



MAKERSPACE

VR GUIDE

Meta Quest 3S



What is Virtual Reality?

VR allows you to be immersed in a 360° virtual environment where you can interact with objects, the world, and other users.



This guide includes:

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Machine Specifications



Photo Credit: Meta

Model: Meta Quest 3S (can be borrowed for at home use)

Storage: 128GB

CPU: Snapdragon XR2 Platform Ram: 8GB

Display: 2 LCD lenses (1832 × 1920 per eye), 20 PPD & 773 PPI

Straps: 2 adjustable straps; Located on the back & top of the head.

Our Additional Included Accessories: 3m charging and tethering USB-C cable, 4 AA batteries, air blower, soft brush, lens cloth

Space Requirements:

- Moving gameplay: Minimum 2m x 2m unobstructed space
- Stationary gameplay (Seated): Minimum 1m x 1m unobstructed space

Apps and Games

The Meta Quest 3S can run games/apps through the headset or via a PC. See pg.16 for recommended games and apps.

Minimum Requirements for PCVR

- A computer running Steam and SteamVR
- Supported OS: Windows 10 or newer
- Computer GPUs: NVIDIA (GTX970 or better)
- Note: AMD GPUs are not yet recommended
- Wireless Router: 5GHz Channel, Wi-Fi 5 minimum
- A wired connection, (gigabit min.), between your computer and your router

Safety



Do Not Eat or Drink While Using the Headset.



Prevent Discomfort

- Adjust the headset for a comfortable and secure fit.



Avoid Drops

- Always wear the wrist straps while playing.



Stay Within Your Space

Remain seated or within your designated boundary. Ensure the area is clear, and move mindfully to avoid injury or collisions.



Know How to Exit.

Press the passthrough button on the bottom right of the headset.



Take Regular Breaks to Avoid Feeling Ill

- New users: take breaks every 10–15 minutes.
- Experienced users: take breaks every 20 minutes.

You may continue if you feel well, but breaks are strongly encouraged.



If You Feel Unwell

- Immediately remove the headset.
- Sit down or remain seated.
- Notify a staff member if at MacEwan
- Rest for 10–20 minutes before considering continued use

FAQs

Where do I start?

Begin with the games available through the on screen library. If you would like more options there are free games available through the Meta Store. See pg.15 for more information on recommended games and apps.

Am I able to purchase games through the Meta store?

To buy apps or games, use your personal Meta profile that you had previously or created when taking out the headset. DO NOT USE your MacEwan credential to create an account for purchases, as these may be lost if the institution discontinues use of the management software.

Am I able to play games through my PC using Steam?

The Meta Quest 3S can connect to your PC to stream games from your Steam library. Steam is a digital distribution platform and online storefront for games and you can create an account for free [here](#). Steam offers a wider selection and typically lower prices than the Meta store, however it typically requires a compatible computer with a strong graphics card, sufficient RAM, and powerful processor. For minimum requirements to use Steam link see pg.3. Always verify your computer meets the specific game's requirements before purchasing. To learn about how to link your Steam account go to pg.9.

Am I able to clean the lenses if they become smudged/dirty?

The Lenses are VERY SENSITIVE and can be easily scratched so it is best to only clean them if ABSOLUTELY NECESSARY and ONLY with the provided microfiber cloth to avoid damaging the lenses. Keep in mind that blurriness can be caused by poor fit. Ensure the headset is properly adjusted to your head. See pg.14 for more information on troubleshooting blurry lenses.

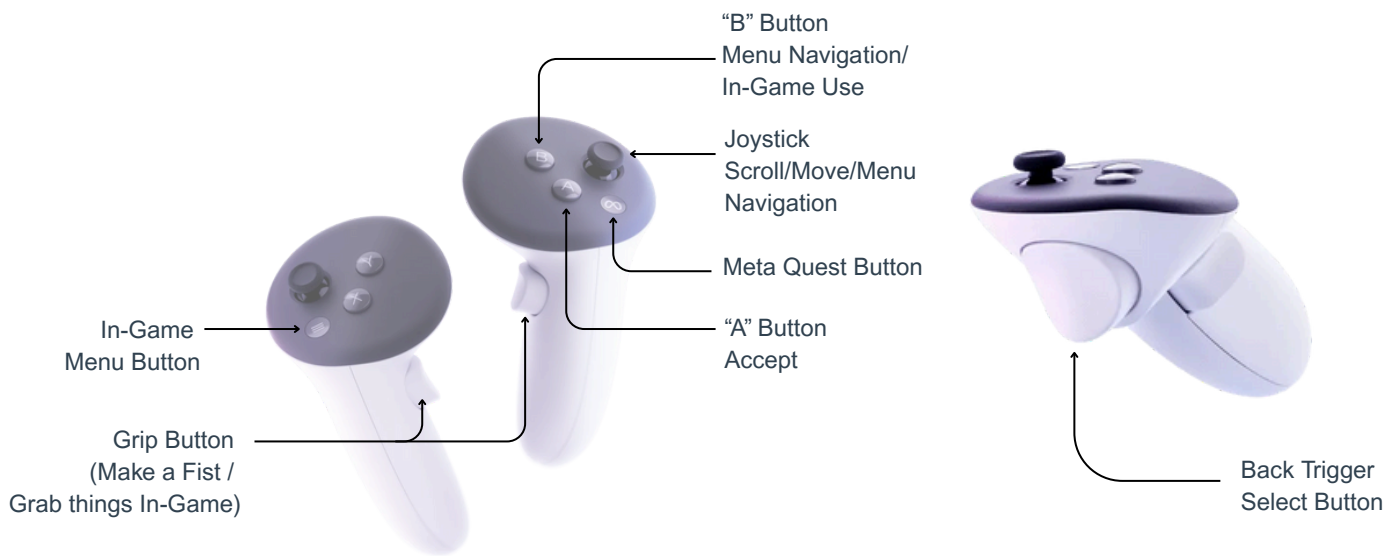
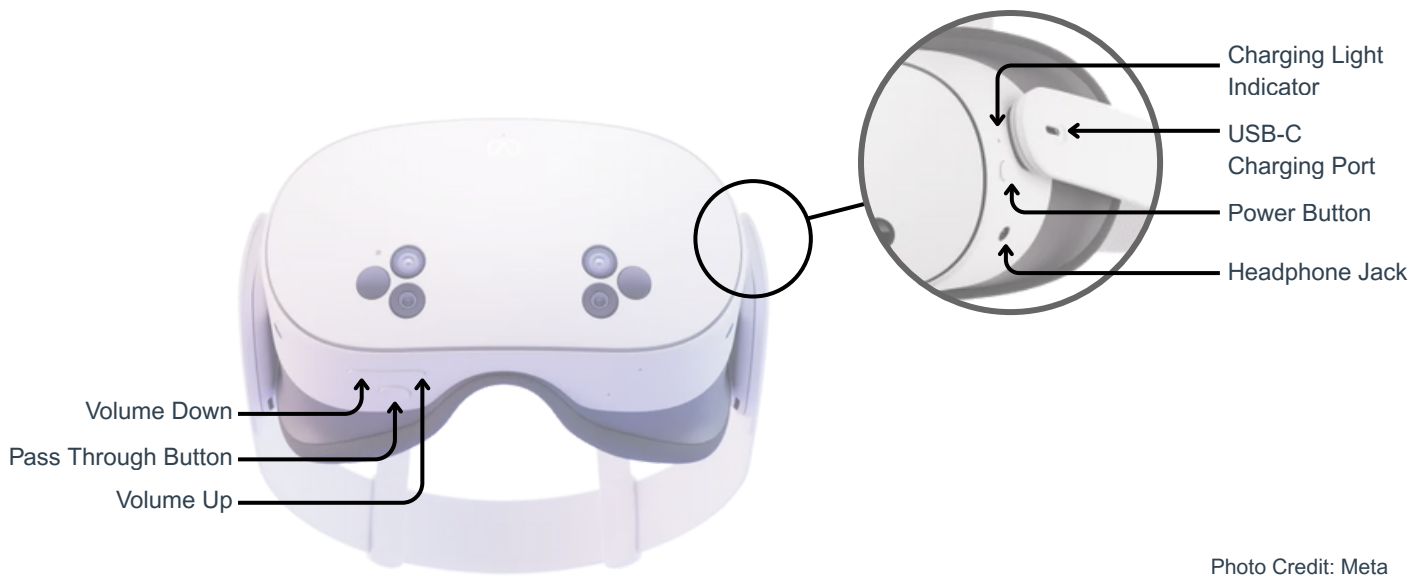
To clean the lens

- Wipe lenses with the microfiber cloth using circular motions from center outward

If lens problems continue after cleaning, return the device to the Makerspace for assistance.

Machine Diagrams

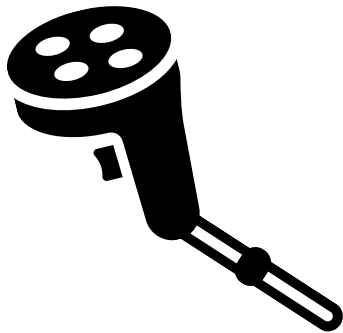
Meta Quest 3S



Checklist for Use

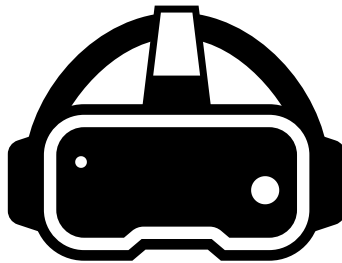
Follow this helpful overview of steps

6 Easy Steps to using VR at home



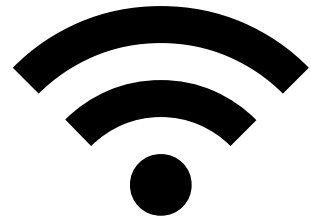
1. Secure

Tighten the strap of controllers around your wrists.



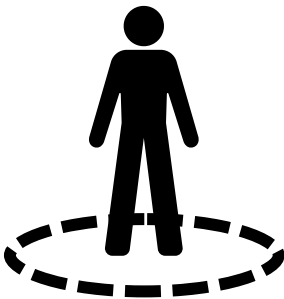
2. Put On

Put on the headset and adjust fit.



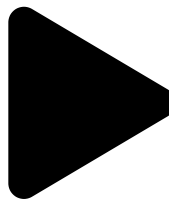
3. Connect

Connect to Wi-Fi



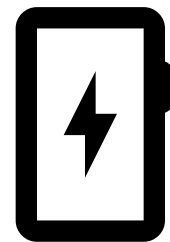
4. Set Up

Set up your safety boundary



5. Play

Select your preferred app.



6. Charge

After using charge the headset.

For more detailed instructions continue to pg.7

Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

1. Secure Controllers

- a. Secure the wrist straps of your controllers around each wrist, familiarize yourself with the buttons (refer to pg. 6)



Photo Credit: Amazon

2. Put on Headset

- a. Loosen the back strap and top straps, then place the headset in a comfortable position against your face.
- b. Pull the straps over the back of your head and tighten the back strap by pulling apart the adjustors, then adjust the top strap to take weight off your face and hold the headset comfortably in place.



Photo Credit: Meta

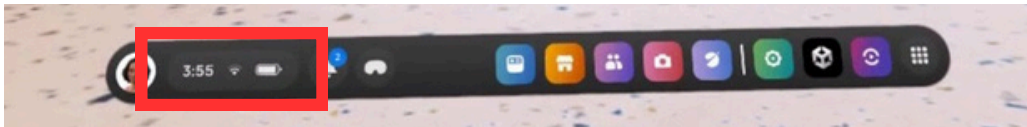
Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

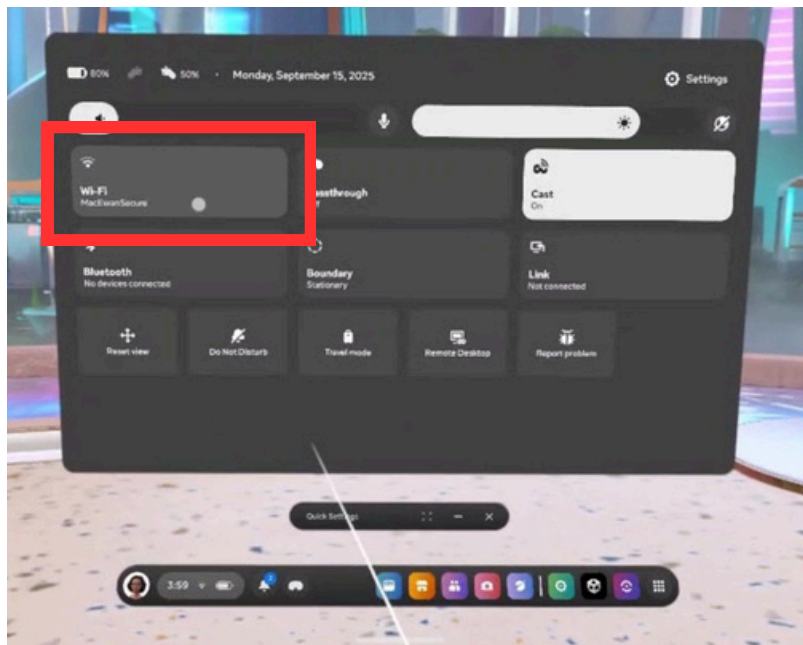
3. Connect to Wi-Fi

- a. In your headset, point the controller at the toolbar at the bottom of your field of view. Point your cursor at the Wi-Fi icon on the left of the toolbar, use the back trigger (select button) on your controller to select.

****Note:** If you cannot find your toolbar, press and hold the Meta Quest button (flat button) on the right controller. This should reset your field of view.



- b. Select the Wi-Fi tile, then select the Wi-Fi you want to connect to. Enter the correct Wi-fi credentials for your home



- d. Wait for the headset to update if needed.

Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

4. Set Up Boundary

a. Before setting up your boundary determine preferred gameplay and clear adequate space.

- Moving gameplay: Minimum 2m x 2m unobstructed space (select "Choose Your Own Boundary").
- Stationary gameplay (seated) : Minimum 1m x 1m unobstructed space (select "Stationary Boundary").

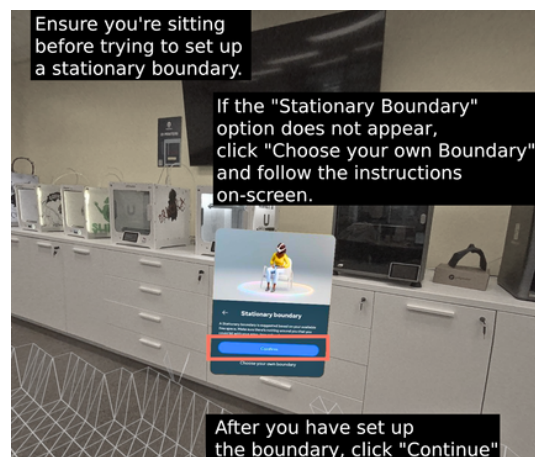
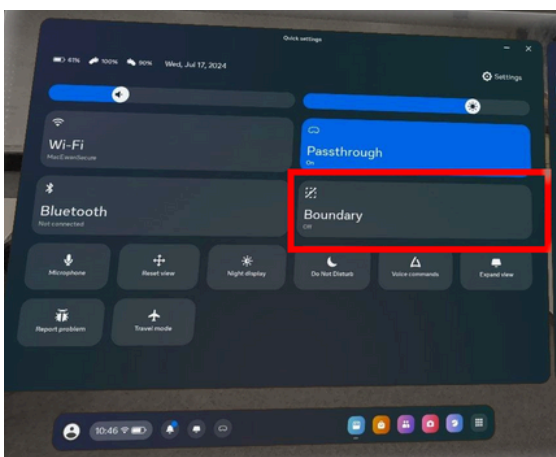
Safety tip: Use a spotter to help you stay oriented within boundaries.

b. If not automatically prompted to create a boundary, access “Quick Settings” (green button) located bottom left in the toolbar in-headset and toggle Boundary from "off" to "on".

b. Center yourself in your unobstructed space.

c. Select boundary type. For moving gameplay select "Choose Your Own Boundary" for stationary gameplay select "Stationary Boundary". You must be seated for the “Stationary Boundary” option to appear.

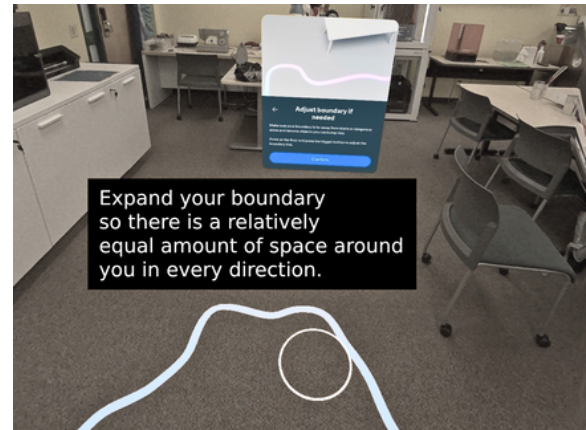
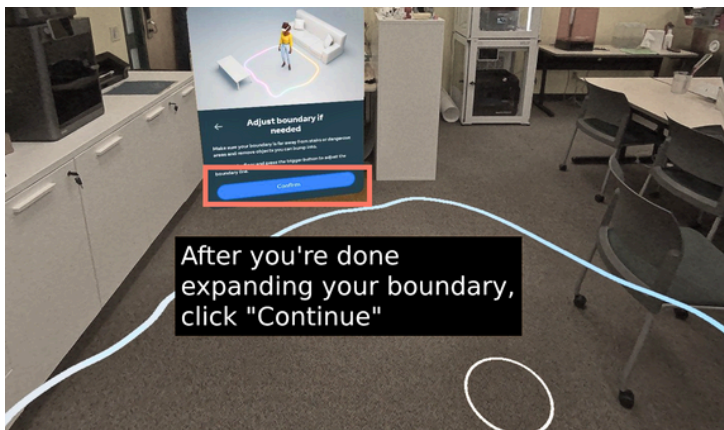
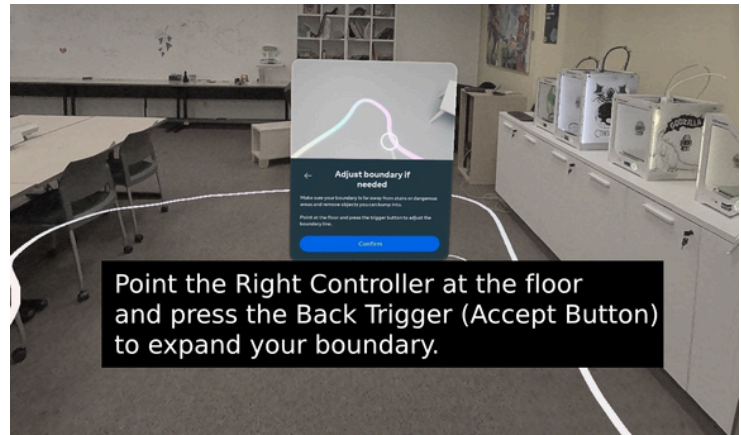
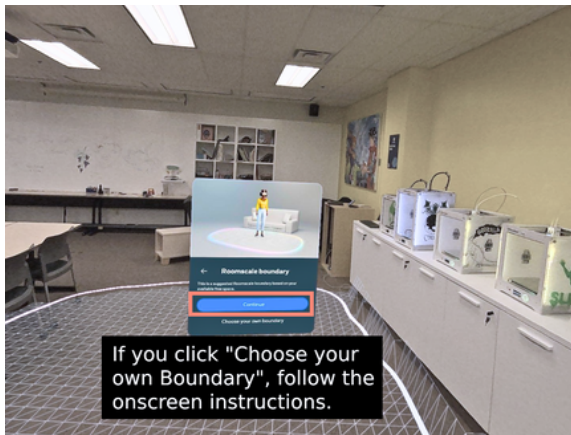
c. Follow the in-headset prompts (see detailed instructions with images below and on the following page).



Using the Meta Quest Headset

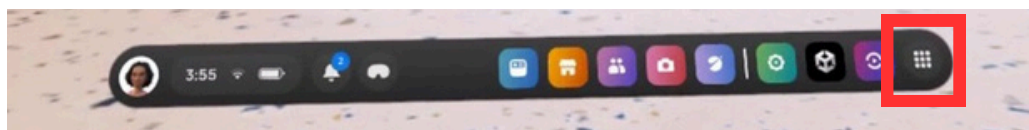
Note: DO NOT reset headset. Only put to sleep by tapping power button once.

4. Set Up Boundary



5. Play Games

- Open the library app located in the toolbar and browse the available apps that are provided.



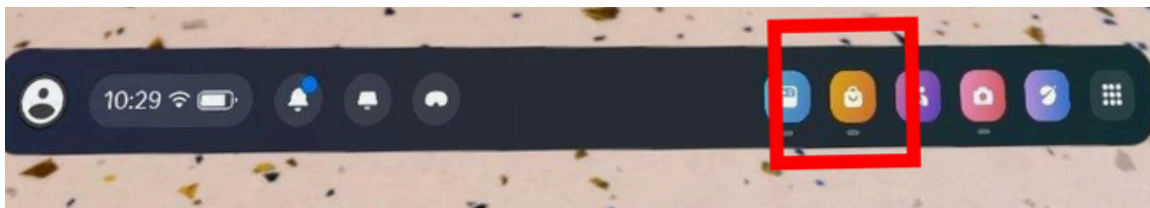
- Select games or apps using the trigger button on the controller or pinch using the hand tracking function.

Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

5.1 Download Games; Meta Horizons Store

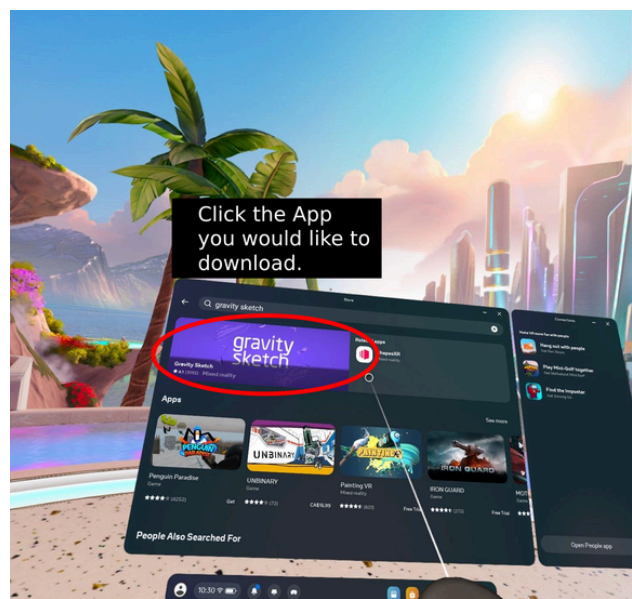
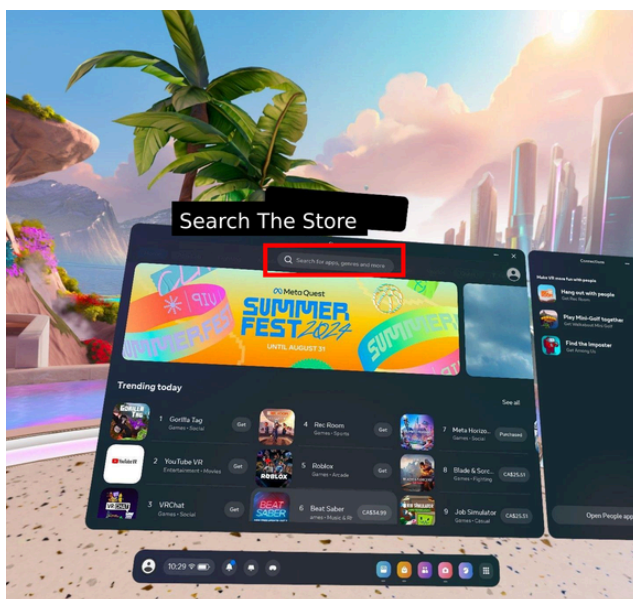
c. If you do not want to use the available apps or games you can browse other free and paid options in the Meta Store. Select the store (orange button) from the bottom toolbar.



d. Once in the store see the trending apps or search for an app using the top search bar. Note: Free apps will say have a “Get” button. Paid apps will list a price.

e. Click the app you would like to download. If paid, enter your payment details. DO NOT SAVE payment information.

f. Click get for the app to start downloading.



Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

5.2 Connect Steam; Download and Launch

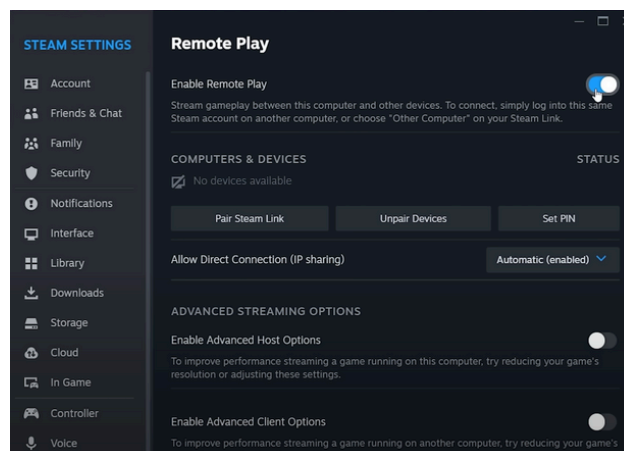
****Note:** You may need to remove the headset for this step or get help from someone else.**

On your Computer:

- Install the Steam client from store.steampowered.com/about/.
- Launch the stem app on your computer, allow time to update if necessary, then log in with your account.
- Download “SteamVR” from the Steam Store and install the game on your computer.



- Search for and download VR-enabled games you would like to play, you can find a list of them at store.steampowered.com/vr/
- In the Steam window, go to Steam settings > remote play (left menu) > enable remote play (toggle) to enable wireless pairing capability between your headset and your computer.



- Do NOT launch the game on your computer, launch the game from inside of your headset using steam link (see next section).

Using the Meta Quest Headset

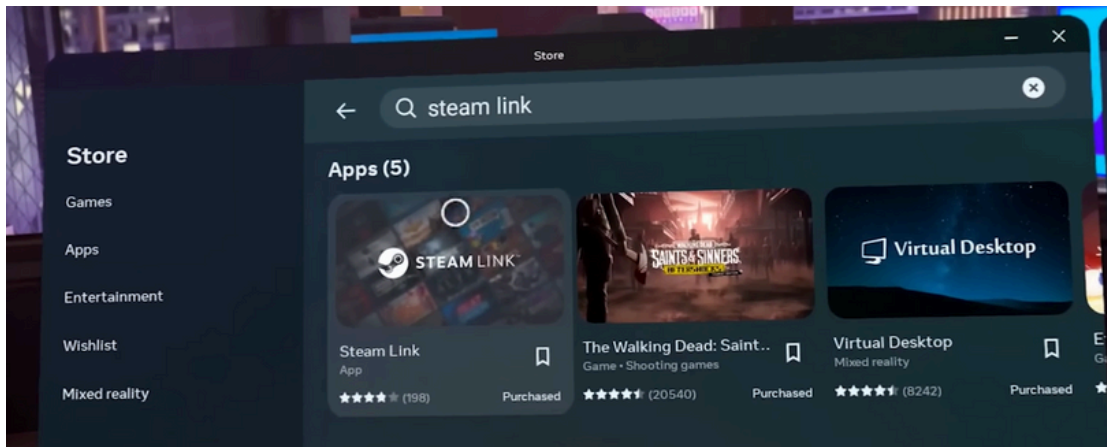
Note: DO NOT reset headset. Only put to sleep by tapping power button once.

5.2 Connect Steam; Download and Launch

****Note:** You may need to remove the headset for this step or get help from someone else.**

In your VR Headset:

- a. Search the Meta Horizon Store for “Steam Link”, download the application on your headset, refer to *5.1 Download Games; Meta Horizons Store* of this guide if needed.



- b. After downloading, open the Steam Link app.
- c. Follow the steps on the headset, selecting the computer you wish to link to.
****note:** Ensure that your computer running steam is connected to the same Wi-Fi your VR headset is connected to.
- d. Enter the 4 digit code displayed in the VR headset into Steam as indicated.
- e. After connected, your headset will load the Steam Link waiting area. You can select your games from the Steam Library window within this area.

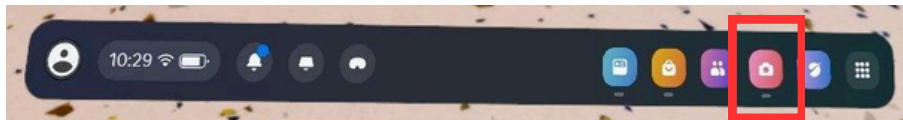
Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

5.2 Share your Screen; Headset Casting

g. To cast what you see in the headset to a screen there are multiple methods. The simplest method, if you have a smart tv, is to use Chromecast.

- i. Make sure your tv and your headset are connected to the same WiFi network.
- ii. Open the camera menu by selecting the red camera button from the bottom toolbar



- iii. Open the camera menu by selecting the red camera button from the bottom toolbar
- iv. Toggle the Casting function from “off” to “on”.
- v. From the list of available devices select your tv.

If this method does not work for your device use the QR code or link below to a Youtube video showcasing 6 ways to cast the Meta Quest 3S.



YouTube Video Tutorial

[How to Cast Meta Quest 3S to TV](#)

If using Steam Link you should automatically see the gameplay cast on your computer where you are connected to Steam.

Using the Meta Quest Headset

Note: DO NOT reset headset. Only put to sleep by tapping power button once.

6. Charge

A. Included with the headset is a USB-C cord that can be used to charge the headset. We recommend having the headset at least 50% charged before beginning a VR session.

b. The controllers use AA batteries. There are 2 extra rechargeable AA included with the headset.

c. To replace batteries:

- i. Press the small triangle near the top of the controllers to pop open the cover (as pictured).
- ii. Remove the old batteries and replace with new ones following the correct positive and negative alignment. Do NOT throw away the dead batteries as they are also rechargeable.
- iii. Slide back on the cover until you hear it snap back into place.

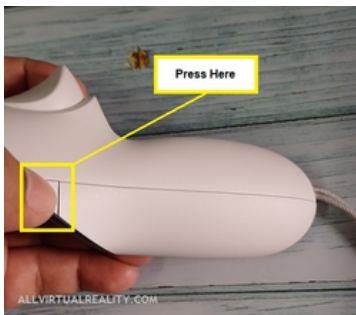


Photo Credit: All Virtual Reality
<https://www.singer.com/en-ca/products/singer-4423-heavy-duty-sewing-machine>

Note: Please delete your personal profile from the headset before returning to the Makerspace to protect your privacy. The device will also be wiped to ensure your data is protected.

Troubleshooting

Common Issues	
Issue	Fix
Height Adjustment	<ul style="list-style-type: none"> • Select “Settings”, then “Accessibility” • Click “Mobility” and turn on “Adjust Height”
Headset Isn’t Connected to the Meta Horizon App	<ul style="list-style-type: none"> • Ensure its logged into the correct account • Completely close & reopen the app. • Restart the headset
Controllers Aren’t Detected	<ul style="list-style-type: none"> • Ensure you have the correct controllers for the headset. • Check if the controllers have batteries/if the batteries are dead.
Can’t Sign Out of the Meta Horizon App	<ul style="list-style-type: none"> • Uninstall and reinstall the app to reset login access
Headset Is On, But You See Nothing / It’s Blurry	<ul style="list-style-type: none"> • The headset is most likely too far away from your face. • Tighten the Back Strap & adjust the Top Velcro Strap so the that the image in VR is clear. The back strap should rest from the middle to lower side of the skull for optimal comfort. If the image is still blurry, change the lens spacing to fit your eye width. • Adjust lens spacing by shifting the lens left/right manually. • If you have visual aids (glasses, contacts etc.), ensure you wear them while in VR. • If you wish to abstain from using your aids, your experiences will be impacted, and things may be blurry. • The easiest way to wear the headset comfortably with glasses is by placing the glasses inside the headset before putting it on. • Depending on the size, your glasses may not fit within the headset.

Recommended Apps and Games

Meta Store Free

- ShapesXR (3D concepting, UX/UI)
- OpenBrush (3D painting)
- Gravity Sketch (3D painting & modelling)
- ShapesXR (3D concepting, UX/UI)
- Shapelab Lite (3D voxel sculpting)
- Steam Link (requires external desktop with Steam + Steam VR)
- Rec Room (multiplayer party games)

Meta Store Paid

- Superhot (low poly shooter - rated teen)
- Beat Saber (rhythm game)

Steam (check computer requirements before purchasing)

1. Half-Life Alyx (zombies!)
2. The Lab (open world, explore, sandbox, good for beginners)
3. Skyrim VR (fantasy)
4. Google Earth VR

References

I acknowledge the use of ChatGPT (<https://chat.openai.com/>) to help develop this instructional guide.