



**Imagine  
A new  
reality.**  
**pico** neo •

## Pico Neo DK User Manual

- Please read this manual before operating your device •  
and keep it for future reference.

## INTRODUCTION

Pico Neo DK is an all-in-one virtual reality device designed for excellent mobile virtual reality experience. It includes a virtual reality headset and a virtual reality controller designed with the creative idea of “separated-parts”, which allows you to explore and interact within immersive and fantasy virtual worlds more comfortably.

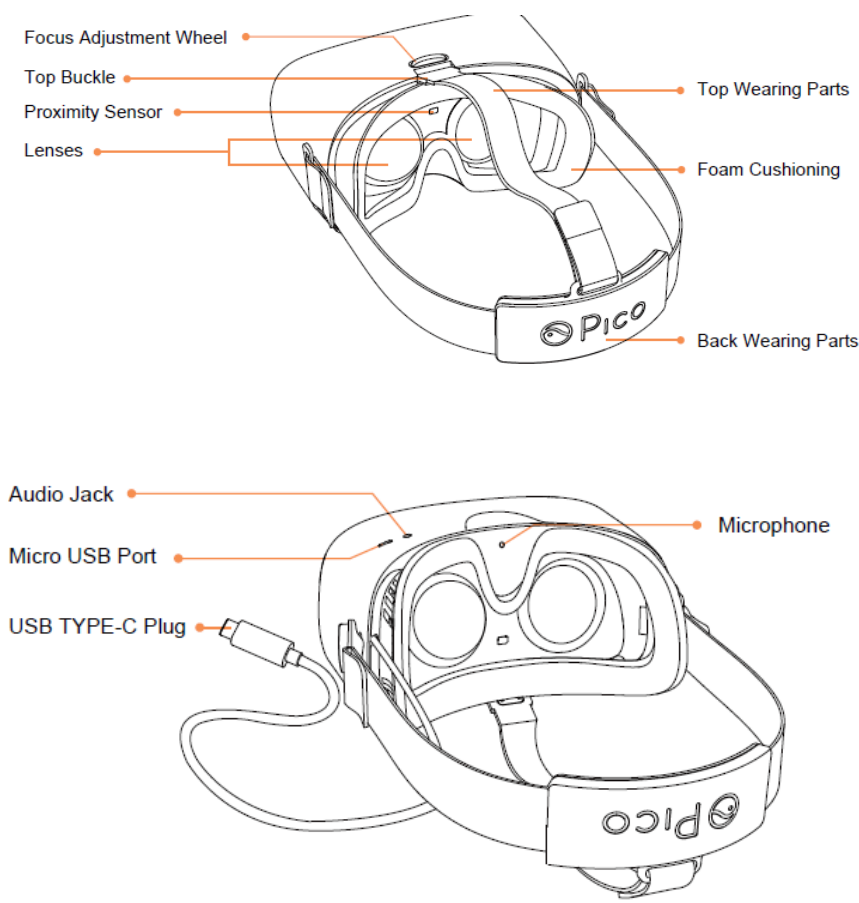
Pico Neo DK could also be expanded with the coming Pico Tracking Kit for a better immersive experience.

## IMPORTANT NOTICES

1. You need to adjust the focus adjustment wheel for better vision at your first time wearing Pico Neo.
2. You can wear Pico Neo with your glasses on. If you want to wear Pico Neo without you glasses, it is suggested you are in the situation below,
  - 1) Diopter of myopia is between 0 and -8.00
  - 2) Difference between diopters of myopia of two eyes is under 2.00
  - 3) Diopter of Astigmatism is between 0 and -2.00
  - 4) Inter-pupillary distance is between 54mm to 73mm
3. Children under 12 years are not suggested to use Pico Neo.
4. It may cause discomfort when wearing Pico Neo for long time, please take 10-15 minute break every 30 minutes. Immediately discontinue use it and consult a doctor if you feel seriously discomfort.
5. This manual is for reference only.

# DEVICE FEATURES

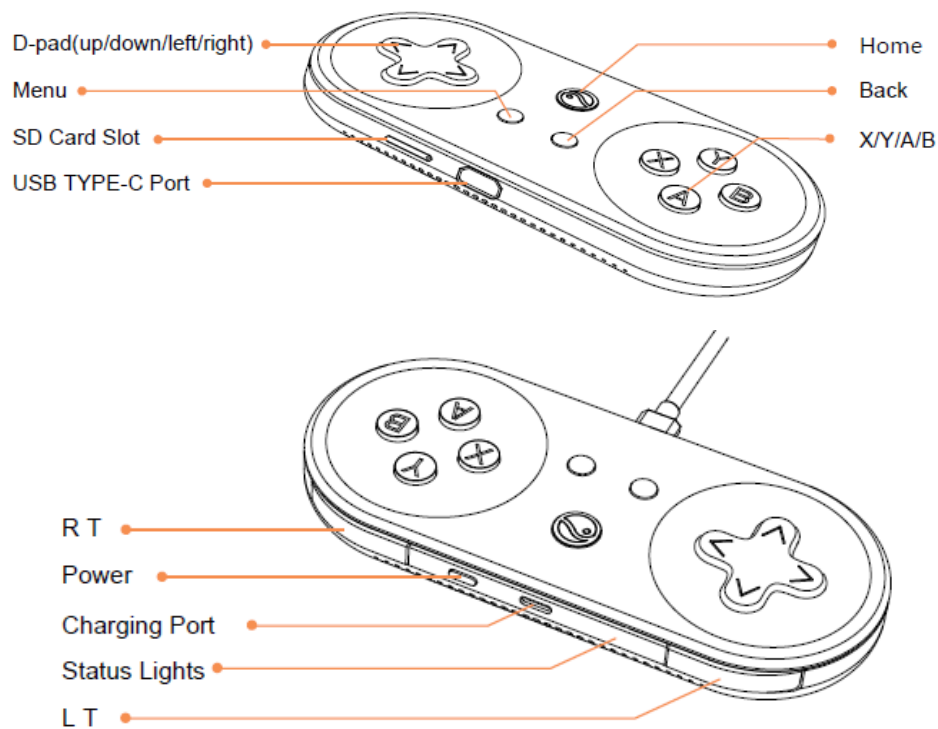
## Virtual Reality Headset



## Functions

Headset		Functions
	Focus Adjustment Wheel	<ul style="list-style-type: none"><li>• Rotate clockwise: For higher degree of myopia</li><li>• Rotate anti-clockwise: For lower degree of myopia</li></ul>
	Proximity Sensor	<ul style="list-style-type: none"><li>• Screen lights on when you put on headset</li><li>• Screen lights off when you take off headset</li></ul>
	Microphone	<ul style="list-style-type: none"><li>• Voice input</li></ul>
Interfaces		Functions
	Audio Jack	<ul style="list-style-type: none"><li>• Connects 3.5mm earphones</li></ul>
	Micro USB Port	<ul style="list-style-type: none"><li>• Connects expanded input devices</li></ul>
	USB Type-C Plug	<ul style="list-style-type: none"><li>• Connects Pico Neo's Controller</li></ul>

## Virtual Reality Controller



## Functions

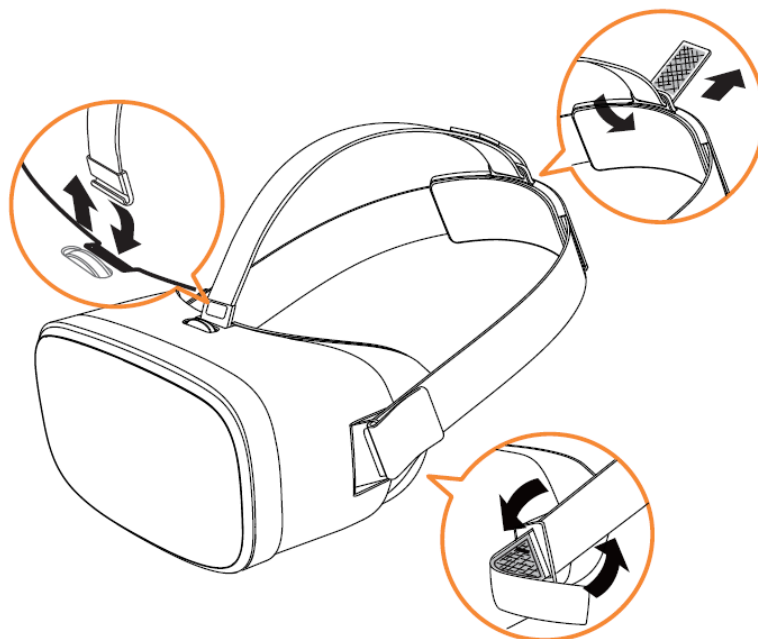
Controller		Functions
	D-pad	<ul style="list-style-type: none"> <li>Directions(up/down/left/right)</li> </ul>
	X/Y/A/B	<ul style="list-style-type: none"> <li>A: Confirmation</li> <li>B: Return</li> <li>X/Y: Functions depend on applications</li> </ul>
	Back	<ul style="list-style-type: none"> <li>Short press: Return to the previous screen</li> </ul>
	Home	<ul style="list-style-type: none"> <li>Return to Home Screen</li> </ul>
	Menu	<ul style="list-style-type: none"> <li>Access current application menu</li> <li>Long press: Switch between 2D/VR modes</li> </ul>
	LT/RT	<ul style="list-style-type: none"> <li>Short Press LT: Confirmation</li> <li>Press RT + Up/Down: Volume up/down</li> </ul>
	Power	<ul style="list-style-type: none"> <li>Short Press: Sleep, Power on/off</li> <li>Long Press 10s: Hardware reset</li> </ul>
	Status Lights	<ul style="list-style-type: none"> <li>Indicate current working/charging status</li> </ul>
Interfaces		Functions
	USB TYPE-C Port	<ul style="list-style-type: none"> <li>Connect to Pico Neo's headset</li> </ul>
	Charging Port	<ul style="list-style-type: none"> <li>Connect to Pico Neo's charger or computers</li> </ul>

# INSTALLATION AND SET UP

## Installing Head Strap

Please follow the steps below to install the head strap.

1. Insert the top buckle's hook into the front bar on top of the helmet.
2. Pull the hook upwards until it locks in place and confirm it is secure enough.
3. Slide the opposite end of the top wearing parts through the hole of the back wearing parts and secure the velcro tip.
4. Slide the side head strap on the back wearing parts through the holes on left and right sides of the helmet and secure the velcro tip.

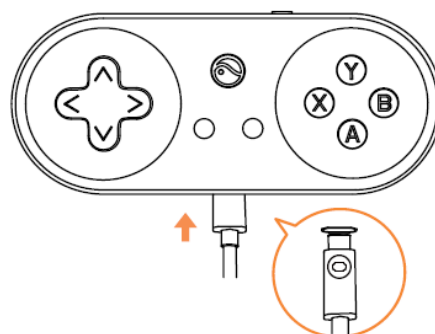


## Connecting Controller

Connect the USB TYPE-C plug and port as the figure below, then make sure it is secure enough.

**Note:**

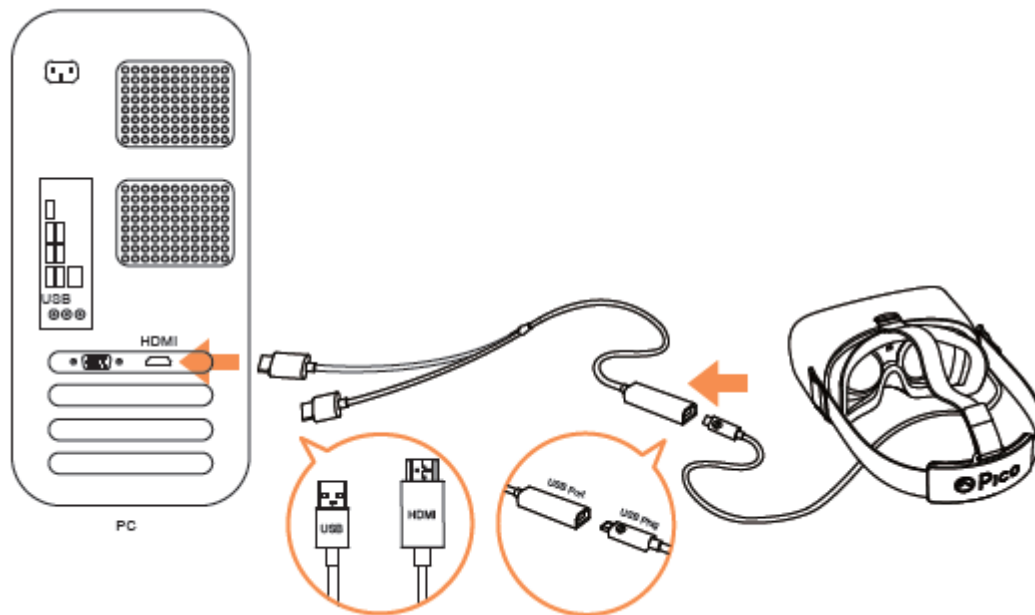
1. Keep the sign on the plug up.
2. Please make sure put the controller safely when trying to put on the headset.



## Connecting PC

Connect the USB TYPE-C plug on the headset to the port on the HDMI&USB to USB TYPE-C cable, and then connect the cable to a PC.

**Note:** you need to install the “PC Home” to use Pico Neo on PC. Check details on Pico’s official website.



## Wearing Headset

Adjust the length of head straps to make it comfortable on your head.



## Clearing Lenses

1. Use the cleaning cloth provided in the box to wipe the lenses.
2. Moisten the lenses with clearance product.

3. Wipe in a circular motion from the center to the outer edges of the lenses.

**Note:** while cleaning the lenses, do not scratch the lenses nor disassemble other parts of the headset.



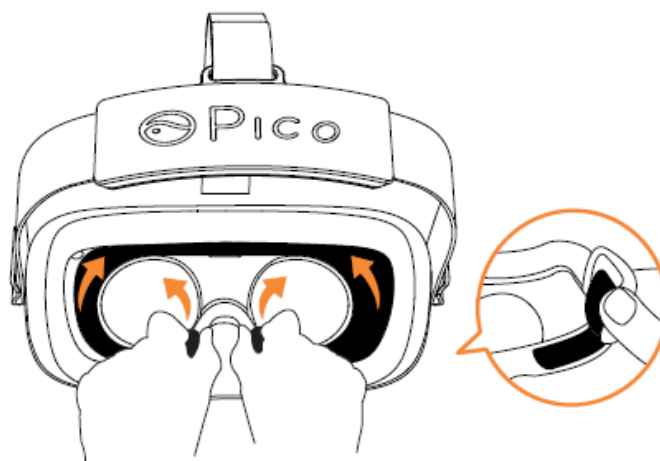
## Replacing the Foam Cushioning

Over time and with normal use, the foam cushioning will wear down. Replace the foam when necessary.

1. Place the Gear VR face down and carefully detach the previous face foam the nose area.
2. In a single motion carefully align the new foam cushioning and press it onto the Pico Neo.

**Tip:** if you want to clear the foam cushioning, dampen a clean soft cloth with cold water and gently wipe the area of the face cushion you want to clean.

**Note:** Replacing foam cushioning is only included in the package of Pico Neo Lite, not Pico Neo Standard.



# OPERATING INSTRUCTIONS

## Signs

System	Status	Signals
Power on	Powering on	<ul style="list-style-type: none"><li>• All signs flash once then flash in sequence</li></ul>
	Powered on	<ul style="list-style-type: none"><li>• Certain signs light on indicating remaining power</li></ul>
Working	Working	<ul style="list-style-type: none"><li>• Certain signs light on indicating remaining power</li></ul>
Charging	Charging	<ul style="list-style-type: none"><li>• Certain signs light on indicating remaining power, and next sign keeps flashing until remain power reach next level</li></ul>
Sleep/Power off	Powering off	<ul style="list-style-type: none"><li>• All signs keep flashing until done</li></ul>
	Powered off/Sleeping	<ul style="list-style-type: none"><li>• All signs light off</li></ul>
Remaining power	0% ~ 25%	<ul style="list-style-type: none"><li>• One sign keeps lighting on</li></ul>
	25% ~ 50%	<ul style="list-style-type: none"><li>• Two signs keep lighting on</li></ul>
	50% ~ 75%	<ul style="list-style-type: none"><li>• Three signs keep lighting on</li></ul>
	75% ~ 100%	<ul style="list-style-type: none"><li>• Four signs keep lighting on</li></ul>

## Powering on/off

### Powering on:

Press the power button until there are signs lighting on then release the button and wait for the home screen showing on the screen.

### Powering off:

Press the power button until you see the powering off instruction on the screen and then release the button.

### Tip:

You will see the powering off instruction on the screen and at the same time all signs will flash during the whole process.

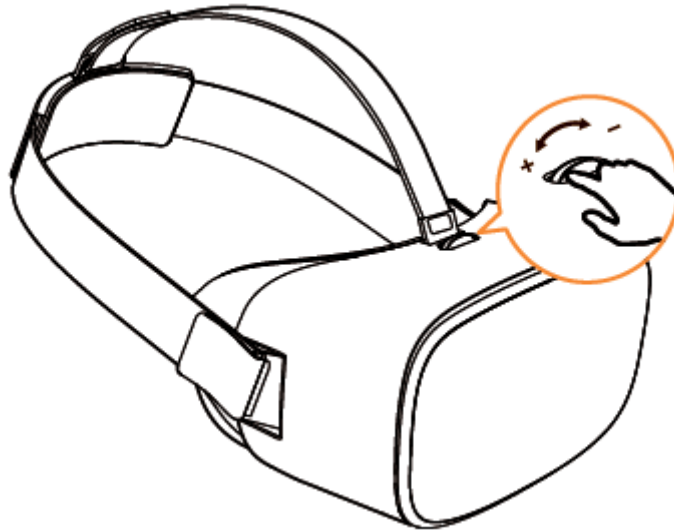
## Adjusting Focus

Rotate the focus adjustment wheel to adjust the distance between the lenses and the screen until you see a clear picture.

### Tip:

Rotate the focus adjustment wheel to right if you have high degree of myopia, vice versa.



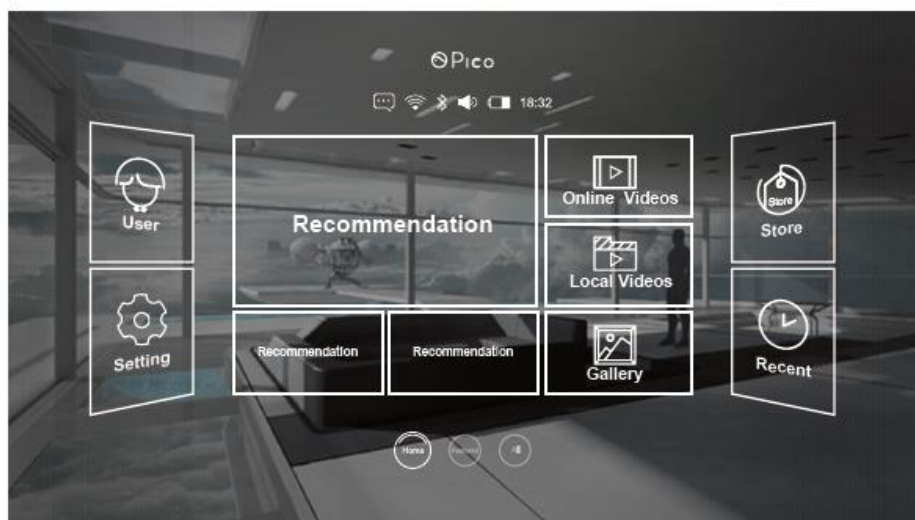


## Basic Operations

Operations	Buttons
Move the cursor	Rotating Head
Page up/down	D-pad(up/down)
Select/Confirm	A or LT
Return	B or Back
Call out current menu	Menu
Return Home Screen	Home
Volume up/down	RT + D-pad(up/down)

## Home Screen

By press the home button, you can access to the home screen at any time. Home screen is the starting point for accessing to Apps, files and features.



Items	Functions
Home	Access to Apps, files and features
Featured	Access to recommended Apps and contents
All	Access to all Apps
User	Set up your personal account
Settings	Set up system settings
Gallery	View your photos
Local Videos	View your local videos
Online Videos	Browse online videos
Store	Browse and download Apps in online store
Recent	View recent Apps and contents

## Status Bar

You can see the status bar on top of the screen (except for playing games and watching videos).



items	Functions
Messages	Showing unread messages
WiFi	Indicating current WiFi connection
Bluetooth	Indicating current Bluetooth connection
Volume	Showing current volume
Remaining Power	Showing remaining power
Time	Showing current time

## Sleeping

System will go sleep when:

1. No operations during certain time (you can set up the time in settings)
2. Pressing the power button once.

You can revoke the system by:

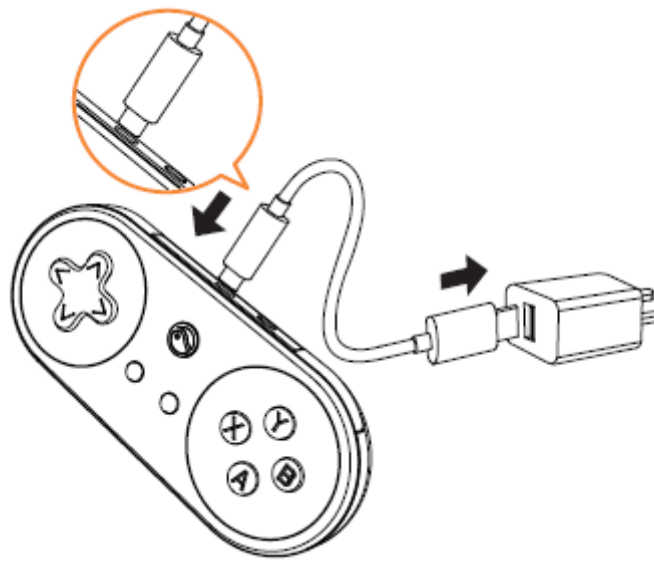
1. Pressing power button once
2. Pressing home button once.

## Charging

1. Connect a Pico Neo's charger cable to the charging port on the controller
2. Connect the other side of the cable to a charger or computer
3. The signs on the controller indicate current power. It is full when all signs light up and you can finish charging.

### Note:

Do not charge the device for too long time. Unplug the charger when the device reaching full power.



## Hardware Resetting

You can try to reset the hardware if the device is crashing by press the power button for 10 seconds and the system will be restarted.

# HEALTH AND SAFETY INFORMATION

## General Instructions and Precautions

- Pico Neo can be affected by magnetic interference created by items like computers, TVs, or electric cables. Please avoid using Pico Neo in areas affected by magnetic interference.
- Use only in a safe environment. Pico Neo produces an immersive virtual reality experience that distracts you from and blocks your view of your actual surroundings. Always be aware of your surroundings when using Pico Neo.
- Do not handle sharp or otherwise dangerous objects while using Pico Neo. Never wear Pico Neo in situations that require attention, such as walking, bicycling or driving.
- Make sure Pico Neo headset is level and secured comfortably on your head, and that you see a single, clear image.
- You may feel discomfort using VR device, please take frequent breaks at the first time using Pico Neo and increase play time gradually.
- Take at least a 10 to 15 minute break every 30 minutes. Each person is different, so take more frequent and longer breaks if you feel discomfort. You should decide what works best.
- The controller will be hot if working for a long time. Please make power it off or make it sleep for some time before continue to use.
- Do not use non authorized charging devices, or it may cause damage to Pico Neo or injury.
- Children under the age of 12 are restricted from using Pico Neo. Children (age 13 and older) should who are using Pico Neo should be monitored by adults at any situation.
- Any changes or modifications to Pico Neo not expressly approved by Pico could void your warranty for this equipment and void your authority to operate this equipment. Only use approved batteries, antennas and chargers. The use of any unauthorized may be dangerous and void the warranty if said accessories cause damage or a defect to the device.

## Safety Information

- Immediately discontinue use it anyone using the Pico Neo experiences any of the following symptoms: seizures; loss of awareness; eye strain; eye or muscle twitching; involuntary movements; altered, blurred, or double vision or other visual abnormalities; dizziness; disorientation; impaired balance; impaired hand eye coordination; excessive sweating; increased salivation; nausea; lightheadedness; discomfort or pain in the head or eyes; drowsiness; fatigue; or any symptoms similar to motion sickness.
- Do not drive, operate machinery, or engage in other visually or physically demanding activities that have potentially serious consequences until all symptoms have completely subsided.
- If you have any serious discomfort, please stop using Pico Neo and see a doctor immediately.
- Avoid using your device in extremely dry environments, static electricity can build up in the Pico Neo and cause a small quick static electrical shock.
- Keep the device's power adapter away from open flames and other heat sources.

- Seizures or blackouts can occur when you are exposed to flashing lights while watching videos or playing games for extended periods. If you feel any discomfort, stop using Pico Neo immediately.
- Reduce risk of repetitive motion injuries by hold the Pico Neo with a relaxed grip and take frequent breaks.

## **TROUBLESHOOTINGS AND FAQs**

### **What can I do if I can't see any picture on screen?**

1. Please check if the status lights are on and its indication are correct according to Working signs then make sure the device has been powered on.
2. Check the connection between the controller and headset.
3. If you didn't find any problem in steps above, please try to reconnect the controller and headset, make sure you can see there are changes in the screen. Or reset the hardware by pressing the power button for 10 seconds.

### **What can I do if the picture is stuck or the screen keeps flashing?**

1. Please check if there are changes screen when you rotate the headset.
2. Check the connection between the controller and headset and try to reconnect them.

### **What can I do if the controller can't be charged?**

1. Please check if the status lights are on and its indication are correct according to Charging signs. If not, try the following steps.
  - Reset the hardware by pressing the power button for 10 seconds
  - Use another charger or cable for Pico Neo.
2. If you are using a non-authorized charging device, please check if the charging stream is above 5V/2A, an authorized charger is recommended.

## DECLARATION OF TOXIC AND HAZARDOUS SUBSTANCES

Part Name	Hazardous Substances or Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr6+)	Polybrominated Biphenyl (PBB)	Polybrominated Diphenyl Ethers (PBD)
Structural Components	×	○	○	○	○	○
Circuit Module	×	○	○	○	○	○
Optical Lens	○	○	○	○	○	○
Cable	×	○	○	○	○	○
Pouch	×	○	○	○	○	○

○: Indicates that this hazardous substance contained in all the homogeneous materials for this part is below the limit requirement in SJ.T 11363-2006 Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

×: Indicates that this hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement in SJ.T 11363-2006 Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

## FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

- If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

## RF exposure warning

- The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment.

The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

## Note

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

# WARRANTY INFORMATION

## Information

Before warranty expired date you have the rights for repairing, exchanging and returning products with the effective receipt.

1. You can return or exchange (the same model) your device with the effective receipt in 7 days since the purchase date
2. You can exchange the same model of your device with the effective receipt in 15 days since the purchase date
3. You can repair your device for free in 12 months since the purchase date
4. Attached parts have effective date for 3 months.

## Important Notes

The Limited Warranty does not cover:

1. Defects or damage resulting from improper using not included in this manual
2. Attached parts except for controller and headset, such as the packing box or gifts
3. Defects or damage resulting from non-authorized modification, changing or repairing
4. Defects or damage resulting from external causes such as collision with an object, fire, flooding, dirt, windstorm, lightning, earthquake or improper use of any electrical source
5. Expire the effective date.

For more information about Pico's products, policy and authorized servers, please visit Pico's official website or official account on WeChat.

Tel: 400-6087-666



Website: [www.picovr.com](http://www.picovr.com)



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