

TYPE-S

Operations and Safety Manual

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Introduction

| Highly accurate, real-time quantified motion for cycling

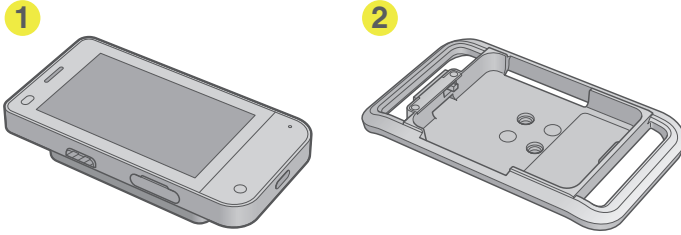
Whether you are a coach who wants to add accuracy and effective tracking to your observations, or a cyclist wanting objective feedback of your motions in real-time, the lab-level accurate motion tracking capabilities of the TYPE-S will deliver. Combining the latest in technology, biomechanics, and cycling form analysis, the TYPE-S brings training, coaching, and injury prevention to a whole new level, inside and outside the lab.

Features

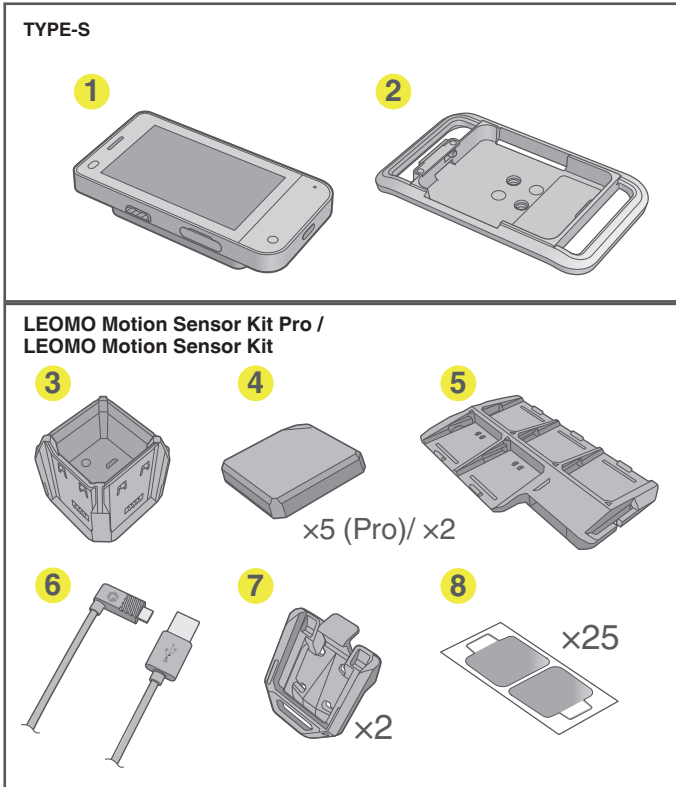
- Quantify your body's 3D movements in real life training and racing environments.
- Includes a transreflective display, which is clearly visible in direct sunlight, and accepts optional five wireless LEOMO Motion Sensors.
- Powerful real-time graphing is available for trend evaluations of your motion, power, cadence, speed, heart rate, and GPS data.
- Available as a smartphone, too, enabling voice calls, photo/video shooting, and use of various Android™ applications.
- Analyze your activity data anywhere using LEOMO's browser-based analysis tool.

Parts and Optional Accessories

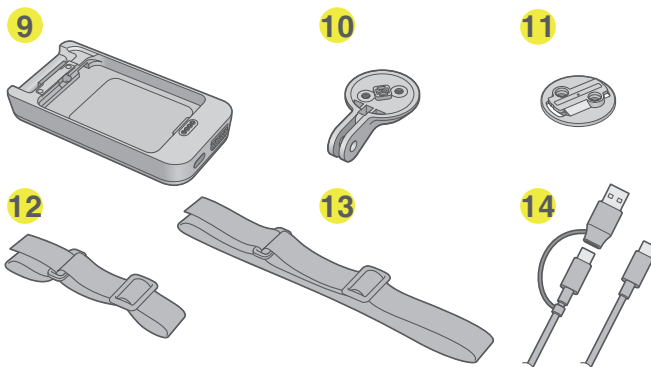
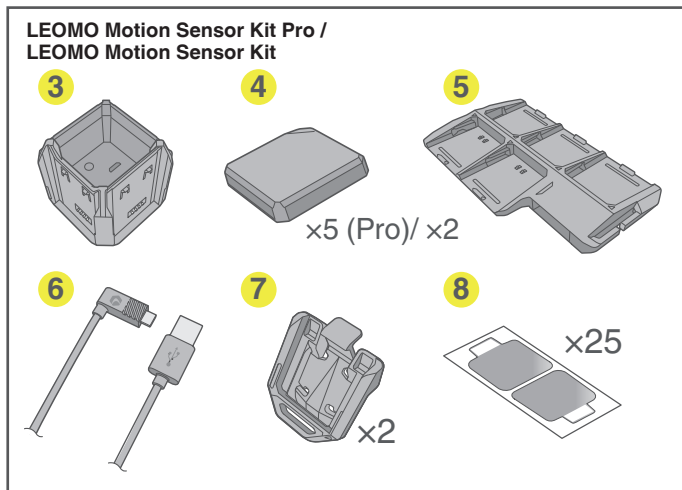
| TYPE-S



| TYPE-S Sensor Kit



Optional Accessories



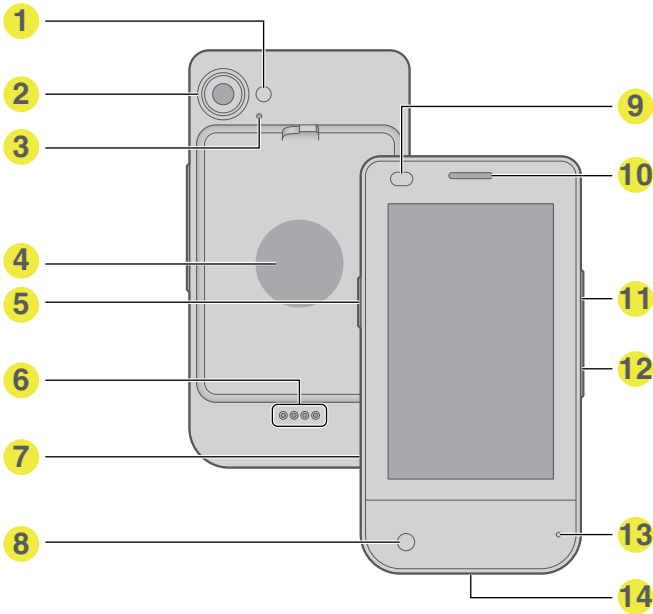
- ❶ TYPE-S main unit
- ❷ Multi-sport Adapter with Bike Plate for fitting on bike mount

LEOMO Motion Sensor Kit Pro / LEOMO Motion Sensor Kit (Optional)

- ❸ Sensor Charger for charging LEOMO Motion Sensors
- ❹ LEOMO Motion Sensors (Set of 5 in the case of LEOMO Motion Sensor Kit Pro) / (Set of 2 in the case of LEOMO Motion Sensor Kit) for motion data collection
- ❺ Sensor Carrier for keeping LEOMO Motion Sensors powered off while in transit
- ❻ USB Cable for charging LEOMO Motion Sensors inserted in Sensor Charger
- ❼ Sensor Clips for using LEOMO Motion Sensors on shoes
- ❽ Sensor Adhesives 2 (Set of 50, 25 Sheets) for wearing LEOMO Motion Sensors. They have stronger adhesion than the previous Sensor Adhesives.
- ❾ Power Mount with Bike Plate (Optional) for fitting on bike mount while charging TYPE-S
- ❿ Camera Mount (Optional) for mounting TYPE-S on a general camera mount for shooting photo/video
- ⓫ Bike Plate (Optional) for fitting on a general bike mount

- ⑫ Arm Band (Optional) for wearing TYPE-S on arm
- ⑬ Waist Belt (Optional) for wearing TYPE-S around waist
- ⑭ USB Type-C Cable (Optional) for charging TYPE-S or for communication with devices such as personal computers
- ⑮ AC Adapter (Optional, Not shown)
- ⑯ Multi-sport Adapter (Optional, same to ② but without the Bike Plate)
- ⑰ Soft Bumper (Optional, Not shown)
See “Using Optional Accessories” (P 20) for details.
- ⑱ Metal Bumper (Optional, Not shown)
See “Using Optional Accessories” (P 20) for details.

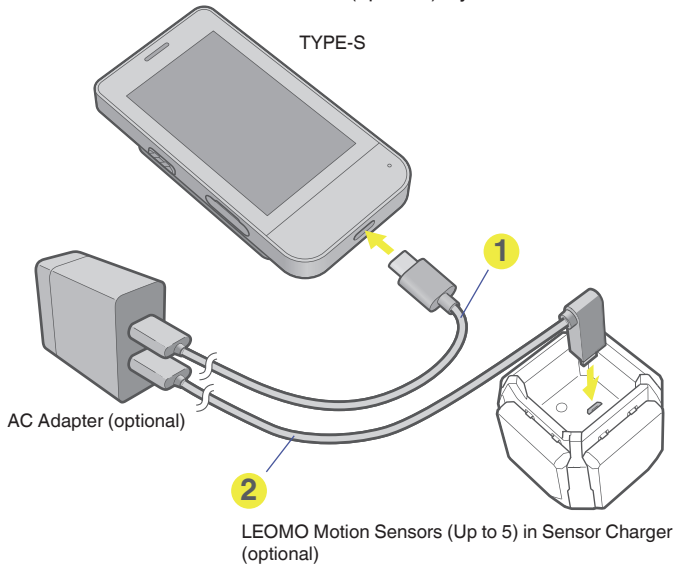
Parts and Controls of the TYPE-S



- ❶ Flash light
- ❷ Rear camera
- ❸ Second microphone
- ❹ NFC
Compatible with NFC type A/B
- ❺ Power key
Turns on/off the TYPE-S. To turn the TYPE-S off, press and hold the key for two seconds.
- ❻ Pin for Power Mount
Connects the TYPE-S and the Power Mount.
- ❼ nano SIM card / Memory card slot
Accommodates a nano SIM and a micro SD cards.
- ❽ Front camera
- ❾ Proximity / Light sensor
- ❿ Receiver / Speaker
- ⓫ Volume Key (Up)
Increases the volume from the TYPE-S.
When the LEOMO App is being used, it starts/pauses an activity.
- ⓬ Volume Key (Down)
Decreases the volume from the TYPE-S.
When the LEOMO App is being used, it marks laps.
- ⓭ Main microphone
- ⓮ USB Type-C port
Connect a USB Type-C cable (optional) this port to charge the TYPE-S.

Charging Devices

Charge your TYPE-S, and LEOMO Motion Sensors (optional) if you will use ones.

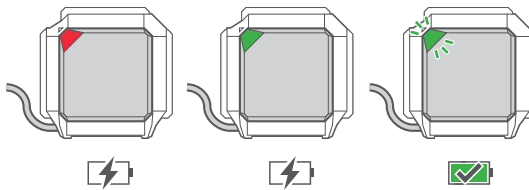


- 1 USB type-C cable (optional)
- 2 USB cable (optional)

NOTE : _____

An AC adapter that outputs 5 VDC, 1.5 A or higher must be used for charging the TYPE-S and LEOMO Motion Sensors.

Charging Indications of the LEOMO Motion Sensors



- Charging (0-20%): Red LED
- Charging (20% - 100%): Green LED
- Finished Charging: Blinking green LED

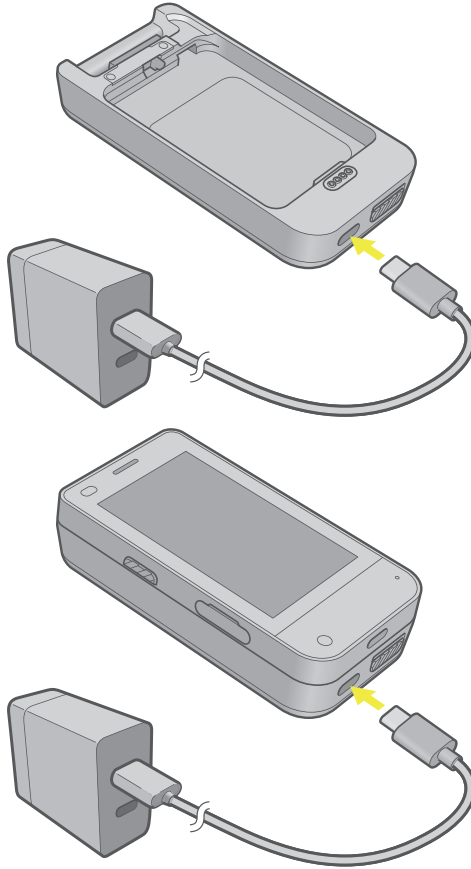
NOTE : _____

When the LEOMO Motion Sensors are connected to the TYPE-S, their assigned location color will take precedent over their charging color.

Using an Optional Power Mount

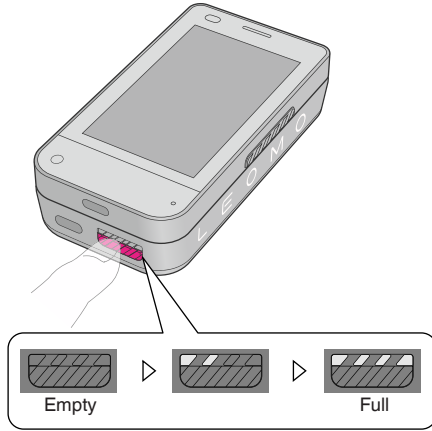
Charge the Power Mount using a USB type-C cable (optional).

To charge the TYPE-S and Power Mount simultaneously, attach the TYPE-S to the Power Mount, and connect the USB type-C cable to the connector on the Power Mount.



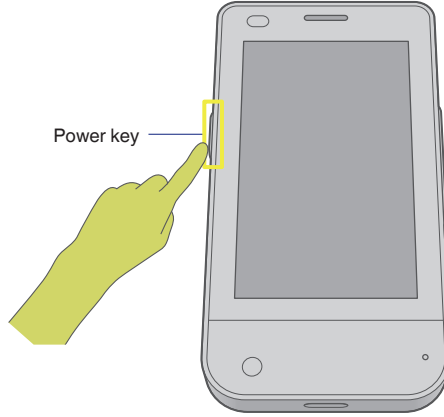
Using the Button on the Power Mount

Pressing the button on the right of the USB Type-C port shows the battery level of the Power Mount. Pressing and holding this button while charging the TYPE-S stops charging. Press the button again to resume charging.



Turning the TYPE-S On

- 1 Turn on the TYPE-S by holding down the power key on the left side of the TYPE-S until it powers on.



- 2 When you use the TYPE-S first time after purchase, follow the instructions displayed on the screen to make the initial settings.

For details, see "Making the Initial Settings" below.

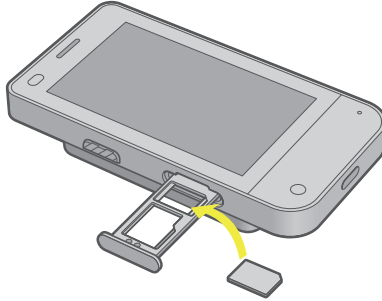
When the initial settings have already been done, swipe up from the bottom of the screen for PIN entering, enter the PIN that you have registered during initial setting, then tap the check mark. The home screen appears.

Making the Initial Settings

When the TYPE-S is first powered on after purchase, it shows a message asking if you will use a SIM.

1 **Insert a SIM.**

To use communication functions of the TYPE-S outside Wi-Fi coverage areas, obtain a nano SIM and insert it in the TYPE-S nano SIM/memory card slot.

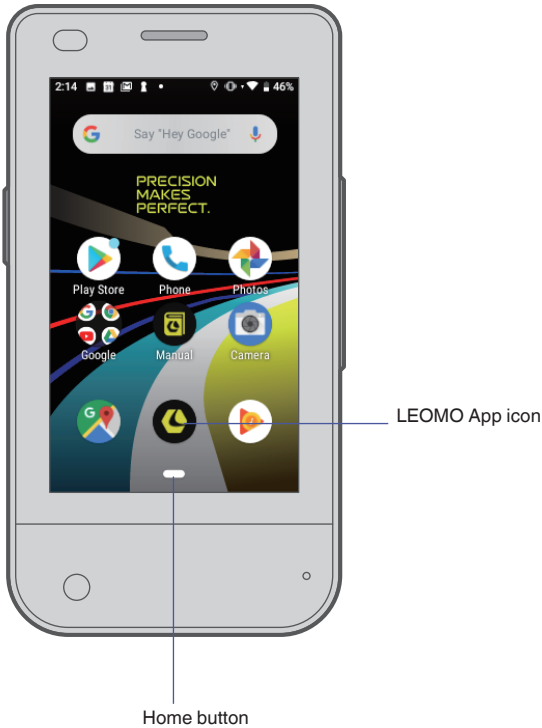


Skip this step if you will not use a SIM.

2 **Make Android configurations.**

Follow the instructions displayed on the screen to make the required Android configurations related to Wi-Fi connection, Android, and the Google™ account to be used. The home screen appears.

TYPE-S Home Screen



The TYPE-S is a device having the preinstalled LEOMO App. It can also be used as an Android smartphone.

There is usually one pill-shaped home button at the bottom of the screen, and the back button is also shown when necessary.

The back button takes you back one step or one screen, and the home button always shows the TYPE-S home screen. Swipe right on the home button and hold to view all the currently running apps. Scroll between apps by swiping slowly right or left, and release to open the center app.

The LEOMO App icon is used to start the LEOMO App. Tap the icon to start the LEOMO App.

Using the Android 9's Three Navigation Buttons

The TYPE-S uses Android 9, you can select the three-button navigation system instead of the gesture navigation system, as follows.

- 1 **Swipe up from the bottom at the home screen.**
- 2 **Scroll down to find and tap the Settings icon.**
- 3 **Proceed to System > Gestures > Swipe up on Home button.**
- 4 **Turn it off.**

The three navigation buttons appear at the bottom of the screen.

Using the Magnification Feature

The Android 9 provides screen magnification feature. You can enable it as follows.

- 1 **Swipe up from the bottom at the home screen.**
- 2 **Scroll down to find and tap the Settings icon.**
- 3 **Proceed to Accessibility > Magnification > Magnify with triple-tap.**
- 4 **Turn it on.**

Now, triple-tapping the screen zooms in the displayed content. Use two-finger dragging to pan across the screen. Triple-tap the screen again to zoom out.

Starting the LEOMO App

Tap the LEOMO App icon.



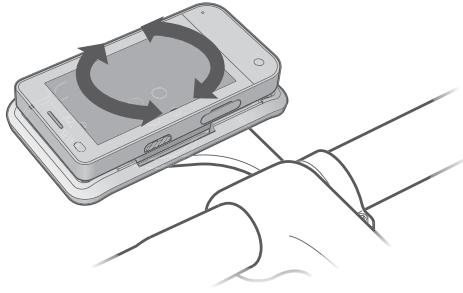
The LEOMO App starts.

Closing the LEOMO App

- 1 Swipe left from the right edge of the screen.**
The pill-shaped home button appears on the right of the screen.
- 2 Point the home button and swipe it left.**
The all currently running apps are shown.
- 3 Point the LEOMO App, and swipe it up.**
The LEOMO App stops running background and disappears from the screen.

Installing the TYPE-S on a Bike

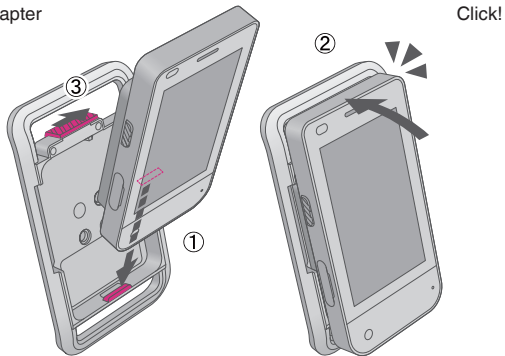
- Attach a standard quarter turn bike mount to your bike's stem or handlebar. Attach the TYPE-S to the Multi-sport Adapter, and attach the Bike Plate at the back of the Multi-sport Adapter as necessary. Then, set them on the bike mount and twist 90 degrees to secure them to the bike.



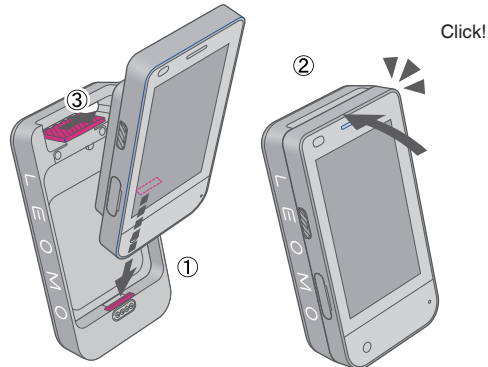
Attaching the TYPE-S to the Multi-sport Adapter or Optional Power Mount

Set the bottom of the TYPE-S on the Multi-sport Adapter or Power Mount (①), then press its top until it clicks into place. (②) Make sure that the knob at the back has located the correct position and the TYPE-S is locked. (③)

Multi-sport Adapter

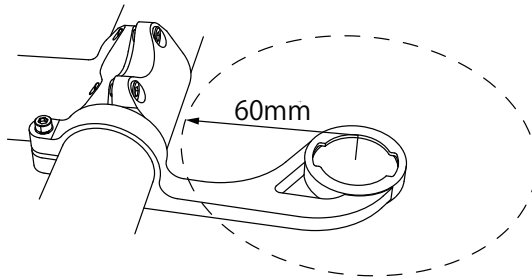
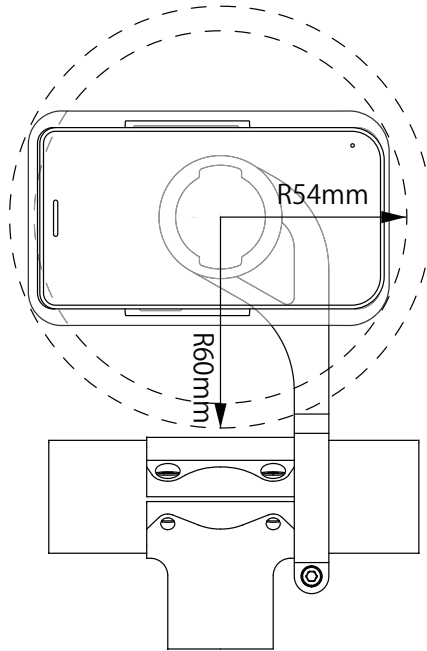


Power Mount



NOTE :

- We recommend you to use a safety cord that ties Multi-sport Adapter to the bike's stem or handlebar in case the Bike Plate or the bike mount breaks.
- Use a standard quarter turn bike mount for a cycle computer having 3-inch or larger screen. The following figures show the required clearance.



WARNING

In order to maintain the product's waterproof capabilities, please follow all instructions in this manual and the LEOMO terms of use listed below. Any damage resulting from user negligence will void the product warranty.

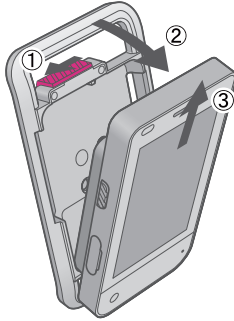
- Make sure the nano SIM card/memory card tray of the TYPE-S is fully inserted.
- Upon charging, make sure the USB Type-C ports and USB type-C cable are completely dry.

For more information, please go to <https://leomo.io/warranty> and <https://leomo.io/terms>

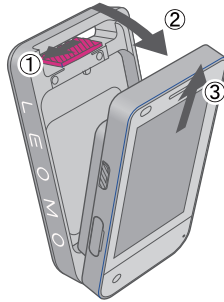
Detaching the TYPE-S from the Multi-sport Adapter or Power Mount

Unlock the knob at the back of the Multi-sport Adapter or Power Mount (①), then detach the TYPE-S from it (②, ③).

Multi-sport Adapter



Power Mount

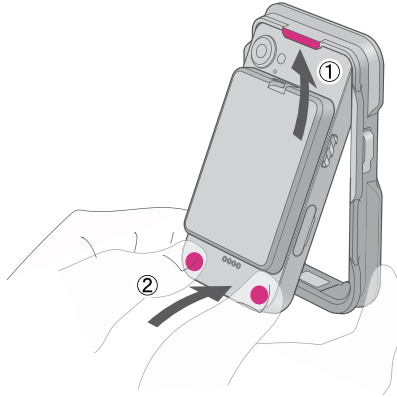


Using Optional Accessories

Using an Optional Soft Bumper

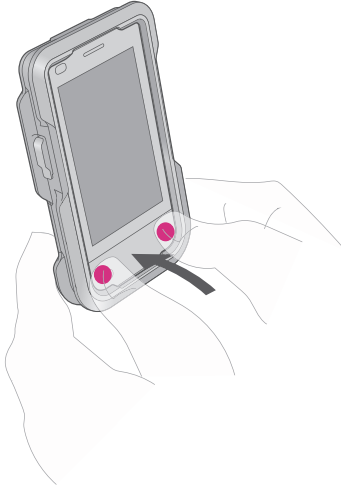
Attaching the TYPE-S to a Soft Bumper

Slide the upper edge of the TYPE-S under the hook of the Soft Bumper (①), then press its bottom until it fits in the Soft Bumper. (②)



Detaching the TYPE-S from the Soft Bumper

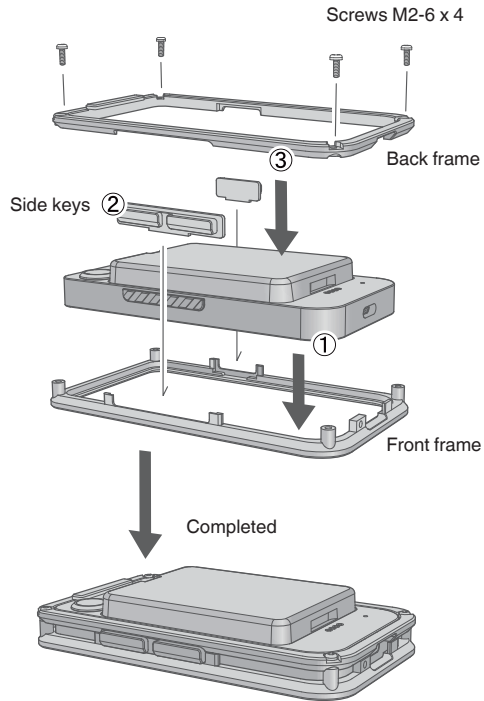
Push the bottom of the TYPE-S out from the Soft Bumper as shown in the figure.



Using an Optional Metal Bumper

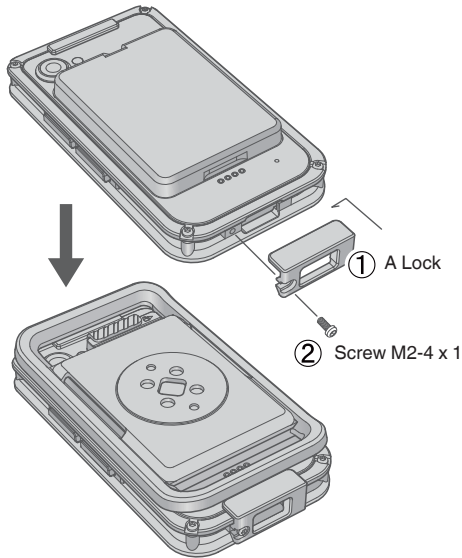
Attaching the TYPE-S to a Metal Bumper

Set the TYPE-S on the front frame (①), and insert the two side keys (②). Then, place the back frame, and secure them all with the four M2-6 screws (③).

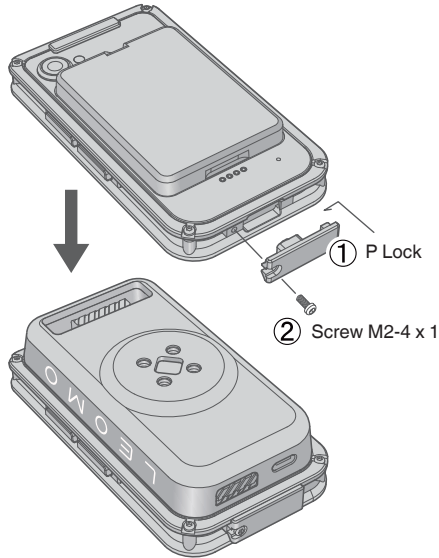


Attaching the TYPE-S to the Multi-sport Adapter.

Fix the A Lock (①) to the hook of the Metal Bumper using an M2-4 screw (②), then attach it onto the Multi-sport Adapter.

**Attaching the TYPE-S to an Optional Power Mount**

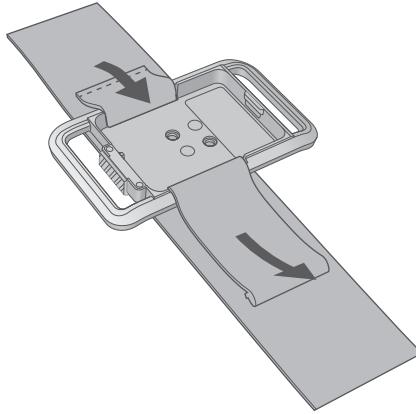
Fix the P Lock (①) to the hook of the Metal Bumper using an M2-4 screw (②), then attach it onto the Power Mount.



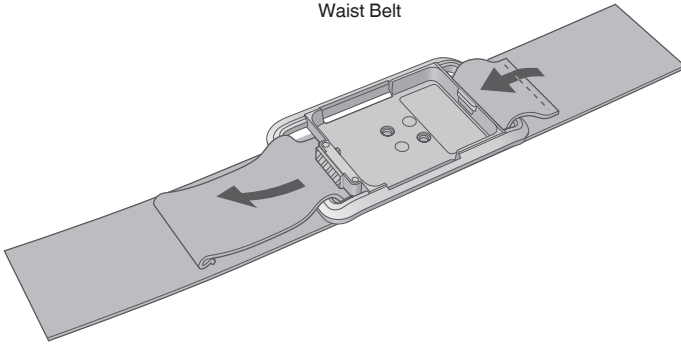
Using an Optional Arm Band or Waist Belt

Attach an optional Arm Band or Waist Belt as shown in the following figures.

Arm Band



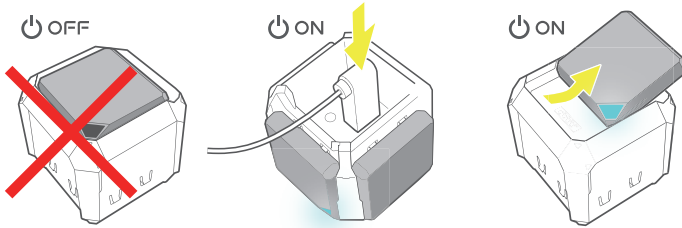
Waist Belt



Turning the LEOMO Motion Sensors On

To use the optional LEOMO Motion Sensors, turn on all five of them.

To turn on the LEOMO Motion Sensors, insert them into a plugged-in Sensor Charger, or remove the LEOMO Motion Sensors from the Sensor Charger after they are charged sufficiently. If the LEOMO Motion Sensors are inserted into an unplugged Sensor Charger or Sensor Carrier, they will be turned off.



NOTE : _____
An AC adapter that outputs 5 VDC, 1.5 A or higher must be used for charging the LEOMO Motion Sensors.

Pairing the LEOMO Motion Sensors

Make sure your LEOMO Motion Sensors are paired and connected to your TYPE-S by checking the sensor connection status.

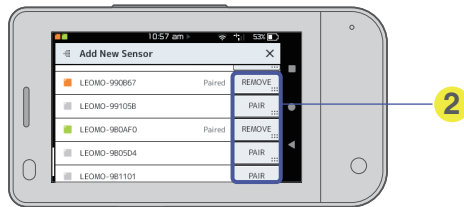
Manual Pairing

If you have a LEOMO Motion Sensor that has not yet been paired to your TYPE-S, you can manually pair it from Quick Menu (swipe up from the bottom of the screen) > Menu > Motion Sensors.

- 1 Tap a plus icon to pair a sensor to access the Add New Sensor screen.



- 2 Tap PAIR for the LEOMO Motion Sensor to be paired.

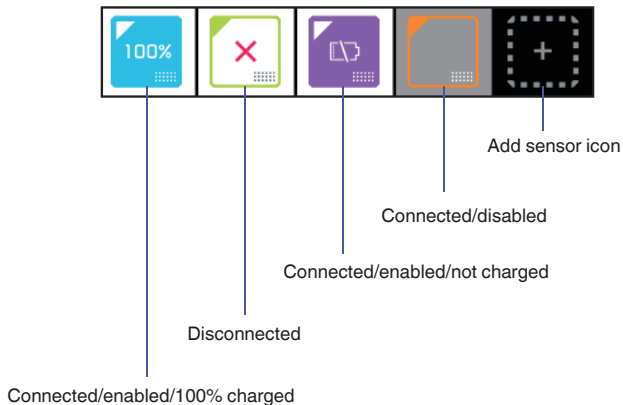


The Add New Sensor screen also allows you to remove (unpair) a LEOMO Motion Sensor from the TYPE-S.

Once the LEOMO Motion Sensors have been added, the Motion Sensors screen is shown as follows.

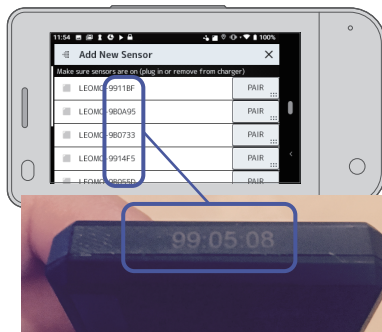


LEOMO Motion Sensor Status



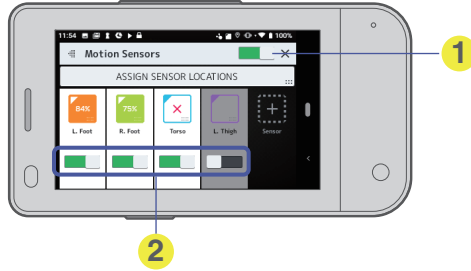
NOTE : _____

- The Motion Sensors screen can also be accessed by tapping the upper-center box, in which the icons of the LEOMO Motion Sensors are shown, of the Quick Menu.
- If manually connecting a LEOMO Motion Sensor does not work, restart the sensor by inserting and removing it from the sensor charger.
- If you have more than five LEOMO Motion Sensors in your surroundings, pair to the correct sensor by checking the ID printed on the bottom of the sensor.



Enabling/Disabling the LEOMO Motion Sensors

Each LEOMO Motion Sensor can be enabled/disabled from Quick Menu (swipe up from the bottom of the screen) > Menu > Motion Sensors.



- 1 Tap the switch to enable/disable all LEOMO Motion Sensors.
- 2 Tap the respective switches to enable/disable corresponding LEOMO Motion Sensors.

NOTE :

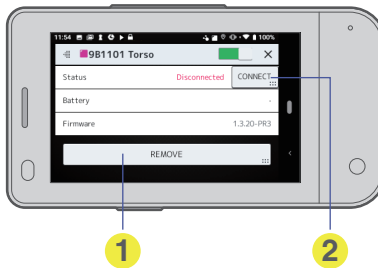
The Motion Sensors screen can also be accessed by tapping the upper-center box, in which the icons of the LEOMO Motion Sensors are shown, of the Quick Menu.

To remove a LEOMO Motion Sensor from the TYPE-S

- 1 Tap the icon corresponding to the LEOMO Motion Sensor to be removed.



- 1 Paired Motion Sensors that are connected.
Tap the corresponding icon to see detailed information or to remove a LEOMO Motion Sensor.
- 2 Tap the REMOVE button at the bottom to remove the corresponding LEOMO Motion Sensor.

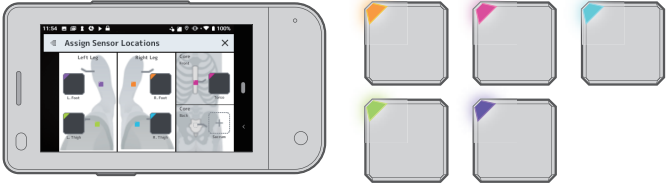


- 1 Tap to remove the sensor from the TYPE-S.
- 2 This allows you to connect/disconnect the sensor to/from the TYPE-S manually.
A confirmation message appears.
- 3 Tap OK to remove the LEOMO Motion Sensor.

Assigning the LEOMO Motion Sensor Locations

Assign LEOMO Motion Sensor locations.

LEOMO Motion Sensors need to be assigned to a specific body location. When prompted, set the locations of your LEOMO Motion Sensors (you can also manually access the location assignment page from Quick Menu > Menu > Motion Sensors > Assign Sensor Locations).



Pairing ANT+ Sensors

Pair ANT+ sensors, such as heart rate and cadence sensors from other companies, when you will use ones.

Optional: Pair ANT+ sensors from Quick Menu > Menu > ANT+ Sensors > Add New Sensor

- Power Meter
- Heart Rate Monitor
- Speed Sensor
- Cadence Sensor
- Speed and Cadence Sensor

When ANT+ sensor connections are unstable, lowering the Bluetooth signal output level may improve connection status.

From the TYPE-S home screen, find and tap the Settings icon, and proceed to Connected devices > Connection preference > Bluetooth > Output Level, then select Output saver instead of Standard.

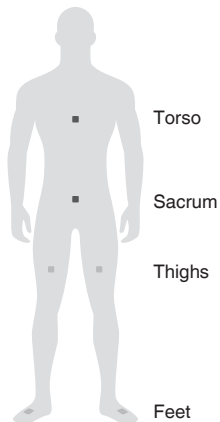
Wearing Your LEOMO Motion Sensors

Match your LEOMO Motion Sensor's color to the assigned location on your body. For example, if you have assigned the orange sensor as the RT (right thigh) sensor, place the orange sensor on your right thigh. The LEOMO App home screen shows what color is assigned to what location.

See "LEOMO App Home Screen" for details.

To change the assignment, go to Quick Menu > Menu > Motion Sensors > Assign Sensor Locations.

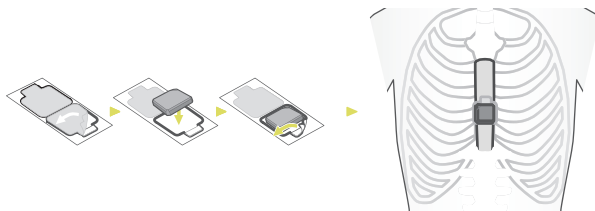
See "Assigning the LEOMO Motion Sensor Locations" for details.



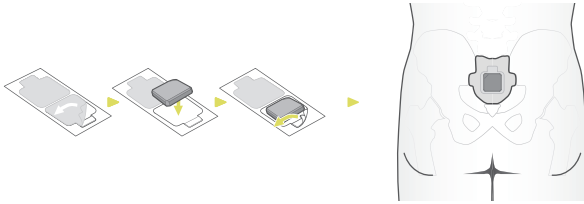
WARNING

Adhesives should always be used with all torso, sacrum, and thigh sensors. Failure to use adhesives could result in serious injury.

Torso (T)



Sacrum (S)



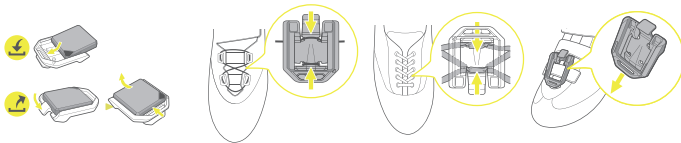
NOTE : _____

- The sacrum can be found right above the tailbone.

Thighs (RT and LT)

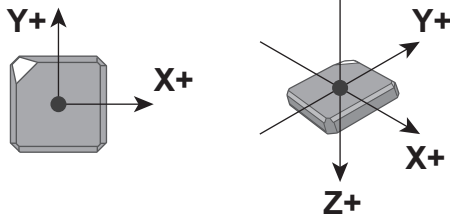


Feet (RF and LF)

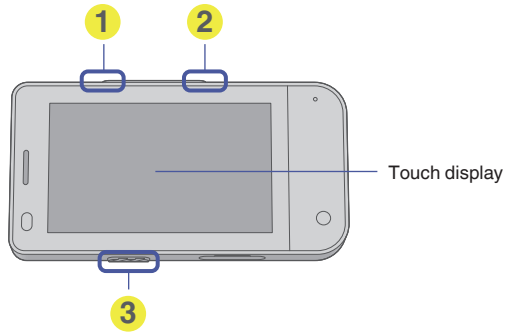


NOTE : _____

The following figures show the axes of the LEOMO Motion Sensors.



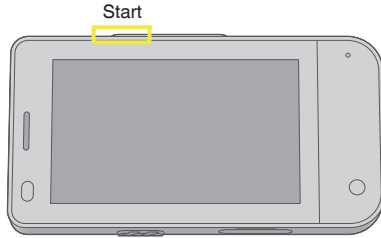
Hardware Controls for the LEOMO App



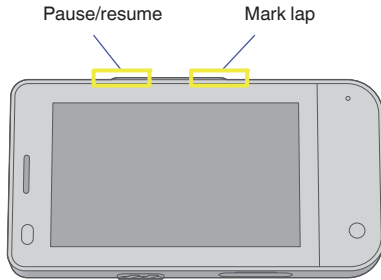
- 1** Start/Pause button
Press to start/pause/resume activity.
- 2** Lap button / Screen Lock
 - Lap button
Press and release to mark lap (can only press once in a paused activity).
 - Screen lock
Press and hold for 2 seconds to lock the screen.
Press and hold again for 2 seconds to unlock the screen.
- 3** Power key
Press and hold for 2 seconds to turn on the TYPE-S.

Recording an Activity

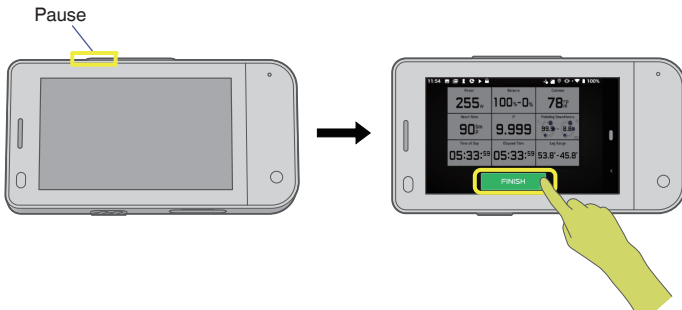
1 Record an activity. Starting an activity



During an activity

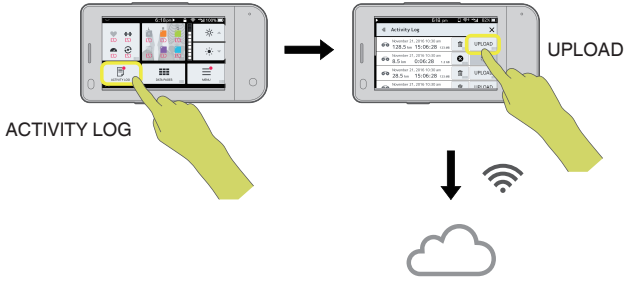


Finishing an activity

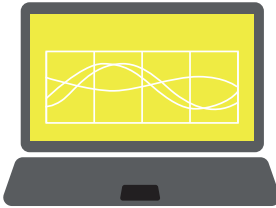


2 Upload an activity.

Upload your activities via Wi-Fi directly from the TYPE-S to the cloud from Quick Menu > Activity Log. Note that the TYPE-S does not upload activities via Bluetooth or USB.

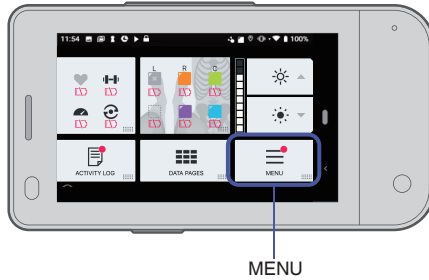


3 Analyze data on the web app.



Customizing the LEOMO App

The LEOMO App has a MENU button for configurations and customization of the LEOMO App. The MENU button is shown on the Quick Menu screen. Swipe up from the bottom of the screen to display the Quick Menu.

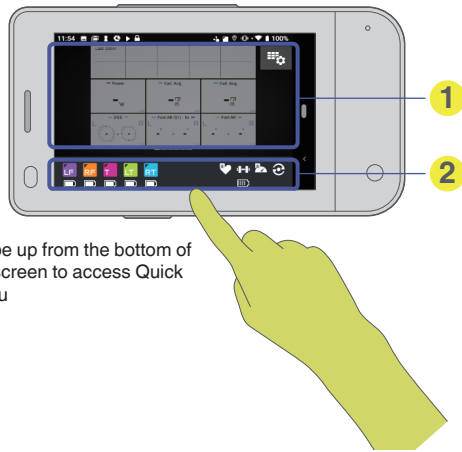


Configurations and customization related to the following items are enabled.

- LEOMO Motion Sensors
- ANT+ sensors
- Data page layouts
- FTP and power zones
- Unit formats
- Account information*

* You must have your LEOMO account when uploading your activities. It can be created in advance by tapping MENU > Account > Create LEOMO Account.

LEOMO App Home Screen



Swipe up from the bottom of the screen to access Quick Menu

1 Data pages

Data pages can be customized through the LEOMO App. Swipe left / right to change pages.

2 Paired sensors connection status

Paired LEOMO Motion Sensors and ANT+ sensors (power meters, heart rate sensors, speed sensors, and cadence sensors) will show here.

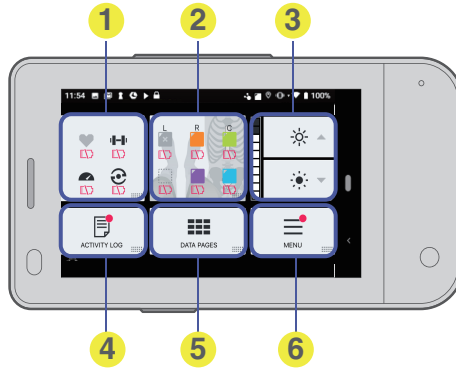
Disconnected sensors will show as a dark grey icon.

Connected ANT+ sensors will be white. Connected LEOMO Motion Sensors will show assigned color and location:

- LF = Left foot
- RF = Right foot
- LT = Left thigh
- RT = Right thigh
- S = Sacrum
- T = Torso
- Empty = Connected but not assigned (will not record data)

Quick Menu Screen

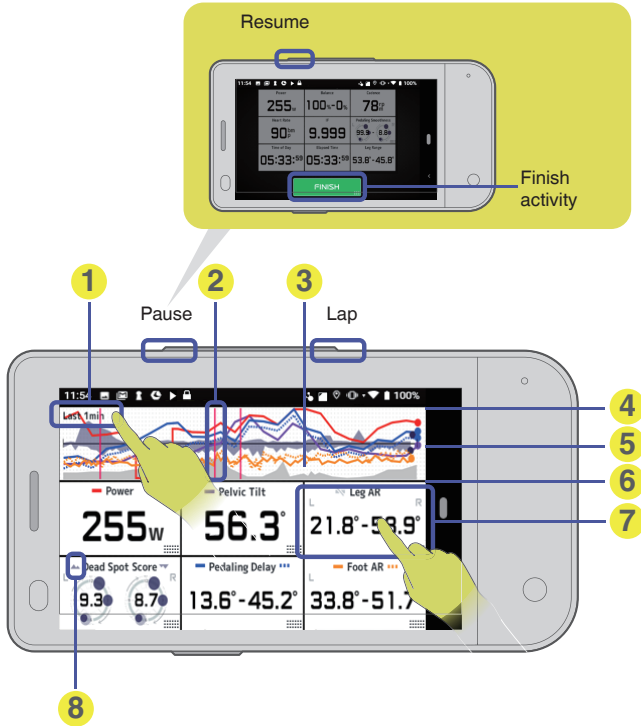
(Swipe up from the bottom of the screen to access Quick Menu)



- ❶ ANT+ sensors
- ❷ LEOMO Motion Sensors
- ❸ Display brightness
- ❹ ACTIVITY LOG
- ❺ Close Quick Menu
- ❻ MENU

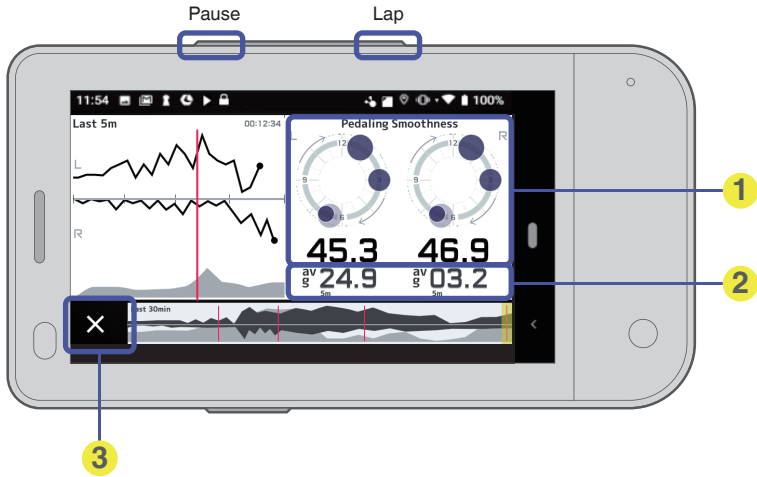
Activity Screens

| Data Pages



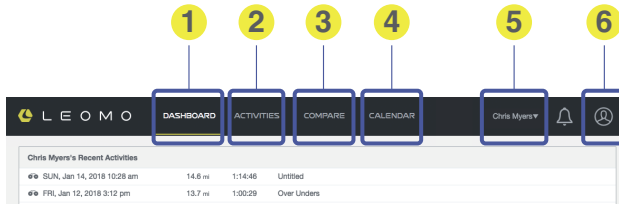
- 1 Graph range
Tap graph anywhere to change range.
- 2 Lap line
- 3 Elevation
- 4 Max point (scaled)
- 5 0 for "balanced" values
- 6 0 / min point (scaled)
- 7 Data box
Short press - turn graph on/off
Long press - open Detailed Data page
- 8 Graph icon
Graph type (standard or balanced), graph color, graph on/off status.

| Data Detail Page (MPIs only)



- ❶ Current value
- ❷ 5 min average
- ❸ Close

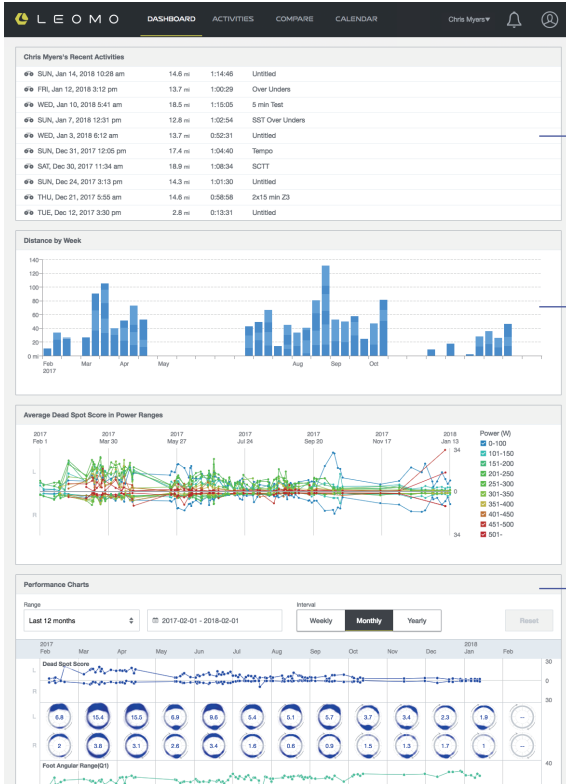
Header



- 1 DASHBOARD**
Displays summary of athlete's data. For details, see "DASHBOARD" below.
- 2 ACTIVITIES LIST**
Shows list of athlete's activities. For details, see "ACTIVITIES" below.
- 3 COMPARE**
Compares athlete's activities data. For details, see "COMPARE" below.
- 4 CALENDAR**
Displays athlete's activities in calendar format. For details, see "CALENDAR" below.
- 5 ATHLETE**
Indicates current athlete. If you are a coach, athletes registered under your name will be accessible here.
- 6 ACCOUNT**
Brings up your account information.

DASHBOARD

Displays summary of athlete's data.



- 1 Recent Activities
List of your (and if you are a coach, your athlete's) activities.
- 2 Distance Traveled
Distance traveled per week for one year.
- 3 MPis Summaries
Summaries of all motion data types.

ACTIVITIES

Shows list of athlete's activities.

Activity List

List of all activities

Activity List

- 21:42 of 454
- 162,2017 Feb 19 7:59 am
Ride to the Office
- 31.6 km - 1:06:35
- 163,2017 Feb 19 8:02 am
Riding to the Office
- 108.0 km - 4:06:38
- 164,2017 Feb 3 7:47 pm
Ride to the Office (to work)
- 10.5 km - 1:05:13
- 165,2017 Feb 8 8:24 am
Ride to work
- 0 km - 0:00:35
- 166,2017 Feb 8 8:39 pm
Ride to work
- 13 km - 1:07:44
- 167,2017 Feb 8 7:48 am
Morning Ride to the Office
- 74.7 km - 2:57:27
- 168,2017 Feb 7 8:43 pm
Ride to work
- 30.1 km - 1:05:02
- 169,2017 Feb 1 8:59 pm
Ride to work (to work)
- 1.1 km - 0:00:43
- 170,2017 Feb 7 8:34 am
Morning Ride to the Office
- 107.7 km - 4:23:45
- 171,2017 Jan 31 8:08 am
Ride to work
- 29.5 km - 1:03:31
- 172,2017 Jan 30 7:02 pm
Ride to work
- 30.7 km - 1:03:34
- 173,2017 Jan 30 8:18 am
Ride to work
- 33 km - 1:19:31
- 174,2017 Jan 28 8:14 am
Sunday Ride
- 115.8 km - 4:25:17
- 175,2017 Jan 28 8:00 am
Ride to work
- 160.5 km - 6:57:29
- 176,2017 Jan 28 8:47 am
Ride to work
- 7.2 km - 0:19:05
- 177,2017 Jan 28 8:58 am
Ride to work
- 0.5 km - 0:00:46
- 178,2017 Jan 28 10:28 pm
Ride to work (to work)
- 58.8 km - 3:31:42
- 179,2017 Jan 28 10:13 am
Ride to work (to work)
- 45.0 km - 2:28:19
- 180,2017 Jan 28 8:00 pm
Ride to work
- 35.8 km - 1:24:28
- 181,2017 Jan 8 8:18 am
Ride to work
- 28 km - 1:19:33

Sunday Ride (115.8 km, 4:14:02, 907 m)

Report Time: 4:25:17
Device: LEO MO - Type: P.3.2017

Type ID works very well.
Last 10 works targeting SST.

Performance Summary:

Min	Max
Power	188
Cadence	63
Speed	28.2
Heart Rate	113
LR Balance	48.951.2

Charts: Elevation, HR Balance, Power, Cadence, Speed, Heart Rate, Draft Heat Index, Power Angular Range, Power HR, Power HR, Power HR, Power HR.

PSI D: Left and Right PSI D charts showing pressure distribution.

PSI Map: PSI Map table showing pressure distribution across different zones.

Ranges: Comparison table for various metrics across different conditions.

- 1 Activity Settings
- 2 Activity Summary
Summary of this activity
All owners can edit the “title” and “notes” section by clicking on it. Make sure to save your notes when done. You can also share / export / delete the activity data from Activity Settings.
- 3 Activity Title
- 4 Activity Notes
- 5 Map
GPS data of your activity.
- 6 ANT+ Sensor and GPS Graph Data
Collected data from connected ANT+ sensors and GPS.
- 7 Motion Sensor Graph Data
Data collected from left and right connected motion sensors.
- 8 Pedal Stroke Intelligence (PSI)
Cross analysis of power, cadence, and dead spot score.
- 9 PCD Map
Maps power / cadence combinations that have the most dead spot scores. Higher opacity means more strokes in that combination. Hover your mouse over each cell to show stroke count with DSS / total stroke count.
- 10 Range Details
Details for laps / ranges in the activity.
 - Tap on a range to zoom into selected range in the above graphs.
 - Select a range in the graphs above and tap “+” on “selected range” to save the range.

COMPARE

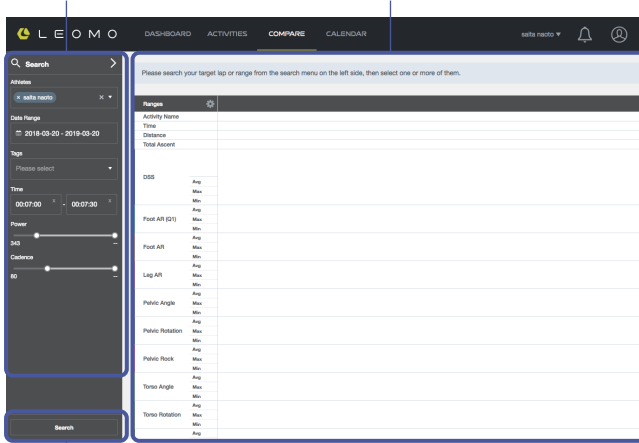
Compares athlete's activities data.

Search Box

Narrows down the Activity Range.

Compare Area

This is where you actually compare data.



Search Button

Click this to see results.



Result List

When the Search button is pressed, the result will show here. Select the Activity Range to compare.

The screenshot displays the LEOMO web application interface. On the left, a sidebar contains a search list of activity ranges. The main panel shows a table of search results. Three numbered callouts indicate key interactions:

- 1**: Points to a selected activity range in the search list.
- 2**: Points to a summary data pop-up that appears when hovering over an item in the search list.
- 3**: Points to a selected activity range in the main panel table.

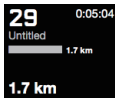
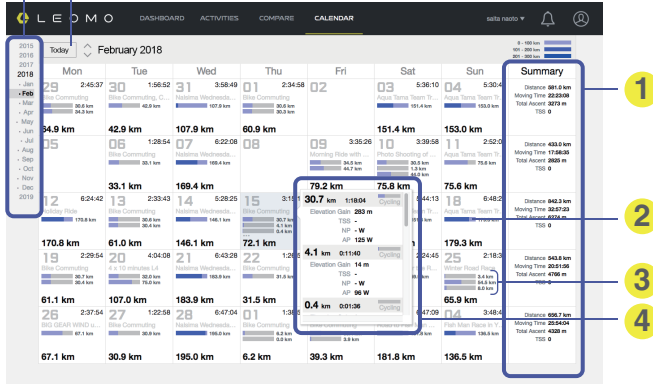
- 1** Selected Activity Range
Select the Activity Range you want to compare and it will show on the main panel.
- 2** Summary data pop up when hovering mouse
- 3** Drag & Drop
Select Activity Range and move order.

CALENDAR

Displays athlete's activities in calendar format.

Select month/year

Button to jump to "today"



Current Day (today)

The current day, which you can go back to directly from the Today button at top left is shown in black.

- 1 Weekly Summary
- 2 Activity Distance by Overlap
- 3 Distance by Activity
- 4 Popup when hovering mouse
Display activity summary of the day at a glance.
By clicking on an item, you can jump to the link and see details.

Why Motion?

| Endurance. Power. Technique.

When these three core skills come together, riders have the key ingredients to reach their maximum performance potential. Though endurance and power are universally used as the basis for cycling training, technique has been a challenging element to measure. Skills such as pedaling, positioning, breathing, muscle de-tension, cornering, and sprinting are all qualitative cycling elements.

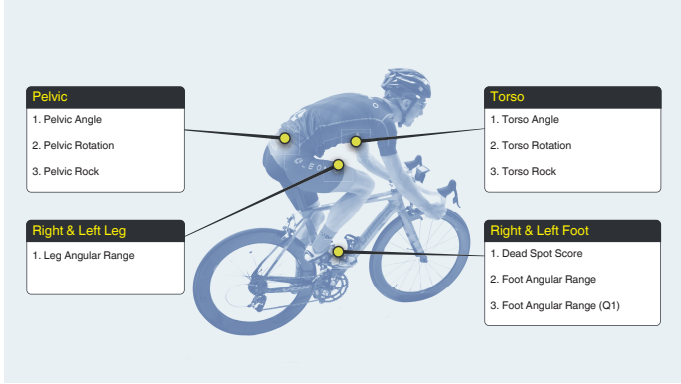
Thankfully, coaches know good pedaling skills and form when they witness it. With the TYPE-S's Motion Performance Indicators, or MPIs, coaches will now have actual values to validate their observations. MPIs give an edge to assessments by making them more precise, more communicable, and more trackable. MPIs measure various motions related to cycling, and by using them, coaches and athletes can:

- Perform a deep analysis of movement versus power, cadence, and fatigue.
- Establish baselines for various physical conditions and situations.
- Discover clues to improving both fitness and technique.

Since everyone's bodies and riding environments are different, each person has their own baseline values, similar to FTP. LEOMO is working with world-class coaches and research centers to continue to improve and expand MPIs to help coaches zero in on the analysis of technique.

Motion Performance Indicators

The TYPE-S comes with five LEOMO Motion Sensors and records several types of Motion Performance Indicators (MPIs).



Dead Spot Score (DSS)

Summary

Dead Spot Scores (DSS) pinpoint the magnitude and locations where pedaling velocities lack smoothness along the left and right pedaling cycle.

- Lack of smoothness is a secondary symptom of sub-optimal pedaling motions.
- Looking at the right and left DSS values provides insight to left/right movement imbalances.

Details

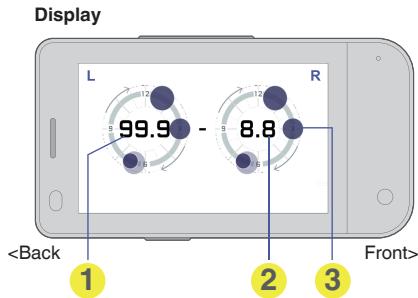
A “dead spot” is where pedaling power is lost when sub-optimally shifting from one movement pattern to another during a pedaling stroke (such as the shift between the power and recovery phase).

Optimal pedaling motions are smooth and put less stress on the body than sub-optimal pedaling motions. DSS is measured by the foot’s angular velocity, where any deviation from a smooth angular velocity sine curve is considered a dead spot. Each dead spot is represented along the pedaling cycle by a filled circle, and a circle’s size indicates the magnitude of deviation.

Since dead spots are caused by many factors, a trained coach must find the primary cause of a high DSS. One known cause of a high DSS is the overuse of less powerful secondary muscles (such as hamstrings) over larger primary muscles (such as the glutes).

Score

The center value shows the total sum of magnitudes (measured in degrees/sec) of the dead spots that occurred in a single pedaling cycle. Each dead spot is represented along the pedaling stroke, with the size showing the magnitude of deviation from a smooth angular velocity.

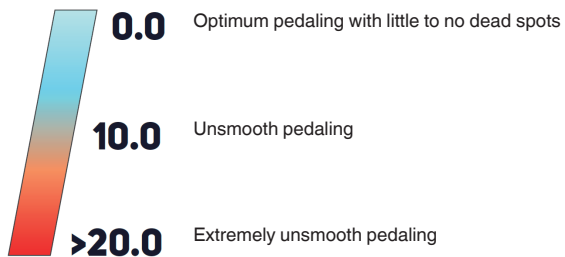


- 1 Left DSS (total for one cycle)
- 2 Right DSS (total for one cycle)
- 3 Dead spot location and magnitude
(Dark circle = last cycle,
Light circle = previous cycles)

Motion



Rating



Leg Angular Range (LEG AR)

Summary

Leg Angular Range measures how much the thighs move up and down while pedaling.

- Looking at right and left Leg AR values provides insight to left/right movement imbalances.

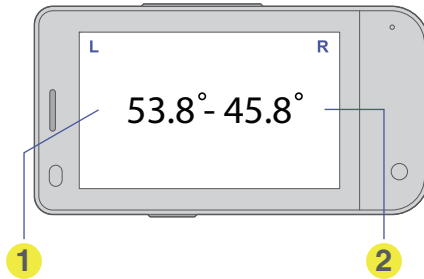
Details

The Leg Angular Range is calculated by subtracting the angle of the thigh at its lowest point from that at its highest point. Athletes should attempt to maximize their Leg Angular Range without sacrificing a stable pelvic tilt or an aggressive torso angle. Leg Angular Range should not be increased using incorrect form or bad bike fit, such as by hyper-extension of the knee, a low saddle height, increasing the Foot Angular Range, or crank lengthening, etc.

Score

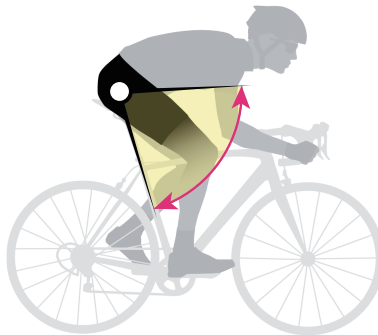
The up-to-down angular range of the left and right thighs (with the hip as the vertex) in a pedaling stroke is expressed in degrees.

Display

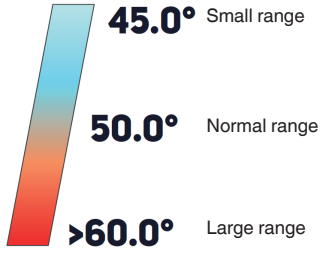


- 1 Left leg angular range
- 2 Right leg angular range

Motion



Rating



Foot Angular Range (FOOT AR)

Summary

Foot Angular Range measures how much the heel moves up and down while pedaling.

- Looking at the right and left Foot AR values provides insight to left/right movement imbalances.

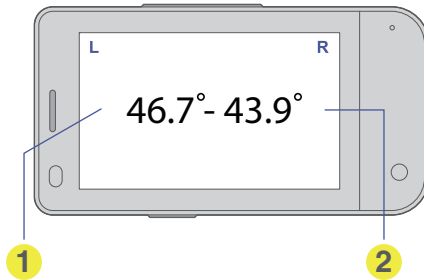
Details

The Foot Angular Range is calculated by subtracting the angle of the foot at its lowest point from that at its highest point. This score is mainly used for characterizing an athlete's pedaling. The larger the Foot Angular Range, the higher the heels rise during the 9 - 12 o'clock phase, and the more that anking occurs between 0 - 6 o'clock.

Score

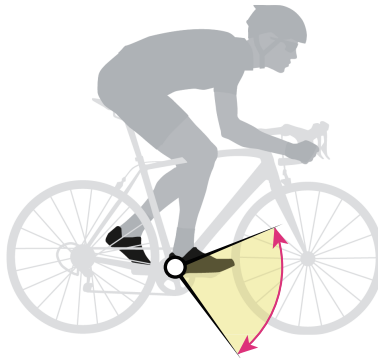
The up-to-down angular range of the foot (with the pedal as the vertex) in a pedaling stroke is expressed in degrees. The lower the range, the easier it is for the leg to transfer power to the pedal.

Display

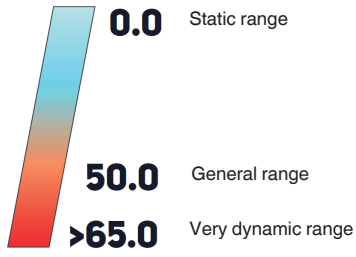


- 1 Left foot angular range
- 2 Right foot angular range

Motion



Rating



Foot Angular Range (Q1) Foot AR (Q1)

Summary

Foot Angular Range (Q1) shows the foot angular range of the first quadrant of the pedaling cycle (12 o'clock to 3 o'clock position).

- Looking at the right and left Foot AR (Q1) values provides insight to left/right movement imbalances.

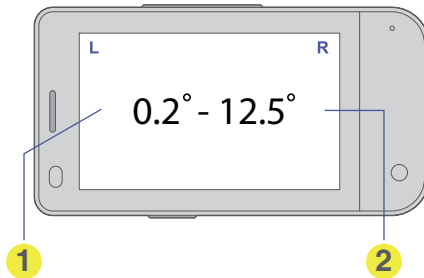
Details

A large Foot AR (Q1) shows that the cyclist pushes down hard after the 12 o'clock position, creating thrust around the 1 and 2 o'clock positions. By pushing down earlier, near the 12 o'clock position, the cyclist minimizes the total angle the foot shifts between the 12 and 3 o'clock position.

Score

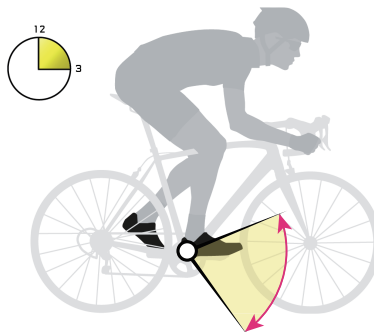
Foot Angular Range (Q1) measures the range of angular movement that occurs between the 12 and 3 o'clock position. The higher the range, the longer the delay for the "push down" motion to start for the power phase.

Display

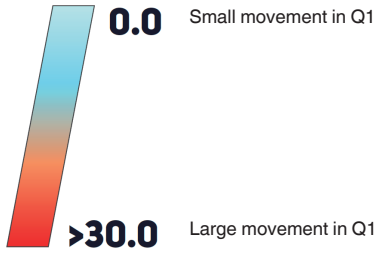


- ❶ Left foot AR (Q1)
- ❷ Right foot AR (Q1)

Motion



Rating



Pelvic Angle

Summary

Pelvic Angle indicates the degree to which the pelvis is tilted upward. The sensor should be fixed with adhesive on the lower back in the area of the sacrum.

Details

Each cyclist has a different neutral pelvic alignment. Finding a natural pelvis position engages the core muscles and reduces lumbar spine strain. Coaches have observed that riders with an upright Pelvic Angle have a higher chance of back injury.

If the pelvis is tilted too far back, lumbar strain can occur, and if the pelvis is tilted too far forward, maximum Leg Angular Range cannot be achieved. Also, posterior rotation of the pelvis reduces power generation capability.

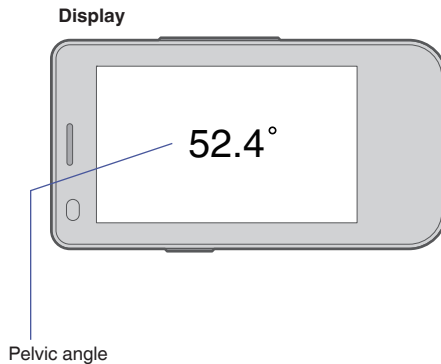
Score

The front-to-back (z-axis) angle of the hip is expressed relative to gravity. Straight up is 90 degrees, while 0 degrees is parallel to the ground*.

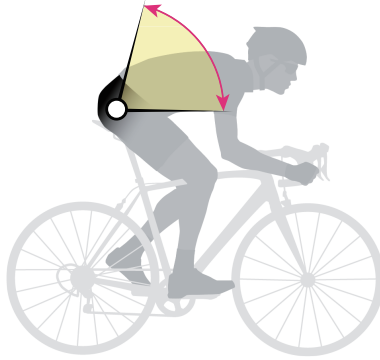
* Assuming that the cyclist is on flat ground.

NOTE :

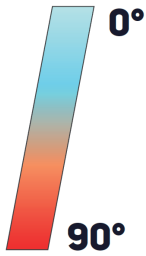
- Climbing, descent, and velodrome riding: remember that the Pelvic Angle score does not represent the angle relative to the bicycle or the ground, but to the direction of gravity. Therefore, care is necessary when verifying the data from banked or graded sections, such as those encountered with climbing, descent, and velodrome riding.



Motion



Rating



Parallel to ground*

*Assuming that the cyclist is on flat ground.

Upright

Pelvic Rock

Summary

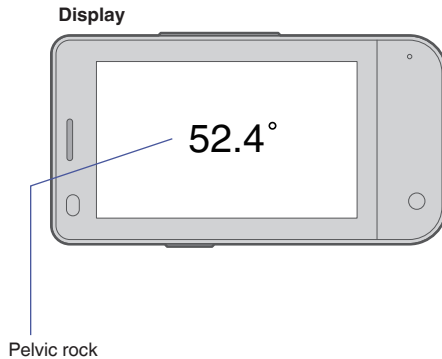
Pelvic Rock measures the average up-down angular movement of the pelvis.

Details

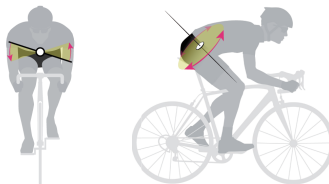
Pelvic Rock represents the average angular rotational range along the pelvis' local sagittal axis (the axis that intersects the pelvis from front to back). When sitting up on flat ground, this front-to-back axis is parallel to the ground; when in riding position, this axis will tilt toward the base of the front wheel.

Score

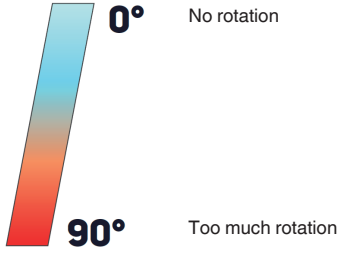
Each clockwise and counterclockwise rotation occurring each second is recorded and then averaged. This motion is commonly known as "rocking on the saddle."



Motion



Rating



Pelvic Rotation

Summary

Pelvic Rotation measures the average angular rotational range of the pelvis.

Details

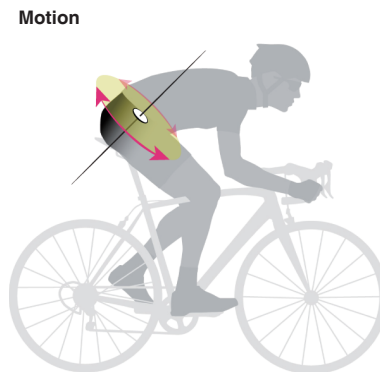
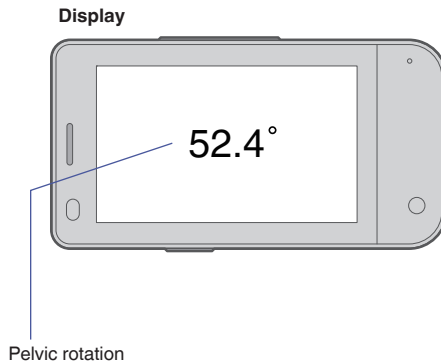
Pelvic Rotation is the average angular rotational range of the pelvis, measured at the sacrum once per second. This measurement is dependent on the sacrum's local vertical axis, which will be perpendicular to the ground when sitting up and that may tilt toward the handlebars when in riding position.

This motion can also be described as the anterior to posterior rotation of the pelvis along the transverse plane.

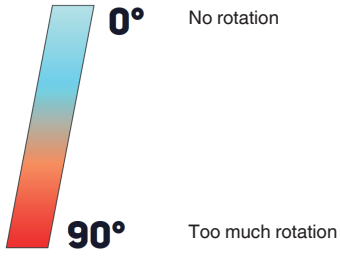
A larger Pelvic Rotation value indicates greater average rotation of the pelvis, and a lower value indicates more limited average rotation.

Score

Each clockwise and counterclockwise rotation occurring each second is recorded and then averaged.



Rating



Torso Angle

Summary

Torso Angle indicates in degrees how much the chest (i.e. torso) is tilted upward relative to gravity. The sensor should be affixed along the sternum with an adhesive.

Details

Torso Angle indicates the angle of the sternum relative to gravity. Generally speaking, Torso Angle decreases when riding in an aero position (upper body angled toward the ground) and increases when riding in a more upright position.

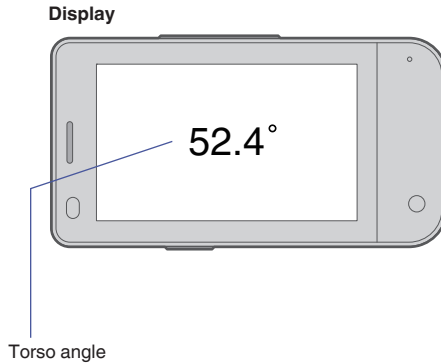
Intentional form change is not the only factor that affects Torso Angle; slight changes due to the influences of power, fatigue, and other factors also affect Torso Angle. For instance, when doing two-minute intervals, Torso Angle is likely to change since it will be difficult to keep a stable chest position as fatigue sets in.

Score

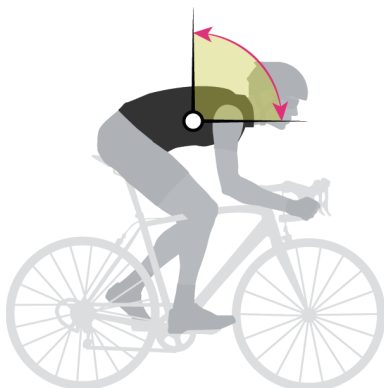
Torso Angle is expressed as the angle of the chest relative to gravity. Sitting with the chest perpendicular to gravity will yield a 90° value, and a 0° value indicates that the chest is parallel to gravity.

NOTE : _____

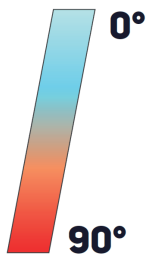
- Climbing, descent, and velodrome riding: remember that the Torso Angle score does not represent the angle relative to the bicycle or the ground, but to the direction of gravity. Therefore, care is necessary when verifying the data from banked or graded sections, such as those encountered with climbing, descent, and velodrome riding.



Motion



Rating



Parallel to gravity

Upright, perpendicular to gravity

Torso Rock

Summary

Torso Rock measures the average angular rotational range of the chest to the left and right.

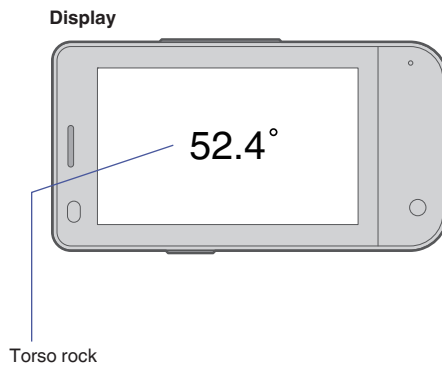
Details

Torso Rock represents the average angular rotational range of the torso, measured at the sternum once per second along the local sagittal axis (the sagittal axis intersects the lower back and the abdomen area above the pelvis).

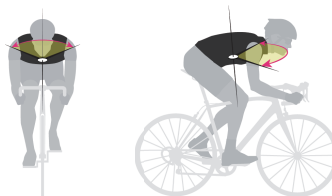
A larger Torso Rock value indicates higher average torso rotation and a lower value indicates more limited rotation. Although torso movement from side to side can generally be called “rocking,” it is important to note that the amount of rocking observed is dependent on both Torso Rock and Pelvic Rock.

Score

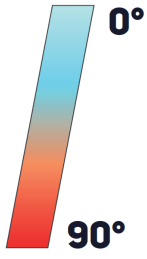
Each clockwise and counterclockwise rotation occurring each second is recorded and averaged, resulting in an angular score.



Motion



Rating



Torso Rotation

Summary

Torso Rotation measures the average angular rotational range of the chest.

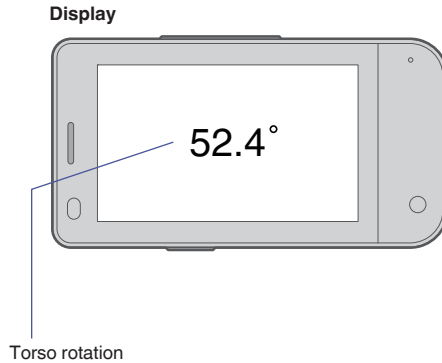
Details

Torso Rotation is the average angular rotational range of the chest, measured at the sternum once per second. This measurement is dependent on the torso's rotational axis, which closely parallels the spine: when sitting up, the spine/rotational axis will be vertical (perpendicular to the ground), and when in riding position, the spine/rotational axis will tilt toward the handlebars.

A larger Torso Rotation value indicates greater average rotation of the torso, and a lower value indicates more limited average rotation. Although this motion might be thought of as being similar to twisting of the torso, it is important to note that the amount of "twisting" is dependent on actual torso rotation and pelvic rotation at the time of measurement.

Score

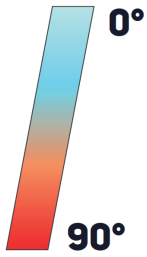
Each clockwise and counterclockwise rotation occurring within a second is recorded and averaged, resulting in an angular score.



Motion



Rating



Specifications of the TYPE-S

OS

Android 9

Available Applications

LEOMO App and other Android apps that can be downloaded from Google Play

SoC

SoC: Snapdragon 439
CPU Clock Speed: Up to 2.0 GHz
CPU Cores: 8x ARM Cortex A53, 4x 2.0 GHz + 4x 1.4GHz
CPU Architecture: 64-bit

Size

L 98.0 mm x W 51.6 mm x H 15.8 mm

Weight

- Main unit: 110 g
- Plus Multi-sport Adapter: +27 g
- Plus Power Mount: +73 g

IPX (Waterproof) Rating

IPX7

Display

- 3.0", WQVGA (400 x 240), Color (65k), Transreflective type
- Touch Panel (Capacitive, Multi point touch)

GNSS (Global Navigation Satellite System)

GPS / GLONASS / BDS / Galileo

Wireless Technology

Supported Bands	<ul style="list-style-type: none">• GSM: 850, 900, 1800, 1900• WCDMA: B1, B2, B5, B8• FDD-LTE: B1, B2, B3, B4, B5, B7, B8, B12, B17, B20, B28• TDD-LTE: B38, B41
Other Wireless Technology	<ul style="list-style-type: none">• ANT+• Bluetooth 4.1 A separate Bluetooth chip is provided for stable connection with five LEOMO Motion Sensors.• Bluetooth Low Energy• Wi-Fi (802.11 a (5 GHz)/b/g/n (2.4 GHz))

Built-In Sensors

Accelerometer / Compass / Gyroscope / Barometric / Altimeter / Proximity sensor / Ambient Light Sensor

NFC

NFC Type A/B (No Felica support)

Other Parts

- Vibrator
- Microphones x 2
- Speaker (Receiver)

Battery

Built-in main unit: 1900 mAh (min)

Maximum Battery Life when Using the LEOMO App

When LTE mobile network is On

5 Motion Sensors	Connected	Off
Built-in battery only	8 h 30 m	9 h 30 m
w/ Power Mount	14 h	15 h 40 m

When LTE mobile network is Off

5 Motion Sensors	Connected	Off
Built-in battery only	9 h 50 m	11 h
w/ Power Mount	16 h 10 m	18 h

NOTE :

All measurements were conducted under: Display brightness: Min, Temperature: 23 °C (73 °F), GPS: On, 3 ANT+ Sensors Connected.

Battery life may be shortened depending on the situation, such as when the temperature is low.

Low- or high-temperature conditions might temporarily shorten battery life, could stop charging from Power Mount and could cause the device to turn off.

The behavior will return to normal when you bring the device within the range of operating ambient temperature.

Avoid leaving the device under high-temperature environment such as under the blazing sun.

Durations

Standby Time (LTE): Approx. 285 hrs

Talk Time: Approx. 990 mins

Charging Time

Main unit: 2.5 hrs

Via attached optional Power Mount (Simultaneous charging): 3.0 hrs

Optional USB Type-C cable and USB AC adapter are required

Main Camera

Photo	<ul style="list-style-type: none">• Sensor size: 13 MP sensor with 1/3" optics• Resolution: 4208 x 3120• Angle: 78.4°• F number: 2• ISO sensitivity: ISO 100 - 1600• HDR: Morpho HDR
Video	<ul style="list-style-type: none">• Resolution and fps: 1080p/720p/480p, all 30 fps• ISO sensitivity: ISO 4800• HDR: n/a

Front Camera

Photo	<ul style="list-style-type: none"> • Sensor size: 5 MP sensor with 1/5" optics • Resolution: 2592 x 1944 • Angle: 76.8° • F number: 2.2 • ISO sensitivity: ISO 100 - 800 • HDR: Morpho HDR
Video	<ul style="list-style-type: none"> • Resolution and fps: 1080p/720p/480p, all 30 fps • ISO sensitivity: ISO 3200 • HDR: n/a

Memory

RAM: 3 GB / ROM: 32 GB

SIM & SD Card

nano SIM x1 with micro SD (up to 512 GB) Slot

USB Terminal

Type-C (Waterproof connector)

Export Data Format (File Types)

FIT (via LEOMO Cloud)

Operating and Charging Temperature Range

Normal Operating: -10 °C to 55 °C (14 °F to 131 °F)

Charging: 0 °C to 55 °C (32 °F to 131 °F)

Pre-Installed Apps

LEOMO App, App Updater, Google Play, Google Maps, Google, YouTube, Google Drive, Gmail, Google Calendar, Google Play Movies & TV, Google Play Music, Camera, Google Keep, Files, Google Duo, Messages, News, Phone, Google Photos Settings, Wallpapers, Calculator

Google, Android, Google Play, YouTube and other marks are trademarks of Google LLC.

Languages (UI)

English, Spanish, German, French, Italian and Japanese

Specifications of the Optional LEOMO Motion Sensors

| Size

L 37.0 mm x W 37.0 mm x H 7.8 mm
(L 1.5 in. x W 1.5 in. x H 0.3 in.)

| Weight

12 g

| IPX (Waterproof) Rating

IPX7

| Batteries

- Built-in Li-ion Polymer Rechargeable Battery
- Lasts up to 7 hrs 50 mins

Specifications of the Optional Power Mount

| Battery Capacity

1900 mAh (min)

| Size

L 98.1 mm x W 51.6 mm x H 15.8 mm
(L 3.9 in. x W 2.0 in. x H 0.6 in.)

| Weight

73 g

| IPX (Waterproof) Rating

IPX7

| Battery Charging Time

2 hrs 40 mins
3 hrs (When simultaneous charging with the TYPE-S)

| Power Sharing and Charging Temperature Range

- Power sharing to the TYPE-S: -15 °C to 55 °C (5 °F to 131 °F)
- Charging: 0 °C to 60 °C (32 °F to 140 °F)

Limitation of Liability

THE TYPE-S PRODUCT AND ALL ACCESSORIES ARE PROVIDED ON AN 'AS IS' BASIS WITHOUT ANY WARRANTIES OF ANY KIND. LEOMO DISCLAIMS ALL WARRANTIES, INCLUDING WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT OF PROPRIETARY OR THIRD PARTY RIGHTS, AND THE WARRANTY OF FITNESS FOR PARTICULAR PURPOSE.

Certification Information

FCC DECLARATION OF CONFORMANCE

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

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

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.

- RF Exposure Information (SAR)

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. To reduce exposure to RF energy, use a hands-free accessory or other similar option to keep this device away from your head and body. Carry this device at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested levels. Choose the belt clips, holsters, or other similar body-worn accessories which do not contain metallic components to support operation in this manner. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified, and use such accessories should be avoided.

The highest FCC SAR values for the device are as follows:

- 1.38 W/kg@1g (Head)
- 1.20 W/kg@1g (Body)

INDUSTRY CANADA DECLARATION OF CONFORMANCE

This device complies with Industry Canada's licence-exempt RSSs.

Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

The device could automatically discontinue transmission in case of absence of information to transmit, or operational failure. Note that this is not intended to prohibit transmission of control or signaling information or the use of repetitive codes where required by the technology.

The device for operation in the band 5150 - 5250 MHz is only for indoor use to reduce the potential for harmful interference to cochannel mobile satellite systems;

L'appareil peut interrompre automatiquement la transmission en cas d'absence d'informations à transmettre ou de panne opérationnelle.

Notez que ceci n'est pas destiné à interdire la transmission d'informations de contrôle ou de signalisation ou l'utilisation de codes répétitifs lorsque cela est requis par la technologie.

Le dispositif utilisé dans la bande 5150 - 5250 MHz réserve une utilisation en intérieur afin de réduire le risque de brouillage préjudiciable aux systèmes mobiles par satellite dans le même canal;

- RF Exposure Information (SAR)

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. To reduce exposure to RF energy, use a hands-free accessory or other similar option to keep this device away from your head and body.

Carry this device at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested levels. Choose the belt clips, holsters, or other similar body-worn accessories which do not contain metallic components to support operation in this manner. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified, and use such accessories should be avoided.

- Informations sur l'exposition RF (SAR)

Cet appareil a été testé et répond aux limites applicables en matière d'exposition aux radiofréquences (RF). Le débit d'absorption spécifique (DAS) désigne la vitesse à laquelle le corps absorbe l'énergie RF. Les limites SAR sont de 1,6 Watts par kilogramme (sur un volume contenant 1 gramme de tissu) dans les pays qui suivent la limite FCC des États-Unis et 2,0 W / kg (moyenne sur 10 grammes de tissus) dans les pays qui suivent le Conseil des Limites de l'Union Européenne. Les tests de DAS sont effectués en utilisant des positions de fonctionnement standard, l'appareil transmettant à son niveau de puissance certifié le plus élevé dans toutes les bandes de fréquences testées. Pour réduire l'exposition à l'énergie RF, utilisez un accessoire mains libres ou toute autre option similaire pour éloigner cet appareil de votre tête et de votre corps. Transportez cet appareil à au moins 10 mm de votre corps pour vous assurer que les niveaux d'exposition restent au niveau ou au-dessous des niveaux testés. Choisissez les agrafes de ceinture, les étuis, ou d'autres accessoires similaires portés au corps qui ne contiennent pas de composants métalliques pour supporter le fonctionnement de cette manière. Les boîtiers avec des pièces métalliques peuvent modifier les performances RF de l'appareil, y compris sa conformité aux directives d'exposition aux RF, d'une manière qui n'a pas été testée ou certifiée, et l'utilisation de ces accessoires doit être évitée.

STATEMENT OF COMPLIANCE WITH EU DIRECTIVE

Hereby, LEOMO, Inc. declares that this LEOMO TYPE-S Phone is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: <https://www.leomo.io/legal>

DECLARATION DE CONFORMITE AVEC LES DIRECTIVES DE L'UNION EUROPEENNE

Par la presente LEOMO, Inc. declare que l'appareil LEOMO TYPE-S Phone est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 2014/53/EU.

Company: LEOMO, Inc.

Address: 2000 Central Avenue, Suite 150, Boulder CO 80301, USA

E-mail: certification@leomo.io

- RF Exposure Information (SAR)


This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. Specific Absorption Rate (SAR) refers to the rate at which the body absorbs RF energy. SAR limits are 1.6 Watts per kilogram (over a volume containing a mass of 1 gram of tissue) in countries that follow the United States FCC limit and 2.0 W/kg (averaged over 10 grams of tissue) in countries that follow the Council of the European Union limit. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. To reduce exposure to RF energy, use a hands-free accessory or other similar option to keep this device away from your head and body.

Carry this device at least 5 mm away from your body to ensure exposure levels remain at or below the as-tested levels. Choose the belt clips, holsters, or other similar body-worn accessories which do not contain metallic components to support operation in this manner. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified, and use such accessories should be avoided.

The highest CE SAR values for the device are as follows:

- 1.369 W/kg@10g (Head)
- 1.653 W/kg@10g (Body)
- 5GHz Restriction

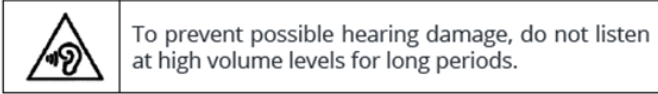
The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

	AT	BE	BG	HR	CY	CZ	DK
	EE	FI	FR	DE	EL	HU	IE
	IT	LV	LT	LU	MT	NL	PL
	PT	RO	SK	SI	ES	SE	UK

- Maximum Transmit Power

GSM 850, 1900 MHz	35 dBm
GSM 900, 1800 MHz	32 dBm
WCDMA 1, 2, 5, 8	25 dBm
LTE 1, 2, 3, 4, 5, 7, 8, 12, 17, 20, 28, 38, 41	32 dBm
Bluetooth® 5.0	20 dBm
WLAN 2.4 G	20 dBm
WLAN 5 G	23 dBm
NFC 13.56 MHz	42 dBuA/m @ 10m

- Prevention of Hearing Loss



- Battery Caution Notice

Caution: Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions

WEEE COMPLIANCE & DISPOSAL INFORMATION

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

STATEMENT OF COMPLIANCE WITH Japan Radio Law

- RF Exposure Information (SAR)

To reduce exposure to RF energy, use a hands-free accessory or other similar option to keep this device away from your head and body. Carry this device at least 5 mm away from your body to ensure exposure levels remain at or below the as-tested levels. Choose the belt clips, holsters, or other similar body-worn accessories which do not contain metallic components to support operation in this manner. Cases with metal parts may change the RF performance of the device, including its compliance with RF exposure guidelines, in a manner that has not been tested or certified, and use such accessories should be avoided. The highest Japan SAR values for the device are as follows:

- 0.945 W/kg@10g (Head)
- 1.100 W/kg@10g (Body)
- 5GHz Restriction

5GHz band (W52, W53): Indoor use only (except communicate to high power radio)

e-Label of Regulatory Information:

For Regulatory Information and Compliance mark (E.labels).
Please refer to your device via the following step: Settings > System > Certification
More information at:
[HTTPS://LEOMO.ZENDESK.COM](https://leomo.zendesk.com)
E-mail support requests to:
SUPPORT@LEOMO.IO

MORE INFORMATION AT:[HTTPS://LEOMO.ZENDESK.COM](https://leomo.zendesk.com)-MAIL SUPPORT
REQUESTS TO:[SUPPORT@LEOMO.IO](mailto:support@leomo.io)