# Fusion3 EDGE 3D Printer

## TROUBLESHOOTING: UNDERSTANDING COMMON ERROR MESSAGES

Revision 5/28/2022

## **UNDERSTANDING COMMON ERROR MESSAGES**

Common error messages on EDGE & what to do about them

One of the benefits of EDGE is its much higher degree of self-awareness about its status and the 3D printing process. As a consequence, EDGE can generate a lot of error messages, depending on what it's seeing and what went wrong. Some of these messages are benign and just relay information, while some indicate a problem that requires your intervention. This document will help you understand what different error messages mean, and what you need to do about them.

## **MESSAGES DESIGN LANGUAGE**

EDGE has two categories of messages:

- 1. Pop-up messages along the bottom of the screen
- 2. Dialog boxes that overlay the interface

#### **Pop-Up Messages**

Pop-up messages come in three colors:

- Blue: Informational message
- Yellow: Error message, but not necessarily requiring your immediate attention
- Red: Fatal error message. Something has gone wrong and needs to be fixed before attempting to print.

All 3 colors also show up in the persistent console history.

Blue and yellow messages will disappear after 3-5 seconds. Red messages will stay on the screen until you acknowledge them, or the printer is power cycled.

#### **Dialog Box Messages**

Dialog boxes may be used to relay messages or get input from you.

- They generally require you to press "ok" or otherwise acknowledge the message before they go away.
- They don't usually leave a message in the console.

### **ERROR MESSAGES LOOKUP & HOW TO FIX**

These are in descending order of their approximate frequency.

# PROBE ERROR: The nozzle probe has failed. Please check that nozzle and probe plate are clean and there is electrical continuity

**Shows up as:** Above message as dialog box; red console message "*Nozzle Offset failed to read nozzle probe*"

**When this happens:** During the nozzle offset calibration process, if the printer is not able to detect electrical continuity between the tip of the nozzle and the print head scrub plate.

What happens: EDGE cancels the print or operation in process and reports this error.

**How to fix it:** *Most* of the time, this can be fixed by wire brushing the bottom of the print head (while hot) and starting your print again. If you consistently get this error every time you start a print, contact Customer Support.

#### Offset Probe Measurement did not complete

Shows up as: red popup error, same message in console.

**When this happens:** During the nozzle offset calibration process, if the probe move with the bed probe (not the nozzle) fails to complete successfully.

What happens: EDGE cancels the print or operation in process.

**How to fix it:** Check that the bed probe can deploy correctly at the scrub plate location. Try to start your print or operation again. If it fails more than twice in a row contact Customer Support.

# NOZZLE OFFSET ERROR: The nozzle offset result falls outside of the safe range. Please check print head, probe, and try again

**Shows up as:** dialog box with above message; red message on console "Action Canceled: Offset outside the safe range".

**When this happens:** During the nozzle offset calibration process, if the new nozzle offset falls outside of a preset safe range.

What happens: EDGE cancels the print or operation in process.

**How to fix it:** Normally this error indicates that something went wrong during the actual nozzle offset process. Maybe there was debris on the head that got pushed through so contact was made eventually,

but distorted the readings. Wire brush the bottom of the print head (while hot) and try again. If you get this error more than twice in a row, contact Customer Support.

#### G29 bed level exceeding the maximum allowed limit

Shows up as: red popup error, same message in console.

**When this happens:** The 5x5 auto bed leveling process finished successfully, but the resulting heightmap shows the bed is too out of level to print on.

**What happens:** EDGE cancels the print or operation in process and reports this error message on the console.

How to fix it: Manually adjust the bed level to bring it into spec.

#### Print Canceled: Probe Did Not Complete

Shows up as: red popup error, same message in console

**When this happens:** During the beginning-of-print sequence when the printer is probing the bed in the center a single time. This can occur at either of the two single probes in the center in bed.g.

What happens: EDGE cancels the print or operation in process and reports this error message on the console.

**How to fix it:** Make sure the bed probe can deploy and retract correctly. Make sure the bed is far enough away that the probe doesn't hit it when it deploys. Make sure the bed is close enough that the probe contacts it before its travel runs out. Try to run your print again, if it happens 2 times in a row contact Customer Support.

#### Print Canceled: Bed Map did not complete

Shows up as: red popup error, same message in console

**When this happens:** During the beginning-of-print sequence when the printer is probing the entire bed in the 5x5 grid of points.

**What happens:** EDGE cancels the print or operation in process and reports this error message on the console.

**How to fix it:** Make sure the height map falls within the allowed leveling tolerance (2mm). If it's out of range, manually adjust the bed level. Make sure the bed probe is able to deploy through the full span of the bed. Make sure the bed probe cable doesn't get tangled or caught somewhere.

#### ERROR: Probe failed to deploy. Check bed probe system

Shows up as: red popup message, same message in console

When this happens: Any time the bed probe tries to deploy and is not able to.

**What happens:** EDGE cancels the print or operation in process and reports an error message on the console.

How to fix it: Make sure the bed probe can deploy and retract correctly. If this happens consistently, contact Customer Support.

#### Error: M260: I2C transmission error

Shows up as: Red popup message, same message in console

**When this happens:** Any time EDGE isn't able to communicate with the filament monitor sensor in the extruder. If that sensor isn't working or isn't connected, you might get this message every time you load the *"Control"* screen, since that screen forces a refresh of the sensor. You might also see this error at the beginning of a print, when EDGE tries to communicate with the sensor to initialize it.

**What happens:** Nothing, EDGE will continue to execute a print file or other operations. But this does mean you cannot rely on the filament monitor to pause your print if you run out of filament!

**How to fix:** Check wiring to the sensor, check for power/function. For information see the separate document on diagnosing filament monitor issues. Contact Customer Support if issue persists.