



CamStage Pro + Batch Render

USER MANUAL

Every camera in your scene keeps its own setup: which objects show, which world and HDRI, which lights, which colour grade. Switch camera and its setup comes back.

Batch Render then renders every camera you tick, one image per camera, named after the camera, with a contact sheet for your client.

Version 2.7.2 with Batch Render 2.2.2 · Blender 4.2 or newer · Windows, macOS, Linux

1. What it does

CamStage Pro + Batch Render is two Blender add-ons in one download, unlocked by one licence key.

CamStage stores a setup on each camera and applies it when that camera becomes the active camera:

- Objects and collections shown or hidden per camera, in the viewport and in the render.
- An optional position, rotation and scale per camera for any object you manage.
- A world / HDRI per camera, with its own rotation, horizon and intensity.
- Lights per camera: on or off, power and colour.
- Colour grading per camera: exposure, contrast and colour temperature.
- Object tracking: the camera aims at an object and can orbit around it, with the HDRI following if you want.
- Applied again just before every render, so what you render is what you set up.

You keep one scene. No view layers, no duplicated scenes.

Batch Render renders the cameras you tick, one after the other:

- One file per camera, named after the camera, in the folder you choose.
- Resolution, scale and samples for all cameras, or different ones for a given camera.
- A contact sheet of every render, labelled with the camera names.
- A Stop button, and your scene settings are put back afterwards.

Because Batch Render switches to each camera before rendering it, CamStage applies that camera's setup first. Each image comes out with its own visibility, HDRI, lights and grade.

2. Requirements

Item	Requirement
Blender	4.2 or newer
System	Windows, macOS or Linux
Render engine for Batch Render	Cycles (Batch Render switches to Cycles while it renders, then puts your engine back)
Internet	Once per computer, to activate the licence
Licence	One key, activated on up to 2 computers

3. Installing

You download one zip: [camstage_v2.7.2_with_batch_render_v2.2.2_licensed.zip](#). It contains both add-ons. Do not unzip it.

1. In Blender, open **Edit > Preferences > Add-ons**.
2. Click the small arrow at the top right of the window and choose **Install from Disk**.
3. Pick the zip as it is and confirm.
4. In the add-on list, type [OmniViz](#) in the search field. You should see **OmniViz - CamStage** and **OmniViz - Batch Render**.

5. Make sure both are ticked (enabled).
6. Close Preferences.

If your computer unzipped the download automatically, do not install the folder. Download the zip again, or zip the folder back, and install the zip.

4. Activating the licence

Your licence key is in your order email. The same key unlocks both add-ons, but each add-on is activated on its own, so you paste the key twice.

1. In the 3D Viewport, press **N** to open the sidebar and click the **CamStage** tab.
2. The **CamStage** panel shows a box: **CamStage: activation required**.
3. Paste your key into the **Key** field.
4. Click **Activate License**. Blender shows "CamStage activated successfully!" and the CamStage tools appear.
5. Below it, the **Batch Render** panel shows the same kind of box: **Batch Render: activation required**.
6. Paste the same key into its **Key** field and click **Activate License** again.

You can also activate from **Edit > Preferences > Add-ons**: unfold the add-on, paste the key into **License Key** and click **Activate License**. When an add-on is active, its preferences show **✓ Licensed**.

Internet and offline use

An internet connection is needed when you click **Activate License**. The activation is then saved on your computer, and the add-ons start without contacting the server, so you can work offline.

Computers

One key can be activated on up to 2 computers that you use. For a new computer, or a third one, write to support@omniviz.studio.

The activation is saved in Blender's own settings folder. If you move to a new Blender version, you may be asked to activate again: paste the same key.

5. Where to find it

What	Where
CamStage panel	3D Viewport > press N > CamStage tab
Batch Render panel	Same CamStage tab, below the CamStage panel
Batch Render, second copy	Properties > Output tab > Batch Render (closed by default, click to unfold)
Licence key field	The panels above, or Edit > Preferences > Add-ons > unfold the add-on

The two Batch Render panels show the same controls. Use whichever is closer.

At the top of the CamStage panel you see **CamStage v2.7.2**: this tells you which version is running.

The CamStage panel has six sections you can fold and unfold: **Visibility**, **Tracking**, **World / HDRI**, **Lights**, **Color Grading** and **Reset**. **Tracking** and **Reset** start folded.

6. How CamStage works

CamStage always works on the **active camera** of the scene (the one you look through with Numpad 0). Its name is shown in a box near the top of the panel. Everything you set in the panel is stored on that camera.

To set up a camera:

1. Make it the active camera: select it and press **Ctrl + Numpad 0**, or set it in the Scene properties, or click it in Batch Render's list with **Selected Camera** chosen (see section 14).
2. Set up its visibility, world, lights and grade in the CamStage panel.
3. Make the next camera active and set it up the same way.

Auto-Apply on Camera Switch

This toggle is at the top of the panel and is on by default. When it is on, making another camera active applies that camera's setup straight away. When it is off, switching camera changes nothing in the scene, but CamStage still applies the active camera's setup just before each render.

The small refresh button next to it (**Apply Now**) applies everything for the active camera again. Use it if the viewport looks out of date.

What "default" means

The first time you add an object, a collection or a light to any camera, CamStage remembers how it was set at that moment. That is its default. When you switch to a camera that does not manage it, CamStage puts it back to its default.

Ticked boxes only

Most CamStage settings have a tick box. A setting is applied only when its box is ticked. An unticked setting is left alone. Section 17 explains what this means when you switch between cameras.

Tip: start in Material Preview or Rendered viewport shading. The world and the colour grading only show there.

7. Visibility

Show or hide objects and collections for the active camera.

Hide objects for this camera

1. Select the objects in the viewport or the Outliner.
2. In **Visibility**, click **Add Selected Objects**.
3. The objects are added to the list and hidden for this camera, in the viewport and in the render.

Hide a collection for this camera

1. Click the collection in the Outliner so it is the active collection.
2. In **Visibility**, click **Add Active Collection**.
3. The collection is added to the list and hidden for this camera.

The main Scene Collection cannot be added: pick one of its sub-collections.

The list

Each line has, from left to right:

- A tick box: untick it to stop managing this line for this camera, without removing it.
- The name. Click it to select the line.
- An eye icon: shown or hidden in the viewport.
- A camera icon: shown or hidden in the render.
- For objects, a transform icon: gives the object its own position for this camera (see below).
- An X: removes the line from this camera's list.

Click the eye and camera icons to choose exactly what this camera shows. For example, keep an object visible in the viewport so you can work around it, but hidden in the render.

Objects inside a collection

Click the small triangle in front of a collection to unfold it. Its objects are listed below it.

- An object with an empty box is not managed. Click the box to manage it: it is then hidden for this camera, and you can change its icons like any other line.
- When the whole collection is hidden for this camera, the objects inside are greyed out: Blender hides them with the collection anyway.

Position, rotation and scale per camera

1. Add the object to the list.
2. Click its transform icon to switch it on.
3. Click the object's name to select its line.
4. A box with **Location**, **Rotation** and **Scale** appears under the buttons. Set the values for this camera.

When you switch to another camera, the object goes back to its default position.

After removing an object with the X, click the refresh button next to **Auto-Apply on Camera Switch** to show it again as it was by default. Removing a collection puts it back straight away.

8. World / HDRI

Give the active camera its own world and HDRI settings.

Load an HDRI for this camera

1. In **World / HDRI**, click **Load HDRI Image....**
2. Pick an image file (.hdr, .exr, .png, .jpg, .jpeg, .tif or .tiff).
3. CamStage builds a new world named "CamStage HDRI - " followed by the image name, sets it for this camera and ticks **Override HDRI**.

A newly loaded HDRI starts clean for this camera: rotation 0, horizon 0, intensity 1.

Use an existing world

1. Tick **Override HDRI**.
2. Pick the world in the field below it.
3. If the scene does not switch to it, click the small refresh button at the end of the field (**Apply HDRI**).

When a camera has no **Override HDRI**, CamStage shows the scene's original world for it.

Rotation, horizon and intensity

Control	What it does
Rotation , then Z Rotation (°)	Turns the HDRI around the vertical axis, from -360 to 360 degrees
Horizon	Moves the HDRI up or down, from -1 to 1
Intensity	The world's strength, from 0 to 10

Tick the box of a control to use it for this camera. Untick it and the world goes back to its default value.

Snapshot HDRI

The refresh button in the **World / HDRI** header is **Snapshot HDRI**. It takes the scene's current world, rotation, intensity and horizon, stores them on this camera and ticks every box. Handy when you already set up the world by hand.

HDRI worlds made outside CamStage often have no Mapping node, which rotation and horizon need. When a file opens, CamStage adds one to any world that uses an environment image and has none. It only adds nodes, it never removes any.

9. Lights

Every light in the scene is listed in **Lights**, with no adding step.

Each line has, from left to right:

- **Managed** tick box: when ticked, CamStage sets this light for this camera. Untick it to leave the light untouched; it goes back to its original values.
- On / off button (light bulb icon): turns the light on or off for this camera.
- The light's name.
- Its power in watts.
- Its colour.
- **Use Current Value** button (import icon): replaces what CamStage stored for this light with what the light is set to right now.

To change a light for one camera:

1. Make that camera active.
2. In **Lights**, change the light's on / off, power or colour.
3. Switch to another camera: it keeps its own values.

The **Lights** header has two buttons:

- **Use Current Values for All** (import icon): does what **Use Current Value** does, for every light in this camera's list.
- **Refresh Lights** (refresh icon): lists lights you added and drops lights you deleted.

Lights are switched off by setting their power to 0, so they are never hidden. The power you set is kept for when you switch the light on again.

10. Color Grading

Give the active camera its own exposure, contrast and colour temperature. These use Blender's Color Management settings (**Properties > Render > Color Management**).

1. In **Color Grading**, tick **Exposure / Contrast**.
2. Set **Exposure** and **Contrast**.
3. For a warmer or cooler look, tick the box in front of **Color Temperature °K** and set a value from 1000 to 12000. CamStage switches on White Balance in Color Management for this.

The grade shows in the viewport in Material Preview or Rendered shading, as the panel reminds you: **Active in LookDev / Rendered mode**.

Snapshot Color

The refresh button in the **Color Grading** header is **Snapshot Color**. It takes the scene's current exposure, contrast and temperature, stores them on this camera and ticks both boxes.

Cameras without a grade

A camera without **Exposure / Contrast** ticked always shows exposure 0 and contrast 1. So no camera's grade leaks onto another. It also means a change you make by hand in Color Management is replaced when you switch to that camera: grade cameras with the CamStage fields.

Contrast drives the value Blender calls Gamma in Color Management.

11. Tracking

Make the camera aim at an object, and orbit around it.

1. Make the camera active and unfold **Tracking**.
2. Choose how it aims, in the **Tracking** menu:
 - **Relative to Object**: keeps the object where it is in the frame now (the default).
 - **Object**: puts the object in the centre of the frame.
3. In **Track Target**, pick the object.

Tracking switches on by itself (the tick box in the **Tracking** header). The panel now shows:

- The target's name and a **Stop Tracking** button.
- **Camera Position**: the camera's X, Y and Z. Move the camera here; it keeps aiming at the target.
- **Orbit**: swings the camera around the target, keeping its distance and height.

HDRI Follows Orbit is on by default. The world turns with the camera when you use **Orbit**, so the lighting seen from the camera stays the same.

Stop Tracking removes the aim and clears the target. The camera keeps its position and goes back to its own rotation.

Choose **Relative to Object** before picking the target if you want an off-centre framing. In this mode CamStage adds a tiny helper empty, named "CS_TrackAim_" followed by the object name, attached to the object. It is not rendered. Leave it in place while tracking is on.

12. Reset

Unfold **Reset** and click **Clear All Assignments** to remove every object and collection from the active camera's **Visibility** list. Blender asks you to confirm. Everything goes back to its default visibility.

This does not change the camera's world, lights, grade or tracking.

13. Batch Render: render every camera

The **Batch Render** panel is below CamStage in the **CamStage** tab, and in **Properties > Output**.

First batch

1. Save your .blend file.
2. Under **Output Folder**, choose where the images go. The default, `//renders/`, is a folder named renders next to your .blend file. It is created if it does not exist.
3. Next to **Cameras**, click the refresh icon (**Refresh Camera List**). Every camera in the scene is listed.
4. Tick the cameras to render. **All** and **None** tick or untick them all.
5. Under **Render Settings**, check the resolution, scale, samples and **Format** (see section 14).
6. Click the big button **Render 8 Cameras** (it shows how many are ticked).

Batch Render makes each ticked camera active in turn, renders it and saves it. With CamStage installed, each camera gets its own setup before its render.

The files

- Each image is named after its camera: a camera named `Living_Room` gives `Living_Room.png` (with PNG as the format). Characters that file names cannot hold are replaced by `_`.
- A file of the same name in the folder is replaced.
- The current frame is rendered.
- At the end, Blender's status bar says how many cameras were saved and where. Cameras that are ticked but no longer in the scene are named as missing.

Stopping

- While it renders, the big button becomes **Stop (camera 3 of 8)**. Click it to stop after the camera that is rendering now.
- You can also press Escape to cancel.
- Images already saved are kept.

When the batch ends or stops, your active camera, render engine, output path and the other render settings Batch Render changed are put back.

Other options

- **Persistent Data**: keeps scene data in memory between cameras. Batches are faster but use more memory (GPU memory when you render on the GPU). Turn it off if Blender crashes on large scenes. Off by default.
- **Restrict to Camera Border**: renders only the camera frame and crops to it. Speeds up previews with a lower **Scale %**.

14. Render settings for all cameras, or per camera

At the top of **Render Settings**, choose **All Cameras** or **Selected Camera**.

All Cameras

These are the batch settings, used by every camera that does not have its own:

- The resolution preset menu: SD 1280 × 720, HD 1920 × 1080, 2K 2560 × 1440, 4K 3840 × 2160, 5K 5120 × 2880, 8K 7680 × 4320.
- **X** and **Y**: any resolution, for example a square or portrait shot.
- **Scale %**, with quick buttons 25%, 40%, 50% and 100%.
- **Samples** (Cycles samples), with quick buttons 100, 200, 300 and 500.

Selected Camera

1. Choose **Selected Camera**.
2. Click a camera in the camera list. It becomes the active camera, so the viewport shows its framing (and CamStage applies its setup).
3. The panel says "batch settings (edit to change)" after the camera's name.
4. Change its resolution, scale or samples. The camera now has its own settings, and the panel says "own settings".
5. In the camera list, that camera now shows its resolution and samples, for example 1080 × 1350 · 256.

To give a camera the batch settings back, select it and click **Use Batch Settings**.

Format and **Contact Sheet** are the same for every camera.

Batch Render keeps Blender's own resolution and samples in step with the active camera. The camera frame in the viewport shows the right shape, and F12 renders it as the batch would. Change resolution and samples in the Batch Render panel: values typed in Blender's Output properties are replaced when you switch camera.

15. Contact sheet

With **Contact Sheet** ticked (the default), a finished batch also saves `_contact_sheet.png` in the output folder:

- Every render in a grid, in render order, each labelled with its camera name.
- A title line with the .blend file name, the number of cameras and the date.

It is made only when the batch runs to the end, not after Stop or Escape. Video formats are left out of it. EXR renders are converted so their thumbnails are not too dark.

16. Typical workflows

An interior with 8 views

1. Name the cameras in the order you want them, for example `01_Entrance`, `02_Living`, up to `08_Terrace`. The names become the file names. Cameras found by a refresh are listed in alphabetical order.

2. Make `01_Entrance` active. In **Visibility**, hide what is in the way (a wall, a door, the ceiling for a high view).
3. In **World / HDRI**, load the HDRI and tick **Rotation** to turn the sun where you want it.
4. In **Lights**, switch off the lights this view does not need, or change their power.
5. In **Color Grading**, tick **Exposure / Contrast** and adjust.
6. Do the same for the seven other cameras. Switch between them to check each one.
7. In **Batch Render**, set the output folder, refresh the camera list, choose HD and 128 samples, tick **Contact Sheet**.
8. Make a quick test: click **25%** under **Scale %** and render. Check the contact sheet.
9. Click **100%**, set the final samples and render again.

Client delivery

1. Choose PNG or JPEG in **Format**.
2. Give the hero shot its own settings: **Selected Camera**, pick it, choose 4K and more samples.
3. Render all cameras into a dated folder, for example `//renders/2026-10-22/`.
4. Send the images with `_contact_sheet.png`: the client sees every view on one page, with the camera names to refer to.

Day and night from the same scene

Duplicate a camera with Shift + D, rename it `Living_Night`, and give it a night HDRI, the interior lights on and a lower exposure. Both versions render in the same batch.

17. Tips

- **Duplicate cameras with Shift + D, not Alt + D.** CamStage stores its setup on the camera data. A linked duplicate (Alt + D, or copy and paste) shares the data, so both cameras share one setup. To split them, select the copy and use **Object > Relations > Make Single User > Object & Data**.
- **Give every camera its own value for the ticked settings.** HDRI rotation, horizon, intensity and colour temperature are only set by cameras that tick them. A camera that does not tick them keeps whatever the last camera set. If one camera uses **Rotation**, tick **Rotation** on the others too.
- **Exposure and contrast are different:** a camera without a grade always shows exposure 0 and contrast 1.
- **Check before a long batch:** a 25% scale render with low samples shows mistakes in minutes.
- **Quit Blender completely after an update** (see section 19). Blender keeps the old code in memory until it restarts.
- **Batch Render renders with Cycles**, even if your scene is set to Eevee. Set your Cycles options (device, denoising) in Blender's Render properties before the batch.

18. Troubleshooting

The CamStage tab or a panel is missing

- Check that **OmniViz - CamStage** and **OmniViz - Batch Render** are ticked in **Edit > Preferences > Add-ons**.
- Press **N** in the 3D Viewport and look for the **CamStage** tab. The tab list may need scrolling.

- Quit and restart Blender.
- In **Properties > Output**, the **Batch Render** panel is folded: click its title.

The CamStage panel shows only "No active camera"

The scene has no active camera. Make a camera active.

The key is not accepted

The message tells you why:

- "Cannot reach the license server: check your internet connection": check that you are online and that a firewall does not block Blender.
- "This license key is not for CamStage" or "This license key is not for Batch Render": the key belongs to another product. Check you pasted the key for CamStage Pro + Batch Render.
- "Paste your license key first": the **Key** field is empty.
- Any other message comes from the licence server, for example when the key is already active on 2 computers. Write to support with your order email address.

Copy the key again from your order email if in doubt.

CamStage works but Batch Render asks for activation

Batch Render is activated on its own. Paste the same key into the **Batch Render** panel and click **Activate License**.

The panel says "License expired: please re-enter your key"

Paste your key and click **Activate License** again, with internet on.

A camera shows another camera's HDRI angle or colour temperature

That camera does not tick that setting, so it keeps the last value set. Tick it on this camera and set its own value. See the tips.

My exposure goes back to 0 when I switch camera

By design, a camera without **Exposure / Contrast** ticked shows exposure 0 and contrast 1. Tick it and grade the camera in CamStage.

An object is hidden on a camera where it should show

Look in that camera's **Visibility** list, including inside unfolded collections. Then click the refresh button next to **Auto-Apply on Camera Switch**.

Two cameras always change together

They are linked duplicates. See the first tip.

HDRI rotation or horizon does nothing

The world needs an Environment Texture node. Load the image with **Load HDRI Image...**, which builds a world that works, or save and reopen the file so CamStage can add the missing Mapping node.

A new light is not in the list

Click **Refresh Lights** in the **Lights** header.

The resolution changes when I switch camera

That camera has its own Batch Render settings, or you typed the resolution in Blender's Output properties. Set resolution in the Batch Render panel.

Batch Render renders nothing

Check that at least one camera is ticked, that the list is up to date (refresh icon next to **Cameras**) and that an output folder is set.

No contact sheet

Check **Contact Sheet** is ticked and that the batch ran to the end. If the status bar says the contact sheet failed, open Blender's System Console to see why, and send it to support.

19. Updating

Updates within the same major version are free. Your camera setups are saved in your .blend files and stay there.

1. In **Edit > Preferences > Add-ons**, remove the old **OmniViz - CamStage** and **OmniViz - Batch Render**.
2. Quit Blender completely.
3. Open Blender again and install the new zip as in section 3.
4. Check the version: **CamStage v2.7.2** (or newer) at the top of the CamStage panel. Both versions are also shown in the add-on list in Preferences.

If an add-on asks for activation after the update, paste the same key.

20. Licence and support

Licence

- One licence key per purchase. It unlocks both CamStage and Batch Render.
- Up to 2 computers that you use.
- Personal and commercial work, including client work.
- Not transferable. You may not share, resell or publish the add-ons or the key.
- Free updates within the same major version (2.x).

Support

- Email: support@omniviz.studio
- Questions and answers: <https://omniviz.studio/#faq>

When you write, please give your Blender version, your system, the add-on versions and, for licence questions, your order email address.