Start Guide

2024

Product Description and Intended Use

Magnes NUSHU X is NOT a medical device. It is intended to be used for collecting data about the user's gait and activity as well as for cueing and/or notifying about gait events while walking by vibrations.

Magnes NUSHU may not perform as expected if used outside of its intended purpose.

Magnes NUSHU X is not intended to be used for making diagnostic or therapeutic decisions.

Intended User Profiles and Intended Use Environment

Intended user profiles:

- Users wearing Magnes NUSHU X.
- Users generating data while walking and get notifications by vibrations.

Intended Use Environment:

Device is meant for indoor and outdoor walking.

⚠ Device is **not** meant for high-impact activities, e.g. running, jogging, or doing other sports.

⚠ Do **not** submerge the shoes in water or expose them to condition that drench or soak the shoes (e.g. river-crossing, nautical activities, strong rain or snow).

Warnings / Important Notes

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:

- Users 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Warnings / Important Notes

Users shall carefully read and understand these instructions for use prior to using Magnes NUSHU X. Any questions can be asked to Magnes AG.

Magnes AG, Hardturmstrasse 253, 8005 Zurich, e-mail: support@magnes.ch

Users shall report any serious incident to Magnes AG.

The product is NOT intended to come into contact with bare skin or wounds. Users must wear socks when using Magnes NUSHU X.

Make sure to charge the battery before using NUSHU X.

Do not wear Magnes NUSHU X while they are charging.

Magnes NUSHU X shall not be exposed to loads exceeding 120 kg.

Transport and storage temperature must be between 0°C and 30°C.

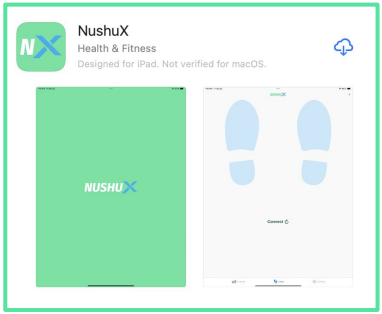
Maximum humidity shall not exceed 85%.

Do not leave your Magnes NUSHU X exposed to direct sunlight during storage.

Warnings / Important Notes

- Do not use Magnes NUSHU X in heavy rain and do not walk through water pools.
- Do not dry Magnes NUSHU X in the dryer, Microwave or Oven.
- Only clean the shoes with a damp cloth.
- Do not open the device or repair it yourself. This will void your warranty and may cause serious harm.
- No modification of Magnes NUSHU X is allowed.
- Use with caution on slippery and wet floors.

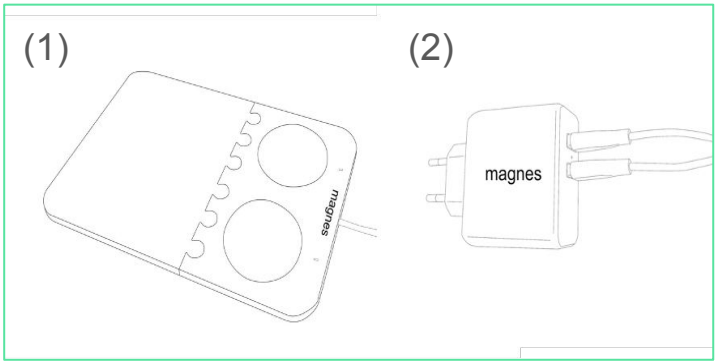
1. Installing NUSHU X

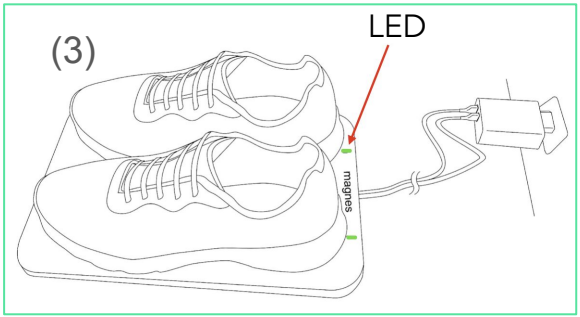


- A smartphone or tablet with iOS 14.0 or later is required to install the NUSHU X app
- Scan the QR-code or go to your apple store to download NUSHU X
- Activate Bluetooth
- Click on the NUSHU X app
- Click "Go to login"
- If you already have an account --> enter E-mail address and password and click "Sign in". Otherwise, tap on "Create account" to register a new user
- ⚠️ Before using, please check that the shoes are charged.

2. Charging the shoes

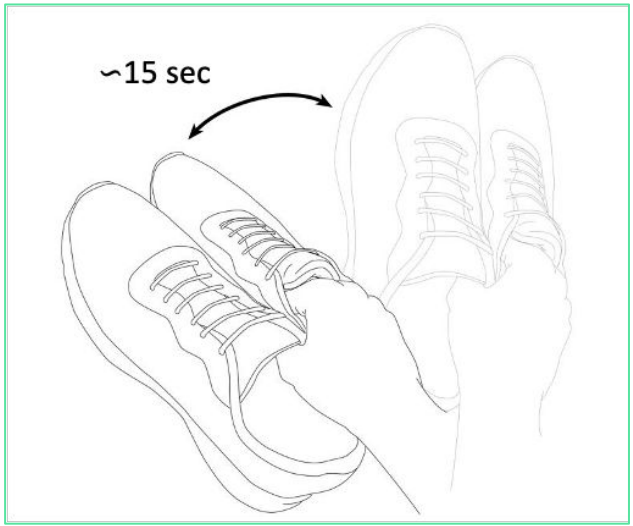
- Connect the two charger pieces to each other like a jigsaw puzzle. (1)
- Connect the two charging cables to the power adapter. (2)
- Place the shoes on the charging station. The back of the shoes should completely cover the round discs of the charging station. (3)
- The LED starts to flash slowly. ⚠️ If the shoes are not positioned correctly on the charging station, the LED will flash quickly or not at all.
- Shoes are fully charged when the LED are ON and not flashing.





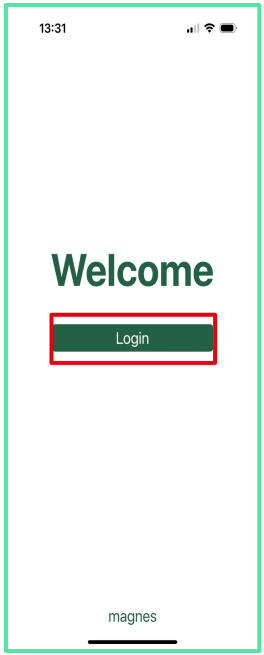
3. Turning on the shoes

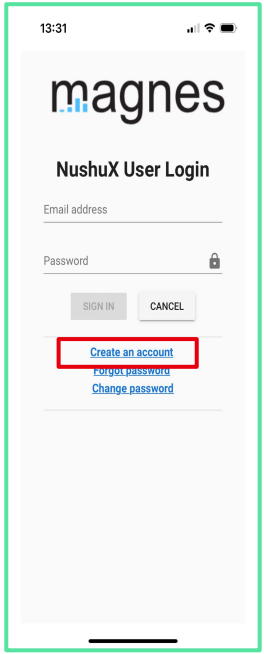
- Move the shoes (e.g. gently shaking them up and down) for at least 15 seconds.
- The shoes will vibrate twice when they power on.

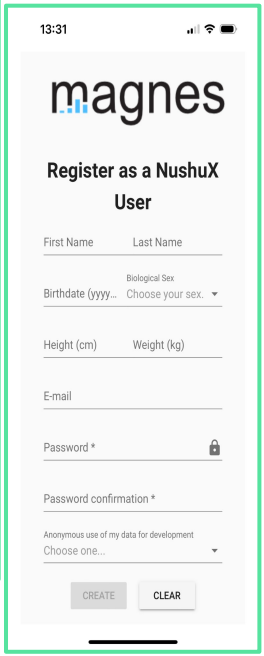


4. Create account

- Open the NUSHU X app (⚠️ You need to be connected to a cellular network with internet access or WiFi).
- Click on “Login”
- Click on “Create account”
- If you do not have an own email, you can create one by using your name and surname and adding @magnes.ch (e.g. name.surname@magnes.ch)
- You are required to fill in all the fields marked with a *.



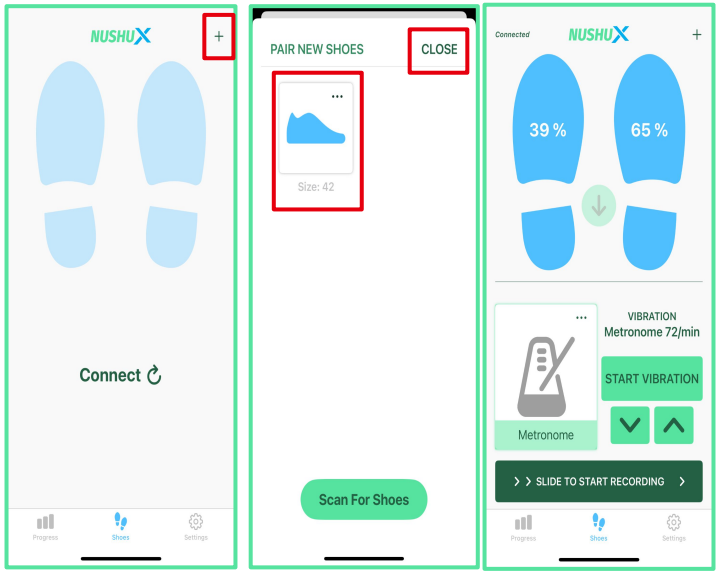




5. Connect the shoes

- Move/shake the shoes until they vibrate 2 times (takes about 15 seconds).
- (⚠️ If the shoes do not vibrate, the battery may be low). Charge the shoes for at least 15 min and try again.
- The first time you log in, you need to pair the shoes. Go to the upper right corner, click on the plus sign +. (1)
- Click on the right shoe size and click on close. (2)
- The shoes appear as connected on the home screen. (3)
- ⚠️ If the shoes do not appear, they are either switched off or low in battery.

(1) (2) (3)



6. Select vibration mode

- Click on the vibration mode icon
- Select vibration mode
  a. Metronome
  b. HS-HO - Heel Strike Heel Off
  c. Ground
  d. Swing
  e. Heel Strike
  f. Heel Off
  g. Pink Metronome
- Click on close
- Tap on “START VIBRATION”

6. Select vibration mode

Metronome: You can set a frequency at which the shoes vibrate. To access the configuration options, tap on the small gear icon on the top right in the vibration mode selection view. By moving the slider, the frequency can be adjusted. You can also specify the side by selecting: left, right or both.

HS-HO Feedback: In this mode, vibrational feedback is given at each heel off and at each heel strike in the form of a vibration pulse.

Ground Vibrate: In this mode, the shoes give vibrational feedback when the shoes are in contact with the ground.

Swing Vibrate: In this mode, the shoes provide vibrational feedback during the swing phase while walking.

Heel Off: In this mode vibrational feedback is given at each heel off.

Heel Strike: In this mode vibrational feedback is given at each heel strike

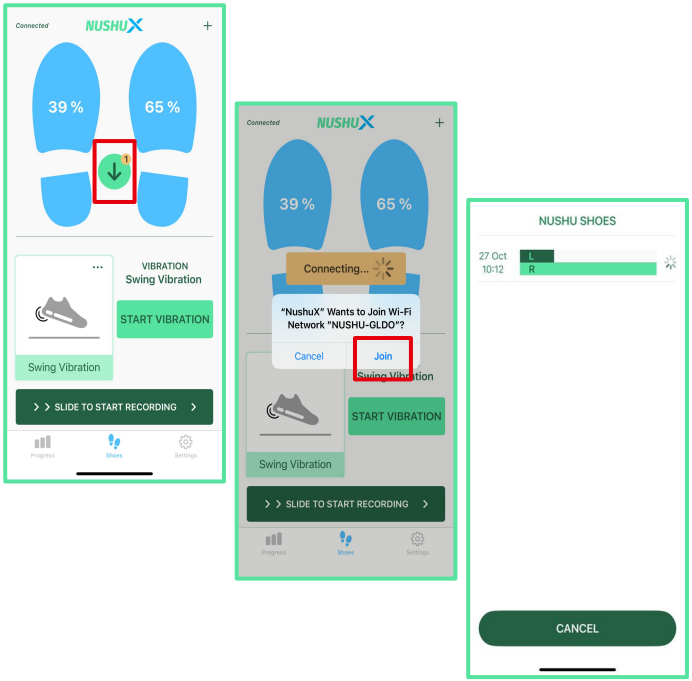
Pink Metronome: You can set a frequency at which the shoes vibrate. By moving the slider, the frequency can be adjusted. You can also specify the side by selecting: left, right or both.
Pink-noise means that the interval is slightly different every time.

7. Start and Stop recording

- Slide the green slider with “>> Slide to Start Recording >” to the right to start the recording
- Two black dots will appear on the heel of the foot and the slider will turn orange and will change to a “STOP Recording” button.
- To stop the recording, press the orange “STOP Recording” Button.

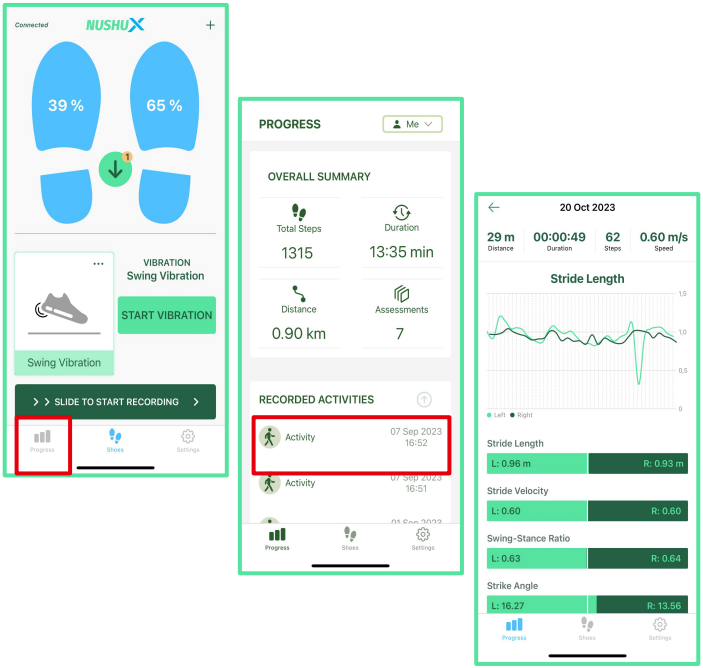
8. Download recordings

- After a recording has been performed, it will appear as a small number next to the green arrow.
- To start the download process, tap on the green arrow.
- Join the Nushu WiFi network. The network is called NUSHU- followed by four random characters. The download process will start shortly after.
- After successful download, you can see your detailed information under “Progress”



9. Track progress

- Click on Progress in the lower left corner
- Tap on an individual activity to see detailed information about it after it has been analyzed. Analyses are run every 5 minutes - allow for this time to pass before checking the analysis results.
- To see more detailed information, slide the graph of “Stride Length” to the left, more information will appear.



10. Troubleshooting

Problem	Cause	Action
Shoes not detected	Bluetooth inactive	Turn on the Bluetooth of your mobile smart device.
Shoes not detected	Electromagnetic interference	Try using your shoes in a place free of other Bluetooth and wireless devices.
Shoes do not connect	Battery is empty	Fully charge the shoes.
Shoes do not connect	Shoes in sleep mode	Wake up the shoes by shaking them for about 15 seconds.
Data not uploaded to database	No internet connection available	If data was download from the shoes, they will be saved under “Local Activities” under “Recorded Activities”. Check mobile data or WiFi internet connection.

10. Troubleshooting

Problem	Cause	Action
Server cannot be reached	No internet connection available	Check mobile data or WiFi internet connection.
Can not connect to the NUSHU X WiFi	Connection issue	Try to reconnect. If the problem persists, close the app completely.
Profile data are not shown correctly	Connection issue	Logout and close the app completely.

Signs and Symbols

Important safety instructions or operating instructions

Read the instruction for use (IFU)

Dispose the device in accordance with EC Directive – WEEE (Waste Electrical and Electronic Equipment)

SN Serial Number

IP22 Dust- and water-proof rating

Max 120 kg Maximal applicable load

Keep away from rain

0°C +30°C Transport and storage temperature

Li-ion Li-ion battery disposal information

CE European Conformity

NUSHUX