

humon

Hex User Manual

What is the Hex?

The Hex is a device that measures the muscle oxygenation (SmO_2) in real time.

How does the Hex work?

The Hex measures SmO_2 by shining light into the muscles and detecting the amount of light reflected back. Light in the near-infrared wavelength range is used by the Hex to penetrate the muscle and is either absorbed or scattered by the tissue. The wavelengths of light are chosen specifically to be sensitive to the absorption of oxy-hemoglobin (HbO_2) and deoxy-hemoglobin (Hb). By measuring how the light is absorbed, the concentrations of HbO_2 and Hb within the muscle can be found. The SmO_2 is then calculated by taking the ratio of HbO_2 to the total hemoglobin ($\text{HbT} = \text{HbO}_2 + \text{Hb}$).

Downloading the mobile app

The Humon Hex is currently compatible with iPhone iOS 9.0 (and higher) and Android. Please download the app from the Apple App Store or Google Play.

Using the Garmin Watch

The Humon Garmin app and Humon Garmin Data field are available on the connect IQ store. Please see the compatible device lists to determine if your Garmin watch can support the app or data field.

More information on how to use the Hex

Please visit humon.io/go for more details about the Humon Hex.

Warranty

There is a one year warranty on the Hex. This warranty does not include devices that are intentionally damaged by services not approved by Humon. Any modifications made to the device without approval by Humon may void the user's authority to operate the device.

Exercise Risk

Please consult your physician before modifying any exercise program. Exercise involves risk to the individual and there is a possibility of injury and/or death. You must discuss with your physician before following any training guidance provided by the Humon Hex. Not all training zones are appropriate for all individuals.

FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

The Grantee is not responsible for any modifications or changes not expressly approved by the grantee. Any changes or modifications not expressly approved by the responsible party for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause

harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Industry Canada Compliance

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause interference; and (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Declaration of Conformity

Please see the Humon website:

humon.io/compliance