Take Me There
Virtual Reality Community Tours
Training Guide

Getting to know the VR Interface

First let's take a look at the PICO headset. The headset is designed for simple use.

To turn on the headset on for the first time, press and hold the Power Button located on the bottom right side of the front panel seen below. Hold the button for about 3 seconds, or until the blue light is seen.

If you leave the headset in standby mode, it will power on when it senses you have put it on. To turn it off, place the headset close to your eyes to awaken it and hold the power button for three seconds. You will see the PICO logo wipe away, indicating that the headset is now turning off.

The PICO headset comes with one easy-to-use controller. Although you will not be using the controller for the Take Me There Tour, it helps to understand the function for each button. Most of the buttons you will use for the Take Me There tours are also available on the headset itself, and they serve the same function. The controller works like a laser pointer. So, moving the controller around will allow you to navigate menus within the headset.

The **back** button seen here allows you to return to previous menus.

The confirm button accepts choices – like a click of a mouse button on a computer. On the controller, the confirm button comes in the form of a trigger under the controller. You can also confirm a choice by pressing down on the touch pad.

The home button serves two important functions. When navigating the PICO interface, the home button quits applications and takes you back to the home screen.

For the Take Me There Tour, holding down the home button will reset your view, ensuring that your video is centered. The PICO headset re-centers every time you put it on, but if you ever need to re-center your view, it's easy to do with the Home Button.

Texas Health and Human Services ● **hhs.texas.gov**

Using the Vuze XR Virtual Reality Camera

While the Vuze XR might not look like a traditional camera, using it can be just as simple as pressing a button to turn it on and another button to record. The camera can tether to your phone for more complex changes and options, but for the purposes of this program, simply turning it on and recording will be enough. The camera must be in 180 degree record mode (indicated below on the left image) in order to capture virtual reality 3D footage.

In order to deploy the dual lens mode, push the 180 Mode Lense button indicated below. To return the lenses to their closed mode, simply grab the edges of the panels (avoid touching the lenses themselves) and pull them back until you hear the click.

Record Button

180 Mode Lens Deployment

WIFI button (to connect to smart phone)

Power Button (hold 2 seconds)

Turn on the camera by holding the **Power Button** for about two seconds. You'll see a small blue light followed by a flashing white light that eventually turns a solid white. Above the power button, along the center ridge separating the lenses, you will see a small video camera icon. If for some reason there is an image of a photography camera, press the power button quickly to return the camera to video mode. Your camera is ready to record. Press the Record button and the recording process will begin, indicated by a white light flashing above the Record button. Press Record again to stop the recording. When you're ready to power off the camera, press and hold the power button for three seconds.
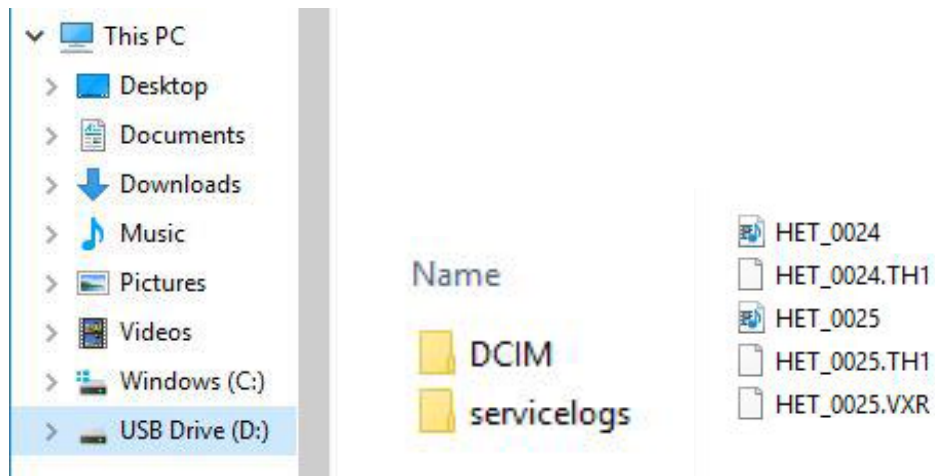
Getting that Footage off your Camera

Open up the port to your Vuze XR camera as seen below. Plug in the supplied USB cable to one end of the camera and the other end to your PC (the camera does not need to be turned on for your PC to see it).

Once plugged in, go to your File Explorer on your PC and you will see the following drive. Click on the drive.

The following folders will apear after selecting the USB Drive. Select the folder titled "DCIM".

Within the DCIM folder you will find a folder named 101VUZXR. The numbers might vary depending on how much footage you've captured. This is where the camera stores your footage.

The video files will have a media icon (with a small musical note).
You will only need to copy the video files to your PC. Ignore all other files.

Create a folder on your PC and copy these files into this folder.

4

Rendering 5.7K Footage for Better Quality

The Vuze XR camera captures VR footage in both 4K and 5.7K. The higher the resolution, the better the quality experienced within the headset. While 4K footage will still look great, 5.7K will deliver a more life-like experience.

There are a few steps involved in converting your 5.7K footage to a file that's readable for your headset.

You will be using the software called VuzeVRStudio to render out video files. The steps are few and simple.

First let's open VuzeVRStudio and check out the interface.
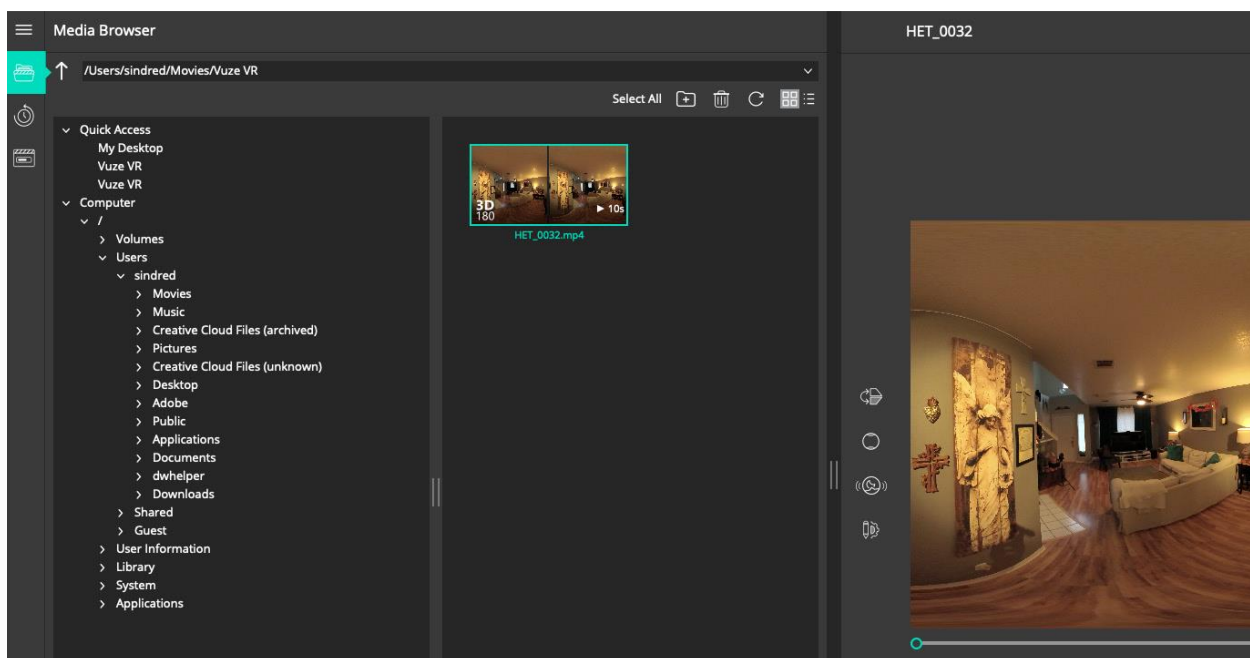
The first thing you'll notice when you open up the application is that the left side resembles your Windows Explorer and shows your computer's folder structure. So when you copy the footage from your camera to your computer, take note of the location, so that you can easily find it on the left panel. VuzeVRStudio does its best to locate your footage, even when you don't go to the exact folder, but if you don't see your clips on the middle panel, you can tell the application where to find them.

You'll notice in the example above that one clip was found in my computer (footage of a living room). If you double-click on the thumbnail in the middle panel (the one immediately to the right of your list of folders), you will see a large version of the video appear on the right.

Texas Health and Human Services ● hhs.texas.gov

Rendering 5.7K Footage for Better Quality (cont.)

Now let's move to the right panel and focus on the selected clip. For our purposes, this panel will normally be used to start rendering the footage. However, there are options available to trim your footage, should you want to remove something from the head or tail of the video (like someone saying "action" or "stop").


So, if you want to trim the above footage, and shave a few seconds from when you started recording, press the play button, or drag the time indicator (small blue circle) across the timeline and when you reach the point you'd like to start the video, click on the left bracket button (this is your in-point button).


After you click the in-point button, you will see the bracket appear on your timeline.

Similarly, if you move the time indicator to your preferred out-point of the video and click the right bracket, an out point will be created on the timeline. When your video is rendered, it will not reflect your new edits.

Texas Health and Human Services ● hhs.texas.gov
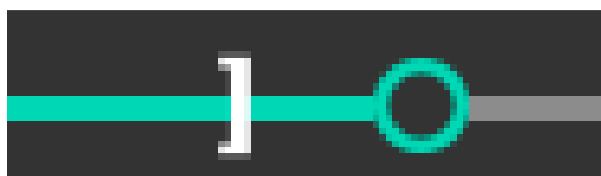
Rendering 5.7K Footage for Better Quality (cont.)

If you're happy with your edit (or even if you have no changes), you will now render your 5.7K footage. Below your playback controls (on the right panel) you will see a button for "Render". You must use the button indicated below in order for the final video to include your "in" and "out" edits.
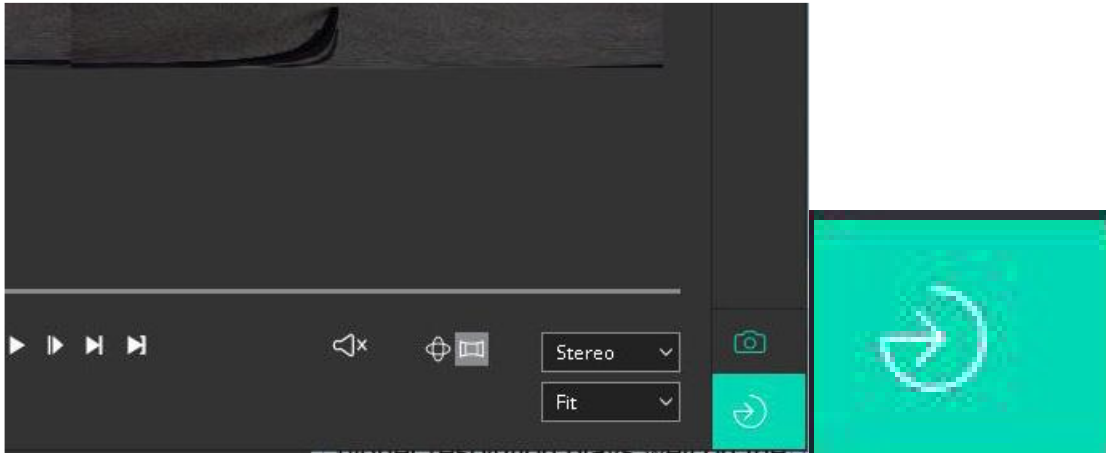
Click the "Render" button.
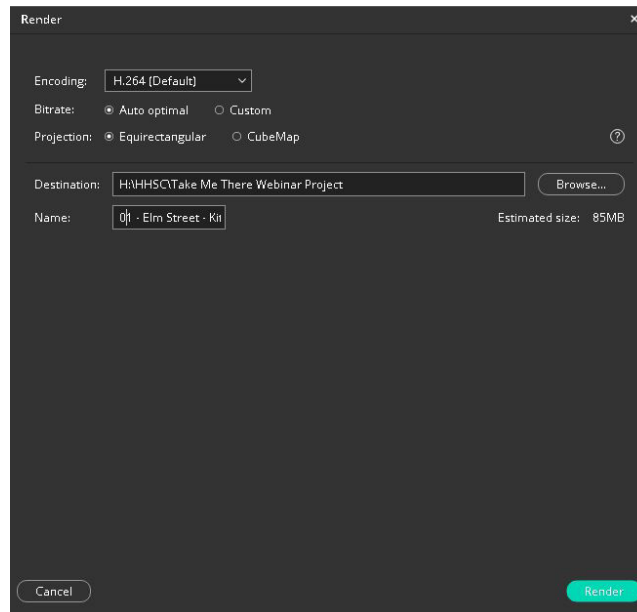
For the best results, mimic the settings in the left example. We are telling the application to render at the Maximum resolution in order to give the viewer the best experience possible on a modern VR headset.

The Encoding option should be set to H.264 (Default). This encoding also ensures that the higher resolution plays well on the portable headset.

For the Destination, click the "Browse" button and select the location where you'd like your rendered video to be stored.

Texas Health and Human Services ● hhs.texas.gov

Finally, name your video, using the example to create a sequential playlist. Be sure to add "_3D180_LR" to the end of your file name
For example:
01 - Elm Street - Kitchen _3D180_LR

02 - Elm Street - Living Room _3D180_LR

Copying Your VR Footage to the Headset

Copying your rendered video files to from your PC to your VR Headset is similar to copying files to a USB stick (with an added few steps).

Only one virtual tour can be stored on the headset at a time. So, keep your previous tours stored in the supplied back-up drive when it's not in use.
Make sure the headset is turned on.
Plug in a USB cable into the port on your headset and the other end to your computer.

Your headset will now show up as a drive on your computer as PICO G2 4K, much like a USB storage device.

Navigate into the headset's folders until you find the **video_replay** folder.
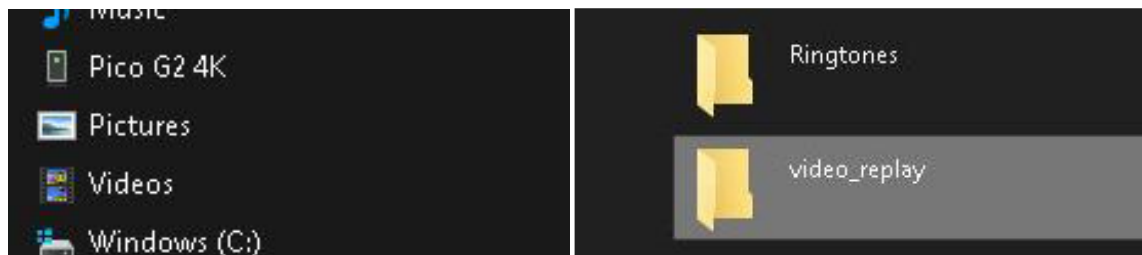
Prior to copying the video files over, be sure to name them sequentially if you haven't already, particularly if your virtual tour needs to follow a certain path through the home (exterior, living room, kitchen, bedroom).

The headset will include an opening animation labeled **01 Intro - Take Me There_360**, so always start numbering your footage with **02** to ensure that your first scene will play after the intro video.

Another very important part of naming your footage is adding the following text to the end of your file. Add "**_3D180_LR**". This lets the headset know that the video should be viewed in virtual reality and in 3D.

The rest of the naming is completely up to you, but here is an example:
02 - Elm Street - Kitchen _3D180_LR
03 - Elm Street - Living Room _3D180_LR
Drag and drop all your numbered footage into the **video_replay** folder.

Eject your headset from the PC.

Watching your Footage within the Headset

Turn on the headset and place it over your eyes. You don't need to touch the headset to your face to activate the sensor.

Your video will automatically start playing. It is programed to re-center the scene when a new person puts it on.

Since the videos auto play, you should be able to turn on the headset and hand it to the viewer a few seconds after restarting. You will be able to hear the audio coming from the headset to let you know that their video has started.

Cleaning the Headset Between Use

It is very important to sanitize the entire headset between every use.

Additionally, wash hands or use hand sanitizer before and after handling any equipment used in this guideline. Please refer the CDC handwashing guidelines. Wear gloves while handling the equipment, if possible.

https://www.cdc.gov/handwashing/when-how-handwashing.html

Wipe down the rubber face plate of the headset with nonalcoholic anti-bacterial wipes. Also wipe the rear padding attached to the head strap.

Wipe the lens using a microfiber cloth, the same kind you would use to clean glasses or a computer screen.

Use alcoholic wipes only after you are done using the headset for the day, and only on the face plate. Avoid touching the lenses with alcoholic wipes.

Do not reuse headset immediately after cleaning with alcohol wipes. Wait about thirty minutes.

For any questions, please email

MFP_Virtualreality_Questions@hhsc.state.tx.us