

## The Peak Atlas LCR Passive Component Analyser (LCR40) – Frequently Asked Questions

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### *Before you buy...*

**Q.** What does the Atlas LCR do?

**A.** It analyses passive electronic components (Inductors, Capacitors and Resistors). It identifies the component type and measures the component's main value. Additionally, the LCR measures the DC resistance of inductors. Just connect the component and press the "test" button. There are no settings to change and everything is automatic, it even selects and displays the test frequency that best suits the component under test - automatically.

**Q.** What range of component values will the Atlas LCR analyse?

**A.** Resistive devices covered range from zero ohms to 2MR with a minimum resolution of about 0.6 ohms. Inductors between 1μH and 10H are supported, minimum resolution is about 0.8μH. Finally, capacitors ranging from 1pF to 10,000μF with a minimum resolution of about 0.5pF can be measured.

**Q.** How accurate is the LCR?

**A.** Basic accuracy is ±1.5% in addition to the stated resolutions and display resolution.

**Q.** Can the Atlas LCR analyse components in-circuit?

**A.** No, it's not recommended. The LCR tests the component at DC, 1kHz, 15kHz and 200kHz and calculates the device type from those measurements. A network of components could easily cause the readings at these different frequencies to be so complex that a sensible result cannot be deduced.

**Q.** What types of probes can I use with the LCR?

**A.** The LCR is supplied with removable micro-hook type probes, ideal for leaded components. Contact us about other probe types such as SMT Tweezers and crocs. Changing probes is very easy as the LCR uses a universal connector.

**Q.** Does the LCR take into account the inductance, capacitance and resistance of the test probes and leads?

**A.** Yes. These can be easily compensated for by using the very simple "probe compensation" function. It is a non-volatile function which means it only needs to be performed if the probe or cable type is changed.

**Q.** Does it come with a battery and can I get spares?

**A.** The LCR is supplied with an Alkaline battery (Type GP23A or MN21) so you're ready to go. Replacement batteries are easily available from many outlets and directly from Peak Electronic Design Limited.

**Q.** What about guarantees?

**A.** All our products are guaranteed for 24 months, we will cover the costs of carriage, parts and labour. After that period we endeavour to solve any problems quickly and economically, we want you to be happy with our products.

**Q.** Can I have some more detailed data on the Atlas LCR?

**A.** Of course, the full data sheet, user guides and extra application notes and hints are available on our website ([www.peakelec.co.uk](http://www.peakelec.co.uk)) or we can send you printed copies free of charge.

### *Using your LCR...*

**Q.** Sometimes the readings don't look right at all, what's going on?

**A.** The Atlas LCR performs many different measurements on the device under test and this can take a couple of seconds or so. It is important that the component is properly connected to the LCR during the full test duration otherwise you can expect unusual readings. As soon as the analysis results are displayed, you may disconnect the component. Additionally, in-circuit testing can lead to misleading results. If you are still concerned, contact us and we'll do our best to assist you.

**Q.** Can I force the LCR to use a particular test frequency rather than let it choose automatically?

**A.** No, although this feature is available in the LCR45 instrument.

**Q.** Can I have the LCR re-calibrated?

**A.** Yes. Calibrations are performed to a traceable standard on our premises. If required, a certificate of traceable calibration can be provided. Re-calibration is recommended every 12 months, the LCR displays the date of the next calibration. Calibrations are stored in non-volatile memory within the LCR.

**Q.** Does the LCR stop working properly after the "Calibration Due Date" if I don't get it calibrated?

**A.** No, not at all. The Atlas LCR doesn't "know" what the current date is, the "Calibration Due Date" is simply a recommendation. This is useful also for the purposes of complying with the customer's quality and traceability procedures.

**Q.** Is the LCR upgradeable if new functions are developed?

**A.** Yes. New functions will be publicised on our web site. Upgrades are performed on our premises, usually free of charge in the first year after purchase.

**Q.** What if I don't like it?

**A.** We are confident that you will love using the LCR but if you are not happy for any reason you can return it to us within 14 days for a full and immediate refund. This policy is in addition to the standard product guarantee.

If you have any other questions then don't hesitate to contact us, we're here to help.