VSET3D

STUDIO

User Guide

Rev 1.0

Contents

INTRODUCTION

Vset3D Studio

Vset3D Studio offers a true 3D virtual environment where you can greatly enhance the production value of your project. Our powerful and versatile software allows you to use a wide range of lighting effects and camera controls within every virtual studio offering.

All you need is a few yards of green material as a backdrop, a good light source, and a camera to record or stream your video footage.

Once you have the footage on the computer running Vset3D Studio, you can adjust the video keying to remove any of the green from the shot leaving only you or your subject placed in the virtual studio.

We provide amazing and professional results at a fraction of the cost to create a similar production in the real world. Best of all, we can do this real time!

Use our software for your live production.

Our software allows you to set several different positions for your virtual camera. These positions can be changed giving the appearance that you have a several camera shoot. The amazing thing about this is that it only requires one camera to get these results.

To use Vset3D's ray tracing and DLSS options, you must use an NVidia RTX graphics card. Vset3D can be run on an AMD card, but ray tracing and DLSS will not be available.

Vset3D can be started in DirectX11 or 12.

Ray tracing and DLSS are only available in DirectX 12 mode.

Vset3D Studio versions Features

Which Graphic card ?

About hardware

1. ABOUT VSET3D STUDIO

Vset3D is a DirectX 64 Bits software built for Microsoft Windows 10 or 11.

Vset3D can also be started with command line arguments:

- **-monitor N** Run Vset3D on specified monitor; N = monitor number
- **-screen-height** Set the screen height resolution
- **-screen-width** Set the screen width resolution
- **-force-d3d11** Start Vset3D Studio in DirectX11
- **-force-d3d12** Start Vset3D Studio in DirectX12
- **-window-mode** Force Vset3D in resizable windows mode
- **-screen-fullscreen** Force Vset3D in full screen

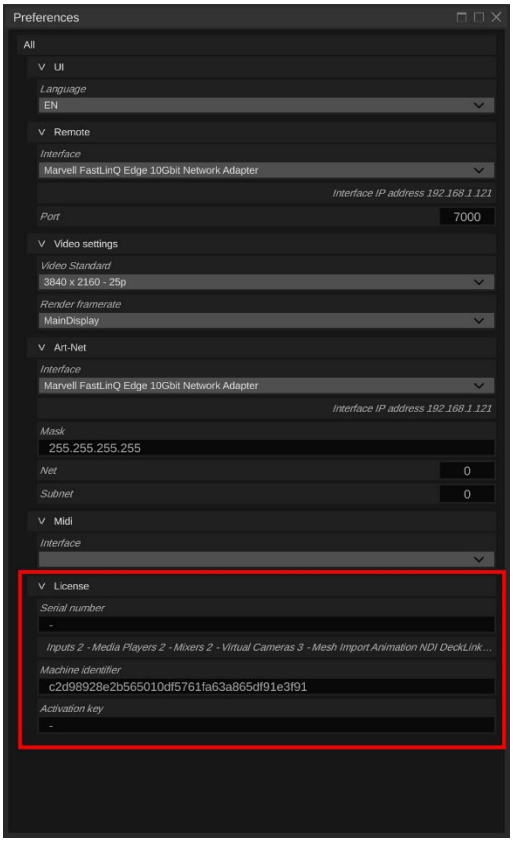
This starts Vset3D in DirectX11 >> **STUDIO.exe -force-d3d11**

2. LICENSE

Vset3D studio license is a lifetime license for one computer. The change of computer is allowed within the limit of 4 per year.

Licensing Vset3D Studio

- Open the Settings menu
- Go to License section
- Send the **Machine Identifier** to Info@vset3d.com to get the Serial and Activation Key
- Enter the serial number and the activation key sent you.

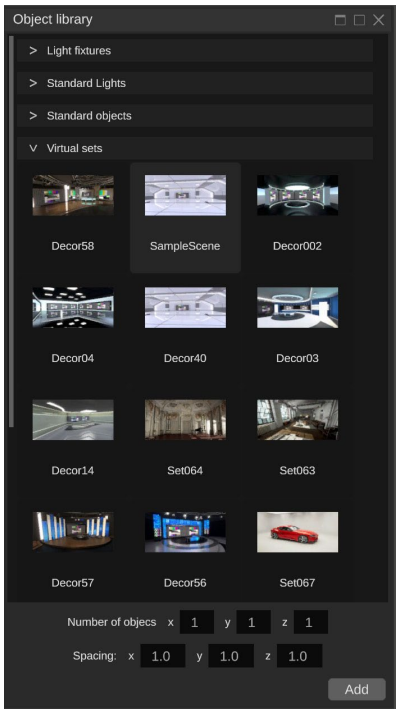


3. QUICK START

Quick Start

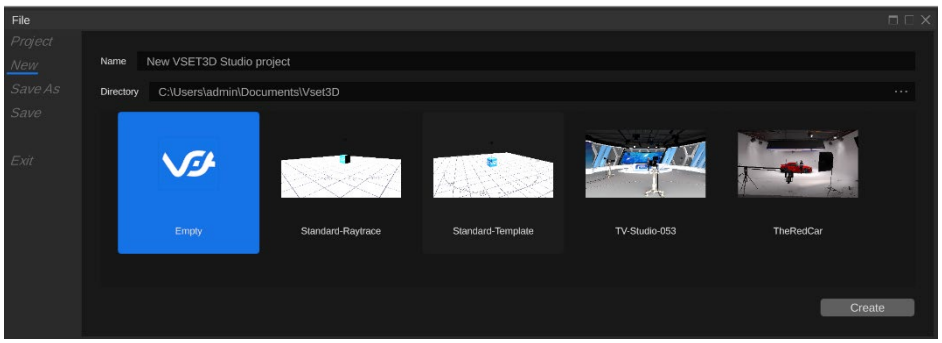
Loading a template :

1. Open Library window
2. Select **Virtual Sets**
3. Select the template
4. Press Add or double click on it



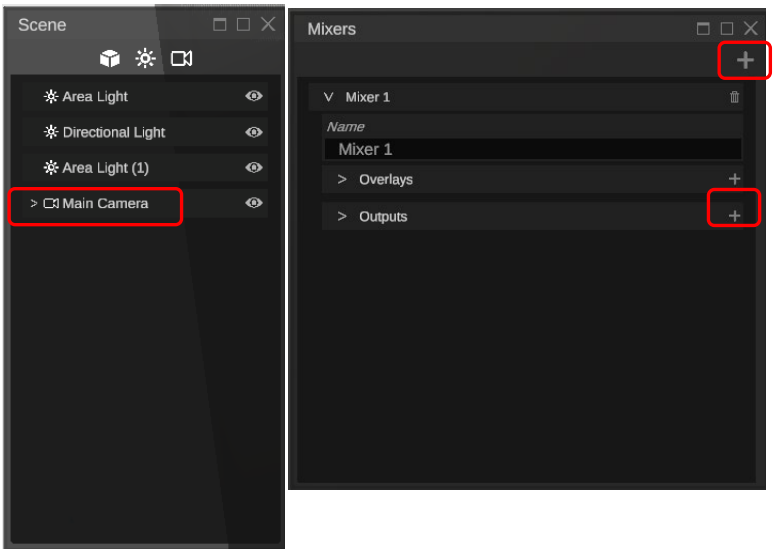
Load Project :

1. Open file window
2. Select New
3. Select your project
4. Select Create



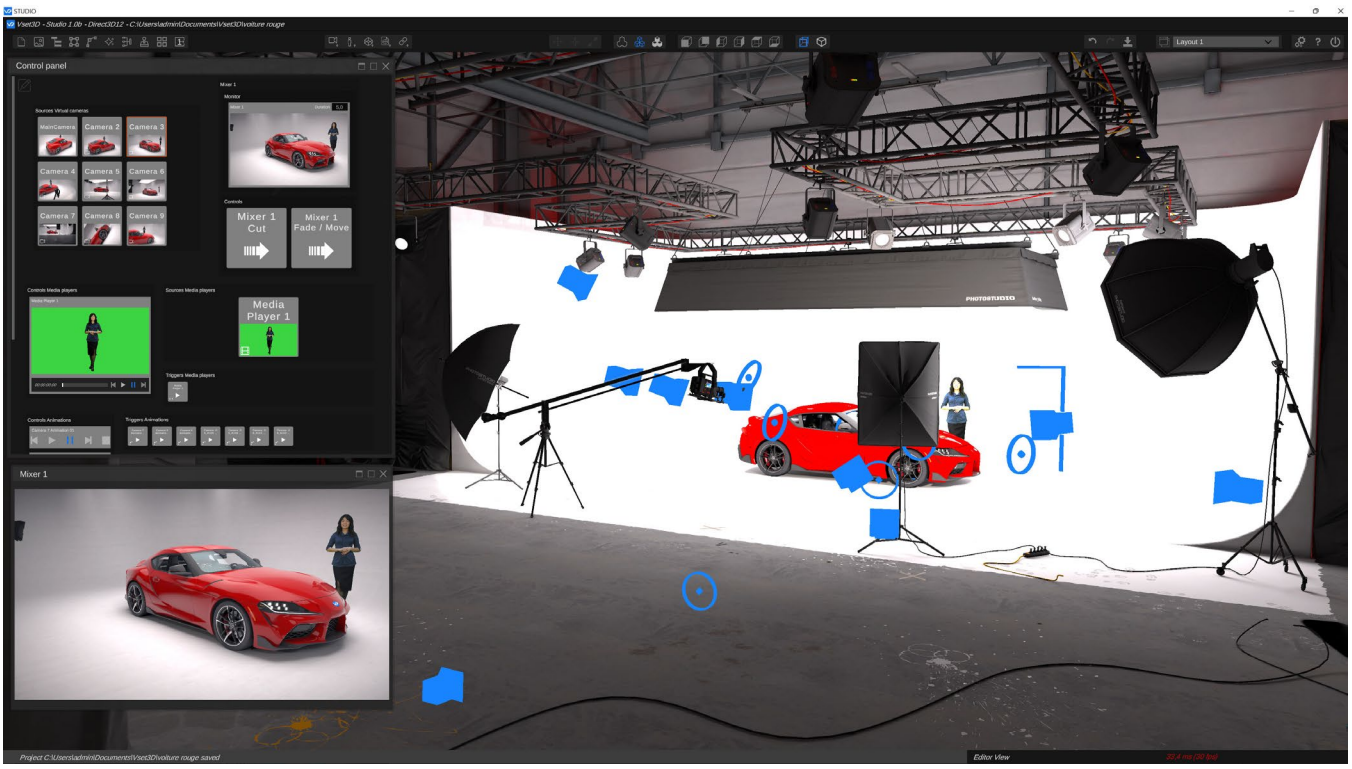
Add Output :

1. Create or select one camera
2. Add mixer 
3. Add Output +
4. Open Mixer window to start switching



4. CAMERA SWITCHING

Once you have set all cameras, live inputs and animations you are able to control them from the Control Panel window.



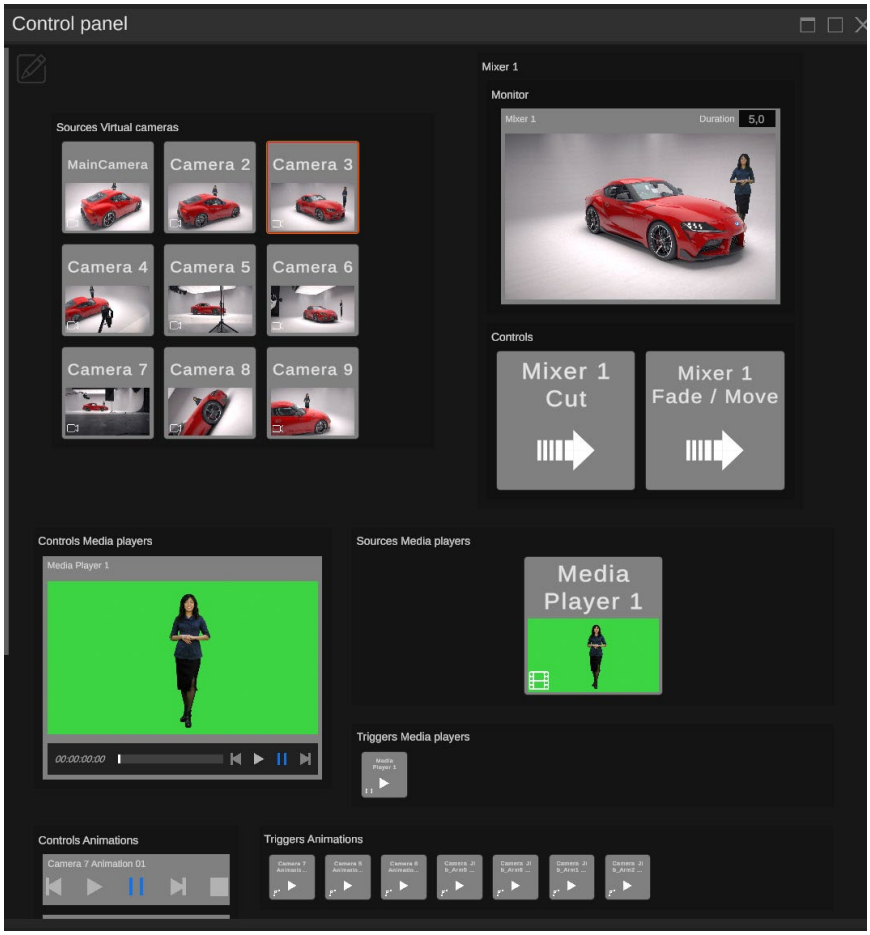
How to work with the Control Panel

There are three ways to use the control panel.

- The Mouse
- The Keyboard
- Network / Stream Deck / companion …

Mouse Camera switching:

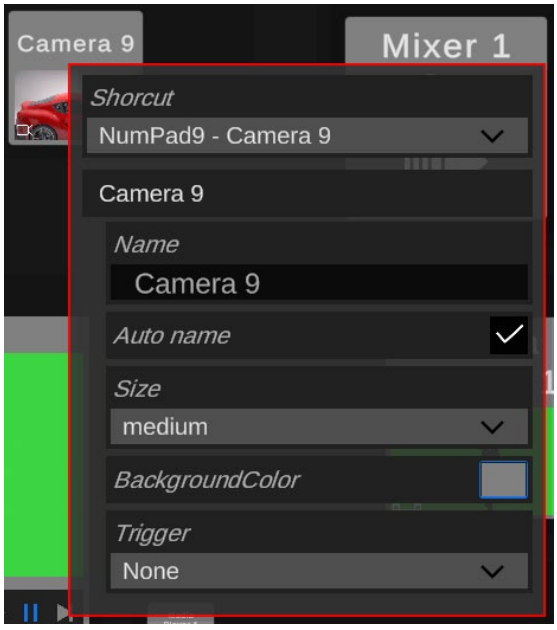
1. Click with your mouse on the button corresponding to the camera you wish to switch
2. Click Mixer Cut or Mixer Move to start switching or movement



The transition speed can be set with the Monitor Duration value (1 = one second)

Keyboard Camera switching:

- Make sure you have a number pad on your keyboard.

When you create cameras or inputs, Vset3D Studio automatically adds the corresponding button with its shortcut in the Control Panel You can use Right click to modify settings of any button **Shortcut:** Define the Keyboard key which preselects the camera **Name:** Use it to rename the button **Auto name:** Let Vset3D naming the button **Size:** Button size in the Control Panel **Background Color:** Set the button color **Trigger:** launches the selected animation at the same time that the switching	Camera 9 Settings 

To switch camera with your keyboard:

Make sure all Control panel shortcuts are correctly assigned.

1. Press the number corresponding to the desired camera on the numeric keypad of your keyboard.
2. Release
3. Press Enter on the num pad to start the switching

Vset3D allows you to have movement between camera positions.

To start movement:

1. Press the number corresponding to the desired camera on the numeric keypad of your keyboard.
2. Release
3. Press **+** on the num pad to start the movement

Start the Movement

Start the Switching

STREAM DECK AND COMPANION

Stream Deck  Companion 

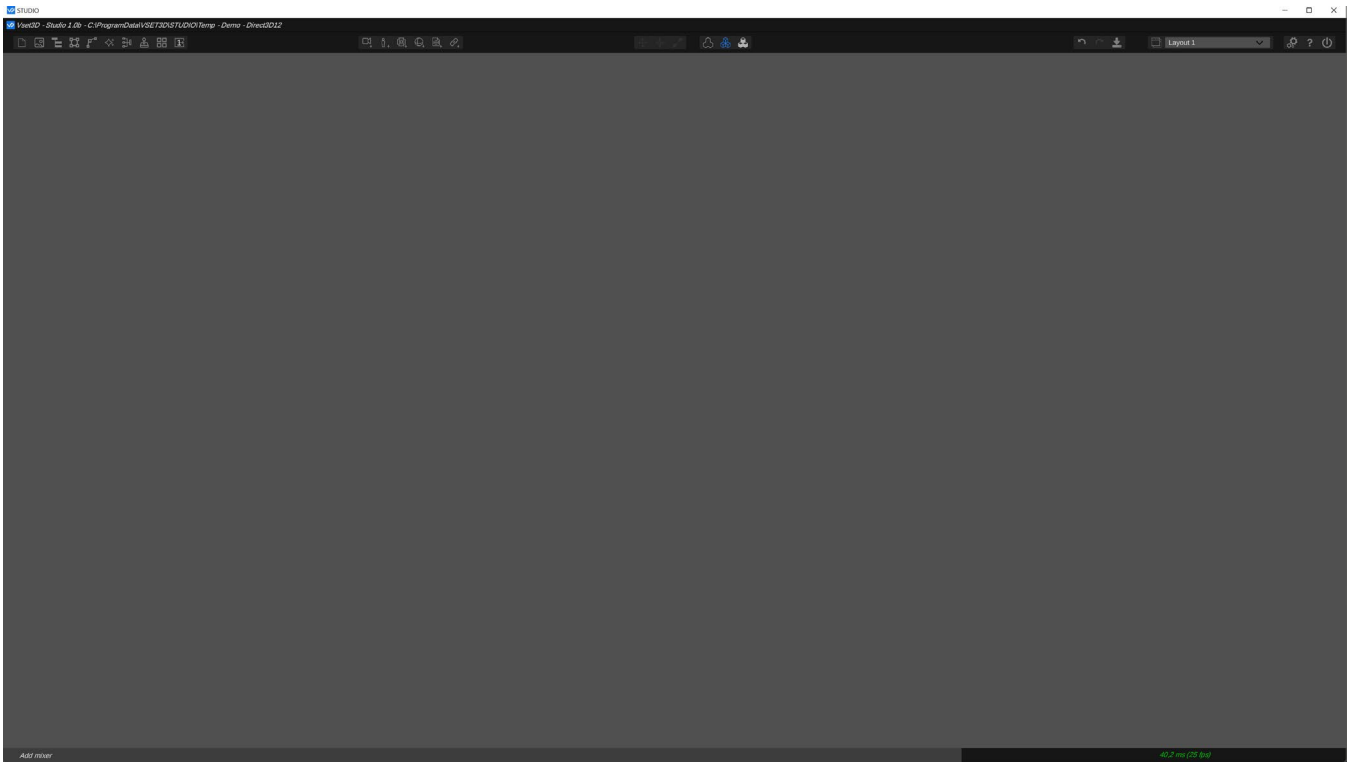
VSet3D Studio can work with Companion and Stream deck or any other device/software able of sending commands over a TCP-IP network.

You can send commands to Vset3D Studio through tcp-udp on Port 7000. Command end character is **\n**

- To select Camera 1 on Mixer 1, use: **setpreview: 0 virtualcamera 0 \n**
- To do a 5 seconds smooth transition to Camera 1on Mixer 1, use: **dotransition: 0 fade 5 \n**
- To do Cut transition to Camera 1 on Mixer 1, use: **dotransition: 0 cut \n**
- To start Media Player 1, use: **mediaplayer: 0 play \n**
- To start Animation, 1use: **animation: 0 play \n**

5. USER INTERFACE

Vset3D Studio User Interface



The user interface of Vset3D Studio is divided into 3 sections. The top section which shows all the tools icons, the middle section which is the 3D editor view, the bottom section which is the statue section.

General Tools Icones

1 2 3 4 5 6 7 8 9 10

1. **File:** Allows you to load and save project
2. **Sources:** Allows you to add live video inputs, NDI, images, media players, to your project
3. **Scene:** Allows you to navigate and select item in your project
4. **Inspector:** Gives you access to the setting of the selected item
5. **Animation:** Allows you to add animation to the selected item
6. **Rendering:** Allows you to add and manage rendering option
7. **Mixer:** Allows you to add live outputs to your project
8. **Camera Remote Control:** Open Camera Remote window
9. **Control Panel:** Open Vset3D Control Panel
10. **Open Mixer1 monitor**

Creation Tools Icons

1 2 3 4 5

1. **Add Virtual Camera:** Allows you to create virtual camera
2. **Add Camera Facing Plane:** Allows you to add plane dedicated to green screen video
3. **Add Item from library:** Allows you to add standard light or fixture, 3D object, primitive
4. **Add Imported Mesh:** Allows you to import single FBX object or full virtual set
5. **Add Group:** Allows you to add dummy objet usefull to group objects in the project

Transform tools Icons

1 2 3

1. **Move** : Allows you to move selected object
2. **Rotate**: Allows you to rotate selected object
3. **Scale**: Allows you to rescale selected object

Editor Quality settings Icons

1 2 3

1. **Editor OFF** : Allows you to turn off 3D editor view to save 3D resources when you are in live.
2. **Editor quality Draft**: Allows you to disable all rendering option available in the Rendering menu
3. **Editor Quality Full**: Allows you to apply all rendering option from the Rendering menu

Editor View Selection

1 2 3 4 5 6 7 8

1. Front
2. Back
3. Left
4. Right
5. Top
6. Bottom
7. Isometric
8. Perspective

Actions Icons

1 2 3

9. **Undo**
10. **Redo**
11. **Save Project**

Layout menu

Allows you to save and manage Vset3D Studio windows position

Settings Icons

1 2 3

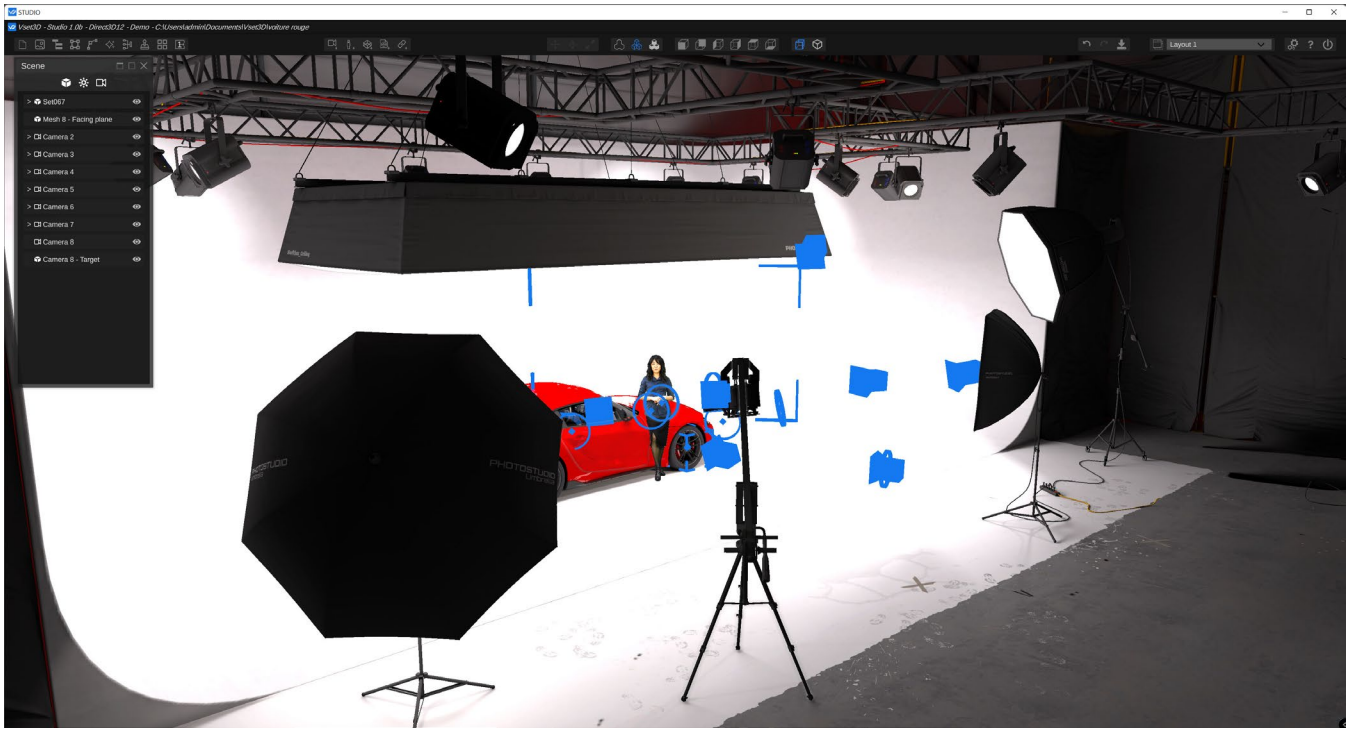
1. **Settings** : Open project settings window
2. Open Help window
3. Open Exit menu

6. 3D EDITOR VIEW

The user interface of Vset3D Studio is divided into 3 sections. The middle section is the 3D editor view.

In this view you will can :

- Add Vset3D library
- Import FBX
- Create animations
- Add and adjust light settings and positions
- Add and adjust cameras positions and settings
- Scale and move objects
- Orient and zoom Editor view



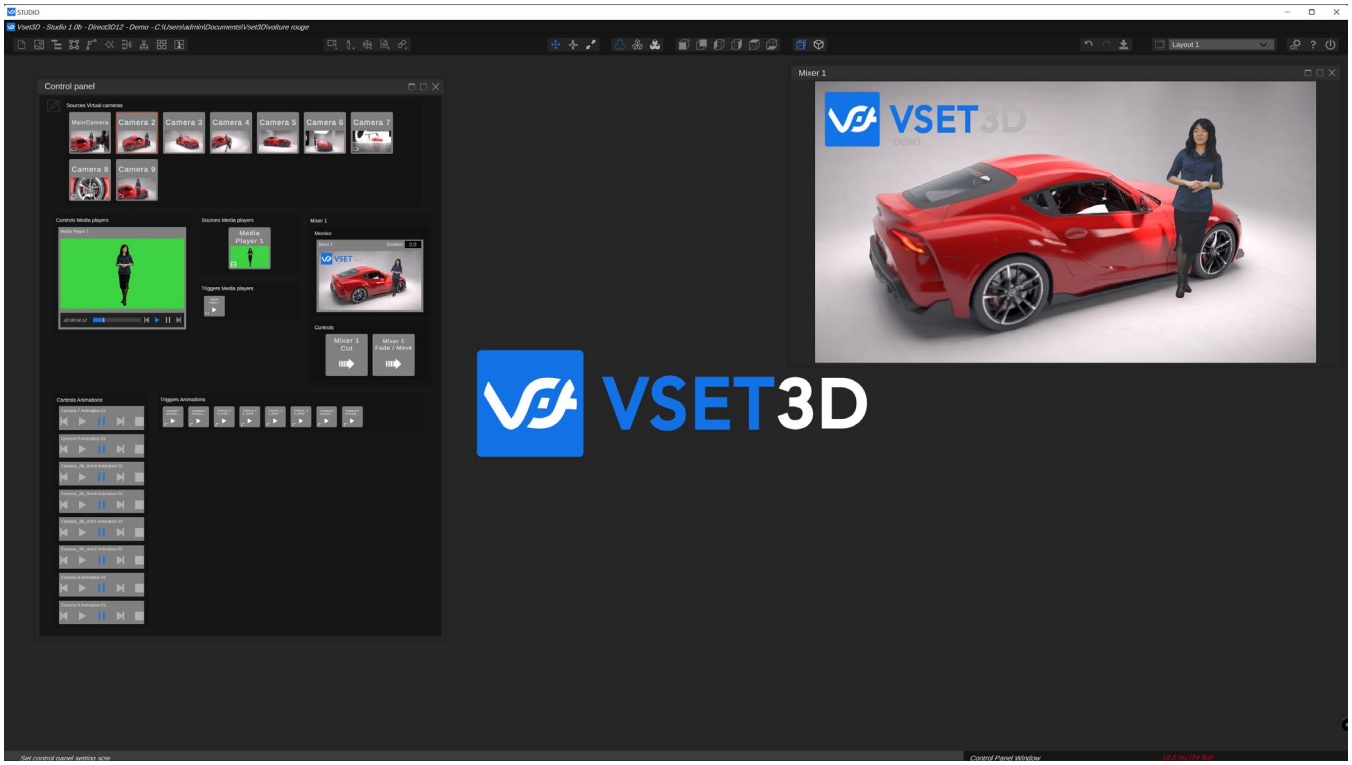
In the editor view your can use **Tab** to **show/hide** all opened windows and **Escape** to **reset** selected window.

 Quality setting icons

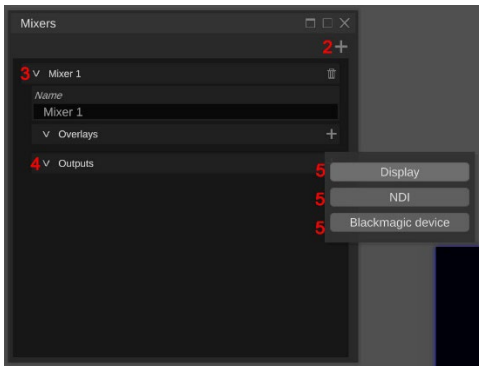
1

Use the number 1 quality setting icon to stop the editor when you are in live, it will save a lot of GPU Resources.

Use the control panel to switch your cameras. The Mixer monitor can be used as program monitor.

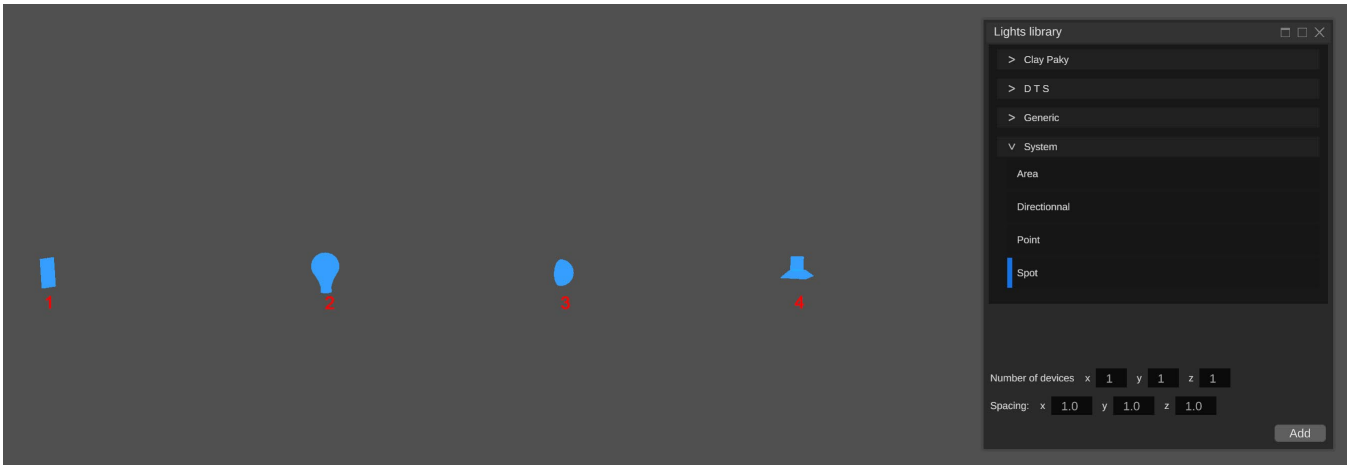


If you have a dual monitor you can assign the mixer output on the 2nd monitor by selecting Display.



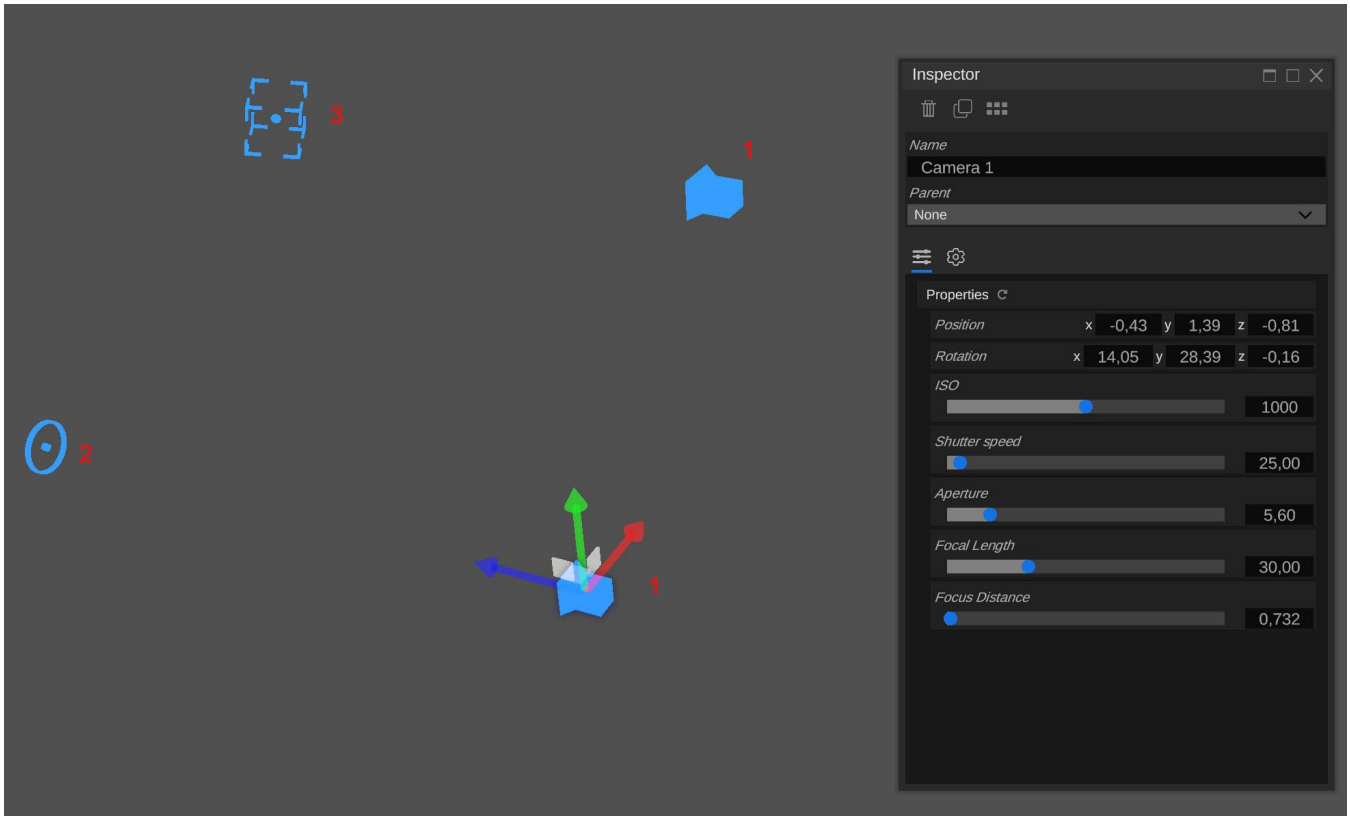
Light Gizmos

1. Area light
2. Omnidirectional Light
3. Direct Light (Sun)
4. Spot Light



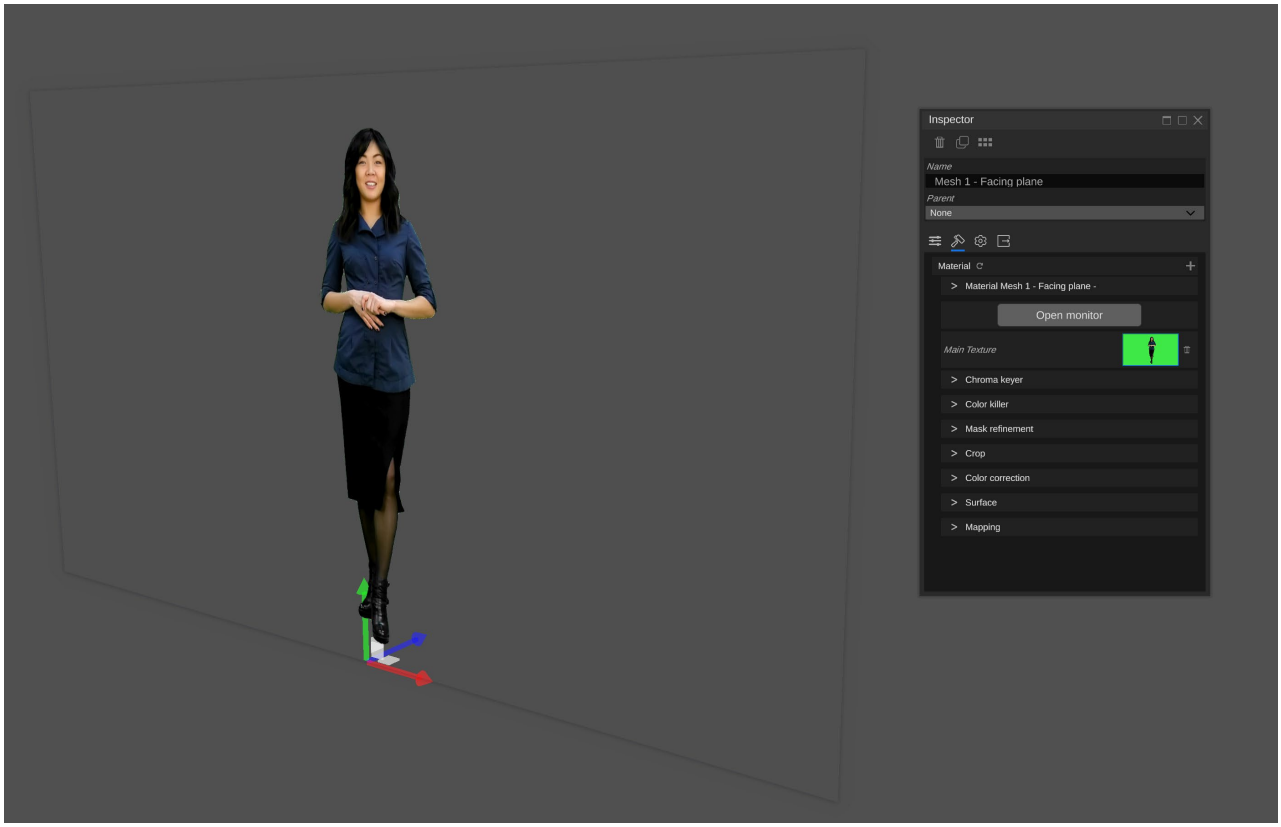
Camera Gizmos

1. Camera Gizmo
2. Focus target gizmo. Allows you to adjust camera's Depth of field focus distance.
3. Camera target gizmo in Locked to target mode enabled.

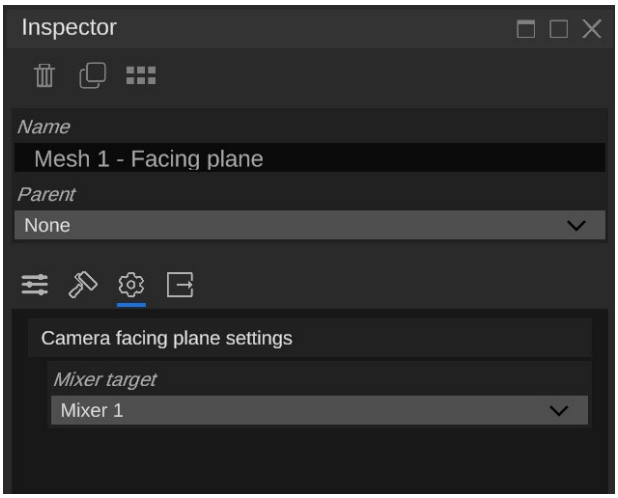


Camera Facing Plane

This object is dedicated to green screen video. Use it to display your talent and do Chroma key.



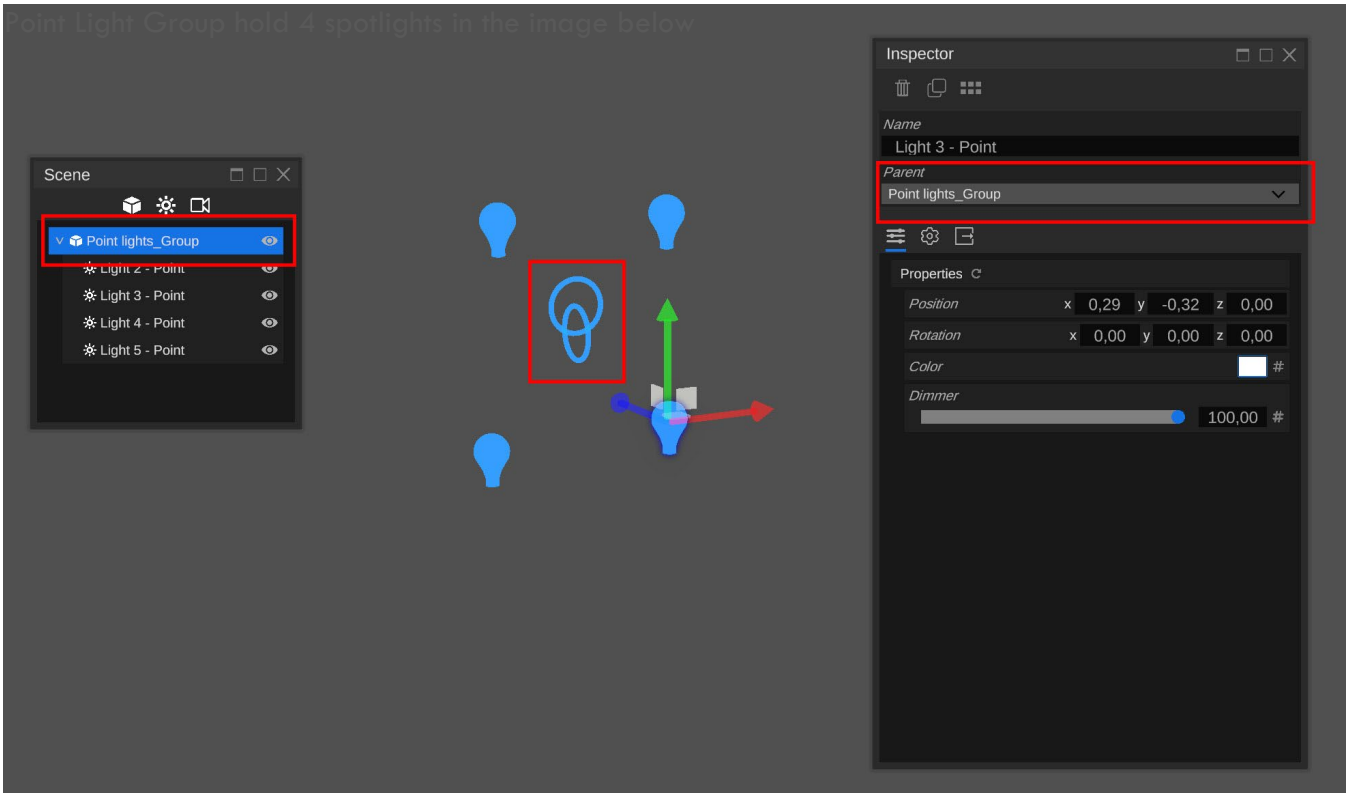
This object is always oriented towards the selected Mixer



Group

Group is an invisible object that allows you to parent Lights or objects

Point Lights Group holds 4 spotlights. Example below :



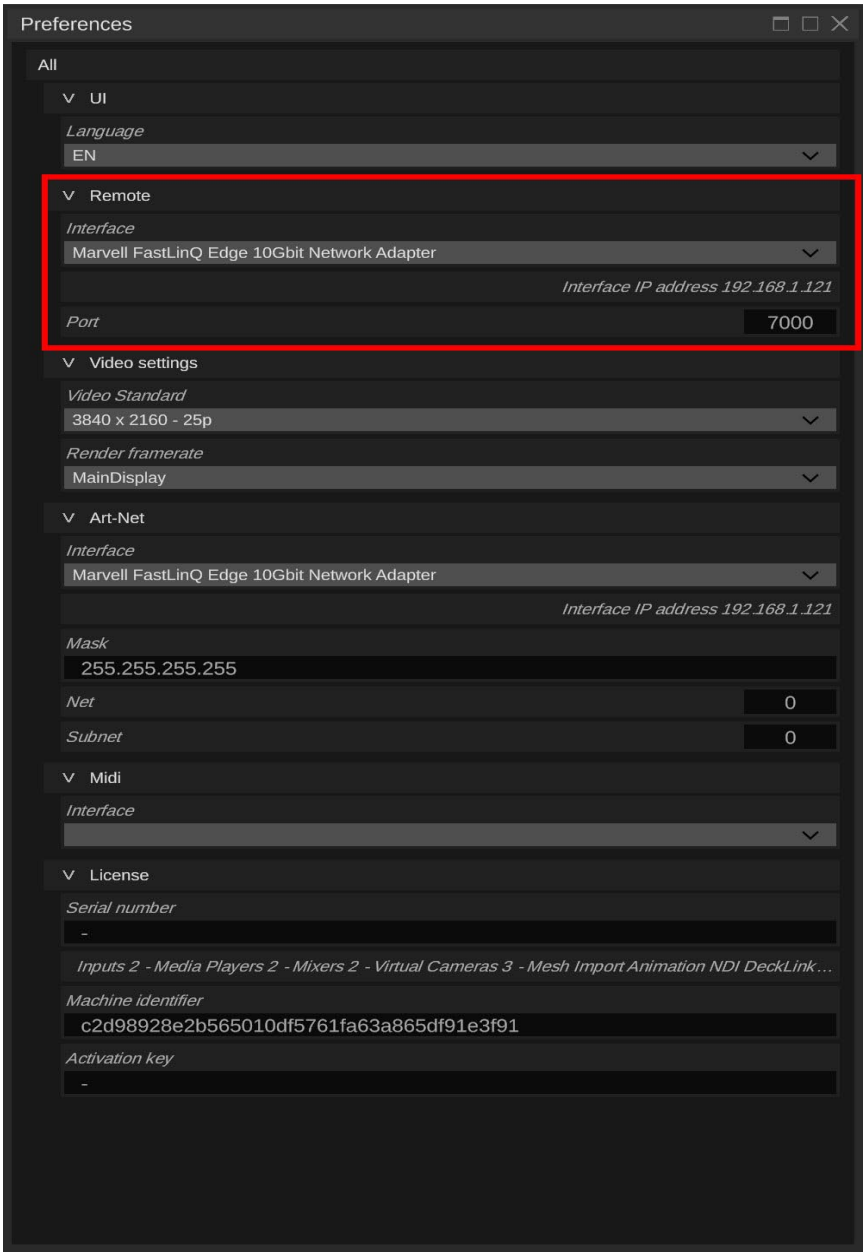
Primitive Meshes

Vset3D comes with build in primitive objects

- Plane
- Cube
- Sphere Cylinder
- Capsule

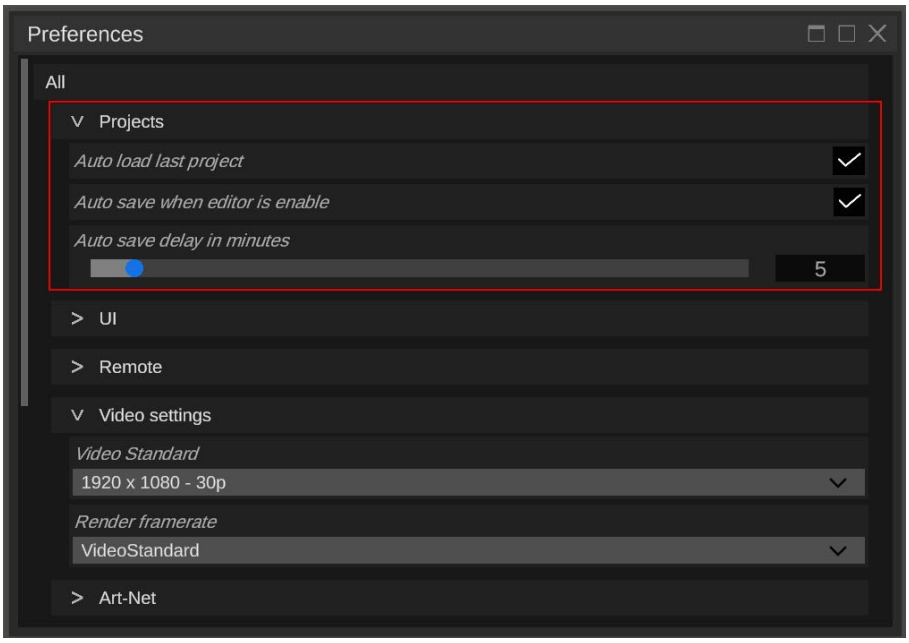
7. SETTINGS

UI language



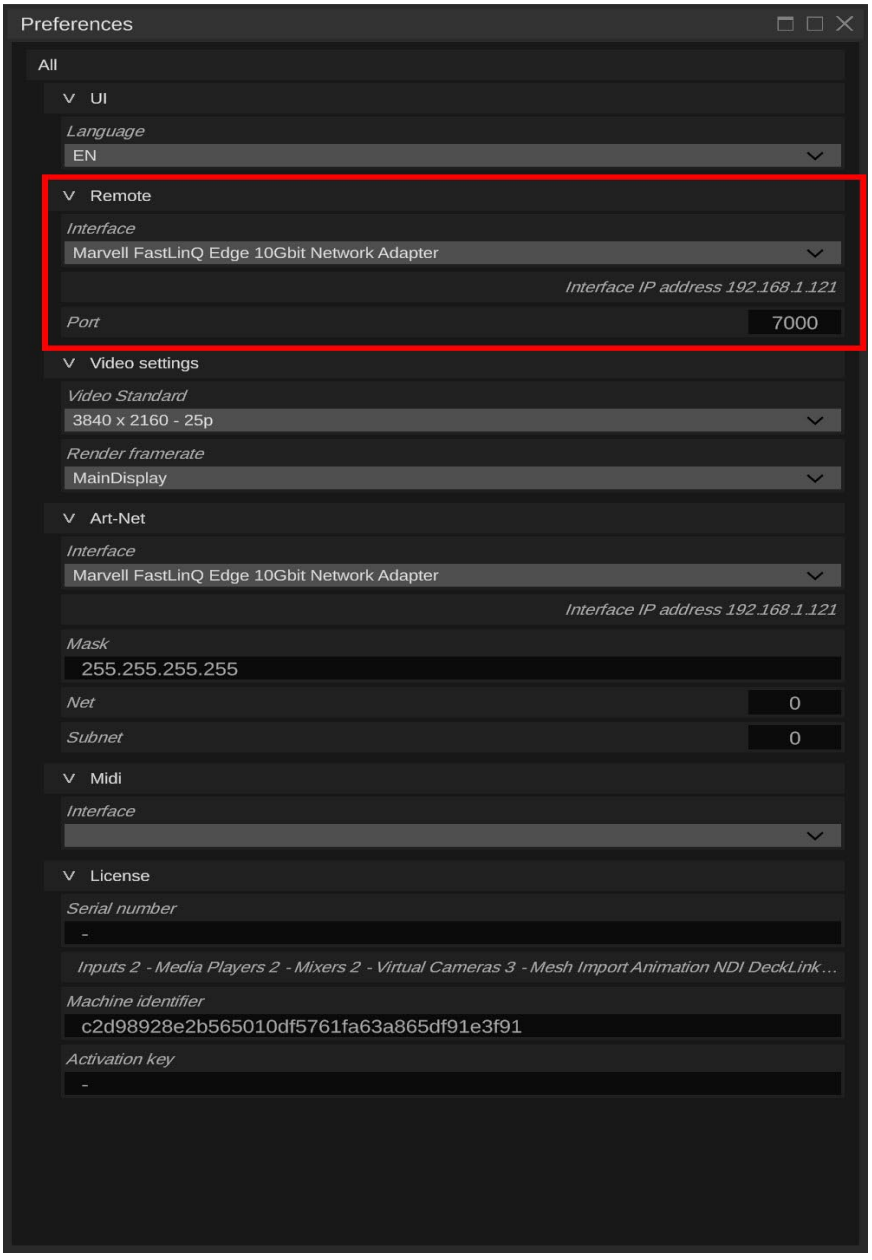
This Option allows you to set Vset3D UI language

Auto load auto Backup



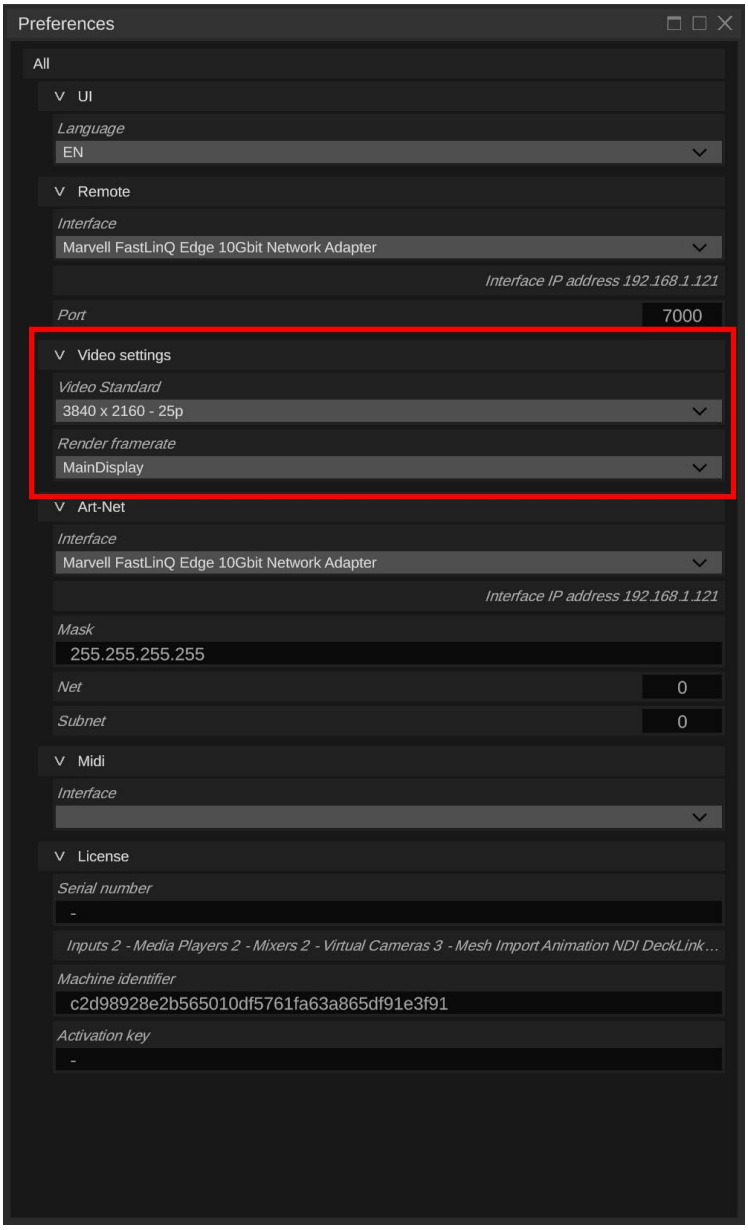
This Option allows you to manage the Auto load and Auto save options

Remote



This option allows you to set network interface used to control Vset3D through IP command

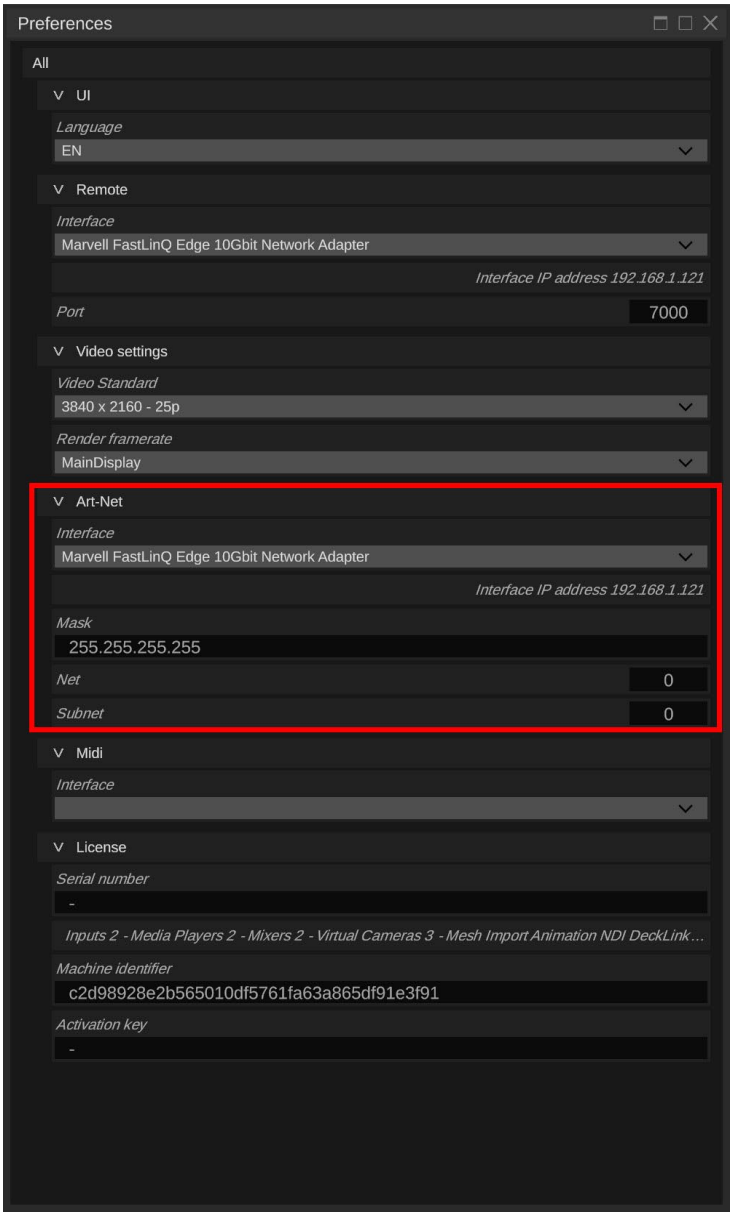
Video Settings



This option allows you to set the project video resolution and frame rate synchronization method.

Always set frame rate and project frame rate to the same value, otherwise you will face dropped frames

Art-Net

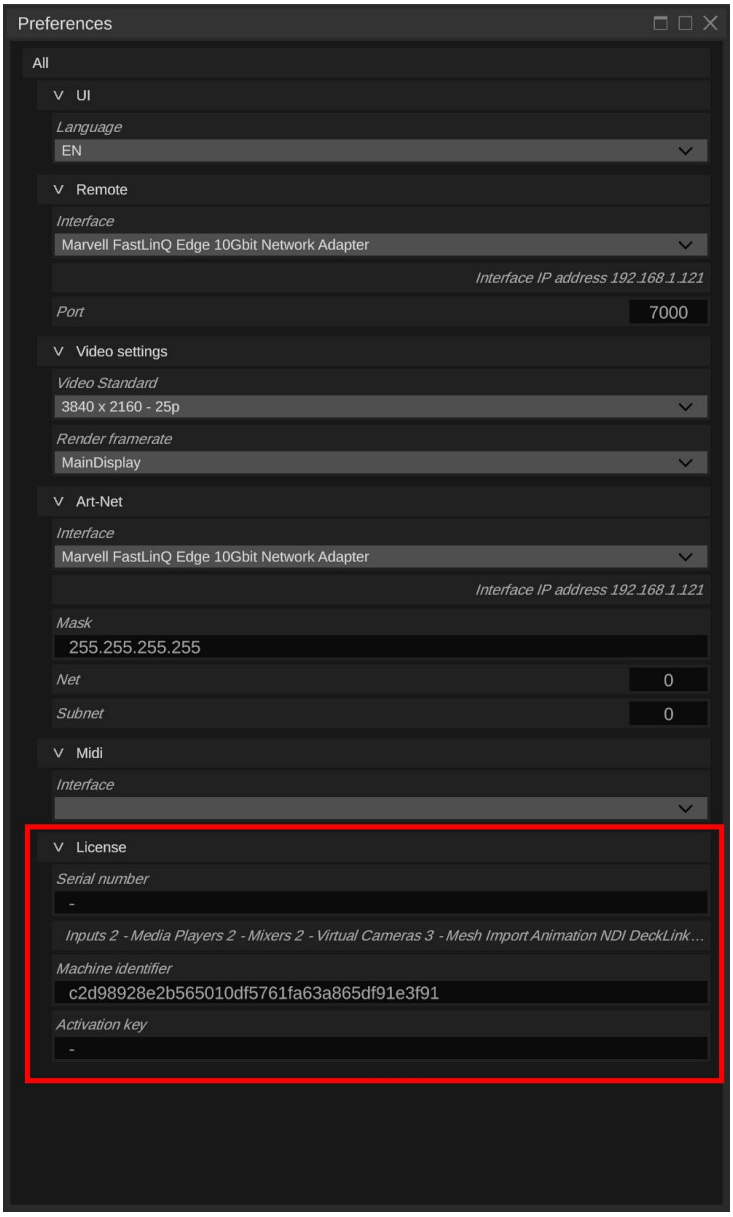


This option allows you to adjust the network device setting used by DMX fixtures

Midi

This option allows you to select a MIDI device

License

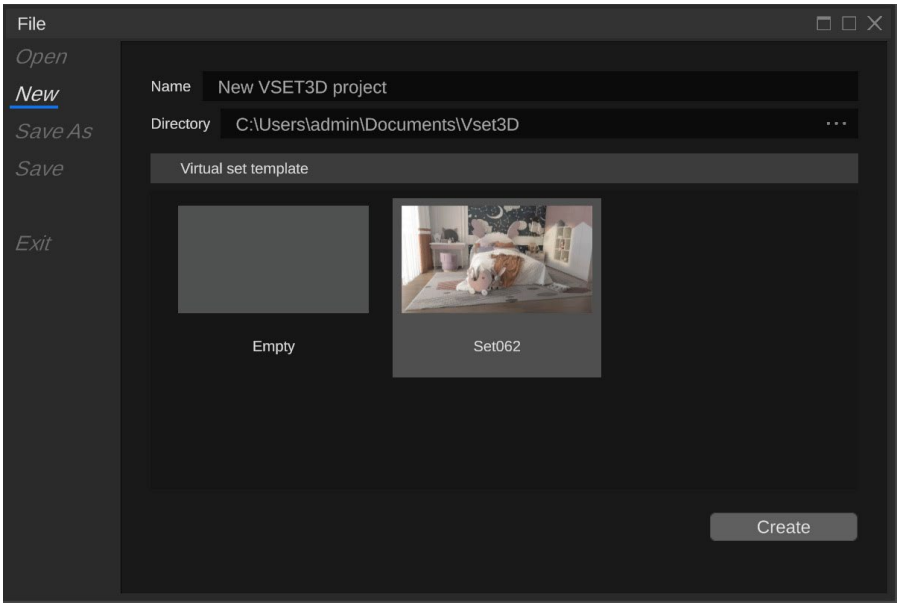


This option allows you to manage Vset3D Studio license.

Don't forget to send your Machine Identifier to Info@vset3d.com to get your activation Key and Serial Number.

8. TOOLS

File



This window allows you to create, load and save your projects.

Sources

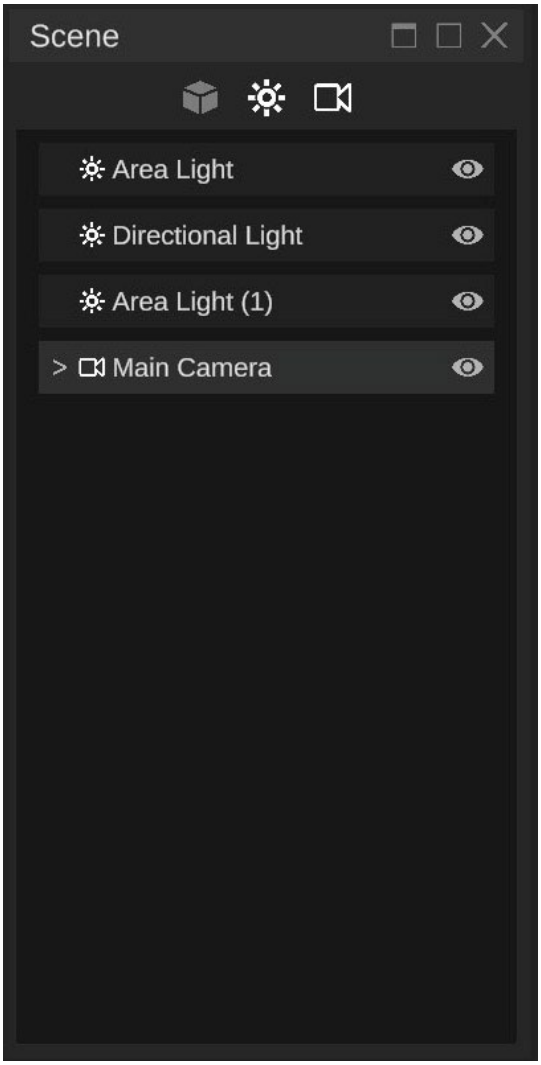
This window allows you to add sources to your project.

Source can be a live video input, NDI stream, video media, png or jpg image.

Vset3D Studio natively supports Blackmagic Decklink devices.

WDM devices are also supported.

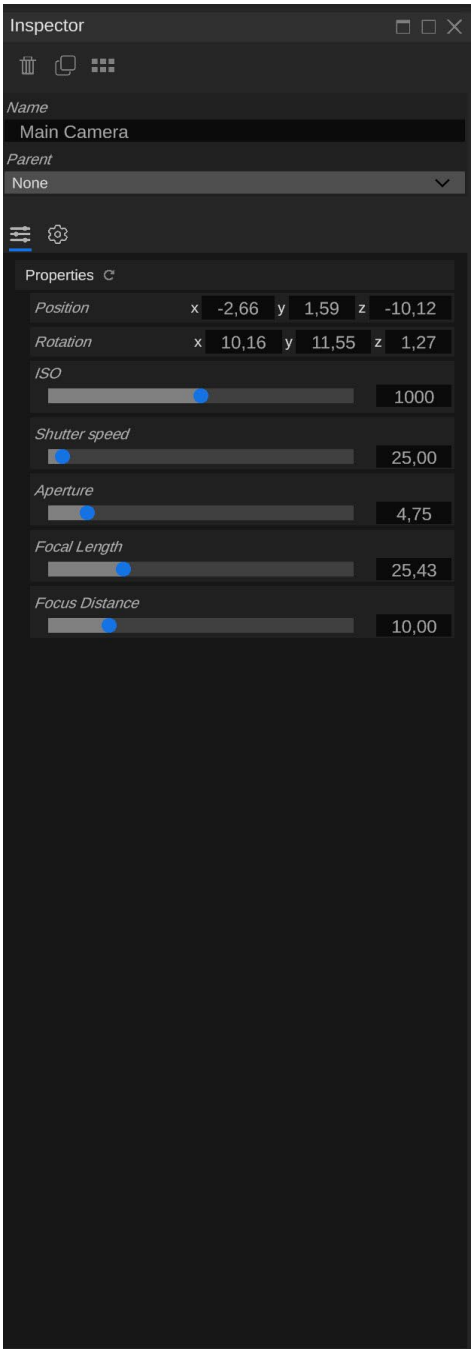
Scene



This window allows you to select or show/hide objects from the scene.

You can use the Object, Light, and Camera icons to filter displayed items.

Inspector



The inspector gives you access to all the parameters and settings of the selected item.

Displayed property depends of the selected item.

Animation

This window allows you to add animation to selected item.

Displayed Property depends of the selected item

Rendering

This window allows you to control rendering quality and rendering settings options.

The **Render Quality** slider adjust DLSS value and is only available on RTX NVidia graphic cards.

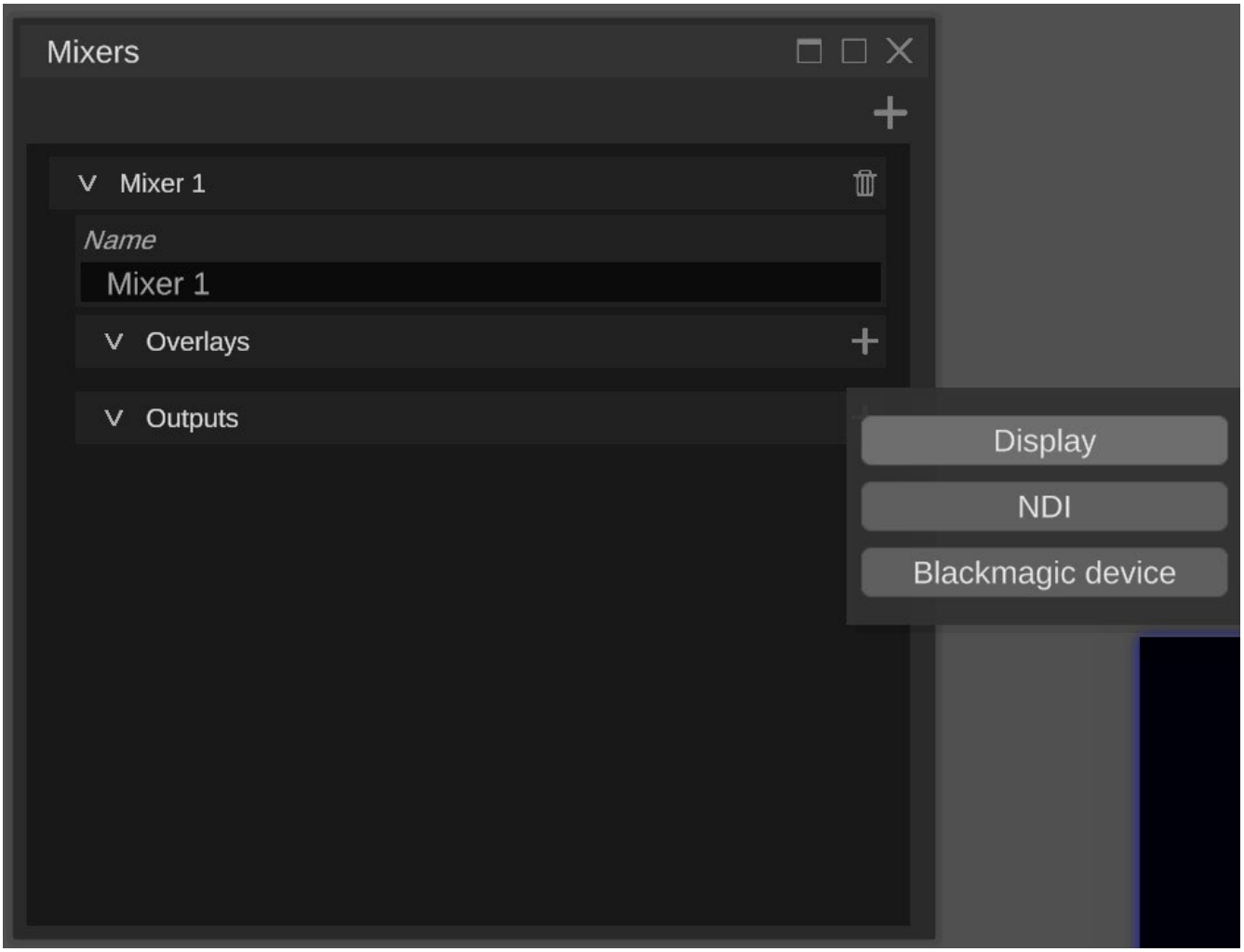
- RTX 20xx
- RTX 30xx
- RTX 40xx

Add settings allows you to add rendering options.

Today's Available Rendering options:

- Ambient Occlusion
- Beauty
- Bloom
- Color adjustments
- Contact shadows
- Depth of field
- Exposure
- Fog
- HDRI Sky
- Indirect Lighting Controller
- Light Cluster
- Screen Space Global illumination
- Screen Space Reflection
- Split Toning
- Tone mapping
- Vignette
- Visual Environment
- Recursive Rendering (experimental)

Mixer



This window allows you to add video outputs to your project.

Outputs can be another monitor, an NDI stream or a Blackmagic Decklink card.

Camera remote

This window shows you the view of the selected camera and allows you to control this camera with your mouse.

Align to view: set orientation of selected camera same as editor.

Reset Transform: resets the camera position and orientation.

Available mouse controls in this window:

Wheel = Field of view

Middle Click = Pan

Alt + Middle Click = Pan/Tilt

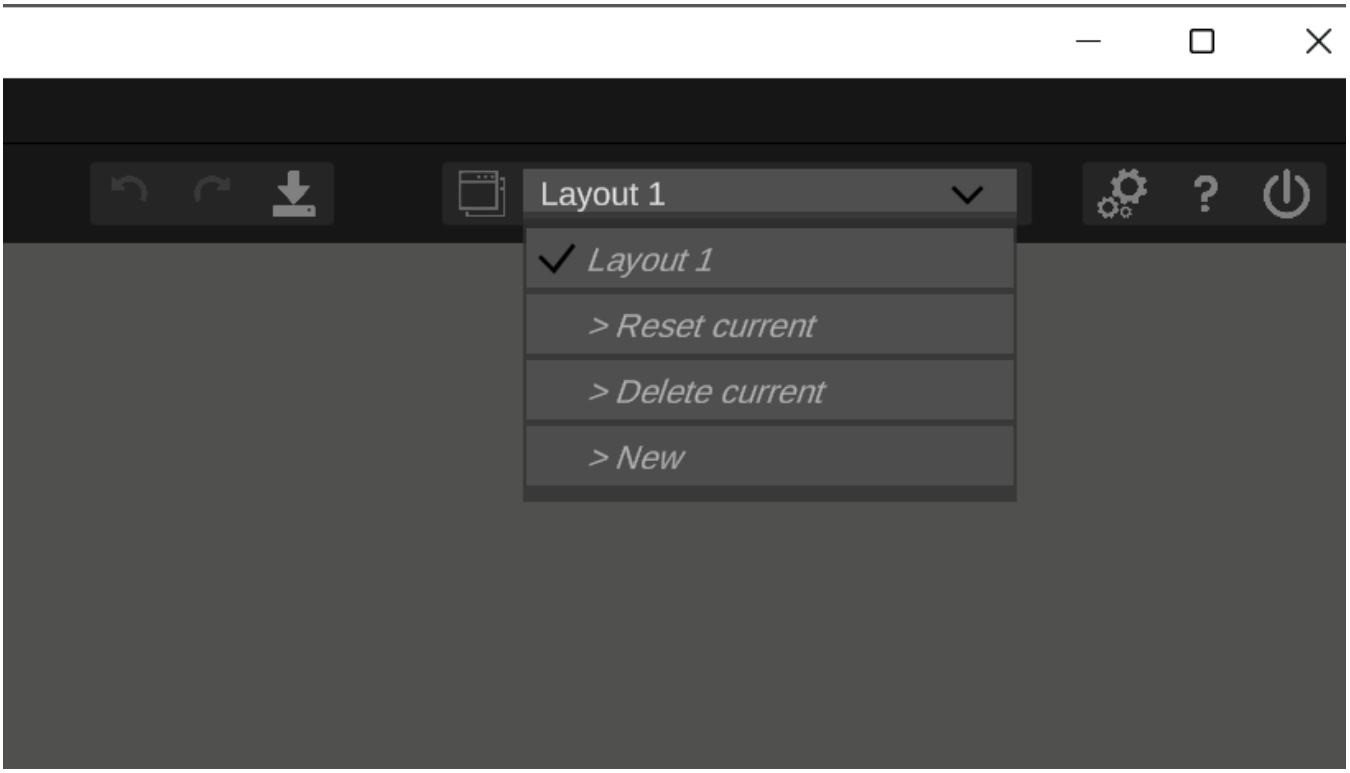
Ctrl + Middle Click = Roll

Maj + Wheel = Move forward/backward

A + Wheel = Aperture

F + Wheel = Focus (Add Depth of Field in the render option to enable it)

Layout



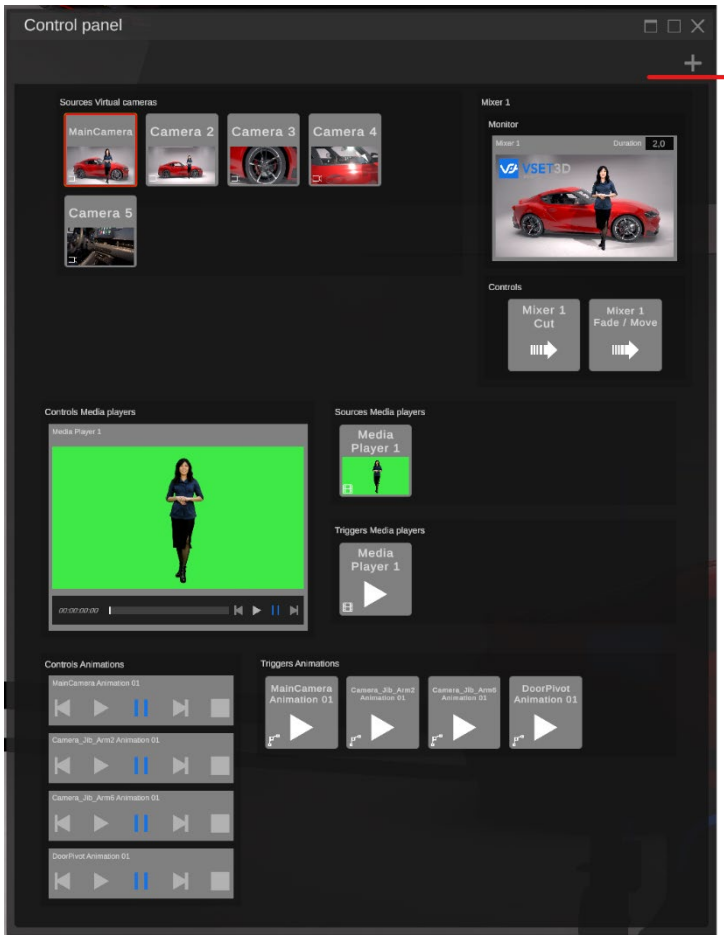
This tool allows you to save Vset3D window position.

- Use **New** to create a new layout slot.
- Use **Reset Current** to clear the active layout.
- Use **Delete Current** to delete active layout.

Use key **Tab** to show/hide all windows

Use key **Esc** to reset selected window.

Control Panel

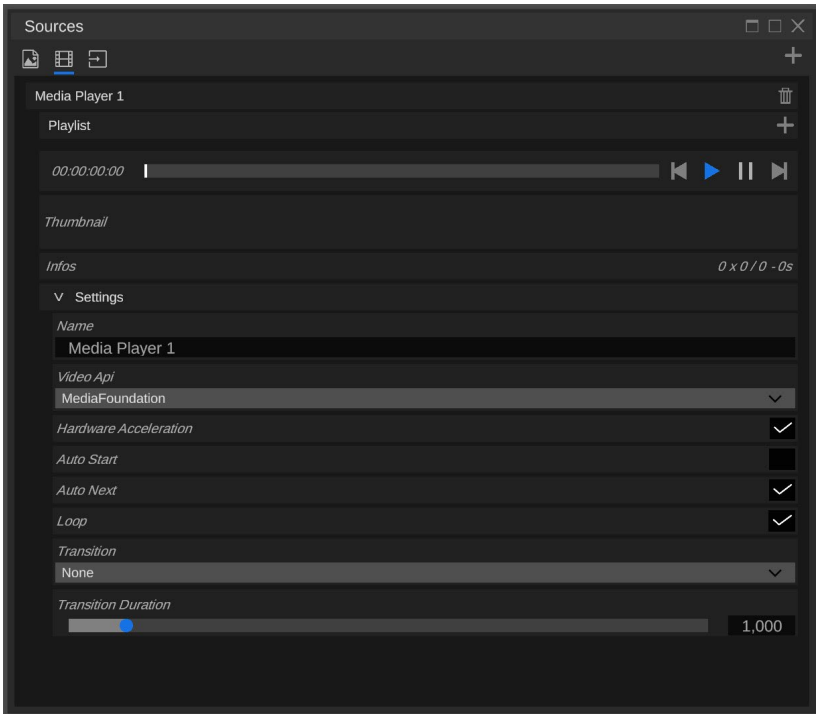


This tool allows you to switch cameras, control animations and media players.

This is a dynamic window. All buttons are automatically created by Vset3D Studio when you add Camera, Media, Animation and Mixer.

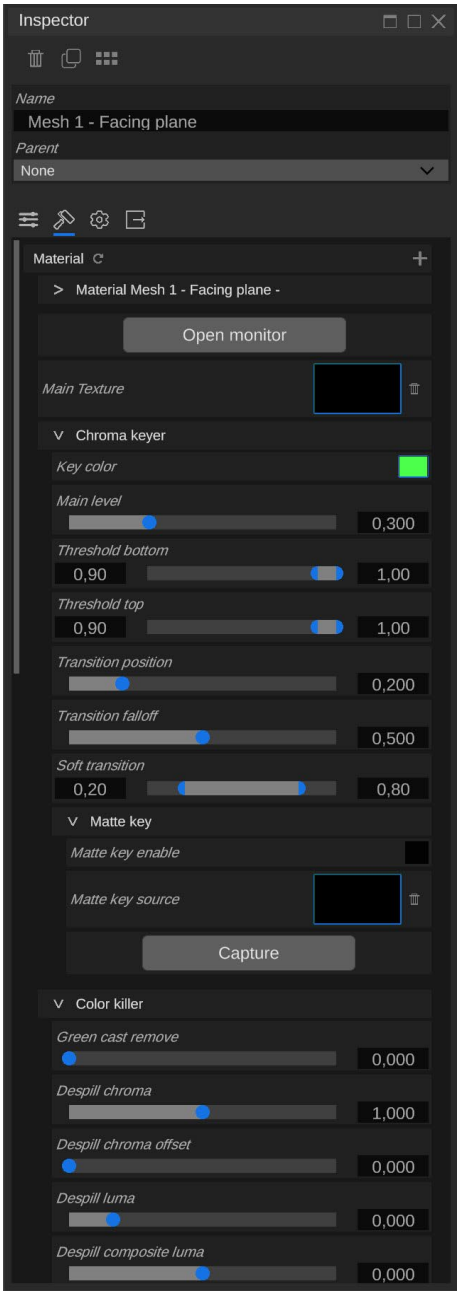
Each button has a keyboard shortcut that can be customized (Use right-click to bring up a button's configuration menu).

Sources Media player



This window allows you to add media players. Each player can handle several videos in a playlist

Chroma Keyer



This window allows you to adjust keyer parameters of the selected Facing plane object.

9. UNITY 3D ADDRESSABLES/LIBRAIRY

Vset3D is based on the Unity 3D game engine, which allows you to use Unity's addressable files and create your 3D Set in Unity 3D, then import them into Vset3D Studio as library.

The addressable Library creation documentation comes with the Expert license.

10. MEDIA FILE FORMAT

PNG/JPG

H264/MPEG/MOV/AVI/

11. 3D FILE FORMAT

FBX

Vset3D studio supports FBX file format

12. DMX FIXTURES AND LIGHTS

Vset3D comes with fixtures that can be added to your project. They can be animated with the Vset3D animation tool or controlled via DMX device or software.

Generic

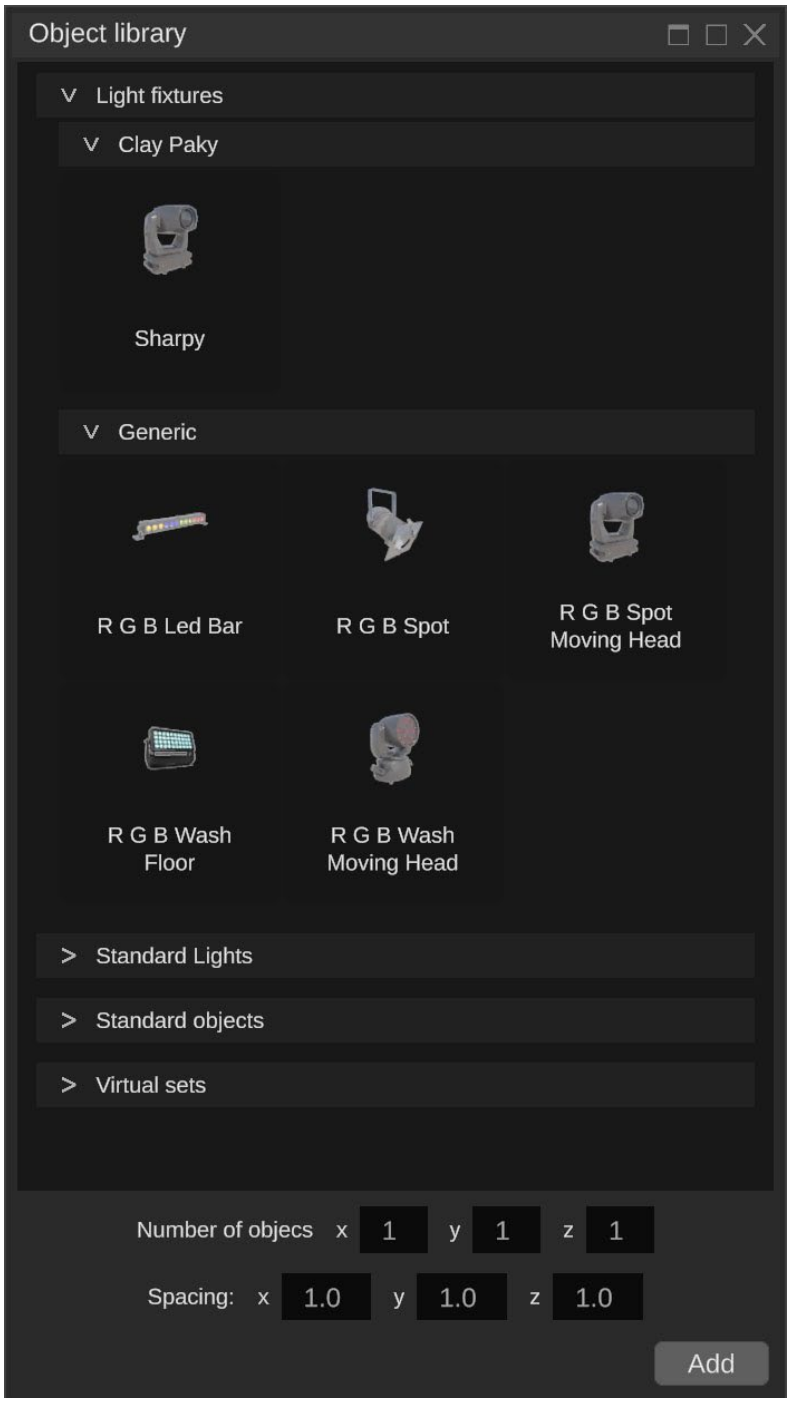
- RGB Led Bar
- RGB Spot (PAR 64)
- RGB Spot Moving Head
- RGB Wash
- RGB Wash Moving Head

Clay Paky

- Sharpy

System

- Aera light
- Directional Light
- Point Light
- Spot Light



13. NDI

Vset3D supports Ndi technology from Newtek. Don't forget to install Newtek NDI Runtime and NDI Tools.

14. WDM DEVICES

WDM = Windows Driver Mode

Vset3D Studio supports WDM compliant USB video capture device.

15. BLACKMAGIC DESIGN

Vset3D studio natively supports Blackmagic Decklink devices.

Compatible Video Capture Cards (Tested):

- DeckLink Mini Monitor
- DeckLink Mini Recorder
- DeckLink Mini Monitor 4K
- DeckLink Mini Recorder 4K
- DeckLink Duo 2
- DeckLink 8K Pro
- DeckLink Quad HDMI Recorder
- DeckLink Quad 2

16. MATERIALS

Vset3D comes with build in Materials which can be applied to any object.

Standard

- Use it on opaque object (default material)

Double Sided

- Use it to have both sides of the object visible

Transparent

- Use it to on basic semitransparent object.

Transparent Cutout

- Use it on transparent object

Transparent Refraction

- Use it to on refractive semitransparent object. (ex: glasses)

Unlit

- Use it on an object that will not be affected by ambient light conditions

Unlit Transparent Cutout

- Use it on an object that will be transparent and not affected by ambient light conditions

Water River / Water Lake

- Specialized materials dedicated to dynamic water simulation

Recursive Shaders (experimental at the moment)

Standard Recursive

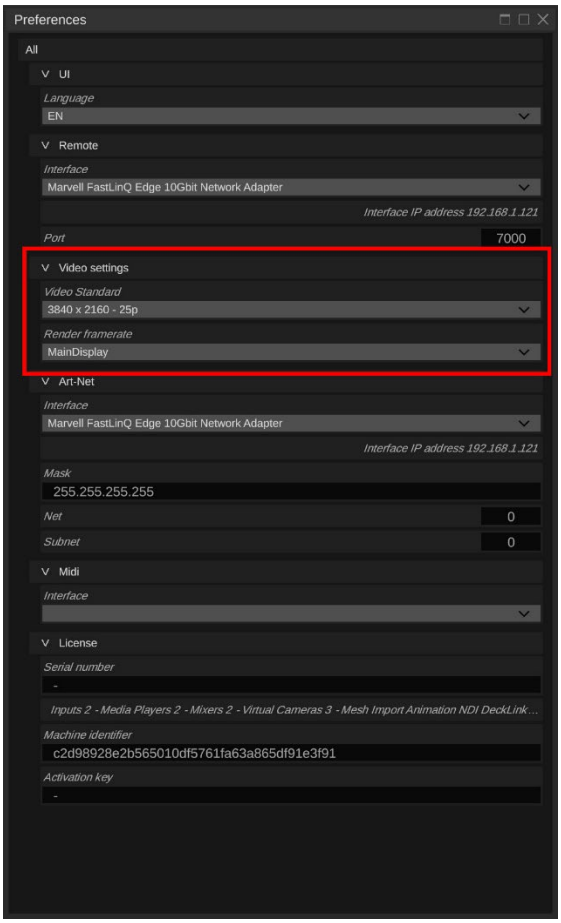
Double Sided Recursive

Transparent Recursive

Transparent Cutout Recursive

Transparent Refraction Recursive

17. VIDEO FORMAT



Video format can be set from the Setting window.

Carefully select the resolution and frame rate as they have a direct impact on VSet3D's performances.

High frame rate and high resolution means high GPU load and can lead to dropped frames.

18. DLSS/ RENDER QUALITY SETTINGS

Render Quality Settings. This slider adjusts the DLSS level.

DLSS is upsampling technology based on Deep learning and AI. DLSS allows you to reduce the GPU load on 4K projects.

You need compatible **NVidia** GeForce RTX 20xx, RTX 30xx, RTX 30xx graphics card to use DLSS.

19. RENDERING SETTINGS

Ambient Occlusion

Adds a shadow to the contact area between objects and in the corners of the decor.

Beautify

Adds sharpness parameter to the render engine

Bloom

Adds glow on Highlight image parts

Color Adjustments

Adds color & contrast parameter to the render engine

Contact Shadows

Enhances shadow quality at the surface contact (works only with Directional light)

Depth Of Field

Adds camera depth of field control to the render engine

Exposure

Overrides camera exposure

Fog

Adds fog fx to the render engine (must be added to use volumetric lights)

Gradient sky

Adds 3 color gradients sky to the render (needs Visual environment)

HDRI Sky

Allows you to use HDRI image as Sky (needs Visual environment)

Indirect Lighting Control

Adds intensity control on Global illumination and reflection

Screen Space Global illumination

Adds indirect lighting support to the render (supports real-time ray tracing on NVIDIA graphic cards)

Screen Space Reflection

Adds refection support to the render (supports real-time ray tracing on NVIDIA graphic cards)

Screen Space Refraction

Adds refraction support to the render (supports real-time ray tracing on NVIDIA graphic cards)

Tone Mapping

Adds overall image lighting curve control to the render engine

Vignette

Reduces peripheral image brightness

Visual Environment

Adds Sky to the render engine

20. PTZ CAMERA TRACKING

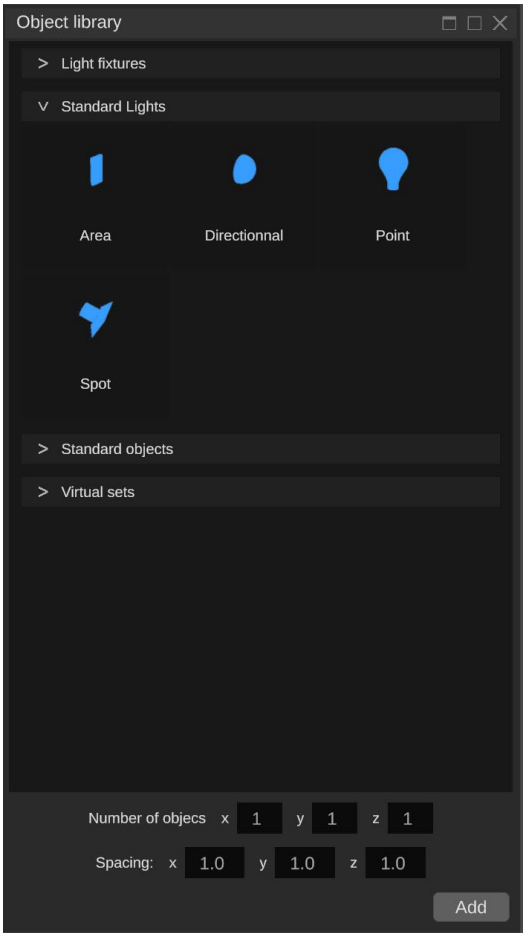
This Expert license feature is not yet available.

21. HOW TO

How to Add Light

1. Select add library icon

2. Select one light from the **Lights Library**



3. Press **Add or double click on it**
4. Double click on the light in the 3D view to open the **Inspector** window
5. Adjust light parameters

How to Add Camera

1. Select **Add Virtual Camera** icon, the Camera will be created at the same orientation as the editor 3D view.

2. Double click on the Camera gizmo in the 3D view to open **Inspector** window
3. Adjust Camera parameters

Mouse camera controls available from Editor view:

Wheel = Move Backward/Forward

Middle Click = Pan

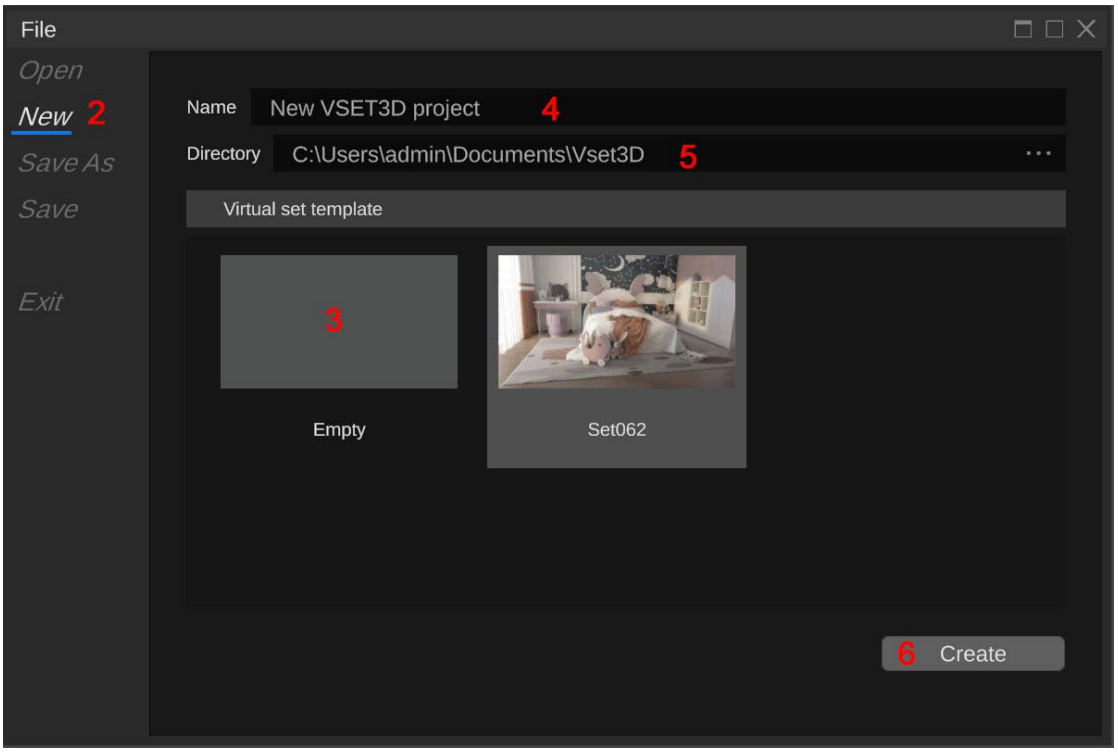
Alt + Middle Click = Camera orientation

Double Left click = Object selection

How to Create an Empty Project

1. Open **File** menu

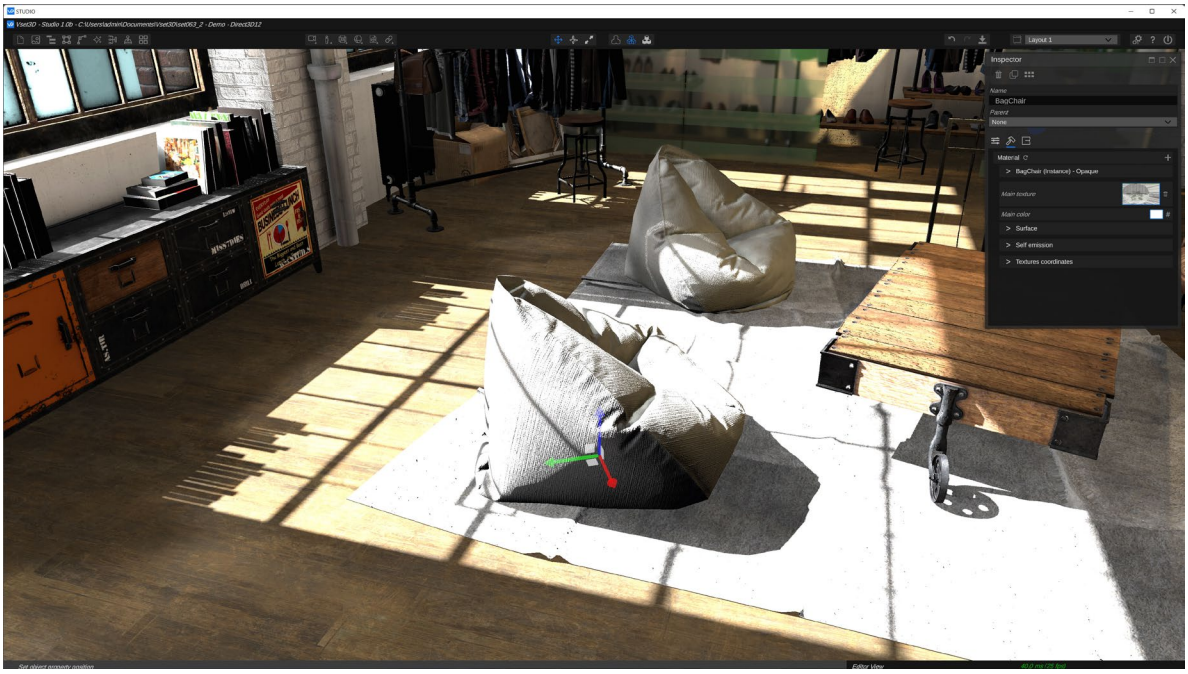
2. Select **New**
3. Select the **Empty** template in the library
4. Enter project Name
5. Set **Directory** if needed
6. Press **Create**



How to Import FBX File

1. Press **Add Imported Mesh**

2. Browse your FBX Object
3. Double click on any object in the 3D view to open **Inspector** window

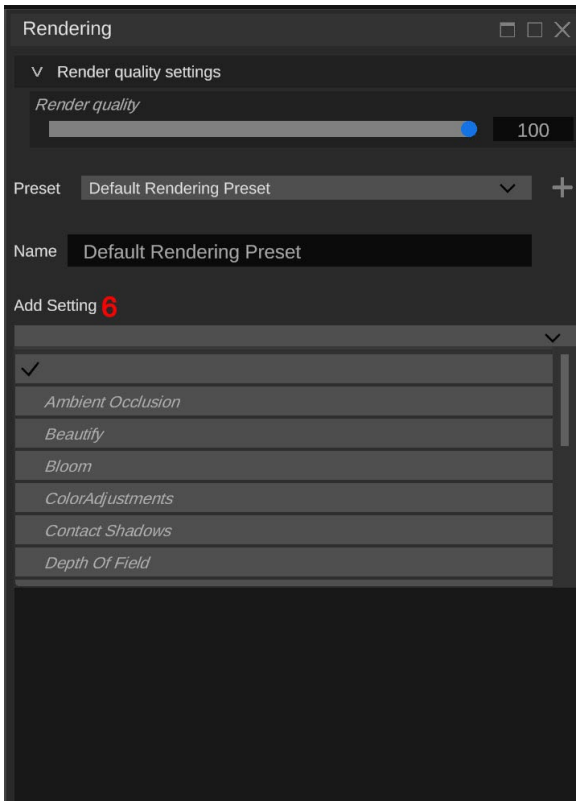


How to Setup a basic Ray Traced Project

Ray trace is only available on DirectX 12

1. Create a new project
2. Add Camera
3. Add light
4. Import a 3D Set or 3D object
5. Open Rendering Window

6. Press Add Settings then …
   a. Add Visual Environment (Select gradient Sky)
   b. Add Gradient Sky
   c. Add Screen Space Global Illumination (Select Ray tracing option)
   d. Add Screen Space Reflection (Select Ray tracing option)
   e. Add Exposure (Select Physical camera)



You can now explore all rendering settings to set the desired lighting condition.

Remember to use camera aperture, shutter speed and iso to adjust overall exposure.

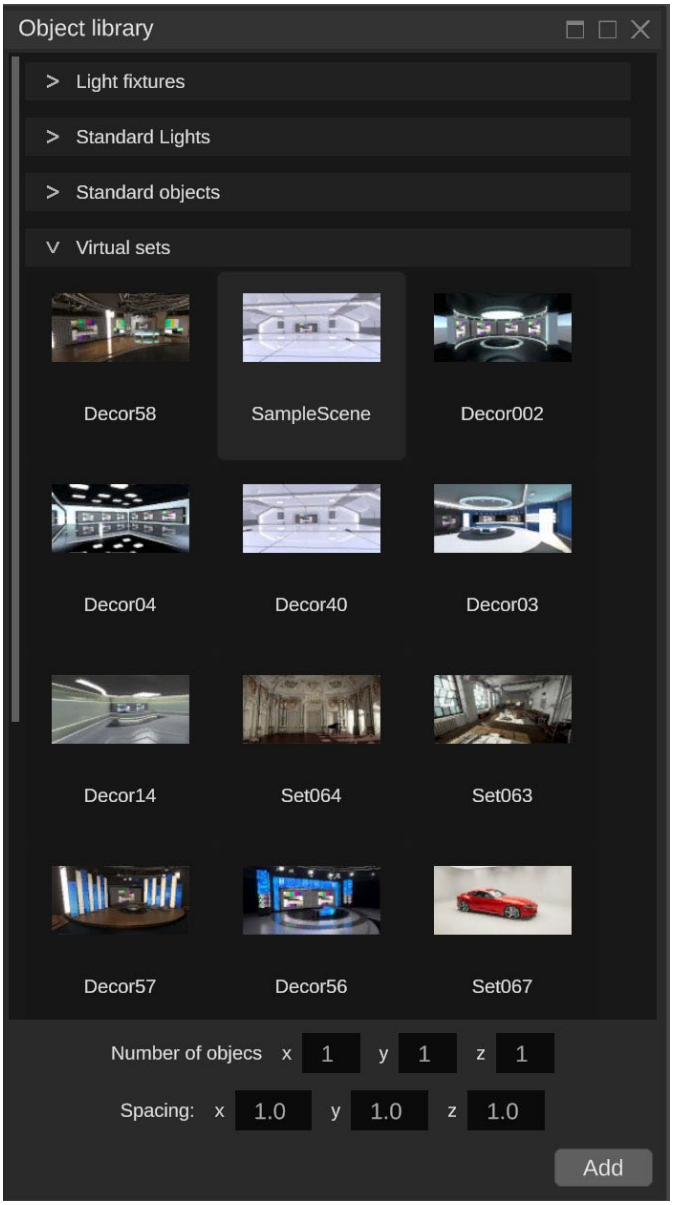
How to Import Custom 3D Set In FBX

1. Create an empty project
2. Press **Add Imported Mesh** 
3. Browse your FBX Set

How to Import Vset3D library

1. Select library icon

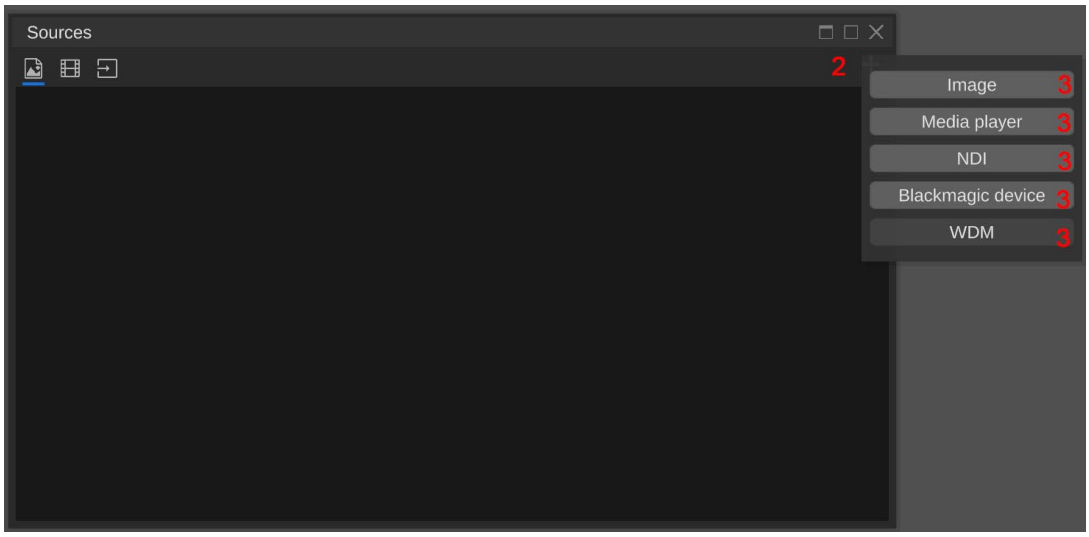
2. Select **Virtual Set**
3. Select a thumbnail
4. Double click on it or press **Add**



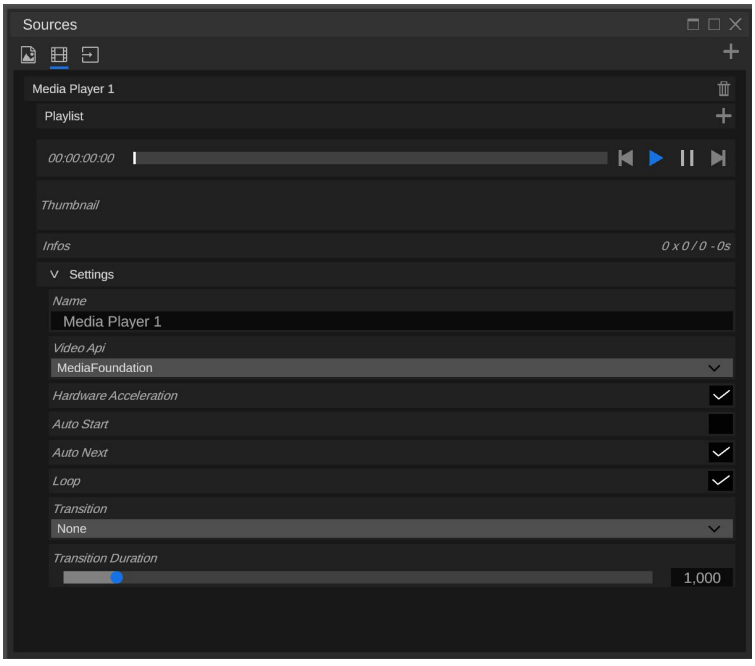
How to Add Live Input or media

1. Open Sources menu

2. Press the plus icon (+) at the top right corner
3. Select the desired source type



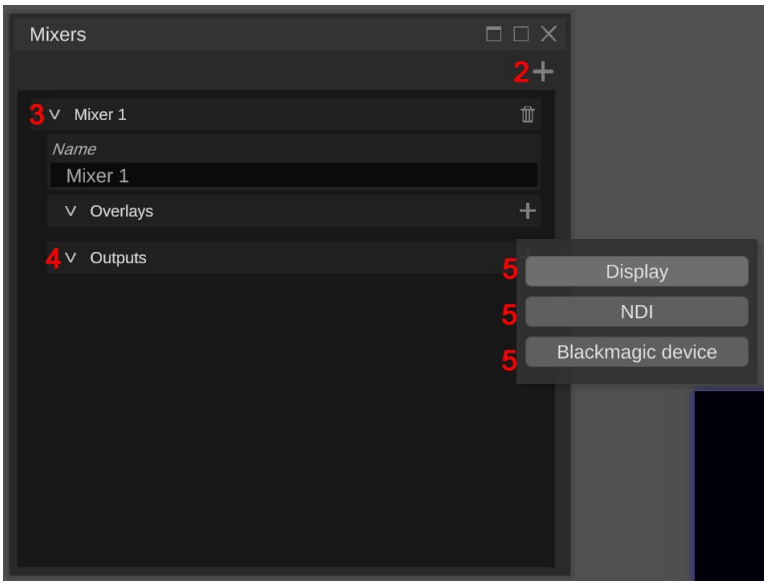
4. Adjust its parameters



How to Add Live Output

1. Open the Mixer menu

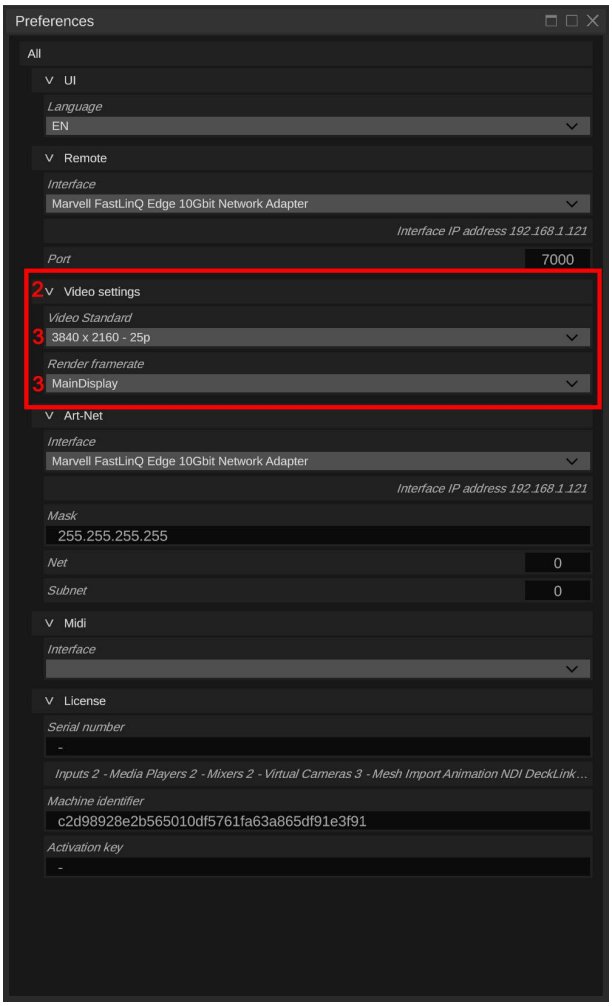
2. Press the plus icon
3. Press V Mixer 1
4. Press > Output
5. Select the desired Output method



How to Set Project Resolution & Frame rate

1. Open Setting menu

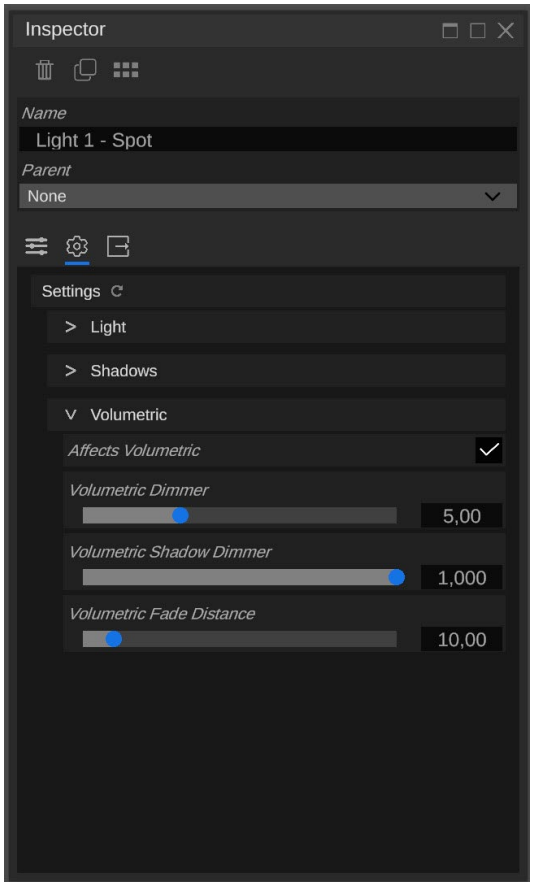
2. Press > Video Settings
3. Set the video standard and Render Frame rate



The **Render Frame rate** option sets Vset3D vertical synchronization method (**MainDisplay** by default)

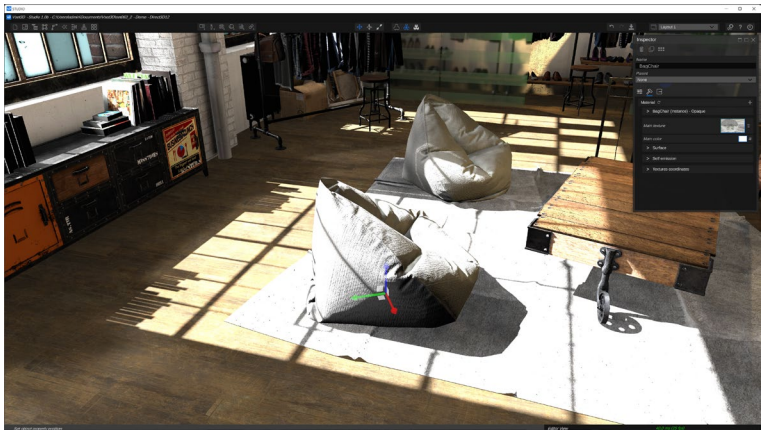
How to activate Volumetric light FX

1. Set basic Ray traced project
2. In the Rendering Setting Add Fog setting
3. Use inspector to adjust Spot light Volumetric settings



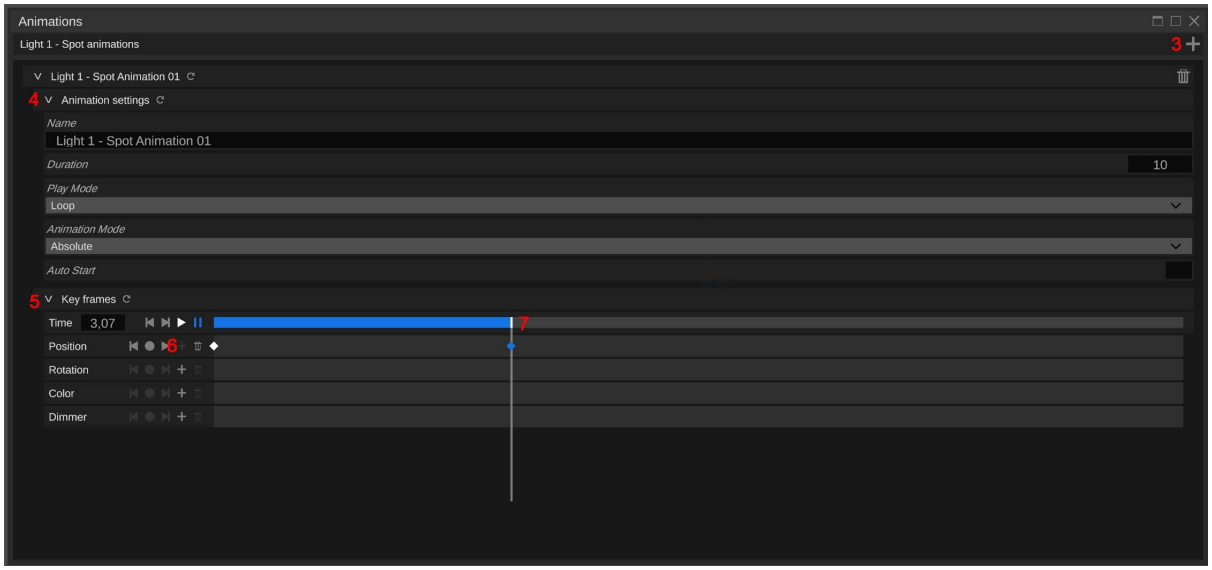
How to Animate object, camera or light

1. Select an Object or Light from the 3D view



2. Open Animation windows

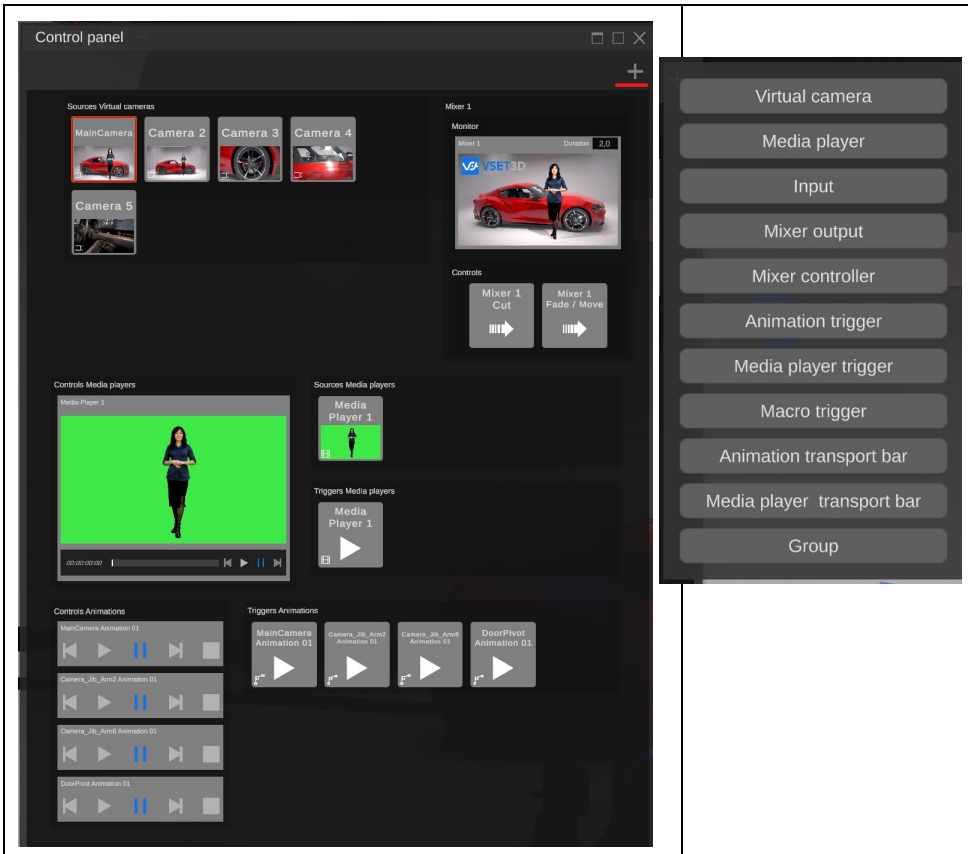
3. Press the plus icon
4. Press > to deploy the parameters
5. Press Key Frames to deploy the Key framer
6. Press Position + to add key at the current time
7. Change Time
8. Move the object in the 3D view
9. Press Position + to add key at the new time



You can do the same for all available parameters. Displayed parameters depend on selected item

How to add item to the Control panel

1. Select + icon
2. Select the item



VIDEO STANDARD AND FRAME SYNCRONISATION

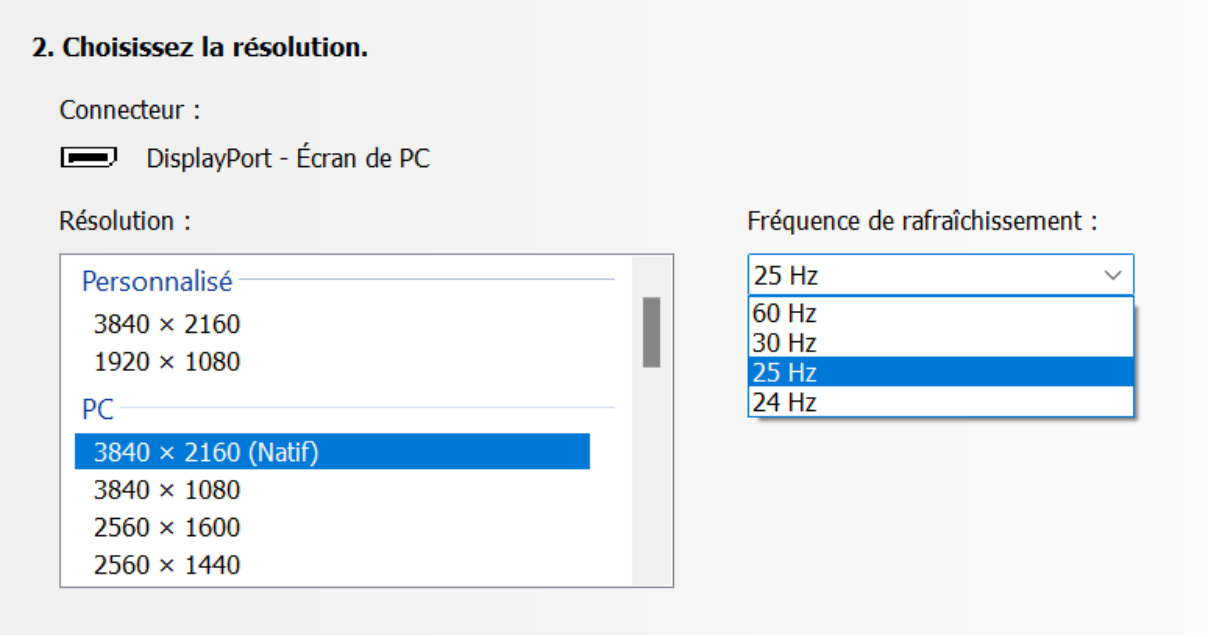
You must set computer refresh rate and resolution according to your project.

To work properly, Vset3D must be running on a perfectly synchronized computer, which means that your Windows display setting must be set according to the resolution and frame rate of your project.

All media, live video and monitors must be played, streamed or set to the same frame rate.

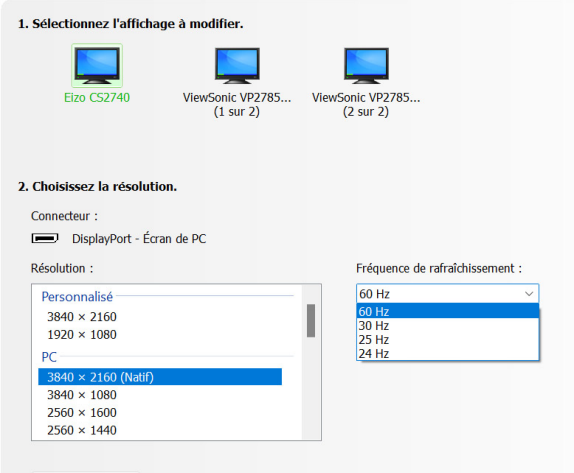
The entire workflow should run at the same frame rate.

Use Windows NVidia Settings to set the frame rate :



Setup your computer for a 25 Fps 1080 Project

1. 1. Make sure your computer monitor supports 25Hz
2. Open the Nvidia display settings and set the frequency to 25Hz

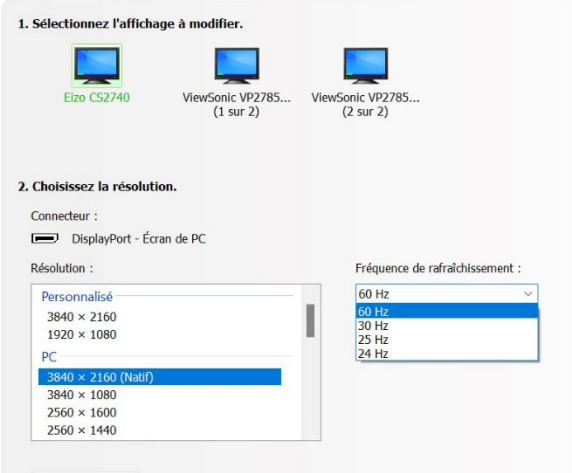


If the 25Hz is unavailable, create it with **Customize** menu

3. Open Vset3D Studio Settings menu 
4. Select Video Settings
5. Select *1920 X 1080 – 25P* as video Standard
6. Select **MainDisplay** as Render FrameRate

Setup your computer for a 30 Fps 1080 Project

1. 1. Make sure your computer monitor supports 30Hz
2. Open the Nvidia display settings and set the frequency to 30Hz



If the 30Hz is unavailable create it with the **Customize** menu

3. Open Vset3D Studio Settings menu 
4. Select Video Settings
5. Select *1920 X 1080 – 30P* as video Standard
6. Select **MainDisplay** as Render FrameRate

HARDWARE

Hardware

- Processor Intel / AMD
- NVidia GeForce RTX 20xx, RTX 30xx, RTX 30xx graphic cards.
- 16Gb Ram.
- BlackMagic DeckLink Video capture card.
- Operating System Windows 10 or 11 64Bits.

Reference computer 1: • Asus ROG Maximus Z690 Formula • I7 1200KF • RTX 3090 • 32 GBytes	Reference computer 2: • Asus WX 299 Sage • I7-7820 3.6Ghz • RTX 3080 • 32 GBytes
Reference computer 3: • Asus WX 299 Sage • I7-7820 3.6Ghz • RTX 2070 • 16 GBytes	Reference computer 4: • Asus WX 299 Sage • I7-7820 3.6Ghz • RTX 1080 • 32 GBytes

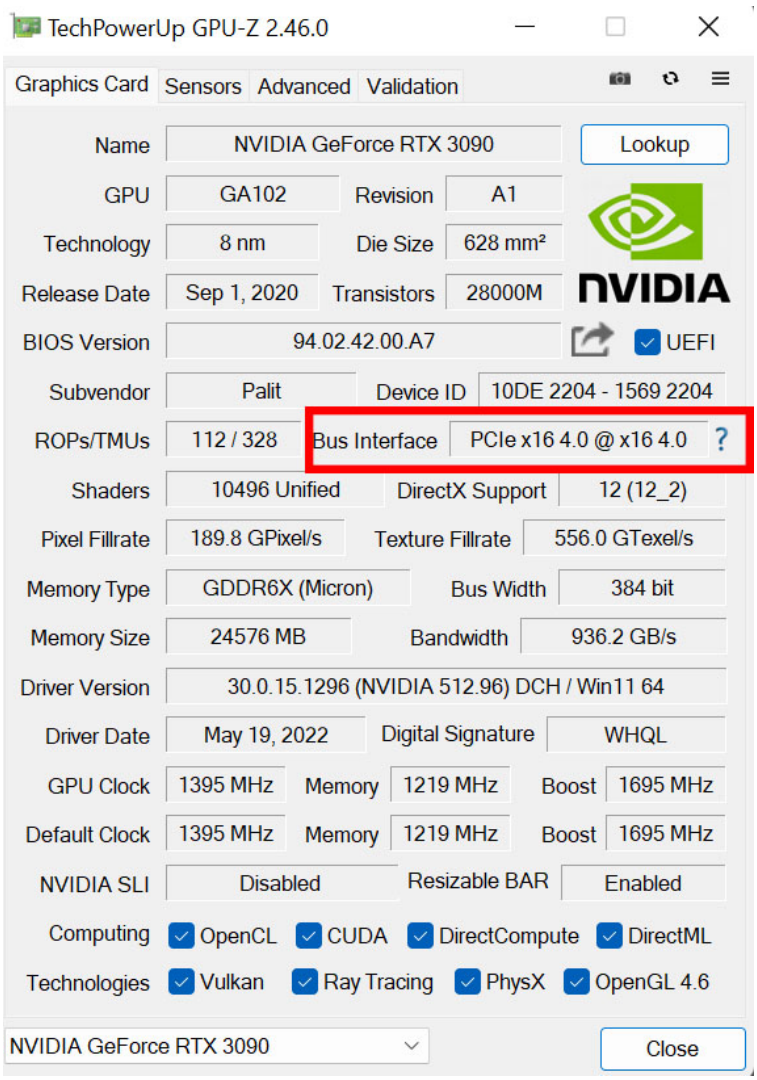
Vset3D primarily uses the GPU for all calculations, so if you are planning large project with lots of polygons, objects, textures, 50 or 60 fps, choose the biggest GPU possible.

Make sure your project does not exceed the memory capacity of the graphic card to avoid shared memory usage.

Using shared memory will cause performance to drop drastically

When installing the graphics card in the computer, make sure you have enough free PCIe lanes to ensure that the graphic card bus interface will operate at full speed. Use GPU-Z to check it.

PCIe lanes are the physical link between the PCIe-supported device and the processor/chipset.



LAPTOP COMPUTERS

Vset3D Studio can be operate on high performances laptop.

Don't forget Vset3D is a video production software and needs to be in sync with all your video inputs and outputs.

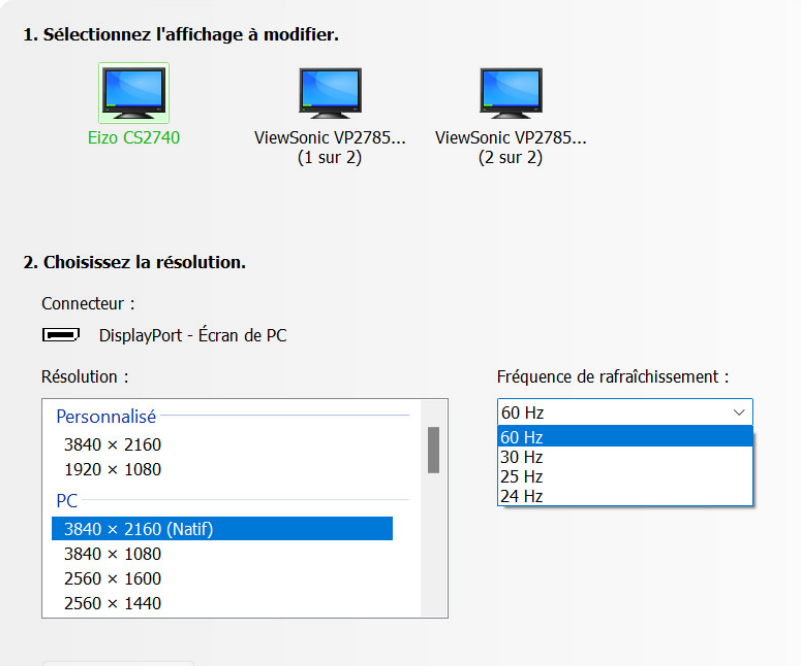
So when you choose your laptop, make sure it will be able to operate at video standard frequency.

This two points must be verified:

- Make sure its default frame rate is not 120Hz or higher.
- Make sure its display can be set to 50 or 25 Hz if you plane PAL projects.

If you are in one of the above cases, you can use an external monitor to set the appropriate frame rate.

Always set the display frame rate and project frame rate to the same value, otherwise you will face dropped frames



SHORTCUTS

Here is the list of shortcuts available in Vset3D Studio

Ctrl + z	Undo
Ctrl + y	Redo
Ctrl + s	Save
R	Select the rotate tool
M	Select the moving tool
S	Select the scaling tool
Alt + Middle Click	Camera orientation
Tab	Show Hide user interface
Esc	Reset selected window
Alt + Middle Click	Pan/Tilt
Ctrl + Middle Click (in the camera remote view)	Roll
Maj + Wheel (in the camera remote view)	Move forward/backward
A + Wheel (in the camera remote view)	Aperture
F + Wheel	= Focus (Add Depth of Field in the render option to enable it)

GPU LOAD OPTIMISATION

Lights count, polygons count, textures count and size, Live outputs or inputs, render FX, Ray tracing, Shadow… All of these have direct impact on GPU load. To maintain stable frame rate and avoid frame dropping, use with care.

The following list shows their estimated GPU load.

	High Load	Moderate Load	Low Load	Requires a lot of GPU RAM
				
Ray tracing				
Ray traced shadows				
High polygons count				
Global illumination				
Animation				
DMX fixtures				
Volumetric light				
Volumetric Fog				
Volumetric Shadow				
NDI Out				
NDI In				
Decklink Blackmagic Out				
Decklink Blackmagic In				
Media player				
4K texture				
Chroma Keyer				
Camera Depth of Field				
Reflection				
Refraction				
Recursive				
25/30 Fps Project				
50/60 Fps Project				
1080 Project				
4K Project				
Control panel				
Editor view				
				

Mixer View

Don't forget to use Render Quality Settings slider to save GPU load (DLSS)

VSET3D STUDIO VERSIONS FEATURES

*Only on Nvidia

** This Starts Vset3D in DirectX11 >> **STUDIO.exe -force-d3d11**

GRAPHIC CARDS

Vset3D Studio is designed to use specific features of the NVidia RTX series such as real-time ray tracing and DLSS.

But you can pretty much use any decent gaming graphics card if you don't need real-time ray tracing. AMD GPUs are suitable for non Raytrace projects.

Vset3D Studio does not take advantage of the multi-GPU setup.

Since Vset3D Studio uses the DirectX API, it is not recommended to run it on a Quadro GPU.

Features	Studio Demo	Studio Basic	Studio	Studio Expert
Watermark	✓	✗	✗	✗
Inputs	3	2	10	10
Mixers (*Simultaneous Outputs*)	2	2	4	4
Media Players	2	2	10	10
Virtual Cameras	5	5	20	20
Import	✓	✓	✓	✓
Animation	✓	✓	✓	✓
Object Parenting	✓	✓	✓	✓
NDI In Out	✓	✓	✓	✓
Decklink Blackmagic In Out	✓	✗	✓	✓
DMX Fixtures	✓	✗	✓	✓
Art-Net	✓	✗	✓	✓
MIDI	✓	✓	✓	✓
FreeD	✓	✗	✗	✓
DLSS Nvidia *	✓	✓	✓	✓
FBX Importation	✓	✓	✓	✓
Unity3D Addressable	✓	✓	✓	✓
Primitive Objects	✓	✓	✓	✓
Ambient Occlusion	✓	✓	✓	✓
Bloom	✓	✓	✓	✓
Color Correction	✓	✓	✓	✓
Depth of field	✓	✓	✓	✓
Fog	✓	✓	✓	✓
HDRI Sky	✓	✓	✓	✓
Indirect Lighting	✓	✓	✓	✓
Global Illumination	✓	✓	✓	✓
Real Time Ray tracing*	✓	✓	✓	✓
Real Time Reflection	✓	✓	✓	✓
Real Time Refraction	✓	✓	✓	✓
DirectX12	✓	✓	✓	✓
DirectX11**	✓	✓	✓	✓
Windows 10/11 64Bits	✓	✓	✓	✓
Customer Extend Support	✗	✗	✗	✓
Unity Addressable kit	✗	✗	✗	✓