

Grid Design Studio Y (GDSY) User Manual

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Grid Design Studio Y is a Windows pixel art creator. Import images, reduce colors, add text and layers, edit individual pixels, and export finished PNG files.

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1. Introduction

GDSY turns imported images into pixel art for LINE Emoji and LINE Stickers, social media icons, Twitch emotes, Discord emoji, RPG assets, and retro artwork. Its main editing features include Pen, Eraser, rectangular and elliptical Selection, Fill, copy and paste, flipping, text, outlines, layers, color-reduction filters, and an Eyedropper for sampling colors from the canvas. Central Canvas Zoom enlarges the entire editing area, while movable guides and template grids help align artwork accurately.

Save editable projects in .gdsy format when you want to continue working with their layers and settings. Use PNG Export to create a finished image at the selected scale. For LINE assets, use the dedicated LINE Export commands to create files at the required LINE dimensions.

2. 5-Minute Quick Start

Step	Action	Instructions
1	Choose a template	Select LINE Emoji, LINE Sticker, X Icon, RPG Tile, Twitch Emote, Discord Emoji, or Custom.
2	Import	Select Choose Image or File > Import PNG Image...
3	Reduce colors	Choose a retro filter and select Apply Filter.
4	Add elements	Add text, outlines, and layers as needed.
5	Refine	Zoom in and use Pen, Eraser, Selection, and Eyedropper.
6	Preview	Check the top-right preview or ZOOM NAVIGATOR.
7	Save or export	Save .gdsy work or export PNG / LINE assets.

3. Screen Layout

3.1 Left Panel

Contains templates, export settings, colors, text, image import, filters, and layers.

3.2 Quick Action Bar

Provides Pen, Eraser, Selection, Eyedropper, Undo, Redo, Confirm, Cancel, filter selection, and Apply Filter.

3.3 Central Canvas

The main editing area. It supports rectangular and elliptical selections; fill, copy, paste, flip, and movement; 16x16 and 24x24 guides; template grids; center lines; and 50% to 400% zoom.

3.4 Right Panel

Shows LINE chat, icon, background, overall, and zoomed previews as appropriate for the template.

The top preview shows the finished artwork at its intended scale. Switching the background helps you check transparent edges. ZOOM NAVIGATOR is a separate inspection aid: it enlarges only the area around the pointer, while Central Canvas Zoom enlarges the entire editable canvas. These three views do not change saved or exported image data.

4. Project Templates

GDSY provides templates for different uses. Selecting a template changes not only the canvas size, but also the guides, previews, and LINE export guidance shown for that template.

Template	Canvas	Purpose
LINE Emoji - Retro	18x18	Compact LINE Emoji with a simple retro pixel-art look.
LINE Emoji - Detailed	36x36	LINE Emoji with more room for detail and clearer expressions.
LINE Sticker - Retro	32x32	Compact LINE Stickers with a simple retro pixel-art look.
LINE Sticker - Detailed	64x64	LINE Stickers with more room for detailed expressions and text.
X Icon	48x48	Base artwork and pixel-art assets for social media icons and profile images.
RPG Tile	48x48	Game-style icons, UI parts, and retro assets.
Twitch Emote	112x112	Emotes and reaction assets for Twitch streams.
Discord Emoji	128x128	Custom emoji for Discord.
Custom	Up to 256x256	A freely selected square size for the intended use, including larger retro-style images.

Service requirements may change. Check the latest LINE, Discord, Twitch, or other official guidelines.

4.1 LINE output sizes

For LINE templates, dedicated export commands are available separately from standard PNG export. These commands automatically adjust the scale and padding for the selected template.

Template	Export command	Output	Notes
LINE Emoji	Export Current Emoji	180x180	Exports one emoji image.
LINE Emoji	Export LINE Emoji Tab	96x74	Exports an image for the chat-room tab.
LINE Sticker	Export Current Sticker	Up to 370x320	Exports a sticker image.
LINE Sticker	Export LINE Sticker Main	240x240	Exports the main image.
LINE Sticker	Export LINE Sticker Tab	96x74	Exports an image for the chat-room tab.

When creating multiple LINE Emoji or LINE Stickers, edit and export each item separately. After exporting, give each file a clear name so that it is easy to identify and manage.

5. File Menu

Command	Description
New Project	Creates a new canvas.
Open Project (.gdsy)...	Opens a saved project.
Save	Overwrites the current .gdsy project.
Save Project As...	Saves the project under a new name.
Import PNG Image...	Imports source artwork.
Export PNG Image...	Exports finished artwork.
Exit	Closes GDSY.

6. .gdsy Save, PNG Export, and LINE Export

Method	Result	Use
.gdsy	Preserves canvas, layers, links, text, images, pixels, and palette	Continue editing later
PNG	Flattened finished image	Posting and general use
LINE Export	Flattened image at LINE-ready dimensions	LINE Emoji and LINE Stickers

PNG Export Scale affects regular PNG files. LINE export uses template-specific dimensions automatically.

7. Quick Action Bar

Group	Commands	Description
Tools	Pen / Eraser / Selection / Eyedropper	Switches drawing, erasing, region selection, and canvas color sampling.
Edit	Undo / Redo	Reverses the previous edit or reapplies an undone edit.
Selection	Confirm / Cancel	Commits or cancels pending movement or pasted content.
Filter	Retro filter / Apply Filter	Selects and applies color reduction without scrolling the left panel.

8. Tools and Basic Operations

8.1 Pen

Click to draw one pixel, or drag to draw continuously with the active color.

8.2 Eraser

Click or drag to make pixels transparent.

8.3 Selection

Rectangle and Ellipse Selection can include transparent pixels. Hold Shift for a square or circle.

8.3.1 Selection information

GDSY displays type, width, height, pixel count, and top-left X / Y coordinates.

Start a selection by choosing Rectangle Selection or Ellipse Selection, then drag on the canvas. Transparent pixels may be included. Releasing the mouse keeps the selection active. Click outside its border to clear it; click and drag inside it to move it. Hold Shift before or during the drag to create a square or circle. Pressing or releasing Shift while dragging switches between constrained and unconstrained shapes.

For an ellipse, width and height describe its rectangular bounds, while the selected-pixel count describes only pixels inside the ellipse mask. These values and the X / Y coordinates update during the drag.

8.3.2 Fill and move

Fill Selection uses the active color and opacity. Drag to move the selection; the Arrow keys move it 1 px, and Shift + Arrow keys move it 10 px. Content outside the canvas is clipped.

Filling preserves the active selection and supports Undo / Redo. Moving transfers both selected pixels and transparent pixels covered by the mask; the source area becomes transparent. Ellipse movement retains the ellipse mask. The selection remains active after movement.

8.3.3 Copy, paste, flip, and delete

Ctrl + C and Ctrl + V use GDSY's internal RGBA clipboard. Flip Horizontal / Vertical preserves the selection mask. Delete / Backspace clears selected pixels. Confirm commits and Cancel discards pending movement or paste. Undo / Redo are supported.

Pasted content is placed on the active layer and immediately becomes the active selection. Move it by dragging or using the Arrow keys, then select Confirm. Cancel removes an unconfirmed paste or restores an unconfirmed move. Switching to another tool confirms pending content so that it is not lost. Copy / paste does not place an image file on the Windows clipboard.

Arrow-key movement is disabled while a text field, number field, menu, or slider has focus. Click the canvas or selection border before using the keys.

8.4 Eyedropper

Samples a visible color from the canvas, then returns to Pen. Use the GDSY Color Picker to create new colors.

8.5 Mirror mode

Draws with horizontal symmetry.

8.6 Guides

Show or hide the 16x16 / 24x24 guides, and drag them to reposition them. They cannot extend beyond the canvas, are reset when you create a new project or change templates, and are not exported.

8.7 Grid divisions

Canvas	Interval	Grid
18x18	3 px	6x6
32x32	8 px	4x4
36x36	6 px	6x6
48x48	8 px	6x6
64x64	8 px	8x8
112x112	14 px	8x8
128x128	16 px	8x8
256x256	32 px	8x8

9. Colors and Palettes

9.1 Palette and opacity

Select a swatch in the Palette to make it the current drawing color. The current color is used by tools such as Pen and Fill. You can also check or enter a HEX value and adjust opacity.

Use the Eyedropper when you want to sample an existing color directly from the canvas. Use the GDSY Color Picker when you want to create or fine-tune a color numerically or visually.

9.2 GDSY Color Picker

The Color Picker shows the current color and the newly selected color separately, so you can compare them before applying the change.

1. Open the GDSY Color Picker from the color controls.
2. Adjust hue, saturation, and brightness, or enter a color using HEX or RGB values.

3. Compare the current color with the new color.
4. Select Use This Color to make the new color the current drawing color.

Select Cancel or press Esc to close the Color Picker without changing the current color.

9.3 Default Palettes

You can load default palettes for different themes. Palettes such as Cute Character, Animal Friends, and Retro 8-bit make it quick to select a coordinated set of colors.

10. Retro Color Reduction Filters

Filter	Col ors	Appearance and suitable uses
4-Color Retro	4	Produces a bold, highly simplified retro look. Suitable for minimal pixel art and strongly limited-color designs.
8-Color Retro PC	8	Creates the restricted-color appearance of a retro computer. Suitable when you want a classic PC-style palette while retaining more detail than the 4-color filter.
16-Color Retro	16	Balances a clear retro appearance with recognizable details. Suitable for general-purpose pixel-art conversion.
32-Color Detailed Retro	32	Retains finer shading and detail while preserving a retro look. Suitable for artwork that needs more information than the 16-color filter can retain.
64-Color High-Detail Pixel	64	Preserves the most color and image detail of the five filters while giving the result a pixel-art appearance. Suitable when retaining source-image detail is the priority.

1. Choose a filter from the filter list.
2. Select Apply Filter.
3. Check the result on the canvas and in the preview.
4. If necessary, refine individual pixels manually with tools such as Pen, Eraser, Selection, or Eyedropper.

11. Text

Enter text, choose its color and style, and select Place on Grid. The text is added as a layer. Add an edge color or outline to improve readability.

1. Enter the text in the Text field.
2. Choose the text size and text color.
3. Enable an outline when needed, then choose its color and thickness.
4. Select Place on Grid and position the result on the canvas.
5. Confirm placement, or cancel before committing it.

Placed text is managed as a text layer. Select that layer to move or edit it later. Text layers count toward the additional-layer limit in the Free Trial. For very small templates, check the preview and refine the

result pixel by pixel when necessary.

12. Importing Images and Adding Outlines

12.1 Import

Select Choose Image or File > Import PNG Image... The image is added as an image layer.

12.2 Outline

Add an outline to improve readability at small sizes, especially for LINE, Discord, and Twitch assets.

13. Layers

13.1 Select

Click a layer row to edit that layer.

13.2 Rename

Double-click its name, type a new name, and press Enter. Esc cancels.

13.3 Visibility, lock, and order

Use the eye, lock, Up, and Down controls. Higher layers appear in front.

14. Linked Layer Movement

Enable the chain icon for multiple layers, then move one linked layer to move them all by the same amount. The link state is saved in the .gdsy file and supports Undo / Redo.

15. LINE Export

15.1 LINE Emoji

Export Current Emoji creates a 180x180 image. Export LINE Emoji Tab creates a 96x74 tab image.

15.2 LINE Stickers

Export Current Sticker creates up to 370x320; Export LINE Sticker Main creates 240x240; Export LINE Sticker Tab creates 96x74. Edit and export each item separately.

16. Central Canvas Zoom

Zoom changes only the editing view, not project data or output dimensions.

16.1 Controls

Use Minus, Plus, the 50 / 75 / 100 / 125 / 150 / 200 / 300 / 400% options, Fit to View, or Ctrl + Mouse Wheel.

16.2 Standard view

In GDSY, 100% is the standard fit view; it does not map one artwork pixel to one screen pixel.

16.3 Navigation

Use scroll bars while enlarged. Use 100% for composition, 150% to 200% for outlines, and 300% to 400% for individual pixels.

16.4 Center-based zoom

Zoom remains centered on the artwork. Selections, guides, and coordinates do not change.

16.5 Export scale

Use PNG Export Scale for regular PNG size and LINE Export for LINE dimensions.

17. ZOOM NAVIGATOR

ZOOM NAVIGATOR magnifies the pixels around the pointer. It operates independently of Central Canvas Zoom and can be turned on or off while the main canvas remains at 100%.

18. Language Selection

Switch the interface between Japanese and English from the upper-right language menu. Project data and canvas content do not change.

19. Free Trial and Full Version

Feature	Free Trial	Full Version
Purpose	Workflow / compatibility test	Finished artwork
Templates	LINE 18 / 36 / 32 / 64, X 48, RPG 48, Twitch 112	Plus Discord 128 and Custom up to 256

Feature	Free Trial	Full Version
.gdsy Save	Not available	Saves work in progress
.gdsy Load	Not available	Reopens saved projects for editing
PNG Export	Available with "GDSY Trial" watermark	No watermark
LINE Emoji Export	Available with "GDSY Trial" watermark	180x180 emoji and 96x74 tab, no watermark
LINE Sticker Export	Available with "GDSY Trial" watermark	Up to 370x320 sticker, 240x240 main, 96x74 tab, no watermark
PNG scale	1x	1x to 10x
Filters	4 / 8 / 16 colors	4 / 8 / 16 / 32 / 64 colors
Additional layers	Up to 2, including text	No additional-layer limit
Preview	Trial watermark	Standard
Zoom	50% to 400%	Same
Selection tools	Rectangle / ellipse, fill, copy / paste, flip, drag / Arrow-key movement, and size display	Same
Movable guides	16x16 and 24x24	Same
Template grid divisions	Available	Available
Eyedropper / Color Picker	Available	Available
Price	Free	Introductory price: ¥980; regular price: ¥1,980, tax included

20. Keyboard Shortcuts

Keys	Function
Arrow keys	Move selection 1 px
Shift + Arrow keys	Move 10 px
Shift + Drag	Square / circle selection
Ctrl + C / Ctrl + V	Internal copy / paste
Delete / Backspace	Clear selection
Ctrl + Mouse Wheel	Canvas zoom
Space	Activate selected Pen / Eraser target

Arrow keys do not move a selection while an input, menu, or slider has focus.

21. Installation and Supported Operating Systems

21.1 Systems

Windows 10 and Windows 11 are supported. Windows 11 or Windows 10 version 22H2 or later is recommended. macOS, Linux, mobile devices, Windows 7, and Windows 8.1 are not supported.

21.2 Installation

Run the downloaded .exe installer. Node.js, Rust, Codex, and Cursor are not required. Microsoft Edge WebView2 Runtime may be required.

21.3 Windows warnings

Windows may display a confirmation screen for independently developed software. If you are concerned, test the Free Trial before purchasing.

22. Copyright and Responsible Use

Use only original, licensed, permitted, or public-domain source material. Check copyright, trademark, portrait rights, and service rules. Processing an image does not remove source rights. Users are responsible for finished work.

Third parties may hold copyright, trademark, portrait, privacy, or other rights in imported material. Obtain any permission required before using characters, company logos, photographs of people, or artwork from anime, manga, films, and games. The right to use a source image does not transfer merely because GDSY reduces its colors or converts it into pixel art.

When publishing LINE stickers, Discord emoji, Twitch emotes, social icons, or other service assets, also follow that service's current rules. GDSY is an image creation tool and does not guarantee review approval, sales, or revenue. Responsibility for selecting source material and using finished work remains with the user.

22.1 Recommended use

Use your own photos and illustrations, appropriately licensed assets, or original characters.

23. Support and Contact

23.1 Covered

- Installation

- Startup problems
- Basic operation
- Reproducible bug reports
- Questions about the Free Trial and Full Version

23.2 Not covered

- Creating artwork on a user's behalf
- Design review or critique
- Guaranteed approval of LINE stickers or other service assets
- Guaranteed sales or revenue
- Problems caused by third-party service specification changes

23.3 Include

- Windows version, such as Windows 11
- Full Version or Free Trial
- The operation that caused the issue
- The complete error message
- A screenshot, if available

Contact: gdsy.official@gmail.com

Replies are generally sent within three business days. Reproduction, investigation, or adjustment may take longer depending on the issue.

24. Troubleshooting

24.1 Cannot draw

Confirm that the intended layer is active. Make sure it is visible and unlocked, then check that opacity is not too low. Select Pen and try clicking one visible canvas pixel.

24.2 Layer will not move

Select the correct layer and make sure it is unlocked. For linked movement, confirm that the chain icon is enabled on every layer that should move.

24.3 Cannot see the whole canvas

The canvas may be zoomed in. Select Fit to View to return to the standard 100% view and show the full canvas.

24.4 Zoom does not enlarge export

Central canvas zoom changes only the editing view. Use PNG Export Scale for regular PNG files. Use the dedicated LINE Emoji or LINE Sticker export command for LINE-ready dimensions.

24.5 Unexpected PNG dimensions

For a regular PNG, check PNG Export Scale. For LINE Emoji, use Export Current Emoji or Export LINE Emoji Tab. For LINE Stickers, use Export Current Sticker, Export LINE Sticker Main, or Export LINE Sticker Tab.

24.6 Trial watermark

It cannot be removed in the Free Trial.

24.7 Cannot save .gdsy

Save / Load requires the Full Version.

24.8 Eyedropper

The Eyedropper samples colors already visible on the canvas. Click a colored pixel, not a transparent area. For a new color, open GDSY Color Picker and adjust HEX, RGB, hue, saturation, or brightness.

24.9 Close Color Picker

Select Use This Color or Cancel, or press Esc.

24.10 Selection disappears

Confirm that Selection is active. Clicking outside the border clears the selection; releasing the mouse alone does not. Transparent areas can be selected. Switching tools confirms pending selected content.

24.11 Arrow keys do not move

Confirm that a selection exists. Arrow keys do not move it while a text field, number field, menu, or slider has focus. Click the canvas or selection border first. Arrow keys move 1 px; Shift + Arrow keys move 10 px.

24.12 Copy / paste fails

Create a selection before Ctrl + C. Ctrl + V requires content in GDSY's internal clipboard. After pasting, move the selected content by dragging or with Arrow keys, then select Confirm.

24.13 Guide will not move

Enable the 16x16 or 24x24 guide and drag its border. Guides cannot move outside the canvas. A new project or template change resets guide positions to the center.

24.14 Grid lines are hard to see

Use 100% zoom or higher. Center lines are heaviest, division lines are slightly heavier than regular grid lines, and low zoom levels may make adjacent lines appear merged because of screen scaling.

25. Final Notes

GDSY combines image import, retro color reduction, text, layers, Canvas Zoom, Selection editing, and dedicated LINE Export for pixel art. Save editable work in .gdsy format, and export finished images as PNG files or with LINE Export.

Grid Design Studio Y - Crafted for Pixel Perfection.