

**USING THE WINDOWS XP SOUND RECORDER
TO MAKE COMPACT DISK AUDIO CD'S
FROM TAPE RECORDINGS
OR OTHER AUDIO SOURCES**

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SUMMARY

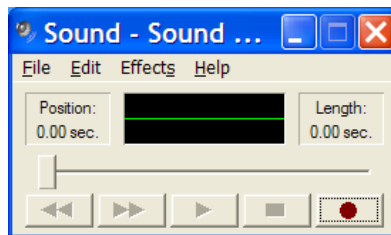
Once the initial setups are made this is quite easily done. This document will discuss setting up the XP Sound Recorder, Using the Real Player 10 to burn the audio CD's (in Compact Disk Audio (CDA) format), and some issues with the external audio sources.

MICROSOFT ALERT

The XP Sound Recorder program will work as described herein only if the computer's installed memory is 2 GB or less. This is a known "bug" and Microsoft has no plans to correct it. See <http://support.microsoft.com/kb/284893> . If your computer has more than 2 GB of memory installed the workaround is to tell the computer to only use 2 GB of memory. Run "msconfig". Click on the "BOOT.INI" tab. Click the "ADVANCED OPTIONS" button. Put a checkmark in the "\MAXMEM" line and set the value to "2048". Restart the computer. Now the XP Sound Recorder will work as discussed herein, but your computer will only be using 2 GB of its installed memory until this change is put back to normal. I am currently using XP Professional with my 3 GB of memory limited to 2 GB as described here.

XP SOUND RECORDER SETUP

This program is found at START, PROGRAMS, ACCESSORIES, ENTERTAINMENT, SOUND RECORDER. This program takes in analog audio from the computer microphone jack or line input jack and converts it to a digital WAV file. The program includes an oscilloscope waveform display of audio volume. The program Help Menu will answer many questions about how to use the program.



When the sound recorder is first opened the Position and the Length will both read zero seconds. If you click on the round dot RECORD button the Position will start counting record time and the Length will read 60 seconds. This is fine for recording "I got the job" or "It's a boy!" but how do we record a 60-MINUTE tape on this thing?

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Here's how I do it. With no audio input, click the record button and record NOTHING AT ALL for 60 seconds! When 60 seconds of nothing is recorded the recorder will automatically stop recording. Save the file (FILE, SAVE AS) somewhere with a name like "Blank 1 Min". The title bar will now show the new name.

Next, click on the menu EFFECTS, DECREASE SPEED. Notice you now have 120 seconds (2 minutes) indicated on the length. Click DECREASE SPEED again for 240 seconds, again for 480 seconds, again for 960 seconds, and once more for 1920 seconds (yes the 3-digit counter will only show the number '920' but it really is 1920 seconds which happens to be 32 minutes! This will take one whole side of a C-60 tape (two 30-minute sides). Save this file (FILE, SAVE AS) somewhere with a name like "Blank 32 Min". The title bar will now show the new name. You might note that the process of saving the file takes several seconds. This 32 minute blank file is over 80 Megabytes in size! A digital file with either nothing in it or a full orchestra has the same number of bits in it.

To use this file, just call up the sound recorder and then click on FILE, OPEN, and browse to where you stored your 32-minute blank file. This is just like putting a blank tape in a tape recorder.

RECORDING A WAV FILE FROM A TAPE PLAYER

To make a WAV file from any audio source - microphone, tape player, or other audio source - is easy once the setup details have been worked out. I will use the example of a tape player. If your computer has a sound card with stereo line input jacks then simply connect a stereo cable from the tape player headphone output jack (or line output jacks) to the computer line input jack and you are ready to record in stereo. But, if your computer is like my laptop and only has a monaural microphone input jack you will need a cable that takes the two-channel stereo signal and sums them together into a one-channel monaural signal. The simplest way to do this is to buy a stereo to mono adapter cable from Radio Shack with the right connectors on it. I made my own. This will only permit recording a monaural signal but that is sufficient for many situations.

1. Connect the sound recorder to the computer as indicated above.
2. Open the XP Sound Recorder Program.
3. Click FILE, OPEN and navigate to your 32 minute blank WAV file and click OPEN.
4. Click on the round RECORD button.
5. Start the Tape Player.
6. Observe the audio level and adjust the tape player output level or the sound card input level so the waveform stays within the window on the loudest passages.
7. Wait for the tape to finish playing. This is real-time recording and may take up to 30 minutes.
8. When the tape selection is finished, click the STOP button on the recorder and stop the tape player.

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9. On the recorder, click FILE, SAVE AS and give the recording a name and select a folder to store the file in. Click SAVE. It may take 10 or 15 seconds for the saving as the file is 80 megabytes in size.

EDITING A WAV FILE

The WAV file just recorded may be edited using the SP Sound Recorder Program. Under the EDIT menu you can “Delete all before position” or :”Delete all after Position” This allows trimming off dead time before or after the recorded sounds. It also allows deleting all but a desired song or portion of the recording.

1. Play the WAV file using the sound recorder.
2. Observe the position (in seconds) where you want to delete all before or after. You can drag the position indicator throughout the selection while playing to locate the position of interest. This may take a few tries to get the right location.
3. Stop the playback at the desired location.
4. Click EDIT, DELETE ALL BEFORE (OR DELETE ALL AFTER) as desired.
5. When the editing is complete, click FILE, SAVE AS and save the edited file to the name and folder of your choice.

To record the second side of the tape just repeat the process for the first side.

REAL PLAYER 10 SETUP

If you do not already have this on your computer, this program is available for free download from <http://www.real.com/player/?src=realaudio>

If you click on the gold colored “Free Download” you will sign up for a more advanced program with monthly payments. Instead, look in the upper right hand corner under the “Free Games” link and you will find a link for “FREE Real Player”. Click that and follow the instructions. I prefer the Real Player over the Windows Media Player for what I am doing.

Real Player 10 provides an excellent CD burner program and will automatically convert the WAV files from the XP Sound Recorder into Compact Disk Audio (CDA) formatted files when it burns the CD so your finished CD can play on any CD player.

BURNING YOUR WAV FILES ONTO THE CD

The WAV files will be automatically converted from WAV to CDA format during the burn. A screen capture view of the Real Player 10 program is shown on the following page for illustration.

1. Open the Real Player 10 program.
2. Click on the “Burn/Transfer” Tab.
3. On the left panel, click on MY LIBRARY.
4. At the bottom of the menu that opens, click on BROWSE.

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5. Navigate to the WAV file you want to put on the CD and click on OPEN.
6. Repeat Step 5 for each track you want to burn onto the CD.
7. When all the tracks for the CD are listed in the right panel, the tracks may be dragged and dropped to put them into the desired order.
8. Insert a blank CD-R into your CD burner and wait for the **Insert Blank CD** to change to **Ready to Burn**.
9. In the Real Player left panel, click on “Burn Your CD”
10. When the CD is burned it will automatically eject.

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