External Mic Port

LINE IN

Headphone Volume

VOLUME
+
−

Recording
Indicator

Headphone Port

REMOTE

Front display

LINE OUT

00:00:00
SURROUND

USB Port
(Charge / Export)

USB

Record Button

ZOOM

Menu Button
(& Back Button)

HOLD FOR
HOME
MENU

Selection Dial
(Click to Select)

PLAY

Mic Gain Dial
(Recording Level)

MIC GAIN

Battery Case
(Slide down to replace)

ZOOM

HOLD

Power Button
(Hold to power on & off)

H2n
Handy Recorder

Quick Guide to the H2n Zoom Recorder:

How to set up a recording:
1. Make sure you have batteries & an SD Card (with memory space)
2. Choose a location to save your files:
    a. If this is a brand new SD Card, the recorder will default to the first folder.
    b. If you've used the SD Card before, choose an empty folder to record to.
        i. Menu → Folder → Choose a folder and press the play button
3. Choose a Recording Mode: The H2N has four recording modes which are selected using the selection dial on top of the recorder.
    a. MS (Mid-side Stereo) Mode: Records sound directly ahead of and to the left and right of the microphone. Ideal for wide and open conditions. If you use this mode, point the front display away from what you are trying to record.
    b. XY Stereo Mode: Records sound in stereo with mics at 90 degree angles from the front display. Ideal for interviews, live rehearsals, and field recordings).
    c. 2CH Surround Mode: Records the signals from both the MS and XY microphones at the same time, mixing them. Ideal for live rehearsals, studio sessions, and business meetings.
    d. 4CH Surround Mode: Records the signals from the MS and XY microphones separately so that you can adjust the recordings separately afterward. If you are in 4CH mode, you must chose a .wav format.
4. Choose a recording format (.wav/.mp3). If you are using 4CH mode, you must use a .wav format. Change the format by going to Menu → REC → REC FORMAT → select the recording format.
    a. 48/24 is ideal for use with video
    b. 44/16 is ideal for use with audio only
5. Conduct a sound check: You can either record your sound check or test your levels without recording.
    a. Remember to read part of your script for your sound check.
    b. Adjust the Mic Gain to increase or decrease your levels or you may need to change your position or adjust your speaking volume.
    c. If at any point during your sound check or recording you see the light above MS or XY (depending on which mode you are using), your levels are too high. Either move the microphone farther away, lower your voice, or lower your recording level. The flashing red light indicates that your levels are too high, which will cause over modulation and other issues with your recording.
6. Start recording: Hit the record button.

Quick Guide to Editing with Audacity:

Overall, the best way to learn how to use any editing program is to play around with it. Choose an audio file or two and experiment with the various effects and tools in Audacity. If you need additional help, you can sign into my.newpaltz.edu and access Lynda.com which has tutorials on Audacity and many other programs. If you're not sure how to do something or need a refresher, you can check Youtube for tutorials, use Lynda.com, or come visit the DASH Lab during open office hours.

Important Steps to Creating an Audacity Project & Final Audio File:
- To import an audio track: go to File → Import and select your file
- Make sure you save your audacity file as you go. You may want to keep this file even after your export your final creation so that you can go back and edit if you want to.
- To export your creation: File → Export and choose the file format you want. A .wav file will have higher quality but a .mp3 file will use less memory and be easier to upload and share.

Guide to Your Audio Track:
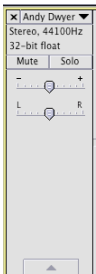
- To remove a specific track, click the "x" button in the top left corner.
- Use the mute button to mute a specific track.
- Use the solo button to mute all other tracks except for the one you selected "solo" on. This is very useful for editing, so that you can focus on one track at a time.
- The – to + affects the volume level of that specific track. The L to R scale indicates left and right ear, which can be used to create 3D audio.

Guide to Your Buttons:
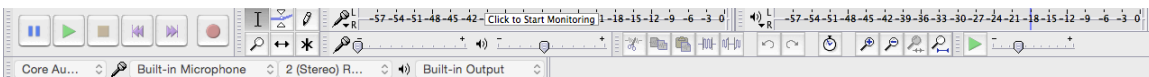
- The pause, play, and stop buttons function normally
- If you hit the 'fast forward' and 'rewind' buttons, they will automatically put you to the beginning or end of the audio track.
- The red circle indicates the record button, use this if you are recording directly into Audacity.

Selection & Adjustment Mode Tools:

- Selection (I) Tool: Allows you to select portions of the track in the same way you would select words/paragraphs in a Word document.
- Envelope Tool: Allows you to change the levels on your entire track and at specific points within the track. Click and drag at a point on the track to raise or lower the overall volume. To change a selection, click and drag a second time at the end of the selection you want to change.
- Pencil Tool: Allows you to change the levels on a much more detailed level. Zoom in until your sound wave looks like individual dots connected by a line. Use the pencil to raise or lower each specific dot to change the level of that specific spot.
- Zoom (⌕) Tool: Allows you to zoom in by clicking and zoom out by holding down the shift key as you click.
- Time Shift (←→) Tool: Allows you to move either an entire track or a clip within your track. Simply click on the selection and drag left or right.
- Multi (*) Tool : Allows you to use several of the functions of the tools above at once.
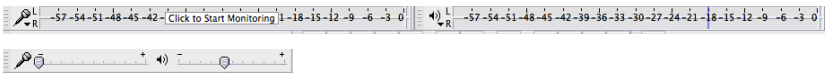
- The microphone audio level indicates the levels of an active recording. The – to + scale indicates the gain (or volume increase/decrease) for the recording. You should use this sliding scale if you are NOT using a sound board and you need to boost your levels.
- The volume audio level indicates the levels of your playback (your project). The – to + scale next to the volume symbol will affect the levels of your overall project. To change the volume levels on a specific track, use the individual scale that is next to the track on the left.

Effects:
- If you pull down the effects menu, you will see a number of effects available to you. The following are important effects for basic editing (explore the others as you get more familiar with the program!)
- Fade In & Fade Outs allow you to smoothly transition audio in and out. This can (and often should) be used at the end of your project, at the end of clips that stop in the middle of the project, and on any clips with a lot of background noise.

- Noise Reduction may be able to eliminate certain undesirable background noises. Do NOT rely on this to clean up your audio file, try your best to get a clean recording.
- Repeat allows you to loop a clip. Repeat is useful if you have music or audio you want to play throughout the file that is too short.
- Reverb allows you to synthesize the ambience and general effect of certain rooms and spaces. Reverberation refers to the way that sounds reflects off of surfaces in a space (think of the difference between sound in a building such as a church with vaulted ceilings and a classroom).

Music & Audio in the Public Domain:
- http://training.npr.org/audio/where-to-find-archival-audio/
- freesound.org (you will need to create a free account)