

HUMANOX

# QUICK USER GUIDE HUOX 50 AND HUOX SPACE





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HUMANOX informs that the HUOX 50 is not a diagnostic medical device. For any medical problem it is important that you have seen or visited your physician and initiated or completed treatment.

Nothing in this guide is intended to be medical advice, nor should it be construed as such. Consumers should consult with their own health care professionals for their individual medical recommendations. The information on this website relates to smart shin guards for sports performance monitoring, an over-the-counter product that is not a medical device. Our products are not intended to be used as a means to cure, treat, prevent, diagnose or mitigate any disease or other medical or abnormal condition.



*Congratulations!*

You have just acquired the HUOX 50  
smart shin guards from HUMANOX

You are about to enter HUOX Space, the  
platform that integrates the HUOX 50

In these pages, we will guide you step by  
step through the HUOX 50 and we will teach  
you how to use HUOX Space

*Let's  
Start!*

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## GENERAL DESCRIPTION OF THE HUOX 50

The HUOX 50 are the world's first smart and connected carbon shin guards, capable of collecting more than 50,000 pieces of raw data, and translating them in real time in the form of metrics on the HUOX Space platform. Manufactured with aerospace technology using carbon fiber, which makes them very resistant and lightweight, HUMANOX shin guards become an aid for the player's sports performance and health status.

This highly technological device is equipped with an electronic board inside with sensors and advanced elements such as gyroscopes, accelerometers, GPS, heart rate sensor, etc. All the data collected will be available on the HUOX Space ecosystem through the web or the App on both Android and iOS.

The metrics that can be obtained using the HUOX 50 are the following:

- Time spent walking and standing
- Time spent running
- Time spent sprinting
- Average speed
- Maximum speed
- Maximum Heart Rate.
- Ball kicks with the left Leg
- Ball kicks with the right Leg
- Heart Rate Frequency Graph
- Calories
- Number of Steps
- Time played
- Temperature
- Total Distance
- Average Heart Rate
- Impacts
- Activity Percentage Graph
- Speed Graph

*\*Day by day we are incorporating new metrics. Visit our website for the most updated version of the guide: [www.humanox.com](http://www.humanox.com)*



# TECHNICAL CHARACTERISTICS

<b>Communications networks</b>	2G
<b>Frecuency band</b>	GSM Quad Band (850/900/1800/1900MHz)
<b>Data Transmission</b>	Protocol TCP / IPv4
<b>Global Navigation Systems</b>	GPS / GLONASS / Galileo / BeiDou / QZSS
<b>Connection between Shin guards</b>	Bluetooth

## SENSORS

<b>Accelerometer &amp; Gyroscope</b>	Sensitivity : $\pm 2/\pm 4/\pm 8/\pm 16$ g Angular velocity: $\pm 125/\pm 245/\pm 500/\pm 1000/\pm 2000$ dps
<b>Microphone</b>	Extended frequency response of 60 Hz to 20 kHz Signal noise ratio (SNR) 65dB
<b>Pulsimeter</b>	Detection of changes in blood vessels
<b>Temperature</b>	By contact (Rank: -40 a 125°C)

## BATTERY

<b>Type</b>	Polímero Li-Ion
<b>Charging method</b>	Charging Base with technology Qi
<b>Input Charging Base</b>	USBmicro 5VDC – 2,5A
<b>Charging time</b>	3 – 5 hours



 **INFORMATION COVID-19**

The HUOX Space APP offers a Covid alert. During the first five minutes of use, an alarm message is triggered if the player's temperature exceeds 38° degrees Celsius. This warning is possible thanks to the body temperature sensor built into the HUOX 50.

Before going into the guide of the HUOX 50 smart device and the HUOX Space platform, we must inform you that it is important to have an active subscription to the platform (to check plans and prices visit our website <https://humanox.com/>) once the user has received the smart shin guards.

In said digital ecosystem, you can synchronize / add your shin guards to get the data collected from the HUOX 50 in real time.

You can also subscribe as a follower without having to purchase the device, so your friends and family can follow you in real time, both you and your favorite players.



HUMANOX

# HUOX 50





## CONTENT OF YOUR HUOX 50

Your HUOX 50 set includes a bag to store your shin guards, a charging base, and a USB cable for charging.

1



2



1

Carrying bag

2

Charging base

3

HUOX 50

3



4



4

USB Cable for charging

## KNOW YOUR HUOX 50

The HUOX 50 smart shin guards are a sensorized device with real-time connection, equipped with high technology made available to the user. These shin guards are made of carbon fiber, which makes them very light. Its mechanical properties allow that the strength of any received impact is distributed over the entire surface, thus reducing the power of the impact that the player receives.

LEFT



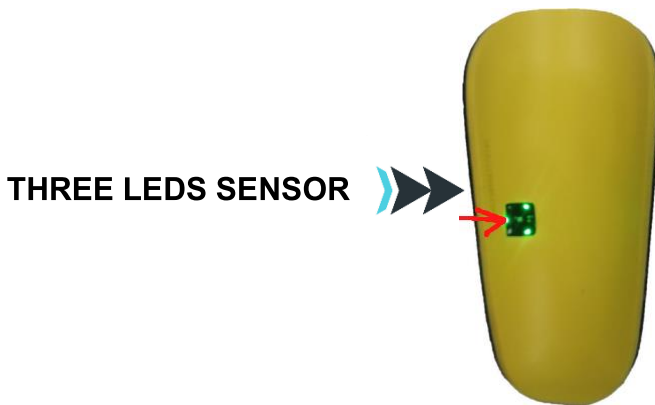
RIGHT



## HUOX 50 INTERNAL PARTS

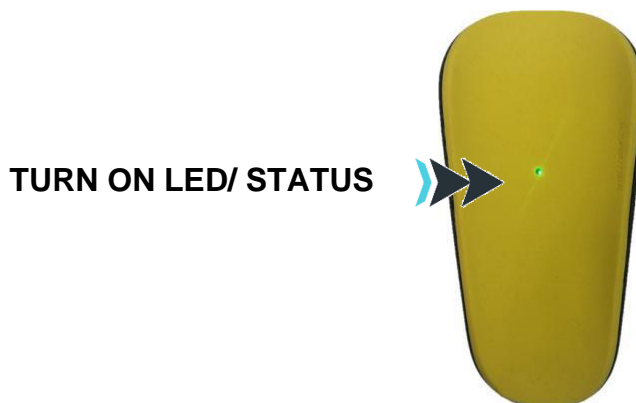
Both shin guards, left and right, are different both in their internal design and in their functionalities. To differentiate between the left and right shin guards, note that the left HUOX 50 has a built-in sensor with three LEDs, while the right HUOX 50 has a single LED. In addition, on the outside, the HUOX 50 is labeled "Left" (left shin guard) and "Right" (right shin guard).

### LEFT SHIN GUARD



- Measures cardiac frequency
- Measures body temperature

### RIGHT SHIN GUARD



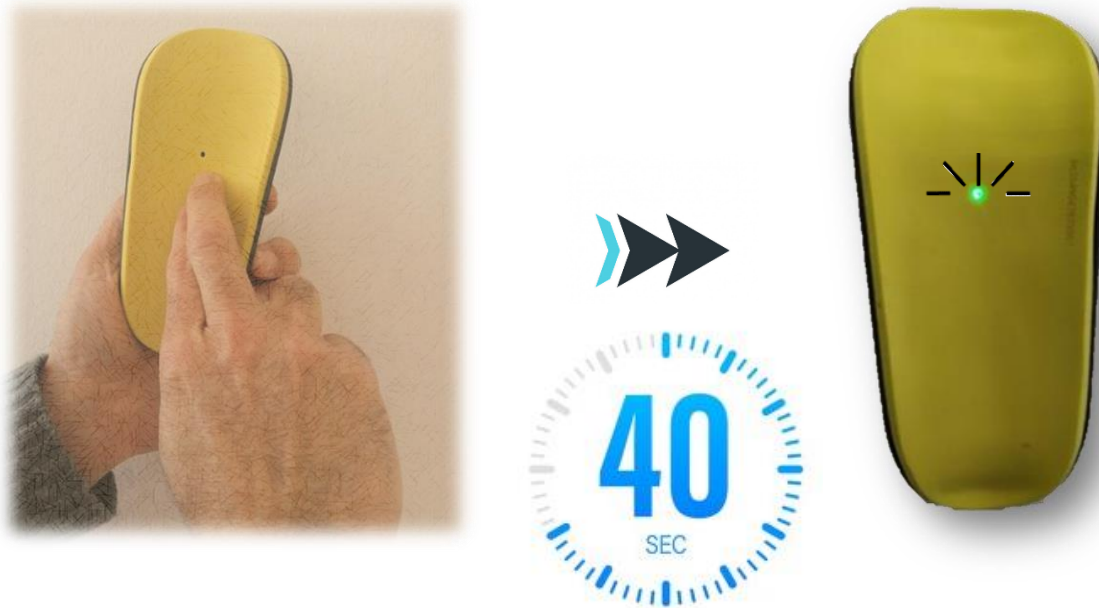
It gives us information regarding connectivity with the mobile network and GPS connectivity

*Your HUOX 50 will automatically shut down after five minutes of inactivity. The complete shutdown process is described on page 11.*



# TURNING ON YOUR SHIN GUARDS




They must first be charged (page 13 of this guide). Turning on the HUOX 50 is very simple, you just have to hold the shin guard with one hand and, with two fingers of the other hand, tap twice on the inner central part to turn it on. This process must be done with each shin guard. There is not a preference to turn on the left or right first. Turn them on outdoors before starting your match or training (Pay attention to the Satellite/GPA acquisition process described on this page).



## RIGHT SHIN GUARD



When turning on the right shin guard, you should be aware of its 3 power-on states:

- 
**FIXED LED (Steady Green Light):** means that the right HUOX 50 is powered on correctly.
- 
**SLOW FLASHING LED:** Green light with one single flash per second): Means correct connectivity of the shin guard to the mobile network, i.e. shin guard correctly connected to the HUOX Space platform.
- 
**FAST BLINKING LED (Green light with two blinks per second:** means GPS signal activated. To get a GPS signal, it is important to be in an open area and hold the right shin guard in your hand for about 40 seconds before putting it in place.



## LEFT SHIN GUARD



The HUOX 50 remains fixed from the start and will not change its status until it is turned off again.

## NUMBER IMEI OR MIC

A 15-digit identification number is printed on the inside. This number is unique and is the one that is entered into the HUOX Space platform so that the shin guards are correctly synchronized. If you add your shin guards through the HUOX Space website, the identification number appears under the name IMEI. If you are adding the HUOX 50 from the APP, this number appears as MIC. The ID number can be found on both the left and right shin guards. The synchronization process is described on page 26.

NUMBER  
IMEI OR MIC



## TURNING OFF YOUR SHIN GUARDS

Your shin guards will automatically turn off after five minutes of inactivity.

They will also turn off when inserted into the main charging base, as described in the "Charging your shin guards" section on page 13 of this guide.



## CHARGING BASE FOR YOUR HUOX 50

Your HUOX 50 comes with a charging base and USB cable. For a full charge, the approximate charging time is 4 hours. The first time you charge them you will need to leave them for 6 hours.



① Micro USB port to insert the cable to charge the shin guards.

② | ③ Charge identification LEDs for your HUOX 50. They also inform you when the HUOX 50s are fully charged. (Charging the LEDs blink, when fully charged the LEDs remain fixed).

④ | ⑤ Spaces in which to deposit the HUOX 50s to be charged.



## CHARGING YOUR HUOX 50

To charge the HUOX 50, you need to note that a USB cable is provided with the delivery of the shin guards. A USB adapter or another source such as a computer can be used as a power source which is not included in your pack.



1

First, place the HUOX 50 on the charging base. When loading the HUOX 50 it is important to place the shin guards correctly in the spaces of the charging base. To do this, you must place the shin guard vertically. Once the shin guard is vertical, you will need to insert the narrowest part of the shin guard into the space allotted for the charging base. Then press the shin pad down until it clicks into the bottom.



2

Plug the USB cable into the USB port, which is located in one of the laterals of the inferior part of the charging base.



3

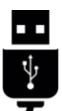
Then, plug the cable into the power source and charge the HUOX 50 for 4 hours (6 hours for the first time).

The charging base adapts to any power source from a USB adapter to a computer, for example. Please note that for the charging process to last four hours you need to use a 3.5 mA charger plug. If this is lower than recommended, the charging process may take longer.



4

The LEDs will give you the information if the shin guards are charging correctly or if the HUOX 50 are fully charged. If both LEDs, which are located on each side of the micro-USB port of the charging base (one LED for the left shin guard and one LED for the right shin guard), are flashing, it means that the HUOX 50 are charging correctly. When the LEDs remain fixed, it means that the HUOX 50s are already charged.



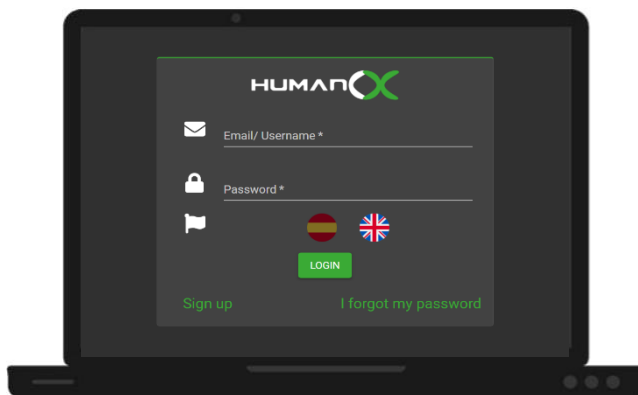




# HUOX SPACE

## GENERAL DESCRIPTION OF HUOX SPACE


HUOX Space is the HUMANOX platform where you can see your metrics for each match or training session. Here you can create a profile and link your HUOX 50 shin guards, as well as follow other users, have them follow you and share your metrics.



Registration to the HUOX Space platform can be done from the web or from the APP, available on both Android and iOS. To enjoy the advantages and benefits of the HUOX Space ecosystem you need to subscribe.

Remember that if you have any doubts or questions regarding the operation of the HUOX 50 device or the HUOX Space platform, you can contact Customer Service:

 Phone Numbers: +34956263058

 WhatsApp: +34655092190

 Email: [atencion.cliente@humanox.com](mailto:atencion.cliente@humanox.com)

## **A**ccess through the web

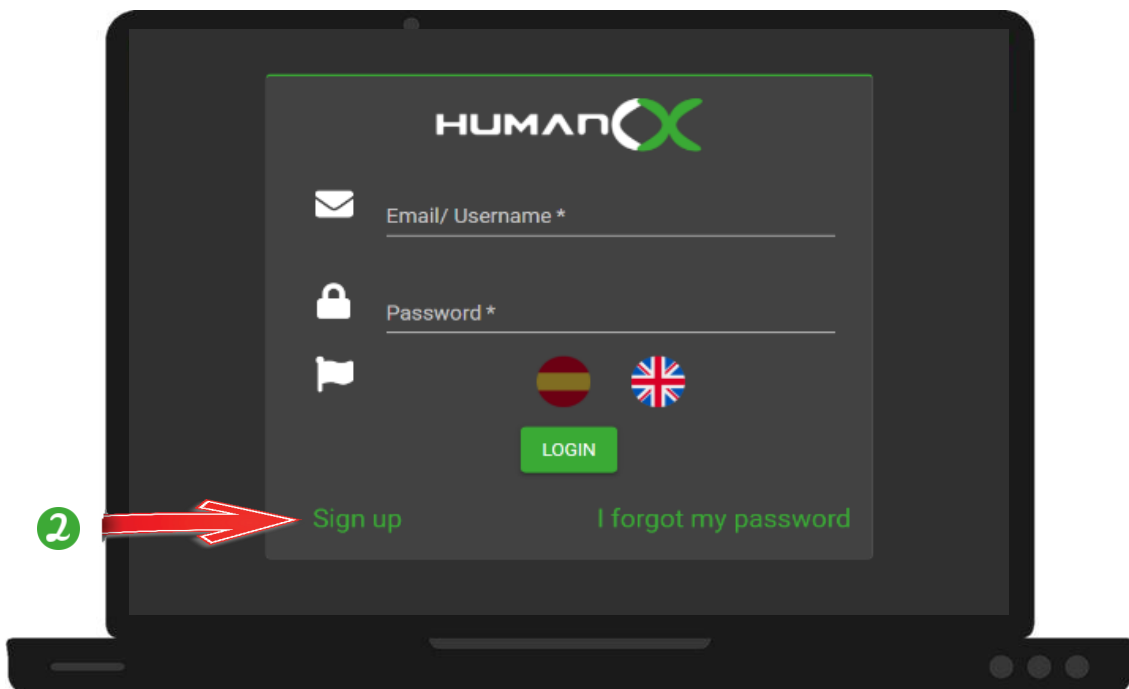
In the following pages, you can see the steps you need to follow to enjoy all the functionalities that HUOX Space offers through the web.

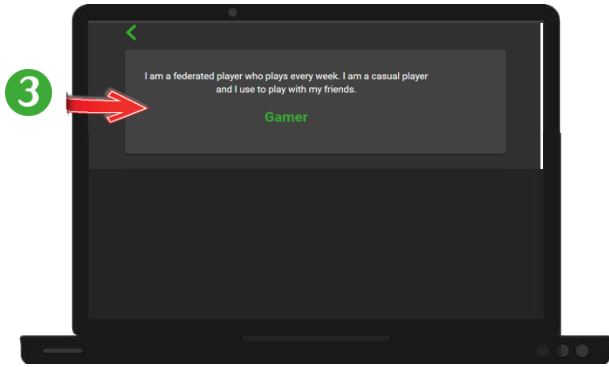
## **R**EGISTER ON THE HUOX SPACE PLATFORM

Registering on HUOX Space through the website is very easy. Remember that you need to be a subscriber to be able to see your metrics for each training session or match.

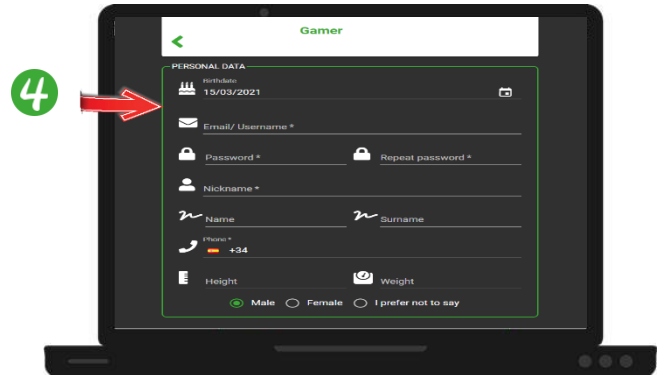
**1** Enter the website: <https://live.humanox.com>.

**2** Then click the button **“Sign up”**

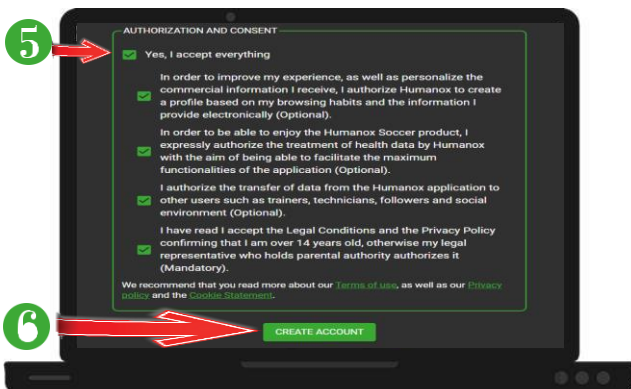




3 You will find three profiles: player, technical team (coach or physical trainer), environment (parents or followers). Choose the one that applies.

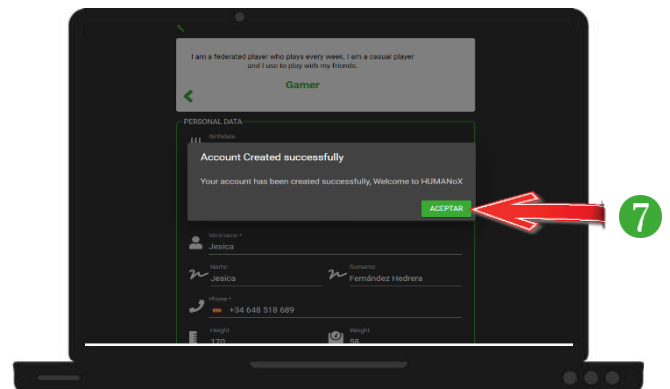


4 Fill in your personal data.



5 Accept the terms and conditions.

6 Click "CREATE AN ACCOUNT"



7 After the message "Account successfully created" pops up, click "ACCEPT."



# MAIN SCREEN

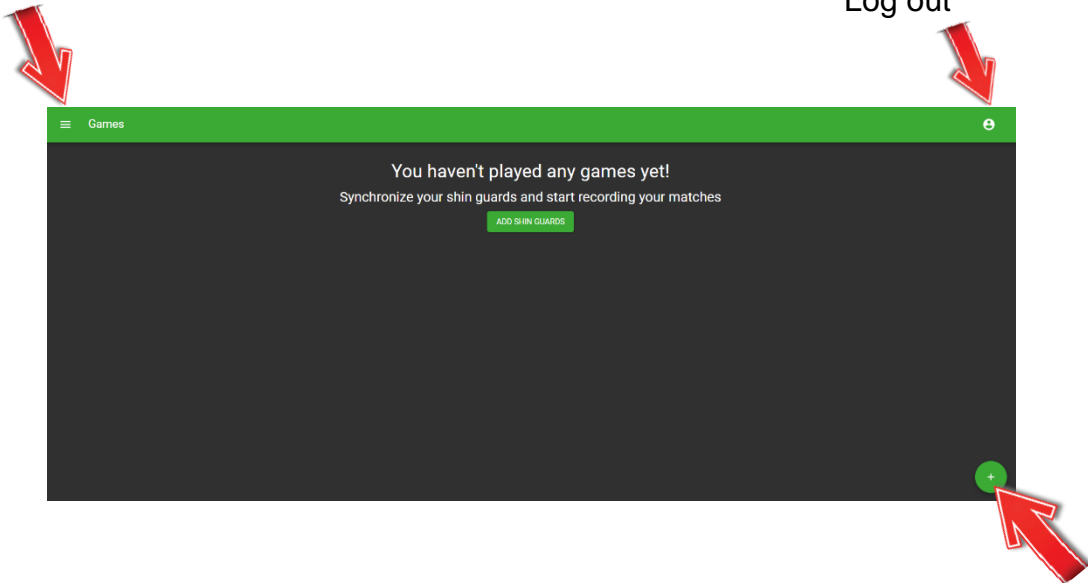
From the main screen you will be able to access the 3 HUOX SPACE menu selections

### Left menu selection:

- Add and remove shin guards,
- Start and stop matches,  
Check your metrics  
Interact with other users

### Superior Right Menu:

- Edit profile
- Log out



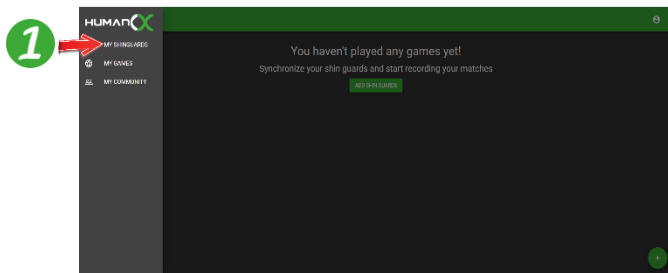
### Inferior Right Menu:

- Synchronize your shin guards
- Check the GPS signal status
- Record the match



# ADDING YOUR SHIN GUARDS

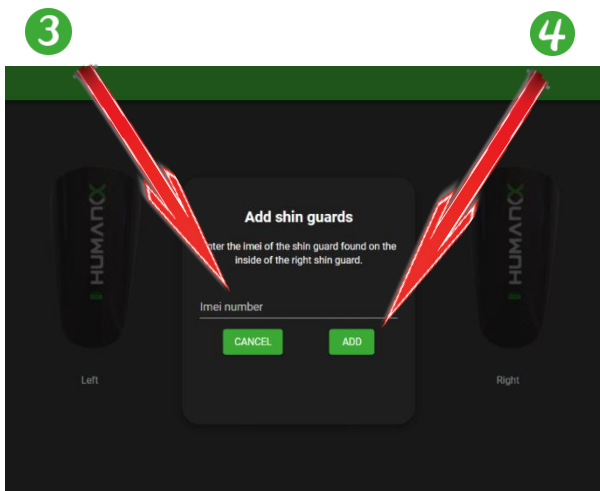
First of all, you need to add your shin guards to your previously registered user. To do this you have to turn them on, wait for the HUOX 50 LED to flash every second and follow the steps described below. Once added, through the APP or web, you will be able to record your matches or training sessions, as long as the HUOX 50 are turned on and they have a GSM and GPS mobile network signal. You will also be able to see in the APP and/or Web all the registered/recorded matches/trainings.



1 Click on "MY SHIN GUARDS"



2 Click on "ADD SHIN GUARDS"



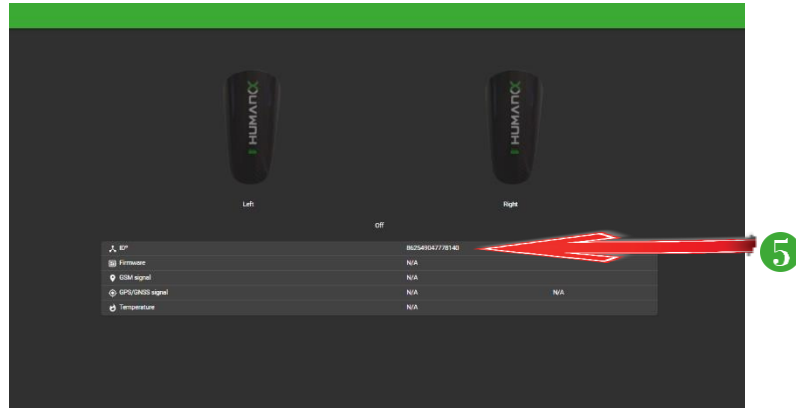
3 Fill in the IMEI number of your shin guards.

4 Click on "ADD"



The IMEI is the identification number of the HUOX 50 to connect to the HUOX Space platform. It appears on both the left and right shin guards, and is given under the name MIC.

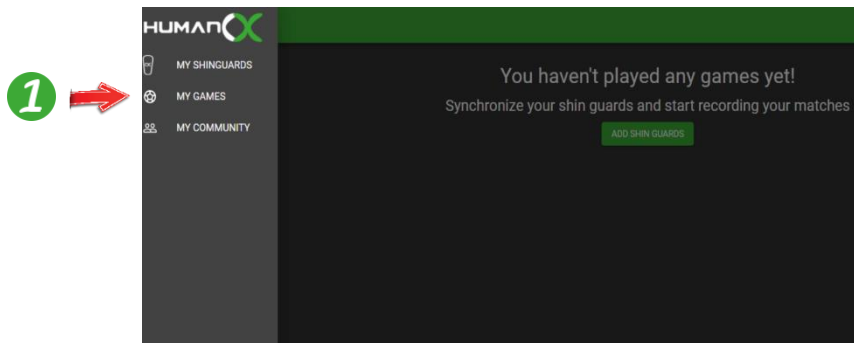




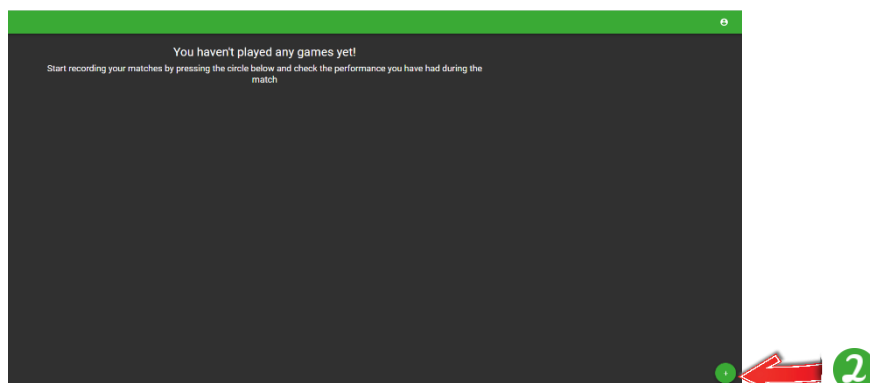
5 Check that the identification number is correct

## STARTING A MATCH

ATTENTION: Before starting the game, make sure that the HUOX 50s are turned on and connected to GPS (two flashes per second).

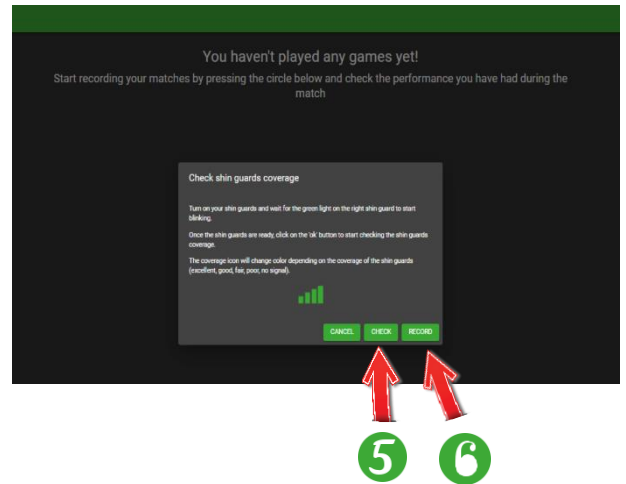
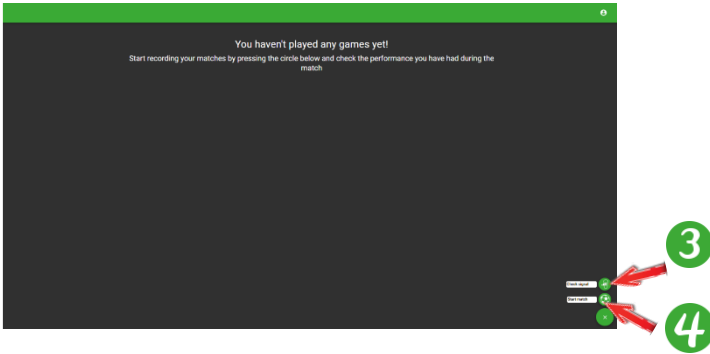


1 Click in "MY GAMES"



2 Click the green "+"





3 Optional, "Check the GPS signal" to see the GPS connection at the time.

4 Click the button "Start match".

5 Optional, check the GPS sign clicking on the "CHECK" button.

6 Click in "RECORD THE MATCH"



7 At the start of the game, a running timer appears, indicating that the game is recording successfully.

8 As the recording of the match is taking place, the data collected from the HUOX 50s will be collected as metrics in HUOX Space in real time.

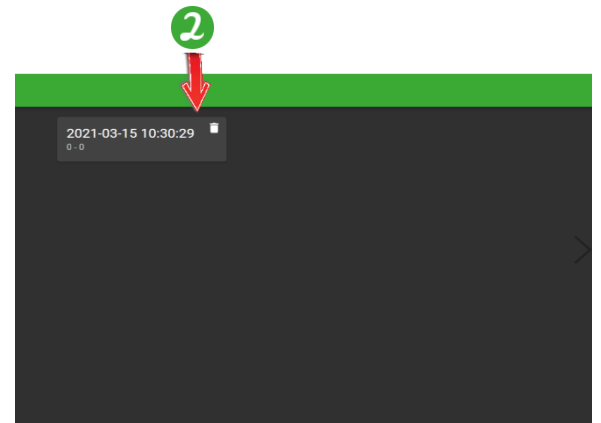
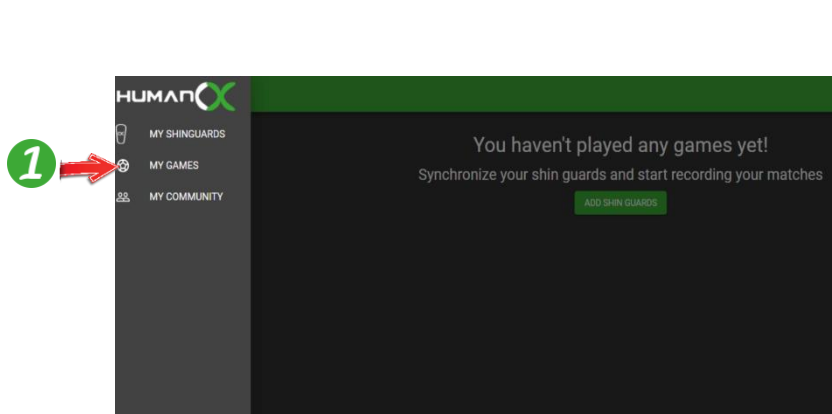
9 On the image of the field, you can see the position of the player in real time.

10 Once the match or training is over, click on the "Stop" button.



# CHECK YOUR METRICS

Once you have recorded your match you can check your metrics by following these steps:



**1** Click on "MY GAMES"

**2** Choose the match of your preference



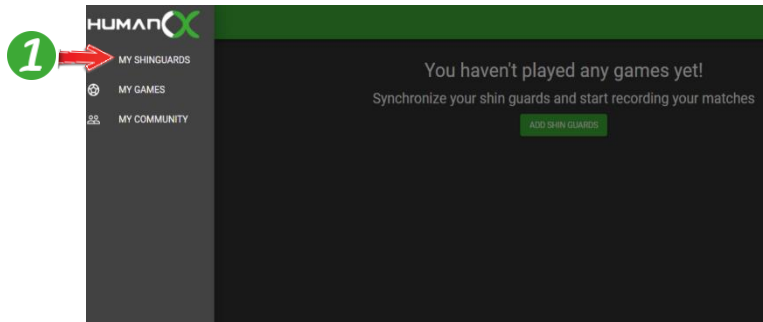
Example of metrics that are shown on in HUOX SPACE



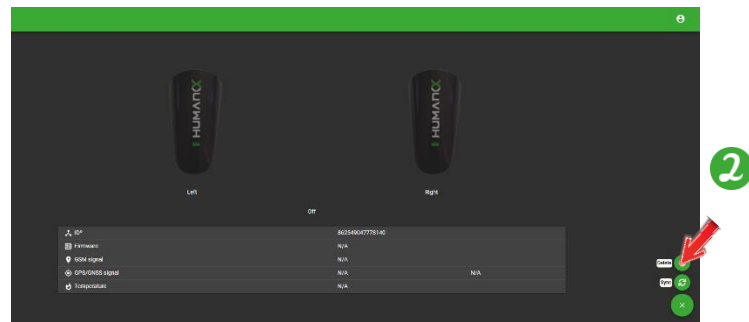


## CHANGING THE DEVICE

If for some reason you need changing your device, you first need to unlink the one you are using, and then add a new one as indicated in the "Add your shin guards" section (p. 19 of this guide).



**1** Click on "MY SHIN GUARDS"

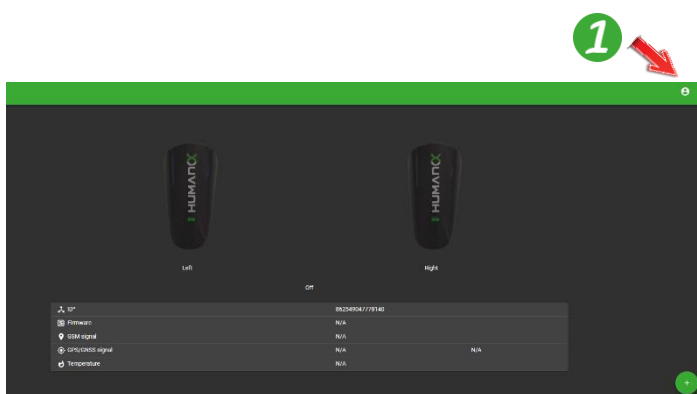


**2** Click on the green "+" button and select the option "Remove".

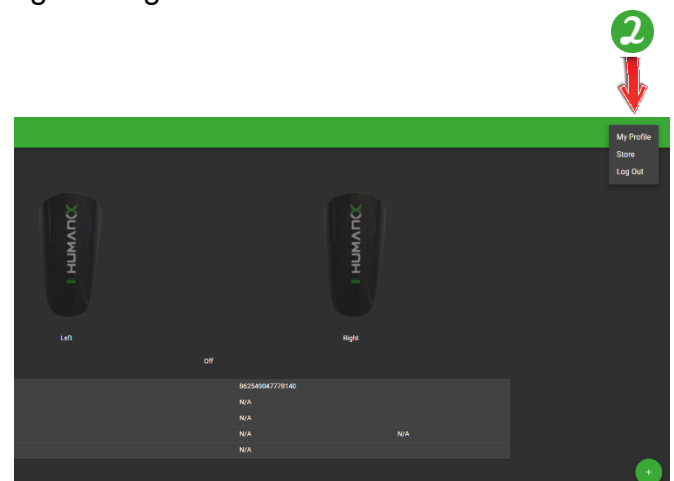
**3** Go to section: "Add your shin guards" (p. 19)

## LOSING SESSION

Once you have finished using the platform, do not forget to log out.



**1** Click on the superior right menu



**2** Click on the button "Log out"



# Access through the APP

If you prefer to access HUOX Space through the APP, it is also possible from both Android and iOS.

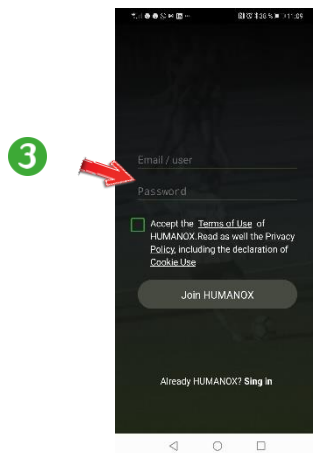
## HOW TO REGISTER

Registering with HUOX Space is very easy. All you have to do is follow the steps below. The first thing you need to do is download the HUMANOX APP. We remind you that in order to access your metrics to have an active subscription.



**1** Download the APP from Play Store or Apple Store

**2** Click the button "Sign up"

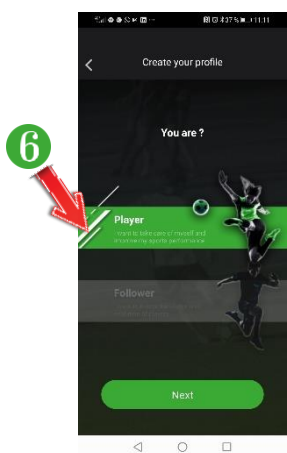


**3** Add the email and password that you wish to register yourself with

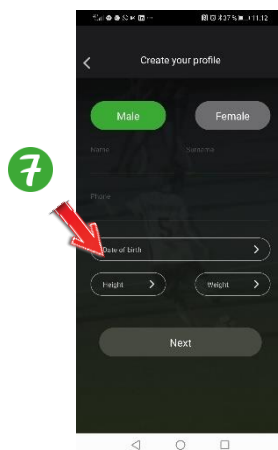


**4** Accept the terms and conditions.

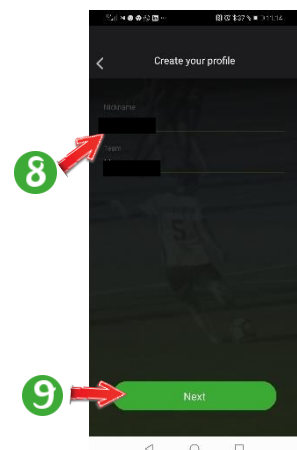
**5** Click on the button "Join HUMANOX"



**6** Choose a profile: "player" or "follower"



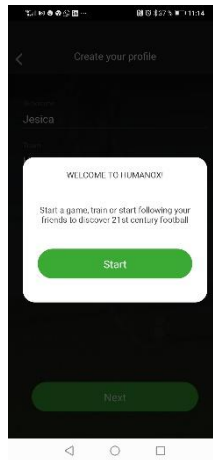
**7** Fill out your personal data



**8** Introduce your name and nickname

**9** Click on the button "Following"

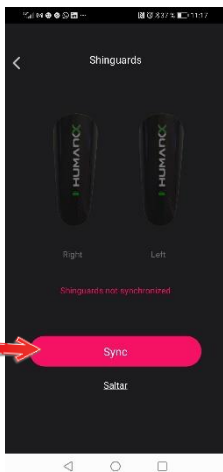




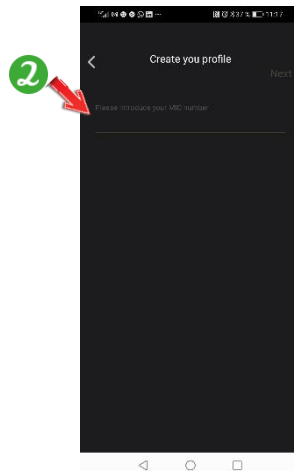
**10** Finally, a welcome screen pops up. Click on the button **"Start"**

## SYNCHRONISING YOUR SHIN GUARDS

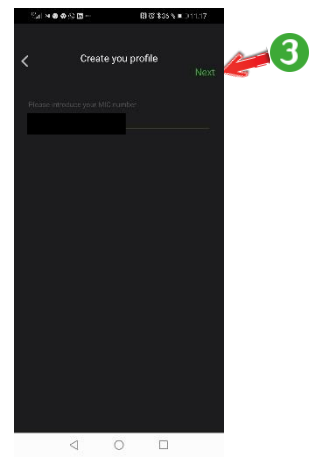
By syncing your shin guards, you can record your matches or training sessions, as long as the HUOX 50s are switched on and have a mobile network signal.



**1** Once you are registered, click the button synchronize

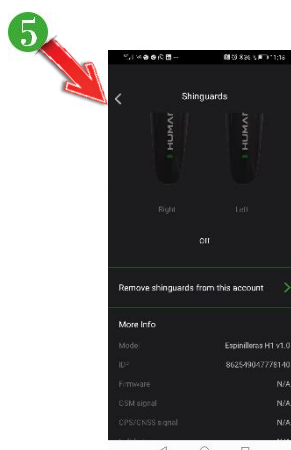


**2** Introduce the IMEI number of your shin guards



**3** Click the button **"Next"**

The MIC or IMEI is the identification number of the HUOX 50 to connect to the HUOX Space platform. It appears on both the left and right shin guards.



**4** Check that the IMEI number is correct

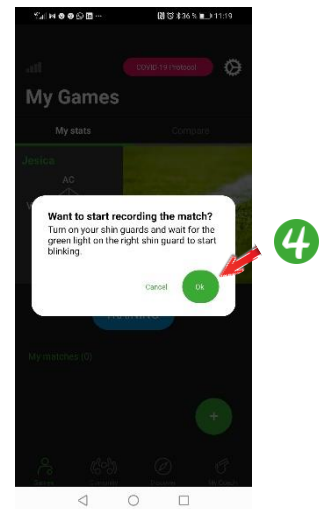
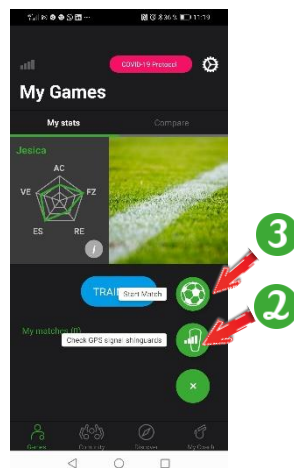
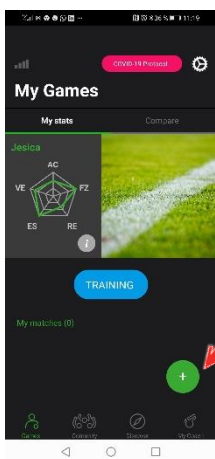
**5** Click on the icon to go to **"My profile"**

**4**



# STARTING A MATCH

**ATTENTION:** Before starting the match, make sure that the HUOX 50 is turned on and connected to the GPS signal (two flashes per second). Make sure you wear your shin guards in such a way that they do not move and in the correct position for the entire match, to obtain accurate metrics. The left shin guard should be in contact with the skin in order to obtain both body temperature and heart rate. The right shin guard does not need to be in contact with the skin.

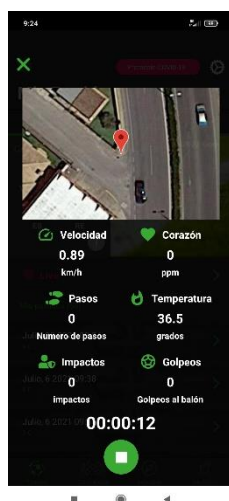


1 Click on the green button

2 (Optional) Check your GPS

4 Then, a screen with a confirmation statement will pop up. Click "OK"

3 Click on the button "Start a match"



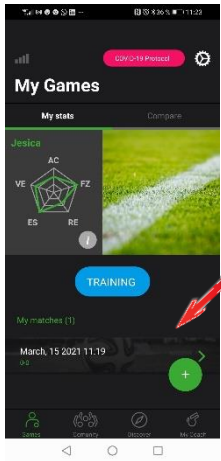
5 Once It's recording, real time data will pop up on the screen

6 Click on the "stop button" once the match or training is over

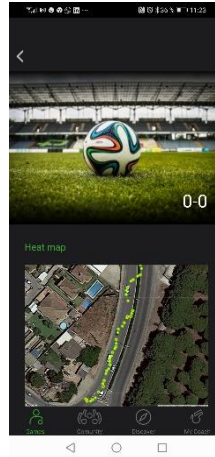


# CHECKING YOUR METRICS

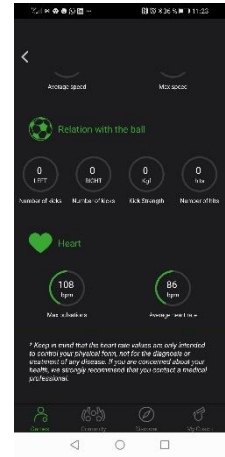
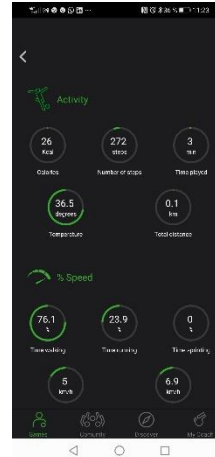
Once you have finished your match, you can check your metrics by following these steps:



**1** Once the match has been completed, it'll appear on the "My profile" screen. You need to select the desired match.

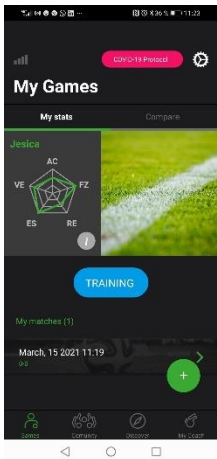


**2** The metrics screen will appear immediately

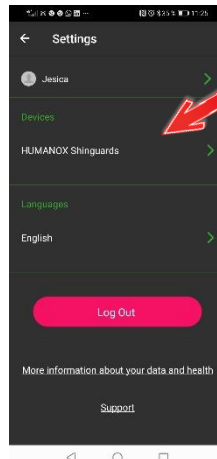


# CHANGING YOUR DEVICE

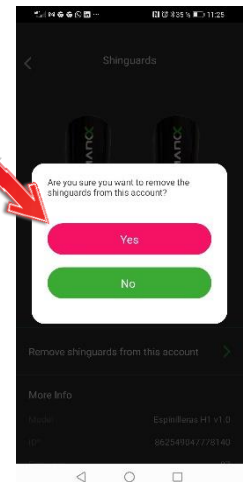
In case you need to change the device, you must first unlink the one you are using, and then add the new one following the steps indicated in the section "Synchronise your shin guards" (page 25).



**1** Click on the Wheel situated in "my profile" section



**2** Click on "Humanox Shin guards"

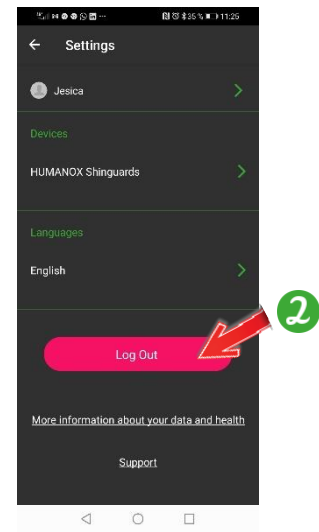
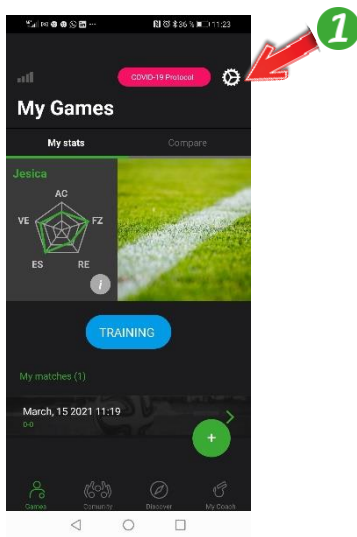


**3** Next, a confirmation screen will pop up. Click on the button yes. Then, the device will be removed.



## HOW TO LOG OUT

Once you are done working with HUOX SPACE, do not forget to log out.



**1** In the screen "My profile", click on the right superior menu

**2** Once you are inside the configuration menu, click on "Log out"



enjoy every moment



## RECOMENDATIONS & WARNINGS

### MAINTENANCE

- Use the shin guard correctly according to the present manual terms.
- Do not disassembly or manipulate the device.
- Protect the integrity of the device and do not damage parts or surfaces. Do not pierce or peel off the shin guard padding.
- Do not expose to extreme heat temperatures due to excessive sun exposure.
- Keep the shin guards stored in a cool and dry place inside the bag together with the charging base while they are not being used.
- Protect the device from water.
- The devices must not be thrown or hit outside of their normal use.
- If the device is to be left unused for a long period of time, it is necessary to store it with a discharged battery and perform at least one battery charge and discharge cycle every 6 months.

### CLEANING

- Cleaning the device should be done by rubbing with a soft, damp cloth, without immersing or putting the device under a stream, and without applying excessive pressure to the padding.
- Use only water. Do not use solvents, alcohols, paints or any other type of chemical product.

### WARNING

- The HUOX 50 is an electronic device that requires connection to a 2G network and is not considered a medical device. Therefore, it should not be used for diagnostic purposes or as a substitute for obtaining measurements that require the use of a laboratory or precision medical device.

### BATTERY

To obtain the maximum performance and durability of the battery it is necessary to follow these recommendations. Failure to follow these recommendations can reduce battery life or cause irreversible damage and the device could stop working.

- If the device is stored for a long period of time, ensure that the ambient temperature is kept between 15 °C and 35 °C.
- Do not use the device if the temperature reaches values outside the range between -10 °C to 60 °C.
- Do not charge the device if the ambient temperature reaches values outside the range between 10 °C to 45 °C.
- Do not pierce or bend the device.
- Do not expose the device to high temperatures.
- Do not bring the device close to fire.
- Do not immerse or put under a direct stream of water.
- Do not remove the protections or stickers from the battery or the circuit.
- Do not replace or modify the battery or the electronics of the device.

- The battery is a fixed element in the electronics of the device that cannot be replaced or modified. The only valid charging method is inserting the shin guard into the charging base provided.
- The charging base must be powered by a PS2 source according to the 62368-1 standard.

## **USE RECOMMENDATIONS**

- To prevent injuries, use a suitable method of support to the leg that guarantees a fixed position of the device throughout the session.
- Each shin guard has its unique partner. Do not separate a shin guard from its partner or exchange it with another pair.
- Use the shin guards positioned correctly on the leg, with the widest part towards the knees and following the RIGHT and LEFT indications.

## **COMPOSITION AND MATERIALS**

- Polyethylene foam with a closed cell structure with good resistance to weathering and moisture absorption of 1%
- Carbon fiber shell.
- Tropicalized internal electronics sealed with a protective plastic.
- Traces of contact glue may appear at the joints between the shell and the foam.







## **FCC Regulatory notices**

Humanox Soccer, S.A. has not approved any changes or modifications to this device by the user. Any changes or modifications could void the user's authority to operate the equipment.

### **INTERFERENCE STATEMENT**

This device complies with Part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). 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.

### **WIRELESS NOTICE**

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **FCC CLASS B DIGITAL DEVICE NOTICE**

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:

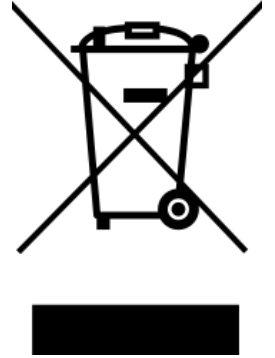
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **Declaration of obtaining CE certification**

Humanox Soccer, S.A. hereby declare that the equipment complies with the applicable European Directives and Standards and their amendments. You will find the full text of the EU declaration of conformity at this Internet address:

## **RAEE directive on disposal and recycling information**

All products bearing this symbol are waste from electrical and electronic equipment (WEEE according to Directive 2012/19/EU) that should not be mixed with unsorted household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a collection point for the recycling of waste electrical and electronic equipment designated by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences for the environment and human health. Contact your installer or local authorities for more information on the location and conditions of these collection points.



If you have any questions regarding the operation of the HUOX 50 shin guards and the HUOX Space platform, please contact us:

☎ **Telephones: +34 956263058**

📞 **WhatsApp: +34 655092190**

✉ **Email: [atencion.cliente@humanox.com](mailto:atencion.cliente@humanox.com)**



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