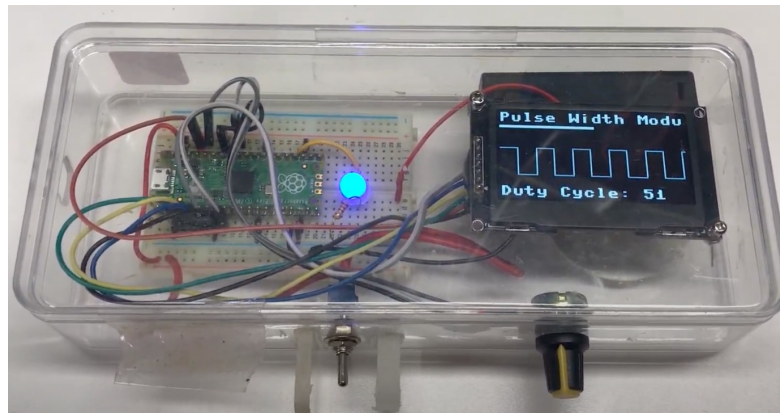




Prepare2Inspire STEM Project Kit

Urban Research and Outreach-Engagement Center

Pulse Width Modulation Kit



Operation:

- Turn the knob to change the pulse width of the signal
- See the width of the pulse change in the display
- Note that the brightness of the LED changes
- Note that you can change the duty cycle ranges from 0 %to 100%

Challenges:

- Can you turn the knob so that the duty cycle is 25%?
- When is the width of the pulse the same as the spacing between the pulses

Parts:

- Raspberry Pi Pico (\$4.00)
- Breadboard (\$1.75)
- Potentiometer (20K ohm) (\$0.50)
- LED (0.05)
- 128x64 OLED display (\$13.00)
- **Total Cost: \$20**



<https://dmccreary.github.io/learning-micropython/kits/pwm/>