



# **Manual for**

LavvieTAG

LavvieTAG Charger

LavvieBeacon

LavvieScanner

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# What is LavvieTAG?

LavvieTAG is a health tracker designed for cats. Put this item around a cat's neck and you can monitor your cat's daily routine and activities by having LavvieTAG collect cat's daily activity data. This will also help track changes in their health conditions. Connect to your smartphone along with LavvieBot S (automatic litter box) or LavvieScanner (After LavvieTAG accumulates more than 1 hour of activity data, LavvieScanner transfers that collected data to PurrSong application when a cat wearing LavvieTAG approaches near it) to receive cat's activity data. On top of that, on PurrSong application, you can easily check collected data of a cat who has been wearing LavvieTAG and using PurrSong's IoT products. Now, try checking your feline friend's activities!

## What is in the package?

1 Lavvie TAG, 2 silicone cases, 2 straps, 2 sets of letter stickers, and 1 manual

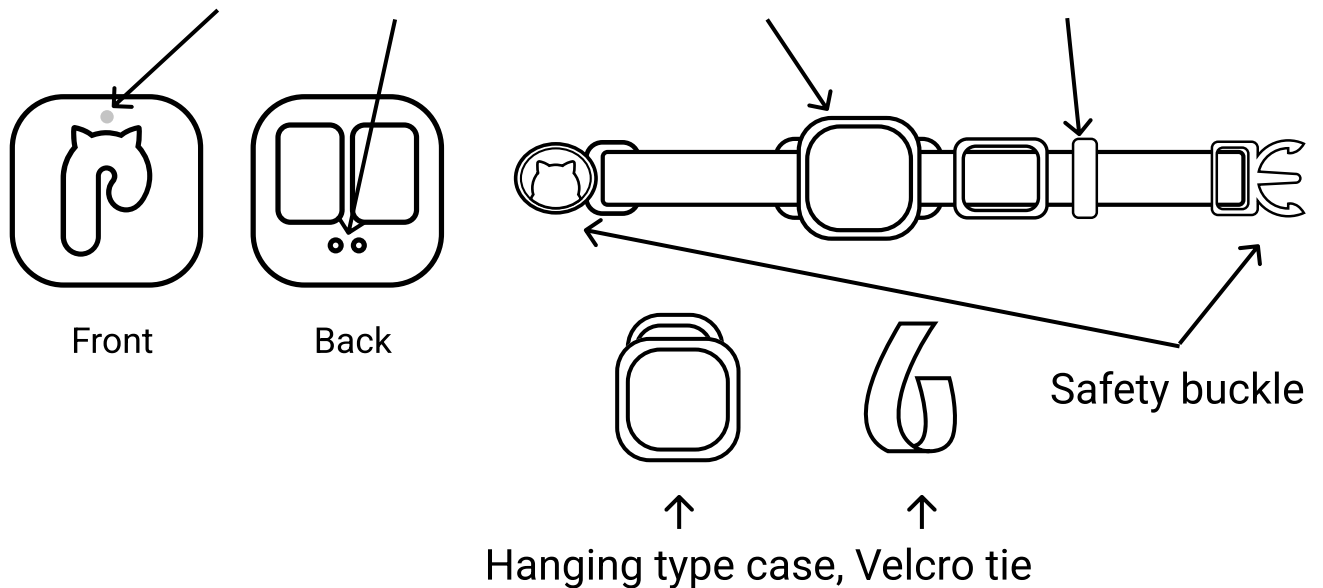
\*Please refer to the quick guide in the product box to check each component.

\*\*Those components and accessories are subject to change.

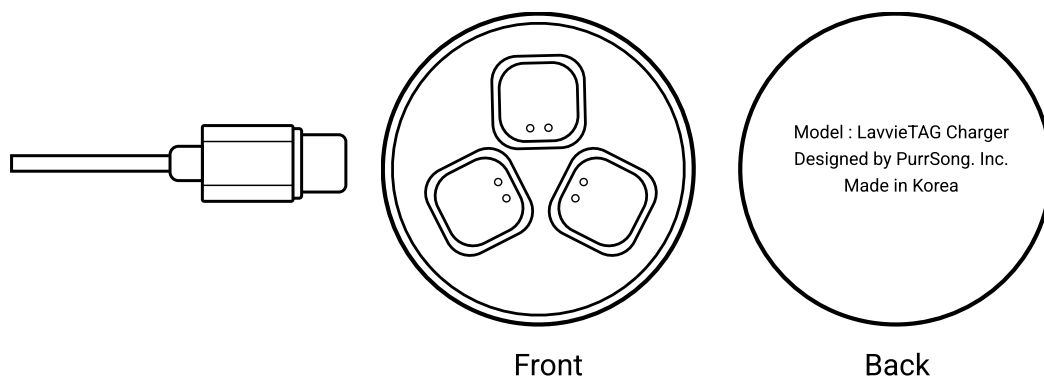
\*\*\*The product's appearance and specifications may change without prior notice to improve its performance.

# Product name & parts

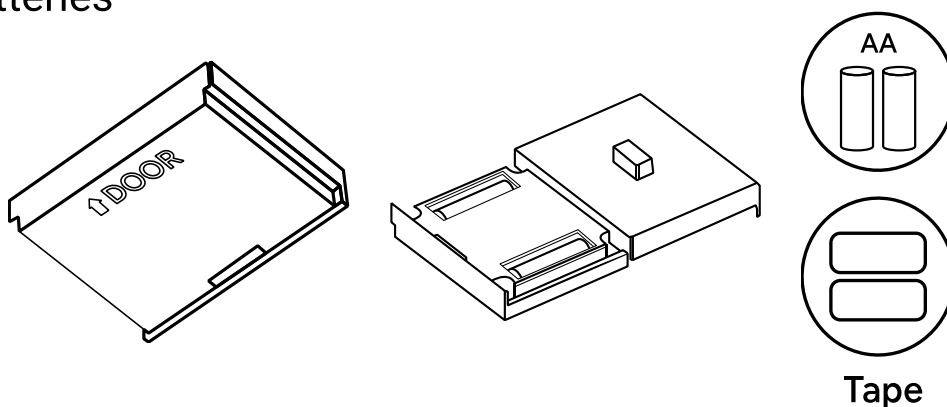
LavvieTAG : LED, charging terminal, band type case, adjustable strap



LavvieTAG Charger : Charger (charging pad), C-TYPE cable  
(\*power adapter not included)



LavvieBeacon : LavvieBeacon(cover, body), double-sided tape, two AA batteries



# Precaution before use

- A certain part in the manual may not apply to your condition/usage depending on your software version, a service provider's circumstances or model specifications.
- Do not use it for any other purposes.
- Keep the product away from water. When it touches/contacts water, wipe it and dry with a clean cloth. Do not use any type of heating device such as a hairdryer to dry the product.
- Keep the product away from fire or a high-temperature environment.
- The product can be broken when hit by a heavy object or falls on a hard surface. When not in use, please store it safely.
- Keep the product out of reach of children or pets to prevent them from swallowing it.
- This product has a built-in magnet. Keep it away from the following items: credit cards, key cards, parking tickets, and medical devices since the magnet in the product could damage the data of those items mentioned above.
- Be aware that sensitive cats may feel uncomfortable when carrying it around their necks.
- When a cat nibbles or bites the surfaces of the products, there could be scratches or deformation.
- Please use DC 5V only as a power adapter that connects to the LavvieTAG charger.
- If the voltage is low, the product may not be charged. LavvieTAG circuit could be damaged when the voltage is too high.

# Precaution during use

For cat's comfort, it is important to correctly fit the strap on a cat's neck. Read **<How to correctly adjust and wear LavvieTAG strap>** on page 7 and choose the adequate strap and silicone case before fitting LavvieTAG for your cat.

1. There are 2 types of straps: Gray is for S-M size and Orange is for M-L size. Choose an adequate strap type that comfortably fits your cat's neck.
2. Silicone case comes with 2 types: band type and hanging type. With 'band type', it wears in one piece, but it may cause a hair loss around neck due to friction. 'Hanging type' is when LavvieTAG pendant is connected with a velcro tie to reduce friction.
3. There may be some hair loss around cat's neck, however, this is natural for cats when they wear necklaces or straps in general and does not harm/irritate their skin.
4. LavvieTAG's straps are made of soft fabric to prevent hair loss around cat's neck and are safe from skin irritation. Please note that it still may cause hair loss due to friction. If the skin is irritated or swollen, please visit the nearest vet because it may be signaling cat's pain.
5. Fitting a strap too tightly can cause hair loss and if the strap is too loose, it may get stuck on cat's chin or paws interfering cat's movement. Hence, make sure to read the fitting instruction on page 6 to correctly fit the LavvieTAG on a cat's neck.
6. If you worry about hair loss, please follow the steps below.
  - ① Wait for the hair to grow temporarily and then fit the strap.
  - ② Loosen the strap a little and correctly adjust the strap length.
  - ③ Give your cat enough time to get familiar with the strap around the neck.
  - ④ You can also try with other types of straps or the ones that your cat used to wear.

# How to use LavvieTAG

Install PurrSong application on your mobile device. Before connecting LavvieTAG to your mobile device, please go through “cat registration procedures” and membership registration procedures first by referring to page 8 “4. PurrSong Application”.

Android: Search 'PurrSong' in Play Store and download.

IOS: Search 'PurrSong' in App Store and download.

## 1. Register LavvieTAG on PurrSong App

In order to register your LavvieTAG in PurrSong application, first create your account and register your cat.

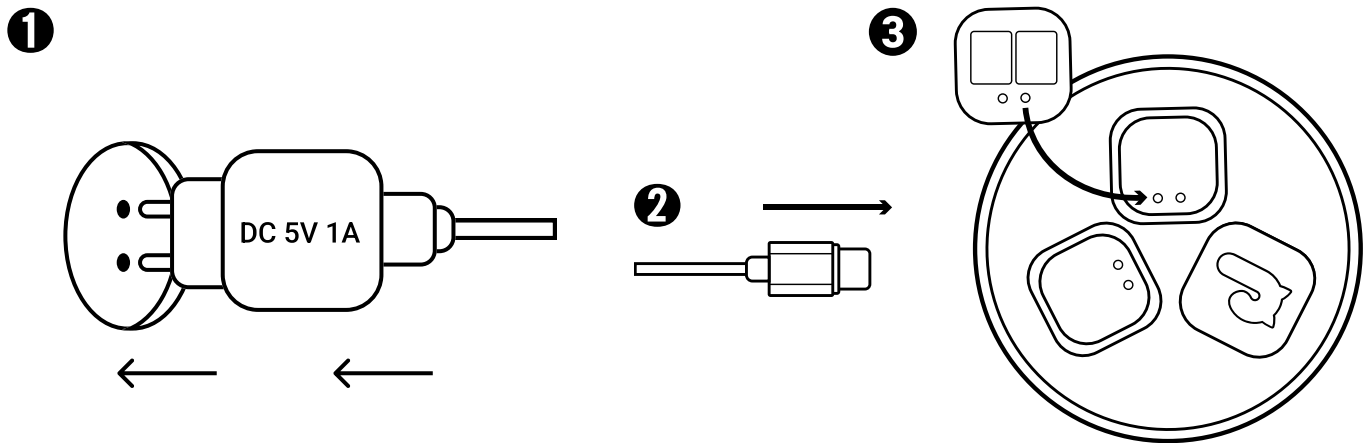
- When placing LavvieTAG on LavvieTAG Charger (the charging pad), the power will turn on and charging will begin. You can start registering LavvieTAG when it is charged over 80% (green LED will appear on the device). Then, install PurrSong application and follow the instructions to register your cat before registering LavvieTAG. (Bluetooth of your smart device should be ON all the time)

### **\*\*Instructions for LED\*\***

※ LED lights can be seen blurry in bright surroundings.

- When first turned on: Red, green, and blue lights blink sequentially one time. (When LavvieTAG is placed on LavvieTAG Charger, it turns on automatically. Its power is turned off when first opened.)
- When LavvieTAG is not registered to PurrSong Application: Red and blue lights blink twice every 4 seconds. (when disconnected from the charger after being turned on.)
- Device registration: A blue light blinks once every second.
- Sync: A blue light blinks once every second.
- When sync is required: A red light blinks once every 10 seconds. (Also happens when the battery was off and then on. It may occur if the device is affected by an external shock or pressure.)
- Battery life/charging status: Red light (0-79%), Greenlight (80-99%), and Blue light (100%).

# How to use LavvieTAG



## 2. How to charge

1) Plug the C-Type USB cable (provided along with LavvieTAG) into the LavvieTAG Charger and connect it to the power adapter.

\* Please use a DC 5V power adapter only.

2) You can place up to 3 LavvieTAG pendants to charge. Correctly place a pendant on each slot to make sure it is charging. (Won't charge when LavvieTAG is incorrectly positioned in a charging slot)

3) Different colors will show up for different charging status: Red light (0-79%), Green light (80-99%), and Blue light (100%).

- It takes about 2 hours and 30 minutes to be fully charged for initial charging or when the battery is completely dead.
- You can use it for 30 days max. once it is fully charged.
- We recommend charging fully for initial charging of your LavvieTAG.



# How to use LavvieTAG

## 3. How it works

1) How to put/wear on a cat: Once the device is registered on PurrSong application, put it on a provided strap and place it around your cat's neck. Adjust the strap length to prevent it from discomforting your cat's neck.

### <How to correctly adjust and wear LavvieTAG strap>

1. Select one strap from the two given straps
  - ☐ Grey (S-M/16-22cm) ☐ Orange (M-L/19-29cm)
2. Select one silicon case
  - ☐ Band type silicon case ☐ Hanging type silicon case (w/ velcro tie)
3. Connect the silicon case to the strap
  - ☐ For band type : Let the strap pass through each side hole of a silicon case while the strap is touching the back side of a silicon case.
  - ☐ For hanging type : Use the given velcro tie to connect the strap and the silicon case.
4. Adjust the strap length
  - ☐ First, measure a cat's neck with a tape measure or a string, then adjust the strap based on the measured size.
  - ☐ Make sure to put two to three fingers between the strap and a cat's neck to check the best fit for your cat's comfort.

2) Sync: After LavvieTAG collects cat's activity data, you can check the information by synching on PurrSong application. LavvieTAG connects to application on your mobile device through Bluetooth and it will send such data to the server. When the sync is completed, PurrSong app will show you the collected cat's activity data. The activity data is collected and recorded every hour and this each hourly data will become 1 activity data.

- Data recording: Once the device is registered on the PurrSong app, it starts recording at next hour sharp (0:00) and generates the 1 hour of collected data into 1 activity data making synchronization available.

**For example, if LavvieTAG is registered at 3:30pm on application, then the device starts to record activities starting from 4:00pm (At this time, there is no accumulated data). Therefore, at 5:00pm, one data will be created, and sync will be available.**

- When there is not enough activity data collected on LavvieTAG, then the data will not be transmitted.

- If there is too much data piled up, it takes a longer time to transmit.

- If a smart phone is located too far from the LavvieTAG, then the connection between your device and LavvieTAG may be unstable.

- LavvieTAG can store up to one week of activity data.

- If you don't synchronize the device regularly, then some of the data could be deleted.

# How to use LavvieTAG

## 3) When using with LlavieScanner:

Install LlavieScanner where your cat mostly stays and continue with IoT registration and Wi-Fi registration on PurrSong app. Then, after LlavieTAG accumulated more than 1 hour of activity data, LlavieScanner will automatically transfer that LlavieTAG's collected data to PurrSong app every hour.

- Use with DC 5V power adapter when installing LlavieScanner.
- Unstable or weak Wi-Fi strength and a distance between a Wi-Fi router and your cat may interrupt data transfer made by LlavieScanner and fail to send the data to app.
- Please read the LlavieScanner guide and PurrSong app before installing.
- LlavieScanner is for a separate purchase.

## 4) When using with LlavieBot S:

When using LlavieTAG with LlavieBot S, you have to attach "LlavieBeacon" to LlavieBot S. When a cat with a LlavieTAG on uses LlavieBot S, the data of the LlavieTAG will be transmitted to the server through LlavieBot S.

- LlavieBot S must be connected to Wi-Fi for data transmission to the server.
- There are 6 LEDs of WAIT TIME on LlavieBot S display panel. You can refer those LED lights to check the status of data transmission.
- If there is too much data, the data transmission may take a long time, and in some cases, data transmission may fail during the time a cat uses LlavieBot S. In this case, please synchronize through your mobile.
- Please refer to LlavieBeacon package box for 'how to install LlavieBeacon.'

## 5) ) Firmware Update:

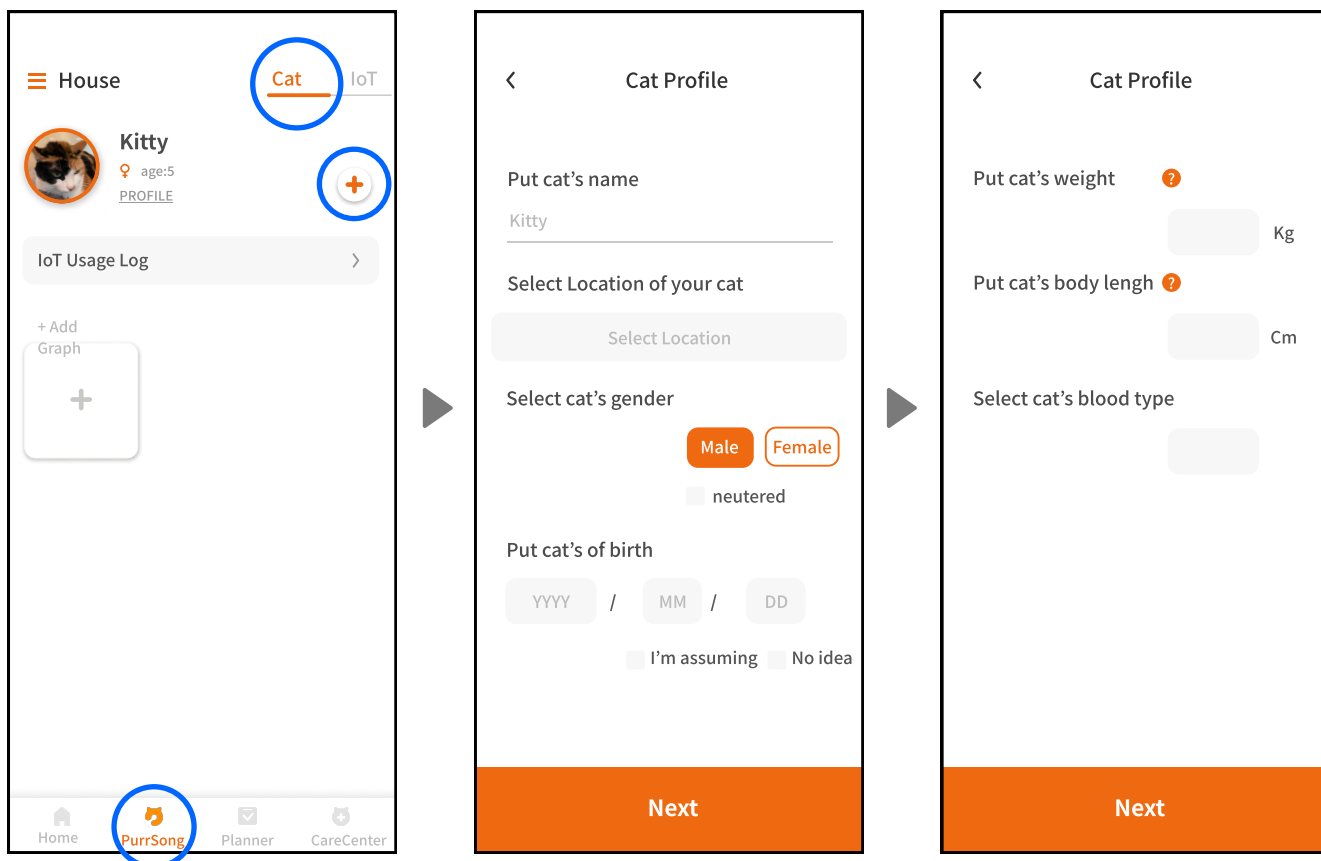
Press the update button on the screen of the IoT on PurrSong app to update the firmware of each LlavieTAG pendant. If the distance between LlavieTAG and your mobile device is too far, the connection may be unstable, hence please update firmware by having both devices near to each other.

## 6) LlavieTAG re-registration:

On PurrSong app, you can delete and add a new LlavieTAG by going to the IoT screen, click (already registered) LlavieTAG with registered cat and delete.

# PurrSong Application

## Register Cat



Click the PurrSong tab, go to the Cat tab on the top, and click the plus icon (+) to start cat registration.

Enter the name and DOB of your feline, and select a location and gender, then click the Next button.

Enter weight and body length, select the blood type, and click the Next button.

# PurrSong Application

## Register Cat

The image shows three sequential mobile app screens for a cat registration process, connected by right-pointing arrows. Each screen has a title bar with a back arrow and the text 'Cat Profile'.  
Screen 1: 'Select cat's eye colors' with a help icon. It has two rows: 'Left eye' and 'Right eye', each with a yellow color swatch, the word 'Select', and a dropdown arrow. Below is 'Select cat's fue color' (note the typo) with a note '(can select up to 3)' and a dropdown menu. An orange 'Next' button is at the bottom.  
Screen 2: 'Select cat's breed' with a dropdown menu. Below is 'Select breed of cat's parents' with two rows: 'Papa Cat' and 'Mama Cat', each with a dropdown menu. An orange 'Next' button is at the bottom.  
Screen 3: 'Was your cat a feral cat?' with 'Yes' and 'No' radio buttons. Below is 'Do you walk your cat?' with 'Yes' and 'No' radio buttons. Then 'Does your cat go outdoors?' with 'Yes' and 'No' radio buttons. Next is 'Select cat's chronic disease?' with a text input field and the example 'ex) Select'. Then 'What is your cat's favorite snack?' with a text input field and the example 'ex) Salmon, Tuna Can'. An orange 'Next' button is at the bottom.

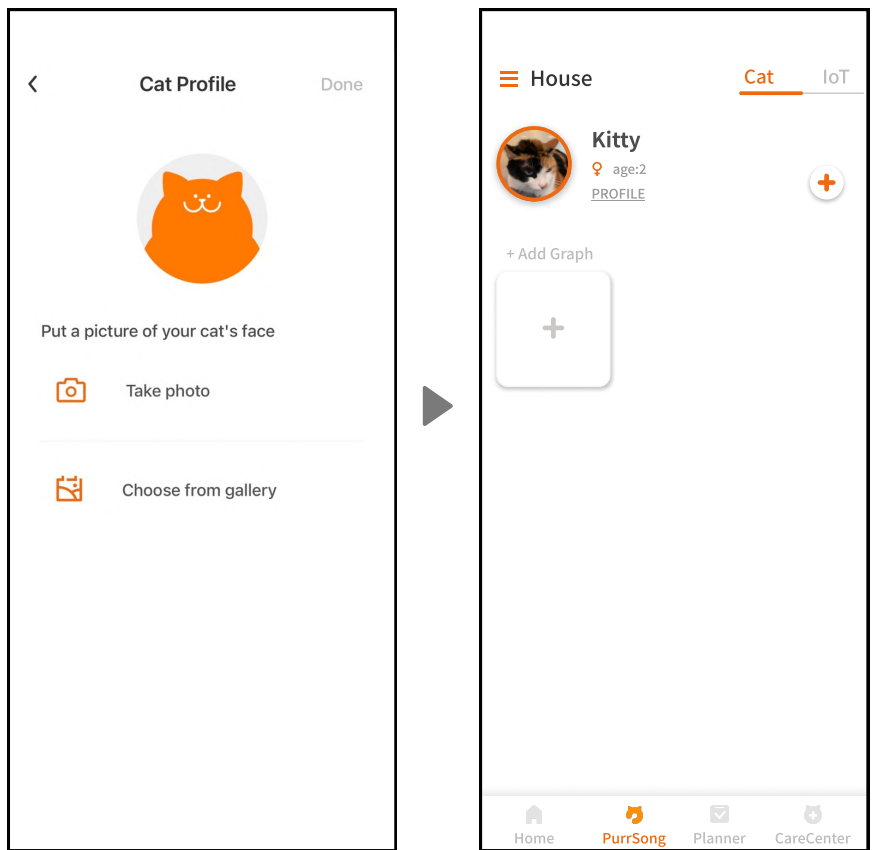
Select eyes and fur color of your cat, then click the Next button.

Select a breed of your cat, your cat's mother and father breeds, then click the Next button.

Select a chronic disease your cat has (if applicable), put your cat's favorite snack, and click the Next button.

# PurrSong Application

## Register Cat

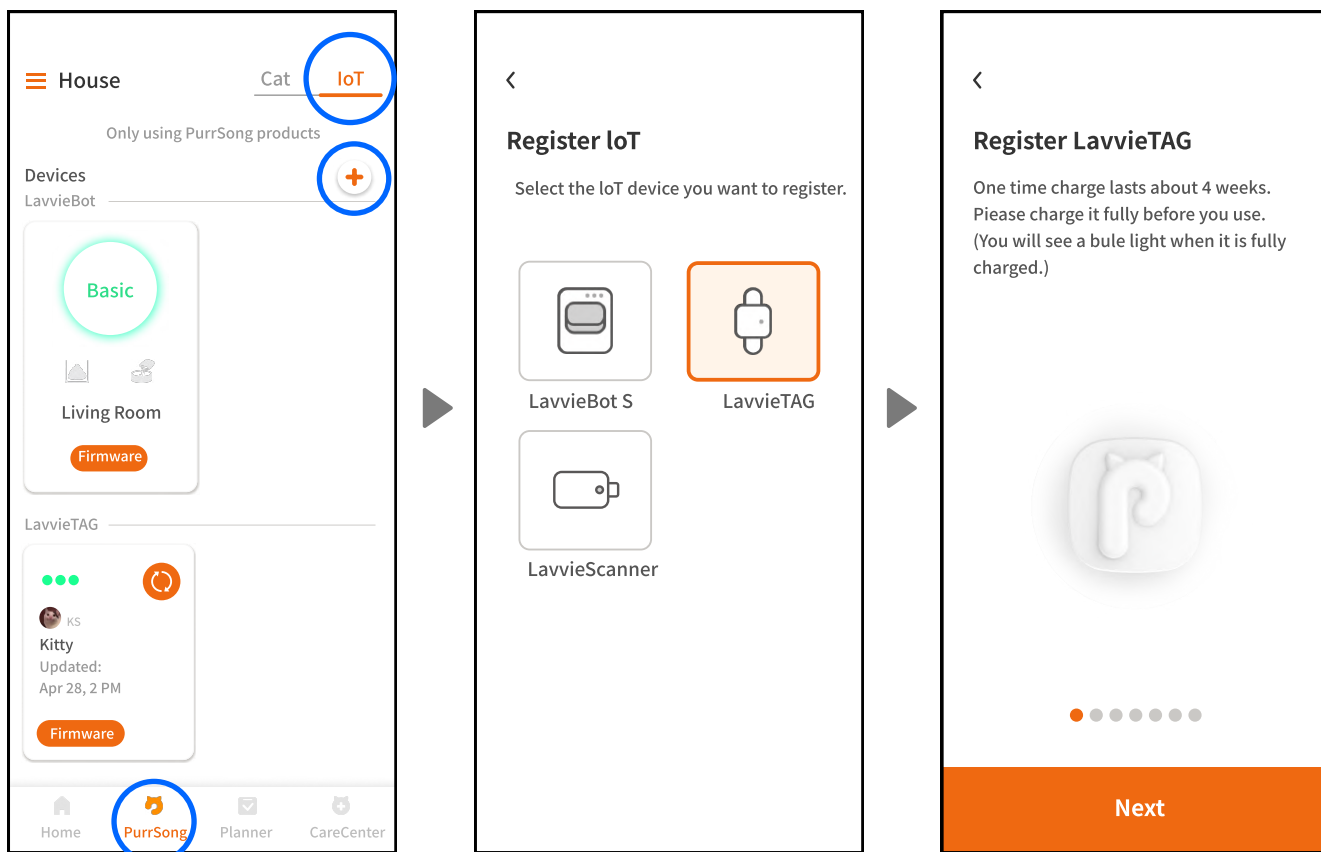


Register a photo of your cat.

Your cat has been registered on the PurrSong tab.

# PurrSong Application

## IoT registration: LavvieTAG



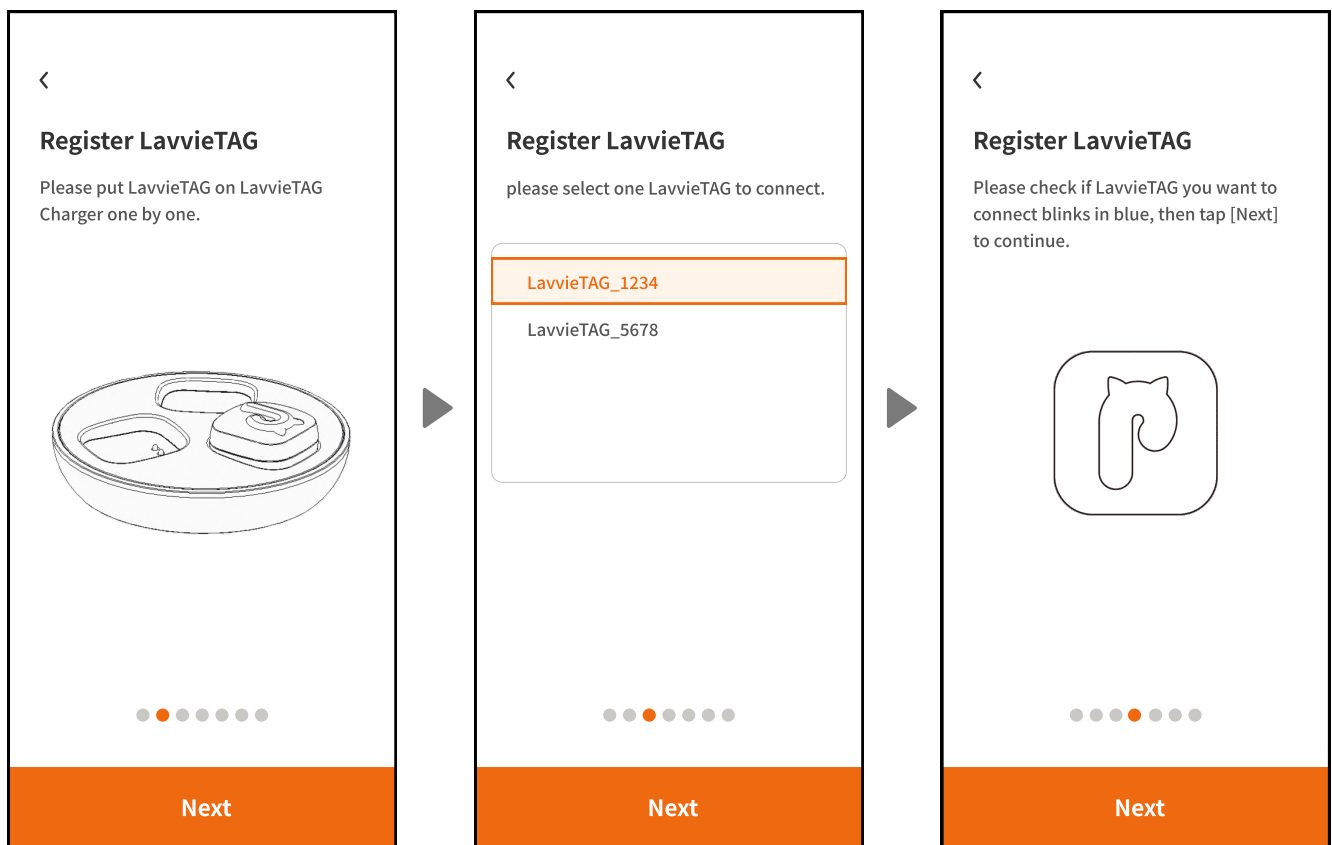
Select the 'PurrSong' tab, select the IoT tab, and click the plus icon (+) to start registering LavvieTAG.

Select LavvieTAG in IoT registration screen.

Select 'Next' after reading the instructions.

# PurrSong Application

## IoT registration: LavvieTAG



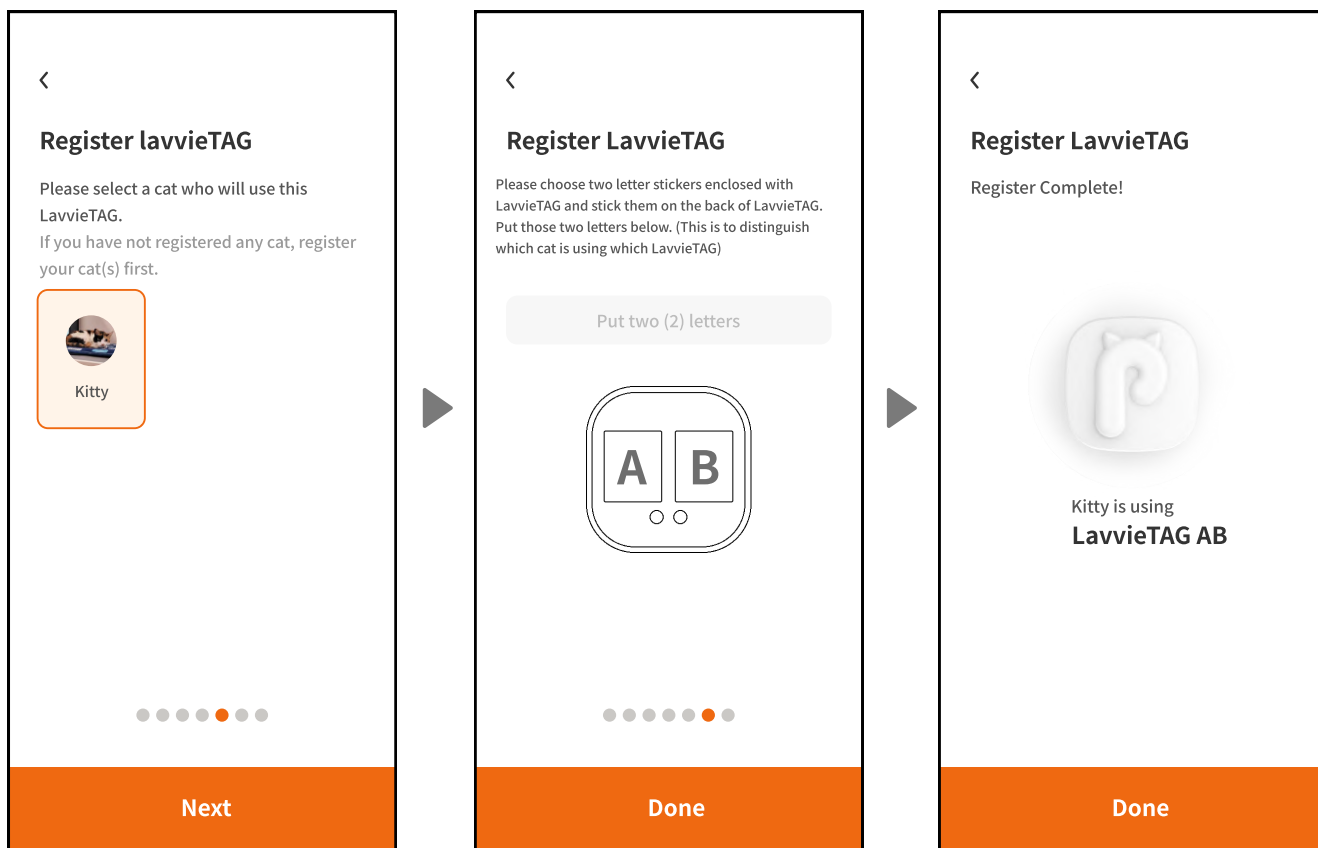
Place LavvieTAG on the LavvieTAG Charger and select 'Next.'

Select LavvieTAG you would like to register and click 'Next.'

Check if the LED light appears on the pendant and click 'Next.'

# PurrSong Application

## IoT registration: LavvieTAG



Select the cat who will be using LavvieTAG and click 'Next.'

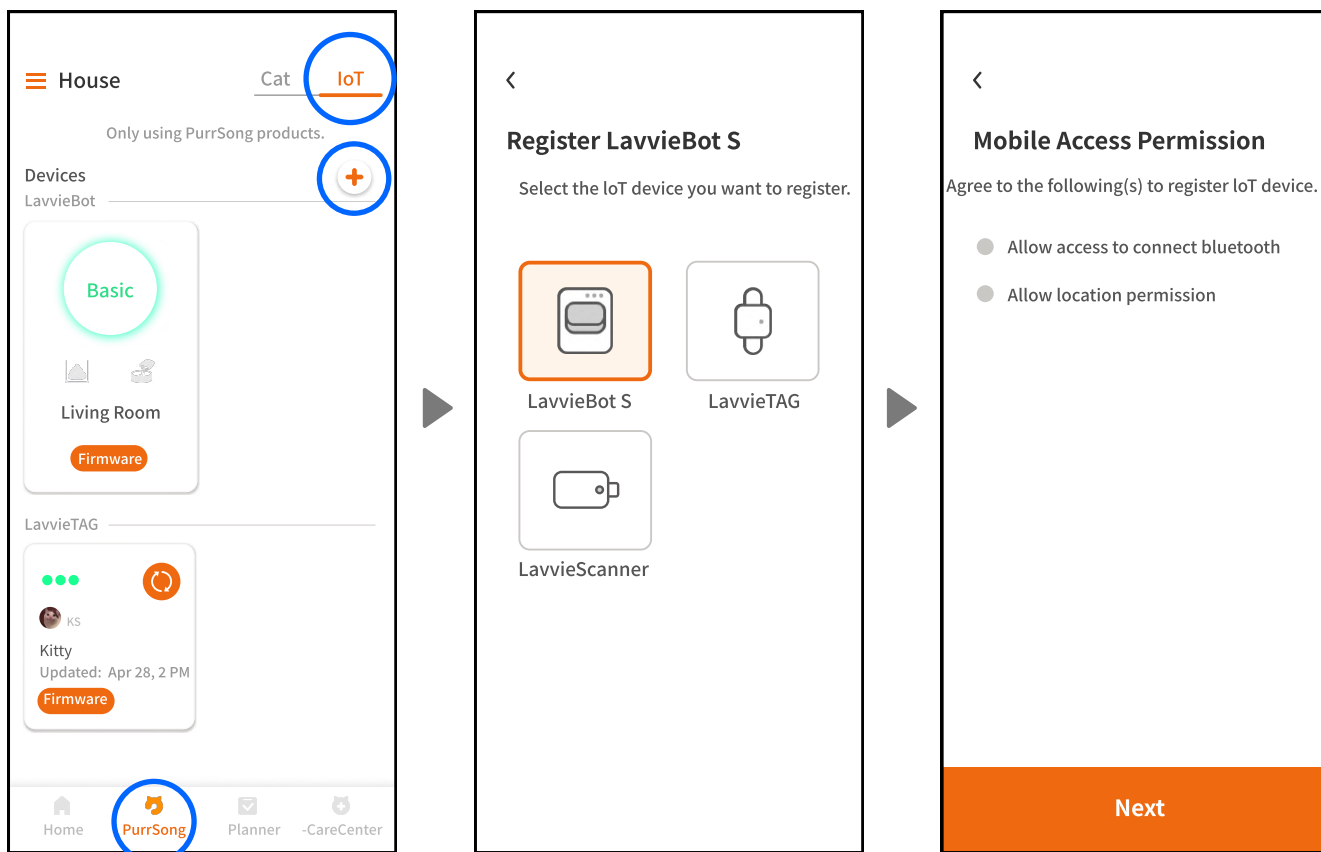
If you are adding multiple LavvieTAGs, use "initial stickers" to stick them on the back of the devices to distinguish LavvieTAGs and cats, then click 'Next.'

Click the complete button and you are done with LavvieTAG registration.



# PurrSong Application

## IoT registration: LavvieBot S



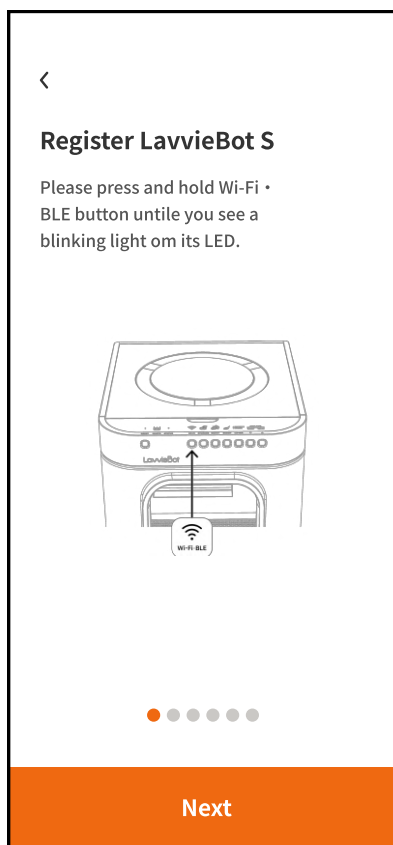
Select the 'PurrSong' tab and go on to select the IoT tab, and press the plus icon (+) to start registering LavvieBot S.

Select LavvieBot S on 'IoT registration' screen.

Please agree with the terms and conditions of the use of BLE and location service.

# PurrSong Application

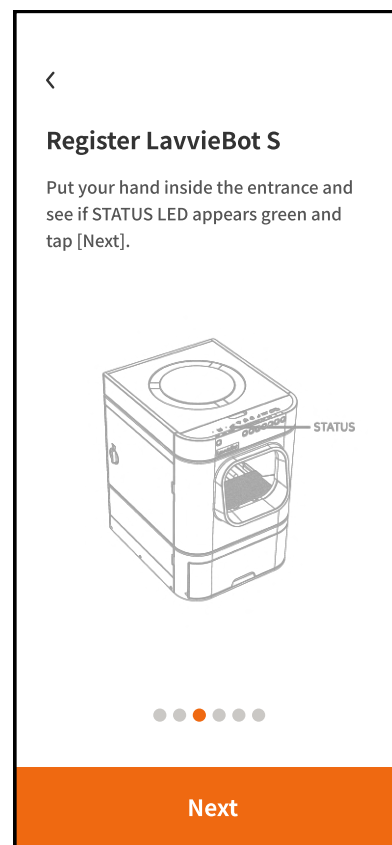
## IoT registration: LavvieBot S



Press and hold the Wi-Fi BLE button of LavvieBot S until its LED flashes green.



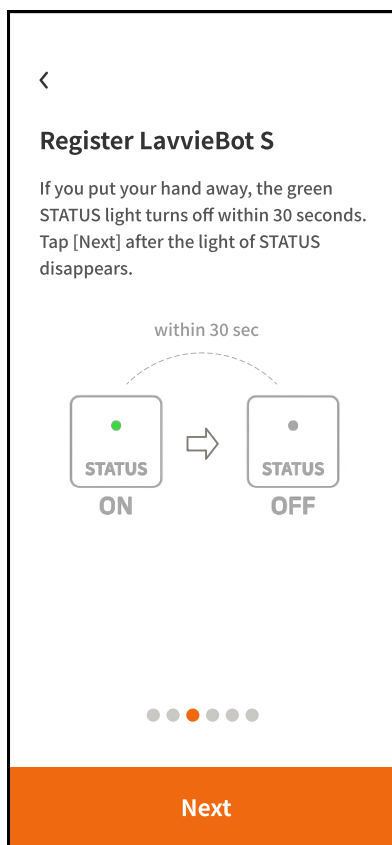
Select LavvieBot S to register and click the next button.



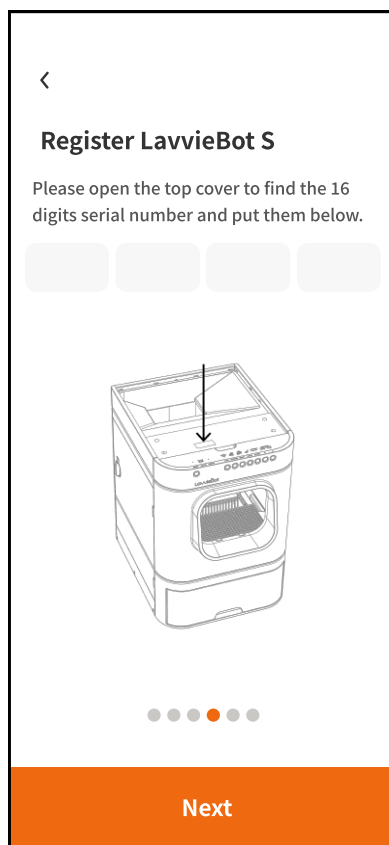
Put your hand in the entrance of LavvieBot S to see if the STATUS LED turns green.

# PurrSong Application

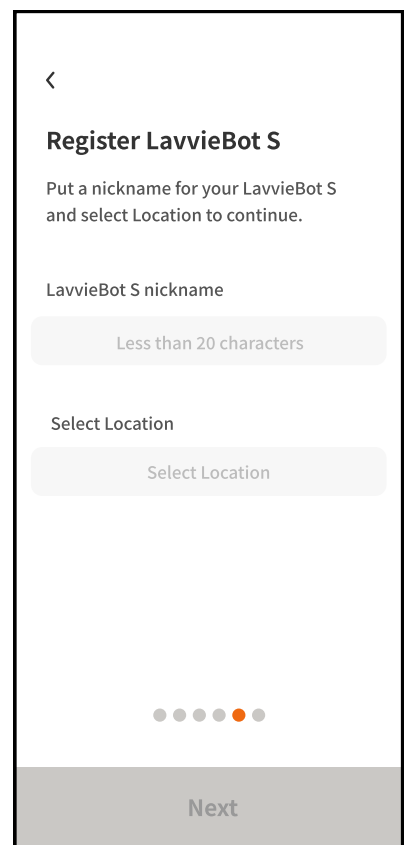
## IoT registration: LavvieBot S



Check whether the green light of the STATUS turns off within 30 seconds after pulling your hand away.



Open the top storage cover to find a serial number and enter the code on the PurrSong app.



Set a nickname for your LavvieBot S with a location to use, and go on to select the next button.

# PurrSong Application

## IoT registration: LavvieBot S

The image shows two sequential mobile app screens for IoT registration of LavvieBot S. The first screen, titled 'Litter I Use', has a back arrow at the top left. It contains instructions: 'Put an actual litter name and select a type you use. You can write up to three.' Below this are two bullet points: '·Bentonite: clumping clay litter' and '·Natural: tofu, corn, cassava or other botanical ingredients litter'. There are three input fields. The first field contains 'ex) Lavvie Sand'. Below the fields are three buttons: 'Bentonite' (highlighted in orange), 'Natural', and 'Other'. The second screen, titled 'Register lavvieBot S', also has a back arrow at the top left. It asks 'Are you using LavvieBot S only?'. Below the question are two options, each with an image of a white cat litter box. The first option is 'Yes, I'm only using LavvieBot S' and the second is 'No, I use it with other litter boxes'. The 'Yes' option is highlighted with an orange border. Both screens have a progress indicator at the bottom with five dots, the fourth of which is orange. The first screen has an orange 'Next' button at the bottom, and the second screen has an orange 'Done' button at the bottom. Arrows between the screens indicate the flow of the registration process.

**Litter I Use**

Put an actual litter name and select a type you use. You can write up to three.

- Bentonite: clumping clay litter
- Natural: tofu, corn, cassava or other botanical ingredients litter

① ex) Lavvie Sand

Bentonite Natural Other

②

③

Next

**Register lavvieBot S**

Are you using LavvieBot S only?

Yes, I'm only using LavvieBot S

No, I use it with other litter boxes

Done

Enter the type and product name of cat litter that you are using and select the next button. (You can enter three items max.)

Click the complete button and you are done with LavvieBot S registration.

# Using LavvieTAG with LavvieBot S

1. LavvieBeacon must be installed in order for LavvieBot S to transfer LavvieTAG's data.
2. LavvieTAG and LavvieBot S (with LavvieBeacon installed) recognize each other through connection.
3. Automatic data transmission through LavvieBot S requires following conditions/process.
  - 1) When a cat enters LavvieBot S and stays in the litter box, it starts detecting LavvieTAG.  
[Condition: a cat on the litter box → Time required to connect and transmit data takes about 30 to 60 seconds.]
  - 2) If there are several cats near LavvieBot S, it may take a long time to detect LavvieTAG of a cat inside LavvieBot S. This process is required to accurately detect a cat with LavvieTAG who used the litter box.
  - 3) You can check the process of data transmission of LavvieBot S by looking at its 6 LEDs of WAIT TIME (Its LED will light up as it transfers the data).
4. Note that it may fail to transmit LavvieTAG data depending on a cat's excretion habits.
5. If you want to check the data right away, please click "Sync" on the PurrSong App near the cat who is wearing LavvieTAG.

1. How do you take care of your cat's health with LavvieTAG?

A. Each cat has different patterns of activity, resting, and excretion habits. Since LavvieTAG keeps track of this activity and resting pattern, you can check and find if there is any change in patterns or unusual pattern. This will be a great reference to find a potential (health) issue or problem and when taking to a vet if necessary.

2. How does LavvieTAG measure the cat's movement?

A. LavvieTAG measures the cat's movement through an acceleration sensor equipped inside.

3. Does it have Wi-Fi function?

A. LavvieTAG supports BLE (Bluetooth) function only. It does not include Wi-Fi, GPS, or heart rate measurement functions.

4. How can I synchronize or send data of LavvieTAG?

A. Data collected to LavvieTAG can be synchronized through the PurrSong app on a smartphone or automatically sent when connecting to PurrSong's IoT products you use with LavvieTAG.

5. How much data can LavvieTAG store?

A. LavvieTAG stores up to seven days and if the storage gets full and no sync is made, the data will be automatically deleted when the latest data is added.

6. The application failed to synchronize LavvieTAG.

A. In this case, please proceed with device re-registration after deleting the previously registered LavvieTAG on PurrSong application.

7. My cat cannot walk, can I still use it?

A. As long as there is a small motion (or acceleration), cats who cannot walk, feels uncomfortable with walking, or has hind legs can use LavvieTAG.

8. Can dogs wear/use it, too?

A. This device is specially designed for cats and to detect their characteristic movements and activities. Hence, it is not recommended for dogs to use it because it may cause data errors.

9. What if our cat gets uncomfortable wearing straps around the neck?

A. If your cat has no experience wearing a necklace, we recommend trying with other necklace or strap to give your cat enough time to adjust before making a purchase.

# Appendix

Spec.

Product name: LavvieTAG

Description: Smart Pet Health Tracker

**\*Specification\***

Product name: LavvieTAG

Developer: PurrSong, Inc.

Country of Origin: Rep. of Korea

Date of manufacture: marked separately

Size: 22.5 X 22.5 X 12.5 (mm)

Rated voltage: 3.7V

Charging voltage, rated current: DC 5V, 50mA

Rated power consumption: 0.5mW

MARKING ACCORDINGLY TO THE ELECTRICAL APPLIANCES AND CONSUMER  
PRODUCT'S SAFETY CONTROL ACT

FCC ID: 2AWFPTAG1

IC: 26107-TAG1

Product name: LavvieTAG

Description: Smart Pet Health Tracker

Rated voltage : 3.7V (Charging voltage: DC 5V 0.5A)

FOR HOME AND OFFICE (INDOOR) USE ONLY

Temperature setting for use: 10°C ~ 35°C

Manufacturer : PurrSong, Inc.

Developer : PurrSong, Inc.

Country of Origin : Rep. of Korea

Date of manufacture : marked separately

Customer service: purrsong.cs01@gmail.com

Address: 1F, D-2dong, 179, Daehag-ro, Yuseong-gu, Daejeon, Republic of Korea

