

ABSTRACT

3D Scanner collects data from the surface of objects that stand in front of it, and 3D scanners collect distance information from its position to the surface of the observed object. If using a three-dimensional coordinate system, the result will be the angle variable of the object, and relative distance from the object surface to the 3D scanner. 3-dimensional scanning system is made using Ultrasonic Sensor as a device to scan an object. Arduino microcontroller is used as processing media for data that have been obtained from the scanning process performed by Ultrasonic Sensor. Every data of object displacement will be processed and displayed on the Arduino Serial Monitor. The data obtained from the result of scanning process is the distance information from sensor to the observed object. DC Motor is used for the sensor movement or a mechanical system for the scanner. DC motor moves automatically and sensor position moves from bottom to top.

Keywords: 3D Scanner, Ultrasonic Sensor, Arduino, DC motor