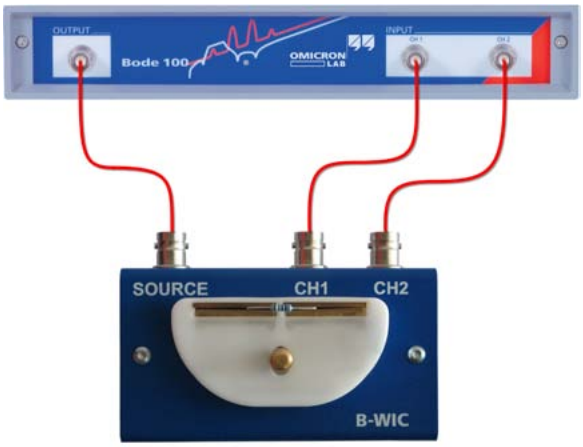
Getting Started

Impedance Adapters

The impedance adapters **B-WIC** and **B-SMC** change your Bode 100 into an easy to use LCR meter. Now the magnitude and phase, the series and parallel equivalent circuit parameters as well as quality factors of complex impedances can be directly measured in the full frequency range from 1 Hz to 40 MHz.

1. Connection Setup

The impedance adapters are connected to the Bode 100 using three BNC cables. The standard cables which come with the Bode 100 can be used.

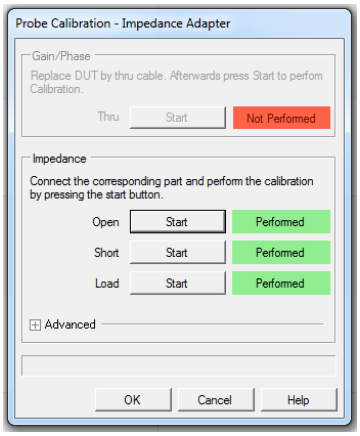


2. Impedance Adapter Mode

The Bode Analyzer Suite (Version 2.30 or higher) directly supports measurements with the impedance adapters by offering the **Frequency Sweep (Impedance Adapter) mode**. To ensure precise measurement results, the impedance adapters should only be used in this mode.

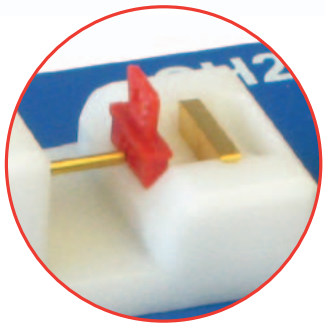
3. Calibration

Before a measurement is started, an OPEN SHORT and LOAD calibration has to be performed. Please refer to the following page to learn how to set up the adapters for each calibration step.

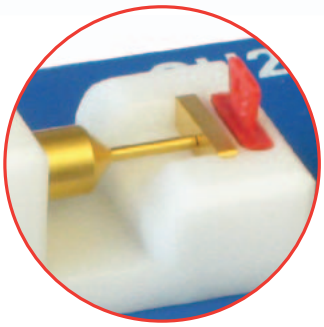


4. Start the Measurement

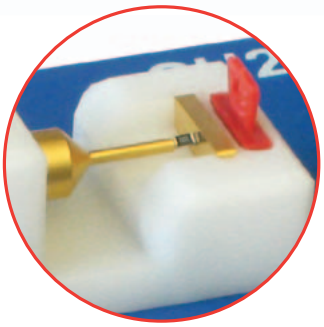
After the calibration has been performed, the impedance measurement can be started. Inductance, capacitance, resistance and quality factor can directly be measured by changing the measurement format to the desired parameter. Please refer to the Bode 100 User Manual for further details. Additional measurement examples can be found in the Application Note section of the OMICRON Lab webpage: ***www.omicron-lab.com***



OPEN[1]



SHORT



LOAD

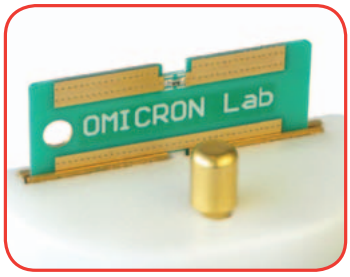
B-SMC

OPEN, **SHORT** and **LOAD** calibrations have to be performed after connecting the impedance adapters to the Bode 100.
For the calibration, we recommend using the OMICRON Lab calibration objects delivered with the adapters. The pictures on this page show how to set up the adapters for each calibration point.

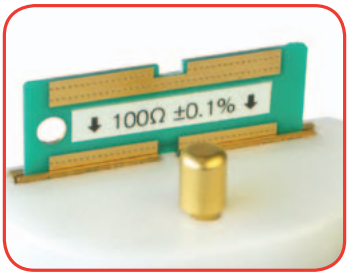
B-WIC

OPEN

SHORT



LOAD



V1.0

[1] For precise results at high frequencies, the electrode distance for the OPEN calibration has to equal the size of the device under test.