

AUDACITY, VAC and W-CODE Decoder

Audacity

Audacity is a free, easy-to-use audio editor and recorder for Windows, Mac OS X, GNU/Linux and other operating systems. With Audacity and VAC users of the W-CODE decoder are able to playback audio files such as WAV, FLAC etc. without using any cables and bypassing DA/AD conversion.

Recording

You can use Audacity to:

- ◆ Record from microphone, line input, or other sources
- ◆ Record up to 16 channels at once (requires multi-channel hardware)
- ◆ Monitor volume levels before, during, and after recording using the level meters

File Import and Export

Import sound files, edit them, and combine them with other files or new recordings. Export your recordings in several common file formats.

Import and export WAV, AIFF, AU, and Ogg Vorbis files.

- ◆ Export MP3s with the optional LAME encoder library
- ◆ Create WAV or AIFF files suitable for burning to CD
- ◆ Open RAW (header less) audio files using the "Import Raw" command

Editing

- ◆ Easy editing with Cut, Copy, Paste, and Delete.

- ◆ Use unlimited Undo (and Redo) to go back any number of steps
- ◆ Very fast editing of large files
- ◆ Edit and mix an unlimited number of tracks
- ◆ Use the Drawing tool to alter individual sample points
- ◆ Fade the volume up or down smoothly with the Envelope tool

Effects

- ◆ Change the pitch without altering the tempo, or vice-versa
- ◆ Remove static, hiss, hum, or other constant background noises
- ◆ Alter frequencies with Equalization, FFT Filter, and Bass Boost effects
- ◆ Adjust volumes with Compressor, Amplify, and Normalize effects

Sound Quality

- ◆ Record and edit 16-bit, 24-bit, and 32-bit (floating point) samples
- ◆ Record at up to 96 kHz
- ◆ Sample rates and formats are converted using high-quality re-sampling and dithering
- ◆ Mix tracks with different sample rates or formats, and Audacity will convert them automatically in real-time

Analysis

- ◆ Spectrogram mode for visualizing frequencies.
- ◆ "Plot Spectrum" command for detailed frequency analysis

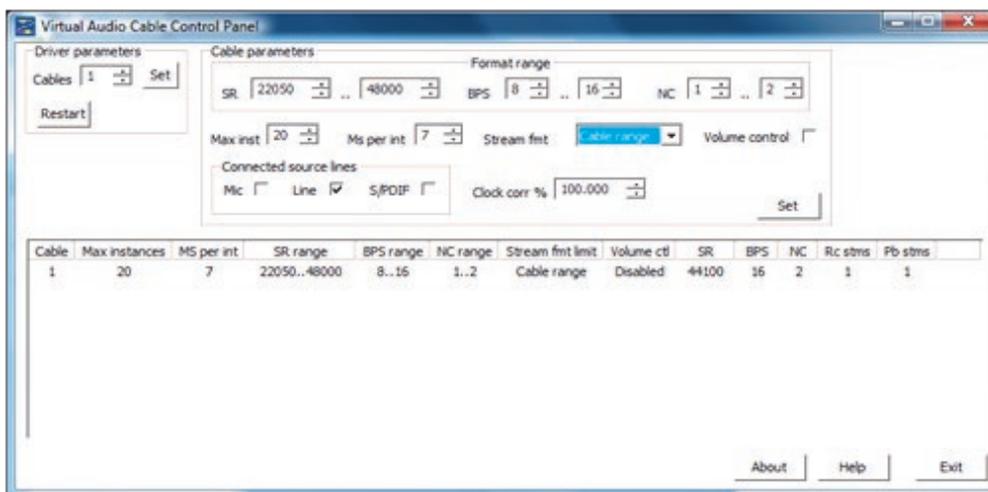
AUDACITY Audio Editor

Application Note

Setup Instructions

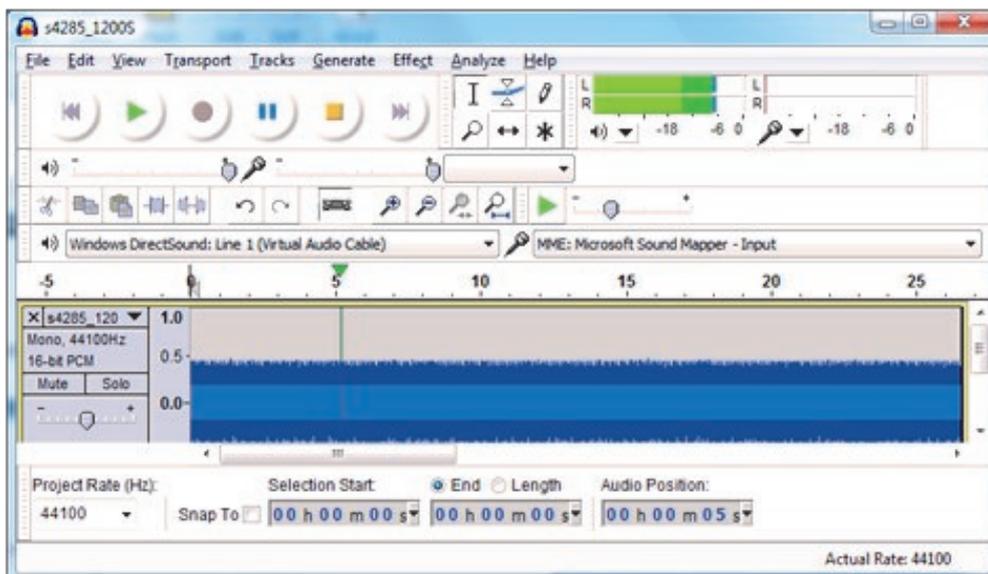
Install and Setup VAC

- ◆ Use the Virtual Audio Cable Control Panel to check the settings of VAC
- ◆ Installation instructions can be found in the VAC documentation



Start playback in Audacity

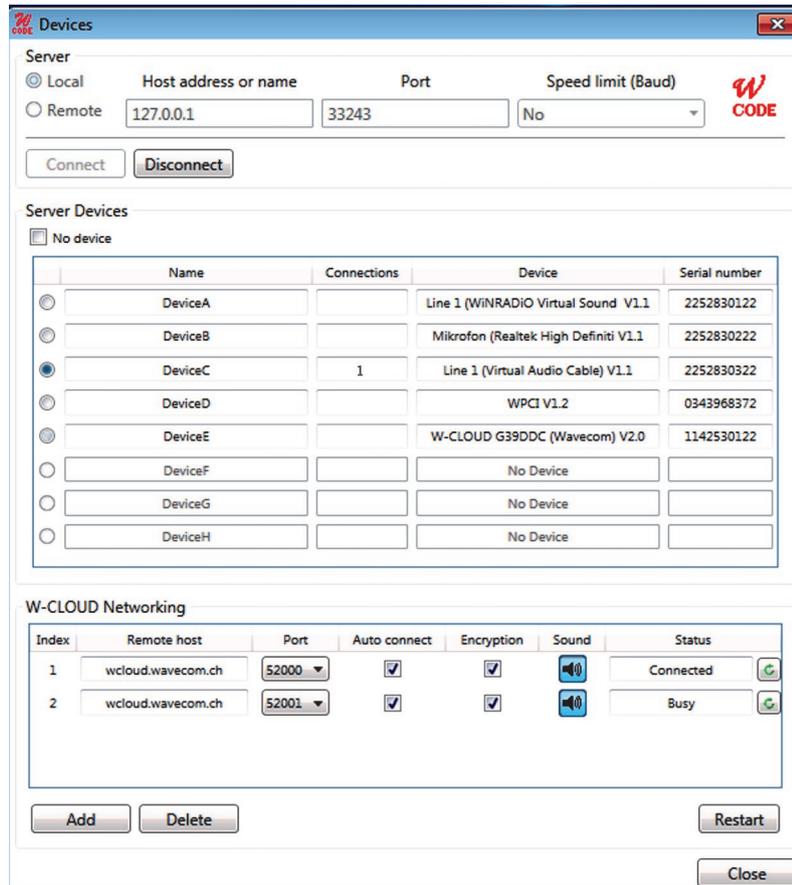
- ◆ Select Line 1 (Virtual Audio Cable) as the Playback Device
- ◆ Open a file for playback and press play



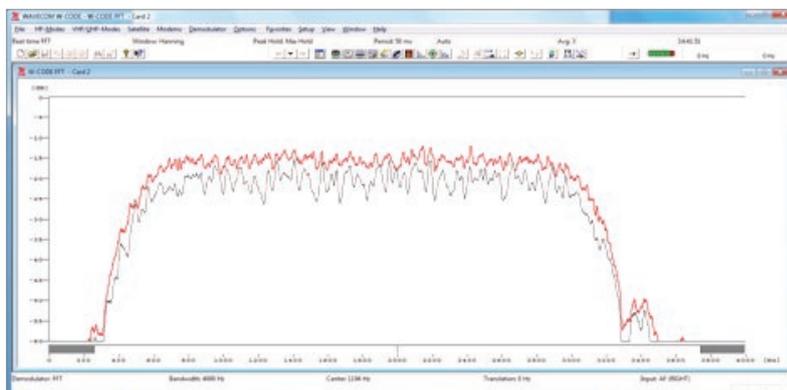
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Application Note

Start Decoding



- ◆ Close all decoder windows
- ◆ For W-CODE open Setup "W-CODE Device", for W61PC open "Setup"
- ◆ Open "Custom Input" to create a Custom Input
- ◆ Select Line 1 (Virtual Audio Cable)



- ◆ Start the FFT
- ◆ Select the correct Signal Input (in this sample AF Right)
- ◆ Adjust the signal gain

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Application Note

Troubleshooting

If the Virtual Audio Cable does not appear in the device list

- ◆ Close W-CODE
- ◆ Restart the WAVECOM Server (the server will refresh the list of available input devices)

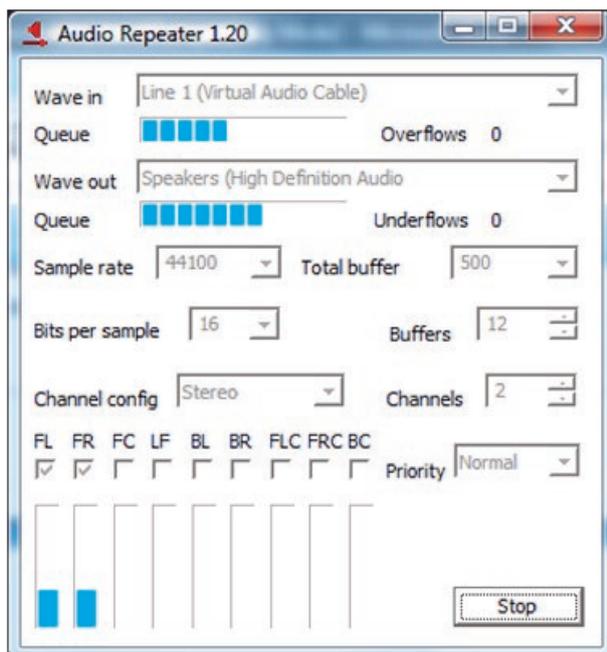
If no signals are displayed in the FFT

- ◆ Restart the WAVECOM Server (the server will refresh the list of available input devices) and try again
- ◆ Remove VAC
- ◆ Delete all registry entries for VAC
- ◆ Re-Install VAC
- ◆ Restart you computer
- ◆ Try again to select VAC from the device list

If the problem persists, try to remove computer specific sound card tools, which could be preventing VAC from “picking-up” samples

Adding Audio Playback via a Speaker

- ◆ Start the VAC Audio Repeater
- ◆ In Wave in select Line 1 (Virtual Audio Cable)
- ◆ In Wave out select Speakers
- ◆ Press the Start/Stop button



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Application Note

Since more than thirty years Wavecom Elektronik AG has developed, manufactured and distributed high quality devices and software for the decoding and retrieval of information from wireless data communication in all frequency bands. The nature

of the data communication may be arbitrary, but commonly contains text, images and voice. The company is internationally established within this industry and maintains a longstanding, world-wide network of distributors and business partners.

Product Information

Products	http://www.wavecom.ch/product-summary.php
Datasheets	http://www.wavecom.ch/brochures.php
Specifications	http://www.wavecom.ch/product-specifications.php
Documentation	http://www.wavecom.ch/manuals.php
Online help	http://www.wavecom.ch/content/ext/DecoderOnlineHelp/default.htm
Software warranty	One year free releases and bug fixes, update by DVD
Hardware warranty	Two years hardware warranty
Prices	http://www.wavecom.ch/contact-us.php

System Requirements

	<i>Minimum</i>	<i>Recommended</i>
CPU	Core i5 or Core i7 2.8 GHz	Core i7-6700 3.4 GHz
Memory	4 - 8 GB RAM	16 - 32 GB RAM
OS	Windows 7	Windows 10 32-bit or 64-bit

Distributors and Regional Contacts

You will find a list of distributors and regional contacts at <http://www.wavecom.ch/distributors.php>