

APRIL 2006

Here are my experiences with buying and using a laptop computer for working with square dance music. I understand that you will be summarizing this along with the information presented at the last caller's meeting. However, since I was unable to attend that meeting and give my ideas, I'll also copy all callers on this memo.

Since this is a long message, I'll start by giving a Summary of my recommendations and opinions first so you won't have to read beyond the Summary if you wish. These are based on using a laptop for Square Dance music for 3 months at the beginning of this year.

More details on why I have these recommendations/opinions can be found in the longer Detailed Section that follows the summary.

Summary:

My views on laptops:

- Laptops are not as reliable as other equipment we use (obvious understatement)
- Laptops are not as small and portable as they seem. I rejected getting a DJ CD player because it seemed big and bulky. Although laptops are not bulky, they are generally larger than our amplifiers, and require special and delicate handling/transporting.
- A lot of modern day laptops are really Desktop Replacements; they have large screens, fast processors, 60/80 Gig Hard Drives and mucho memory. The common screen size today is 15.4 inches, nice to look at and read, but hard to transport.
- Unless you pay big bucks for a laptop, such a machine will eat batteries for lunch – less than 2 hours running on a battery. In these machines, the CPU processor and other components are really designed for Desktop use where the machine is always plugged in and power conservation is not an issue. You have to spend the big dollars to get a new machine with a fast processor that is kind to batteries.
- Laptops don't generally have room for a separate sound card. You use the sound capabilities that are built right into the motherboard --and the sound quality that you get from these built-in circuits can be very poor indeed. Get a laptop that you know has a good audio output or you will be adding additional external PCMCIA or USB sound cards.
- I went for the latest, fastest machine in my budget, trying to get the same capabilities as I have on my desktop computer. Probably a bad approach since the needs are different.

Why I like a laptop:

When you read the detailed section you might wonder if I'm crazy to want to continue to use a laptop.

Here are some of the reasons why I still like to use one:

- Laptops are sexy. I admit it. It seems the whole world is jumping on the bandwagon of using a laptop to play square dance music and I jumped on the wagon too.
- I'm a computer nerd, a web developer/programmer so computers are in my blood.
- I like being able to cue up the next Patter and Song ahead of time. (See Software in the Detailed Section.)
- I like being able to use a single keystroke to fade out the patter and another one to start the singer, with no volume control to play with (How many times have I faded out the patter on a 45 RPM record and forgot to turn the volume back up when I put on the song record). (See Software in the Detailed Section.)
- I love automatic looping of the patter record. My turntable/amplifier does not have a mechanical record reset so I use the old lift-and-drop method. However a mechanical reset wouldn't help because I use a

wireless headset mic with no cable to operate a reset anyway. However when you use the auto looping, watch out that you don't get carried away with the patter going into overtime because it's hard to tell if you've looped once, ... or twice or ...3x already.... (See Software in the Detailed Section.)

- I love being able to set the tempo (not just the speed) for the music and have it remembered each time I use that piece of music. The same is true for setting the pitch on a few "difficult" songs. (See Software in the Detailed Section.)

If I could do it over again...

- I'd go for a laptop with a smaller screen, perhaps in the 12 to 14 inch range – making it more portable and safer to transport than my 15.4 inch laptop.
- I'd go for a laptop that can run for an evening on batteries (see Detailed section)
- I'd investigate getting an older used machine, perhaps a Pentium 3. From what my computer technician tells me, it would do me just as well, be smaller in size and have a better battery life than my current laptop. It might even be cheaper.
- I might even take a visit to Eurocom computers in Ottawa. They actually build – and hence service – laptops in Ottawa. Primarily they produce premium laptops but perhaps there could be a good value in an older used machine. The big thing is that the machine can be fixed IN OTTAWA.

End of Summary -- although you'll have to read the bottom of the detailed section below to see the ***really great free square dance software*** that I use.

Detailed Section

The Computer:

I bought an Acer Aspire 3003 laptop from The Source (Radio Shack) in December 2005 when the price was too good to refuse:

\$799 for
80 Gig Hard Drive,
512 MB memory,
1.8 GHZ AMD processor,
DVD R/W drive (dual layer holds 8Gig)
15.4 inch screen
--- a good price for a machine with those capabilities.

Problem #1: Too Large?

What I actually bought was a Desktop Replacement, not a really portable laptop machine. It's a large machine so it ***doesn't pack easily*** with my other stuff. I love the size of the screen (15.4 inches) when I use it on my lap in the family room or at the kitchen table for general use. And the large screen is great when using it to read lyrics at the club. However the laptop is actually bigger than my amplifier so it requires special handling, packing, carrying, etc.

Problem #2: If you buy a cheap machine ...

The external power supply is not well filtered. I was picking up electrical "noise" through the power outlet while at the club, probably generated by the floor polisher used by the maintenance staff. The solution was to buy a better quality power supply. I was lucky to get a used one made by Compaq for \$10; it solved the problem.

Problem #3: If you buy a cheap machine ...

The sound provided by my Acer is very poor. After researching on the internet, I found many references to poor sound quality using a laptop's built-in sound circuitry (no mention of any particular computer brand, just blanket statements). So the solution seemed to require some sort of external sound card to provide the quality that was missing in a laptop. SoundBlaster makes a USB card, so does Rolland, but the one that kept coming up as the best in sound quality was Echo Indigo IO PCMCIA card. So I bought one at Steve's music for \$200.00 cdn (actually \$215.00, but the price has come down now). With this card, the sound was great: just as good as playing records. Added bonuses:

- A PCMCIA card can be left in the laptop permanently and so requires less connecting than a USB solution. Note: it sticks out about $\frac{1}{2}$ inch.
- This card had "headphone" volume control which I adjust upward when connecting to some Hilton's. Note: the line-in on some Hilton's are poor in that they require a higher than normal signal level; that's why you sometimes require a separate Hilton Booster amp on the line-in for external signals.

Aside: Poor sound quality can also be caused by mismatched impedances when connecting a headphone output jack to an amplifier line-in jack. I experienced a little of that using a portable MP3 player and a CD player prior to getting the laptop. In these cases, I had to provide a step-up transformer which matched the impedance better and provided better signal level. However it also seemed to affect the sound a bit, probably because the small transformer lost some of the frequencies.

However the Acer laptop output jack has a dual name: "Headphone/Line-out" so I'm not sure what its impedance it is. It does not need any transformer for the signal level; the level was just perfect for my Ashton amplifier (unlike the MP3 player) and the volume I used to play the laptop was essentially the same volume used to play records. However the sound quality was pitiful.

Problem #4: If you buy a cheap machine ...

The Echo Indigo card worked great for about a month or more, and then died. Steve's Music gave me a new card but it didn't work either and my laptop experienced the same symptoms as with the first card (wouldn't boot properly with the card installed). So either the second card was DOA (Dead on Arrival) or it was "eaten" by the laptop as soon as it was put in. So the laptop went to Toronto to be fixed suspected of eating PCMCIA cards for lunch -- under warranty, thank goodness, but there's still the hassle of sending/taking it in for repair and not having it available. At least I give Acer top marks for picking up the laptop on Thursday and having it back to me on the following Wednesday – and this over the Easter weekend.

Problem #5: If you buy a cheap machine ...

The power jack on the laptop doesn't make good contact with the plug from the power supply. This is the second reason that the laptop headed for Toronto. Quite often the laptop would go into hibernation mode because it was running on batteries (even though it was plugged in). It does this when the battery level drops to 25% power level to conserve its battery supply. And yes, this did happen right in the middle of a song! @#\$%!

Problem #6: Battery life

The battery life is not much more than 1 hour. This is to be expected since the CPU processor is a regular AMD desktop type processor, not one designed especially to be used with batteries. It gives the laptop it's 1.8 GHz speed (cheaply) which is higher than most laptops, but drains power from the battery. Now you wouldn't think that we'd really worry about battery power since all the rest of our equipment is plugged in and that's why I didn't care too much about the battery life. However, getting a laptop with a longer battery life would:

- Allow quicker set up by eliminating one more object (power pack and cable) to be unpacked, unrolled and connected during setup (likewise for packing),
- Perhaps eliminate the need for an additional AC outlet required by the power pack.
- Remove any chance of picking up electrical noises from the AC supply,
- Allow you to move from room to room with the laptop already to go in an open dance with several halls, requiring only one audio cable to be connected.

Also, since I use my laptop for things other than just playing music, I've been limited to working for short sessions while waiting in the car, waiting rooms, etc.

Problem #7: Sound quality in creating MP3 Music (NOT the laptop)

I've made a good stab at recording a lot (not all, yet) of my records into Digital format, first into WAV format and then into MP3. I use a Mono setting and I didn't have any of the problems that Geoff described last year when he used mono for his CDs. While I was processing some of my older records, I played with filters to remove scratches, hiss, pops, etc and then even added some presence and brilliance that was missing to make them sound better. However, I got carried away with this and eventually created an equalization filter to make all my recordings (even new records) sound good -- to me. Trouble is, like most older males, I tend to not hear the higher frequencies and found that most music when recorded at "flat" equalization sounded bassy and boomy. So I compensated with equalization to make the music sound good to "me" and through my small computer speakers.

I would have lived in ignorant bliss with this except that I made a CD of some of the SD music that I was going to use at the Spring Thaw so that I could practice my intros and pitch on some of the songs on the way down to Brockville. Needless to say, Marguerite let me know that the music on the CD sounded awful and I will be changing the equalization to something more in line with "true" quality music. In this respect, it is fortunate that my laptop sound card had failed just prior to this and I was planning to use records for the Spring Thaw anyway.

Software:

I researched both Digital Magician (by Hanhurst) and SQMP3Gold (by Dave Wilson); both to be looked good and very similar, but thought I'd like to save \$150.00 US initially and get a feel for using the laptop first to help me decide what features were important to me.

So I initially set up to use the free WinAmp software player because it had tempo control plug-ins. I used WinAmp for a number of weeks. I would launch two separate WinAmp windows, one set up with a playlist for my patter music and the other set up with songs. I used this setup for several weeks at my club. The best plug-in for speed control was Pacemaker. Pacemaker could memorize the tempo set for a song for use the next time the song was played. I remember having some issues about which window (WinAmp or Pacemaker) was the active window and it required you to click within the appropriate window first to make it active when you wanted to use keyboard commands. (Pacemaker now has a newer version which I haven't tried).

I investigated Caller's Caddy. It was free to try. It seemed that it could do most of the things that you might want. The evaluation copy was limited to a 1-minute playing time, so I couldn't get real world experience with it. Caller's Caddy was very poorly documented – almost non-existent. You could figure some things out but you had to set directory paths to your music, lyrics, etc almost manually. With the 1-

minute time limit, and the amount of effort I felt would be needed to figure it out how to set it up to work properly, I basically gave up on this program.

Then I heard about SQView. Nothing more than just an email address of the developer. I sent an email asking about the program and whether there was any documentation that I could read. Within a day, I got a return email with a link to a website that let me download the full program.

WOW! What an absolutely superb program. It appears to do everything that you'd ever want and has basically all the bells and whistles of Digital Magician and SQMP3Gold – and for FREE!. There was a caveat that since it's free, the technical support is limited. Well, I printed off the manual and it was so complete (over 70 pages), I had to put it into a 3-hole binder. I used the program for about a month with ease. Then, just last month, a newer version was released to add even more features.

I can't say enough about this program:

- Keyboard shortcuts to almost everything
- Tempo, Speed, Pitch, volume, equalization control which is memorized for each song
- The ability to slow down everything (eg, for One night stands, slow moving dancers) without affecting the saved settings
- Patter and song play lists available all the time
- Ability to cue the next patter and next song, fade out the patter, and start the song
- Lyrics that display automatically when the song is played, in the same window or a larger separate window
- Timers: count down, count up, running time, actual time, etc
- Looping patter music: automatically, or at set points; ability to jump to a set point, etc
- Highlights songs already played so you won't select them again
- History tracking so you know which songs you've played in the past
- Keyboard select 1 of 10 separate windows: the main Music window, a separate Lyrics window (although lyrics can appear on the main window in place of the play lists), a window for displaying CallerLab Definition files, Openings, Get-ins, Get-outs, Song Choreo, etc
- If you suspect problems with a piece of choreo, you can save it to a "check this later" area.
- You can even type in identifying information for a pilot square – and if you have a web cam on your laptop, you can take a snapshot of a pilot square and have it appear on command in a separate window for resolving. Now that's high tech!

One more thing. I have been using a MS Word template for several years to create 7x7 inch record jacket inserts on which I print the lyrics I need for each song. I changed this to an HTML web page template so my lyrics will pop up automatically in SQView and can also be printed to create the 7x7 record jacket insert to use with the actual 45 RPM record.

I know you can download HTML pages with the lyrics, but I prefer to do my own pages where I can add comments, use different lyrics, and highlight alternate breaks in a way that's easier to read. Besides, those downloadable HTML pages do not have a 7x7 cutting template built in for use with the record jackets.

Hope my experience can help anyone already using or planning to use a Laptop for playing their square dance music.

Bob Summers