

ADDING VOICE CUES to an MP3 using only Laptop and Headset/Mike

by Tim Eum (21 June 2009)

If you have a computer/laptop and a headset/microphone, then with software like Audacity you can add voice cues to an MP3 music file and create a stereo MP3 file with voice cues on the right channel and music on the left channel. You do not need to set up a mixer-amplifier (such as a Hilton turntable/amp), nor set up speakers, nor run wires, nor use any other sound source.

If you do not already have Audacity, you can get it free from the Internet at <http://audacity.sourceforge.net/download/> .

While you can use regular headphones which plug into the headphone-out jack of a PC's sound card and also use a microphone that plugs into the very small microphone-in jack on the PC's sound card ---- it is easiest to use a combination headphone/microphone headset that plugs into a USB port on the laptop PC. Such a headphone can be obtained from places like Walmart for about \$40. I recommend something such as the Logitech 350 Premium USB Headset. http://www.walmart.com/catalog/product.do?product_id=4064454



I like this headset because of the noise-cancelling technology it uses and the very comfortable ear pads it has.

STEP 1: Get started.

Turn on your laptop, plug in the headset/microphone, and start Audacity.

STEP 2: Open an MP3 file.

Click on "File" and then "Open", then browse your computer to find and select the MP3 file that you wish to add voice cues to. Audacity will import the MP3 file and convert it to a WAV file for editing within Audacity. If your copy of Audacity has trouble importing an MP3 file, it may be that you have not yet downloaded the lame MP3 encoder. Go to this link for instructions on how to get and load it.

<http://audacity.sourceforge.net/download/lame>

STEP 3: Convert the music to a single track mono.

It is common that the music will have two tracks even if it is mono (both tracks will be the same). If the music is stereo the two tracks are different and you need to combine them into a single track to get the full sound (not just delete a track). The easiest way to do this is to simply Click on “Tracks” in the Audacity (version 1.3) Menu Bar and then “Stereo Track to Mono”. You will notice that Audacity will then convert the two tracks to become a single mono track.

STEP 4: Set the audio input of the recording microphone.

Open the laptop/PC’s volume control by double clicking on the volume control icon in the systems tray (on the bottom far right of screen for Windows XP). If you only get a single slide control, you didn’t double click but only single clicked. If you don’t have a volume control icon in the system tray – open Control Panel, then “Sounds and Audio Devices” and put a checkmark in the box for “place volume icon in the taskbar”. You can also go to Start, All Programs, Accessories, Entertainment, and then click on Volume Control to open it. This should bring up a dialog box showing the settings of all the playback devices. Click on “Options”, then on “Properties”, and then select “Recording”. Make sure that microphone is clicked and click “OK”. The dialog box will now show the settings for the microphone and other recording devices. Set it fairly low to start with, perhaps at only a third up from the bottom.

STEP 5: Test the audio input of the microphone.

Put the headset with microphone on. Note that with the headset plugged in, you no longer can hear PC sounds through the PC speakers and can only hear them through the headset. Go back to the Audacity window and “press” the round “Record” button and start speaking. You should be able to hear the music in the earphones of the headset and see a second audio track being created under the music track. Keep talking and recording for about ten seconds or so and then hit the square “Stop” button. If you hit the triangular “Start” button you will be able to hear both the music and your voice as both play. If it is too loud or too soft you can use Audacity’s input volume control to adjust the volume of the input. You should also check the wave pattern of the input. If the input signal is too loud Audacity will “clip” the sound and distort it. Thus if the wave pattern you see extends beyond the upper and lower boundaries of the track (i.e. there are flat tops to the wave pattern instead of jagged lines) then you need to lower the volume control on the laptop/PC and make a corresponding adjustment to the Audacity window microphone input volume control. You want this wave pattern to be as wide as possible without showing the clipping distortion. You may have to test and adjust the volume controls on both the PC and in Audacity several times to optimize the input. After each adjustment, delete the test voice track by clicking on the “X” in the upper left corner of the track in the control area and leave only the first track which contains the music. Once you think you have all set correctly, try recording your voice once more and listen to it with the music. If it sounds good, you are ready to record.

STEP 6: Have head cues memorized or printed out.

Unless you have the cues to the dance memorized, print out a copy of the cue sheet so that you can read them as you record. You could bring up the cue card on your PC but it is awkward to keep the cue card on top for viewing when the Audacity window must also be displayed.

STEP 7: Record your voice cues.

Make sure that the Audacity window only shows the one music track and that all test voice tracks have been deleted. Have cue card ready and headset/mic on. Press the circular "Record" button and cue through the whole dance. At the end, hit the square "Stop" button. Hit the triangular "Play" button and listen to the music with your recorded cues. If all is well go to step 8, otherwise delete the voice cues track and re-record your cues until they are to your liking.

STEP 8: Set Audacity controls to create a stereo MP3.

The simplest way to set the controls is to simply go to control area of the top track (far left side) and press the down triangle menu and then select "Make Stereo Track". You should see an immediate change in that the control areas of both tracks become one. Note that the top track (the music track) becomes the left channel and the bottom track (the recorded voice cues track) becomes the right channel. You can test this by hitting the play button and then moving the slider in the track's control area from left to right to hear what plays when the control is on the left and what plays when the control is on the right.

STEP 9: Create/export the stereo MP3.

Create the MP3 by clicking on Audacity's "File" pulldown menu, then on "Export". A window will open in which you indicate where on your PC you want to export the file to (I like to export to my Desktop since I can find it there easiest), what name you want the file to be, and what type of file to save it as (choose MP3). Hit "Save" and another window will open asking for additional data about the file. I usually type in the name of music file on the "Track Title" line, and change "Genre" to the rhythm (i.e. Waltz, Foxtrot, Jive, etc.). After putting in the metadata that you wish, hit "OK" and voila --- Audacity creates your stereo MP3 with music on the left channel and voice cues on the right channel.

STEP 10: Move the "cued" MP3 to your Dancemaster Music File or wherever you would like it to be permanently stored. You don't want to leave your Desktop with bunches of music files.

NOTE: In playing back a stereo MP3 file with music on left and voice cues on right, Dancemaster allows you to control volume on each channel with only a single software slide bar. This is awkward to use. If you can, connect your PC to your mixer/amplifier using a cable that splits the stereo output into left and right outputs so that you can input each into separate input channels. You can then use the mixer/amplifier's physical input controls to individually control the volume and even tones (treble/bass) of the music and voice cues separately.