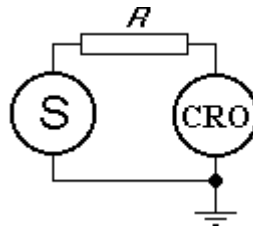


The input impedance of an oscilloscope

1. Connect a signal generator directly to a CRO. Adjust the signal generator so that it feeds out a signal with a peak value of 800 mV and a period of 4 ms. Don't adjust the signal generator for the rest of the experiment.
2. Now place a 100 k Ω resistor between the output of the signal generator and the input of the CRO as shown below.



3. Measure the amplitude of the signal detected by the CRO.
4. Repeat step 3 for the other resistors shown in the table.

$R/k\Omega$	amplitude/mV
100	
220	
470	
1000	
2200	
4700	

5. Plot a graph to show how the signal at the CRO input depends on the value of R .
6. Explain why the value of R which gives an amplitude of 400 mV is the input impedance of the CRO.