



Measuring Capacitance with the TPI 270

Prior to performing capacitance tests make sure power to the circuit is disconnected and the capacitor to be measured is discharged. Failure to fully discharge the capacitor may result in damage to the 270 or personal injury. For best results the capacitor should be removed from the circuit.

1. Set the 270 to the capacitance (⚡) range. Connect the red lead to the **V/Ω** jack of the 270 and the black lead to the **COM** input jack of the 270.
2. Connect the test leads to the fully discharged capacitor to be measured. If the capacitor is polarized observe the markings and connect the red lead to the “+” side of the capacitor and the black lead to the “-” side.
3. The capacitor will charge and the 270 will automatically select the proper range. Wait until the measured value displayed fully stabilizes. This may take 3 to 5 seconds or longer depending on the size of the capacitor. Large capacitors take longer to charge and measure.

NOTE:

Unless the value of the capacitor is known, do not manually range the meter by pressing the range (R-H) button. Pressing this button disables the auto range function and sets the 270 into the lowest capacitance range. If a capacitor with a value above the range selected is measured the 270 will display over range (OL).

Repeatedly pressing the R-H button will cycle through the available ranges (4nF, 40nF, 400nF, 4uF, 40uF, 400uF, 4000uF, 40000uF). Pressing and holding the R-H button for approximately 3 seconds will return the 270 to auto range. When the 270 is in auto range mode, “AUTO” will be displayed in the upper left corner of the display. Consult the 270 owners manual for additional information.