



# PROSERVE

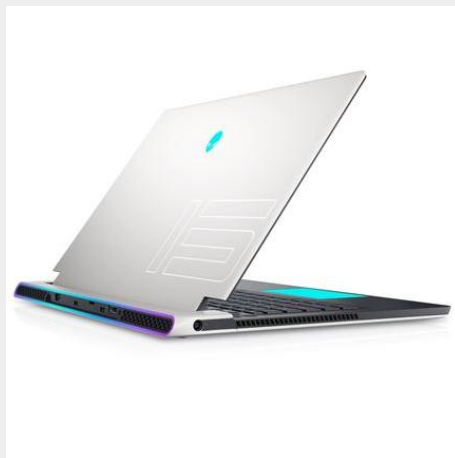
User Documentation



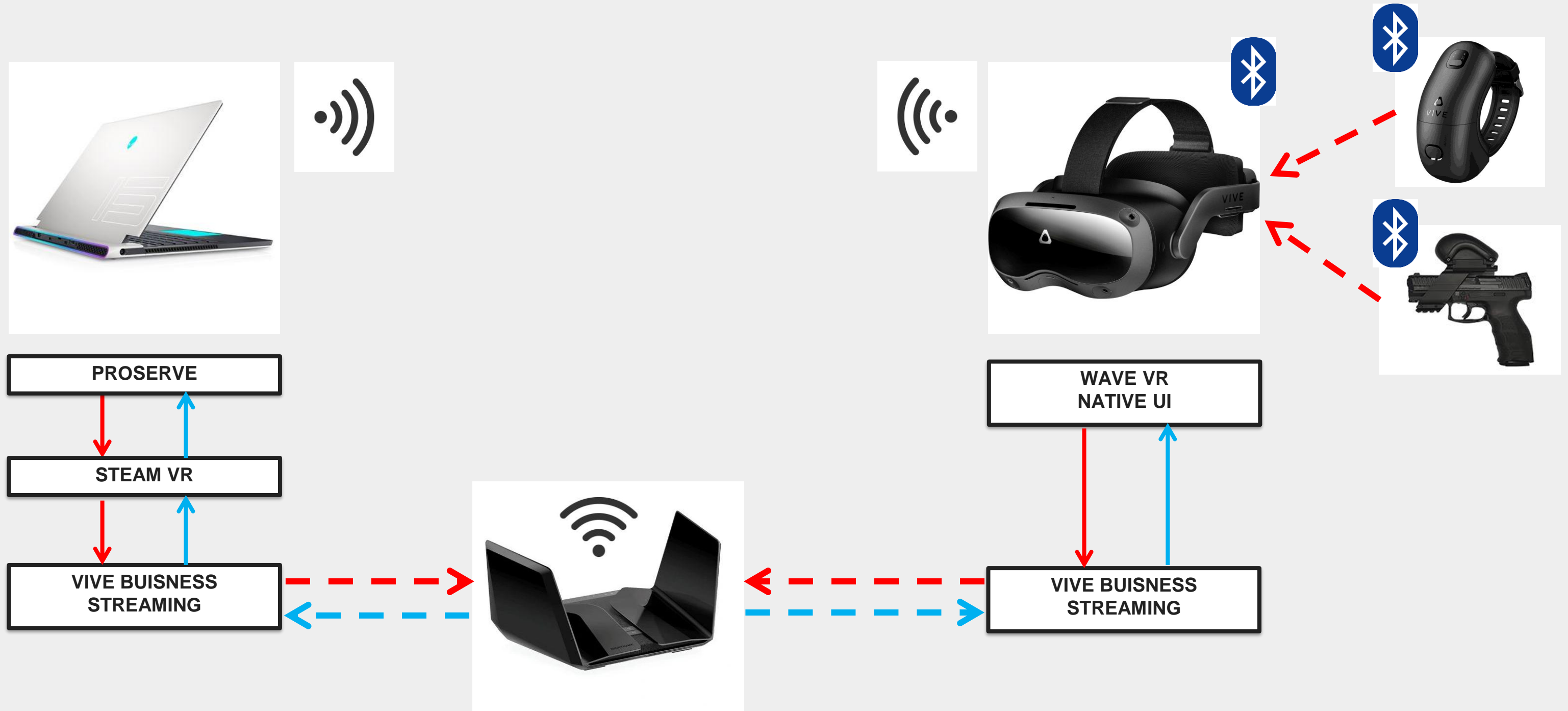
# CONTENT OF TRAINEE PACK



- The solution contains the following equipment:
  - Last generation laptop
  - WIFI 6E Router
  - 5K VR Headset
  - Weapon Replica + Tracker
  - Wrist Tracker
  - Additional Battery
  - Misc cable, power adaptor



# OVERALL FUNCTIONNING



# MULTI-USER SETUP



- Use only one router to connect all trainee Pack.
- Connect PC to router with RJ45 Ethernet cable
- Up to 4 trainee pack on the same router
- If more, link another router to extend

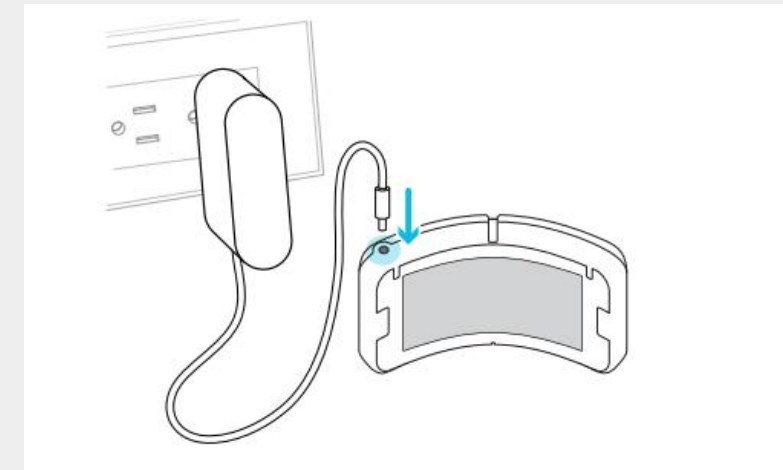
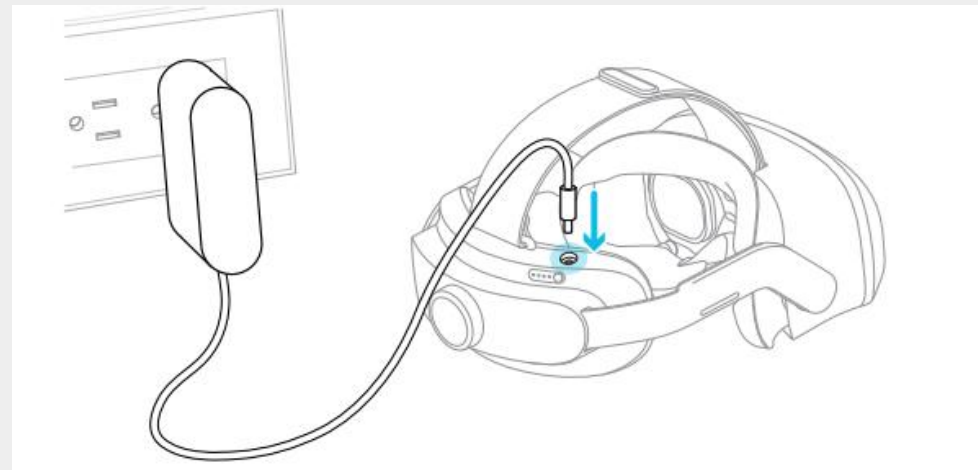
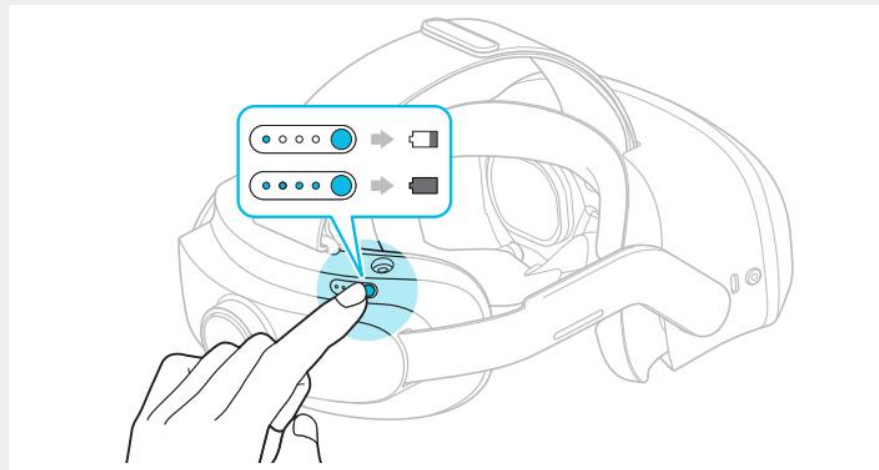


# COMMISSIONING

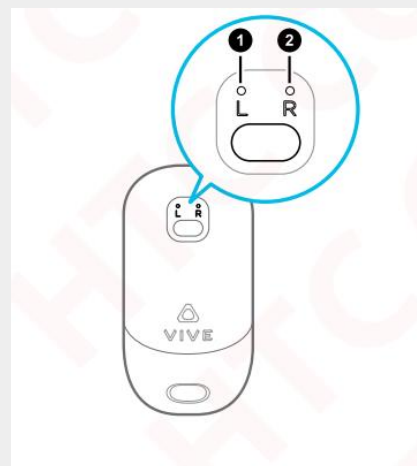


# 1 - CHARGING VR EQUIPMENT

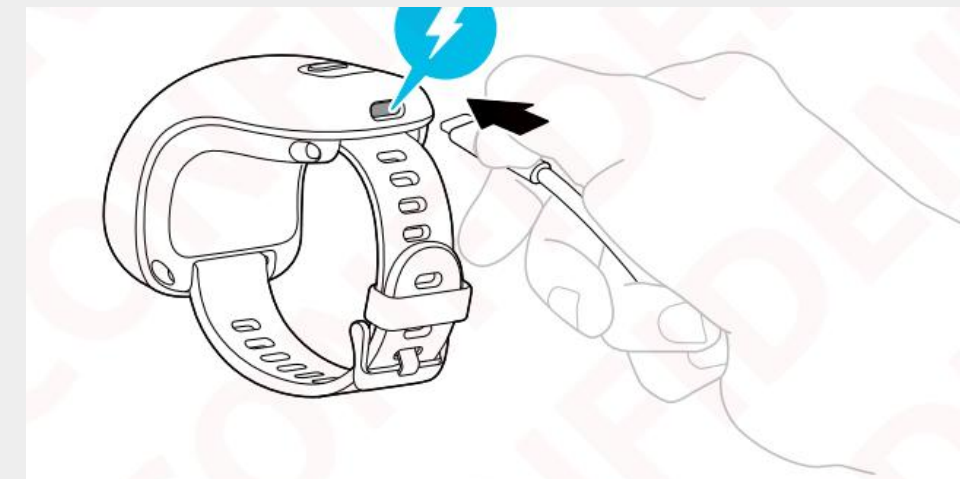
- Check the battery level of the headphones via a short press of the button on the back of the headphones or the second battery provided. If necessary, recharge the headset battery



- Check the charge of both trackers via a short press of the button. They should light up solid blue or green, if red or no light they must be charged using a USB-C cable

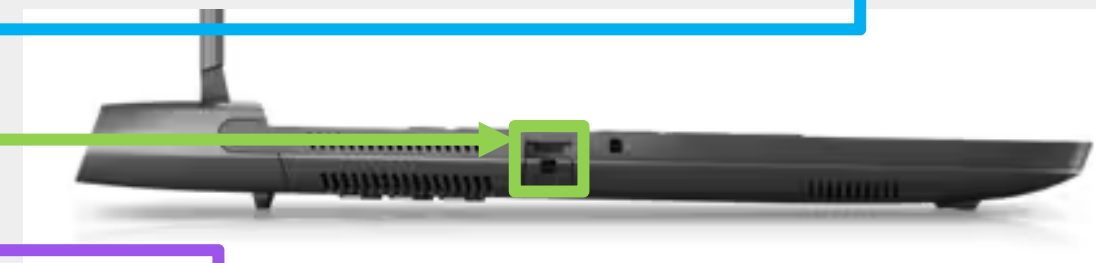


Status	LED behavior
Low battery	Blinks red
Charging	Solid amber
Fully charged	When connected, solid amber to solid green when not connected, solid amber to solid blue
Pairing	Blinks blue
Connecting	Solid blue
Connected	Solid green



# 2 - CONNECTION AND IGNITION

- Connect the laptop to the mains via its adapter
- Connect the router to the mains via its adapter
- Connect the Ethernet cable to the router on one side on one of the inputs numbered 1, 2, 3 or 4
- And on the other side on the network socket
- Press the Router power button
- Open the laptop and power on with a press on the "Alien" button for one second, it takes 3-4 seconds to light up and boot up
- Press the Power button of the VR headset long enough, the "Vive Focus 3" Logo should appear on the screen
- Once the helmet is started, briefly press the Power buttons of the two trackers which must switch to green, that of the weapon above the mention R for Right and the wrist tracker on L for Left



# 3 - CONNECTION AND PREPARATION

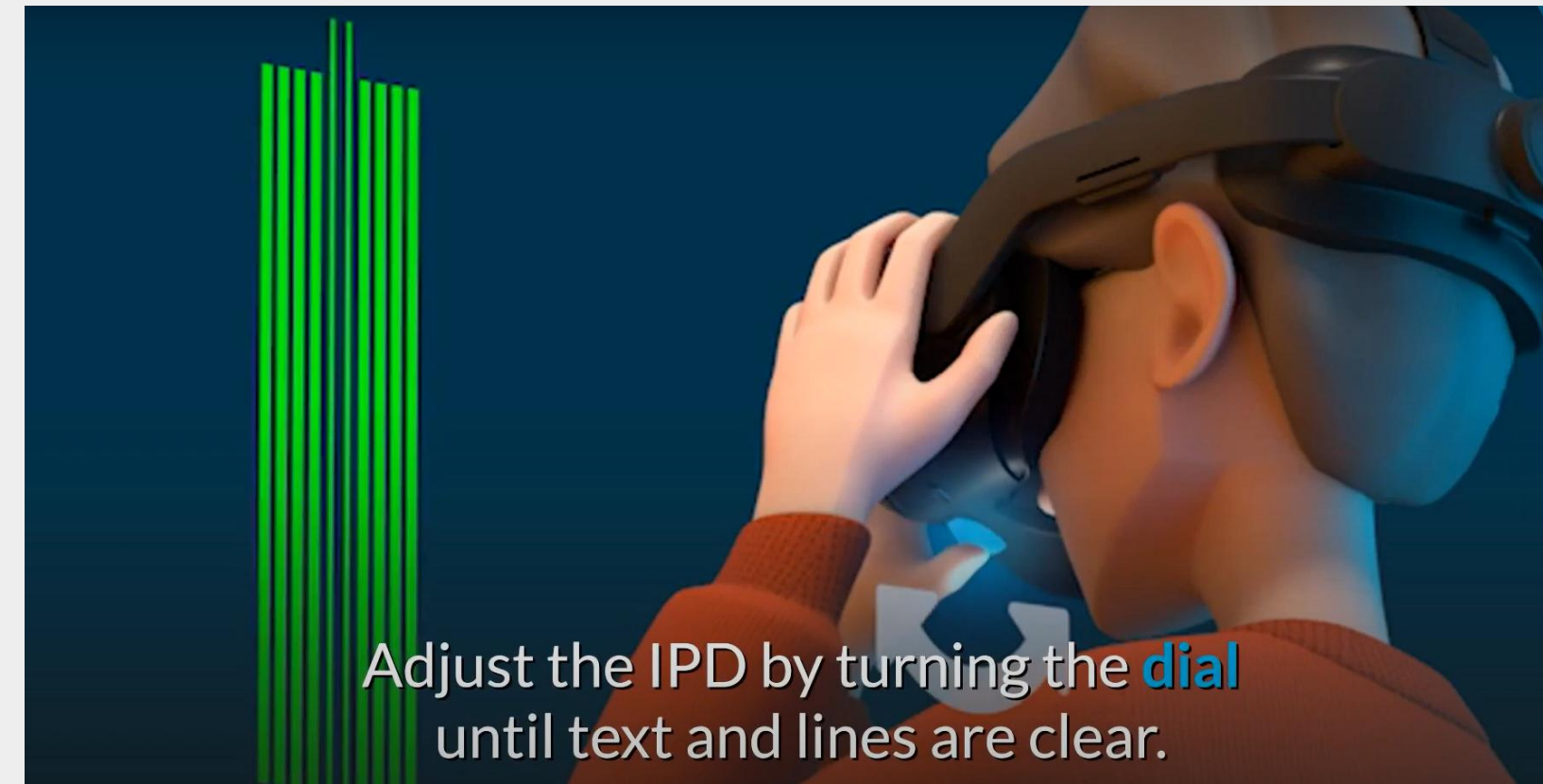


- **Don't launch PROSERVE at this time:** you need to check that VR is Ready in a first step
- **Check that the router is ready:** the LEDs on the fronts must be fixed
- **Initialization of VR headset**
  - Wear the VR headset
  - You should see the Vive logo turning progress on a black background
  - Turn your head slowly in all direction, look the ground even if you can't see it.
  - If you are in front of a table, for example, it could be initializing the headset with a wrong height (see troubleshooting section to fix this)
  - It will take a few seconds, then Vive logo will disappear, and it will reveal a void environment with a grid on the ground and a "Vive Streaming" mention in front of you
  - Then in the helmet you should also see the trackers appear and even see them move if you manipulate them

# 4 – ADJUST HEADSET



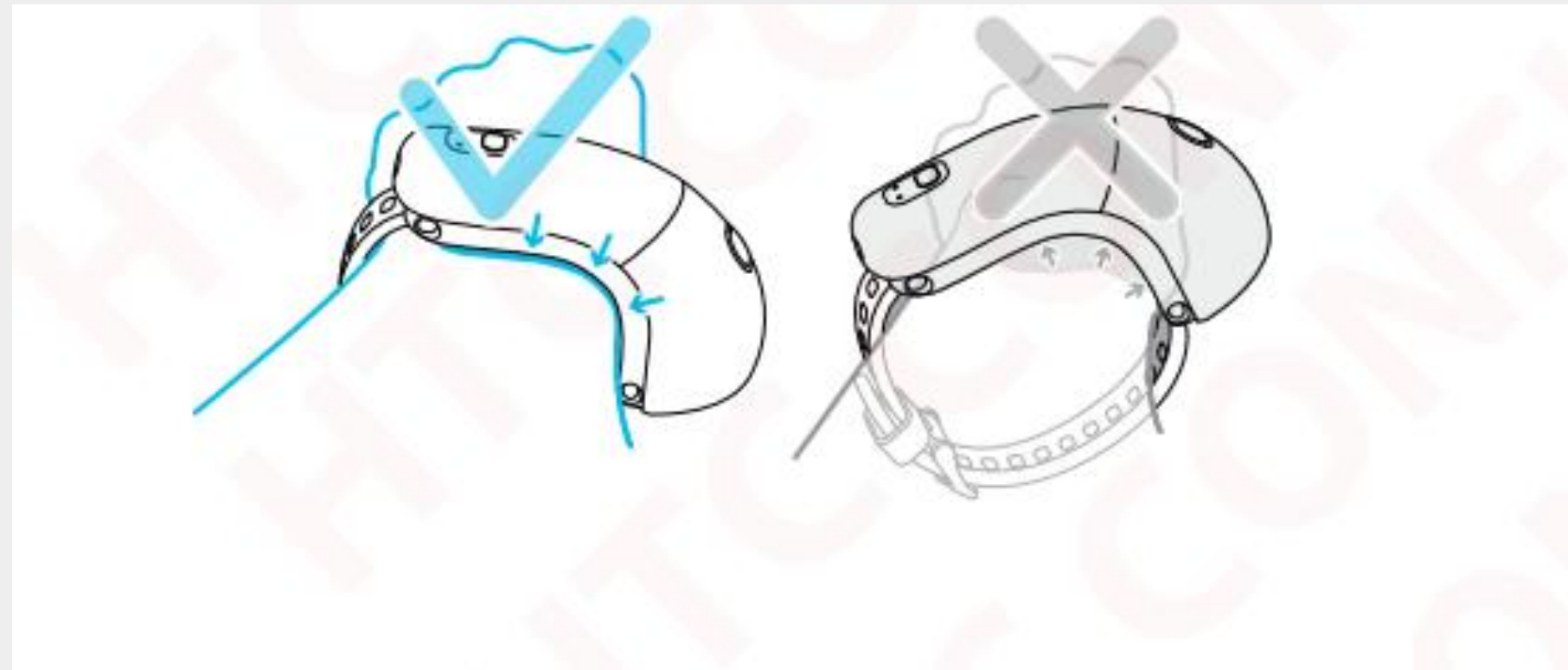
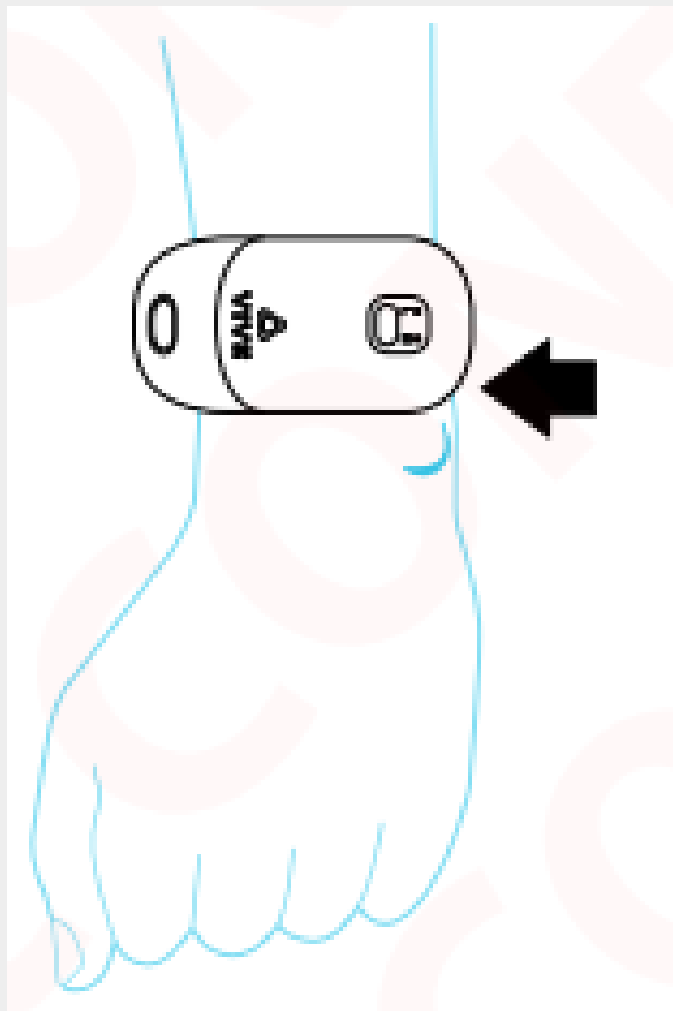
- Adjust vertical position of the headset
- Move headset up and down on your face



- Adjust horizontal position of the headset
- Moving the dial under the headset will make appear vertical and horizontal lines which help you to adjust headset to your vision

# 5 - WRIST TRACKER

- Your wrist that is not carrying the weapon must be equipped with the Wrist tracker so that the simulation can animate your second hand. Attach it like a watch around the wrist.
- **You should be able to read the VIVE in the right way**



# 6 – Refill Gaz for your Replica

- Depending of your replica there is two type of gaz needed for blowback
- Procedure for refilling Gaz or change CO2 cartbridge can change dependings of the replica
- There is is many resource videos and tutorial you can easily find on internet

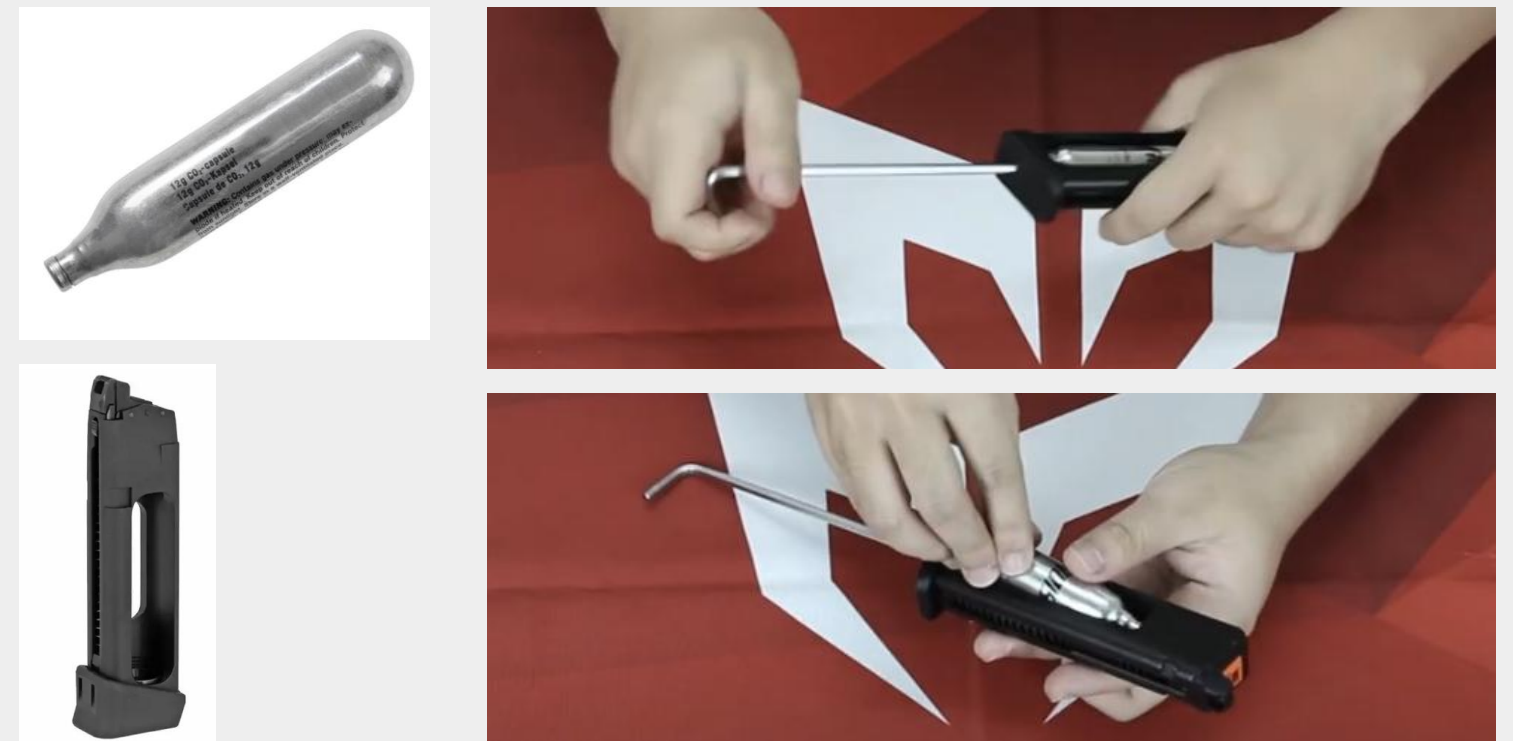
## Gaz

Always refill with the Gaz bottle upside-down so that the liquid gaz can go in the charger



## Co2

Unfill old cardbridge, unscrew, insert new one, rescrew

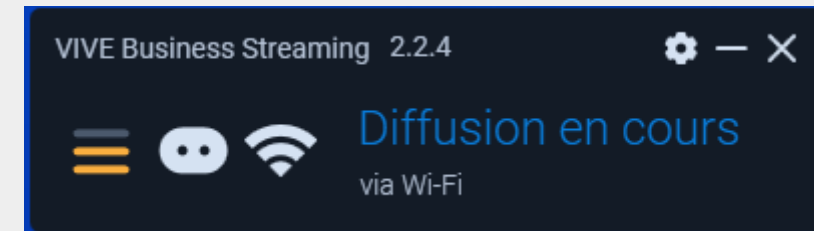
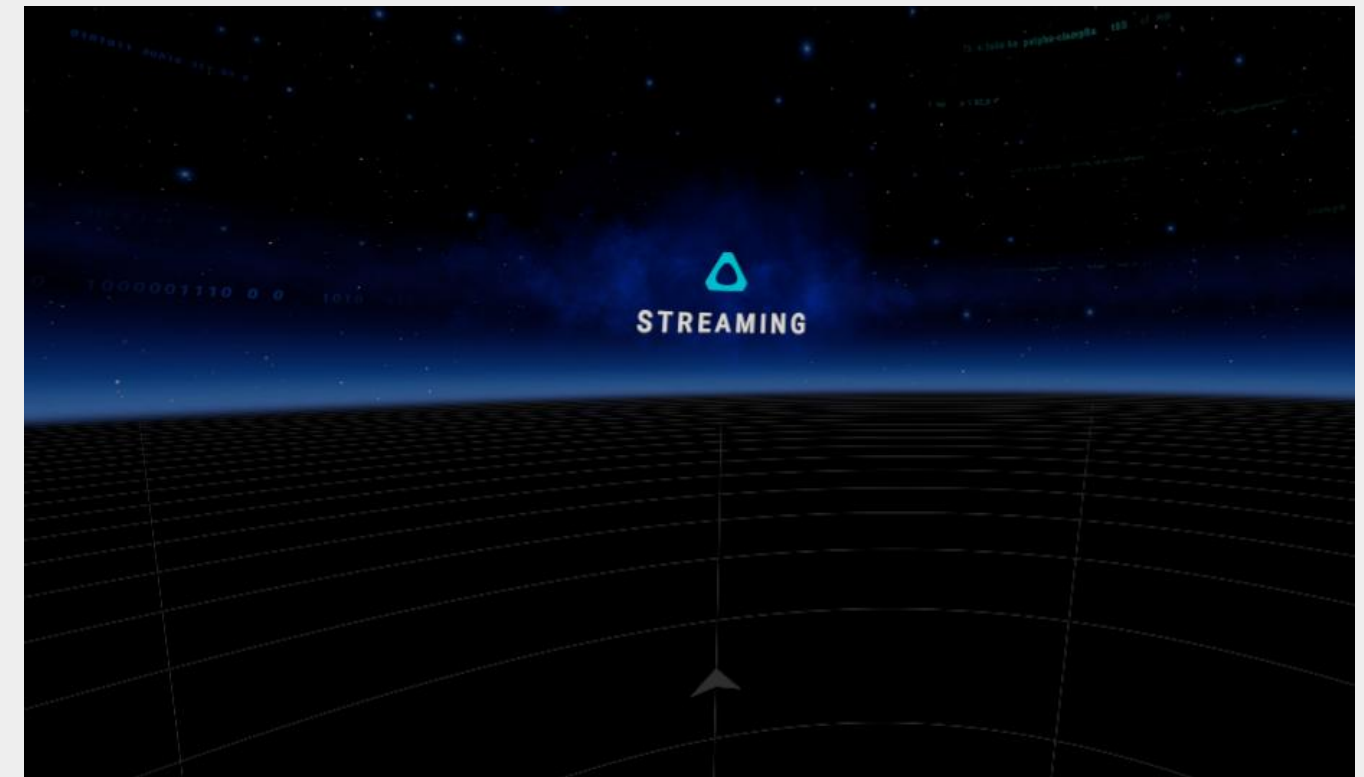


# 7 – GLOBAL CHECKS



- Before launching PROSERVE, check that you are in the Vive Business Streaming (VBS) environment and that **no error message** appears.
- You should also see the trackers floating at their 3D position
- Check that the 3D ground (represented by a grid) corresponds to the real ground, place the replica on the ground to ensure this, for example
- Otherwise put the headset on standby (double quick press on the rear button), take it off then put it back on again. Look around you while tilting your head slightly downward.
- Remember to turn the trackers back on as well, putting them into standby turns them off
- The proximity of a table can make the headset believe that the floor is at that level

**Launch PROSERVE!**





# USE OF PROSERVE

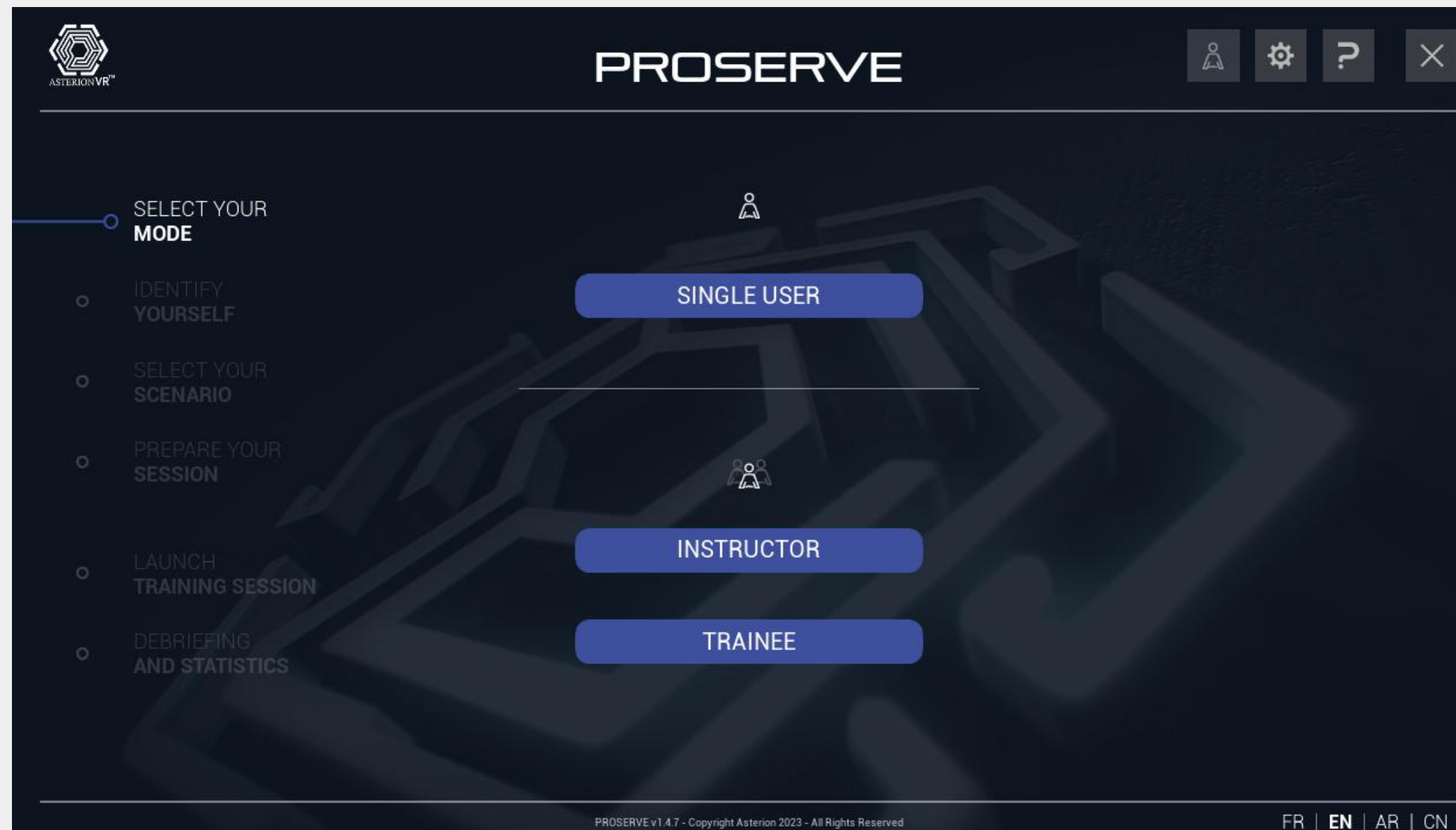
Single Trainee Pack



# LAUNCH PROSERVE



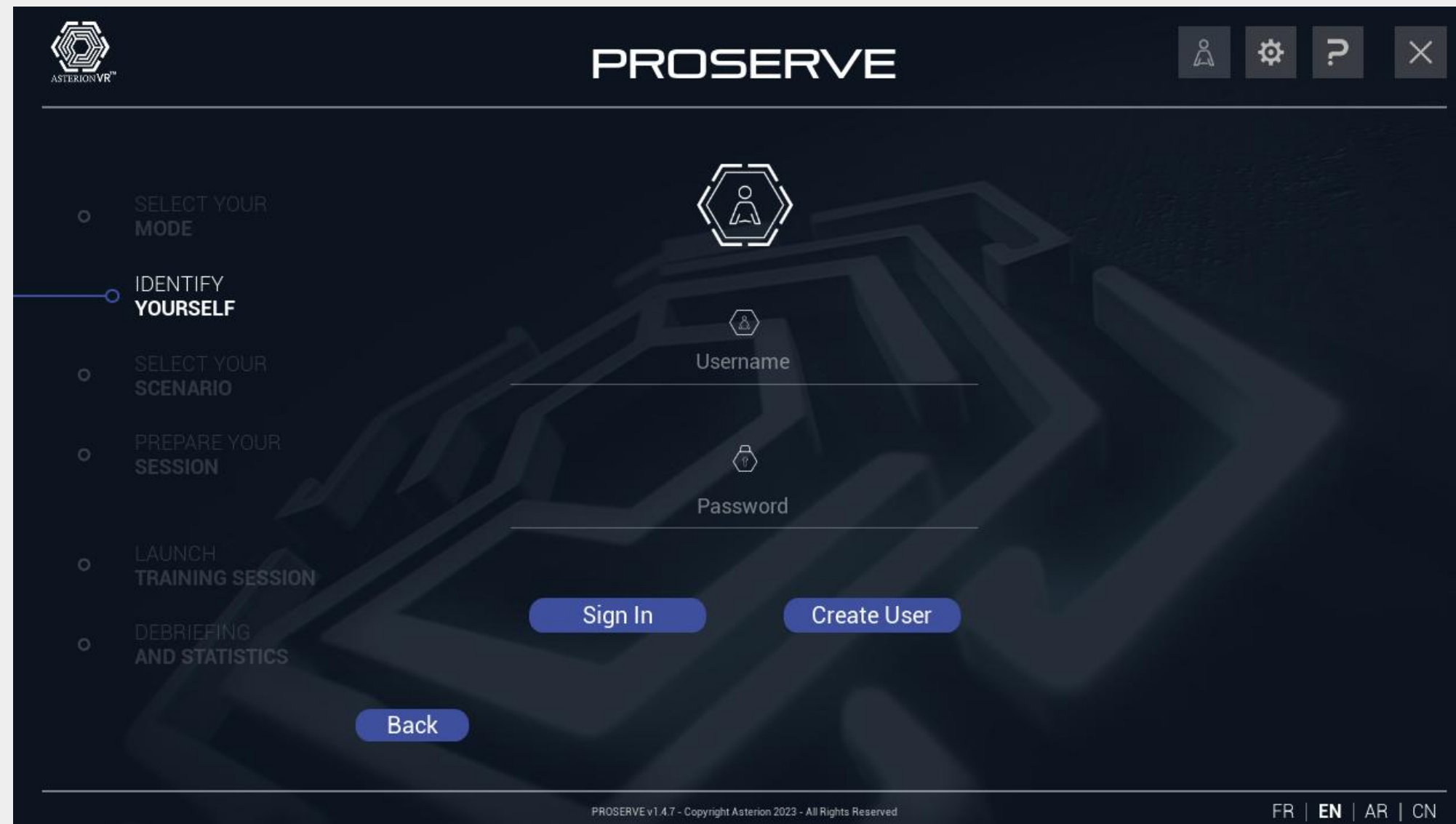
- Double Click on the PROSERVE application icon on the Windows desktop
- The application loads and displays the following screen



# USER IDENTIFICATION



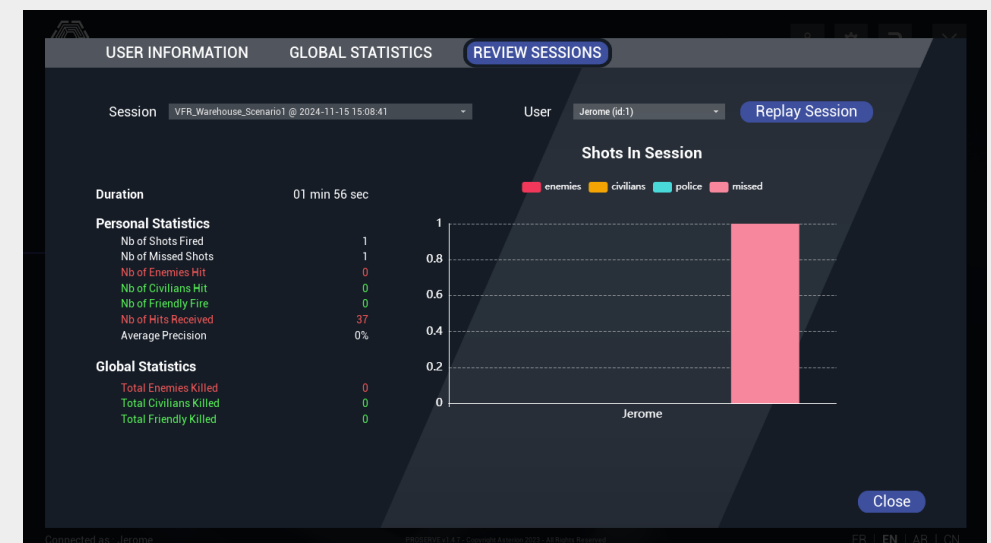
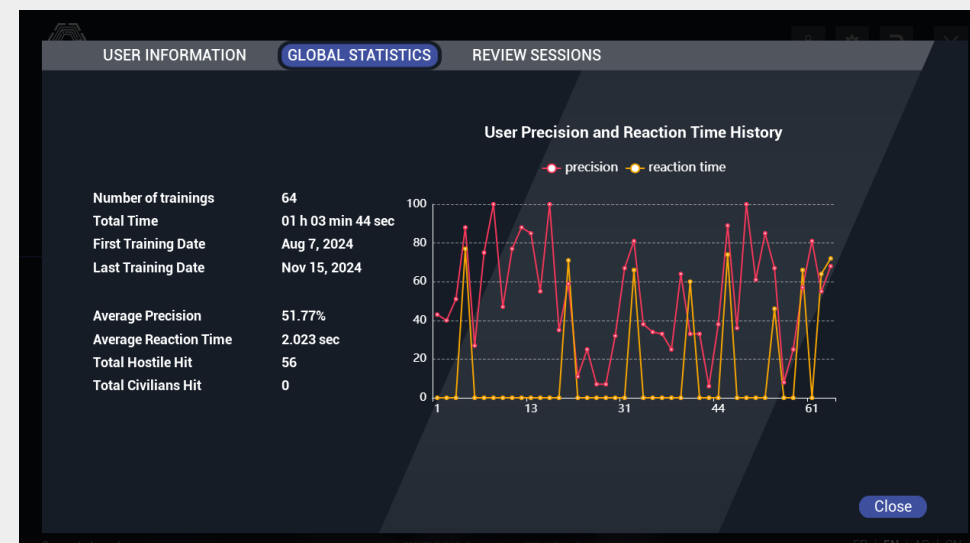
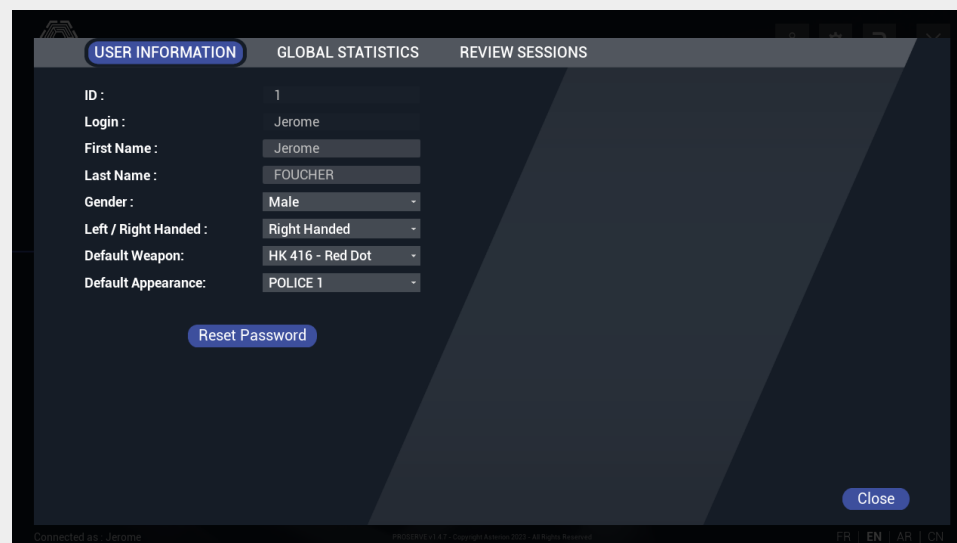
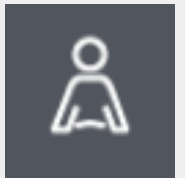
- The next screen will ask you to **log in with your user account**
- If you don't have any account yet, fill in a username and password then click on **"Create User"**
- If you have already created an account before, enter the information and click on **"Sign In"**



# USER SETUP



- Once connected you can access and modify your personal information via this button at the top right
- A new screen opens above the main screen giving you access to your personal information, preferences, statistics and recordings of past sessions



- The backup is performed automatically by closing the window via the close button.

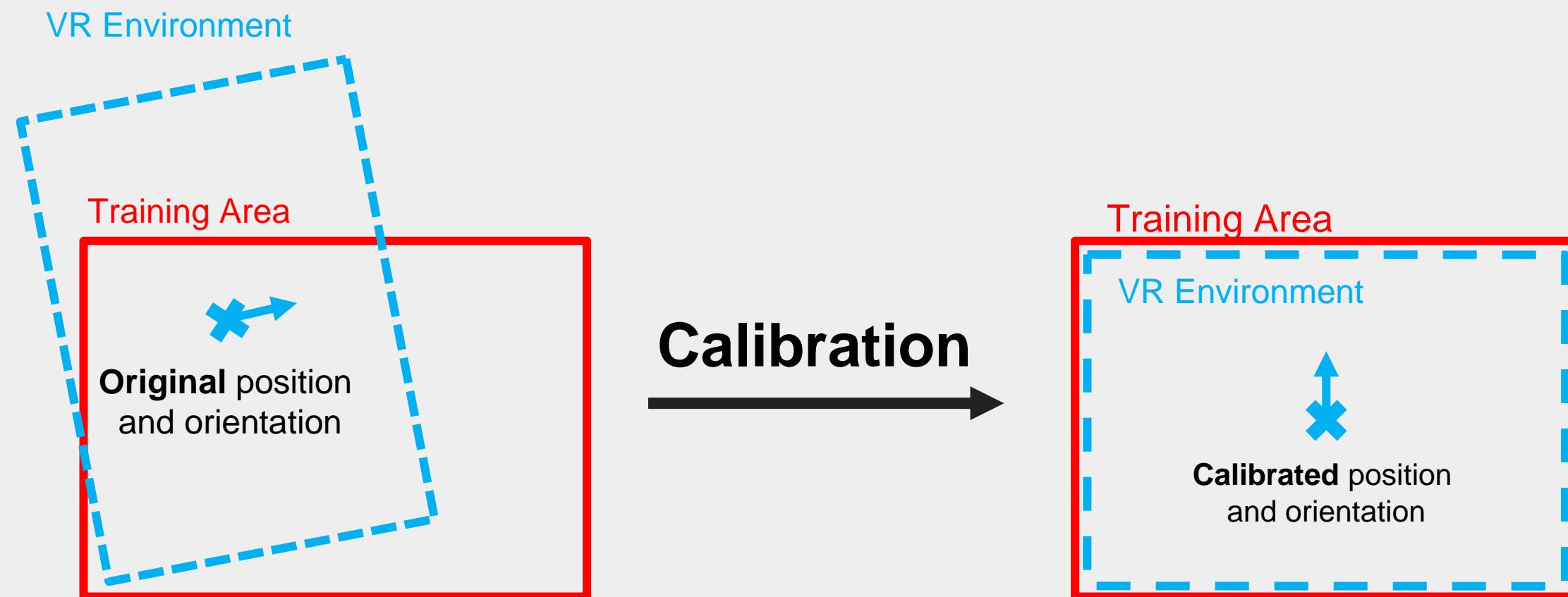


These information are only stored on the PROSERVE system and are not transferred over the internet

# CALIBRATION



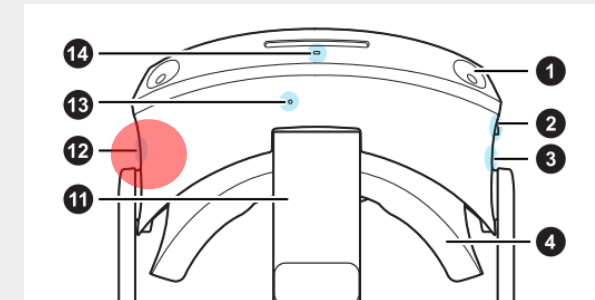
- Calibration allows you to adapt your training space to PROSERVE scenarios.
- It's very important to understand that:
  - When you put the headset, center position and orientation will be at the place you stand and look
  - It will not fit your training space, you have to change this center and orientation



# CALIBRATION (SINGLE TRAINEE PACK)



- Launch Calibration scenario
  - Work on any scenario but calibration scenario is suited for this
- Wear the headset
  - You can activate **passthrough** of headset to move without risk of hurting walls
  - Switch VR and Passthrough mode: **Fast double press headset button** at left side
  - If you press not fast enough, it will open a menu, press again to close this menu and retry



- Long press the App Button of tracker (Gun or Wrist)
  - A message will appear after 3 seconds
  - Message will tell you what to do



Long Press

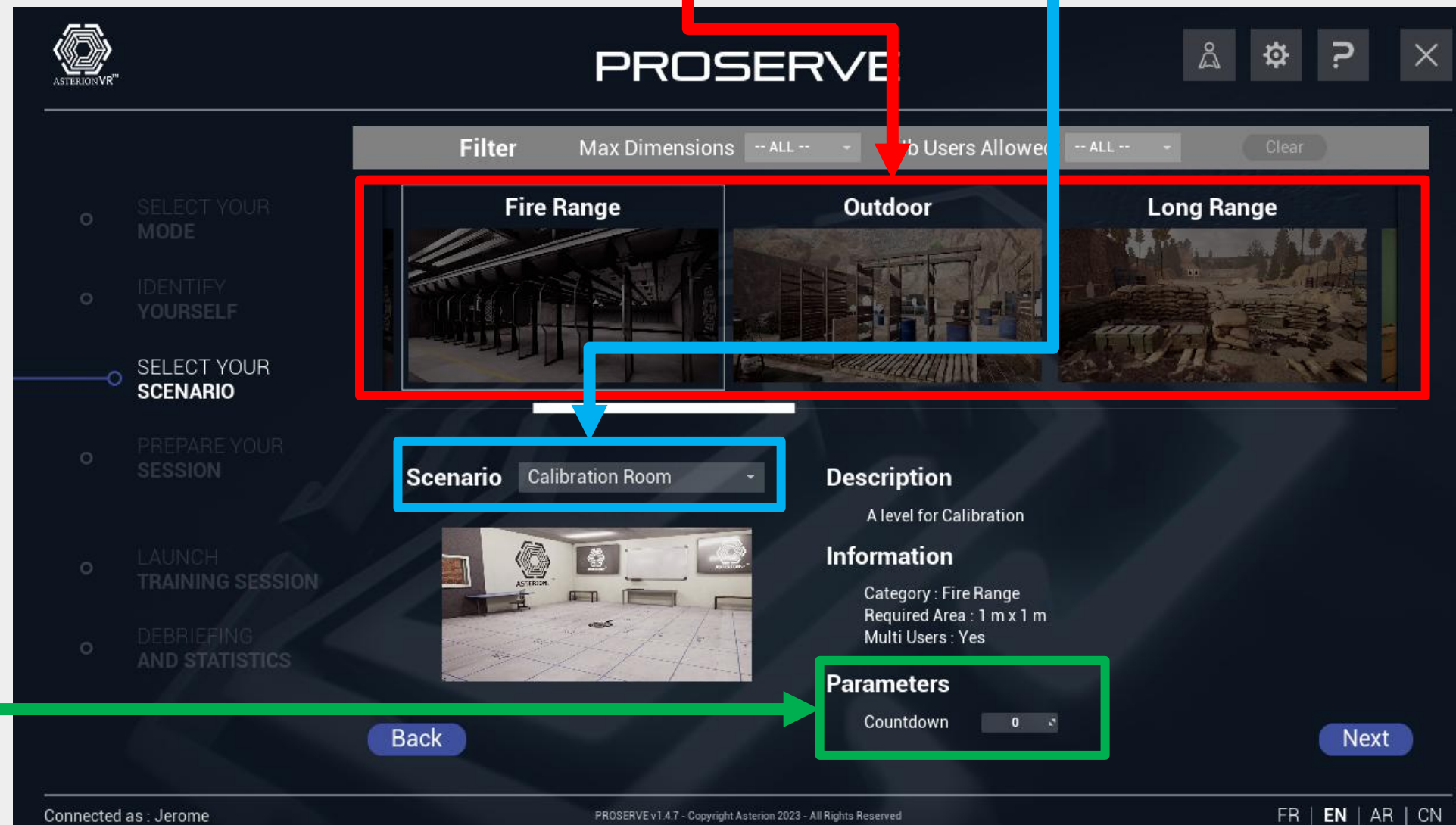
- Like indicated in the message box:
  - Place yourself at the center of the training Area,
  - Look straight ahead at a wall
  - Short press same button of the tracker



Short Press

# SCENARIO CHOICE

- The next screen allows you to choose your **environment** and your **scenario**

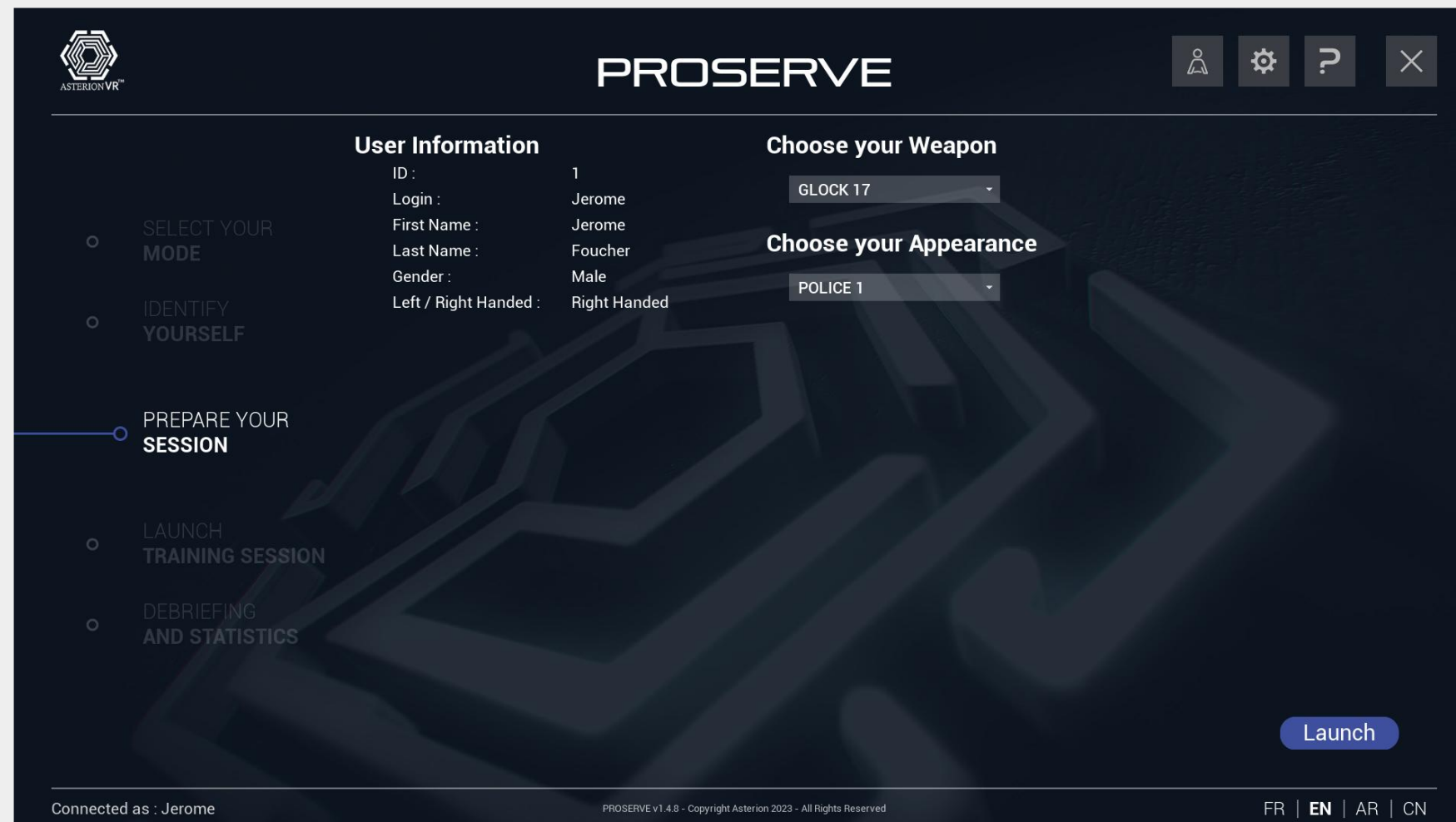


- You can set a **countdown** that will at scenario start

# WEAPON AND APPEARANCE CHANGE



- The next screen presents you with a summary and to choose your weapon which must correspond to the one on which the tracker is fixed
- click on the start button to start the training session
- The display switches to virtual reality with a copy on the laptop screen



# MISSION



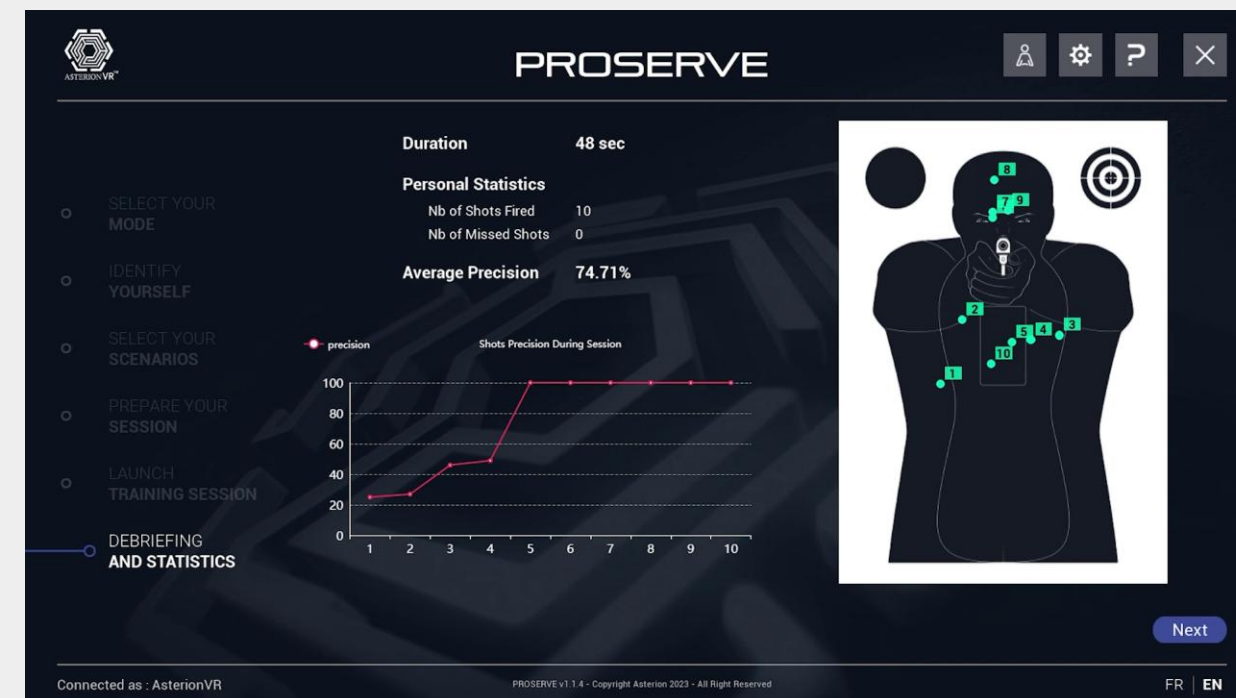
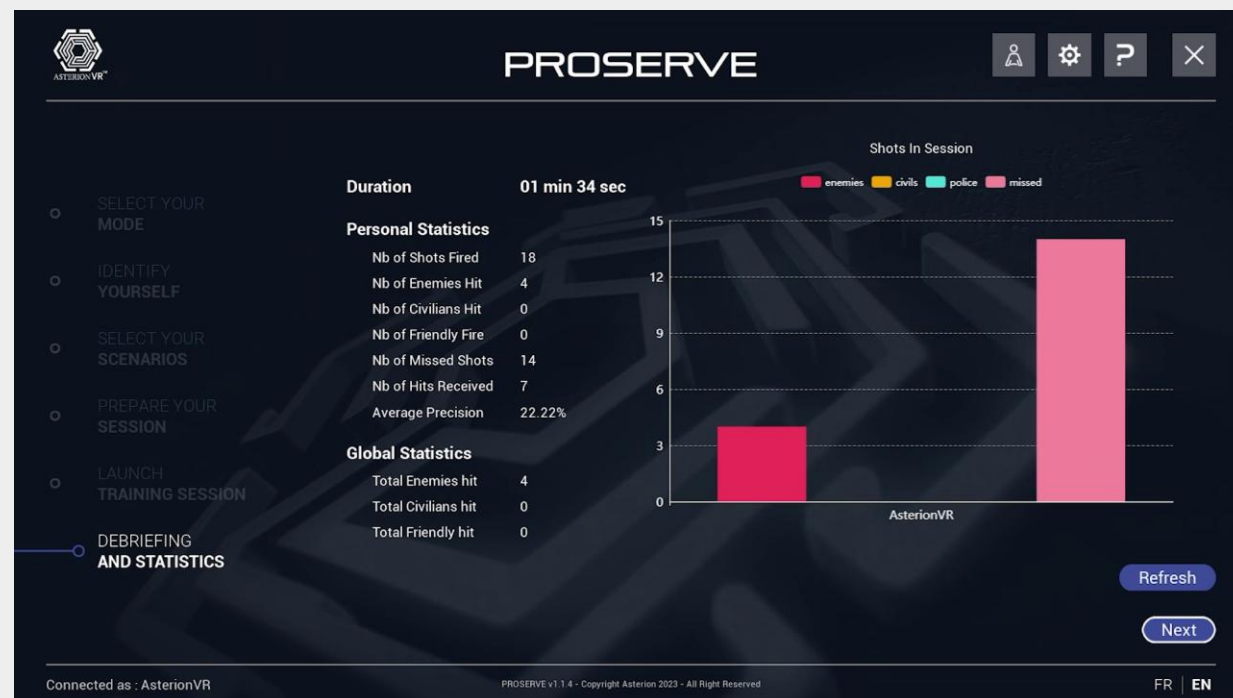
- Follow the mission objectives



# END OF MISSION



- Depending on the scenarios, you will either be asked to remove your helmet if the objectives are reached or a stopping condition has been caused (death in the simulation for example), or you will make the decision yourself to stop it (free shooting in the shooting range for example will not stop on its own)
- In both cases, take off your headset and press the ESCAPE button on the laptop
- A debriefing screen will then be displayed with the statistics related to the scenario





# USE OF PROSERVE

Multi Trainee Pack + Server

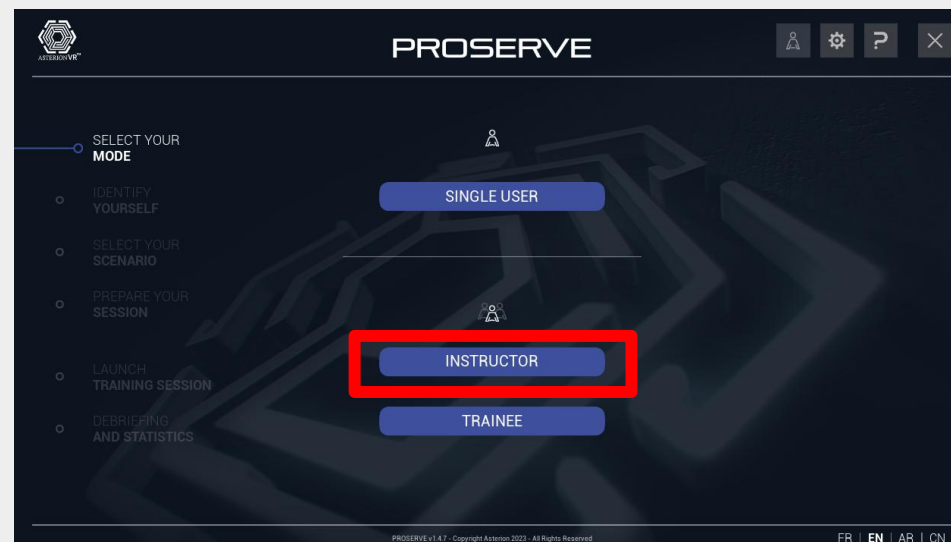


# LAUNCH PROSERVE

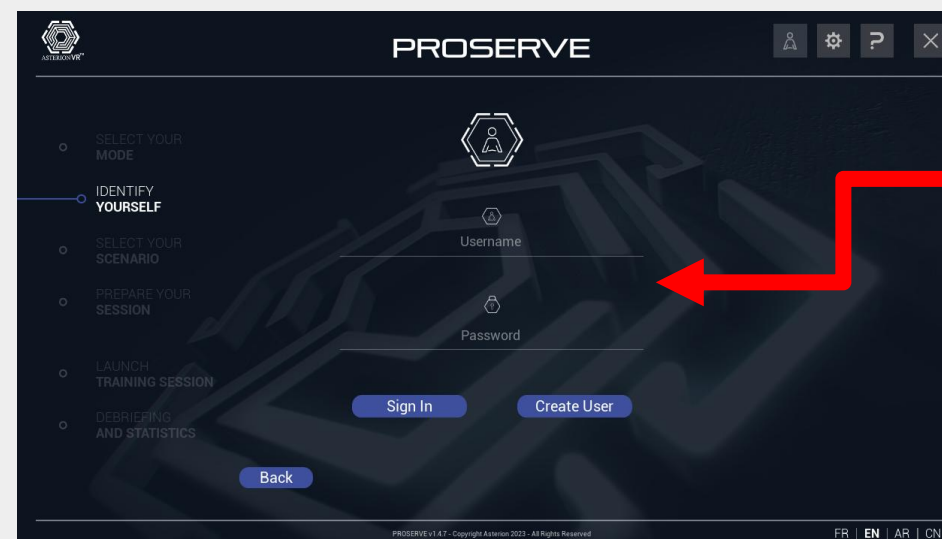
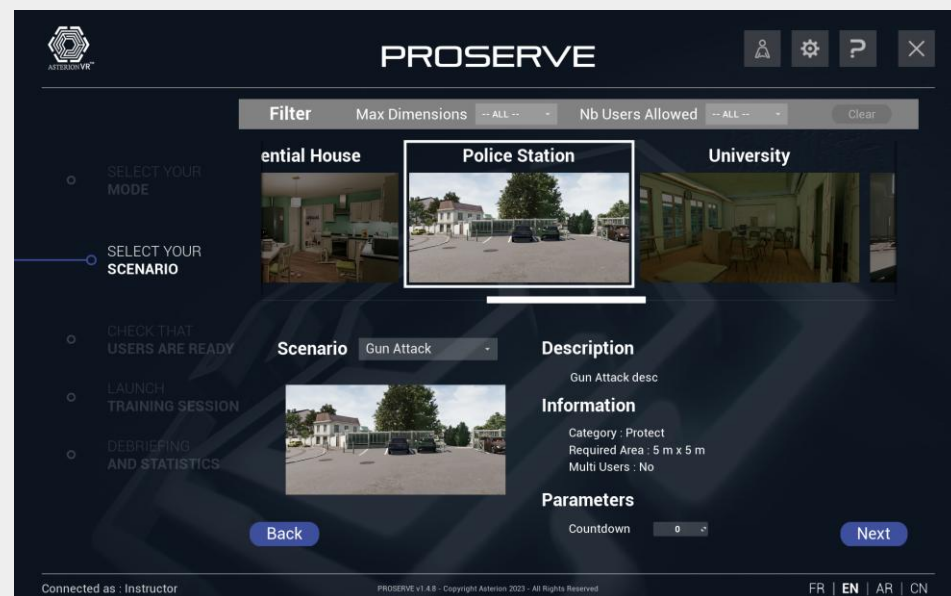


- Launch PROSERVE on SERVER and All Trainee Pack, Login on trainee Pack

## SERVER



## TRAINEE PACK



Enter your credentials : Login and Password

Important : if you previously used the system alone you may have recreate your account

As you are connected to server, the database used will be the server one

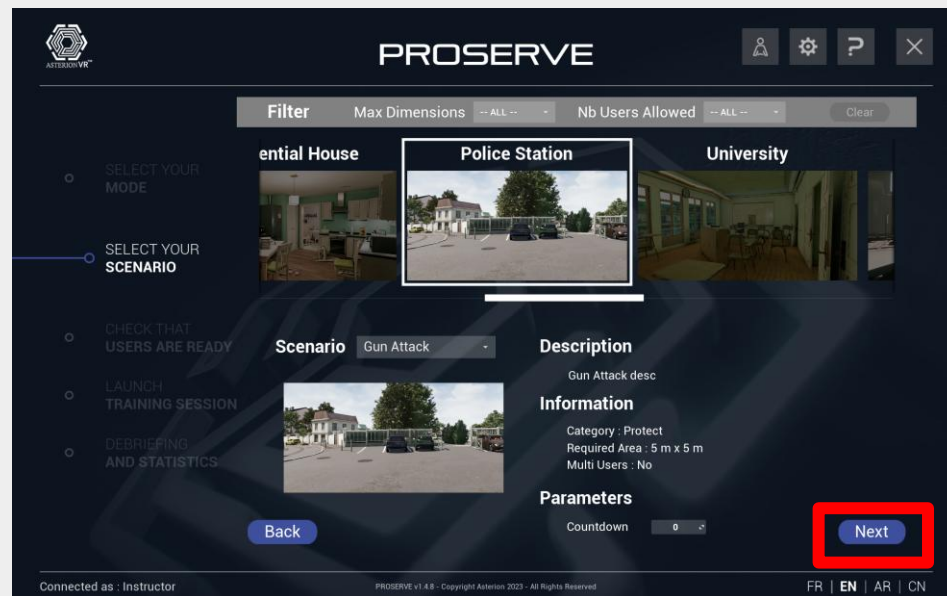
If you use the trainee pack again, your account will be accessible same way as before

# SCENARIO CHOICE

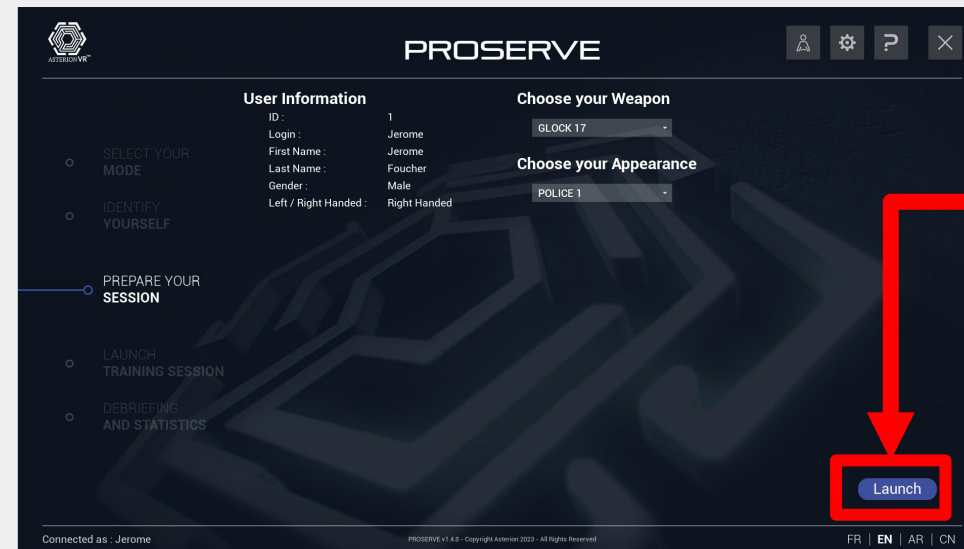


- Select Scenario On Server, trainees can change their equipment and character meanwhile

## SERVER

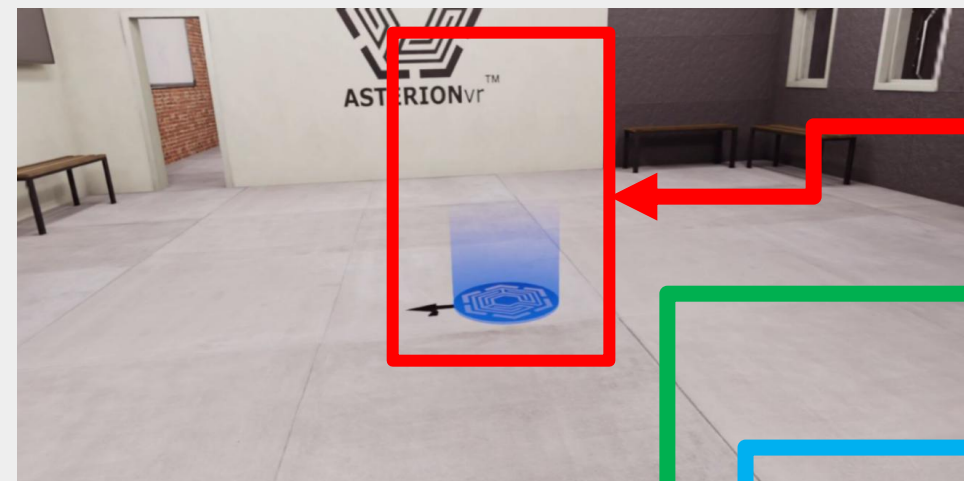
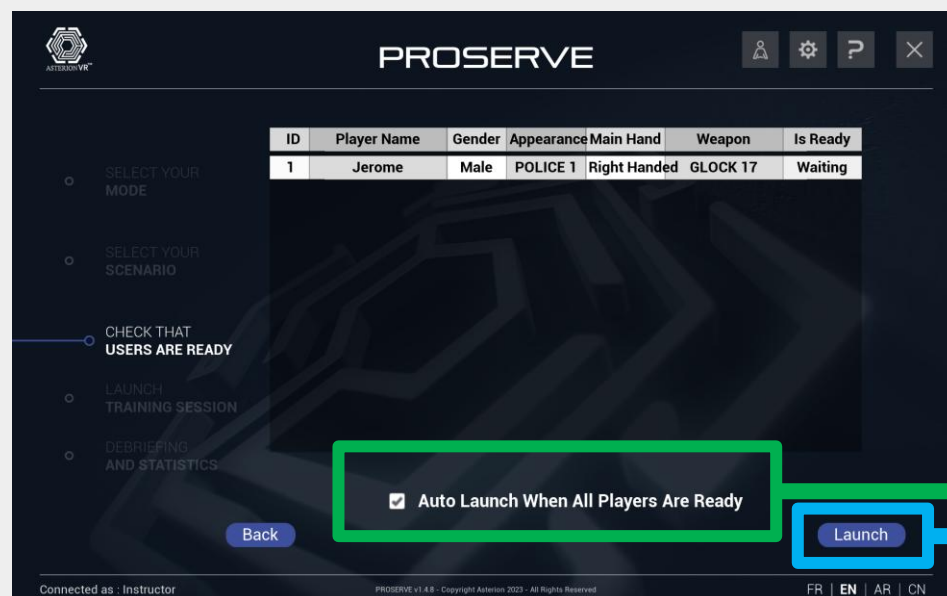


## TRAINEE PACK



In MultiUser, the Launch button on the trainee pack don't launch the scenario itself, Server is responsible of this.

This button switch to a VR waiting room allowing them to place themselves at the right place for each scenarios



Place yourself in the blue zone and wait for the end of the countdown

If auto Launch option is selected on the server, the scenario will launch when all trainee are in their start zone

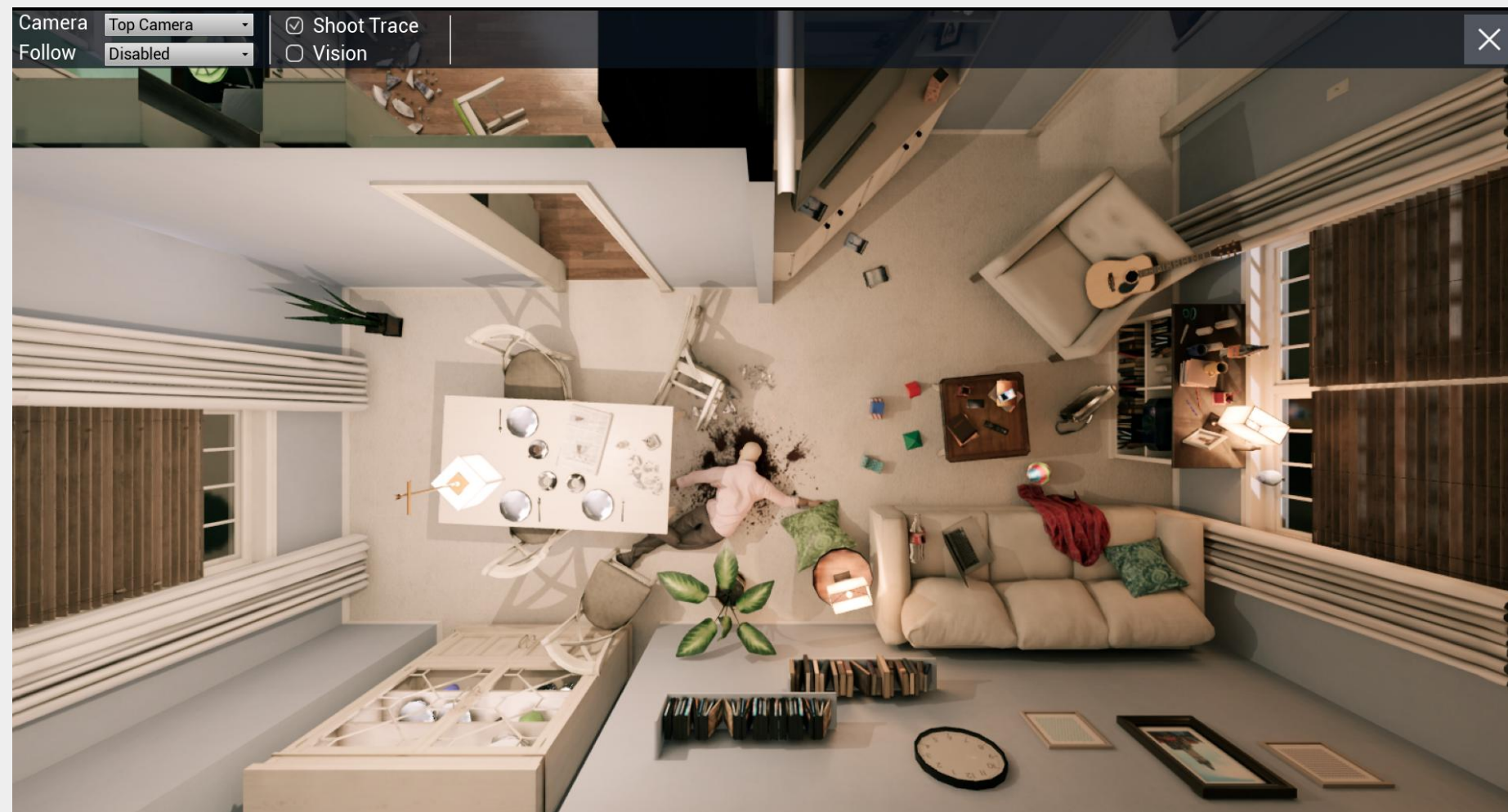
You can also manually launch the scenario with the Launch Button on the server

Trainee will be transported in new environment after a loading time

# Follow Mission on Server



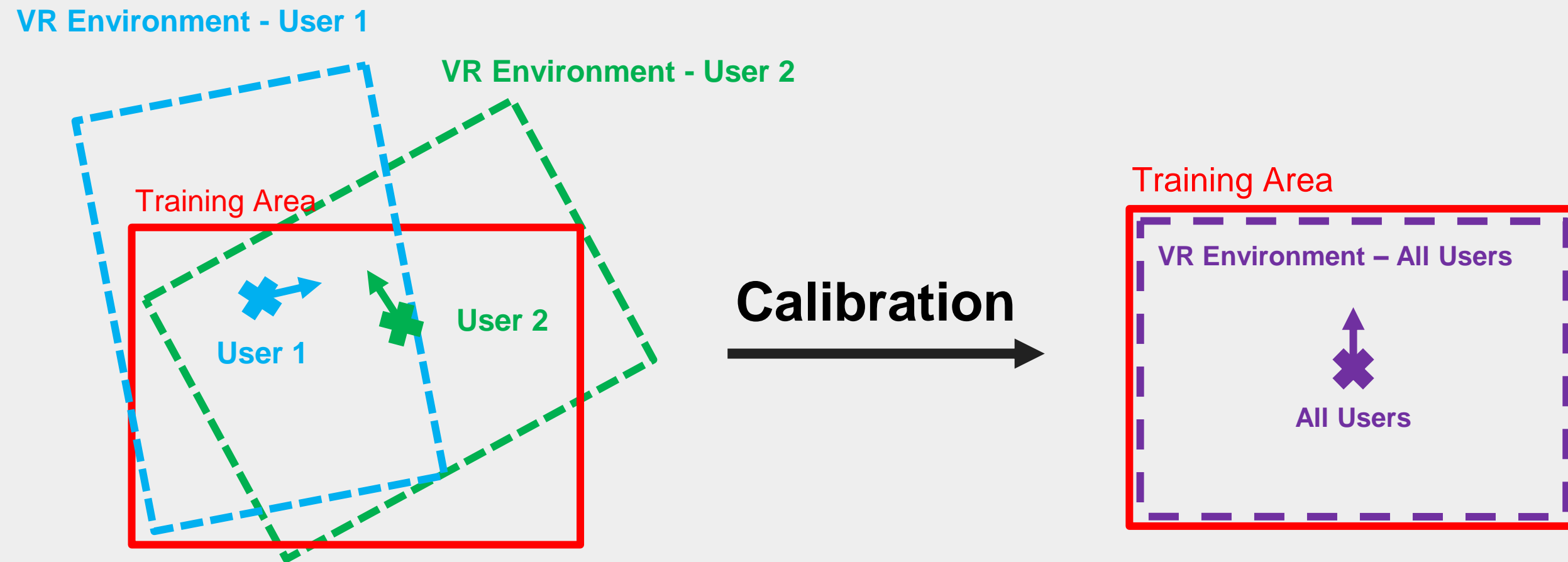
- Each trainee Pack show realtime view of trainee
- When using server you can have additional views (Free camera, Top camera, ...)
  - Use keyboard and trackpad (or mouse) to change position and point of view
  - Server can force end of scenario



# MULTI-USER CALIBRATION



- Each user needs to **share the same calibration** to enable cooperative scenarios within the same VR space.
- **Each trainee have to calibrate**
- PROSERVE provide **method and tools** to help precise calibration



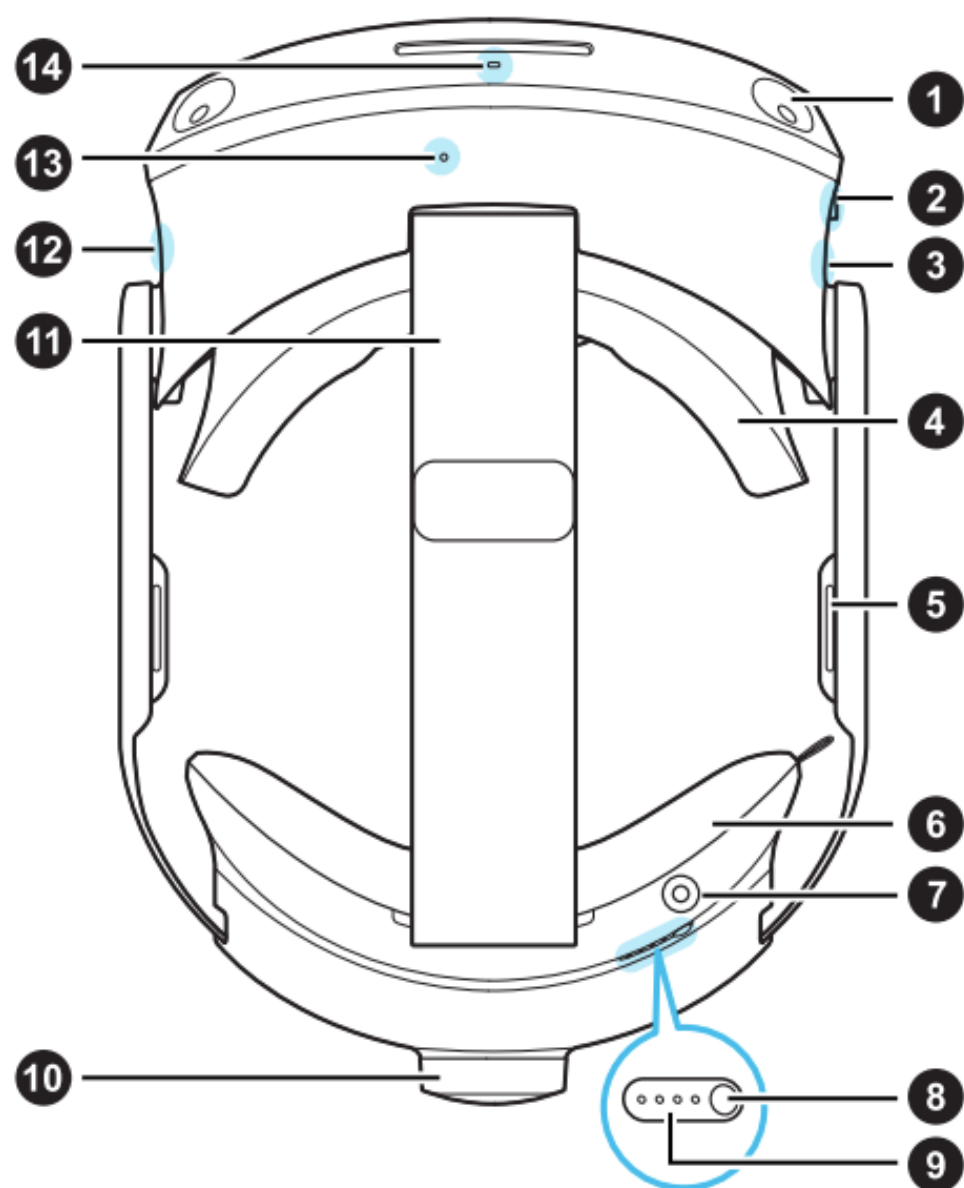


## HELMET USE

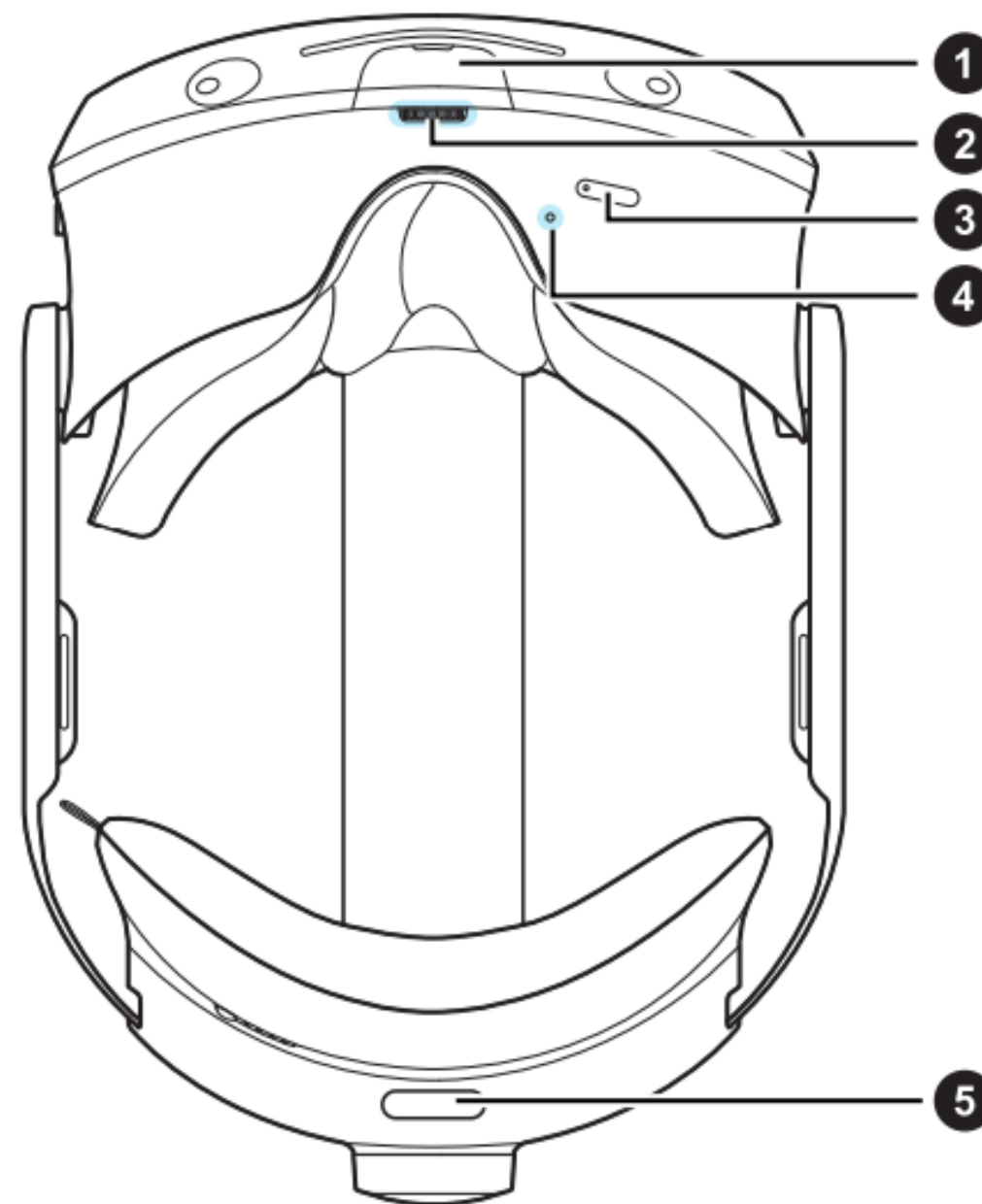
Official Documentation: [Vive Focus 3](#)



# OVERVIEW



- 1 Headset camera (4x)
- 2 3.5mm audio jack
- 3 USB Type-C® port
- 4 Face cushion and frame
- 5 Built-in speaker
- 6 Back pad
- 7 Charging port
- 8 Power button
- 9 Battery LEDs
- 10 Adjustment dial
- 11 Headset strap
- 12 Headset button
- 13 Microphone
- 14 Headset LED

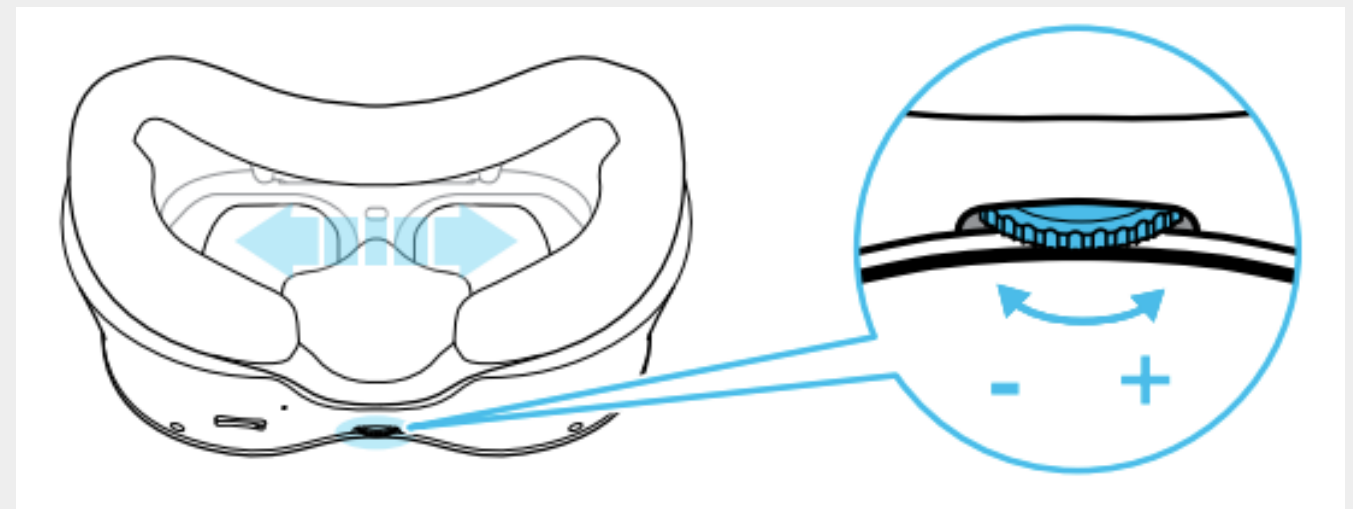
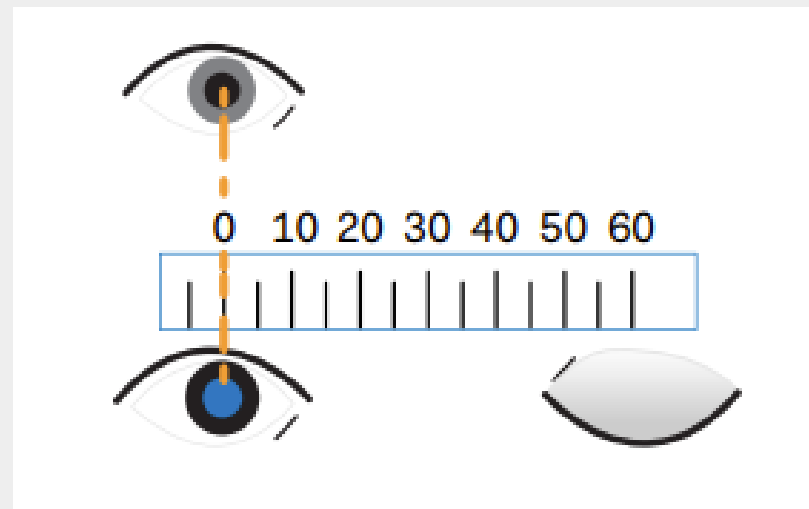


- 1 USB Type-C port (remove cover)
- 2 IPD dial
- 3 Volume buttons
- 4 Microphone
- 5 Quick adjustment button

# ADJUSTING THE INTER-PUPILLARY DISTANCE



- The inter-pupillary distance is the distance that separates our two eyes, it varies from person to person.
- In order to obtain maximum comfort, it is a question of adjusting the spacing of the lenses of the helmet to make it correspond to our pupillary distance.
- It is possible to measure this difference simply with a ruler placed above the eyes in front of a mirror, the knob placed below the helmet then makes it possible to make the adjustment.



# BACK BUTTON OF HEADSET (Battery)

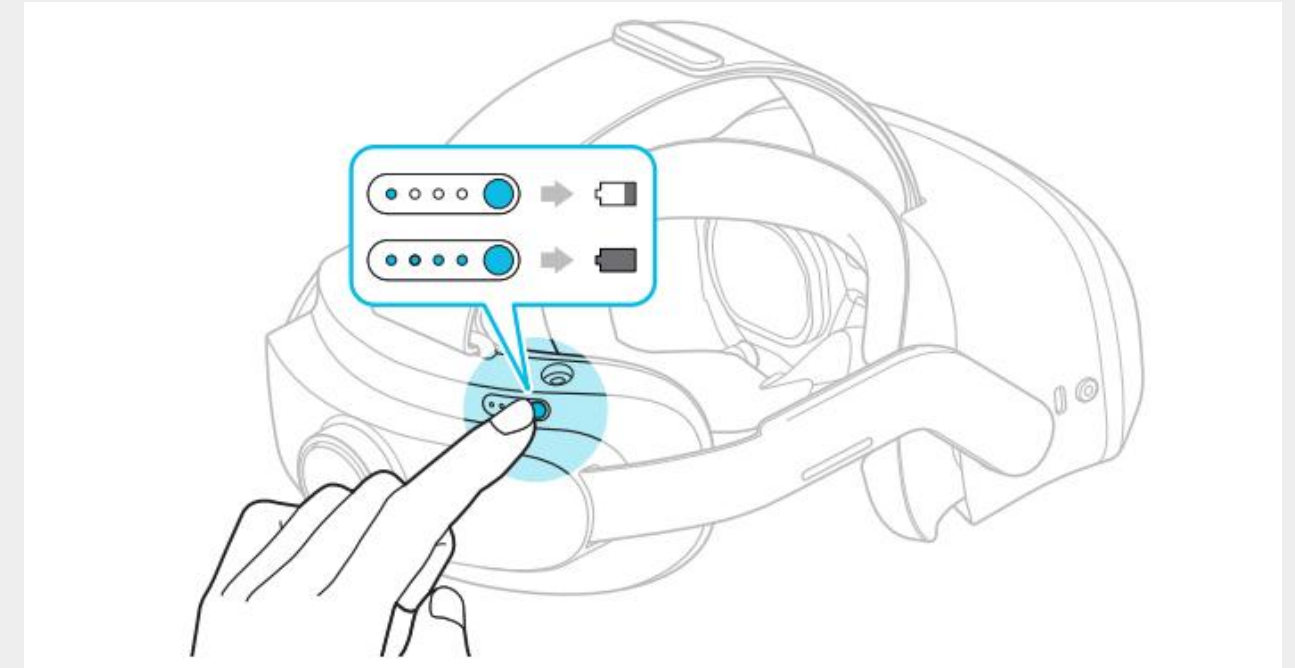


## ■ VR headset Off:

- **Short press:** show battery level
- **Long press:** turn On
  - Vive Logo appear in the VR headset

## ■ VR Headset On:

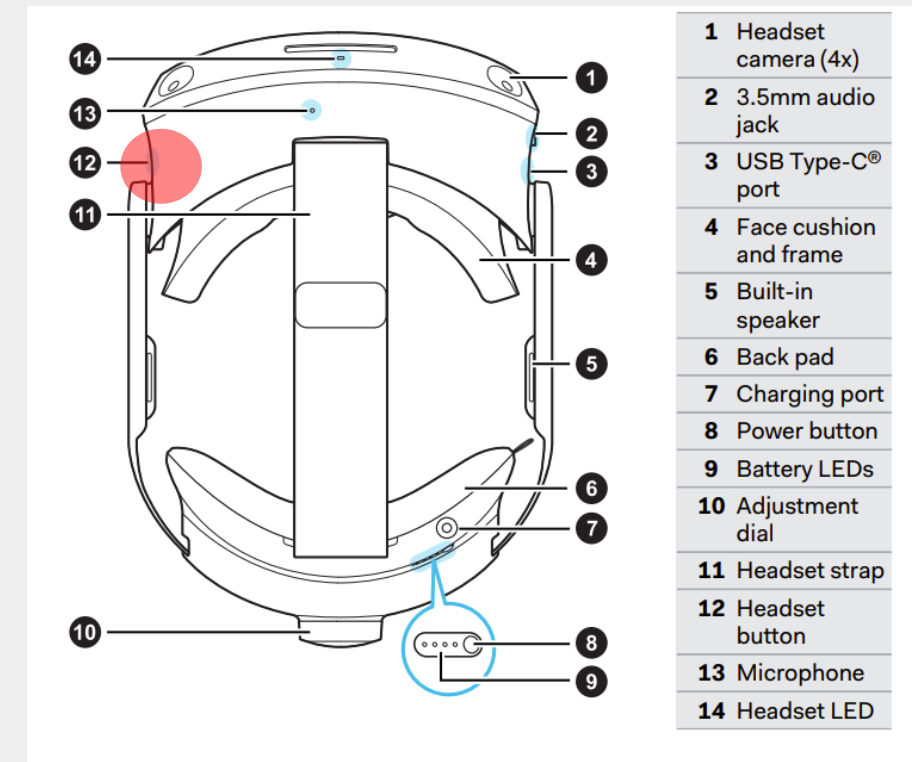
- **Two short and quick press:** Standby
  - The headset AND the tracker go in standby
  - To wake up the headset, remove it from your head then put it again.  
The proximity sensor inside the headset need to see a state change in order to wake up the headset.
  - Power on the Tracker (Weapon and wrist) too
- **Long press :** Power off the headset



# SYSTEM BUTON OF VR HEADSET (Left side)



- **Short press:** Show the application menu
  - Kiosk mode may prevent the use of this fonctionnality
  
- **Two quick and short press:** Camera Mode
  - Same interaction to come back to VR view
  
- **Long Press (5s):** Show the kiosk mode menu
  - Allow to quit the kiosk mode in order to access to main User interface of the headset for advanced settings (Wifi, Bluetooth pairing of trackers, ...)



# TRACKERS BUTTON AND LEDS



## ■ Power Button

- **Short press:** Power on the tracker,  
One of the Led (R or L) should become green
  - If the two Leds are blue, it means that there is no bluetooth link between the headset and the tracker
    - Check that the headset is ON
    - You have to pair the tracker again (Quit kiosk mode in vr headset, Go To Settings->Input->Pair Tracker)
- **Long Press:** First go in Pairing mode (Blinking blue LED)
- **Even Longer Press:** Power off the tracker
  - If you want to Pair the tracker, you have to release the button when Leds begin to blink, before the tracker power off
    - If tracker go off, power on again and retry
  - If you want to shutdown, don't release before the Leds are off
    - If you release before, tracker will go to pairing mode even if he was not unpaired.



# TRACKERS BUTTON AND LEDS



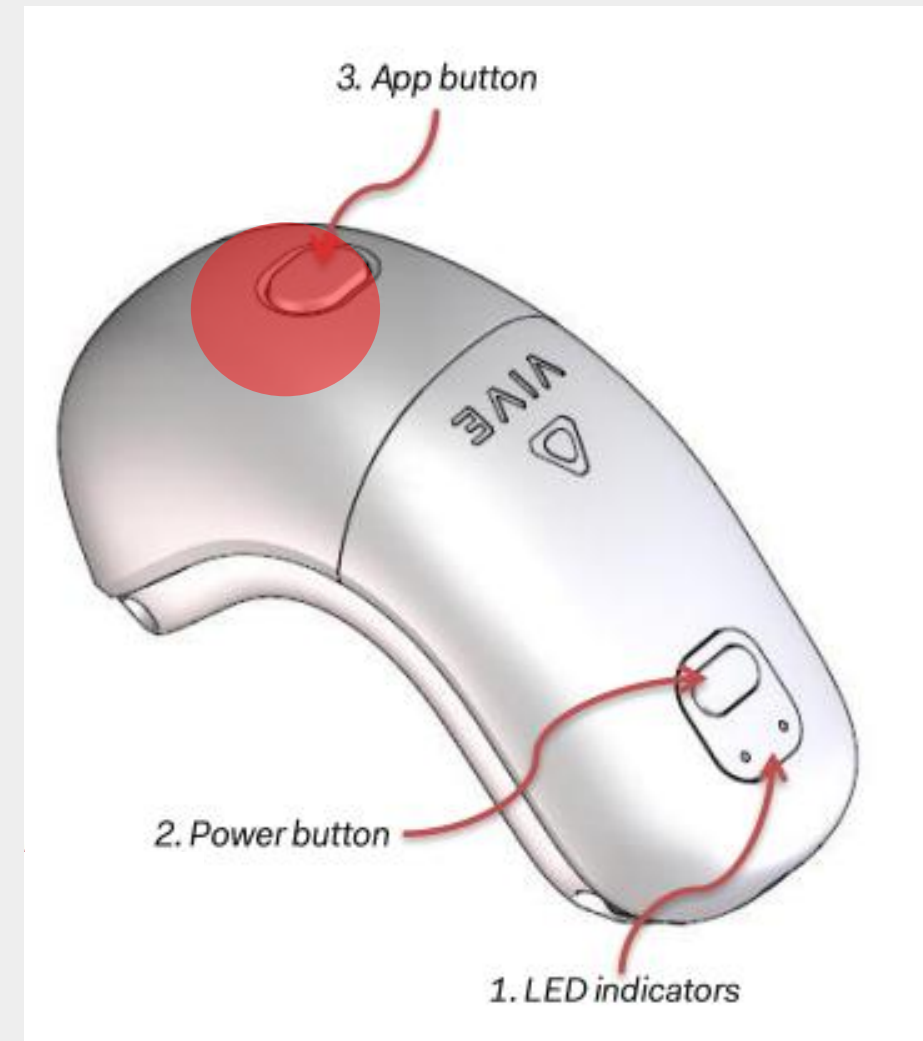
## ■ Application Button : in PROSERVE

### ■ Short Press: Simulate a shot when you are in a scenario

- Usefull to check that all is correctly working
- Real shot is binded to this button

### ■ Long Press: In a scenario, activate the calibration Process

- Then short press to validate the new center position and orientation



# TRACKERS BUTTON AND LEDS



## ■ App Button + Power Button

### ■ Press both buttons at the same time

- Switch the role of trackers Right <-> Left
- Allow to the system to be used by left handed people
- To use Proserve in Left handed you also have to setup your profile as Left Handed in PROSERCE

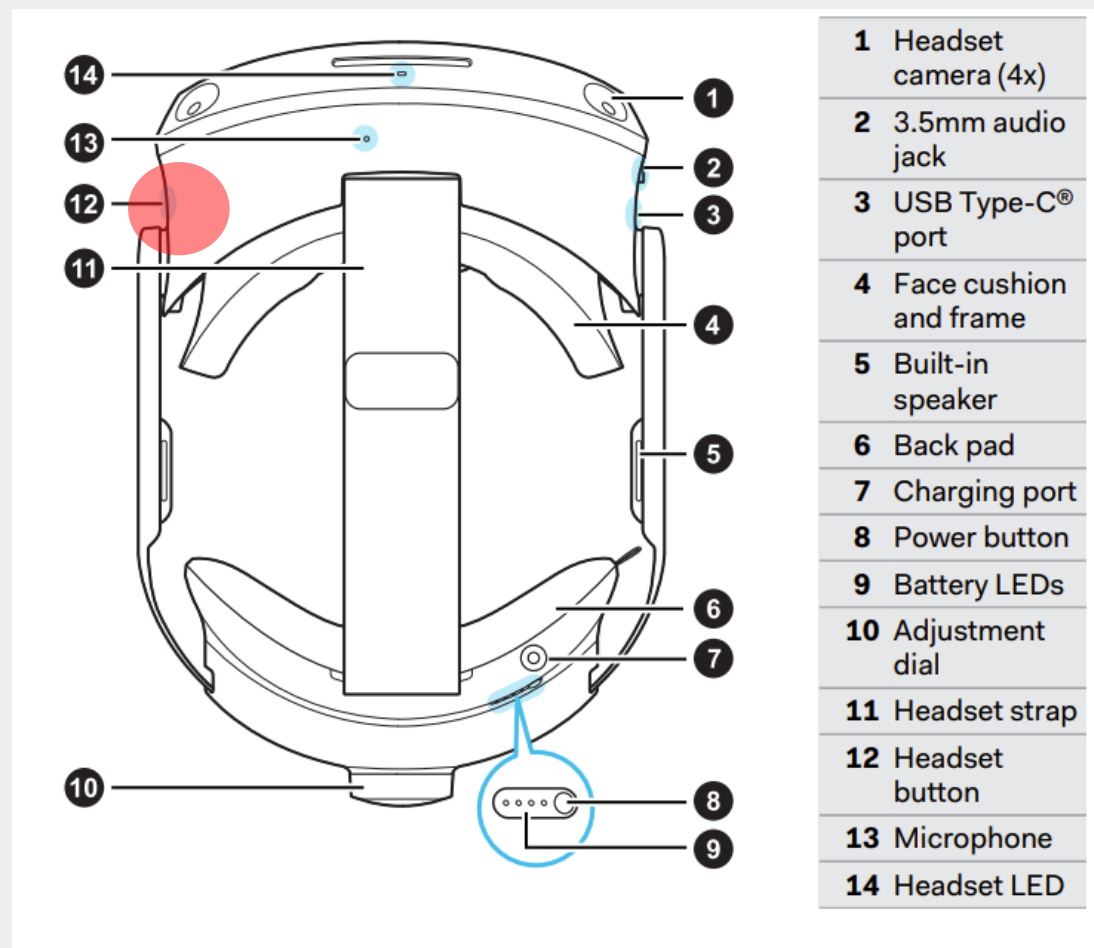
INFORMATIONS	STATISTICS	REPLAYS
ID:	38	
Login:	Jerome	
First Name:	Jerome	
Last Name:	Foucher	
Gender:	Male	▼
Left / Right Handed:	Left handed	▼
Default Weapon:	HK VP9	▼
Default Appearance:	POLICE 1	▼



# CAMERA VIEW

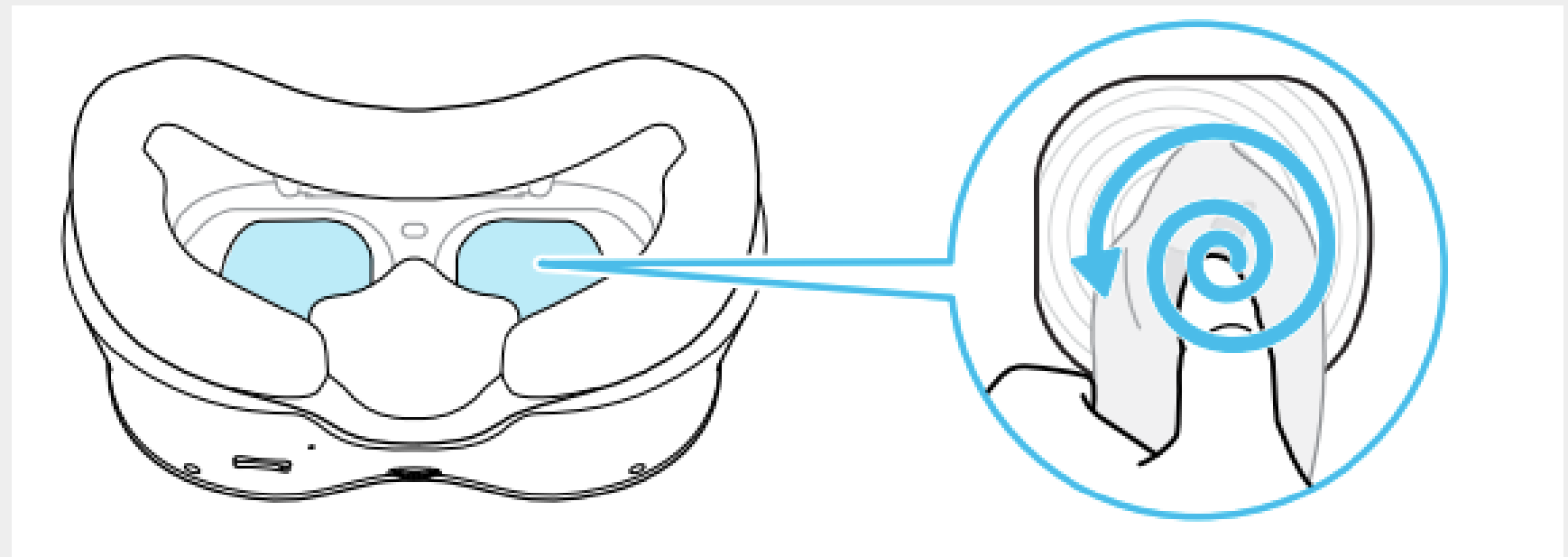
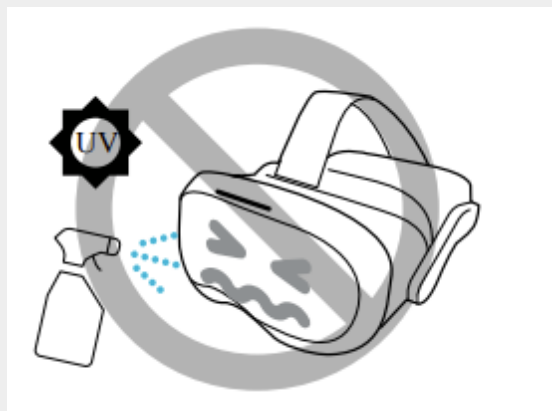
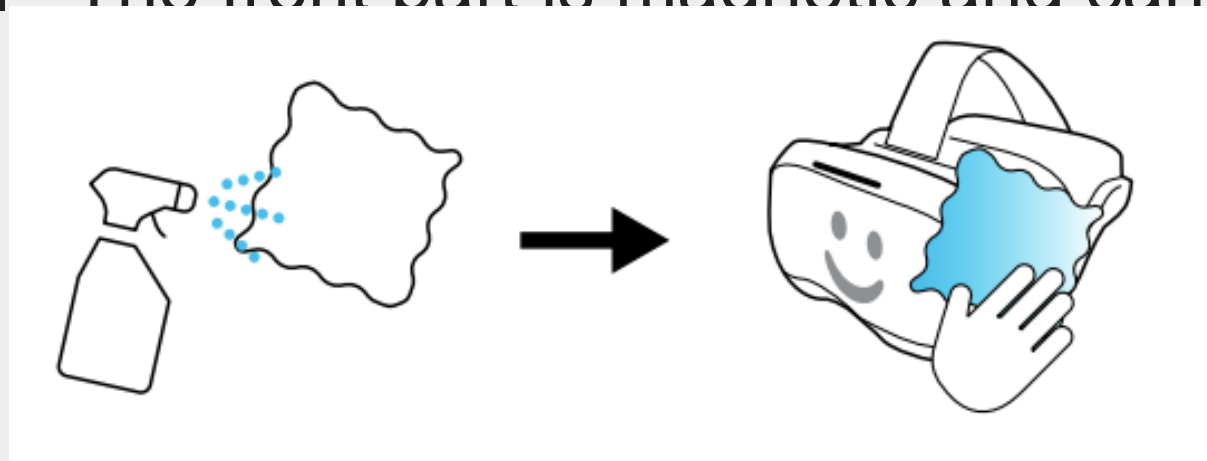


- The headset allows you to see the real environment using the cameras, this is particularly useful when you need to move around without removing the headset
- Switching to camera mode is done by making two short presses quickly on the system button on the left of the headset



# HELMET CLEANING

- The external parts can be cleaned with a cloth soaked in 75% diluted alcohol.
- The cleaning of the lenses must be done with a dry microfiber cloth so as not to scratch the lenses or damage them with a product that is too corrosive
- Do not spray cleaner directly on the helmet
- The front part is magnetic and can be easily removed for easier cleaning





# ADVANCED HELMET USE

Official Documentation: [Vive Focus 3](#)

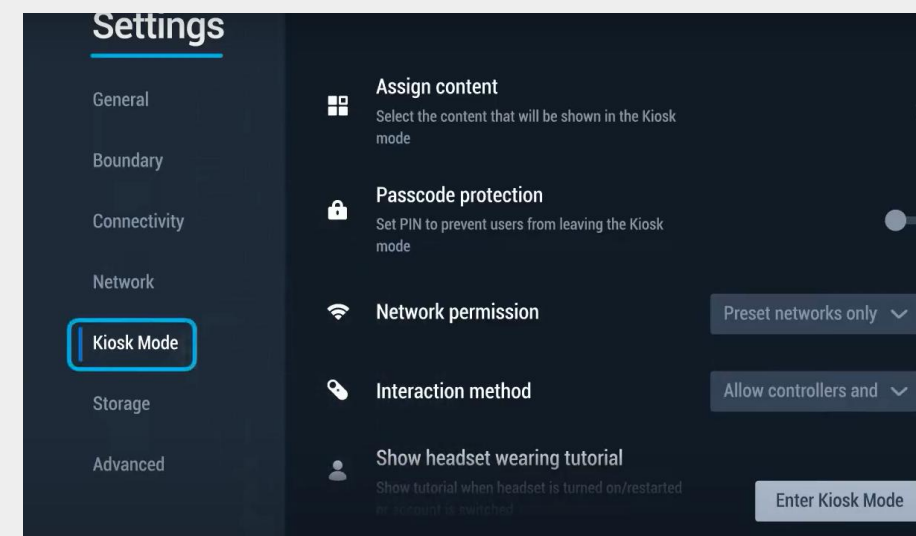


# KIOSK MODE



- Kiosk mode is a features of the VR headset that **automatically launches an application** at power on and prevent user to access advanced configuration of the headset
- In some cases, however, it is necessary to **quit kiosk mode** change settings or to fix some issue :
  - Pairing new trackers
  - Changing the WIFI connection
- To **exit kiosk mode**, it is necessary to make a **long press on the side button of the headset**.
  - A menu then appears offering us to leave the kiosk mode
  - Aim the option with one of your hands, a laser pointer will help you, and pinch with your index finger and your thumb to select this option

- You can then **relaunch kiosk mode** :
  - Settings -> Kiosk Mode -> Enter kiosk mode
  - Don't set PIN code, as you may forget it



# HAND TRACKING



- Interaction with headset UI is done with Hand Tracking Features
  - You can aim an option with your hand, the targeted position is represented by a virtual “laser” which end with a circle
  - Then, the selection is done by pinching with his index finger and his thumb, so leave his two fingers wide apart during other movements
  - Navigating the menus sometimes requires scrolling a page, in this case pinch with two fingers and move your hand leaving them pinched



# PAIRING TRACKERS



- Although it is relatively rare, it happens that the trackers (wrist and replicas) can become unpaired from the helmet.
- If the LEDs are blue then you need to re-pair the trackers in question
- The trackers work via Bluetooth, here is the procedure to re-pair them:
  - Exit kiosk mode
  - Go to settings via the icons at the bottom of the floating menu
  - Select “Input”, then Controllers
  - Select pair on unpaired tracker
  - Long press the button with the tracker LEDs until it flashes blue
  - Depending on the role of the tracker (Right or Left) one of the two LEDs should turn solid green, the other tracker will take the other role
  - You can reverse the role of the trackers by pressing both buttons on one of the two trackers simultaneously





# CONNECTION CODES



# TECHNICAL INFORMATIONS



## ■ Windows Session :

- Login / Password: AsterionVR / Control35

## ■ IP Address

- Router : 10.0.4.1
- Server Kit : 10.0.4.100
- Trainee Kit : 10.0.4.101, 10.0.4.102, 10.0.4.103, etc...
- Headsets : 10.0.4.151, 10.0.4.152, 10.0.4.153, etc...
- Headset 1 (10.0.4.151) will be binded to PC 1 (10.0.4.101), etc...

## ■ Router :

- Session : Admin / AsterionBB35
- SSID WIFI : PROSERVE-6G
- WIFI Password (WEP3): Control35



ASTERION VR™

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