

Audacity: Applications for CW

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Audacity – Free, open source, cross-platform audio software. Audacity is an easy-to-use, multi-track audio editor and recorder for Windows, macOS, GNU/Linux and other operating systems. Developed by a group of volunteers as open source.

Audacity allows us to record, visualize, and analyze our sending. Audacity also allows us to record our sending and off the air QSO to share with others and to save for later review.

Web sites:

<https://www.audacityteam.org/>

<https://www.audacityteam.org/download/>

<https://www.audacityteam.org/help/documentation/>

Loads of on-line help... text and video. Search engines are yor friend...

Exceptional YouTube instructional videos such as the following that includes a timestamp index:

<https://www.youtube.com/watch?v=yzJ2VyYkmaA>

Getting started:

Download and install the program... Windows, Mac, GNU/Linux and others: <https://www.audacityteam.org/download/>

Setup default formats for CW applications: minimal size files

Edit: Preferences: Quality: 8000 Hz sample rate, 16-bit

Sample rate on an mp3 can have a 2:1 or greater impact on file size. Impacts storage and effect processing times.

And, just in case you get it ~~wrong~~ different...

Tracks: Resample

Tracks: Mix stereo down to mono

Select audio input and output devices, tracks:

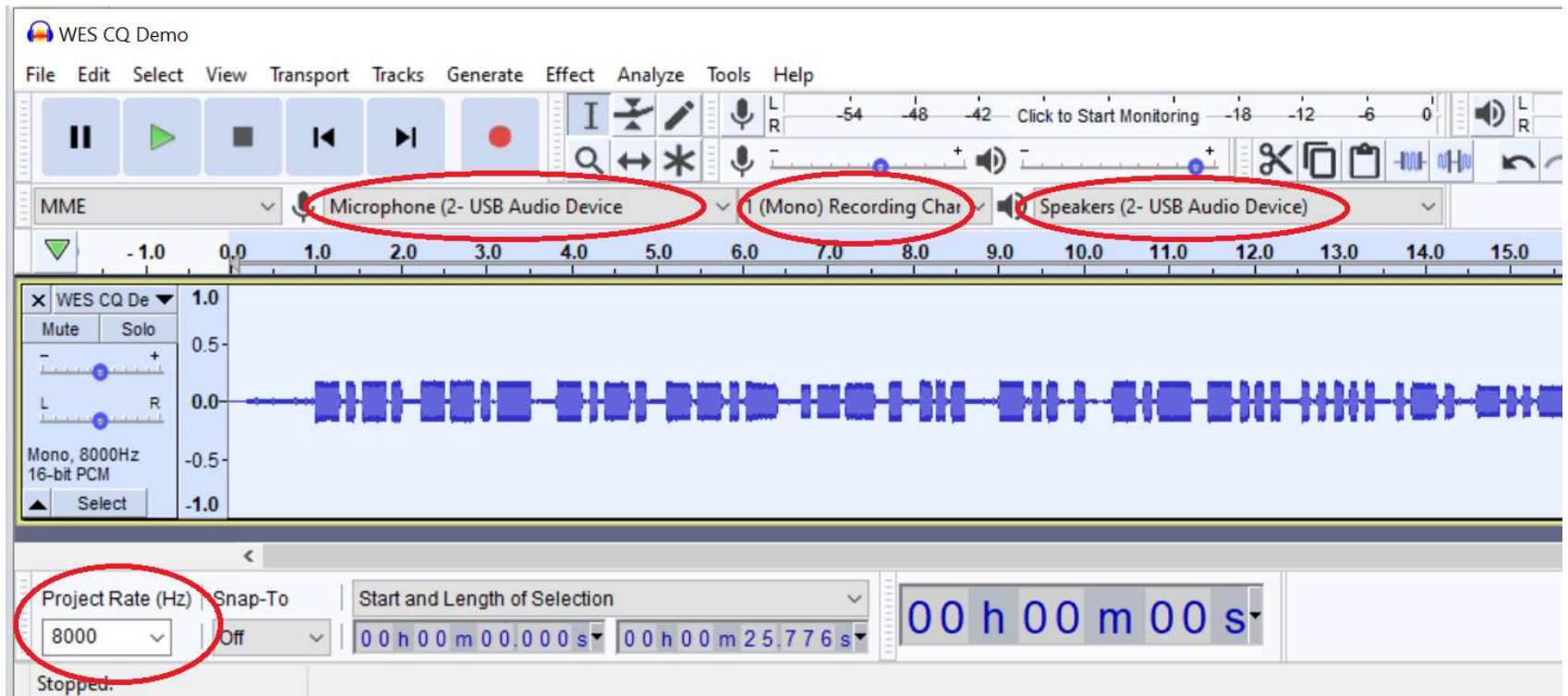
Input device:

Minimize unwanted sounds – keyboard key clicks, voices, dogs... Best is hard wired, a microphone close to a speaker can work well.

Recording your station audio: Audio splitter cable sending radio headphone output to a speaker and a USB sound port can work well. An audio mixer can be a very nice solution, but relatively expensive and complex – mixer, ferrites, audio isolation transformers,

When keying radio side tone: Break-in OFF, RF Gain minimum, or Squelch set not to break

Output device: Consider Zoom pick-up of the recorded audio. Zoom can share the audacity window with sound.

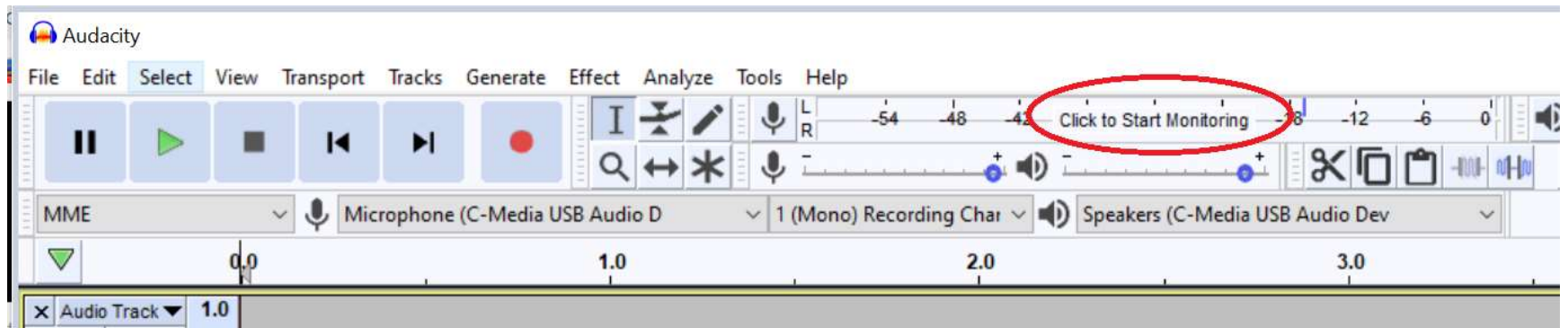


<Questions?>

Basic recording and playback:

Handy Hint: *File*: New

Handy hint: Click on microphone level slider to monitor level. Level meter now alive, but not recording. Adjust levels as needed.



Transport controls: Pause, Play, Stop, Skip to start, Skip to end, Record.

Note: Pause allows you to pause and resume without losing your place. Play always starts from the beginning of a selection.

Basic Editing: Select, Copy, Paste, Delete

Select All: ^A,

Zoom to selection: ^E

Copy: ^C, Paste: ^V, Cut: ^X

Undo: ^Z

Use mouse to select audio for playback and effects.

Edit: Remove Special > Trim Audio

Effect: Amplify Adjust level! I usually adjust for 0 dB - maximum level, full dynamic range.

Tracks: Align Tracks > Start to zero

<Demo with maritime CW>

<Questions?>

File: Export File as MP3. Far less storage than saving an Audacity Project, only one mp3 file.

Saving an Audacity Project takes much more storage space and generates multiple files.
I've seen 8:1 ratio in storage space.

Export early, export often...

File: Import Audio will load an MP3 file into Audacity for playback and editing.

Remember these? Frequently used for mp3 files emailed to me.

Tracks: Resample

Tracks: Mix stereo down to mono

<Questions?>

Interesting additional Effects: <Demo with HeadCopyClip>

Effect: Change Pitch,

Effect: Change Tempo

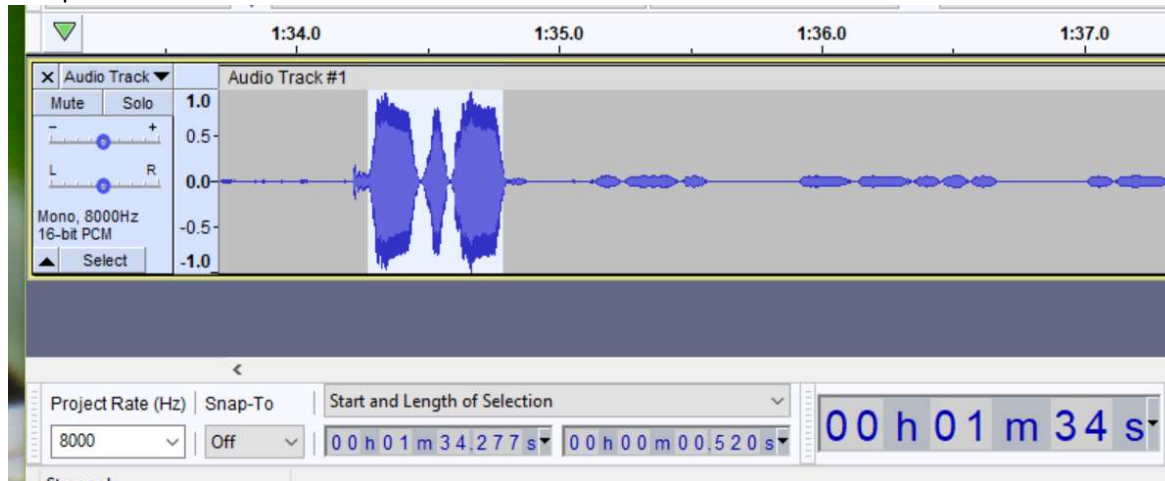
Annotating an Audacity Project recording...

Edit: Labels: <Add label at selection: ^B>

<Questions?>

Taking measurements:

Setup for measurement of intervals...



How fast is someone sending? Match to local keyer, or measure some dits...

Checking a bug dit ratio with a noisy signal.

Measuring a side tone frequency.