

E-Band Instructions



Image 1: E-Band

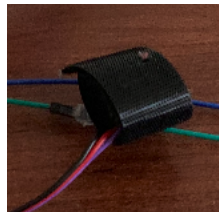


Image 2: Left image is the heart rate sensor. Right image is the muscle contraction sensor.

Wearing Device

Wear the left arm device as Bradley demonstrated to you. The left image in image 2 is the heart rate sensor which needs to be worn around the index finger. The muscle contraction sensor should be worn above the E-Band and secured using the smaller Velcro band. The bigger Velcro band is used to secure the E-Band to the upper arm.

Turning ON/OFF Device

To turn on the device, toggle the red switch. When the switch is toggled in the image above, the device is off. The device turns on when the O is pressed and I is elevated.

Buttons

- Red: No input to the question
- Blue: Yes input to the question
- Yellow: Emergency input. Will cause the system to contact the phone numbers and email addresses listed in AWS.

Operation of Device

The device is continuously monitoring your heart rate, muscle contraction, and falling state. The muscle contraction, heart rate, and fall sensors have set a threshold. If the threshold for any of the sensors are surpassed, the E-Band starts a timer to detect if another threshold is surpassed within 2 minutes. If a second threshold is surpassed within 2 minutes, the E-Band will display a question on the LCD. The question will ask the user if they are having a seizure. The blue button should be pressed if the user is experiencing a seizure; emergency contacts are notified with your current location. The red button should be pressed if the user is not experiencing a seizure; emergency contacts are not notified. If two thresholds are not surpassed within 2 minutes, the E-Band continues to monitor the user; no action is taken. If the user experiences an aura or believes they will have a seizure, the user should press the yellow button to contact emergency contacts listed in AWS with their current location.

Operational Diagram

