
AS and A-level Physics practicals: Equipment set up

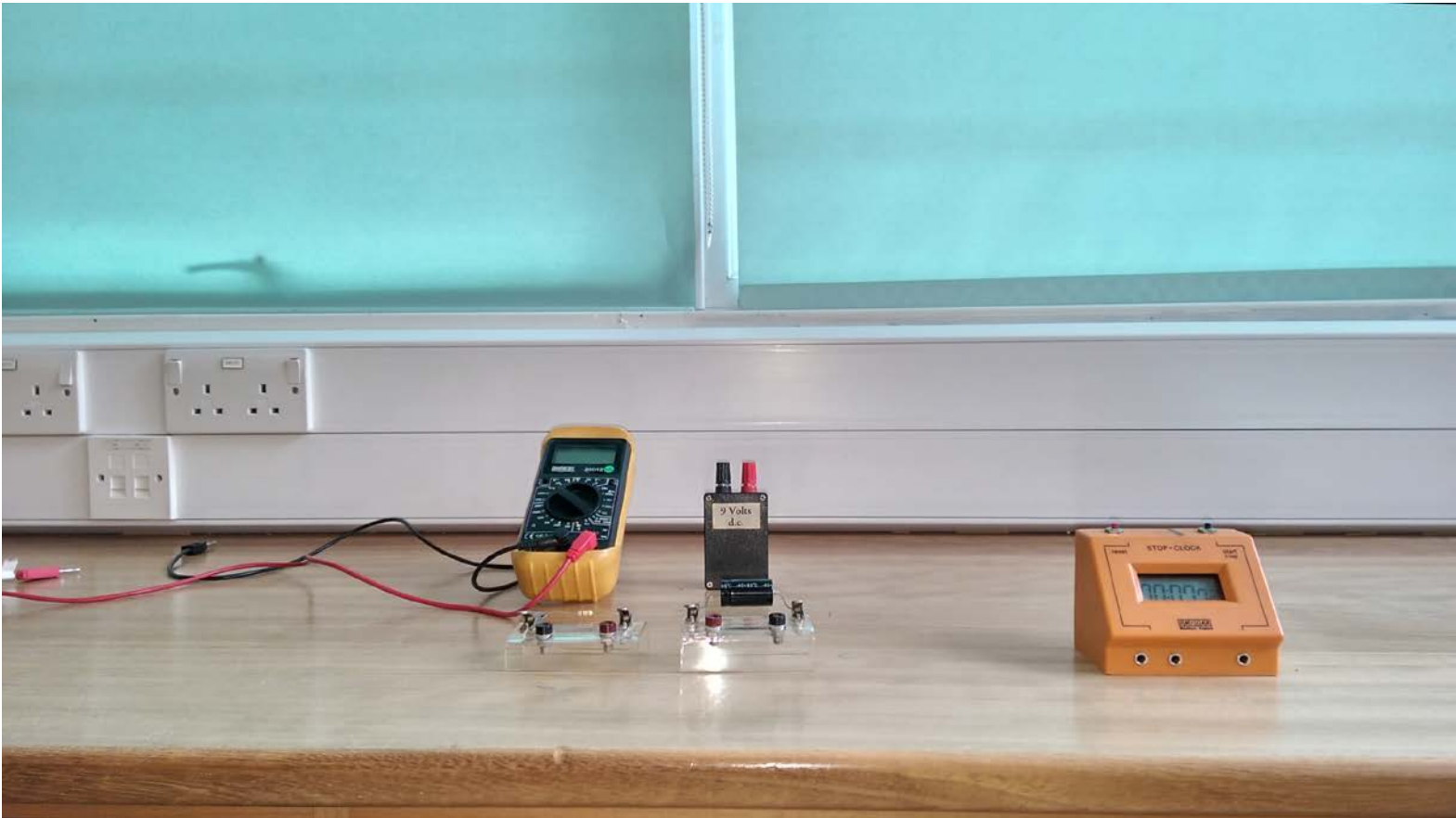
Practical 9: Investigation of the charge and discharge of capacitors. Analysis techniques should include log-linear plotting leading to a determination of the time constant RC

Part 1: Discharging a capacitor through a resistor

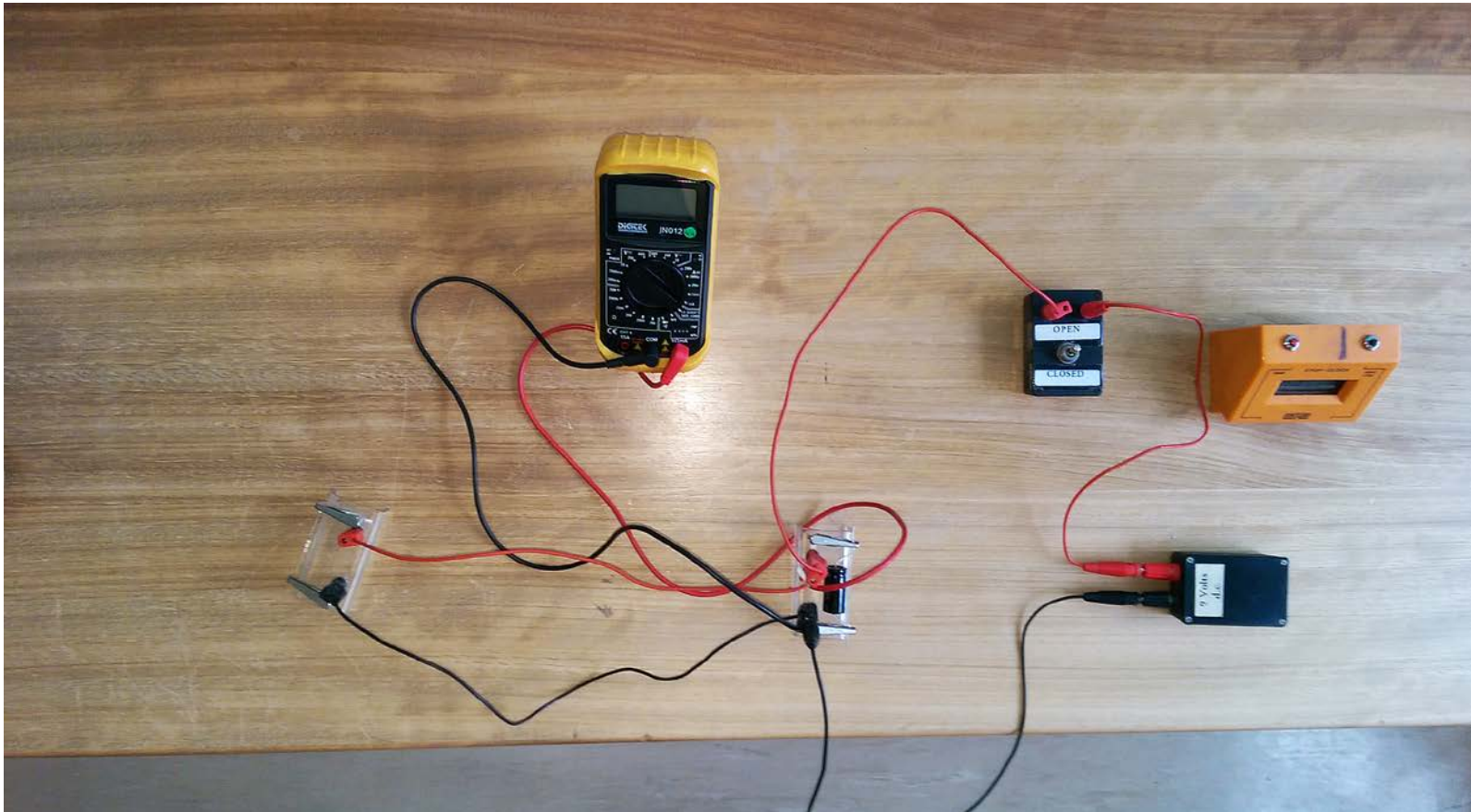
V1.0 – September 2016

Contribution from Marcin Poblocki, Senior Physics Technician at Manchester Grammar School

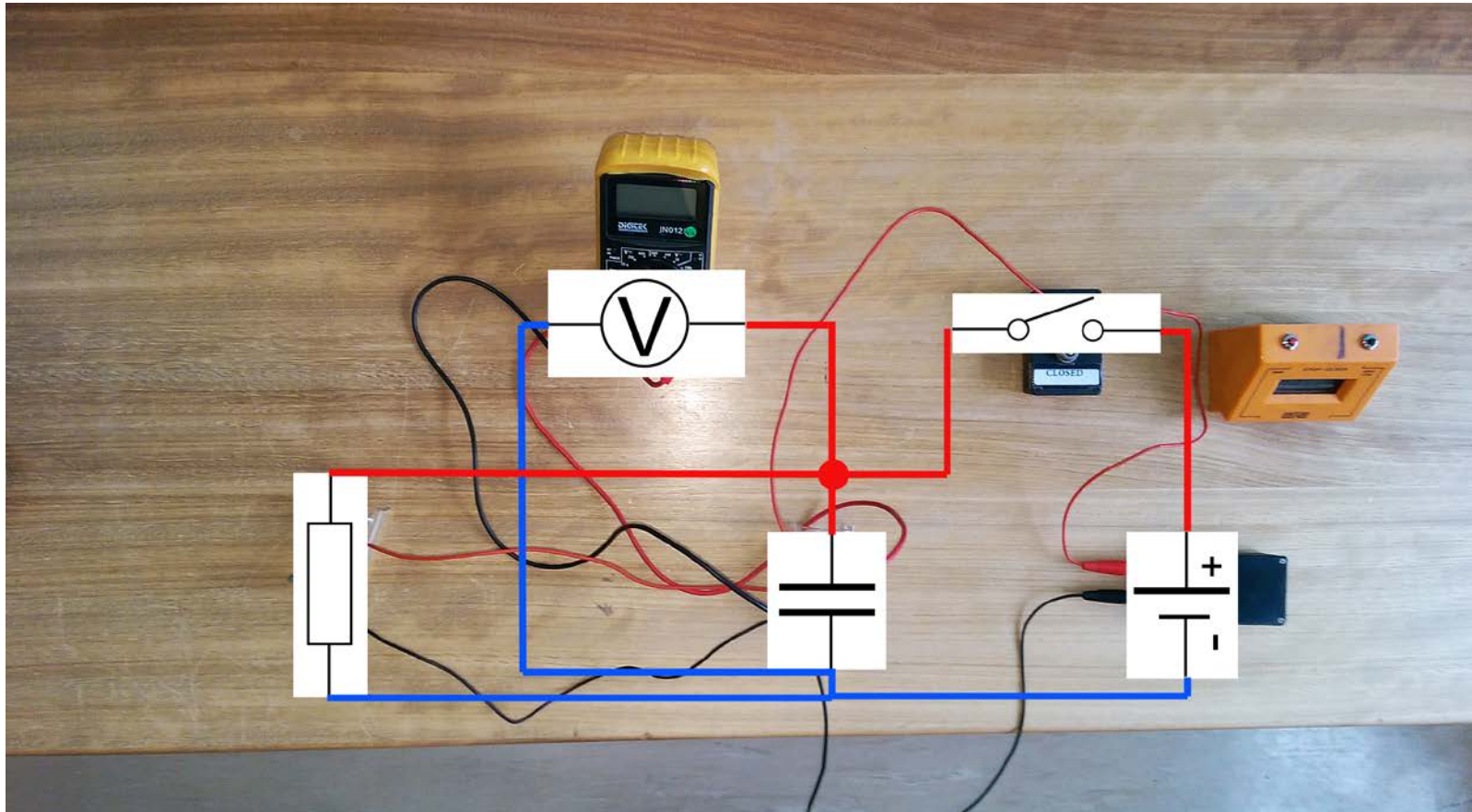
Gathering some of the equipment before...



...assembling the circuit. In position A the capacitor will charge, when in position B the capacitor will discharge through the resistor



...assembling the circuit. In position A the capacitor will charge, when in position B the capacitor will discharge through the resistor (with schematic symbols)



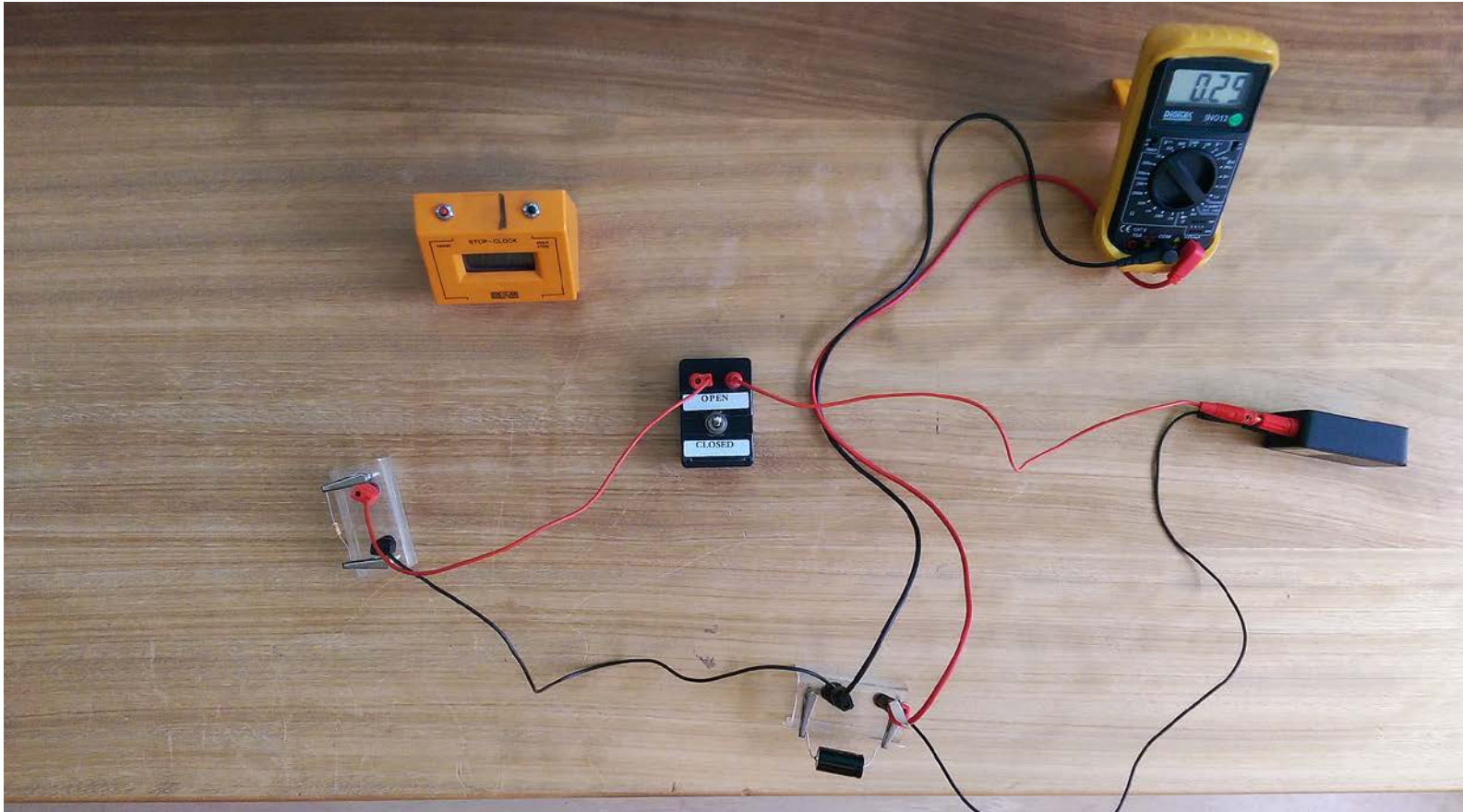
AS and A-level Physics practicals: Equipment set up

Practical 9 – Part 2: Charging a capacitor through a resistor

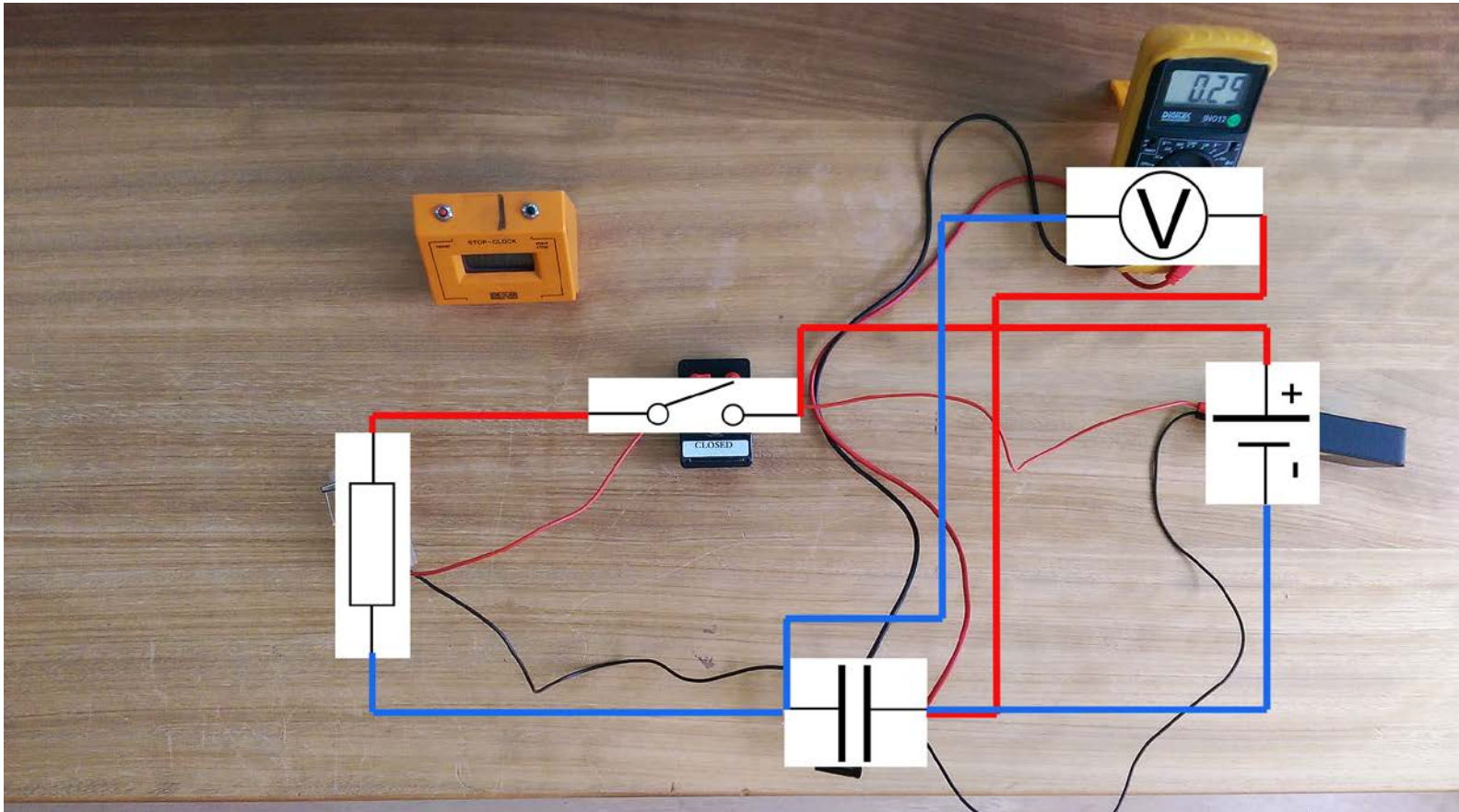
V1.0 – September 2016

Contribution from Marcin Poblocki, Senior Physics Technician at Manchester Grammar School

Setting up the circuit as shown in the diagram, with the switch open and capacitor initially uncharged the voltmeter should read zero



Setting up the circuit as shown in the diagram, with the switch open and capacitor initially uncharged the voltmeter should read zero (with schematic symbols)



Note how the voltmeter is in parallel with the capacitor which is in series with all the other components

