

# FLEXLINK DESIGN TOOL

## VR GUIDE

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## Requirements

### 3D Viewing

- **Computer**

Refer to Design Tool system requirements

<https://kb.flexlink.com/help/fldt-system-requirements>

### Virtual Reality

Visual Components Experience requires HTC Vive hardware as well as Steam and SteamVR to run 3D animation files in Virtual Reality mode.

- **Computer**

Refer to HTC Vive computer specs <https://www.vive.com/eu/setup>

- **Gear**

HTC Vive hardware including headset, joysticks, and cameras

- **Software**

Steam and SteamVR

## Setup

### 3D Viewing

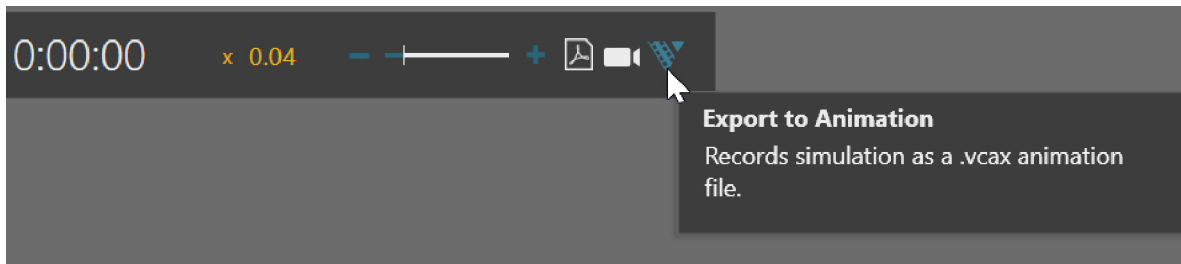
- Install 3<sup>rd</sup> party application, Visual Components Experience  
<http://www.visualcomponents.com/products/downloads>

### Virtual Reality

1. Set up HTC Vive.  
<https://www.vive.com/eu/setup>
2. Install Steam.  
<http://store.steampowered.com/about>
3. Install SteamVR.
  1. Run Steam.
  2. In Steam, go to **Library > Tools** and then search for SteamVR.
  3. Right-click **SteamVR** and then click **Install Game**.

## Supported File Types

Visual Components Experience allows you to open and play VCAX files. A **VCAX** file is a container for a 3D simulation recorded as an animation using a Design Tool.

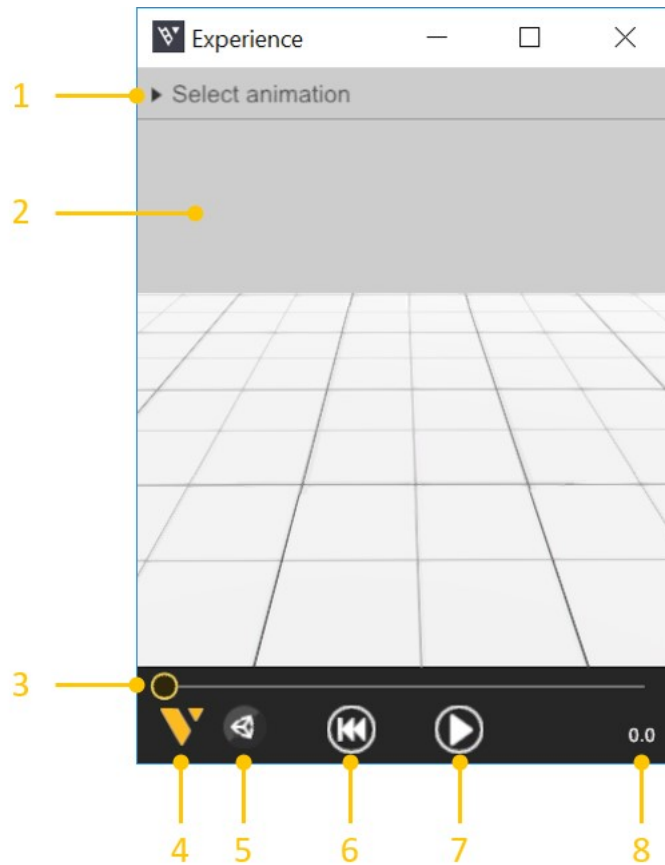


To create a VCAX file, see "Record a Simulation as Animation" tutorial.

- **YouTube** <http://academy.visualcomponents.com/lessons/record-simulation-animation>
- **Other** (download video) <http://bit.ly/2AezlWC>

## Controls

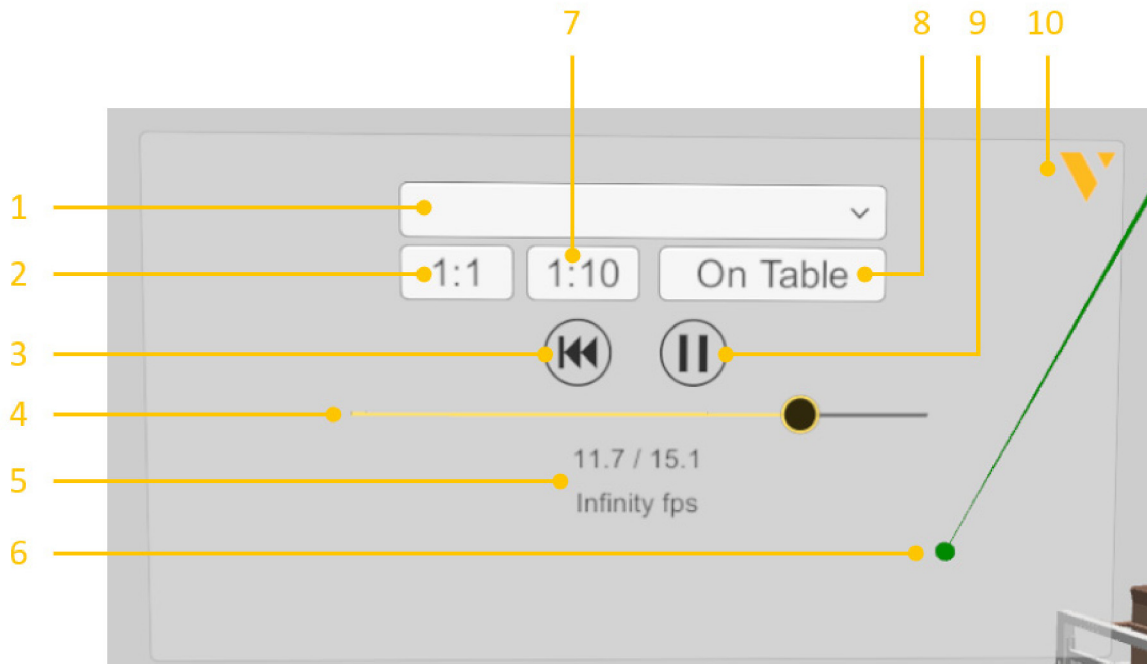
### 3D Viewing



1. **File** - Allows you to select and open VCAX files in your My Animations folder. Path is C:\Users\%username%\Documents\Visual Components\4.0\My Animations.
2. **Viewport** - Displays the 3D scene and animation. Point at the viewport to interact with its camera: RMB to orbit, LMB+RMB to pan, and rotate mouse wheel to zoom.
3. **Slider and Thumb** - Shows the position of animation and allows you to jump forward or backward in time.
4. **About** - Displays app information.
5. **Settings** - Allows you edit quality settings for playing animation.
6. **Reset** - Returns animation to its initial state and time of zero.
7. **Play** - Allows you to start or stop animation.
8. **Time** - Shows the position (in seconds) of animation.

## Virtual Reality

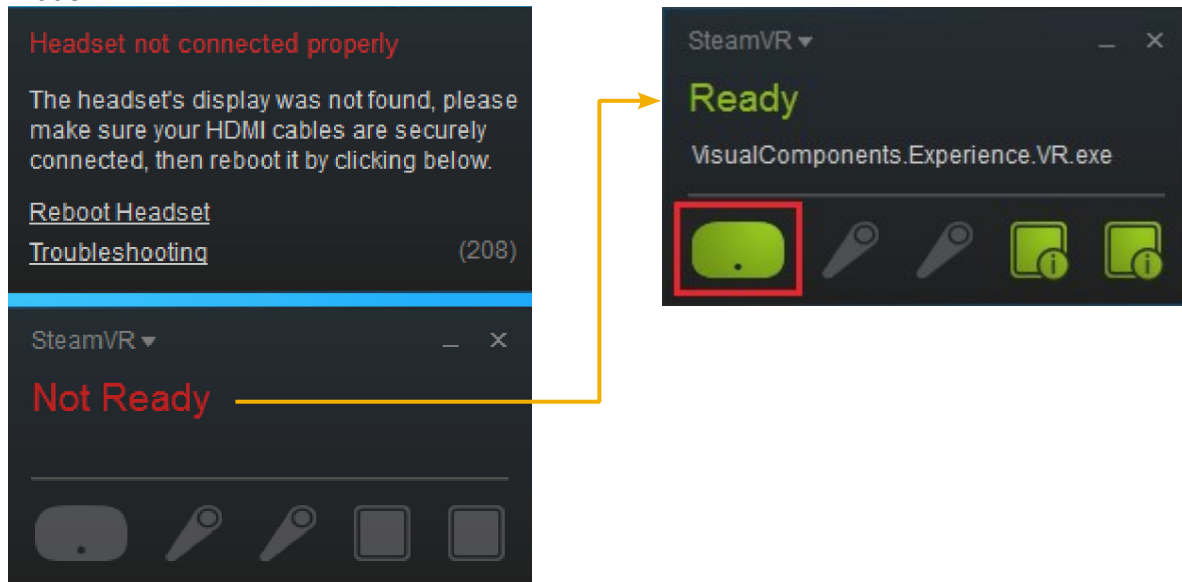
### Main Menu



1. **File** - Allows you to select and open VCAX files in your My Animations folder. Path is C:\Users\%username%\Documents\Visual Components\4.0\My Animations.
2. **1:1** - Scales components to their original size.
3. **Reset** - Returns animation to its initial state and time of zero.
4. **Slider and Thumb** - Shows the position of animation and allows you to jump forward or backward in time.
5. **Time and Frame rate** - Shows the position (in seconds) of animation and its frame rate.
6. **Ray** - Pointer for selecting objects and menu items.
7. **1:10** - Scales components to 1/10th of their original size.
8. **On Table** - Scales components to HTC Vive play area.
9. **Play** - Allows you to start or stop animation.
10. **About** - Displays app information.

## Headset

An HTC Vive headset allows you to look around in the scene. You must connect the headset to SteamVR before using Visual Components Experience in Virtual Reality mode.

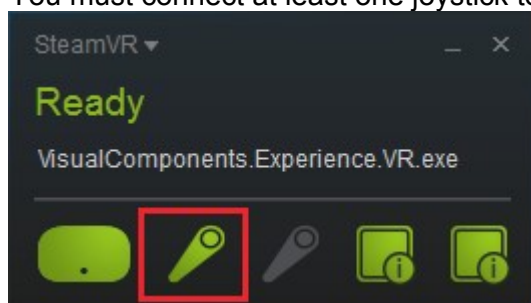


## Joystick

An HTC Vive joystick allows you to select and interact with objects in the scene.

- **Connect joystick** - press and hold Menu and System buttons.
- **Show main menu** - press the Menu button.
- **Raise camera** - press top face of trackpad.
- **Lower camera** - press button face of trackpad.
- **Cast ray to display pointer** - lightly press trigger.
- **Select menu item** - point at item and pull trigger.
- **Teleport to new location** - point at location and pull trigger.

You must connect at least one joystick to SteamVR to support these actions.

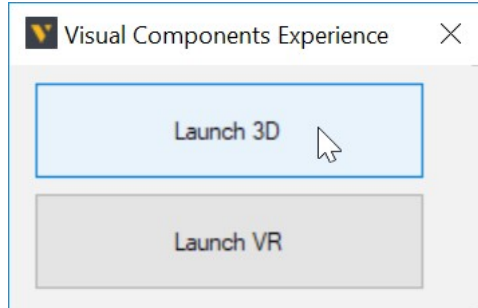




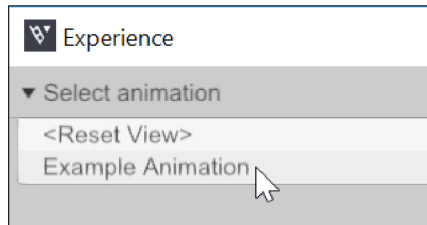
## Experience 3D View

1. Run Visual Components Experience.

2. Click **Launch 3D**.



3. Click **Select animation**, and then select a listed animation to load it in the scene.



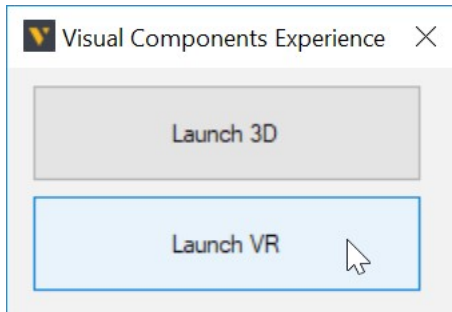
**NOTE!** You can double-click a VCAX file to automatically open it in Visual Components Experience. Otherwise, you need to add VCAX files to your My Animations folder to list them in the File menu.

4. If you need to:

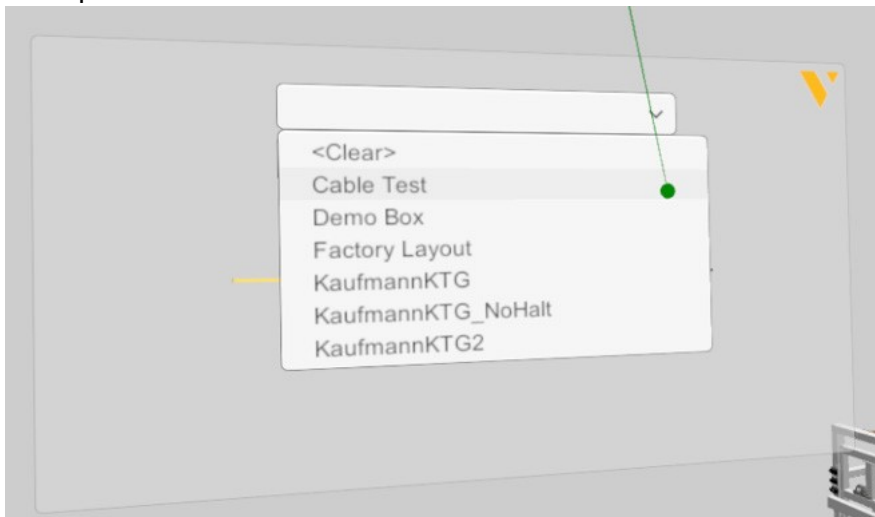
- Remove the animation, click **File > Clear**.
- Return to the default view, click **File > Reset View**.

## Experience Virtual Reality

1. Run SteamVR, and then connect your headset and joystick(s).
2. Run Visual Components Experience.
3. Click **Launch VR**.



4. With the joystick, press the **Menu** button, cast a ray, and then use the **File** menu to select and open a listed animation.



**NOTE!** You can double-click a VCAX file to automatically open it in Visual Components Experience. Otherwise, you need to add VCAX files to your My Animations folder to list them in the File menu.

5. If you need to:
  - Scale the components, use the main menu. Generally, you would use 1:10 to view a large scene or On Table to walk around and view a scene.
  - Remove the animation, click **File > Clear**.
  - Return to the default view, click **File > Reset View**.