

Overview

This document details out how to set up an external display (TV or projector) to a SimSpray unit.

Limitations

1. This document corresponds only to:
 - a. Computers running SimSpray software version 2.0 or later.
 - b. SimSpray units with the Oculus HMD (Head Mounted Display).

NOTE: These instructions should be performed by a technical resource, instructor or owner familiar with the SimSpray. If you need assistance beyond these instructions, please contact VRSim Technical Support at 860-893-0080.

Instructions

Step 1. Preparation

- A. Identify if your external display (TV or projector) meets the following requirements:
 1. Supports 1080p (widescreen resolution of 1920x1080 in progressive mode) at 60Hz.
 - a. *Note: 1080i is not officially supported.*
 2. Accepts an HDMI input.
 - a. *Note: if the external display supports VGA but not HDMI, then your system may or may not work with SimSpray. You will need a male HDMI out (from the SimSpray) graphics card to VGA adapter. We recommend purchasing the [OMORC 59 active HDMI to VGA adapter](#).*

B. If these requirements are not met, STOP! Attempting to connect CAN SIGNIFICANTLY MESS UP your SimSpray system (e.g., not able to see anything on the monitor).

Step 2. Initial Set Up

- A. Prepare SimSpray
 1. Turn on the SimSpray bay's Power Strip.
 2. Turn on the Computer.
 3. Wait for the SimSpray *Turn on your Sony HMD* setup page to appear.
 4. Hook up the Mouse and Keyboard to your SimSpray unit (these can go in the C1 and C2 slots in one of the USB HUBs on the back of the case and to the right of the computer).
 5. On the Keyboard, hold down *Alt* and *F4* to exit SimSpray.
- B. Prepare the external display

SETTING UP AN EXTERNAL DISPLAY

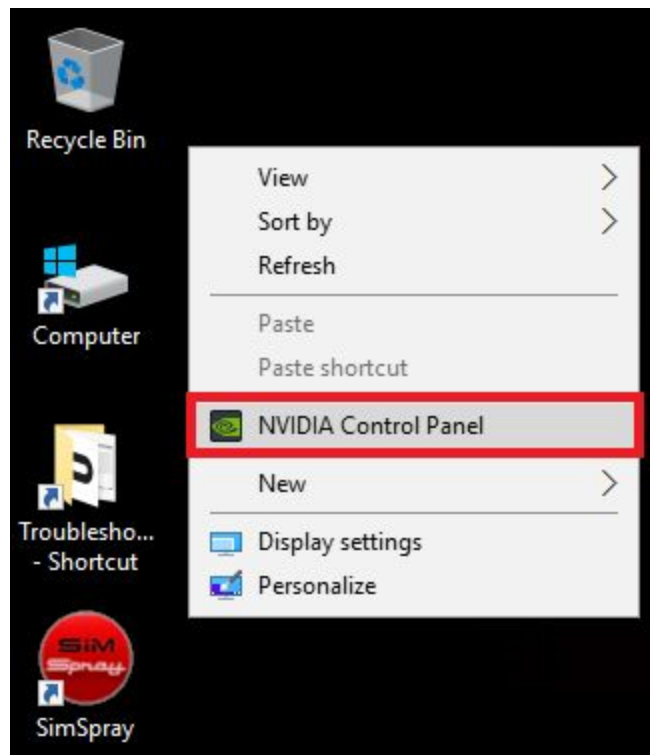
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1. Turn on the external display (TV or projector).
2. Connect the video cable from the external display to the V2 connection at the back of the SimSpray.
 - a. Note: if the external display does supports VGA only, then first connect the HDMI to VGA adapter into V2. Then connect your VGA cable from this adapter to your external display.
 - b. Note: The SimSpray touchscreen may flicker for a few seconds. This is expected.

Step 3. Adjust the Video Settings

A. Nvidia

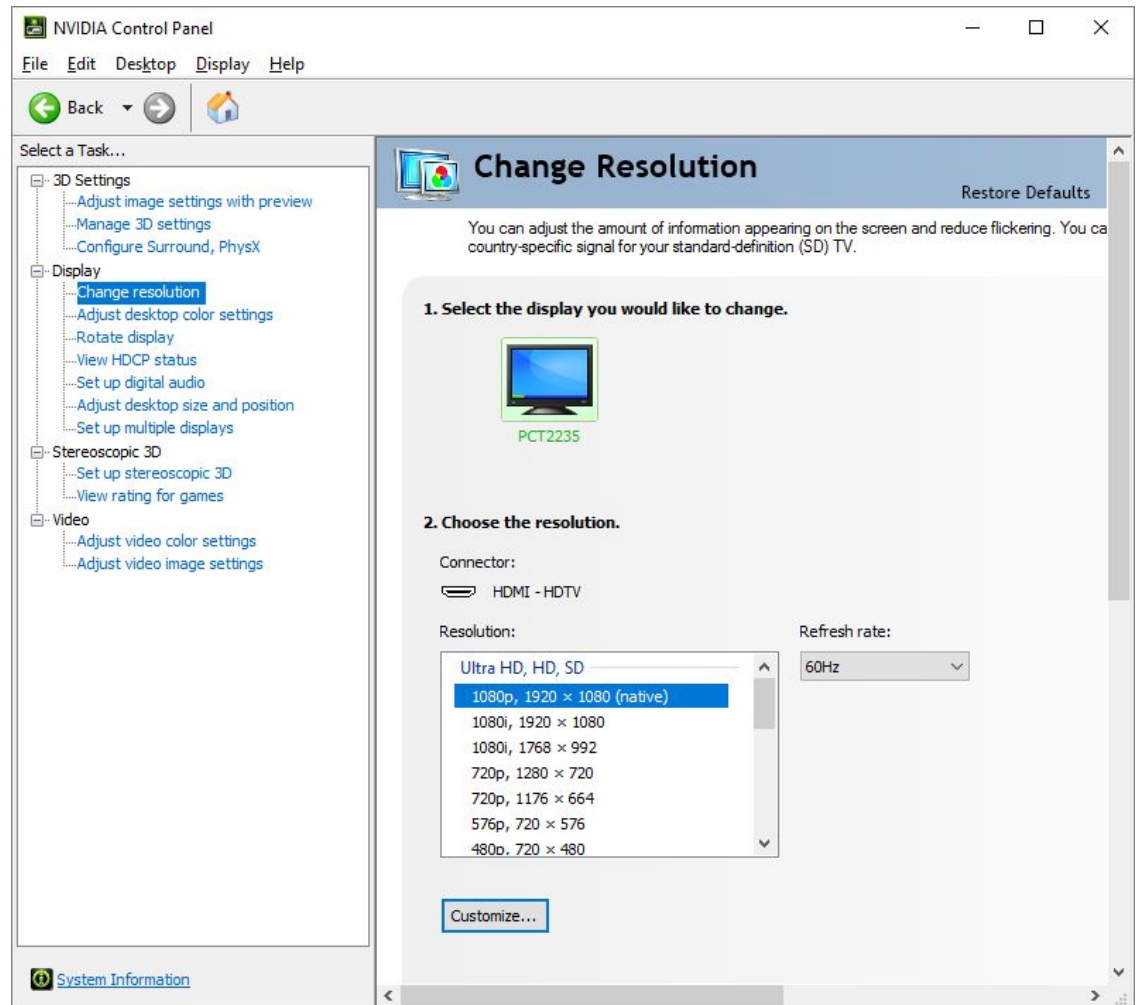
1. Using the Mouse, right click on the desktop, and choose *NVIDIA Control Panel*.



2. Click on *Display* and then *Change resolution*.
3. Change the resolution to *1080p, 1920 x 1080* if it is not already set to that. Hit *Apply*, and select *Yes*.

SETTING UP AN EXTERNAL DISPLAY

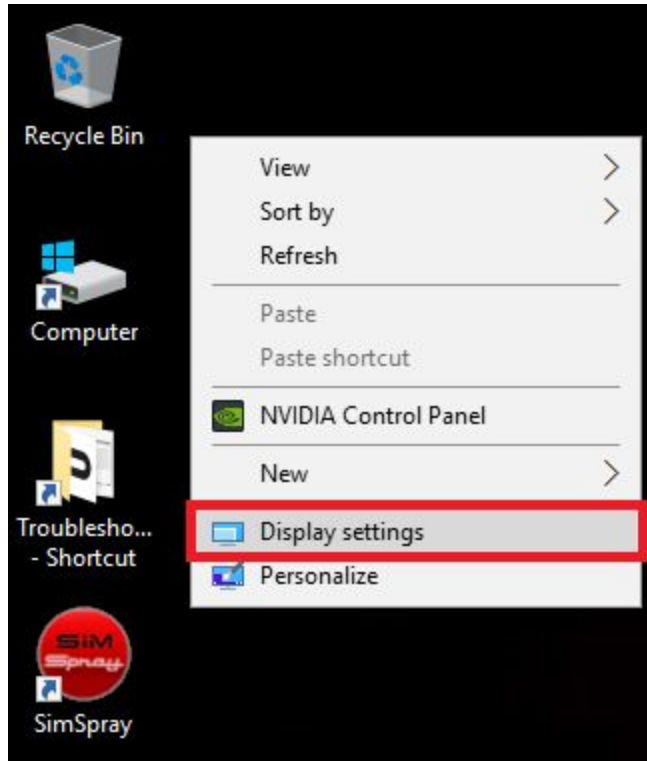
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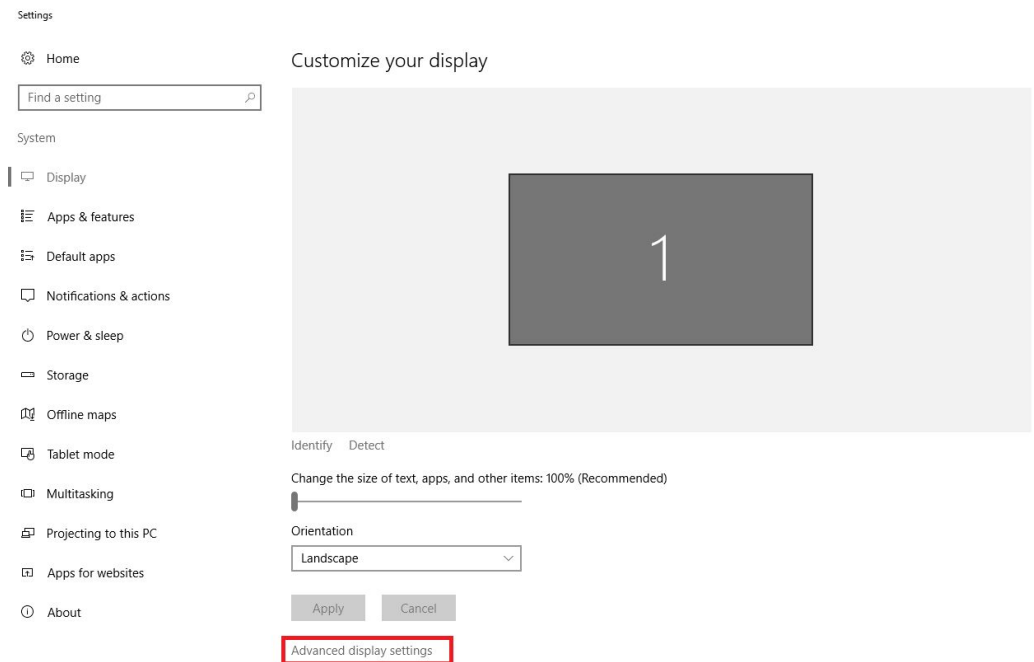
4. Exit by pressing the X in the upper right.
- B. Windows
1. If you were not able to access the NVIDIA Control Panel, then:
 - a. Using the Mouse, right click on the desktop, and choose *Display setting*.

SETTING UP AN EXTERNAL DISPLAY

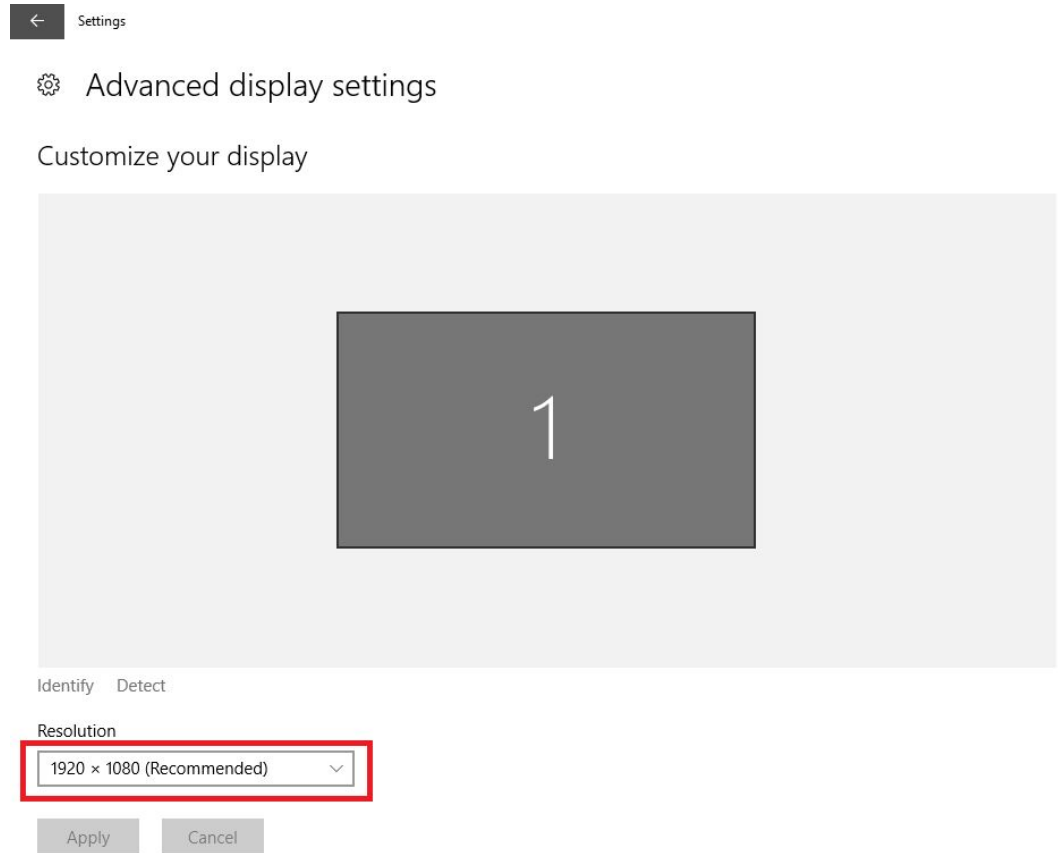
Document version #1.00, Last updated 3/15/18



b. Click *Advanced display settings*.



c. Under *Resolution*, change to 1920 x 1080, click *Apply*, and select *Accept changes* if this is not currently set.



Step 4. Verify the Video Settings

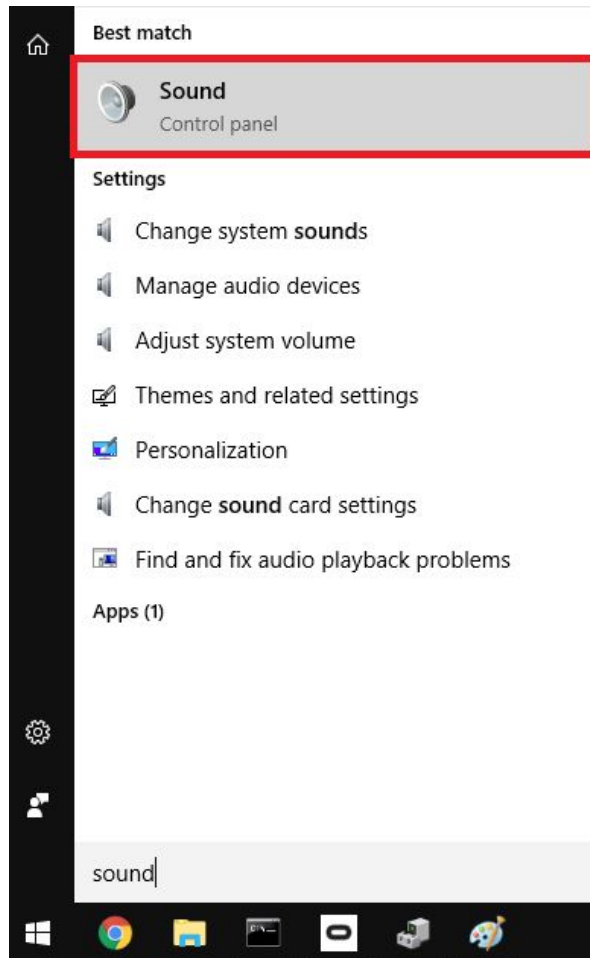
- A. Verify the SimSpray Touchscreen Monitor and your external display both show an image.
 1. If not:
 - a. STOP. Verify the above connections and settings. If this does not resolve your issue, your display may not be capable of displaying SimSpray. Contact tech support for further support.
- B. Verify the Touchscreen Monitor and your external display show SimSpray:
 1. Using the Mouse on your SimSpray unit, double click on the *SimSpray* icon on the desktop.
 2. Wait for the SimSpray *Turn on your Sony HMD* setup page to appear.
 3. Press *Proceed*.
 4. Verify the Touchscreen Monitor shows SimSpray
 5. Verify your external display shows SimSpray.
- C. Verify your Touchscreen Monitor and external display show the full SimSpray screen:
 1. On the Touchscreen Monitor, verify you can fully see all 4 corners and text of the SimSpray window. See image below.



2. On your external display, verify you can fully see all 4 corners and text of the SimSpray window.
 - a. If you cannot:
 - i. You may need to change the display settings on your external display. On your external display, attempt to change the aspect ratio settings (you want widescreen, 16:9). These may also be listed as zoom settings.
- D. If you are still having issues, then contact tech support.

Step 5. Adjust the Audio Settings

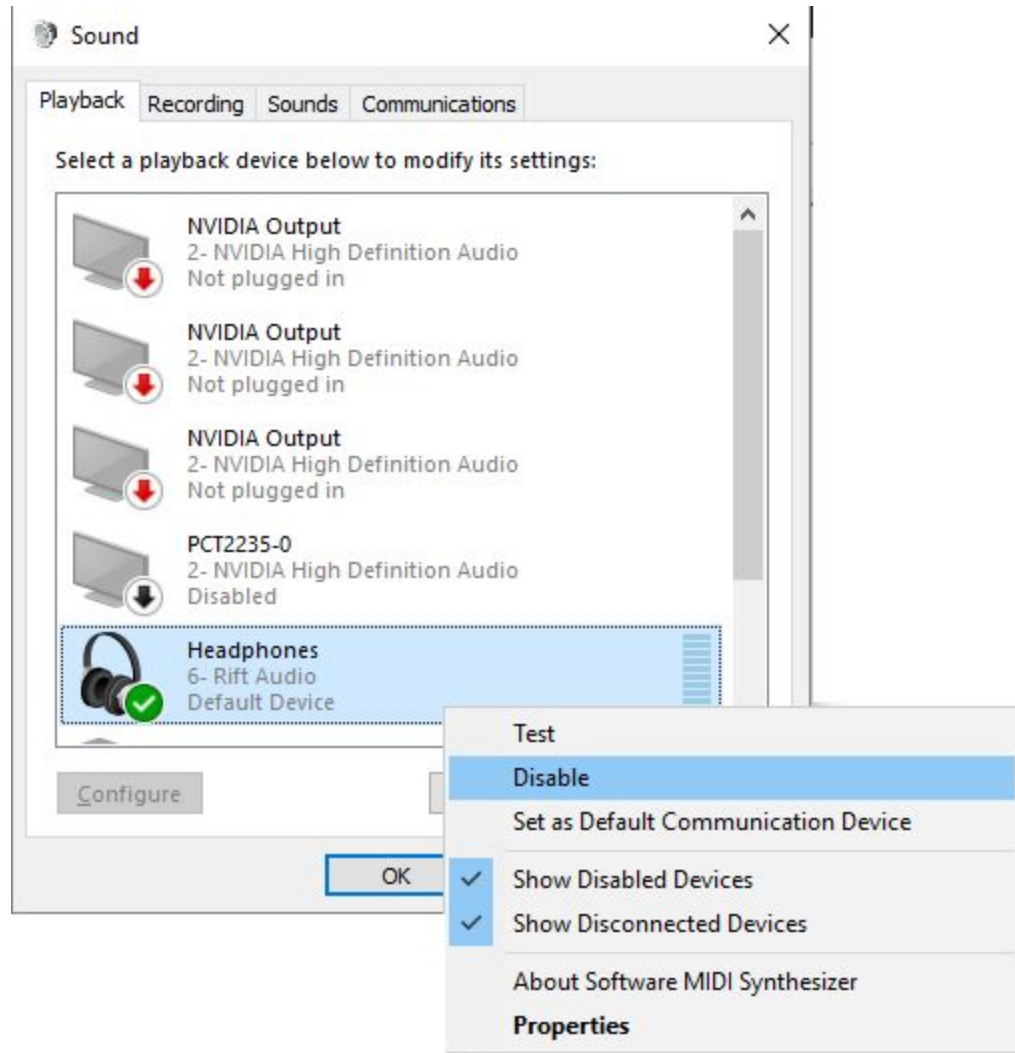
- A. Turn off the SimSpray speakers.
- B. Using the Touchscreen, click on the *SimSpray* menu.
- C. Click on *Options*.
- D. Adjust all sound settings to 100.
- E. Click on *Options* to close it. You should hear no sound yet. If you hear sound, then:
 1. On the Keyboard, hold down *Alt* and *F4* to exit SimSpray.
 2. Tap the Windows key, and type *sound* into the search bar.
 3. Select *Sound*.



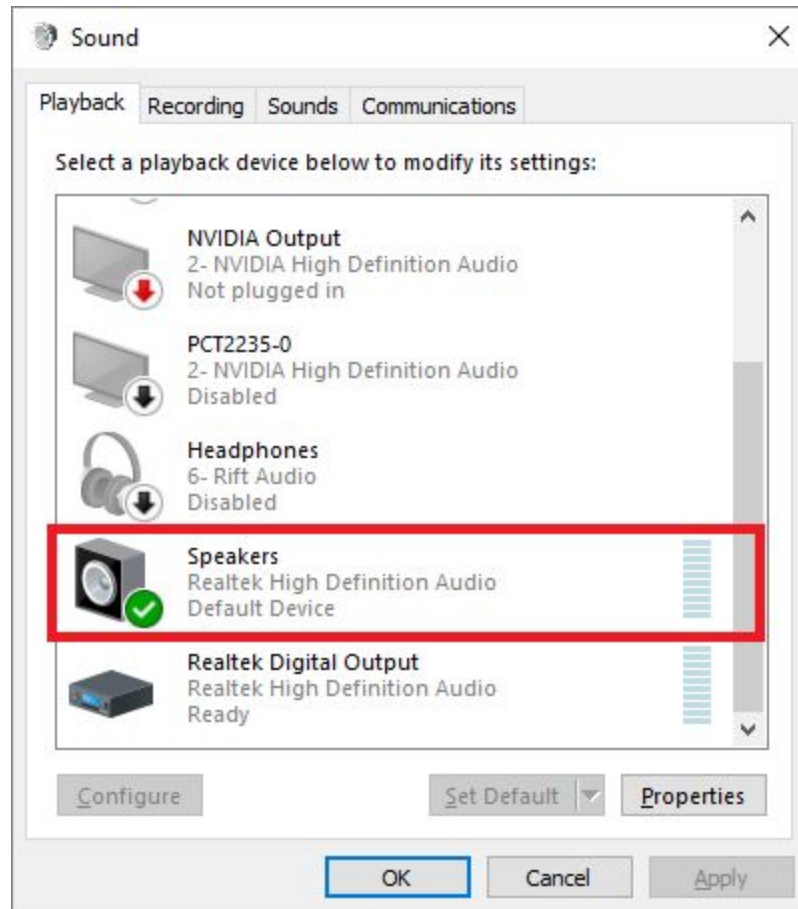
4. On the *Playback* tab, right click on *Headphones* and select *Disable*.

SETTING UP AN EXTERNAL DISPLAY

Document version #1.00, Last updated 3/15/18



5. Make sure that the default device are the *Speakers*.



6. Click *OK*.
- F. Turn on your SimSpray Speakers.
- G. Turn up the volume on your Speakers so they are not too low.
- H. Double click on the *SimSpray* shortcut on the desktop.
- I. Verify that the sound now comes from the speakers as you use the SimSpray software.
- J. If you do not hear sound, then turn up the volume. If you still do not hear Sound, contact tech support.

Step 6. Test Power Cycling

If you intend on normally using this external display with SimSpray, then you will want to make sure the video and display settings remain correct after you turn off the SimSpray and/or the external display.

- A. Click on the *SimSpray* menu, choose *Shutdown*, and press *Yes*.
- B. Wait for your Computer to shut down. Wait for the Touch Screen Monitor to stop displaying an image. Wait for the lights at the front of the Computer to turn off.

SETTING UP AN EXTERNAL DISPLAY

Document version #1.00, Last updated 3/15/18

- C. Turn off the Power Strip to your SimSpray bay.
- D. Wait 10 seconds.
- E. Turn on the SimSpray bay's Power Strip.
- F. Turn on the Computer.
- G. Wait for the SimSpray *Turn on your Sony HMD* setup page to appear.
- H. Follow the onscreen instructions to setup your HMD. (This will power on your HMD and properly set up the 3D display settings.)
- I. Verify your Touchscreen Monitor and external display show the full SimSpray screen.
- J. Verify that when touching the SimSpray user interface and painting, blasting, or powder coating, you hear sound from the SimSpray speakers, you do NOT hear sound from the Touchreen Monitor, and you do NOT hear sound from the external display.

Step 7. Clean Up

- A. Detach your Mouse and Keyboard from the Computer.

Step 8. Use After Attaching an External Display

- A. If you ever remove this external display, you may need to adjust your display settings and audio settings. They should match the above instructions, except there will be no external display.
- B. If you ever add a different additional external display, please start these instructions from the very top.