

-- FINAL GUI RETARD GUIDE --

"HE WHO SHALL NOT BE NAMED"

The definitive Stable Diffusion experience™

---NEW FEATURE SHOWCASE & HOWTO---

Notable: Inpainting/Outpainting, Live generation preview, Tiling, Upscaling, 4gb support

(Basic) CPU-only guide available [Here](#)

[Japanese guide here](#) [日本語ガイド](#)

Special thanks to all anons who contributed

Guide

Step 1: Install Git ([page](#))

Step 2: Clone the WebUI repo to your desired location in a Git bash terminal:

```
git clone https://github.com/AUTOMATIC1111/stable-diffusion-webui
```

OR download the WebUI repo .zip [HERE](#) and extract

(*git clone is easier to update since you can just type `git pull` in the directory*)

Step 3: Download the 1.4 AI model from [huggingface](#) (requires signup) or [HERE](#)

([torrent magnet](#))

(NEW 9/7) Alternate 1.4 Waifu model trained on an additional **56k** Danbooru images [HERE](#)

([mirror](#)) ([torrent magnet](#))

(*Note: Uncompressed, several GB larger than normal model*)

[comparison](#)

Step 4: Rename your .ckpt file to "model.ckpt", and place it in `stable-diffusion-webui-master`

Step 5 (Optional): Download and place [GFPGANv1.3.pth](#) into the master webUI directory

Step 6: Install Python 3.10.6 ([page](#))

Step 7: Run `webui.bat` from Windows Explorer. Run it as normal user, **not** as administrator.

- Wait patiently while it installs dependencies and does a first time run. It may *seem* "stuck" but it isn't. It may take up to 10-15 minutes. **And you're done!**

Usage:

- Open webui.bat
- After loading the model it should give you a LAN address such as '**127.0.0.1:7860**'
- Enter the address into your browser to enter the GUI environment

RUNNING ON 4GB

It is possible to run the Stable Diffusion webui on 4gb Vram with **some modifications:**

- Edit `webui.bat`
- In line **5** after `COMMANDLINE_ARGS=`, enter your desired parameters:
Example: `COMMANDLINE_ARGS=--medvram --opt-split-attention`
- If you have 4GB VRAM and want to make 512x512 (or maybe up to 640x640) images, use `--medvram`.
- If you have 4GB VRAM and want to make 512x512 images, but you get an out of memory error with `--medvram`, use `--medvram --opt-split-attention` instead.
- If you have 4GB VRAM and want to make 512x512 images, and you still get an out of memory error, use `--lowvram --always-batch-cond-uncond --opt-split-attention` instead.
- If you have 4GB VRAM and want to make images larger than you can with `--medvram`, use `--lowvram --opt-split-attention`.
- If you have **more VRAM** and want to make larger images than you can usually make, use `--medvram --opt-split-attention`.

You can use `--lowvram` also but the effect will likely be barely noticeable.

Otherwise, do not use any of these

- **NOTE:**

If you get a **green screen** instead of generated pictures, you have a card that doesn't support half precision floating point numbers
You must use `--precision full --no-half` in addition to other flags, and the model will take much more space in VRAM

i LINKS/NOTES/TIPS

-----LINKS-----

- Build great aesthetic prompts using the [prompt builder](#)
- Check out the wiki https://wiki.installgentoo.com/wiki/Stable_Diffusion
- Japanese keywords: https://chara-zokusei.jp/question_list
- Use [Darkreader](#) to change your Gradio theme to dark mode
- [Stable diffusion WebUI repo](#)
- [Waifu Diffusion huggingface page](#)

-----TROUBLESHOOTING-----

- if your version of Python is not in PATH (or if another version is)
create or modify `webui.settings.bat` in the root folder (same place as `webui.bat`)
add the line `set PYTHON=python` to say the full path to your python executable: `set PYTHON=B:\soft\Python310\python.exe`
You can do this for python, but not for git.
- The installer creates a python virtual environment, so none of installed modules will affect your system installation of python if you had one prior to installing this.
- To prevent the creation of virtual environment and use your system python, edit `webui.bat` replacing `set VENV_DIR=venv` with `set VENV_DIR=`
- `webui.bat` installs requirements from files `requirements_versions.txt`, which lists versions for modules specifically compatible with Python 3.10.6.
If you choose to install for a different version of python, editing `webui.bat` to have `set REQS_FILE=requirements.txt` instead of `set REQS_FILE=requirements_versions.txt` may help (but I still recommend you to just use the recommended version of python).
- If you feel you broke something and want to reinstall from scratch, delete directories: `venv`, `repositories`.
- If your output is a jumbled rainbow mess your image resolution is set TOO LOW
- Having too high of a CFG level will also introduce rainbow distortion, your CFG shouldn't be set above 20
- On older systems, you may have to change `cuda-toolkit=11.3` to `cuda-toolkit=9.0`
- Make sure your installation is on the C: drive
- This guide is designed for NVIDIA GPUs *only*, as stable diffusion requires cuda cores.
AMD users should try <https://reentry.org/sdamd>

-----TIPS-----

- You can drag your favorite result from the output tab on the right **back into** `img2img` for further iteration
- The `k_euler_a` and `k_dpm_2_a` samplers give vastly different, more intricate results from the same seed & prompt
- Unlike other samplers, `k_euler_a` can generate high quality results from low steps. Try it with 10-25 instead of 50
- The seed for each generated result is in the output filename if you want to revisit it
- Using the same keywords as a generated image in `img2img` produces interesting variants
- It's recommended to have your prompts be at least 512 pixels in *one* dimension, or a 384x384 square at the smallest
Anything smaller will have heavy artifacting
- 512x512 will always yield the most accurate results as the model was trained at that resolution
- Try Low strength (0.3-0.4) + High CFG in `img2img` for interesting outputs
- You can use Japanese Unicode characters in prompts

-----Changing UI Defaults-----

- After running once, a `ui-config.json` file appears in `webui` master directory:
Edit values to your liking and the next time you launch the program they will be applied.

-----Running Online-----

- Use `--share` option to run online. You will get a `xxx.app.gradio` link. This is the intended way to use the program in collabs.
- Use `--listen` to make the server listen to network connections. This will allow computers on local network to access the UI, and if you configure port forwarding, also computers on the internet.

- Use `--port xxxx` to make the server listen on a specific port, `xxxx` being the wanted port. Remember that all ports below 1024 needs root/admin rights, for this reason it is advised to use a port above 1024. Defaults to port 7860 if available.

💡 RUNNING ON WINDOWS 7/CONDA

(You can also try this method if the traditional install isn't working)

Windows 7 does **not** allow for directly installing the version of Python recommended in this guide on it's own.

However, it does allow for installing the latest versions of Python within **Conda**:

- **Follow all the same steps from the main guide, up to Step 5**
- Download Miniconda [HERE](#). Download Miniconda 3
- Install Miniconda in the default location. Install for **all users**.
Uncheck "Register Miniconda as the system Python 3.9" unless you want to
- Open Anaconda Prompt (miniconda3)
- In Miniconda, navigate to the `/stable-diffusion-webui-master` folder wherever you downloaded using "cd" to jump folders.
(Or just type "cd" followed by a space, and then *drag the folder into* the Anaconda prompt.)
- Type the following commands to make an environment and install the necessary dependencies:
- `conda create --name qwe`
(You can name it whatever you want instead of qwe)
- `conda activate qwe`
- `conda install python`
- `conda install git`
- `webui.bat`
(Note: it may seem like it's stuck on "Installing torch" in the beginning. This is normal and should take 10-15 minutes)
It should now be ready to use

RUNNING:

- Navigate to `/stable-diffusion-webui-master` in Miniconda
- Type `conda activate qwe`
(You will need to type 'conda activate qwe' every time you wish to run webui)
- Type `webui.bat`
- After loading the model it should give you a LAN address such as '**127.0.0.1:7860**'
Enter the address into your browser to enter the GUI environment

💡 EXTRAS

--OLD MODEL--

The original v1.3 leaked model from June can be downloaded here:

<https://drinkordiecdn.lol/sd-v1-3-full-ema.ckpt>

Backup Download: <https://download1980.mediafire.com/3nu6nlhy92ag/wnljy8vikn2kpzn/sd-v1-3-full-ema.ckpt>

Torrent Magnet: <https://reentry.co/6gocs>

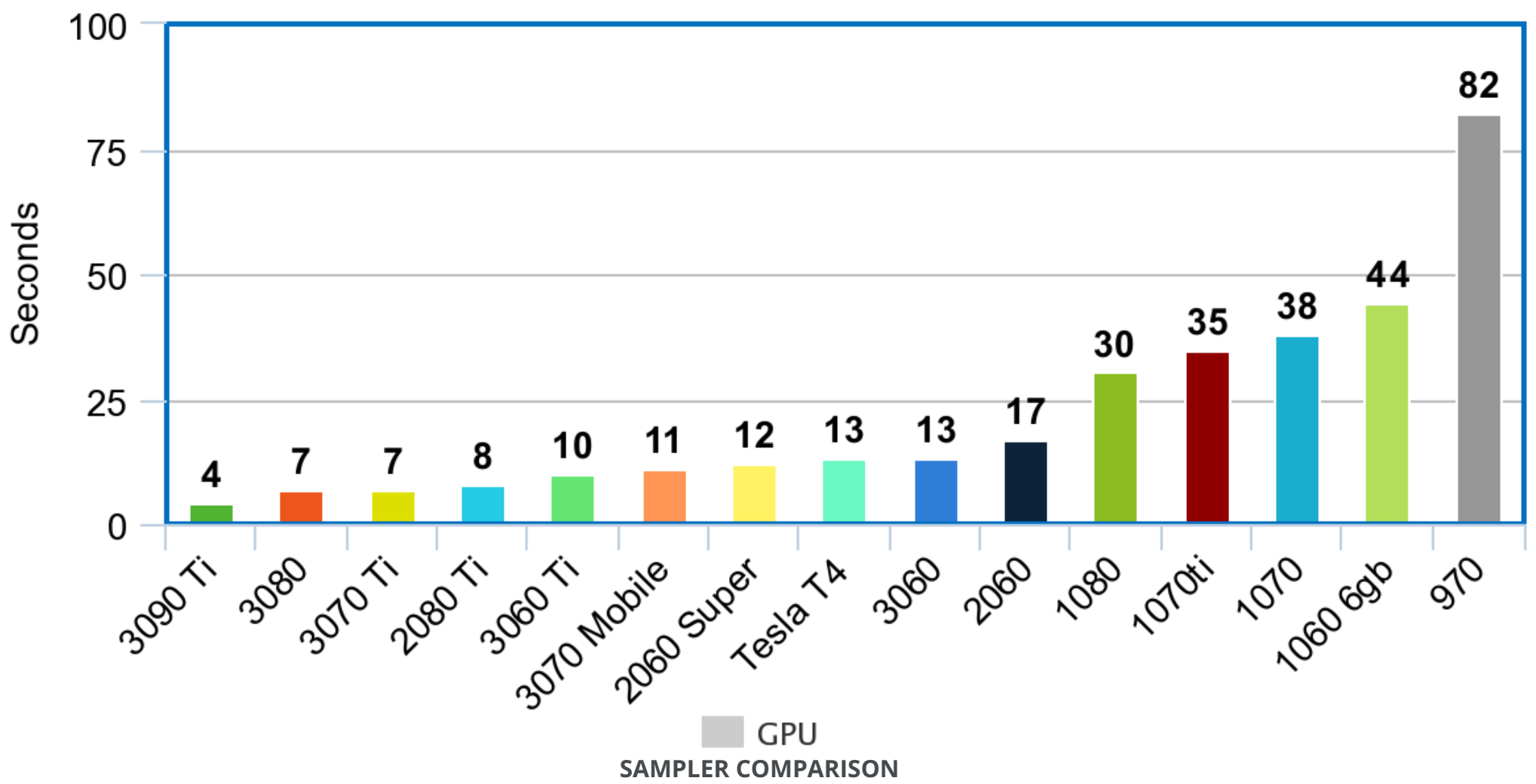
--OLD GUIDE--

The original hlky guide (replaced as of 9/8/22) is here: <https://reentry.org/GUltard>

The original guide (replaced as of 8/25/22) is here: <https://reentry.org/kretard>

APPROXIMATE RENDER TIME BY GPU (50 steps)

Time spent generating 512x512 sample (Stable Diffusion)



Sampler vs. Steps

(Scale = 15.0, W = 512, H = 512)

steps = 2

steps = 4

steps = 8

steps = 16

steps = 32

steps = 64

k_euler_a



k_euler



k_lms



plms



ddim



k_heun



k_dpm_2



k_dpm_2_a

