



Ender 3 V2 - 7 inch Klipper LCD Mount



odonnell944

[VIEW IN BROWSER](#)

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Summary

Portrait and landscape mounts for generic 7" KlipperScreen

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Add a 7" touchscreen to your Ender 3 V2 with this printable mount. You need to flip the top and lower sections upside down in your slicer to avoid supports! Sorry, missed that in Solidworks. Native SLDPRT and STEP files also included.

- **Top section:** used for both portrait and landscape versions
 - QTY 4 of M3 x 16mm cap screws, flat head (countersink type) looks good
 - No logo on the main files
 - Made one with my O'Donnell Engineered Solutions logo, which I used with multi-material printing (it is debossed by 0.02mm)
- **Lower section,** each one adapts to the stock LCD mount piece:
 - **Portrait orientation option**
 - QTY 2 of M6 x 20mm hex bolts
 - QTY 2 of M6 nuts + washers (preferably lock nuts)

- QTY 4 of M3 heat-set inserts
- Landscape orientation option - print the main piece and also the adapter
 - QTY 2 of M6 x 45mm hex bolts
 - QTY 2 of M6 nuts + washers (preferably lock nuts)
 - QTY 4 of M3 heat-set inserts
 - QTY 2 of M4 heat-set inserts
 - QTY 2 of M4 x 6mm BHCS with washers (8mm or 10mm also ok)

Refer to pictures for the assembly structure. I personally prefer portrait, it looks less awkward.

Print this in something stiff, especially the landscape files... it can flex if you press hard. I used CF-ASA for this. ABS, ASA, and PC would be the best choices because they will not creep over time and leave the screen at a slight drooping angle due to self-weight.

However when printing with a high-shrinkage material such as ABS, suggest to scale the X/Y dimensions by +1% so that the PCB fits smoothly.

Many 7" screens have a 1024 x 600 resolution. Your screen will be slightly distorted unless you adjust this. You can add this to your config.txt file to force the correct resolution:

```
#framebuffer_width=1024 #framebuffer_height=600
#hdmi_ignore_edid=0xa5000080 hdmi_cvt=1024 600 60 3 0 0 0 #
uncomment to force a specific HDMI mode (this will force VGA)
hdmi_group=2 hdmi_mode=87
```

I also had to change the driver from kms to fkms in this same file:

"dtoverlay=vc4-kms-v3d" --> Changes to: "dtoverlay=vc4-fkms-v3d"

For adjusting the screen rotation by 90 deg in software, check [this link](#). Portrait mode for me was the "right" rotation option.

When rotating the screen, often the touchscreen will no longer match. Touching on the left really presses something on the right, etc. You need to transpose this by editing a conf file:

```
cd /usr/share/X11/xorg.conf.d sudo nano 40-libinput.conf
```

Find the section shown below ("touchscreen catchall") and add in an 'Option' command.

```

GNU nano 7.2                                40-libinput.conf *
Identifier "libinput touchpad catchall"
MatchIsTouchpad "on"
MatchDevicePath "/dev/input/event*"
Driver "libinput"
EndSection

Section "InputClass"
Identifier "libinput touchscreen catchall"
MatchIsTouchscreen "on"
# 90° Shift
Option "TransformationMatrix" "0 1 0 -1 0 1 0 0 1"
# 180° Shift
# Option "TransformationMatrix" "-1 0 1 0 -1 1 0 0 1"
# 270°
# Option "TransformationMatrix" "0 -1 1 1 0 0 0 0 1"
MatchDevicePath "/dev/input/event*"
Driver "libinput"
EndSection
Section "InputClass"

^G Help      ^O Write Out ^W Where Is  ^K Cut      ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste    ^J Justify  ^_ Go To Line

```


90°: Option "TransformationMatrix" "0 1 0 -1 0 1 0 0 1"


180°: Option "TransformationMatrix" "-1 0 1 0 -1 1 0 0 1"


270°: Option "TransformationMatrix" "0 -1 1 1 0 0 0 0 1"

For my portrait orientation, it was the 90 deg option which you can see uncommented in the screenshot above.

Model files


Portrait Orientation
4 files


lower-portrait-rev1.stl


lower-portrait-rev1.3mf

lower-portrait-rev1.step

lower-portrait-rev1.sldprt



Landscape Orientation

8 files



lower-landscape-rev2.stl



lower-landscape-rev2.3mf

lower-landscape-rev2.step

lower-landscape-rev2.sldprt



landscape-adapter-rev2.stl



landscape-adapter-rev2.3mf

landscape-adapter-rev2.step

landscape-adapter-rev2.sldprt



top-rev4.3mf



top-rev4.stl

top-rev4.step

top-rev4.sldprt



top-rev4-with-logo.3mf

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