

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM-590014**



A PROJECT REPORT ON

“ELECTRONIC STICK FOR BLIND”

*Submitted in partial fulfillment of the requirement for the award
of degree of Bachelor of Engineering in electronics and communication*

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2009-2010

ABSTRACT

The project is related to an electronic stick for the blind to help a blind man to walk, which utilizes synthetic voice to inform passers or the blind man of the existing situation. It indeed helps to solve the problems a blind man may encounter while carrying a conventional stick. Due to the development of modern technologies, many different types of devices are available to assist the blind. They are commonly known as electronic travel aid.

The P89V51RD2BN microcontroller plays an important role in this project as it is programmed to read the detection signal from decoder and activates the audio playback unit. IR proximity detector in the transmitter detects the obstacles, and then sends the detection signal to receiver through RF link. This signal is received by microcontroller, which activates the audio playback unit. The audio playback unit plays the stored audio signal through headphone. The key features of the project as follows,

- Obstacles detecting using IR proximity detectors.
- Wireless design using RF link.
- Audio playback on detection of obstacles.
- Low power consumption.
- Compact due to use of microcontroller.
- Simple and low cost.