

Audiomoth recording Manual

Mobile type



Overview

AudioMoth is a low-cost, full-spectrum acoustic logger, based on the Gecko processor range from Silicon Labs. Just like its namesake the moth, AudioMoth can listen at audible frequencies, well into ultrasonic frequencies. It is capable of recording uncompressed audio to microSD card at rates from 8,000 to 384,000 samples per second

The screenshot shows the 'AudioMoth Configuration App' window. It has a menu bar with 'File', 'Process', 'Time', and 'Help'. Below the menu is a date/time display showing '--:--:-- --/--/---- UTC'. There are four tabs: 'Recording', 'Schedule', 'Filtering', and 'Advanced'. The 'Recording' tab is active. It contains settings for 'Sample rate (kHz)' with radio buttons for 8, 16, 32, 48 (selected), 96, 192, 250, and 384. The 'Gain' section has radio buttons for Low, Med (selected), and High. There are checkboxes for 'Enable sleep/record cyclic recording' (checked) and 'Enable LED' (checked). A 'Sleep duration (hh:mm:ss)' field is set to 5. A 'Recording duration (hh:mm:ss)' field is set to 55. At the bottom, there is a 'Configure AudioMoth' button.

The screenshot shows the 'AudioMoth Flash App' window. It has a menu bar with 'File', 'Firmware', and 'Help'. There are two tabs: 'Use Standard Release' (selected) and 'Use Local File'. The 'Use Standard Release' tab shows the following information: 'Firmware: AudioMoth-Firmware-Basic', 'Version: 1.11.0', and 'Date released: 19/11/2024'. Below this is a 'Changes' section with a list of updates. A 'Downloaded' button is present. To the right of the changes list is a scrollable list of version numbers from 1.11.0 down to 1.4.3. At the bottom, there is a 'Flash AudioMoth' button.

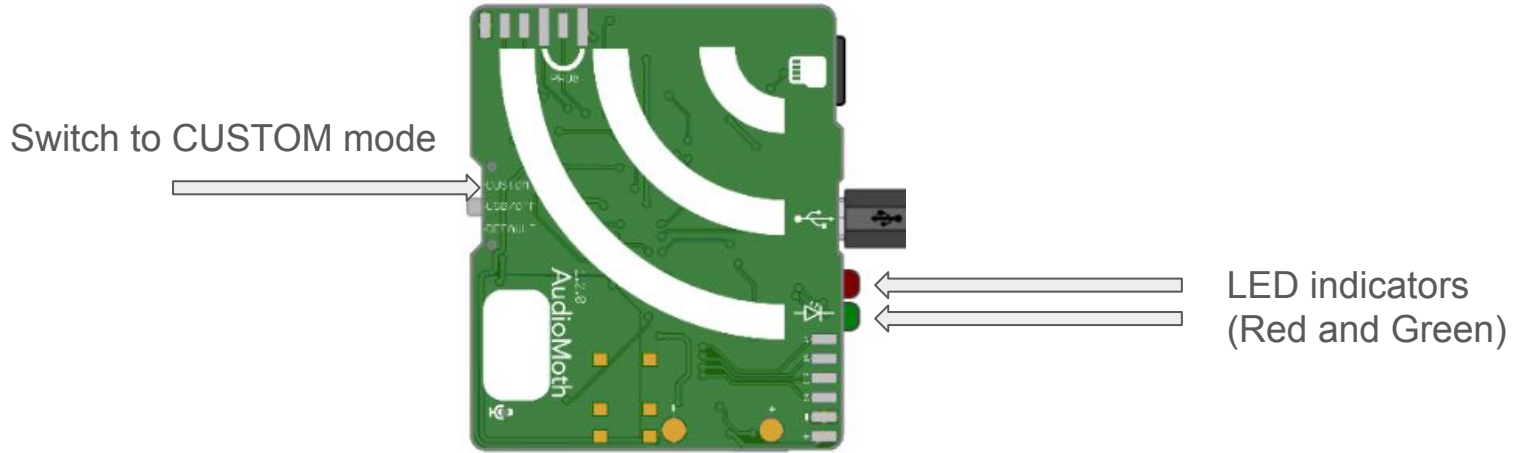
Changes:

- Added additional support for GPS synchronisation of recordings.
- Added additional GUANO metadata describing all recording settings.
- Improved reporting of SD card write errors in WAV

**Notes configurations used for adjusting the Audiomoth.
Do not need to set up.
They are already pre configured at AIT**

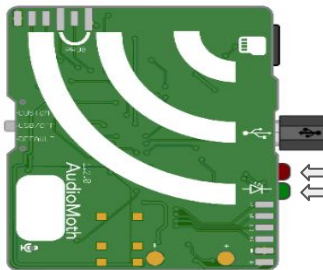
Usage

First step: Begin by inserting the three AA batteries and the SD card for audio file storage. Then, switch the device to the custom mode.

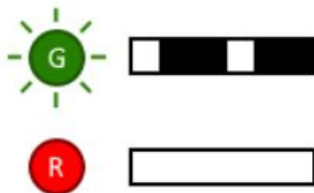


Usage

Second step: observe the green and red blinking signals



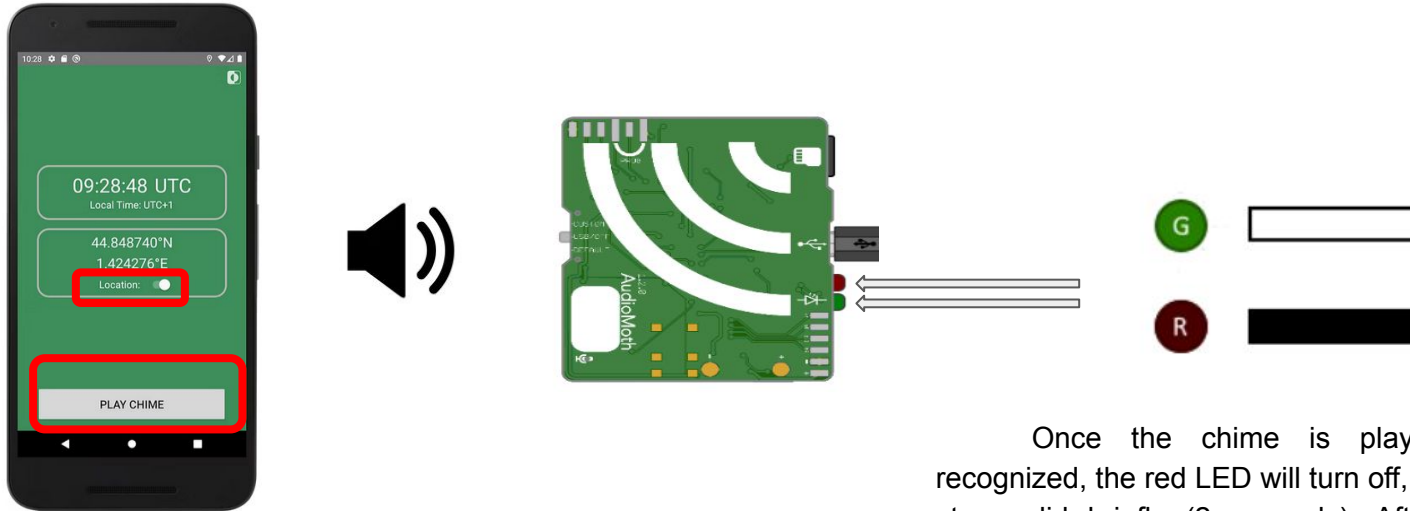
LED indicators
(Red and Green)



When the switch is turned to CUSTOM mode, the red light will stay solid while the green light flashes briefly (100ms), indicating the device requires activation.

Usage

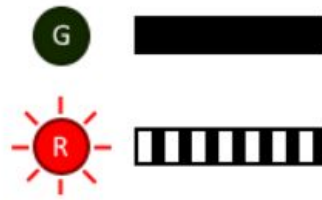
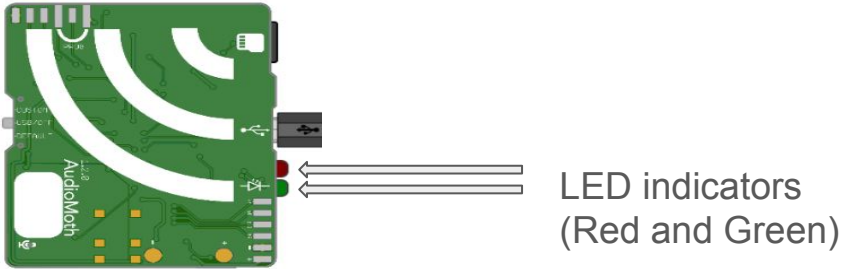
Third step: bring your phone close to the AudioMoth and play the chime one time to detect and activate



Once the chime is played and successfully recognized, the red LED will turn off, and the green LED will stay solid briefly (2 seconds). After this, the recording schedule will start.

Usage

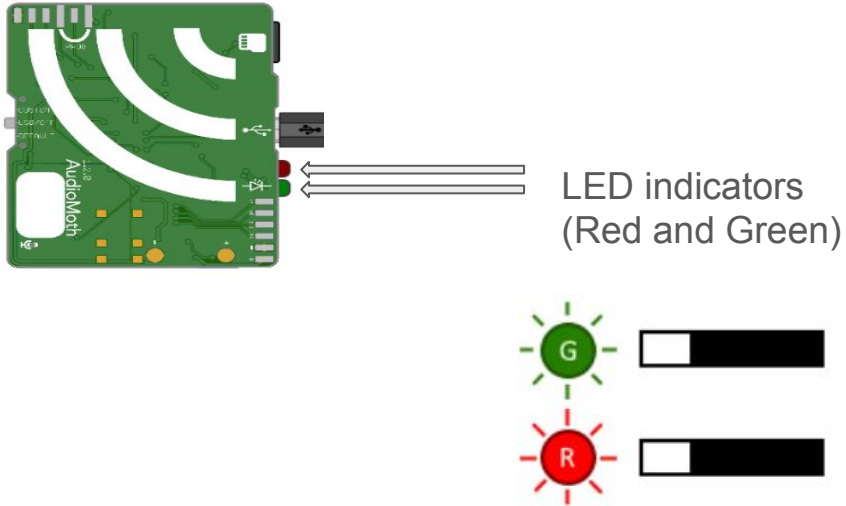
Final step: Indicating that recording is now active



During recording, green light turns off and the red light will flash, with the frequency depending on the sample rate as the audio is saved to the SD card.

Potential failures

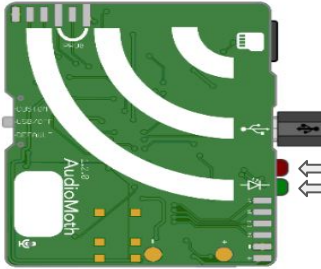
SD card write error or a low battery



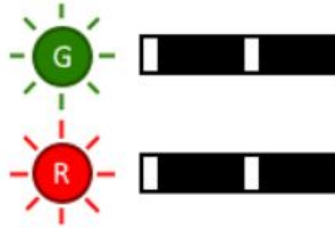
A long flash (500ms) of both LEDs occurs when there is a recording failure, due to an SD card write error or a low battery, that results in a recording being cut short.

Potential failures

recording failure



LED indicators
(Red and Green)



Short flashes (10ms) of both LEDs between recordings mean an earlier scheduled recording has been cut short due to a recording failure