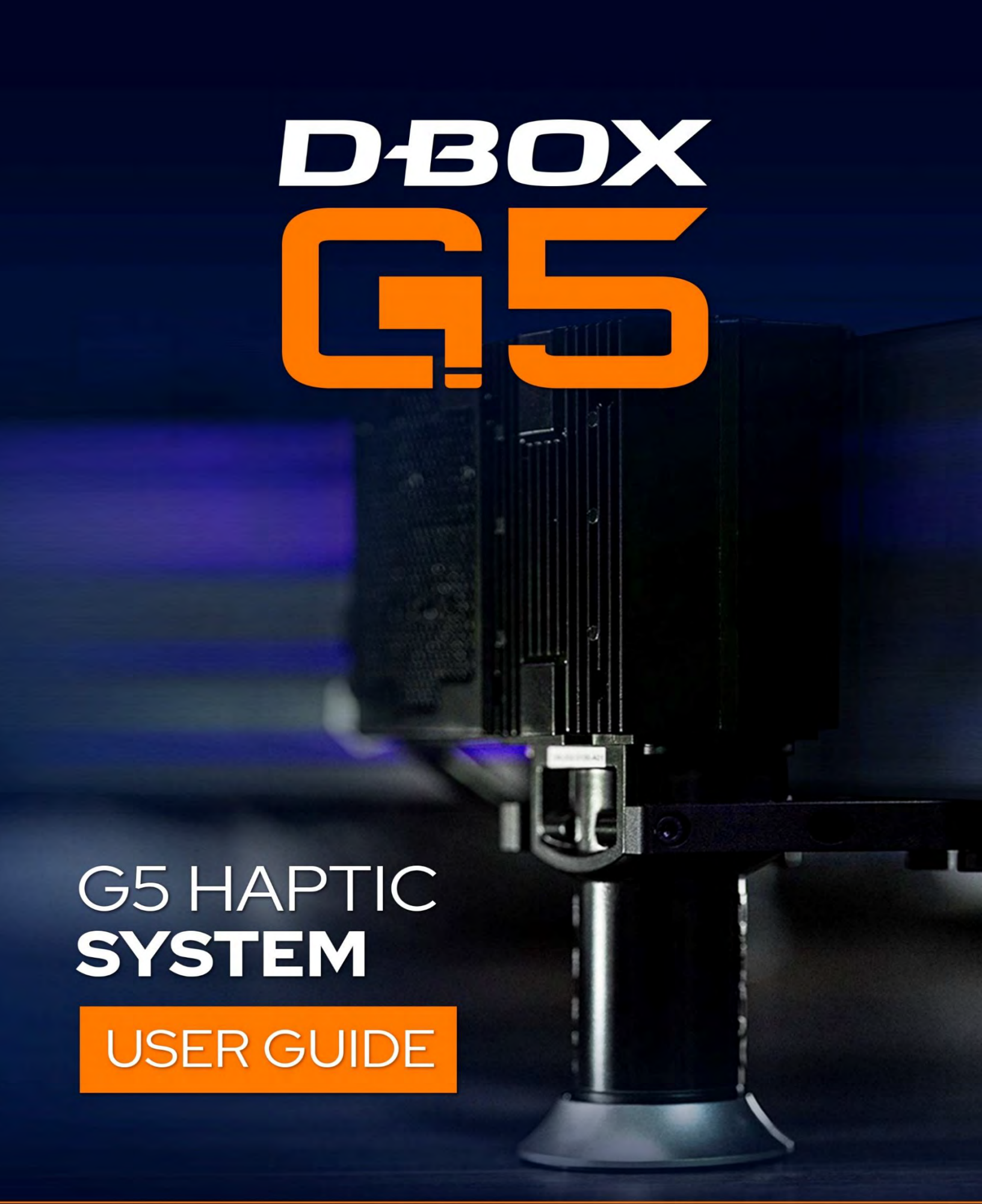
D-BOX

G5



G5 HAPTIC SYSTEM

USER GUIDE

231-914-0001-EN12

April 2025

TABLE OF CONTENTS

IMPORTANT SAFETY INSTRUCTIONS

- Read, keep, and follow these instructions.
- Heed all warnings.

This D-BOX haptic system may be harmful to women who are pregnant, persons with heart conditions, the elderly, or those with other pre-existing medical conditions. All such persons should consult their physicians before using this D-BOX haptic system.

Use of this D-BOX haptic system is a risk to hands and feet. Do not put hands or feet underneath the seat or near the haptic system. This may lead to serious injury.

Use of hot liquids in the vicinity of this D-BOX haptic system should always be avoided to prevent spillage which could cause serious injuries to the user.

Do not use this device near water.

- Only clean the device with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Protect all the cables (USB, network, power, etc.) from being walked on or pinched, particularly at the ends.
- Use only attachments/accessories specified by the manufacturer.

Use of this D-BOX haptic system is not recommended for children under the age of ten years old without adult supervision. Owners and/or users of this D-BOX haptic system should consult and comply with the user guide enclosed.

Unplug this device during electrical storms or when unused for long periods of time.

Do not install near any heat sources such as radiators, heat registers, stoves or any other appliances (including amplifiers).

Refer all servicing to qualified personnel. Servicing is required when the device has been damaged in any way. For example: if liquid has been spilled or objects have fallen onto it, if it has been exposed to rain or moisture, if it does not operate normally or, it has been dropped.

Owners and/or users of this D-BOX haptic system are responsible for the dissemination of this information to all such persons named herein. Each owner and/or user of this D-BOX haptic system agrees to evaluate and bear all risks associated with the use of this D-BOX haptic system for themselves and for any subsequent users of this D-BOX haptic system and any subsequent users of this D-BOX haptic system shall be deemed to be using this D-BOX haptic system under the direct supervision of such owner/user and such owner/user will be deemed to have communicated this advisory to all persons described herein.

D-BOX Technologies Inc. is in no way responsible for any damages of any kind arising from the use of this D-BOX haptic system and the owners and/or users of this D-BOX haptic system hereby agree not to hold D-BOX Technologies Inc. responsible for any and all damages of any kind arising from the use of this D-BOX haptic system including, but not limited to direct or indirect, punitive, incidental, special or consequential damages arising out of or in any way connected with the use of this D-BOX haptic system.

Thank you for purchasing a D-BOX haptic system, an extremely immersive experience for the simulation and game markets. We strongly advise that you read these guidelines before assembling and using your haptic system.

Please make sure to provide the **serial numbers** (Haptic Bridge & Haptic Actuators) of your haptic system when contacting your reseller support team (or the D-BOX Technical Support team if you are an integrator and your system was bought directly from D-BOX).

The serial numbers (in yellow) are located on the haptic components.

If you have questions:

- Contact your official D-BOX reseller;
- Reach out to D-BOX Technical Support if you purchased directly from D-BOX;
- You can also visit the Help Center section of our website to access our Knowledge Base or chat with D-Buddy, our chatbot.

If remote assistance is required, ensure that you have TeamViewer installed on your PC.

D-BOX Technical Support

2172 rue de la Province, Longueuil, Québec, Canada, J4G 1R7

BY EMAIL: support@d-box.com

BY PHONE: 1-888-442-3269 ext. 931 (toll-free CAN/US)
1-450-442-3003 ext. 931 (other regions)

G5 HAPTIC SYSTEM SPECIFICATIONS:

PERFORMANCE UNDER MAXIMUM LOAD	
MAXIMUM LIFTING CAPACITY	250 lb / 114 kg
HORIZONTAL LOAD	Translation on limited friction surfaces can be done on weights up to 3 times vertical lifting capacity.
MAXIMUM STROKE	1.5 inch / 38.1 mm
MAXIMUM VELOCITY	100 mm/s
MAXIMUM ACCELERATION	+/- 1 g-force
FREQUENCY RANGE	0-100 Hz
OPERATING TEMPERATURE RANGE	0-40 °C
OPERATING HYGROMETRY	10 to 85 % (free from condensing)

POWER REQUIREMENTS		AVERAGE POWER To be used for electric consumption (Watts)	AVERAGE POWER To be used for converter specification (VA)	PEAK CURRENT To be used for breaker specification (A)
120 V 50/60 HZ	1 ACTUATOR	150 W	240 VA	2 A
	2 ACTUATORS	270 W	470 VA	4 A
	3 ACTUATORS	420 W	710 VA	6 A
	4 ACTUATORS	540 W	940 VA	8 A
230 V 50/60 HZ	1 ACTUATOR	150 W	260 VA	1.1 A
	2 ACTUATORS	270 W	480 VA	2.1 A
	3 ACTUATORS	420 W	740 VA	3.2 A
	4 ACTUATORS	540 W	960 VA	4.2 A

Note: It is not recommended to connect your D-BOX system to a GFCI breaker type.

G5 COMPONENTS	WEIGHT
HAPTIC ACTUATOR G5 - HA201 (M1-250 AC218 63")	9.2 lbs / 4.17 kg
HAPTIC BRIDGE G5 - HB140	1.2 lbs / 0.54 kg
CAPTIVE ENDING, AC218, 1 AXIS 0330, W SPACER RETAINER	5.8 lbs / 2.63 kg
CAPTIVE ENDING, AC218, 2 AXIS 0563, W SPACER RETAINER	5.4 lbs / 2.45 kg
CAPTIVE ENDING, PILLOW BLOCK 25MM, AC218, 1 AXIS, W ROTULE ANCHOR	1.4 lbs / 0.63 kg

BRACKET OPTIONS

L Brackets

U Bracket

ENDING OPTIONS

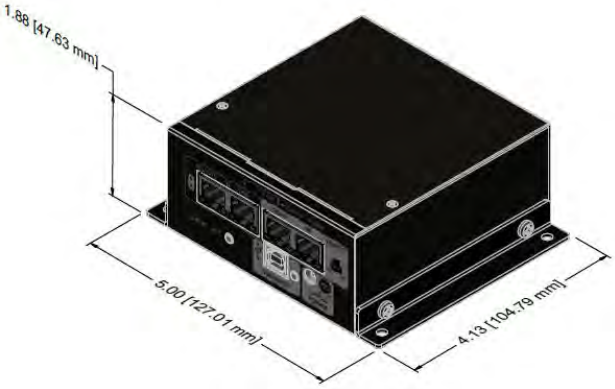
NON CAPTIVE ENDINGS

CAPTIVE ENDINGS

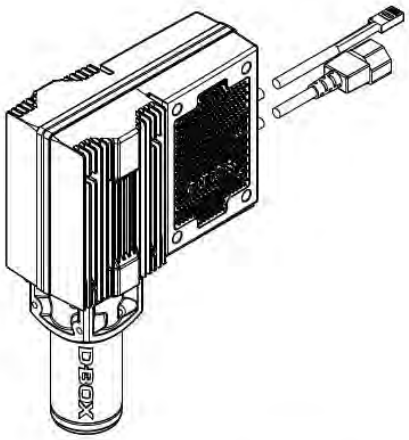
G5 HAPTIC BRIDGE

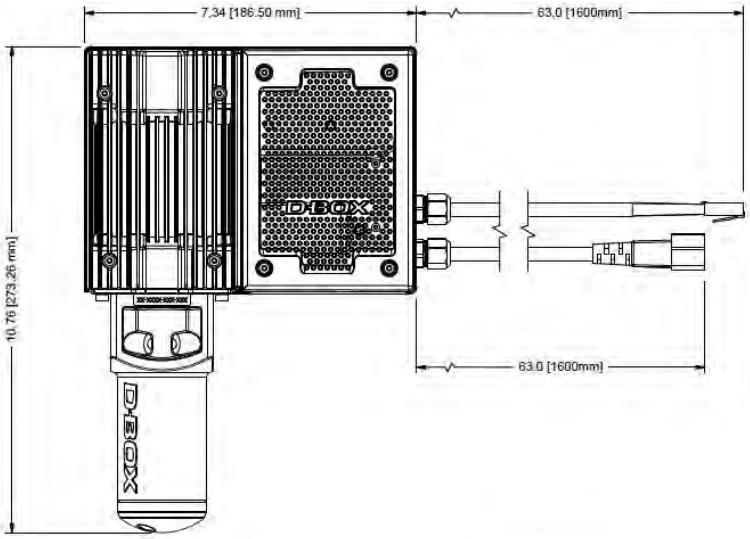
HB140 (USB)

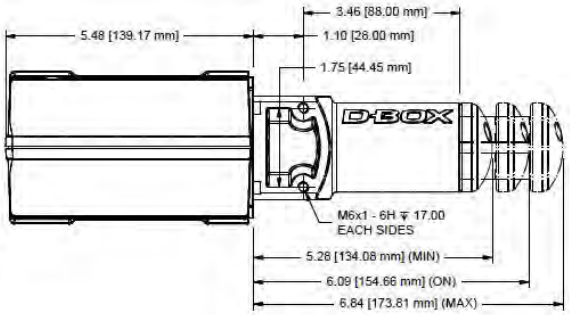
HB240 (USB & KineChain)

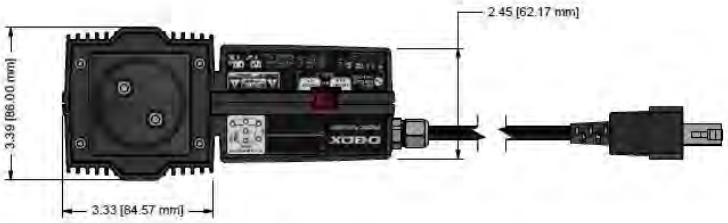


G5 HAPTIC ACTUATOR









1. INTRODUCTION

Featuring a completely new form factor as well as simpler infrastructure and simpler connections, G5 offers all the benefits you have come to know and love from D-BOX in terms of performance, realism, and reliability, but now in an all-new package ready to make the operation and installation of our systems easier than ever before! Gone are the days of multiple large ACM boxes, as our new "haptic bridge" gathers the data of up to four actuators in a single control box that is significantly smaller and sleeker than our previous design. With voltage selection included in every individual actuator, you can seamlessly go between 110V and 230V with the flick of a switch…making G5 a much more flexible solution!

The following components are part of a D-BOX G5 **haptic system**.

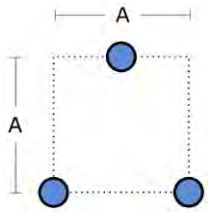
- **Haptic System:** A complete architecture of hardware and software providing motion, textures, and vibrations.
- **Haptic Actuator:** An assembly of motor and mechanics providing motion, textures, and vibrations.
- **Haptic Bridge:** A communication module controlling 1 to 4 haptic actuators.
- **Haptic Source:** Devices or applications generating haptic data for the D-BOX haptic system.

2. INSTALLATION GUIDELINES

When integrating your D-BOX G5 haptic system, please comply with the following guidelines. This will help you keep your product healthy and maximize its life span. If you must deviate from the guidelines, please contact us to make sure you are still using the system as prescribed.

2.1 Minimum Spacing Between Actuators

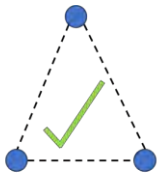
Respect the minimum spacing between actuators for adequate movement of the platform. Measure the distance from a **square surface enclosing all actuators** (see example below). Respecting the spacing guidelines ensures proper interaction of the haptic system with the actuator endings, and proper lateral force transfer.



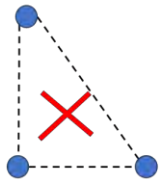
TRAVEL	MINIMUM SPACING BETWEEN ACTUATORS (A)
1.5 in	14 in [356 mm]

2.2 Haptic Actuator Alignment

When using 2 haptic actuators + pivot, or 3 haptic actuators, install them in an isosceles triangle pattern.



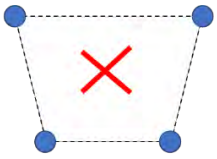
Adequate actuator integration



Inadequate actuator integration

When using 4 haptic actuators, install them in a square or rectangular pattern.

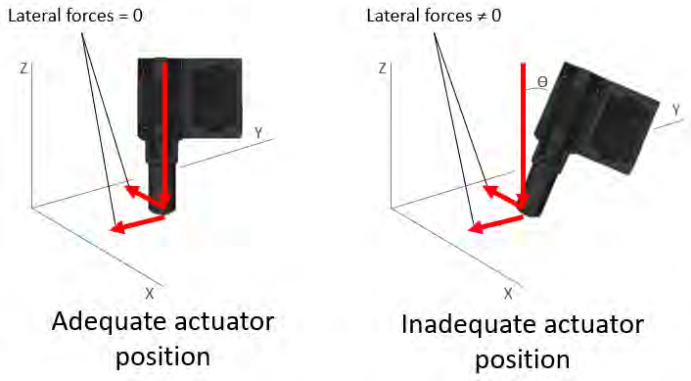
Adequate actuator integration (square/rectangular)



Inadequate actuator integration

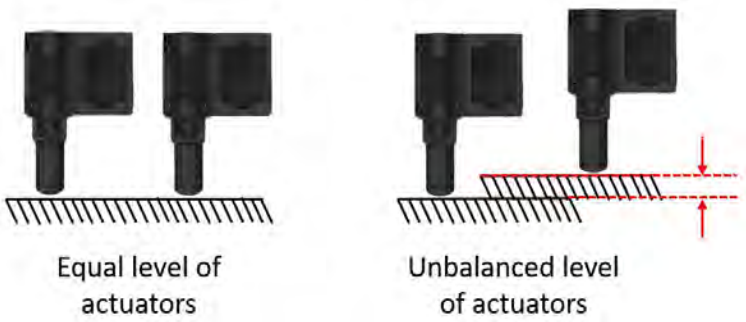
2.3 Haptic Actuator Levelling

During installation, the actuators should always remain straight to limit radial loading. Radial loading could result in premature wear of the actuators.



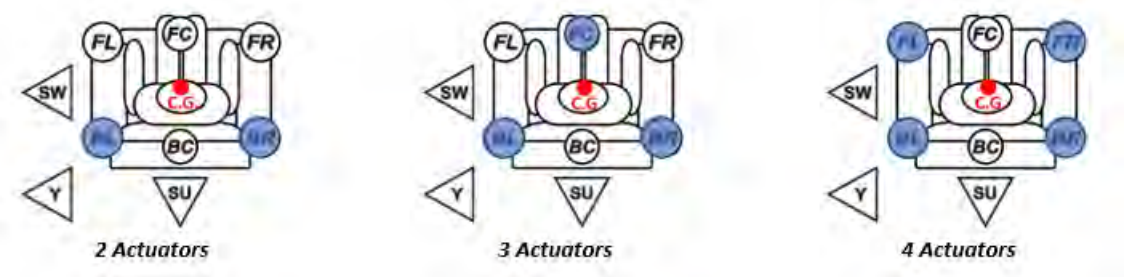
2.4 Level Surface

All actuators must be level on the same flat surface for optimal operations. Different levels could result in premature wear of the actuators.



2.5 Weight Distribution

Each actuator has a 250-lb maximum payload. When integrating the haptic system on a platform, D-BOX recommends balancing the **center of gravity** (CG) of the platform to ensure **each haptic actuator supports an equal load**. The following figures are examples of equal weight distribution with two, three and four actuators.



3. VOLTAGE SELECTION

Set all haptic actuators to meet your region's power voltage by using the switch selector located underneath the casing.

NOTE: The Haptic Bridge has a universal power supply supplied by D-BOX.

4. ACTUATOR ENDING INSTALLATION

G5 haptic actuators come with a non-captive ending.

Captive endings are required when you want to bind the actuators to the floor or a sub frame.

4.1 Non-Captive Ending Installation

Once the actuators are installed on your platform, lower the actuators and pivots (for 2-actuator configuration) into the provided metal cups. Actuators and pivots must be centered into their respective cups.

4.2 Captive Ending Installation

The D-BOX captive ending is made up of a 2-component assembly.

Ball Joint

Spacer Retainer

Spacer Retainer: The spacer-retainer allows specific movements of the ball joint on both X and Y axes, thus eliminating any constraints during the movement of the platform. There are 2 models of spacer retainer. All spacer retainers can be fitted to any model of ball joint.

- **1 axis:** Allowing movement only on 1 axis (X or Y)
- **2 axes:** Allowing movement on 2 axes (X and Y)

Spacer Retainer Configurations

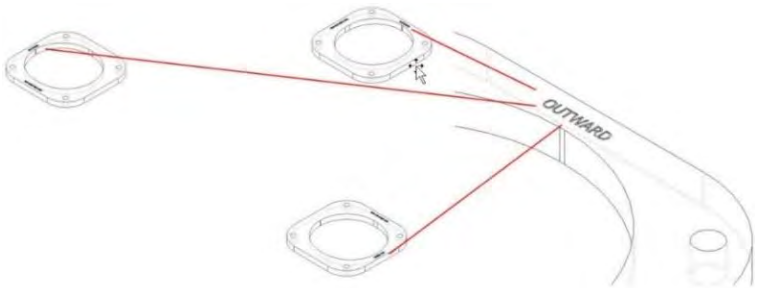
2 x Haptic Actuators and front Pivot

3 x Haptic Actuators

4 x Haptic Actuators

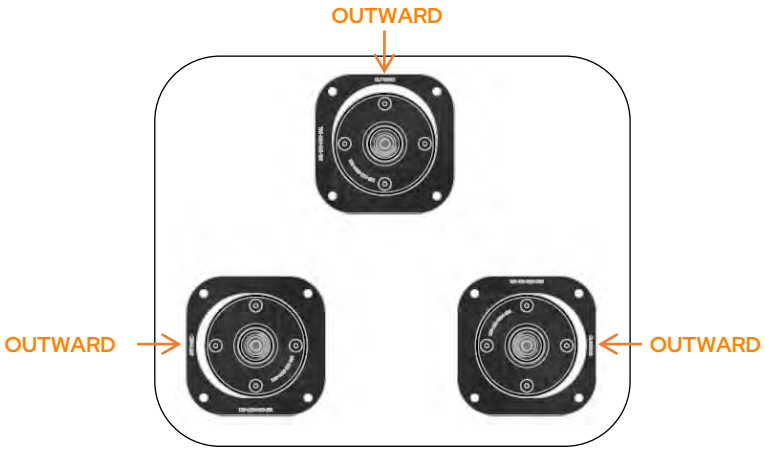
CAUTION: Always respect the orientation of the spacer retainer to avoid any damage to the haptic system.

To help with positioning, "OUTWARD" is marked on its top surface.



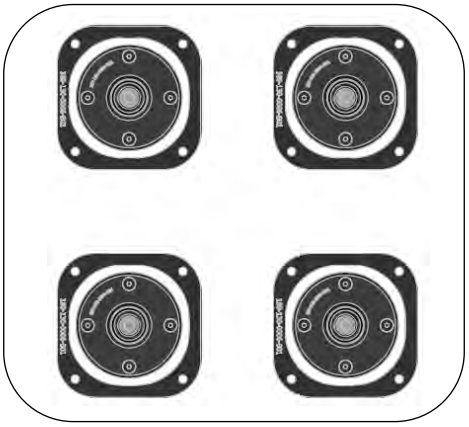
2 or 3 Haptic Actuators

The captive endings must be installed off-center from the spacer retainers with the gap at the OUTWARD marker.



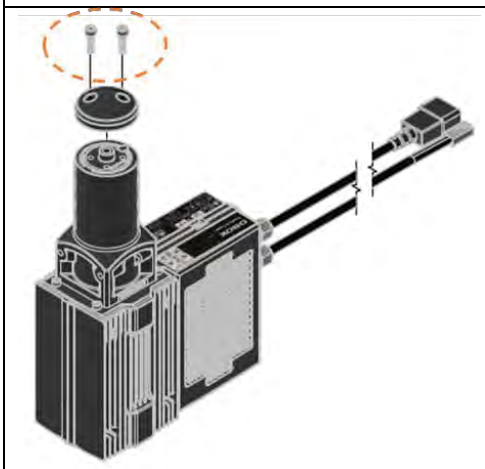
4 Haptic Actuators:

The captive endings must be installed in the center of the spacer retainers.

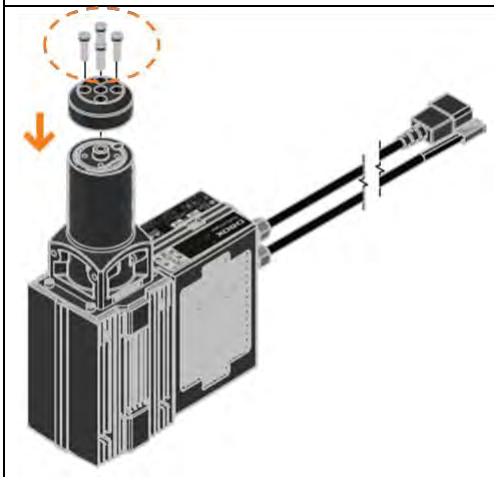


INSTALLATION

Never operate the Haptic Actuator without the ending installed. This may lead to irreparable damage to the Haptic Actuator.

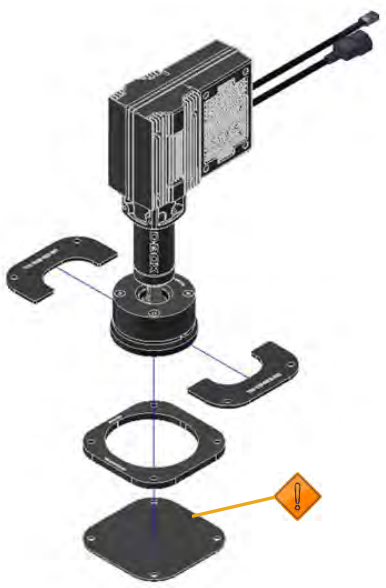


STEP 1:
Remove the existing non captive ending by removing the two (2) screws using a 4mm Allen key.



STEP 2:
Attach the piston adaptor with the four (4) screws provided. Apply some blue thread locker on the screw threads and then torque them to a value of **100 lbf·in (11 Nm)** using a 4mm Allen key.

STEP 3:
Apply some blue thread locker on the ball joint threads and then tighten with a torque of **130 lbf·in (15 Nm)** using a 5/8'' (16 mm) wrench.

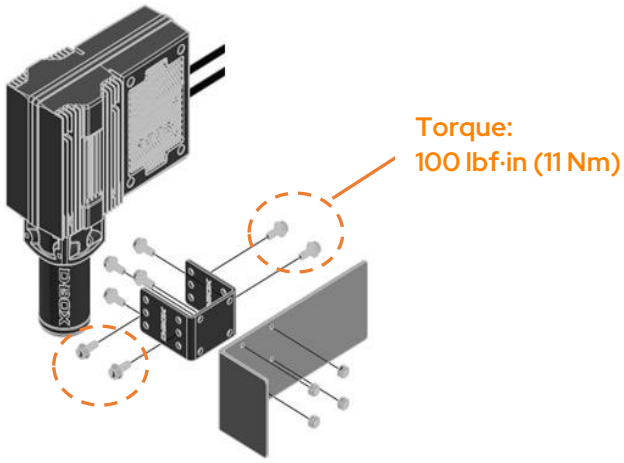
	**STEP 4:** Install the ball joint assembly to the spacer retainer and then attach it to the floor (or sub frame) with adequate hardware (e.g. anchors, bolts, etc.), which is not included. **Never operate the Haptic Actuator without the back plate installed. This may lead to malfunction or damage to the Haptic Actuator.**

5. BRACKET INSTALLATION

D-BOX offers two (2) types of brackets: "**L**" and "**U**"-shaped. The screws to attach your Haptic Actuator to a bracket are included with your Haptic Actuator; however, you need to provide the screws to mount the brackets to your platform.

5.1 "U" Bracket Installation

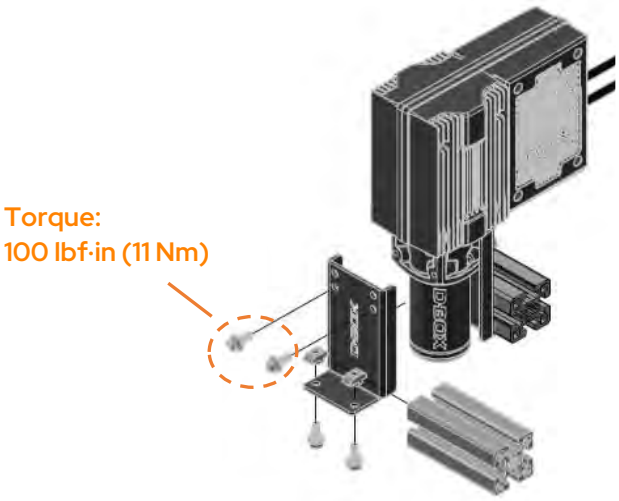
First, install the "**U**" bracket first to your platform and then attach the haptic actuators to the brackets using the screws provided.



NOTE: Screws to attach the bracket to your platform are not included.

5.2 “L” Bracket Installation

First, install the “**L**” bracket first to your haptic actuators using the screws provided and then attach the assembly to your platform.



NOTE: Screws to attach the bracket to your platform are not included.

6. CONNECT YOUR HAPTIC SYSTEM

This section contains wiring diagrams for all standard haptic actuator configurations (one (1) to four (4)).

Haptic Actuators must be connected in a specific order to ensure a proper system operation. Ensure to choose the appropriate diagram (corresponding to your setup).

Although they are optional, we strongly suggest installing the IEC plug lock inserts that prevent power cables from being disconnected. Slide the insert to the IEC female connector (seen in yellow).

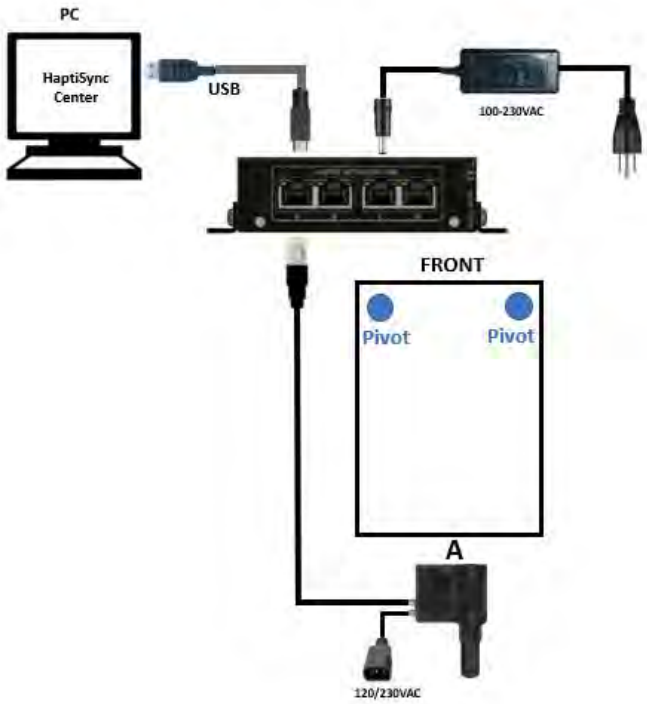
The Haptic Bridge must be connected directly to your computer (USB port). Using an external USB hub may create haptic interruption and/or system error.

Home theater configurations are available in the HaptiSync System User Manual.

6.1 1-Actuator Configuration

Configure your system using the D-BOX System Configurator (**see section 8.3**).

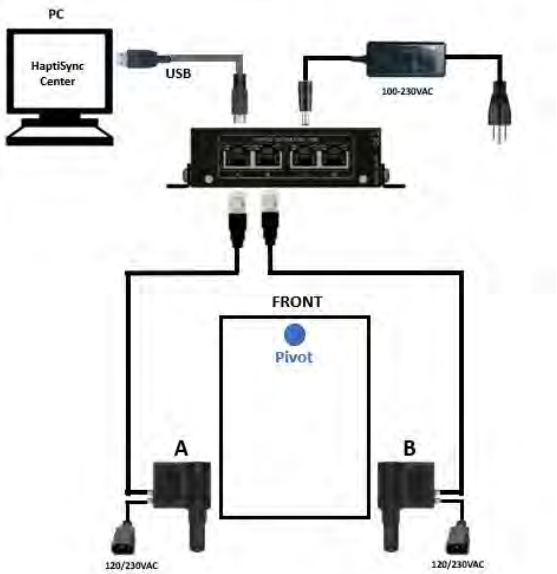
Enter Configuration # **1050**



6.2 2-Haptic Actuator Configuration

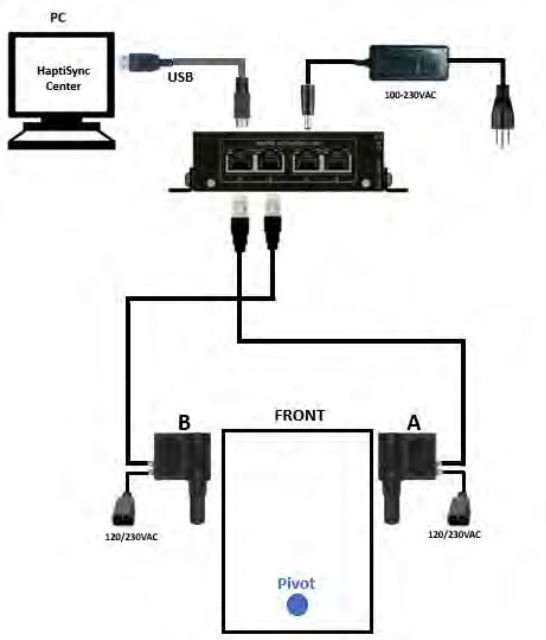
Configure your system using the D-BOX System Configurator (**see section 8.3**).

Enter Configuration # **10721**



OR

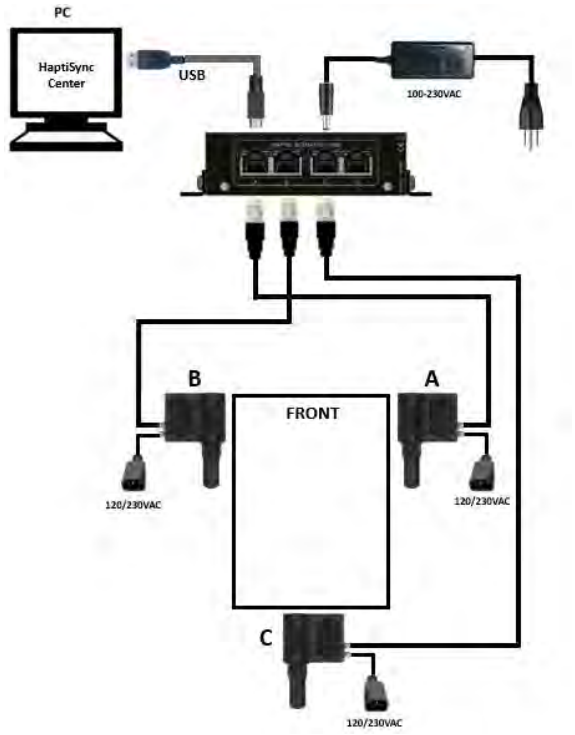
Enter Configuration # **10719**



6.3 3-Haptic Actuator Configuration

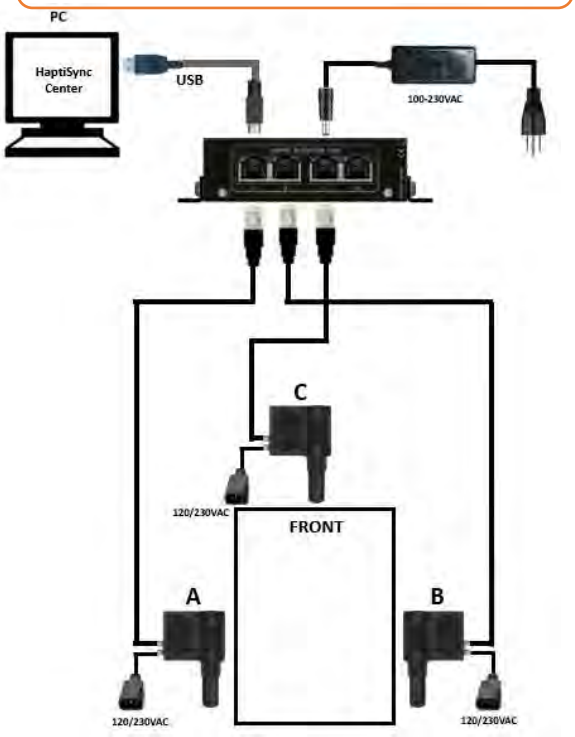
Configure your system using the D-BOX System Configurator (**see section 8.3**).

Enter Configuration # **10733**



OR

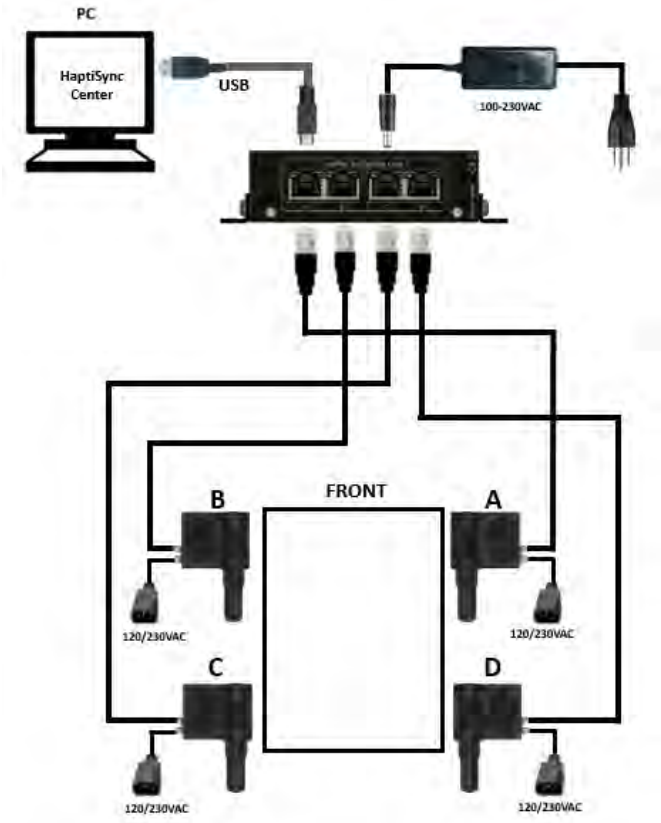
Enter Configuration # **10731**



6.4 4-Haptic Actuator Configuration

Configure your system using the D-BOX System Configurator (**see section 8.3**).

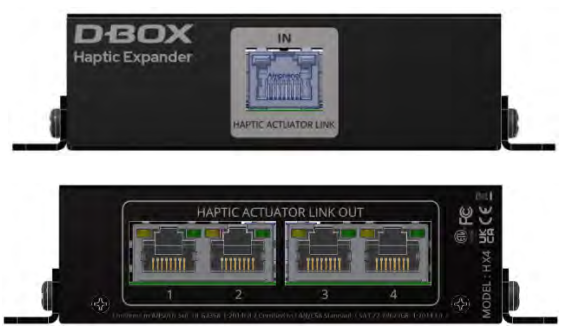
Enter Configuration # **10774**



6.5 Haptic Expander

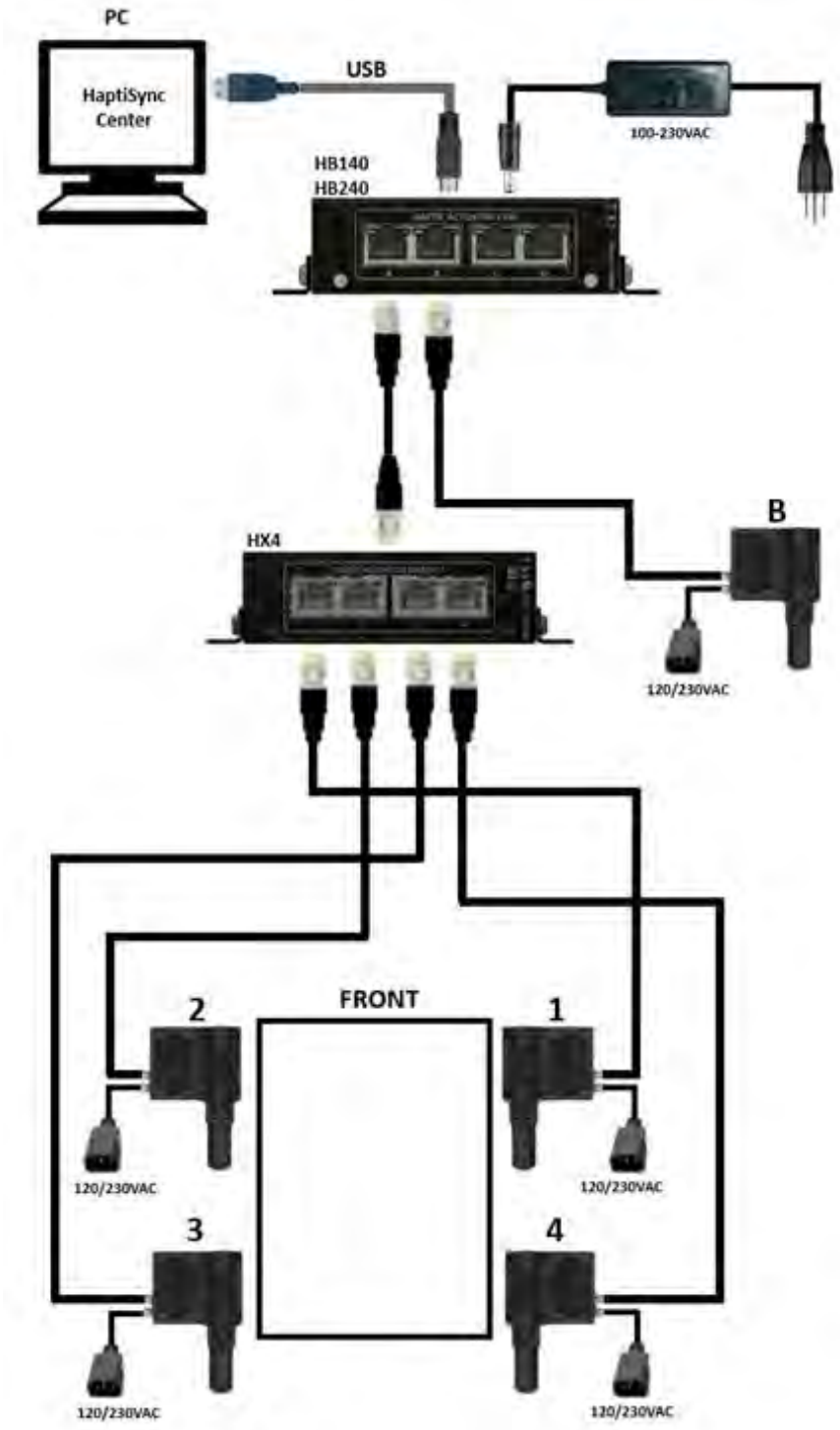
For configurations requiring more than four Haptic Actuators, you must use a D-BOX Haptic Expander (HX4) to increase the number of ports from the Haptic Bridge (HB140 or HB240).

D-BOX Haptic Expander (HX4):

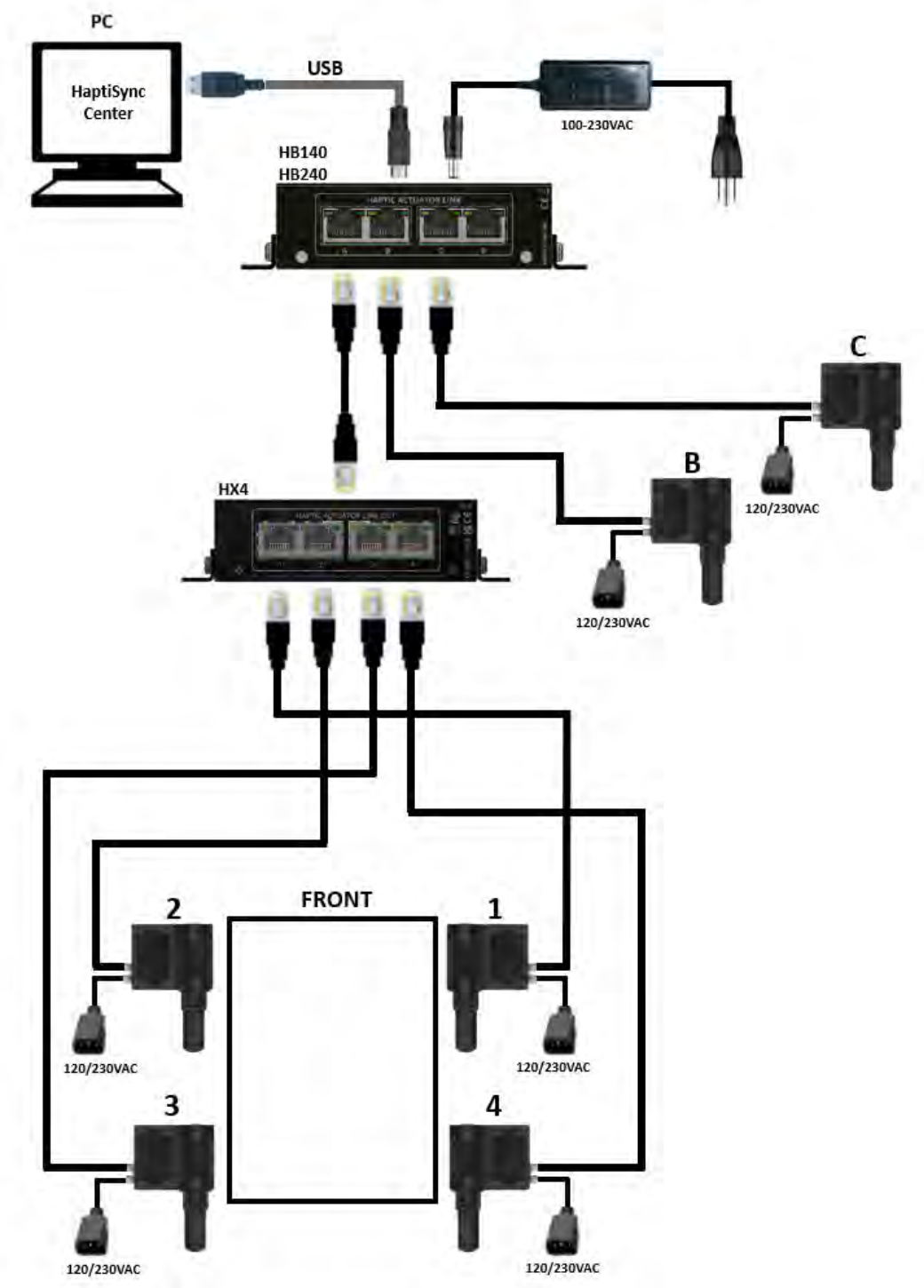


The Haptic Expander must be connected to port A of the Haptic Bridge. The first four (4) Haptic Actuators must be connected to the HX4. The following actuators are connected to ports **B**, **C,** and **D** of the Haptic Bridge, depending on the number of actuators. For an eight (8)-actuator configuration, the Haptic Expander must be connected to ports **A** and **B** of the Haptic Bridge.

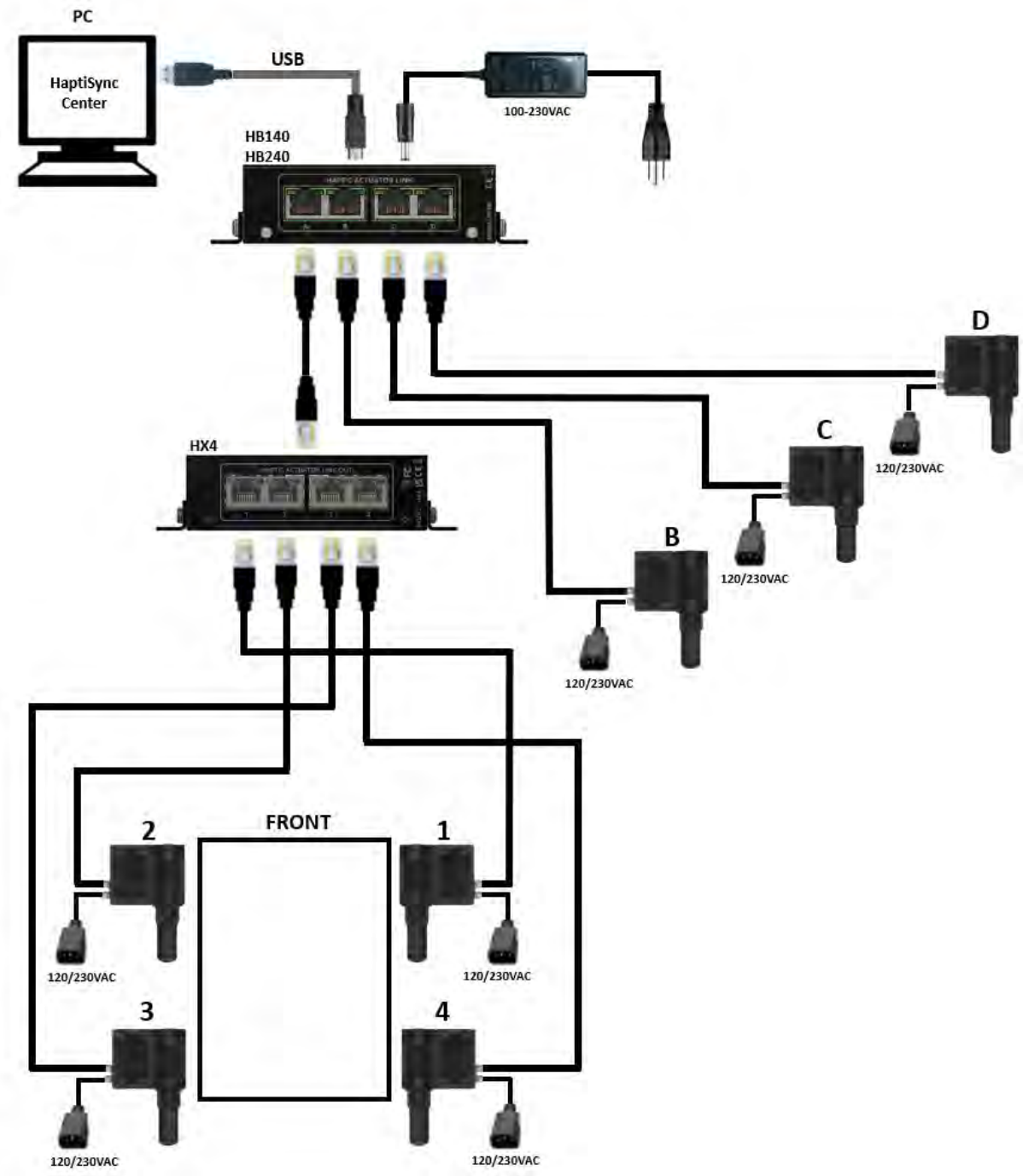
6.5.1 5-Actuator Configuration



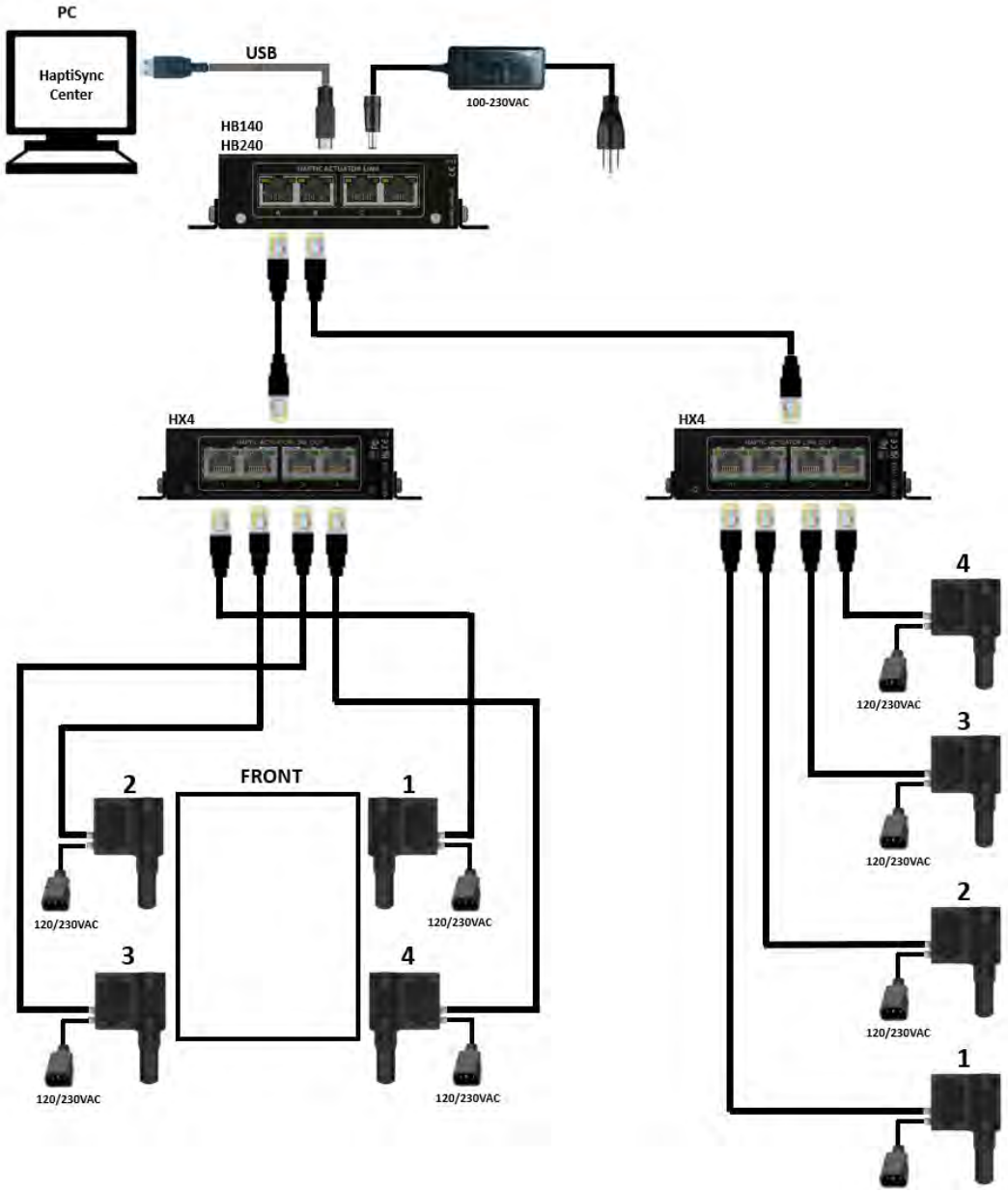
6.5.2 6-Actuator Configuration



6.5.3 7-Actuator Configuration



6.5.4 8-Actuator Configuration



7. CREATE YOUR D-BOX CONNECT ACCOUNT

A **D-BOX Connect account is required** to install and update haptic codes for D-BOX Coded Games and access haptic codes for movies. Follow the on-screen instructions of the D-BOX Connect webpage to create your account.

8. SOFTWARE INSTALLATION

There are two (2) D-BOX software packages to install: the **D-BOX HaptiSync Center** and the **D-BOX System Configurator (section 8.3)**. Both are available on our website.

8.1 Minimum System Requirements (PC)

- Microsoft Windows 10 x64 (1809 or later) or Windows 11
- 512 MB of free RAM for D-BOX Coded Gaming and an additional 1 GB if using D-BOX Coded Video mode
- 850 MB free space on drive for D-BOX Coded Gaming and an additional 23 GB for the D-BOX Coded Video haptic library
- USB port 2.0 Full Speed (or faster)

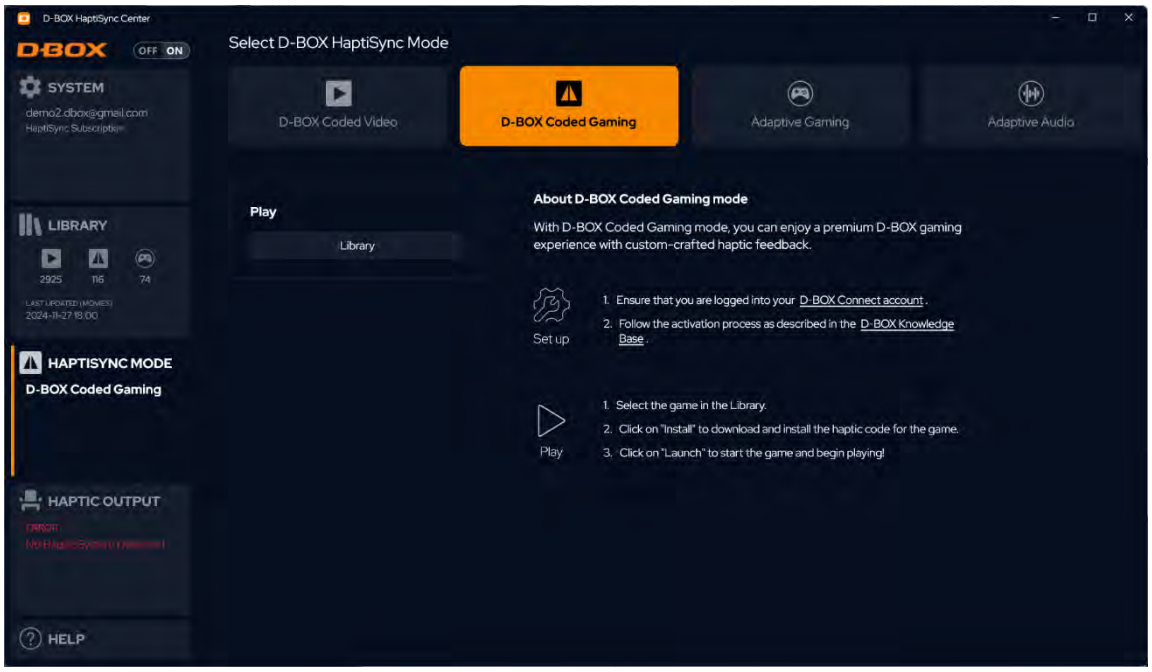
8.2 D-BOX HaptiSync Center

D-BOX HaptiSync Center is an application to manage all experiences enabled by your D-BOX haptic system. This software package includes the system's driver in addition to the following software and utilities:

- D-BOX HaptiSync Center
- D-BOX Adaptive Gaming Configurator
- D-BOX System Monitor
- D-BOX Stimuli Presenter

You can download it from our website. After downloading, simply follow the on-screen instructions to install the software.

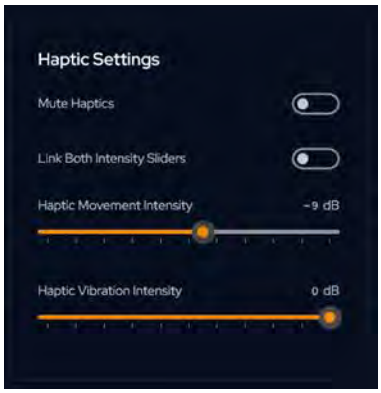
Select your haptic experience in the HaptiSync Mode section.

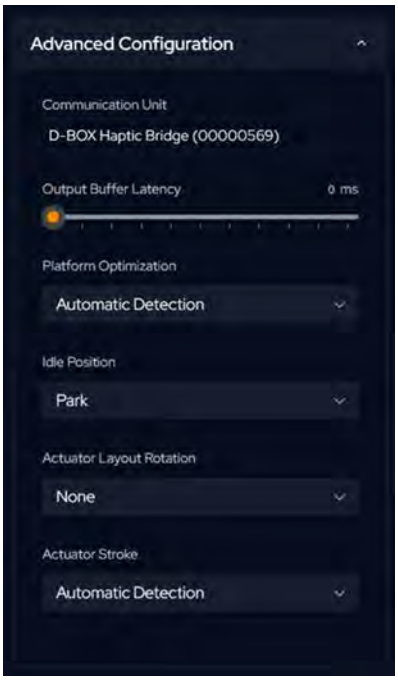


D-BOX Coded Gaming	Premium haptic experiences for D-BOX-coded apps, simulators and games. Use Adaptive Gaming mode for titles not listed. For detailed instructions, visit: *https://support.d-box.com/en/knowledge/hsc-dbox-coded-gaming*
D-BOX Coded Video	Premium haptic experiences for D-BOX-coded movies and TV shows using audio synchronization. For detailed instructions, visit: *https://support.d-box.com/en/knowledge/hsc-dbox-coded-video*
Adaptive Gaming	Haptic experiences using real-time events, triggered by game controller or keyboard. For detailed instructions, visit: *https://support.d-box.com/en/knowledge/hsc-adaptive-gaming*
Adaptive Audio	Automated haptic experiences for any movie, music, TV show, or game using audio processing. For detailed instructions, visit: *https://support.d-box.com/en/knowledge/hsc-adaptive-audio*

8.2.1 D-BOX HaptiSync Center – Haptic Output Section

The Haptic Output section of the D-BOX HaptiSync Center allows you to manage the settings and features related to your hardware. These settings will apply to all games and software on your computer.

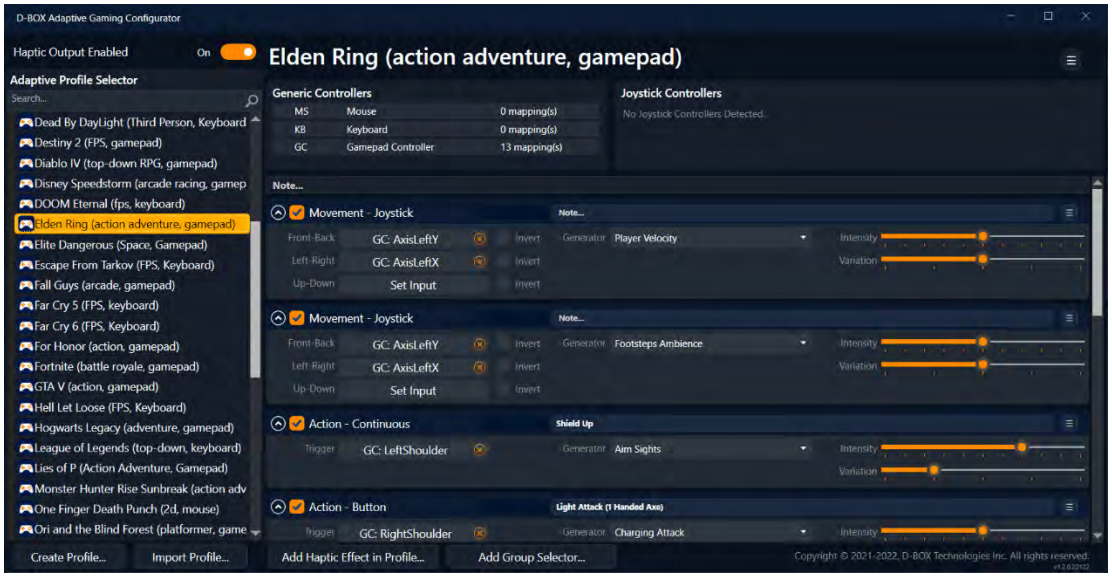




On-screen, contextual tooltips provide high-level information for these settings. Please refer to our Knowledge Base for more details.

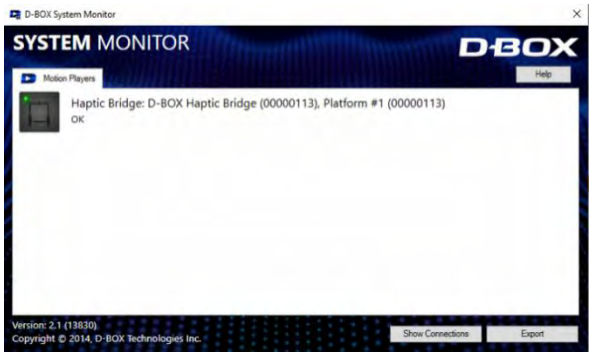
8.2.2 D-BOX Adaptive Gaming Configurator

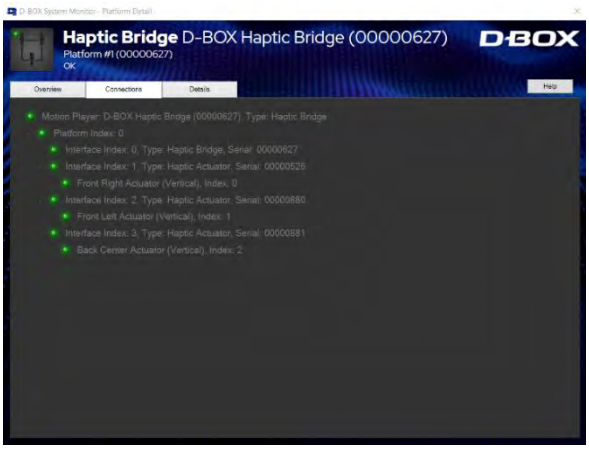
This application allows you to build, modify, and activate your Adaptive Gaming profiles. You can also share your favorite profiles with other D-BOX users.

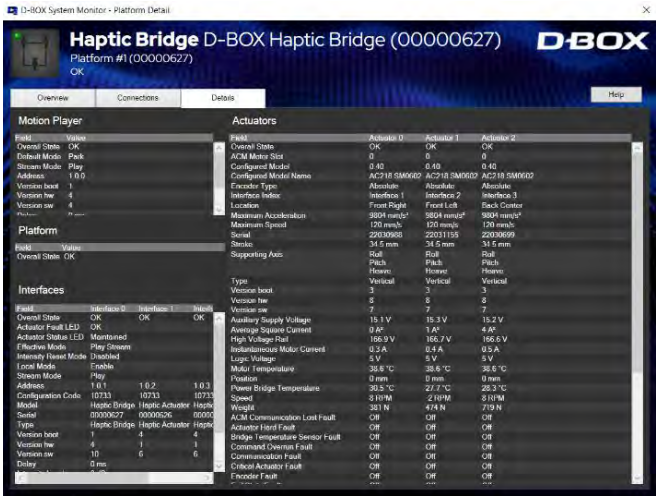


8.2.3 D-BOX System Monitor

This application displays live health and operational data for all connected haptic systems. This is useful to troubleshoot your haptic system.

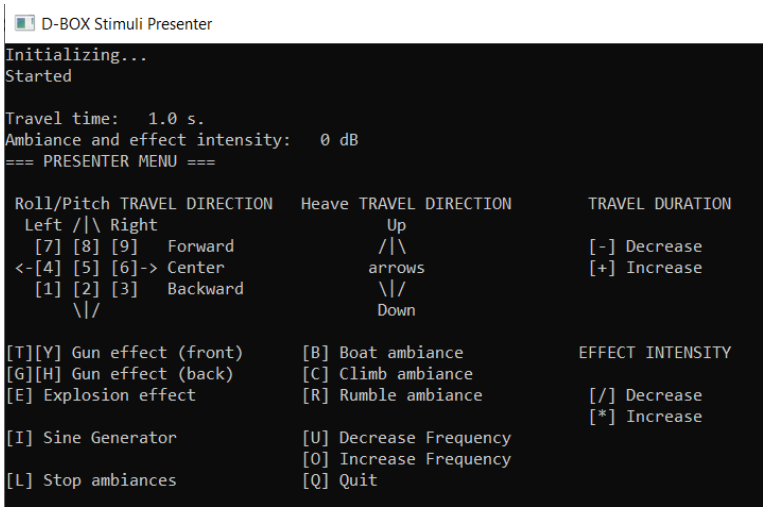






8.2.4 D-BOX Stimuli Presenter

The D-BOX Stimuli Presenter is a keyboard-controlled application for sending basic signals to the haptic system (for tests and demos).



8.3 D-BOX System Configurator

The D-BOX System Configurator is a free software tool for updating and configuring your haptic system.

It is necessary to update and configure your system because it is delivered from the factory with a blank configuration.

The D-BOX System Configurator is compatible with Microsoft Windows 7, 8, 10, and 11 - 64 bit.

Step 1: Download the D-BOX System Configurator

Step 2: Extract the compressed file and run the installer.

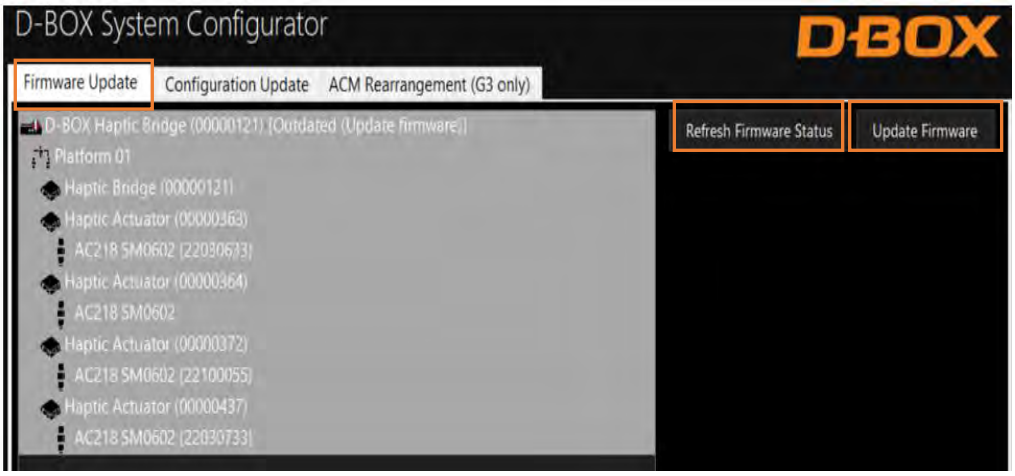
Note: The User Guide is available in the included D-BOX folder.

Step 3: Update your firmware.

a) Ensure your haptic system is powered on and open the D-BOX System Configurator (in the D-BOX folder).

b) From the Firmware Update tab, click **Refresh Firmware Status.**

c) If the system display reads ''*Outdated (Update firmware)*'', click **Update Firmware** and follow the instructions.



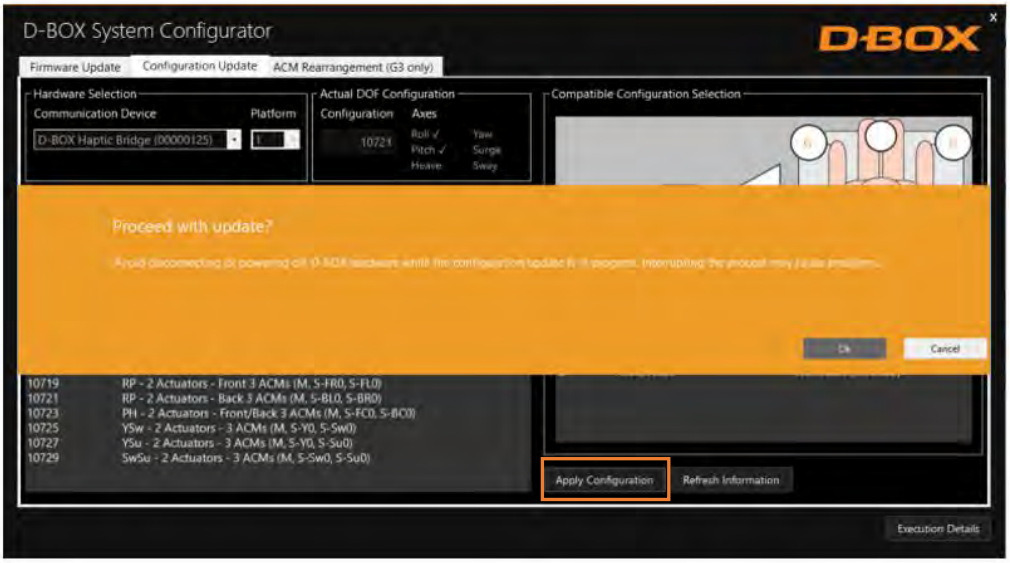
Step 4: Update the Configuration.

The Configuration Update allows you to configure your haptic system (actuator positions and axes (Degree of Freedom - DOF)).

a) Select the Configuration Update tab and click **Refresh Information**. Ensure the Actuator Count matches with your system. If not, make sure that all power cables and the RJ45 are firmly connected.

b) Enter the configuration number matching your system (**see section 6)** or select the axes you want for your system.

c) Once the configuration is selected, click **Apply Configuration** to start the configuration update process, then follow the instructions.



9. HAPTIC SYSTEM OPERATION

Power on your haptic system. Haptic Actuators should do a homing sequence going all the way up, all the way down, and then center. This is a normal behavior.

You are now ready to live an immersive haptic experience!

10. TROUBLESHOOTING

This section contains step by step instruction to troubleshoot your G5 haptic system. If you need additional support, contact your reseller support team or the D-BOX Technical Support team if your system was bought directly from D-BOX.

10.1 Initial Troubleshooting Steps

STEP 1: Verify that all Haptic Actuators are set to your country's voltage (**See section 3**).

STEP 2: Make sure your Haptic Actuators are connected to a grounded electrical outlet. If you must use an extension cable, use a 3-wire cable with properly grounded plugs. Do not connect to a circuit with a GFI breaker.

STEP 3: Make sure that all power and network cables are firmly plugged in.

STEP 4: Verify that your Haptic Actuators are connected to the right ports of the Haptic Bridge (**see section 6**).

STEP 5: Do a visual inspection of your setup to make sure nothing prevents the haptic system from moving properly. Power cords and network cables must be secured and away from the Haptic Actuators path.

10.2 Reinitiate Your Haptic System

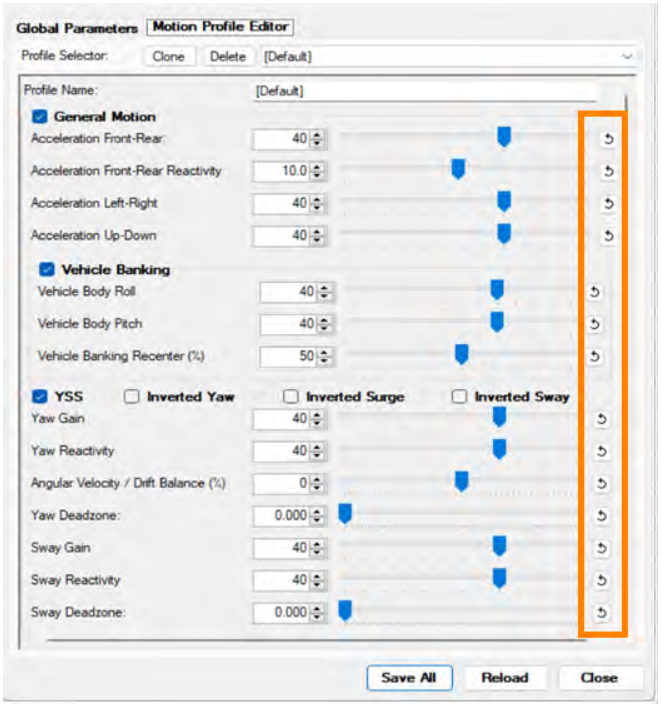
STEP 6: Reset the entire system.

a) Reboot your computer.

b) Power off the Haptic Actuators as well as the Haptic Bridge by unplugging the power cords. Wait for at least 60 seconds then restore the power to the equipment. The platform should do its homing sequence by going up, down then middle position. If the system does not go through its homing sequence, open System Monitor and check if there are some alarms. See section 10.6 for faults and corrective actions.

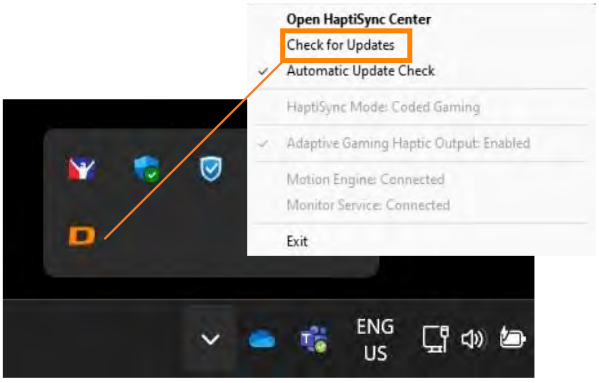
STEP 7: Reset all the global settings in the D-BOX HaptiSync Center (Haptic Output section).

STEP 8: Reset the specific motion code settings for the game you are using. If playing a game using the D-BOX Coded Gaming mode, select your game in the Library, and then click **Haptic Settings & Profile Selection**. In the new window, you will find the **Global Parameters** tab as well as the **Motion Profile Editor**. From the Motion Profile Editor tab, reset all the motion settings.



10.3 Update Software and Firmware

STEP 9: Make sure you have the latest version of the D-BOX HaptiSync Center installed on your PC. Click the ^ icon that is located to the left of the System Tray icons to open the expanded tray. Right click on the D-BOX Updater icon then select **Check for updates**.

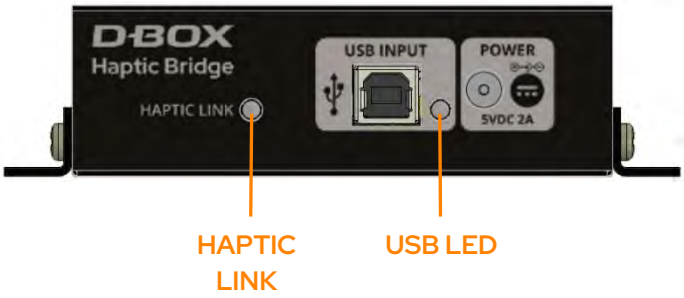


STEP 10: Make sure you have configured (if not done by your dealer) your G5 haptic system using the latest version of the D-BOX System Configurator software (**see section 8.2**).

10.4 Troubleshooting with Haptic Bridge LEDs Status

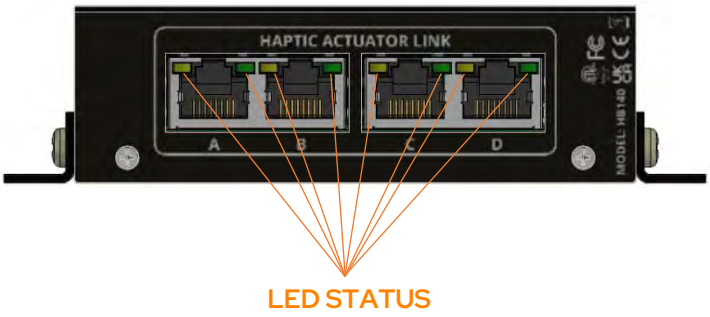
This section covers the status LED located on your Haptic Bridge.

FRONT PANEL



HAPTIC LINK LED	USB LED	STATUS	SOLUTION
○	○	Haptic Bridge is not powered	Make sure the power supply is properly connected.
●	●	No USB connection is detected	Check that the USB cable is properly connected (both ends). **Do not use a USB HUB.** Make sure you are using the original USB cable provided with your controller. Make sure you have the latest version of D-BOX HaptiSync Center installed (**see section 8.2**).

HAPTIC LINK LED	USB LED	STATUS	SOLUTION
		Unit is ready to operate but the platform is in *Park*	Make sure your platform is enabled.
		The platform is enabled but no haptic is sent	USB LED should turn green as soon as you stream haptic data to your haptic system.
		The device is operational and receiving motion data (or silence data)	-



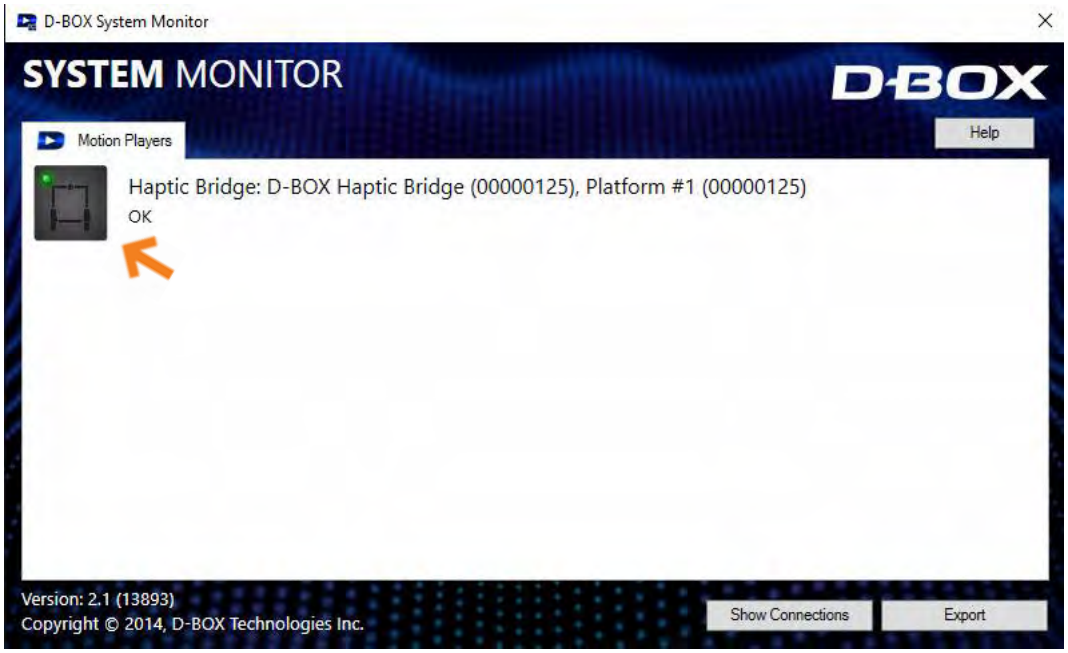
REAR PANEL

LED STATUS	STATUS	SOLUTION
Blinking amber 	No Motion Player detected / no communication.	Make sure the USB cable is properly connected (both ends). **Do not use a USB HUB.** Make sure you have the latest version of D-BOX HaptiSync Center installed (**see section 8.2**).
	System fault or haptic actuator has not been set to the right voltage.	Verify that all Haptic Actuators are set to your region's power voltage (**see section 3**).
	Actuator fault	Use the D-BOX System Monitor software to see the system fault (**see section 10.5**).
Blinking amber & green 	Haptic Actuators communication issue.	Make sure the Haptic Actuator power and RJ45 cables are properly connected. Make sure the RJ45 cables are connected into the right ports of the Haptic Bridge (**see section 6**).
	The system is operational	-

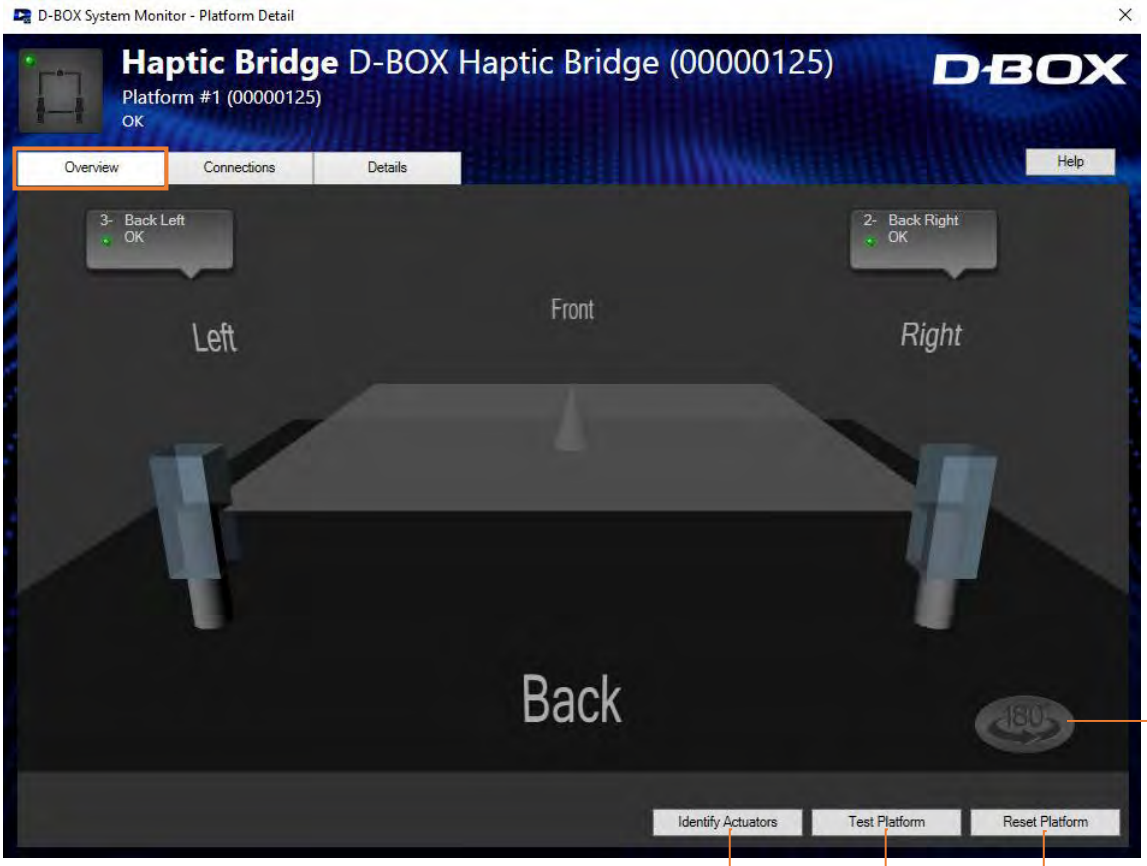
10.5 Troubleshooting with D-BOX System Monitor

The D-BOX System Monitor software is the right tool to test and diagnose your haptic system. The software is accessible by selecting Monitoring & Diagnostics in the Haptic Output tab of the HaptiSync Center.

Once the window appears, click the Haptic Bridge device, then a new window opens.



Overview Tab: The **Overview** tab displays a live overall 3D view of your D-BOX haptic platform and its current state. Haptic Actuators in a pending or alarm state are displayed as yellow or red.



The **Identify Actuators** button is used to start an interactive test to validate that all actuators are located as expected on the platform.

The **Test Platform** button is used to start a motion test on the selected platform. If your D-BOX Motion Player is connected to multiple platforms, all of them will receive the motion test.

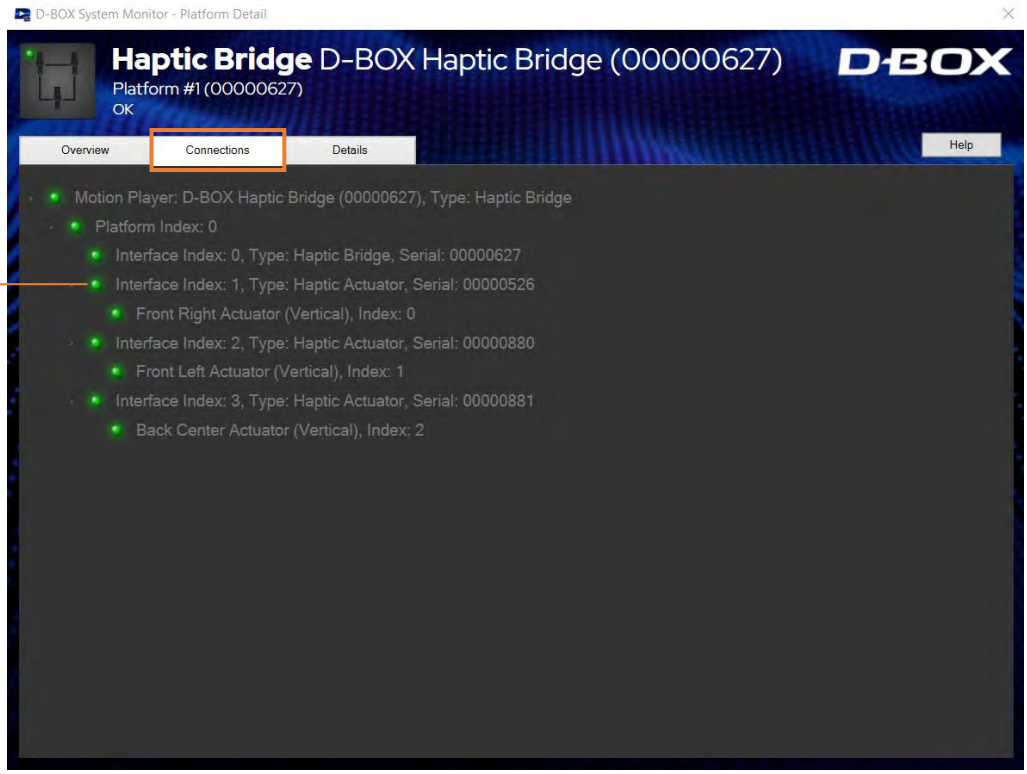
The **Reset Platform** button is used to reset the D-BOX haptic system connected to the currently selected D-BOX Motion Player.

The **Rotate 180 degrees** button is used to change the orientation of the 3D view of the platform.

Connections Tab: The **Connections** tab lists the components of your platform. The status light is displayed as well as any active alarm.

Dots show the status of the D-BOX equipment.

Red dots indicate a failure.



Nodes description

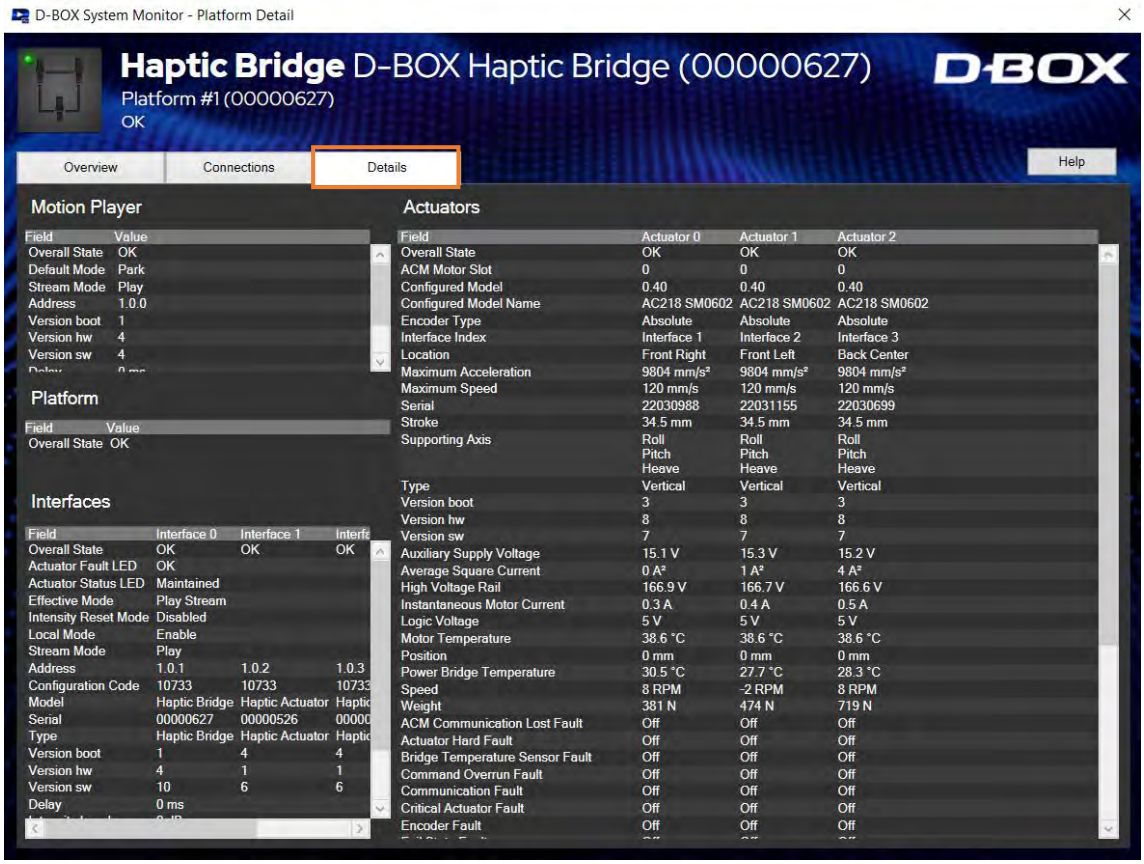
Motion Player: The Communication Unit/Haptic Bridge connected to your computer.

Platform Index: Position of the platform connected, starting at 0.

Interface Index: Haptic Bridge and Haptic Actuators of your platform.

Alarm: Any alarm currently active (**see section 10.6 for details**).

Details Tab: The **Details** tab contains the complete technical details of the current D-BOX haptic system and can be used to further evaluate the status of each individual component (Motion Player/Communication Unit/Haptic Bridge, and Haptic Actuators).



10.6 Faults and Corrective Actions

Here is a list of the faults you can find in the D-BOX System Monitor (Details tab) including the corrective actions.

FAULTS	CAUSES	CORRECTIVE ACTIONS
ACM Communication Lost Fault	Disconnected Haptic Actuator power and/or network cable.	Make sure the power, USB, and network cables (if applicable) are securely plugged in. Visually inspect the entire length of the network cable for obvious signs of damage. Make sure your Haptic Actuator is connected to a grounded electrical outlet. Do not use adapter plugs or remove the grounding prong from cables. If you must use an extension cable, use a 3-wire cable with properly grounded plugs.

FAULTS	CAUSES	CORRECTIVE ACTIONS
Actuator Hard Fault	This is a Hard fault. The faulty Haptic Actuator is immediately deactivated, and all other Haptic Actuators go to their lowest position.	Do a visual inspection to make sure nothing is blocking the travel of the Haptic Actuator. Power off the haptic system, support your platform to gain access to the Haptic Actuator piston and pull it out of its body slowly until the entire piston is out of the body and than slowly push it back in. If error persists, replace/repair the faulty Haptic Actuator.
Bridge Temperature Sensor Fault	The error can be triggered by starting the haptic system when the temperature is too low. The internal power bridge sensor is defective.	Make sure your haptic system is running in a temperature range between 0 to 40°C. Make sure there is enough ventilation around the Haptic Actuator. If the problem persists, replace/repair the faulty Haptic Actuator.
Command Overrun Fault	A new command was received by the Haptic Actuator while the previous command was not completed. This should not be a permanent fault and should be cleared after a while.	In System Monitor, reset your haptic system (Reset Platform). Power off the haptic system, wait for a minute, then try again. In System Monitor, check if there is any other fault and follow the recommended solution. If the error persists, contact your reseller support team or D-BOX Technical Support if your system was purchased directly from D-BOX.
Critical Actuator Fault	This is a Hard fault. The faulty Haptic Actuator is immediately deactivated to prevent damage, and all other actuators go to the lowest position.	Do a visual inspection to make sure nothing is blocking the travel of the Haptic Actuator. Power off the haptic system, support your platform to gain access to the Haptic Actuator piston and pull it out of its body slowly until the entire piston is out of the body and than slowly push it back in. If error persists, replace/repair the faulty Haptic Actuator. If error persists, proceed with Haptic Bridge replacement.

FAULTS	CAUSES	CORRECTIVE ACTIONS
Encoder Fault	There is a problem associated to the motor encoder.	Power off the haptic system, wait for a minute, then try again. If error persists, replace/repair the faulty Haptic Actuator.
High Voltage Rail Overvoltage Fault	Too high voltage detected. Voltage from the wall outlet is too high for the haptic system.	Verify that all Haptic Actuators are set to your region power voltage (**see section 3**). Make sure you are not connected to a GFI breaker. Check the power coming out of the outlet and make sure it respects the specified operating conditions. In case of doubt, connect the haptic system to another circuit. Visually inspect the entire length of the power cable for obvious signs of damage. Make sure you are connected to a grounded electrical outlet. Do not use adapter plugs or remove the grounding prong from cables. If you must use an extension cable, use a 3-wire cable with properly grounded plugs. If you are using an extension cable, try without. If error persists, replace/repair the faulty Haptic Actuator.
High Voltage Rail Undervoltage Fault	Too low voltage detected. Voltage from the wall outlet is too low for the haptic system.	
Logic Voltage Undervoltage Fault	Low-voltage rail is too low.	
Motor Temperature High Fault	The motor temperature detector has failed or disconnected, or that the temperature is too low. If the temperature shown is around 561 degrees, it may be a defective motor cable or temperature sensor.	Make sure that the weight on the platform is not heavier than the maximum supported weight. Make sure that the weight is evenly distributed among the Haptic Actuators of the platform (as centered as possible). In System Monitor, weight limits in "D-BOX Newton" should be lower than **1900N**. Make sure the haptic system is operating in normal operating conditions (room temperature). If error persists, replace/repair the faulty Haptic Actuator.
Motor Temperature Sensor Fault		

FAULTS	CAUSES	CORRECTIVE ACTIONS
Out of bounds Fault	When the position of the Haptic Actuator is over its limits. Should never occur in normal operation conditions. Might comes from Haptic Code.	Verify that you are running a D-BOX certified haptic code. Call D-BOX Support for validation if necessary. Perform a test using the 'Start System Test' in the HaptiSync Center.
Overcurrent Fault	Haptic Actuator might have the wrong configuration (ex: 250lbs motor instead of 400lbs).	Make sure you have the right configuration using the D-BOX System Configurator (**see section 8.3**). If the error persists, contact your reseller support team or D-BOX Technical Support if your system was purchased directly from D-BOX.
Overweight Fault	There is too much weight on the platform. The weight is unbalanced on the platform.	Make sure that the weight on the platform is not heavier than the maximum supported weight. Make sure that the weight is evenly distributed among the Haptic Actuators of the platform (as centered as possible). In System Monitor, weight limits in "D-BOX Newton" should be lower than **1900N**. If the error persists, contact your reseller support team or D-BOX Technical Support if your system was purchased directly from D-BOX.
Power Bridge Temperature High	The Haptic Actuator power bridge has overheated, or the sensor is defective.	Remove the power, wait for a minute then try again. Let the system cool down for a while and see if the temperature cools within normal limits. If the error persists, contact your reseller support team or D-BOX Technical Support if your system was purchased directly from D-BOX.
Soft Actuator Fault	This fault is always accompanied with another fault (called ''main fault'').	Check solution for the main fault.
Temporary Actuator Fault	This fault is always accompanied with another fault (called ''main fault'').	Check solution for the main fault.

FAULTS	CAUSES	CORRECTIVE ACTIONS
Travel Fault	Travel measure during the search-stop procedure is too large or too small. Normally caused by an external body preventing the Haptic Actuator to move. Could be a defective Haptic Actuator. Bad communication with encoder.	Do a visual inspection to make sure nothing is blocking the Haptic Actuator travel. Power off the haptic system, support the platform to gain access to the Haptic Actuator piston and pull it out of its body slowly until the entire piston is out of the body and than slowly push it back in. If error persists, replace/repair the faulty Haptic Actuator.

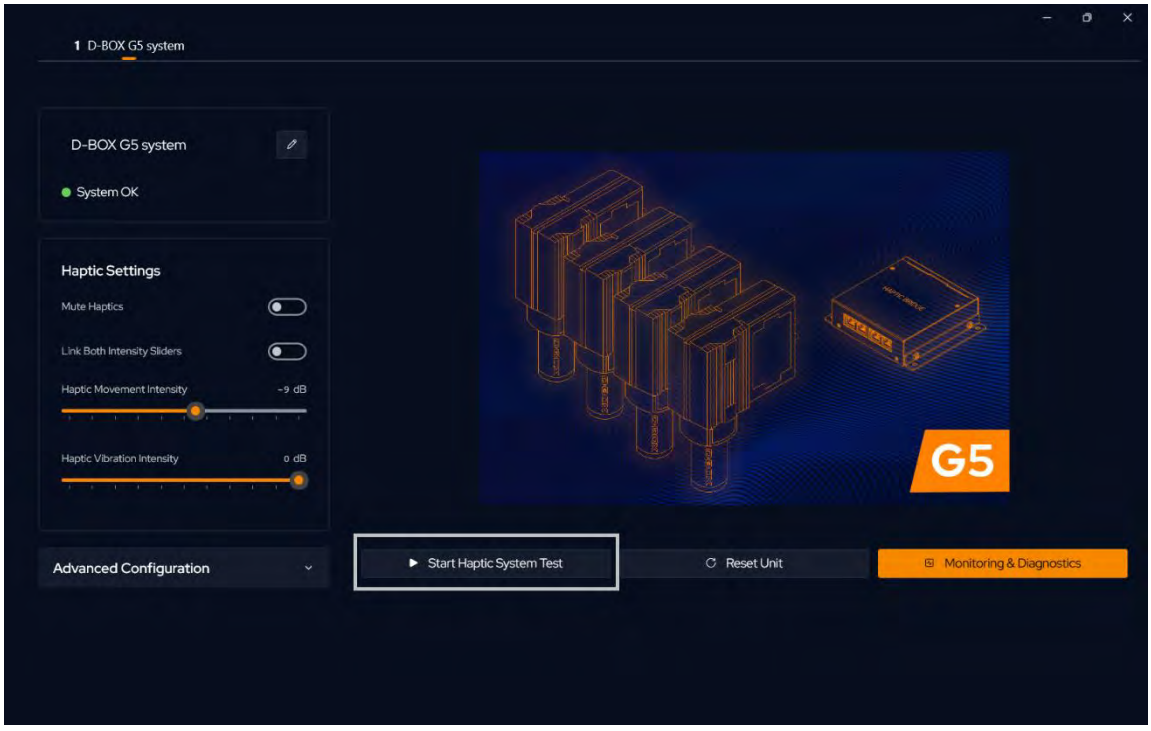
10.7 Troubleshooting Software Issues (D-BOX Coded Gaming - HaptiSync Center)

This section covers a step-by-step approach to help you fix issues related to the host software (game) or haptic code.

STEP 1: Make sure you are using the latest version of D-BOX HaptiSync Center (**see section 8.2**).

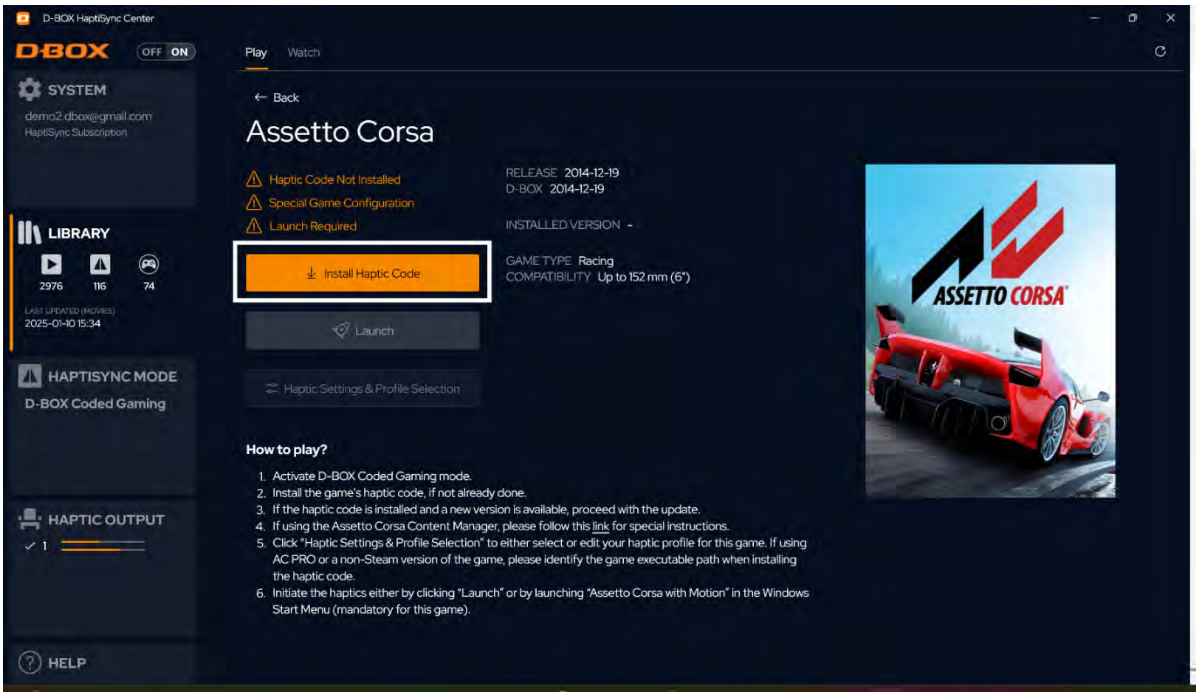
STEP 2: Make sure that your HaptiSync Mode is set to **D-BOX Coded Gaming.**

STEP 3: Proceed with a motion & communication test by clicking **Start Haptic System Test** in the Haptic Output section of the HaptiSync Center.



STEP 4: Open D-BOX HaptiSync Center and make sure the game is installed properly.

STEP 5: Make sure you have the latest version of the haptic code installed. If there is a newer version available, click **Update Haptic Code**.



STEP 6: Make sure to launch the game from the D-BOX HaptiSync Center. Select the game then click the **Launch** button at the bottom. Some games may need to be launched in a specific way. Read the detailed instructions.