Assuming that a suitable method of measurement has been selected and that the source and detector are given, there are some precautions which must be observed to obtain accurate readings.

The leads should be carefully laid out in such a way that no loops or long lengths enclosing magnetic flux are produced, with consequent stray inductance errors.

With a large L, the self-capacitance of the leads is more important than their inductance, so they should be spaced relatively far apart.

In measuring a capacitor, it is important to keep the lead capacitance as low as possible. For this reason the leads should not be too close together and should be made of fine wire.

In very precise inductive and capacitances measurements, leads are encased in metal tubes to shield them from mutual electromagnetic action, and are used or designed to completely shield the bridge.