

Acoustic Recording Unit (ARU) Deployment Protocol

- ARUs for Shrub Planting Cluster: Audiomoths



Preparation before deployment

- Needs 3 AA batteries
- Place SD micro card in the slot
- For configuring the device, connect it to computer using the port
- Make sure that when you place it back in the box, the microphone part of the chip is in the corner where the microphone outlet is (circle in the picture above)



Download the following 2 apps from the website onto your desktop/ laptop/ device where you will connect the audio moth:

<https://www.openacousticdevices.info/applications>

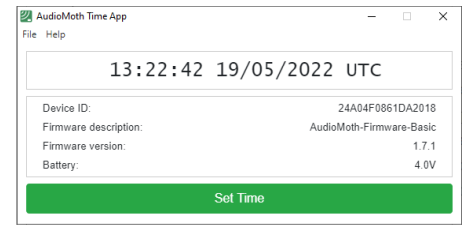
- AudioMoth Configuration App (will work with macOS, Windows, and 64-bit Linux systems)
- AudioMoth Time App (used to set time on your device)

ARU settings for AudioMoth

1. Switch the device to USB/Off, and connect it to your computer (you will see a green indicator on the device)



2. Use the **AudioMoth Time app** to set the time on your device
 - a. Click local time on the AudioMoth Time app
 - b. You should see the change in time on your AudioMoth



3. On your **AudioMoth Configuration app**,
 - a. Under Recording tab, use following settings:

- Sample rate: 48
- Gain: High
- Enable sleep/record cyclic recording: unchecked
- Enable LED: checked
- Enable low-voltage cut-off: checked
- Enable battery level indication: checked

- b. Under Schedule tab, use the following settings
 - i. Decide start time based on sunrise of date the device is getting deployed.
 1. Start time should be 30 minutes before sunrise, for example if sunrise is at 6:30, Start recording would be set at 6:00. The whole survey is for 3 hours, so End recording would be set at 9:00.
 2. This below is an example of what the recording period would look like, but will change throughout the season.

- Start recording: 6:00
- End recording: 9:00
- Click Add Recording period

4. Leave everything else as it is
5. Click Configure AudioMoth button on your app (you should see a flickering green indicator, can see more details about these led indicators on <https://www.openacousticdevices.info/led-guide>)
6. Unplug your device.

**** Before deployment, put it on the Custom switch ****

In the field

At a survey location on the site, one audio moth should be deployed as following:

- 1) Drive a 5-foot metal t-post approximately 15-20 cm into the ground using a mallet.
- 2) Attach the audio moths to the posts using 2 or 3 zip-ties (or more if needed to secure).
- 3) Double check that ARU is set to record correctly before leaving.
- 4) Record GPS coordinates of the ARU once when first setting up.
- 5) All ARUs are waterproof so do not need to be placed in a bag/ undercover.