# Newborn hearing screening device

Country of origin | India

Primary function | Diagnosis

## Health problem addressed

The device is a non-invasive and safe newborn hearing screening device, specially designed for mass screening of newborns in resource constrained settings with high sensitivity and specificity. Every year, 800 000 babies are born with hearing loss globally, and 90% of them are born in developing countries. Early detection and intervention leads to prevention of speech loss, impaired communication skills, avoidable disability, possible mental illness and unemployment for lifetime.



## Disease addressed \_

Diseases of the ear and mastoid process; pregnancy, childbirth, and the puerperium; certain conditions originating from the perinatal period; congenital malformations, deformations, and chromosomal abnormalities.

### Product information \_

The device uses brainstem auditory evoked response (BAER or ABR) technology, which is the gold standard in auditory testing and is recommended as the test of choice by the American Academy of Pediatrics (AAP, US) and the National Health Institute (NHS, UK). A series of stimuli is given in the ear and the response is collected with non invasive electrodes placed on the head of the baby. The device is used in an innovative way and is able to perform in a noisy environment, with reduced test time, automated results and an easy-to-use interface for healthcare workers to use.

#### Use and maintenance \_

User: Midwife, technician, nurse, general physician, specialized physician, audiologists, pediatricians.

#### Environment of use

Setting: Rural settings, urban settings, outdoors, indoors, at home, primary level (health post, health centre), secondary level (general hospital), tertiary level (specialists hospital).

Energy requirements: Rechargeable battery.

#### Product specifications\_

Consumables: Cleaning scrub gel, cotton swabs, electrode gel. Other features: Non magnetic zone, open electrical wires.

#### Commercial information.

Reference price (USD): 5000

Model: Sohum newborn hearing screening