

# Gridfinity Label Maker Documentation

Welcome to the documentation for the Gridfinity Label Maker! This tool was created to generate labels for the 3D printed Gridfinity Organization System. The aim is to provide a better labeling system for the community to enhance the original Gridfinity foundation. Before we delve into the details of the Gridfinity Label Maker, here are some links to familiarize yourself with Gridfinity:

[Gridfinity: Your Ultimate Modular Workshop is FREE!](#) - [Zack Freedman](#) (AKA the original creator of the Gridfinity system)

[Gridfinity Specification](#) - [grizzie17](#)

[Gridfinity Files \(Printables\)](#)

[Removable Gridfinity Lids \(Lidfinity\)](#) - [Kyle Warren](#)

[Images Used for Default Theme](#) - [Reavenk](#)

## Donations & Tips

The Gridfinity Label Maker is provided free of charge, and donations are welcome to support further development and additional features. Your contribution is greatly appreciated!

[Paypal Donation/Tip](#)  
[Cryptocurrency](#)

## Roadmap and Future

Below are some potential future features for the Gridfinity Label Maker. Please note that these features are not guaranteed and may take some time to develop. Donating will help prioritize these features and gauge community interest.

- Discovery: A centralized platform to find and share themes for the Gridfinity Label Maker, allowing for more customization options.
- Label Size Options: Enhance label compatibility by introducing various label size options for different Gridfinity products.
- Alternative Options: Provide the ability to select alternative images (e.g., Ortho vs. Top vs. Side Views) instead of relying solely on the current Head/Style selection.
- Support Additional Image Formats: Expand the supported image formats to include jpg, gif, and svg.
- Save/Load System: Implement a save and load functionality to quickly access and print label setups.
- Integration with [MakerMate](#): Generate QR code links to your MakerMate materials for easy inventory management and supplier access. Avoid relabeling bins when URLs become inactive or sold out.
- Automatic Updates: Enable automatic updates to ensure users have the latest version of the Gridfinity Label Maker.

## The Interface

The Gridfinity Label Maker interface consists of three main sections:

- Setup:** Fill out the form by selecting the desired options for your label. Customize each label with an intuitive system for identification and sorting.
- Actions:** Access options to reset or reload the setup, print labels, and export labels as JPG or PNG files for use in other applications.
- Preview:** Generate a preview of your label. Select at least the following fields to view the preview: Theme, Type, Size, and Head/Style.

## The Folder Structure and Themes

The Gridfinity Label Maker supports extensibility, allowing users to create and customize their themes. The program comes preloaded with a Default theme to help you get started. Keep the following guidelines in mind for creating themes:

- Avoid using spaces in folder and file names. Use underscores ( `_` ) instead to represent spaces in the interface.
- The application supports two folder structures. Ensure you follow the rules for each structure to ensure proper functionality.
- Please note that the Gridfinity Label Maker is a work in progress, and errors may occur.
- The software is provided as-is with no guarantees. Consider donating to support ongoing development.

### Accessing the Themes Folder

To access the themes folder, open the Help dialog within the application. From there, you can conveniently access the themes folder.

### Folder Layout

The Gridfinity Label Maker supports two folder layouts, each with its own purpose and functionality. The following sections describe these layouts. Alternatively, you can edit the Default theme provided with the application.

### Main Hierarchy

The main folder hierarchy is as follows:

```
└─ [Theme Folder]
  └─ [Type Folders]
    └─ Screw (Include this file if using Screw layout)
      └─ [Size Folders]
```

### Default Layout

The default layout is the simplest to set up but offers limited options:

- Within your desired Type folder, create subfolders to represent different size options. For a single size option, use “Standard” or “Misc.”
- Inside each size option folder, add images for the various styles. Styles can be customized to suit your needs.

### Screw Layout

The screw layout allows combining two images, such as a Screw Head and Screw Length:

- In the desired Type folder, create an empty file named “Screw” (without an extension) to indicate the use of the screw layout.
- Create size folders within the Type folder for different sizes.
- Each size folder must include at least “Heads” and “Lengths” subfolders.
  - Optionally, you can add a “Drives” folder to include images of screw drives.
- The “Heads” folder should contain .png images representing screw head styles.
- The “Lengths” folder should contain .png images representing screw lengths.
- Optional:** If you are including items in the “Drives” section, create subfolders within it for each Head/Style, and include the necessary drive images.

**Note:** Avoid using spaces in file and folder names. Use underscores ( `_` ) instead. Review the Default->Screws folder for reference.

### Testing

After setting up your images, restart the application or click the “Reset/Reload” button to rescan the image directory and update the options. Thoroughly test your theme to ensure proper functionality before distributing it.

## Distributing and Installing Themes

To distribute your theme, follow these steps:

- Locate your theme folder within the Themes directory.
- Select all files and folders within the theme folder (Keyboard Shortcut: CTRL + A).
- Right-click and choose “Compress to ZIP File” to create a ZIP archive.
- Name the ZIP file as desired to represent your theme.
- Your theme file is now ready for distribution.

To install a shared theme:

- Download the ZIP file containing the theme.
- Scan the ZIP file for viruses before proceeding.
- Place the downloaded ZIP file into your Themes folder.
- Right-click the ZIP file and select “Extract All.”
- A new folder with the same name as the ZIP file will appear.
- Delete the ZIP file if desired.
- Restart the application or click the “Reset/Reload” button.
- Your new theme will be installed and available in the Theme Setup options.

## Additional Notes

- Labels generated by this program are approximately 12x36mm (45x136px). For optimal quality, use images with a minimum size of 100x100px. The program will not scale up images but will scale them down if necessary.