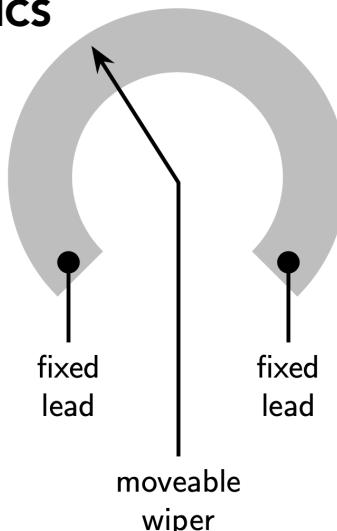


Using a potentiometer as a variable resistor

Dr.P

POTENTIOMETER BASICS

- ▶ A potentiometer is a 3-terminal device. The resistance between the two fixed leads is fixed and is equal to the resistance of the potentiometer.
- ▶ The wiper rotates as the capacitor is twisted and changes the resistance between the wiper and either fixed lead.



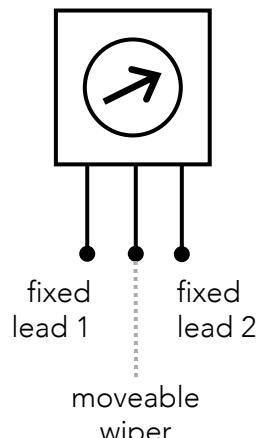
- ▶ A potentiometer is symmetric, so it does not matter which direction it is plugged in to a breadboard.

TO USE THE POTENTIOMETER AS A VARIABLE RESISTOR...

Use the connection between one fixed lead and the wiper to generate a variable resistance.

Short the wiper to the second fixed lead to eliminate the parasitic resistance of the wiper.

Check that it works: connect an ohmmeter between the two terminals and rotate the potentiometer. See the readout vary between 0 and the resistance of the pot.



BREADBOARD VIEW

