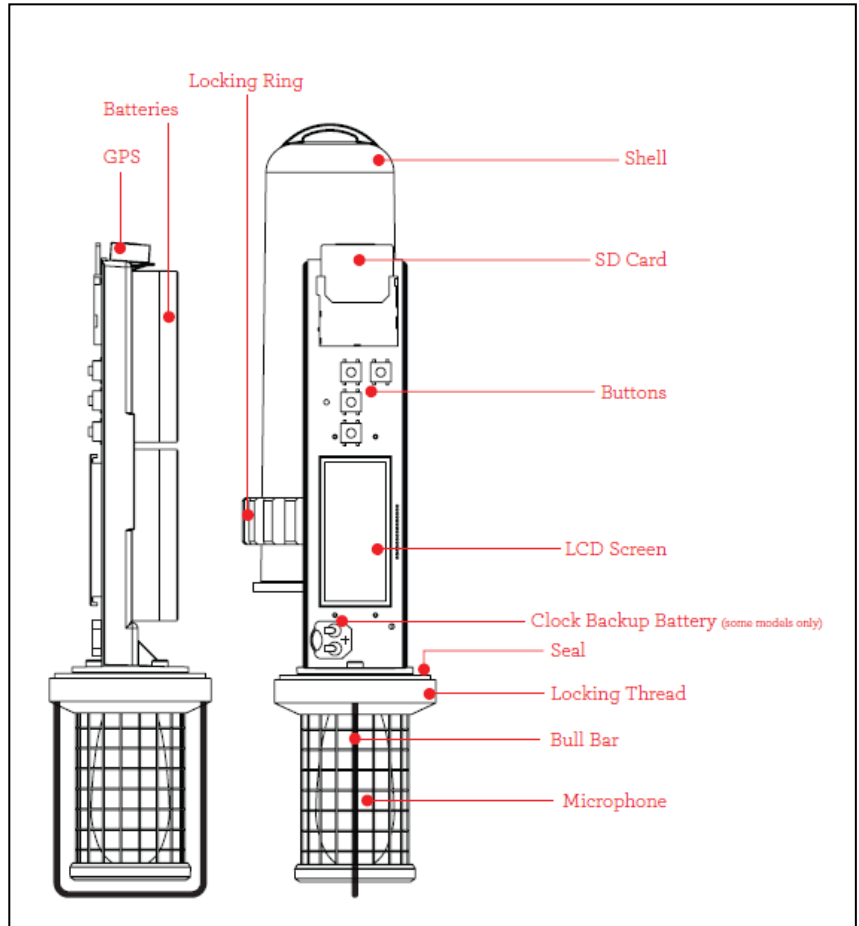


Monitoring with Acoustic Recording Devices

This Acoustic Recorder (AR) has been pre-programmed to switch on at a preset time and start recording for a set number of hours.

When you are ready to use the device, insert the four batteries and it is good to go.

Please do not change any of the programming or adjust the settings.



Setting up the Recorder:

To open the AR and insert the batteries, loosen the large knurled ring, grip the plastic tube and turn the ring clockwise looking from the top of the mesh cage.

Fully unscrew the large knurled ring by gently twisting until the ring is fully unscrewed.

Avoid excessive force on the mesh microphone cover (if the locking ring is tight then grip the tube while removing it – not the microphone cover).



Once the recorder is open you can see the display screen, control buttons and SD card slot on one side, the battery holders are on the other. Try to avoid getting moisture or debris inside the recorder.

Each device has a sachet of desiccating crystal inside as moisture effects the performance of the AR. These tend to fall out when you open the device, please try not to lose them.

SD card:

If you are borrowing an AR from Kiwi Coast the SD card will be formatted, cleared and ready to go. Please only use the SD card provided.

If you are going to use the AR at more than one site it is important that you

- 1) Change the SD card
- 2) Replace all batteries with freshly charged ones
- 3) Use the form provided to record the location of each place, and keep the right SD card with the right info so there is no confusion.
- 4) Put the SD card in a packet/envelope if one has been provided and clearly label the location

NB: Do not use SD cards that have also been used in trail cams as this appears to corrupt them and make them unusable in ARs. Please do not put Kiwi Coast SD cards in any other device.

Choosing a good recording location:

ARs can 'hear' about 500m – 1km in good conditions.

Give the AR the best chance possible to record calls! Take time to choose a good spot that will give the AR the best chance to hear sounds clearly, with minimum noise interference.

The AR won't be damaged by rain, but avoid putting them out in storms or high winds as this creates a lot of background noise and makes them hard to analyse. Be sure to put the microphone mesh end facing downwards.

If you're on the coast, crashing waves can also cause a lot of background noise that makes the data hard to analyse. You may need to wait a couple of days after a storm for the swell to calm down.

Ridges can be good locations for ARs so they can listen into wide valley systems, but try to avoid the very ridge or hill top for less wind interference.

Once you're in a good spot, choose a tree or post to secure the AR. Try to avoid trees that will be knocked by swaying branches, swishing fern fronds or anything that looks like it will create noise close to the AR.

Smaller trees are better as large trees can cause unwanted blocking of the sound.

Secure the AR at head height using bungees. Ensure it is a snug fit so that it does not rattle in the wind and curious rats and possums cannot dislodge it!



Record the location:

Use a GPS or print off a map to record the location of where the AR was placed. This info is vital if ARs are used annually for kiwi monitoring, so the device can be returned to the same site each year, and also means the data can be mapped.

Remember if you are using more than one AR at a time, be sure to clearly mark which device was at which site so there is no confusion about where calls were heard when the data is analysed!

Batteries:

Fresh non-rechargeable batteries work best in ARs. Faults occur when batteries are low on charge or old.

Note: the only way to stop the AR from recording is to remove the batteries. Remove the batteries as soon as you remove the AR from the recording location or it will keep recording and our analyser will sift through hours of data for no purpose!

Returning the equipment

- 1) Fill in the paper form, or add in any details if partially filled in if you can
- 2) Put the form and the SD card into an envelope or small plastic bag and seal tightly.
This ensures your SD card (and calls) will be recorded against the correct location!

Please return all the gear provided back to us and avoid swapping in any other SD cards, batteries or ties. We thoroughly check, clear and dry the equipment before it goes out again to minimise the chance of failure at the next site. Getting back incomplete sets of gear means the next site does not have all that they need.

Any problems or questions contact Ngaire at ngaire@kiwicoast.org.nz or ring 0274 250 249

Please fill this in for each Acoustic Recording Device site



Site name:

Name of contact person:

Email address:

Phone number:

Group or project

AR number:

SD card#:

GPS location of KLD site:

Easting

Northing

Or printed map attached with site/s labelled attached. Yes/No

Date AR out:

Date AR in:

Dates of any stormy nights to avoid analysing:

Dates and times of any kiwi calls you heard while AR was out:

Date:

Time:

Date:

Time:

How do you want the data analysed: circle one

- 1) Analyse just 6pm – 8pm for four clear nights to mimic Annual Kiwi Call Count Survey protocols.
- 2) Fully analyse at least 5 clear nights for total number of male and female kiwi calls, duets and retain any clear images of calls for sharing with our group/project.

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