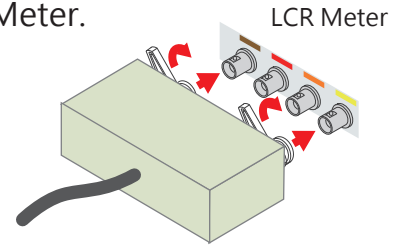


LCR-DB1 Operation Guideline

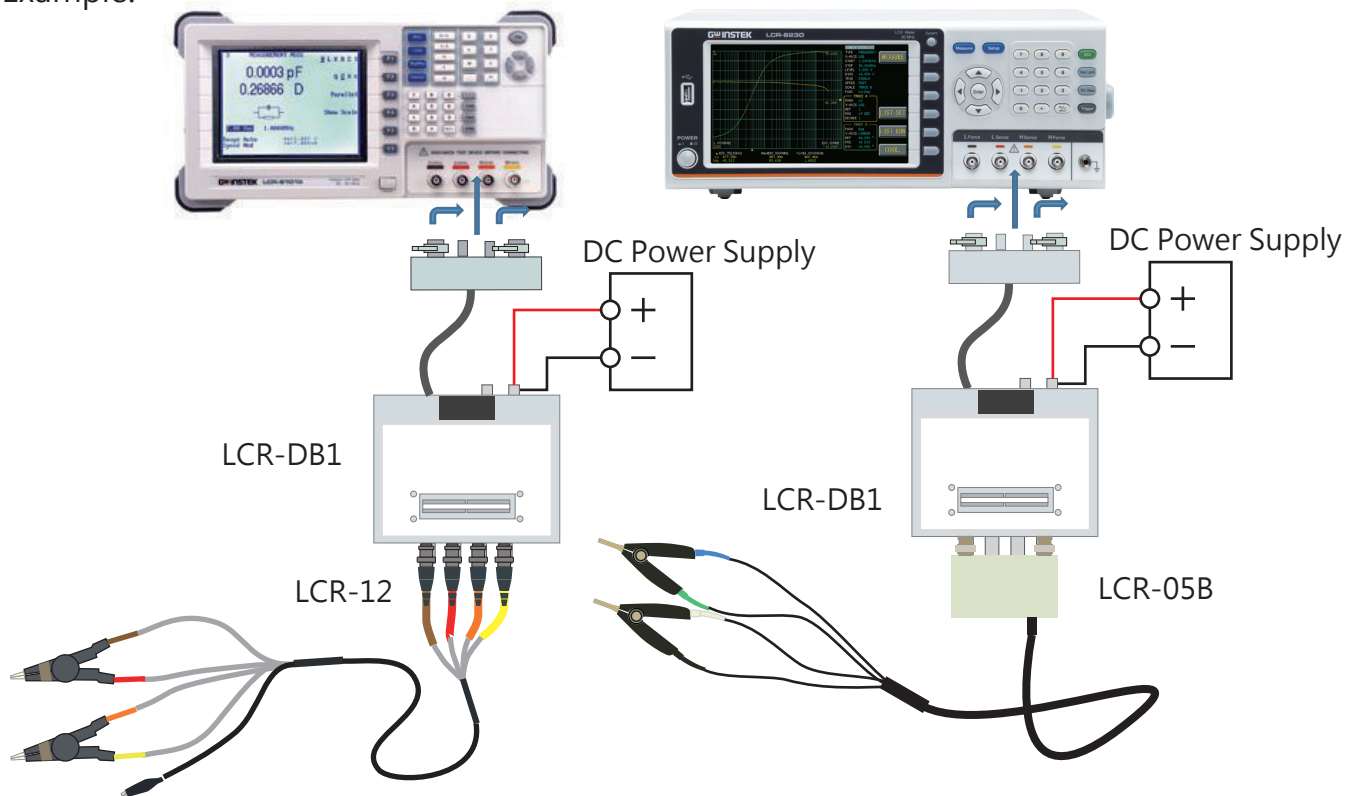
1. Connection:

- a. Connect the LCR-DB1 box into the front terminals of the LCR Meter.
Line the box fixture up to the front terminals and slide in.
Turn the BNC handle clockwise to lock the fixture.
Turn the handles counterclockwise to unlock the fixture.



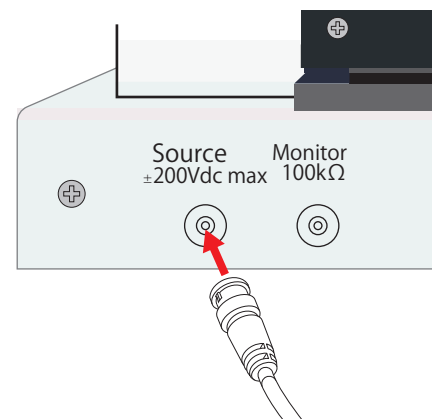
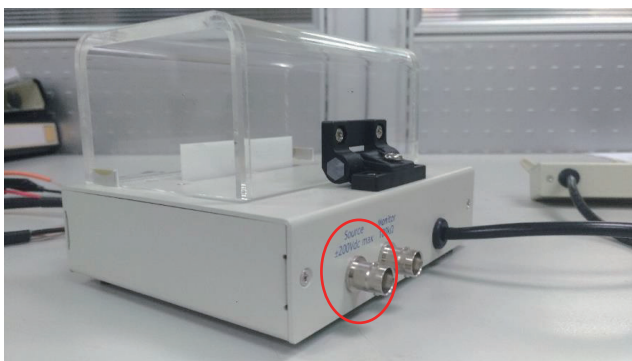
- b. Connect each test lead terminal to the LCR-DB1 box by matching the color of the front panel terminals respectively.

For Example:



c

- c. Connect Power supply (**Output is OFF**) to the terminal marked with "Source $\pm 200\text{Vdc max.}$ " (positive inner connector, negative outer connector).



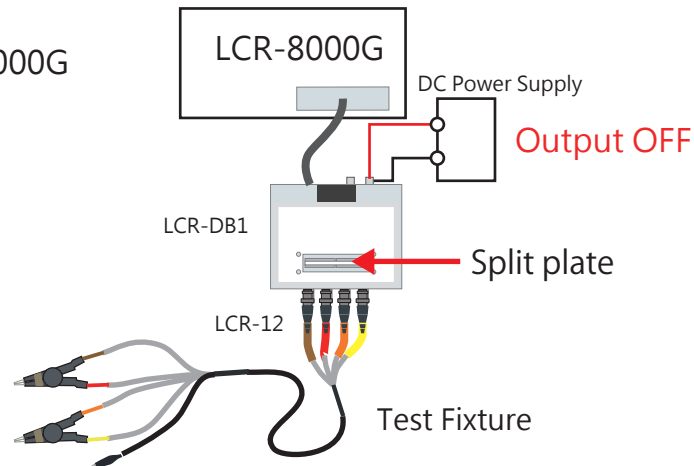
LCR-DB1 Operation Guideline

2-a. Trim the LCR Meter :

Calibration (trimming) eliminates stray capacitance and series impedance from the testing fixture. It is required when using the instrument in a new environment, or using a new set of testing fixtures.

 **Maintain above connection condition (including power supply is connected and output is OFF)**

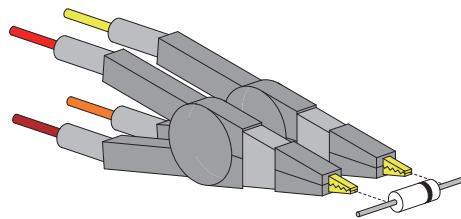
For Example: LCR-8000G



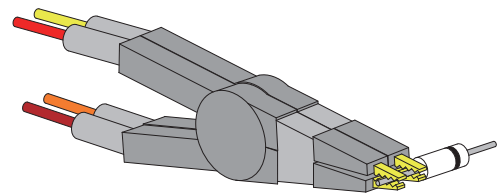
Fixture setting

Prepare the fixture accordingly. (In order to run a complete trimming, both O/C and S/C trimming have to be done.)

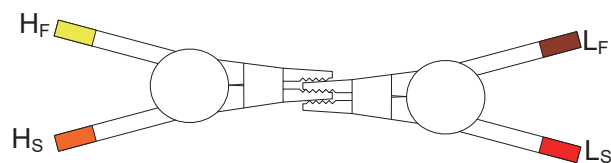
O/C trimming



S/C trimming

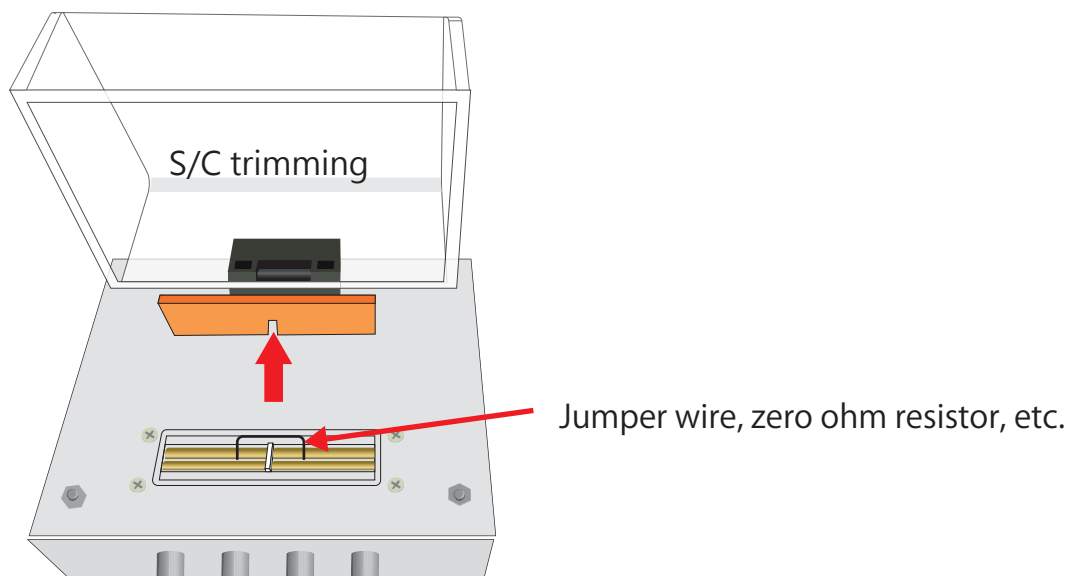
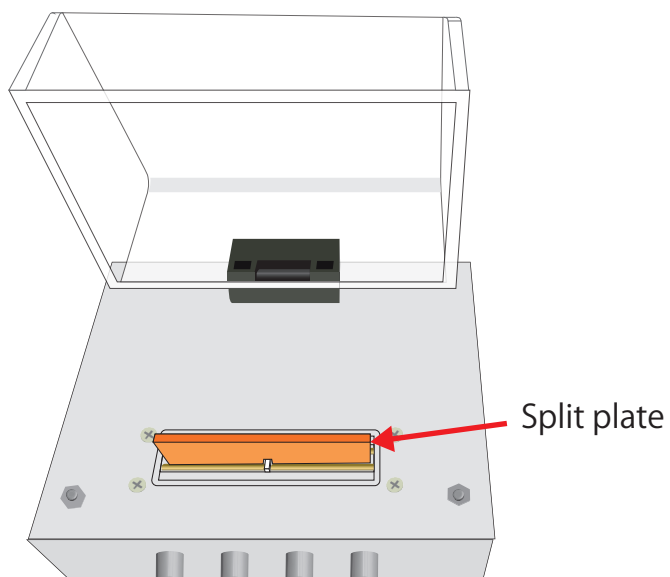
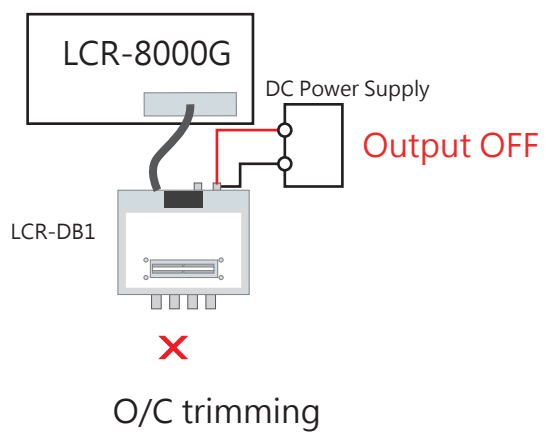


Alt. S/C trimming



For Panel-operation, please refer to section "Calibration" in user manual.

2-b. Trim the LCR Meter When using only LCR-DB1.



LCR-DB1 Operation Guideline

3-a. Measurement procedure: use Attached Test Fixture

- a. Set relative test parameters of LCR Meter according to DUT's measuring requirement.

For example:

~ Mode: C / D

~ Equivalent: Series

~ Frequency: 1kHz

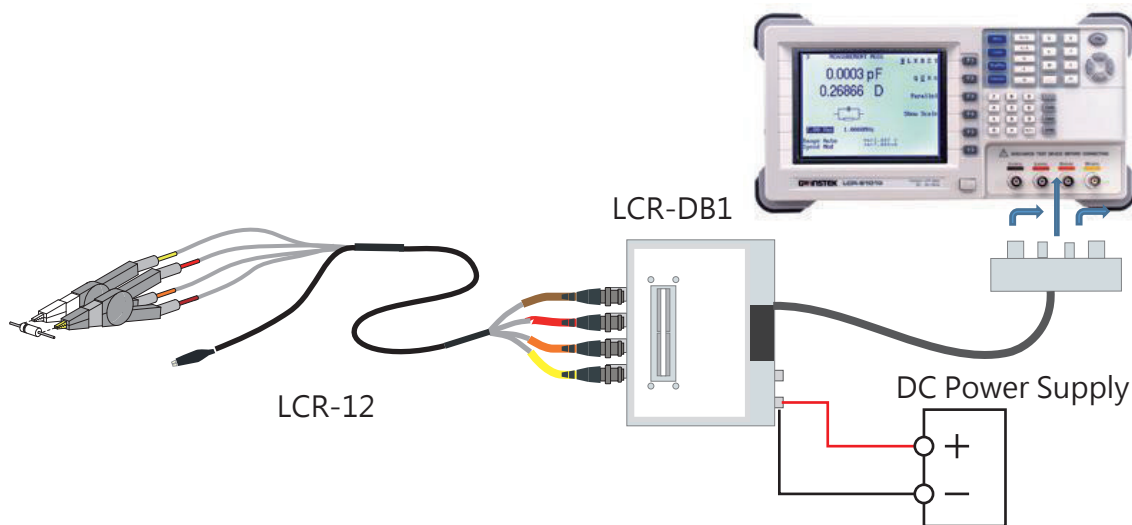
~ Level : 0.1V

- b. Connect DUT to test lead clip

- c. Set power supply

- With zero output and then output ON
- Adjust power supply output to desired voltage of DUT

- d. Observe measurement result from LCR Meter



[Caution]

- After measurement is complete, for safe consideration, adjust the power supply voltage to zero first and then turn output OFF.
- DUT might be fully charged, do not touch electrode or lead of DUT to prevent electric shock

3-b.Measurement procedure: use LCR-DB1

- a. Set relative test parameters of LCR Meter according to DUT's measuring requirement.

For example:

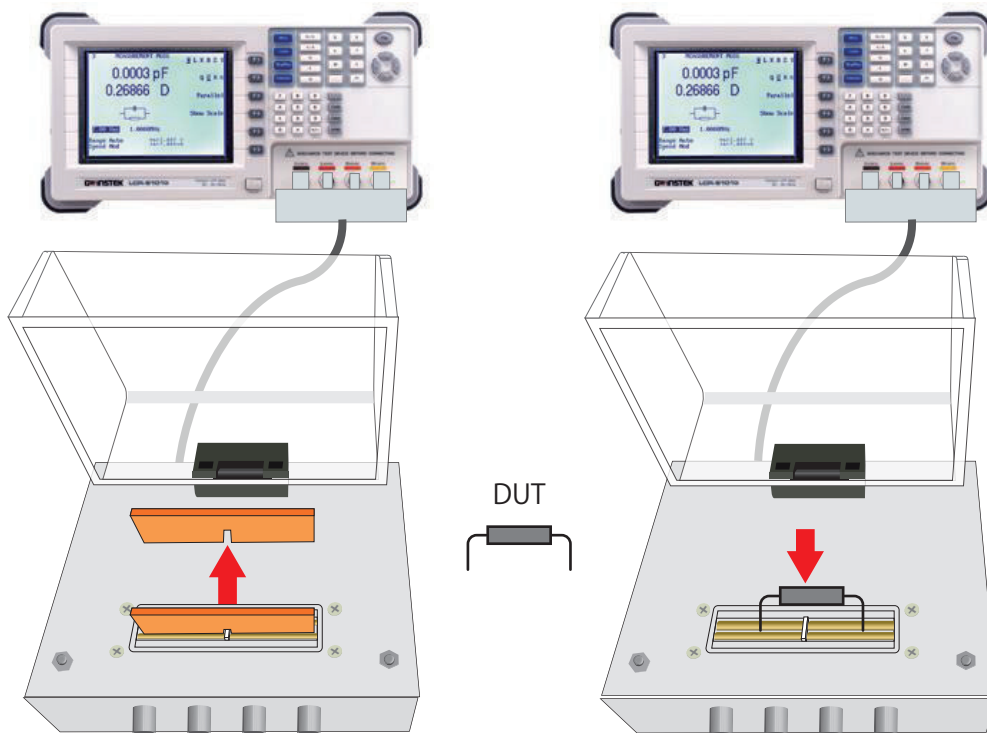
- ~ Mode: C / D
- ~ Equivalent: Series
- ~ Frequency: 1kHz
- ~ Level : 0.1V

- b. Open the cover, remove the split plate.
insert DUT to LCR-DB1.

- c. Set power supply

- With zero output and then output ON
- Adjust power supply output to desired volta

- d. Observe measurement result from LCR Meter



[Caution]

- After measurement is complete, for safe consideration, adjust the power supply voltage to zero first and then turn output OFF.
- DUT might be fully charged, do not touch electrode or lead of DUT to prevent electric shock

LCR-DB1 Operation Guideline

Appendix ~ DC Bias Voltage Box Specification



Specifications

Model	LCR-DB1
External DC Bias	DC \pm 200V
Input Resistance	100k Ω \pm 2%
Measurement Frequency	50Hz ~ 2MHz
Series Capacitor	5.6 μ F (560 Ω at 50Hz)
Cable length	25cm (approx.)
Dimensions:	140W x 105H x 145D mm
Weight	1200g
Operating Environment	
Temperature	0~50 $^{\circ}$ C
Relative Humidity	<70%RH