ORAL HISTORY ASSOCIATION OF AUSTRALIA NSW INC

Transferring analogue tapes to digital using your computer.

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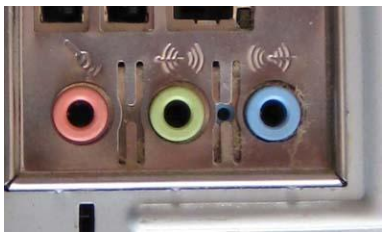
In order to convert audio to digital one has to connect the audio tape player to the computer. Obtain the necessary plugs and cables.

The audio input to a computer needs a cable with what is called a 3.5 mm stereo plug. The "3.5 mm" refers to the diameter of the metal barrel of the plug.

The connection to the computer:

Desk top computers almost always have both a "mic" (Microphone) input and a "line" input on the back of the computer. Some more expensive versions of modern computers may also have audio sockets on the front. On all but the older computers, the sockets are colour coded plus have a symbol next to each.

On laptops, the audio sockets may be on the side or the back. Some laptops may not have a line input.



The mic. input is always **pink**, and has a symbol of a microphone next to it as well.
The line input is always **blue**. The symbol is hard to describe but includes an arrow pointing towards the socket.
The **green** socket is the headphone/ audio output of the computer, the symbol is similar to the line socket but has the arrow pointing away from the socket.

If your computer has both mic. and line sockets, use the line one. If no line socket you will have to use the mic. input. Remember that older computers may not have the sockets coloured.

The other end of the cable goes to the tape player. The cable is plugged into the earphone output of the tape player; usually this is also 3.5 mm.

Some tape players, particularly high end tape decks or older models, may have the earphone socket 6.5 mm instead of 3.5 mm. In that case, you need an adaptor TO FIT THE SIZE OF YOUR SOCKET.

The thick end plugs into the tape unit, and the 3.5 mm plug on your cable plugs into the hole (*SOCKET)* at the back.

The cable may be bought at most places that sell sound equipment, including Jaycar and Dick Smith's:

Jaycar:
3.5 mm stereo cable, plugs both ends 1.5 m long, catalogue WA7008 (other lengths also available). Jan. 2011 - $4.956.5 mm plug to 3.5 mm socket adaptor, catalogue PA3590. Jan. 2011 - $1.95

Dick Smith:
3.5 mm stereo cable, plugs both ends 2 m long, catalogue C1158. Jan. 2011 - $16.976.5 mm plug to 3.5 mm socket adaptor, catalogue P6500. Jan. 2011 - $3.98.

Note: Whatever input is used, it may have to be activated via the "Control Panel" on your computer, then "sounds and audio devices" then "audio" then "sound recording volume" which should give a listing of the various inputs and one has to tick which ever to use. Also note that every time one turns on the computer this may have to be repeated.

Once you have established contact between the computer and your audio tape recorder via either the line input or the microphone sockets on the computer, you need to open a 'sound recording' program to copy the recording on to your computer. This program will usually also allow you to listen, using headphones, to the input volume to the computer, so that you can ensure that you keep it to a level which does not 'peak' or 'clip', thereby causing distortion.

A variety of free sound recording programs are available on the internet. OHAA NSW recommends a program called 'Audacity'. Instructions on how to use Audacity are available by Googling 'Audacity'.

When the audio cassette run to the end and stops, hit the 'stop' button in Audacity and then click on Export as .WAV. Give your file a name and store on your computer then burn it to a disc using a burning program e.g. Nero or Roxio.

At this time it is worthwhile considering the long term storage of your recording.

If you wish your grandchildren to be able to access this legacy, then it is suggested that every few years you consider whether to upgrade for use on the latest devices. Otherwise in 20, 40 or 50 years time, the recording may still be here, but the appliance to play it on won't be.

Consider long term digital storage on 'cloud' or external storage. For further information on this free or paid service go to 'google' and type in 'cloud' storage.

Many thanks to Norm Champion, Electronics Engineer who worked for TAFE NSW as Laboratory Manager for 29 years and OHAA NSW member Trish Levido for contributing this article.

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Choosing the appropriate method of digitising analogue recordings needs careful consideration. It is important to think through what uses might be made of the recording in the future and what are the specified requirements of libraries and other repositories. The NSW State Archives is currently in the process of digitising 550 oral history tapes – 450 already digitised. They offer many tips on their website ***http://futureproof.records.nsw.gov.au/home*** *- in particular read the article* ***Digitisation of analogue audio and video.*** *Contact Cassie Findley 8247.8629 Mobile 0412.355.899.*

Andrew Host contributed this comment in ORAL HISTORY NETWORK NEWS April 2011 No.6

More on transferring analogue tapes to digital using your computer

I was particularly interested in the article, "Transferring analogue tapes to digital using your computer" as that is what I spend much of my time doing for my living. I thought the article was well written, and I agree with everything that was said, particularly the section about continuing to upgrade the files as new formats appear in the future.

What I would add to the article is that it is very rare for modern computers to come with high quality built-in sound cards. Nearly always, the built-in sound cards will be noticeably inferior to third-party sound card, such as one from Creative Lab's "Sound Blaster" series of cards. As these are usually less than a hundred dollars, it is worth paying to have a high quality sound card installed in your computer before digitising your analogue collection.

Another thing to note about digital files, is that *"..if it doesn't exist in three places, it doesn't exist at all."* I don't remember who to attribute that quote to, but I've never forgotten it. In other words, if you have the file only on a hard drive in a computer, the hard drive will eventually fail. So it should also be copied to a high-quality optical disc, preferably a gold archive-grade disc. But discs can also be easily damaged by mishandling, so the files shouldn't exist only on an optical disc either. The idea of using cloud storage, as mentioned in the article, is a good one, but only as one of three storage locations.
