

# Set Protocol Manually

This procedure toggles the protocol between **UART** and **I2C**. If the EZO Circuit is in **UART** mode, this procedure will switch it to **I2C**. If it is in **I2C** mode, it will switch it to **UART**.

Before starting the procedure, remove the EZO Circuit from the Tentacle (or other carrier boards). Remove power and all connections.

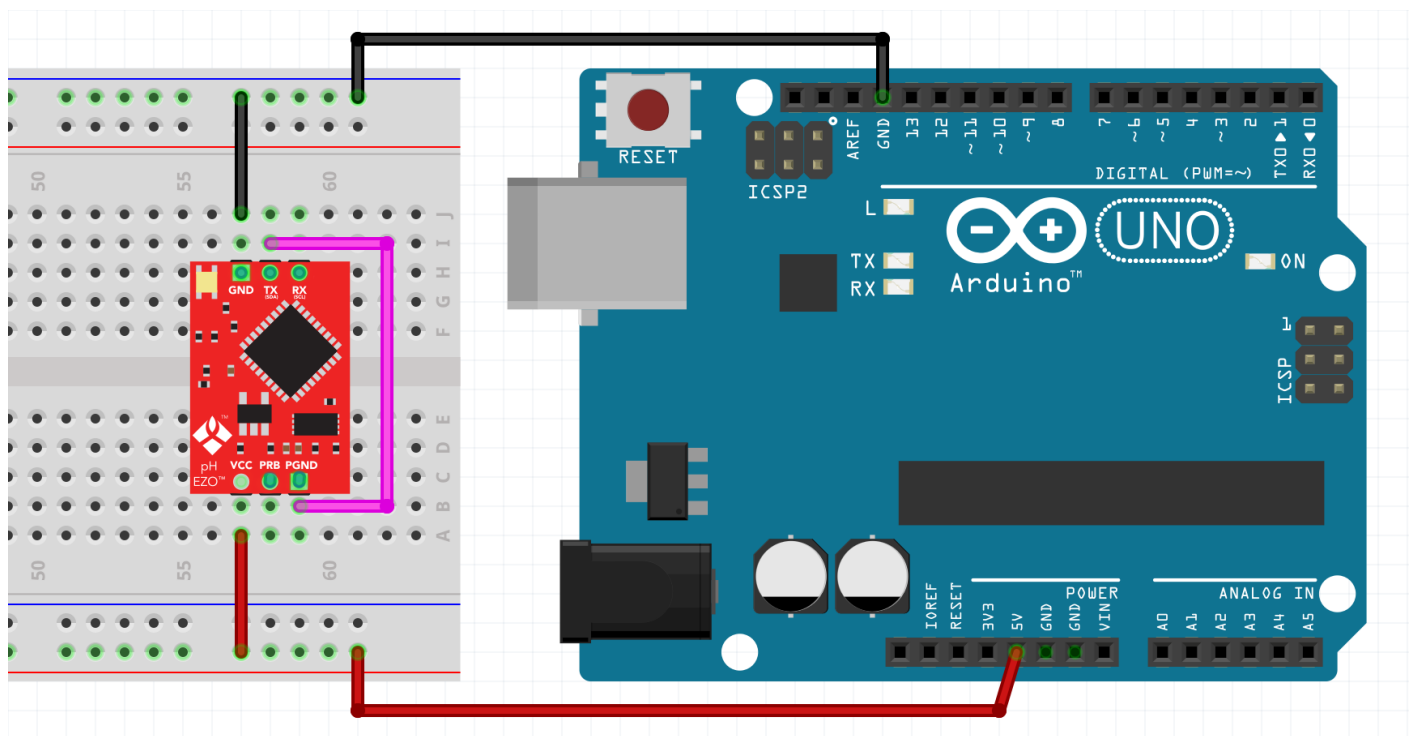
This procedure is easiest using a breadboard and a set of jumper wires

1. Connect (shortcut) these two pins:

- **PGND pin to the TX pin** if your circuit is **EZO pH**, **EZO DO**, **EZO ORP** or **EZO EC**
- Only exception is **EZO RTD**: Short the **PRB pin to the TX pin** instead.

1. Power the EZO Circuit (GND, +5V)

- Wait for LED to change from green to blue (**UART** -> **I2C**) or from blue to green (**I2C** -> **UART**).



*(The Arduino is used as a power source only. You can connect any other power source (3.3V-5V))*

1. **Remove** the jumper wire from the PGND (or PRB respectively) pin to the TX pin

## 2. **Remove** power (GND, 5V)

The device is now using the new protocol (repeat above steps to toggle back to the other protocol)