

Virtual Rabbids: The Big Ride Troubleshooting Guide



Please select the appropriate symptom from the list below:

Both HTC Vive Headsets show white screen during gameplay

ONE HTC Vive Headset is showing white screen during gameplay

Player 2 Not Crediting

No Motion at all from Motion Base

Motion from only ONE actuator on Motion Base

Game volume too low

Safety sensor showing blocked

PC will not power up or will not stay on

Other

SYMPTOM

During gameplay, especially in sections with heavy vibration or impact, the picture inside the headset goes grey, either briefly or for long periods of time (15-20 seconds).

ROOT CAUSE

If the headset loses tracking at any time, the picture inside will turn grey. Only one base station needs to see the headset to maintain tracking, but both base stations need to be able to see each other. The base stations are sensitive to vibration and impact, as they have moving parts inside. If either base station is subjected to vibration, it will cause them to briefly lose sync with each other, and thus the headset will lose tracking, and show a grey screen.

STEPS TO RESOLVE

Go through each section below, checking to see if the problem still persists after each change. If so, continue on to the next troubleshooting step.

1. CHECK FOR DIRT OR DAMAGE ON THE BASE STATIONS

Check the face of the base stations to make sure they are clean and scratch free.

2. REDUCE VIBRATION AT THE BASE STATIONS

A. SLED FEET

Ensure the feet on the front sled are wound all the way down. If not properly balanced, the vibration in the sled is amplified, which transfers more vibration to the base station housed here.

B. BASE STATION MOUNTING

Check that the base stations are securely mounted on their brackets, and that the front face of the base station is parallel with the grey acrylic. They can come lose during transport.

C. LOOSEN CONNECTION TO TOWER

Loosen the bolts connecting the yellow cable trunking to the tower (as shown below), so the trunking is floating. This drastically reduces the vibration passed to the base station housed in the tower.





3. INSTALL SYNC CABLE

By connecting the base stations via sync cable, it allows them to sync over wired communication instead of wirelessly. This allows them to re-establish syncing much faster, so even if either base station receives a small to medium amount of vibration, they won't lose tracking of the headset. The sync cable is a standard 3.5mm to 3.5mm audio cable. This needs to be plugged into the back of each base station, and run down the tower, through the motion base, and up through the sled. Once the cable is installed, the base station channels must be changed.

- Wireless: Sled = b, Tower = C
- Wired: Sled A, Tower = b

4. CHECK CHANNELS

The base station channel is visible in the bottom left hand corner of the base station face, as shown below. The two base stations must be set to different channels. Use the button on the back of the base station to toggle between channels.

Note that the channels shown below are an example only.

- Wireless: Sled = b, Tower = C
- Wired (after installing the sync cable): Sled A, Tower = b









FURTHER TROUBLESHOOTING

If the steps above did not improve the issue, you can use the information below to continue more indepth troubleshooting to identify potential issues with a faulty base station, interference, or a faulty headset. Alternatively, you can contact LAI Support for more assistance.

TROUBLESHOOTING BASE STATION AND HEADSET ISSUES

The SteamVR window is always running in the background. It can provide valuable information if you are troubleshooting issues with headset tracking or base stations, but during normal operation, it is always hidden.

If you want to view the SteamVR window:

- 1. Ensure the HDMI switch is set to the PC you want to troubleshoot
- 2. Ensure the keyboard dongle is plugged into the same PC
- On the keyboard, press the Windows Key + P. This will stop the SteamVR window from automatically being hidden
- 4. Press Alt + Tab to show the SteamVR window
- Once you are finished, press Windows + P again and the window will automatically hide restarting the cabinet will have the same effect

During normal operation, the SteamVR window should appear as shown below:



- 1. The icon on the left represents the headset
 - If this icon is flashing green, or black with a green outline, it means the headset is detected but not awake and tracking. Simply moving the headset around will wake it up and it will start tracking again.
 - If this icon is grey, it means the headset is not detected. Check the light on the side of the headset.
 - If the light is red, the headset is receiving power but not detected by the PC. Check the HDMI cables and link box.
 - If the light is off, the headset is not receiving power. Check the power cables and linkbox.
- The two icons on the far right represent each base station one in the sled, and one in the tower. If you use the mouse to hover over the icon, it will specify which channel base station that icon represents – you can see which channel a base station is set to by viewing the front of the base station.



- If this icon is grey, the base station is not detected. Check the base station has power.
- If this icon is changing between grey and green intermittently, there could be a few causes. Any of the below could result in a grey screen appearing intermittently during gameplay:
 - Interference from other base stations. Base stations are very sensitive to interference – if you have two Virtual Rabbids units, they should not be operated next to each other. We recommend operating them back to back, or in separate areas of your location.
 - Intermittent power. Check the power cables are securely plugged in on both ends.
 - Faulty base station. If you have checked all of the above and the problem persists, the base station may be faulty.
- If you have more than two base station icons, it means the base stations are picking up interference from other nearby base stations. If you have two Virtual Rabbids units, they should not be operated next to each other. We recommend operating them back to back, or in separate areas of your location.

BASE STATION STATUS LIGHT

At the top centre of the base station face, there is a small light that indicates the current status of the base station.

- Green
 - Normal operation. The base station is turned on, synced with the other base station.
 During normal operation, status lights on both base stations should always be green.
- Blue
 - The base station is waiting to stabilize. This means it has received impact or vibration, which will prevent it from syncing. Open the base station housing and ensure the base station is securely positioned and has not come loose. Also check the levelling feet underneath the sled have been adjusted to touch the floor, ensuring the sled is stable when touched.
- Purple
 - The base station is trying to sync. This status may be visible briefly after start up, or after a blue status light has been seen. It means the base station has recovered and is trying to re-establish syncing with the other base station.



SYMPTOM: ONE HEADSET HAS WHITE/GREY SCREEN DURING GAMEPLAY

STEP 1: Reseating the I/O connections on the headset

- Power off the game.
- Remove the 2 screws securing the cover.





- Remove the HDMI, USB and Power connections and firmly push them back into place.
- Replace the I/O cover and screws.
- Power the game back on.
- Test (If you are still seeing white screen continue to step 2).

STEP 2: Swapping Headsets to determine fault

- Once again, remove the I/O cover and disconnect the HDMI, USB and power.
- Before working on the headset it is recommended to place a thin cardboard sheet inside to protect the lenses.
- Remove the 2 nuts and washers from the inside and pull out the security brackets. The headset should be free from all tethers at this point.
- Do this for the other headset and swap positions.
- If the problem stays with the position and does not follow the headset, the 3-in-1 cable is faulty.





SYMPTOMS:

- P2 does not show credits while P1 plays as normal
- Top monitor display shows P2 and/or P1 labeled "OFF" instead of "WAITING" after coin up



If these issues are present, it most likely means the PCs are not communicating. Follow the steps below to resolve.

STEP 1: Determine the PC address for PC1 (Refreshing Address)

- Insert the keyboard dongle into PC1 and turn on the keyboard.
- Press the letter "O" on the keyboard to enter the operator menu. You should then see this screen below.
- Select "System Settings" then select "Linking Settings"







- The Player ID should show PLAYER_1. Even if the Player ID is correct, toggle the Player ID to PLAYER_2, then back to PLAYER_1. This will "refresh" the Player ID and will save further steps later.
- Exit the operator menu by pressing the letter "O" on the keyboard.

LINKING SETTINGS		
PLAYER ID	PLAYER_1	
HEADSET	CALIBRATE HEADSET	

STEP 2: Determine the PC address for PC2 (Refresh Address)

- Insert the keyboard dongle into PC2 and power down PC2 only using the power button located on the front of the PC. Wait 60 seconds before powering back on.
- Change the HDMI switch to show PC2 image on the top monitor.
- Once the PC has booted up, enter the operator menu using the keyboard.
- Again, toggle the Player ID to PLAYER_1 and then back to PLAYER_2.
- Exit the operator menu.
- Change the HDMI switch back to PC1.
- Perform a power cycle on the entire game. Be sure to wait at least 60 seconds after everything boots down before turning power back on.

STEP 3: Once the ride has booted up, test by crediting both sides. If the problem is not resolved, continue to step 4.

STEP 4: Replace the cat5e cable that is linking both PCs. This will be the only Cat5e coming from either PC. Once installed, power cycle the entire game and test. If the same results are seen, proceed to step 5.

STEP 5: Perform a system image on both PCs (Re-install Software)

- Locate the recovery USB flash drive that came inside the Virtual Rabbid's support kit.
- Follow the instructions in the manual on how to install.



D-BOX TROUBLESHOOTING GUIDE



Overview of Components



WARNING: USE CAUTION WHEN HANDLING ACTUATOR CABLES AND CONNECTIONS INSIDE THE ACM. THESE EQUIPMENT OPERATE UNDER EXTREMELY HIGH VOLTAGE. SERIOUS INJURY OR DEATH COULD OCCUR IF HANDLED WHILE OPERATING.

SYMPTOM: NO MOTION AT ALL

STEP 1: Open access door at the rear of the tower (bottom door), and locate the D-Box Motion Controller KCU (black box on right above PC2).

STEP 2: Note the color of the indicator light on the box. Color codes are below:



- No light KCU is not receiving 48v > Check power plug in rear of KCU, check plug at 48V adapter located below the PCs on the floor of the tower, check plug located on power strips above the PCs.
- Red light Not receiving signal from PC > check USB connection to KCU from PC1.
- Orange light KCU is trying to obtain a signal (will usually see this when the KCU is booting up)
- Green light KCU is working properly (If you have a green light and there is no motion, follow to Step 3).



Step 3: Check the Cat5e cable is securely plugged into the rear of the KCU.

Step 4: Check that both Cat5e ends are connected where the tower connects to the motion base (open the lower front tower access door to check). Firmly push both Cat5e terminals into the coupler simultaneously. If there is motion, bypass this coupler by using the Cat5e from the KCU to the ACM.





STEP 5: Checking the Actuator Control Module (ACM)

- Remove the skirt under player 2 seat
- Ensure the Cat5e cable, Jumper Cat5e cable and power are all firmly connected to the ACM correctly.
- Check the lights

No lights – ACM has no power and no data.

Status light only – ACM has power but no data (most likely a bad cat5 cable or coupler if all of the above steps have been followed).

Cat5 port lights only and no Status light – ACM does not have 110V (check power cord to the ACM to ensure 110V is provided, check power connection to tower, check power strip inside cabinet).

STEP 6: Opening the ACM to check the fuse and power connector

- Power off the game.
- Unplug power and cat5e from the ACM.
- Remove the 4 nuts securing the ACM to the motion base floor to allow for better access.
- Open only the area labeled "Access Cover" (Opening the entire top of the ACM will cause damage to the components and void the warranty).



- Check the 8 amp fuse and reseat the power connector.
- If the fuse is good, reinstall the ACM and test. Contact your distributor if the problem persists. Note the serial number on the ACM, you will need this for the D-Box warranty process.

SYMPTOM: ONE ACTUATOR NOT MOVING



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STEP 1: Opening the ACM

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- Remove the skirt under Player 2 seat.
- Unplug power and cat5e from the ACM.
- Remove the 4 nuts securing the ACM to the motion base floor to allow for better access.
- Open only the area labeled "Access Cover" (Removing the entire top of the ACM will cause damage to the components and will void the warranty).



STEP 2: Swapping the actuator connectors



Inside access area of ACM

Image 2

- Determine the connectors for the working actuator.
- Very carefully, swap both connectors for both actuators.
- **CAUTION**: the encoder connector is fragile. Handle the connector with care. Do not disconnect the connector by pulling on the wires. Use your index nails to extract the connector as shown above in *image 2*.
- Plug everything back into the ACM and power cycle the ride.
- If the problem follows the actuator, then you have a faulty actuator (if you now have movement from the other actuator, then you have a faulty ACM).

NOTE: If this is a newly installed unit and the non-working actuator has never worked upon install, it could be that the factory plugged the actuator connectors into the wrong ports.

• If so, keep an actuator connected to the working ports, and move the other actuator connectors to the unused ports. Power cycle and see if this resolves the issue.

END

This is the end of this section. Click the button on the right to return to the main menu.

HOW TO ADJUST MASTER/ATTRACT VOLUME

STEP 1: Adjusting the attract volume

- Put the keyboard dongle into PC1 and press the letter "O" on the keyboard to enter the operator menu.
- Select "Sound Settings."
- Adjust the attract volume using the up/down arrow keys on the keyboard.



STEP 2: Adjusting the Master Volume on the amplifier

- Locate the amplifier in the rear of the tower. It is located just right of the FB216 I/O board
- Adjust the far right knob to desired volume.





SAFETY SENSOR CALIBRATION

While the safety sensors shouldn't need calibration during normal operation, moving the cabinet or replacing some hardware (sensors, reflectors) may mean the sensors require recalibration. In the event of a recalibration, please ensure the steps below are followed closely, as incorrectly calibrated safety sensors will result in a negative gameplay experience.

CLEAN

For the safety sensors to operate reliably, the sensor windows and reflectors need to be clean. Even if reflectors look clean on inspection, we strongly recommend you wipe them down with a damp cloth and check if the problem persists.

CHECK

Safety sensors have a single trimpot for setting the ready distance. To check if the sensor is working correctly and properly aligned, check a few things such as:

- Lamp Indicator on the sensor is on solid red (image below on the left). It means that the sensor is powered up and not blocked (it can see the reflector OK).
- Block the sensor all the way through from the safety sensor transmitter down to the reflector and check the lamp indicator. It should go to solid green (image below on the right) – indicating that something is blocking the area between Safety Sensor Transmitter and the reflector.



Not blocked



CALIBRATE

 Use a small screwdriver and rotate the adjustment pot clockwise until at maximum position. Ensure the LED is Red.



Turn slowly and be sure not to turn past the minimum or maximum limit. Doing so will damage the sensor

TEST

• Try to block the sensor in all positions from the sensor through to the reflector. Ensure the lamp turns green for each block attempt at each position.



FURTHER TROUBLESHOOTING

- Remove one of the reflectors from the ride and bring it close to the sensor. If the sensor does not turn red, adjust the trimpot clockwise and counterclockwise slowly.
- If the sensor turns red, it is most likely just out of alignment. Loosen the mounting bolts to realign. Adjust the trimpot once again to find the correct range.
- If the sensor stays green, you have a failed sensor and will need to contact your distributor.





SYMPTOM: PC DOES NOT FULLY BOOT UP OR HAS INTERMITTENT FAILURES

STEP 1: Remove all cabling attached to the back of the PC, and remove the PC from the cabinet.

STEP 2: Remove the access cover and check for any loose connections inside.

- Remove the six screws in the image below which will give you access to the video card.
- Reseat the video card and reinstall screws.
- Make sure all connections are secure.



STEP 3: Replace cover and reinstall the PC in the cabinet.

• Be sure to reconnect all cabling back into the rear of the PC exactly how it was before removal.

TEST

• Power on the unit to see if the problem is resolved. If the power issue continues. Contact your distributor.





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