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**Preface**

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## Copyright Notice

The material in this document is the intellectual property of Micro-Star International Co., Ltd. We take every care in the preparation of this document, but no guarantee is given as to the correctness of its contents. Our products are under continual improvement and we reserve the right to make changes without notice.

## Trademarks

All trademarks are the properties of their respective owners.

## Revision History

- ▶ Version: 1.0
- ▶ Date: 10, 2016

## FCC-B Radio Frequency Interference 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 radiates 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.

### NOTE

- ▶ The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- ▶ Shield interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

## FCC Conditions

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- ▶ This device may not cause harmful interference.
- ▶ This device must accept any interference received, including interference that may cause undesired operation.

## CE Conformity



This device is in compliance with the essential safety requirements and other relevant provisions set out in the European Directive.

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## Battery Regulations



European Union: Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.



廢電池請回收

Taiwan: For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

California, USA: The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California.

For further information please visit: <http://www.dtsc.ca.gov/hazardouswaste/perchlorate/>

### Safety Guideline for Using Lithium Battery

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

## WEEE Statement



European Union: Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

## Chemical Substances Information

In compliance with chemical substances regulations, such as the EU REACH Regulation (Regulation EC No. 1907/2006 of the European Parliament and the Council), MSI provides the information of chemical substances in products at:

[http://www.msi.com/html/popup/csr/evmtprrt\\_pcm.html](http://www.msi.com/html/popup/csr/evmtprrt_pcm.html)

## RoHS Statement

### Japan JIS C 0950 Material Declaration

A Japanese regulatory requirement, defined by specification JIS C 0950, mandates that manufacturers provide material declarations for certain categories of electronic products offered for sale after July 1, 2006.

[http://www.msi.com/html/popup/csr/cemm\\_jp.html](http://www.msi.com/html/popup/csr/cemm_jp.html)

[http://tw.msi.com/html/popup/csr\\_tw/cemm\\_jp.html](http://tw.msi.com/html/popup/csr_tw/cemm_jp.html)

### India RoHS

This product complies with the "India E-waste (Management and Handling) Rule 2011" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

### Turkey EEE regulation

Conforms to the EEE Regulations of the Republic Of Turkey.

### Ukraine restriction of hazardous substances

The equipment complies with requirements of the Technical Regulation, approved by the Resolution of Cabinet of Ministry of Ukraine as of December 3, 2008 № 1057, in terms of restrictions for the use of certain dangerous substances in electrical and electronic equipment.

### Vietnam RoHS

As from December 1, 2012, all products manufactured by MSI comply with Circular 30/2011/TT-BCT temporarily regulating the permitted limits for a number of hazardous substances in electronic and electric products.

## **Upgrade and Warranty**

For any further information on the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product if users do not understand the component location or how to assembly/disassembly, since it may cause the product damaged. It is recommended that user contact the authorized dealer or service center for product service.

## **Acquisition of Replaceable Parts**

Please be noticed that the acquisition of replaceable parts (or compatible ones) of the product users purchased in certain countries or territories may be fulfilled by the manufacturer within 5 years at most since the product has been discontinued, depending on the official regulations declared at the time. Please contact the manufacturer via <http://www.msi.com/support/> for the detailed information about the acquisition of spare parts.

## Safety Instructions

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- Read the safety instructions carefully and thoroughly.
  - All cautions and warnings on the equipment or user's manual should be noted.
- 



Keep this equipment away from humidity and high temperature.

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Do not cover the ventilators of the equipment to prevent the equipment from overheating.

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- Do not leave the equipment in an unconditioned environment with a storage temperature above 60°C (140°F) or below 0°C (32°F), which may damage the equipment.
  - This equipment should be operated under maximum ambient temperature of 35°C (95°F).
- 



Place the power cord in a way that people are unlikely to step on it. Do not place anything on top of the power cord.

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Always keep the strong magnetic or electrical objects away from the equipment.

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Never pour liquid onto the equipment, since it may damage the equipment or cause an electrical shock.

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If any of the following situations arises, get the equipment checked by a service personnel:

- The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment has not worked well or you can not get it work according to User's Manual.
  - The equipment was dropped and damaged.
  - The equipment has obvious signs of breakage.
- 

#### Green Product Features

- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy



#### Environmental Policy

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.
  - Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
  - Visit the MSI website and locate a nearby distributor for further recycling information.
  - Users may also reach us at [gpcontdev@msi.com](mailto:gpcontdev@msi.com) for information regarding proper disposal, take-back, recycling, and disassembly of MSI products.
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## MSI Highlights

Explore more exclusive features of MSI notebooks for all series, please visit:  
<http://www.msi.com> and <https://www.youtube.com/user/MSI>

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### How to use SteelSeries Engine 3 on MSI notebooks

MSI collaborates with SteelSeries to develop an exclusive SteelSeries Engine 3 in gaming notebooks. SteelSeries Engine 3 is the Apps to combine frequently used functions for gamers in multiple devices management.

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### MSI GAMING Notebook is the first gaming Notebook featuring XSplite Gamecaster live stream app!

MSI gaming notebook features XSplite Gamecaster, the easiest live streaming and recording solution for gamers. See the basic tutorial of XSplite Gamecaster.

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### Sound by Dynaudio on MSI Gaming Notebooks

MSI partners with Dynaudio, the Danish sound specialists, in its gaming notebooks to present you an authentic fidelity audio performance.

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### Color Your Life with True Color

MSI has partnered with Portrait Displays, Inc. in developing more accurate, high precision panel quality. MSI True Color Technology guarantees that each panel in a MSI notebook comes with the finest precision in color.

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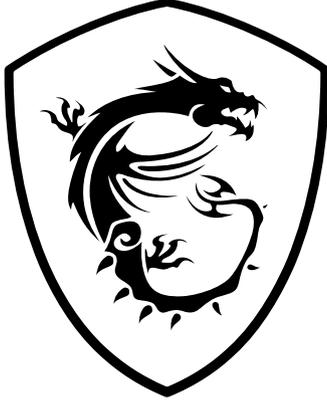


### Tutorial: How to use Nahimic

Discover how to use Nahimic and its three features: Nahimic Audio Effects, Microphone Effects and HD Audio recorder.

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**Introductions**

Congratulations on becoming an user of this equipment, the finely designed equipment. You will have a delightful and professional experience in using this exquisite equipment. We are proud to tell users that this equipment is thoroughly tested and certified by our reputation for unsurpassed dependability and customer satisfaction.

## Unpacking

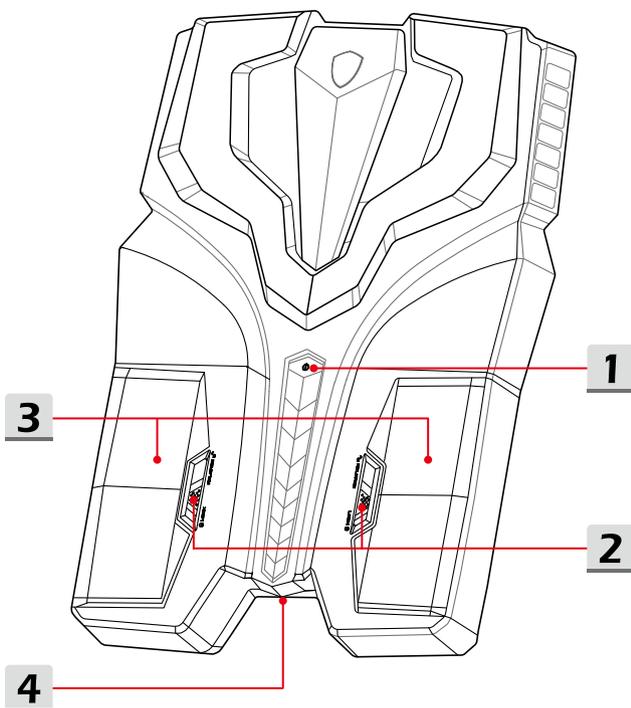
First, unpack the shipping carton and check all items carefully. If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packing materials in case you need to ship the unit in the future. The package should contain the following items:

- ▶ VR backpack PC
- ▶ Quick start guide
- ▶ AC/DC adapter and AC power cord
- ▶ 3-in-1 cable for VIVE

## Product Overview

This section provides the description of basic aspects of the equipment. It will help you to know more about the appearance of this equipment before using it. Please be aware that the figures shown here are for reference only.

### Front Side View



## 1. Power Button / Power LED

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**Power**

### **Power Button**

- Use this button to turn the equipment power ON and OFF.
- Use this button to awake the equipment from the sleep state.
- Note: The equipment can also be awakened by any mouse or keyboard activity.

### **Power LED**

- LED glows when the equipment power is turned on.
  - LED goes off when the equipment is turned off.
- 

## 2. Battery Lock/ Release Button

Battery cannot be moved when the button is positioned on lock status. Once the button is slid to release position, the battery is removable.

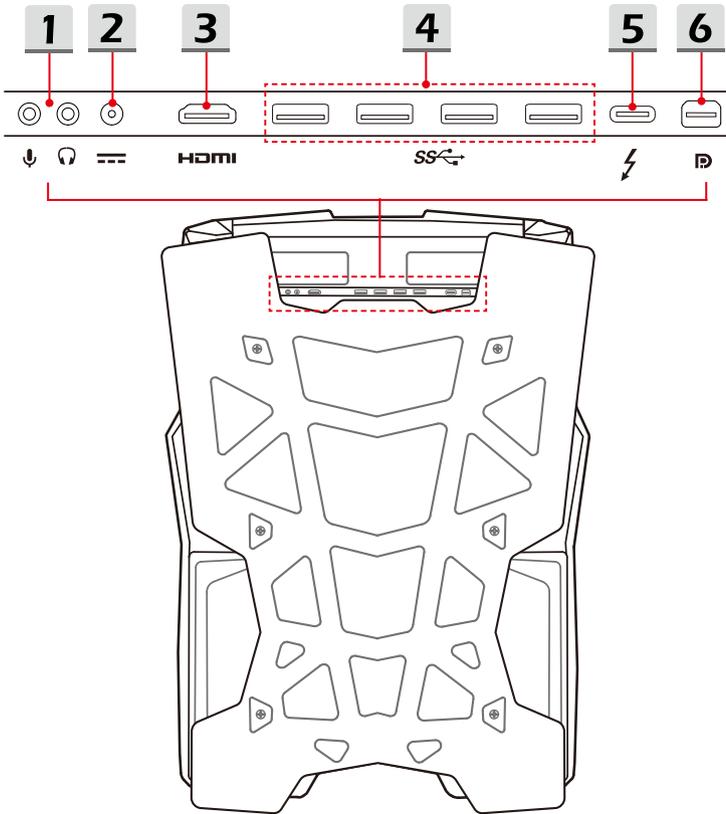
## 3. Battery Pack

This device will be powered by the battery pack when the AC/DC adapter is disconnected.

## 4. Power Connector

This connector is to connect the AC/DC adapter and supply power for the device.

## Rear Side View



## 1. Audio Port Connectors

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### Microphone

Used for an external microphone.

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### Headphone

A connector for speakers or headphones.

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## 2. Power Connector

This connector is to supply power for your VR headset.

## 3. HDMI Connector

HDMI (High-Definition Multimedia Interface) technology is the industry-leading interface and de-facto standard connecting high-definition (HD) and ultra high-definition (UHD) equipment.

## 4. USB 3.0 Port

USB 3.0, the SuperSpeed USB, delivers the higher interface speeds for connecting various devices, such as storage devices, hard drives, or video cameras, and offers more advantages over high-speed data transferring.

## 5. Thunderbolt (Type-C)

Thunderbolt™ 3 supports up to 40Gbps data rate, dual 4K displays monitor output, USB3.1 connection, and portable charging power up to 5V/3A.

## 6. Mini-DisplayPort

The Mini-DisplayPort is a miniaturized version of the DisplayPort, with a suitable adapter, the Mini-DisplayPort may be used to drive displays with a VGA, DVI or HDMI interface.

# Specifications

The specifications listed here is reference only, and may change without notice. The actual products sold are different from areas.

Visit MSI official website at [www.msi.com](http://www.msi.com), or contact the local retailers to learn the correct specifications of the product user purchased.

Physical Characteristic	
Dimension	291.9 (W) x 409.3 (D) x 71 (H) mm
Weight	3.55 kg
CPU	
Package	BGA
CPU Processor Type	Intel® SKL-H K Series CPU
Core Chip	
PCH	Intel® HM170/ CM236
Memory	
Technology	DDR4 2400MHz
Memory	SO-DIMM slots x 2
Maximum	Up to 32GB
Power	
AC/DC Adapter	230W, 19.5V Input: 100~240V, 50~60Hz Output: 19.5V $\equiv$ 11.8A 
RTC Battery	Yes
Storage	
SSD	M.2 SSD NVMe PCI-e

### **I/O Port**

USB	x 4 (USB 3.0)
Thunderbolt™ 3	x 1, USB 3.1, Type-C interface, 4K@60Hz output supported 5V/3A output charging optionally supported
Mic-in	x 1
Headphone-out	x 1 (S/PDIF-Out supported)
HDMI	x 1, 4K@60Hz output supported
Mini-DisplayPort	x 1, 4K@60Hz output supported

### **Communication Port**

LAN	Optionally supported by USB dongle
Wireless LAN	Supported
Bluetooth	Supported

### **Video**

Graphics	NVIDIA® GeForce® discrete graphics supported
VRAM	GDDR5, based on GPU structure



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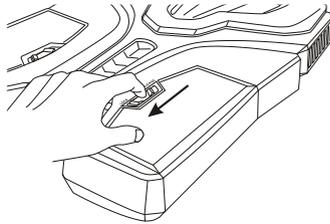
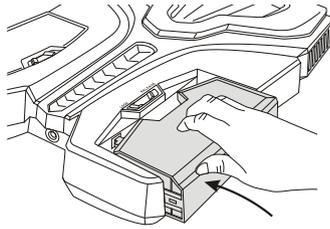
**How To Get Started**

## Battery Usage

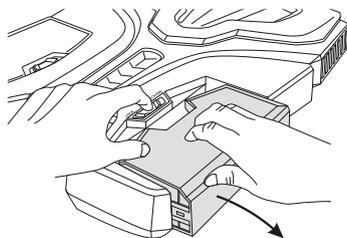
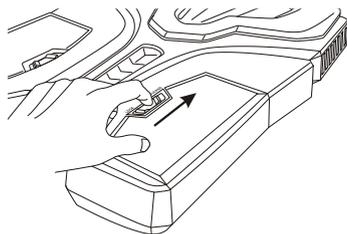
Users can hot-swap one battery without using an adaptor. However, it is necessary to have your VR backpack PC plugged to a power socket before removing both batteries.

### Install the Battery

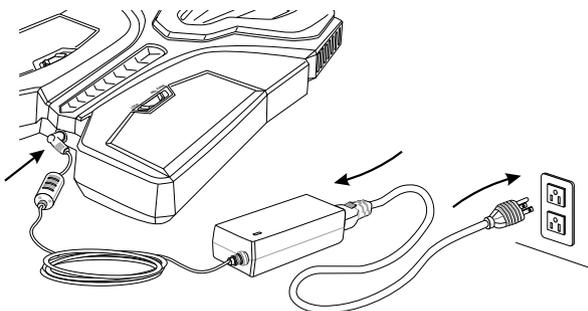
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## Remove the Battery



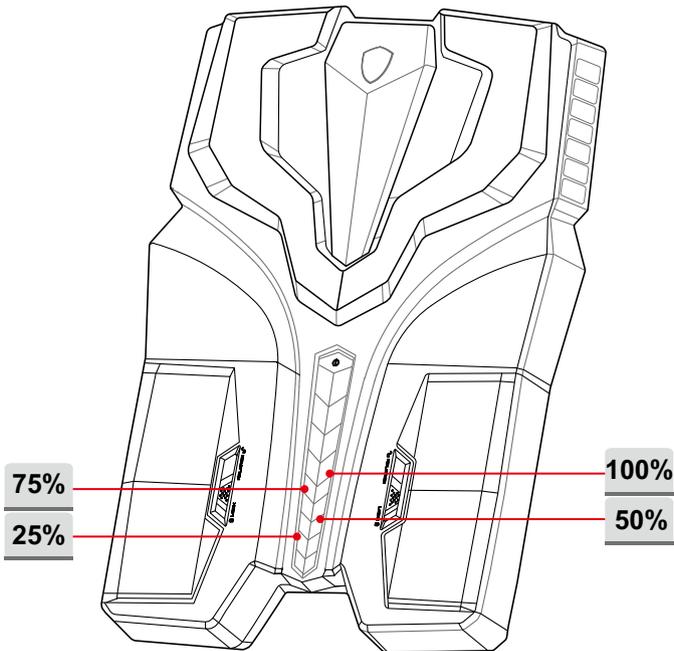
## Connect the VR Backpack PC to a Power Socket



## Battery Status

The VR backpack PC comes with battery indicators, the number of lights illuminated next to the mount shows the battery life percentage.

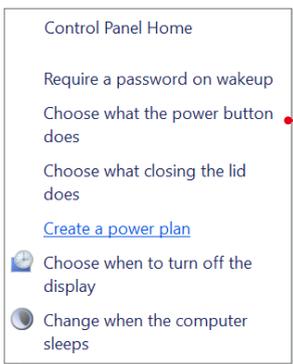
Light	Percentage
1	25%
	Note: The light flashes indicates low battery condition.
2	50%
3	75%
4	100%



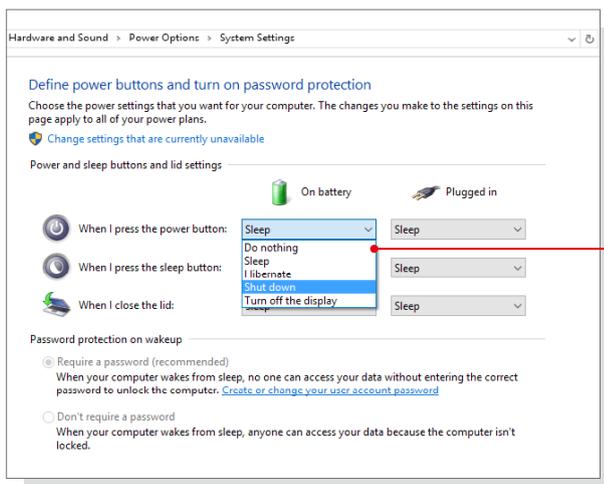
## How to Define Power Button

It is suggested that user to define power buttons before having all your VR gears ready. User can choose whether to shut down or sleep when pressing the power button.

1. Find [Control Panel], select [Power Options] and then click [Choose what the power button does].
2. Choose [Sleep] or [Shut down] in the drop-down list.

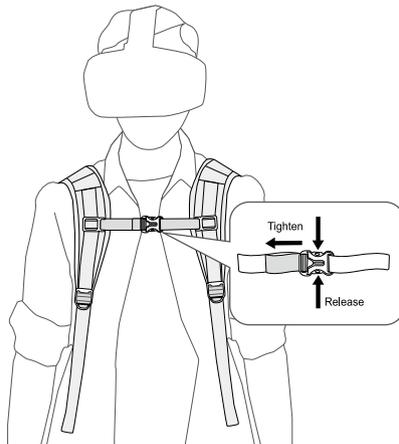
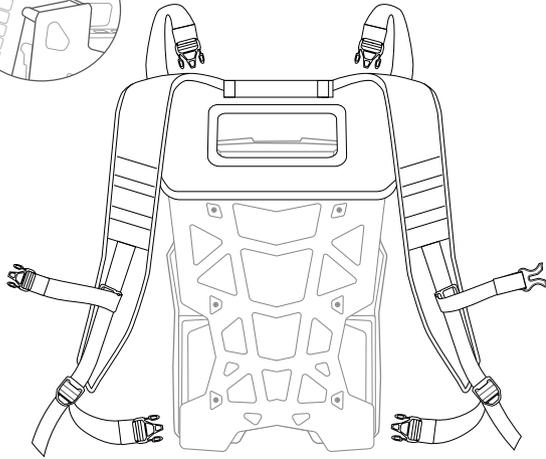


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## How to Wear Your VR Backpack PC



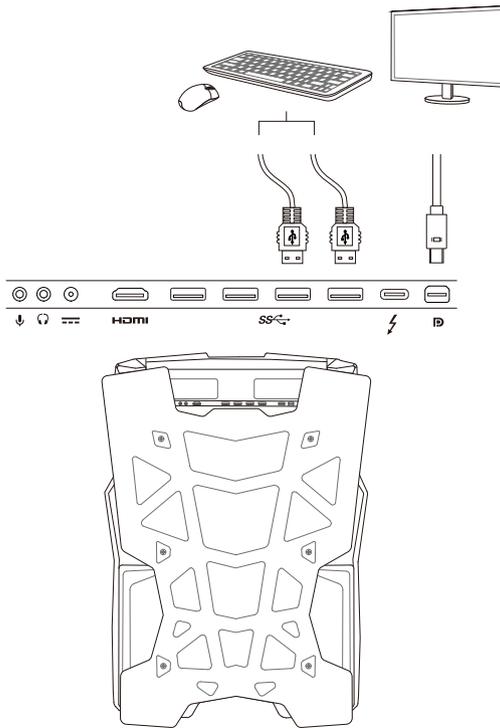
# How to Set Up the VR Backpack PC for the First Time

## Connect a Monitor to the VR Backpack PC

Have the VR backpack PC connected to a monitor through mini-DisplayPort and then have it connected to AC power. Power on the VR backpack PC. DO NOT connect your VR headset yet.

**Note:**

- DO NOT have your VR headset and monitor connected simultaneously during first boot.
- Once users change the settings and scenarios, the remote configuration needs to be reset.
- Refer to your VR device supplier's guide for detailed settings.



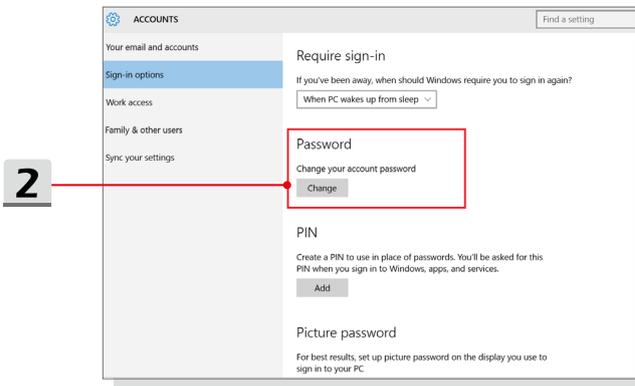
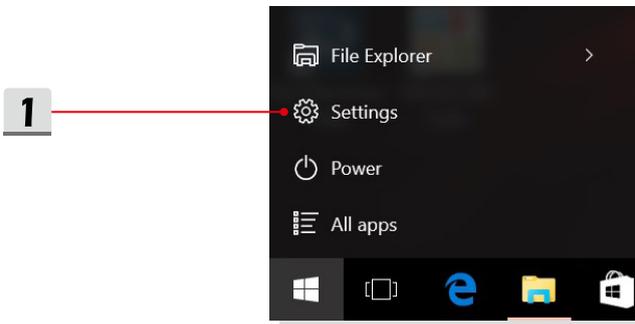
# Configure Remote Desktop Connection on Your Windows 10 Pro System

The following configuration shows you how to enable remote desktop connections on your Windows 10 Pro computer. This feature is only available for Windows 10 Pro only.

Users can also consider using Miracast or Wireless HDMI as alternative solutions. For other operating system, refer to "Project to a wireless display with Miracast" on Microsoft website for details.

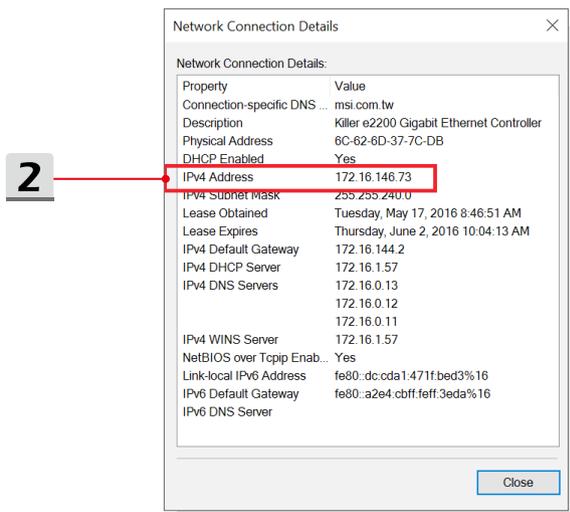
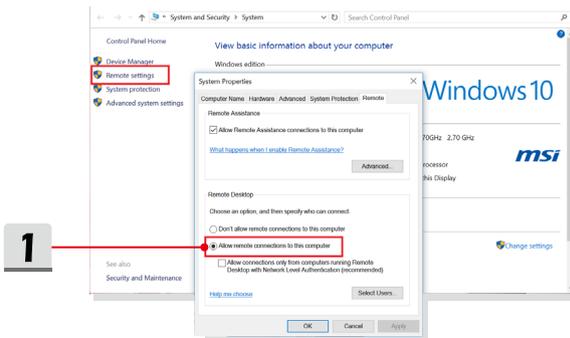
► Set password

1. Click the  icon, select [Settings].
2. Go to [Accounts/ Sign-in options] to set password.



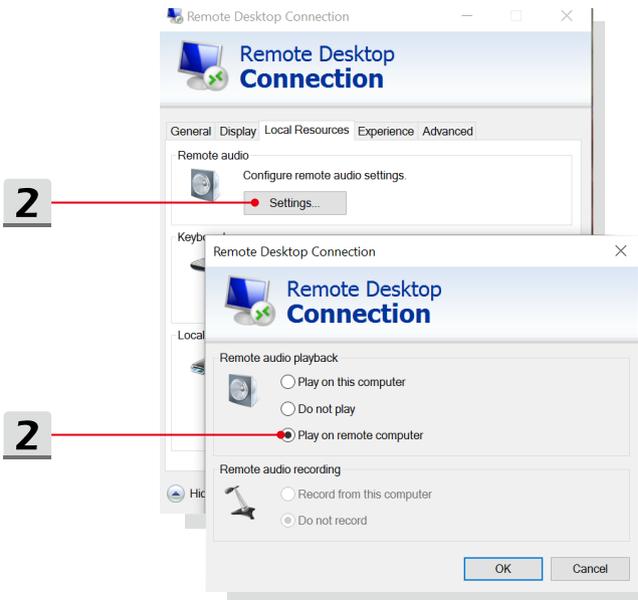
► Allow remote connections

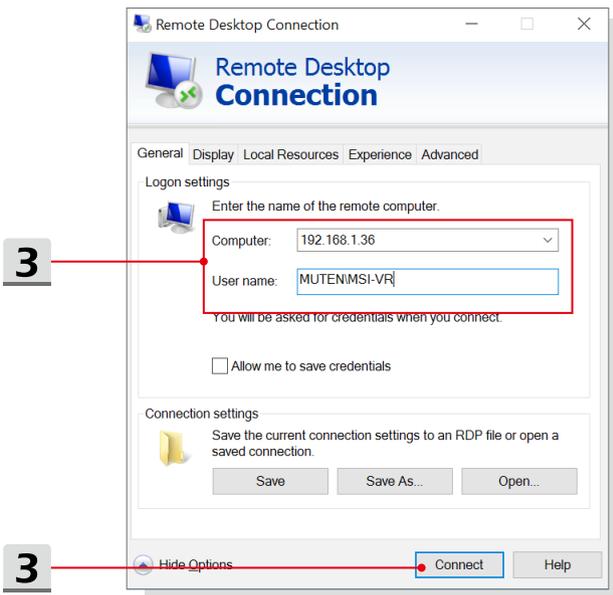
1. Open [System], go to [Remote settings], select [Allow remote connections to this computer] to enable remote desktop.
2. Connect the VR backpack PC to a wireless router, copy the IP address from Windows Network and Sharing Center. Connect remote client PC to the same wireless router. Make sure the VR backpack PC and the remote PC are on the same workgroup.



► Set up remote desktop connection

1. Activate Remote Desktop Connection on the client computer, and click [Show Options].
2. On [Local Resources] tab, click [Settings] and check [Play on remote computer].
3. Enter the IP address and user name of the VR backpack PC on [General] tab, click [Connect] to enter the password.





## Connect Your VR Headset to the VR Backpack PC

Connect your VR headset to VR backpack PC and disconnect the monitor.

Note: If you're a HTC VIVE user, replace the VIVE headset cables with the 3-in-1 cable for VIVE for immersive VR experience.

Activate VR software from the remote client PC. You are now ready to explore the world of virtual reality.

