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#include <LiquidCrystal.h>

const int rs = 3, en = 4, d4 = 5, d5 = 6, d6 = 8, d7 = 9;
LiquidCrystal lcd(rs, en, d4, d5, d6, d7);
char rec;
//const int motor = 2;
int encoder_pin = 2;
unsigned int pulsesperturn = 12;

unsigned int rpm; // rpm reading
volatile byte pulses; // number of pulses
unsigned long timeold;

void counter()
{
    //Update count
    pulses++;
}

void setup()
{
    Serial.begin(38400); // initialize the serial communications
    //pinMode(motor, OUTPUT);
    //38400
    attachInterrupt(0, counter, FALLING);
    // Initialize
    pulses = 0;
    rpm = 0;
    timeold = 0;
}

void loop()
{
    if (millis() - timeold >= 1000) {
        //Don't process interrupts during calculations
        detachInterrupt(0);
        rpm = (60 * 1000 / pulsesperturn )/ (millis() - timeold)* pulses;
        timeold = millis();
        pulses = 0;
        Serial.print("RPM = ");
        Serial.println(rpm,DEC);
        Serial.write(rpm);
        lcd.setCursor(0, 1);
        lcd.print("Motor Speed");
        lcd.print(rpm);
        //Restart the interrupt processing
        attachInterrupt(0, counter, FALLING);

        //Serial.write("1");
        delay(500);
        //digitalWrite(motor, HIGH);
        lcd.begin(16, 2);
        lcd.print("TRANSMITTING");
    }
}

```