



SIMSPRAY 3.X OR GO COMMON TROUBLESHOOTING

Contact:

- **Call: (860) 893-0080**
 - Weekdays 8 AM-5 PM (Eastern)
- **E-Mail: SimSpraySupport@vrsim.net**
- **Or fill out a [web ticket](http://support.simspray.net/index.php/contact-us/)**
(<http://support.simspray.net/index.php/contact-us/>)

Additional Documentation:

- [SimSpray 2.x and 3.x support portal](http://support.simspray.net)
(<http://support.simspray.net>)
- [SimSpray website](https://www.simspray.net) (<https://www.simspray.net>)
and <https://www.simspray.net/support.html>)

Hardware Terminology:



SimSpray 3



SimSpray Go

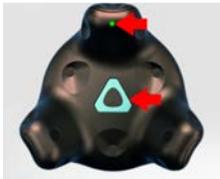
HMD <i>(Head Mounted Display)</i> <i>(VIVE Pro, VIVE Pro Eye)</i>	Base station <i>(2.0)</i>	VIVE Tracker
		

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Troubleshooting:

Item/Location	Description/Symptoms	Next Steps/Actions
SET UP AND POWER ON/OFF:		
Setting up and powering on	How to	1. SimSpray 3: <ol style="list-style-type: none"> a. Follow the Quick Start Guide on http://support.simspray.net/.
Setting up and powering off		

EQUIPMENT SETTINGS:		
Equipment Settings screen - Incorrect Settings	<p>When clicking “Proceed” on the Equipment Settings screen, you get the “Incorrect Settings” message.</p> 	<p>Use the values found in the Project Settings.</p> <ul style="list-style-type: none"> ● See the Default Project List on http://support.simspray.net/. <ul style="list-style-type: none"> ○ This applies to VRSim default content. For custom projects and lessons, ask your teacher to identify the settings in the Admin portal of the SimSpray software.

Item/Location	Description/Symptoms	Next Steps/Actions
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MOTION TRACKING:

Positioning SimSpray for best motion tracking

Part or environment are too far away, high, low, or rotated incorrectly

Gun or HMD are not motion tracking properly (wrong location or flying away)

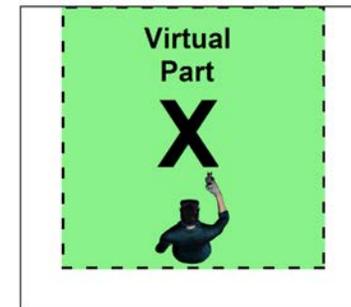
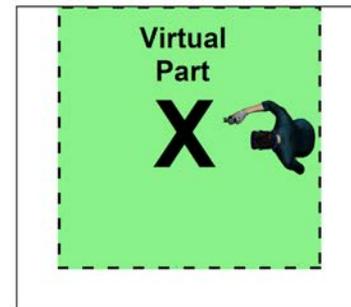
- When wearing the HMD:
- The part is behind the SimSpray unit
 - The environment or part seem:
 - far away
 - too high or low
 - rotated incorrectly
 - The view in the HMD does not change when you move your head.
 - It looks like your view or the gun is/are moving or flying away when you are not moving either.

1. Expected location of the part:

SimSpray 3
Top view



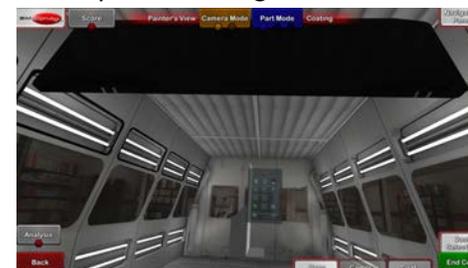
SimSpray Go
Top view



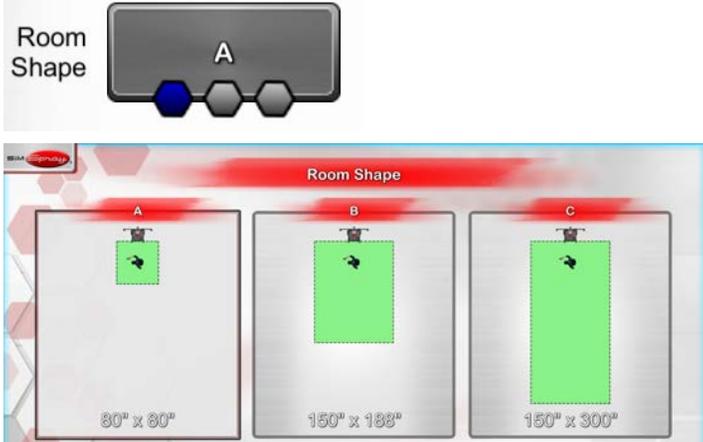
2. Correct view (when a user wearing VIVE is facing the SimSpray unit).
a. Notice the virtual part is nearby:

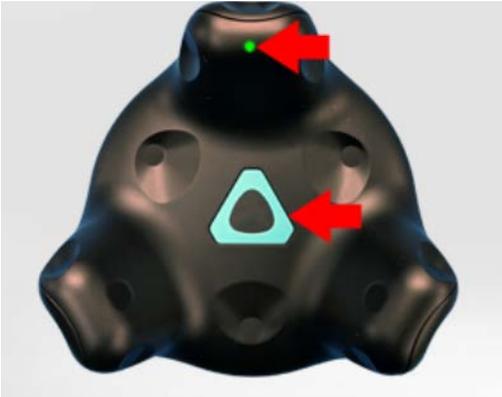


3. Incorrect view (when a user wearing VIVE is facing the SimSpray unit).
Notice you are seeing the back of the scoreboard:



Item/Location	Description/Symptoms	Next Steps/Actions
		<p>Steps:</p> <ol style="list-style-type: none"> 1. Check warnings: <ol style="list-style-type: none"> a. Take off the HMD. b. Look at the monitor. c. If any of the following warnings appear, follow the troubleshooting for the corresponding item(s): <ol style="list-style-type: none"> i. “Gun Not Visible / Check Gun Light” ii. “HMD Not Visible” iii. “Left Base Station Not Visible” iv. “Right Base Station Not Visible” 2. Reset Space (<i>software version 3.2.x</i>): <ol style="list-style-type: none"> a. Click the “SimSpray” menu, and select “Reset Space.” b. Follow the onscreen instructions. c. Repeat 1-2 more times if issues are not resolved. 3. Recalibrate (<i>software versions 3.0.x or 3.1.x</i>): <ol style="list-style-type: none"> a. Click the “SimSpray” menu, select “Recalibrate,” and confirm. b. Go back into the motion tracked zone, and put on the HMD. c. Wait up to 1 minute and see if the issue is resolved. d. Repeat 1-2 more times if issues are not resolved. 4. Follow “HMD Not Visible.” 5. If using a Powder Gun, remove the “SimSpray Powder” stickers. (These can sometimes cause infrared reflectivity that can interfere with motion tracking.)
Motion tracked spatial volume adjustment	Change the motion tracked zone size (e.g., for larger or smaller rooms).	<ol style="list-style-type: none"> 1. Click on the “SimSpray” menu. 2. Select “Options.”

Item/Location	Description/Symptoms	Next Steps/Actions
		<p>3. Press “Room Shape” to toggle the room shape.</p>  <p><i>Note: in SimSpray Go, the motion tracked volume has the longer side left-to-right vs. as shown above.</i></p>
Part height, rotation, or position	<ul style="list-style-type: none"> • The part is too high or low to access it. • You want to adjust the part rotation around the vertical axis. • The part is too far forward, back, left, or right. 	<ol style="list-style-type: none"> 1. Change the part height or rotation: <ol style="list-style-type: none"> a. See “In-Sim Tablet use.” 2. Adjust the forward-to-back position: <ol style="list-style-type: none"> a. Change the Room Shape: <ol style="list-style-type: none"> i. See “Motion tracked spatial volume adjustment.” 3. Adjust the forward-to-back or left-to-right position: <ol style="list-style-type: none"> a. Reset Space: <ol style="list-style-type: none"> i. See “Positioning SimSpray for best motion tracking.” 4. Make sure motion tracking is working correctly: <ol style="list-style-type: none"> a. Check warnings, Reset Space, or Recalibrate: <ol style="list-style-type: none"> i. Follow the steps for “Positioning SimSpray for best motion tracking.”
No gun	You do not see the virtual gun when you move the physical spray, powder, or blast gun and are wearing the HMD.	<ol style="list-style-type: none"> 1. Power on the VIVE Tracker: <ol style="list-style-type: none"> a. On the gun’s VIVE Tracker, if the status light is off (not lit), ensure the USB is inserted firmly into the back of the Tracker. b. If the status light is white, press and hold the blue button for 1 second, and release.
Gun not visible		
Gun not motion tracked		
	Warning appears on the monitor.	

Item/Location	Description/Symptoms	Next Steps/Actions
		 <ol style="list-style-type: none"> i. The light should turn green, orange, or red. ii. If the light turns blue, wait 30 seconds, and it should then turn one of the other colors. c. (If the status light is orange, normally you do not need to press the button to turn the tracker on. It will already be charging and connected.) <ol style="list-style-type: none"> 2. Reposition the gun so the motion tracking system sees it: <ol style="list-style-type: none"> a. Follow steps in “HMD Not Visible.” 3. If the VIVE Tracker light does not turn on: <ol style="list-style-type: none"> a. Check the cable connection to the VIVE Tracker. b. For Blasting, check the cable connection to the SimSpray unit. c. Note: if these do not resolve the issue, you may need to check the connections on the inside of the SimSpray unit. See “Accessing the inside of the SimSpray unit.” Or the cable and/or VIVE Tracker may need to be replaced. Contact VRSim tech support.
“HMD Not Visible”	One or more warnings appear on the monitor.	<ol style="list-style-type: none"> 1. Move yourself and your HMD (Head Mount) into the motion tracked zone. Note that you may need to step back, away from the SimSpray unit monitor.
“Left Base Station Not Visible”		<ol style="list-style-type: none"> 2. Remove obstructions: <ol style="list-style-type: none"> a. Make sure there are no obstructions between: <ol style="list-style-type: none"> i. The base stations and the gun. ii. The base stations and the HMD.
“Right Base Station Not Visible”		<ol style="list-style-type: none"> 3. Make sure the small light at the front of each base station (black box on the top of the metal arms) has a lit light. If not: <ol style="list-style-type: none"> a. Access the inside of the SimSpray unit. See “Accessing the inside of the SimSpray unit.”

Item/Location	Description/Symptoms	Next Steps/Actions
		<ul style="list-style-type: none"> b. Connect the HLO and HRO AC/DC power bricks if either is disconnected from the power strip. c. Wait 30 seconds. d. If either base station's light is still unlit, continue. e. Connect the HLO and HRO power cable connections to the base stations if either cable is disconnected. Note: for SimSpray Go, you may need to unscrew a fastener on the case lid to access the base stations.  <ul style="list-style-type: none"> f. Wait 30 seconds. g. If this does not resolve the issue, the cables or Base Station may need to be replaced. Contact VRSim tech support.
Jittery motion tracking	The HMD or Gun jitter excessively or intermittently loose tracking.	<p><i>Note: SimSpray uses a camera based tracking system. Reflections, infrared devices, or other VIVE motion tracking systems in the area may degrade the motion tracking.</i></p>
Intermittent motion tracking		<ul style="list-style-type: none"> 1. Move yourself, your HMD (Head Mount), and your Gun into the motion tracked zone. See “HMD Not Visible” and “Gun Not Visible.” 2. Minimize reflections or infrared interference. <ul style="list-style-type: none"> a. Cover sources of IR (Infrared) interference. b. Turn off infrared emitting devices. c. Reorient, reposition, or move the SimSpray system away from reflective materials or infrared sources. 3. Make sure there are no other VIVE base stations (as seen below) in the area. If there are:

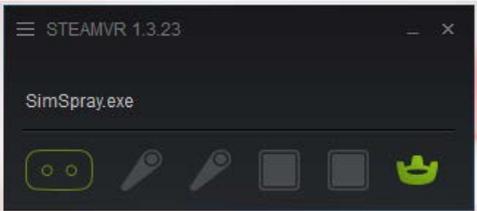
Item/Location	Description/Symptoms	Next Steps/Actions
		 <ol style="list-style-type: none"> a. Turn off non-SimSpray VIVE base stations. b. Move the SimSpray system to another location. <ol style="list-style-type: none"> 4. Make sure the channels of your SimSpray's motion tracking system are not conflicting with other VIVE base stations in the area. Follow the steps in "Base Station Setup Error / Changing Frequencies." 5. If using a Powder Gun, remove the "SimSpray Powder" stickers. (These can sometimes cause infrared reflectivity that can interfere with motion tracking.)
<p>"Turn on your Vive HMD" reappears after restarting application</p>	<ol style="list-style-type: none"> 1. You follow the instructions on the "Turn on your Vive HMD" screen at startup, and press "Restart Application." 2. The same "Turn on your Vive HMD" screen appears after the application restarts. 	<ol style="list-style-type: none"> 1. Press "Restart Application." Sometimes you may need to do this step ~2-3 times. 2. Follow "No image in the HMD / no light on the HMD." 3. Follow "Link Box Details."

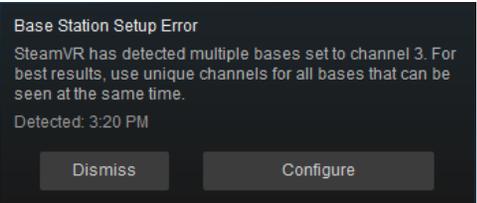
Item/Location	Description/Symptoms	Next Steps/Actions
Base Station light codes		<ul style="list-style-type: none"> ● Powered off: <ul style="list-style-type: none"> ○ Light not lit. ● Stabilizing: <ul style="list-style-type: none"> ○ Blue or blinking blue = base station is waiting to stabilize. If it remains in this state, check if it is mounted securely or on a surface that's not prone to vibration. ● Normal: <ul style="list-style-type: none"> ○ Green or white = normal mode. ● Error <ul style="list-style-type: none"> ○ Blinking red = error. See below for troubleshooting.
Base Station red light	<p>A base station shows a blinking red light.</p> 	<p>This indicates an error, usually from hardware.</p> <ol style="list-style-type: none"> 1. Contact tech support: <ol style="list-style-type: none"> a. Contact your distributor or VRSim. <ol style="list-style-type: none"> i. Fixing this issue normally requires a physical replacement of the base station (VIVE base station 2.0) and/or power cable. b. After getting replacement hardware, follow the instructions to replace a base station. 2. If you need to fix this issue immediately and cannot wait, sometimes but infrequently attempting the following may provide a workaround: <ol style="list-style-type: none"> a. Disconnect the base station's power cable, HLO or HRO, at the top of the arm. Loosely twist the cable in both directions, and reconnect it so it is unbent or only lightly bent. Check if the light is corrected. If not, continue. b. Access the inside of the SimSpray unit. c. At the back of the unit where the cables are, lightly unbend and untwist the corresponding base station's power cable, HLO or HRO, and any extension cable attached to it. Check if the light is corrected after doing this.

Item/Location	Description/Symptoms	Next Steps/Actions
VIVE HMD light codes		<ul style="list-style-type: none"> ● Powered off: <ul style="list-style-type: none"> ○ Light not lit. ● Normal: <ul style="list-style-type: none"> ○ Green = normal mode. ● Red: <ul style="list-style-type: none"> ○ Red or blinking red = cable, driver, or hardware issue.
VIVE HMD red light		<ol style="list-style-type: none"> 1. Check hardware connections: <ol style="list-style-type: none"> a. See No Image in the HMD.
VIVE Tracker light color codes (on spray, blast, or powder gun)	Identify what the light means on the gun's VIVE Tracker.	<ul style="list-style-type: none"> ● Powered off: <ul style="list-style-type: none"> ○ Light not lit. ● Not fully turned on: <ul style="list-style-type: none"> ○ Light is white. ● Normal: <ul style="list-style-type: none"> ○ Green = normal mode. ○ Orange = charging. ○ Blinking red = battery is low. ○ Blinking blue = attempting to pair with the HMD or another device. <ul style="list-style-type: none"> ■ After 30 seconds, pairing attempts will end. ○ Blue = when connecting with the HMD or another device (not normally expected). <p>Notes:</p> <ul style="list-style-type: none"> ● The Tracker may automatically turn off if: <ul style="list-style-type: none"> ○ The battery is drained

Item/Location	Description/Symptoms	Next Steps/Actions
		<ul style="list-style-type: none"> ○ Pairing has timed out after being idle for more than 30 seconds ○ There was no user movement for 5 minutes

STEAMVR WINDOW:

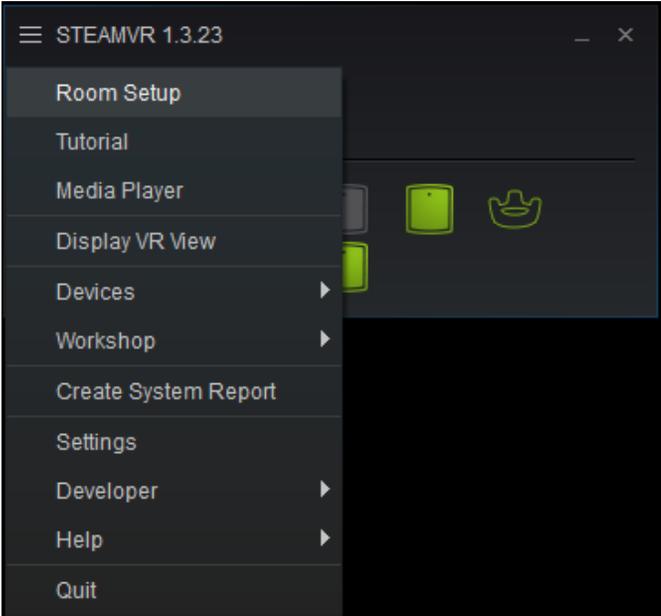
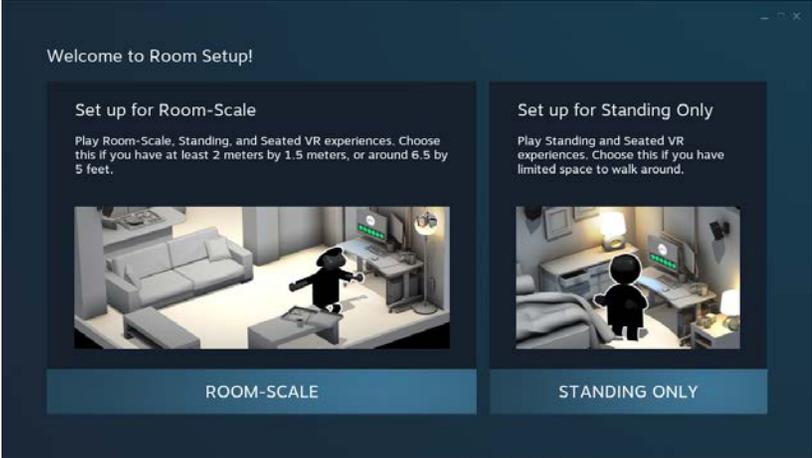
STEAMVR window shows up	<p>You see a window such as the following on top of the SimSpray software:</p>  	<p>Normally, you can ignore the STEAMVR window. It runs in the background and sometimes accidentally appears on top. Even if it indicates “SteamVR Fail,” often the SimSpray software will work fine.</p> <ol style="list-style-type: none"> 1. Click anywhere on the SimSpray software to bring the SimSpray software into focus and hide the STEAMVR window.
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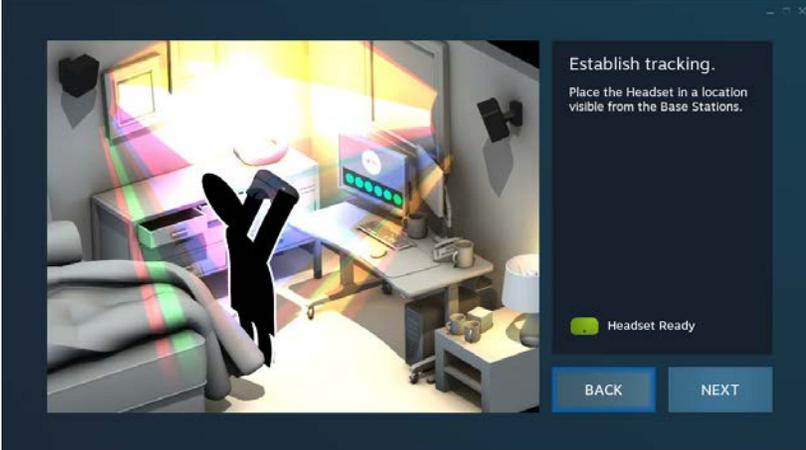
<p>“Base Station Setup Error” / Changing Frequencies</p>	<p>You see a window such as the following on top of the SimSpray software:</p> 	<p>One or more non-SimSpray VIVE base station(s) is/are conflicting and on the same channel(s) as your SimSpray’s VIVE motion tracking system.</p> <ol style="list-style-type: none"> 1. If you can, have whoever manages the non-SimSpray VIVE base stations turn their base stations off. If not possible, have them change the base station frequencies so they are unique and not overlapping SimSpray’s. 2. Move the SimSpray to a different room or area away from the non-SimSpray base stations. 3. If that is not possible, on the SimSpray unit, attempt to change the (SimSpray or non-SimSpray) base station channels so they are all unique: <ol style="list-style-type: none"> a. For SimSpray 3:
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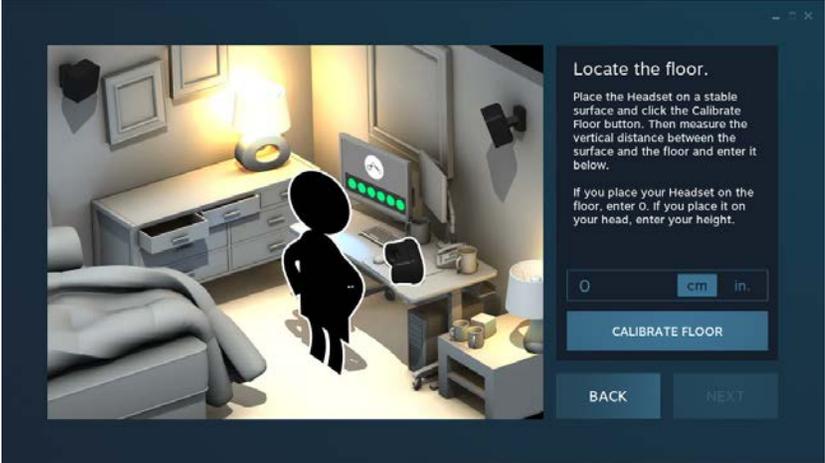
Item/Location	Description/Symptoms	Next Steps/Actions
		<ul style="list-style-type: none"> i. To add a mouse and keyboard (<i>note: you can potentially do this using the touchscreen only, but using a mouse and keyboard is safer</i>): <ul style="list-style-type: none"> ● Locate the back metal plate of the SimSpray unit. ● Unscrew the 2 top thumbscrews holding it to your SimSpray unit. ● Carefully remove the panel. ● Remove the mouse and keyboard from their box on the inside of the back panel. ● Connect the mouse and keyboard to any available USB port on the SimSpray unit (e.g., at the front USB ports of the SimSpray unit). ● Using the touchscreen, touch the SimSpray window so it is in focus. b. On the keyboard, press and hold ALT, and tap F4. <ul style="list-style-type: none"> i. This will close SimSpray. You will see the desktop. c. On the “Base Station Setup Error” pop up, click “Configure.” d. If you see a yellow triangle with an asterisk next to a channel, click on the underlined channel to change that base station’s current channel. <ul style="list-style-type: none"> i. <i>Note: if you do not get to the screen below, then in SteamVR, you may need to go to the menu at top left->Settings->USB->Refresh. Then go to the menu at top left->Devices->Restart Headset. Then go to the menu at top left->Devices->Base Station Settings->Configure Base Station Channels.</i>

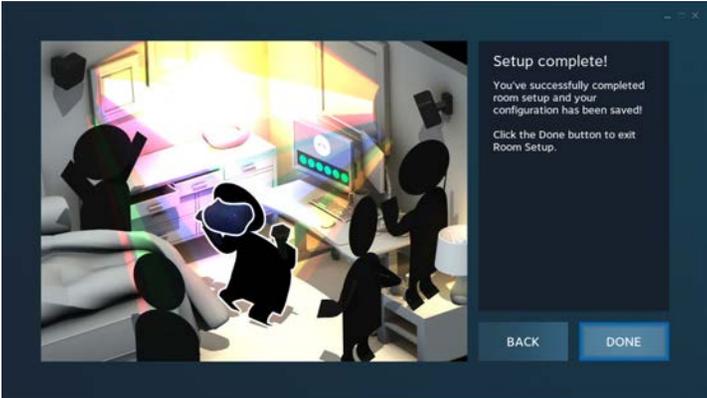
Item/Location	Description/Symptoms	Next Steps/Actions
		<div data-bbox="1234 167 1915 662"> </div> <p data-bbox="1178 675 2003 703">e. Select an unused channel from the available list, and click “Apply.”</p> <div data-bbox="1234 711 1915 1190"> </div> <p data-bbox="1178 1203 1961 1516"> f. Continue this process until all channels are unique. g. Click “Done.” h. Double click on the “SimSpray” icon. i. Test going in and painting, blasting, or powder coating. j. If there are issues with motion tracking: <ul style="list-style-type: none"> i. Fully power off the SimSpray unit as normal. ii. After it is off, remove the power cable from the power outlet. iii. Wait 15 seconds. </p>

Item/Location	Description/Symptoms	Next Steps/Actions
		<ul style="list-style-type: none"> iv. Plug the power cable into the power outlet, and turn the system on. v. Retest. k. If there are issues, follow “Reconfiguring motion tracked zone (Room Setup) / Fixing height offset.”
<p>Reconfiguring motion tracked zone (Room Setup) / Fixing height offset</p>	<p>For normally correcting gun or HMD motion tracking, see the other entries above in the “Motion Tracking” section.</p> <p>In extreme situations (e.g., changing VIVE base station channels), it’s possible the gun and HMD will not properly motion track, and the motion tracking zone needs to be partly reconfigured. This may occur if the VIVE base station channels were changed.</p>	<p><u>In normal use, you should not need to do this.</u> If you changed VIVE base station channels (see “Base Station Setup Error”), you may need to do this.</p> <ol style="list-style-type: none"> 1. For SimSpray 3: <ul style="list-style-type: none"> a. To add a mouse and keyboard (<i>note: you can potentially do this using the touchscreen only, but using a mouse and keyboard is safer</i>): <ol style="list-style-type: none"> i. Locate the back metal plate of the SimSpray unit. ii. Unscrew the 2 top thumbscrews holding it to your SimSpray unit. iii. Carefully remove the panel. iv. Remove the mouse and keyboard from their box on the inside of the back panel. v. Connect the mouse and keyboard to any available USB port on the SimSpray unit (e.g., at the front USB ports of the SimSpray unit). vi. Using the touchscreen, touch the SimSpray window so it is in focus. 2. On the keyboard, press and hold ALT, and tap F4. <ul style="list-style-type: none"> a. This will close SimSpray. You will see the desktop. 3. On the SteamVR window, click on the 3 horizontal lines at top, left, and choose "Room setup."

Item/Location	Description/Symptoms	Next Steps/Actions
		 <p>4. Click "Standing only."</p>  <p>5. Click "Next."</p>

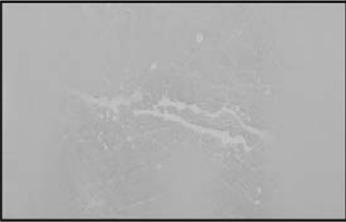
Item/Location	Description/Symptoms	Next Steps/Actions
		<div data-bbox="1129 167 1948 626">  </div> <p data-bbox="1079 639 1955 703">6. Hold the VIVE Pro HMD in front of and facing the SimSpray unit. Click "Next."</p> <div data-bbox="1129 711 1948 1170">  </div> <p data-bbox="1079 1183 2007 1250">7. Hold the VIVE Pro HMD in front of, facing, and centered left-to-right in relation to the SimSpray unit. Click "Calibrate Center." Wait for the bar to</p>

Item/Location	Description/Symptoms	Next Steps/Actions
		<p>fill up. Then click "Next."</p>  <p>8. Leave the floor value at the default 0 cm. Place the VIVE Pro HMD on the floor, a few feet in front, centered left-to-right, and facing the SimSpray unit. Click "Calibrate floor." Wait for the bar to fill up. Click "Next."</p>  <p>9. Click "Done."</p>

Item/Location	Description/Symptoms	Next Steps/Actions
		 <ol style="list-style-type: none"> 10. Double click on the SimSpray shortcut on the desktop. 11. Test going in and painting, blasting, or powder coating. 12. When issues are resolved, if you took out the mouse and keyboard, put them back, put the back metal plate back on, and tighten the 2 thumb screws to attach the plate back onto the SimSpray unit.

WHERE TO PAINT, BLAST, OR POWDER THE PART:

Live Scene - where to paint, blast, or powder coat on the part	Certain areas of the virtual part are expected to be painted, blaster, or powder coated. Other areas are not.	Some areas are unscorable and not expected to be painted. These areas are often indicated with a surface that is unclear.
Scorable regions		If you paint in these areas, your Transfer Efficiency will decrease because material is wasted, and your Mil Build Score will <i>not</i> increase. Other parameters such as Angle, Distance, and Speed will still be scored.
No mil build score or 0 mil build		

Item/Location	Description/Symptoms	Next Steps/Actions
		<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Clean Paint, Blast, or Powder Coat this side.</p> </div> <div style="text-align: center;">  <p>Unclean <i>Don't</i> Paint, Blast, or Powder Coat this side.</p> </div> </div> <p>If you are facing the front of the unit with your VIVE Pro HMD on, you are expected to:</p> <ul style="list-style-type: none"> ● Paint or blast: <ul style="list-style-type: none"> ○ For SimSpray 3: The right facing side of most parts. ○ For SimSpray Go: The front facing side of most parts. ○ The top of most horizontal parts. ● Powder coat: <ul style="list-style-type: none"> ○ The full part (in the Electrostatic Booth Environment). ○ The right facing side (in the Electrostatic Conveyor Environment).

Item/Location	Description/Symptoms	Next Steps/Actions
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>SimSpray 3 Top view</p>  </div> <div style="text-align: center;"> <p>SimSpray Go Top view</p>  </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 20px;"> <div style="border: 1px dashed black; padding: 10px; width: 150px; height: 150px; background-color: #90EE90; display: flex; flex-direction: column; justify-content: center; align-items: center;"> <p>Virtual Part</p> <p style="font-size: 2em; font-weight: bold;">X</p>  </div> <div style="border: 1px dashed black; padding: 10px; width: 150px; height: 150px; background-color: #90EE90; display: flex; flex-direction: column; justify-content: center; align-items: center;"> <p>Virtual Part</p> <p style="font-size: 2em; font-weight: bold;">X</p>  </div> </div>

EXTERNAL DISPLAY:		
TV, projector, smart board, or monitor adding	How to	<p>Use an additional external display if you want more people to be able to see the image and (optionally) hear the sound of SimSpray:</p> <ol style="list-style-type: none"> 1. Verify the external display (TV, projector, or monitor) supports 1920x1080 resolution and progressive scanning (1080p). 2. Connect an HDMI cable to the SimSpray HDMI out. <ol style="list-style-type: none"> a. For SimSpray 3: this port is located at the back or, for older units, on the inside near the power button. b. For SimSpray Go: this is located on the HDMI splitter behind the laptop. 3. Connect the cable to the external display's HDMI in. 4. Turn on the external display. 5. Make any other AV adjustments on the external display (e.g., which video input is being used, scaling, zoom, sound unmuted and volume adjustment). <p>Notes:</p>

Item/Location	Description/Symptoms	Next Steps/Actions
		<ul style="list-style-type: none"> ● The SimSpray image is intended to display on both the monitor and external display. ● Sound is intended to play from the SimSpray speakers and external display for external displays that support sound. ● Touch will only work on the SimSpray 3 touchscreen.
TV, projector, smart board, or monitor no, fuzzy, or pixelated image		<ol style="list-style-type: none"> 1. See “TV, projector, smart board, or monitor adding.” 2. Fully power cycle SimSpray off and then on. See “Setting up and powering off” and “Setting up and powering on.”

ADMIN MODE:		
Cannot access Admin mode		<ol style="list-style-type: none"> 1. After turning on the system and selecting a product, click on “Admin.” 2. Use the code provided with your system. It is typically printed on a small card. <ol style="list-style-type: none"> a. If someone in your organization has changed the code, request this from them. b. If you do not know the new code or cannot find the default passcode, contact tech support.

NO IMAGE:		
No image on the monitor		<p>For SimSpray 3:</p> <ol style="list-style-type: none"> 1. Verify there is a light on the bottom, right of the touchscreen. If not, then press the power button. <ol style="list-style-type: none"> a. Note: the buttons on some monitors may be locked so users cannot accidentally turn off the monitor.

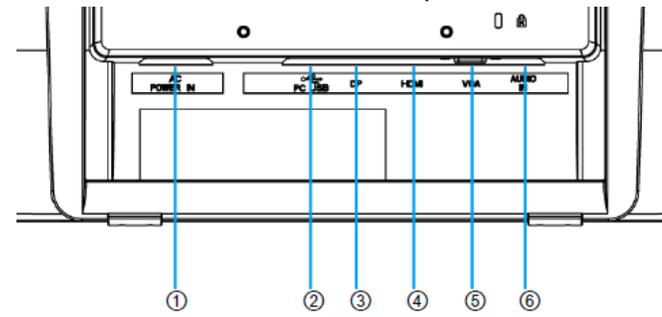
Item/Location	Description/Symptoms	Next Steps/Actions
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No image in the HMD / no light



①	OSD Turn On/ Off
②	Scroll Down/ Adjust Decrease/ Brightness / Auto *
③	Scroll UP/ Adjust Increase/ Blue Light Reducer *
④	Input select/ Confirm Selection
⑤	Power On/ Off
⑥	LED Indicator

2. Verify the connections on the back of the monitor.
 - a. Note: labeled numbers may be different.



①	Power Input
②	Up-stream USB port (to PC)
④	HDMI input (HDMI 19 pin)

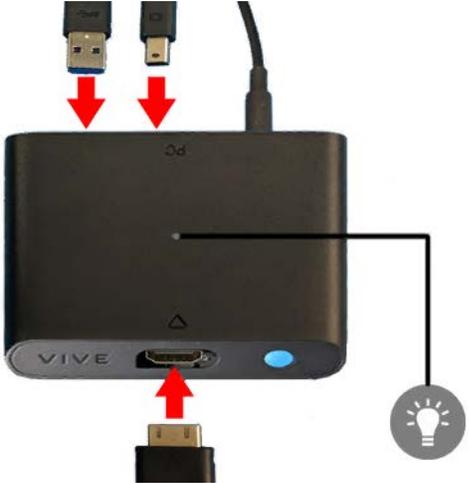
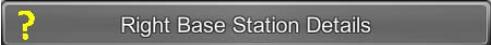
1. If seeing only a blue image, then follow [“HMD Not Visible.”](#)

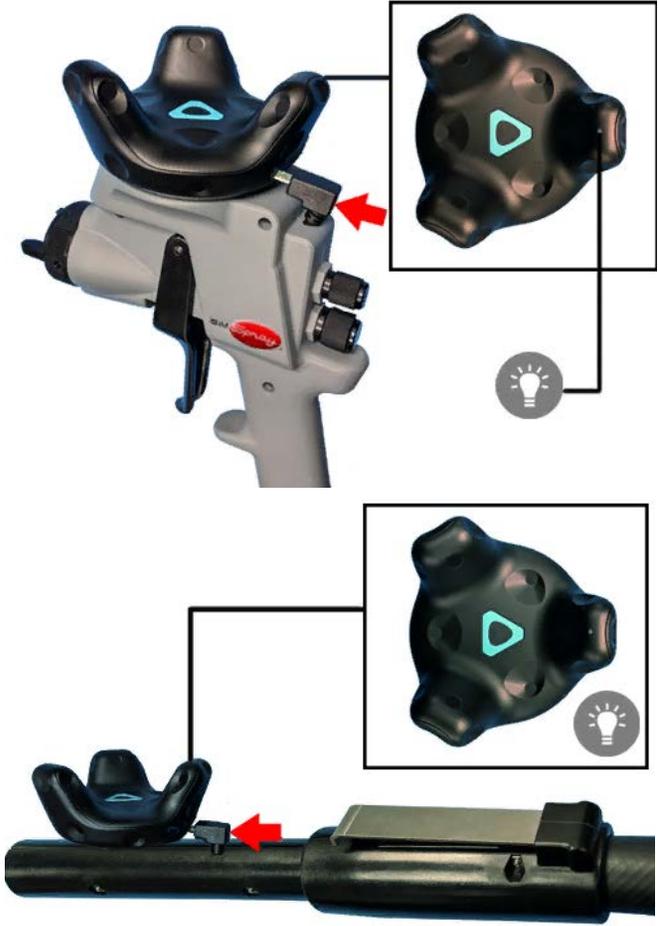
Item/Location	Description/Symptoms	Next Steps/Actions
on the HMD		<ol style="list-style-type: none"> 2. If seeing “Please view screen,” then take off the HMD and look at the monitor. 3. Check connections: <ol style="list-style-type: none"> a. Verify there is a green light on the HMD. b. If not: <ol style="list-style-type: none"> i. While facing the lenses, push up the bottom, left button of the HMD, and slide the front of the HMD forward. Let go of the button. This is to give you the most access to the cable at the top of the HMD. ii. Verify the cable going into the HMD at the HMD is secure and connected. If unsure, push the cable forward, into the HMD. iii. Ensure the cable is looped around and embedded into the cable channel on the left side of the HMD.  <ol style="list-style-type: none"> c. Follow “Link Box Details.”

HARDWARE ERROR CHECK SCREEN:

Hardware error check screen	Hardware error check screen comes up	<ol style="list-style-type: none"> 1. Follow the instructions on the monitor. 2. Find the corresponding item in this documentation and follow those instructions.
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Item/Location	Description/Symptoms	Next Steps/Actions
		
"Link Box Details"	<p>Error</p> 	<ol style="list-style-type: none"> 1. Verify power to the Link Box: <ol style="list-style-type: none"> a. Check that the status light on the VIVE Link Box (the box attached directly to the HMD) is on. b. If the status light is off, press the blue button on the Link Box to turn the Box on.  <ol style="list-style-type: none"> c. Ensure that all cables shown are plugged into the link box. <ol style="list-style-type: none"> i. 1 cable goes directly to the HMD. ii. 3 cables go out. These attach to the computer.

Item/Location	Description/Symptoms	Next Steps/Actions
		 <p data-bbox="1182 662 1514 691">d. Press “Retry” if needed.</p>
“Left Base Station Details”	Error or warning.	<ol style="list-style-type: none"> 1. Follow “Left Base Station Not Visible”. 2. Press “Retry” if needed.
“Right Base Station Details”	 	
“Spray Gun COM Details”	Error.	<ol style="list-style-type: none"> 1. Press “Retry” if needed. 2. There may be a problem with the connection between your gun and computer. Check this. If not resolved, contact tech support.
“Blasting COM Details”		
“Powder COM Details”	 	
“Spray Gun Details”	Error.	<ol style="list-style-type: none"> 1. Verify the gun’s VIVE Tracker is powered: <ol style="list-style-type: none"> a. Follow “Gun Not Visible / Check Gun Light.” 2. Make sure the USB cable going into the VIVE Tracker is connected.
“Blasting Details”	  	

Item/Location	Description/Symptoms	Next Steps/Actions
<p>"Powder Details"</p>		

Item/Location	Description/Symptoms	Next Steps/Actions
		

ACCESSING INTERNAL HARDWARE:

<p>Accessing the inside of the SimSpray unit</p>	<p>If you need to access the interior of the SimSpray unit to check connections</p>	<p>SimSpray 3:</p> <ol style="list-style-type: none"> 1. Locate the back metal plate of the SimSpray unit. 2. Unscrew the 2 top thumbscrews holding it to your SimSpray unit. 3. Carefully remove the panel. <p>SimSpray Go:</p> <ol style="list-style-type: none"> 1. Power down the laptop. 2. Disconnect the laptop connections. 3. Remove the laptop. 4. Lift up and remove the foam.
<p>Attaching a mouse and keyboard for tech support</p>	<p>If VRSim tech support asks you to attach your mouse and keyboard in order to access your computer, follow these instructions.</p>	<p>SimSpray 3:</p> <ol style="list-style-type: none"> 1. To add a mouse and keyboard (<i>note: you can potentially do this using the touchscreen only, but using a mouse and keyboard is safer</i>): <ol style="list-style-type: none"> a. Locate the back metal plate of the SimSpray unit. b. Unscrew the 2 top thumbscrews holding it to your SimSpray unit. c. Carefully remove the panel. d. Remove the mouse and keyboard from their box on the inside of the back panel.

Item/Location	Description/Symptoms	Next Steps/Actions
		<ul style="list-style-type: none"> e. Connect the mouse and keyboard to any available USB port on the SimSpray unit (e.g., at the front USB ports of the SimSpray unit).
Detaching a mouse and keyboard after tech support	After tech support is done, VRSim tech support may ask you to replace the mouse and keyboard into your SimSpray unit.	SimSpray 3: <ol style="list-style-type: none"> 1. With the SimSpray unit's back panel off, place the mouse and keyboard back into their box on the inside of the back panel. 2. Place the back metal plate back on. 3. Tighten the 2 thumb screws at the top of the back metal plate to attach it to the back of the SimSpray unit.

IN-SIM TABLET:		
In-Sim Tablet use	Unsure how to use the In-Sim Tablet 	<p>The In-Sim Tablet makes it easy to do common actions while keeping the HMD (helmet) on.</p> <p>Controls:</p> <ol style="list-style-type: none"> 1. Coating – View Coating Mode. 2. Coverage Map – Enable or disable Coverage Map Mode. 3. Defects – View Defects. Select the defect to highlight from a secondary menu. <i>Note: defect selection is limited to applicable defects in the selected process.</i> 4. Angle – Enable or disable the Angle Cue. 5. Distance – Enable or disable the Distance Cue. 6. Speed – Enable or disable the Speed Cue. 7. Controls shown here are dictated by the selected processes. These controls include: <ul style="list-style-type: none">  Conveyor Speed – Adjust the conveyor line speed. <i>Note: this is only visible in the conveyor environment.</i>  Edge Blending – Enable or disable the Edge Blending Cue. <i>Note: this is only visible in the HVLP Edge Blending process.</i> 8. Remove One – Remove the current Coat. 9. Remove All – Remove all Coats.

Item/Location	Description/Symptoms	Next Steps/Actions
		<ol style="list-style-type: none"> 10. Equipment Settings or Part Adjustment– Adjust Equipment Settings, including Tip Size, Pressures, part height location, or part rotation (<i>in software version 3.2</i>). 11. Lines – Enable or disable 3D line replay of Gun movement. 12. End Coat / Project – End the current Coat. If on the last Coat, this ends the Project. <i>Note: in the conveyor environment, use this button to also start the conveyor line.</i> 13. Coat Selection – Use the left and right arrows to view the information (Score, Coating, Coverage, 3D lines, Defects) of the ‘previous’ or ‘next’ Coat(s).
Finding the In-Sim Tablet	While wearing the HMD, cannot find the In-Sim Tablet	<ol style="list-style-type: none"> 1. Make sure you are in the paint, powder, or blast environment. 2. Move closer to one of the walls until the Tablet appears. By default, the Tablet will typically be found docked on the inside of the closest of the four walls of the tracking environment. Note that the User will normally need to turn around to see the Tablet. 3. To redock the Tablet to the side walls, point the Gun at any of the ‘Return’ boxes located on the walls.

MISCELLANEOUS		
Changing the size of the tracked zone	How to	<ol style="list-style-type: none"> 1. Click “Options,” and choose the item you wish to change. 2. Click “Options” again to close the menu.
Changing language		
Changing units of measurement (metric/imperial)		
Changing date and time formats		
Edit or make your own projects, lessons, or courses	<p>If you want to change the following:</p> <ul style="list-style-type: none"> ● Number or type of coats ● Dry film thickness ● Equipment settings (air and/or fluid pressure) 	<ol style="list-style-type: none"> 1. Go into “Admin” mode. See “Cannot access Admin mode.” 2. See Managing Content on http://support.simspray.net/.

Item/Location	Description/Symptoms	Next Steps/Actions
	<ul style="list-style-type: none"> ● Angle, distance, and/or speed ideals or ranges ● Which visual cues are allowed ● Target score for a lesson 	
Changing air or fluid pressure does not change the paint		Changing the air or fluid pressure is not intended to and does not affect the paint type or physics. These numbers are there only to expose users to and reinforce proper settings ranges.
Saving student reports	How to	<ol style="list-style-type: none"> 1. Insert a USB thumb drive into one of the USB outputs. 2. See Student Reports on http://support.simspray.net/.
Outputting student lesson completion	How to	<ol style="list-style-type: none"> 1. Insert a USB thumb drive into one of the USB outputs. 2. Go into “Admin” mode. See “Cannot access Admin mode.” 3. See Tracking Lesson Progress on http://support.simspray.net/.
Outputting Paintometer Info	How to	<ol style="list-style-type: none"> 1. Insert a USB thumb drive into one of the USB outputs. 2. Click on “Options” and then “Paintometer.” 3. Go to the advanced options, and select to output a snapshot of the data.