COMMON TROUBLESHOOTING

Contact:

- Call: (860) 893-0080
 - Weekdays 9 AM-5 PM (Eastern)
- E-Mail: <u>SimSpraySupport@vrsim.net</u>
- Or fill out a <u>web ticket</u>
 (http://support.simspray.net/index.php/contac
 t-us/)

Additional Documentation:

- SimSpray 3.x Support Portal (http://support.simspray.net)
 - Guides and helpful files
- SimSpray website (https://www.simspray.net)
 - Features and benefits
- <u>Performance Portal</u>
 (https://portal.simspray.net/)
 - o Online student reports and gradebook

Hardware Terminology:



Go		
30		



SimSpray 3

SimSpray Go

COMMON TROUBLESHOOTING

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"Right Base Station Not Visible"

"Turn on your Vive HMD" reappears after restarting application

COMMON TROUBLESHOOTING

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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:
Setting up and powering off		a. Follow the <u>Quick Start Guide</u> on <u>http://support.simspray.net/</u> .

EQUIPMENT SETTINGS: When clicking "Proceed" on the Equipment Equipment Settings screen -1. Use the values found in the Paint or Project Settings. See the <u>Default</u> Settings screen, you get the "Incorrect <u>Paint Types</u> (software v3.3.x or later) or <u>Default Project List</u> (software **Incorrect Settings** Settings" message. v3.2.x or earlier) on http://support.simspray.net/. **Incorrect Settings** a. 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. 2. OR: log into Admin Mode, select Score Settings, Proceed, change Machine Settings to "Automatic", Apply, and Log Out. This automatically sets the proper settings on the Equipment Settings screen. (Software v3.2.1 and later)

ADMIN MODE:		
Cannot access Admin mode	 After turning on the system and selecting a product, click on "Admin." Use the code provided with your system. It is typically printed on a sm card. If someone in your organization has changed the code, request this from them. If you do not know the new code or cannot find the default passcode, contact tech support. 	nall

Item/Location	Description/Symptoms	Next Steps/Actions

GUN PAINTING:		
Painting - Gun stuck painting or in air stage	After releasing the physical gun's trigger, the virtual gun continues to paint in the paint or air stage. The physical gun vibrates when not being physically triggered	 Check your software version. a. If not sure how to do this, see https://support.simspray.net/index.php/2019/11/11/versions/ If you are running software version 3.2 or later: a. Apply a content update fix for the gun. Follow the documentation here:

WINDOWS UPDATES:		
Windows Updates	 Windows notifies you: There are Windows updates available. Do you want to update from Windows 10 to Windows 11 	 We highly recommend <u>Suppressing Windows Updates</u> Otherwise, your operating system may become incompatible with your system. Updating from Windows 10 to Windows 11 <u>is not supported</u>.

MOTION TRACKING:		
Positioning SimSpray for best motion tracking Part or environment are too far away, high, low, or rotated incorrectly	 When wearing the HMD: The part is behind the SimSpray unit The environment or part seem: far away too high or low rotated incorrectly 	Steps: 1. Use a compatible environment: a. Rotate or aim SimSpray away from windows, TVs, infrared sources, and reflective materials. Minimize reflections or infrared interference. SimSpray uses a camera based tracking system. Cover sources of IR (Infrared) interference, turn off infrared emitting devices, and turn off nearby Bluetooth devices for best results.

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

- 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.

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



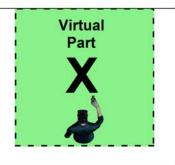
Incorrect view (when a user wearing VIVE is facing the SimSpray unit). Notice you are seeing the back of the scoreboard:



- b. Keep SimSpray away from dust and dirt. It is intended on being used in an office setting, not a paint shop.
- 2. Use the expected location:
 - a. For software version 3.4 or after:

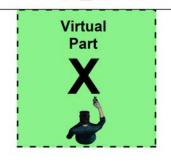
SimSpray 3
Top view





SimSpray Go Top view





b. For software version 3.3.3 or before:

SimSpray 3

Top view

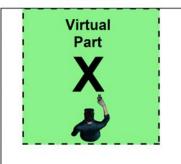




SimSpray Go

Top view





- 3. Check warnings:
 - a. Take off the HMD.

Item/Location	Description/Symptoms	Next Steps/Actions
		b. Look at the monitor. c. If any of the following warnings appear, follow the troubleshooting for the corresponding item(s): i. "Gun Not Visible / Check Gun Light" ii. "HMD Not Visible" iii. "Left Base Station Not Visible" iv. "Right Base Station Not Visible" 4. Reset Space (software version 3.2.x or later): 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. 5. Recalibrate (software versions 3.0.x or 3.1.x): 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. 6. Follow "Jittery motion tracking." 7. Follow "No gun". 8. Follow "HMD Not Visible." 9. If using a Powder Gun, remove the "SimSpray Powder" stickers. (These can sometimes cause infrared reflectivity that can interfere with motion tracking.) 10. Make sure you have not changed the Windows region settings. See Windows Region Settings.
No gun	You do not see the virtual gun when you move the physical spray, powder, or blast gun and are wearing the HMD.	 Power on the VIVE Tracker: 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. 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
		 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.) 2. Reposition the gun so the motion tracking system sees it: a. Follow steps in "HMD Not Visible." 3. If the VIVE Tracker light does not turn on: 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. 4. Make sure you have not changed the Windows region settings. See Windows Region Settings.
Jittery motion tracking	The HMD or Gun jitter excessively or intermittently lose tracking.	Note: SimSpray uses a camera based tracking system. Reflections, infrared devices, or other VIVE motion tracking systems in the area may degrade the
Intermittent motion tracking	mermittently lose tracking.	motion tracking.
		 Move yourself, your HMD (Head Mount), and your Gun into the motion tracked zone. Follow these, in this order: a. "Positioning SimSpray for best motion tracking." b. "HMD Not Visible." c. "Gun Not Visible."

Item/Location	Description/Symptoms	Next Steps/Actions
		 Rotate the SimSpray unit. Rotating the unit (e.g., in 90 degree increments) can decrease environmental issues and improve motion tracking. Reposition the SimSpray unit. Move the SimSpray unit somewhere else in the room or to a different room. Minimize reflections or infrared interference. Cover sources of IR (Infrared) interference. Turn off infrared emitting devices. Reorient, reposition, or move the SimSpray system away from reflective materials or infrared sources. Remove obstructions: Make sure there are no obstructions between:

Item/Location	Description/Symptoms	Next Steps/Actions
Item/Location	Description/Symptoms	i. Tap the Windows key. ii. Look at the system tray. iii. If the laptop is powered, it will show the following icon: 1. iv. If instead you see the following icon, then check the power cable is connected at back of the laptop, the Go power cable is connected to a power outlet, lift up the laptop and foam up, check the laptop power brick is attached to the power strip, and check the laptop power brick is attached to its power cable.
		 b. Using the mousepad or mouse, click on the SimSpray software again to focus off of the Windows taskbar. 10. Make sure there are no other VIVE base stations (as seen below) in the area. If there are:
		 a. Turn off non-SimSpray VIVE base stations. b. Move the SimSpray system to another location. 11. 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."

Item/Location	Description/Symptoms	Next Steps/Actions
		12. If using a Powder Gun, remove the "SimSpray Powder" stickers. (These can sometimes cause infrared reflectivity that can interfere with motion tracking.)
Part height, rotation, or position	 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. 	 Change the part height or rotation: a. See "In-Sim Tablet use." Adjust the forward-to-back position: a. Change the Room Shape:
Motion tracked spatial volume adjustment	Change the motion tracked zone size (e.g., for larger or smaller rooms).	Note: the following applies to v3.3.3 or earlier: 1. Click on the "SimSpray" menu. 2. Select "Options." 3. Press "Room Shape" to toggle the room shape. Room Shape A Note: in SimSpray Go, the motion tracked volume has the longer side left-to-right vs. as shown above. Note: v3.3.2 defaults to room shape B each time the user gets into the virtual environment. v3.4 has a single, default room shape.

Item/Location	Description/Symptoms	Next Steps/Actions
"HMD Not Visible"	One or more warnings appear on the	Move yourself and your HMD (Head Mount) into the motion tracked
"Left Base Station Not Visible"	monitor.	zone. Note that you may need to step back, away from the SimSpray unit monitor.
"Right Base Station Not Visible"		 Remove obstructions: Make sure there are no obstructions between: The base stations and the gun. The base stations and the HMD. Do not cover the HMD with your hand. Normally if someone has a hand on the HMD during use, it means the HMD does not fit well. Adjust the top strap and back knob of the HMD so the HMD is a comfortable fit. Make sure to keep your hand off the HMD while painting, blasting, or powder coating. Make sure the small light at the front of each of the two base stations (black boxes on the tops of the metal arms for SimSpray) (black boxes on the inside top of SimSpray Go) is lit with a green light. If not:
	 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. 	

Item/Location	Description/Symptoms	Next Steps/Actions
"Turn on your Vive HMD" reappears after restarting application	 You follow the instructions on the "Turn on your Vive HMD" screen at startup, and press "Restart Application." The same "Turn on your Vive HMD" screen appears after the application restarts. 	 Press "Restart Application." Sometimes you may need to do this step ~2-3 times. Follow "No image in the HMD / no light on the HMD." Follow "Link Box Details." For Go, if using Laptop B (Lenovo Legion 7i), make sure to connect the USB-C dongle to the left, back USB-C (Thunderbolt), not the left, front USB-C port. For Go, fully power cycle: a. Fully power down the unit. b. After 30 seconds, disconnect the power from the wall. c. Wait 10 seconds. d. Connect the power to the wall. e. Turn on the laptop. f. Wait until SimSpray loads. g. Do not turn on the VIVE linkbox until prompted.
Cannot complete "Reset Space"	1. After pressing "Proceed" on the "Reset Space" screen, the "Scanning" bar never fills up. **Tenders You Control That Body College (Part Body Co	 Make sure the gun light is green or orange. Follow "Gun Not Visible." Make sure no one is standing between the gun and case. Make sure the VIVE tracker is facing the case. Make sure the gun is in the motion tracked space. It must be far enough away that any tables, objects, or the SimSpray Go case do not obscure the line of sight between the VIVE Tracker and base stations. I.e., place the VIVE Tracker at least 4' (1.2m) in front of the case. Move the VIVE Tracker even further away if still having issues. Make sure both base stations have green lights. See "Base Station light codes." Possibly change base station frequencies. Follow "Base Station Setup Error / Changing frequencies."

Item/Location	Description/Symptoms	Next Steps/Actions
Base Station light codes		 Powered off: Light not lit. Stabilizing: 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: Green or white = normal mode. Error Blinking red = error. See below for troubleshooting.
Base Station red light	A base station shows a blinking red light.	This indicates an error, usually from hardware. 1. Contact tech support: a. Contact your distributor or VRSim. 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: a. Disconnect the base station's power cable, HL0 or HR0, 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, HL0 or HR0, 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		 Powered off: Light not lit. Normal: Green = normal mode. Red: Red or blinking red = cable, driver, or hardware issue.
VIVE HMD red light		Check hardware connections: a. See "No Image in the HMD."
Valve Index HMD light codes		 Powered off: Light not lit. Cause: SimSpray unit may be powered off, trident cable disconnected from HMD cable, power disconnected from trident cable, and/or power disconnected from power strip. Normal: Green = normal mode. Standby: Blue Cause: DisplayPort disconnected from computer, adapter between SimSpray Go laptop and Valve Index DisplayPort disconnected, and/or trident USB disconnected from computer. Red: Red steady = display has failed to initialize.

Item/Location	Description/Symptoms	Next Steps/Actions
		 Cause: Check all connections listed in "powered off" and "standby" listed above. Read blinking = startup error. Cause: make sure the System Button is not being pressed while the headset is turned on. Otherwise, this may be a firmware issue.
VIVE Tracker light color codes (on spray, blast, or powder gun)	Identify what the light means on the gun's VIVE Tracker.	 Powered off: Light not lit. Not fully turned on: Light is white. Normal: Green = normal mode. Orange = charging. Blinking red = battery is low. Blinking blue = attempting to pair with the HMD or another device. After 30 seconds, pairing attempts will end. Blue = when connecting with the HMD or another device (not normally expected). Notes: The Tracker may automatically turn off if:
		 Pairing has timed out after being idle for more than 30 seconds There was no user movement for 5 minutes

CURRICULUM OR LESSON MODE:

Item/Location	Description/Symptoms	Next Steps/Actions
Curriculum Mode - creating users, signing in, or credentials	When going into Curriculum Mode, you do not know how to create a user or what credentials to use. Note: Curriculum Mode is in software v3.3 or later.	 To access Curriculum Mode for the first time (requires software v3.3.x or later): Option A:

Item/Location	Description/Symptoms	Next Steps/Actions
Lesson Mode - creating users, signing in, or credentials	When going into Lesson Mode, you do not know how to create a user or what credentials to use. Note: Lesson Mode is in software v3.2.2 or earlier 3.x.	 To access Lesson Mode for the first time (requires software v3.2.x or earlier): a. Enter a username and password. b. Then "Proceed" and select "Yes" to create this new profile. To access Lesson Mode again: a. Sign in. If you forget your credentials, ask your administrator or teacher to find or reset these in Admin mode.
Curriculum Mode - cannot connect	When going into Curriculum Mode, you see this icon or you see another indication the unit is disconnected: Network connection unavailable. Note: This feature requires your SimSpray unit is running software version 3.3 or later AND your SimSpray unit is connected to the internet.	When using Curriculum Mode online, Performance Portal and SimSpray 3.3 require an active internet connection. The connection must be constantly connected or always online for users to access the reporting functionalities and other capabilities in Performance Portal. 1. Check that your SimSpray computer is connected to the internet. a. If using SimSpray 3, follow "Attaching a mouse and keyboard for tech support". b. Tap the Windows key on the keyboard. c. Once the taskbar is open, find the internet connection icon and click on it. d. d. e. Find your local wifi connection, ensure the "connect automatically" box is checked, and then connect to that wifi connection. Enter your wifi credentials if prompted. You do not need the computer to be discoverable. This should be all you need to do to ensure that your unit automatically connects to your wifi when you start it up. i. Note: if the wifi connection is weak or not stable, you may need to add compatible wifi antennas to the computer or use a wired ethernet connection instead. f. Press the Windows key to open the taskbar. g. Type "Chrome" using the keyboard, and hit enter to run Google Chrome.

Item/Location	Description/Symptoms	Next Steps/Actions
		 h. In Chrome, in the navigation bar at top, type the following, and then press Enter: https://www.google.com/ Verify the page loads. If not, then diagnose your internet connection or ask your IT for help. If using wifi, double check your wifi connection is set to auto connect on startup. See the above details. Run the Windows Firewall hotfix. Verify that you have a stable connection that does not drop. If you are having trouble maintaining a constant wifi connection, your unit will benefit from a wired connection or adding wifi antennas. Details: wifi antennas were added to SimSpray 3 units shipped late November 2021. SimSpray 3 units before then do not have the antennas but do have wifi. Purchasing a compatible set of antennas may help if using wifi. Alternatively, use a wired ethernet connection instead. If using wifi, check that the wifi user the SimSpray computer is signed into that can access the outside internet and is not internally restricted. Ask your IT department if unsure. Verify with your IT department that https://data.simspray.net is not blocked, especially on port 443. This may need to be whitelisted. Contact VRSim tech support.

Item/Location	Description/Symptoms	Next Steps/Actions
Curriculum Mode - progress not saved or incorrect	You see any of the following symptoms: Your Lesson scores are different between Curriculum Mode on SimSpray and the Portal website. You have 2 or more SimSpray units, and the Lesson scores in Curriculum Mode are different between the 2 SimSpray units. Note: Curriculum Mode is in software v3.3 or later.	 To have student data show in Portal, the SimSpray unit must be connected to the internet. Follow "Curriculum Mode - cannot connect". Note: customers who are not allowed to ever connect the SimSpray unit to the internet (e.g., department of defense) may need to switch the unit to offline Curriculum Mode, new to v3.3. Contact tech support for more info about this.

Item/Location	Description/Symptoms	Next Steps/Actions
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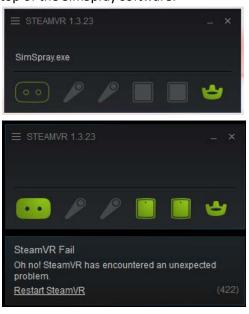
	PERFORM	ANCE PORTAL:
Performance Portal - creating users, signing in, or credentials	In the Performance Portal, you do not know how to create a user or what credentials to use. Note: This feature requires your SimSpray unit is running software version 3.3 or later AND your SimSpray unit is connected to the internet.	 To create a user in Portal: On a non-SimSpray computer, go to Portal (https://portal.simspray.net/user/login). Click "Create new account." Enter your information. In the "Key" field enter the SimSpray Portal Student (for students) or Teacher (for teachers) Key
Performance Portal - progress not saved or incorrect	The progress, scores, or user accounts do not match between your SimSpray unit's Curriculum Mode and what is shown on Portal (https://portal.simspray.net/user/login). Note: This requires you have SimSpray software version 3.3 or later AND your SimSpray unit is connected to the internet.	 Go to your SimSpray unit, and verify your software version is 3.3 or later. a. If not sure how to do this, see https://support.simspray.net/index.php/2019/11/11/versions/ b. Note: student data from SimSpray software version 3.2.2 or earlier will not show up in Portal. Verify data is sending properly from SimSpray. See "Curriculum Mode - progress not saved or incorrect" Troubleshoot using the Performance Portal help resources: https://portal.simspray.net/help

STEAMVR WINDOW:

STEAMVR window shows up

"SteamVR Fail"

You see a window such as the following on top of the SimSpray software:



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.

1. Click anywhere on the SimSpray software to bring the SimSpray software into focus and hide the STEAMVR window.

"Base Station Setup Error" / Changing channel frequencies You see a window such as the following on top of the SimSpray software:

Base Station Setup Error
SteamVR has detected multiple bases set to channel 3. For best results, use unique channels for all bases that can be seen at the same time.

Detected: 3:20 PM

Dismiss

Configure

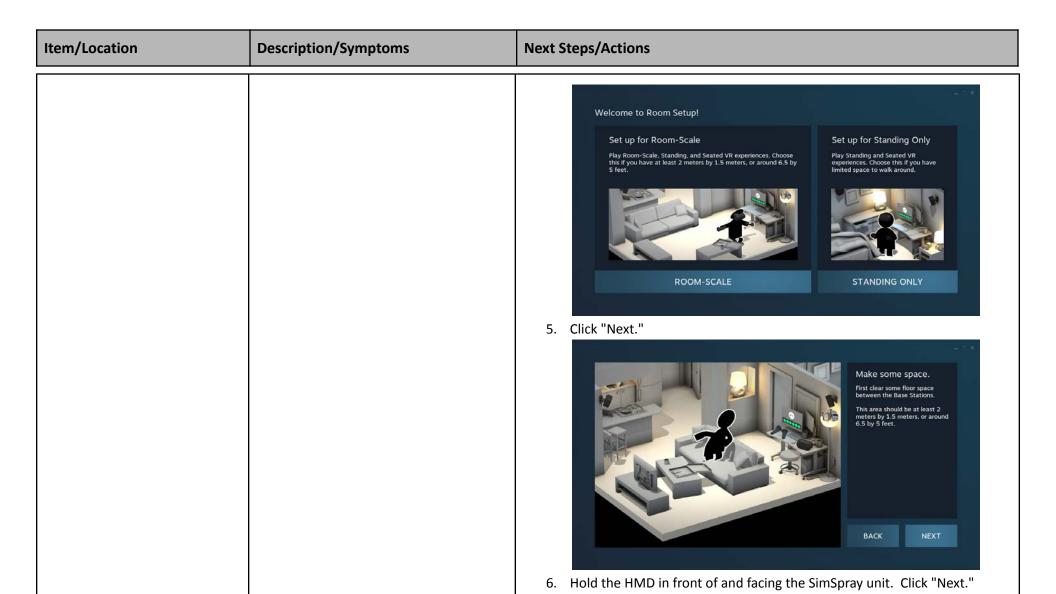
One or more non-SimSpray VIVE base station(s) is/are conflicting and on the same channel(s) as your SimSpray's VIVE motion tracking system.

- 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:
 - a. For SimSpray 3:
 - i. To add a mouse and keyboard (note: you can potentially do this using the touchscreen only, but using a mouse and keyboard is safer):
 - Locate the back metal plate of the SimSpray unit.

Item/Location	Description/Symptoms	Next Steps/Actions
		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. 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. 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 a

Item/Location	Description/Symptoms	Next Steps/Actions
		Ease Station 2.0 Channel Configuration Configuring LHB-50247420 on Channel 6 Select an unused channel for this Base Station to avoid potential tracking conflicts. No conflict on Channel 6 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 Denotes a channel used by other Base Stations in radio provimity. Cancel Apply 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: 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. 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."
Reconfiguring motion tracked zone (Room Setup) / Fixing height offset	For normally correcting gun or HMD motion tracking, see the other entries above in the "Motion Tracking" section. 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	In normal use, you should not need to do this. If you changed VIVE base station channels (see "Base Station Setup Error"), you may need to do this. 1. For SimSpray 3: a. To add a mouse and keyboard (note: you can potentially do this using the touchscreen only, but using a mouse and keyboard is safer): i. Locate the back metal plate of the SimSpray unit. ii. Unscrew the 2 top thumbscrews holding it to your SimSpray unit.

Item/Location	Description/Symptoms	Next Steps/Actions
	if the VIVE base station channels were changed.	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. 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." STEAMVR 1.3.23 Room Setup Tutorial Media Player Display VR View Devices Workshop Create System Report Settings Developer Help Quit 4. Click "Standing only."





8. Leave the floor value at the default 0 cm. Place the HMD on the floor, a few feet in front, centered left-to-right, and facing the SimSpray unit. Click

Item/Location	Description/Symptoms	Next Steps/Actions
		"Calibrate floor." Wait for the bar to fill up. Click "Next."
		Locate the floor.



9. Click "Done."



- 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 unscoreable and not expected to be painted. These areas are often indicated with a surface that is unclean.

Scorable regions No mil build score or 0 mil build

If you paint in these areas, your Transfer Efficiency will decrease because material is wasted, and your Mil Build Score will not increase. Other parameters such as Angle, Distance, and Speed will still be scored.





Clean

Paint, Blast, or **Powder Coat this** side.

Unclean

Don't Paint, Blast, or **Powder Coat this** side.

If you are facing the front of the unit with your HMD on, you are expected to:

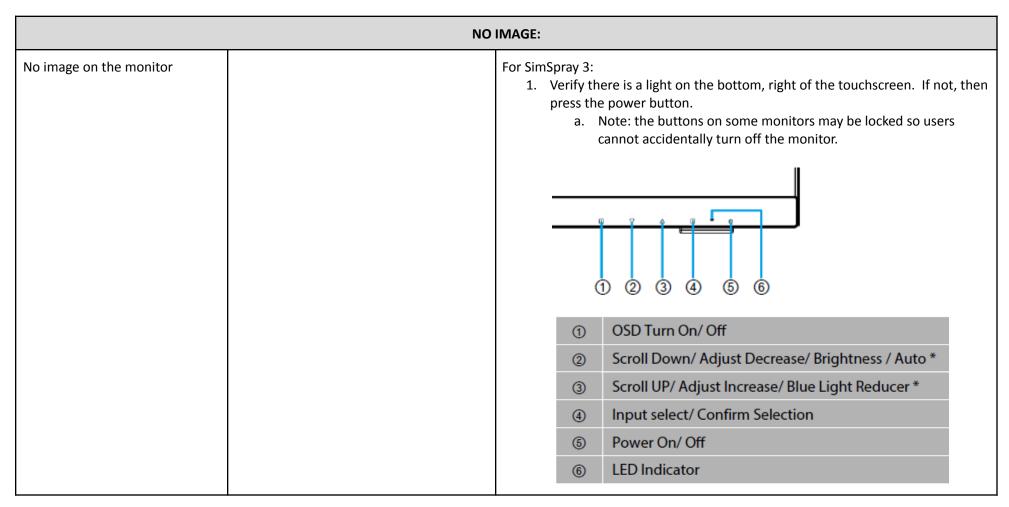
- Paint or blast:
 - For SimSpray 3:
 - Starting v3.4: The front facing side of most parts.
 - v3.3.3 or earlier: The right facing side of most parts.
 - For SimSpray Go: The front facing side of most parts.
 - The top of most horizontal parts.
- Powder coat:
 - In the Electrostatic Booth Environment: the full part.
 - In the Electrostatic Conveyor Environment:
 - Starting v3.4: The front facing side of most parts.
 - v3.3.3 or earlier: The right facing side.

Item/Location	Description/Symptoms	Next Steps/Actions
		See <u>"Positioning SimSpray for best motion tracking"</u>

	EXTERN	IAL DISPLAY:
TV, projector, smart board, or monitor adding	How to	Use an additional external display if you want more people to be able to see the image and (optionally) hear the sound of SimSpray: 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. 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).
		 Notes: 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		 See <u>"TV, projector, smart board, or monitor adding."</u> Fully power cycle SimSpray off and then on. See <u>"Setting up and powering off"</u> and <u>"Setting up and powering on."</u>

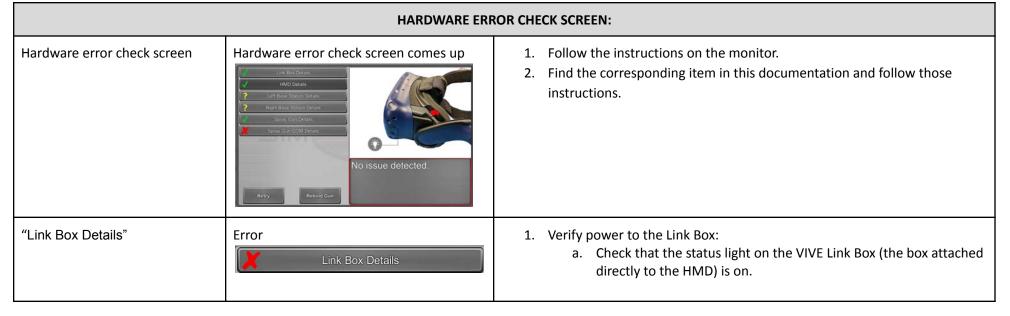
ADMIN MODE:		
Cannot access Admin mode		 After turning on the system and selecting a product, click on "Admin." Use the code provided with your system. It is typically printed on a small card.

Item/Location	Description/Symptoms	Next Steps/Actions
		 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.
Paint Editor has too large values	The Paint Editor values in Admin Mode are large, and when editing the values the value ranges are more restricted than normal.	Make sure you have not changed the Windows region settings. See <u>Windows Region Settings</u> .



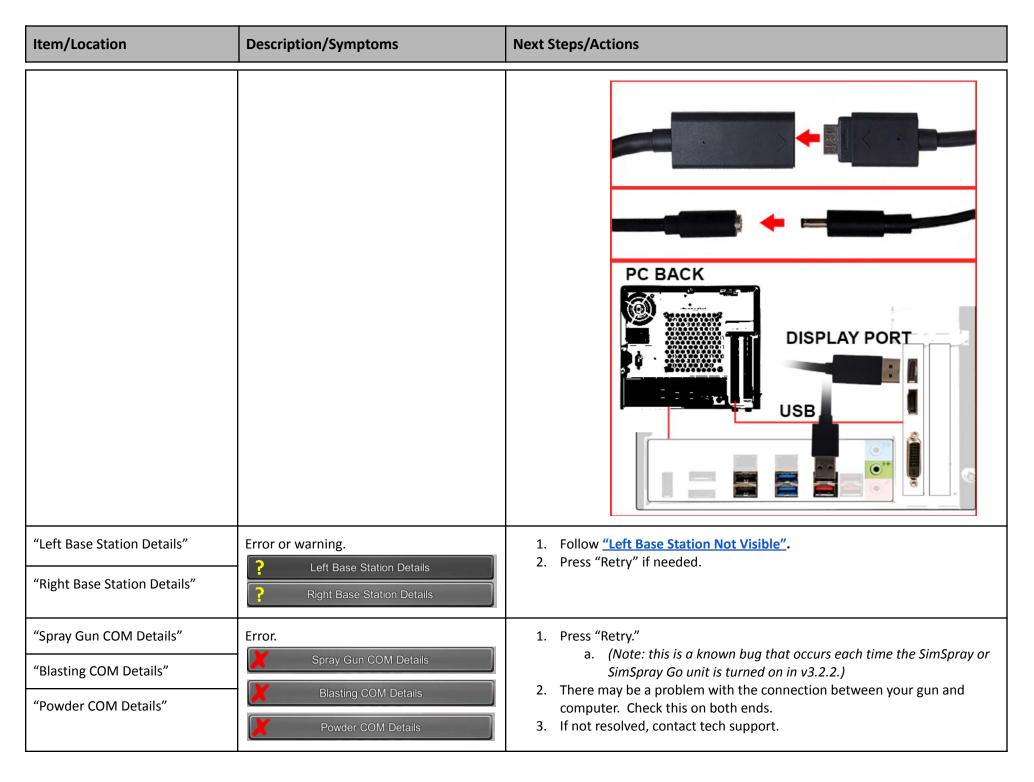
Item/Location	Description/Symptoms	Next Steps/Actions
		2. Verify the connections on the back of the monitor. a. Note: labeled numbers may be different. o
No image in the HMD / no light on the HMD		 If seeing only a blue image, then follow "HMD Not Visible." If seeing "Please view screen," then take off the HMD and look at the monitor. If using a VIVE HMD, check these connections: a. Verify there is a green light on the HMD. b. If not:

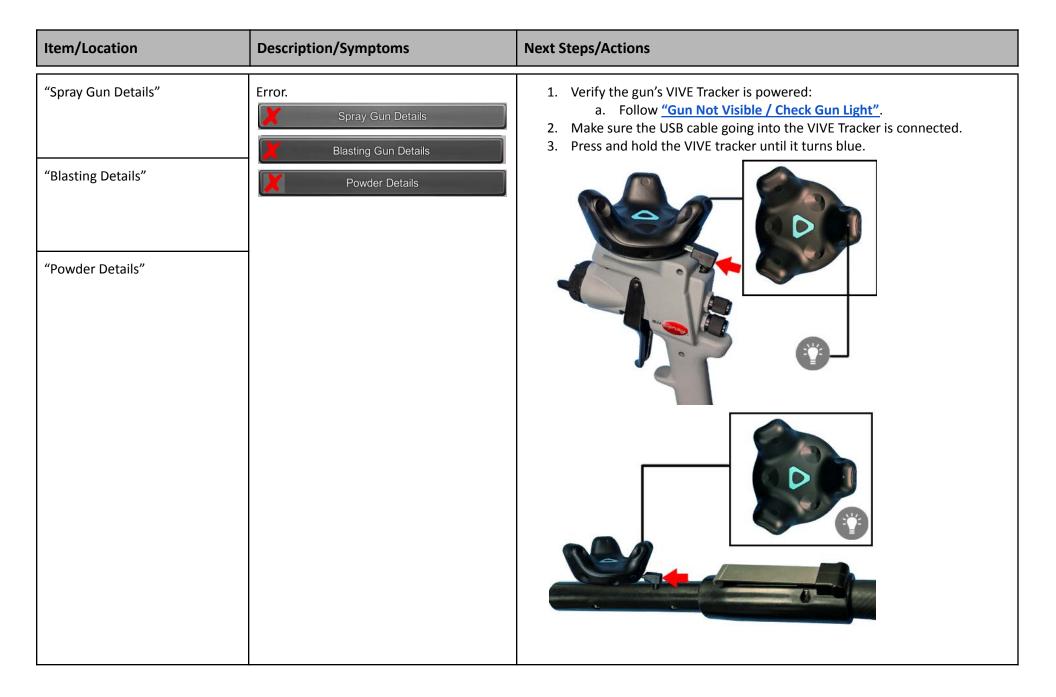
Item/Location	Description/Symptoms	Next Steps/Actions
		c. Follow "Link Box Details." d. For Go, if using Laptop B (Lenovo Legion 7i), make sure to connect the USB-C dongle to the left, back USB-C (Thunderbolt), not the left, front USB-C port. 4. If using a Valve Index HMD, follow "HMD Detection."

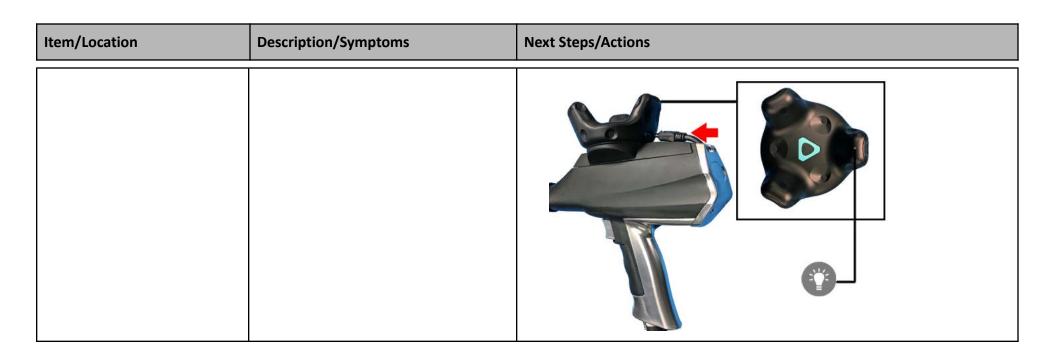


Item/Location	Description/Symptoms	Next Steps/Actions
		b. If the status light is off, press the blue button on the Link Box to turn the Box on.
		c. Ensure that all cables shown are plugged into the link box. i. 1 cable goes directly to the HMD. ii. 3 cables go out. These attach to the computer. d. Press "Retry" if needed.
"HMD Detection"	HMD Detection	1. Check that the Valve Index lights are green.

Item/Location	Description/Symptoms	Next Steps/Actions
		If not:
		cable.
		b. Check from the trident cable to the power.
		c. Check the USB to the computer connection.d. Check the DisplayPort to the computer connection. For Go, this
		includes checking the adapter to the laptop.
		e. Make sure the power is in the power strip.







Launcher screen Launcher screen comes up Launcher screen comes up This screen comes up: 1. After the SimSpray 3 unit or Go laptop are turned on and Windows loads. 2. Follow the instructions on the monitor.

ACCESSING INTERNAL HARDWARE:		
Accessing the inside of the SimSpray unit	If you need to access the interior of the SimSpray unit to check connections	SimSpray 3: 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.

Item/Location	Description/Symptoms	Next Steps/Actions
		SimSpray Go: 1. Power down the laptop. 2. Disconnect the laptop connections. 3. Remove the laptop. 4. Lift up and remove the foam.
Attaching a mouse and keyboard for tech support	If VRSim tech support asks you to attach your mouse and keyboard in order to access your computer, follow these instructions.	SimSpray 3: 1. To add a mouse and keyboard (note: you can potentially do this using the touchscreen only, but using a mouse and keyboard is safer): 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. 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: With the SimSpray unit's back panel off, place the mouse and keyboard back into their box on the inside of the back panel. Place the back metal plate back on. 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:			
Finding the In-Sim Tablet	While wearing the HMD, cannot find the In-Sim Tablet	 Make sure you are in the paint, powder, or blast environment. 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. To redock the Tablet to the side walls, point the Gun at any of the 'Return' boxes located on the walls. 	
In-Sim Tablet use	Unsure how to use the In-Sim Tablet	The In-Sim Tablet makes it easy to do common actions while keeping the HMD (helmet) on.	



Controls:

- 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. *Note: defect selection is limited to applicable defects in the selected process.*
- 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:



Conveyor Speed – Adjust the conveyor line speed. *Note: this is only visible in the conveyor environment.*



Edge Blending – Enable or disable the Edge Blending Cue. *Note: this is only visible in the HVLP Edge Blending process.*

- 8. Remove One Remove the current Coat.
- 9. Remove All Remove all Coats.
- 10. Equipment Settings or Part Adjustment—Adjust Equipment Settings, including Tip Size, Pressures, part height location, or part rotation (*in software version 3.2*).
- 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. *Note: in the conveyor environment, use this button to also start the conveyor line.*
- 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).

Item/Location	Description/Symptoms	Next Steps/Actions
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MISCELLANEOUS		
Changing the size of the tracked zone	How to	 Click "Options," and choose the item you wish to change. 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	If you want to change the following: Number or type of coats Dry film thickness Equipment settings (air and/or fluid pressure) Angle, distance, and/or speed ideals or ranges Which visual cues are allowed Target score for a lesson	 Go into "Admin" mode. See "Cannot access Admin mode." See Managing Content on http://support.simspray.net/.
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	Requires software v3.2.x or earlier: 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	 Insert a USB thumb drive into one of the USB outputs. Go into "Admin" mode. See "Cannot access Admin mode." See Tracking Lesson Progress on http://support.simspray.net/.
Outputting Paintometer Info	How to	 Insert a USB thumb drive into one of the USB outputs. Click on "Options" and then "Paintometer." Go to the advanced options, and select to output a snapshot of the data.