

Isomorphic Keyboard Piano Overlay Assembly

Supplies:

3D Printed Keybases

3D Printed Keytops, 24/octave: 4 Blue, 4 White, 3 Red, 3 Yellow, 4 Purple, 3 Green, 3 Orange

Super Glue

3/16" Diameter Metal Round, cut to the length of your keyboard + one or two centimeters

Needle Nosed Pliers

Instructions:

- 1 There are 12 keys, and each is labeled on the back with the numbers 0-11. 0 goes on top of A, 1 goes on top of A#/Bb, etc, so, for a full 88 key keyboard, you would print 7 of each key except for the keys with 7, 8, 9, and 10 on the back. Those you'll need 8 of.
- 2 Slide the pieces onto your metal round in the order of their pitch.
- 3 Once you have all the key bases on the metal round, set it on top of your keyboard and make sure that the keys are in the right order. The stalks sticking up from the keys should be regularly spaced in a grid, and the taller bases should be on white keys while the shorter bases should be on black keys.
- 4 If everything looks right, you can now attach the keytops. It's probably easiest to get one keytop attached correctly for sure, and then just follow the pattern shown in the picture on my post on Patreon page. A good place to start might be C, whose key stalk closest to the player will get a blue keytop.
<https://isomorphickeyboardoverlay.weebly.com/uploads/1/1/4/8/114878165/published/698666571.jpg?1557048368>
- 5 Some of the keytops will fit tightly over the stalks on the stalks. They will probably not need super glue, though you can add it if you want it. When sliding/snapping those keys on, I recommend rotating the keybase up above the rest and squeezing the keytop onto the stalk with your palm below the keybase and fingers on the keytop. If you try to push down on the keytop while the overlay is on top of your keyboard, you may damage the underlying keys.
- 6 Other keytops will sit loosely, and those will need a small amount of superglue. (The variance here is due to print quality.) Make sure the area is well ventilated when you're supergluing the keys. (I gave myself a bad headache gluing all of mine on at once with only a window open. You'll probably want windows open and fans going, and will want to leave the area for a while once you're done.) When gluing, make sure that the keytop is all the way attached, else it will cure with the keytop at a slight angle.
- 7 Finally, you can secure the keys in place using the included end-clamps and two m3 nuts and bolts.

If there are flaws in the parts I send that significantly affect the playability of the overlay, please just send me photographic evidence of it and I'll be happy to replace the part.