

# User Manual & Technical documentation

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#### Before you begin:

Before using your Device, please read this manual carefully. It contains all the information you will need to use the device safely.

#### Precautions to take before use

There is a risk of injury or accident to yourself or others, as specified in this manual.

CAUTION:

This manual indicates that there is a risk of material damage to this or any other device.

The Digitsole Pro® solution is not intended to be used as a diagnostic tool. Digitsole Pro ® can be used to assist a healthcare practitioner or any user in completing a clinical evaluation using the data offered by the product. The healthcare practitioner is responsible for making the diagnosis.

Digitsole Pro  $\circ$  is a device that can be used to examine the walking and running gait of patients aged 7 and older who have a shoe size of  $\geq$  30 (EU size = 12-12,5 US Kids). The size of the insole should correspond to the patient's foot size. With Digitsole Pro  $\circ$  and DSPods insoles, it is mandatory that patients wear clean socks.

Analyses should be carried out on patients who are able to:

- Walk and run (depending on the type of analysis the healthcare provider wishes to perform)
- Understand, follow, and apply simple mobility instructions

#### WARNING

- Do not open, puncture, or punch the DSPods.
- If a DSPod is damaged, do not attempt to repair it; instead, contact the seller.
- Do not throw it in a fire.
- Shoes with a metal plate on the lower part should not be worn.
- Avoid bending or twisting your DSPods.
- If the DSPods have deteriorated, do not use them.
- A wound must not come into direct touch with the insole or DSPod.
- Please contact Digitsole support at contact@digitsole.com if the device produces results that differ from your observations.
- If the device displays conflicting information or text, clear the browser cache and refresh the page with the F5 key.
- Do not use the DSPods near a magnetic resonance device. \*

\*The product's safety in a magnetic resonance environment has not been investigated. It has not been tested in the magnetic resonance environment for heating or undesired movement. The product's safety is unclear in the magnetic resonance environment. A magnetic resonance exam performed on a person who has this medical device may result in damage or device malfunction.

#### RF Warning

The device has been tested to ensure that it meets general RF exposure criteria. The device can be utilized without restriction under portable exposure conditions. This device conforms with the RF radiation exposure limitations established by the EC, FCC, and Industry Canada for the general population (uncontrolled exposure). This device must not be co-located with any other antenna or transmitter, nor may it be used in conjunction with any other antenna or transmitter.

You can request a paper copy of this notice by emailing us at contact@digitsolepro.com

#### Intended use

Digitsole Pro® standard version is a solution for healthcare practitioners that displays objective data based on spatio-temporal and kinematic patient mobility metrics. Mobility reports provide the following information to healthcare practitioners:

- A set of biomechanical metrics with a visual comparison to literature standards,
- The digital "gaitline" linked to pressure,
- Basic interpretations of mobility parameters,
- The evolution of mobility parameters as a result of various analyses.

A standardized test can be selected by the healthcare practitioner to focus on the biomechanical factors connected to the patient's mobility.

The healthcare practitioner will use these reports to conduct a more in-depth medical investigation in order to decide a diagnosis.

#### Contraindication

There is no specific medical contraindication; nonetheless, testing should only be undertaken on patients who can:

- Walk and run (depending on the type of analysis the healthcare provider wishes to perform)
- Understand, follow, and apply simple mobility instructions.

#### **Adverse effects**

To date, no adverse effects have been identified

# **Product description**

Health practitioners, paramedics, sports coaches, caregivers, and anyone who is qualified to perform quantified mobility analyses can use the Digitsole Pro® device (gait and run).

Digitsole Pro ° can be used as part of a standard mobility analysis protocol (walking or running) at a patient's session with their health practitioner, whether or not they have reported mobility issues as a result of various reasons.

Digitsole Pro  $^{\circ}$  can be used in adults and children over the age of 7, with a shoe size of  $\geq$  30 (EU size = 12-12,5 US Kids), and in the following situations:

- Mobility assessment
- Follow-up/monitoring on-site or remotely
- Rehabilitation follow-up

Digitsole Pro® insoles and DSPods can be utilized on several patients.

The Digitsole Pro <sup>®</sup> device is intended for usage in a medical professional context. However, the system can be utilized in other settings (hospital, exterior, interior type house or healthcare structure) to monitor and collect daily mobility data for patients (adults and children aged 7 and over).

The Digitsole Pro \* system can be used to track people's mobility data and provide warnings to patients, family, caregivers, health practitioners, and paramedical professionals, as well as to export data analyses from a group of patients in the form of dashboards that show compiled product data. This information can be downloaded and organized into a dashboard, which can then be shared with health practitioners, paramedics, sports coaches, family caregivers, or anyone who is qualified to interpret gait or running parameters.

#### Kit contents

The Digitsole Pro \* kit comes with a case containing the following items:

- 6 insoles with the following sizes:
  - o (EU size) 36/37, 38/39, 40/41, 42/43, 44/45 and 46/47
  - o (US Men size) 4.5/5.5, 6-7, 7.5-8.5, 9-10 and 10.5-11.5
  - o (US Women size) 5.5/6.5, 7-8, 8.5-9.5, 10-11 and 11.5-12.5
- 2 DSPods (1 right, 1 left)
- 1 DSPods charger kit, consisting of a charger plug and a charger dock
- 1 document indicating where the user manual may be found and how DSPods can be inserted into Digitsole
  insoles
- 1 document describing how to use the charger kit
- A strap



## **Authorized accessories**

Kit of a pair of DSPods	DSPS001-KIT10
Charger Kit	DSPS001-KIT00
- DSPods charger socket	DSPS001-CAB00
- DSPods charger dock	DSPS001-CAB10
Digitsole Pro case	DSPS001-PCK00
Digitsole Pro 30-32 insole (US 12-1,5)	DSPS001-INS30
Digitsole Pro 33-35 insole (US 2-4)	DSPS001-INS33
Digitsole Pro 36-37 insole (US Men 4.5-5.5 – US Women 5.5-6.5)	DSPS001-INS36
Digitsole Pro 38-39 insole (US Men 6-7 – US Women 7-8)	DSPS001-INS38
Digitsole Pro 40-41 insole (US Men 7.5-8.5 – US Women 8.5-9.5)	DSPS001-INS40
Digitsole Pro 42-43 insole (US Men 9-10 – US Women 10-11)	DSPS001-INS42
Digitsole Pro 44-45 insole (US Men 10.5-11.5 – US Women 11.5-12.5)	DSPS001-INS44
Digitsole Pro 46-47 insole (US Men 12-13 – US Women 13-14)	DSPS001-INS46

## **Recommended Computer/Phone Specifications**

The Digitsole Pro interface is compatible with both PCs and tablets.

The interface: MacOS/IOS - Windows - Android.

Web browser: Mozilla Firefox – Google Chrome – Microsoft Edge. The Digitsole Pro application is compatible with mobile phones.

OS: Android 6.0+/iOS 14.0+.

## **Functioning of the DSPods LEDs**

- LEDs are red: DSPods are charging.
- LEDs are off:
  - DSPods are plugged in, which means they are fully charged.
  - O DSPods are not charged, which means that they are in standby mode. Simply shake them to bring them out of this mode.
- LEDs are blinking: DSPods are ready for use.

# **Product Installation**

## **Product operation**

Insert the DSPods into your insoles as follows:

- Identify left and right DSPods



- Identify the left insole and the right insole



Place the left DSpod in the left insole and the right DSPod in the right insole. Please keep in mind that the DSPods must be inserted in the correct direction for the data capture to work (see image below)

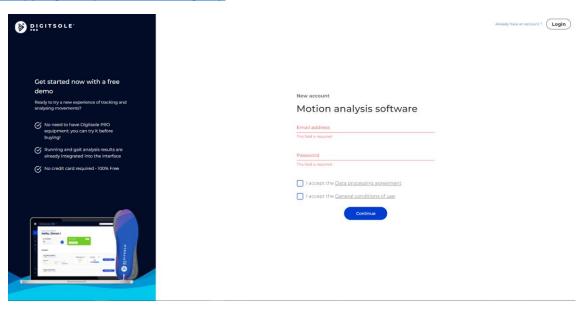


The data acquisition can also be done with the use of DSPods positioned on the bottom of the foot if the positioning of the DSPods avoids any unexpected slippage.

#### **Account creation**

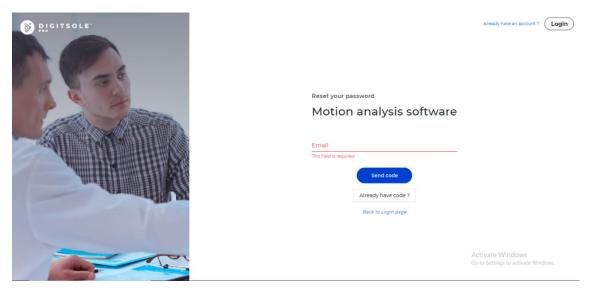
If you have not already done so, go to the following page to create a Digitsole Pro \* account:

https://app.digitsolepro.com/auth/sign-up



After reading the data processing contract, enter the email address and password you want to use for your Digitsole Pro \* account.

Your password must have at least eight characters, contain at least one number, one lower case letter, one capital letter, and one special character for security purposes.



After that, you will receive an email with a code to confirm your registration. Please enter it in the field provided.

Then enter your personal data to finish your account creation.

## Two-factor authentication activation

To active the two-factor authentication, go to the Your account in the top right corner



Then select **Enable dual authentication** in the menu.



Scan the QRCode with your two-factor authentication app (for example, Google authenticator) and enter the code in the area specified for this purpose.

#### Enable dual authentication

Scan the QR code below with your dual authentication application



## Download the mobile application

The Digitsole Pro® app is free and works with iOS 14.0+ and Android 6.0+ mobile devices. Please check the firmware version on your phone to see which devices are compatible with the apps.



Enter Digitsole Pro® in the search bar to locate the application:

- For iOS devices, go to the App Store®
- For Android devices, go to the Google Play™ store

It is necessary to use the browsers Mozilla Firefox, Google Chrome, Safari or the latest version of Microsoft Edge. Please refer to https://www.digitsolepro.com/customer-support compatibility section for compatible browser versions. It is necessary to use a phone with Android 6.0+ or iOS 14.0+.

# Use of the mobile application

## Connection to the application



To access the application, ensure that you have already created your account on the web interface, and you can connect to this application using the same credentials.

To log in, enter your account email address and password.

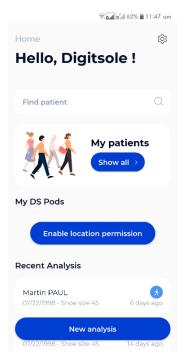
If you have forgotten your password, go to the Digitsole Pro® interface and create a new one.

## **DSPods management**

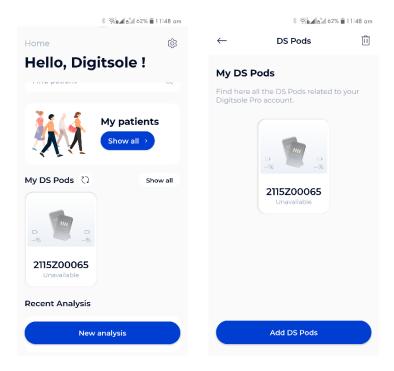
#### Add DSPods

To add DSPods to your account from the main app screen, follow these steps:

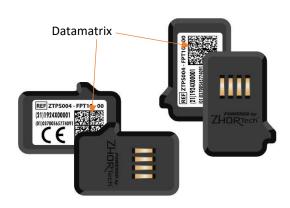
If you do not already have DSPods, go to the "DSPods" area and click Add



• If you already have DSPods, go to the "My DSPods" area and click on "See all," which will redirect you to a list of your DSPods. Select Add DSPods from the menu.



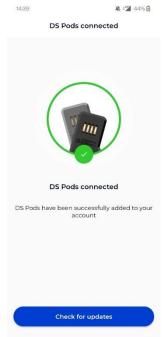
To add your DSPods to your account, go to a new page and scan the Datamatrix code from your pair of DSPods. If you have more than one pair of DSPods, repeat the procedure.





Datamatrix code example

#### **Update DSPods**



Click on **Check for updates** to check the DSPods version and see if they need to be updated.

You will have the choice to perform the update now or later.

We advise you to do it now but if you choose to do it later, you will have to rescan your Pods by adding them to your account again.

#### Remove DSPods



Click on "See all" in the "My DSPods" section from the main application screen to be redirected to a list of your DSPods. Click the trash can icon in the upper right corner of the screen, select the pair(s) you want to delete, and then click **Delete selected pairs**. To exit delete mode, click on the cross icon in the upper right corner of the screen.

#### **Check battery levels**



When the DSPods are charging, you will not see the charge level of your DSPods.

To check the charge level of your DSPods, go to the DSPods page. The battery charge levels of the left and right DSPods are displayed. By scrolling down on the screen, you can refresh the battery levels.

#### In the event of a problem:

If you still can't view the battery level after reloading the page, your DSPods may be "asleep" (to save power, they automatically turn off after about 20 minutes). Shake them vigorously to "wake them up" (please DO NOT hit them on a hard surface as this may damage the sensors). Then, by swiping down on your screen, you can reload the website and see the battery of the DSPods, this action can take 30 seconds.

## **Application settings**

#### Units

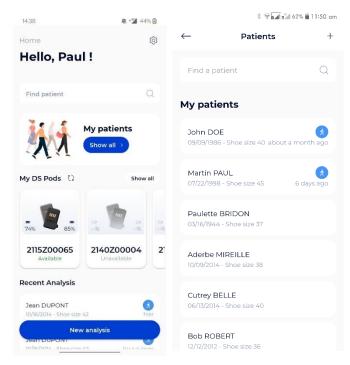
In the "Settings" section, you can choose the system of units you want to use in the application. You can choose between the metric and imperial systems.

#### **Languages**

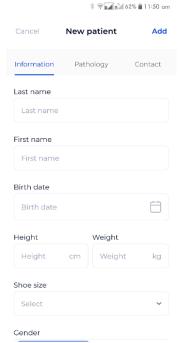
Our application is available in several languages. The choice of the language is defined according to the language set as the main language in your phone.

## **Patient management**

#### Add a patient



To add a new patient to your account from the main application screen, click on **See all** under the "My patients" area, then on the + sign at the top right of your screen.



A form appears; complete the patient file by filling out at least the information and pathology pages. If your patient has no pathology, select "Healthy patient."

It is critical to select the correct pathology because it will affect the interpretations and standards of the analyses.

The Contact tab is optional. However, it allows you to add your patient's contact information so you may easily reach them.

NB: Note that with imperial units, choose the gender of the patient first to access the men or women's sizes.

#### Edit a patient

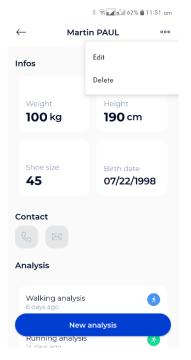
Click on the patient you want to edit from the list of patients, and the patient file will open. Select **Edit** from the menu at the upper right of the screen. When the form appears, fill in the fields and then click **Submit** to save your changes.

After that, the patient's file will be updated.

#### Delete a patient

Click on the patient you want to delete from the patient list, and the patient file will open. Select **Delete** from the menu at the upper right of the screen, then confirm the deletion. After that, you will be taken to the newly updated patient list.

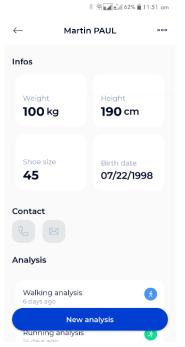
Please note: This is an irreversible action.



#### Contact a patient

Click on the patient you want to contact from the patient list and the patient file will open.

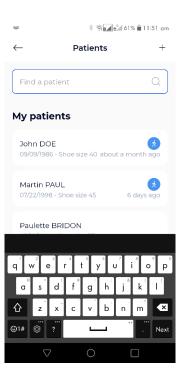
If you have entered your patient's phone number, you can call them by clicking the **Call** button. If you have entered your patient's email address, you can send a message by clicking the **Send a message** button



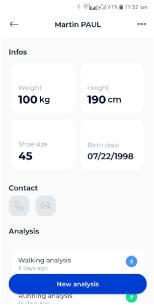
#### Search a patient

Type either the last name and/or the first name of the patient you want from the patient list in the text field at the top of the screen.

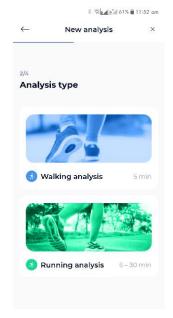
Note: The patient search only works with one word, so if you write your patient's first and last name in the search bar, you will not find any matches.



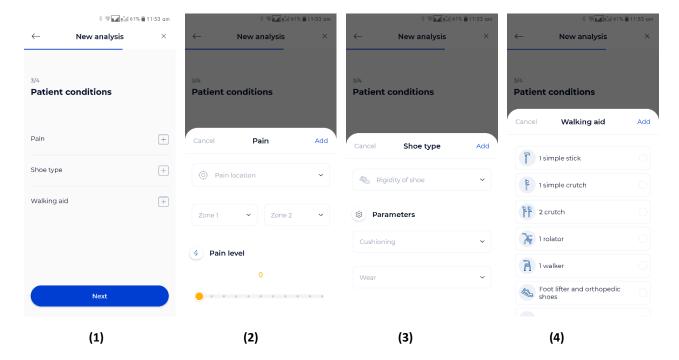
## Start and stop data capture



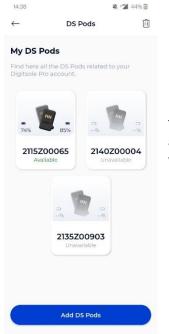
 $1-{\sf Go}$  to your patient's file once your patient is created and your DSPods have been added to your account. Click on the button New Analysis.



2 - Next, choose the type of analysis



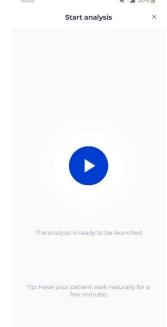
- 3 -Using the menu above, you can then enter further information about your patient. (1)
  - You can enter the location and intensity of your patient's pain(s) in the Pain tab (2).
  - You can specify the stiffness and cushioning of your patient's shoes in the Shoe type tab (3).
  - Any walking aid device used by your patient should be listed in the Walking aid tab (4).



Then pick the pair of DSPods with which you will use for the data capture; the application will then establish a connection to the DSPods and send you to the screen where you can begin the analysis.



**CAUTION:** If you have multiple pairs of DSPods, make sure to choose the ones that correspond to the insoles in your patient's shoes.



Once the DSPods have been placed in the insoles and the insoles have been placed in the patient's shoes, click the **Play** button to begin the data capture. Following the appearance of the stopwatch, your patient should remain in a static position for 3 to 5 seconds for initialization before they start to walk or run.



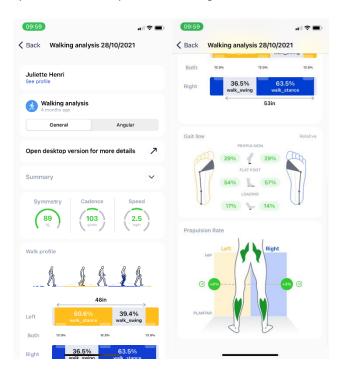
Click the **Stop Analysis** button to end the data capture. When the data capture is complete, the data is transmitted to the Digitsole Pro® web interface.

## View the data

In the "My patients" area, click **See all**, then pick the relevant patient. You are now in the patient file.

Click on the analysis you want to see in the "Analyses" section.

You can select the sort of view you want at the top: General or Angular.



Clicking the **For more details** option will automatically link you to the Digitsole Pro web interface, where you may perform a more intensive analysis of the results.

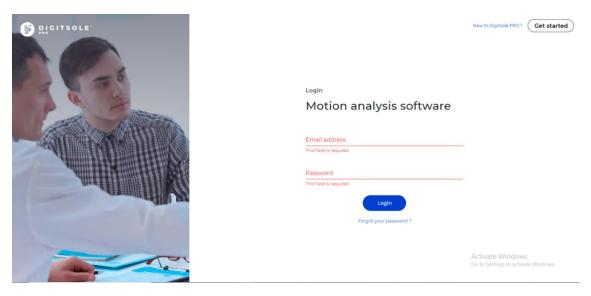
#### NB: If you have "Not enough steps" at the end of your activity:

- Make sure to place the DSPods in the right position in the insoles. (Refer to page 9)
- Make sure you stay still during the initialization phase.
- In the walking analysis, make sure more than 20 steps have been taken during the acquisition.
- In the running analysis, make sure the run speed is more than 8 km/h.

# Using the web interface

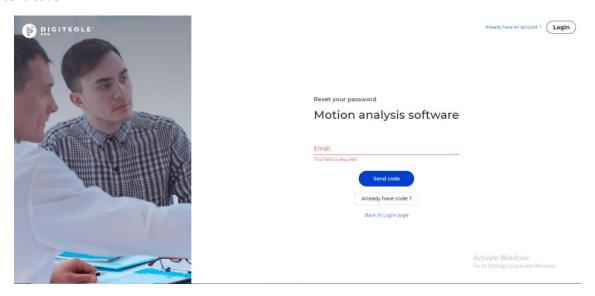
## Login to the interface

To access the interface, ensure that you have already made your account on the web interface. You can connect to this application using the same credentials. Log in via the following link: <a href="https://app.digitsolepro.com/auth/sign-in">https://app.digitsolepro.com/auth/sign-in</a>

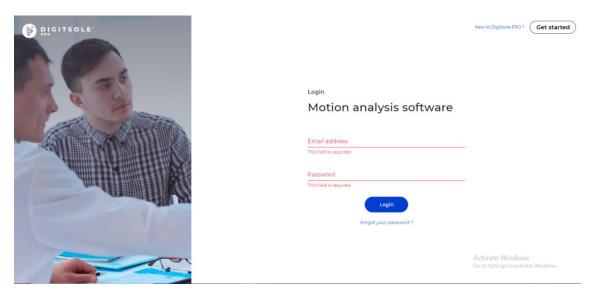


To log in, enter your account's email address and password.

If you have forgotten your password, click **Forgot password**, enter your email address in the provided box, and then click **Send code**.

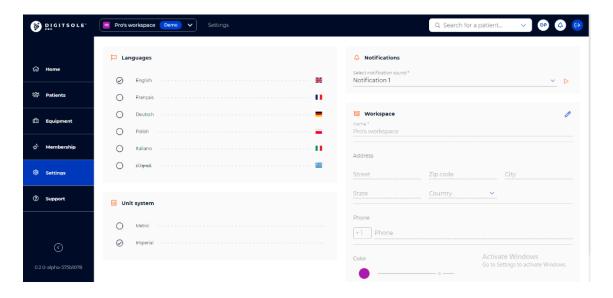


Along with your new password, enter the code you received through email. When you click **Submit**, your password will be changed.



You then proceed to the login screen, where you enter your email address and your new password to use Digitsole Pro®.

## Web interface settings



#### **Units**

In the "Settings" section, choose between the metric or imperial systems of units to use on the web interface.

#### Languages

Our web interface is available in several languages. In the "Settings" section, you can choose the language you want to use on the web interface

#### **Notifications**

Once you have performed a Digitsole Pro® analysis via the mobile application, the results are transmitted directly to the web interface. You will be notified by a sound. The notification can be found in the dedicated tab at the top right of your screen, by clicking on it you will have direct access to the analysis results of your patient.



You can change the sound of the notification in the settings of the web interface. You can choose between several sounds.

## Changes to my account

#### Information management for health practitioners

To change your practitioner information, go to Your account button at the top right



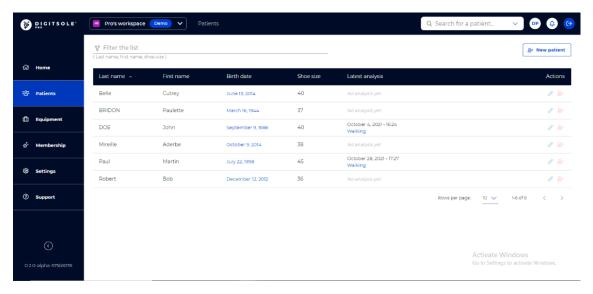
Then, to edit your practitioner information, click the **Pen** icon.



## **Patient management**

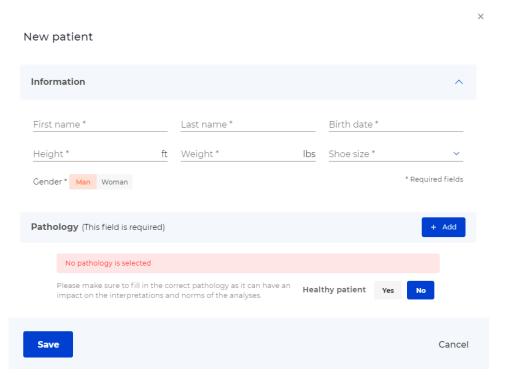
#### Add a patient

Select the **Patients** tab, then **New patient** on the top right.



A new window opens, allowing you to enter your patient's details, address, preferred method of contact, purpose for consultation, and any history and pathologies.

Mandatory fields are indicated with an Asterisk (\*) in the "Information" section and in the "Pathology" section. When finished, click **Add** 



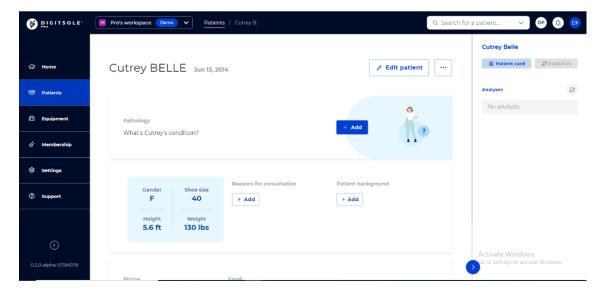
NB: Note that with imperial units, choose the gender of the patient first to access the men or women's sizes.

#### Edit a patient

To make changes to a patient's file, go to the Patient tab and then choose the patient.

Click **Edit patient** to make changes to the patient's personal information, address, and contact information.

Depending on the data already entered, you will be able to change or add a known pathology, cause for consultation, and history by clicking on the **Pen** icons or on **Add** to add new information.

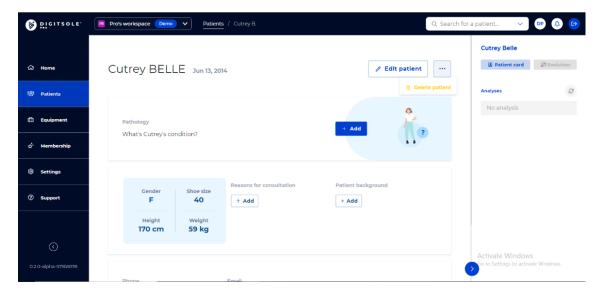


#### Delete a patient

To make changes to a patient's file, go to the **Patient** tab and then choose the patient.

To change the patient's personal information, address, or method of contact, click the 3 dots at the top right, then **Delete patient**.

Please note: This is an irreversible action.



#### Search a patient

Type the last name and/or first name of the patient you are looking for in the **search for a patient** section at the top right of the **Home** page, and then click on their name to access their patient file.



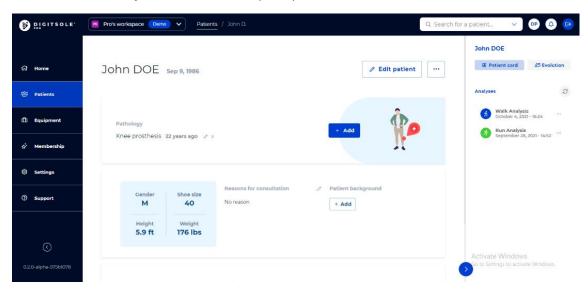
## **Delete an analysis**

Select the **Patients** tab, then the selected patient's line.

You are now in the patient file.

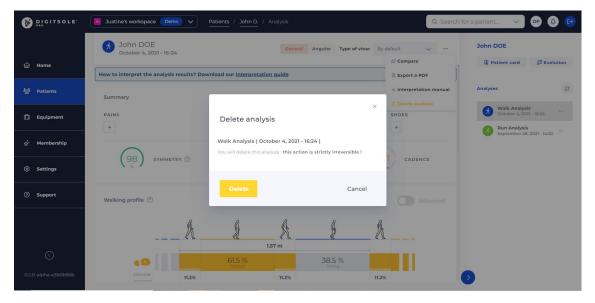
The "Analyses" section is on the right.

Click... and select **Delete analysis** next to the data capture you want to delete.



A window appears, asking you to confirm your deletion request.

The analysis will be permanently deleted if you click **Delete**.

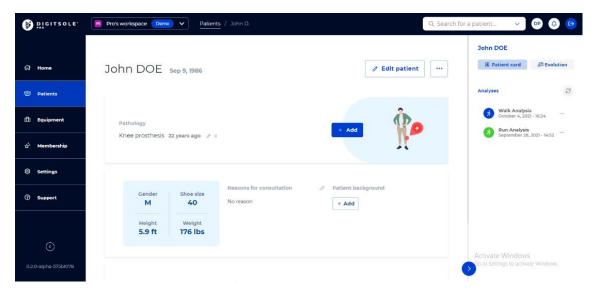


## View the analysis

Select the Patients tab, then the selected patient's line.

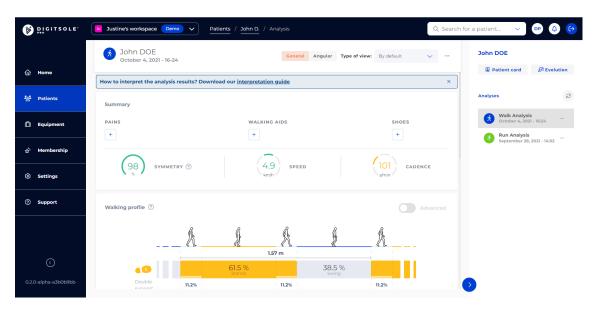
You are now in the patient file.

The "Analyses" section is on the right. Select the analysis you wish to view by clicking on it.



The patient analysis is now displayed.

In the top right corner, you can select the type of view you want: General or Angular, then: Neurological, Trauma, Rehabilitation. You can also select the default view or edit it with the settings that you want to see.



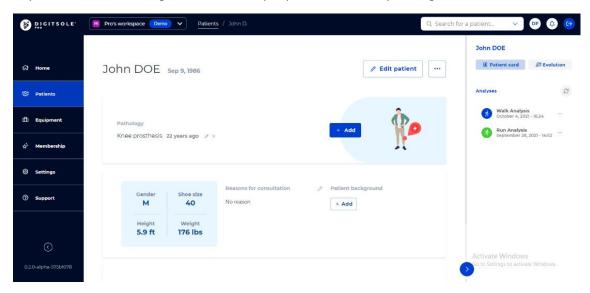
## **Generate report**

#### **Export report**

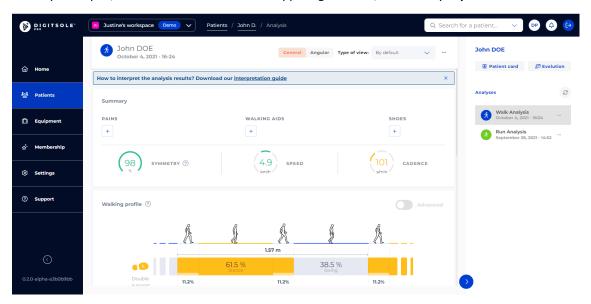
Select the **Patients** tab, then the selected patient's line.

You are now in the patient file.

The "Analyses" section is on the right. Select the analysis you wish to view by clicking on it.



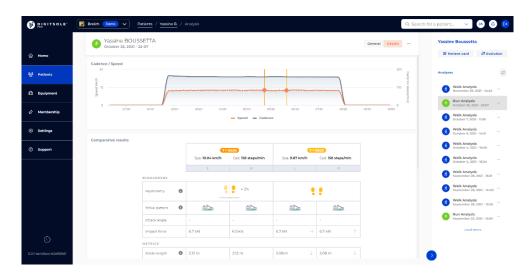
Once the analysis is open, click on the three dots in the upper right corner, followed by **Export PDF**.



The export analysis page will appear.



For more details about exporting a run analysis, select two points on the details tab chart as below:



You can then click Export PDF which opens the analysis export page. By checking the details box, you will have access to a more detailed PDF including the comparison of the two points you selected earlier.

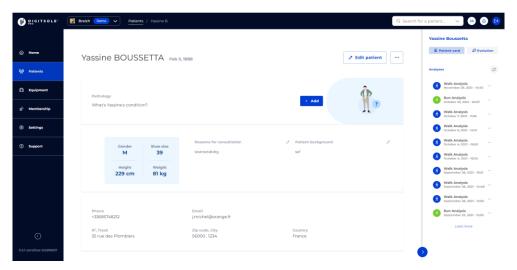


#### **Export a Comparative Report**

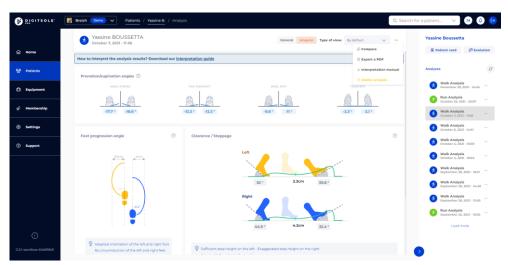
Click on the **Patients tab and** then on the line of the desired patient.

You are now in the patient's file.

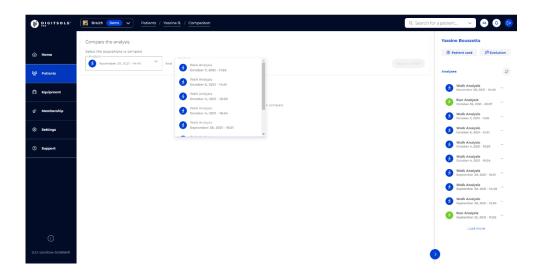
On the right is the "Analyses" section. Click the scan you want to access.



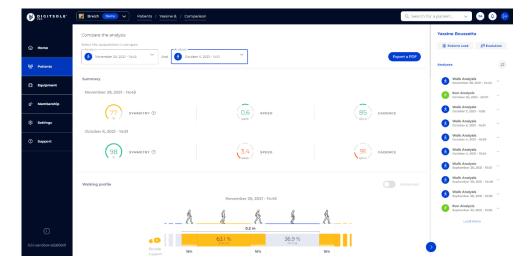
Once the scan is open, click on the three dots button at the top right and then click **Compare.** 



Then select the second analysis for comparison.



#### Then click **Export PDF**.



The analysis export page will open and you can chose how you'd like to export the report.



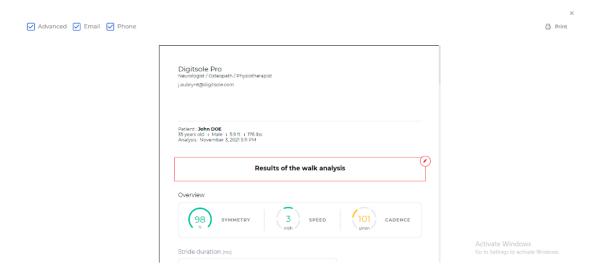
#### Change the information about the healthcare practitioner that appears on the

#### report

Following the completion of your analysis export, you can:

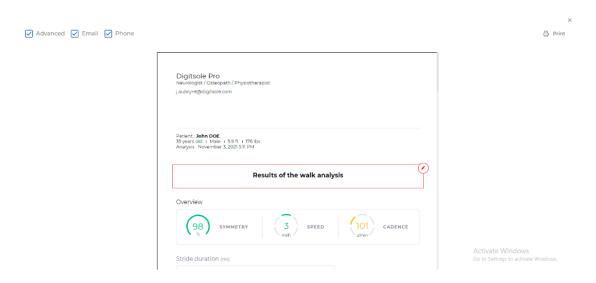
- Check the "Advanced" box to generate a more advanced report
- By clicking on the Eye icons, you can choose whether or not to show your email address and/or phone number

Note: A crossed-out eye indicates that the parameter will not be presented on the report; an uncrossed-out eye indicates that the parameter will be displayed on the report.



#### **Print report**

When your analysis export is finished, you can print the report by clicking on the **Print** button at the upper right of the screen.

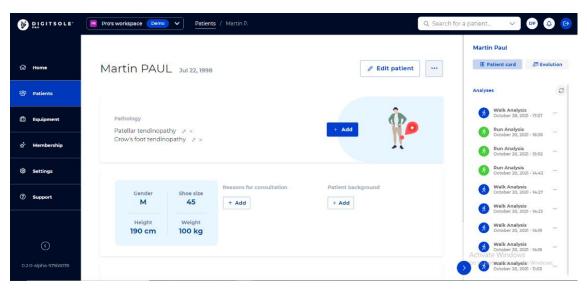


## **Compare analyses**

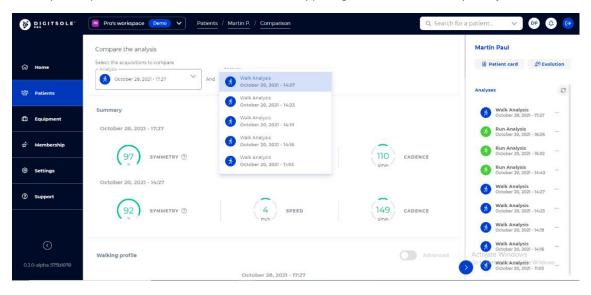
Select the Patients tab, then the selected patient's line.

You are now on the patient file.

The "Analyses" section is on the right. Select the analysis you wish to compare by clicking on it.



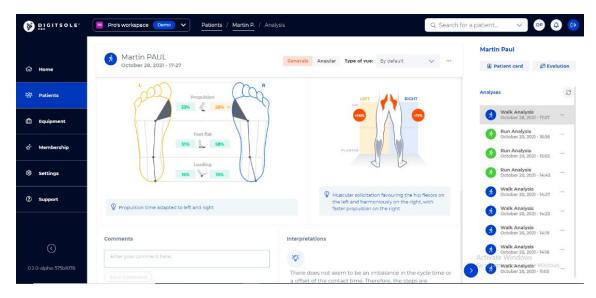
Once the analysis is open, click the three dots button in the upper right corner, followed by Compare.



Then select the analysis that you want to compare it with.

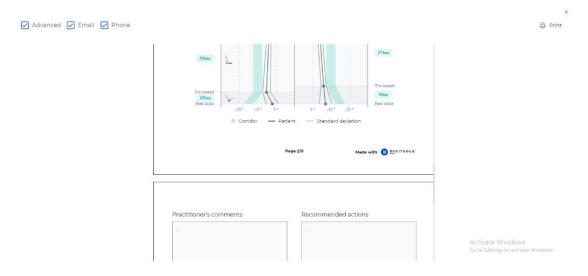
#### **Add comments**

Notes can be added to the Comments section at the bottom of the analysis results. Comments will be saved with the results to be viewed at any time.



After the report has been exported, you can add notes in the Comments section. The comments you enter here will not be saved on the interface.

You can, however, save them by printing the report, emailing it to the patient, and/or saving it as a PDF.



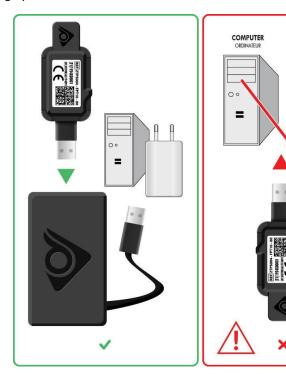
## **Maintenance**

## **Charging DSPods**

Remove the DSPods from the insoles and position them on either side of the USB charger plug. After connecting the two boxes to the USB plug, place everything in the charger connector provided for this purpose. To power the device, plug the connector into a USB port on your computer or into a power supply that fulfils IEC 60601-1: 2005 (1MOOP) medical specifications.

110V / 220V

The recharging time is roughly 2.5 hours.



#### **CAUTION**



Remember to charge DSPods before leaving them disconnected for extended periods of time to avoid damaging the battery.

To maximise the lifespan of your DSPods, charge them at temperatures ranging from 10°C (50°F) to 40°C (104°F).

## Cleaning instructions for your device



Warning: Use the insole only with a clean sock.

You can use disposable socks -

It is recommended that the following operations be performed on a regular basis and before the first use:

- Use a disinfectant that meets the following requirements:
  - EN1276\*, EN13727\*, EN13697\*, EN14561 bactericide (including SARM).
  - Mycobacterium Terrae EN14348\* and EN14563\* tuberculocide.
  - Fungicide EN14562\* (on Aspergillus Fugimatus).
  - Levuricide EN1650, EN13697\*, EN13624\*, EN14562\* on Candida albicans.
  - Virucide EN14476 on HBV, HCV, Adenovirus, Coronavirus, Norovirus, RSV, H1N1, HSV-1, Polyomavirus\* and Rotavirus\*.
  - \*Unless it is very soiled
- We recommend the STERIMED wipes for EU and the SANI-CLOTH product for US, which are available from Digitsole at: <a href="mailto:contact@digitsolepro.com">contact@digitsolepro.com</a> and satisfies the requirements.
- Allow to air dry before reusing, or wipe with a clean, dry, lint-free cloth.

#### **CAUTION**



- Do not clean the device with corrosive chemicals, oil, acetone, or petroleum-based products
- Do not place the device in a washing machine, dryer, hand dryer, or other piece of equipment.
- Avoid immersing the device in water.

# **Technical Specifications**

## **Battery**

Battery: Li-Ion Polymer

Nominal voltage: 3.7V

Charging voltage: 4.2V

Life cycle ~ 500 cycles

• Full charge time: 2h30

Active mode: 1.2 mA

• In standby mode (while not in use), total autonomy is: 1750 h

## Charger



#### **CAUTION**

Charging equipment must comply with IEC60601-1 standards

Entry: 100-240 V - 50/60 Hz

Exit: 5.0V with an output current greater than 30mA

#### Radio module

Frequency band: 2400-2483.5MHz Maximum power: 10 mW

This device conforms with the EMC directive 2014/30/EU and the IEC 60601-1-2:2014 standard for electromagnetic compatibility of medical equipment and/or medical electrical systems. These parameters are intended to offer reasonable interference protection in a residential installation.

However, because of the use of radio frequency transmitting equipment and other sources of interference in healthcare and other settings, significant levels of interference from the proximity or power of the source may interfere with the operation of this device.

## **Usage environment**

## <u>/i\</u>

#### **CAUTION**

In order to use the device safely, observe the environmental conditions

Maximum body pressure:	50 kg/cm2 (or 500 n/cm2)
Maximum load of the insoles	200 kg
Atmospheric pressure	Between 70-106Kpa
Relative humidity at the time of use (humidity level)	10 ~ 95%
Recommended operating temperature	Between 0°C and 60°C (between 32°F and 140°F)

## **Product performance**

Product life	2 years
Warranty duration	2 years
Storage time	1 year. If you charge the DSPods every six months, you can extend the storage time

#### **Detailed performance**

#### Gait parameters

- o Stride length: Distance travelled by the foot in a gait cycle.
- o <u>Pace</u>: Number of steps taken per minute.
- o Cycle time: Time between two successive contacts of the same foot.
- o <u>Stance time</u>: The duration between heel strike and toe lift for each foot during the stride cycle is used to determine gait stance time, which is the length of the period of the gait cycle when the limb is in contact with the ground.
- o <u>Swing time</u>: The duration between foot lift and heel strike for each foot during the stride cycle is used to determine the swing time, which is the length of the section of the gait cycle when the limb is not in contact with the ground.
- o <u>Double support</u>: This is the percentage of the gait cycle during which both limbs make contact with the ground.
- o Speed: The speed at which the body moves in a straight line while walking.
- o <u>Pronation and supination angles:</u> The average angle of inclination between the foot and the earth's surface. Supination is a negative angle, while pronation is a positive angle.
- o <u>Duration of the support phase</u>: The stance phase's first sub-component. When the heel strikes the ground and absorbs the impact, the support phase begins. It comes to an end when the toes touch the ground.
- o <u>Duration of the flat foot phase</u>: The support phase's second sub-component. The flat foot phase begins when the full foot is in contact with the ground and ends when the heel is removed.
- o <u>Duration of propulsion phase</u>: The stance phase's third sub-component. The time between the heel and toe lifting events is referred to as propulsion.
- o <u>Symmetry</u>: The ratio of the exposure time of the right foot (respectively, the left foot) and the sum of the exposure times of the right and left feet.
- o <u>Gait line</u>: The gait line is estimated using the pronation/supination angles at four important events (heel strike, toe strike, heel lift, and toe lift) to determine the trajectory of the center of pressure during the unrolling of the foot.

- o <u>Propulsion ratio</u>: The ratio of the speed at which the foot is removed from the ground to the average speed during the swing
- o Stepping: During initial contact, the angle of flexion/extension of the foot on the earth's surface.
- o Circumduction: Perpendicular to the progression line, the distance between the centre of each foot's heels
- o Clearance: Minimum toe height at swing.
- o Step progression angle: During the flat foot phase, the angle between the walking path and the foot's orientation.

#### Running parameters

- o Stride length: Distance travelled by the foot in a gait cycle.
- o Analysis time: Running time during data capture.
- o Speed: The average speed at which the body moves in a straight line while running.
- o Pace: Number of steps taken per minute.
- o <u>Asymmetry</u>: The ratio of the exposure time of the right foot (respectively, the left foot) and the sum of the exposure times of the right and left feet.
- o Attack type: Defined as the part of the foot that makes contact with the ground at the start of a stride
- o Attack angle: Angle between foot and ground at initial contact.
- o <u>Stance</u>: Contact is calculated as the interval between initial contact and toe lift off for each foot throughout the stride cycle as a percentage of the length of the period of the stride cycle during which the limb is in contact with the ground.
- o <u>Swing</u>: The swing is the proportion of time during the running cycle when the limb is not in contact with the ground, measured as the interval between foot lift and initial contact for each foot during the stride cycle.
- o <u>Double float</u>: For a running cycle, the percentage of time when no foot makes contact with the ground.
- o <u>Pronation and supination angles</u>: Angle of inclination between the foot and the earth's surface. Supination is a negative angle, while pronation is a positive angle.
- o Impact force: Maximum vertical ground reaction force in the gait support phase.
- o Parameter changes during running: Allows for the comparison of two running moments.

## **Conditions of shipping and storage**



#### **CAUTION**

Follow the storage instructions to ensure the product has the longest potential shelf life.

To avoid damaging the batteries, remember to charge the DSPods before putting them away for an extended period of time.

The recommended battery charge level for storage is	between 75 and 100%.
Temperatures for storage and shipping	between -10°C and 60°C (between 14°F and 140°F)
Atmospheric pressure	between 50-106Kpa
Recommended humidity (humidity level)	0 ~ 100% HR

## **Symbols definitions**

Symbol	Description	Symbol	Description
C€	The device meets the requirements of European Directive 93/42/EC, which covers medical devices.	MD	Medical device
DC 5.0V === 30mA	DC power supply 5 V 30mA.	Z	When a device reaches the end of its useful life, it must be disposed separately from household waste. See the section "Product End-of-Life" for more information
	Manufacturer	<b>((⊕)</b> )	Non-ionizing radiation device with an RF transmitter.
	Please do not hit	$\sim$	Manufacture date.
	Please do not repair		Please do not puncture
	Please do not immerse the insole in water		Please do not place into the washing machine
	Please do not put on fire		Please do not bend
IP54	Device protected from powerful water sprays		Charger side to download data
<b>\$•</b> \$	This symbol on the box indicates "Atmospheric pressure limit" during shipping and storage.	<b>2</b>	This symbol on the box means "Relative humidity limit".
X	This symbol on the box means "Temperature limit".	Ť	This symbol on the box means "Keep dry," because the product must be protected from humidity and water.
Æ	USA: Federal Communication Commission (FCC) statement		Before using, consult the user manual.
(2)	Prevent the risk of suffocation	Ť	Type B applied part (this device is protected from leakage current and electric shocks)
<b>₹ R</b> 214-10 5146	The product is type certified in compliance with Japanese Ordinance MPT No. 37 of 1981 (Technical Regulation Conformity Certification of Specified Radio equipment)	<b>®</b>	Keep out of the reach of children. It may cause suffocation.
$\triangle$	Indicate a potential danger associated with the device's use		It contributes financially to the organization of recycling in accordance with European Directive 94/62/EU and national Law.
	Normal charger use	REF	Commercial reference of the device.
	Do not use near a magnetic resonance device		Prohibited use of the charger
†i	Inform that some information for use are available on the web	Y	

## **Regulatory conformity**

The risks associated with this medical equipment have been appraised in accordance with the ISO 14971 standard, particularly in terms of the overall residual risk.

Digitsole Pro complies with the following directives and standards:

- Council Directive 93/42/EEC relating to medical devices, as amended by European Directive 2007/47/EC.
- European Parliament and Council Directive 2014/53/EU of 16 April 2014 on the harmonisation of the legislation of Member States on the commercialisation of radio equipment (RED).
- European Parliament and Council Directive 2011/65/EU of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (ROHS).
- The European Parliament and the Council Directive 2012/19/EU (WEEE) on waste electrical and electronic equipment of 4 July 2012
- Directive CEM 2014/30/UE
- IEC 60601-1:2005 + AC1:2006 + AC2:2007 + Amd1:2012: Medical electrical equipment Part 1: General requirements for basic safety and essential performance
- IEC 60601-1-2:2014: Medical electrical equipment. First part: General safety rules. Collateral standard: Electromagnetic compatibility Requirements and tests

The declaration of conformity can be found on the <u>Compliance Centre's website (digitsole.com)</u>, or it can be requested by emailing <u>contact@digitsole.com</u>

#### FCC-FCCID: 2AO4H-DSI

United States: Federal Communications Commission (FCC) declaration. This device complies with FCC Part 15 FCC Rules. Its operation is subject to the following two conditions:

"Changes or modifications not expressly approved by Digitsole may result in the user's right to use the equipment being terminated"

Note: This equipment has been evaluated according to section 15 of the FCC Rules and determined to meet the requirements for a Class B digital device. These parameters are intended to offer reasonable interference protection in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and may cause harmful interference to radio communications if not installed and used according to the instructions. However, no guarantee can be provided that interference will not occur in a specific installation.

If this device causes harmful interference to radio or television reception, which can be determined by turning it off and on again, the user is advised to try one or more of the following actions to rectify the interference:

- Adjust the position of the receiving antenna or relocate it.
- Increase the distance between the equipment and the receiver.
- Connect the device into an outlet on a different circuit than the one to which the receiver is connected.
- Seek assistance from a dealer or an expert radio/TV technician.

## End of product life

Electronic components and lithium-ion batteries are subject to recycling regulations which vary by country and region. Please observe the legislation in effect in your region before disposing of these insoles in order to respect good environmental practices.

As a result, the device should be returned to your healthcare provider, distributor, or manufacturer.

# **Assistance and help**

## **Help - Troubleshooting**

Full information is available on: https://www.digitsolepro.com/customer-support

#### **Contact**

Do you have a question or a suggestion? Don't hesitate to get in touch!

Contact us:

+33 (0)3 55 40 91 55

+1 720 798 4452

contact@digitsole.com

Please email us at <u>Vigilance@digitsole.com</u> if you have an unpleasant incident that is directly or indirectly related to the use of the device.

## **CE** marking

Date of CE marking: May 2021

REF DSPS001-FPT00

UDI-DI: 03700565774633







DIGITSOLE S.A.S 13 Rue Héré Place Stanislas 54000 Nancy France