

DepthQVR_AQUA Quick Start Guide

(Release version Oct 7, 2020)

EXPERIENCE WITH A VR HEADSET & VR CONTROLLERS

1. Click the Play button in Steam.
2. Click Play! on the DepthQVR_AQUA Configuration screen.
3. Shortly you will see a black screen. In about 25 seconds you will see a loading percentage in white at the top of the screen. In about 90 seconds you will see the fishbowl area.
4. Put on your VR headset.
5. Sit in your play area, look straight forward and press the SPACE BAR. This calibrates the experience.
6. When you are ready to start the experience, press the Q key on the keyboard.
7. Some objects are interactive, try touching them.
8. At the end of the experience, you will return to the fishbowl. You can press Q to ride again or press ESC to exit the game.

EXPERIENCE WITH A VR HEADSET & LEAP MOTION (ULTRALEAP)

Leap Motion sensor configuration, see [page 28](#)

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4. Put on your VR headset.
5. Sit in your play area, look straight forward and press the SPACE BAR. This calibrates the experience.
6. When you are ready to start the experience, press the Q key on the keyboard.
7. Some objects are interactive, try touching them, via the Leap.
8. At the end of the experience, you will be back in the fishbowl. You can press Q to ride again or press ESC to exit the game.

WATCH ON A 2D 16:9, DESKTOP COMPUTER SCREEN:

(Full interactivity is still in development via a game controller.)

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3. Shortly you will see a black screen. In about 25 seconds you will see a loading percentage in white at the top of the screen. In about 90 seconds you will see the fishbowl.
4. You can look around using the mouse, the arrow keys or WASD keys.
5. When you are ready to start the experience, press the Q key on the keyboard.
6. When you stop at a button press area, press the P key to proceed.
7. At the end of the experience, you will be back in the fishbowl. You can press Q to ride again or press ESC to exit the game.



DEPTH QVR
AQUA

AN IMMERSIVE RIDE EXPERIENCE

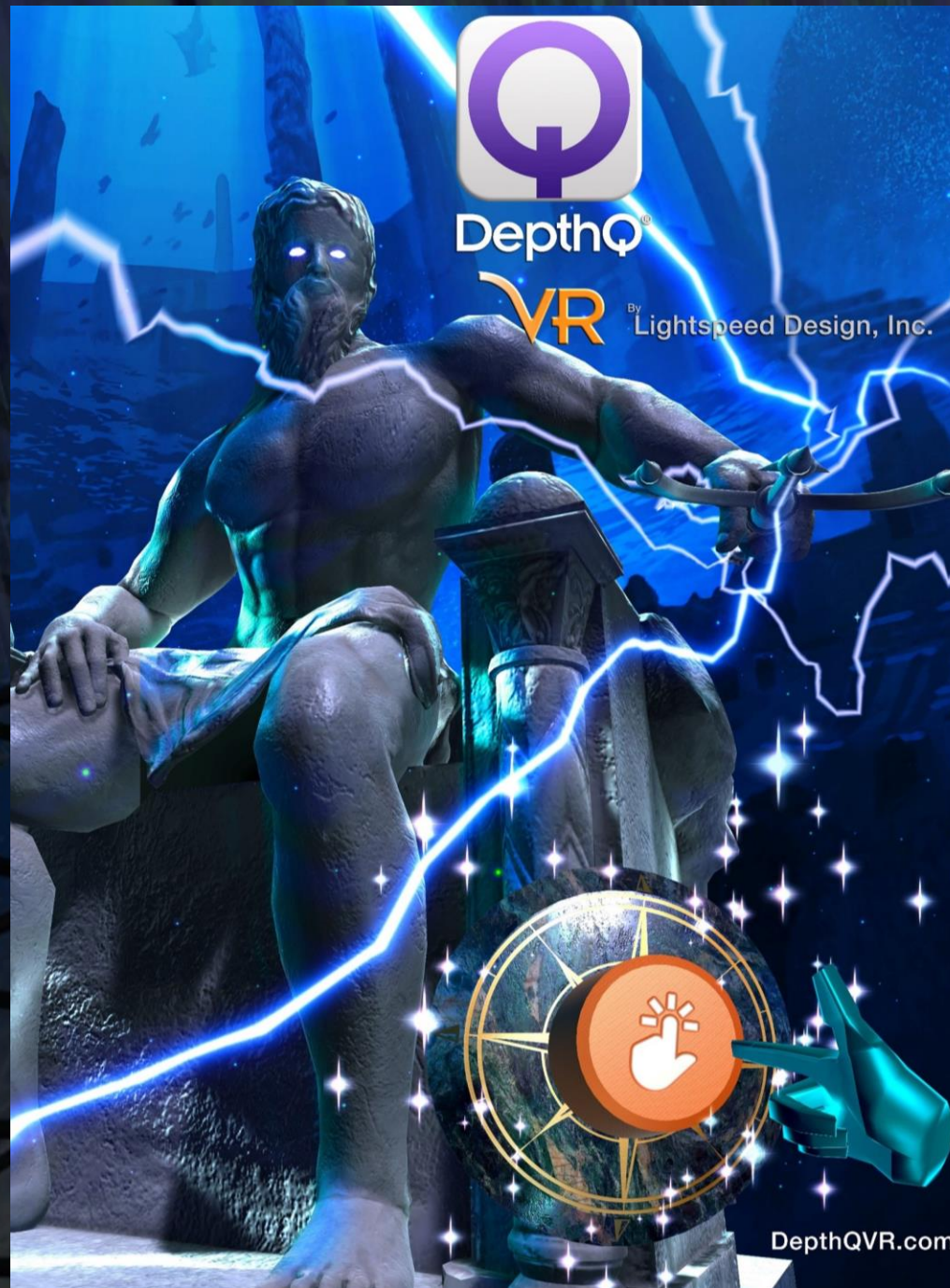
DepthQVR

ABOUT

Lightspeed Design, Inc., located in Bellevue, WA, USA, is an experienced technology developer who has successfully commercialized numerous visualization products, including 3D cinema technology currently certified by six major Hollywood studios, and utilized by over 2,750 first run movie theaters worldwide.

DEPTHQVR® is both a technology and an immersive 360° attraction enhanced with motion and interactivity, that captures the viewers' attention to deliver compelling and memorable experiences. It is an evolving effort by Lightspeed Design that unites our well-seasoned talents and expertise in attraction design, consumer engagement, and event technology to help you create fresh and exciting experiences.

Applications include attractions for theme parks, cinema lobbies, museums, heritage centers and event marketing.



DepthQVR®

DepthQVR is a fun and engaging virtual reality ride for brand experiences and attractions that delivers compelling customer experiences and enhanced impressions and recall.

DepthQVR is not only visually immersive but invites the viewer to participate through playful 'natural-touch' interactivity and exhilarating body motion with the D-BOX haptic motion chair.

DepthQVR supports our immersive display technologies: Head Mounted Display, 3D Curved Torus Projection, 4K Dome, and 4K Flat Panel. Pick your desired format and we customize the playback.



DepthQVR was recently uploaded to Valve's Steam. **Just ask us for the access key.**

Immersive Display Technologies



HMD



3D TORUS



4K DOME



4K TV

DepthQVR.com

DepthQVR by Lightspeed Design, Inc.
Bellevue, WA USA



Preliminary instructions for installing DepthQVR_AQUA from Steam

October 7, 2020

DepthQVR

INSTALL

There are three available user modes:

- Experience: HMD with VR Controllers (Oculus Rift CV-1, HTC Vive)
- Experience: HMD with Leap Motion (Ultraleap)
- Watch: 2D 16:9, Desktop Computer Screen

In 2D 16:9 mode the functionality is limited, no touch. Most standard computers can use this mode. To look around use the keyboard arrow keys and/or the mouse.

In HMD mode, the keyboard/mouse can be used. Touch is supported by use of Leap Motion, Oculus touch controller or Vive wand controllers.

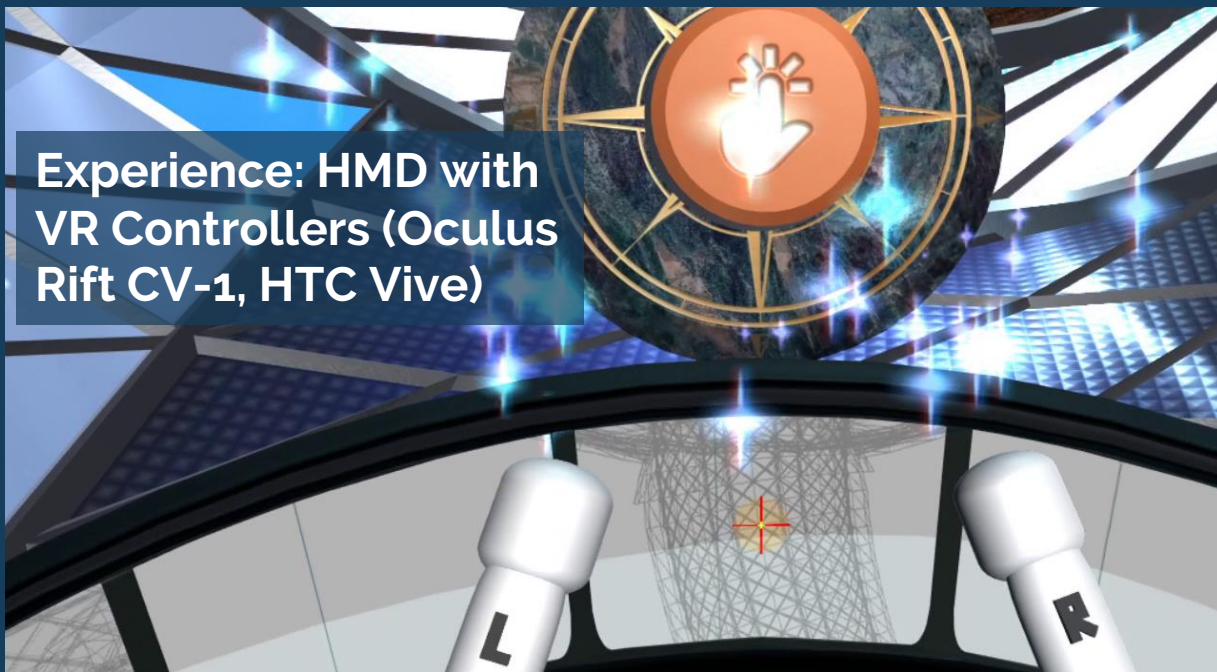
D-BOX motion is supported in 2D 16:9 or HMD

DEPTHQVR AQUA

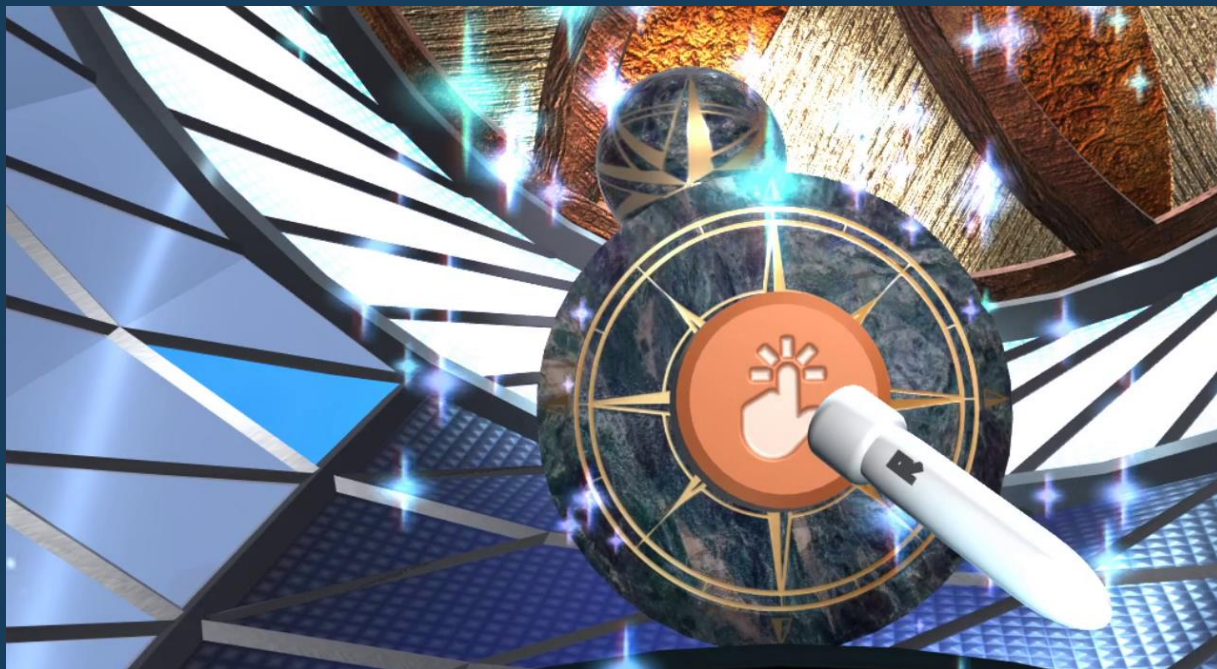
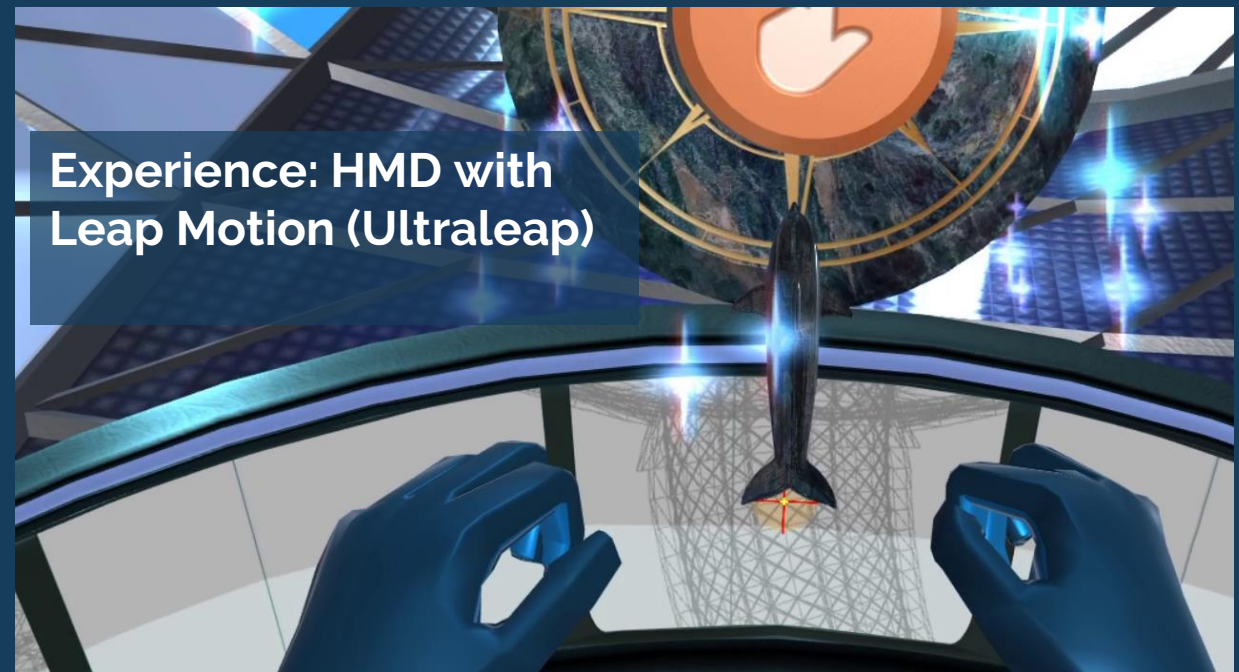
AN IMMERSIVE RIDE EXPERIENCE



Experience: HMD with
VR Controllers (Oculus
Rift CV-1, HTC Vive)



Experience: HMD with
Leap Motion (Ultraleap)



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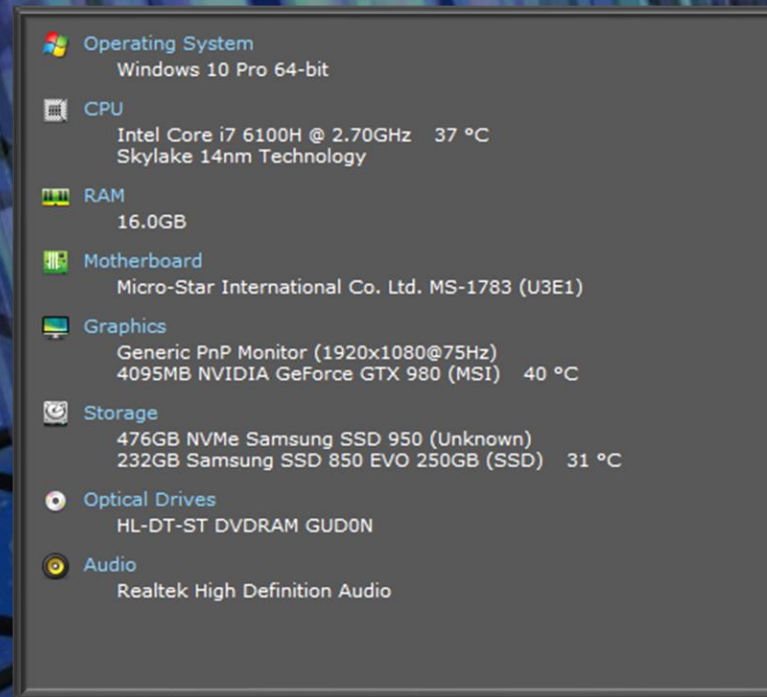
INSTALL

Sample computer specifications for operating DepthQVR_AQUA.

We address installation of Leap Motion starting on [page 28](#).

Gamer Laptop

Example minimum specification



Operating System
Windows 10 Pro 64-bit

CPU
Intel Core i7 6100H @ 2.70GHz 37 °C
Skylake 14nm Technology

RAM
16.0GB

Motherboard
Micro-Star International Co. Ltd. MS-1783 (U3E1)

Graphics
Generic PnP Monitor (1920x1080@75Hz)
4095MB NVIDIA GeForce GTX 980 (MSI) 40 °C

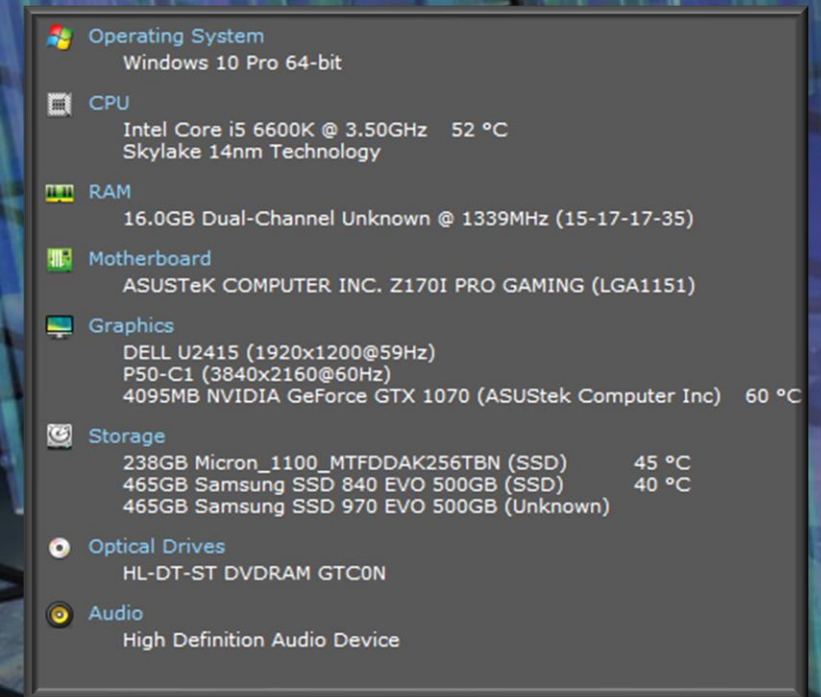
Storage
476GB NVMe Samsung SSD 950 (Unknown)
232GB Samsung SSD 850 EVO 250GB (SSD) 31 °C

Optical Drives
HL-DT-ST DVDROM GUD0N

Audio
Realtek High Definition Audio

Gamer Desktop

Example minimum specification



Operating System
Windows 10 Pro 64-bit

CPU
Intel Core i5 6600K @ 3.50GHz 52 °C
Skylake 14nm Technology

RAM
16.0GB Dual-Channel Unknown @ 1339MHz (15-17-17-35)

Motherboard
ASUSTeK COMPUTER INC. Z170I PRO GAMING (LGA1151)

Graphics
DELL U2415 (1920x1200@59Hz)
P50-C1 (3840x2160@60Hz)
4095MB NVIDIA GeForce GTX 1070 (ASUSTek Computer Inc) 60 °C

Storage
238GB Micron_1100_MTFDDAK256TBN (SSD) 45 °C
465GB Samsung SSD 840 EVO 500GB (SSD) 40 °C
465GB Samsung SSD 970 EVO 500GB (Unknown)

Optical Drives
HL-DT-ST DVDROM GTC0N

Audio
High Definition Audio Device

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INSTALL HMD

DepthQVR_AQUA supports the Oculus Rift CV1, HTC Vive and HTC Vive PRO Head Mounted Displays (HMD). Download the appropriate driver and set up your HMD. Note: For the CV1, be sure to select "Oculus Rift" and not "Oculus Rift S".

<https://www.oculus.com/setup/>

<https://www.vive.com/us/setup/>

<https://www.vive.com/us/setup/vive-pro-hmd/>

DepthQVR_AQUA will automatically detect and configure itself for your attached devices.

To switch between HMD and 16:9 mode, press the 'backspace' key.



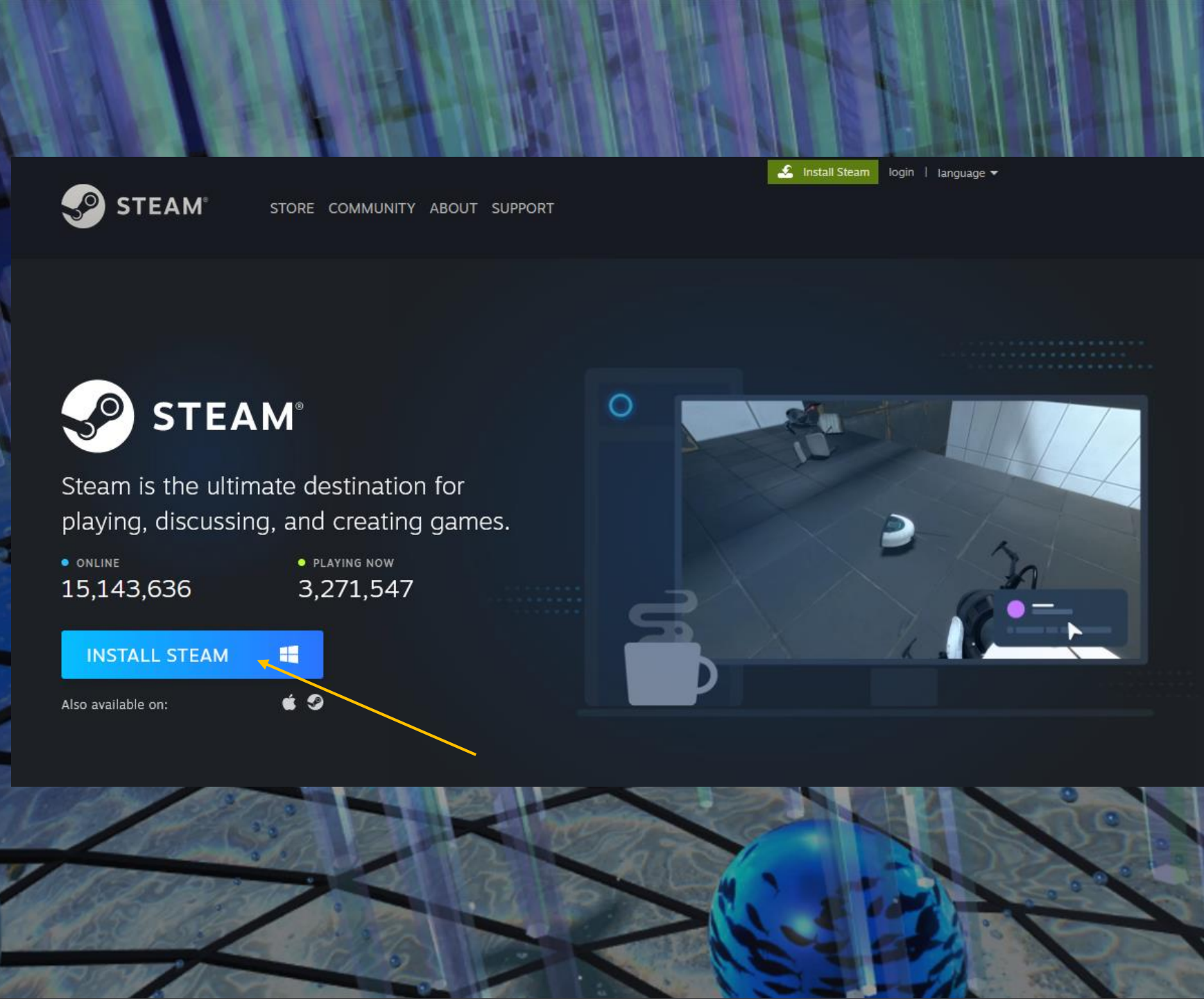
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INSTALL STEAM

Steam is a video game and software digital distribution platform.

<https://store.steampowered.com/>

1. Go to this site and create a Steam account OR login using an existing Steam account.
2. Install the Steam software on your PC.
3. The "SteamVR" software should automatically install along with Steam if you have a VR headset.



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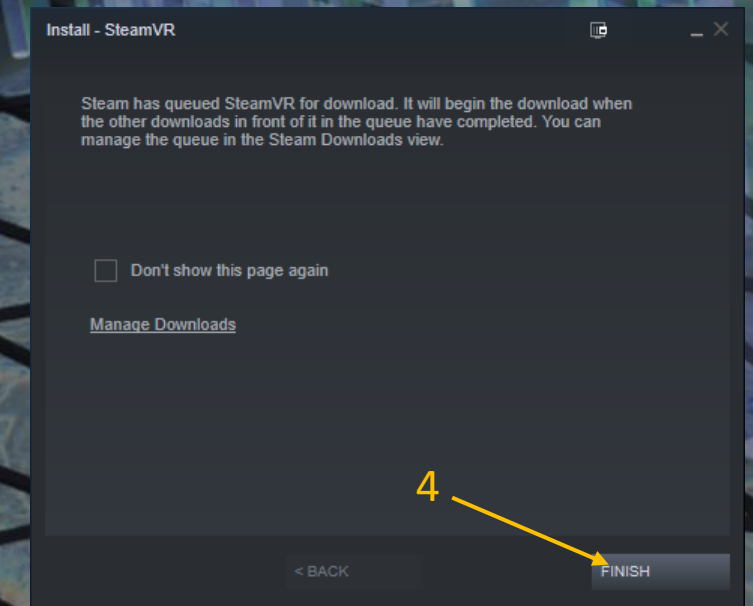
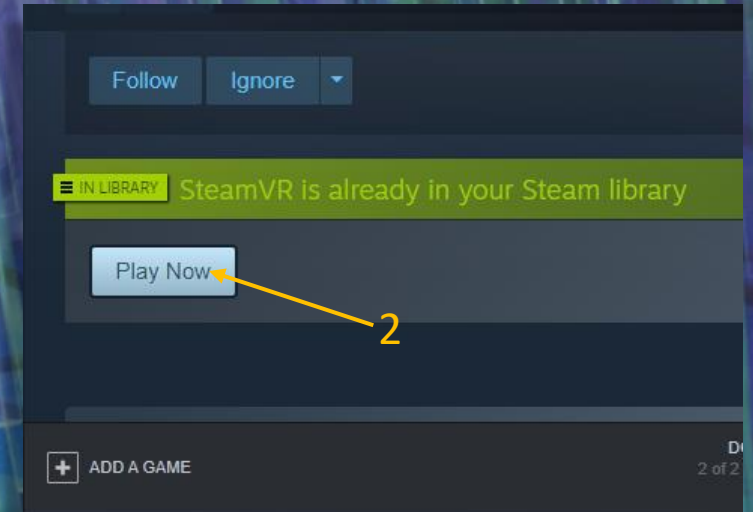
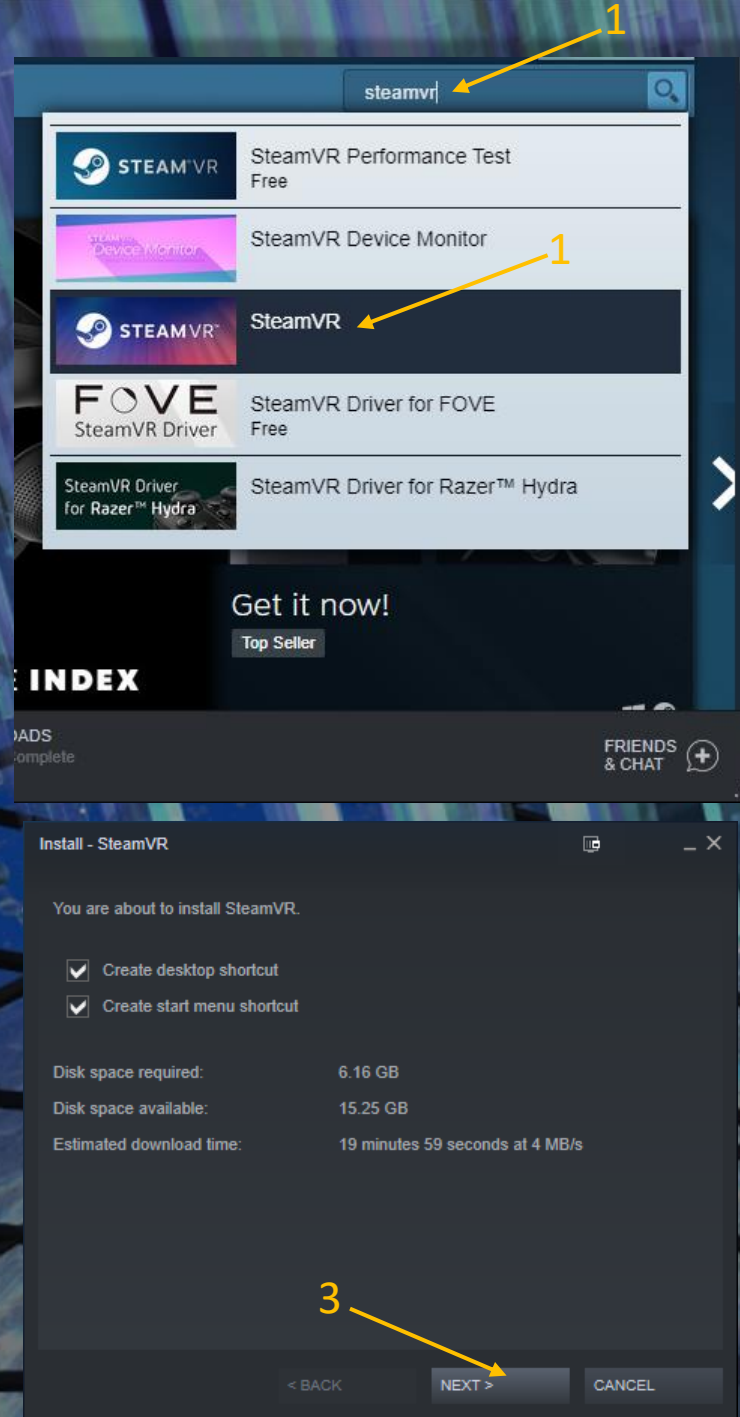
INSTALL STEAMVR

SteamVR is the software that interfaces Steam to your VR hardware. **If you do not have a VR headset, you do not need SteamVR.**

SteamVR is usually installed automatically when you install Steam. If it was not, follow the below steps:

1. Search "SteamVR" in the Steam store and select it
2. Click the "Play Now" button
3. At the Install prompt, click "NEXT"
4. When the install is done, click "FINISH"

SteamVR is now installing. It will take a few minutes to download and finish.



DepthQVR

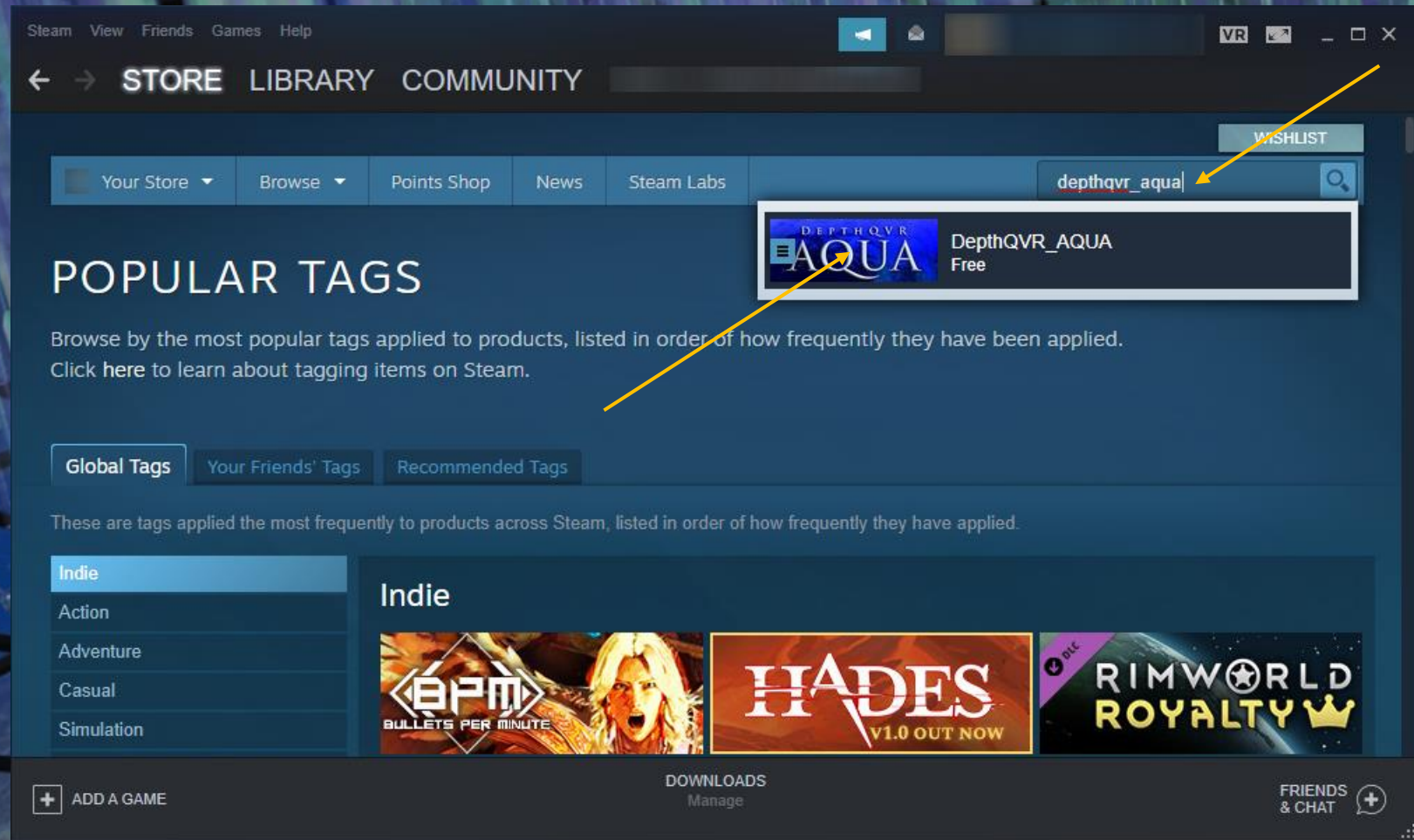
STEAM – LOCATE AQUA

Go to the STORE area of the Steam App.

In the search box, type "depthqvr_aqua"

Click on the DepthQVR_AQUA logo

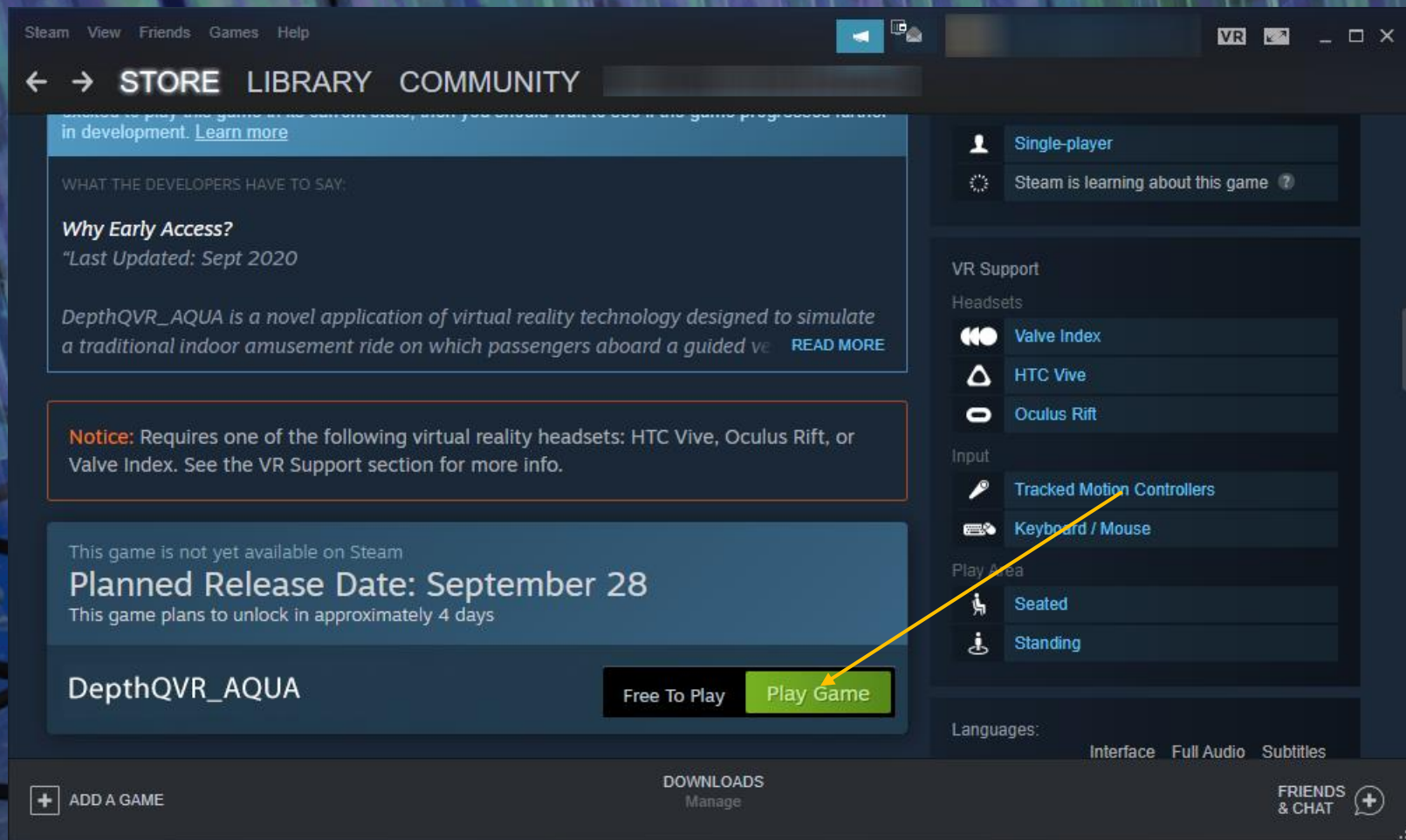
This will take you to the store page for DepthQVR_AQUA.



DepthQVR

STEAM – INSTALL AQUA

Click on the “Play Game” button to add DepthQVR_AQUA to your game library.



Steam View Friends Games Help

← → STORE LIBRARY COMMUNITY

in development. [Learn more](#)

WHAT THE DEVELOPERS HAVE TO SAY:

Why Early Access?
"Last Updated: Sept 2020

DepthQVR_AQUA is a novel application of virtual reality technology designed to simulate a traditional indoor amusement ride on which passengers aboard a guided ve [READ MORE](#)

Notice: Requires one of the following virtual reality headsets: HTC Vive, Oculus Rift, or Valve Index. See the VR Support section for more info.

This game is not yet available on Steam
Planned Release Date: September 28
This game plans to unlock in approximately 4 days

DepthQVR_AQUA

Free To Play **Play Game**

VR Support

Headsets

- Valve Index
- HTC Vive
- Oculus Rift

Input

- Tracked Motion Controllers
- Keyboard / Mouse

Play Area

- Seated
- Standing

Languages: Interface Full Audio Subtitles

+ ADD A GAME

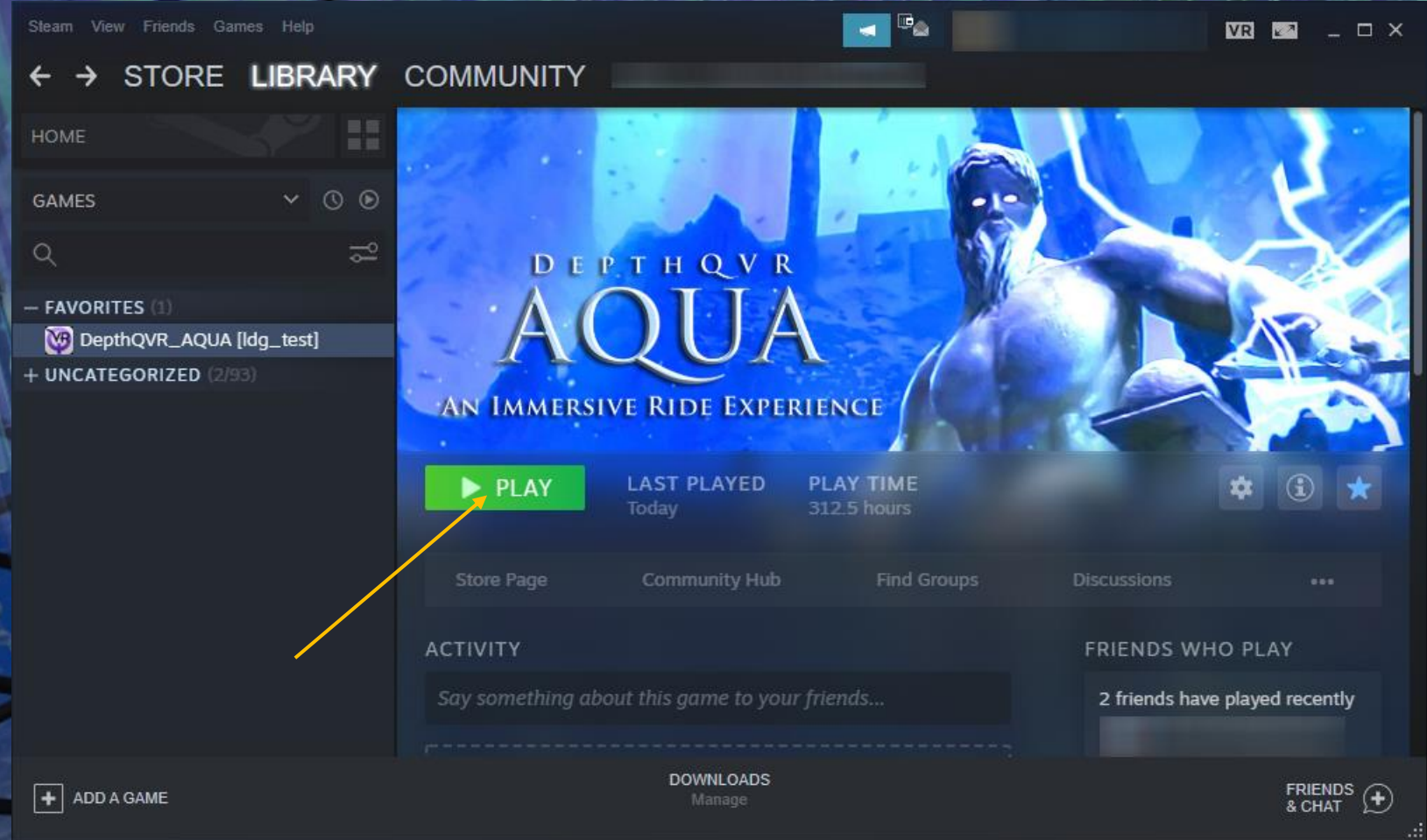
DOWNLOADS Manage

FRIENDS & CHAT +

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STEAM - LAUNCH

Click the PLAY button to launch the game



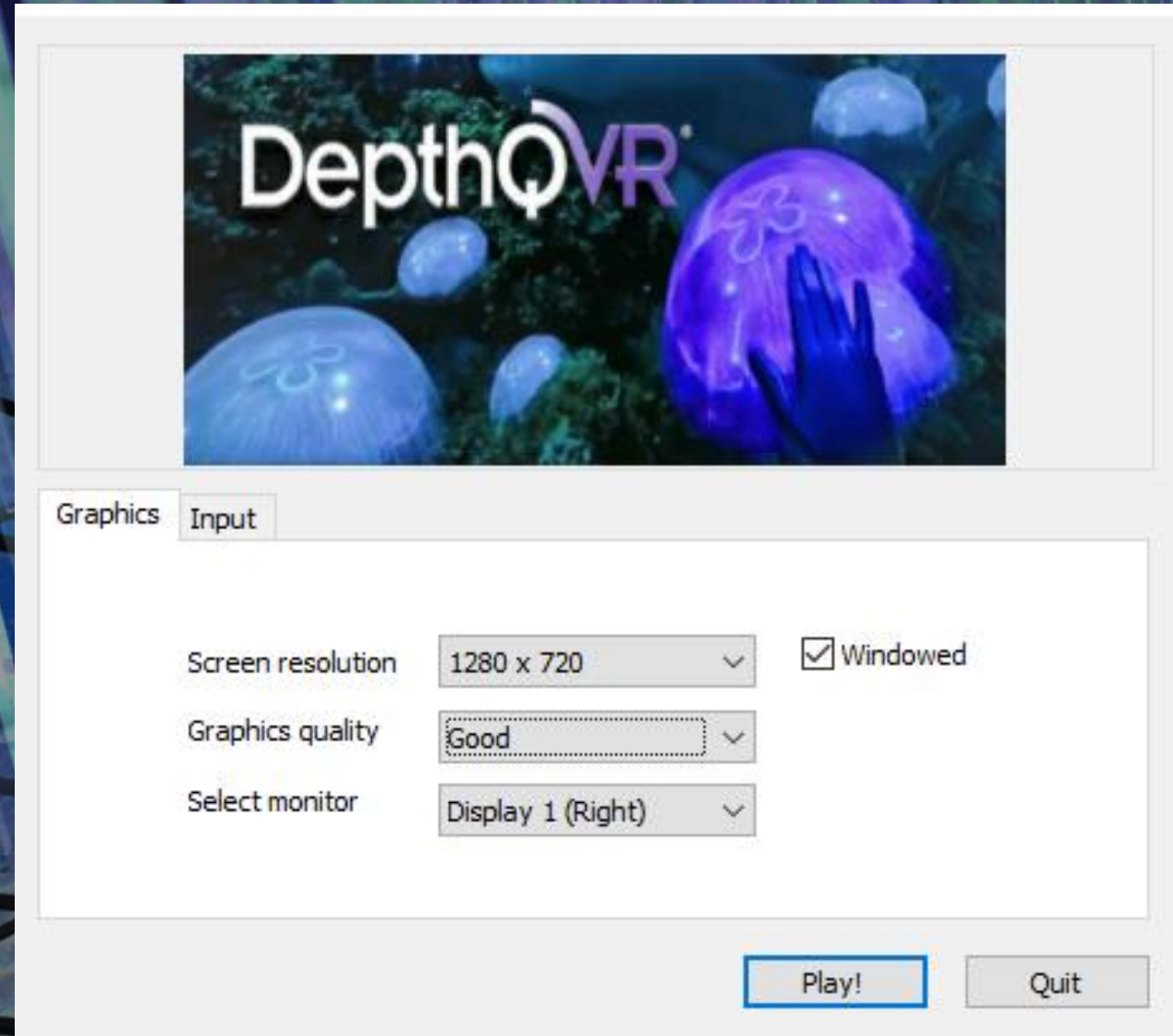
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DEPTHQVR_AQUA SOFTWARE

If VR Equipment is not installed, we suggest a test run of the software using your computer monitor and keyboard only. (you will not be able to touch with keyboard only.)

Set the Screen resolution to 1280x720, windowed, and your graphics quality to "Good". This should be sufficient quality to determine if the computer can maintain 60 FPS. If positive, then you may turn the graphics quality to "Fantastic" and Screen resolution to 1920x1080, at your next load.

Click "Play!"



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DEPTHQVR_AQUA SOFTWARE

The software can take a minute and a half to load (we are working to reduce the load time).

When you see "60 FPS", the product is fully loaded. You may see a lower FPS if the GPU or computer speed is not sufficient.

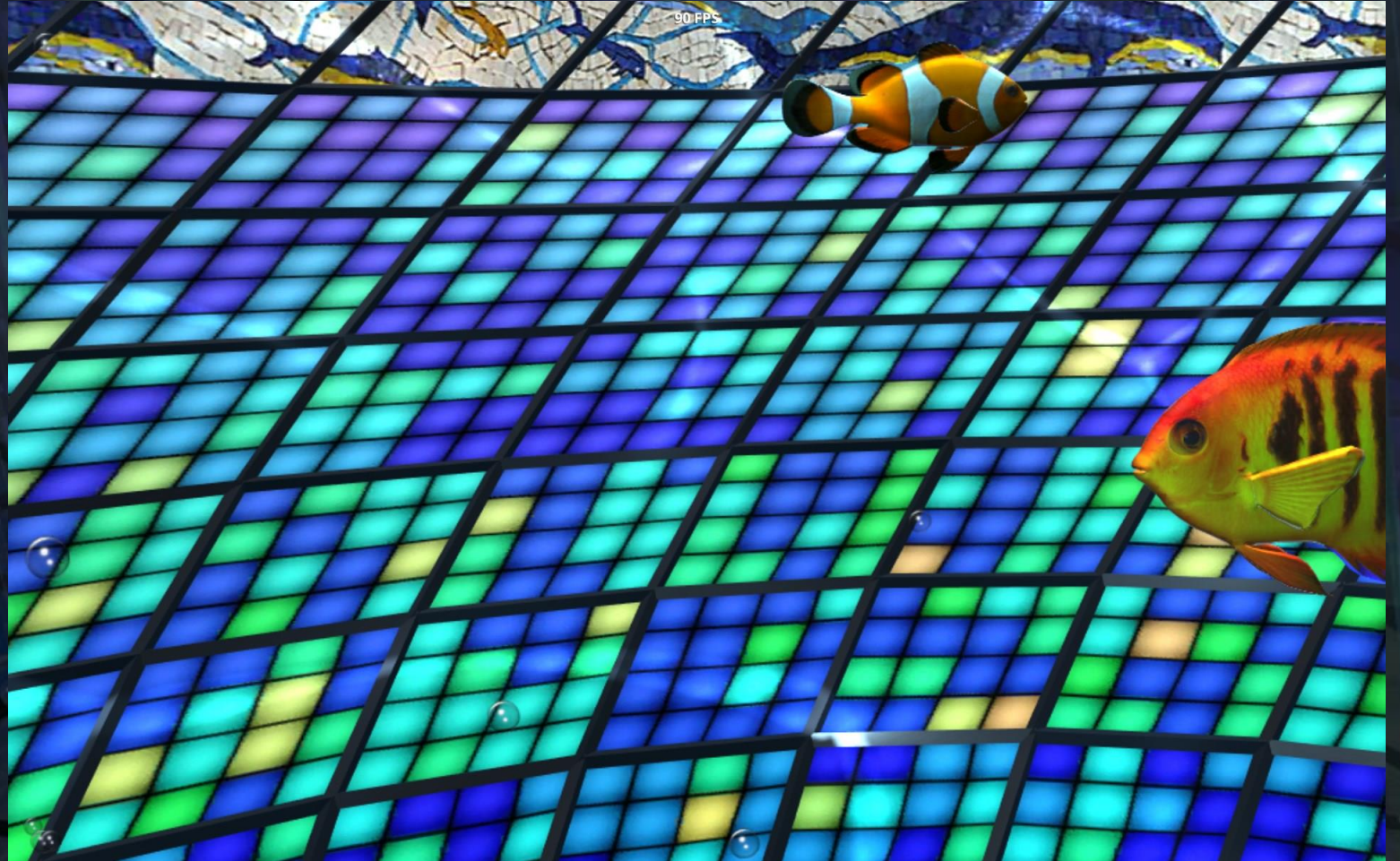


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HMD ALIGNMENT

If you are using a HMD, look level and straight forward and press the SPACE BAR on the keyboard. This will calibrate the experience to your room environment.

Calibration is not necessary without a HMD.



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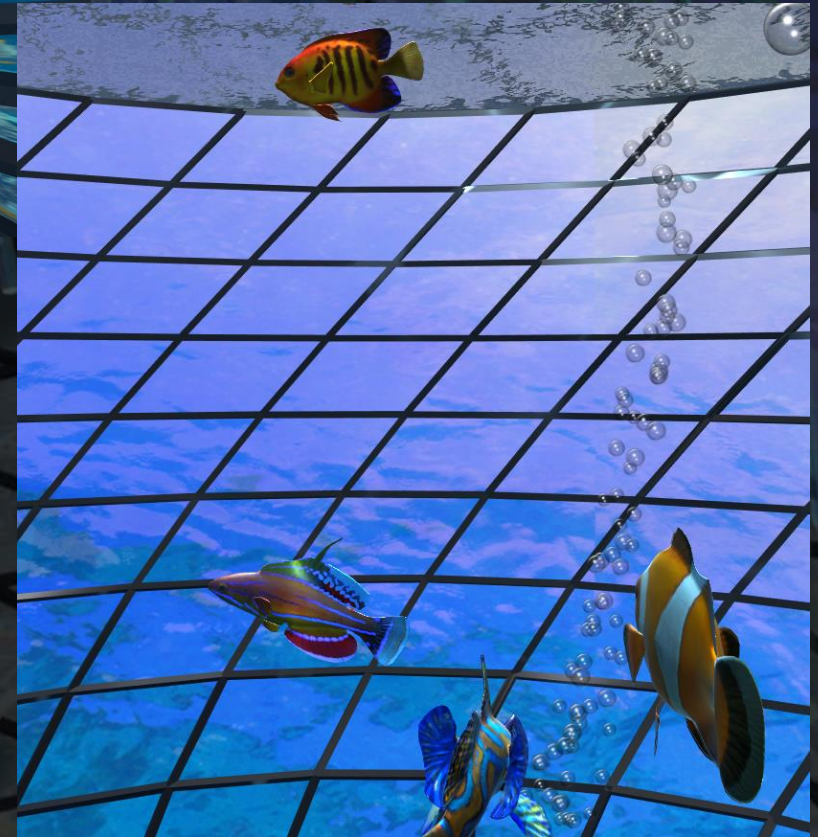
BEGIN IN THE "FISH BOWL"

Starting out, you are in the "Fish Bowl", this is a holding area and a place to learn how to navigate.

You can use the arrow keys and/or the mouse to simulate "HMD look around". If the D-BOX is active the chair will follow where you "look", letting you fly around the space in a limited way.

Reach out and touch a few fish. They should react to your touch.

Note: if nothing happens it means the game window is not active. Clicking on the game window with the mouse makes it active.



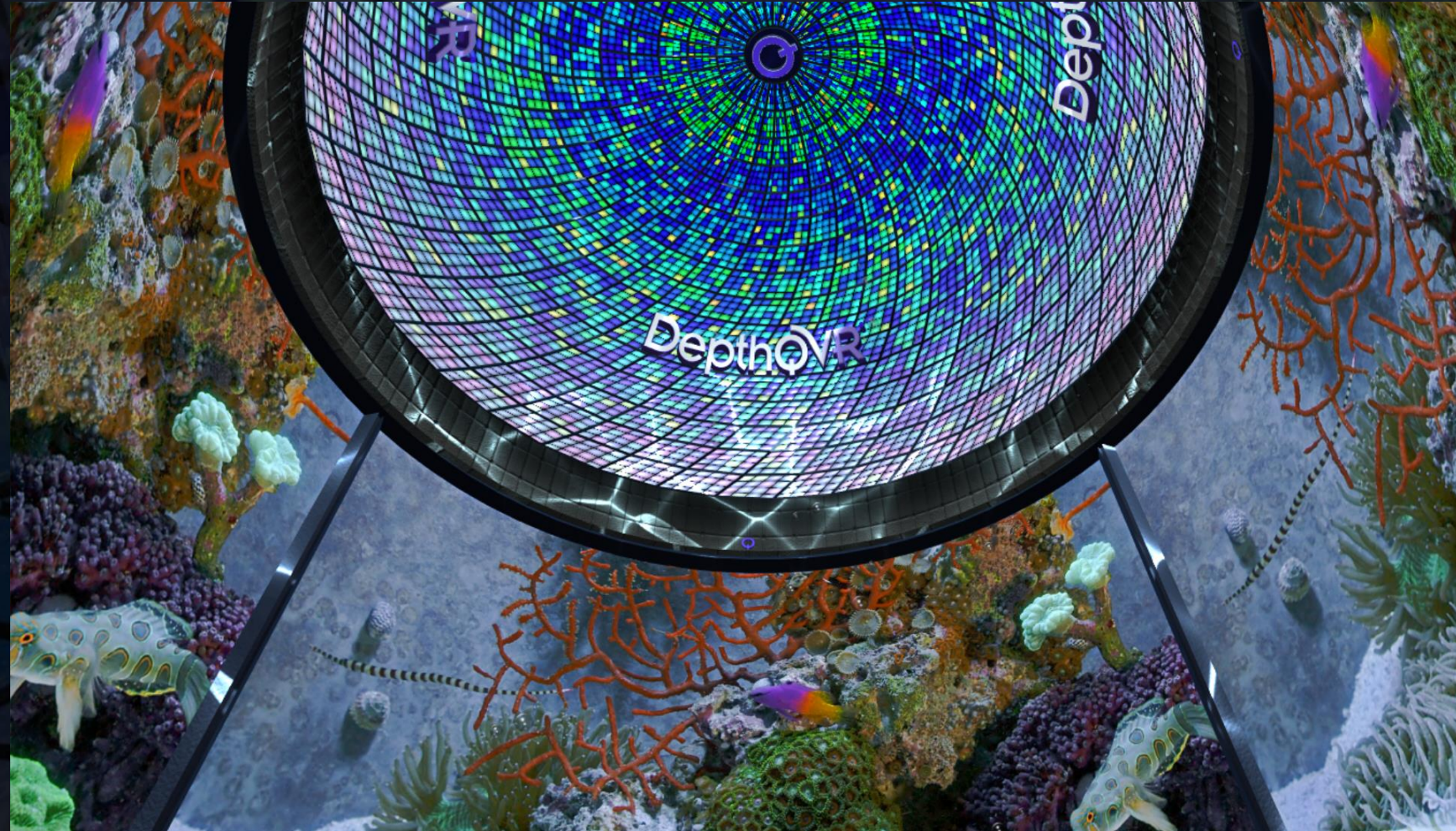
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THE "Q" SEQUENCE

The "Quick Tour" operation sequence:

- When ready hit the "Q" key, you will hear "Quick Tour". This recommended sequence will take you on a 4.5 minute tour of the ride.

The software takes over and moves you through the space. You may look around as you travel, think of it like sitting in an amusement ride.



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THE FLOWER DOOR

When you arrive at the door, you pause and a button will emerge.

With an HMD and Leap Motion, you can push the button with your virtual hand, activating the door.

In the Quick Tour sequence the door button is activated with the P key on your keyboard. You can press P for any virtual button pushes.



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ANIMATION

You will experience animated characters.



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TOUCH OBJECTS

You will now fly through the space.

With Leap Motion or touch / wand controllers you can interact with some objects by touching them.



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TOUCH ANIMATION

Your next stop is the interactive Jellyfish.

With Leap Motion or touch / wand controllers you can touch objects.



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BUTTON PUSH

Pick a fast or slow descent into the 360 3D movie theater.

With the Leap Motion or touch / wand controllers you can touch the objects.

In the Quick Tour sequence the door button is pressed with a P key for fast and the O key for slow.

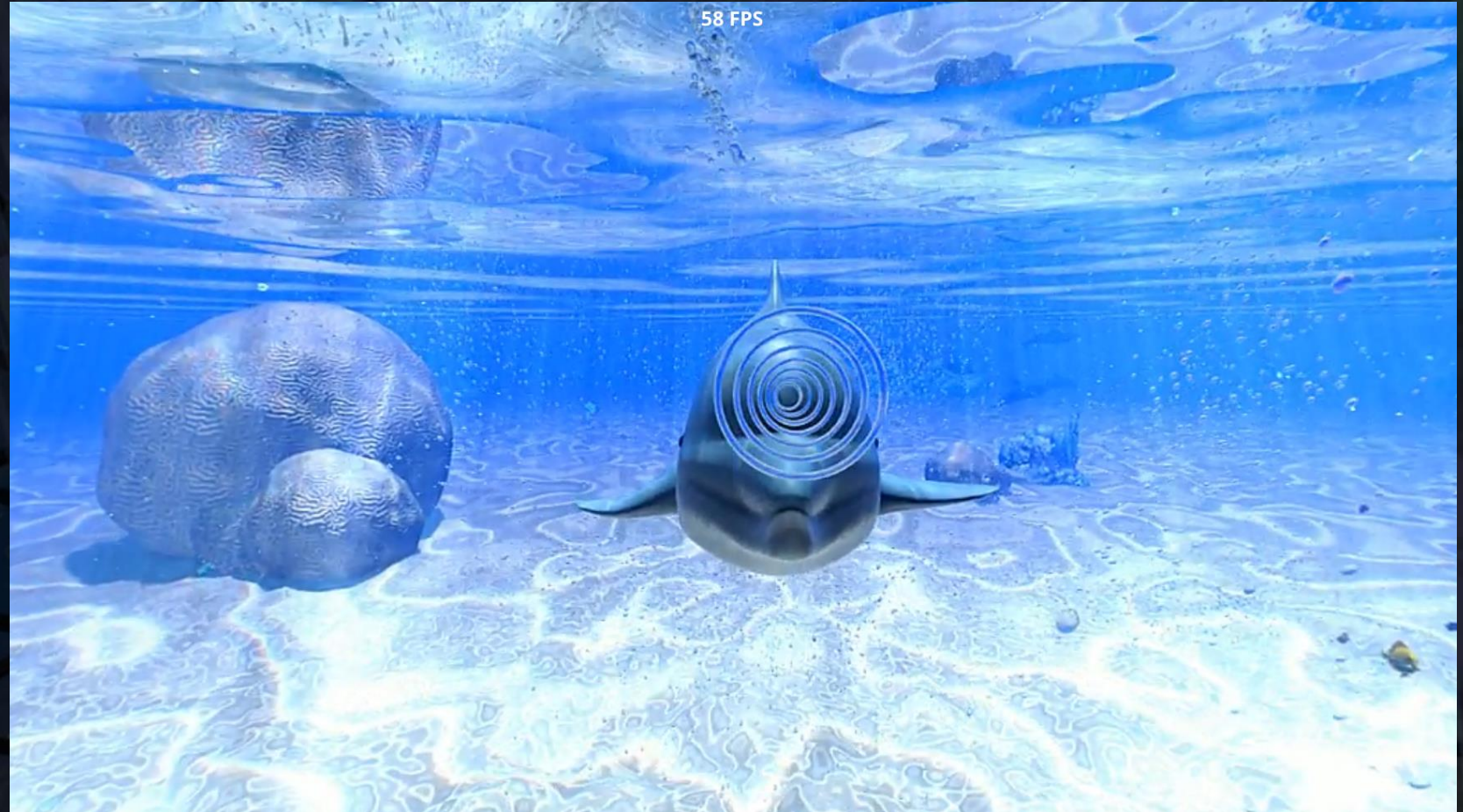


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FILM PLAYBACK

Now a 360 3D film will play, with synched D-BOX motion.

Technologically, this space allows for the virtual playback of existing pre-rendered simulator films.



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SOCIAL MEDIA

This is the social media and sponsorship space.

Live social media feeds can load. (disabled at the moment.)

You can move around freely until the time out is reached. You will plunge into the pool, fade out and then reset back into the Fish Bowl.

Fade to black. Hit "F1" to reset and ride again.



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KEY DIRECTORY

The entire ride architecture is interactive, and it is possible to “hop” to any location, even change the order of events.

The shows current length is 7.5 minutes.

For a list of Keys, press “H”



Addendum

#1: Add Contactless 'in Air' Gesture Technology
Leap Motion (Ultraleap)

#2: Add Ride Technology - simulated motion base
D-BOX

DepthQVR

INSTALL Leap Motion

DepthQVR_AQUA uses the Leap Motion (Ultraleap) for interactivity.

Download the Leap Motion Orion Beta SDK

<https://developer.leapmotion.com/vr-setup>

Continue to the next page to edit the config.ini file.



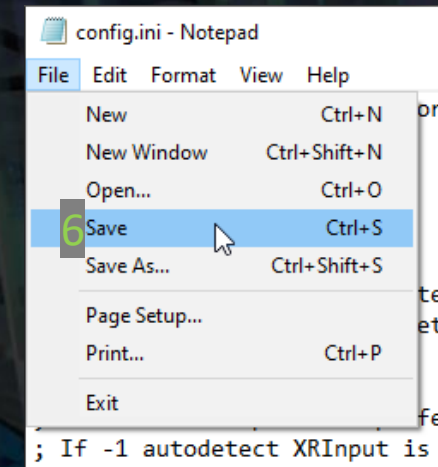
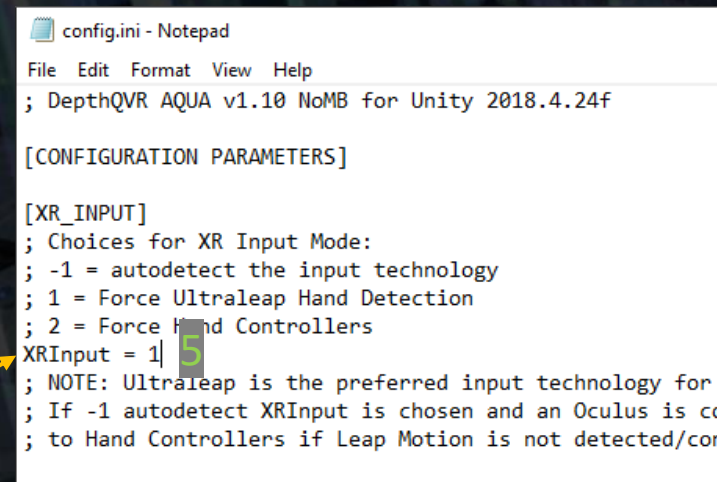
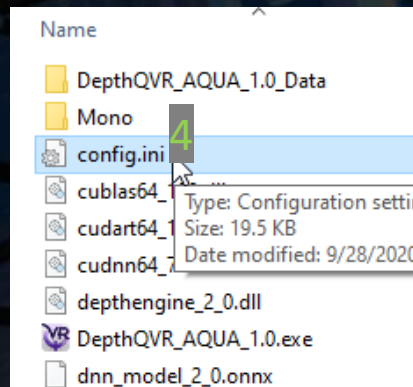
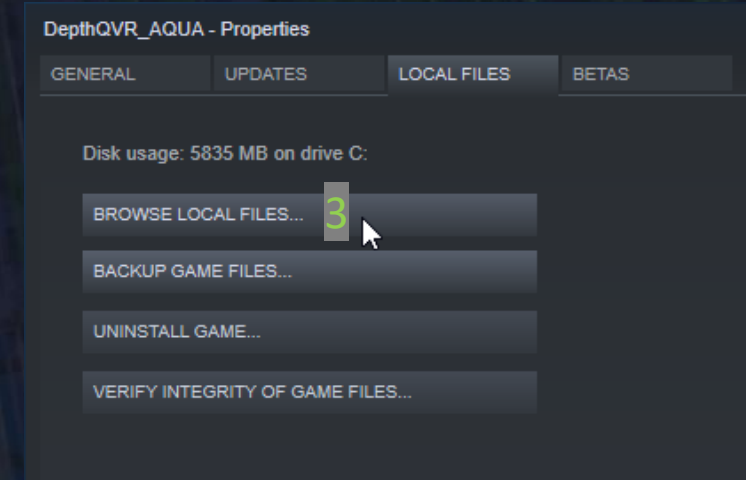
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Edit config.ini

You need to edit the config.ini text file to enable use of the Leap Motion.

1. In the Steam App, right click on DepthQVR_AQUA
2. Left click on Properties...
3. Click the "LOCAL FILES" tab
4. Click on "BROWSE LOCAL FILES..."
5. Double Click on "config.ini"
6. In notepad, locate "XRInput = 2" and change the value to "XRInput = 1"
7. Click on File, then click on Save
8. Exit Notepad

Now you are ready to run DEPTHQVR_AQUA



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Ride Technology

Motion by D-BOX, accurate/reliable, three degrees of freedom

Jaymar home theater recliner chair, customizable style and color



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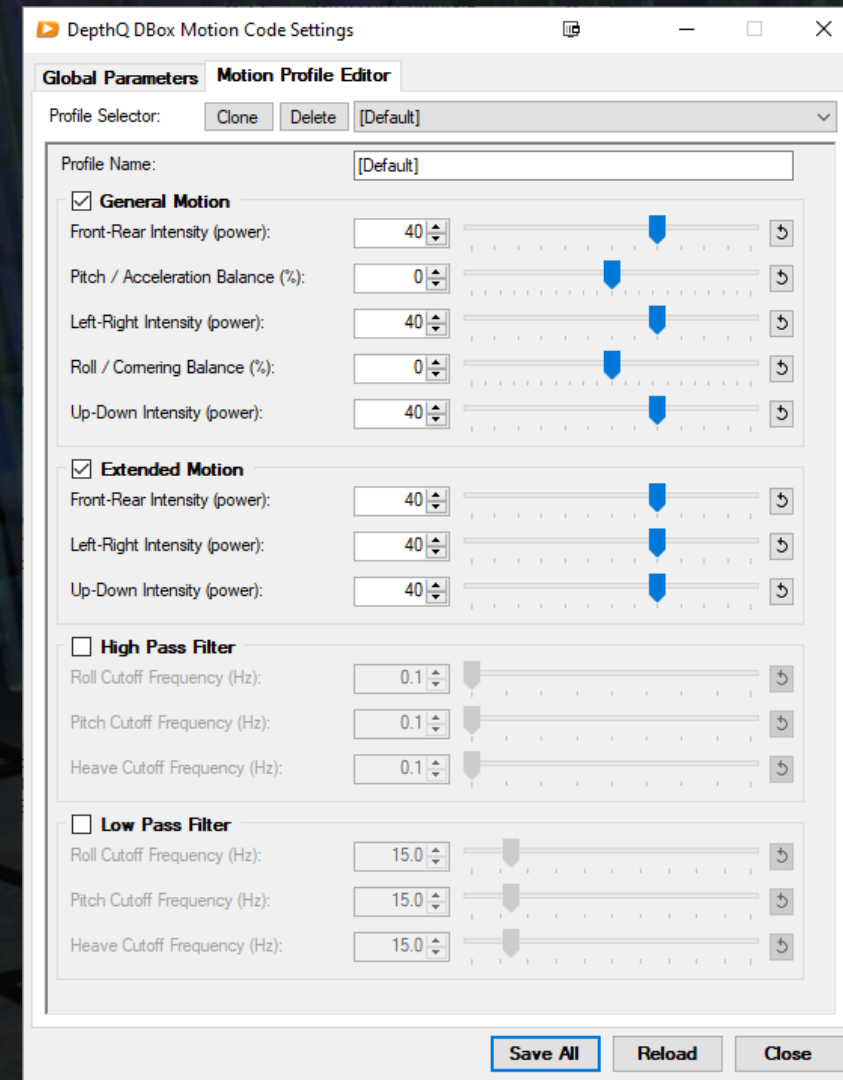
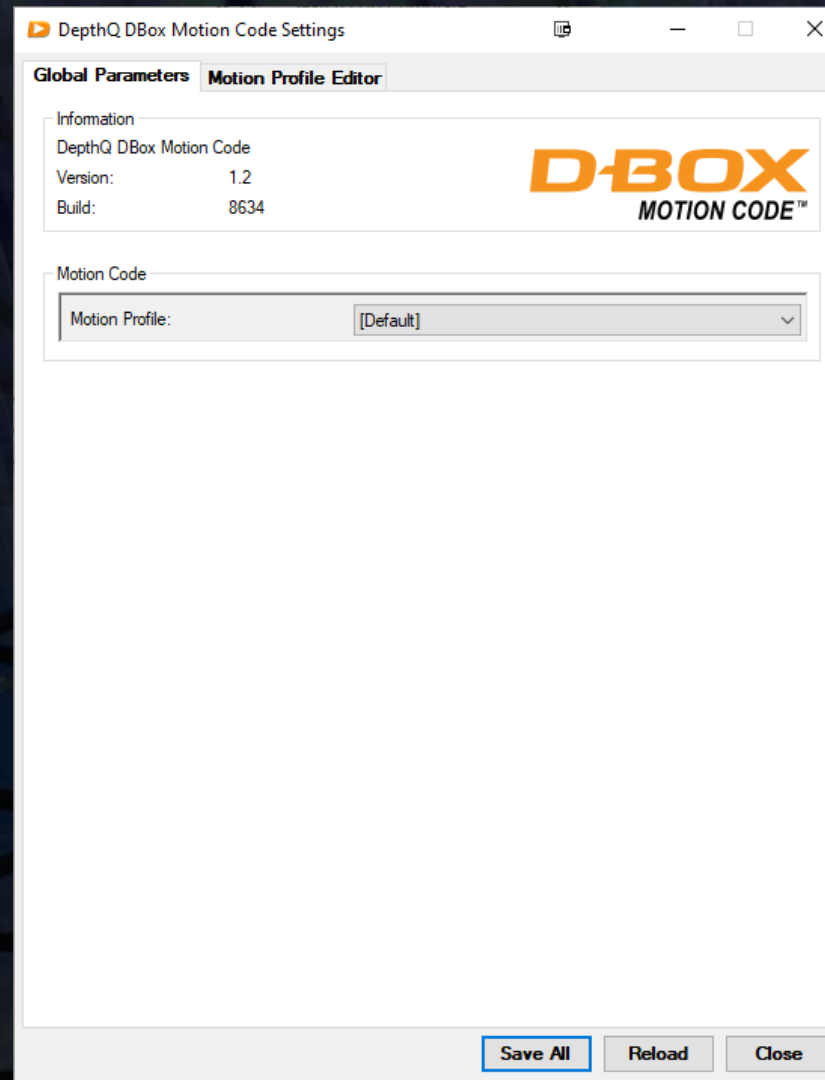
INSTALL D-BOX

DepthQVR synchronies with a D-BOX motion base. <https://www.d-box.com/en>

Download and install Motion Core – v9.3 – <http://tech.d-box.com/corporate-page/downloads/>

Go [here to download](#) the D-BOX Motion Code file **dbxMotionPanel.exe** and set the panel to match these pictures.

When you are done with the D-BOX panel, you are ready to run DepthQVR



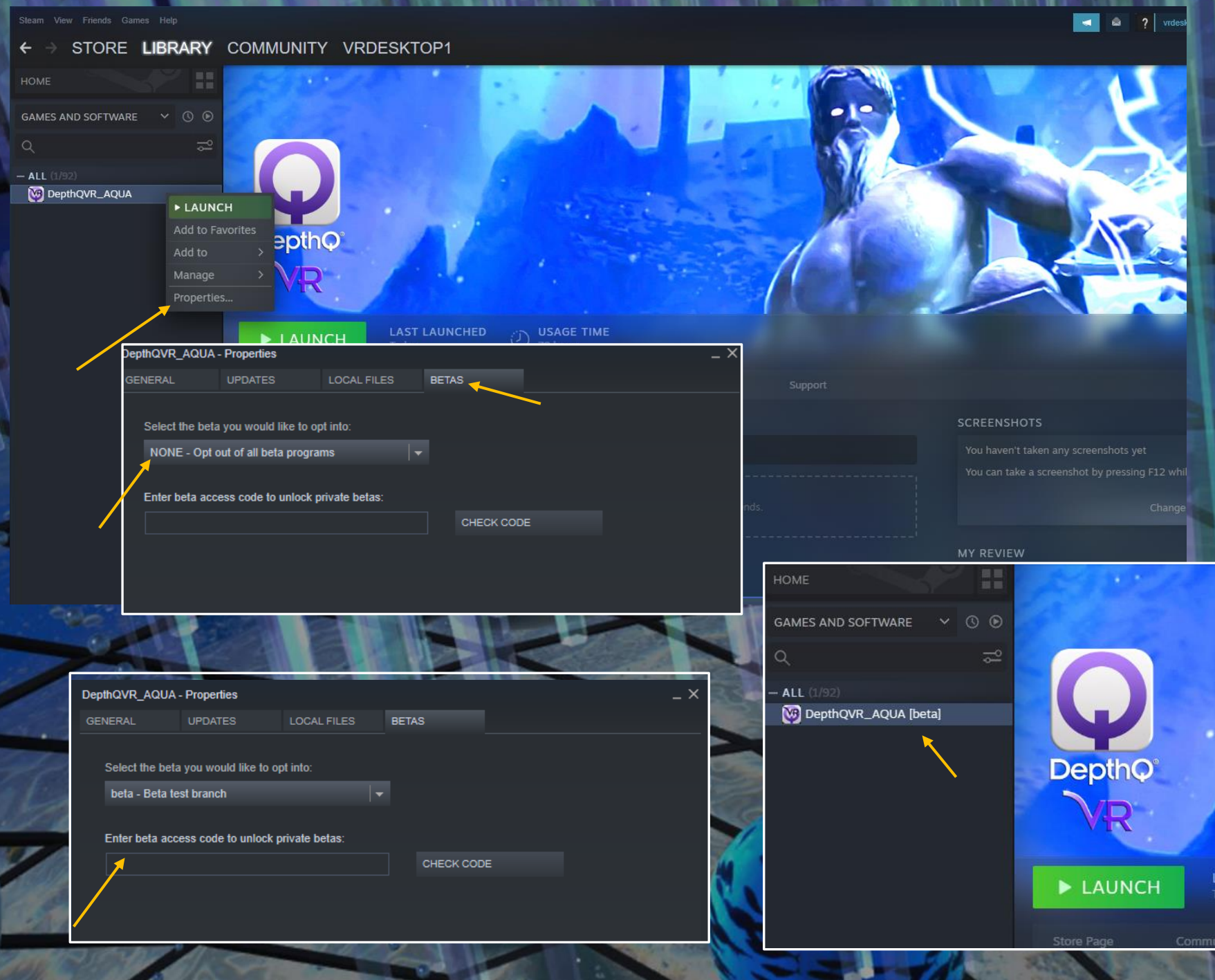
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STEAM – LAUNCH – BETA

DepthQVR_AQUA “beta” program

If we have provided you with a “beta access code” then do the following:

1. Right click on DepthQVR_AQUA, go to Properties
2. Go to > BETAS Tab
3. Change > “NONE – ...” to “beta – ...”
4. Enter > the access code we provided and click the “CHECK CODE” button
5. Launch > DepthQVR_AQUA (beta)





DepthQVR[®]
By
Lightspeed Design, Inc.

IMMERSIVE RIDE EXPERIENCES

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