

LIFEPLAN Getting Started:

Version Oct 18 2022

From receiving equipment to going to the field

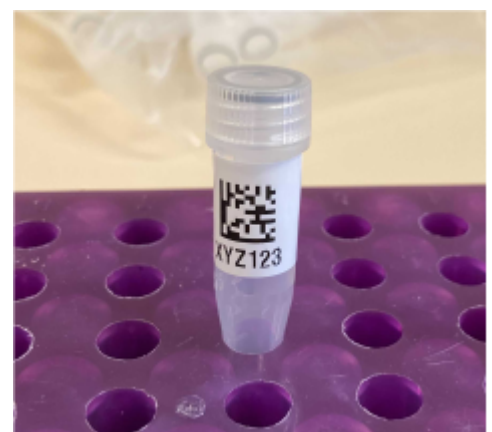
These instructions describe what you need to do when you've received your equipment, to prepare everything before going into the field for the first time.

LIFEPLAN App and Web admin

- Software User Manual as downloadable pdf at <https://www.helsinki.fi/en/projects/lifeplan/instructions>

Cyclone sampler

- Equipment you received:
 - Cyclone sampler sent from Burkard
 - QR code sticker for cyclone sampler, first letter A (pictured top)
 - 100 screw cap vials (pictured middle)
 - QR codes for vials, first letter C (pictured bottom)
 - A 24-hour timer if you asked for one
- Prepare equipment:
 - Purchase car battery
 - Attach QR code sticker to cyclone sampler's lower plate (pictured top). Choose sticker marked "urban" or "natural" depending on which place you are sampling in the first year.
 - Attach QR code sticker to at least your first tube (pictured bottom)
- Just before going into the field:
 - Charge car battery
- To bring into field:
 - Smartphone with Lifeplan app installed and logged in
 - Cyclone sampler with QR code attached
 - Tube with QR code attached
 - Charged car battery
 - Timer if you have it
 - Disposable gloves or something to cover your hands, like plastic bags. These are unfortunately not provided by LIFEPLAN yet due to global supply problems, but we will get them to you when we can. Until then, please use whatever you can to cover your hands



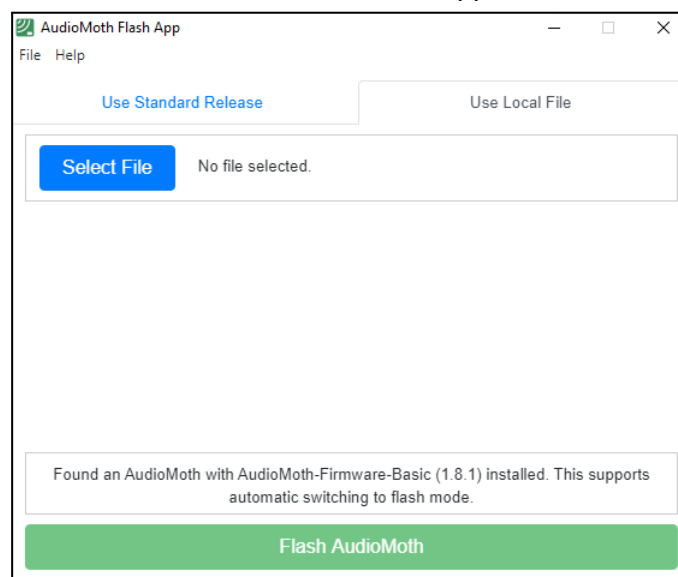
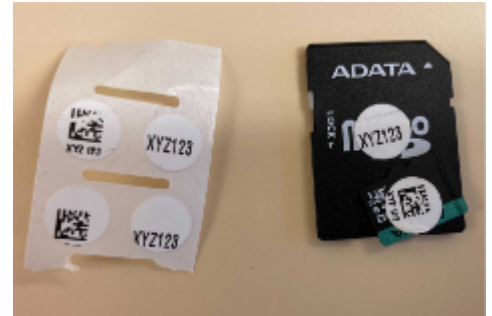
Malaise trap

- Equipment you received:
 - EZ-Malaise Trap kit (pictured top)
 - QR code sticker for Malaise trap, first letter E (pictured second)
 - 500 ml collection bottles, as many as you ordered from us (pictured third)
 - QR code stickers for collection bottles, first letter G (pictured third)
 - Yellow rubber bulbs (pictured fourth)
 - Decanting lid for bottles (pictured fifth)
 - 3 nitex filters for decanting lid (pictured fifth)
 - The tent pegs you requested
 - 2 extra ropes
- Prepare equipment:
 - Attach QR code sticker to at least the first collection bottle that you will bring into the field. Attach high up on the bottle (pictured third)
 - Attach yellow rubber bulb to one end of each tent pole (pictured fourth)
- Just before going into the field:
 - Fill collection bottle with 300 ml of ethanol (3 / 5 full)
- To bring into field:
 - Smartphone with Lifeplan app installed and logged in
 - Malaise trap
 - QR code sticker for trap. Choose sticker marked “urban” or “natural” depending on which place you are sampling in the first year.
 - Rubber bulbs
 - 1 Ethanol-filled collection bottle with QR code attached
 - Tent pegs

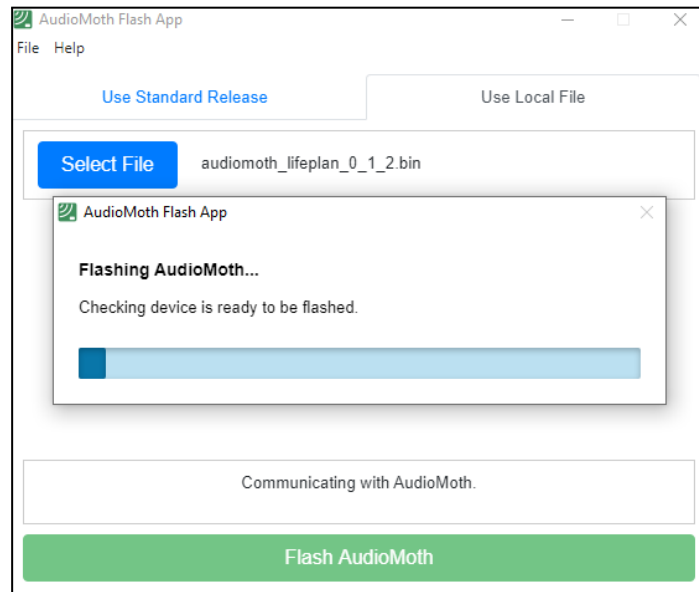


Audio recorders

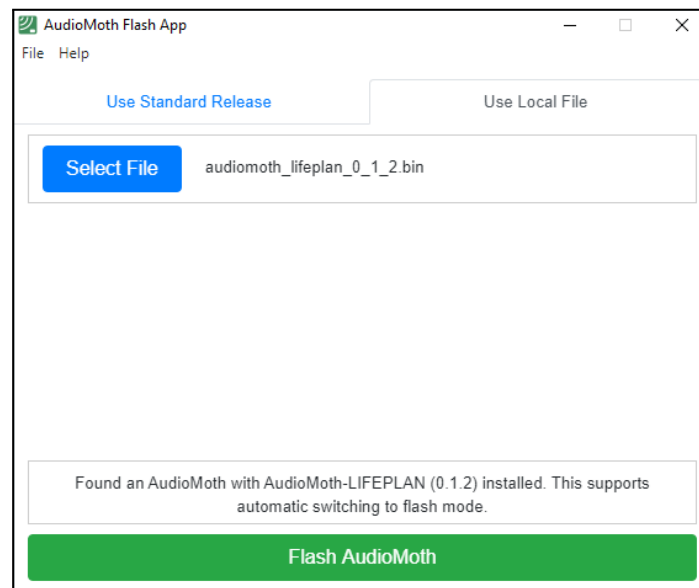
- Equipment you received:
 - 5 AudioMoths (pictured top)
 - 2 x 5 QR codes for AudioMoths, first letter N (pictured top)
 - A red coloured dot sticker
 - 5 Waterproof cases (pictured top)
 - 5 straps (pictured top)
 - 30 rechargeable AA batteries
 - Battery charger (you will need an adapter for this outside the EU)
 - 10 microSD cards with adapters (pictured right). Two of them have a red sticker dot.
 - 10 QR codes for microSD cards, first letter P (pictured right)
 - Memory card reader
 - 3 external hard drives
- Important to know: Of the 5 recorders, four will go in the corners of your plot and one in the middle. The middle recorder will record differently than the others. The programme that tells the AudioMoth how to record is actually a text file on the microSD card. For this reason, it is important to separate between middle micro SD cards (marked with a red sticker dot) and other microSD cards (no colored sticker dot), and to use only middle microSD cards in the recorder placed at the middle.
- Update firmware for new recording regime:
 - Download and install Audiomoth's Flash app on your computer (<https://www.openacousticdevices.info/applications>, second one on the list)
 - Download the new firmware from our Instructions page [Downloads section](#) (audiomoth_lifeplan_0_1_2.bin)
 - Open the Flash app on your computer, connect the Audiomoth to your computer with the USB cable
 - Select "Use local file" in the flash app



- Click on Select file and choose the lifeplan firmware “audiomoth_lifeplan_0_1_2.bin” then click on Flash AudioMoth



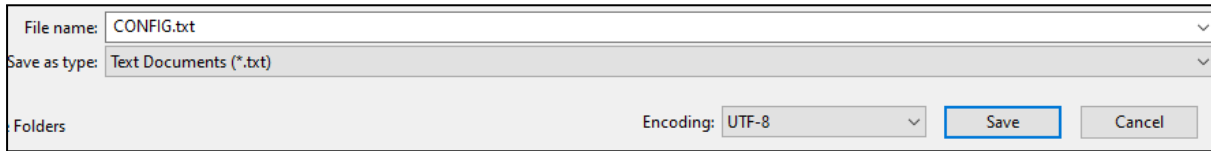
- Once the audiomoth is flashed, the textbox should say that “AudioMoth-LIFEPLAN (0.1.2) is installed



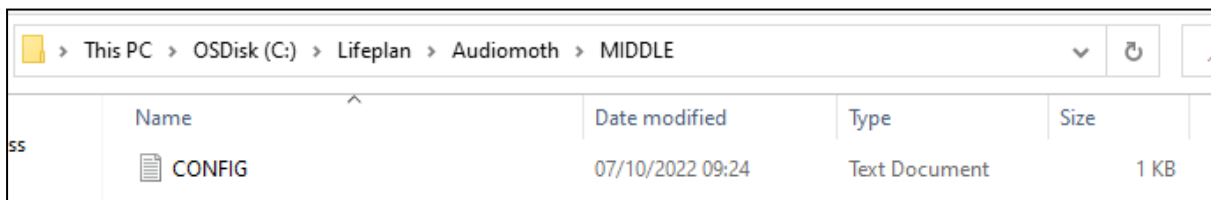
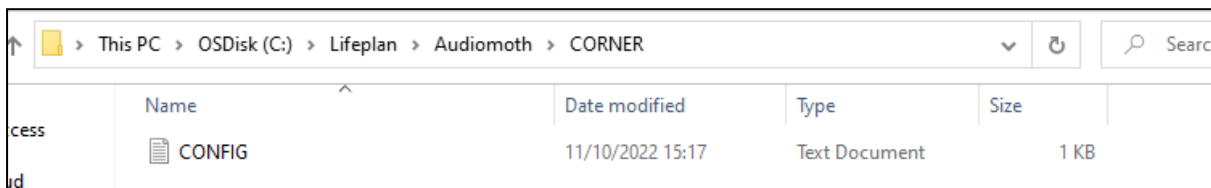
- Once the process is complete, be sure to disconnect the USB cable, then remove and reinsert batteries before use. A newly flashed AudioMoth must have its power cycled before use.

The audio recorders will be pre-programmed by a CONFIG file on the microSD card to record at set periods. The middle recorder will record at bird frequencies continuously for two days a week and then 1 minute in every ten minutes, while the recorders at the corners will record at bird frequencies for 1 minute every 10 minutes and listen for bats in between. Mark the cards that will be used for the middle AudioMoth with a red dot.

- Install CONFIG files on the microSD cards for new recording regime:
 - Download the config files from our instructions page
 - Rename the files so that they are **both** called “CONFIG”.



- We recommend keeping each CONFIG file in a different folder to avoid confusion.

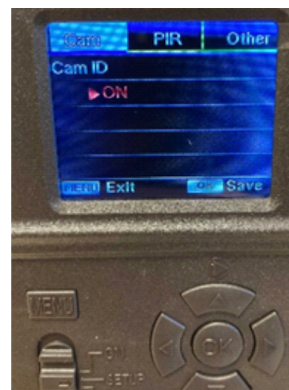
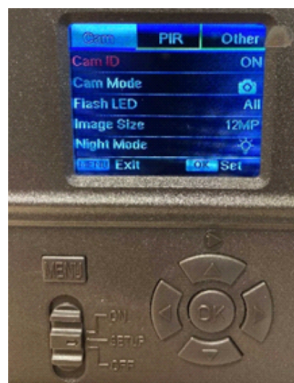


- Copy the CONFIG file from the MIDDLE folder to the middle SD card (red dot sticker).
- Copy the CONFIG file from the CORNER folder to the corner SD cards (no red dot)
- Install the free AudioMoth app by Open Acoustic Devices on your phone, available on App Store and Play Store. It will enable you to set the correct UTC time on the AudioMoths in the field by playing a chime.
- Label audio recorders with their QR code stickers. Choose stickers marked “urban” or “natural” depending on which place you are sampling in the first year.
 - Label microSD cards:
 - Take the microSD card out of its adapter
 - Attach sticker with the QR code to the small microSD card
 - Attach sticker with only six letters/numbers to the adapter
 - It does not matter for attaching QR codes which is the middle microSD card and which is not: you will log this later in the field
 - Keep the adapters for transporting AudioMoths to and from field
 - Insert microSD cards in Audiomoths (slot marked with picture of card)
 - Push in until you feel a click
 - Mark the AudioMoth that has the red-dot microSD card with a red-dot sticker: that AudioMoth will go in the middle of the plot
 - Charge the first 15 batteries (get an adapter if the plug on the charger does not fit your outlets)

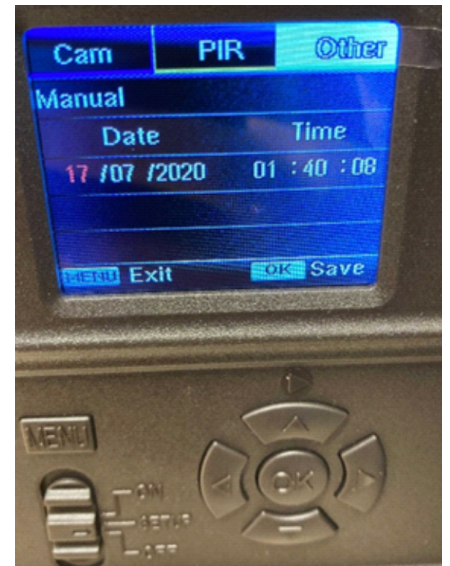
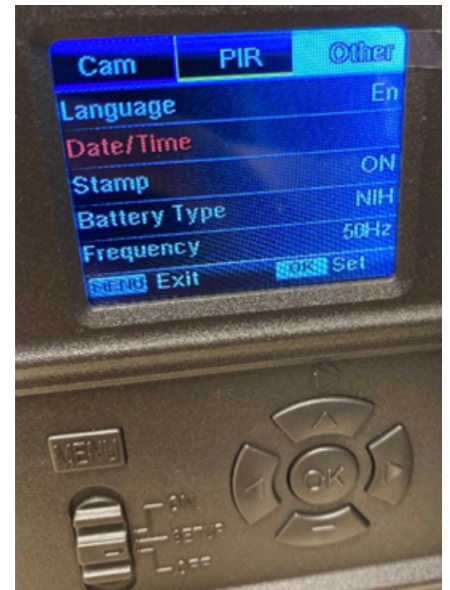
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- LIFEPLAN**
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Camera traps

- Equipment you received:
 - 5 camera traps (pictured top)
 - QR codes for cameras, first letter J (pictured top)
 - 5 straps for mounting
 - Cable ties and python cables if you requested them
 - Silica gel packets
 - 60 rechargeable AA batteries
 - Battery charger (same as for audio recorder)
 - 10 SD cards (pictured top)
 - QR codes for SD cards, first letter L (pictured top)
 - Memory card reader (same as for audio recorder)
 - 3 external hard drives (same as for audio recorder)
- Prepare equipment:
 - Label cameras with QR codes on the inside (pictured top). Choose stickers marked “urban” or “natural” depending on which place you are sampling in the first year.
 - Label SD cards with QR codes (pictured top)
 - Insert SD cards in cameras
 - Check camera ID and change the Night Mode setting:
 - Insert 6 charged batteries per camera in top row (pictured second). Bottom row will be space for a silica gel pouch in wet conditions.
 - Move the on/off/setup switch to “setup”
 - Every time you start the camera you need to enter a passcode. Wait for this screen to pop up. Enter the passcode 120010 and press “OK”.
 - Press “Menu”
 - In the “Cam” tab, use arrow keys to go to “Night Mode”. Select “MIN BLUR” mode and press OK.
 - Use the arrow keys again to select “Cam ID” under the “Cam” tab (pictured below). Select “ON” and press “OK” to see the camera ID. Check that it is the same as the ID written on the inside of the camera. If it is not, change the camera ID numbers with the up and down arrows. Set the switch to “OFF” and remove the batteries.



- Just before going into the field:
 - Insert 6 batteries per camera in top row. Bottom row will be space for a silica gel pouch in wet conditions.
 - Move the on/off/setup switch to “setup”
 - Enter the passcode 120010 and press “OK”.
 - Set time to UTC (pictured right): Press “Menu” and navigate to the “Other” tab with arrow keys. Enter UTC date and time in format DD:MM:YYYY, HH:MM:SS.
 - Tip: to get UTC time, you can use the free AudioMoth app by Open Acoustic Devices
 - Important: If you remove the batteries, the date and time will stop, so set them shortly before you go out and change the batteries quickly when you visit the plot. Keep the camera in standby mode until you place it in the field to save the batteries.
 - Set camera in standby mode by setting the switch to “OFF”
- To bring into field:
 - Smartphone with Lifeplan app installed and logged in
 - 5 Cameras with SD cards and batteries inserted and labels attached as instructed
 - 5 Straps
 - 5 cable ties and 5 python cables if you have them



Soil sampling

- Equipment you received:
 - Clear plastic bags
 - Paper bags (pictured top)
 - QR codes for paper bags, first letter S (pictured top)
 - Zip-loc bags
 - Large size zip-loc bags for sites outside Europe
 - 1 litre of silica gel packed in Malaise bottles (pictured middle)
- Prepare equipment:
 - Add silica gel to five zip-loc bags. In the field, the sealed paper bags with soil samples will go inside these zip-loc bags so the silica can remove moisture (pictured bottom).
 - Write your site code on the soil sticker
- To bring into field:
 - Smartphone with Lifeplan app installed and logged in
 - 5 clear plastic bags
 - 5 paper bags
 - 5 QR code stickers, first letter S
 - 5 zip-loc bags containing silica gel
 - Knife and/or metal garden spade
 - Tablespoon
 - Ruler
 - Ethanol and flame for sterilising tools
 - Cooler box
 - Disposable gloves or something to cover your hands, like plastic bags.

