

# 3D File Sorter User Guide

Organize, preview, and estimate your entire 3D-print library — offline, on your own PC.

Free Utility

Windows Desktop

100% Offline

makerxdesigns.com · Built by MakerX Designs — Virginia Beach, VA · © 2026

The MakerX 3D File Sorter is a free Windows app that turns a messy download folder into a tidy, categorized model library. Preview STL, 3MF, OBJ, PLY, STEP and ZIP files in 3D, get instant print weight / time / cost estimates, and sort hundreds of files into category folders — manually, or automatically with one click. Everything happens on your computer; no files are ever uploaded.

## ★ What's new in 2.2

Added native support for **OBJ** and **PLY** models (in addition to STL, 3MF and STEP), with improved 3MF reading for slicer-exported files. OBJ and PLY now preview, estimate, and auto-sort just like every other format.

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# 1 · Getting started

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## Download & install

1. Go to [makerxdesigns.com/utilities/3d-file-sorter.html](https://makerxdesigns.com/utilities/3d-file-sorter.html) and click **Download**.
2. Run the installer ( `MakerX 3D Viewer Setup x.x.x.exe` ).
3. Launch **MakerX 3D Viewer** from your Start menu or desktop.

### ⚠ Windows SmartScreen warning

Because the app is not signed with a (costly) commercial code-signing certificate, Windows may show a blue “Windows protected your PC” screen. This is expected for small independent apps. Click **More info** → **Run anyway**. The complete source code is published on GitHub so anyone can verify exactly what the app does before installing.

## First launch

The app opens to an empty workspace inviting you to open a folder. It also remembers the last folder you used and can reopen it automatically next time. Use the **Check for Updates** button (top-right) at any time to see whether a newer version is available.

### Your files stay private

Every operation — reading, previewing, estimating, moving, deleting — happens locally on your machine. Nothing is uploaded to any server, and the app works fully offline.

## 2 · The interface at a glance

► Top bar: MakerX logo · links · **version** | breadcrumb · stats · **Check for Updates** · ⚙ **Settings** · **AUTO sort** toggle · **Open Folder**

**LEFT — Files sidebar**

- File list (icons by type)
- Filter box + Sort by name/date/size
- Multi-select bar (Move / Delete)
- 🗑 Trash drop zone

**CENTER — 3D Viewer**

Color swatches · Wireframe · Auto-Rotate · Reset

☐ rotating model preview ☐

Print Estimate panel (overlay, bottom)

| Area                 | What it's for                                                                                                                                                           |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Top bar              | App version, quick links to makerxdesigns.com, Check for Updates, Settings (⚙), the AUTO-sort toggle, and the Open Folder button.                                       |
| Files sidebar (left) | Every supported file in the open folder, with a color-coded type badge. Filter and re-sort here, multi-select with checkboxes, and drag files to a folder or the trash. |
| 3D viewer (center)   | Renders the selected model. Change color, toggle wireframe, auto-rotate, and reset the camera.                                                                          |
| Print Estimate       | A collapsible overlay showing estimated weight, print time and cost, plus the model's size and volume.                                                                  |

## 3 · Opening a folder

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There are two ways to load your models:

- **Open Folder button** — click it (top-right) and pick any folder. The app scans it and lists every supported file.
- **Drag & drop** — drag a folder straight onto the sidebar's drop zone.

The sidebar shows a running file count. Use the **Filter files...** box to narrow the list by name, and the **Sort by** control to order files by *Name*, *Date*, or *Size* — click the arrow button to flip between ascending and descending.

**Tip — only the current folder is scanned**

The app lists files in the folder you open (it does not recurse into every subfolder). This keeps large libraries fast and predictable. Subfolders you create while sorting become the destinations for your moves.

## 4 · Supported file types

| Type              | Preview     | Notes                                                                                                 |
|-------------------|-------------|-------------------------------------------------------------------------------------------------------|
| STL               | Yes         | Binary & ASCII. The most common print mesh format.                                                    |
| 3MF               | Yes         | Reads slicer-exported 3MF (Creality, Bambu, Orca), including multi-part files.                        |
| OBJ<br>new in 2.2 | Yes         | Wavefront OBJ meshes; quads and n-gons supported.                                                     |
| PLY<br>new in 2.2 | Yes         | Stanford PLY, both ASCII and binary.                                                                  |
| STEP / STP        | Yes         | CAD solids, tessellated locally by an OpenCASCADE engine (first STEP file takes a moment to warm up). |
| G-code            | Toolpath    | Shows the sliced toolpath rather than a solid model.                                                  |
| ZIP               | Peek inside | Expand a zip to preview the models inside without extracting it first.                                |

Each file in the sidebar carries a colored badge showing its type, so you can spot formats at a glance. Selecting (or ticking the checkbox of) any previewable file loads it into the 3D viewer.

# 5 · Previewing a model in 3D

Click any file (or tick its checkbox) to load it into the central viewer. The viewer toolbar gives you:

| Control        | What it does                                                                                              |
|----------------|-----------------------------------------------------------------------------------------------------------|
| Color swatches | Recolor the preview to judge how the model reads in different filaments.                                  |
| Wireframe      | Toggle between a solid surface and a wireframe mesh view.                                                 |
| Auto-Rotate    | Slowly turns the model through front, side, top and iso views. On by default; any drag or zoom pauses it. |
| Reset          | Recenters and re-frames the camera.                                                                       |

## Mouse controls

Drag rotate · Scroll zoom · Shift + Drag pan

### Previewing inside ZIPs

Expand a zip row to see the models packed inside it, then click any one to preview it directly — no need to unzip first.

## 6 · The Print Estimate panel

Whenever a solid model is loaded, the **Print Estimate** overlay (bottom of the viewer) shows three headline numbers — **Weight**, **Print Time** and **Est. Cost** — plus expandable sections. Click the header to collapse or expand it.

### Print Settings

- **Material** — PLA, PETG, ABS, ASA, TPU or Nylon (sets filament density and a sensible default price).
- **Infill** — 5%–100%.
- **Layer height** — 0.10–0.30 mm.
- **Walls** — 1–6 perimeters.
- **Speed** — 30–300 mm/s (affects the time estimate).

### Filament Cost

Pick a price **tier** — Budget, Typical or Premium — or type your own **\$/kg** to match the spool you actually use.

### Model Details

Triangle count, number of objects, volume, filament length, and the model's X / Y / Z size in millimetres.

#### ⚠ Estimates are an approximation, not a slice

Weight, length and time are calculated geometrically from the model's volume and surface area — they are **not** a real slicer result. Accuracy is usually within about  $\pm 10\text{--}15\%$ , but thin-walled, spiky or highly detailed models can read high, and supports / brim / ironing are not modelled. For exact numbers, slice the file in your slicer.



## 7 · Sorting files manually

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You don't have to use AUTO sort — you can organize by hand at your own pace.

### Right-click a file

- **Rename** — give the file a cleaner name.
- **Move to folder** — send it to any existing subfolder, or...
- **New folder...** — create a category folder and move the file into it in one step.
- **Delete** — remove the file.

### Drag & drop

Drag a file row onto a folder target to move it, or onto the  **Delete** zone at the bottom of the sidebar to remove it.

### Work in bulk

Tick the checkboxes on several files and a **selection bar** appears with **Move** and **Delete** buttons that act on all selected files at once. Use **Clear** (X) to deselect.

#### Naming conflicts are handled for you

If a file with the same name already exists in the destination, the app asks whether to **Skip**, **Rename**, or **Overwrite** — so a move never silently clobbers an existing file.

## 8 · AUTO sort — one-click categorizing

Flip the **AUTO sort** toggle (top bar) and the app regroupes the current folder into category folders automatically. It reads each *file name* and matches it against a built-in keyword dictionary — entirely offline, no account or API key required.

### How the grouped view works

- Files are gathered under category headers (e.g. **KEYCHAINS** **DRAGONS** **KITCHEN** ).
- Each group has a **“Move All”** button that files the whole group into a matching subfolder in one click.
- Anything the classifier can't place is left under an **UNSORTED** heading (with no move action) so nothing is mis-filed.
- If the app notices the same new word recurring across several unsorted files, it can **suggest a new group** — accept it or mute that word.

### Smart matching

The classifier recognises names in **several languages** (English, Spanish, Portuguese, French, German, Italian, plus some Chinese, Russian and Ukrainian terms). It also understands the difference between what a model *looks like* and what it *is*: a functional “form-factor” category beats a decorative theme. So *“Easter Bunny Bookmark”* → **BOOKMARKS** and *“Star Wars Yoda Lamp”* → **LAMPS**, while a plain *“Easter Egg”* still lands in **EASTER**.

### Built-in categories



Your own folders are picked up automatically too — any subfolders that already exist become valid destinations in the move menus.

## 9 · The Sorted Items folder (Settings)

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Open ⚙ **Settings** (top bar) to choose a single, top-level “**Sorted Items**” folder. When one is set, *every* move, new-folder and AUTO-sort action creates its category folders **inside that one folder** — no matter which folder you happen to be browsing.

- **With it set** — you can open messy download folders anywhere and have everything land neatly in your chosen library, instead of scattering category folders all over your drive.
- **Without it** — categories are created inside whichever folder you currently have open (the classic behaviour).

The gear button shows the folder's name and highlights when a Sorted Items folder is active. Files are still *scanned* from the folder you open; only the *destinations* are redirected to your library.

## 10 · Sort Check — review an already-sorted library

Already organized a library and want a second opinion? Open ⚙ **Settings** → “**Review sorted files...**”. Sort Check walks every file under your Sorted Items folder (or the open folder), runs the same classifier on each name, and **flags any file whose best-guess category differs from the folder it's actually in**.

### The review screen

- A clearly-marked amber **SORT CHECK** screen opens with the live 3D viewer built in.
- The left list shows each suggestion as **FROM** → **TO**; the right pane previews the model.
- For each one choose **Move** (accept the suggestion) or “**Correct — keep here**”. Resolved files drop off the list and a counter tracks progress to a completion screen.
- Right-click a row for **Rename / Move / New folder / Delete**; selecting a **.zip** peeks inside and previews the first model.

#### It remembers your decisions

Every “keep” or “move” is logged, so a later Sort Check won't pester you about files you've already settled. You can wipe that history any time via **Settings** → “**Reset review history**”.

## 11 · Keyboard shortcuts

| Key                 | Action                                                                     |
|---------------------|----------------------------------------------------------------------------|
| ↑ / ↓               | Move the cursor up/down the file list (and preview that file).             |
| Page Up / Page Down | Jump up/down a page of files.                                              |
| →                   | Open the move / actions menu for the highlighted file (or its parent zip). |
| ←                   | Collapse an expanded zip / step back out.                                  |
| Delete              | Delete the highlighted file.                                               |
| Esc                 | Close a menu or the Settings / Sort Check screen.                          |

### While a right-click menu is open

| Key     | Action                                 |
|---------|----------------------------------------|
| ↑ ↓ ← → | Move between menu items / columns.     |
| Enter   | Activate the highlighted menu item.    |
| Esc     | Close the menu and return to the file. |

## 12 · Tips & troubleshooting

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### A STEP file takes a few seconds the first time

STEP/STP files are real CAD solids and are converted to a mesh locally by an OpenCASCADE engine. The first STEP you open loads that engine (a one-time warm-up); subsequent ones are quick.

### My estimate doesn't match my slicer

That's expected — the estimate is a fast geometric approximation, not a slice (see section 6). Use it for quick comparisons between models; slice the file for exact figures.

### A model looks dark or solid black

Some exporters write blank surface normals. The app detects this and recomputes them automatically, but if a preview ever looks off, toggle **Wireframe** on and back off to re-light it.

### The “Move All” menu doesn't show my folder

Move destinations come from existing subfolders — of your **Sorted Items** folder if one is set (section 9), otherwise of the folder you opened. Create the folder once (via right-click → New folder) and it will appear thereafter.

### Keeping the app up to date

Click **Check for Updates** in the top bar. If a newer version exists, it links you to the download page on [makerxdesigns.com](https://makerxdesigns.com).

#### Need help or have a request?

Visit [makerxdesigns.com](https://makerxdesigns.com) for the latest version, more free 3D-printing utilities, and contact details.  
Thanks for using the MakerX 3D File Sorter!