

Experiment No. 5

Aim: To evaluate time-of-flight principles through HC-SR04 ultrasonic transceiver operation, calculating object proximity via pulse-echo timing measurements.

Simulator used: Wokwi

Circuit Layout:

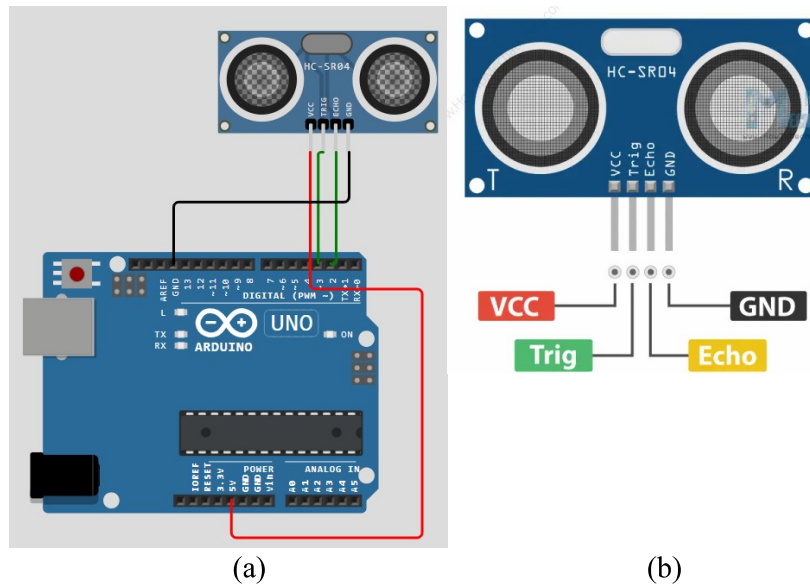


Figure 1: (a) Interfacing HC-SR04 with Arduino (b) Pin description of HC-SR04

Theory:

HC-SR04 ultrasonic transceiver

*****To be completed by the student***

Pin description

Code used:

Simulation Outcome:

Figure 3: HC-SR04 ultrasonic transceiver simulation output

Result:

**To be completed by the student