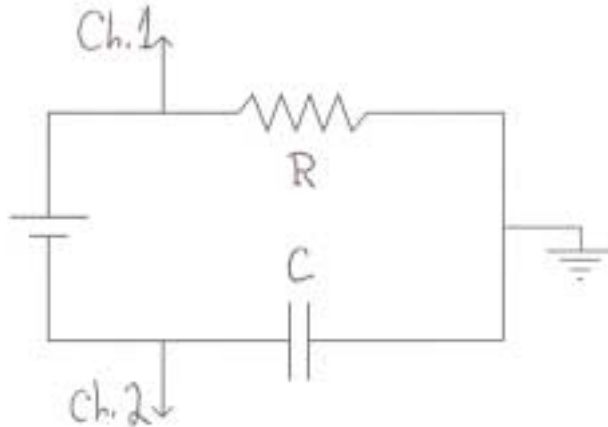


## RC Charge and Discharge

- Set up the circuit as shown below.



- Set the power supply to  $\sim 4V$  and check to make sure the connections are set to float the power supply and do not cause two different grounds.
- Pull the invert knob on Channel 2 and set the time base on either  $1s/div$  or  $x-y$  ext hor. The latter setting allows viewing with vertical motion only. Position Channel 1 trace on the third line from the bottom, Channel 2 on the first line from the bottom and voltage scales to  $1V/div$  on each.
- Turn the power supply on and off and observe the movement of the two channel traces. Note that the voltages of the two channels move in opposite directions such that their sum remains constant.
- Vary the resistance or the capacitance to show different charging/discharging rates.