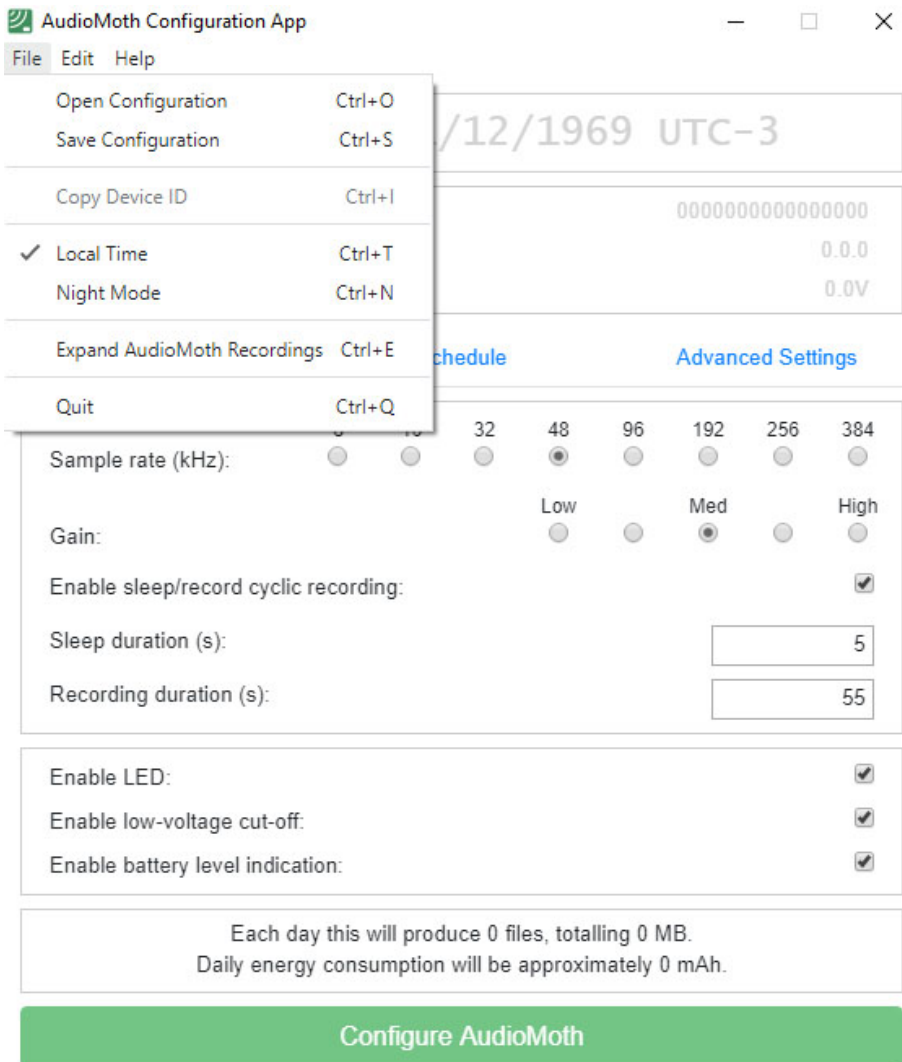


## AudioMoth Instructions

Everything you need to set up your AudioMoth is in the package you received except three AA batteries and something to attach your AudioMoth to a tree or post.

1. Open the AudioMoth Initial Setup Guide at <https://www.openacousticdevices.info/setup-guide>.
2. Follow the nine steps with the following additions or changes.
3. At Step 1, you don't need to reformat the micro SD card if I sent it to you. It is in the right format. If you purchased the card, make sure the format is FAT32 or exFAT. The micro SD card goes in upside down (label side down). You should feel the card click into its slot.
4. At Steps 5 and 6, the latest version of the configuration app has changed, as described below.
  - a. First, decide if you want the AudioMoth to record in Local Time or UTC (Greenwich Meridian Time). If you're going to record in Local Time, go to the File menu and set the device to Local Time, as shown below.



- b. Next, click on the Recording Settings tab. For recording birds, set the Sample rate to 32, and the Gain to Med (High may be better if birds are flying or high in trees; in any case, analysis software can amplify the sound later).
- c. Enable sleep/record cyclic recording if you are recording for more than one recording interval. Then set the Sleep duration in seconds and the Recording duration in seconds. In the example below, the AudioMoth will record for 600 seconds, sleep for 3000 seconds, followed by another 600 seconds of recording. It will cycle this way throughout the recording period as established in the next step.

The screenshot shows the AudioMoth Configuration App interface. At the top, there is a status bar displaying the time and date: 21:00:00 31/12/1969 UTC-3. Below this, there are fields for Device ID (0000000000000000), Firmware version (0.0.0), and Battery (0.0V). The main settings area is divided into three tabs: Recording Settings (selected), Schedule, and Advanced Settings. Under the Recording Settings tab, there are radio buttons for Sample rate (kHz) with options 8, 16, 32, 48, 96, 192, 256, and 384. The 32 kHz option is selected. There are also radio buttons for Gain with options Low, Med, and High. The Med option is selected. Below these are checkboxes for 'Enable sleep/record cyclic recording' (checked), 'Sleep duration (s):' (3000), and 'Recording duration (s):' (600). At the bottom of the settings area, there are three more checkboxes: 'Enable LED:' (checked), 'Enable low-voltage cut-off:' (checked), and 'Enable battery level indication:' (checked). A summary box at the bottom states: 'Each day this will produce 3 files each 37 MB, totalling 110 MB. Daily energy consumption will be approximately 10 mAh.' A large green button labeled 'Configure AudioMoth' is at the very bottom.

- d. Next, click on the Schedule tab. Enter the time you want your AudioMoth to start and end recording.

- e. In the example below, it will record from 05:00-05:10, 06:00-06:10, and 07:00-07:10 using the durations set in the Recording Settings tab.
- f. Use the First and Last recording dates if you want to save disk space on the SD card if there are gaps between when you deploy or retrieve your AudioMoth and the desired recording date.
- g. Note at the bottom of the tab that the AudioMoth will produce three files per day, as expected, and 110 MB. Thus, you can calculate how many days you can record before your SD card is full. Similarly, considering that the 3 AA batteries have a capacity of about 2500 mAh, you can calculate the approximate lifetime of your batteries.

AudioMoth Configuration App

File Edit Help

21:00:00 31/12/1969 UTC-3

Device ID: 0000000000000000  
 Firmware version: 0.0.0  
 Battery: 0.0V

Recording Settings Schedule Advanced Settings

00:00 06:00 12:00 18:00 24:00

Start recording: 05:00  
 End recording: 07:10  
 Add recording period  
 Remove selected period  
 Clear all periods

05:00 - 07:10 (UTC-3)

First recording date (UTC-3): 07-Jun-2020  
 Last recording date (UTC-3): 20-Jun-2020

Each day this will produce 3 files each 37 MB, totalling 110 MB.  
 Daily energy consumption will be approximately 10 mAh.

Configure AudioMoth

- h. Do not make any changes to the Advanced Settings tab.
- i. Step 8 was written before the Local Time feature was available.
- j. In step 9 do not switch from USB /Off mode to Custom Mode until you are in the field and ready to deploy your AudioMoth

## 5. Deploying the AudioMoth in the field

- a. Be careful not to jostle AudioMoth too much since the batteries could come loose, and you will lose your programming.
- b. When you have chosen a site to deploy, set the mode from USB/Off to Custom. On the side where you inserted the micro SD card, a green light should start. If it is flashing both green and red, there is an error, and you will have to go back to your computer to reprogram.
- c. Insert the AudioMoth in the ziplock freezer bag with desiccant bags if available, and keep the top of the AudioMoth flush with the side of the bag facing out towards the forest. I position the AudioMoth, so the microphone side (microphone icon next to number) faces toward the sky rather than the ground.
- d. Attach AudioMoth to a branch or a trunk (see photo below). Zip-tie or duct tape is best for a branch and buckling-strap for the trunk. (Photo from AudioMoth Guide by Tessa Rhinehart)



- e. If you are deploying in a place where there is public traffic, it is advisable to attach a notice to the tree saying this is a recording device for a scientific study. Please include a contact number, so they seek further information.
6. If you are returning equipment to me:
    - a. Place AudioMoth and micro SD card in the red antistatic bag it was sent in. If you want to download your recordings, slip the micro SD card into the adapter card and place (label side up) into the card reader of your computer if it has one. However, I will have the recordings online where you can listen to them later.
    - b. Place the red antistatic bag (with AudioMoth and micro SD card in the card adapter), and the micro USB cord in the shipping box I sent you (or another box or large padded envelope).
    - c. Mail to:

John Kearney

3627 Highway 1

Beaver River, NS B5A 5A9

Keep your post office receipt, and send a scan of it by email to [j.f.kearney@gmail.com](mailto:j.f.kearney@gmail.com)

Thanks so much for your participation and I hope you enjoyed it!

John Kearney

Listening Together Project

Funded by Canadian Wildlife Service, Environment and Climate Change Canada, and Wildlife Division of Nova Scotia Lands and Forestry

If you want more information on using the AudioMoth see: <https://github.com/rhine3/audiomoth-guide/blob/master/guide.md>.