

Tap to start or stop a measurement.  
 Tapping one of these buttons highlights it (yellow). Tapping a spot on the impedance curve produces a cursor and assigns that frequency to the highlighted button.

**Introduction:** Measuring impedance with the Z-Meter software and cable assembly is fast and easy. First, connect the cable assembly to your IE-35, or IE-45 as shown above.

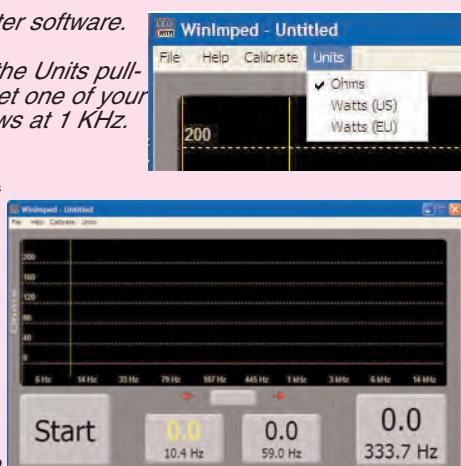
**Calibration:** Calibration of the Z-Meter is necessary in order to account for the resistance/impedance in the test leads and fuses of the measurement hardware. There are two steps to calibration of the Z-Meter, which must be done in order.

#### 1. Start the Z-Meter software.

Select "Ohms" in the Units pull-down menu and set one of your impedance windows at 1 KHz.

Calibrate with a dead short: Short the clip leads. Next, using the Calibrate pull-down menu, tap "Take Shorted Measurement." Close the calibration window. You should see a measured impedance very close to "0."

2. Use the supplied 100 ohm resistor, or another resistor (1% or better) of known value. Enter the known value (for example, 100) in the "Known" Window. Tap "Calibrate." Close the calibration window. You should see a number very close to the known impedance on the screen.



In unusual circumstances, you may manually enter a calibration coefficient. To do this, enter "500" in the "Known" window. Tap calibrate. This will generally put you within 1% of the actual reading.

The calibration coefficient is stored in the IE-45IM so it is not necessary to calibrate prior to each use, even though calibration should be done regularly to account for changes in testing conditions.

Note: For dead-on calibration, you may wish to follow steps 1 and 2 above. You can get a quick calibration by just using step #2.

**Making Measurements:** Once your Z-Meter has been calibrated, you can begin making measurements. The illustration above shows the impedance curve of a loudspeaker. The Start/Stop button can be used to start, or stop measurements. The three frequency select buttons can be programmed with any frequency of interest by tapping one to highlight it, and next tapping the impedance curve at the desired frequency. This produces a cursor at that frequency and labels the highlighted button. Buttons can be reassigned to different frequencies as desired. The last button tapped will display the cursor at the frequency assigned to that button.

**Saving a Measurement Screen:** Once a measurement has been made, a bit-map screen capture can be made by tapping the "Capture" button. This

saves a bit-map file to your "My Documents" folder.

Tap "Capture" to save a screen.

