RRAZ Depth

Installation and check · Affinity 3 · Windows 10/11 (64-bit) · version 1.0.0

This sheet covers installing RRAZ Depth and checking that it runs. Depth is a filter that builds a 16-bit depth map from the selected pixel layer, in Affinity. The photographer's notes are a separate document, linked at the end. Everything runs on this computer: no upload, no account, no server.

> **These filters only work on 16-bit rasterised images.**
> A 16-bit per channel pixel layer, in RGB or greyscale. 8-bit and 32-bit HDR documents cannot be processed.

1 Install

Before you start

- Windows 10 or 11, 64-bit.
- **No NVIDIA card and no CUDA required**: Depth runs on the processor, so any 64-bit Windows machine will do.
- About **1.8 GB free**, in two places: about 680 MB where you extract the zip (the zip and the folder), and about 1 GB on the drive that holds your Windows account, where the engine is installed. Check both drives before you start.
- Close Affinity. The plug-in cannot be replaced while Affinity is using it.
- The install is per user. No administrator rights are needed.

The download

Download one file: `RRAZ_DEPTH_1.0.0.zip`, about 340 MB. It contains the setup, the runtime, this sheet and the checksums.

> **Decide where it will be extracted before you extract it.** Do not just double-click the zip and drag the files out — the files stay where you put them until you delete them.
>
> - Right-click the zip and choose **Extract All**. Windows proposes a folder next to the zip, usually inside `Downloads`.
> - Look at the drive in that path. If it has about 340 MB free, continue. If it does not, choose another folder on a drive that has the room, in the same dialog.
> - The setup does not ask where to install the filter. The engine always goes to the drive that holds your Windows account, usually `C:`, and needs about 1 GB there.

Run the setup

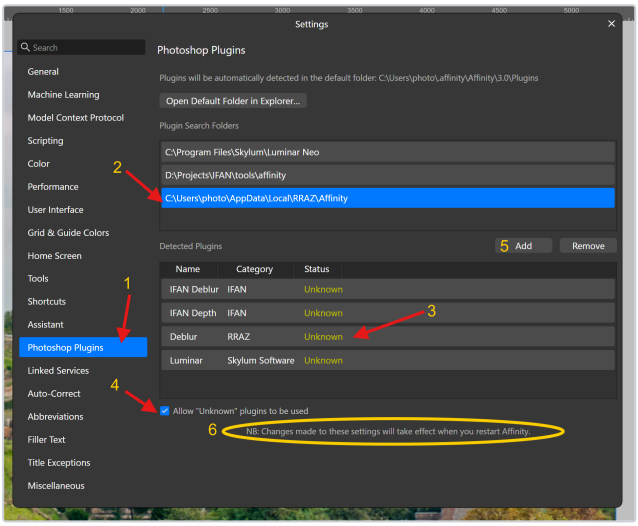
- In the extracted folder, double-click `RRAZ_DEPTH_1.0.0_Setup.exe`. Windows may warn that it is unsigned: choose **More info**, then **Run anyway**.
- Setup verifies the runtime's SHA-256, then expands the engine. This takes a minute or two.
- No files are written outside `%LOCALAPPDATA%\RRAZ`.

Check that it installed

- **Settings > Apps** lists **RRAZ Depth 1.0.0**.
- The engine is in `%LOCALAPPDATA%\RRAZ\Depth` (it contains `python\python.exe` and `app\`).
- The plug-in files are in `%LOCALAPPDATA%\RRAZ\Affinity`: `Depth.8bf`, `to_raw.py`, `depth.ini`.
- After the install, delete both the zip file and the folder you extracted it into, with everything in it. The filter does not need them. If Windows will not delete a file because it is in use, close anything open from that folder — including the PDF sheet or a text file — then delete the folder again. The engine stays in `%LOCALAPPDATA%\RRAZ\Depth`.

Add the folder to Affinity

Affinity's plug-in folder is a preference, so it has to be added once, the same way for every RRAZ filter. The setup finish page shows the exact folder for your Windows account.



Affinity Settings > Photoshop Plugins (1). Other rows in this example are unrelated; only the RRAZ row matters.

1. Open Affinity, then **Settings > Photoshop Plugins** (1).
2. Already have an RRAZ filter installed? If your RRAZ folder is listed in **Plugin Search Folders** (2), a filter is listed in **Detected Plugins** (3), and (4) is ticked, the folder is already added: close and reopen Affinity and go to step 6.
3. Otherwise tick **Allow "Unknown" plugins to be used** (4) and click **Add** (5).
4. Paste `%LOCALAPPDATA%\RRAZ\Affinity` into the folder dialog, press Enter, then choose **Select Folder**.
5. Close Affinity and open it again; the note at (6) says changes take effect on restart.
6. Open **Filters > Plugins > RRAZ > Depth**.

That folder is normally `C:\Users\<you>\AppData\Local\RRAZ\Affinity`, and the user name is different on each computer. Add the **Affinity** folder, not the engine folder (`...\RRAZ\Depth`). Any folder already listed can stay; RRAZ is a separate entry.

To uninstall

Settings > Apps > RRAZ Depth > Uninstall. It removes its engine and files. The plug-in folder entry in Affinity is a preference and can be removed there.

2 Check it in Affinity

Open a 16-bit image

- Use a 16-bit per channel, rasterised pixel layer: **RGB (16 bit)** or **Grey (16 bit)**.
- With an 8-bit or 32-bit HDR document the RRAZ Depth menu entry is **greyed out**. Convert first with **Document > Colour Format > RGB (16 bit)** (or Grey 16-bit).
- If the filter is run on an unsupported bit depth anyway, the layer becomes flat **mid-grey** — 50% grey (128 in 8-bit, 16384 in Affinity's 16-bit range, 0.5 in 32-bit). That is a refusal, not a result. Undo; the log says why.

Run the filter

- Select the pixel layer and open **Filters > Plugins > RRAZ > Depth**.
- The active layer is replaced by the depth map. **Duplicate the layer first**: the original pixels are not kept.
- The map is 16-bit greyscale, returned at the layer's own size. The model works at a smaller internal size and scales the result up, so the map covers the whole frame with no crop.
- Affinity waits while it runs. On the processor a large layer takes noticeably longer than a small one. Everything is local; no image leaves the computer.

What success looks like

- The same layer and dimensions, now a greyscale depth map. There is no success dialog.
- A line is added to `%LOCALAPPDATA%\RRAZ\Affinity\depth.log`.

If the menu entry is missing

- Check that `%LOCALAPPDATA%\RRAZ\Affinity` is listed in **Settings > Photoshop Plugins**.
- Restart Affinity.
- Read `%LOCALAPPDATA%\RRAZ\Affinity\depth.log`.
- Confirm the layer is 16-bit, not 8-bit or 32-bit.

Depth model: *Depth Anything At Any Condition* (Depth Anything AC), HVision-NKU, built on Depth Anything V2. Model code and weights are licensed CC BY-NC 4.0 with Apache-2.0 components; the licence files are installed in `app\LICENSES\`. Original code: github.com/HVision-NKU/DepthAnythingAC.

Changes for the Affinity plug-in: github.com/RRaz/Filters/. Not affiliated with or endorsed by the original authors.

All RRAZ filters, notes and example images
https://github.com/RRaz/Filters/

The list, notes and images are kept separately and updated independently of this installer. Download them when you want; there is no ZIP.