

# Electronics Digital Multimeters

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voltage, current, resistance

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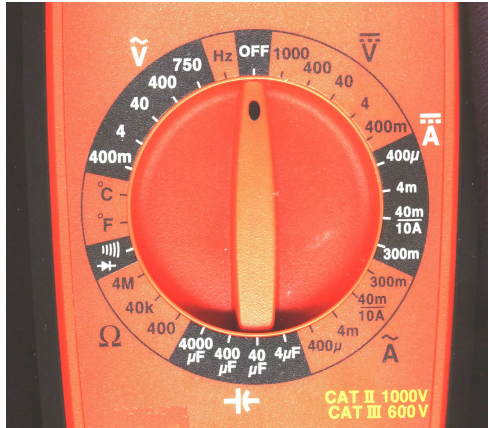
- allows measurement of multiple things  
voltage, current, resistance
- allows measurement of both DC (i.e. static) and AC (i.e. time-varying) quantities



Sample multimeter - Amprobe 33XR



Display section - Amprobe 33XR



Control section - Amprobe 33XR

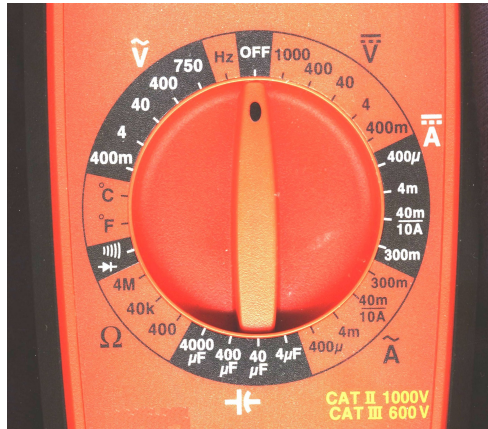


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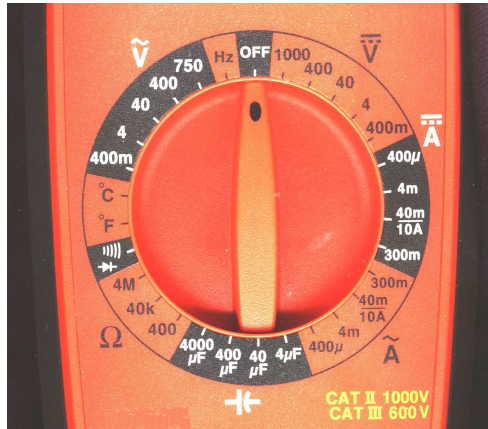
DC voltage

Control section - Amprobe 33XR



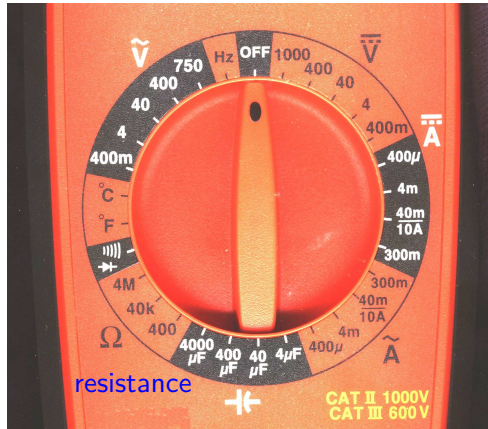
AC current

Control section - Amprobe 33XR



DC current

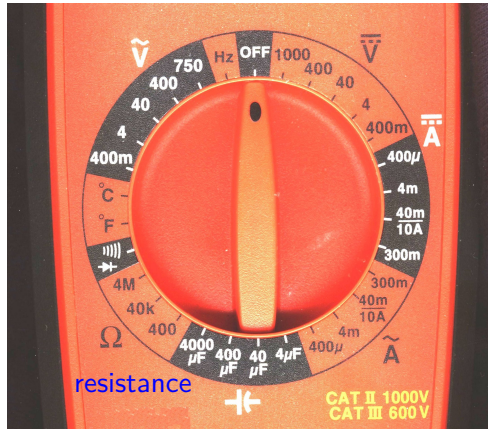
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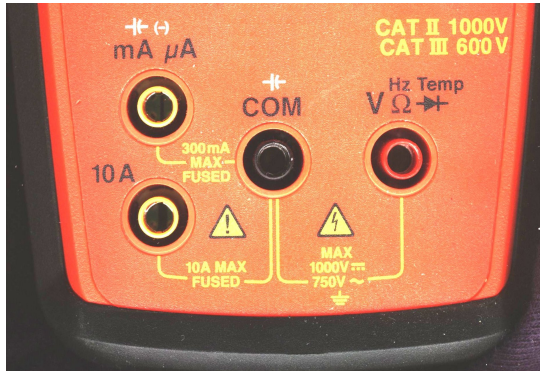


DC voltage

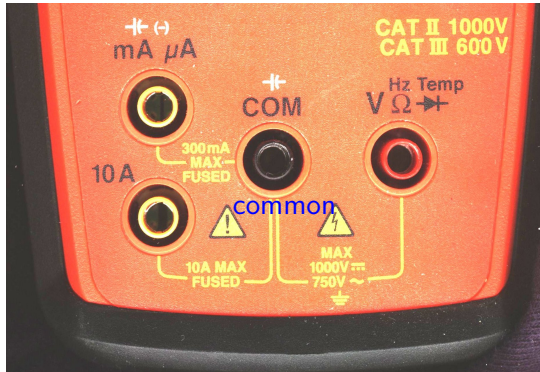
DC current

resistance

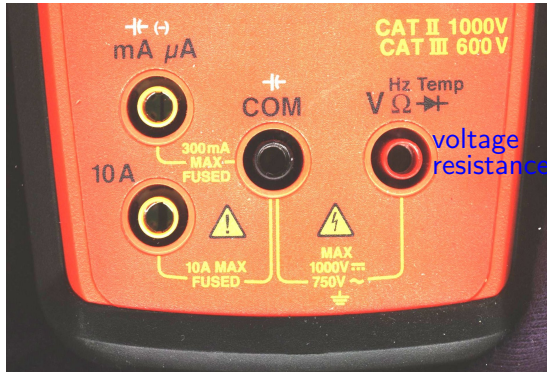
Control section - Amprobe 33XR



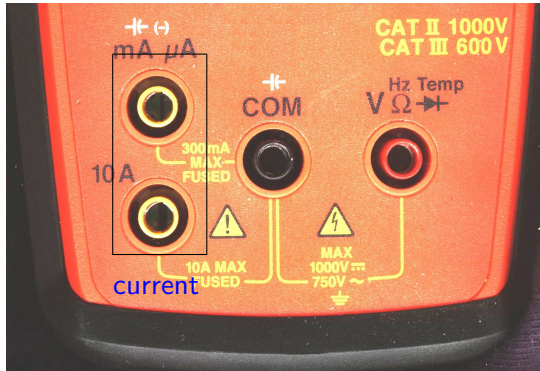
## Connection section - Amprobe 33XR



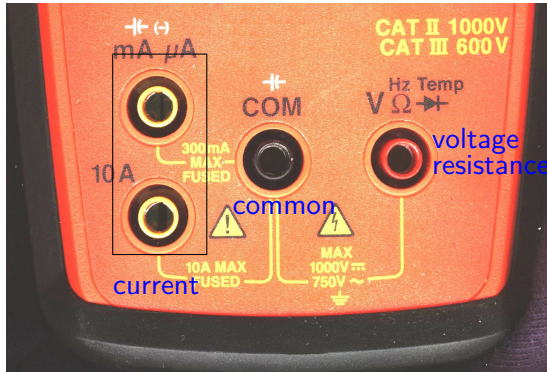
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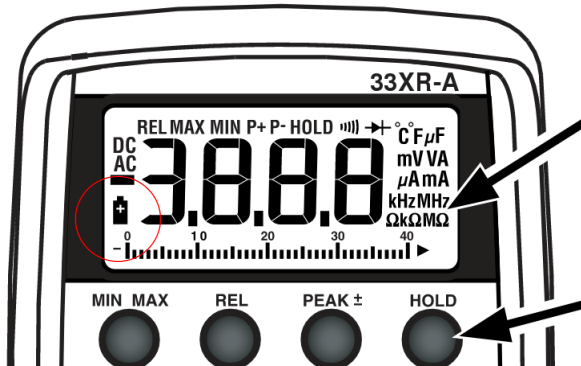


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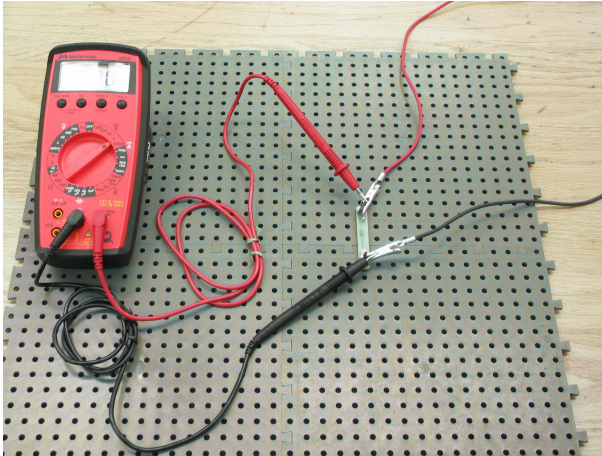


Connection section - Amprobe 33XR

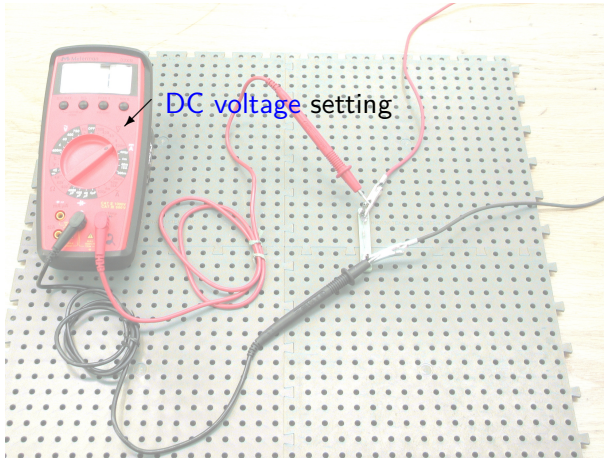
## Low battery indicator



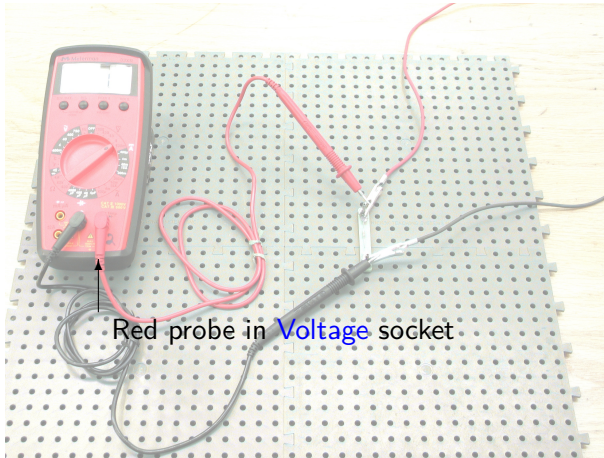
**Low battery indicator** -replace battery before using



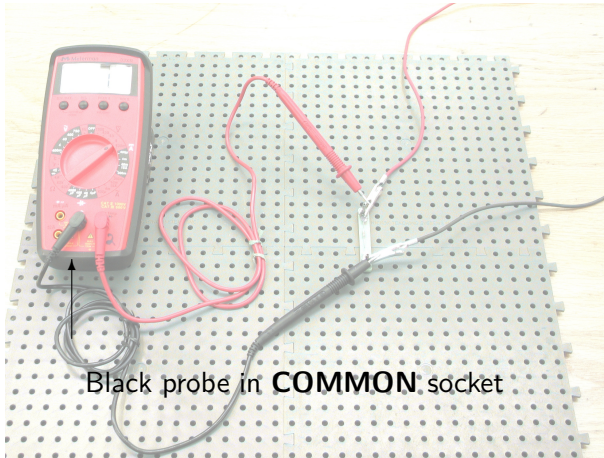
## Voltage measurement



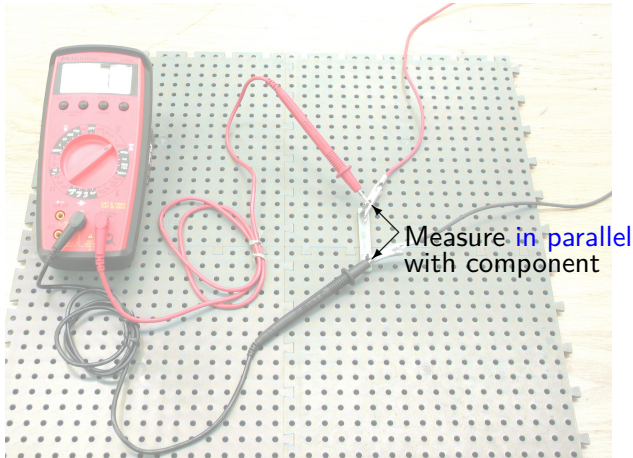
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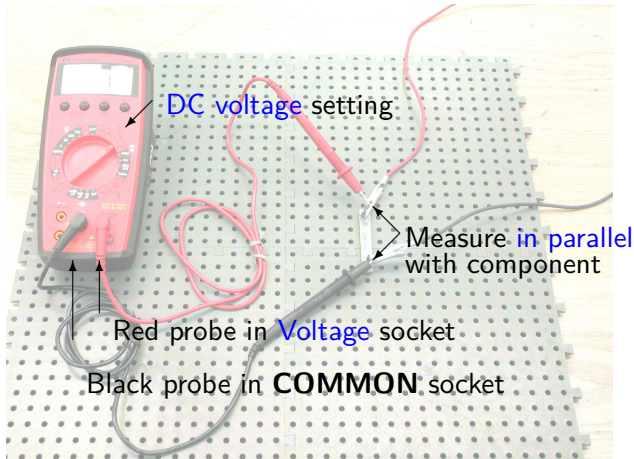
## Voltage measurement



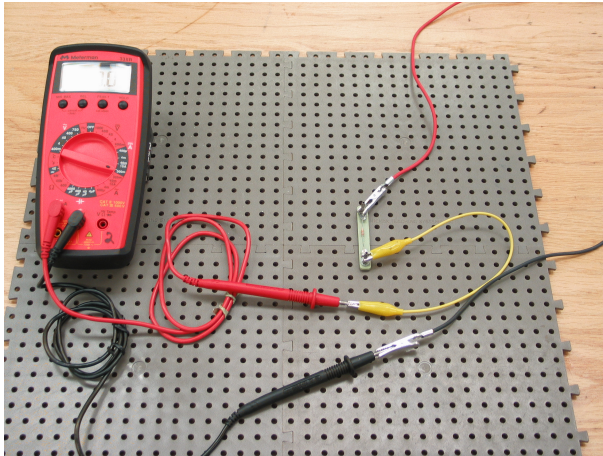
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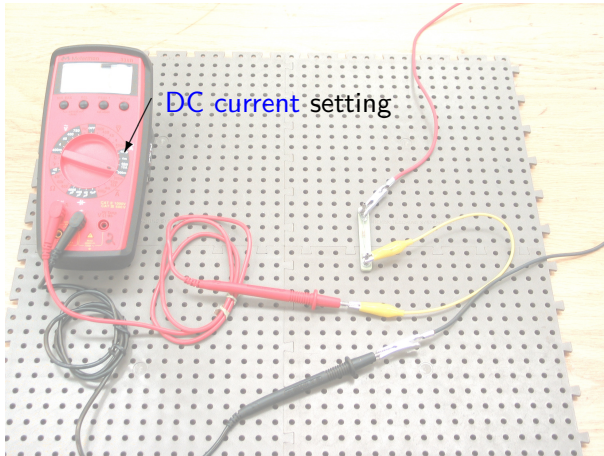
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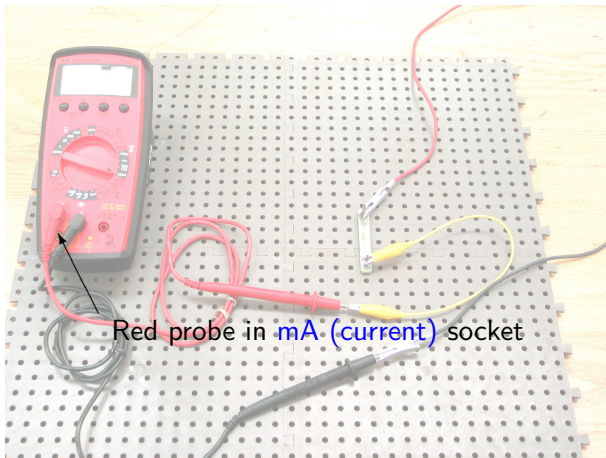
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## Current measurement

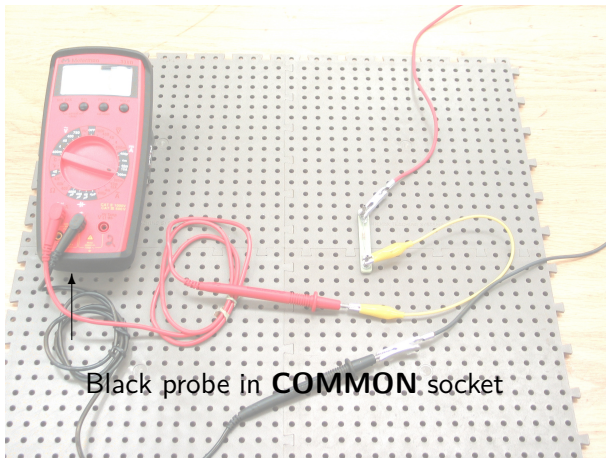


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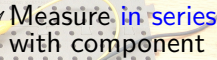


Red probe in mA (current) socket

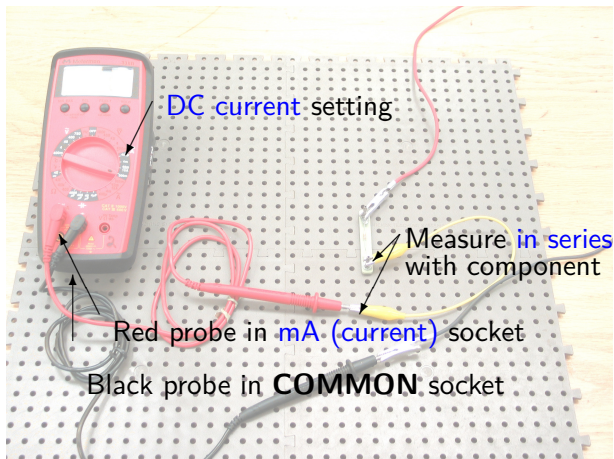
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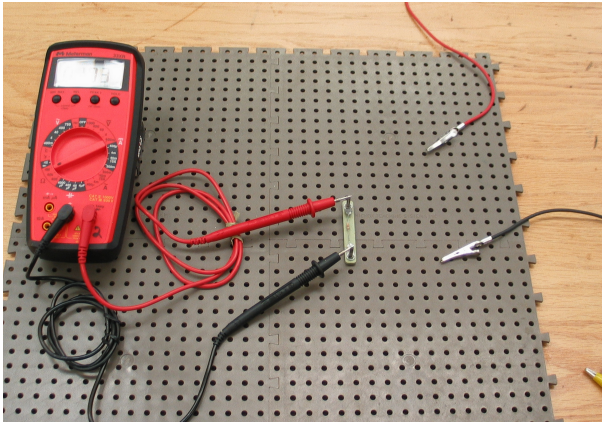
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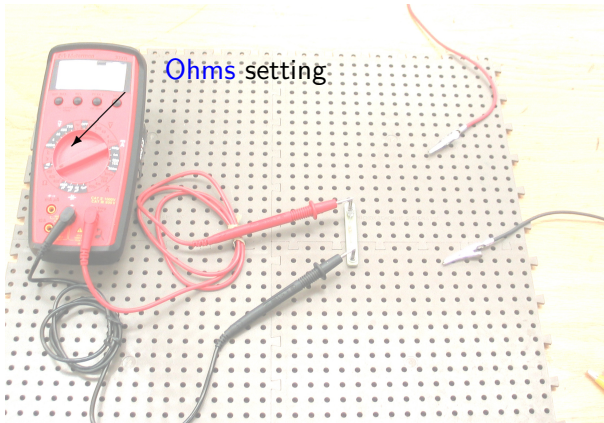
A set of navigation icons typically found in Beamer presentations, including symbols for back, forward, search, and other slide controls.



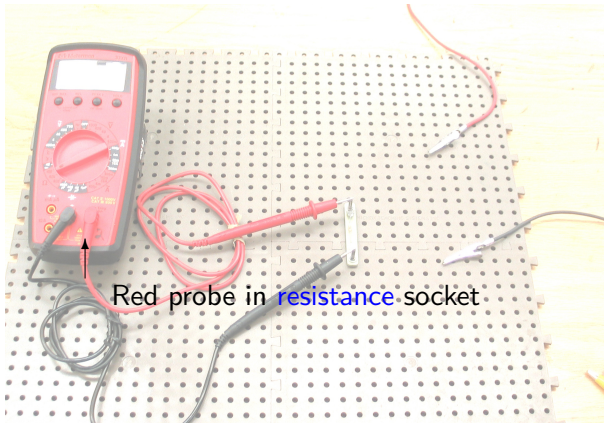
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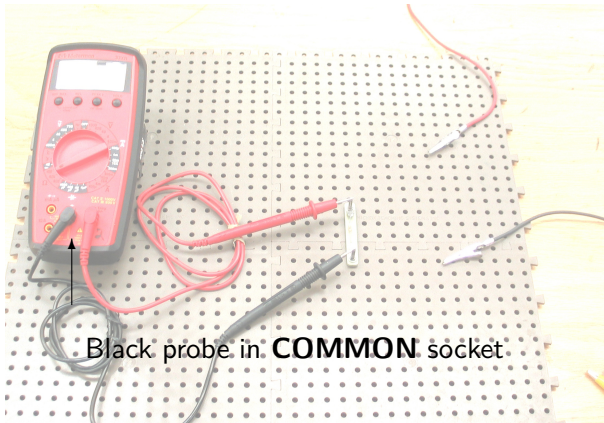
## Resistance measurement



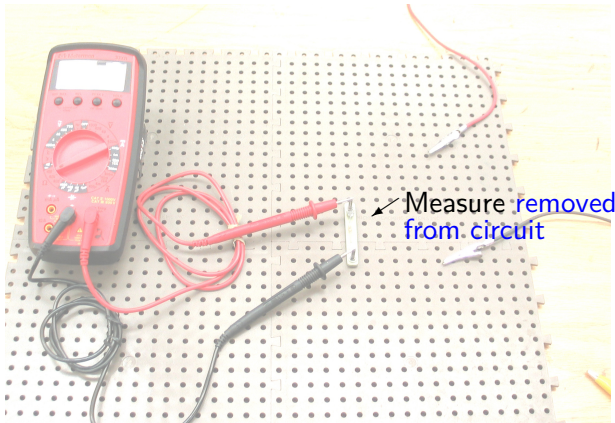
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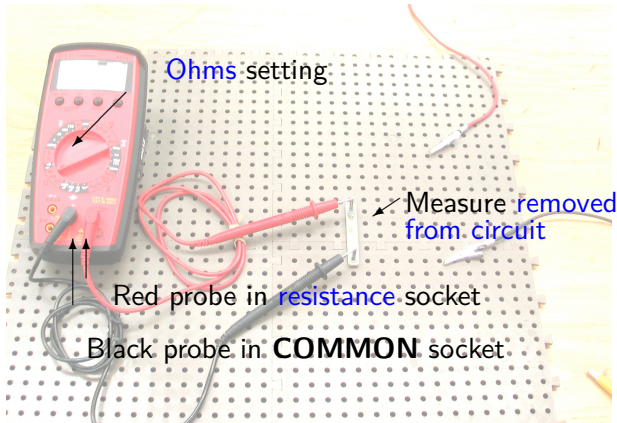
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- ③ Resistance is always measured with the power off, or preferably by removing the resistor from the circuit with the leads in the *common* and *resistance* terminals.

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