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www.squarez.com/digitalmusic/

- Do you want to go digital?

- Pros:

- Greater music selection

- With traditional square dance music, about 50% is now being offered in a digital-only (CD or MP3) format.
- Out-of-print records are being re-released as MP3s
- Non-traditional square dance music: music that can be used for square dancing, but is not released by square dance record producers

- **Convenience**: More music, less space.
- **Longevity**: Digital music doesn't wear out and get scratchy
- **Music control** (with some equipment): independent pitch and tempo control

- Cons

- **Expense**: you'll need some additional equipment and additional software.
- **Time**: If you choose to go completely digital, it takes time to digitize your vinyl recordings.
- **Complexity**: You'll need to learn about new equipment and new techniques.

- Factors to consider in choosing a system

- How **easy** is it to use at a dance? You don't want the hardware to interfere with your calling and your relationship with the dancers. MD, CD, and MP3 players may have tiny buttons and a confusing interface. Some functions may only be available on the remote control. A computer requires working with the software you choose to play your music.
- Do you need **tempo control**? At the dance? The slider on a turntable is easy.
- Do you need to **loop** your patter music? The reset button on a turntable is easy.
- How will you handle **singing call lyrics**? The record jacket is convenient.
- Do you work with **other callers**? It's easier to flip through someone's records than it is to examine their laptop.
- How much **money** are you willing to spend?
- How comfortable are you with **modern technology**?
- How easy is it to convert your vinyl to a digital format? Recording to MiniDisc is fairly easy (but time consuming). Recording to a computer requires more knowledge, but gives you more flexibility in the future.
- What kind of **image** do you want to project? Most people under thirty have never used vinyl or even seen records.

- You don't want to use a computer

- You don't want to go completely digital

- You don't have many options. Buy an inexpensive portable CD player and buy CDs. If a song is offered only as an MP3, buy the MP3 and ask a friend with a computer and a CD burner to download it and burn a CD for you.

- You do want to go completely digital.

- If a song is offered only as an MP3, you're still going to need to get help from a friend with a computer.
- **MiniDisc** is your best bet. You can record your vinyl from a turntable directly to a minidisc. You then have some limited editing capabilities: you can remove noise from the beginning and end of a track, and you can split a track into pieces for looping patter.
  - Equipment needed: a portable MiniDisc recorder/player. Check out the new Hi-MD format. Depending on the quality you choose, you can record up to 45 hours of music on a single disc.
- CD Audio Recorder: You can record from a turntable to an audio CD recorder. You can't edit the recording or add trackmarks later.
  - Equipment needed: An audio CD recorder and a CD player to use at dances.

- You do want to use a computer

- You don't want to go completely digital

- Buy an inexpensive CD player. Use the computer to burn MP3s to CDs when necessary. You can also use the computer to burn compilation CDs to cut down on the number of CDs you need to carry.

- **You do want to go completely digital**

- You'll need software for digitizing your vinyl records, cleaning up your recordings, and converting your recordings to some other media. Once you've done that, you can transfer the music to other media.

- **Do you want to use a laptop at dances?**

- **Pros**:

- **Power**: A laptop allows you to change pitch and tempo on the fly. You can have easy access to thousands of songs. You can set up playlists, do looping, display information on the screen.
- Can **eliminate paper**: display all information on screen

- **Cons**

- **Expense**: Laptops are the most expensive playback technique.
- **Reliability**: Laptops are fragile. Hard disks can crash. Software can crash. You must carry some kind of back up music.
- **Complexity**: Along with the power comes a steep learning curve.

- **You don't want to use a laptop at dances**

- My recommendation would be to use **MiniDisc**. The new Hi-MD format lets you do high speed downloading (and uploading) of music. You can put hours of music on a single disc. The MiniDisc format is rugged. You can do looping and (on some players) tempo control, but be sure to check the interface for going into single track repeat mode and the granularity and interface for the tempo control (a 5% at a time speed adjustment doesn't work for callers).

- **Alternative: CDs**. DJ CD players provide tempo control and a way of looping (which may involve setting loop points every time you play the track). If you use MP3 CDs, you can pack a lot of music on a single disk. CDs are more fragile and are larger than MDs.

- **Alternative: MP3 players**. Hard disk MP3 players can hold all your music. Looping is possible, especially if you plan ahead and divide your patter music into separate tracks on your computer. Tempo control may be possible, but check the interface and the granularity. Check the interface; when you have thousands of songs on the device, you need a way to find and organize them to make it easy to play them at dances.

  Solid state MP3 players hold less music, which will force you to plan ahead to decide what music you want to have with you. Extra memory cards are relatively expensive.

- Ways to handle looping:

- All players have a single-track repeat mode. Be sure to check the interface. This works if you don't mind starting the track from the beginning when you reset, or if you divide the song into separate tracks on your computer.

- Alternative: create longer tracks on the computer, using your sound editing software's capability to copy and paste sections of the music. This is more work up front, but easier at the dance.

Ways to handle tempo control:

- Note which records are slower and faster, and use records with the appropriate tempo.

- Alternative: Use your computer's sound editing software to create different versions of the track at different tempos.

- You do want to use a laptop at dances

- Choose software for organizing and playing the MP3s and for displaying cue sheets.

- Factors to consider

- **Features**. Looping, tempo control, searching, multiple playlists, displaying cue sheets, keywords, ease of backing up

- **Ease of use at the dance**. I look for single key control of major functions.

- **Ease of adding data** or setting up to use. Consider cue sheets, keeping track of tempo, setting up for looping, organizing your music and related information.

- **Support**: If you have questions or issues, can you get answers? Are bugs fixed quickly? Is the software being improved?

- Initial **cost** and cost of updates.

- Options

- Winamp, plugins, html or .doc files

  - Inexpensive, hard to keep organized, not easy to loop or keep track of tempo.

- Specialized programs for callers

  - Ceder Square Dance System - Vic Ceder

  - Digital Music Magician - Supreme Audio

  - Sqmp3 - Dave Wilson

  - Sqview - Thomas Bernhed

  - Callers Caddy - David Goebel

  - Sdplayer - Atsushi Takeuchi

  - Others that I don't know about???

- Conversion

- Vinyl to Anything:

- Best technique: Record to computer, use software to remove scratches and clean up sound, back up .wav files to CD, transfer to desired format.

- MiniDisc to MP3

- Best technique: re-record your original vinyl to computer. See above.

- Record to computer. There's currently no way to avoid the step of reconverting the ATRAC format MD files to .wav files and then converting to MP3. There's also currently no way to avoid real-time recording. The best you can do is look for convenience: if your MD player has an optical out, and your sound card has an optical in, you may be able to avoid a digital to analog to digital conversion. Check out the Xitel (xitel.com) equipment designed specifically for recording to and from MiniDisc recorders. Back up .wav files to CD (to avoid future lossy conversions) and then convert to MP3s.

- CD to MP3

- Use computer software to "rip" the CD files. Most software can create MP3 files directly. You don't need to back up, since you have the original CDs as your backup.

- MP3 to Anything:

- Try to avoid doing this. MP3 is a lossy compression format. You should use your original .wav files or CDs to convert to other formats. If it's unavoidable (i.e., you bought MP3 files), use software to convert the MP3 to a .wav file. Back up the .wav file, so you won't have to do this again. Convert the .wav file to the desired format.

- MP3 to MD

- New Hi-MD technology allows high speed transfers (while conver ting to ATRAC). Because of copy-protection issues, there may be limits on what you can do and how many times you can transfer audio to MD.

- Backup

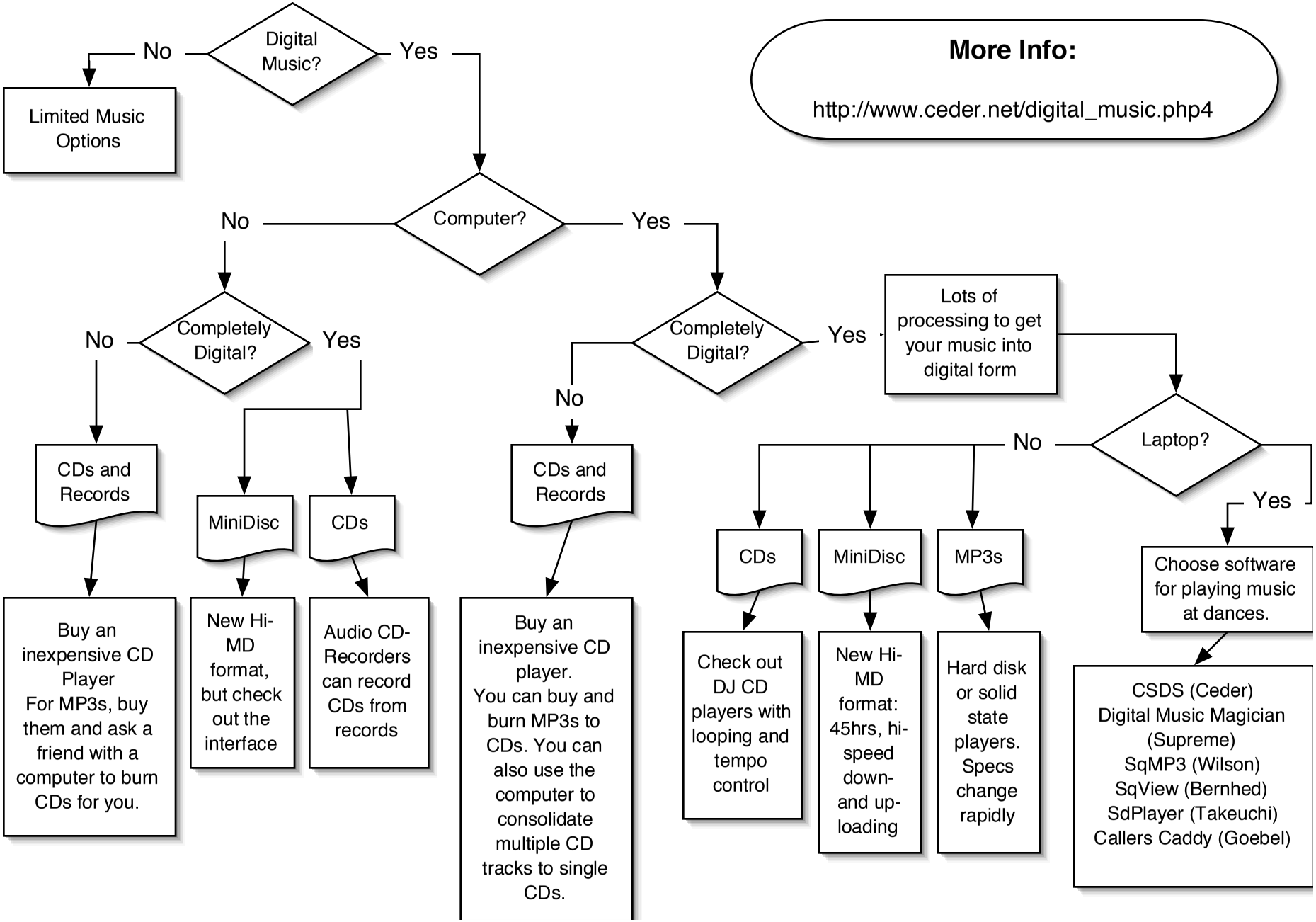
- You must have a backup at the dance.

- You should back up your digital music; you don't want to have to re-record it from vinyl.

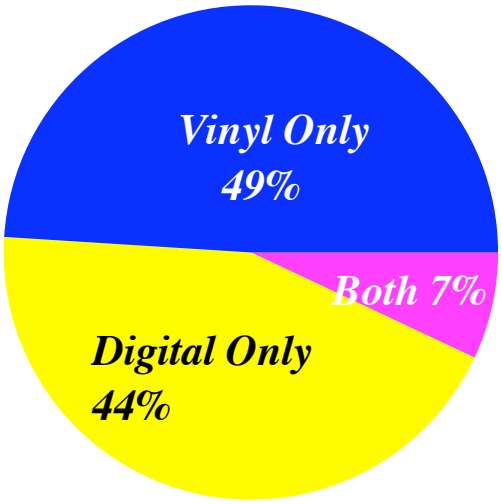
- Legality

- Technically, it's probably illegal to copy music that you've purchased and use it in a profit-making activity. Ethically and practically, it's considered okay.

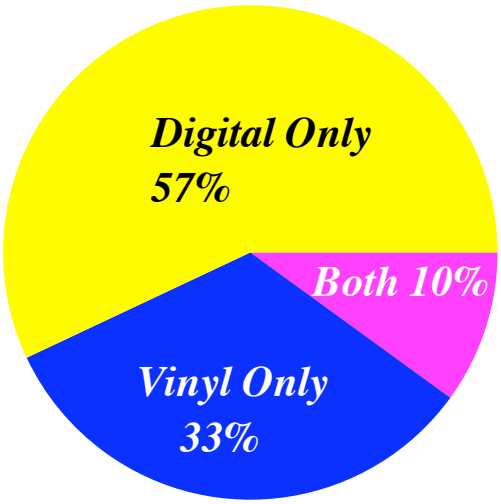
- It is illegal to make copies of your digital music and give or sell them to others while you also retain copies. It is also unethical and impractical, as it will result in less music for all of us.


Digital Music?
No
Limited Music Options
Yes
Computer?
No
Completely Digital?
No
CDs and Records
Buy an inexpensive CD Player
For MP3s, buy them and ask a friend with a computer to burn CDs for you.
Yes
MiniDisc
New Hi-MD format, but check out the interface
CDs
Audio CD-Recorders can record CDs from records
Yes
Completely Digital?
No
CDs and Records
Buy an inexpensive CD player.
You can buy and burn MP3s to CDs. You can also use the computer to consolidate multiple CD tracks to single CDs.
Yes
Lots of processing to get your music into digital form
No
CDs
Check out DJ CD players with looping and tempo control
MiniDisc
New Hi-MD format: 45hrs, hi-speed down- and up-loading
MP3s
Hard disk or solid state players. Specs change rapidly
Laptop?
Yes
Choose software for playing music at dances.
CSDS (Ceder)
Digital Music Magician (Supreme)
SqMP3 (Wilson)
SqView (Bernhed)
SdPlayer (Takeuchi)
Callers Caddy (Goebel)
More Info:
http://www.ceder.net/digital_music.php4

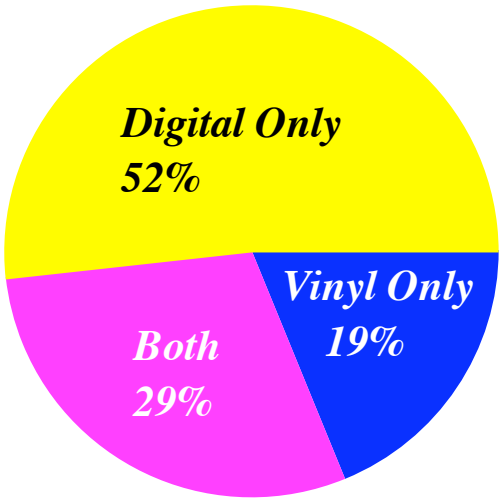
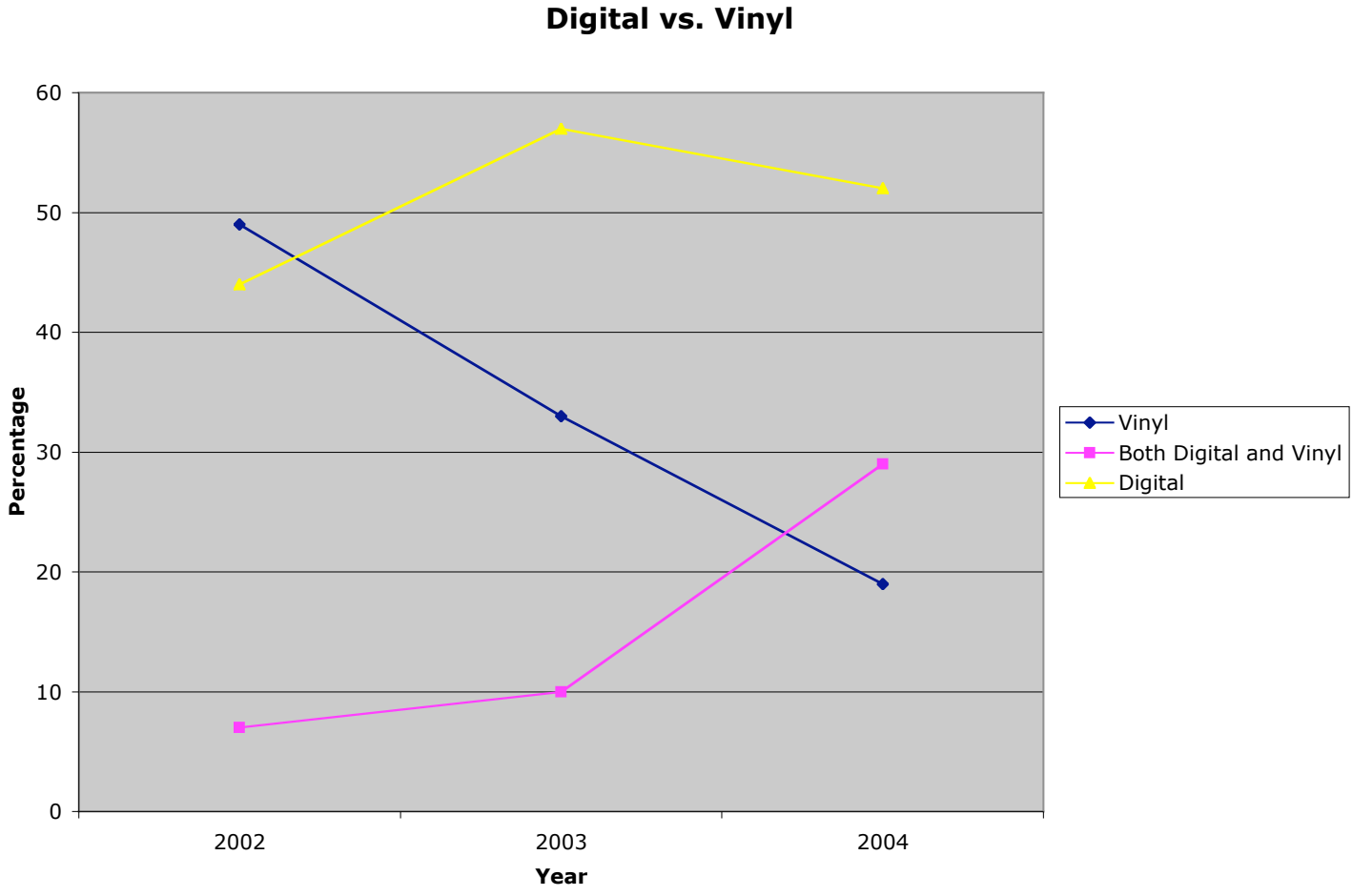
Over 50% of new square dance music is digital only



2001- 2002



2002 - 2003



2003 - 2004