leave the batteries in the unit for a long time when not in use. The electrolyte solution in the battery may leak, damaging the unit.



### STATUS LED

When switching on, the status LED light will inform you with the battery capacity :

Continuous green (red on 2025 models) = 100 % - 30 %  
Continuous orange blinking = < 30 % (low battery indicator)

### **APC - Li-ion MODEL**

Fig3

13. USB-C charge port



This product incorporates a built-in rechargeable battery that cannot be replaced. When utilizing this product, consider the following precautions: Cease use if the outer casing is damaged or if battery damage is suspected. In such instances, promptly contact our customer service to mitigate the risk of explosion and/or accidents. Charge the device using the supplied USB cable and a suitable power source that adheres to local regulations or possesses FCC/CE/IC approval.

### CHARGING:

Begin by connecting the USB charging cable to the USB-C port on the device.

Attach the opposite plug of the cable to a suitable USB power adapter with a minimum input of 1.5 A/5 V for optimal charging times, or another external power source such as a power bank. Ensure the power source meets safety and regulatory standards.

Note: Please be cautious during the charging process and follow these instructions diligently to ensure the longevity and safety of your device.

Status LED light is orange = charging  
Status LED light is green (red on 2025 models) = fully charged

To prevent battery deterioration, please disconnect the product from the power supply device when the status LED turns green. (red on 2025 models)

### CHARGING BEHAVIOR:

Per KITE OPTICS experience and thanks to APC power saving functions :

Battery fully charged = 30 hours power = up to 2 months intensive binocular use  
up to 6 months average binocular use

### **STATUS LED**

When switching on, the status LED light will inform you of the actual Li-ion battery capacity :

- 3x green / red blink = > 80 %
- 2x blink green / red = 80 % - 50 %
- 1x blink green / red = 50 % - 20 %
- Continuous orange blinking = < 20 % (low battery indicator)

### **GENERAL SAFETY GUIDELINES**

- Disconnect the power cord during electric storms or extended periods of non-use.
- Battery life depends on conditions, environmental factors, features, and connected devices.
- Keep the device away from heat sources and avoid covering it during charging.
- Exercise caution to prevent forcing connectors into ports or applying excessive pressure to buttons, as this may void the warranty.

- Operational temperature : -20 to +45 degrees Celsius
- Re-charge temperature : 10 to +45 degrees Celsius
- Storage temperature : -20 to +60 degrees Celsius

### **SWITCHING THE DEVICE ON/OFF**

The device is switched on by placing the power switch in the 'I' position. The device is switched off by placing the power switch in the 'O' position. The status LED light will be green (red on 2025 models) when the device is switched ON.

### **SLEEP MODE BY APC**

The device is equipped with KITE's APC system (angle power control). Without having to switch the button, it will put the stabilizing electronics to sleep mode when the instrument is in rest position, and automatically activate the unit when you start observing again. This results in a huge increase of battery life and comfort of use.

- REST POSITION (Hanging from the neck or standing on a table) The instrument is tilted to a vertical position by 60° or more. The stabilizing electronics automatically go into SLEEP mode, the status LED blinks red.
- ACTIVE POSITION (during observation) The instrument is tilted to a horizontal position by 40° or more. The electronics automatically become active, the status LED lights green. (red on 2025 models)

### **AUTOMATIC OFF BY TIMER**

No matter the position the instrument is in (active mode or sleep mode), 90 minutes after placing the switch to ON, the instrument will completely switch OFF again. At this moment the status LED will go dark.

NOTE : When the instrument was in SLEEP mode and automatically entered OFF mode after 90 minutes, the power switch might still be in the ON position. To re-activate the instrument, turn the power switch to OFF and to ON again. The 90 minute cycle starts again.

## USE OF THE DEVICE WITHOUT POWER

apart of power on and off, the power switch also acts as a physical lock for the internal gimball. When the device enters SLEEP mode while the power switch is still in the ON position, the internal gimball system is no longer actively powered but will be free in movement. This free movement can be felt when shaking the binocular, or seen when looking through the binoculars as a very unstable and shaky image. In the same way, placing the power switch to ON position while no batteries are placed or with a dead battery, will cause the gimball system to be unlocked and move freely. This is normal. You can perfectly use the device as a conventional binocular when no battery is placed or when battery is dead, only keep in mind to put the power switch in OFF position so the gimball is locked.

### FIRST USE

- A. Attach the neck-strap to the neck-strap passage way on both sides.

Attach a hand-strap



Attach a neck-strap



- B. For use while wearing spectacles, do not twist up the eyecups. For use without wearing spectacles, twist up the eyecups by turning them anti-clockwise.  
C. Look through the binoculars and adjust the interpupillary distance by folding the eyepieces in or out, until you see one nice and round image.  
D. Adjust the diopter setting. To achieve optimal image quality, the possibly varying visual acuity between the left and right eye must be corrected.

// Use without eyeglasses and equal acuity of both eyes, or with eyeglasses.

Place the diopter ring in middle neutral position (alignment of indications in diopter wheel and rubber).

// Use without eyeglasses and varying acuity.

Look through the left eyepiece with your left eye and turn the focus wheel to focus sharply on a selected object. Now look at that same object through the right ocular with your right eye and again create a sharp image of this object by turning the diopter ring only. Now the dioptric correction has been set for our particular visual acuity.

## **OBSERVATION**

- A. Look through the binoculars, keeping in mind the above instructions of first use.
- B. Depending on the distance of the observed object, adjust focus by turning the focus wheel.
- C. Activate the stabilisation system by flipping the power switch to the ON position. The status LED turns green.

## **CARE AND MAINTENANCE**

Note : Avoid the instrument of being exposed to jolts and shocks, dust and sand.

Cleaning of the lenses: Always remove large particles first, using a soft brush or by blowing them away. Large particles such as sand and salt could cause scratches on the lens surface during cleaning. For thorough cleaning we recommend breathing onto the lens surface to form a coat of condensation and then cleaning it with a soft and moist cloth. Never press hard or use force while wiping the lenses. We advise not to use liquids ment for spectacle cleaning, unless they are advised for binoculars. Some liquids can bring damage to the coatings of your binoculars.

## **LONG-TERM STORAGE OF THE APC - Li-ion MODEL**

When in long time storage, to prevent battery deterioration, please charge the battery once every six months. The built-in rechargeable battery will naturally discharge even if it is charged and stored. When storing for a long time, the recommended charging time is approximately 50 minutes. Disconnect the product from the power source even if the charging indicator is still orange.

## **STORAGE**

- Keep your device stored in its bag in a well-ventilated area. In case of moisture exposure, ensure thorough drying before storage.
- In high-humidity or tropical environments, consider using an airtight container with a moisture-absorbing agent (e.g., silica gel).
- Avoid subjecting the device to excessive heat, such as direct sunlight or fire.
- Avoid storing in areas with dramatic temperature changes.
- Using damaged cables or chargers, or charging in humid environments, may result in electric shocks, fire, injury, or equipment damage.
- Refrain from attempting to remove the rechargeable lithium-ion battery; contact us or an authorized dealer for assistance.
- Do not leave the batteries in the unit for a long time when not in use. The electrolyte solution in the battery may leak, damaging the unit.

## KITE OPTICS LIMITED LIFETIME WARRANTY

Including Optical and Electronic Components

(Valid for Products Purchased in the USA)

At KITE OPTICS, our commitment is simple: if your product fails due to a defect in materials or workmanship, we will take care of it. KITE OPTICS warrants this product against defects in materials and workmanship under normal intended use and service. If a defect is confirmed, KITE OPTICS will, at its sole discretion, repair the product or replace it with the same product. If the original product or any component is no longer available, KITE OPTICS may replace it with a functionally equivalent product or component of comparable performance and value. Replacement does not extend or restart the original warranty period. This warranty applies only to products purchased through authorized KITE OPTICS dealers in the USA. Proof of purchase is required. This warranty covers defects in materials or workmanship only. It does not apply to normal wear, aging, natural material degradation, cosmetic damage not affecting function, wear parts or accessories, sealing components subject to natural aging, reduction of water resistance over time, corrosion, oxidation, environmental exposure, improper use, misuse, impact, unauthorized repair or modification, loss, theft, or missing parts. Batteries of any type, whether removable or built-in (including rechargeable lithium-ion batteries), are consumable components and are not covered under this warranty. Battery performance, charging characteristics, capacity reduction, normal battery aging, or battery replacement are not considered defects in materials or workmanship. Any damage resulting from battery leakage, swelling, venting, overheating, corrosion, improper charging, use of non-approved batteries, use of third-party chargers or power supplies, or other abnormal battery behavior is not considered a defect in materials or workmanship, even if such damage affects electronic, optical, mechanical, software, or stabilization components of the product. Water resistance is designed to meet the specified protection rating under controlled conditions and is not permanent. Performance may diminish over time due to normal aging and use. Any damage resulting from normal wear, aging, environmental exposure, seal degradation, liquid ingress, firmware modification, unauthorized software alteration, or other excluded causes is not considered a defect in materials or workmanship, even if such damage affects other components of the product. Repair or replacement as provided herein shall be the exclusive remedy available to the purchaser. To the extent permitted by applicable law, any implied warranties, including implied warranties of merchantability or fitness for a particular purpose, are limited in duration to this Limited Lifetime Warranty. In no event shall KITE OPTICS be liable for any indirect, incidental, consequential, special, or punitive damages arising out of the purchase or use of this product. Some states do not allow limitations on implied warranties or the exclusion or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## COMPLIANCE

### CE MARK

The CE mark signifies compliance with fundamental EU guidelines.



### DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

(For EU and European countries with waste separation policies)

Dispose of this device, containing electric/electronic components, at a designated recycling collection point provided by local authorities.

Standard or rechargeable batteries must be removed and disposed of separately in line with local regulations.





Vlamingveld 89  
8490 Jabbeke  
Belgium  
T +32 50 69 23 19  
[www.kiteoptics.com](http://www.kiteoptics.com)  
[info@kiteoptics.com](mailto:info@kiteoptics.com)