

Key ID Covers Print & Setup Guide

A lettered cover for the head of a key, so you can tell your keys apart at a glance.

26 Letters

No Supports

1.7 g Each

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

Every key ring ends up the same way: a handful of near-identical keys you squint at, or try one by one in the lock. A letter on each key head fixes that.

Each cover is one small printed part. The head of the key slides into a slot in the cover, and the key ring passes through the cover and the key together, so the cover can't slide off. The letter is raised on **both faces**, so it reads whichever way the key hangs.

It takes about half an hour and under 2 g of filament per cover, so printing a letter for every key on the ring is an easy evening.



Two keys, two letters. The ring runs through each cover and its key together.

In the download

File	What it is
<code>makerx-key-id-single-color.3mf</code>	Start here. All 26 letters on one plate, in one color, with the tested profile already set up. 5 h 39 m for the whole alphabet.
<code>makerx-key-id-two-color.3mf</code>	The same 26 letters set up for two colors — the letter in a second filament on both faces, already assigned. Needs a multi-material setup.
<code>makerx-key-id-a.stl</code> ... <code>makerx-key-id-z.stl</code>	One file per letter, A to Z, 26 in all. Use these when you want just a few. Each is already standing in print orientation, so it drops straight onto the plate.

You also need the **keys** and a **split key ring**. Neither is printed. Section 1 has the size of key head the slot takes.

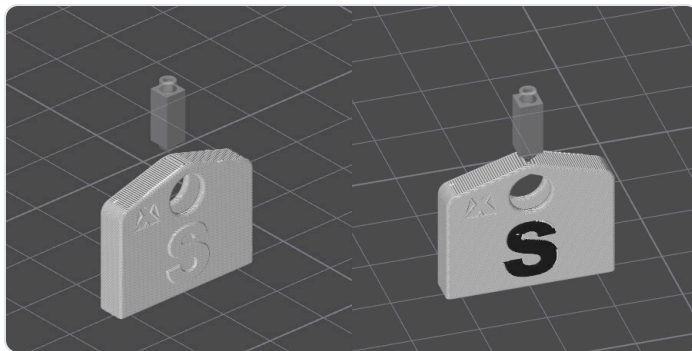
1 • Check the fit before you print

One cover	
Overall size	25 × 22.8 × 5.4 mm, the same for every letter
Key slot	22 mm wide, 2.25 mm thick , 20.1 mm deep, open at the bottom
Ring hole	6.0 mm across
Letter	Raised 0.375 mm, on both faces
On the plate	1.6 g PLA and 13 min a letter, printing the full alphabet in one color

What it was tested with

Ordinary **Kwikset house keys** (the blade is stamped KW1). The slot takes a key head up to 22 mm wide and 2.25 mm thick. What matters most is the ring hole: with the key pushed all the way in, the key's own hole has to line up with the cover's so the ring can pass through both. Print one and try it on your key before you print a set.

2 • One color or two?



The two finishes, as sliced. Left, *one color*: the letter reads by its shadow. Right, *two color*: the letter in a second filament.

All 26	One color	Two color
Print time	5 h 39 m	9 h 7 m
Filament	42.2 g	128.3 g
Per letter	1.6 g	4.9 g
Changes	0	98
Cost	\$1.27	\$3.85

Two color pays off on the SET, not on one letter

Every filament change flushes the nozzle, and the changes happen **per layer, not per cover** — all 26 letters stand at the same height, so the whole plate costs 98 changes and pays that purge once. Print a single letter on its own and you pay almost the same purge for one 1.7 g cover: **79 g and 3 h 25 m**. Spread across the plate it comes to 4.9 g and 21 min a letter. So if you want two color, **print the whole plate**. For one or two keys, print one color.

3 • Slice it

- 1 Open `makerx-key-id-single-color.3mf` (or `makerx-key-id-two-color.3mf`) in Creality Print, or any slicer that imports 3MF project files. When it asks whether to load the project's print settings, **say yes**.
- 2 All 26 letters are already arranged on the plate, standing the right way up. Slice and print.
- 3 **Only want a few letters?** Delete the ones you don't need, or start a new project and import just those letters' STLs — for example `makerx-key-id-k.stl`. They arrive standing the right way up and the settings in section 4 apply unchanged.
- 4 **Two color, one letter at a time:** don't. The purge is charged per layer, so a lone letter costs almost as much filament as the whole plate. See section 2.
- 5 **Building a two-color letter yourself?** Each cover in the two-color project is three separate meshes — the cover and one letter shell per face. If your slicer loses the assignment, use *break into parts* and set the two parts named `-letter-front` and `-letter-back` to your second filament. Nothing needs hand-painting.

★ Why it prints standing up

There is a raised letter on both faces. Lying flat, one of them would be on the bed. Standing on its open end, both faces print as side walls, so the two letters come out identical and nothing needs support.

4 • The profile baked into the 3MF

Using your own profile instead? Match these. All sliced and print-tested on a Creality Hi with a 0.4 mm nozzle.

Quality		Material & plate	
Layer height	0.10 mm	Filament	PLA
First layer	0.20 mm	Nozzle temp	220 °C
Nozzle	0.4 mm	Bed temp	60 °C
Walls	4 loops	Plate	Epoxy resin
Top / bottom	5 / 3 layers	Supports	Off
Infill	9 % gyroid	Brim	None

The two-color project uses white for the body and black for the letter. Any two colors that contrast will do.

The preset says 0.20 mm. The layer height is 0.10 mm.

The process preset inside the 3MF is *named* "PLA 0.20mm", but the layer height set in it is **0.10 mm**. That is what gives the letter crisp edges, and it is what the times and weights in this guide are for. Leave it there.

5 • Before you hit print

- ☐ Each cover standing on its open end, letter faces to the sides.
- ☐ Supports **off**. Nothing on this part needs one.
- ☐ Plate clean. A cover is 22.8 mm tall and stands on two thin rails with no brim; if one ever lets go of your plate, add a brim.

6 • Off the plate

- 1 Let the plate cool, then lift the covers off. There is no support and no brim to remove.
- 2 Look into the open end: the slot should be clear all the way up.
- 3 Check the ring hole. It prints on its side, so a small blob or strand can be left inside it. Clear it with a blade or a small drill bit if the ring binds.

7 • Put it on a key

- 1 Take the key off its ring.
- 2 Slide the head of the key into the open end of the cover, blade pointing out, until it stops.
- 3 Check that the key's own hole shows through the cover's ring hole.
- 4 Open the split ring and thread it through the cover and the key together. That is what holds the cover on.
- 5 Repeat for each key, one letter per key: F for the front door, B for the back, G for the garage.



Key heads seated in their covers, with the ring through each cover and key.

★ Pick a filament the letter shows up in

In one color the letter reads by the shadow along its raised edges. A light or mid-tone filament, like the gray in these photos, shows that shadow well. Black has almost no shading range and hides it. Two color sidesteps the question.

Want two letters, or your initials?

Two-letter covers and initials are a quick custom job. Leave a comment on the model page and I'll make one.

Where precision meets the printer

Thanks for printing this one. If it saved you a round of trial and error at the front door, that is exactly what it was designed to do.

For years my design world existed entirely behind a screen. As a mechanical engineer I spent countless hours building complex CAD models, but there was always a missing link — the ability to hold an idea in my hands. That changed in January 2026, when I went headfirst into 3D printing. The moment that first layer stuck to the bed, the gap between concept and reality vanished.

Coming from a background where precision is everything, tolerances aren't suggestions to me — they are a religion. I didn't want to print trinkets; I wanted to apply industrial engineering discipline to desktop manufacturing. Every wall count, every layer height and every infill percentage in this guide is a deliberate decision backed by testing. If a part can't handle the environment it was built for, it goes back to the drawing board.

Three principles behind every print

01

Functional Engineering

High-utility, real-world solutions rather than purely decorative models. If it doesn't solve a practical problem, it doesn't leave the workstation.

02

Rigorous Tolerances

Designed in professional CAD with mechanical intent — press-fits that click and assemblies that work straight off the build plate. No sanding, no filing, no guesswork.

03

Bridging the Gap

Industrial structural integrity at maker speed. Proving a desktop printer can produce parts worthy of real engineering applications is what drives every release.

The workshop

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A note on sharing

I'm thrilled when people use and share these designs. I just ask that you respect the license shown on the model listing and give the required credit, so I can keep contributing to the collective workshop.

IF THIS ONE EARNED ITS SPOT

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Tried it on a different brand of key? Post a make with a photo and say which keys you used — that is the information the next person with the same keys is looking for.

Happy organizing. — MakerX Designs · makerxdesigns.com · © 2026