



User Manual

THIM is not a medical device. The information contained in this document is not intended to be used as medical information or as a substitute for your own health professional's advice. As a matter of good practice we recommend you seek the advice of your health professional before using this product.

March 2019
For Firmware Version 1.0.3

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Getting started

Welcome to the THIM community! THIM was designed by sleep researchers to track and improve your sleep.

What you'll find in the box

- 1 X THIM device with inbuilt rechargeable lithium-ion battery
- 4 X finger bands. Insert your preferred band size into the THIM device
- 1 X USB power cable

The most up to date copy of this manual can be downloaded from:

<https://thim.io/faq/>

Setting up your THIM

To setup THIM, you must first enable Bluetooth on your smartphone.

The THIM app is optimized to run on the latest smartphone operating systems for iOS and Android. We recommend updating your software to the latest version available.

Setting up a THIM account on your smartphone

1. Install the THIM app from the Apple App store or Google Play store. Search for “THIM sleep ring” or follow this link: <https://thim.io/app/>

Note: if you do not have an account with the Apple App or Google Play store you will need to create one before you can download the THIM app

2. When the app is installed, open it and select “START” on the app
3. Select “SIGN UP” on the app
4. Agree to the terms of use by selecting the tick box. Then select “NEXT”
5. On the Create Account Page enter your personal information and select a password. Then select “NEXT”
6. Open the activation email sent to your inbox and click the “ACTIVATE LINK” button
7. Select “NEXT” on the app

Note: you do not need to set up anything on your personal computer. THIM operates from your smartphone.

Tip: If you are unable to find the activation email, please search your junk folder. You can send another activation link by selecting this option on the THIM app.

Connecting THIM to your Account

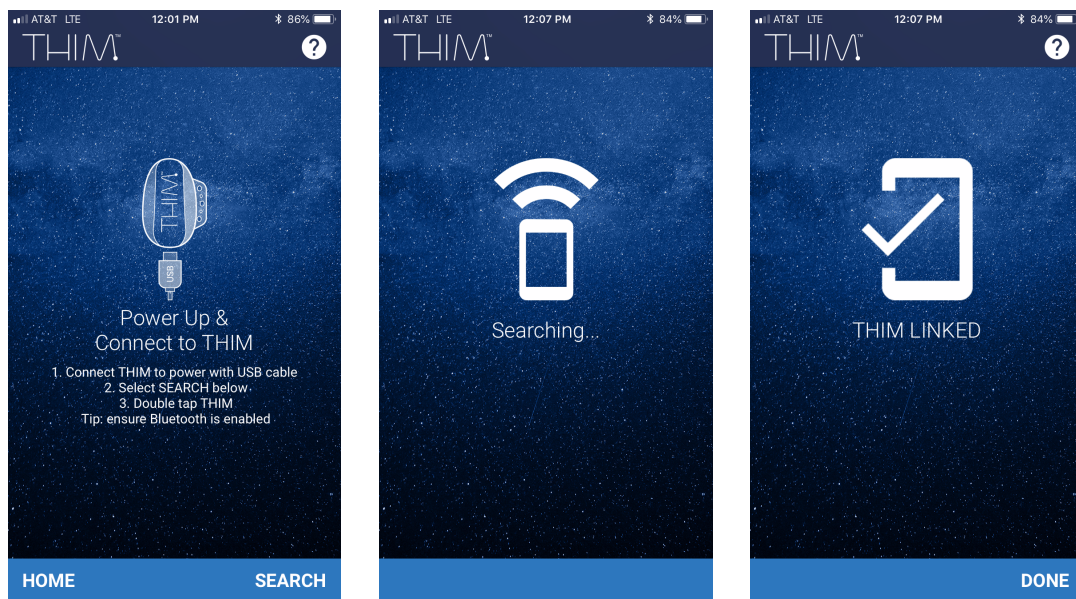
THIM arrives to you in sleep mode. This is done to preserve battery life. You need to wake THIM up and link THIM to your account.

Follow these steps:

1. Take the THIM power cable and connect one end into THIM and the other end into a powered USB port

Note: ensure the USB cable is connected to power

2. Select “SEARCH” on the app
3. Double tap the THIM device until the app says “THIM LINKED”. Then tap “NEXT”



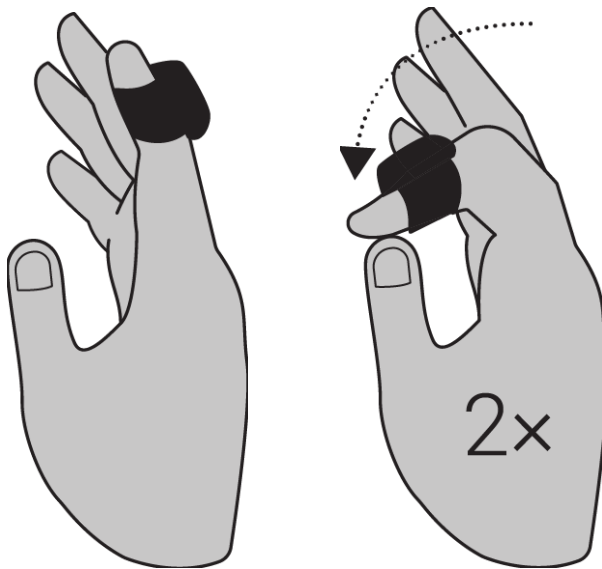
If the “THIM LINKED” screen does not display, follow these steps:

1. Check that Bluetooth is enabled in your smartphone settings
2. Check that your USB power cable is plugged in and receiving power
3. Check that you are tapping on THIM as the app displays “Searching...” on the screen

Wearing THIM

Place THIM on the index finger of your dominant hand. You will double tap THIM often to begin and end programs such as sleep re-training.

Tapping your index finger and thumb together is the best way for THIM to detect this double tap. See picture below:



Ensure THIM is a snug fit.

The end of your finger provides a greater range of movement during sleep compared to the lower part of the finger. This allows THIM to collect more data points and enhance the sleep tracking abilities.

THIM is not an activity tracker. You do not wear THIM throughout the day. THIM is worn only while you are in bed or taking a nap.

Calibrating THIM

THIM will emit a calibrated vibration every ~30 seconds. Tap your finger when you feel this vibration. This is how THIM knows you are still awake.

This calibrated vibration is used as you fall asleep during the sleep re-training and power nap programs. This calibrated vibration should be subtle, yet strong enough for you to feel it.

Note: The calibrated vibration is not used if you have selected sleep-tracking program.

Follow these steps:

1. Place THIM on your index finger, above your knuckle
2. Select “NEXT” on the app
3. Select “CALIBRATE”
4. THIM will cycle through 12 pre-set vibration levels in ascending order
5. Once you feel your preferred vibration level tap “SET” on the app
6. Complete step 5 a total of 3 times. THIM will remember the average vibration of your 3 attempts. When finished select “DONE”

Checking for the latest firmware

The software on THIM (firmware) is routinely updated to improve performance and enhance functionality.

Check for the latest firmware by visiting the MY THIM page. This can be achieved by going to SETTINGS – MY THIM. At the bottom of the app screen you will see “Firmware”. Tap here on the app to check for the latest firmware update.

Latest firmware available in March 2019 is firmware **version 1.0.3**

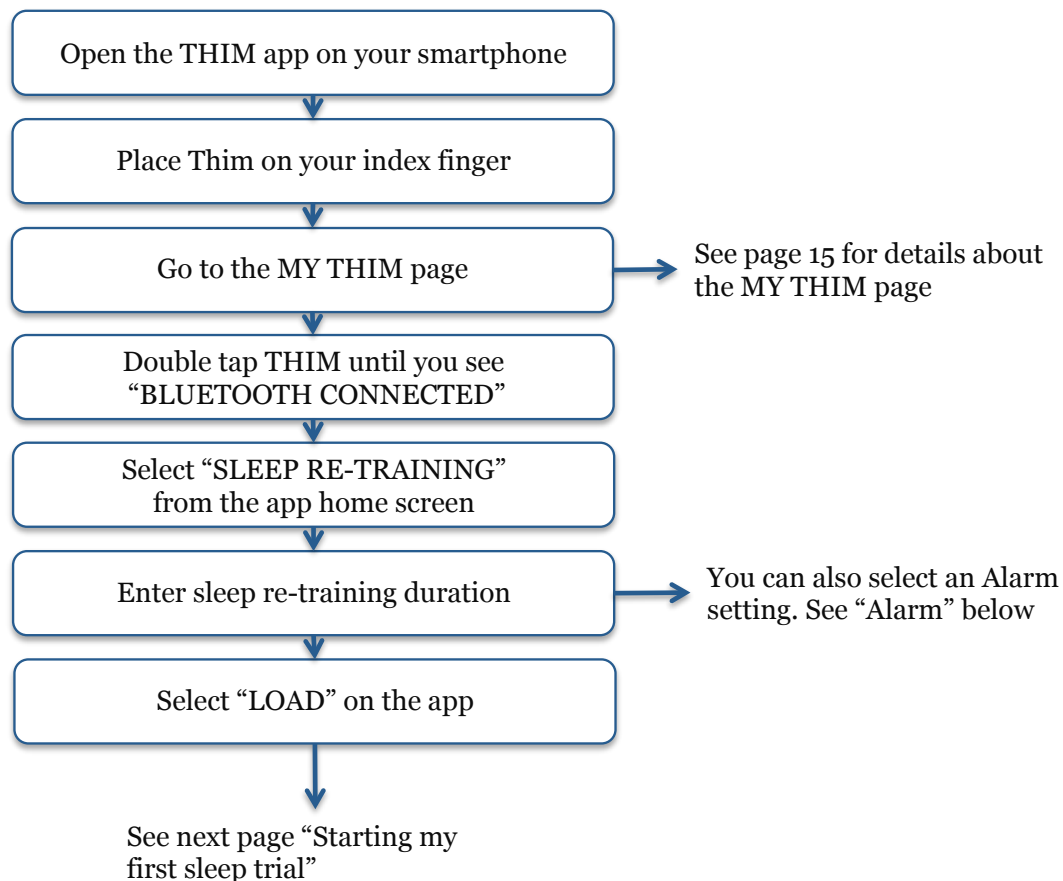
Sleep re-training

Falling asleep, repeatedly, can condition you to sleep better. Each attempt at falling asleep and then waking up is called a sleep trial. In University studies, sleep trials have been shown in most people to reduce the time it takes to fall asleep, reduce wakefulness across the night and increase total sleep duration.

THIM delivers these sleep trials during the first 1-hour of your bedtime. Doing this for 5 consecutive nights will promote better sleep on night 6.

Tip: If you have not fallen asleep within 20 minutes THIM will vibrate and flash white. When this happens, get out of bed for 10 minutes and then attempt another sleep trial.

Follow the steps below at your regular bedtime to set up sleep re-training:



Setting an alarm

You can set a **normal alarm** on the app. Simply enter the time you wish THIM to wake you and the device will vibrate intensely at that time.

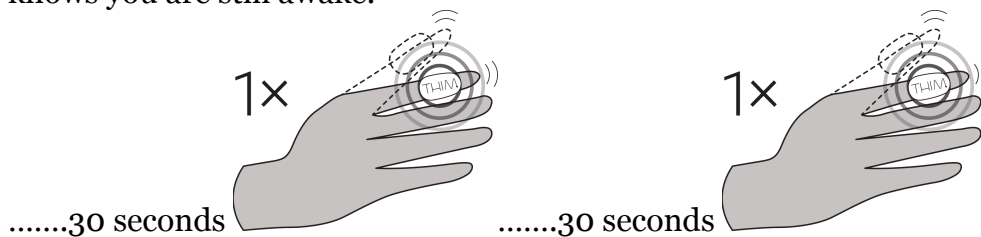
A **smart alarm** is similar to the normal alarm. The difference is that a smart alarm will detect your lightest stage of sleep in a 30-minute window and then vibrate to wake you.

For example, if you set your smart alarm for 8:00am, THIM will wake you up sometime between 7:40-8:10. THIM will select your lightest sleep stage to alarm.

Starting my first sleep trial

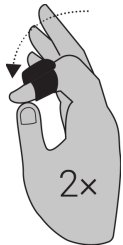
When ready to begin, double tap your index finger and thumb together. THIM will flash blue 3 times. THIM will continue to flash blue every 6 seconds when the program is active.

Tap your index finger each time you feel your calibrated vibration. These vibrations will be timed *approximately* 30 seconds apart. This is how THIM knows you are still awake.



Shortly after the second vibration has stopped, THIM will emit an intense alarm vibration to wake you up.

To cancel this vibration, double tap your index finger and thumb together.

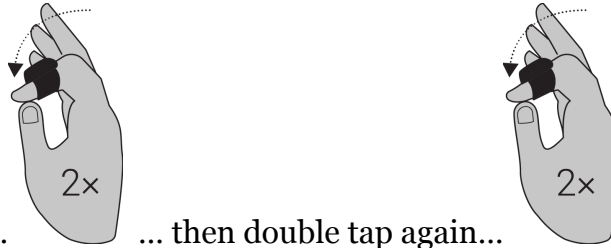


NOTE: If you haven't started your next sleep trial within 5 minutes THIM will vibrate (Buzz...Buzz...Buzz... Buzz) as a reminder to double tap and start your next sleep trial.

Tip: Research shows that, on average, you will have been asleep for 3-minutes following the second missed tap. This is why THIM will alarm immediately after the second missed tap.

Starting my *second* and subsequent sleep trials

To begin your next sleep trial, double tap your index finger and thumb together twice in a row...



Double tap... ... then double tap again...

THIM will flash blue 3 times once the next sleep trial has begun.

You should aim to complete as many sleep trials as you can within the sleep re-training window you set. For example, if you set the duration of 1-hour of sleep re-training, completing 3 or 4 sleep trials within this period is a great outcome.

Finish

If you set a normal alarm to wake you in the morning, THIM will vibrate at the time you set (for example: 8:00am). To cancel this alarm, double tap your index finger and thumb together.

Syncing your data

From the homepage, select GET DATA. Once synced, your data will be visible under VIEW MY DATA on the homepage.

If THIM has lost Bluetooth connection to your phone, you will need to double tap your finger and thumb together to connect. If you are having trouble connecting please see **My THIM / Bluetooth connection** on page 17.

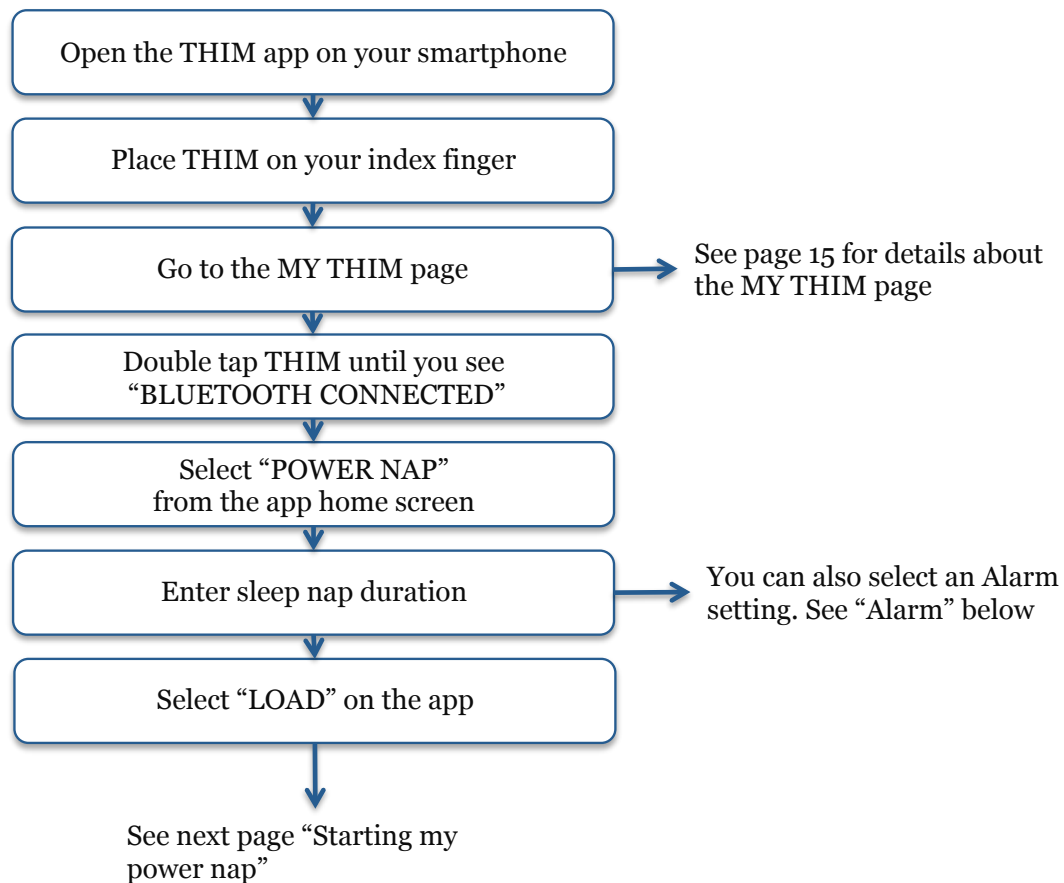
Tip: You must be connected to the Internet to see the data on your dashboard.

Power nap

Refresh with a short sleep during the day. This power nap program is separate and unrelated to the sleep re-training program.

Tip: *Research shows that 10 minutes is the perfect duration for a power nap. 10 minutes of naptime avoids you waking with sleep inertia, so you can quickly get back to your day.*

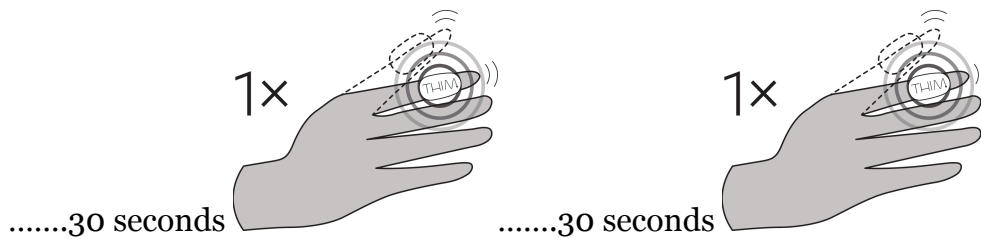
Follow the steps below to begin your power nap:



Starting my power nap

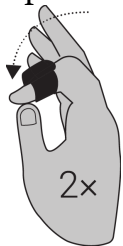
When ready to begin, double tap your index finger and thumb together. THIM will flash blue quickly 3 times. THIM will continue to flash blue once every 6 seconds when the program is active.

Tap your index finger each time you feel your calibrated vibration. These vibrations will be timed *approximately* 30 seconds apart. This is how THIM knows you are still awake.



Once asleep, you will stop tapping your finger and THIM will know you are asleep. These vibrations will then stop until your naptime has expired.

At the end of your nap, THIM will emit an intense alarm vibration to wake you up. To cancel this vibration, double tap your index finger and thumb together.



Selecting a time limit

If you are on a schedule and only have a short window of time to nap, you can set a time limit to ensure you wake up. This ensures your time spent napping or attempting to nap does not exceed a specific time window.

Syncing your data

From the homepage, select GET DATA. Once synced, your data will be visible under VIEW MY DATA on the homepage.

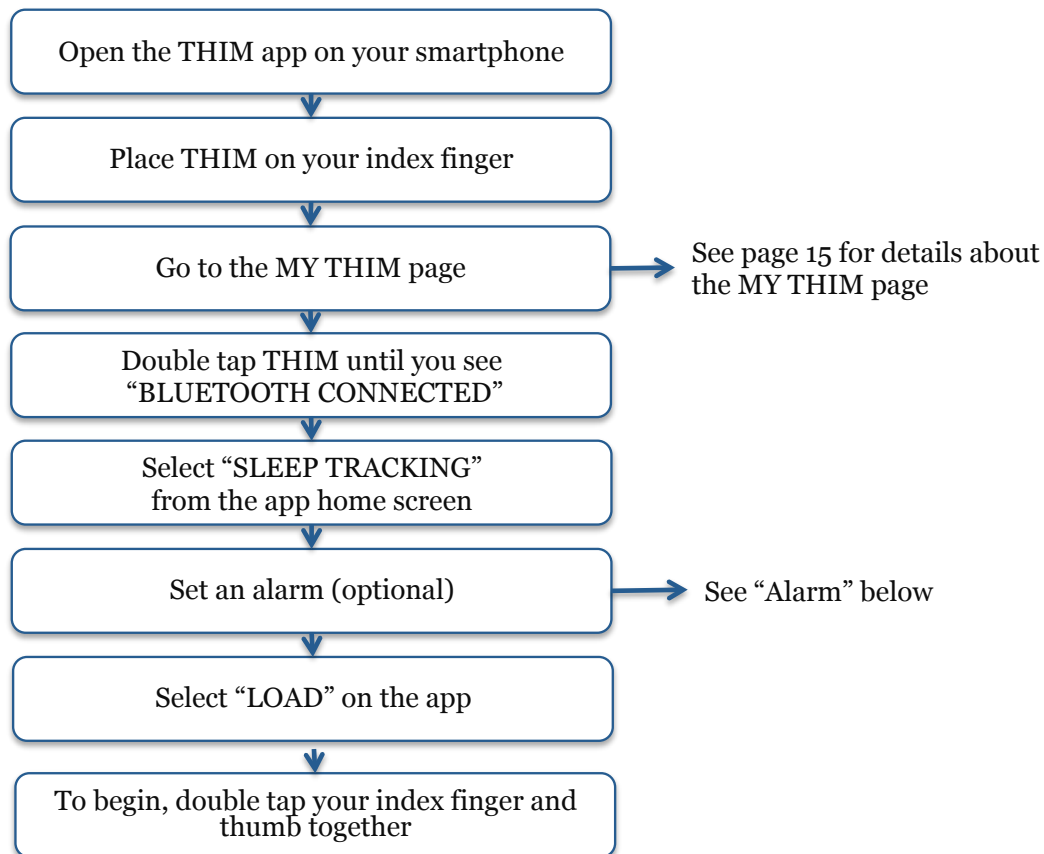
If THIM has lost Bluetooth connection to your phone, you will need to double tap your finger and thumb together to connect. If you are having trouble connecting please see **My THIM / Bluetooth connection** on page 17.

Tip: You must be connected to the Internet to see the data on your dashboard.

Sleep tracking

Please follow the steps below to begin tracking your sleep.

Tip: *If you are using the sleep re-training program, you do not need to select sleep tracking also. Sleep tracking will occur automatically when you begin the sleep re-training program.*



Cancelling the morning alarm

If you set an alarm, this will intensely vibrate at the time you selected. Tap your index finger and thumb together to cancel the alarm.

If you did not set a normal morning alarm, you will need to select GET DATA from the home screen in the morning to stop THIM from tracking your sleep.

Syncing your data

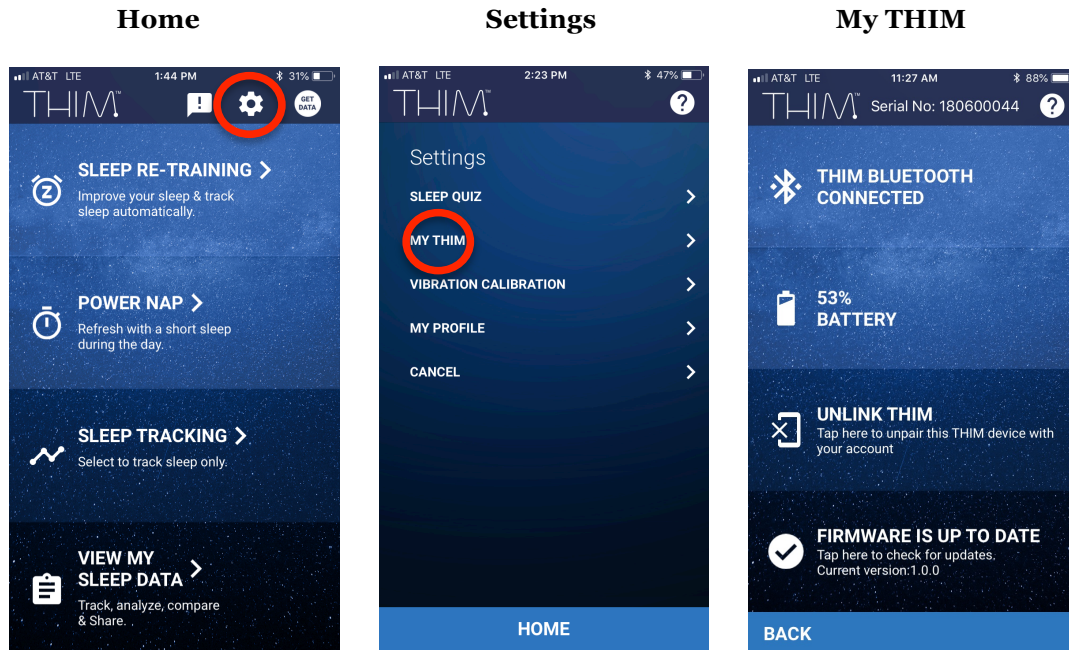
From the homepage, select GET DATA. Once synced, your data will be visible under VIEW MY DATA on the homepage.

If THIM has lost Bluetooth connection to your phone, you will need to double tap your finger and thumb together to connect. If you are having trouble connecting please see **My THIM / Bluetooth connection** on page 17.

Tip: You must be connected to the Internet to see the data on your dashboard.

My THIM / Bluetooth connection

The my THIM page can be accessed by tapping the settings icon in the top right hand corner of the home screen and then selecting “MY THIM”



The my THIM page contains four sections:

THIM BLUETOOTH

This tells you if your THIM device is connected to your app through a Bluetooth signal. If Bluetooth is disconnected, double tapping your finger and thumb together whilst wearing THIM will connect THIM via Bluetooth.

If you are still unable to connect, follow these steps:

1. Double tap THIM again
2. Check that Bluetooth is enabled on your smartphone
3. Check THIM is linked to your account (see pages 4 & 5)
4. Charge THIM for at least 20 minutes with the USB power cable
5. If the above steps do not work, re-set your device. Insert and remove the USB power cord 3 times in 10 seconds. *Ensure the power cable is plugged in and receiving power whilst doing this.*

BATTERY

When connected to Bluetooth you will receive a battery level reading. This battery level can only be displayed when THIM is connected to your smartphone via Bluetooth.

UNLINK THIM / LINK THIM

You can unlink your THIM device from your account here. This might be useful for sleep clinics that use multiple units, so that units can be shared amongst various people.

FIRMWARE

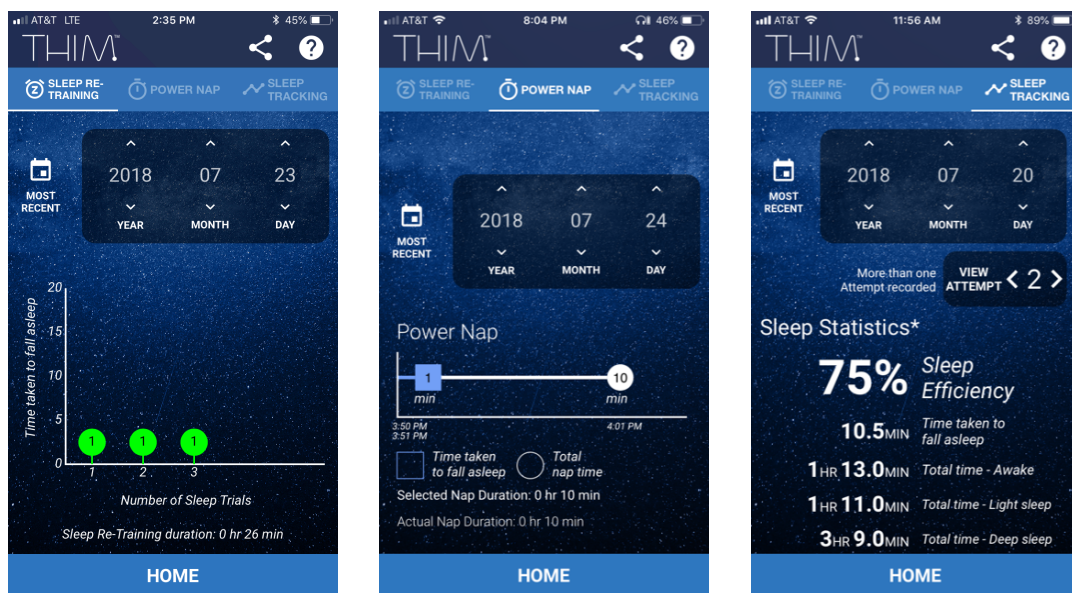
When a firmware update is available, it will display here. Tap “Firmware” to check for the latest version available. Please keep your firmware up to date. This allows us to maximize the performance of your device.

Viewing your sleep data

You can see your sleep data by tapping “VIEW MY DATA” on the home screen.

Tip: You must be connected to the Internet to see sleep data. This data is stored on a secure server, not on your phone.

Your sleep data will be available under one of the program tabs at the top of the screen. Select the data you wish to view – sleep re-training power napping or sleep tracking.



Tip: When using sleep re-training, THIM will record data under the sleep re-training tab and also the sleep tracking tab. THIM will automatically begin recording your sleep data once sleep re-training is finished.

Sleep efficiency score

Sleep efficiency is a measure of time asleep over total time in bed. Generally, sleep clinicians regard 85% or above as excellent.

Multiple data sets for the same date

When you record multiple activities on the same day, your data can be accessed via the VIEW ATTEMPT tab. You can use this to scroll through the different data sets.

Charging THIM

THIM comes with a USB power cable. When one end of the cable is plugged into THIM and the other end is plugged into a power source, THIM will charge.

Note: THIM will glow white when the battery is less than 100% full. If already full, THIM will not glow white when you plug into USB power.

Troubleshooting

1. My THIM is new but not working

THIM arrives to you in sleep mode. To wake THIM up you must complete the steps listed on pages 4, 5 & 7.

If connection not successful, try:

- Double tapping THIM again whilst the app says “searching”
- Check your phone Bluetooth settings to ensure Bluetooth is enabled
- If these steps do not work, re-set your device. Insert and remove the USB power cable into THIM 3 times within 10 seconds. The power cord must be receiving power.

2. My THIM does not glow white when I plug it into power

THIM will glow white when connected to a power source. **The light will not turn on, however, when the battery is already 100% full.**

You can check the status of your battery by visiting the MY THIM page (see page 15).

Tip: to check battery status you must be connected via Bluetooth. Double tap THIM to connect. You will see Bluetooth connection status at the top of the MY THIM page.

3. I am unable to connect via Bluetooth

See “My THIM / Bluetooth Connection” on page 15.

4. THIM is vibrating before I fall asleep

If you feel that the vibration is sounding before you fall asleep, there are two possibilities:

- 1) THIM is not detecting your tap. Tapping your index finger (with THIM on it) against your thumb is the best option.
- 2) You have actually entered your first stage of sleep. Your sleep time is only very brief during Sleep Re-Training. As a result you may feel like you did not fall asleep at all. Trials at Flinders University have shown that people have entered sleep even though they may verbally report not doing so.

5. I cannot see my sleep data

See page 17 on how to view sleep data.

To see your sleep data, you must first:

- Sync data from THIM to your phone by selecting GET DATA from the home screen
- Be connected to the Internet. Your data is stored on a server, not on your phone

6. My THIM is still not working, how do I re-set my device?

You can perform a device re-set by inserting and then removing the USB power cable 3 times in 10 seconds. **Ensure the USB cable is plugged into power.**