

**Desain Tongkat Sensor Jarak dengan *Output* Suara Sebagai Alat Bantu Jalan Bagi Penyandang Tuna Netra, (Stick Design Proximity Sensor with Sound Output Way As A Tool For Blind People).**

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***ABSTRACT***

*Most of the blind just use a stick to locate the object or objects that are around. Another shortcoming of the stick is usually just to feel objects or obstacles that are in front of or below, but obstacles such as a car or truck is often not detected by an ordinary stick. Blind persons also experienced problems to determine the distance of objects that are nearby, such as a friend who is talking to. with advances in technology, it can be made an instrument in the form of a stick that uses ultrasonic waves used to detect the presence of an object around. The ultrasonic waves will be radiated through the TX (transmitter) signal on an object will be reflected back and received by the RX (receiver). then processed by a microcontroller. The microcontroller will control and process, then the result of the processing of the program will be displayed on the voice recorder module. so it can produce a warning about the presence of an object.*

*Keywords: Stick Blind , Sensor Ping Ultrasonic HC SR04, Module ISD1820.*