

DreamStudio beta

User Manual V1.5.101122

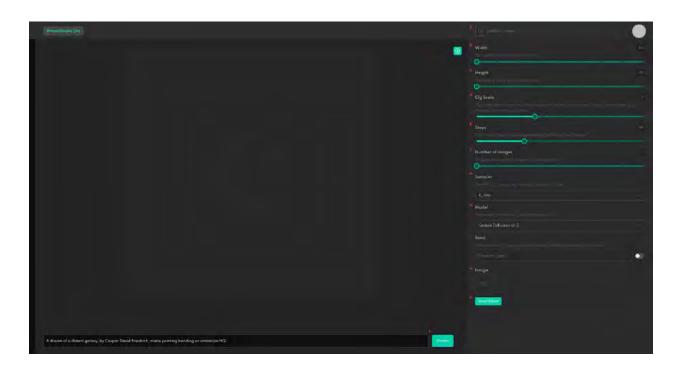
11-Oct 2022

1. Default Mode

100% Al-generated, no initial image.

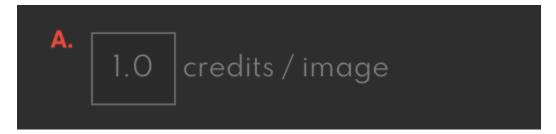
1.1 Accessing Default Mode

Default Mode loads automatically upon login.



1.2 Overview of Default Mode

1.2.A Credit Counter



The **Credit Counter** racks how many generation credits each image generation costs based on how much compute the current settings use. Settings that impact the cost per image are:

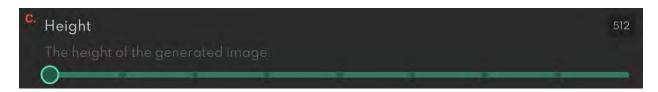
- Width
- Height
- Steps

1.2.B Width



The width of the image(s) generated. Increasing the width will increase the cost per image.

1.2.C Height



The **height** of the image(s) generated. **Increasing the height will increase the cost per image.**

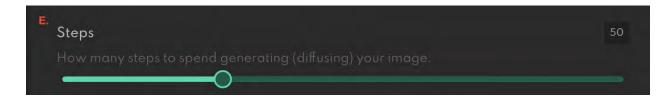
1.2.D Cfg Scale



The **CFG** (classifier free guidance) Scale controls how closely an output image matches a prompt. Lower CFG Scale values allow for more divergence from the prompt content. Higher CFG Scale attempts to force a closer adherence to the language input at the expense of image variation.¹

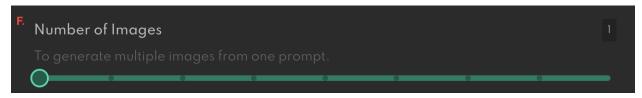
¹ The paper announcing Classifier-Free Guidance can be read in full <u>here</u>.

1.2.E Steps



The number of **steps** controls how many diffusion steps the model spends generating an output. **Increasing or decreasing steps from the default will increase or decrease your cost per image.** Lower steps will generate more quickly and cost less, but if they are lowered too much, image quality will suffer. Images with higher steps cost more and take longer to generate, but give more detailed results. The improved quality becomes less drastic per step the higher the step scale is set.

1.2.F Number of Images

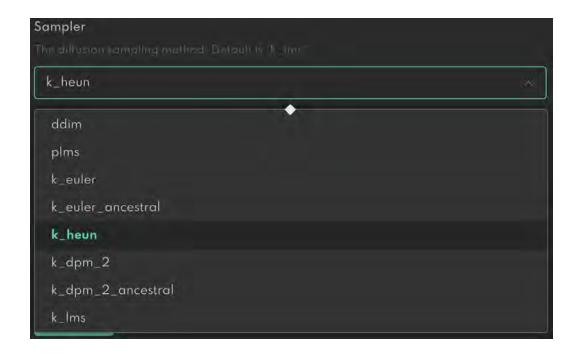


The **Number of Images** counter determines how many images are generated per model run which can be between 1 and 9 images.

1.2.G Sampler



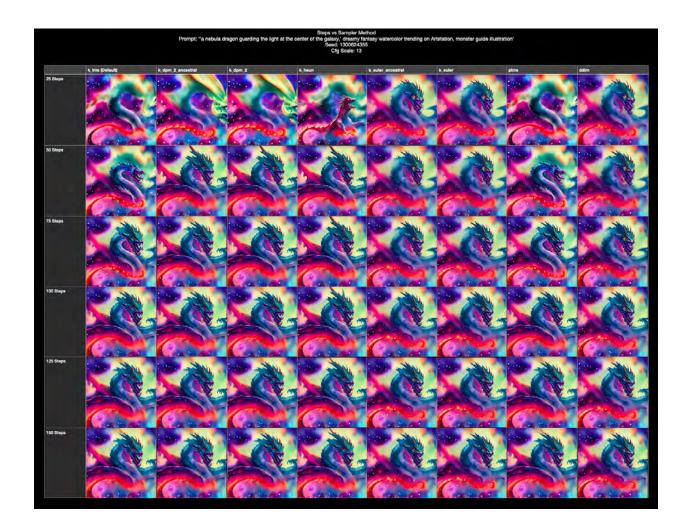
The **Sampler** menu allows for user selection of the sampler method used to generate images. There are a number of options besides the default k_lms sampler. Click the dropdown menu to see the options.



1.2.G.i Sampler Method Comparisons

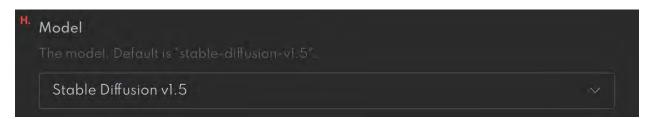
The following charts compare all of the currently--available sampling methods to one another at intervals of 25 steps for two different prompts. These are for comparison only; your prompts may behave differently!





For more information visit this excellent post by Tanishq Mathew Abraham.

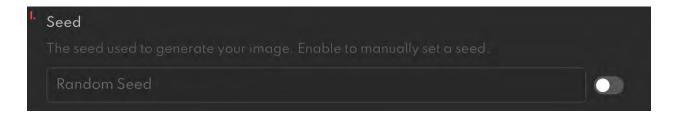
1.2.H Model



The **Model** section allows selection of the Stable Diffusion model used to render images. Currently, the options are **Stable Diffusion v1.4** and **Stable Diffusion v1.5**.

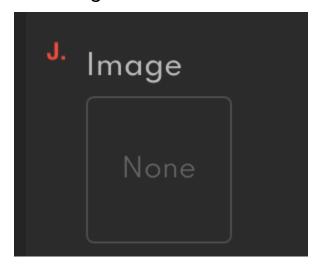
- v1.4 was released open-source 22-Aug, 2022.
- v1.5 was made available on the DreamStudio beta website on 5-Sept, 2022.

1.2.I Seed



The **seed** is a pseudorandomly generated number used to generate images. Seeds can be manually entered by toggling the "random seed" switch and typing in the desired seed. Using the same seed gives the same results and you can use it to iterate on a generation by modifying the prompt, CFG, or step count.

1.2.J Image



The **Image** thumbnail is where images will appear if one is loaded in the Image Editor for use with Initial Image Mode or Inpainting Mode.

Alt: The **Image** thumbnail is where images appear if loaded in the Image Editor for use with Initial Image Mode or Inpainting Mode.

1.2.K Show Editor



Click **Show Editor** to open the Image Editor and to access Initial Image Mode and Inpainting mode

1.2.L Prompt Box



Prompts are typed in the **Prompt Box**. Clicking "Dream" after entering a prompt will finalize all settings and generate image(s). [Link to prompting guide?]

1.3 Using Default Mode

Using Default mode is simple, but before you begin generating images, it is recommended that you read through the explanations of each of the settings (discussed in **Section 1.1**, above). Once you've chosen the settings you wish to use and you've input a prompt, simply click "Dream" to generate your first images in DreamStudio!

1.3.A Default Mode QuickStart Videos

To see Default Mode in action and for further discussion of each setting, check out the following QuickStart videos!

- Getting Started With DreamStudio Website Beta, Part Two: Width/Height and Number of Images
- Getting Started With DreamStudio Website Beta, Part Three: CFG Scale, Steps, and Seeds

2. Initial Image Mode

Partially AI-generated; guided by a user-submitted image

2.1 Accessing Initial Image mode

Initial Image Mode allows the user to upload their own image and generate art based on that image using an input prompt. Users can control how much their new images resemble the input image using a slider. Initial Image Mode can be initially accessed in two ways.

2.1.A Uploading an Initial Image From Hard Drive

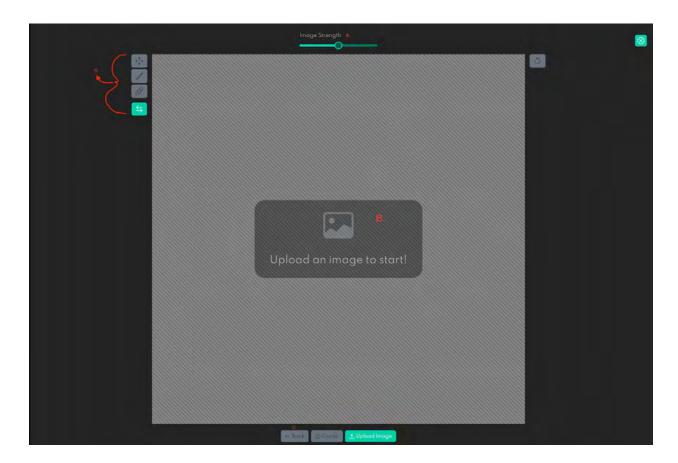
If you wish to use an initial image from your hard drive, you can click on "Show Editor" and upload an image. This can be done either by dragging and dropping the desired image onto the image space or by clicking "Upload Image" below the image space and selecting the desired image from your hard drive.

2.1.B Using a DreamStudio Generation as an Initial Image

If you wish to use an image you have just generated in DreamStudio, hover over the image and select the pen-and-paper icon that appears on the image, shown below.



2.2 Overview of Initial Image Mode



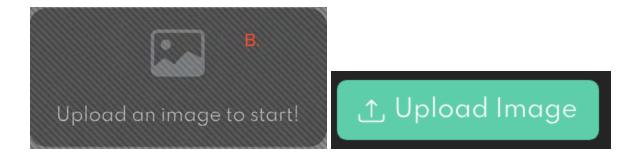
2.2.A Image Strength

The **Image Strength** slider increases or decreases the influence of the initial image on the generated output.



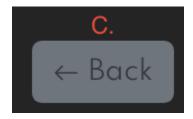
2.2.B Upload Image

There are two ways to upload an image: either click and drag an image onto the image area (image 1 below), or click the "Upload Image" button and choose an image from your hard drive.



2.2.C Back

Click Back to return to Default Mode.



2.2.D Mode/Editing Icons

These icons allow the user to switch between various modes and tools. They are discussed individually below.



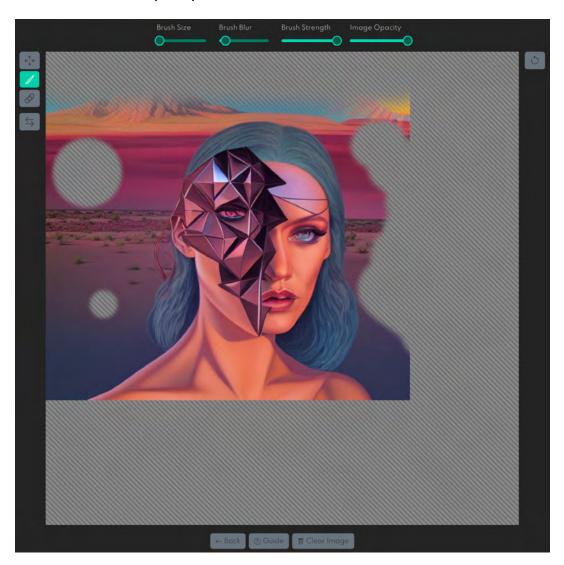
2.2.D.i Select and Move

When activated, **Select and Move** () allows the user to click and drag an initial image around the image space. It also allows the user to resize their initial image.



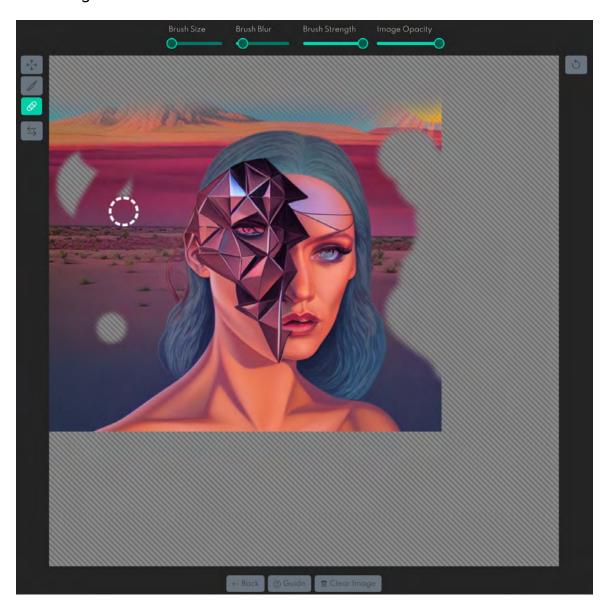
2.2.D.ii Masking/Inpainting Mode

Masking/Inpainting Mode () allows the use of an adjustable brush to erase or reduce the opacity of any part of the image. The model will re-imagine the edited areas based on the user's prompt.



2.2.D.iii Masking Restore

The **Restore** tool () allows the user to selectively restore opacity to a masked region of an image.



2.2.D.iv Initial Image Mode (On/Off)

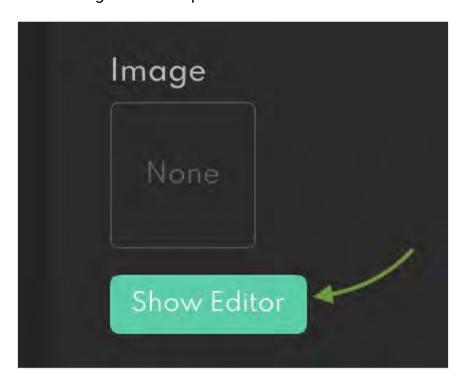
Selecting this icon () toggles on **Initial Image Mode.**

2.2.D.v Undo

Undo () undoes edits to an image.

2.3 Using Initial Image Mode

To access **Initial Image Mode** within DreamStudio, click on **Show Editor** at the bottom of the configuration tool panel.



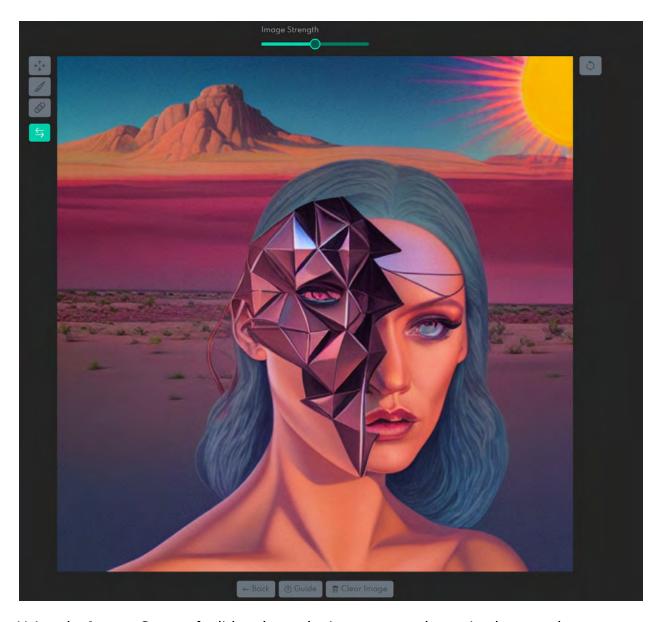
In the Editor window, click "Upload Image" and select the image you want to edit. Alternatively, drag your desired image onto the Image Area.



You can also open an image from DreamStudio in Initial Image Mode by hovering over the image and selecting the pen-and-paper icon that appears on the image (shown below).



By default, the image opens in Initial Image Mode (see below image). Initial Image Mode is also accessible via the icon to the bottom-left of the image area).



Using the **Image Strength** slider above the image area, determine how much you want your initial image to influence your new output (0%--100%). If you're working with a piece you generated previously and wish to keep your new outputs stylistically consistent, input the same (or slightly different) prompt.

2.3.A Initial Image Mode QuickStart Video

To see Initial Image Mode in action and for further discussion of each setting, check out the following QuickStart video!

Getting Started With DreamStudio Website Beta, Part Four: Image Guidance

3. Inpainting Mode

Partially AI-generated; guided by a user-submitted image and custom masking.

3.1 Accessing Inpainting Mode

Inpainting Mode allows the user to upload their own image and generate art based on that image, customizable masking, and an input prompt. Users can control masking brush properties using various slider controls.

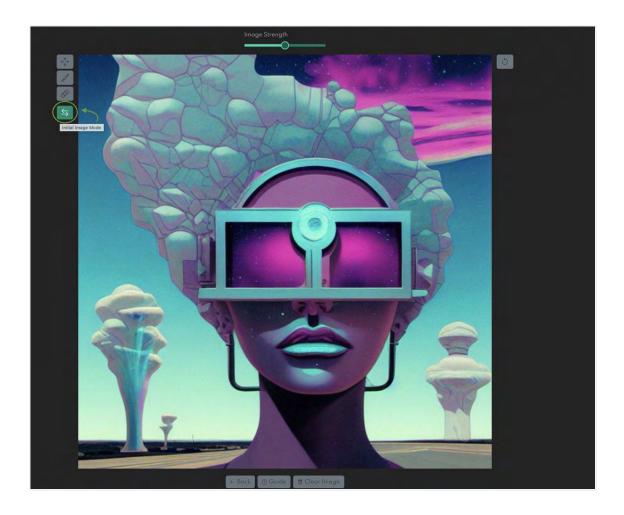
To access Inpainting Mode within DreamStudio, click on **Show Editor** at the bottom of the configuration tool panel.



In the Editor window, click "Upload Image" and select the image you want to edit.



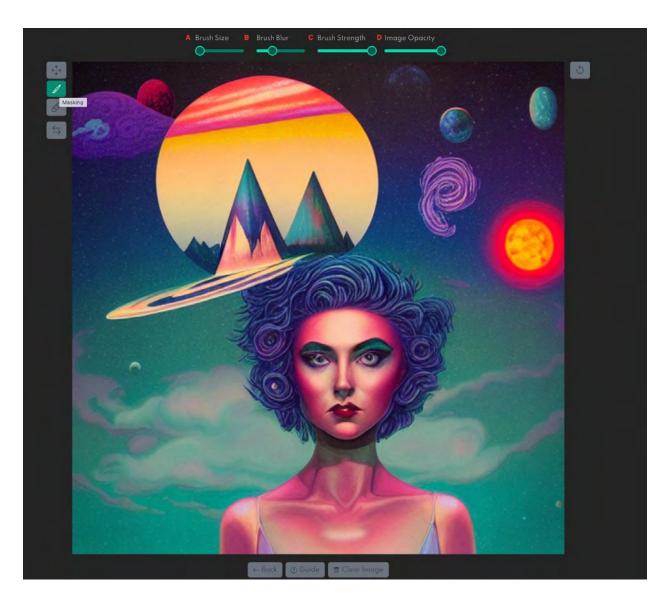
By default, the image opens in **Initial Image Mode** (also accessible via the icon with the two arrows to the bottom of the icon stack). Initial Image Mode is discussed in-depth in **Section 2**.



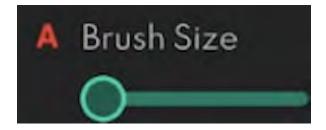
To access **Inpainting Mode**, simply click on the paintbrush icon to open up the inpainting tools (discussed in more detail in **Section 3.2).**



3.2 Overview of Inpainting Mode

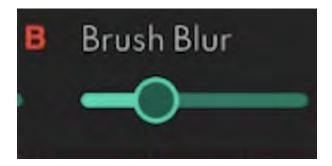


3.2.A Brush Size



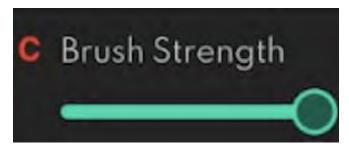
Brush Size controls how large the masking brush is (1 px-500 px)

3.2.B Brush Blur



Brush Blur controls the amount of edge blur the masking brush has (0%-100%)

3.2.C Brush Strength



Brush Strength controls how strong the masking brush is (0%-100%)

3.2.D Image Opacity

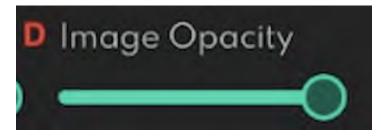


Image Opacity controls the opacity of the initial image (0%-100%). It is similar to **Image Strength** in Initial Image Mode.

3.3 Using Inpainting Mode

Open DreamStudio. Click on **Show Editor** at the bottom of the configuration tool panel.



In the Editor window, click "Upload Image" and select the image you want to edit.

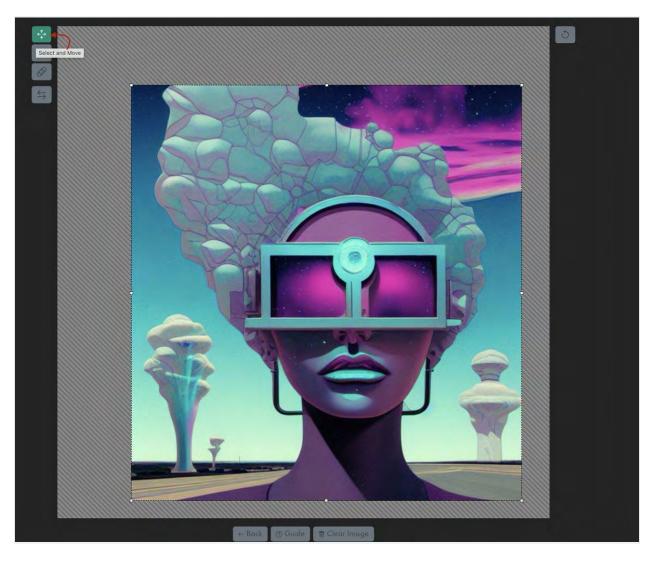


By default, the image opens in Initial Image mode (the icon with the two arrows to the bottom-left of the image area).

To resize/reposition your image, click the icon with four arrows at the top of the icon stack.

Click and drag anywhere on the image to move it around.

Click the squares in the corners/edges of your image to resize it.

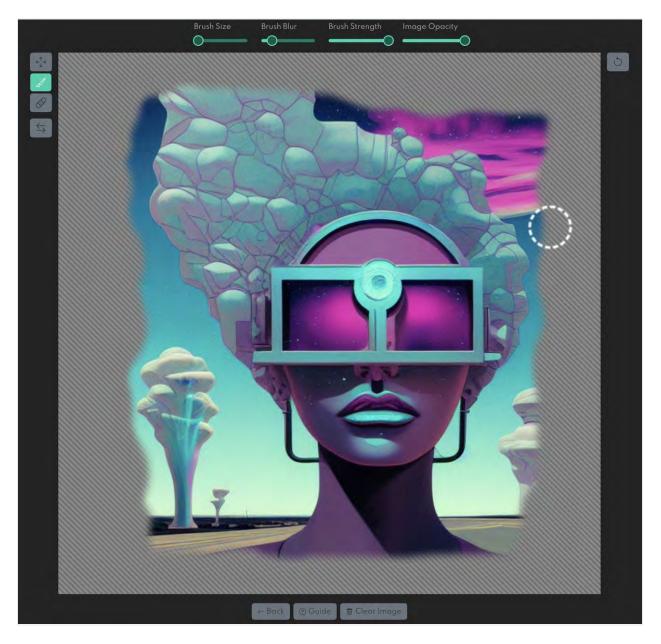


When you're happy with your layout, click on the paintbrush icon to open up the inpainting and outpainting tools (discussed in more detail in **Section 3.2**).



Using brushes and brush sliders, erase or partially-erase any details you don't want to

see in your new piece.
This can be blemishes, weirdly-rendered areas, or anything else!
To ensure the straight edges of the original image blend correctly, feather them using Brush Blur.



When you're happy with your edits, type in a prompt to apply to your edited piece and click Dream!!

If you're working with a piece you generated previously and wish to keep your new outputs stylistically consistent, input the same (or slightly different) prompt.



3.3.A Inpainting Mode QuickStart Video

To see Inpainting Mode in action and for further discussion of each setting, check out the following QuickStart video!

Getting Started With DreamStudio Website Beta, Part Five: Inpainting/Outpainting