

# BONE CONDUCTION TRANSDUSER

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## Abstract:

Bone conduction transducer device is used for those people they cannot hear. Bone conduction transducer is attractive technology for voice communication system. IN this project voice get converted into vibration through bone conduction device

*Keywords* —Bone conduction device transducer, voice , vibration.

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## I. INTRODUCTION

Bone conduction is conduct the sound to the inner ear through the skull. Bone conduction device is a alternative to the normal hearing how have a problem in outer or middle ear. It transfer sound by bone vibration to the cochlea to passing the outer and middle ear. It transfer sound by bone vibrations directly to the cochlea, by passing outer and the middle ear. A Bone Conduction hearing device release on a working cochlea to ear. This means it is use full for conductive and mixed hearing losses send sound to the brain.

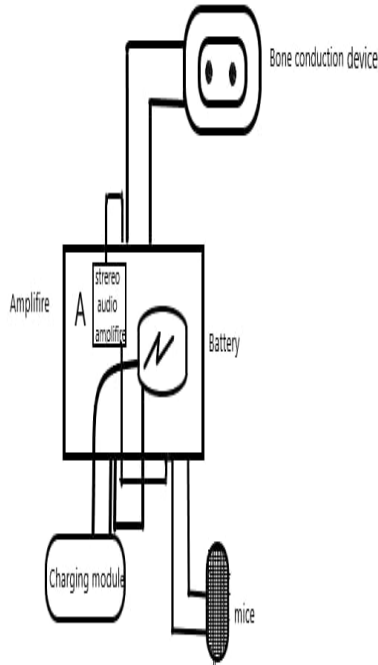
system. In that two system we need a operation under a skin .To overcome these problems we are presenting an idea called Bone Conduction Transducer . There are several idea which can used for these problem. In our research we are trying to develop a one module that is used for those people they cannot hear through its eardrum. So we are introducing such system in which it tries to help those people who cannot hear.

## II. LITERATURE SURVEY

Because of some diseases there is a problem to a some people they cannot hear .For Bone Conduction Transducer we do a survey for existing system .That two system are Bone Bridge ,Ponto

## III. SYSTEM ARCHITECTURE

The below fig. shows architecture and block diagram of system. In this system we use a bone conduction device , amplifier, Lithium polymer Rechargeable Battery(3.7v 180mAh), Lithium charging module ,Mice ,audio, amplifier.



**.FIG: Bone conduction transducer**

The bone conduction transducer work as follow:-

Mice take a input from the outside then Audio Amplifier, it sent to the bone conduction transducer then bone conduction device create a vibrations and it sent to the brain then that person can listen everything.

#### IV. COMPONENT DESCRIPTION

**IV.A.1.1 Bone Conduction Device:** Bone conduction device is used for create a vibration on a skull .

**IV.A.1.2 Charging Module:** It is used for to charge the battery to continues working of project.

**IV.A.1.3 Battery:** In this we used a Lithium Polymer Rechargeable battery (3.7v).

**IV.1.4 Amplifier:** It is a D class amplifier . It operate on voltage 5.5v. In this module it is

**IV.A.1.5 Mice:** It is used for take input from the outside.

#### V Conclusion

With the help of this device those people can't hear they can hear

#### VI Future scope

Those people can't hear they can hear with the help of device.

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