



**FORKLIFT\_  
SIMULATOR**

**SIDE STANCE  
FORKLIFT-SIMULATOR  
DESKTOP MODEL**

GETTING STARTED



# INDEX

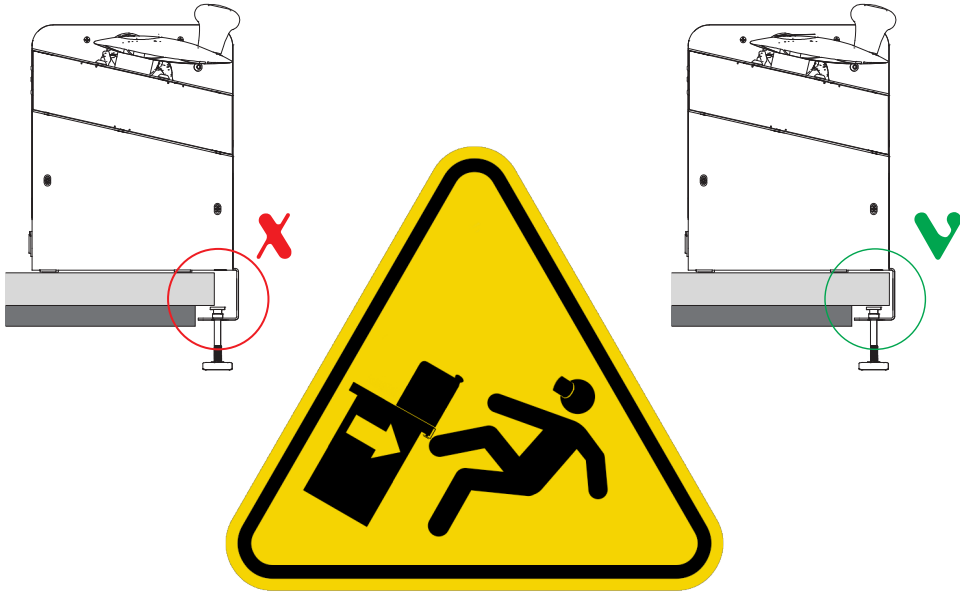
## Congratulations on your brand new VR Forklift-Simulator!

To get you started quickly here's a simple start up guide to your new Forklift-Simulator.

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## WARNING !



### IMPORTANT:

For your own safety and the safety of others:

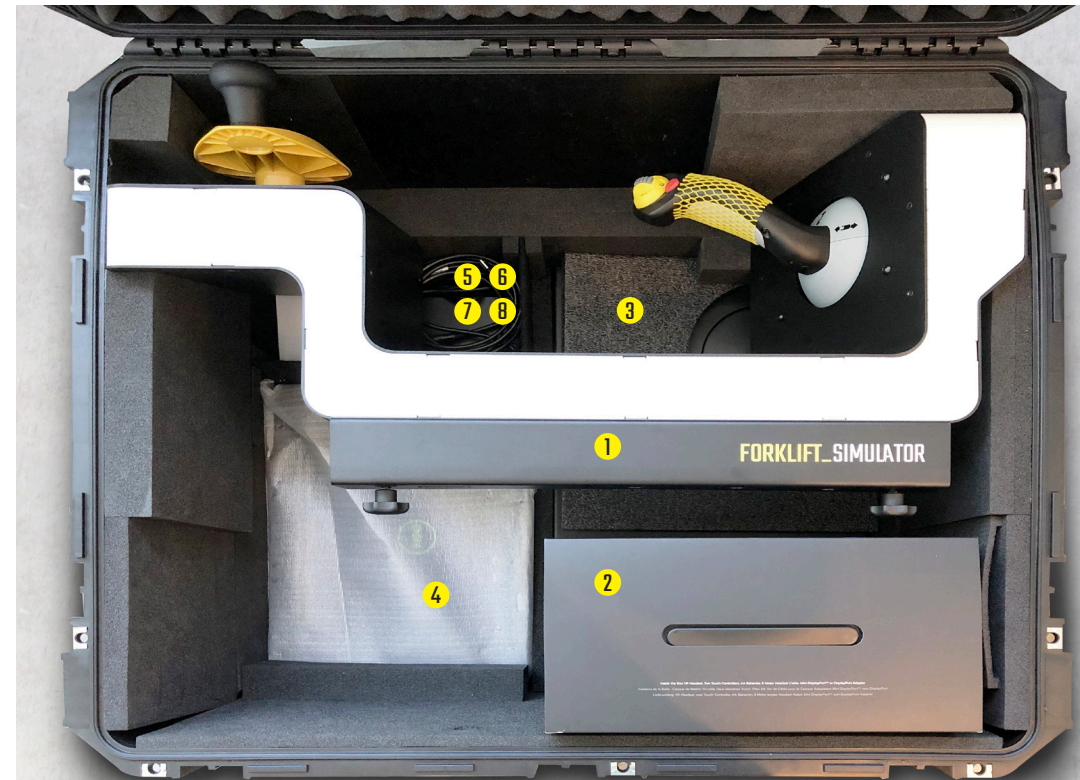
1. Always make sure the desktop module is properly clamped onto the desk or table to prevent it from sliding off during a VR session. Do not use a desk or table that does not have enough edge clearance to properly fixate the desktop module using the thumb screws!
2. Make sure you use a table that is not on wheels and stable enough so that it can not tip over. Don't use a light foldable table or a table on wheels. Use a heavy table or desk with a wide base or a table that is fixed to the floor.
3. Never let someone use the simulator for the first time unattended. Make sure the person is familiar with the equipment and knows what to expect and how to operate it.



## WHAT IS IN THE BOX?

### UNBOXING THE REACH TRUCK SIMULATOR - FLIGHT CASE

The desktop model comes in a military grade transport case.



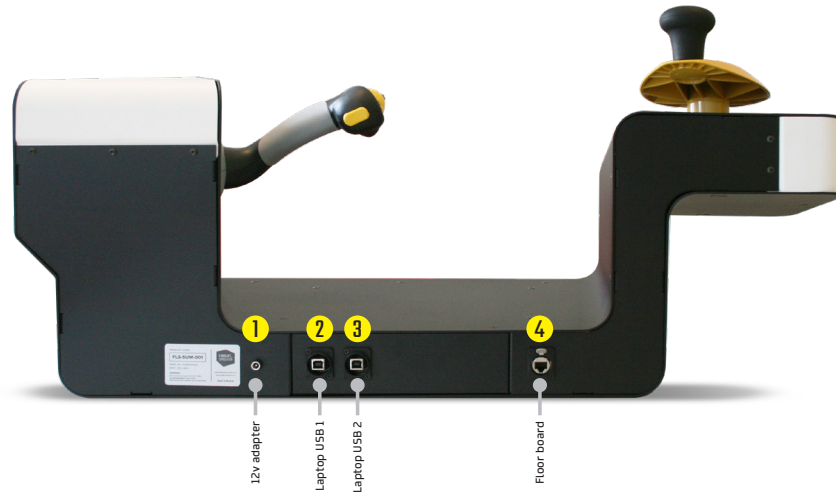
### WHAT IS IN THE BOX

- |                     |   |
|---------------------|---|
| 1 Desktop Module    | 5 2 USB cables (desktop-laptop connection)    |
| 2 Oculus Rift S Box | 6 1 UTP Cable (floorboard-desktop connection) |
| 3 Floorboard        | 7 12V power adapter for desktop module        |
| 4 VR Ready Laptop   | 8 Power adapter for VR Ready laptop           |

# SETTING UP - HARDWARE

## THE REACH TRUCK SIMULATOR - SETTING UP THE UNIT

To set up your unit for use, follow these simple steps.



- 1 12v Power adapter
- 2 USB connection 1 (dekstop module to laptop)
- 3 USB connection 2 (dekstop module to laptop)
- 4 UTP connector (dekstop module to floorboard)
- 5 UTP connector (floorboard to desktop module)

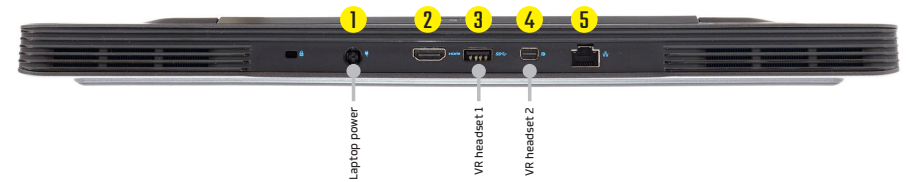


# SETTING UP - HARDWARE

## IMPORTANT:

In order to provide a comfortable VR experience the power of the laptop needs to be plugged in! Stutter and low frame rate can be experienced if the laptop is running on battery only.

## LAPTOP CONNECTIONS - BACKSIDE



- 1 Laptop power adapter
- 2 HDMI (optional for external screen)
- 3 USB3.0 (VR headset)
- 4 Mini DisplayPort (VR headset)
- 5 NETWORK (Ethernet connection)

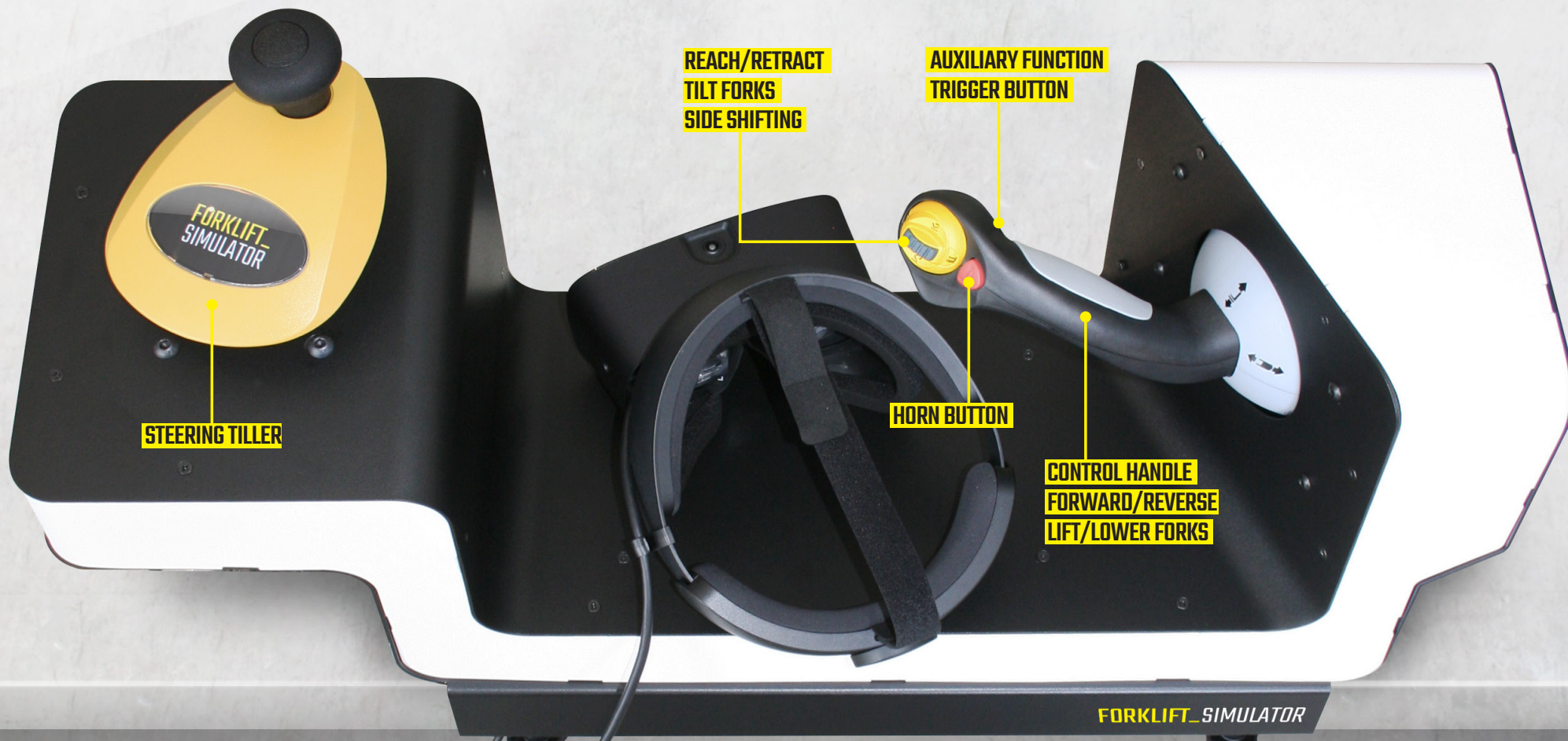
## LAPTOP CONNECTIONS - SIDES

- 6 USB3.0 (USB connection 1 between dekstop module and latop)
- 7 USB3.0 (USB connection 2 between dekstop module and latop)



# SIDE STANCE FORKLIFT-SIMULATOR

# GENUINE FORKLIFT CONTROLS



STEERING TILLER

REACH/RETRACT  
TILT FORKS  
SIDE SHIFTING

AUXILIARY FUNCTION  
TRIGGER BUTTON

HORN BUTTON

CONTROL HANDLE  
FORWARD/REVERSE  
LIFT/LOWER FORKS

FORKLIFT\_SIMULATOR

### IMPORTANT:

Always make sure the desktop module is properly clamped onto the desk or table to prevent it from sliding off during a VR session.



BRAKE PEDAL  
/OPERATOR PRESENCE SWITCH

### IMPORTANT:

Always make sure the desktop module is properly clamped onto the desk or table to prevent it from sliding off during a VR session.



## SETTING UP - HEADSET

### HOW TO PROPERLY USE THE OCULUS RIFT VR HEADSET

A best practice guide on how to deliver a Forklift Simulator experience to new and experienced users.

#### MAINTENANCE

Clean the Rift lenses free of smudges and dust particles.  
Avoid scratching the lens by using high quality lens cloths.  
Use anti-septic wipes to sanitize the Rift.

#### ASSURE COMFORT AND VISUAL CLARITY

Release the Velcro strap and widen the head band by turning the back adjustment knob counter clockwise.

Enter in the headset, eyes first while fitting the back of head.  
(Put it on like a baseball cap, forward to back.)

Gently tighten the head band by turning the back adjustment knob clockwise to keep Rift in place. Then fasten the Velcro strap.

Assure that the lens is placed over the eyes where the image is most clear!  
If the image is not sharp, move the headset up or down a little and reposition. There is a sweet spot in the middle of the lenses.

The front of the headset can also be moved further away from your eyes if needed.  
To do so, push the button on the bottom side of the headset and gently slide the front forward.

**PRO-TIP** If the position of the Rift is falling over the eyes, tighten the top strap.  
Experience that is not in focus can stimulate motion sickness.

Users with glasses should be extra careful with putting on the Rift.  
Enter in the Rift glasses first. Once their glasses have passed through the headset, fit the back of headset to the back of head. The front of the headset can be adjusted to create more room for glasses to fit in.

#### GETTING STARTED

Important to remember that first time users should ease into their first VR experience!  
Making the user feel comfortable is key.

Once a lesson has been chosen, begin by having users look around the environment.  
Encourage the user to look behind them, above them, and carefully leaning outside the truck. When the driving portion of an exercise begins, start by driving slowly around the environment.

## SETTING UP - HEADSET



**PRO-TIP** It usually takes 2-3 trials before first time users get acclimated to the VR technology. Users will build a higher tolerance overtime.

If user cannot proceed with VR simulation, help remove the headset and have them relax until they are ready to proceed.

#### REMOVING THE RIFT

Release Velcro strap and head band and remove the headset.

For additional information on the use and maintenance of the Oculus please read the original Oculus manual that is included in the Oculus box.

# HEADSET CALIBRATION

## OCULUS CALIBRATION

The Oculus software will ask you to setup up a play area at first use. To do so you need the hand controllers included in the Oculus box. Put the wrist straps on, put the headset on and follow the instructions in VR.



### SET FORWARD POSITION

Point out the forward position and pull one of the triggers on the controllers with your index finger. Point/select 'continue' and press the trigger button again to acknowledge.

### SET FLOOR POSITION

Touch the floor with one of the controllers and pull the trigger on the controller with your index finger. Point/select 'continue' and press the trigger button again to acknowledge.



Left trigger

Right trigger

### DRAW PLAY AREA

#### BOUNDARIES

Using one of the controllers point and hold the trigger button to draw a wide circle or square around you. You can skip this step if you do not want.



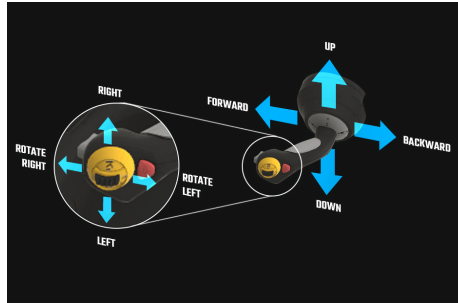
Make sure you leave enough room in front of you and the shape needs to be closed before you can proceed. Select 'continue' and pull the trigger.

# FORKLIFT-SIMULATOR SOFTWARE

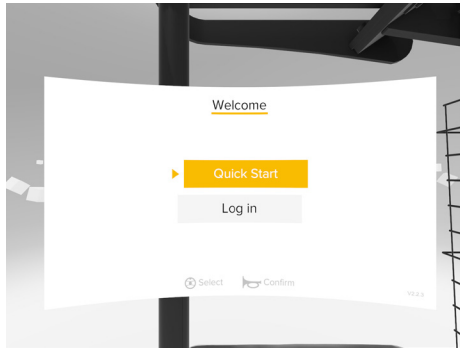
## CALIBRATION

At startup you will be asked if the simulator needs to be calibrated. If you feel that the actual controls match the position of the virtual controls, select 'skip' and use the horn to proceed.

Select 'calibrate' to start calibration. In calibration mode, use the control handle to move the position of the truck until the virtual controls match the real controls. Once set, hit the horn to proceed.



Calibration functions using the control handle.



Quickplay or Log in

## QUICKPLAY - LOGIN

### QUICKPLAY MODE

This modus can be used by anyone. No individual results will be saved and progress will not be tracked in this mode.

### LOGIN MODE

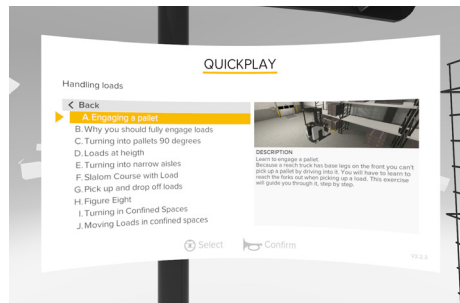
If your company has access to the LMS that allows individual drivers to log in and track their progress you can choose to log in with the pin code provided to you by the system's administrator. Individual results will be saved enabling both driver and trainer to track his/her progress over time.

## MENU AND NAVIGATION

In general the steering wheel is being used to scroll through the menu's. Turn the steering wheel left to move the selector up, turn the steering wheel right to move down.

Use the horn in the middle of the steering wheel to select or acknowledge.

When in a sub-menu, you can always go up one level in the menu by selecting the back button on top of the menu.



'Handling Loads' Menu of the default RT curriculum

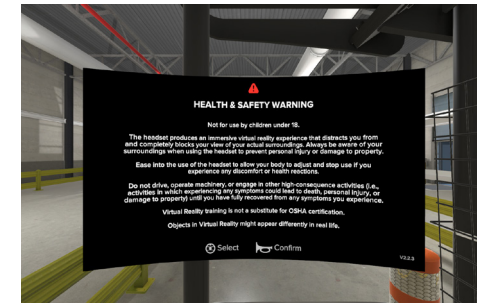
# FORKLIFT-SIMULATOR SOFTWARE

## SAFETY & HEALTH DISCLAIMER

### FL-SIMULATORS

When in Quickplay mode you will need to acknowledge the Reach Truck Simulator disclaimer at the start of each exercise to be able to proceed. You can acknowledge by simply pressing the horn button on the middle of the steering wheel.

When Logged in you will only need to acknowledge this disclaimer once after login.



Reach Truck Simulator disclaimer

## COMPLETING AN EXERCISE / IN GAME MENU

When an exercise is completed, a new screen will appear showing the results and acquired medal. At this point you'll have three options:

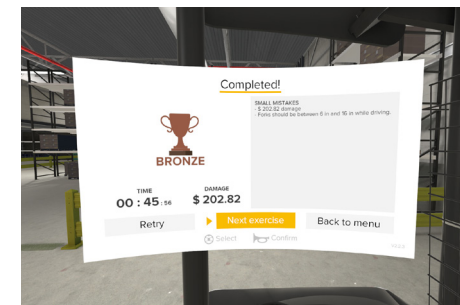
Retry: Restart the same exercise and try to improve your result.

Next exercise: Immediately skip to the next exercise in the current level.

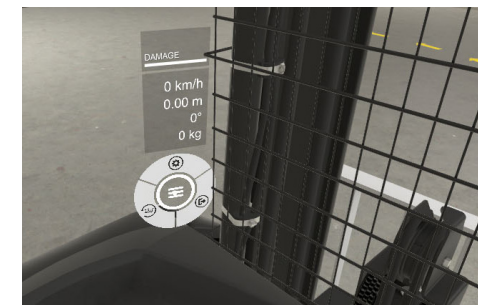
Back to menu: Return to the exercise selection menu.

Use the steering wheel to select and the horn button to acknowledge.

During an exercise you can access an expandible menu located under the head up display. Center your view on the circle with 3 horizontal lines and it will expand. Here you can exit the exercise, access the language/units menu or set a comfort mode.



Results page



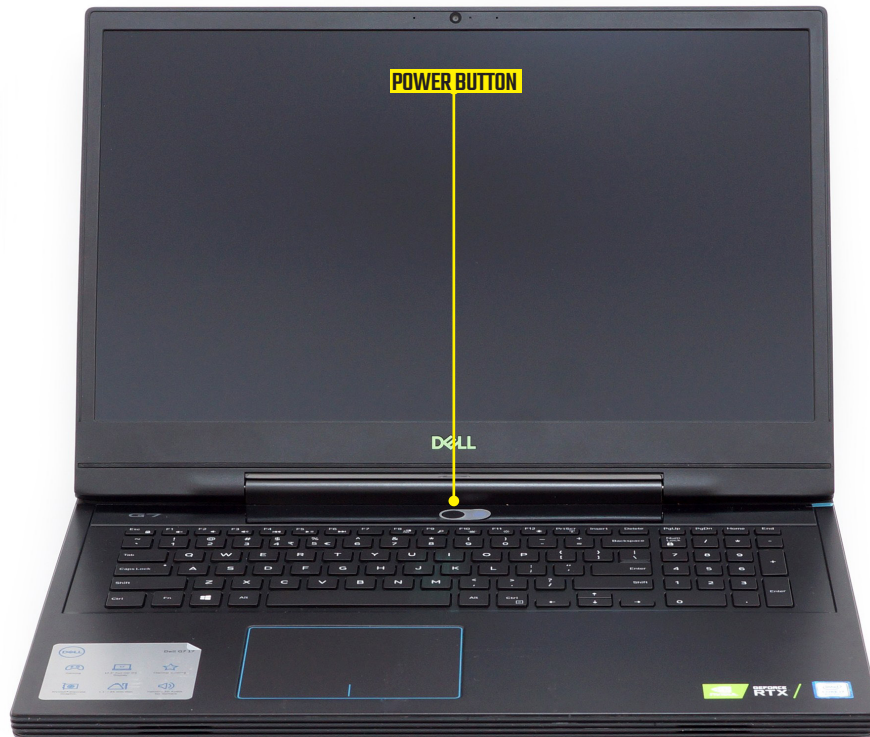
Head Up Display and expandible menu

# SHUTTING DOWN

## SHUTTING THE DOWN THE REACH TRUCK SIMULATOR

To shut down the unit all you need to do is push the power button on the laptop. The unit wil shut down and will be waiting for the next ride.

You can unplug the power for the laptop and the 12v adapter for the desktop if you are not going to using it for a while. Don't forget to plug the power back in when using it because the laptop will not be running at full performce on battery only. The control handle on the desktop module will also not function when it is not powered by the 12V adapter.



# REACH TRUCK SIMULATOR - TROUBLE SHOOTING

	Problem	Solution
1	The controls in VR do not match the position of the actual controls	At startup you will be asked if calibration is needed. If the controls in VR do not match the actual controls select 'calibrate' using the steering wheel and acknowledge using the horn. (red button on hte control handle). This will activate the calibration mode. You will now be able to move the truck up/down/left/rigth or rotate it using the control handle functions. Look at the instructions in front of you. Once positioned correctly hit the horn to proceed and close the calibration mode.
2	Low, laggy VR performance	Check if the power supply for the laptop is plugged in correctly. The graphics card will not get enough power to perform well when the laptop is running on battery. If this does not solve it please make sure the unit is connected to the internet and contact <a href="mailto:support@forklift-simulator.com">support@forklift-simulator.com</a>
3	The control handle is not working	Check if the 12V power adapter is plugged in and connected to the desktop module. The control handle will not function without it. If the problem persists, please make sure the unit is connected to the internet and contact <a href="mailto:support@forklift-simulator.com">support@forklift-simulator.com</a>
4	The steering knob position does not match with the position in of the steering knob in VR	Please make sure the unit is connected to the internet and contact <a href="mailto:support@forklift-simulator.com">support@forklift-simulator.com</a>

For all other questions, please contact [support@forklift-simulator.com](mailto:support@forklift-simulator.com)

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