



Smart Smart Hearing Aids: The Basic Information You Need to Know

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Outline

- **Abstract**
- **Aim**
- **Facts on Hearing Aids**
- **Block diagram**
- **Implementation**
- **Testing**

Abstract

Smart hearing aids are the most popular and effective treatment option for hearing loss. The automatic functionality in intelligent hearing aids allows users to interact with their environment naturally while the device's algorithms sort out noise and enhance the desired sound in real-time

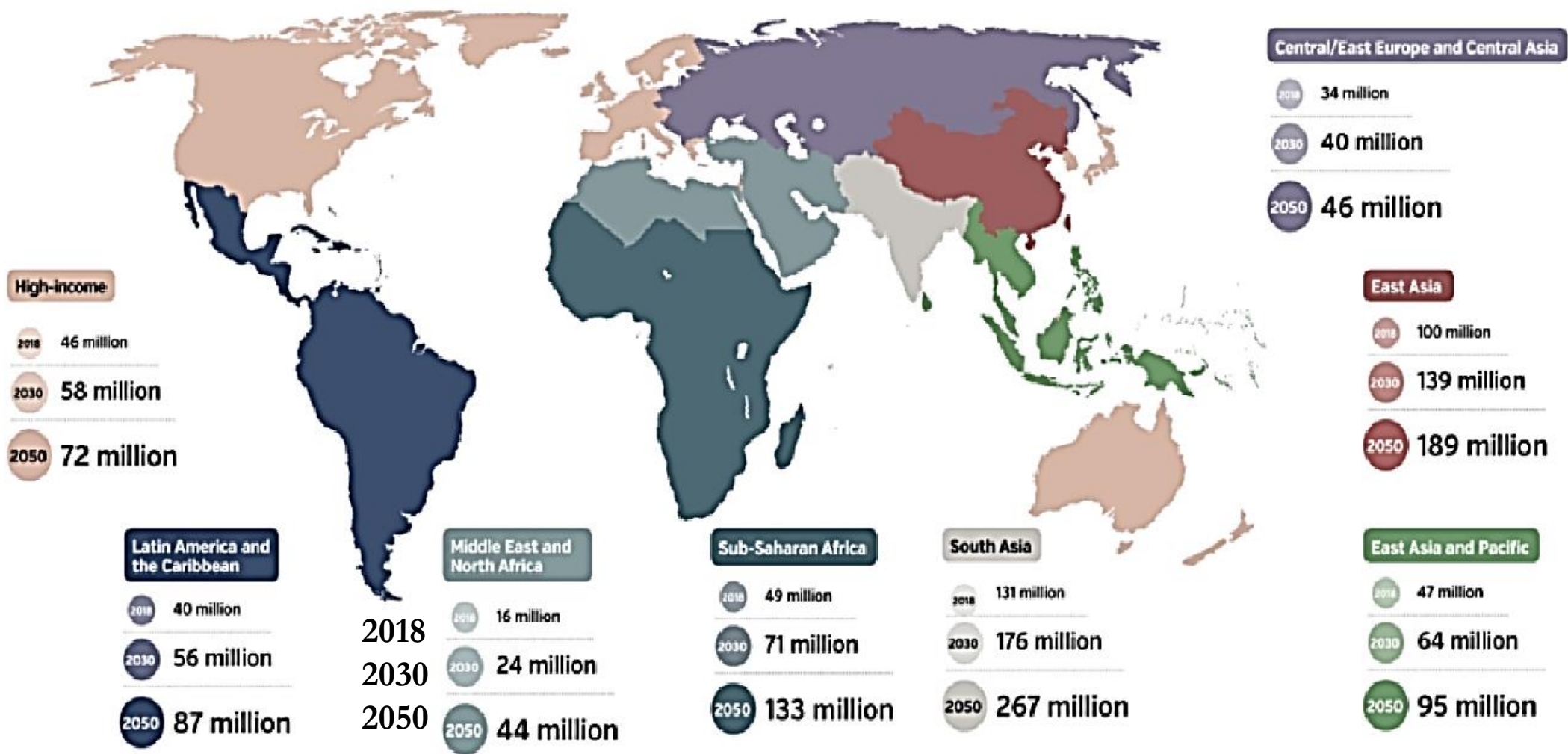
Aim

The goal of smart hearing aids is to make the hearing restoration process feel as natural as possible by removing wires and other physical connectivity. The intelligent hearing aid can be modified to amplify a certain band or harmonies of frequencies (Letters or Words).

While most smart hearing aids allow you to make manual adjustments as needed, the devices will learn your listening preferences over time and begin to make adjustments automatically.

Facts about Hearing Loss

- **Some facts about hearing loss that 46 million (or 23%) adult population in the US report some degree of hearing loss.**
- **Less than 20% of those with hearing loss who might benefit from treatment actually seek help.**
- **Most hearing aid users had lived with hearing loss for 10+ years, and waited until it progressed to moderate-to-severe levels before seeking professional help for hearing aid fitting.**



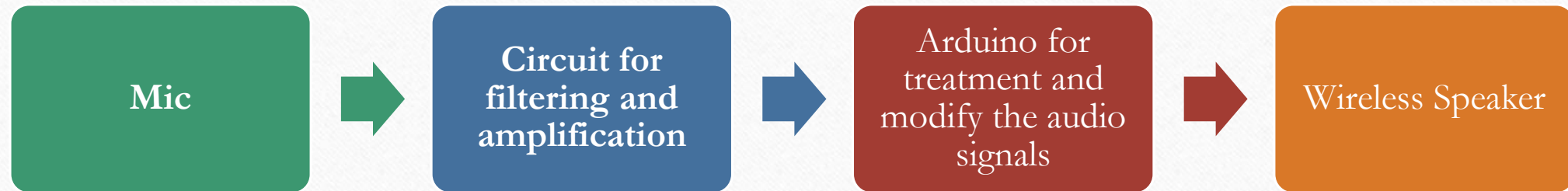
Based on Global Burden of Disease regions.

*The current projections are based on the assumption that age-, gender- and region-specific prevalence of disabling hearing loss does not vary over time.

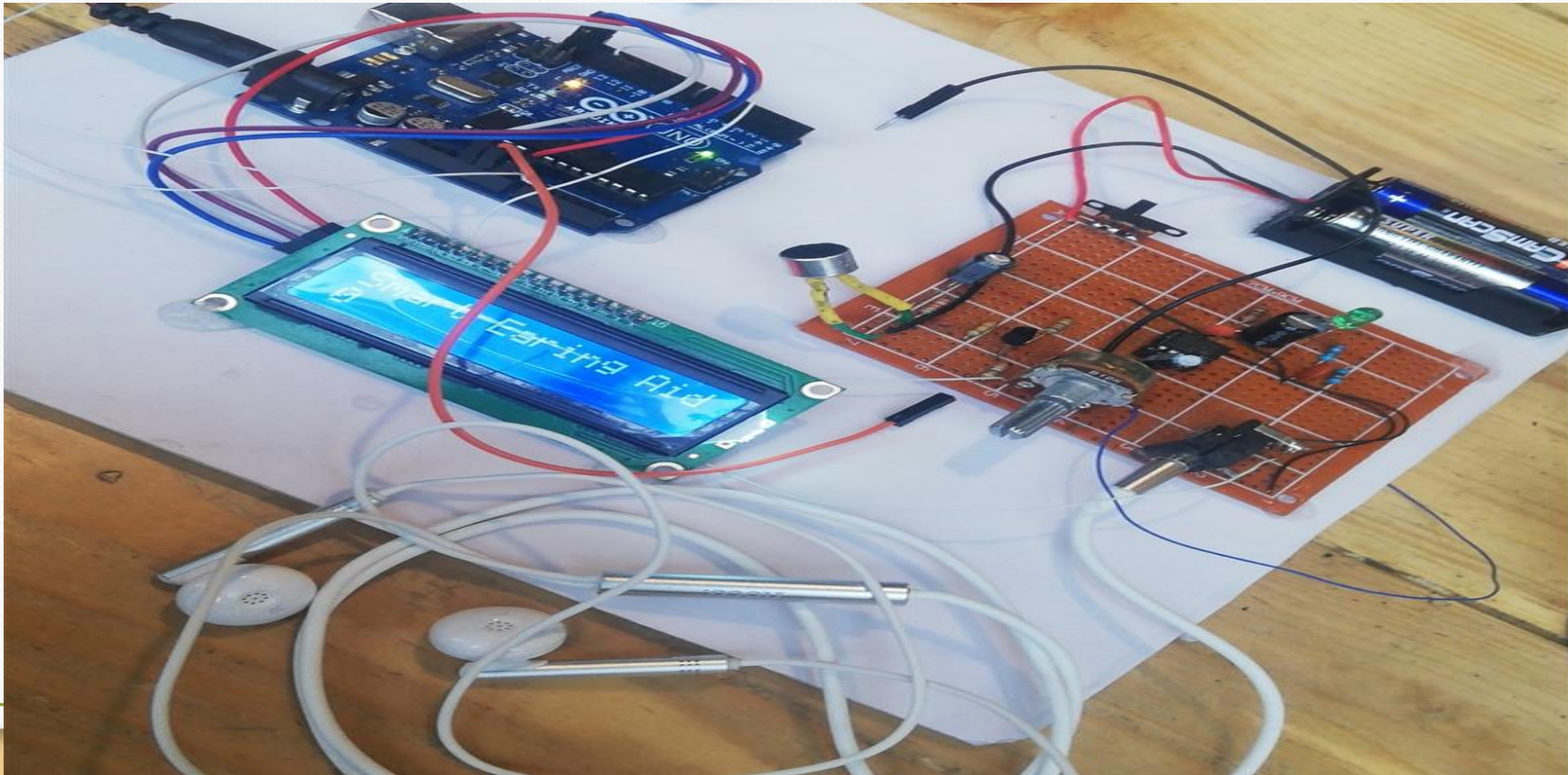
Types of Hearing Loss

- **Conductive:** Middle ear pathology
- **Sensorineural:** Damage at the inner ear (cochlea)
- **Mixed:** Both cochlear damage & outer/middle ear pathology

Block Diagram



Implementation





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