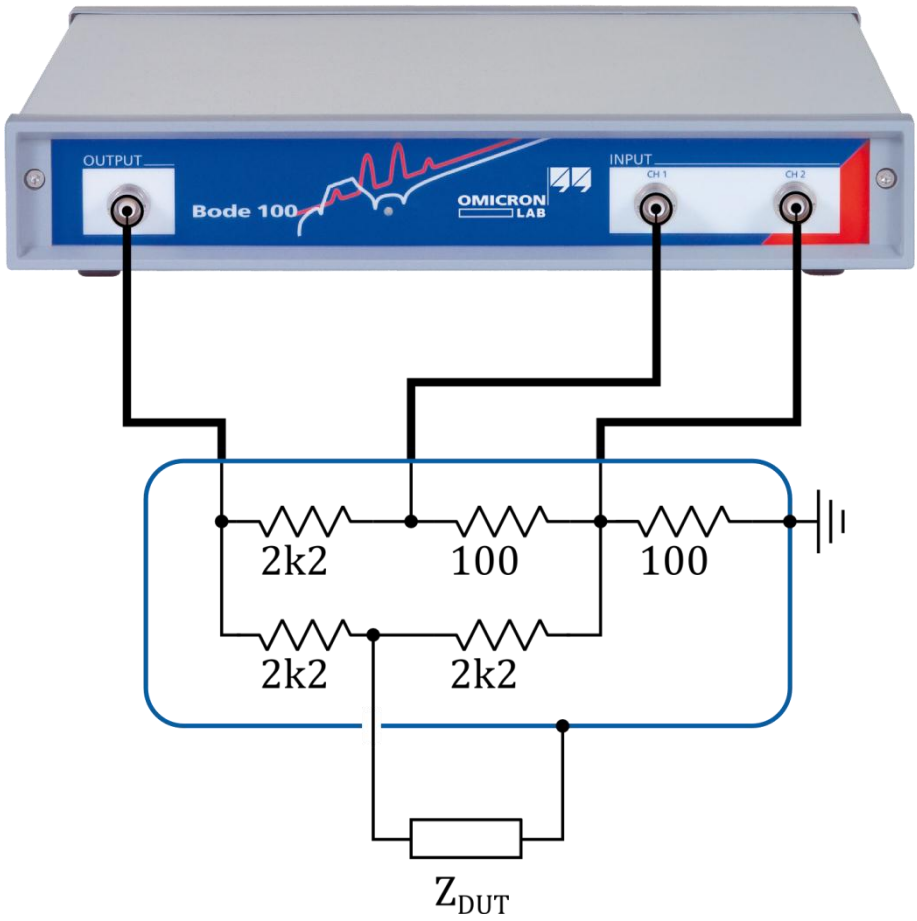
High Impedance Measurements

Extending the Impedance Measurement Range of the Bode 100



Visit www.omicron-lab.com for more information.
Contact support@omicron-lab.com for technical support.

1 Measurement Bridge

Due to the internal $50\ \Omega$ source resistor the Bode 100 is suitable to measure impedance values very accurate close to $50\ \Omega$. Using a simple external bridge the Bode 100 can also be used to measure impedance values up to several mega Ohms. The following figure shows the resistive bridge used for this purpose:

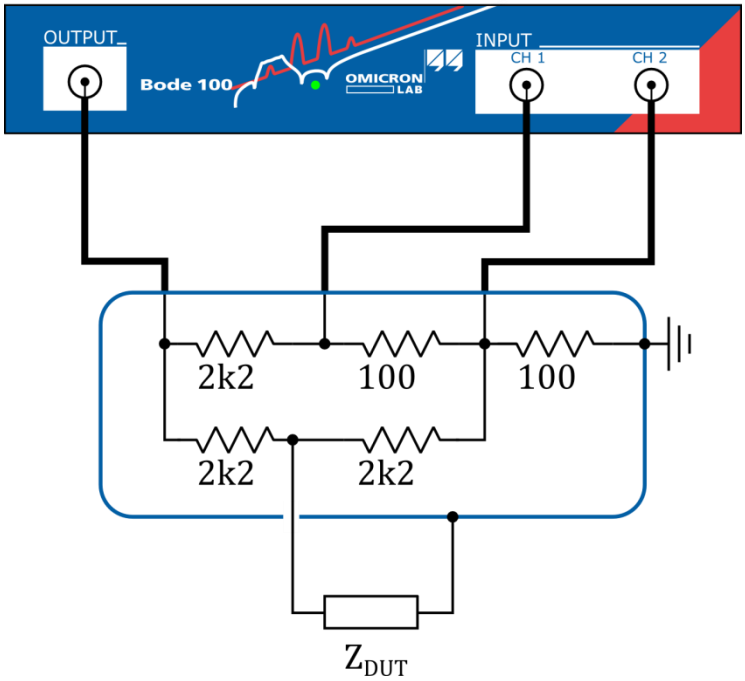


Figure 1: high impedance Measurement Bridge

The bridge can be built up with standard resistors as shown in the following picture. The impedance calibration of the Bode 100 compensates parasitics of the bridge.

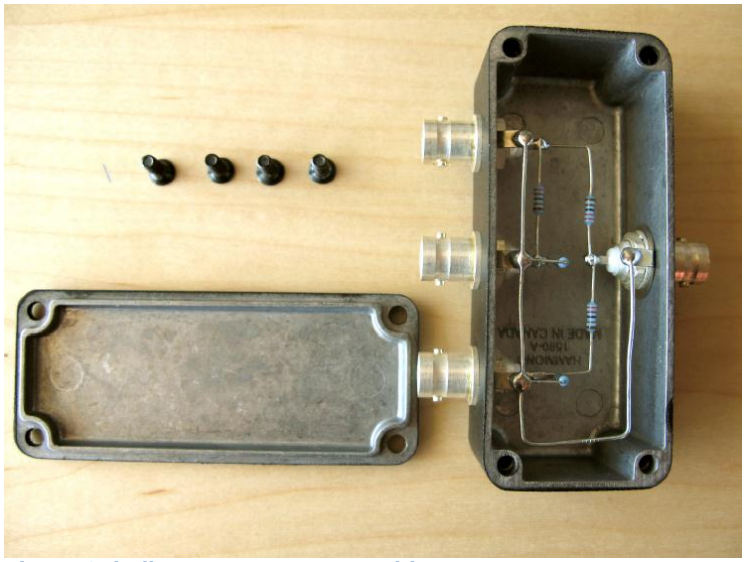


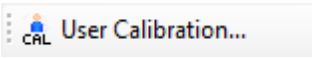
Figure 2: built up Measurement Bridge

2 Device Settings

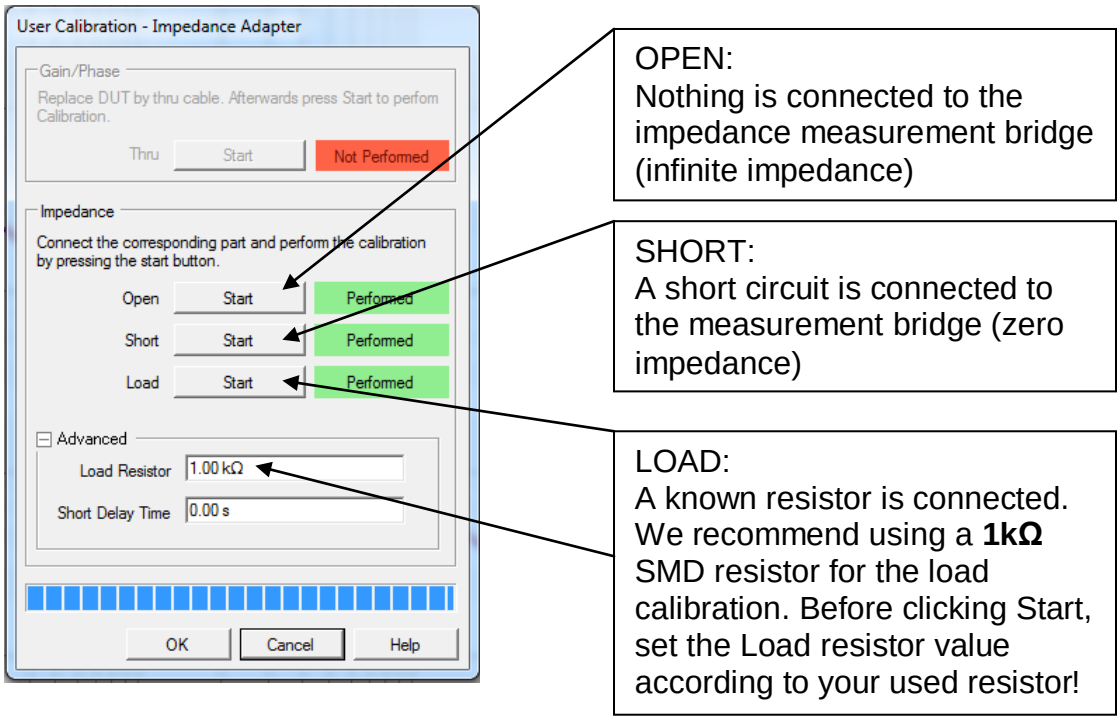
Measurements using this bridge should be performed in the Frequency Sweep (Impedance Adapter) mode.

This mode is activated by clicking on the Impedance Adapter icon in the Bode Analyzer Suite:

Before a measurement can be performed, the measurement setup needs to be calibrated.

We recommend performing a User Calibration for accurate results. The calibration window is opened by clicking on the User Calibration Icon: 

OPEN, SHORT and LOAD need to be calibrated:



After performing the calibration the measurement can get started.