How to replace the LCD

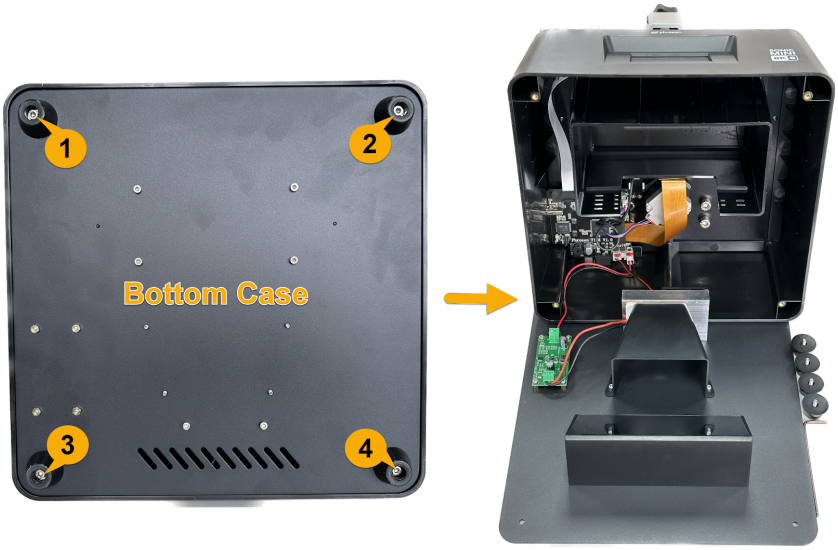
The LCD screen is essential in resin 3D printing. An image of each layer is generated on the LCD while an array of LED chips project light through the LCD.

As the LCD is a consumable part, it may need to be replaced after a period of time. The LCD screen is fragile so be careful during the replacement process.

SONIC MINI 8K S

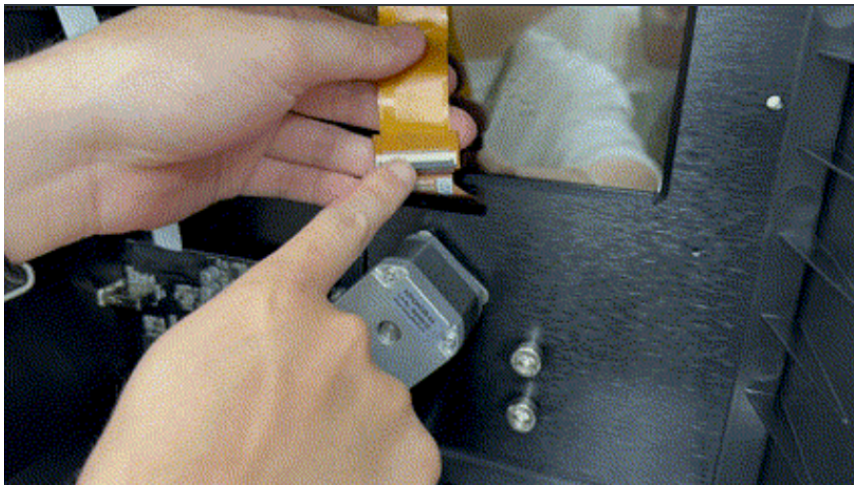
Removing the Old LCD

Step 1: Turn off the printer and remove the UV cover, building plate and the resin vat.
Step 2: Carefullt lay the printer down on a flat surface.
Step 3: Loosen the 4 screws on the bottom case, and then open the case.



Step 4: Remove the LCD hood by loosing 4 screws that hold the hood in place, remove then the tape that secures the LCD cable and after that remove the hood to detach it from the device.

Step 5: Disconnect the LCD screen from the mainboard (open the cable clips, detach the LCD ribbon cable from both the mainboard and the LCD screen).



Step 6: Turn the printer upright
Step 7: Remove the tape around the LCD screen
Step 8: Remove LCD screen (with one hand, gently push the bottom of the LCD screen from inside the printer and assist in removing the screen with the other hand)

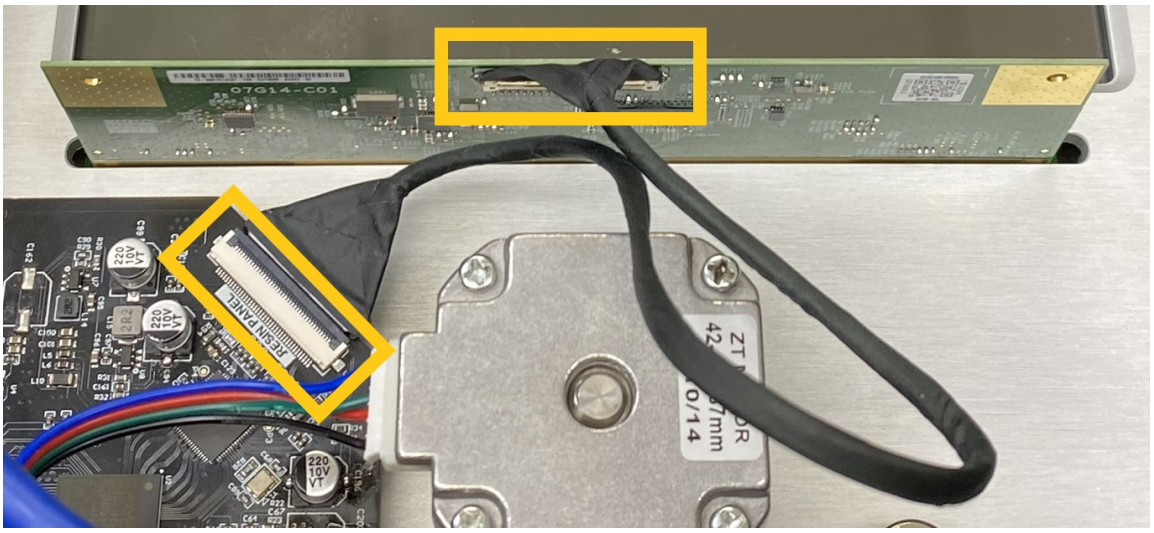
Installation for new LCD

Step 1: Thread the LCD ribbon cable through the slot and position the LCD screen in place.
Step 2: Paste the tape around the edge of the new LCD.
Step 3: Carefully lay the printer down on a flat surface.
Step 4: Connect the LCD ribbon cable to both the LCD screen and the mainboard.
Step 5: Tighten the 4 screws for the LCD hood to secure it.
Step 6: Tape the LCD ribbon cable on the hood.
Step 7: Reinstall the bottom case.
Step 8: Turn the printer upright.

SONIC MINI 8K

Removing the Old LCD

Step 1: Remove the plastic case, resin vat and building plate.
Step 2: Select TOOLS > MANUAL >10mm until the T-plate lifts to the top.
Step 3:<u>**Important:**</u> Turn off the printer and unplug the power cable.
Step 4: Turn the printer upside down and remove the bottom cover.
Step 5: Unplug the LED module and unscrew the lens hood.
Step 6: Flip the latch and detach the LCD ribbon cable connecting to the mainboard.



Installation for new LCD

Step 1: Lay the new LCD in place and paste the electrical tape around the edge of LCD.
Step 2: Plug the LCD ribbon cable on the LCD and mainboard
Step 3: Plug the LED module and tighten the lens hood.
Step 4: Install the bottom cover back.
Step 5: Perform the built-in LCD test to ensure that the LCD works properly.

SONIC MINI/ SONIC MINI 4K/ SONIC MIGHTY 4K

Removing the Old LCD

Step 1: Remove the plastic covering.
Step 2: Remove the resin vat and the building plate.
Step 3: Make sure the building plate on the Z-axis is lifted completely. If it isn't, click TOOLS, and then click MANUAL, click on 10mm several times.
Step 4: Important, turn off the 3D printer and unplug the power cable.
Step 5: Flip the 3D printer and remove the bottom with an m3 Allen wrench which is included in the toolbox.
Step 6: Loosen the LCD ribbon cable connecting to the LCD control board (in brown). Make sure to flip up the latch before removing the cable.

Step 7: Turn the 3D printer upright. Remove the black electric tape placed around the LCD. Then, remove the LCD. Use a blade for assistance, if necessary.

Placing the New LCD

Step 1: Place the new LCD in place and tape down all four sides with electric tape.
Step 2: Flip the 3D printer and attach the LCD's ribbon cable onto the mainboard.
Step 3: Place the bottom back onto the 3D printer and tighten the screws.
Step 4: Turn the 3D printer upright. Plug in the power cable, and turn on the 3D printer.
Step 5: Perform the LCD test to ensure that the LCD is functioning properly.

Note:
1. We suggest using black electricity tape, as it is water-proof, heat resistant, and doesn't conduct electricity.
2. Turn off the 3D printer and unplug the power cable before changing the LCD.

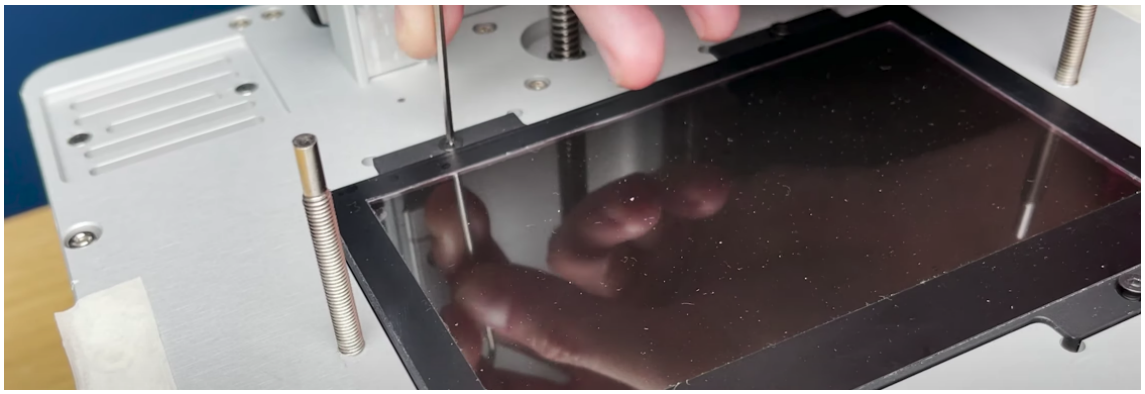
SONIC MEGA/ SONIC SERIES/ SHUFFLE SERIES/ MAKE

Removing the Front Case

Step 1: Remove the resin vat.
Step 2: Make sure the building plate on the Z-axis is retracted completely. If it isn’t, click TOOLS, and then click MANUAL, click on 10mm several times.
Step 3: Important: Turn off the 3D printer and unplug the power cable.
Step 4: Open the lower-front part of the printer.
Step 5: Unplug the cables which are attached to the front part, then remove the front case.

Removing the Old LCD

Step 1: Loosen the LCD ribbon cable connecting to the LCD control board (in brown). Make sure to flip up the latch before removing the cable.
Step 2: Remove the black electric tape placed around the LCD.
Step 3: Remove the four screws on the LCD (if there are any). Then remove the LCD. Use a blade for assistance, if necessary.



Placing the New LCD

Step 1: Place the new LCD in place and ensure it is aligned correctly, then tape down all four sides with electric tape.

Step 2: Attach the LCD's ribbon cable onto the control board.
Step 3: Plug in the cables back to the control board, and then place the screen frame back to the 3D printer.
Step 4: Screw the bolts back onto the 3D printer.
Step 5: Plug in the power cable, and turn on the 3D printer.
Step 6: Perform an LCD test to ensure that the LCD is functioning properly.

Note:
1. We suggest using black electricity tape, as it is water-proof, heat resistant, and doesn't conduct electricity.
2. Turn off the 3D printer and unplug the power cable before changing the LCD.

TRANSFORM

Step 1: Remove the resin vat.
Step 2: Make sure the building plate on the Z-axis has retracted completely. If it hasn't, click TOOLS, and then click MANUAL, click several times on 10mm.
Step 3: Turn off the 3D printer and unplug the power cable.
Step 4: Remove all four bolts on the four corners of the LCD.
Step 5: Unplug the cables and the ribbon cable, which is attached to the control **board.**
Step 6: Remove the black electric tape placed around the LCD. Then remove the LCD. Use a blade for assistance, if necessary.
Step 7: Place the new LCD in place and ensure it is aligned correctly, then tape down all four sides with electric tape.
Step 8: Attach the LCD's ribbon cable onto the control board.
Step 9: Plug in the cables back to the control board, and place the LCD frame back onto the 3D printer.
Step 10: Screw the bolts back onto the 3D printer.
Step 11: Plug in the power cable, and turn on the printer.
Step 12: Perform an LCD test to ensure that the LCD is functioning properly.
Note:
1. We suggest using black electricity tape, as it is water-proof, heat resistant, and doesn't conduct electricity.
2. Turn off the 3D printer and unplug the power cable before changing the LCD.