MindWave

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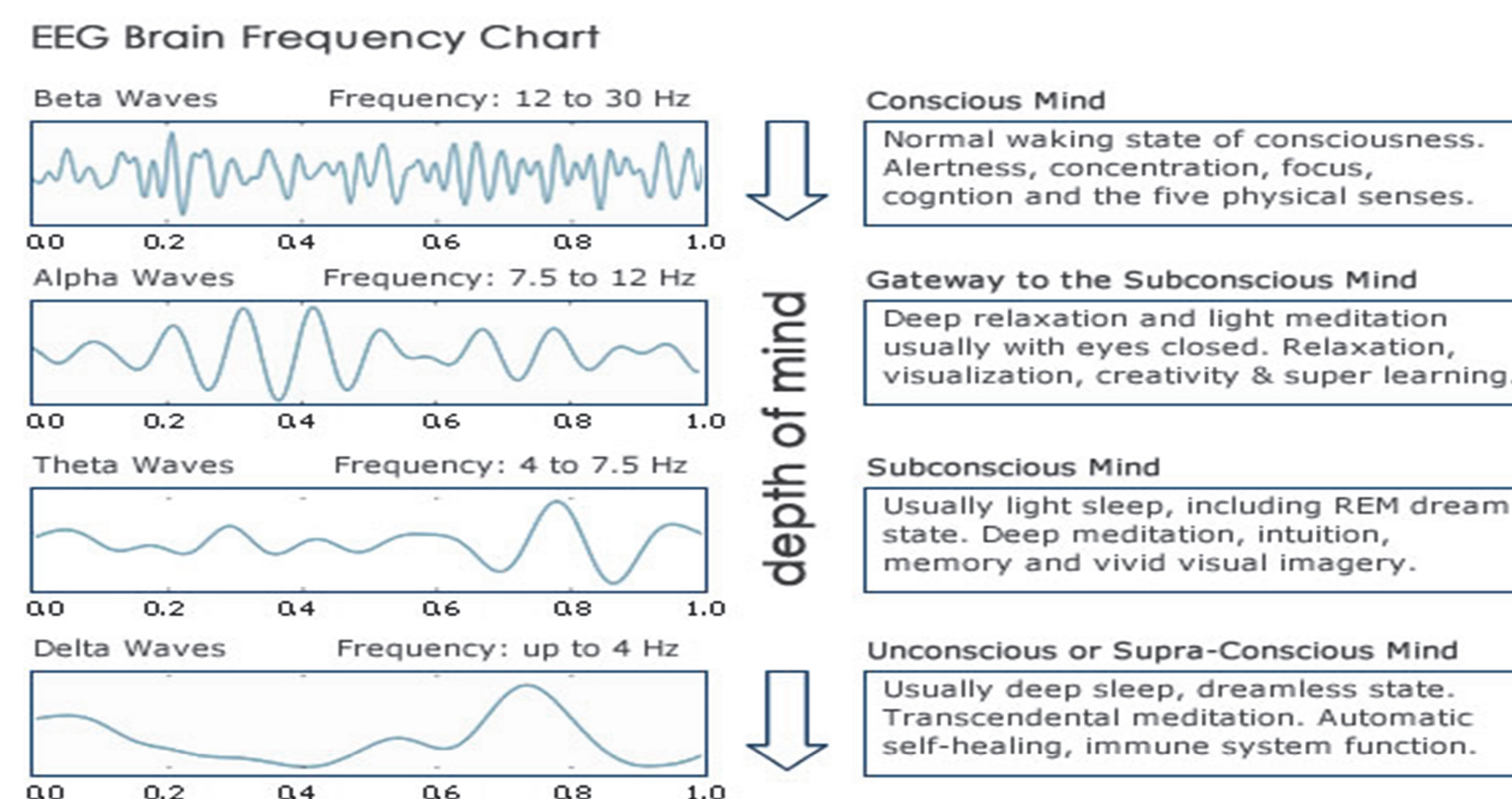
MIND MW WAVE

What Is This Demo:

In this demo, MindWave headset is used for showing smart controlling of items using brain signals.
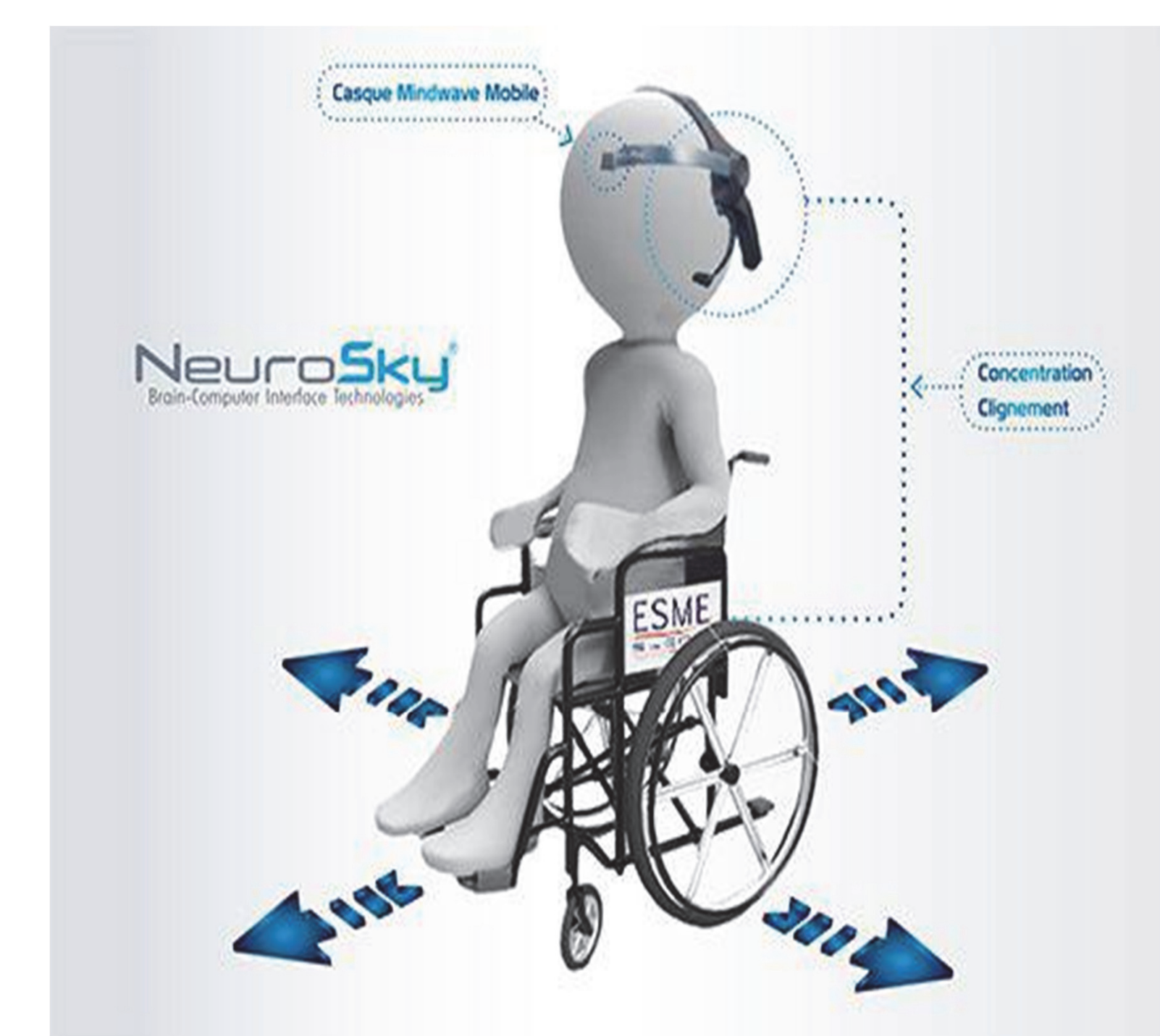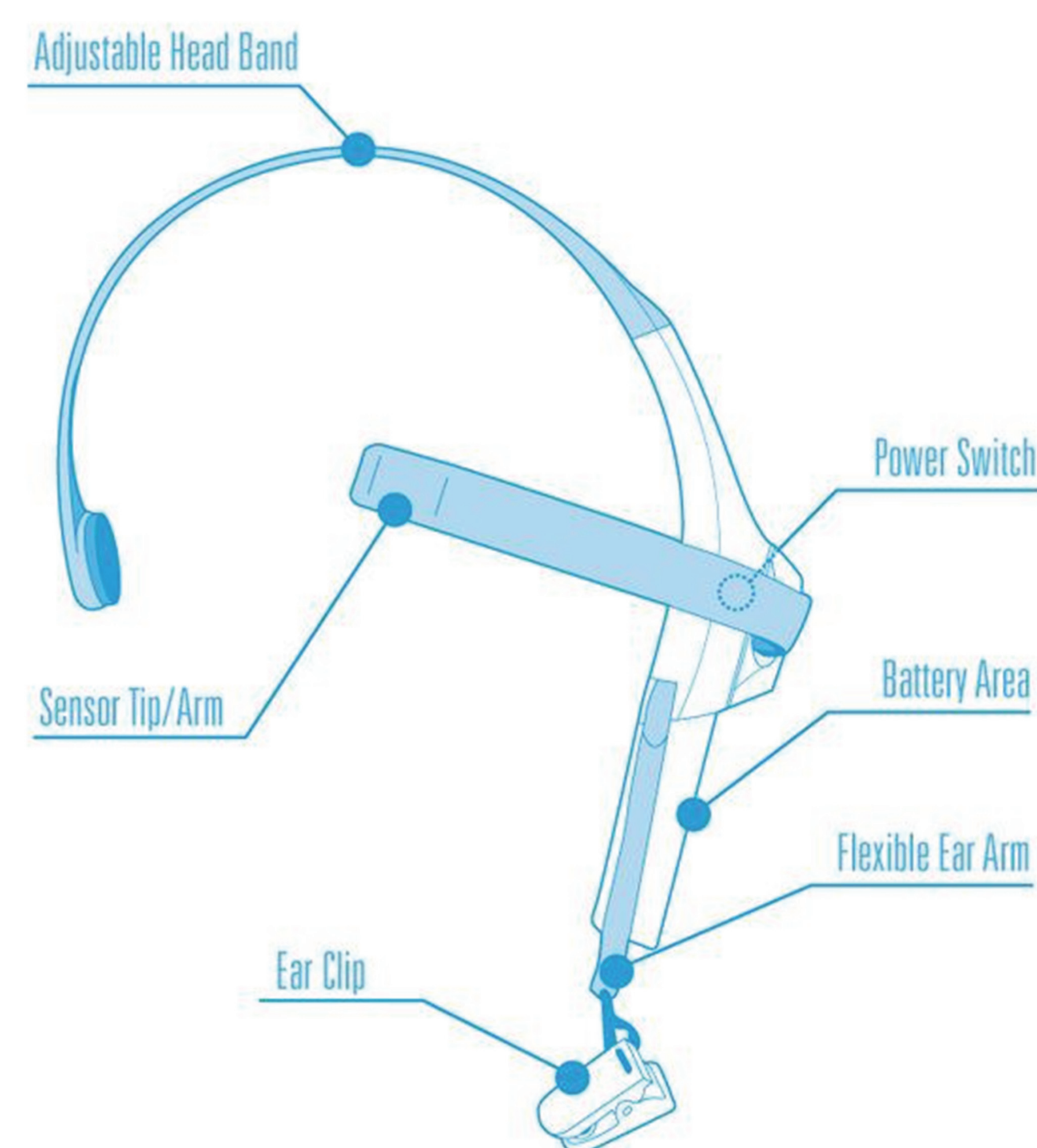
How It Works:

The MindWave headset, a brain-computer interface, can measure the brainwave signals from FP1 and EMG.

EEG Brain Frequency Chart

Beta Waves — Frequency: 12 to 30 Hz

Conscious Mind
Normal waking state of consciousness. Alertness, concentration, focus, cogntion and the five physical senses.

Alpha Waves — Frequency: 7.5 to 12 Hz

Gateway to the Subconscious Mind
Deep relaxation and light meditation usually with eyes closed. Relaxation, visualization, creativity & super learning.

Theta Waves — Frequency: 4 to 7.5 Hz

Subconscious Mind
Usually light sleep, including REM dream state. Deep meditation, intuition, memory and vivid visual imagery.

Delta Waves — Frequency: up to 4 Hz

Unconscious or Supra-Conscious Mind
Usually deep sleep, dreamless state. Transcendental meditation. Automatic self-healing, immune system function.

depth of mind

Advantages and Other Applications:

Helping people with disabilities, the gaming industry and in academic use.

Adjustable Head Band
Power Switch
Battery Area
Sensor Tip/Arm
Flexible Ear Arm
Ear Clip

Attention Detection

Interfacing Mindwave Mobile with Arduino

NeuroSky
Brain-Computer Interface Technologies

Casque Mindwave Mobile
Concentration Clignement
ESME

Try It:

- Put on the headset and find your cognitive score!
- Play MindHunter by concentrating on the target and blinking.
- Measure your attention and concentration by meditating.

Lessons Learned:

- How to wear the headset properly.
- Lack of community and technical support slows down prototyping.
- Not easily integrable with IoT platforms.
- Device is fragile.