

## Lab 1: Recording Audio Basics

Task 1: Basic audio recording with the Zoom H4 recording device and transferring audio to computer

Task 2: Recording audio in Logic Pro 8

### Task 1: Basic audio recording with the Zoom H4 recording device and transferring audio to computer.

1. Turn on the Zoom H4 from the switch on the left side panel.
2. Select the format you wish to record in from the numbers listed on the front of the device. Once a format is selected you can also change the bit depth and the sample rate (WAV) of a sound recording. For general recording the WAV format is recommended with a sample rate of 44.1kHz at either 16 or 24 bit. (Use the 'jog dial' on the right side panel of the device to navigate through the menus.)
3. Click the *menu button* to return to the main recording screen.
4. Plug headphones into the labelled *jack* slot on the left side panel.

*Please note: If you wish to use a separate microphone or sound source you must select the 'input menu' at the bottom of the front menu button and then use the jog dial to navigate. If you have a microphone that requires phantom power this can also be activated via this menu.*

5. Press the *record button* on the front of the device once. This will allow you to set the recording level.
6. Adjust the 'mic' *gain control* on the right side panel to either low, medium or high (L/M/H). Ensure that you get the highest volume possible without going beyond 0dB, this will avoid signal distortion.

*Please note: If you wish to more accurately set your recording levels select 'input menu' at the bottom of the front menu button, use the jog dial to scroll across to the level option. Once you see the level representation on screen press the jog dial in once then use it to set an appropriate level. Press the jog dial once again to finalise your level choice.*

7. Once levels are set press the *record button* once again and your recording will begin.
8. Once you have finished recording press the *record button* once again to stop the device.
9. To play back your recording or any previous recordings press the *play button* on top of the *menu button*. Use the *jog dial* to navigate between recordings.

*Please note: If you wish to further edit your file (e.g. file name, encode to MP3, delete file) press the menu button then use the jog dial to select 'FILE' from the menu. Also note that the menu button also acts as a return/back button.*

10. Once you are happy with your recordings they can be transferred to your computer via the USB cable supplied in the box. Press the *menu button* and use the *jog dial* to scroll down to the 'USB' option. Select 'Connect to PC' from the following menu.
11. The device will now function in a similar way to a USB stick. Open the device on your machine and navigate to the 'STEREO' folder. This folder will contain all of your audio files.

## Task 2: Recording audio in Logic Pro 8

Bar ruler: *Displays Logic's time axis.*

Arrange area: *Your main workspace, it can contain many midi or audio tracks across the horizontal track lanes.*

Track list: *Here you can add, move and remove tracks.*

Inspector: *Used to adjust parts of a track or a region.*

Channel strips: *Used to further adjust parameters of a track, such as volume level, inputs and outputs.*

Transport buttons: *Used to control the playback and also activate recording.*

Local menu: *Contains arrange window options only.*

Tool menu: *Contains selection and editing tools.*

1. Create a new track in logic and name it 'test recording' or something else appropriate.
2. Plug the Zoom H4 into the USB slot of the computer.
3. Select Audio I/O from the menu list using the *jog dial* then select connect from the following menu. (On screen you will be asked if you wish to use the audio device that Logic has detected, click yes.)

*Please note: The device will then become your core audio device. You will need to monitor all playback from the device's line output or headphone jack slot.*

4. Arm the track you wish to record to by selecting the small 'R' next to it on the track list. (All recorded audio will now be destined for this track).
5. Ensure that 'mic' is selected and adjust your recording levels appropriately as you did in task one. (Pay close attention to the level monitor in the relevant channel strip, ensure that the level is not in the red as this will lead to distortion).
6. Press the record button on the transport bar.
7. Once you have recorded all of your, audio stop the recording, again using the transport bar.
8. Add a new audio track to your project by selecting the '+' symbol just above your track list. (Ensure the format is 'Mono', Input is set to 'Input 1', and Output is set to 'Output 1-2').
9. Record a new piece of audio to the new track.
10. Repeat steps 8 and 9 to produce several layers of audio. Try fading the audio at the beginning and end of the regions using the region settings in the inspector.