

Atlas LCR (Model LCR40) Software Revisions

| Revision | Notes |
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| R1.0 | Original release. |
| R1.1 | Probe compensation out-of-range detection. |
| R1.2 | Accepts negative inductance offset during probe compensation. |
| R1.3 | Longer watchdog timeout to allow for very large capacitor measurements to complete. Improved special LCD character definitions. |
| R1.4 | Removed option for user to clear calibration data (useful for factory only). |
| R1.5 | Added factory serial comms for improved calibration procedure. |
| R1.6 | Improved Resistor/Inductor distinction. |
| R1.7 | Added more self-diagnostics and error codes. |
| R1.8 | Adjusted self-test thresholds. |
| R1.9 | Improved polynomial performance for capacitance calibration. |
| R2.0 | Display of serial number on start-up. Allowed abort of probe compensation if started accidentally. |
| R2.1 | Small adjustment of self-test thresholds. |
| R2.2 | Reduced harmonic content of 1kHz and 15kHz sine-wave code. |
| R2.3 | Slight improvement in auto-range selection for inductance measurement. |
| R2.4 | Added unique polynomials for each of the 3 test frequencies to improve inductance calibration. |
| R2.5 | Added unique polynomials for each of the 6 drive levels to improve inductance calibration. Re-organised EEPROM calibration storage to allow for more floating point calcs to be stored. |
| R2.6 | Added leading zero suppression for floating point numbers. Improved 15kHz drive levels. |
| R2.7 | Up-issued to reflect correction in calibration system. |
| R2.8 | Improved EEPROM write protection to reduce chance of corruption if charge on probes. Improved power management when idle. |
| R2.9 | Support for new board design with new synchronous rectifier. Improved power management when idle. |
| R3.0 | Introduced hardware versioning in the software build for backward PCB compatibility. |
| R3.2 | Display of hardware version as part of overall build version. |
| R3.3 | Improved power management for PCBs that have controllable analogue power rail. |
| R3.5 | Support for new LCD modules and new special character definitions. |
| R3.60 | Removed milli-Farads (mF), units remain in micro-Farads (μ F) even for large capacitors. Inductance milli-Henries (mH) not affected by this change. |
| R3.61 | Improved internal calculation resolution. Enabled negative resistance display (in case of probe compensation offset). |
| R3.62 | Moved some operational thresholds to EEPROM. |
| R3.63 | Reduced jitter in sine-wave generating code. Extended auto-power-off time to 60 seconds. |
| R3.64 | Improved inductance calculation if Rdc negative (in case of probe compensation offset). |
| R3.65 | Improved power-up performance. |
| R3.70 | Improved low inductance resolution (for $L < 1\mu$ H). |
| R3.72 | Support for new micro. |

Please note that upgrades can only be performed by Peak Electronic Design Ltd.
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