

X156 8K Upgrade Kit Installation Instructions

Parts/Accessories List

- Touchscreen Kit x1 PC
 - Contains touchscreen with bracket, screen cable, Bracket-2
- Screws Pack x1 PC
 - Contains some backup screws, zip-ties, two green connectors, M2mm wrench
- 8K Mainboard Pack x1 PC
 - Contains 8k mainboard, mainboard bracket, and Bracket-1 for mounting the new touchscreen
- LCD Screen Bracket x1 PC
 - Includes four mounting strips and LCD bracket
- 16.0 inch 8K Mono LCD Screen Pack x1 PC
 - Contains a 8K screen, screen ribbon cable, and pre-cut black screen tape (this is stuck on the backside of a foam)

****Make sure when working with electronic parts to either ground yourself or wear rubber gloves to avoid shocking yourself or shorting the parts via static charge****

You can uninstall the old parts and install the new parts in any order, but, to avoid flipping the machine as much as possible, it's recommended to do it in the order described.

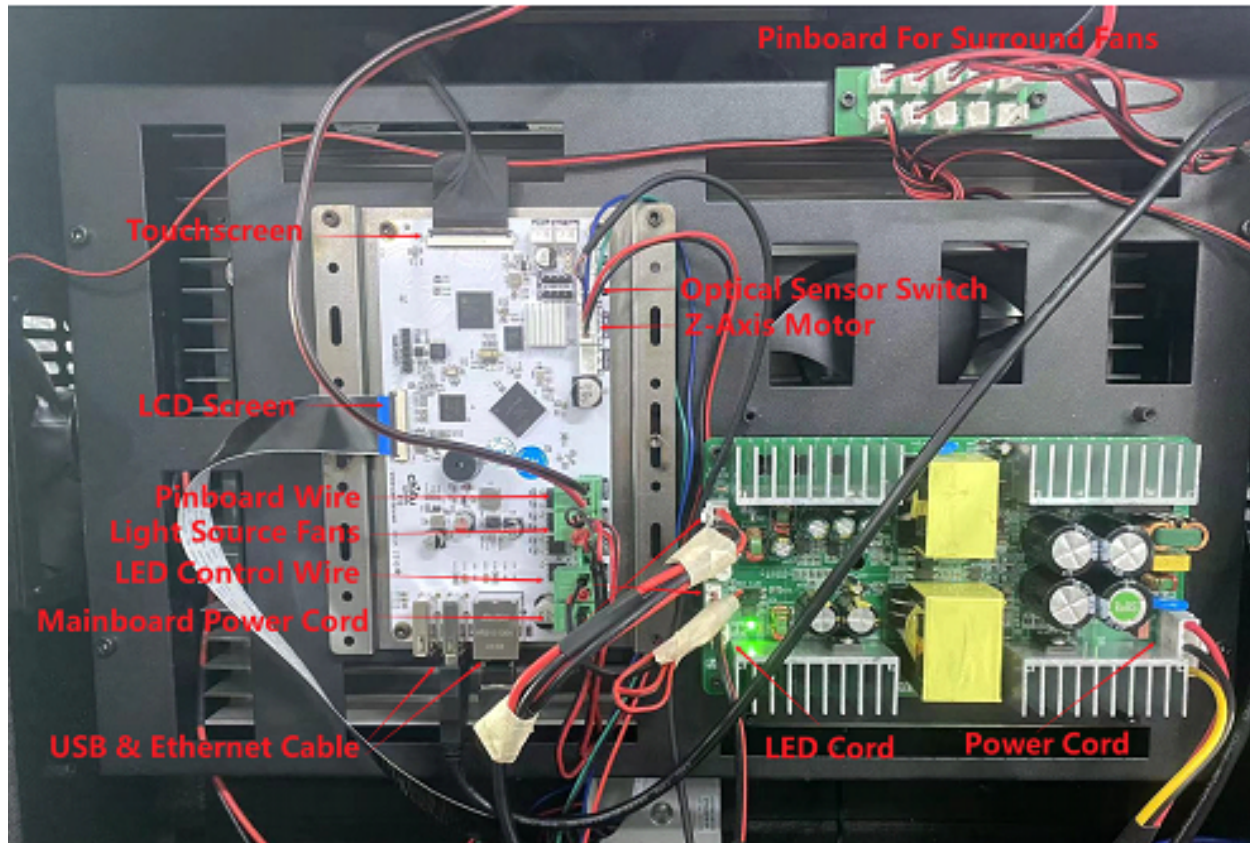
Start by removing the bottom panel to access the bottom of the machine.

1. Remove all connections from the old motherboard
2. Take off the four screws that hold the old motherboard onto the bracket.
3. Unplug and remove the HDMI board (you can remove the entire bracket) and disconnect the HDMI board power supply cable from the power supply unit
4. Remove the 4 M3*4mm screws that hold the old touchscreen on the front of the machine.

Now, we can go ahead and install the new motherboard and touchscreen.

Motherboard:

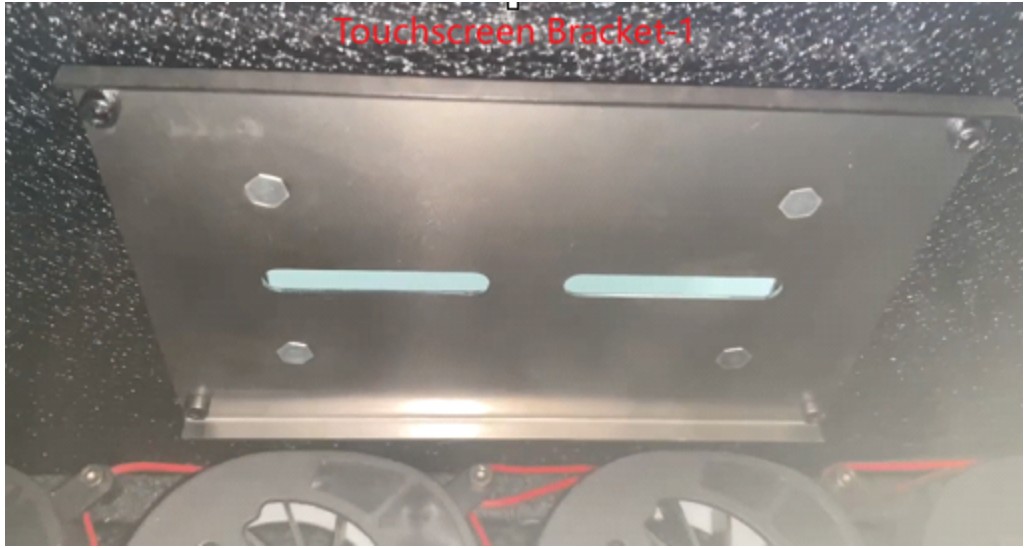
1. Use the same screws and install the new motherboard in the position according to the diagram below.
2. The touchscreen connection should be facing the front of the machine.
3. Plug in the cables according to the wiring diagram below (the touchscreen and LCD screen cables aren't in yet)



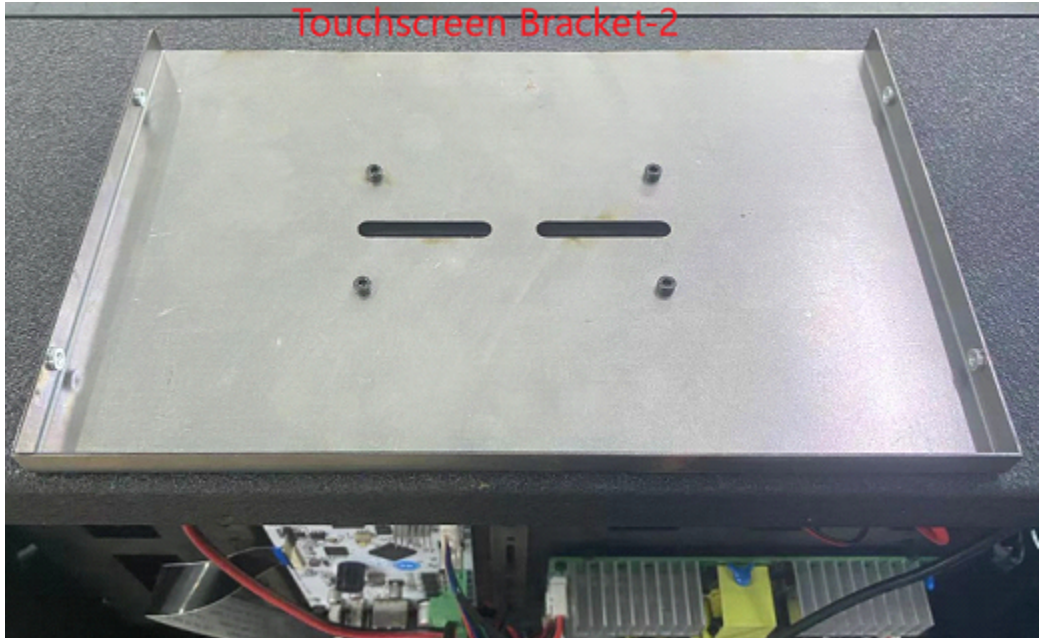
Note: The light source fans may be plugged into the pinboard for surround fans depending on your printer configuration. It is fine to leave this port on the mainboard open and just have them on all the time along with the other fans. If you want the LED fans to only be on when the machine is actually printing, you can remove the connectors from the pinboard and splice them into one of the spare green connectors that come in the bag with the screws and plug it into the mainboard.

Touchscreen:

1. Mount Bracket-1 with M3*4mm screw on the inside of the machine where the old touchscreen was installed. It may be helpful to unscrew the motherboard bracket and slide it toward the back of the machine to fit the wrench down into the gap - just make sure to resecure it afterward.



2. Remove the Bracket-2 from the touchscreen kit, then mount Bracket-2 with M3*4mm screws. It should be installed on the front of the machine. The open edge should be towards the top of the machine.



3. Mount the Touchscreen. Run the touchscreen cable through the two bar-shaped holes on Bracket-1 and Bracket-2, then secure the two M3*4mm screws on either side of the touchscreen to attach it to Bracket-2.



4. Slide the touchscreen cable into the touchscreen connection on the motherboard and flip the black locking mechanism down to close it in.

Now flip the machine right-side-up to install the new 8K LCD screen. Make sure not to pinch any loose wires. You can put the bottom panel back on temporarily, but you will need to remove it again to plug in the new LCD screen.

To remove the old LCD screen, peel off the black screen tape and unscrew the 8 screws that hold the screen bracket onto the bottom of the print chamber.

If you're doing the instructions in a different order and haven't uninstalled the HDMI board yet, you'll need to unplug the screen from the HDMI board before pulling it out of the screen and screen bracket.

Install the 8K LCD Screen:

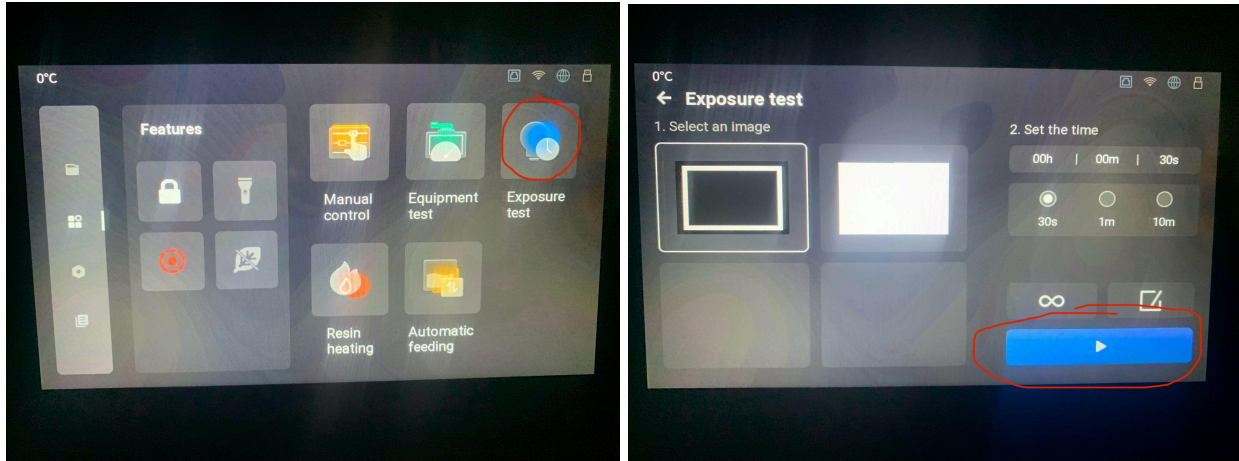
It's recommended to wear gloves while installing the LCD screen to avoid smudging it

1. Remove all the retention strips from the LCD screen bracket



2. Remove the film from the bottom of the screen, then put the LCD screen onto the screen bracket carefully.
3. Screw the side retention strips onto the bracket, and then the two longer strips. It's recommended to screw them all onto the bracket loosely, and then tighten the screws to lock the LCD screen onto the bracket once they're all in place.
4. Plug the LCD ribbon cable into the screen and make sure to lock it in place with the gold lock bar.
5. Slide the screen cable in behind the light source and slot the screen bracket into place.
If the screen bracket cannot sit flush into the space, the screws that hold the light source in place may be too tight and need to be loosened a bit.

Lastly, you'll just need to flip the machine back to plug the LCD screen cable into the new mainboard. It's recommended to plug in the printer and run an exposure test from the Features menu before replacing the bottom panel to ensure everything is working right.



Once everything is installed and working right, replace the bottom panel.

Light source intensity

Mono screens transmit UV light much better than old color screens.

The light intensity should be correct by default. If you notice prints are being over or underexposed with settings that should be fine, you can measure and adjust the light intensity.

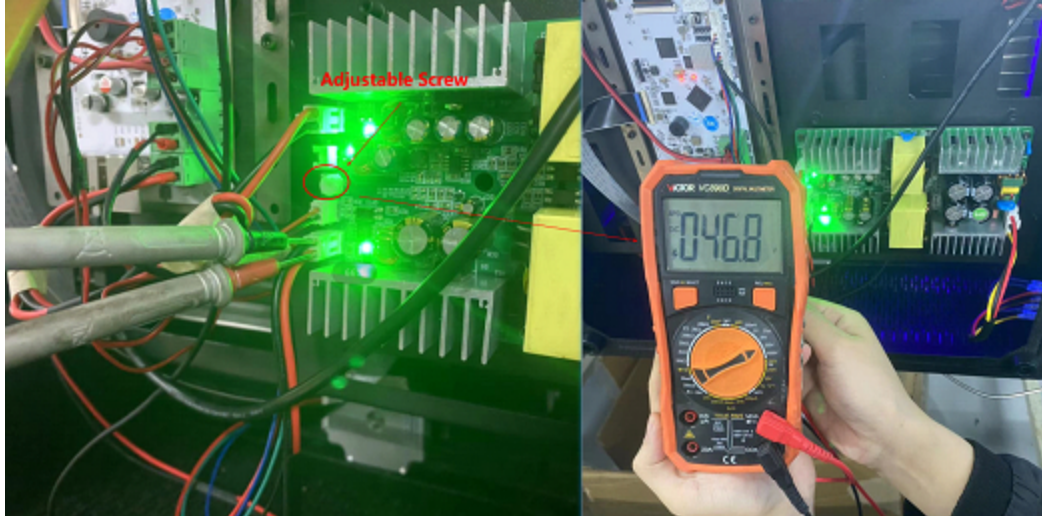
Adjust Light Intensity:

There are two methods to get the correct light intensity:

(1) Multimeter:

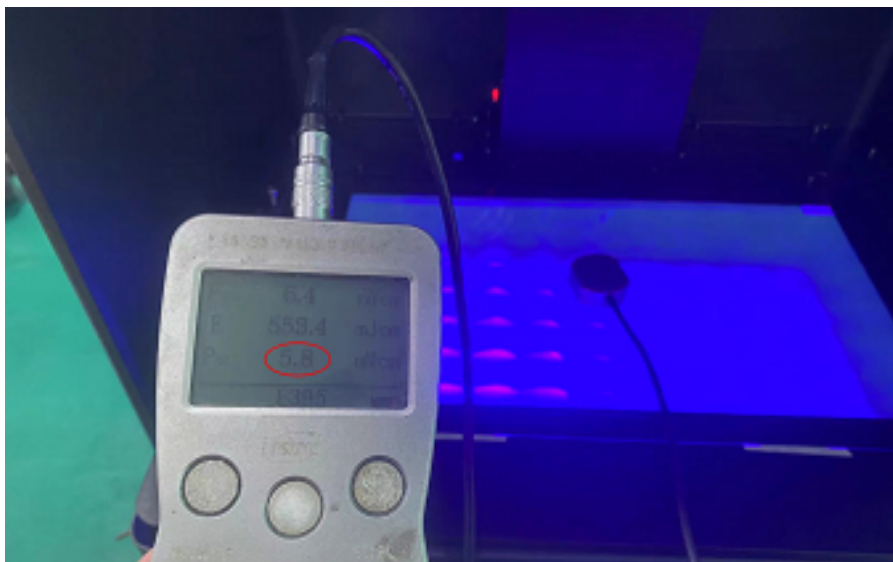
Set the multimeter to the 200V Dc voltage gear, find the white plastic/adjustable screw on the power supply, plug the red & white probe into the LED terminal, then power the machine on, then run an Exposure test/Clean function to light the light source, then slowly & slightly turn the adjustable screw, till the value is approximately 46.8V (Original approximately 48.23V—10.1mw/cm²), and the UV light intensity should be 4.8~6mw/cm².

Caution: Make sure not to touch the power supply when you adjust the voltage - in case of an electric shock.



(2) Photometer (Recommended) :

Find the white plastic screw on the power supply, power the machine on, then run a Clean function to light the whole LCD screen, then measure the value with a photometer, slowly and slightly turn the adjustable screw, till the value is approximately 4.8~6mW/cm².



Re-level the build plate

Any time you replace the screen or screen protector, it's important to check the level of the build plate and relevel if necessary.

In this process, if you find the motor is running in the opposite direction, then you just need to go to Parameters>Motor direction, then set it to the other direction.

Remove the protective film that's over the screen protector (not the screen protector itself) then you should be good to go to send the build plate to the home position to re-level the build plate and set the Z=0 position.

Run a dry print

Run a test/dry print without the resin vat and build plate in the machine. Slice a small file (set the layer height to 0.2mm) on the slicer, then print the file to run a dry print, to make sure it can run a test print perfectly, then install the black screen tape *only after checking everything else*.

Happy Printing!

Email support@epax3d.com for additional support