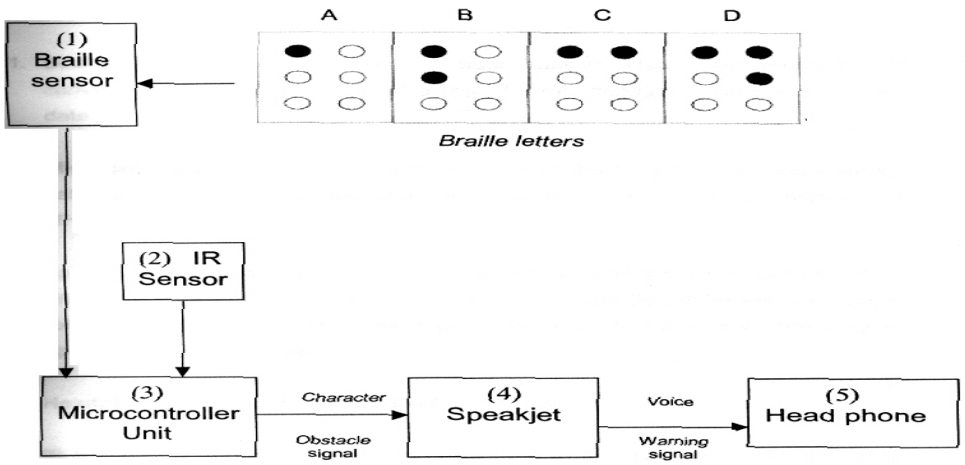
BRAILLE READER AND OBSTACLE WARNING DEVICE FOR BLIND

COLLEGE : KLE SOCIETY'S COLLEGE OF ENGG., AND TECH., BELGAUM
GUIDE : PROF. UMA KULKARNI
STUDENTS : ANITA V. DHANGI
MEDHA M. HEGDE
NEETHA C. R.
PRIYA S. GADVI

Introduction

The project is a portable tool that reads Braille and signals close objects. It is ideal for those who are new to Braille reading. This project uses Braille sensor (a combination of six push buttons) to sense Braille characters. The sensed Braille character is identified and told to the user using speakjet / allophone and earphone. When a full word is fed character by character, it will pronounce the word. The push button design makes the project simple and affordable to blind. Since this project is targeted to blind people who didn't master the Braille reading, it assumed they are new to the blind walking stick as well. Therefore it attached an IR sensor to detect whether there is any object close to the user, in hope to reduce the change of any unfortunate collisions.

Here microcontroller is used to control the various actions. Microcontroller is programmed using C-code. In human language, a phoneme is the smallest structural unit that distinguishes meaning.



Advantages

- It is a portable device
- It is affordable
- Helps in easy learning of Braille language.
- Warns the user if there is any obstacle in from of him.

Conclusion

The project is a means to learn Braille language for those unfortunates who accidentally turned blind, who is new to Braille language.

This device also helps the user to avoid any obstacles in his path.