## COPYING VINYL RECORDS TO CDS

The basic steps are:

1.) Recording the vinyl lp to the hard drive in a WAV format;

2.) Clean the WAV file removing pops, clicks and hisses using a WAV editor;

3.) Normalize the WAV files; and

4.) Burn the WAV files to a CD-R.

You need the following items:

1.) a sound card with a line-in jack which most computers these days already have;

2.) a simple WAV editor software such as "*Groove Mechanic*" works well. You can try it for 15 days and then purchase at about \$40. You may also want to upgrade "*Real Player*" which came on my computer to "*Real Player Plus*" because that will allow you to use "*Real Player*" as the homebase for your data; 3.) a turntable connected to an amplifier with phono inputs and tape output jacks;

4.) a cable connectiong the amplifier to the sound card (ask for a double RCA to headphone jack which you can get at any store that sells computers or stereos, i.e. Best Buy, Radio Shack, Walmart). The cable has a miniature connector on one end that plugs into the Line-in on the back of your computer and the standard RCA jacks on the other end that plug into your amplifier Tape Out;

5.) blank cd's.

6.) Plenty of hard drive, approximately 2 gig free for recording one full LP.

The *first* thing you need to do is open Control Panel and click on Sounds & Volume. Go to Audio/Sound Playback/Volume and the Master Volume screen will appear. Follow across to the "Line In" column and make certain there is 'no' checkmark in the mute box. *If you don't do this, the sound from the turntable will never be heard from the speakers or recorded by the software.* While the Master Volume is open click on Options/Properties and make certain that the Mixer Device is set to Audio Rear Input...adjust volume for "recording" and the Volume Controls should show checkmarks in "Stereo Mix", "CD Volume", "Line-In" and "Microphone" Click OK and "Recording Control" window opens. Put Balance and Volume Control settings where you want them, not too loud, and make certain the the 'Line-In' box is now checked.

Connect your turntable to the amplifier as you would normally thru the input and output jacks. Those directions should be in the booklet that came with the amplifier and turntable. Then connect the amplifier to the sound card in your computer thru the "line-in" located either on the back or front of your computer with the double RCA to headphone jack cable. Without any software running and with your line-in turned on as stated above you should be able to play a record and hear it through your computer speakers. If you can't, double check your connections and settings. I would make certain that I could hear the record through the computer speakers before I did anything further.

Install your software (Groove Mechanic, Goldwave, Media Digitalizer, Audio Record Wizard, Spin Doctor or whatever wav editor you choose. Most of these can be downloaded online) and open. Usually you can also download a pdf manual which I did with Groove Mechanic. I also open Real Player as that is where my music is stored. Follow the instructions to record in a WAV format and save the album/song in Real Player. You can record a whole Ip at one time but since I am picky and only wanted a song here and then I chose to record mine one song at a time. The software can split an Ip into tracks and rid the recording of clicks and noises. Make certain the format you use is a WAV format for recording.

Once it's digitized you can burn it to a CD from Real Player. Good idea to 'normalize' the cd first to make certain that all the songs are of the same volume. You can get 80 minutes on most CD-R's and that amounts to between 25-27 songs depending on length but your software will usually tell you how much room you have.

Revised 6/22/2009 JMM