

# MAXXESHOP3D

## RESOURCE CENTRE

## 3D Printer Error Codes

*A practical beginner-friendly guide to the most common error-code systems used on modern FDM printers, including many brands seen in schools, makerspaces and workshops.*

**Important:** the same underlying fault can appear with different wording or different numbers on different printers. Always match the exact printer model and current firmware version before following a fix.

**What this guide does:** It explains how common brands present errors, what the most common fault families mean, and what a teacher, student or workshop user should check first. It is intentionally a practical guide, not a complete code book for every model and firmware revision.

### Quick read: how to think about printer error codes

**Most modern FDM printers report faults in one of four ways:** named errors with a code, long numeric strings, short alphanumeric codes, or plain-language warnings. The number itself matters, but the subsystem matters more: temperature, motion, levelling, extrusion, cooling, storage/networking, or firmware/file mismatch.

### How common printer families show errors

Brand family	How it appears	Typical examples	Best first response
<b>Prusa</b>	Named error + numeric code + QR code	Hotend preheat, bed preheat, thermal runaway, homing, stuck filament, firmware/file-system errors	Scan the QR code or open the exact code article; check heater, thermistor, bed, axis movement, or firmware match.
<b>Bambu Lab</b>	HMS multi-part code strings	Nozzle temperature, AMS/feed, storage-space and calibration/health messages	Read the exact HMS code page; note whether the error came from the printer, toolhead or AMS.
<b>UltiMaker / MakerBot</b>	ERxx and named system messages	ER30 build plate max temp, ER32 Z-axis stuck, ER65 extrusion problem, active leveling errors	Read the named message first; check bed motion, print cores/nozzles, plate condition and leveling.
<b>FlashForge</b>	Plain-language equipment messages and logged faults	Host Error, Z-axis abnormal, platform/bed cable issues	Restart once, then check motion, bed wiring and machine logs if the message returns.
<b>Creality</b>	Model-specific numeric faults	111, 2000, 2243, 2403, 2526, 2527, TF0526 and other model-specific warnings	Use the exact model wiki page; Creality numbers are often strongly model-dependent.
<b>Anycubic</b>	Numeric error code pages	10122 heating abnormal, 10124 extruder NTC abnormal, 11511 extrusion abnormal	Use the model-specific fault page and inspect heater, thermistor/NTC, feed path and wiring.

Brand family	How it appears	Typical examples	Best first response
Raise3D	Text prompts, warnings, LEDs and assistant-driven troubleshooting	Extruder abnormal warnings, guided troubleshooting and print-failed/jam prompts	Read the on-screen prompt carefully and use the printer manual/support flow for that exact model.

**Beginner rule:** do not keep pressing Retry on any heating, thermal runaway, mintemp, maxtemp, smoke, smell, or melted-wire fault. Those are inspection faults first, not “try again” faults.

## Common error families across brands

Fault family	Usually means	What the user sees	Best first checks
<b>Hotend heating / nozzle temperature</b>	Thermistor unplugged, heater cartridge issue, damaged toolhead cable, loose board connection	Printer struggles to warm up, shows preheat / NTC / temperature error	Inspect hotend wiring, toolhead plug, heater cartridge retention, thermistor retention and connector seating.
<b>Thermal runaway / over-temperature</b>	Unsafe temperature rise or unstable reading, failed sensor, failed control component, damaged wiring	Rapid shutdown, thermal runaway, max temp or “abnormal heating” fault	Turn off power, allow the printer to cool, inspect heater and thermistor wiring before retrying.
<b>Bed heating / bed temperature</b>	Bed heater problem, bed thermistor issue, broken cable at bed hinge or strain point	Bed preheat, bed max temp, bed mintemp, plate temperature fault	Check bed cable routing, connector tightness and any visible insulation damage.
<b>Homing / axis motion</b>	Obstruction, bent rod/rail issue, over-tight belt, failed switch/sensor, Z screw friction	Homing failed, axis stuck, unable to level, wrong coordinates	Remove obstructions, move the axis gently by hand where safe, inspect belts, rods/rails, leadscrews and endstop/sensor area.
<b>Levelling / probe / calibration</b>	Dirty nozzle, dirty bed, bad probe reading, bed sheet not seated, warped surface or wrong start state	Active leveling failed, calibration abnormal, probing error	Clean nozzle tip and bed, reseal plate/sheet, repeat homing, then re-run leveling.
<b>Extrusion / filament feed / jam</b>	Clog, tangled spool, worn drive gears, bad filament sensor, AMS or feeder issue	Extrusion abnormal, stuck filament, filament not detected, ER65, jam messages	Check spool path, feeder path, nozzle clog signs, extruder tension and whether the filament can move freely.
<b>Fan / cooling</b>	Fan jam, damaged fan, wire issue, feedback/signal issue	Cooling fan low speed, fan fault, overheating soon after preheat	Check for filament strands or labels blocking the fan, verify free rotation, wiring and plug seating.
<b>Storage / network / cloud / communication</b>	Full storage, Wi-Fi issue, ESP or network module issue, host communication fault	Registration failed, host error, storage full, cloud connect issue	Restart once, verify network and storage, then inspect firmware version and logs if the fault returns.
<b>Firmware / file / machine mismatch</b>	Wrong firmware package, corrupted update, wrong machine profile, damaged file system or incompatible file	Unsupported printer type, signature verification failed, file system error	Stop and verify the exact printer model, firmware package and storage media before re-flashing or retrying.

## Helpful brand notes for schools and workshops

### Prusa

Modern Prusa machines often make troubleshooting easier by showing the error name and a QR code that opens the matching support article. This is very useful in classrooms because it shortens the gap between the printer fault and the exact fix steps.

### Bambu Lab

Bambu printers and AMS systems commonly use HMS codes. Write down the full code exactly as shown, because one digit group usually identifies the subsystem involved.

### UltiMaker / MakerBot

These printers often combine clear named messages with ER codes. In school settings, active leveling, print-core/nozzle condition and build plate condition are common first checks.

### FlashForge

FlashForge often uses plain-language machine messages. If a message returns after a restart, collect logs if the model supports it and inspect the named subsystem rather than guessing.

### Creality / Anycubic

Many recent Creality and Anycubic machines use model-specific numeric pages. The safest habit is to search the exact code plus the exact printer model, not just the brand name.

### Raise3D

Some Raise3D workflows lean more on the on-screen manual, assistant or warning description than on a single public code table. Read the wording carefully and match it to the model manual.

## A simple diagnosis routine for beginners

- Read and record the exact message. Take a photo of the screen before doing anything else.
- Write down the exact printer model and the current job state: preheating, homing, leveling, loading filament, or mid-print.
- Decide whether it is a safe-to-retry fault or a stop-and-inspect fault. Heating, thermal runaway and electrical smells are stop-and-inspect faults.
- Check the subsystem named by the error first. Do not immediately disassemble unrelated parts.
- If the error is motion-related, remove obstructions and inspect belts, rails, rods, screws and sensors.
- If the error is temperature-related, inspect heater, thermistor/NTC, connectors and toolhead/bed cabling before retrying.
- If the fault keeps returning, stop repeated retries and use the exact official support page for that code and model.

**School / lab tip:** keep a simple printer fault log. Record the date, printer name, code, fault family, action taken, and whether the fix worked. Repeated faults often reveal a failing harness, fan, thermistor, heater, plate cable or feeder before a complete failure happens.

## Do not keep printing if you see these signs

- A thermal runaway, maxtemp or abnormal heating fault that comes back after one careful inspection.

- A burnt smell, visible smoke, melted connector, scorched insulation or discoloration near a heater or board connection.
- A bed cable or toolhead cable that gets hot, cracks when moved, or causes the temperature reading to jump when touched.
- A fan that is blocked, slow, noisy or not spinning during a heat-related fault.
- Repeated homing crashes or grinding that suggest the machine is forcing motion against an obstruction.

## Common examples from official support systems

Below are a few real examples that show how different brands name similar problems:

**Prusa:** #26202 Hotend preheat error, #26201 Bed preheat error, #26204 Hotend thermal runaway, #26305 Homing error Y, #31613 File system error.

**UltiMaker / MakerBot:** ER30 Build plate max temp, ER32 Z-axis stuck or limit switch broken, ER65 Extrusion problem detected.

**FlashForge:** "Host Error, please Restart!", plus machine-specific motion and bed-cable related messages.

**Creality:** 111, 2000, 2243, 2403, 2526, 2527 and TF0526 are examples of the numeric/system-specific style used on recent models.

**Anycubic:** 10122 Extruder heating abnormal, 10124 Extruder NTC abnormal, 11511 Extrusion abnormal.

## Official support families consulted for this guide

- [Prusa QR Error Codes hub](#)
- [Prusa MK4S QR error list](#)
- [Bambu Lab HMS error/code resources](#)
- [Bambu Lab HMS home / help resources](#)
- [FlashForge equipment error messages](#)
- [UltiMaker / MakerBot S series error messages](#)
- [Creality Wiki troubleshooting hub](#)
- [Creality TF0526 fan fault page](#)
- [Anycubic Error Codes wiki](#)
- [Raise3D support manuals / support center](#)

**Note:** brand firmware and code lists change over time. Always confirm the exact code and exact model on the official support page before ordering parts or performing board-level repairs.