bendlabs

Two Axis Development Kit

Getting Started Guide

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Precautions

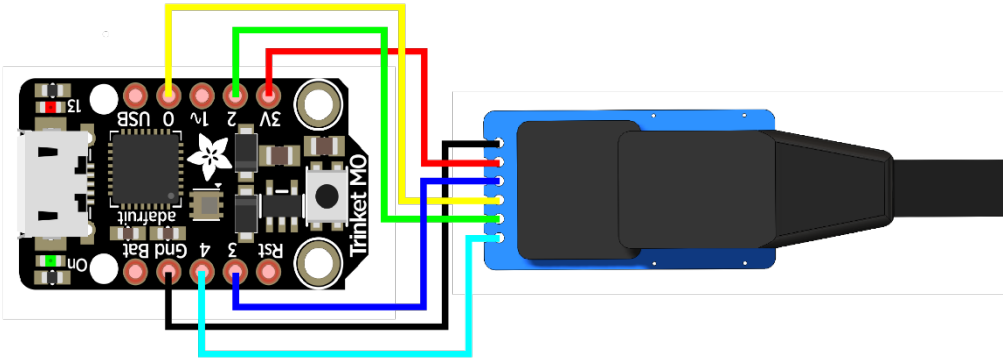
Two Axis angular displacement sensor is NOT 5 V tolerant. Requires 1.62 - 3.6 V regulated supply for proper operation.

Don’t pull the sensor by the wires

Don’t strain the sensor more than 15%

Device Setup

1: Connect Two Axis sensor to the included trinket M0 as shown below:



2: Set up Trinket M0 Arduino IDE

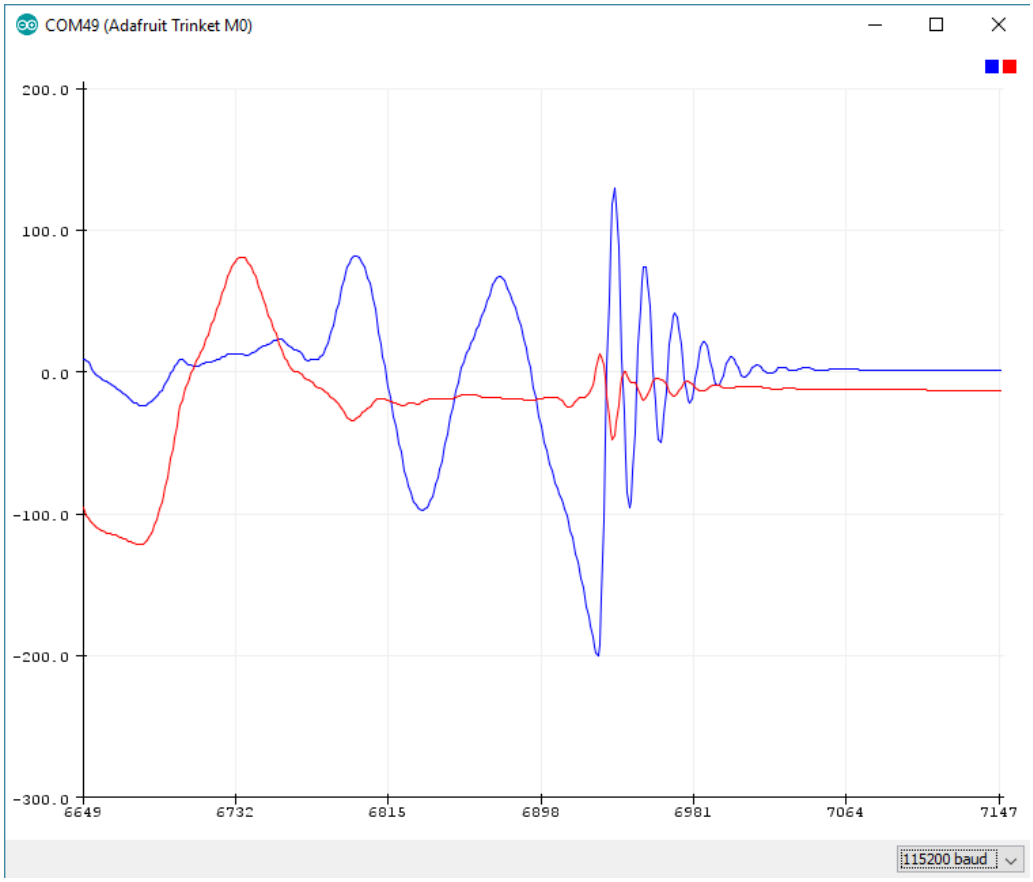
- Follow Adafruit's guide found at https://learn.adafruit.com/adafruit-trinket-m0-circuitpython-arduino/arduino-ide-setup to get the Trinket M0 up and running in the Arduino IDE.

3: Integrate Sensor and Trinket

- Download example sketches and ads_two_axis Arduino driver at (github link)
- Copy *two_axis_ads_demo* sketch into your Arduino folder
- Copy folder *ads_two_axis_driver* into Arduino/Libraries folder
- Connect the Trinket M0 to a USB port
- Select Trinket M0 from the Arduino board manager and the associated COM port
- Flash *two_axis_ads_demo* sketch onto trinket M0

Expected Output

1: Click on tools and then Serial Plotter in the Arduino IDE or CTRL+SHIFT+L to verify that angular data coming from the Two Axis sensor is correct. (Note that touching the sensor while coupled to AC power can cause 60 Hz line noise).



2: Click on tools and then Serial Monitor in the Arduino IDE or CTRL+SHIFT+M to interface with the Two Axis Sensor through the serial port. A list of serial commands can be found in the parse_serial_port function in the two_axis_demo sketch.

Additional References

Pin Diagram: