CE-01H-UG-EN-006

TPCAST
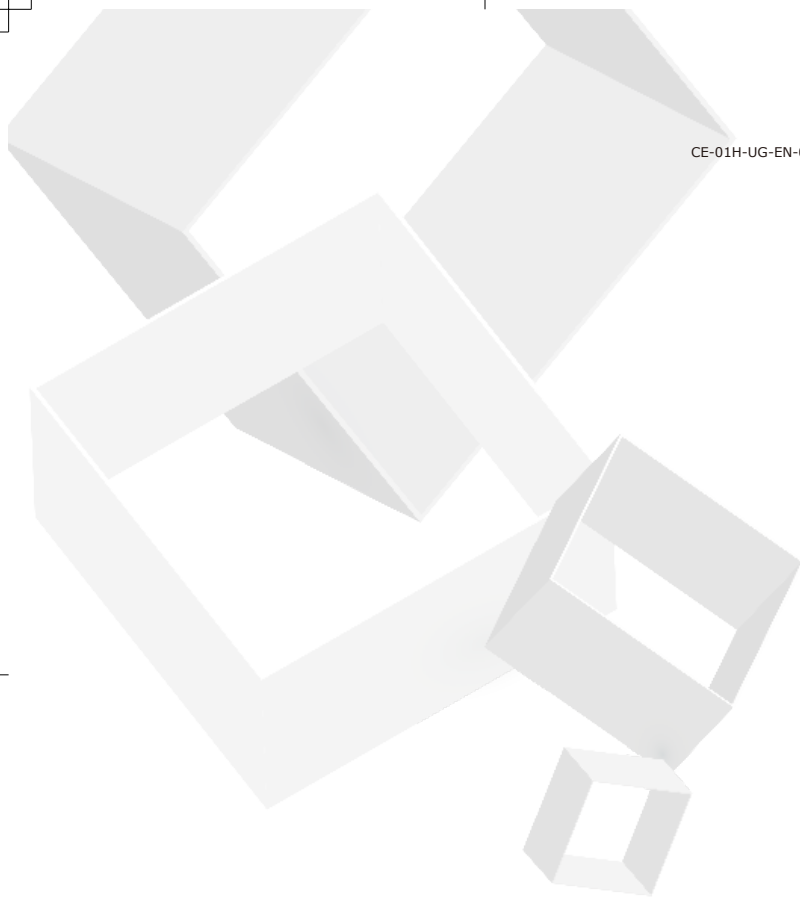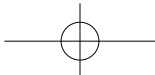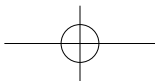
User Guide on installation of
TPCAST Wireless Adaptor for VIVE

CONETENTS

Scan code to view installation
video of Wireless Adaptor for VIVE

⚠ Because there is no cable effect, you should pay attention to the safety of game area during using TPCAST Wireless Adaptor for VIVE, to ensure that will not touch to the surrounding objects, or take the experience under the care of others.

Please read the user guide prior to operating of the product.
Update the soft copy of user guide on a regular basis to improve the accuracy and completeness.
Please visit the website of www.tpcast.cn to get the up-to-date version.
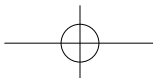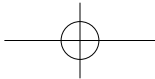
1. What's inside the box

① HMD Receiver
② PC transmitter
③ Power box
④ Portable power bank of 20000mAh
⑤ Dedicated cable for long distance connection
⑥ HDMI short connection cable
⑦ Instructions and warranty card
⑧ Nylon Bag
⑨ Router
⑩ Router power supply
⑪ Network cable
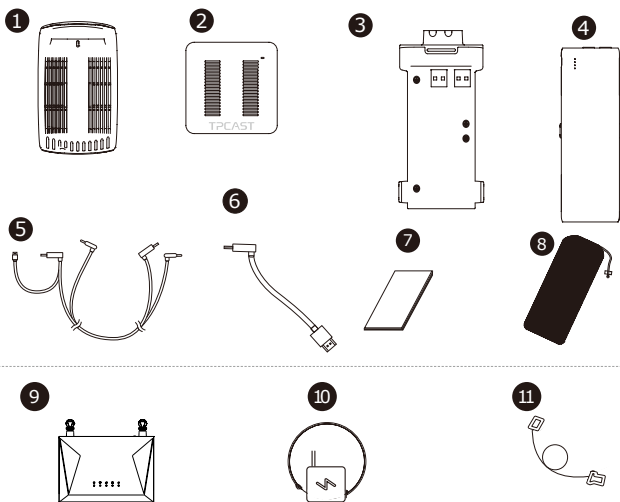
2. Instructions of main components

1、HMD Receiver
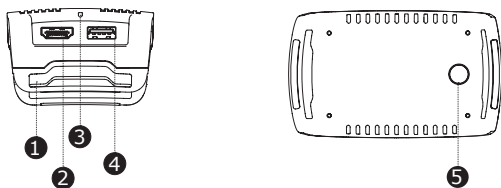
① HMD strap and cable port
② HDMI short connection port
③ Indicator for video signal connection
④ USB port
⑤ Video link pairing button

2、PC transmitter
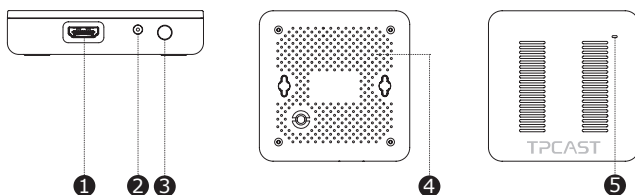
① HDMI connection port
② DCIN power port
③ Video link pairing button
④ Port for fixing the platform
⑤ Indicator for video signal connection

2
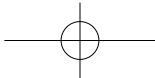
3、Power box
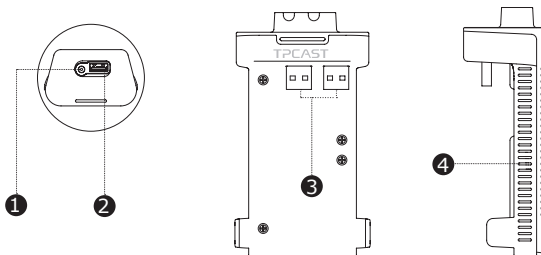
① DCIN power port for dedicated long distance connection cable
② USB port for dedicated long distance connection cable
③ USB port for portable power bank
④ Indicator for VR wireless operating signal

4、Portable power bank
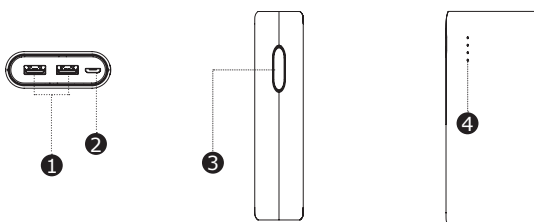
① USB power output port
② Micro USB charging port
③ Battery indicator button
④ Battery indicator

3
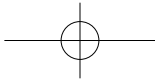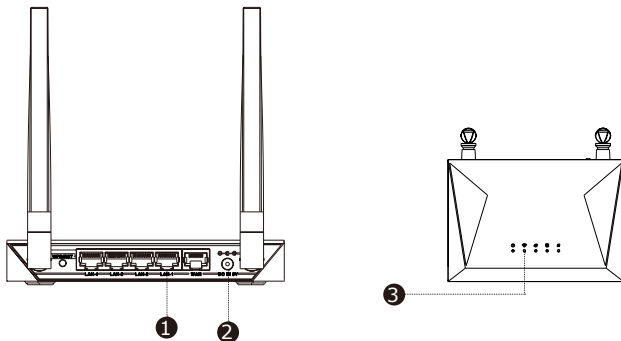
5、Router

① Network cable port
② Router power adapter port
③ Status light for the router

6、Cable

Dedicated cable for long distance connection

1-C 1-A 1-B 1-D 1-E
USB USB DC

4
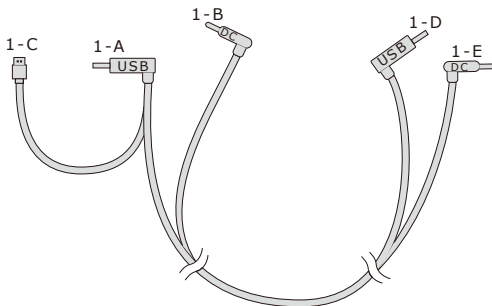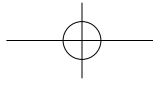
HDMI cable for short distance connection

2-A

HDMI

2-B

HDMI
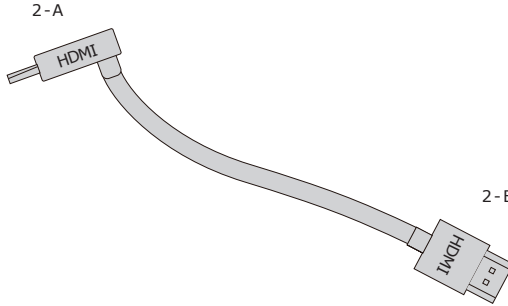
3. Connection instructions

1、Instructions on connection of HMD Receiver

Step one: Unplug the connected cables
① As shown in the figure, open the compartment cover.

❶   ❷
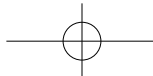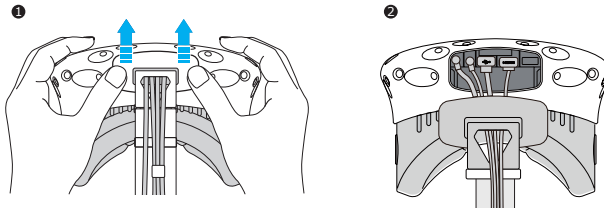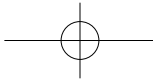
② Unplug all power cable, 3-in-1 cable as well as the audio cable, there are four interfaces in total.
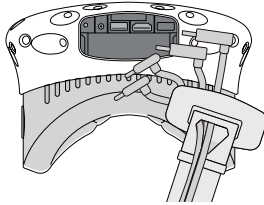
③ Pull the 3-in-1 cable and audio cable out of the compartment and the strap to completely separate from the HMD.
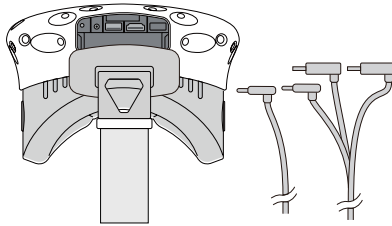
④ Separate the strap from the compartment.
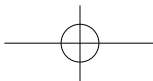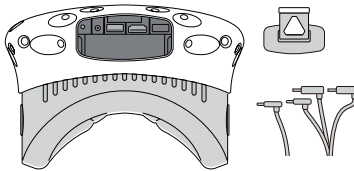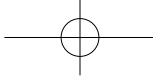
Step two: Fix the HMD Receiver
① As shown in the figure, thread in all three interfaces (1-a, 1-b and 1-c) of the dedicated long distance connection cable and audio cable from the HMD receiver with TPCAST side and out of the other side.
Note: The curved USB plug through the thread hole, need to forcibly finger along the right direction to pass through.
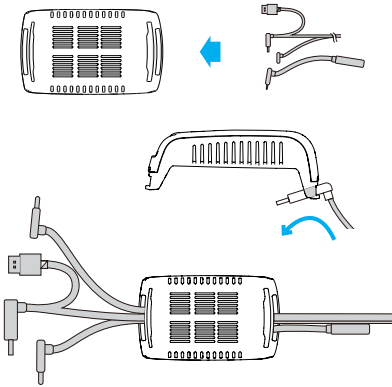
② Thread the separated strap through the HMD cable ports in turn and routed under the dedicated long connection cable, then the receiver end will be fixed on the HMD strap.
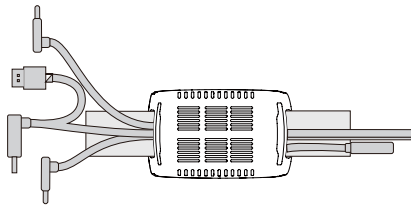
Step three: Cable connection
① As shown in the figure, thread in all three interfaces (1-a, 1-b and 1-c) of the dedicated long distance connection cable and audio cable from the HMD receiver with TPCAST side and out of the other side.
Note : The curved USB plug through the thread hole, need to forcibly finger along the right direction to pass through.

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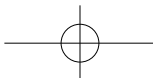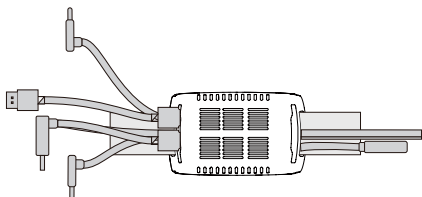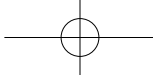
② Reconnect strap to the compartment cover.
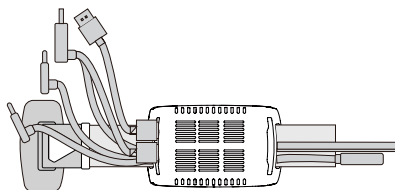
③ Thread the 1-a and 1-b interfaces of long connection cable through the compartment cover cable port, and the 2-a interface of short connection cable as well.
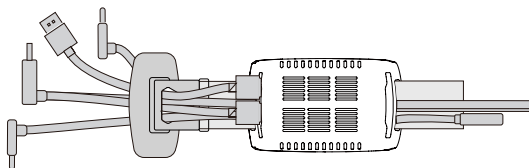
④ In turn plug in these three interfaces into the VIVE HMD power port, USB port, HDMI port and audio connector port.

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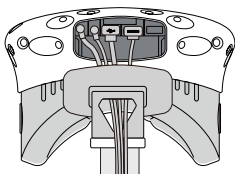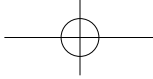
⑤ Straighten out the cable, hatch cover back again, it is recommended that you adjust the length of the sliding zone to meet the HMD receiver to the end of sliding zone and the cable still tight.
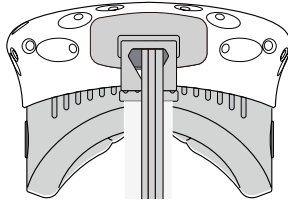
Step four: Overall adjustment
① Slide the interface of long connection cable (to be plugged into the power supply) through these two sleeves at the back of HMD and hang on the back.
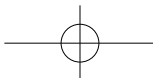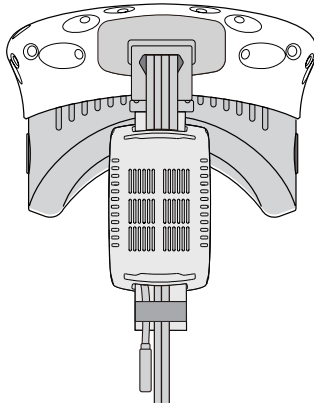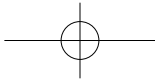
2、Power box connection instructions

Step one: As shown in the figure, respectively connect the d and e interfaces of long connection cable to the power box and HDMI port;

Step two: As shown in the figure, connect the portable power bank to the power box and when successfully connected, the blue battery light on the portable power bank turns on to indicate the state of charge. In order to improve the utilization rate of battery charge, please only connect to the portable power bank prior to operation of the product. And after operation, remove the portable power bank in the first place.

Step three: Put the completed power supply as well as the power box in a portable pack and string the pack to prevent falling of power supply in motion.
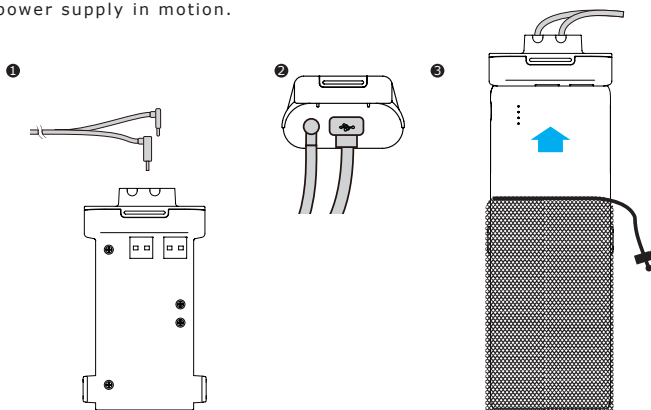
3、Instructions on connection of PC transmitter

Step one: Disconnect power supply for VIVE streaming box.
Step two: As for the existing VIVE 3-in-1 cable detached from the HMD, connect the DCIN power interface and the HDMI interface to the corresponding port on the PC transmitter, and

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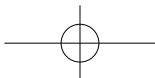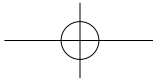
the USB interface is not required to be connected.

Step three: Connect power supply for VIVE streaming box.
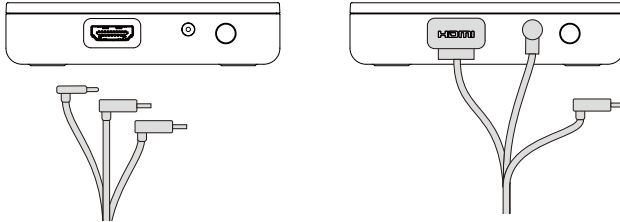
4、Instructions on connection of router

Step one: Connect the router power adapter and confirm power indicator on the front of panel is on.

Step two: Connect the yellow port of router to the PC host through network cable, as shown in the figure.

Step three: In PC's network connection Settings of Windows system, select "Local connection" to connect the router of wireless adaptor, change the connection of TCP/IP Settings to automatically obtain IP address and DNS server address.

Note: DO NOT make any settings in the router. DO NOT restore factory settings. Please use it directly when connecting network cable. In order to optimize user's product experience, we recommend to place the router in an open location with a 90-degree antenna, there is no obvious obstacles between the router and VIVE product.

In order to ensure PC can access to the Internet normally while wireless adaptor is in usage, it need to insert the original network cable to WAN port of the router.

LAN Port

WAN Port

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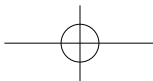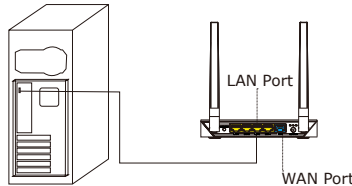
4. Installation of software client

1、Download the software client

Visit the website of TPCAST which is www.tpcast.cn and log in, browse the page of TPCAST wireless adaptor for VIVE, click to download the wireless adaptor for VIVE assistant. The current version of client is compatible with Windows 7, Windows 8 or later version, Windows 10.

TPCAST Wireless Adaptor for VIVE

PC Client Download

Support Windows7/8/10 64-bit system
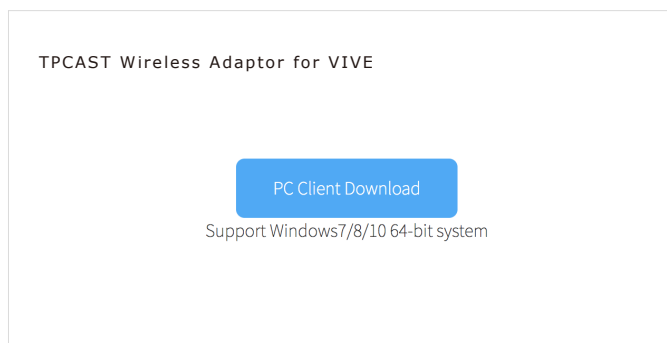
2、Install the connection assistant software

① Double click the icon to run the downloaded .exe file for installation. If already installed any other versions of the client, please uninstall and restart the PC according to the prompt.

TPCAST
Setup.exe

② Following the instructions of the system, select the installation path, complete the client installation, and generate desktop shortcut icon of wireless adaptor connection assistant.

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5. Operation instructions

1、Installation verify

Verify all connections of the wireless adaptor including the HMD Receiver, PC transmitter, power box & portable power bank, router, and make sure the portable power bank is fully charged.
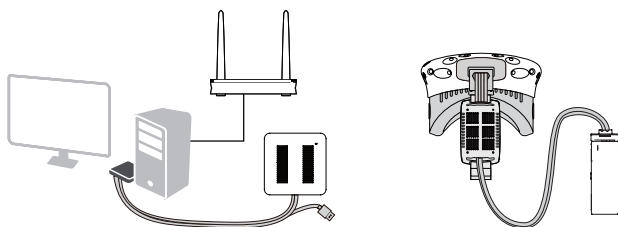
2、Pair HMD receiver with PC transmitter

Pair HMD receiver with PC transmitter for the first time operation only.

① When the power is on, the video signal connection indicators on both receiver end and transmitter will start blinking slowly.
② Then keep pushing the pairing button on both ends for at least 5 seconds till all indicators are off.
③ Ensure there is no obstacles between the transmitter and receiver end and release the pairing buttons. The video signal indicator will return to slow blinking mode after about 5 seconds.
④ No more operation and wait for about 10 seconds till the signal indicator change to fast blinking mode which means the pairing is completed. In the second operation, the signal indicator will quickly blink about 10 seconds after the energization.

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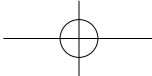
3、Erect PC transmitter

Appropriately erect based on the current site condition for optimal outcome, refer to the instructions on PC transmitter setup for details.

4、Run wireless adaptor connection assistant

Double-click the PC desktop client icon, then click "Start" after the client started.It will automatically test the environment of wireless adaptor working in turn .When wireless connection starts, please start VIVEPort and SteamVR software.
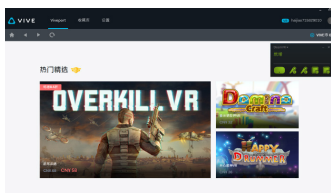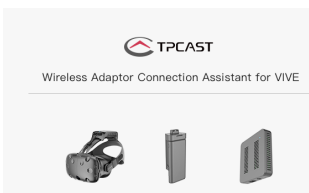
5、Enjoy wireless VR

In normal operation of wireless adaptor, the indicators of both transmitter and receiver end will change from fast blinking to normal light mode, HMD imaging function and manual operation shall be normal.

6. Instructions on setup of PC transmitter

Erection of PC transmitter is subject to the specific situation of proposed location, the setup plan, therefore different setup plan will be applied accordingly to different cases. We recommend to setup the PC transmitter where close to your VIVE laser locator (lighthouse) and turn the side with tags against the play area. As shown below:

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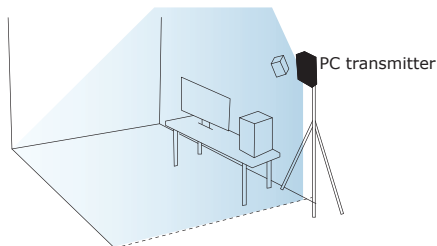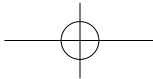
PC transmitter

If failure of connection still occurred, following the instructions from above, or you are experiencing sluggish video play or stopping in some angle, corner, we will suggest you placing the transmitter above the play area, as shown below:

PC transmitter
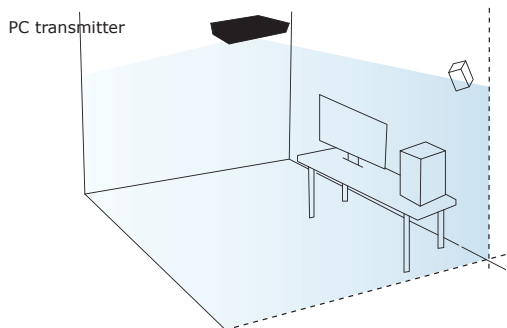
7. Safety and note

Safety:
User need to pay attention to safety within the play area since it's free of tangling by cables or wires. The user shall not bump into anything around the play area or the play is under watch.

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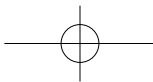
Cable:

In order to contain the damage may cause to the cables, it's suggested not pulling cable to fetch the adaptor or unplug any plugs or interfaces.

Heat rejection:

The adaptor will generate heat during normal operation and the temperature on the surface may rise up after long period operation. Please immediately stop operation and contact our customer service when abnormal heat generation occurred.

Battery safety:

The portable power bank as included in the adaptor package is power supply dedicated for this product, you must not replace with any non-TPCAST portable power bank, and any damage caused accordingly will waive the warranty of the adaptor. In order to mitigate the risk of fire hazard or combustion hazard, please do not disassemble, squeeze the portable power bank and shall not expose the power supply to environment exceeding 60℃, or toss into the fire or water.

Children use:

Children are not allowed to use this product, please keep this product in appropriate locations where beyond reach of children and please not grant access to children. If elder children are allowed to use this product, please do proceed under close watch of adults.

Recharging:

The portable power bank can be recharged through the household cell phone charged and charger greater than 2A is recommended in order to reduce the charging period. Nine to twelve hours will be needed to be fully charged. Charger greater than 2.4A shall not be used for recharging.

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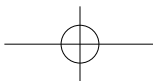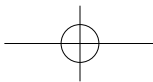
Service and maintenance

The adaptor is non-waterproof product, therefore attention shall be attached for proper protection including shall not use blower, air duct, etc. to dry the product when wet or the product may otherwise not be able to normally operating.

Please do not disassemble this product and avoid any surprised collision, otherwise, risk of electric shock, short circuit and fire hazard would be involved.

Please operate and maintain in an environment of temperature ranging from zero to forty degrees Celsius.

Please use the parts permitted only and shall not connect to any incompatible products or parts.

Please refer the local regulations on disposal of electronic wastes for proper waste management.

Please do not spread the small size objects the into the products through the surface vents.

Please do not clean this product with any irritating chemical, detergent, liquid detergent or aerosol.

8. Frequently Asked Questions

1、Connection issues

Why always failed the VR control connection tests?
① Check the test results and check the power, router whether is properly installed following the instructions, and energize.
② If still failed the tests after several try, re-install the portable power bank, router and the reboot the computer if necessary.
③ Relaunch the wireless adaptor connection assistant and retry, please contact the customer service if the problem is still not solved.

How to verify the pairing of receiver end and transmitter?
① Make sure the receiver and transmitter are connected and energized, and there is no obstacles in between, in compliance with setup requirements.
② Pair following the operation instructions, if the indicators switch from slow blinking mode to fast blinking mode for about 15 seconds after energized, then the pair is successfully

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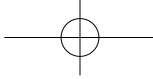
completed.

③ If still failed in pairing after repeating of step 2 hereinbefore, please contact the customer service.

If the VR is still not launched two minutes after the indicators (both receiver end and transmitter) switching to fast blinking mode, the indicators will automatically turn off and switch to standby mode in order to save energy. It will be automatically activated after connection and launching of VR.

How to connect the router? And connecting PC to Ethernet?

① Use the associated Ethernet cable to connect to the blue port of router and the PC.

② If Ethernet cable is used on PC to access to the Ethernet, then connect the existing Ethernet cable to the yellow port.

③ If PC access the Ethernet through wireless, please make sure normal operation of existing wireless (or normal access of wireless), then connect to the router through Ethernet cable which is to complete connection to the router without impairing on existing wireless access.

Why router is included in the adaptor package, may I use my own router?

TPCAST Wireless Adaptor for VIVE is globally the first version at the present, and the router is part of the adaptor. We will design built-in router in future products. Currently, this router is customized as well as optimized and exclusively to serve the TPCAST wireless adaptor for VIVE. For the concern of interruption may be imposed on the existing router, we not suggest using the existing router to connect to the TPCAST Wireless Adaptor for VIVE.

2、Abnormal problems during operation

Why frequently controller vibrating or automatic relocation is happening during playing?

Vibrating of manual controller is usually caused by the complicated ambient network condition, or caused by wireless channel jam which impair the wireless signal transmission.

① Firstly, check the location of router, we suggest placing on

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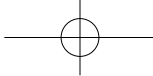
an open table or ground, and avoid locating in the corner, back of computer host as much as possible in order to keep out any obvious obstacle blocking the router and the adaptor. Check is the manual controller vibrating is mitigated.
② If not mitigated yet, we suggest you selecting the option of switching channel from the dropdown on the right bottom corner of connection assistant, may try several channels. If the problem is still not solved, please try in a different location.

Everything appears normal on the PC from the connection assistant tests to launching of Steam VR, however, why is there no content playing in the HMD view?
① Please check the indicators of receiver and transmitter, if the indicators are off, then check the connection of adaptor for VIVE and power supply. Unplug and re-plug power, wait for at least 10 seconds and the check the indicators again. If both indicators are in fast blinking mode, manually shut off the steam VR, reboot the Steam VR. Try to reboot the computer if the problem is still not solved.
② If after 10 seconds, the signal indicator is still in slow blinking mode, as the first priority, please check is there any obstacle blocking the receiver and transmitters, or repair the receiver end and transmitter, refer to section of operation instructions for details.
③ If the indictor light is normally on, please check the receiver of HMD and the HMD short HDMI cable is loose fall off.
④ If problem still not solved, please contact the customer service.

After wireless adaptor connection is successful, start Steam VR but it displays unready. Why does all device status icon in Steam VR display as gray?
It can return normal state by restarting VIVE HMD. Operation as below: Unplug and replug power connector (1-B) of VIVE HMD, or unplug and replug power connector of power box (1 - E). If still can't repair, please try to restart the PC.

Why view turn to black/screen turn off?
Off of screen or black screen is caused by the interruption of video transmission, as the first priority, please check the battery charge. If the charge of battery is adequate, it may caused by obstacles between the receiver and transmitter. If the signal indicator is in fast blinking mode, then wait shortly till the

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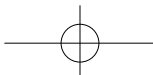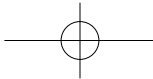
reconnected. If still not connected, please disconnect and shut off the connection assistant, reboot the adaptor for VIVE.

Why all of sudden the view turns to completely gray, there is no image at all?
A gray screen view is usually caused by disconnection of VR wireless control, please verify the battery charge, router connection & power supply. Check the connection assistant for any warning information. If disconnection occurred, please retry following the instructions.

System loading error or unable to load occurred in wireless connection assistant, how to handle?
It may be caused by not restarting PC according to prompt after uninstalled wireless adaptor connection assistant. Please uninstall the current client, restart PC, then reinstall client. The issue can be solved.

The connection assistant is used and successfully launched the steam VR, what should I do if sudden disconnection occurred in the middle of gaming?
①Check the connection assistant against any warning information.
② Reconnect as instructed.
③ Waiting during testing procedure and a prompt box saying waiting to restore will pop out after certain period, click to confirm. Wait till the tests completed or click on the option of returning to home page and start testing from the first step.
④ If it still not operating after completion of step three, you may exit the connection assistant and unplug the portable power, reboot the system.

After successful connection of adaptor, why does color disorder and distortion in imaging occur?
Color disorder, blurring and distortion are all cause by abnormal video transmission, please verify all cable/wires used for connection of VIVE and the adaptor for VIVE are original products of HTC and TPCAST. Verify all interfaces against any unstable or loose connection, try to unplug and plug all interfaces for next try. Please contact our customer service if the problem is still not

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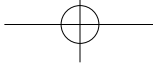
solved.

3、Other questions

When using the wireless adaptor connection assistant, steam VR is not launched after passing of all tests, what should I do?
Verify all settings including power box and router, may manually launch the Steam VR after verification.

Why the camera of my HMD can't work normally?
At present, TPCAST wireless adaptor for VIVE is the global first released version, the function is temporarily unavailable.

Can multiple TPCAST wireless adaptor for VIVE be used in the same area at the same time?
No. Currently, the version of TPCAST wireless adaptor for VIVE is for ordinary users, it temporarily does not support multiple users at the same time.

For a full charge portable power bank, how long can it last?
It can be continuously operating for about 5 hours.

How long will it take to be fully charged?
About nine to twelve hours through a 2A charger or longer with charger lower than 2A. Please do not use charger greater than 2.4A.

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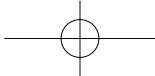
Status of indicators

Indicator	Location	Color	Status	Description
Video signal connection indicator	HMD receiver	Green	Off	Power off or system standby
			Slow blinking	To be paired
			Fast blinking	Successfully paired with the transmitter
			Normal light	Video in transmission
Video signal connection indicator	PC transmitter	Green	Off	Power off or system standby
			Slow blinking	To be paired
			Fast blinking	Successfully paired with the transmitter
			Normal light	Video in transmission
Power box lamp	Power box	Red	Off	Power off
			Blinking/ normal light	System in normal operation
Battery charge lamp	Portable power bank	Blue	Normal light	Each stands for 25% charge

Decoration of Conformity
"Hereby, [Name of manufacturer/ retailer], declares that this [type of equipment] is in compliance with the essential requirements and other relevant provisions ofDirective 2014/53/EU.

2.4G spectrum: 2.4-2.4835 GHz Power: 15dBm
5G spectrum: 5.15-5.25GHz Power: 13dBm
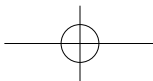
TPCAST WIRELESS ADAPTOR for VIVE LIMITED WARRANTY

PLEASE READ THIS LIMITED WARRANTY CAREFULLY TO UNDERSTAND YOUR RIGHTS AND OBLIGATIONS. THIS LIMITED WARRANTY CONTAINS A MANDATORY ARBITRATION CLAUSE WITH A CLASS ACTION WAIVER.
BY USING YOUR TPCAST PRODUCT OR ACCESSORY, YOU AGREE TO THE LIMITED WARRANTY,INCLUDING THE MANDATORY ARBITRATION CLAUSE AND CLASS ACTION WAIVER BELOW.
IF YOU DO NOT ACCEPT THIS LIMITED WARRANTY, DO NOT USE YOUR TPCAST PRODUCT.INSTEAD, PLEASE RETURN IT TO THE RETAILER FROM WHOM YOU PURCHASED IT WITHIN THE RETAILER'S RETURN PERIOD.
THIS PRODUCT IS FOR PERSONAL, NON-COMMERCIAL USE ONLY. WARRANTY COVERAGE IS VOID IF USED FOR COMMERCIAL PURPOSES.

DEFINITIONS
The following definitions apply to this Limited Warranty:
1. "Product" means the TPCAST WIRELESS ADAPTOR FOR VIVE system, which includes PC Transmitter, HMD Receiver, Power Box, Portable power bank, Dedicated cable for long distance connection, HDMI short connection cable, router and power charger for router provided in the box at the time of original purchase from an authorized Retailer.
2. "Normal Use Conditions" means common end-user use under normal home conditions in accordance to the instructions provided with the Product or Accessory or posted online.
3. "Accessory" or "Accessories" means other secondary component(s) that are included in the box with theProduct at the time of sale, which includes: Portable power bank, Dedicated cable for long distance connection, HDMI short connection cable, router and power charger for router; provided that the component was manufactured by or for TPCAST and can be
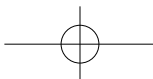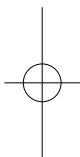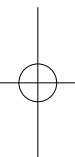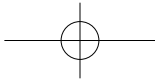
identified by the "TPCAST" trademark, tradename, or logo affixed to the component as originally supplied.

4. "Retailer" means a business that sells goods directly to end users, including those with a physical and/or online presence.

5. "State" means a State, the District of Columbia, and any other United States territory or possession.

6. "Warranty Period" means twelve (12) months from the date You purchased the Product from an authorized Retailer.

7. "You" or "Your" means the original purchaser and/or original end-user of the Product.

## WHAT IS COVERED BY THIS LIMITED WARRANTY?

During the Warranty Period TPCAST warrants that the Product or Accessory will be free from defects in material and workmanship if used under Normal Use Conditions.

This Limited Warranty is given only to You, and may not be sold, assigned, transferred, or given in full or in part to any subsequent purchaser or acquirer of the Product or Accessory or any other person. This Limited Warranty gives You specific legal rights, and You may also have other rights which vary from State to State.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY?

This Limited Warranty does not apply other than to the Product or Accessory. It therefore does not apply to any non-TPCAST equipment or any software whatsoever, whether developed by TPCAST or a third party, even if intended or labelled as for use with the Product. Third party manufacturers, suppliers, or publishers may provide warranties for their own products and You may contact them directly for service.

EVEN WITH RESPECT TO THE PRODUCT OR ACCESSORY YOU PURCHASED, THIS LIMITED WARRANTY SHALL NOT APPLY:
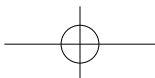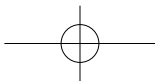
1. if the Product or Accessory serial number, the date code, the water indicator, or the warranty seal (voidlabel) has been removed, erased, defaced, or altered, or is illegible;

2. to any deterioration of the cosmetic appearance of the Product or Accessory due to normal wear and tear;

3. to consumable parts, such as batteries or protective coatings that are reasonably expected to diminish over time, unless failure has occurred due to a malfunction;

4. to malfunctions caused by the battery, if improperly installed by You or another person, if the seals of the battery enclosure or the cells are broken or show evidence of tampering, or if used in equipment other than that for which it has been specified;

5. to malfunctions caused by electrical surges or other electrical current problems that are not the fault of the Product or Accessory;

6. to use not in accordance with the user manual or not under Normal Use Conditions;

7. to rough handling; use outdoors; exposure to liquids; dampness or extreme thermal or environmental conditions or a rapid change in such conditions; corrosion; or oxidation;

8. to use for commercial purposes, as the Product is intended only for personal entertainment purposes;

9. to defects, conditions, or other issues caused by or resulting from unauthorized modifications or connections or unauthorized opening, repair by use of unauthorized spare parts, or repair by an unauthorized person or location;

10. to accidents, forces of nature, or other actions beyond the reasonable control of TPCAST (including but not limited to deficiencies in consumable parts) unless the defect was caused directly by a malfunction;

11. to physical damage to the surface of the Product or Accessory, including but not limited to cracks or scratches on the surfaces of the Product or Accessory, including any screen or lens;
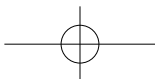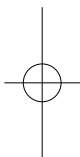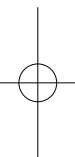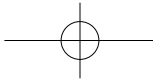
12. to any computer or other product to which the Product may connect. TPCAST does not warrant that the operation of the Product or Accessory will be uninterrupted or error-free;

13. where the software loaded on the Product, including but not limited to the operating system and/or firmware, needs to be upgraded, if such updates can be loaded by You;

14. to any Product in which the operating system and/or firmware has been altered, including any failed attempts to alter the operating system, regardless of whether such modifications are authorized, approved,or otherwise sanctioned by TPCAST; or

15. to malfunctions caused by unplugging any cable from or otherwise powering off the Product or your computer during a firmware update; or

16. to malfunctions caused by the use of the Product or Accessory with or connection of the Product to an accessory not approved or provided by TPCAST or used in any way other than its intended use and where such defect is not the fault of the Product itself. Use of non-TPCAST accessories may void this Limited Warranty.

This Limited Warranty is valid and enforceable only in the United States where the Product and Accessories are intended to be sold. A Product or Accessory can only be returned to be repaired under this Limited Warranty in the country where it was purchased. Warranty service availability and response times may vary from country to country.
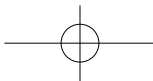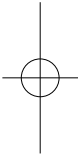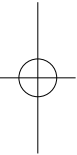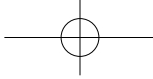
Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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 equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body."