

## VERY BASIC WINDOWS COMMAND-LINE TUTORIAL FOR CDP

1) To use the Command Line with CDP in Windows, you should first set a PATH to the CDP programs, so that the computer knows where to find them:

- To add the Path to the CDP programs (executables) to the PC system path, go to:  
Control Panel > System (Properties) > Advanced (or Advanced System Properties) > Environment Variables
- In the LOWER window, select the Path line and click Edit. Put a semi-colon (;) after the last entry and then add the CDP programs path. This should be: [drive-letter]:\cdpr8\\_cdp\\_cdprogs
- **You only set the Path in this way once** (i.e. not every time you use the Command Line).

2) Now you can run CDP programs from the Command Line.

- Open the Windows Command Processor (type Command Prompt in the Search Box to find it).
- Type the name of a program, e.g. **modify speed**, to display its usage statements and so you know stage 1) worked.

3) Change Directory (folder) to the one containing the sound you want to process.

- If your sound is not on the current drive, first change to that drive by typing its letter followed by a colon (e.g. E:)
- Then type **cd** followed by a space, then the folder name.
- For example, if **mysnd.wav** is in **E:\Snds\Clips** but the Command prompt is showing C:\> type E: [RETURN] then **cd Snds\Clips** [RETURN]

- More details on the **CD** command can be found at <https://ss64.com/nt/cd.html>

4) Type the command. For most CDP programs, the format is <prog. name> <mode> [if applicable] <infile> <outfile> <param1, param2,...>

- Type something like **modify speed 2 mysnd.wav mysndslow -12**
- If you have Windows Explorer open in your sound's folder, this helps a lot.
- Double-click the result to play it in the Windows Player (or whatever).

5) Parameter values. CDP programs can use many parameter values; getting them all right is not always easy.

- You might consider using Soundshaper or Soundloom to show you the relevant parameters and ranges for a given program/mode.
- But ALWAYS follow the order shown in the official CDP documentation (or, less reliably, the usage statement), especially as Soundshaper may display parameters in a different order from the official CDP one.

6) Automation: time-varying params. Instead of a single value, CDP may allow time-varying values, typically in the format TIME VALUE.

- The documentation will show which parameters support time-varying datafiles. Instead of a single value, put the name of the textfile containing your values.
- NB. Times must advance, if only by a tiny amount. Most (all?) programs support optional comment lines beginning with a semicolon.
- There are also many specialist types of datafiles - for details see **File Formats** in the CDP Documentation.

7) Batch Files - are just text files consisting of multiple commands.

- Write them in a text editor like Notepad and afterwards change the suffix from **.txt** to **.bat**
- The special characters **%1**, **%2**, etc (up to **%9** at least) can be used to provide parameter variables within your script. The arguments are put on the command line when you call the batch. This is simple text substitution.

For example, we can make the above speed-change more generally useful. Save the following and save it as a text file **tpose.bat** -

```
REM Batch file to change speed, in semitones
REM Parameters are %1 - infile, %2 - outfile, %3 - transposition in semitones (put negative if going down)
modify speed 2 %1.wav %2.wav %3
paplay -i %3.wav
```

- To run the batch with **mysnd.wav** you could type:

**tpose mysnd mysndup3**

- Note that you don't need to add **.bat** and we're not including **.wav** as it's already in the script
- **paplay** plays the sound (instantly, with the -i flag)

- When you name your batch file, avoid any name used by a CDP program, or a Windows reserved word. Also avoid reserved words used by any other scripting language included in your PATH statement.
  - Note also that Batch files can call other batch files, e.g. to do basics like pvoc conversion for spectral commands.
- 8) • Further details on the Command Line are found within the CDP documentation at:  
**<https://www.composersdesktop.com/docs/htmltuts/cdpsys/cmas1cdp.htm#CMDENVIRON>**
- More in-depth explanation of all CMD commands is available at: **<https://ss64.com/nt/>**
  - More details of batch scripting at: **[https://www.tutorialspoint.com/batch\\_script/index.htm](https://www.tutorialspoint.com/batch_script/index.htm)**

R.F. 31 May '24