

A New Reality

Virtual Reality All-In-One Headset

USER GUIDE



Pico Neo 2 User Guide R01-20190903.indd 39

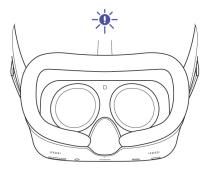
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# Warning

Please do not expose the optical lens of the helmet to the sun to prevent damage to the helmet screen.

Permanent yellow spots may be caused to the screen in less than on minute when the lens is exposed to the sun, both indoors and outdoors.

Please note that such physical damage is not covered by the warranty of the product.





## Important Notes

 It is recommended that you use this product in an open and safe indoor area (at least 2m<sup>•</sup> 2m). Please confirm that you are in a safe environment without any discomfort before using it. Remember to avoid accidents, especially when you move indoors with the helmet on. Pleas wear the lanyard when using the handle, and make sure that there is enough space around your head and body to stretch your arms to avoid injury to others or yourself.

 It is recommended that you should be careful when using it and putting it back to protect the optical lens form being scratched by sharp objects. Please use the cloth enclosed in the package when cleaning the lens, otherwise it may be scratched and the visual effect may be affected.

 $\cdot$  It is recommended that you should not turn up the volume too much, otherwise it may cause damage to your hearing.

 Long time of wearing may cause slight diztiness or eyestrain, so it is recommended that you take a rest every 30 minutes. You can relieve eyestrain by doing some eye exercises or watching distant objects. If your feel any discomfort, please stop using it immediately.

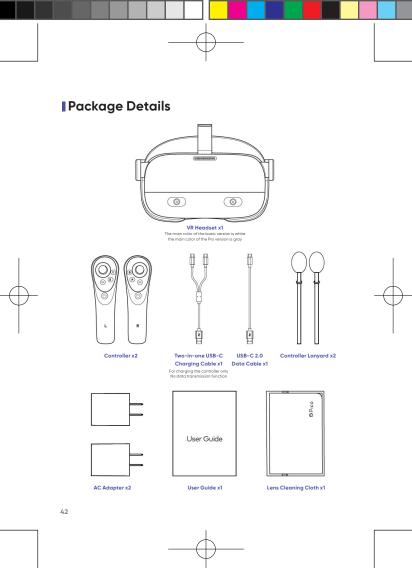
 $\cdot$  Basic operations can be achieved through the buttons of the helmet. For more interesting functions, please connect the handle.

This product has no myopia adjustment function. For myopic users, please wear your glasses according to the wearing instructions when using it.

 The "Eye Protection Mode" of this product has been certified by TUVRheinland, Germany. In this mode, the picture color is yellowish. You can activate or deactivate this function in in "Settings -> Display -> Eye Protection Mode" according to your personal preference.

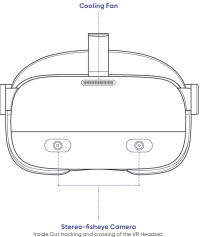
 Children aged 12 years old and under are not recommended to use this product. Please keep your helmet, handles and accessories out of their reach. Children over 12 years old should use this product under adult supervision to avoid accidents.

\* This introduction is for reference only. The final appearance and functions of this product shall be subject to the actual product.



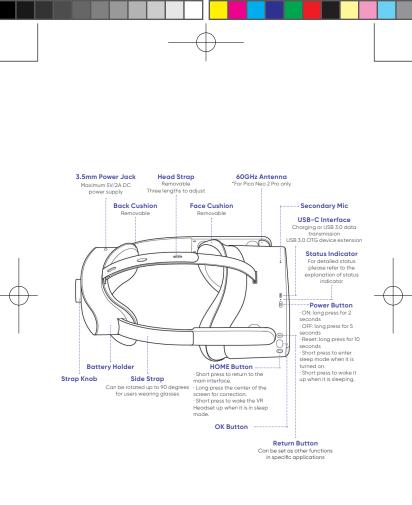


## **VR** Headset Instructions



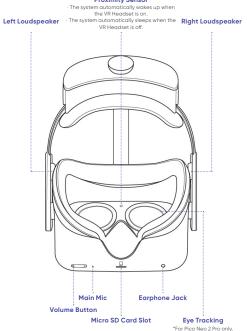
No block when using it.





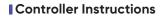
44

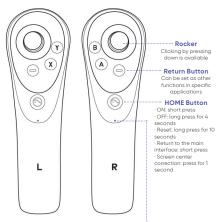
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#### Proximity Sensor

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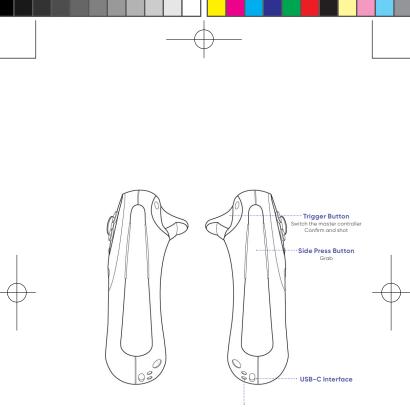




Status Indicator For detailed status please refer to the Explanation of Status Indicator

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Lanyard Hole

## Explanations of status indicator of the VR Headset

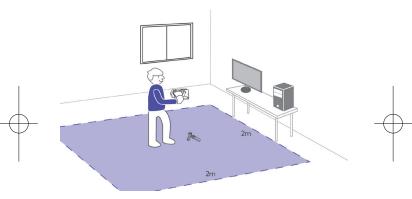
Color of the status indicator	Status of the system		
The red light is always on	Charging. The battery is less than 20%.		
The yellow light is always on	Charging. The battery is less than 90%.		
The green light is always on	Charging finished. The battery is more than 90% or full.		
The blue light is always on	Starting up or working.		
The red light flickers	The battery is less than 20%.		
The blue light flickers	Shutting down.		
The white light flickers	The firmware is updating.		
The indicator is off.	Sleeping or power-off.		

## Explanations of status indicator of the Controller

Color of the status indicator	Status of the system
The blue light flickers	Connecting.
The blue light is always on	Connected.
The red and blue lights flicker alternately at a slow frequency (0.5s)	Waiting to be matched.
The red light flickers	Low battery.
The red light is always on	Charging.
The white light flickers	The firmware is updating.
The indicator is off	Power-off or full-battery.

## Play Space

Since there is no cable constraint, your movements in the real world will be same as in the virtual world, so it is recommended that you ensure a safe play area before you start playing.



1. Prepare a clean and safe indoor area of at least 2m \* 2m;

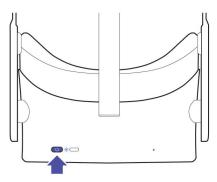
- 2. Charge the helmet and handle first;
- 3. Wear the handle lanyard;
- 4. Set the security area according to the notice on the screen after starting up.



## Wearing Instructions

## - Turn on the VR Headset

Long press the Power button for 2 seconds (until the blue light is always on) to trun on the VR Headset.





-Connect the Controller



After the VR Headset is turned on and worn, press the HOME button of the controller (until the blue light flickers) to turn it on, and the system will automatically complete the connection.

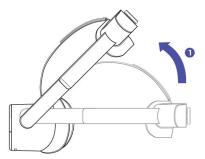
When the connection is complete, the status indicator of the controller is blue, and the virtual controller and rays are visible in the VR Headset.





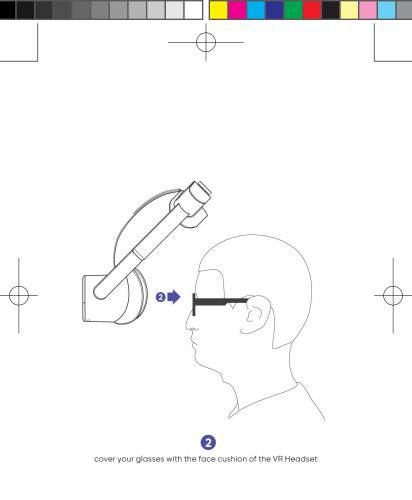
### -Wear the VR Headset

Note: Since this device has no myopia adjustment function, please do not remove your glasses when wearing it.

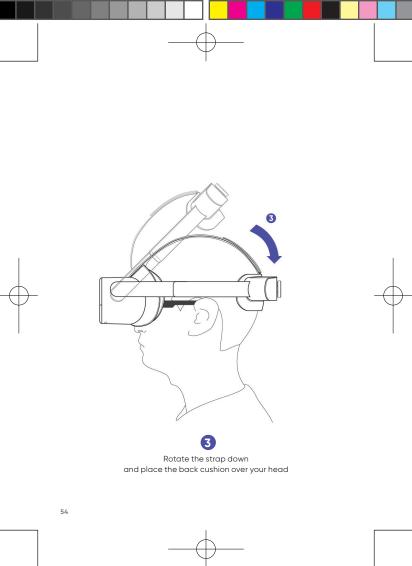


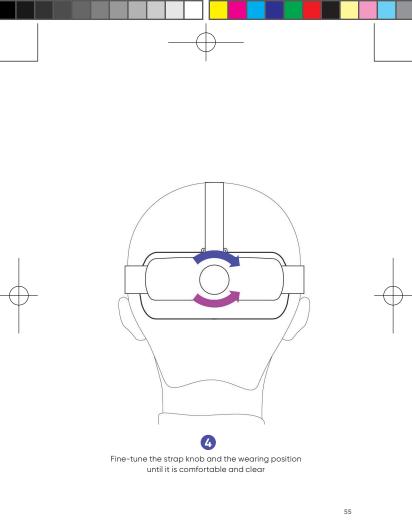
Adjust the strap knob to the maximum or appropriate size and rotate the strap up to allow enough space for your head











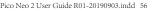
## Operation Instructions

## - Rocker operation

Shaking in four directions are available to perform page-turning operations;

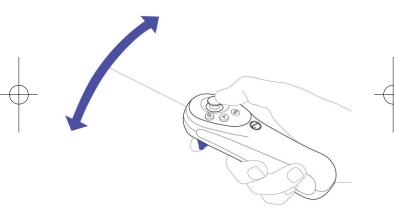
Clicking by pressing down is available.





### -Browse contents

You can switch to what you want to browse by moving and rotating the handle/helmet and select the content with the Trigger button of the handle or the OK button of the helmet.



Note: You can operate by turning your head and clicking the buttons on the VR Headset if the controller is not connected.



#### Screen center correction

Wear the VR Headset and look straight ahead, press and hold the HOME button of the VR Headset/controller for more than 1 second to correct the center of the screen, and adjust the interface to the current field of view.

### -Switch the rays of the master controller

In the main interface, short press the Trigger button of the corresponding controller to switch the rays of the master controller;

### - Sleep / Wake up

Method 1: The system automatically sleeps a while after the VR Headset is removed and automatically wakes up when the VR Headset is worn.

Method 2: Short press the Power button of the VR Headset to perform sleep or wake-up operation.

#### Disconnect the controller

Press and hold the HOME button until its status indicator turns red with vibration. The controller is then turned off and disconnected from the VR Headset.

You do not need to deliberately shutdown the controller. It will automatically shut down to save power in the following cases.

- · when the VR Headset enters deep sleep (a while after the helmet is removed)
- · when the Bluetooth of the VR Headset is off
- · when the controller is unbound in the helmet management interface
- · when the VR Headset is turned off

### - Add new controller

If you need to add a new controller (the VR Headset can only connect one pair of controllers at the same time, that is, one left controller and one right controller) or connect the controller again after unbinding it, you can enter "Settings" -> "Controller", click "Add Controller", press and hold the HOME button and the Trigger button at the same time until the red and blue lights of the controller status indicator flicker alternately, and then follow the instructions on the VR Headset screen.

#### -Volume adjustment

You can use the Volume Adjustment button of the VR Headset to turn up or turn down the volume, and long press it to continuously adjust the volume.



### - Hardware reset

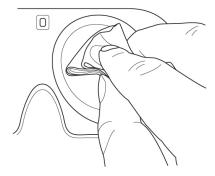
If the HOME button and all button status indicators of the VR Headset do not respond, or the virtual handle in the VR Headset is stuck, you can press the HOME button for more than 10 seconds to restart the handle.

If the VR Headset dose not respond after short-press the HOME button or the Power button, or the picture in the VR Headset is stuck, you can press the Power button for more than 10 seconds to restart the VR Headset.

## Product Cleaning

#### -Product care

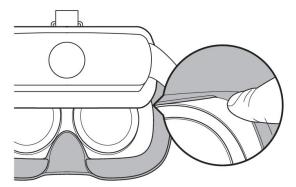
Please wipe the lens with the lens cleaning cloth dipped into a small amount of alcohol or cleaning solution



### - Replace and clean the face cushion

Please follow the figure below to put the face cushion into the VR Headset gap along the edge.

The removal steps are reversed.

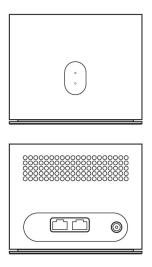


\*Note: It is recommended to wipe the face cushion with a small amount of water. No dry cleaning, machine washing, exposure to the sun or contact with organic solvents. Otherwise, it may be less comfortable when the face cushion contacts your face, and the chance of the glasses colliding with the optical lens may increase.



## Wireless Streaming Hub (for Pico Neo 2 Pro only)

You can use the Pico Wireless Streaming Hub to relay the interesting games in the PC Steam VR for a better VR experience.



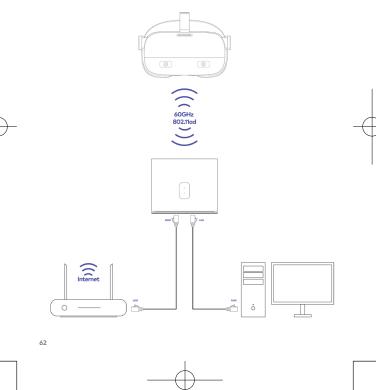
### -PC's Configuration requirements

A VR-ready PC may be needed to run the game in the SteamVR platform. For PC's configuration requirements and installation, please visit the SteamVR's official website .



## -Connection method

Please connect the wireless streaming hub as shown below. After connection, open the "Pico Wireless Streaming" application in the VR Headset and follow the instructions on the screen.

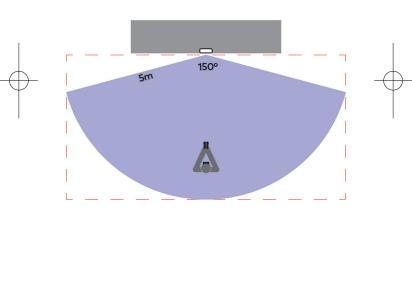


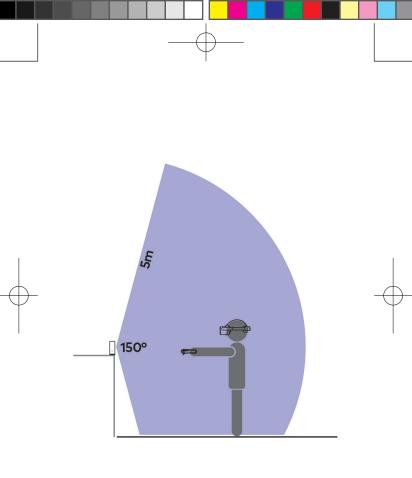
-Explanation of status indicator of the wireless streaming box

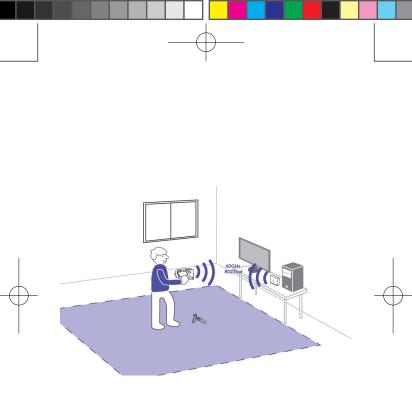
Color of the status indicator	Status of the system
INTERNET The orange light is always on.	INTERNET Searching the network.
INTERNET The blue light is always on.	INTERNET Internet connected.
60GHz The orange light is always on.	60GHz Waiting to be connected.
60GHz The blue light is always on.	60GHz Connected.
60GHz and INTERNET The white light flickers.	The firmware is updating.
INTERNET The red light flickers.	INTERNET System alert.
60GHz The red light flickers.	60GHz System alert.



-Play space of PC Steam VR wireless streaming







Please refer to the User Guide of the Wireless Streaming Hub for detailed instructions.



## Safety Warnings

Please carefully read the following warnings and information before using the VR Headset and follow all guidelines on production safety and operation. Failure to follow these guidelines may result in physical injuries (including electric shock, fire and other injuries), property damage and even death.

If you allow others to use this product, you shall be responsible for ensuring that every user knows and follows all the instructions on production safety and operation.

#### Health and safety warnings

Please ensure that this product is used in a safe environment. This product creates an
immersive virtual reality scene for you, and you cannot see the situation around when
using it. Please move within the safe area and keep an eye on your surroundings. Do not
approach stairs, windows, heat sources or other hazardous areas.

 Please confirm that you are in good health before using. It is recommended that you should consult a doctor before using if you are pregnant, elderly, or have serious physical, mental, visual, or heart problems.

 A small number of people may have epilepsy, fainting, severe dizziness and other symptoms caused by flashes and images, even if they may not have such medical history.
 It is recommended that you should consult a doctor before using if you have the above similar medical history.

 Some people will suffer from severe dizziness, vomiting, palpitations and even fainting when using VR Headsets, and this kind of people will also have the same feelings when playing ordinary video games and watching 3D movies. It is recommended that you should consult a doctor before using VR VR Headset if anyone has similar conditions.

 Children aged 12 years old and under are not recommended to use this product. Please keep your VR Headset, handles and accessories out of their reach. Children over 12 years old should use this product under adult supervision to avoid accidents.

 Some people are allergic. Their skin is allergic to plastic, leather, fiber and other materials, and their long-term contact parts will have symptoms such as redness, swelling and inflammation. Anyone with similar conditions should stop using VR Headset and consult a doctor.

 It is recommended that you should wear a VR Headset for no more than 30 minutes each time. If you feel uncomfortable, please increase the frequency and time of rest according to your personal habits, and the time of rest should be no less than 10 minutes per time. It is recommended that you stop using it immediately when there are visual abnormalities (diplopia and sight distortion, eye discomfort or pain, etc.), excessive sweating, nausea, vertigo, palpitation, disorientation, loss of balance, etc.



 This product provides an immersive virtual content experience and some types of content may cause your discomfort. Stop use immediately and seek medical treatment when the following symptoms occur.

-Epilepsy seizures, loss of consciousness, convulsions, involuntary movements, dizziness, disorientation, nausea, somnolence, or fatigue;

-Eye pain or discomfort, eye fatigue, eye twitching, or visual abnormalities (such as illusion, blurred vision, or diplopia);

-Itchy skin, eczema, swelling, irritation or other discomfort;

-Excessive sweating, loss of balance, impaired hand-eye coordination, or other similar motion sickness symptoms.

Only when you have fully recovered from these symptoms can you drive a motor vehicle, operate machinery, or engage in activities that may have potentially serious consequences.

#### Impact on medical devices

 Please comply with the expressly stated prohibition of the use of wireless equipment in medical and healthcare facilities, and shut down the equipment and its matching mobile devices.

 Radio waves generated by the equipment and its matching mobile devices may affect the normal operation of implantable medical devices or personal medical devices, such as pacemakers, cochlear implants, hearing aids, etc. Please consult the manufacturer about the restrictions on the use of this equipment if you use these medical devices.

 Please keep a distance of at least 15cm from the implanted medical devices (such as pacemakers, cochlear implants, etc.) when the mobile device matched with the equipment connecting Bluetooth.

#### Operating environment

• Do not use the equipment in dusty, humid, dirty or near the magnetic field, so as not to cause internal circuit failure of the equipment.

• Do not use this equipment in thunderstorm weather. Thunderstorm weather may cause equipment failure or danger of electric shock.

 Please keep equipment away from direct sunlight, such as car dashboards or windowsills.

• It is recommended that you keep the equipment and its accessories away from rain or moisture, otherwise fire or electric shock may be caused.

 Do not place the equipment near heat sources or exposed fire sources, such as electric heaters, microwave ovens, water heaters, stoves, candles or other places that may generate high temperature.



 Please do not squeeze the equipment during use to avoid damage to the equipment and lens, resulting in facial injuries.

 Do not use strong chemicals, cleaning agents or strong detergents to clean the equipment or its accessories, which may cause material changes that affect eye health.

• Do not allow children or pets to bite or swallow the equipment or its accessories in case of injuries, or failure or explosion of the equipment.

### Children's health

This equipment and its accessories may contain some small parts. Please place these out of the reach of children. Children may inadvertently damage the equipment and its accessories, or swallow small parts resulting in sufficaction or other dangers.

#### Requirements for accessories

 It is recommended that you use the matching mobile devices specified by Pico and the approved and compatible accessories, such as power supplies and data cables, otherwise it may cause fire, explosion or other dangers.

 Only accessories approved by the equipment manufacturer and matched with this type of equipment can be used. If other types of accessories are used, it may violate the warranty terms of the equipment and the relevant regulations of the country where the equipment is located, and may lead to safety accidents. For approved accessories, please contact Pico Customer Service Center.

#### Environmental protection

· Do not treat this equipment and its accessories as ordinary household garbage.

Please comply with the local laws and regulations on the disposal of the equipment and its accessories, and support recycling actions.

#### Hearing protection

· Do not use high volume for long periods of time to prevent possible hearing damage.

 When using headphones to listen to music or have a call, it is recommended that you use the minimum volume required for the music or call, so as not to damage your hearing. Prolonged exposure to high volume may cause permanent hearing damage.

#### Flammable and explosive areas

 Do not use the equipment at the gas station (maintenance station) or near any inflammable and explosive areas such as inflammable articles and chemical agents, and follow all graphic or text instructions. It is recommended that you turn off the mobile device matching the VR Headset. The matching mobile devices may cause explosions or fires in the areas for the storage and transportation of fuel or chemical agents, or in or around the explosive sites. • Do not store or transport the equipment and its matching mobile devices in the same box with flammable liquids, gases or explosive substances.

#### Transportation safety

 Do not use VR VR Headsets when walking, cycling, and driving or other situations that require concentration.

• Do not use VR VR Headsets when riding, as irregular vibration will increase the burden on your vision and brain.

### Charger safety

 It is recommended that you use the charging device attached to the product package or in line with the input value marked on the product nameplate, otherwise it may cause accidents.

When charging the equipment, the power socket should be installed near the equipment
 and should be easily accessible.

• When charging is completed or not charging, it is recommended that you disconnect the charger from the equipment and unplug the charger from the power socket.

· Do not fall or collide the charger.

 If the charger plug or power cord is damaged, do not continue to use it to avoid electric shock or fire.

 Do not touch the equipment or charger with wet hands to avoid short circuit, failure or electric shock.

· Please stop using the charger when it is soaked by rain and liquid or seriously damp.

### Battery safety

• Do not disassemble or modify the battery, insert foreign matters, or immerse in water or other liquid to avoid battery leakage, overheating, fire or explosion.

If the battery leaks liquid, do not contact the skin or eyes with the leaked liquid. In case
of contact with skin or eyes, please immediately rinse with clear water and seek medical
advice.

• Do not drop, squeeze or puncture the battery. Avoid subjecting the battery to high external pressure, resulting in short circuit and overheating inside the battery.

 VR Headsets are equipped with non-removable internal batteries. Do not try to replace the battery by yourself, which may cause battery damage, overheating, fire or human injury. The battery can only be replaced by Pico or Pico authorized service providers. Replacing the wrong type of battery by yourself may cause danger of explosion.

## Product Warranty Terms

You can repair your device for free in 12 months since purchase date. Please contact with Pico if you need repair services.

#### Warranty Tips

The Limited Warranty does not cover:

1.Defects or damage resulting from improper usage, maintenance or storage not included in this manual;

2.Packing box or gifts other than the main device;

 Defects or damage resulting from unauthorized dismantling, alteration and maintenance;

4.Damage caused by force majeure such as fire, flood and lightning, etc.;

5. The product has exceeded the valid period of the warranty.

## **EU REGULATORY CONFORMANCE**

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

#### **RF Exposure Information**

This device meets the EU requirements (1999/5/EC Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection. The device complies with RF specifications when the device used in normal condition. Hereby, Pico Technology Co., Ltd. declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

#### "DECLARATION OF CONFORMITY\*1 of "CONFORMITE EUROPEENNE"

DOC Website: www.picovr.com/certifications/DOC\_neo 2.pdf



#### Headset:

Frequency Range (BT/WIFI): 2400-2483.5MHz and 5150-5350MHz and 5470-5725MHz 5150-5350: Indoor use only Max Output Power: 2.4G WIFI: 20dBm BT: 7dBm 5150-5725MHz: 20dBm HW Version: R2 SW Version Format: CCCC\_rf01\_bvY/\_svZ.ZZ\_YYM M DD\_Bttt "CCCC" stands for the nation. "YY" stands for Baseband Version. "Z.ZZ" stands for the software Version. "YY" stands for the update year. "MM" stands for the software Version. "YY" stands for the update date. "TTT" stands for the Build No. And the update will not change the radio frequency conformance of this product.

#### Controller:

Frequency Range (2.4GHz): 2400-2483.5MHz Max Output Power: 2dBm HW Version: R2 SW Version Format: CCCC\_rf01\_bvY/\_svZ.ZZ\_YYM M DD\_Bttt "CCCC" stands for the nation. "YY" stands for Baseband Version. "Z.ZZ" stands for the Software Version. "YY" stands for the update year. "MM" stands for the update month. "DD" stands for the update date. "TTT" stands for the Build No. And the update will not change the radio frequency conformance of this product.



#### Disposal and recycling information

The crossed-out wheeled-bin symbol on your product, battery, literature of packaging reminds you that all electronic products and batteries must be taken to separate waste collection points at the end of their working lives; they must not be disposed of in the normal waste stream with household garbage. It is the responsibility of the user to dispose of the equipment using a designated collection point or service for separate recycling of waste electrical and electronic equipment (WEEE) and batteries according to local laws.



Proper collection and recycling of your equipment helps ensure electrical and electronic equipment (EEE) waste is recycled in a manner that conserves valuable materials and protects human health and the environment, improper handling, accidental breakage, damage, and/or improper recycling at the end of its life may be harmful for health and environment.

For more information about where and how to drop off your EEE waste, please contact your local authorities, retailer or household waste disposal service or visit the website www.ploor.com.

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This equipment maybe operated in

AT	BE	BG	СН	CY	CZ	DE	DK		
EE	EL	ES	FI	FR	HR	HU	IE		
IS	IT	LI	LT	LU	LV	MT	NL		
NO	PL	PT	RO	SE	SI	SK	UK		

# 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.

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.

 This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

#### FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment is also designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). The SAR limit adopted by the USA is 1.6 W/kg averaged over one gram of tissue. The highest SAR value 0.63W/kg reported to the FCC for this device type complies with this limit.

### "Supplier's Declaration of Conformity 47 CFR §2.1077 Compliance Information"

SDOC Website: www.picovr.com/certifications/SDOC\_neo 2.pdf



# Laws and Regulations

#### Copyright © 2015-2019 Qingdao Pico Technology Co., Ltd.. All Rights Reserved

This information is for reference only and does not constitute any form of commitment. Products (including but not limited to color, size, screen display, etc.) shall be subject to physical objects.

### User Software License Agreement

Before using the product, please read the software license agreement carefully. When starting to use the product, you agree to be bound by the license agreement.

If you do not agree to the terms of this agreement, do not use the product and software, and return the product to its original place for refund.

For more details about the agreement, please visit:

https://www.picovr.com/cn/terms/user\_terms.html

#### **Privacy Protection**

To learn how we protect your personal information, please visit:

https://www.picovr.com/cn/terms/privacy.html

Read our privacy policy.





Official Forum

Offical wechat

Product Name: VR All-In-One Headset Headset Model: A7B10/A7C10/A7D10 Controller Model: C1610

For more information about Pico's products, policy and authorized

servers, please visit Pico's official website.

Official Website: www.pico-interactive.com

Service Mail: service@picovr.com