

AutoCamDirector Instructions (English)

Plugin **1.17.0** / package **4** | **130** parameters | **24** runtime actions | built with VaM 1.22.0.13

Chinese version: [INSTRUCTIONS_CN.md](#) | Release page text: [HUB_PAGE.md](#) | What changed: [RELEASE_NOTE S.md](#)

The notes inside the plugin (one or two sentences per row) are the per-setting reference; this file is the task-oriented guide.

1. Install and load

1. Copy `EZhustler.AutoCamDirector.4.var` (Chinese build: `EZhustler.AutoCamDirector_CN.4.var`) into `Virt-A-Mate\AddonPackages\`.
 - You can install both builds, but only run one of them per atom.
 - After replacing a package you must restart VaM, otherwise the old package index is still cached.
2. Add a **CustomUnityAsset (CUA)** or **Empty** atom to your scene - it only has to exist to carry the plugin.
3. Open that atom's **Plugin Manager, Add Plugin** and pick `LoadMe.cslist` - it loads the main panel and the optional Director Mode panel together.
4. Tick **Start directing** at the top of the plugin panel and the camera starts working.
 - To stop: untick it, or use the Stop directing action.

Note: in **Player camera** mode the VaM UI is hidden while directing (a built-in rule, it cannot be switched off); opening the UI again stops it. In **Host atom / Target atom** mode the UI is not affected.

2. Quick start (six steps)

Step	Do this	Where
1	Tick Start directing	Global tab, top
2	Pick a camera mode - start with Player camera (desktop and VR)	Global tab
3	On the Subject 1 tab tick Enable this subject and set Atom (who to film)	Subject tab
4	Choose a focus mode : Joint (fixed part) / Random joints / Atom centre / Main control	Subject tab
5	Set Orbit positions , Dwell time , Move time , plus Camera distance and Camera height	Subject tab
6	For front shots set Front chance (%) and Front arc (deg)	Subject tab

For more subjects, repeat steps 3-6 on the **Subject 2 / Subject 3** tabs, then pick a **subject switch mode** (cycle / random / group shot) on the Global tab.

3. Which camera mode to use

Mode	Best for	Notes
Player camera (recommended)	Watching in desktop or VR	Drives your own view; the UI is hidden while directing
Host atom	Letting an atom (empty, prop) carry the camera	That atom drives the camera
Target atom	A scene that already has a dedicated camera atom	Pick it in Atom (who to film)

4. The panel at a glance

- **Four tabs:** Global / Subject 1 / Subject 2 / Subject 3, with a live **status box** pinned at the top (position, focus, facing rule, avoidance, containment state).
- **Top row of every tab:** Load / Save / Default
 - Load and Save use VaM's own file browser, already pointed at the preset folder.
 - A **global preset** stores the whole plugin (global settings plus all three subjects); a **subject preset** stores one subject and can be loaded onto any other subject.
 - **Default** restores the factory values. Presets are plain JSON in `Saves\PluginData\EZhustler\AutoCamDirector`, easy to copy, share and back up.
 - The line underneath shows what is applied, or `custom (unsaved)` once you change something.
- **Notes on the right** are in the same order as the settings on the left, one or two sentences each; that column never takes mouse input, so the wheel always scrolls the panel.
- **Copy status** puts the status text on the clipboard. **Print diagnostics** writes a detailed report to the VaM log (and to the clipboard).

5. Common tasks: what to set for what

You want	Set this
A steady orbit with no pauses	Dwell time = 0, Move time = your speed, all randoms = 0
A pause on every position	Dwell time 2-4 s plus Dwell random 1
Front shots only	Front chance = 100, Front arc 40-60
Back shots only	Front chance = 0
No nodding up and down	Tick Keep level (no pitch)
Always aim at a part (e.g. the face)	Give Look height offset (m) a positive value - it moves the aim point, not the camera pose
A fixed camera height (crouch or jump)	Global Camera height (m) with its random at 0

You want	Set this
On a bed: keep the camera above the mattress	Global Height reference set to measure from the current focus
Close-ups without hitting the face	Small Camera distance (0.5-0.8) and keep Avoid obstacles on (the skin clearance runs every frame)
Lying / prone / kneeling without clipping	Leave the defaults: the eye-to-skin floor measures the true nearest surface in 3D
Never a straight-down shot	Per-subject Max look-down / Max look-up (deg) (default 60/60)
Random body parts	Focus mode = Random joints, plus Joint switch time / random and the 6 joint weights (0 = never)
Only some body parts	Set the unwanted joint weights to 0 - weights only apply while Joint set is Custom
Cycle between characters	Global Subject switch mode = Cycle, plus Switch time / random
Random characters	Subject switch mode = Random
Everyone in one frame	Subject switch mode = Group shot
Fast hard cuts	Director Mode panel: tick Enable Director Mode , set Cut min / Cut max, optionally New joint focus on cut / Zoom in on focus / New subject on cut
Cut by hand	The Cut now button, or the Cut now / Cut now (director) actions
Cut to a named joint or subject	Actions Cut to head / neck / chest / abdomen / pelvis / hip and Cut to subject 1 / 2 / 3
Facing is always wrong	Change Facing source (Auto / Body cues only / torso bones / pelvis control / atom root) and fine-tune with Facing offset (deg); Print diagnostics lists the candidate directions and the angles
A prop (non-Person) needs facing too	Facing rows hide for Person subjects; for a non-Person use the mirror switch in the advanced section (same setting)
Drive it from another plugin or Timeline	See section 7: 24 actions and 130 parameters

6. Parameters by tab

Global: Start directing / camera mode / Atom (who to film) / stop if camera is taken / disable collision while directing / avoid obstacles / obstacle clearance (m) / Person atoms block camera / fix near clip plane / subject switch mode / switch time + random / camera height + random / height reference / rotation apply mode / keep level / restore view on stop / debug log / auto release links / preset row.

Subject (basic): enable this subject / Atom (who to film) / focus mode / joint / joint set / max look-down and look-up / joint switch time + random / orbit positions / dwell time + random / time on this subject + random / smooth move / move time + random / camera distance + random / follow smoothing / focus smoothing / advanced options.

Subject (person only): use subject facing / facing source / front chance / front arc / facing offset / the 6 joint weights.

Director Mode panel: enable Director Mode / cut min and max / cut chance / hold after cut / new joint focus on cut / zoom in on focus / zoom distance / new subject on cut / switch mode and weights / disable follow smoothing / disable focus smoothing / cut now.

The full parameter names (as other plugins see them) are in section 7.

7. Triggers, Timeline and key bindings

Actions (24): Start / Stop / Toggle directing | Next position / Previous position | Next subject / Next camera mode | Restart | Enable all subjects / Disable all subjects | Cut now | Cut to head / neck / chest / abdomen / pelvis / hip | Cut to next joint / Cut to previous joint | Cut to subject 1 / 2 / 3 | Toggle Director Mode / Cut now (director).

In Timeline: add a Storable track for the plugin, then use the parameter names below; actions are picked by their action names.

Note: **the on-screen label is not always the parameter name** (17 rows). Other plugins must use the right-hand column (per-subject names take the `Subject N` prefix):

On screen	Real parameter name
Enabled (this subject)	Subject 1 Enabled
Start directing	Enabled
Atom to drive (global row)	Target atom
Subject (who to film) (subject row)	Subject 1 Atom
Joint to look at	Subject 1 Joint
Orbit positions	Subject 1 Position count
Time on this subject (s)	Subject 1 Stay time (s)
Subject time random (s)	Subject 1 Stay random (s)
Smooth move	Subject 1 Smooth transition
Height random (m)	Subject 1 Camera height random (m)
Switch time (s) / Switch random (s)	Subject 1 Subject switch time (s) / Subject 1 Subject switch random (s)
When to switch subject	Subject 1 Subject switch by
Subject rotation (global)	Multi-subject mode

The English and Chinese builds use different parameter names (English names in one, Chinese names in the other), so preset files are not interchangeable; do not run both builds on one atom.

8. Diagnostics and troubleshooting

Click **Print diagnostics** first, then search `%USERPROFILE%\AppData\LocalLow\MeshedVR\VaM\output_log.txt` for `AutoCamDirector`. It reports the full status, the position and focus, the driven target, avoidance and containment results, the nearby colliders, the facing candidates and their angles, the preset self-check, and the **last 4 seconds frame by frame** (for twitching or stutter).

Symptom	Likely cause and fix
Camera does not move	Start directing is off, or another plugin took the camera (the status box says so) - resolve the conflict and tick it again
Camera twitches against the body	Open the frame trace in the diagnostics; check that the camera distance is not too small and Avoid obstacles is on; set the randoms to 0 to reproduce
Shots always come out from the side	Wrong facing source - change it or correct with Facing offset; for props use the mirror switch
Camera drops below the mattress	Set the global Height reference to measure from the current focus
Someone keeps blocking the view	Keep Person atoms block camera on (the camera nudges sideways and moves on after 0.45 s)
Settings look greyed out	That setting does not apply right now (facing rows on a non-Person, Director Mode items while it is off); greyed rows are fully non-interactive
A label looks wrong	A third-party UI translation patch can rewrite plugin labels at runtime - disable the patch and check again
A parameter is missing in Timeline	You are using the on-screen label - use the real name from section 7

9. FAQ

Does a preset save everything? Yes. A global preset covers the global settings plus all three subjects; a subject preset covers one subject and can be loaded onto any other. Two renamed dropdown values in older preset files (`Auto (torso bones)`, `Custom`) are mapped to the new values instead of being dropped.

Do my old scenes still work after updating? Yes. The parameter count and names are unchanged and settings are saved with the scene. Only Timeline bindings that reference actions **by index** need a second look.

Why do some changes not take effect immediately? Several values are sampled once per camera position rather than every frame: camera height and its random, camera distance and its random, dwell and its random, move time and its random, angle random, front chance, orbit direction. Animating them with a Timeline curve therefore steps once per position. The per-frame ones are the two smoothing values, start angle, use subject facing, look height offset, keep level, rotation apply mode, the four avoidance settings and the debug log.

Is Director Mode safe? It is **experimental**: it does nothing until you tick Enable Director Mode, and turning it off restores the settings it changed. It only *requests* a hard cut - the main plugin still does the camera writing.

Performance? The collider cache refreshes round-robin (and fully on a hard cut); turning Debug log off reduces log noise; more subjects cost more, one or two is usually plenty.
