

# User Manual



***Developed by VRSim***

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## Safety Information

Please follow the instructions outlined in this document and product-relevant user guides from the manufacturer to take care of the equipment.

This product and its packaging are updated regularly. The functions and contents of the standalone headset may be upgraded in the future. Therefore, the content, appearance and functionality listed in this manual and product packaging are subject to change and may not reflect the final product. These instructions are for reference only.

### Important Notes

Read the following warnings and information carefully before using the VR (Virtual Reality) headset. Follow all guidelines presented here and in the accompanying user guides, manuals, and documents. If you allow others to use this product, you shall be responsible for ensuring that every user knows and follows all safety and operational instructions.

Always operate VRNA with a partner who is monitoring you and your environment to maximize safety while immersed in the virtual environment.

This product is designed to accommodate most prescription glasses. Take care to wear the VR headset in a manner in which the VR headset lenses do not rub or impact your prescription lenses. To reduce the risk of discomfort, the inter-pupillary distance (IPD) should be adjusted to suit each user. See [Wearing the VR Headset](#) for more information.

### Health and Safety Warnings

Ensure that this product is used in a safe environment. By using this product to view an immersive virtual reality environment, users will not be able to see the physical environment. Move only within the safe area that you have established, and keep your surroundings in mind. Always use the provided controller lanyards when operating the controllers.

Do not use near stairs, windows, heat sources or other hazardous areas. Remove any trip or slip hazards from the VR workspace prior to use. Do not use the equipment near flammable articles and chemical agents. Do not store or transport the product or its accessories in the same container as flammable liquids, gasses, or substances. Do not use the product when walking, cycling, driving, or other situations that require full visibility. Do not use the headset when you are drowsy or fatigued.

Remain conscious of your real-world environment and do not rely on anything presented in the virtual environment to provide structure or stability while you perform any activities (e.g., do not lean, sit, or put your weight on virtual objects, as they do not exist physically in the real world).

Do not use the headset while it is actively charging. Using VR with an attached cable in this manner can damage the headset or create unnecessary hazards for you or your surroundings.

Take breaks as needed or at a recommended interval of every 30 minutes of continuous use.

Confirm that you are in good health before using. Consult a doctor before using if you are pregnant, elderly, or susceptible to or have been diagnosed with serious physical, mental, visual, or heart problems, including any of the health effects mentioned in this manual. People can experience seizures when exposed to certain visual images, including flashing lights or patterns. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause “photosensitive epileptic





seizures.” Seizures may cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects. If you have a history of epilepsy or seizures, avoid using this product.

Misuse or overuse of this product may injure your eyes or affect visual function. Overexposure to video and flashing light may cause or aggravate the following health effects to light-sensitive users:

- Eye disease and/or injury, Glaucoma
- Epileptic (and other) Seizures
- Heart disease or high blood pressure

Stop using the headset immediately and consult your physician if you experience any of the following symptoms:

- Double vision or inability to focus on the display
- Excessive sweating, loss of balance, impaired hand-eye coordination, nausea, or other similar motion sickness symptoms
- Headaches or dizziness
- Aches and pain in the neck or shoulders
- 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 discomforts

See “Policies” (below) and the Pico Neo 3 Pro User Manual (a copy of which is located here: <https://portal-cna.vrna.net/help>) for additional health and safety warnings.

Additionally, when casting the headset video to an external display (TV, projector, monitor), users who have a history of epilepsy, seizures, or motion sickness may want to avoid watching the cast. When casting to an external display, it is recommended that the user wearing the headset move and rotate more slowly to reduce sudden movements, which can aggravate the possibility of motion sickness.

## Headset Safety Precautions

Avoid exposing the headset and its lenses to direct sunlight or intense/high-powered lighting. Adjust the headband so the headset is secure and will not fall off in use. Do not use the headset if temperature is below 32°F/0°C or above 104°F/40°C or in wet, humid, dusty or smoky areas. Avoid dropping or impacts to the headset. If the headset is damaged contact your local distributor.

There are no user serviceable parts. Only qualified service personnel should perform any repair on this product. Please see the included headset manual for further precautions regarding the use of the VR headset.

## Impact on Medical Devices

Only use the product in areas approved as safe for wireless equipment use in accordance with the equipment manufacturer’s guidelines.

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

Keep a distance of at least 6 inches or 15 centimeters from the implanted medical devices (such as pacemakers, cochlear implants, etc.) when this product and any accessories are connected. Stop using the headset and/or its accessories if you observe a persistent interference with your medical device.



## User Software License Agreement

Before using the product, please read the software license agreement carefully. When choosing to use the product, you agree to the terms set forth by the license agreement.

## Policies

More information about VRSim's products and policies, please visit VRSim's official website:

<https://vrsim.com/>

VRNA product policies are available at: <https://support.vrna.net/>

For information about Pico's products and policies, please visit Pico's official website:

<https://www.picoxr.com/>

Privacy Policy: <https://business.picoxr.com/us/legal/privacy-policy>

EULA: <https://business.picoxr.com/us/legal/service-agreement>

Health and Safety: <https://business.picoxr.com/us/legal/health-and-safety-warnings>



## Updates and Maintenance

Updates and maintenance will occur automatically while the device is connected to a wireless network. You will be informed if any additional actions are required to complete or access the update. The VR headset **must** be charged and connected to Wi-Fi® to receive updates.

VRSim will attempt to notify you of major changes, required maintenance, and any related impacts of outages. Information about updates and maintenance will be available on <https://www.vrna.net/>. For additional information or questions, contact VRSim or your VRSim-authorized distributor.

Additional support resources are available on the VRNA website at <https://support.vrna.net>



Please contact us if you have any questions or concerns that are not met by the provided resources.

[www.vrsim.com](http://www.vrsim.com) | 860-893-0080 | [support@vrsim.net](mailto:support@vrsim.net)



## Package and Contents

The software applications available and number of VRNA units, or headsets, in your order will vary depending on what selections were made when placing the order.

Each VRNA unit, or headset, comes boxed with:

- **1 VR Headset** (with group symbol sticker)
- **2 Controllers** (1 Left, 1 Right, each with corresponding group symbol sticker)
- **2 Controller Lanyards** (pre-installed on the Controllers)
- **1 Charging Cable** (USB-C to USB 2.0 Data Cable)
- **1 AC Adapter** (for use with the Charging Cable)
- **VRNA CNA Software Application** (pre-installed, depending on purchase selections)
- **VRNA EMS Software Application** (pre-installed, depending on purchase selections)
- **Printed “Pico Neo 3 Pro” User Manual**

*Note: Each unit's headset and controllers will be labeled with a group symbol sticker (e.g. an outline of a star or solid colored circle shape). These symbols are intended to help you know, at a glance, which controllers are paired with which headset. See [Turning it On/Off](#) for more information.*

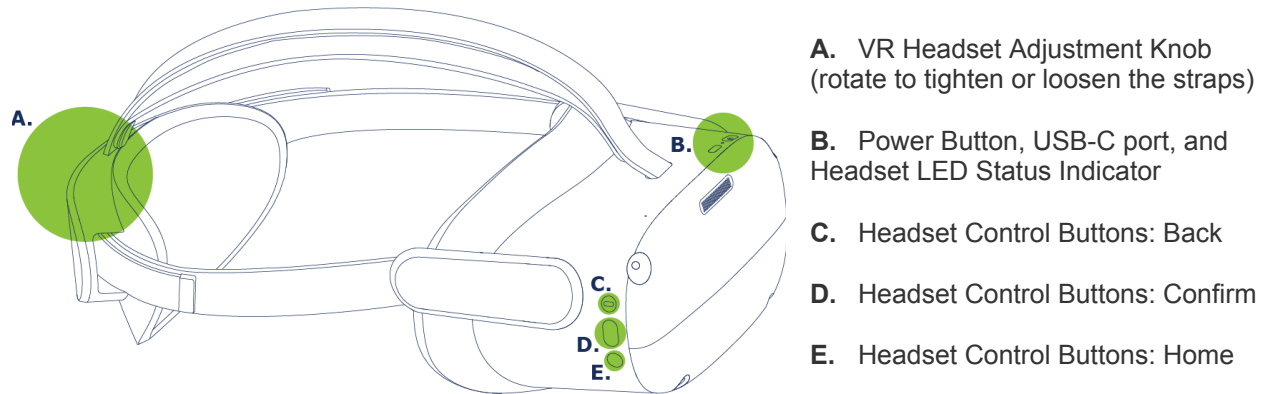
Each initial VRNA order also includes:

- **1 “Quick Start” Classroom Poster**
- **1 Teacher's Packet with:**
  - **1 Printed “VRNA User Manual”** (*this document*)
  - **1 Printed “Getting Started with VRNA”**
  - **1 Printed “VRNA Safety Bulletin”**
  - **1 Printed “Privacy Policy”**
  - **1 Printed “End User License Agreement”**
  - **1 Printed “Terms of Sale”**

## Hardware Controls

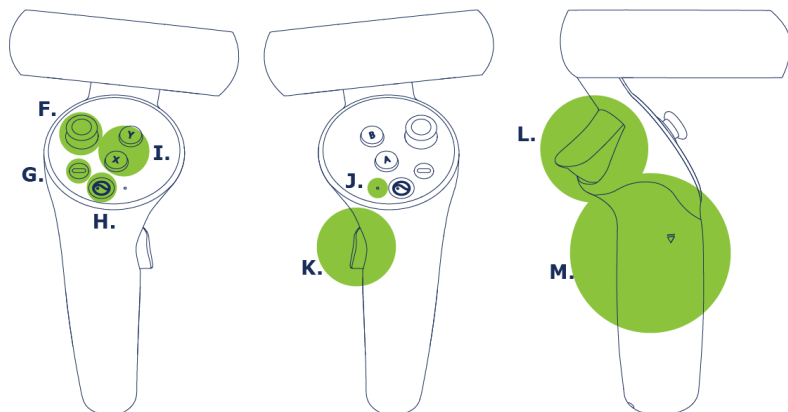
VRNA uses a simplified control scheme. Users will use the trigger buttons (G) on the controllers to confirm selections and interact with the environment. See the following hardware diagrams for details.

- **Headset:** Power, Back, Confirm, Home, Volume (+/-).
- **Left Controller:** Joystick, X, Y, Home, Back, Grip, and Trigger.
- **Right Controller:** Joystick, A, B, Home, Back, Grip, and Trigger.

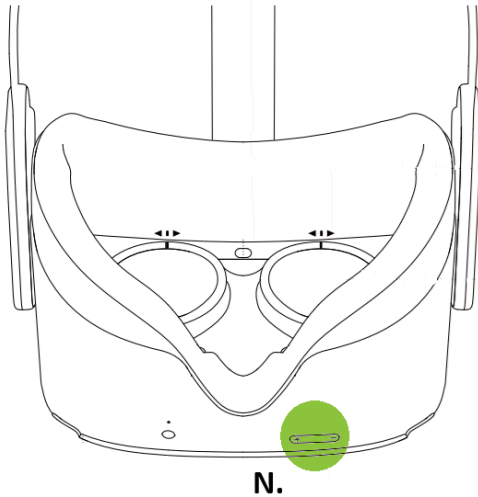


**Pictured:** VR Headset (Pico Neo 3 Pro)

- F.** Controller Thumbstick
- G.** Back
- H.** Home
- I.** Controller Control Buttons: X and Y (left controller only), and A and B (right controller only)
- J.** Controller LED Status Indicator
- K.** Controller Trigger (Grip)
- L.** Controller Trigger (Rear)
- M.** Controller Battery Cover



**Pictured:** Left Controller (front),  
Right Controller (front),  
Right Controller (back)



**N.** Volume Control Buttons

## Technical Specifications

**HMD (Headset):** Pico Neo 3 Pro

**Weight:** 1.4 lbs (620g)

**Display:** 4k, 3664 x 1920 LCD Screen (PPI 773)

**Lens and FoV:** Fresnel 98°

**Refresh Rate:** 72/90Hz

**CPU:** Qualcomm Snapdragon XR2

**Storage:** 256GB

**RAM:** 6GB

**Connectivity:** 2.4 & 5GHz 2X2MIMO 11ax (Wi-Fi 6), and Bluetooth 5.1

**Charging AC Adapter Input Power:** 100-240V, 50/60Hz, 0.5A

**Batteries:** Each controller contains 2 AA batteries. The HMD (Headset) contains a rechargeable lithium-ion battery (20.4Wh, 3.85V, 5300mAh, 1 cell, 74±2 grams).

**Operating Environment:** 32°F/0°C - 104°F/40°C. Indoors. Avoid wet, humid, dusty or smoky areas

**Hardware:** Controller (2), Controller Lanyard (2), USB-A 2.0 to USB-C Data Cable (1), AC Adapter (1)



## For First-Time Users

*Note: This section outlines some of the basic concepts and best-practices that users should know before using VRNA. For specific guidance relating to using VRNA applications, see [Using VRNA](#).*

Always operate VRNA with a partner who is actively monitoring the safety and environment of the individual wearing the headset. Remain conscious of your real-world environment and do not rely on anything presented in the virtual environment to provide structure or stability while you perform any activities. Do not use the headset while it is actively charging. Using VR with an attached cable in this manner can damage the headset or create unnecessary hazards for you or your surroundings. Always use the provided controller lanyards when operating the controllers. Take breaks after completing activities and spend the time reflecting on the experience, your objectives, and the feedback received.



If you run into technical issues, scan the QR code, shown above, to access our online support website at <https://support.vrna.net>. This same QR code is also provided on the back of each VR headset.

## Accessibility and Inclusivity

VRNA is designed to maintain accessibility and inclusivity in the following ways:

- Visuals are designed to accommodate color-blindness (red-green, blue-yellow, and complete color loss).
- Written instructions to guide users.
- Audio cues to support users who experience difficulty reading.
- Preferred skin tone options for users to choose from.
- A diverse cast of residents to reflect real people from different backgrounds and lifestyles.

If there are ways you think VRNA could be improved to be more accessible, please reach out to our team and provide feedback at [feedback@vrsim.net](mailto:feedback@vrsim.net).

## Learning Content

VRNA **applications** use a variety of **scenarios** to teach a repertoire of career **skills**. Each application's skill content aligns with state requirements and recommendations. For more information about how VRNA's content aligns with state required skills and instructional curriculum, visit the website: <https://www.vrna.net/>

**Application** - Each application aligns to different career fields. In VRNA EMS, users will encounter scenarios and skills that they would see as a first responder. In VRNA CNA, users will have access to a different set of scenarios and skills that focus on patient care skills in nursing home settings.

**Scenario** - VRNA's scenarios are similar to lessons. In each scenario, the user will be asked to perform a series of care procedures for a resident. Each scenario covers a collection of different skills.

**Skill** - VRNA's skills are the core activities and procedures that professionals are required to perform in their daily tasks as well as on their certification exam.



## Progress Reporting

VRNA reports user progress to the Performance Portal®. Performance Portal® is a virtual reporting tool and portable gradebook that provides performance analysis to students and teachers. VRNA applications will automatically upload progress information to the portal while connected to the internet. See [Performance Portal®](#) for more details.

## User Accounts

A user account is required to use this product. This user account provides access to VRNA as well as Performance Portal®. Teachers will need to create their account and set up their classes. Students will only need to create their account. Account setup may be done in any order.

### Creating an account

There are two ways to create an account:

#### Creating an account while using the headset:

Wear the headset and open the VRNA application that you are making a new account for. Once in the application, use the virtual keyboard and monitor to create a new account. Follow the on-screen instructions, and enter the requested information (name or student ID and email address) to complete the account creation process. *Only student accounts can be created using this method.*

#### Creating an account using Performance Portal®:

*Note: This method requires a client Teacher Key (for teachers) and Student Key (for students). VRSim emails these to a representative of your organization during initial deployment of VRNA to your organization.*

Navigate to <https://portal.vrna.net>. Select the application portal that corresponds to where you want to create a new user account.

If you are making a new **VRNA CNA** student or teacher account, select the **CNA portal**.

If you are making a new **VRNA EMS** student or teacher account, select the **EMS portal**.

Next, locate the “**Create New Account**” tab. Enter the requested information to complete the account creation process. *Both teacher and student accounts can be created using this method of user creation.*

#### Recovering a user account:

Navigate to <https://portal.vrna.net>. Select the application portal that corresponds to which account you are trying to recover.

If you are recovering a **VRNA CNA** student or teacher account, select the **CNA portal**.

If you are recovering a **VRNA EMS** student or teacher account, select the **EMS portal**.

Next, locate the “**Reset Your Password**” tab. Enter the requested information to initiate the account recovery process.

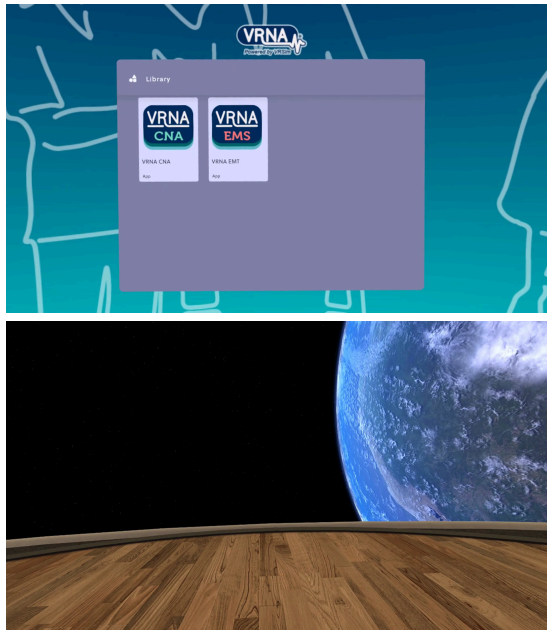


## VR Environments

You will encounter several different environments while using the headset and working in VRNA CNA or EMS applications. Environments outside of the applications are used to adjust settings, connect to networks, and generally maintain the headset. Environments inside of VRNA applications are used to immerse users in realistic situations and settings that promote focus, replicate job settings, and facilitate learning. This section lists those environments and provides an overview of what can be done in them.

### Headset Environments

The headset uses two different environments to display menus.



#### VRNA Launch Room

The VRNA launch room is where the VRNA CNA and/or VRNA EMS applications can be launched. Here, the user can:

- Adjust headset settings (Wi-Fi® settings, casting)
- Launch the application(s)

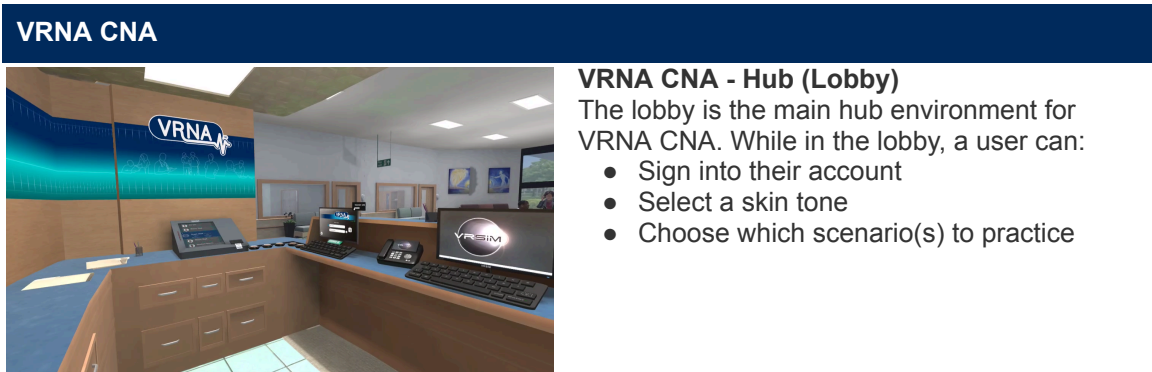
#### Pico Environment

The Pico environment is the main environment for the headset and its settings or menus. While in this environment, the user can:

- Interact with any of the headsets settings and menus

### Application Environments

VRNA applications use 2 types of environments. The first environment is where users login to their accounts and select the scenarios with the content they wish to practice. The second environment replicates job settings and task users with completing patient or resident care.



#### VRNA CNA - Hub (Lobby)

The lobby is the main hub environment for VRNA CNA. While in the lobby, a user can:

- Sign into their account
- Select a skin tone
- Choose which scenario(s) to practice



## VRNA CNA - Scenario Environments

VRNA CNA features 2 scenario environments. Individual scenarios may use variations of these environments and include different elements or virtual structures.

- Resident's Room
- Resident's Shower

In these environments, the user can:

- Perform resident care skills specific to the selected scenario
- Access scores at the end of the scenario
- Restart the current scenario
- Return to the lobby to choose a new scenario

## VRNA EMS



## VRNA EMS - Hub (Ambulance)

The lobby is the main environment for VRNA EMS. While in the lobby, a user can:

- Sign into their account
- Select a skin tone
- Choose which scenario(s) to practice



## VRNA EMS - Scenario Environments

VRNA EMS features 3 types of environments with their own unique implementations across all of VRNA EMS' scenarios. Individual scenarios may use variations of these environments and include different elements, settings, or virtual structures.

- Outdoor Space
- Private Residence
- Public Venue

In these environments, the user can:




- Perform patient care skills specific to the selected scenario
- Access scores at the end of the scenario
- Restart the current scenario
- Return to the hub (Ambulance) to choose a new scenario

## VR Headset Menu

The VR headset menu is available in the VRNA Launch Room. If you need to access this menu while actively using the VRNA application, press the controller's home button to bring up the application menu. The VR headset menu will also be available at this time.



The VR headset menu provides access to:

- **Date and Time** - This is set automatically and reflects your time zone.
- **Device power levels for the VR headset and both controllers** - Reflected per device and by hash-marks representing general charge. Point the controller at the respective device icon to see more detailed charge information.
- (  ) **Wi-Fi® Settings** - Select this icon to access the Wi-Fi® menu to connect to new networks or update network credentials and settings.
- (  ) **Boundary Settings** - Select this icon to access the boundary setup menu. Refer to the [VR Workspace](#) section of this document for details on VR workspace requirements.
- (  ) **Screencasting** - Select this icon to access the screencasting menu. Refer to [Streaming to a Device \(Simulcasting\)](#) for more details on how to configure a screencasting session.
- **Admin Settings** - This section features admin controls locked behind a password. Access to this section is restricted outside of technical support sessions.

## Wearing the VR Headset

To ensure image clarity, adjust the lenses to suit your interpupillary distance (IPD). There are three lens spacing settings: 58mm, 63.5mm, and 69mm. To adjust the IPD, gently move both lenses towards or away from each other to find the clearest setting.

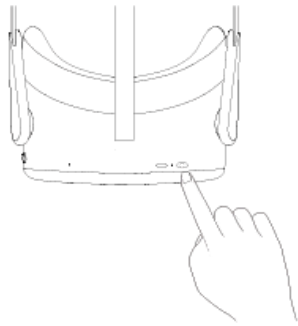
The headset allows wearing most standard glasses with a frame width of less than 160mm. This product is designed to accommodate most prescription glasses.



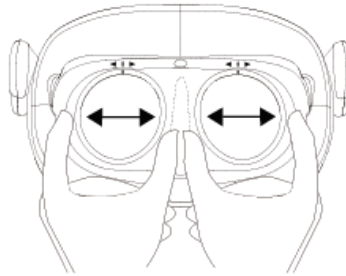
**Take care to wear the VR headset in a manner in which the VR headset lenses do not rub or impact your prescription lenses.**



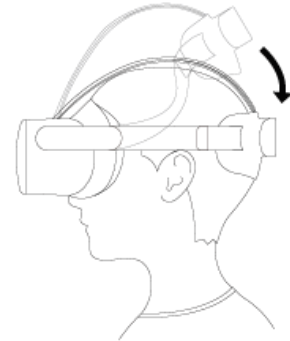
After the headset is powered on, wear the headset fitting the front section's face cushions against your face. Then lower the back head-pad so that it sits comfortably against the back of your head. Adjust the side straps using the adjustment dial on the back if the headset is too tight or too loose. The top strap can also be adjusted for additional comfort.



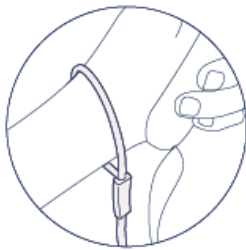
Turn it On



Adjust the Lenses



Put on the Headset



**Always use VR in a safe area and wear the controller lanyards.**

#### Safe Areas are:

*Free of obstacles*

*Free of trip-hazards*

*Free of other users*

## VR Workspace

Before using VRNA, clear a **10ft x 10ft (3m x 3m)** area of obstacles and trip hazards. This is the minimum space required. Clearing an additional buffer zone of 1ft - 2ft (0.3m - 0.6m) around your chosen work area can help promote user safety for a total of a **12ft x 12ft (3.7m x 3.7m)** recommended area. This area is the VR workspace you will use. Do not use VRNA in dusty environments or under extreme temperatures or excessively humid conditions. Always wear the controller lanyards while you are using the controllers.


When selecting a VR workspace area, make sure:

- The area is indoors.
- The area is clear of objects and people.
- The room is brightly lit.
- Avoid using spaces with large glass panes, mirrors or reflective surfaces.

*Note: TVs and moving people or objects in your environment can interfere with the headset's motion tracking.*

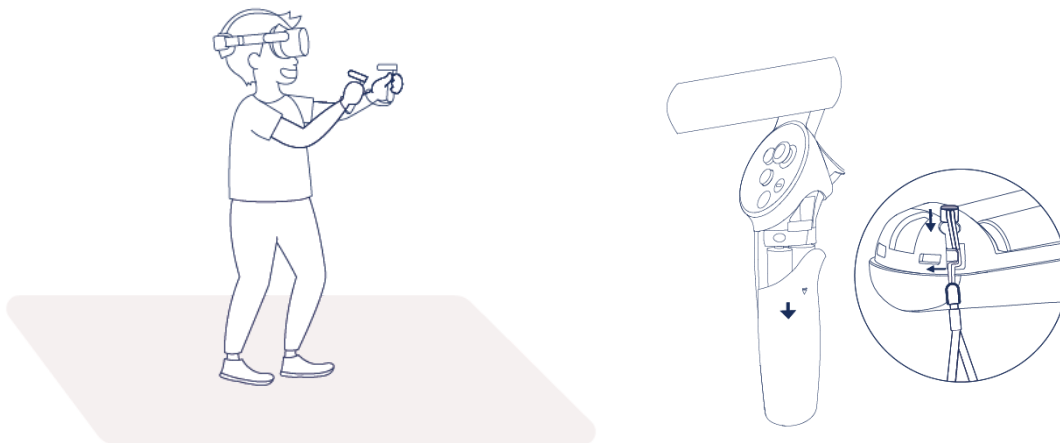
The VR headset requires information about your VR workspace to function. Follow the on-screen instructions to set up VRNA's virtual safety boundary or guardian system. The safety boundary is a virtual grid that outlines the VR headset's established tracking zone. It is only visible when the user nears the boundary. The boundary must be set up before use as a safety measure. If the VR headset is used in the same location, it can use the previously established boundary. For the best and safest experience, we

recommend re-establishing the boundary any time you are prompted. You can set up the boundary by doing the following:

1. Stand in the center of your chosen VR workspace.
2. Put on the VR headset.
3. While in the Launch Room, access the Boundary Settings menu item (  ) to adjust your VR workspace boundary.  
*Note: This process should be prompted automatically every time you turn on the VR headset. See [VR Environments](#) and [VR Headset Menu](#) for more details.*
4. Choose the “**Custom Boundary**” option.
5. When prompted, look down to establish the floor.  
 If the dot marks appear to be at floor level, select “**Continue**”.  
 If the dot marks do not appear to be at floor level, select “**Set Manually**” and gently lower your controller to the ground to manually adjust the floor level. Then, select “**Continue**”.
6. Create your custom boundary by aiming the controller pointer at the floor. Press and hold the trigger to draw along the boundary of your cleared area. We recommend a VR workspace area of at least 10 x 10. We recommend allowing a buffer zone between any physical objects and the boundary.
7. Select “**Continue**” to save the boundary and continue using the VR headset.
8. Confirm the VR workspace boundary and floor are accurate to your physical workspace, then select “**Enter VR World**” to access VRNA's Launch Room.
9. After starting a VRNA application, it will prompt a “**Setup Calibration**” to establish the direction that should be the ‘front’ of your VR workspace. Follow the onscreen instructions to complete this step.

If at any point your virtual and real-world spaces feel inconsistent, check your VR workspace's boundary settings. Redo your VR workspace boundary via the boundary settings option, if necessary. If the virtual environment is still disjointed compared to your physical world after re-establishing the boundary, quit any current scenarios and restart the VRNA application.

Remember that the virtual environment is only a visual representation of an environment. Always maintain your own balance and do not rely on anything visually presented to support you or your actions while using VRNA. See [Safety Information](#) for more details.



*Note: This product cannot guarantee your safety. You will need to always pay attention to the surrounding environment to ensure your safety.*



## Turning it On/Off

### Before You Start

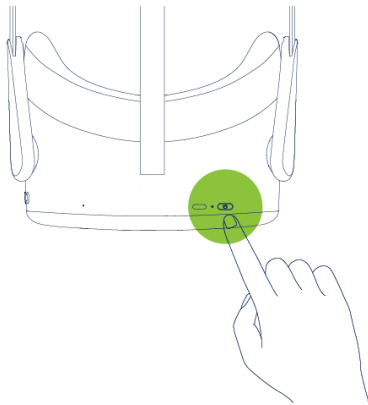
**Before you turn on your devices**, make sure your devices are paired together. You can confirm this by checking the group symbols on the headset and both controllers:



### Powering Your Devices

**Turn the headset on** by pressing the power button on the top of the headset for 2 seconds. The LED status indicator light will turn blue.

**Turn a controller on** by pressing the home button once. The LED status indicator light will flash blue.



**Turn the headset off** by holding the power button for 5 seconds, or until the headset's LED status indicator light starts flashing.

**Turn a controller off** by pressing the home button for 6 seconds. The controller will vibrate once to confirm it has shut down. Controllers are powered off individually. The controller will automatically turn off if the paired headset is turned off.

### Sleep Mode

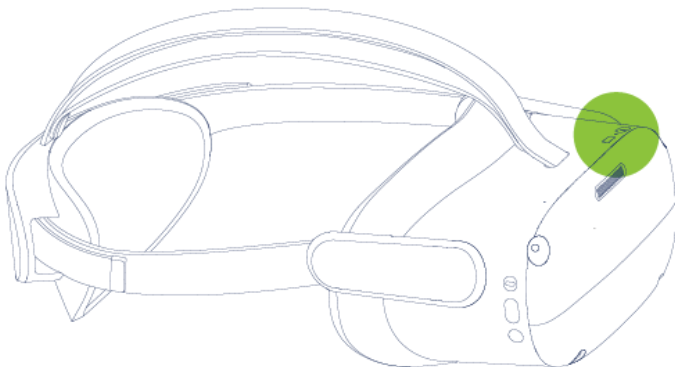
**The headset** will automatically stop displaying if the proximity sensor located between the lenses is not triggered for a period of time (about 30 seconds). After this, the headset will go to sleep. Putting the

headset back on again will trigger this sensor and wake the headset up again. Pressing the power button will also wake the headset up again.

## Status Indicators

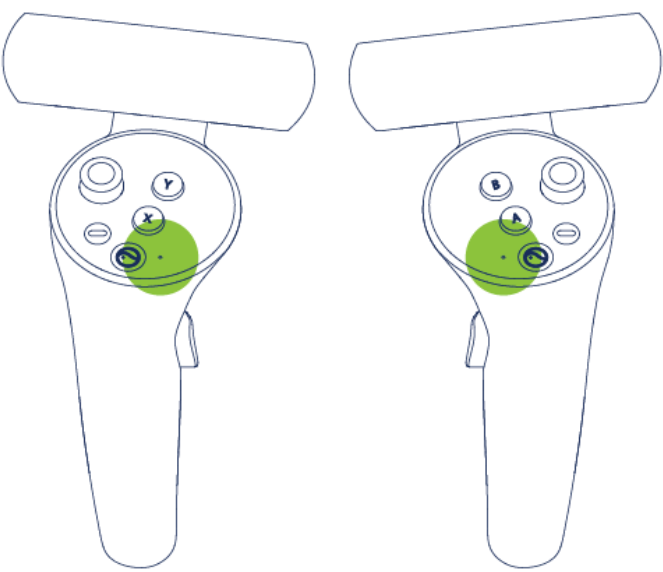
### VR headset LED status indicator light legend:

The headset's LED status indicator is on the top of the headset, next to the power button and USB-C port.

	<b>None:</b> Device is sleeping, powered off, or has no battery charge remaining.
	<b>Green:</b> Charging, battery is 98+% or fully charged.
	<b>Yellow:</b> Charging, battery is less than 98%.
	<b>Blue:</b> Powered on, battery is above 20%.
	<b>Red:</b> Charging, battery is below 20%.
	<b>Red (Flashing):</b> Battery is below 20%.
	<b>Blue (Flashing):</b> Device is shutting down.

### VR controller LED status indicator light legend:

The controller LED status indicators are next to the home button on both controllers. There is no visible or physical marker for the LED. The LED indicator will be visible through the white plastic when it is lit.

	<p><b>None:</b> Device is connected, powered off, or has no battery charge remaining.</p>
	<p><b>Blue:</b> Powering on and connected to a headset.</p>
	<p><b>Blue (Flashing):</b> Searching for a connection.</p>
	<p><b>Red and Blue (Alternating):</b> Device pairing in progress.</p>





## Network Connections and Streaming

### Internet Firewall Guidelines

If your organization restricts or filters outbound internet traffic, please have your IT department add the following hostnames to the allow list for the network the headsets will be used on, ensuring they are permitted by firewall rules for optimal connectivity.

Allow-list rule	Port	Protocol	Usage
<b>mighty-platform-prod.appspot.com</b>	443	TCP (HTTPS)	Communication with the ManageXR API
<b>us-central1-mighty-platform-prod.cloudfunctions.net</b>	443	TCP (HTTPS)	Communication with the ManageXR API
<b>mighty-platform-prod.firebaseio.com</b>	443	TCP (HTTPS)	Communication with the ManageXR API
<b>managexrapi.com</b>	443	TCP (HTTPS)	Communication with the ManageXR API
<b>managexrcdn.com</b>	443	TCP (HTTPS)	Communication with the ManageXR API
<b>*.managexr.com</b>	443	TCP (HTTPS)	Communication with the ManageXR API
<b>*.googleapis.com</b>	443	TCP (HTTPS / WebSockets)	Communication with the Google Cloud Platform APIs used by ManageXR
<b>*.crashlytics.com</b>	80, 443	TCP (HTTP / HTTPS)	ManageXR error reporting ManageXR uses port 80 for error reporting. If this is a security concern, districts may keep it closed as it is not mission-critical, and closing it won't interfere with the day-to-day use of the platform or devices.
<b>openrelay.metered.ca</b>	80, 443	UDP, TCP (HTTP / HTTPS)	Used for ManageXR real-time device streaming during tech support calls
<b>connectivitycheck.picovr.com</b>	443	TCP (HTTPS)	Devices may determine if they have internet access by pinging this endpoint.
<b>vrna.net</b>	443	TCP (HTTPS)	VRNA login & communication with VRNA Performance Portal
<b>*.vrna.net</b>	443	TCP (HTTPS)	VRNA login & communication with VRNA Performance Portal
<b>vrsim.com</b>	443	TCP (HTTPS)	VRNA login & communication with VRNA Performance Portal
<b>*.vrsim.com</b>	443	TCP (HTTPS)	VRNA login & communication with VRNA Performance Portal

Asterisks ( \* ) denote a wildcard in the hostname.


*Note: Captive networks and networks that require a web portal sign-in are not supported.*

We recommend your organization's Information Technology (IT) team run this ManageXR Network Connectivity Test (<https://help.managexr.com/en/articles/11943471-managexr-network-connectivity-test>) to verify that your network can reach all required endpoints used by the ManageXR platform. *Note: this test checks a subset of the above allow list.*

## Connecting to Wi-Fi®

VRNA requires an internet connection to function. To connect your device to a wireless network, you will need to access settings through the VR headset's software. Access the VR headset menu at the bottom of the VRNA Launch Room screen, or by using the controller's home button on the controller to bring up the application menu.



Select the Wi-Fi® or WLAN icon (  ) from the VR headset menu, found toward the bottom of the screen. This menu may not be available if you have already launched the VRNA application. If so, press the controller's home button to bring up the app menu.

Follow the menu's on-screen prompts to either:

- Select a wireless network to connect to.
- Add your network if it is not available to select.

If your network is listed but you cannot connect to it, confirm the network name and security information are correct with your organization's Information Technology (IT) team.




*Note: If you intend to simulcast VRNA applications to local smart TVs or wireless displays, the VR headset and the target display must be on the same network.*

To exit this menu, press the controller's home or back button.

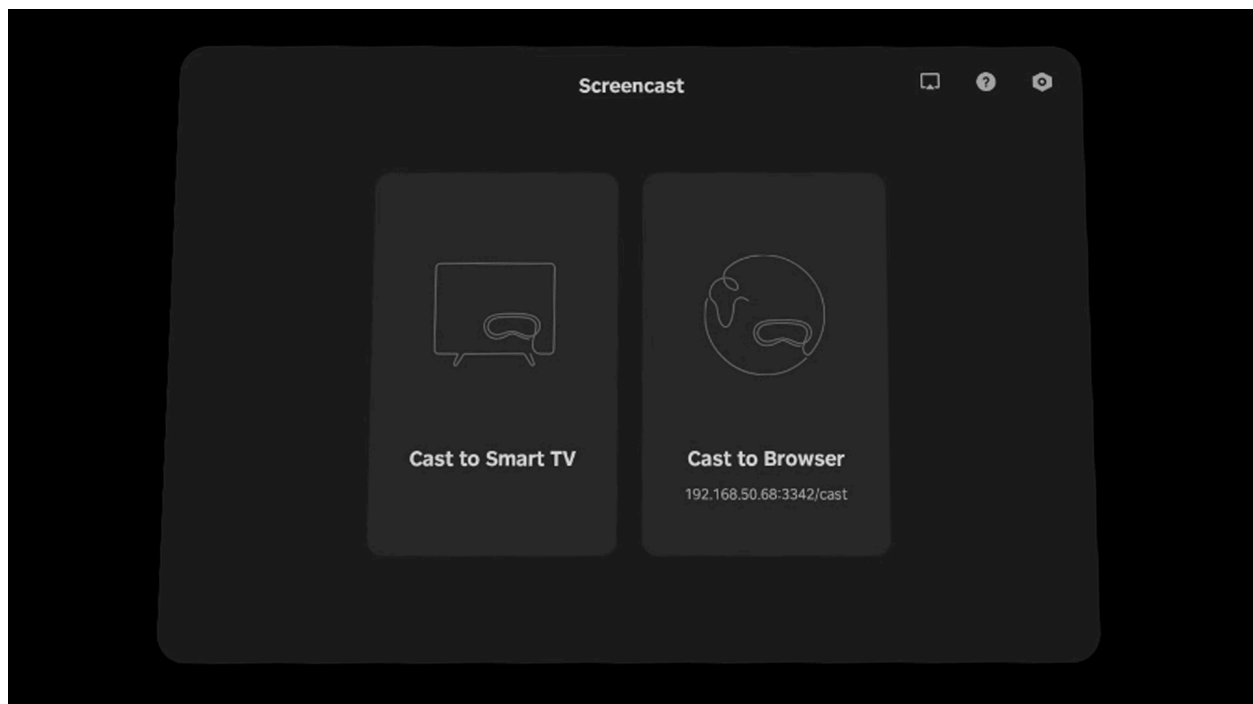
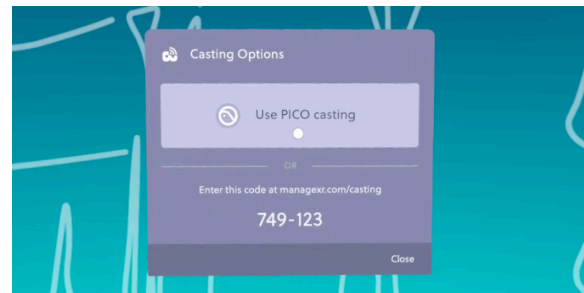
While in VRNA applications, a white Wi-Fi® icon will display when the headset is connected to a Wi-Fi® network.

## Streaming to a Device (Simulcasting or Casting)

VRNA supports simulcasting, also known as casting or streaming. This is the ability to simultaneously broadcast what is displayed on the VR headset to a separate display device. Simulcasting does not prevent the user from continuing to work in the headset; it just shares what they see with an additional display. The headset includes several different casting options. These options include Miracast, Casting to a Browser, and Casting to a Smart TV. See [Safety Information](#) for safety info.

To begin casting to a display device, choose the Casting icon (  ), then choose **Use PICO casting**.

*Note: ManageXR casting is not supported.*



If you would like to **Cast to a Smart TV** or **Cast to a Browser**, select the desired option from the casting menu and follow the prompts to connect to a compatible device.

## Cast to a Smart TV

- 1) Ensure the VR headset and TV are connected to the same Wi-Fi® network.
- 2) Choose one of the following options:
  - Miracast: Open Miracast or the screen mirroring app on your TV. When you see the **“Waiting for Connection”** status, your headset can find your TV.  
*Note: some TV’s may accept a connection, without opening an app, if they are turned on.*
  - Cast for Pico: Download Cast for Pico from your TV app store or Pico official website, and open it.

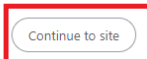
## Cast to a Browser

1. Ensure your headset and receiving device are connected to the same network.
2. Select **“Cast to Browser”** in the headset.
3. On the target casting device, ideally a computer or mobile device, use the device’s web browser to navigate to the address on the right side of the menu (ex. 111.222.33.44:1234/cast).
4. If you get the following warning, select **“Continue to Site”**. On some browsers, this may be accessed under an **“Advanced Settings”** option.



The connection to 192.168.3.118 is not secure

You are seeing this warning because this site does not support HTTPS. [Learn more](#)





5. Select **“Start Screencast”**.
6. In the headset, select **“Allow”**.
7. Press the home button on the controller to exit this menu and continue casting.

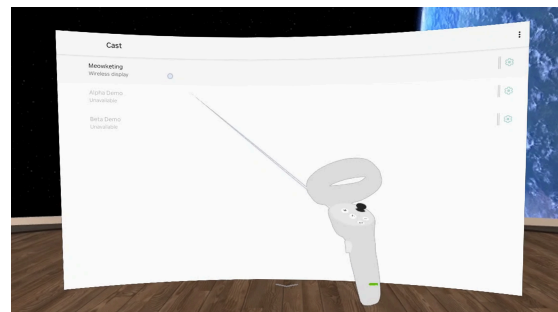
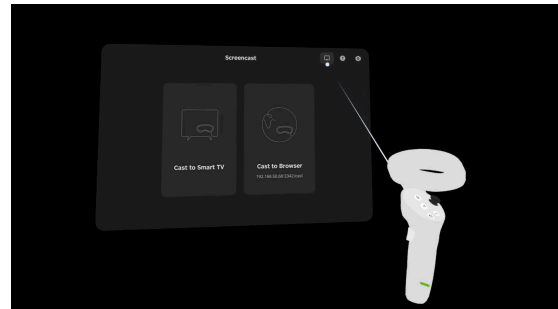
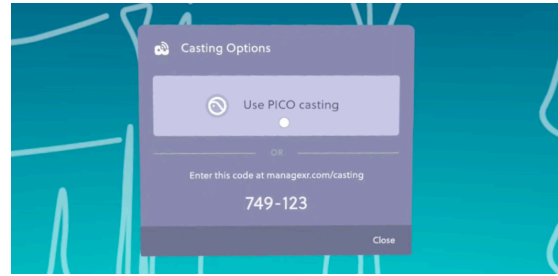
## Miracast Wireless Casting

Miracast allows users to wirelessly share multimedia between Miracast-compatible devices (e.g. Smart TV, Roku device, Windows PC).



## To use Miracast to cast to a compatible device:

1. Turn on the target device (e.g. TV).  
*Note: If casting to a Windows device, you may need to run the Windows “Wireless Display” or “Connect” applications.*
2. Put on the headset.
3. Locate the VR headset menu, located outside of the VRNA application at the bottom of the Launch Room or by pressing the controller’s home button while in VRNA applications.
4. Select the casting icon (  ).
5. Choose the **Use PICO Casting** option  
*Note: ManageXR casting is not supported.*
6. Locate the Miracast icon (  ) in the upper right-hand corner of the casting menu.
7. Select a Miracast enabled device from the list to cast to.
8. You may need to accept or allow the cast to proceed on the target device. This process will vary based on the target device.
9. Once the cast has connected, press the Back ( - ) button on either controller or select the back arrow in the casting menu to exit.



If your device does not show up on the simulcasting options, please reference the target device’s instructions. You will want to confirm that the target device can support Miracast, both the headset and target device are on the same network, Miracast is enabled on the target device, and know how to accept a simulcast from the target device. *For more information about Miracast, see <https://www.wi-fi.org/discover-wi-fi/miracast>.*



## Using VRNA

VRNA and its applications provide a practical hands-on component that complements skills labs and traditional educational curricula. VRNA can be used as a tool for demonstrative teaching, supplementary practice, examination, and evaluation.

## User Flow

### Example Teacher User Flow:

1. Teach a skills concept or procedure
2. Have students practice the corresponding skill in VRNA applications
3. **(Optional)** Evaluate their progress in real-time by casting to a classroom display
4. Evaluate student progress with real-time updates on the Performance Portal® website (<https://portal.vrna.net>)

### Example Student User Flow:

1. Put on the headset
2. Setup the VR workspace's virtual boundary
3. Launch the VRNA application
4. Login and select a scenario to practice skills
5. Complete the scenario
6. Review performance in the application or Performance Portal® website (<https://portal.vrna.net>)
7. *Log out of the application*
8. Turn off the headset
9. **(Optional)** Clean the headset and set it to charge

## Interacting with VRNA

Some of the main interactions:

1. Push the controller (virtual hand) forward to:
  - Select an item on the virtual tablet (e.g. confirm a resident, score a scenario, or end a scenario)
  - Select an answer on a pop up
2. Pull the Controller Trigger once and release to:
  - Pick up a highlighted nearby object (e.g. glove)
3. Move the Controller over:
  - To a highlighted interaction zone while a virtual object is in your virtual hand for the object to snap into the zone (e.g. put a thermometer back on the table).
    - i. *Note: you do **not** need to pull the Controller Trigger. Pulling the Controller Trigger will cause the object to jump back in your hand.*
    - ii. *Note: to throw objects out (e.g. paper towel), push your virtual hand **into** the virtual trash bag or receptacle.*
4. Pull and hold the Controller Trigger to:
  - Move a nearby highlighted body part of a resident (e.g. passive range of motion)
5. Move the Controllers around in a circle motion:
  - To start an animation in an interactive zone (e.g. to lather hands for 30 seconds)
    - i. *Note: make sure not to bump the Controllers into each other*



- ii. *Note: to lather your hands, you may need to move the Controllers to the front of (not in) the sink; you may need to take a step back to do so.*
- iii. *Note: each Controller's position is shown with a white orb. Keep the white orb in the interactive zone for the animation to continue. If you Controller leaves the interaction zone, the animation will end, and you will have to start it from the beginning.*

VRNA maintains a simplified approach to controls. Users will use the rear trigger to confirm, select, and engage with the virtual environment. At times, users will need to move their hands and the controllers to accomplish tasks (e.g. moving a resident's arm). On screen guidance will help guide what can be done, while still leaving the decision up to the user.



*Example: Floating Sphere where a user can hold the resident's ear.*



*Example: Red Marks and Blue Outline on an electric razor showing the user can hold it.*

While the user is performing a task, different forms of on-screen guidance are available to help the user complete the task. These include cues that guide the user as to what motions they need to make, what items they need for a task, and where the user can interact with a tool or resident. Examples of these cues include:

- Floating **SPHERES** indicate items or body parts that can be manipulated.
- If an object can be moved, a **BLUE OUTLINE** will appear when your hand(s) are close to the object. If there is no outline, you cannot interact with that object.
- Items that can be moved or held will often have **RED** markings to help distinguish them from stationary objects.

## Feedback and Guidance

VRNA provides feedback while the application is in use and after they have completed an activity.

### During use:

During use, VRNA applications will provide several forms of guidance and feedback.

Step-by-step instructions guide the user through their care procedures. Access this guidance by raising your arm, and turning the palm of your hand toward your face. The motion is similar to checking your watch. An interactable module will outline the care tasks and the steps required to complete each task. The user's progress through these tasks is tracked and reported on the wrist guidance.



## After use:

VRNA provides a scoreboard at the end of a scenario. This scoreboard breaks down the major skills included in that scenario and how the user performed during each skill.



**Final Score** - The final score is calculated based on the average of all the scenario's skill score(s).

**Skill Score(s)** - The skill score is calculated based on what was completed. Each step of the skill is marked with a **checkmark** for successfully completed steps, or an **X** for steps that were missed or incomplete.

## Performance Portal®

Performance Portal® features detailed feedback, past performance reports, easy-to-read insight charts, and information on development and evaluation across time for individual student users and class-wide. Access Performance Portal® at <https://portal.vrna.net>. Once there, select the portal that corresponds to the performance data you would like to view.

For performance data from **VRNA CNA** and user progress in that application, select **CNA**.  
For performance data from **VRNA EMS** and user progress in that application, select **EMS**.

Performance Portal® is a virtual reporting tool and portable gradebook that works with VRNA applications to provide performance analysis to students and teachers. VRNA will automatically upload a user's progress information after a skill scenario is scored. Progress information is also transmitted when a scenario is exited. Progress information is not reported if an application crashes or the device is shutdown in the middle of scenario activities.

Performance Portal® provides a different experience for teachers and students. After logging in, teachers will see their Gradebook and students will see their own Student Report. Teachers can view both their own Gradebook and their students' Student Reports, while students will only be able to access their own report. Teachers can additionally manage their class(es).

## Reports Available to Teachers:

- **Gradebook** - A collection of reports designed to provide an at-a-glance look at a class' performance and progress through VRNA's content.
  - **Overall progress** - A chart depicting completion and pass/fail information for the class.





- **Student progress** - A report highlighting each individual student's progress.
- **Curriculum progress** - A report highlighting each scenario in VRNA and the class' completion and pass/fail rating for that content.
- **Student Reports** - A list of all students in the organization and links to their individual reports.
- **Classes** - A list of all classes. Classes can be managed, edited, and created here.
- **Users** - A list of all of an organization's users with links to their account profiles and reports. Users can be managed and edited here, but not created.

## Reports Available to Students and Teachers:

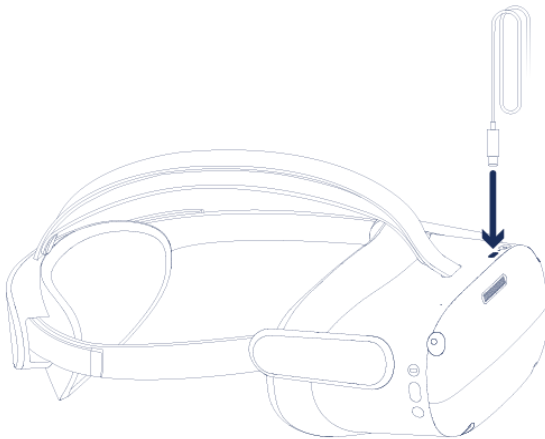
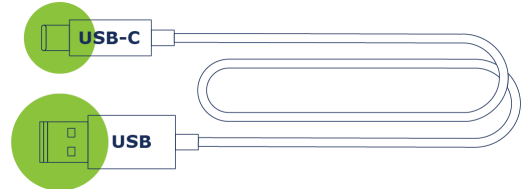
- **Student report** - A collection of reports designed to provide an at-a-glance look at a student's performance and progress through VRNA's content.
  - **Overall Progress** - A chart depicting the student's completion and pass/fail information for all of the application's content.
  - **User's Classes** - Notes which classes the student is included in.
  - **Skill Overview** - A report highlighting each skill and the student's pass/fail/incomplete rating and scores, per skill.
  - **Progress** - A report highlighting each scenario, the student's completion status, and pass/fail rating for that content.
  - **History** - A chronological history of all the content a student has completed.
  - **Activity** - A chart depicting the student's activity in the application over time.

To use Performance Portal®, navigate to <https://portal.vrna.net>, select the corresponding portal, and login. If you do not already have an account, create one using the "Create New User" form found on the login page in the respective application portal. See [User Accounts](#) under [For First-Time Users](#).

## Care and Cleaning

### Charging the Headset

Charge the VR headset with the provided USB-A 2.0 to USB-C cable. The charging port for the VR headset is located on the top, next to the power button. The VR headset will take approximately 2.5 hours to reach a full charge. When charging is completed, disconnect the charger from the equipment and unplug the charger from the power outlet.

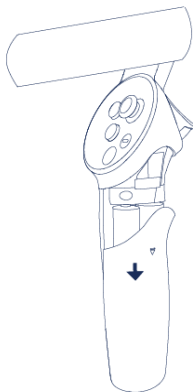


Reference the VR headset's LED status indicator light to see how much charge your device has at a glance. Power and charging information is also available in the menu bar found in the VRNA Launch Room. See [Turning it On/Off](#) for more information.

*Note: The headset includes a non-removable internal battery. Do not attempt to replace the battery, as doing so may cause battery damage, fire, or human injury. Do not use the charger if wet. Do not operate the equipment or charger with wet hands so as to avoid short circuits, failure or electric shock. If the charging adapter or cable is damaged, discontinue use to prevent the risk of electric shock or fire.*

### Charging the Controllers

VRNA's controllers use a total of four (4) AA 1.5V alkaline batteries, two (2) per controller. Reference the controller's LED status indicators to evaluate the remaining charge in the installed batteries. See [Turning it On/Off](#) for more information.

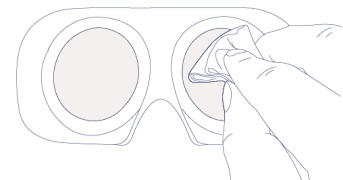


To change the batteries, press on the indicated spot on the battery cover and slide the cover down. Remove the two (2) AA batteries and replace them with a fresh set of batteries. Align the cover on the ridges at the sides of the battery compartment and slide it up to secure it in place.

### Caring for the Lenses

During use or storage, please pay attention to avoid hard objects touching the lens and to avoid lens scratches.

Use an optical lens microfiber cloth to dip in a little water or use a non-alcoholic disinfectant wipe to clean the lenses. Do not wipe the lenses with alcohol or other harsh or abrasive cleaning solutions as this may lead to damage.



Do not expose the optical lenses to direct sunlight or other strong light sources. Exposure to direct sunlight may cause permanent yellow spot damage on the screen. Screen damage caused by sunlight exposure or other strong sources of light is not covered by the warranty.

## Caring for the Face Cushion

Use sterile wipes (alcohol-based ingredients allowed) or a microfiber dry cloth dipped in a small amount of 75% alcohol to gently wipe the surface and surrounding areas in contact with the skin. Apply until the surface is slightly wet and wait for at least five (5) minutes. Dry before use. Do not expose directly to sunlight.

The face cushion will deteriorate with continued use and cleaning. Hand washing or machine washing is not recommended, as this will accelerate the deterioration of the face cushion.



## Caring for the VR Headset, Controllers and Accessories\*

*\* - These instructions do not apply to the Lenses or Face Cushion.*

Use disinfectant wipes (alcohol-based ingredients allowed) or use a microfiber dry cloth to dip in a small amount of 75% alcohol and gently wipe the surface of the product. Apply until the surface is wet, wait at least five (5) minutes, then dry with a dry microfiber cloth. Avoid getting water into the devices during cleaning. Do not soak or submerge any components. Alternative hygienic practices include, but are not limited to, using disposable covers for the VR headset and wiping down controllers between users.

It is recommended to practice good hygiene for use-cases where the devices are being shared between multiple users.

## Common Troubleshooting

This is a collection of common troubleshooting topics and information. If you are experiencing any issues not covered in this section, check out our support portal at <https://support.vrna.net>.

If the guidance here does not help resolve your technical problems, please contact support. Email us at [support@vrsim.net](mailto:support@vrsim.net), or call 860-893-0080 and leave a message.

### Headset Shows “Android Recovery” Screen

If while wearing the headset you only see the following:

"Android Recovery"

"Can't load Android system. Your data may be corrupt. If you continue to get this message, you may need to perform a factory data reset and erase all user data stored on this device."

Then:

1. Follow [Troubleshooting Android Recovery](#).
2. If this does not fix the issue, then contact our support team to reconfigure your headset.

### Headset Shows Pico Menus Instead of VRNA Launch Menus

If while wearing the headset:

You see the Pico menus:



You do NOT see the VRNA Launch menus:



Then:

1. Follow [Troubleshooting Android Recovery](#).
2. If this does not fix the issue, then contact our support team to reconfigure your headset.

### Headset Shows “Loading...” Screen

If while wearing the headset you only see a “Loading...” screen that never goes away, then:

1. Follow [Troubleshooting Loading Issue](#)
2. If this does not fix the issue, contact our support team to reconfigure your headset.



## Headset Shows a White Screen

If while wearing the headset you only see a white screen (for example when trying to go into Wi-Fi or Casting settings), then press the Back ( - ) button on one of the controllers to go back.

## Controller Not Responding

If the virtual controller loses motion tracking or disappears during use, make sure the 4 cameras at the front of the headset are not covered and have line of sight with each controller's top white ring.

If the virtual controller cannot be seen in the VR headset, confirm that the controllers are powered on and have sufficient battery charge.

If the virtual controller seen in the VR headset is not responding to your real-life movements and the buttons of the controller do not respond, perform a hardware reset on the controller. You can perform a hardware reset by removing and reinstalling the batteries and then pressing the Home button on the controller to power it on. If it does not power on, you may need to replace the batteries with new ones, two (2) AA 1.5V alkaline batteries.

If this does not work, the controller may need to be paired. Contact tech support.

## Motion Tracking Space Issues

If the motion tracking space moved (got offset during VRNA use) OR if the motion tracking space is too short on one side (e.g. the virtual sink is too far away for you to actually reach it in a scenario), then:

1. Physically move to the center of the motion tracking area you set up (in real world).
2. Face forward (the orientation you designated to be virtual forward).
3. Hold the Home (Pico) button for 1 second. This attempts to reorient/recenter. (This can be done while in VRNA or outside of VRNA.)
4. If you still have issues, then redo the VR boundary settings. See [VR Workspace](#).

## Motion Tracking Virtual Floor Height

If the virtual floor is too high or low compared to the real world floor, then:

1. Redo the VR boundary settings. See [VR Workspace](#).

## Motion Tracking Losing Tracking or Is Jittery

If the headset or controllers sometimes lose motion tracking or the motion tracking quality feels poor (e.g., is jittery, feels unresponsive or laggy, or the virtual world feels tilted):

1. Redo the VR boundary settings. See [VR Workspace](#).
2. Follow [Controller Not Responding](#).

## No Sound

If you do not hear sounds while using the headset, try to adjust the volume using the “+” and “-” buttons on the underside of the headset. While simulcasting to another device, the audio may only play from the target device.

## Simulcasting (Streaming)

Put on the headset. Locate the VR headset menu, located outside of the VRNA application at the bottom of the screen or by pressing the controller’s home button while in the application, then select the casting button from the top. Then select the device to cast to (any Miracast enabled device). This device could be:

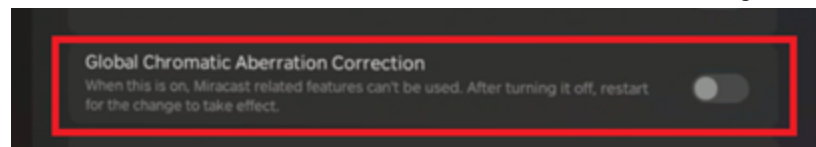
1. Miracast (e.g. a Roku device)
2. Smart TV
3. Windows PC

To exit the casting menu, press the Back ( - ) button on either controller. See [Streaming to a Device \(Simulcasting\)](#) for more details.

## Miracast Unavailable

If the headset shows “Miracast Unavailable” in the casting menu, then do the following:

1. Click on “**Industry Settings**”
2. Locate the “**Global Chromatic Aberration Correction**” setting.



3. Enable the setting by adjusting the toggle. Blue is enabled, gray is disabled.
4. It will indicate “**Restart Device**”. Select “**Restart Now**”.

## Windows Connect App

If you are attempting to cast to a Windows computer and the Connect app is not installed on that computer:

1. On the computer, [install and configure the Windows Connect app](#).
2. In the headset, attempt to cast to the Windows computer.

## Reconnecting After Headset Goes to Sleep

The cast will end when the headset goes to sleep. You may not be able to immediately cast again to the target device.

To help prevent this issue:



1. In the headset, go to the Casting icon.  
*Note: you may need to press the home button on the controller, and then choose the Casting icon.*
2. Select the target device, and then select **“Disconnect”**.

If you try to cast again to the target device and cannot:

1. Power cycle the target device.
  - a. If using a Microsoft wireless adapter, then disconnect the adapter (USB and HDMI), and reconnect it.
  - b. If using a computer, then power cycle the computer.
2. Try casting again.
3. If that does not work, power cycle the headset.
4. Try casting again.

## Application: Cannot Sign In

After starting a VRNA app, if you cannot sign in on the virtual keyboard and touchscreen:

1. In the headset, make sure you are connected to Wi-Fi®. See [Connecting to Wi-Fi®](#).
2. Check on the virtual touchscreen that it shows Portal is connected by confirming the **“Portal Connection”** indicator is displayed in **green**.
3. On a computer or mobile device, try signing into your account on the Performance Portal® at <https://portal.vrna.net>
4. If you cannot sign in, identify if you need to reset your password, and do so on the Performance Portal®.
5. If the browser indicates “The website encountered an unexpected error. Please try again later”, check with your IT department to make sure this site is not blocked. See [Network Connections and Streaming](#).