



REPAIR MODULE 2

Circuit Board Fault Diagnosis & Repair (Mobile Devices & Drones)

Part 2 of 3 | Progressive Mobile Device Repair Training Series

COURSE DETAILS

Duration:	4.5 Days (Teaching Lab Based)
Level:	Intermediate
Max Class Size:	8 Delegates (2 Trainers)
Certification:	Reboot Repair Module 2 Certificate
Pre-requisites:	Reboot Repair Module 1 or demonstrable equivalent experience in mobile device repair
Equipment:	All tools, equipment and practice devices provided
Location:	Hosted at our Reboot training facility at the Electronics Group, Leeds, UK

WHY REPAIR MODULE 2?

Repair Module 2 is an intermediate, lab-based course that develops circuit-level diagnostic and repair skills in digital forensic practitioners. Building directly on Repair Module 1, it equips delegates to tackle the full range of circuit board faults encountered on mobile devices and drones — from short circuits and power-on failures to damaged connectors, faulty components and unresponsive devices that cannot be examined using standard forensic extraction methods.

The course incorporates drone board-level repair alongside an established mobile device curriculum. Forensic practitioners must be equipped to diagnose and recover data from drone flight controllers, ESCs and associated PCBs using the same structured fault-finding approach applied to smartphones.

The course includes instructor-led theory, live trainer demonstrations, video walkthroughs, and extensive hands-on practical work using real faulty handsets and drone components.

WHO WILL BENEFIT FROM THIS COURSE

This course is designed for forensic professionals who have completed Repair Module 1 and are ready to develop deeper circuit board-level skills. It is particularly valuable for:

- Digital forensic examiners and analysts working with damaged mobile devices and drone hardware
- Corporate investigation and incident response teams
- Forensic laboratory managers seeking to expand in-house device and drone recovery capability
- JTAG and chip-off practitioners adding board-level repair skills
- Counter-drone and UAS investigation specialists requiring hardware-level recovery skills

PRE-COURSE REQUIREMENTS

Delegates should have completed Reboot Repair Module 1 or be able to demonstrate equivalent practical experience. A working knowledge of multimeter usage, basic PCB component identification and soldering fundamentals is assumed. No formal electronics qualification is required — the course is designed for forensic practitioners, not engineers.

WHAT WILL WE TEACH ON THIS COURSE

Repair Module 2 provides a more advanced programme of mobile device and drone repair techniques tailored for digital forensic professionals. You will gain hands-on experience with board-level fault diagnosis and micro-soldering. Topics covered include:

- Identification, location and testing of passive and active components on PCBs using Boardview software and schematics
- Identification, diagnosis and resolving of short circuits and power faults on devices, drone flight controllers and ESC boards
- Hot air rework: shield removal, epoxy removal, and component replacement on both phone and drone PCBs
- Diagnose and repair press fit connector faults
- Diagnose USB controller IC (Tristar/Hydra) failures using diode values and voltage checks
- Understand the architecture of common drone flight controller and ESC PCBs and identify key ICs
- Board-level fault diagnosis to recover data from or restore function to damaged drone hardware

THE REPAIR MODULE SERIES

• MODULE 1 — FOUNDATION

Core repair skills and essential techniques for common mobile devices. Hands-on practical tuition in battery, screen and data port repair and replacement.

• MODULE 2 — INTERMEDIATE

Advanced board-level diagnosis, micro-soldering introduction and complex fault-finding across a wider range of device models.

• MODULE 3 — ADVANCED

Expert-level micro-soldering, NAND and chip-level repair techniques for maximum data recovery potential.

CONTACT DETAILS & OTHER INFORMATION

Email: enquiries@rebootforensic.co.uk

Web: <https://rebootforensic.co.uk>

Phone: 0203 879 1746

Social: LinkedIn | Instagram