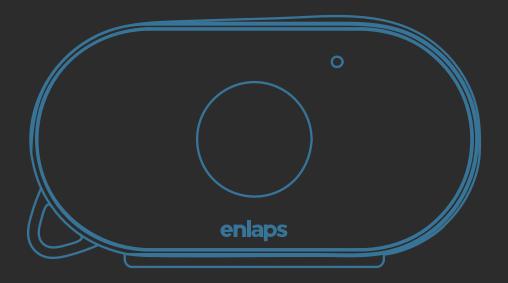
User's guide Tikee mini+ v1.0





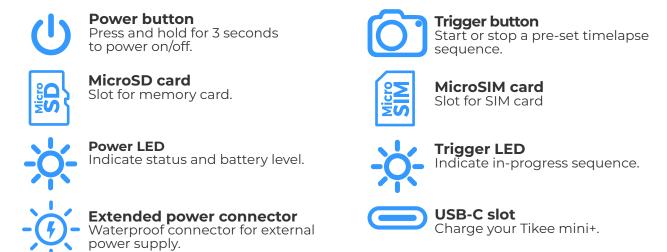
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1. Introduction Overview of your Tikee mini+

Here are the main components of the Tikee mini+:



The rear of the Tikee mini+ has many functions. Each function is explained below with its corresponding icon.



Do not insert any objects into the waterproof breathable membrane, as this will damage the product.

Package contents





Requirements

Some elements are needed to ensure the optimal functioning of your Tikee mini+:

- A microSD card (not provided) is required to use your Tikee mini+ (see dedicated section page 4)
- A smartphone connected to the internet (supported versions: Android 8.0 and up/iOS 11.0 and up Bluetooth version 4.1 and up)
- A tablet or a computer with an Internet connection (to edit and publish your contents) with either Google Chrome or Safari preferably.

For the 4G connectivity: an activated microSIM (not provided) with an adapted subscription is required to upload data using 4G connectivity and use some features..

Downloading the Tikee Remote mobile app



Tikee Remote is the remote control for Tikee mini+. This mobile application lets you make the first settings on your Tikee mini+.

This mobile application is required to set up your Tikee mini+.

Smartphone compatibility: Bluetooth 4.1 and + iOS 11 and up or Android version 8.0 and up.





Creating a user account on the myTikee cloud platform

The use of the myTikee cloud platform and the Tikee remote mobile application require the creation of a myTikee account. If you have not yet created an account, you can do so with any connected device, on my.tikee.io.

Your login credentials are the same on myTikee cloud platform and on the mobile application Tikee remote.

First device charge

Warning: For an optimal use of your Tikee mini+, you have to fully charge the battery before its first use.

Plug a USB cable (not provided) into your Tikee mini+ into the dedicated USB slot. Plug the other end of the USB cable into a power adapter (not supplied), and then into a power outlet. If you have a Tikee Power Adapter, you can also recharge the Tikee mini+ using the external power connector.

Note: the first charge may require up to 48 hours. When charging is complete, the LED power turns blue. (You can monitor the Tikee mini+'s battery level on on the mobile application. See page 8)

Note: the waterproofness of your Tikee mini+ is not guaranteed when the USB cable is plugged into the USB slot.

Note: If an external power source is used, be sure that the voltage is 5V and that the delivered current is more than 1A.



2. Tikee mini+ details Buttons

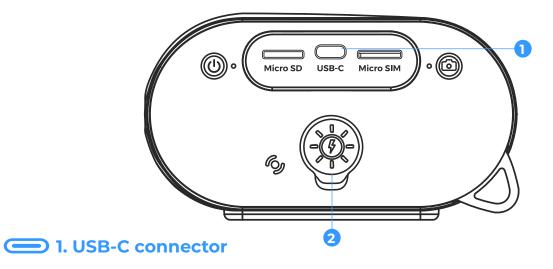


- Turn on your Tikee mini+: 3-second press
- · Display the battery level (see below the Power LED section): single press while the Tikee is on
- Turn off your Tikee mini+: 3-second press



- Starts a shooting sequence (previously set up) : single press
- Stop shooting: 3-second press

Power connectors



This connector is used notably for the Tikee mini+'s first charge. Warning: when plugged in, this connector is not waterproof.



It is used to connect the Enlaps external solar panel or the Tikee power adapter (not supplied with the camera). This connector is waterproof, so it can be used outdoors. Snap-in connector, pull to disconnect.

When not in use, re-insert the plug.

Warning: For your safety and the safety of the camera, do not plug other devices than those provided by Enlaps into this connector.

Enlaps cannot be held responsible for any damage that may result from the misuse of this connector.



LED



- Off: Your Tikee mini+ is turned off, in standby or a sequence is in progress
- On: Your Tikee mini+ is powered on no sequence in progress
- · Blinking: Tikee mini+ is charging through USB-C or external power connector

Its color indicates the battery level:

: Full battery (75%-100%) : Battery level between 50% and 75%

: Low battery (25%-50%) : Very low battery (5%-25%)

Empty battery: flashes twice and turns off

Trigger LED

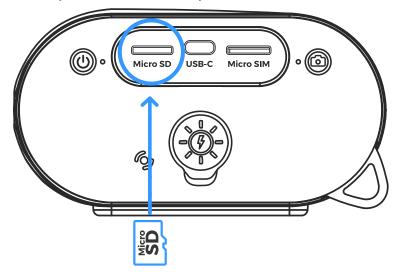
Off: no sequence in progress

Slow blue flash every 10 seconds: sequence in progress

• 0.5 second red flash: error (microSD card missing, full or not compatible)

Slow green flash every 10 seconds: expired sequence

MicroSD card (not included)



Technical information about microSD cards compatible with the Tikee mini+:

- MicroSDHC, microSDXC,

- 8GB to 1 TB capactity

- UHS-1 class and speed class U3 minimum

Note: Before use, we strongly recommend to format the microSD card (see corresponding chapter page 17). This can be done directly from the mobile application.

Important: Push-push insertion and extraction system; a slight click allows you to clip or unclip the card from its slot. Never pull the card directly.

It is important to respect the slots provided for the microSD card and the microSIM card. Although both cards have the same format and fit into each other's slot, the slots are not interchangeable and the Tikee will not work they are interchanged.

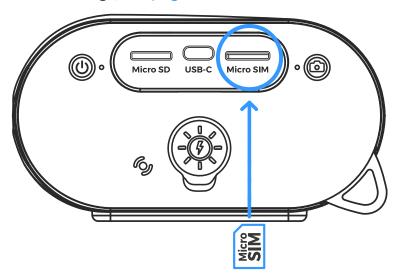
Do not insert any object (clamp, metal objects, etc.) in the slot of the microSD card or in the microSIM card slot.

Any deterioration or dysfunction related to improper use will not be covered by the warranty.

(Z)(Z)

Micro SIM card (not included)

To use the LTE-4G network with your Tikee mini+ you have to previously subscribe to a 4G subscription with data plan (access to the data network) with the telecommunication provider of your choice. For SIM card settings, see page 9.



Inserting the SIM card: Metal contacts of the chip downwards, angle left to the bottom - see above.

Important: Push-push insertion and extraction system; a slight click allows you to clip or unclip the card from its slot. Never pull the card directly but respect the push-pull system.



The card format must be «microSIM». If necessary, you can use an adapter.

- Do not attempt to insert a nanoSIM card without an adapter
- Do not insert a microSIM adapter alone, without a card (risk of destruction of the contacts)

SIM cards and the SIM card slot are delicate items. It is necessary to handle them with care, never use force them and never use metal tools.

Any deterioration or dysfunction related to improper use will not be covered by the warranty.

What volume of monthly data to choose?

```
Size of the package (in GB/month) =

( _ hours of shot per day x _ photos per hour x _ MB per images

(see page 14 according to chosen resolution) ) x 30 days
```

To easily estimate your consumption, you can use the timelapse planner here: https://enlaps.io/timelapse-planner

Few exemples with M picture format:

- 1 photo every 15 minutes, 24/24: about 3,5 GB/month - 1 photo every hour, 10h a day: about 0,4 GB/month - 1 photo every minute, 5h a day: about 11 GB/month

Warning: Although both microSIM and microSD cards have the same format and fit into the slot of each other, the slots are not interchangeable and the Tikee mini+ will not work if they are interchanged.



3. Starting up your Tikee mini+ First connection and initial setup

By connecting to the Tikee mini+ camera with the Tikee Remote mobile application:

- Check that the latest update is installed. If this is not the case, update by reaching this link: https://enlaps.io/download
 - Check the battery status. A full charge (= 100%) is necessary
- For a connected use, check network quality. Achieve and validate a connection test. See Setting up the connection between the Tikee mini+ and myTikee.
- ①

The first connection of the Tikee mini+ to the mobile application requires having an internet connection on the smartphone / tablet.

Installation recommendations

For a shooting duration of a few hours, your Tikee mini+ can be placed on its rubber feet on a sufficiently flat and non-sloped surface or mounted on a camera tripod.

For a shooting duration of several days/months, we recommend using a rigid mount that ensures consistent framing over time and allows you to secure the position of your Tikee mini+. You can find dedicated Tikee mini+ accessories in our store:

https://enlaps.io/en/accessories.html

To prevent theft and/or vandalism, place your Tikee mini+ in a discreet and elevated location, and use a security lock (the Tikee mini+ has a dedicated slot for this purpose).

Important: To ensure your sequence runs smoothly:

It is recommended to regularly check the Tikee mini+ on-site to assess its general condition (mounting, cleanliness of the lens surface, etc.).

You must also check its proper functioning via your myTikee account: battery status, microSD card status, network status, last connection date, etc.

Warning: For long-term usage, a maintenance interval of 3–4 months is recommended to check all these elements. Ensure access to your Tikee mini+ is planned accordingly.

Certain installation sites may require special care (e.g., very dusty areas).

Make sure to follow all safety instructions, especially those related to working at height and any installation guidelines of the site where you are setting up.

Warning: Ensure proper mounting of both the support and the Tikee mini+ to avoid any risk of falling. The Tikee mini+ must not be placed precariously or on an unstable/inclined surface. **We are not responsible for any damages resulting from improper use of our solution.**

Your Tikee mini+ is equipped with a wide-angle lens. We recommend keeping it as horizontal as possible during installation to minimize image distortion (you can use a bubble level or your smartphone with a level app).

Warning: If the Tikee mini+ is tilted (upward or downward), the wide-angle view may distort the horizon line in the final image.



4. Getting started with the Tikee Remote mobile app Connecting your Tikee mini+ to the mobile app

Before you keep reading, make sure you have followed the instructions of <u>Chapter 1 - Introduction</u>. Please, check that the version of your mobile application is the latest available on the store

1. Activate Bluetooth and location services on your mobile device before launching the mobile app. Once your Tikee mini+ is powered on and nearby, launch the mobile app Tikee remote and log in with your credentials - created in "Creating a user account on myTikee cloud platform"

section - same as the cloud platform.



2. Select your Tikee mini+ in the nearby camera list.

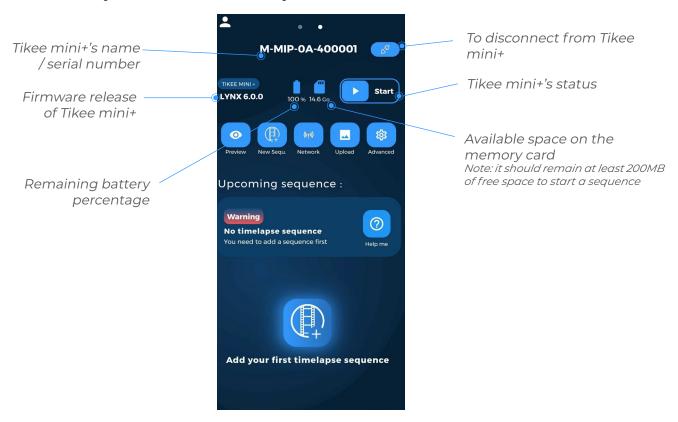


If there are several Tikees mini+ in the area, they are differentiated by their serial number, which can also be read on the label.

Your Tikee mini+ is then associated with your user account. The association prevents any other user account to use your Tikee mini+.



3. You access directly to the status screen of your Tikee:



The Tikee mini+ has 2 possible status:

- STOP: basic status of the Tikee mini+, in inactive mode the camera will not take a photo sequence and will switch off after 30 minutes of inactivity. You will have to access the camera and press the power button to start it again
- START: this mode allows the Tikee mini+ to remain on and therefore to take into account the sequences set up (see <u>page 15</u>). If no sequence is in progress or programmed, the device connects to the cloud at least every 24 hours to retrieve new information (for example, adding a new sequence from myTikee).

To switch between the two status, press « START » or « STOP » on the mobile app.

Warning: If the Tikee mini+ turns off while it was on STOP, you will need to access the camera and press the power button to turn it back on.

Setting up the connection between the Tikee mini+ and myTikee

If you want use your Tikee mini+'s WiFi modem or 4G LTE modem to regularly upload photos to myTikee cloud platform, you have to complete the following settings.

Active connectivity mode is displayed on the mobile application screen (None, Wifi or LTE)

Select the desired connection mode (wifi or LTE) and set up the connection, save and test it.



Please contact your operator for connection settings.



Connecting to WiFi

The WiFi connection is not possible on WiFis that require a connection to a web portal (which is often the case on an industrial site or on free networks WiFis).

Click on Network then Wifi on the homepage. You can scan nearby WiFi networks by pressing SCAN and then selecting the network of your choice.



SSID: name of the WiFi to which you want to be connected to. Case sensitive.

Password or security key: enter the password/security key of the wireless network. Case sensitive.

Security: Scroll to choose the wireless network security type. *Note: Most actual equipment uses "WPA2-PSK" security.*

Once the parameters filled to save them click on: Save

We recommand to test the connection of your Tikee mini+ once the parameters are set up.

For that click on "Test connection". This step may take several minutes because the Tikee mini+ will check all of the steps to be connected to myTikee cloud platform server.

At the end of the test you will receive a notification about the success or not of the test.

If the connection fails: check if the quality of the wireless network is sufficient (for example you can test the connection on your smartphone beforehand) and that your credentials are correct.

Note: you can connect the Tikee mini+ through a mobile hotspot using a smartphone with a 4G connection.

Connecting to an LTE telecom network



An active microSIM card (with active data transmission) needs to be inserted in its appropriate slot.

APN: this field is required - most of the time you can find it on the website of your telecom service provider or on your mail opening line.

PIN: This is the PIN code of the SIM card. Leave blank if PIN off.

User: to complete if provided by your mobile operator (These are not Enlaps identifiers).

Password: To complete if provided by your mobile operator (This is not the Enlaps password).

PIN 2: to complete if provided by your mobile operator.

Once the parameters filled to save them click on: Save

(E)(E)

We recommand to test the connection of your Tikee mini+ once the parameters are set up. For that click on "Test connection". This step may take several minutes because the Tikee mini+ will check all of the steps to be connected to myTikee cloud platform server.

At the end of the test you will receive a notification about the success or not of the test. You will also receive information about the signal quality and the type of connection.

Note: For optimal operation, a 4G(LTE) connection is required. Correct uploading of photos in 3G is not guaranteed in all conditions. In this case it is recommended to disactivate the uploading of photos. However, you can keep connectivity enabled to get status information from the camera.

Note: Be aware of the costs of data roaming in a foreign country.

Using the camera without a connection



If not configured, the Tikee mini+ will not send any data.

If no network is in range or if you do not want the photos be automatically sent to the myTikee cloud platform. Click on the None icon to have no connection.

In this case, photos backup will be made locally on the microSD card. You can then drag and drop the images into the myTikee cloud platform to generate content from them.

Tip: By setting up a Wifi or LTE network but by disabling photos upload, the Tikee camera will send only its status (battery, network, microSD card, etc.) for remote monitoring.

Update your Tikee mini+

Before using the Tikee mini+, check that its firmware version is the latest online (see <u>page 8</u>). If this is not the case, update your Tikee mini+:

Note: To update your camera, make sure the battery charge level is above 50%.

- From the microSD card



Go to our website https://enlaps.io/en/download, download the update according to your camera model from a computer following the instructions given, copy it on the microSD card previously formatted (see formatting chapter). You can also download the update from the myTikee cloud platform.

Note: The file must be named exactly «TikeeUpdate.fw». Be careful, some browsers may rename the file when downloading the same file successively.

- 1) Camera off Insert the microSD card into the dedicated slot.
- 2 Turn on your Tikee mini+ and and from the mobile app, go to:



Getting started with the Tikee remote mobile app



The update may take a few minutes. Once finished, you will receive a notification on the mobile application and then it will disconnect.

Tikee mini+ will restart automatically (the Power LED will go out and then start flashing before becoming steady again).

Once the update is complete, you can reconnect to the Tikee Remote mobile application. The update file is automatically deleted from the microSD card once it is done.

- From the cloud via the Tikee Remote mobile application



This method requires a valid Wi-Fi or 4G/LTE connection and a microSD card into the slot SD. Stand close to your Tikee mini+ and launch the update from the cloud. The update is done following the steps displayed on the screen.

Warning/Important: In both cases, it is recommended to connect your Tikee mini+ to a USB plug because the update is only done if the battery level is higher than 50%

Note: On some smartphones, after an update, switch to the airplane mode 30 seconds before reconnecting to the mobile application.

- From the cloud via the myTikee cloud platform

This method is possible if the Always-ON is set up on your Tikee mini+.

- (1) Go to your myTikee account
- (2) Select « My Tikee » in the left-hand menu and click on your camera's serial number.
- (3) Click on « Always On », then select « **Upgrade firmware** » and click on « **Validate** ».

Your Tikee mini+ will connect to myTikee to download the latest firmware version within a few minutes. It will then install the new software and reconnect to the platform. It takes a few minutes for your Tikee mini+ to be fully updated.

If you have a sequence in progress, your Tikee mini+ will pause it to install the update and will restart itself once t he update is complete.

Framing and viewing angles

Preview

The preview feature allows you to adjust the camera's framing and certain shooting settings.

Steps to perform a preview:

- 1 Click on Preview; the Tikee mini+ will launch a Wi-Fi hotspot with a password displayed on the screen.
- 2 In your phone's settings, connect to the hotspot using the password (only required the first time).
- 3 Return to the Tikee Remote app and click «I'm connected to the Tikee Wi-Fi».





The preview will start automatically, providing a live view from the Tikee mini+.

During the preview, the following settings are accessible:

TrueView mode: choose the field of view. (See TrueView section)

White Balance: choose the white balance mode (See Advanced Settings/White Balance)

Rotation: choose the camera's orientation (See Rotation section)

Note: Preview is not available while sequences are running. You must click "Stop" beforehand.

TrueView Mode

Your Tikee mini is equipped with a wide-angle lens and three selectable fields of view:

Ultrawide 120°: a very wide fisheye-type angle for capturing everything, near or far.

Dewarp 110°: a wide-angle with no distortion, preserving straight lines.

Dewarp 90°: a tighter framing to focus attention on the essentials, without distortion.

You can select one of these three modes:

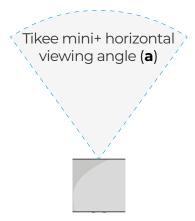
During preview.

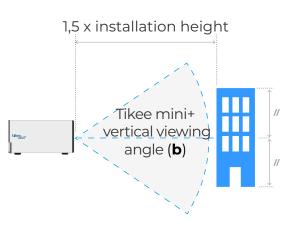
Note: This choice applies to new sequences and Always-On features: snapshot, snapshot video, and livestream.

Directly in the sequence setup.

Note: You can create multiple sequences with different TrueView settings, but it is not possible to change the TrueView setting of an existing sequence.

	Horizontal viewing angle (a)	Vertical viewing angle (b)	
Fisheye	120°	95°	
Dewarped 110	110°	90°	
Dewarped 90	90°	70°	





Rotation

The camera can be installed in 4 orientations:

Landscape : Normal Portrait : -90°
Upside down (-180°) +90°

You can choose one of these orientations: **During preview** and **In advanced settings**Note: This choice applies to all photos and videos captured by the Tikee mini+. You cannot change the orientation if a sequence already exists; it must be deleted first.



Setting up a shooting sequence

Before launching a sequence, you can check the framing of your camera by doing a preview.

To do so, after having performed the connection tests (microSD card, Tikee connected to the wifi or LTE network and smartphone or tablet connected to the wifi or LTE network), click on the preview button.

To create your first sequence, click on new sequence



and then set it up.

Here is a summary table of possible sequences with your Tikee mini+:

		₹	
	Long	Event	Burst
Minimum interval	30 sec	5 sec	5 sec
Maximum interval	24 h	45 sec	45 sec
Recommended interval	15 min	10 sec	10 sec
DNG Format	JPEG* and/or DNG	JPEG	JPEG
Max. duration	Start date and End date or Infinite (depends on the interval, the sunshine and the connectivity)	Limited to 24h / 6000 photos max (200 photos min.) (depends on the interval, the sunshine and the connectivity)	Limited to 2h30 / 200 images max (depends on the interval, the sunshine and the connectivity)
Upload of photos on the web app	Yes**	No	Yes**
Definition of schedules depending on brightne	Available	No	No

^{*}Photos sent only in JPEG format, photos in DNG format only saved on microSD card.

Ambient light sensor - ALS

The Tikee mini+ features a light sensor that allows shooting only if ambient light levels are sufficient to produce a usable image. Enabling this option broadens the shooting time range but only captures photos when lighting is adequate.

Mode low light

When enabled, the maximum exposure time is extended to 2 seconds. This allows for brighter captures in low-light conditions.

Note: Moving subjects may appear blurry.



^{**} At least once a day or according to your send interval settings

Image format and size

JPEG:

Image stored on the SD card : 4032 x 3024 pixels, approx 2.5 MB **Images sent on the cloud platform :** selectable among 3 dimensions :

S (Small): 2048 x 1536, approx. 0,5 MB M (Medium): 2664 x 1998, approx. 1,25 MB

L (Large): 4032 x 3024, env. 2,5 Mo

DNG:

Image stored on the SD card : 4032 x 3024, approx 26 MB.

The DNG format images are not uploaded, nor usable on the cloud platform.

DNG + JPEG:

Images are stored on the microSD card: 4032 x 3024, approx. 26 MB, Images in DNG format are not sent or usable on the cloud platform. but **JPEG images are sent to the myTikee cloud platform** in the desired size (S, M or L).

Tikee mini+ battery life

The autonomy of your Tikee mini+ depends on several factors:

- the type of timelapse (short or long term) and the shooting interval;
- the upload of photos on the cloud (or no) and the quality of the connection.
- the chosen image resolution
- the outside temperature
- whether or not an external power supply is connected

Here are estimates of autonomy with the following assumptions:

- Battery full (without solar panel)
- Ambient temperature 20°C
- Photo resolution M

These figures can be significantly increased by using the Tikee mini+ with the Enlaps external solar panel or the Enlaps external power supply.

.....

		Always ON deactivated		Always ON activated	
		Without upload	With upload (300 kb/s)	Without upload	With upload (300 kb/s)
Event	or burst sequences	Max. 12 h	Max. 10 h	Max. 12 h	Max. 10 h
term	1 photo every 30 sec :	2,7 d (24h/24) 5,3 d (12h/24)	0,7 d (24h/24) 1,5 d (12h/24)	2,6 d (24h/24) 5 d (12h/24)	0,7 d (24h/24) 1,4 d (12h/24)
Long term sequence	1 photo every 5 min :	14,4 d (24h/24) 25,2 d (12h/24)	4,6 d (24h/24) 9 d (12h/24)	14,2 d (24h/24) 25 d (12h/24)	4,5 d (24h/24) 9 d (12h/24)



		Always ON deactivated		Always ON activated	
		Without upload	With upload (300 kb/s)	Without upload	With upload (300 kb/s)
E 9	1 photo every	36 d (24h/24)	12,6 d (24h/24)	30 d (24h/24)	12 d (24h/24)
	15 min :	54 d (12h/24)	23,4 d (12h/24)	36 d (12h/24)	22 d (12h/24)
	1 photo every	54 d (24h/24)	23,4 d (24h/24)	36 d (24h/24)	22 d (24h/24)
tel	30 min :	73,8 d (12h/24)	37,8 d (12h/24)	40 d (12h/24)	30 d (12h/24)
ong. Sequ	1 photo	73,8 d (24h/24)	37,8 d (24h/24)	40 d (24h/24)	30 d (24h/24)
_ ~	every hour :	90 d (12h/24)	55,8 d (12h/24)	43 d (12h/24)	36 d (12h/24)
	2 photos per day :	108 days	93,6 days	45 days	44 days

The Tikee has 3 power modes:

- **Normal:** The Tikee mini+ has sufficient energy, so it captures and downloads the images normally according to the chosen parameters (this status corresponds to a percentage higher than about 30% of the battery).
- **Eco:** Tikee mini+'s energy has decreased, it continues to take images and store them on the microSD card but no longer sends them to the cloud. However, it continues to connect every 24 hours to send its status and update its configuration. The pictures are sent as soon as the battery is above 60%.
- **Standby:** The Tikee mini+'s energy level is too low (about 15%), it continues to capture images but no longer connects to the cloud.

Start a sequence

Once the sequence(s) have been set up and sent, you can start them by pressing **START** or the camera's trigger button .

Once the sequence is started, the power LED turns off and the trigger LED flashes blue every 10 seconds.

You can create new shooting sequences (maximum 6 and only 1 long sequence at a time). If your Tikee mini+ is already active, there is no need to start your sequences again.

You can end a sequence in progress by pressing the camera's trigger button again or by pressing STOP on the mobile application.

Note 1: If a burst sequence in progress stops before the normally set end, the images are not sent to the cloud platform but are kept on the microSD card.

Note 2: You can check the status of the Tikee mini+ at any time on the main menu of the Tikee Remote mobile application (near the Tikee mini+). To refresh the page, scroll down the screen. The status will update.



Monitor sequence progress

You can check the status of each scheduled sequences by clicking on it from the mosaic sequences menu.

When a sequence is in progress, you can see the number of photos taken and sent to the cloud platform in the sequence insert on the home screen.

To delete or stop a sequence:

- 1) Stop shooting by clicking **STOP**
- 2 Drag the insert of the sequence to be deleted to the left and click on the delete logo.
- 3 Press START again to continue with the sequence still in progress

Note: A short-term sequence cannot be restarted.

Deleting a sequence only deletes the settings and does not delete the point of views on the cloud platform or the photos on the microSD card.

User account

Version of the mobile app

You can check the version of the mobile app installed and the connected user (myTikee account) on your smartphone by clicking on in the top left corner.

Disconnecting from the mobile app

The mobile app will keep your user's ID from the first connection. If you want to log off from the mobile application, click on Sign Out.





[&]quot;Long-term" sequences can be searched, edited and removed.

[&]quot;Short-term" sequences (Event or Burst) can be searched and removed, but not edited.

Advanced settings

Formatting the microSD card

We recommend to format the microSD card before first use. You can format it directly from the mobile application.

Here is the path on the mobile application to format the microSD card.



You can not format the microSD card when a timelapse sequence is in progress.

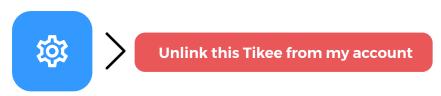
Unlinking your Tikee mini+ from your user account

The association of a Tikee mini+ with a user account is automatic and occurs during the first linking (connection of your Tikee mini+ to the mobile app). During the following connections, the Tikee mini+ linked to your account are marked with 2 chains:



A Tikee mini+ can only be associated with a single user account. However, it is possible to connect several smartphones with the same user account.

If you want another user to use your Tikee mini+ with an other myTikee account you can unlink it from your account.



You will not be able to link with a Tikee associated with another account than yours. You have to unlink it first.

Caution: Once unlinked, any user who has downloaded the Enlaps mobile application can be linked to your Tikee mini+. It is strongly recommended to not unlink a Tikee mini+ having a current sequence. The Tikee mini+ keeps its setting (if it has one) during a unlink.

Modify the interval for sending images on the mobile app



Advanced settings > Sending photos > From



button: choose the sending rhythm.

For long sequences (see <u>page 15</u> to set up the sequences), there are 3 different ways of sending images to the cloud platform:



Normal mode: Choice of the sending rate with the Sending Threshold. The Sending Threshold defines the minimum number of images before the Tikee connects to send them. In this mode, the Tikee mini+ connects at least every 24 hours.

Example: Normal mode activated, threshold set to 15, the Tikee mini+ will wait until it has 15 photos available before sending them.

(Without your intervention, the default value is 25)

Warning/Important: Reducing the image sending threshold can significantly reduce the camera's autonomy (more intense use with data sending).

Minimal mode: The Tikee mini+ connects every 24 hours at the chosen time and sends the last image captured.

This mode saves energy and data while maintaining regular feedback.

Example: Minimal mode activated, set to 3pm. The tikee connects at 3pm every hour, and sends you a single photo (the last available).

Warning/Important: The other images captured by the camera are stored on the microSD card, please allow sufficient space.

Sample mode: The Tikee mini+ sends the last captured image with a periodicity defined by the chosen sending threshold.

This mode saves energy and data while providing even more regular feedback.

Example: Sample mode activated, threshold set to 5. The Tikee mini+ will send 1 image every 5 images.

Warning/Important: The other images captured by the Tikee mini+ are stored on the microSD card, please allow sufficient space.

White Balance

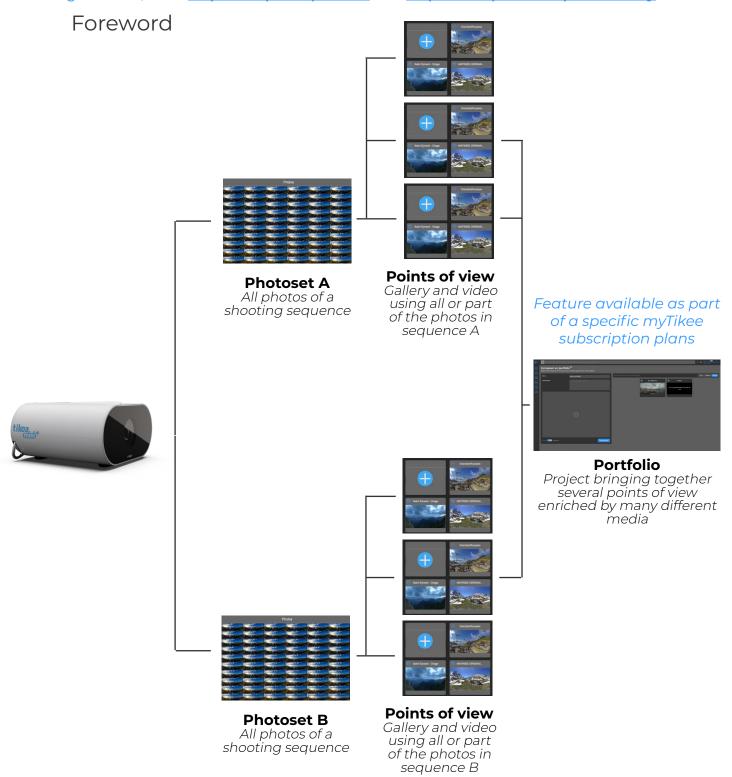
The following white balance modes are available:

- **Auto (recommended)**: Automatically adjusts white balance based on lighting. Ideal for long-term timelapse in all weather conditions.
- **Incandescent (2700K)**: For indoor scenes lit with incandescent bulbs. Cools down yellow-orange tones.
 - Fluorescent (4000K): For indoor scenes lit with fluorescent bulbs or tubes.
- **Phenology, Sunny Outdoor (5500K)**: For full sunlight scenes. Use for phenological index calculations.
 - Cloudy Outdoor (6500K): For cloudy outdoor scenes.
 - **Shade (8500K)**: For shaded scenes with very cool lighting.



5. Getting started with myTikee cloud platform (basic features)

To go further, visit: https://help.enlaps.io/en and https://enlaps.io/enlaps-academy



Upload of photos on the myTikee cloud platform:

From the mobile app, when you set up your sequence, make sure you have selected « Send images » to directly or later make the most of all the features of the cloud platform : combined images, edition, view, sharing...



Sequence: database of all of the shot photos during an in progress or ended sequence.

Point of view: A point of view uses the pictures of a sequence to create a video. You can create several points of views based on the same sequence.

Portfolio (available as part of a specific myTikee subscription plan):

A portfolio brings together several points of view and creates a set of media enhanced by Al processing, filters, navigation between points of view on a map, etc...

Al Dashboard (available as part of a specific myTikee subscription plan):

The AI Dashboard has been developed to help professionals analyse data, with indicators relating in particular to productivity, safety and project monitoring. It contains a compilation of data from one point of view in a dashboard.

Visit enlaps.io to find out more.

Point of view

Editing a point of view:

After you have selected your point of view, you can edit it by clicking on You'll have access to 6 windows:



Window 1: Filters

This gives you access to time-based filter settings, as well as selective filters using Artificial Intelligence (available as part of a specific myTikee subscription plans).

Don't forget to click on Save at the bottom of the page to validate the settings that will be taken into account when generating the video and your content.

Window 2: Photo

The photo mosaic lets you quickly view the images in your sequence that have been selected to make your video.

In this window, you can also delete one or more photos from your sequence You can also manually add photos to the sequence.

Please note: the photos imported into the sequence must be in the same format as the photos already in the mosaic.

Tuile 3: Pan & Zoom

Two types of framing can be selected: Full framing and Pan&Zoom. The video generated in the preview will move around the panoramic image from the « Start » area to the « End » selection area. This is the « Pan » function.

The size of the zones can also be modified to « zoom in ».

Note that the minimum size has been blocked to ensure that the video is always in FullHD format.



Window 4: Preview

This window allows you to preview the video with the latest modifications.



Window 5: Description

Enables you to fill in the description fields specific to the viewpoint.

Window 6: Extras

Gives access to parameters relating to the video to be generated, such as:

- Activation of automatic video generation every 24 hours.
- The possibility of exporting filtered photos or creating videos using the Timelapse Builder (available as part of a specific myTikee subscription plan).
- The length of the video.
- Public or private visibility of the generated video.

Info: When your content is in « Public » sharing mode, it becomes visible and shareable by all the people who have the link (myTikee user or not). The content also becomes visible in the « Public » section next to the search bar.

- The watermark will be inlayed at the bottom left of the videos.

Deleting a point of view:

After you have selected your point of view, you can remove it by clicking on



Warning: If you delete the last point of view based on your sequence, your point of view and photos of this sequence will be lost.

Adding a mask blurring:

The blur mask lets you blur fixed parts of the scene by adding a mask to the images that will appear in the video.

Once the blur mask has been applied, you will have 2 points of view: one with the blurred images and one with the unblurred images.

Portfolio (available as part of a specific myTikee subscription plan):

Create a portfolio:

In the Portfolios section



Fill in the Name and Description fields and then click on the points of view you wish to group

Finally, select the public or private visibility mode for your portfolio and click on « Save ».

Viewing a portfolio:

In the Portfolios section, you can click on the title of your portfolio or on the eye appears when the mouse hovers over the 3 small dots



You will then have access to the different media in the portfolio:



Viewsfeed will automatically provide you with one new media item per day if your portfolio has received new photos in the last 24 hours.

Edit a portfolio:

In the Portfolios section, click on the pencil that appears when the mouse hovers over the 3 small dots

You can delete existing viewpoints by clicking on them and then saving. This leads you directly Getting started with myTikee cloud platform



to the viewing area where you can access the following settings:



- the map to visualize the location of the points of view ____ - full screen mode



- resolution and media sharing settings - the treatments to be applied to the photos

Delete a portfolio:

In the Portfolios section, click on the bin

which appears when the mouse hovers over the 3 small dots

This action will only remove the portfolio and not the point of views present in the portfolio.

Setting up your Tikee mini+

You can manage all of your Tikee mini+ settings by clicking on « My cameras » then « Tikee » on the left of the screen.

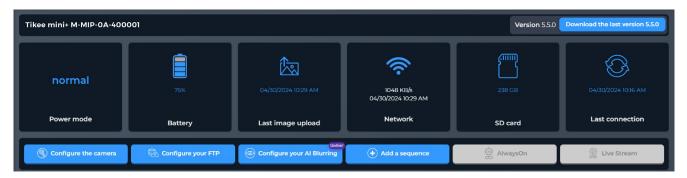
Choice of the Tikee mini+:

Select the Tikee mini+ you want to set up by clicking on the serial number of your camera.

Info: With a specific myTikee subscriptions, you have access to several dashboards showing all the cameras connected to your account.

Checking the status of your Tikee mini+

Once you have selected your Tikee mini+, you can access to all of its status information: The Tikee mini+'s power mode, battery charge status, date of last received image, network quality, available space on the micro SD card and date of last connection.



You will also have access to more advanced settings for your camera on the « Configure the camera » tab which varies depending on your camera model.

From this page, you can also activate your FTP transfer (this is set up on the profile page), add new sequences, activate and use the Always ON features, or even launch a video LiveStream if the camera has been set up for it (FTP transfer and video LiveStream available as part of a specific myTikee subscription plan).

Viewing and editing sequences

You can consult the information of your timelapse sequences by clicking on the chosen sequence. You can add new sequences

You can also remotely modify your sequences, in particular the time slot and the active days. Sequence additions and modifications will be taken into account the next time the Tikee mini+ is connected to the cloud platform (this can be forced thanks to the Always ON function).

To find out more about all the possibilities offered by the « myTikee » cloud platform, register for free on my.tikee.io and follow the many tutorials and articles on help.enlaps.io/en



6. Product brief

Version

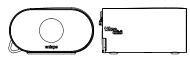


Weight 1 kg

Dimensions

Cameras

Weatherproof



125 x 125 x 70 mm

1 camera module for wide angle photos

Image sensor : Sony 12 Mpx Lens : Wide angle lenses DFOV 149°/HFOV 124°, aperture F2.8

Full resolution image size: 4032 x 3024

Sensor size: 1/2,3 Pixel size: 1,55µm

IP 66: Designed for extended outdoor use (resistant to sand, snow, rain, etc.)

Weatherproof connector for additional solar panel if required Operating temperature: -10 / + 50 °C

Storage temperature: -25 / + 60 °C

MicroSD card (not included) - Up to 1 TB Storage

Battery Built-in Li-Ion battery – 25600 mAh and solar panel

USB-C 5V/3A max. Charge External waterproof connector 5V/2A max.

> Periodic or «Always-On» connectivity over 4G/LTE (telecom subscription and sim card not provided) Periodic connectivity over wifi

Wireless upload Resolution of images sent to the web application:

selectable from 3 dimensions (in pixels) :

Small (S) - 2048 x 1536 per image, approx. 0,5 MB per image Medium (M) - 2664 x 1998 pixels per image, approx. 1,25 MB per image Large (L) - 4032 x 3024 pixels per image, approx. 2,5MB per image

Single-lens video stream - 60sec

Ratio 4:3 Frame rate 30 fps

Live stream Adaptive bitrate

(requires a 4G/LTE connection, activation of the Always ON feature

and a myTikee subscription plan)

On-demand triggering of photos or videos Photo & video

(requires a 4G/LTE connection and activation of the Always ON feature) snapshots

Video rendering Up to 4K, available as part of a myTikee subscription plan

DNG

Pictures format Jpeg + DNG





Dictu	ra in	terval

Long term sequence: 30 seconds minimum Event or Burst sequence: 5 seconds minimum

User-defined or brightness-dependent schedules

Adaptative interval

Mode that automatically adjusts the shooting interval to optimize energy consumption

Normal mode: send a batch of photos (25 photos by default, configurable)

Minimal mode: send one photo, once a day at a set time

Sample mode: samples of photos sent, sends one photo out of N

(configurable value)

Upload Mode

The camera's operating status are sent with each connection.

Note: The selected mode, capture settings, and network quality may significantly impact the camera's energy consumption.

Wireless data

Geolocation

Embedded GPS (A-GPS technology) (requires a 4G/LTE connection)

Bluetooth Low Energy IOS and Android compatible mobile application Minimum smartphone compatibility: Bluetooth 4.1 / Android 8 / IOS 11

Secure Tikee installation

Fixation

mounting

Metal insert for attaching a padlock

Standard 1/4" camera screw

Embedded software update

Near the camera: from the SD card, from the wifi or 4G/LTE network Remotely: from the myTikee web platform with Always ON functionality (requires a 4G/LTE connection and activation of the Always ON feature)

4G/LTE global compatibility

4G LTE modem compatibility

LTE-FDD: B1/B2/B3/B4/B5/B7/ B8/B12/B13/B18/B19/ B20/B25/B26/ B28/B66 LTE-TDD: B34/B38/B39/ B40/B41

7. Maintenance and cautions

A microfiber cloth is included in the package. You can use it to ensure the maintenance of the camera.

Follow the instructions below to get the best performance from your Tikee mini+.

The camera is guaranteed IP66. If the cap protecting the USB-C slot and the microSD and microSIM slot are opened, the waterproofness of the Tikee mini+ is not guaranteed

Make sure that the cap is closed before use to ensure water-resistance.

About the waterproofing of Tikee mini+:

- **Do not immerse.** Check and ensure that **the rear cover is closed**.
- Inspect Tikee mini+ from the outside. Do not expose / use a damaged Tikee mini+.

Electrical characteristics:

Supply voltage at the external and USB-C connectors should be between +4.5 Vdc up to +5.5 Vdc (+5 Vdc typical).

Use AC/DC power supply tpe LPS, Limited Power Source (according to IEC EN 60950-1 Ed2) or type ES1, PS2 (according to IEC EN 62368-1).

Consumption max under 5Vdc: 2000 mA

Built-in-Lithium battery: Typical voltage: 3.6V / Typical capacity 25.6Ah

Temperature range:

Operating temperature: -10° C / + 50° C Storage temperature: -25° C / + 60° C Charge temperature: -10° C / +50° C

Before closing the cover, make sure that no debris is on the seal. If necessary, clean it with a cloth.

Before opening the cover, make sure that the camera is free of water and debris.

If the camera is dirty, you can clean it with a damp soft cloth.

To clean the lens, wipe it with a soft cloth. Don't insert any foreign object around the lens.

Special precautions:

- Do not store Tikee mini+ with a discharged battery (level below 50%).
- Do not insert objects (or metal) into the microSIM and microSD card slots.

If there are signs of condensation or moisture inside a lens, turn off the Tikee mini+ (do not charge) and contact customer support.

Enlaps support

For questions relating to your Tikee mini+ camera or mobile & cloud platform, you can read our FAQ: https://help.enlaps.io/en/

You can also contact us on enlaps.io/contact

In the event of an identified failure, a return of the product to our premises will be necessary for a diagnosis.



8. Informations about frequency bands (4G/LTE & 3G)

Radio-Frequency technologies embedded in Tikee mini+ device :

RF technology	Frequency bands	Max power
WIFI	2.4-2.4835Ghz	17.2 dBm (EIRP)
3G/4G	LTE-FDD: B1/B2/B3/B4/B5/B7/ B8/B12/B13/B18/B19/ B20/B25/ B26/ B28/B66 LTE-TDD: B34/B38/B39/ B40/B41 UMTS/HSPA+: B1/B2/B4/B5/B6/ B8/B19	-34.3 dBm (ERP)
BLUETOOTH	2.4Ghz	-1.1 dBm (EIRP)
GPS	1.57542GHz	Reception Only

ENLAPS Tikee mini FCC ID: 2ASLI-TIKEEM01 IC: 24785-TIKEEM01 Note - Modular Approval:

Contains:

FCC ID: 2AJYU-8PYA007 IC: 23761-8PYA008 FCC ID: S9NBNRGM2SA IC: 8976C-BNRGM2SA

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

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, 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 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 circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with FCC RF radiation exposure limits set forth for general population. This device must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.



This device complies with Industry Canada licence-exempt RSS standard(s). 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.

This device complies with Canada Industry radiation exposure limits set forth for general population. This device must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

9. Battery information

Integrated lithium-ion battery:

Typical voltage: 3.6 V / Typical capacity: 25.6 Ah / 92Wh.

Temperature ranges:

Operating and charging temperature: -10°C / +50°C

Storage temperature: -25°C / +60°C

Shooting while charging

You can shoot while your Tikee mini+ is connected to a USB-C cable (not supplied). Note: as the cap of USB port is open while loading, the waterproofness of the Tikee mini+ is no longer guaranteed.

WARNING: Use only chargers labelled: output 5 V 2A min.

Storage and handling of the battery

The camera contains delicate parts, including the battery. Do not expose your camera at temperatures outside the intended range of use. Too low or too high temperatures could temporarily reduce the battery life or adversely affect the correct functionning of the camera.

Do not dry the camera with the help of an external source of heat such as a microwave oven or hairdryer.

Do not store Tikee mini+ with a discharged battery (level below 50%).

Make no unauthorised changes on the camera. You might compromise your security and the performance of the camera, breaking the regulations in force and void the warranty.

Warning: Never let fall, disassemble, open, crush, bend, deform, pierce, lacerate, expose to the microwave, incinerate or paint the camera. Do not use the camera or battery if these have been damaged, for example if they are cracked, breakthroughs, or if they took the water. Disassembly or drilling of the battery can cause an explosion or fire.

Treatment of electrical and electronic equipment at end of life

This symbol indicates that this product should not be disposed with unsorted household waste. A system of elimination and treatment specific to electrical and electronic equipment used, whose use is mandatory, has been implemented including a free right of recovery of used equipment on the occasion of the purchase of equipment new and separate collection by an accredited body. For more information, you can contact your local Council. A correct disposal of electronic and electrical equipment used ensures treatment and an appropriate value to avoid damage to the environment and human health and conserve natural resources.





10. Trademarks

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