DIGITAL CONVERTING: CASSETTE TO MP3





EZ Vinyl/Tape Converter

The ION Tape Express is a tape cassette player that connects to the computer using a USB cable. Using the EZ Vinyl/Tape Converter software, the ION Tape Express will let you record your music cassette tapes to MP3. Cassette tapes will last about 30 years if kept in good condition, but can wear down or break faster if not stored or used properly.

What is an MP3 file?

This are the file type used for audio files. The music you have imported to iTunes or your preferred music program are MP3 files.

Using the EZ Vinyl Converter Software

EZ Vinyl Converter is free to install on any computer, and is available on the Sound Studio's iMac. The software will look different if you are using a Windows or Mac computer, but the steps are the same. The only difference is that EZ Vinyl/Tape Converter will automatically export music to iTunes on a Mac, but export the files to the Music folder on a Windows computer.

For more resources, visit ionaudio.com/ez-converter

Set Up the ION Tape Express

- 1. Set the case player on the table so the ION Tape Express logo is facing up.
- 2. Plug the micro-USB end of the cable into the port on the left of the cassette player.
- 3. Plug the USB end of the cable to the iMac.
- 4. Make sure the Music Hall USB-1 vinyl record player is not connected by USB to the iMac. If both the vinyl and cassette players are connected at the same time, the EZ Vinyl Converter software won't work.

Micro-USB



The Play button should be pointing to the right



Insert the Tape

- 1. Gently open the lid of the ION Tape Express.
- 2. Insert the tape with the filmstrip side at the front.
- 3. The side facing up is the side that will record. For instance in the photo, Side A is face up so Side A will record first.



Open EZ Vinyl Software

- 1. Find the **EZ Vinyl Converter** icon on the desktop.
- 2. Double-click to open.

Alternative Method

- 1. Click "Go" in the Top Menu.
- 2. Click "Applications."
- 3. Find "**EZ Vinyl Converter**" in the list of Applications.
- 4. Double-click to open.

Get Connected

Follow the prompts on EZ Vinyl Converter.

- 1. Confirm the ION Tape Express cassette player is connected to the iMac.
- 2. Click "Next."







- EZ Vinyl/Tape Converter will ask if you are using a Turntable (aka the Music Hall USB-1 vinyl player) or a Tape Player (the ION Tape Express). Click the checkbox for the Tape Player.
- 4. Click "Next".

Note: If the Music Hall USB-1 vinyl player is still connected to the iMac, it won't let you continue with the software.

 After choosing Tape Player, it'll ask if you are using Normal or Chrome tapes. Click the tape you are using and then "Next".

Normal vs Chrome Tapes

- "Normal tapes" or "Type I" are more common. If your tape isn't labeled, assume it is Normal.
- "Chrome tapes" or "Type II" were more expensive and had higher quality, but less commonly used.
 - If your tape is labeled "metal" or "Type IV," click on "Chrome."



- 1. Press the **Play** button on the ION Tape Express.
- You should hear the music playing from the iMac speaker. You should also see a green bar that moves up and down. The green bar shows how "loud" the music is. Note: Make sure the Volume knob on the left of the ION Tape Express is turned up.
- 3. Adjust the "Gain" as needed so the green bars stay around the middle.



What is "Gain"?

Gain controls how loud the music is during recording, whereas volume is the setting on your speakers to control how loud it is during playback. If the Gain is high—and the green bars hit the red at the top—the audio won't sound clean. If the Gain is low—and the green bars stay at the bottom—it will be hard to hear the music during playback.







- 4. Check the box for "Automatically split into tracks." This will separate the music into tracks when the software notices a pause in the music. This works really well for most albums since there are breaks between songs. However, songs with long pauses or spoken word recordings might split into tracks.
- Press the **Rewind** arrow to go to the beginning of the tape. The cassette player will automatically stop when it gets to the end of the tape.
- 6. Click "Record."

Note: There might be a pop-up asking EZ Vinyl Converter to use the microphone. Click "Allow."





Record

- EZ Converter will start recording the tracks. It records in "real time," so if Side A is 20 minutes long, it will take 20 minutes to record.
- If "Automatically split into tracks" was checked, you should notice the number of "Recording Tracks" increase when there are pauses between songs.
- 3. Once all the tracks are recorded, click "Next."





Tag Your Tracks

- Fill in the Artist, Album, and Track Names accordingly. Note: Text boxes left blank will be labeled "Unknown."
- 2. Click "Next."



Export

The MP3 files will begin exporting.

- Mac computers it will export directly to the iTunes Media folder
- Windows computers it will export to the Music folder



Save to USB

- If using the Sound Studio's iMac, open the "Music" folder found on the desktop below the EZ Vinyl/Converter logo.
- 2. Double-click "**Music**" to open the iTunes folder.
- 3. Double-click "Media."
- Inside the "Media" folder should be a folder with the Artist's name. Click and drag that folder to your USB.

Alternative Method: Copy and paste that folder into your USB.





Troubleshooting

When I start EZ Vinyl Converter, I get an error message that says, "Device not found"

• Make sure only the ION Tape Express is connected to the computer. If the Music Hall USB-1 vinyl record player or other audio-recording device is connected, the software won't work.

The recording is too quiet

• Increase the Gain and re-record. This should help make the recording louder when you listen to it.

The recording is too loud

• Decrease the Gain and re-record. This should help make the recording softer when you listen to it.

I can't hear any of the playback, even when I increase Volume on the iMac

- The ION Tape Express has a volume knob on the device. If the volume is low or off, there will not be any playback sound from the iMac speakers
- When the ION Tape Express is used, the Audio Output is changed from "Built-In Speakers" to "ION Tape Express." Open up the System Preferences to change the Audio Output back to "Built-in Speakers."

The software is not splitting the tracks properly // The song was split into multiple tracks

- The software has an "Automatically split into tracks" feature. It splits the tracks based on pauses or quiet moments in the song. This means that if there is a dramatic pause in your song, it will split it into more than one track. This also happens a lot if your recording is spoken word (short stories, speeches, etc.)
- Uncheck the "Automatically split into tracks."
- When recording, there will be a "Manually split track" button. Click that button when one tracks ends but before the next track begins.

The tape sounds distorted // lots of crackling // lots of static

• This usually means that the film of the cassette tape has worn down or is damaged.

