ZONESTAR

Verify assembly and wiring

Version：1.0

Verify assembly and wiring

After finish to assemble and wiring, please following the steps below to verify.

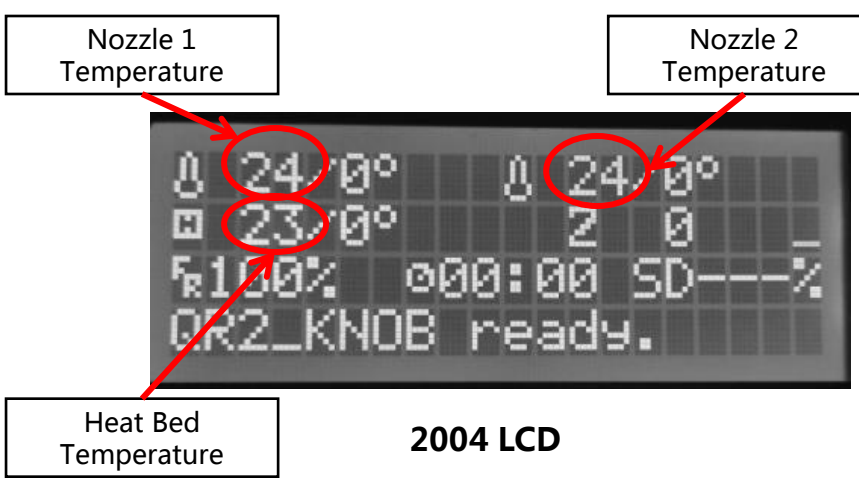
Note: Due to printer model and software version, the picture below may be different from your machine.

Step 1: Before turning on the power, confirm again:

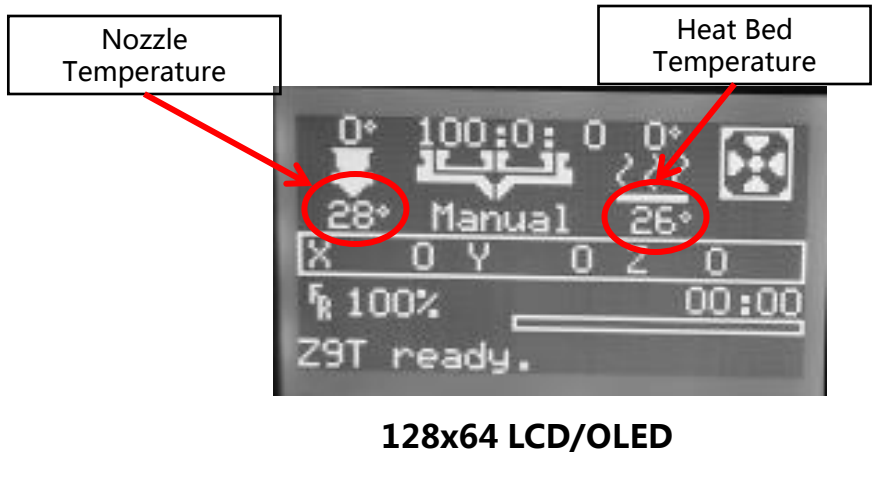
- ✓ Check if it has been set to the correct position if there is a 110V/220V power voltage selector switch.
- ✓ Check if the components are connected correctly. Especially, check DC+ and DC- of the DC power didn't reverse, the wiring is in good contact with the terminals and No wires are short.
- ✓ Check if the cable of LCD is connected well, if there are 2 LCD cables, confirm that EXP 1 and EXP2 connector did not exchange.

Step 2: Check temperature sensor:

Turn on the printer, and watch the LCD screen, the temperature should be almost the same as ambient temperature.



2004 LCD



128x64 LCD/OLED

Note 1, Some printers have more than one temperature sensor.

Note 2, Some printers haven't a heat bed, so they have not heat bed temperature sensor.

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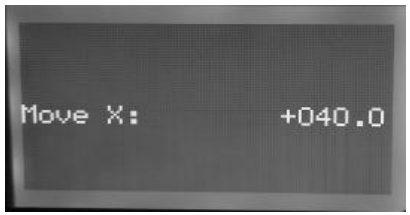
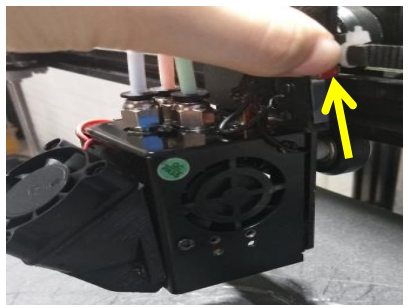
Step 3: Check X, Y and Z axis Motors and ENDSTOPS:

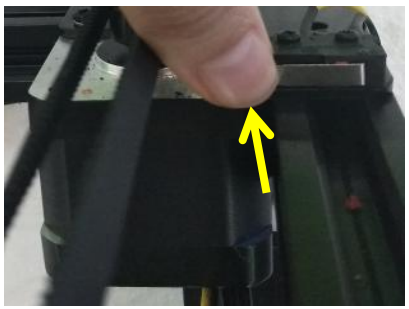
- Check the X axis: Prepare>>Move axis>>Move X>> Move 10mm. Enter and rotate knob to move the X axis.
- Check the Y axis: Prepare>>Move axis>>Move Y>> Move 10mm. Enter and rotate knob to move the Y axis.
- Check the Z axis: Prepare>>Move axis>>Move Z>> Move 10mm. Enter and rotate knob to move the Z axis.

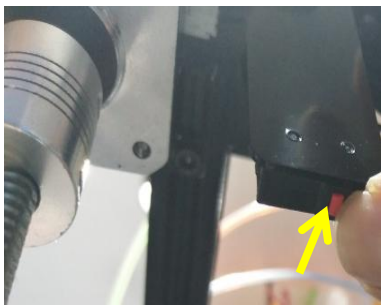
1. Move the X, Y and Z axes to check if the print head (or hot bed) can move left/right (X axis), front/back (Y axis), or up/down (Z axis).
2. **Check X ENDSTOP:** Press and hold the X- limit switch, and try to reduce the value of ***Move X***, the print head should stop moving, otherwise check the connection of the X- limit switch.
3. **Check Y ENDSTOP:** Press and hold the Y- limit switch, and try to reduce the value of ***Move Y***, the heat bed (or print head) should stop moving, otherwise check the connection of the Y- limit switch.
4. **Check Z ENDSTOP:** Press and hold the Z- limit switch, and try to reduce the value of ***Move Z***, the print head (or heat bed) should stop moving, otherwise check the connection of the Z- limit switch.

NOTE: Some printers have two Z ENDSTOPs, for example Z10, when checking Z ENDSTOPs, you need to check them one by one.









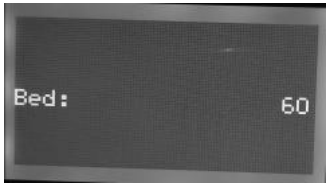
Verify assembly and wiring

Step 4: Check heaters and Fans:

1. ***Control>>Temperature>>Nozzle: 180,*** set the nozzle temperature to 180 degrees, and then return to info menu, to check if the nozzle temperature will rise, usually it rise one degree per seconds or so. ***Note: If the printer have two nozzles, you need to set the temperature separately.***

12864 LCD **2004 LCD**

2. ***Control>>Temperature>>Bed: 60,*** set the heat bed temperature to 60 degrees, and then return to info menu, to check if the temperature will rise, usually it rise one degree per 2 seconds or so. ***Note: If the printer has not heat bed, skip this step.***

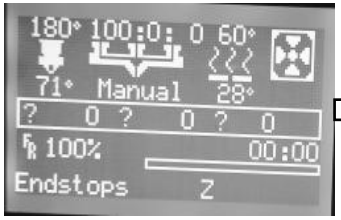


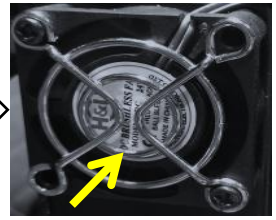
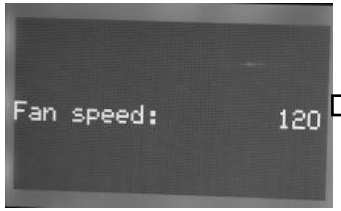
12864 LCD **2004 LCD**

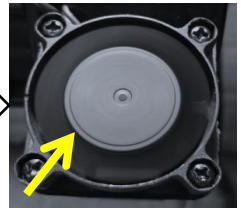
3. **Check HOTEND cooling fan.** When the nozzle temperature exceeds 60~70 degrees, the cooling fan on the side of print head will work.

Note:For some printers, such as Z5 and Z6, this fan is connected to power directly, so it will work immediately after power on.

4. **Check extruder cooling fan,** ***Control>>Temperature>>Fan Speed: 200,*** set the fan speed to 200 degrees, and watch if the extruder cooling fan will work.





HOTEND cooling fan(Side) **Extruder cooling fan(Front)**

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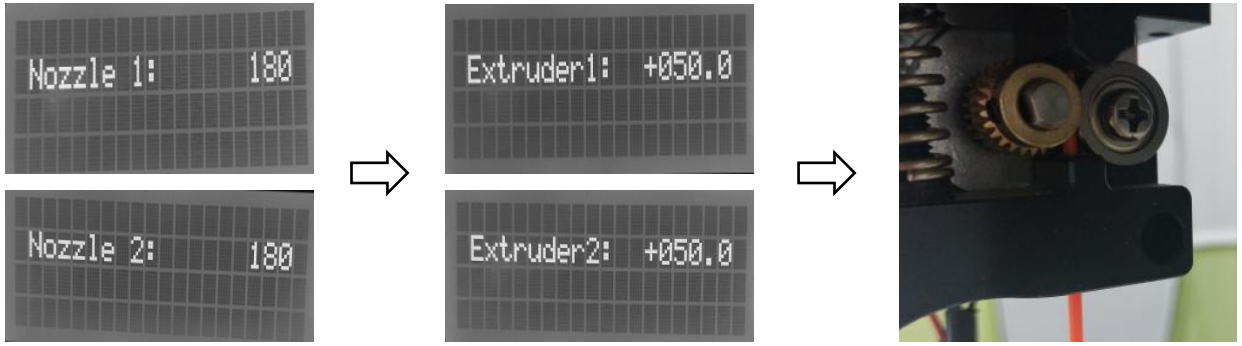
Step 5: Check extrusion feeders:

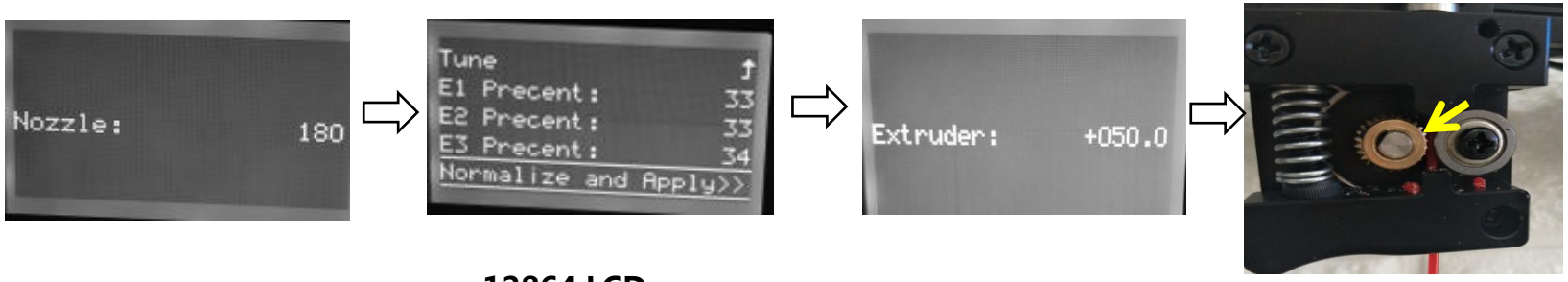
1. ***Control>>Temperature>>Nozzle: 180,*** set the nozzle temperature to 180 degrees, and then return to info menu, waiting for the temperature reached to the setting. ***Note: If the printer have two nozzles, you need to set the temperature separately.***

- ***If your printer have more than on extrusion feeder and HOTEND is mixed color, such Z5M2, Z9M3, etc.,*** set the mixing ratio of all extruders to the same.
- ***If your printer have more than on extrusion feeder and HOTEND isn't mixed color, such P802QR2, Z8XR2, etc.,*** you need to set both of temperature of nozzles and control the extruder separately.

2. ***Prepare>>Move Axis>>Extruder>>Move 10mm>>Extruder: +50mm***, to check if the

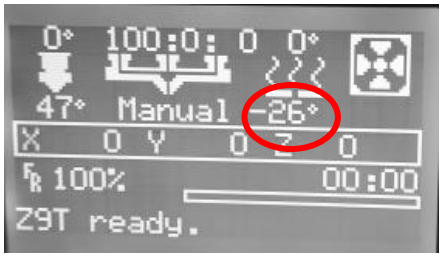


2004 LCD



12864 LCD

Trouble-shooting

LCD does not display after booting	1. The backlight of LCD does not light up. Possible reasons: The AC power cord is not plugged in; DC+ and - are reversed; the power socket are disconnected with power supply. 2. The backlight of LCD light but has not characters. Possible reasons : LCD cable is reversed; firmware error;
Error temperature	 **ETEMP doesn't connect well**  **ETEMP doesn't connect well**  **BTEMP doesn't connect well**
Motor or extrusion feeder does not work properly	1. The power supply does not work (Note: For some printer, USB can also supply power and let the LCD display, but can not supply power to the motors and heater). 2. The motor cable is disconnected. 3. The motor drive module didn't connect well with the socket of control board. 4. Note that the nozzle must be heated to more than 150 degrees when extruding.
Error Motor Direction	1. The motor is not connected to the correct connecotor of the control board, such as exchanged the X and Y sockets. 2. The wire sequence of the motor cable is incorrect. 3. The firmware version is incorrect.
Issue of Limit switch	1. The wire of the limit switch is disconnected. 2. The limit switch is connected to the wrong connector, for example, exchanged the X and Y limit switches. 3. The wire is disconnected witht the limit swich. 4. Check the singnal of the limit swith, it should be connected to pin **"S"** and **"GND"** of the connnector on control board.
Issue of heatbed and HOTEND	1. The printer reboot automatically when heating the heat bed or nozzle. Check if the AC power supply voltage selection switch is set correctly and the DC power cable is connected well. 2. The print head cannot be heated to the set temperature. Check if the thermistor is missing from the heated aluminum block. Check if the printhead heater cable is connected well. 3. The hot bed cannot be heated to the set temperature. Check if the wiring is in good contact. If the ambient temperature is low, it is recommended to add insulation cotton at the bottom of the hot bed.