The path of least resistance

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What we are here to discuss today, dear music lover, is the distinction between analog and digital music, and the path of acceptable resistance. You may already be aware of the path of least resistance, which so far as recorded music is concerned, leads inevitably to the cash register.

Many of us took that path when we decided, years ago, to embrace the audio CD and consign all those analog LPs and music cassette tapes to some forgotten storage system - possibly one or more cardboard boxes.

It wasn't until CD writers became ubiquitous components of the PC and another acronym, MP3 - the digital audio compression format - appeared on the scene, that it became possible to reclaim the contents of those boxes without paying more cash to the record companies.

Doing so, however, required overcoming a certain amount of inertia: while those analog tracks were a potentially free source of music, converting them to audio CDs and MP3 files required a considerable amount of effort and know-how.

It has been quite a while since Bleeding Edge looked at the topic of converting LPs and tapes but given that it's one of the most common questions we get from readers, we thought we'd see whether it had become any simpler since we last explored it.

Fortunately, we can report a good deal of progress - representing a path of acceptable resistance - and some worthy offerings from Australian companies.

Take, for instance, Canberra-based Xitel's INport. It's a $150 USB device that addresses one of the main causes of annoyance in digital files copied from analog sources - background noise. We're not talking about pops and cracks, which you can edit out, although doing so involves an uncommon amount of effort, and does not constitute a path of acceptable resistance, in our opinion.
The INport is aimed at eliminating various extraneous hums and crackles that frequently mar the analog-to-digital conversion process. It does this by first bypassing the soundcard. You can expect better results with a more expensive soundcard, such as our Creative Audigy 2 - which costs about $180 in the basic version and about $400 for the model with a break-out box - but the average soundcard is a definite compromise.

Your PC is a playground for potentially noisy electromagnetic fields, emitted by the power supply, the CPU and hard drive. The USB connection does a much better job of quelling the noise. The other disadvantage of cheaper soundcards is that they frequently lack a line-in connection. The microphone input is designed to work with low inputs generated by microphones and it is likely to introduce noise to your recordings.

Better still, the INport ships with an impressive 9m of studio-quality shielded cable to connect up the tape deck or amplifier. You'll need to use an amplifier or a pre-amp to boost the signal if you're recording from a turntable because, unlike the average tape deck, it doesn't have a line-level output. The length and quality of the cable means you can keep the RF interference from the turntable at bay and possibly save yourself a hernia carting things around.

There is one other potential source of unwanted noise in these recordings: any differences in resistance in your home's electrical wiring can produce a background hum. The INport includes a ground loop isolator to eliminate that. That product is also available separately ($60) to attach to a hi-fi to reduce speaker hum.

The INport is bundled with two pieces of software - LP Recorder and LP Ripper, from Adelaide-based CFB Software <http://cfbsoftware.com>. Given that the retail price of those two packages is $99, the INport represents extraordinary value.

LP Recorder records from any available audio input into WAV format as 44.1 kHz 16-bit CD quality. If you merely want CDs you can play in a conventional CD player, you just burn those files to a CD-R disc, using your choice of burning software. Bleeding Edge has a strong preference for Nero.

LP Ripper allows you to split the WAV file into tracks and encode them as MP3 files - perfect for devices such as the iPod.

The review INport we looked at shipped with older versions of both products (5.0.3 for LP Recorder and 5.1.2 for LP Ripper) than the current package, which includes Version 6. Just last month, however, CFB Software released versions 7.0.2 and 7.1. Upgrades are available at their website for $27.45.
LP Recorder Version 7 adds one significant enhancement - simultaneous playback - which lets you monitor the audio as it's recorded, allowing you to pick up faults. Without it, you could waste a lot of time. A free package called Audacity <http://audacity.sourceforge.net> does the same. It works on Windows, Mac and Linux systems.

It's a powerful sound-editing program but doesn't have LP Ripper's ability to simplify the splitting of an LP or tape album into individual MP3 tracks. You can expect that process to take at least twice as much time with a sound editor such as Audacity.

With LP Ripper, you simply enter the number of tracks on an album and it does a good job cutting the recording up. It displays the start and end times and length of all the tracks in a table. You can either edit the table or use the more intuitive graphical mode, which is accessible via the trim function. The new version also adds a helpful tool bar that lets you merge and split tracks.

The INport also worked on a Mac. Griffin Technology has a similar product for Macs called the iMic. Xitel products are available from the company's online store <http://xiteldirect.com> or Harvey Norman.

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