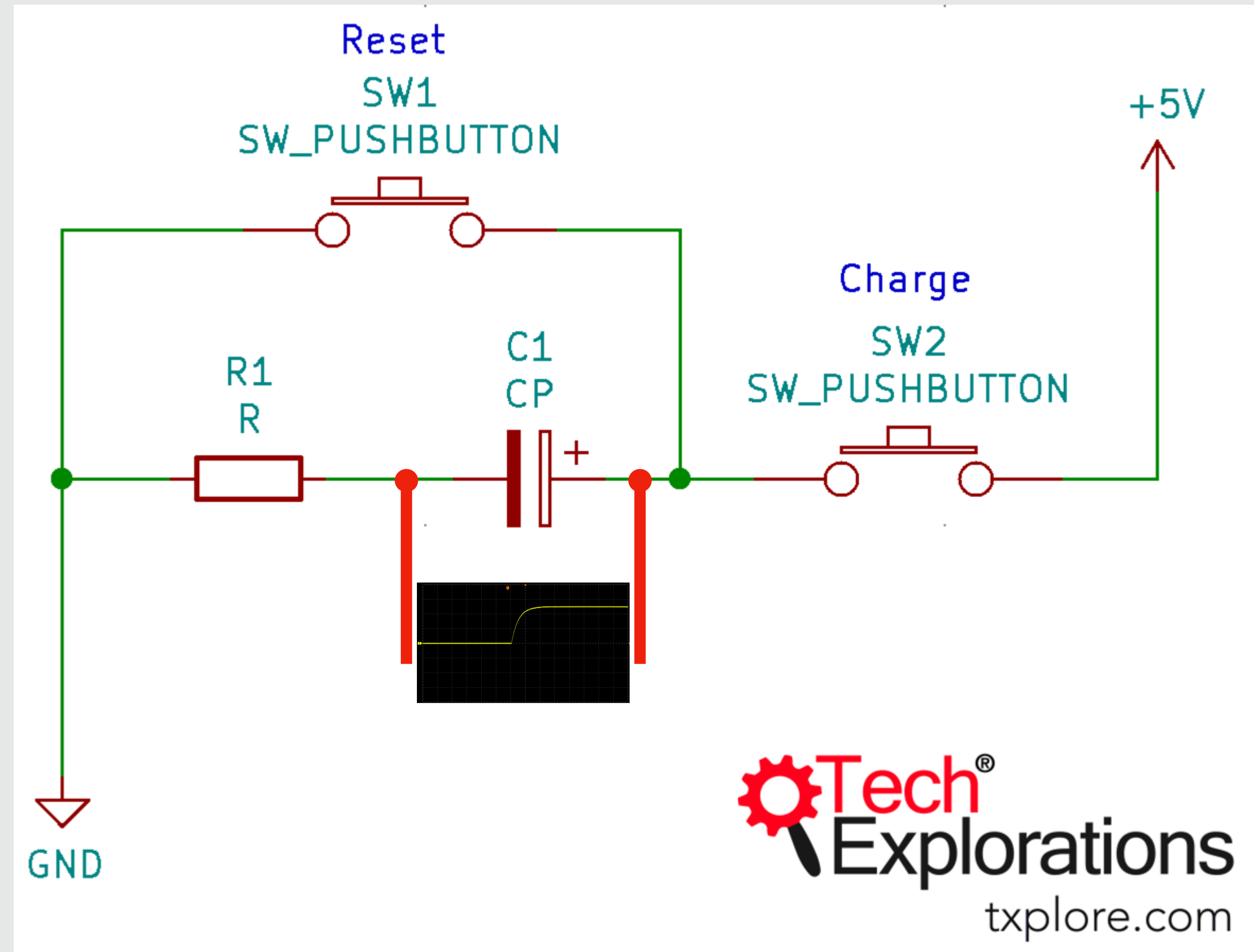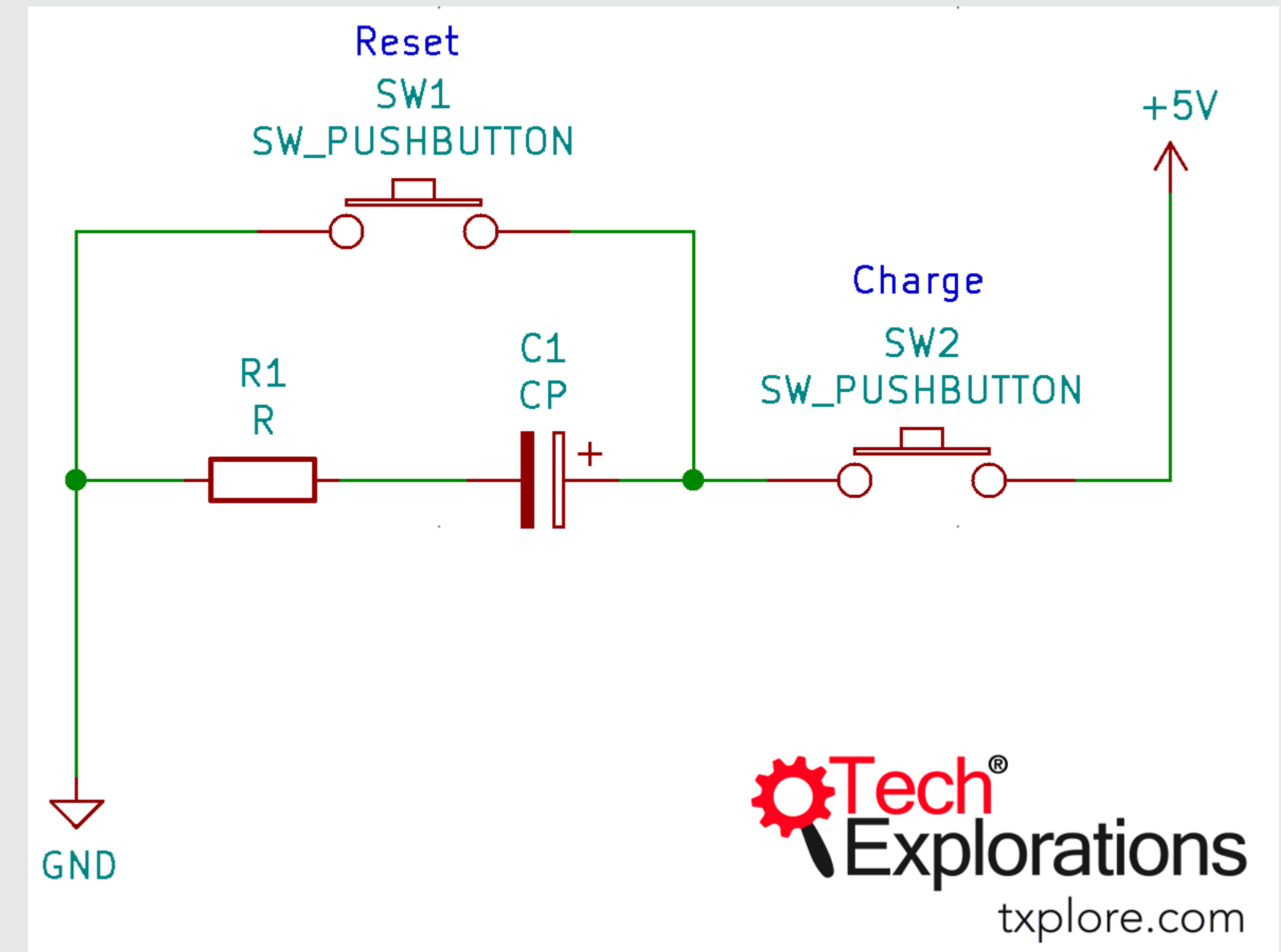# RC circuit measurements

A simple experiment that will help us unlock a lot of oscilloscope capability

RC circuit measurements

RC circuit measurements

- Setup the scope

- Triggering: automatic and manual

- Measure: Rise time, fall time, width, auto and manual

- Cursors: Auto and manual

RC circuit measurements

Time constant: $\tau = RC = \dfrac{1}{2\pi f_c}$

Rise time
(20% to 80%): $t_r \approx 1.4\tau \approx \dfrac{0.22}{f_c}$

Rise time
(10% to 90%): $t_r \approx 2.2\tau \approx \dfrac{0.35}{f_c}$