



Composers' Desktop Project

www.composersdesktop.com composersdesktop@gmail.com

CDP Installation Notes - MAC

The Installation

Welcome to CDP Release 8, for MacOS (Intel, 64bit).

The installation of the complete CDP System for MacOS is contained in separate files:

- the **Installation instructions** (this file)
- a disk-image file for the **SoundLoom GUI**, which includes the **CDP software (Release 8)** and the offline CDP documentation.
- If you have downloaded the light version (CDPRel8Lite_MAC), this does *not* include the documentation, but is otherwise the same as the full version.

The documentation can be downloaded separately:

CDPR800documentationPC-MAC.zip

Note that the documentation is also available online at:

<https://www.composersdesktop.com/docs/home.html>

All of these are downloaded *via* the CDP Downloads page: <https://www.unstablesound.net/cdp.html>

You have two primary options for installation:

- **install as a new system (see step 2 below)**
 - **or update an existing setup (see step 3 below).**
- Active SoundLoom users will likely want to Update rather than Install.

1(a): Copy from the Disk Image directory

Drag the whole **cdpr8** directory from the Disk Image to your home directory.

1(b). Activate executable files and apps

to bypass the MacOS Gatekeeper Security Mechanism.

Like much Open-Source software, the CDP System is not "Code Signed".

This affects any executable file or app, including **cdpr8install.command**

- **Open Terminal:** the Terminal (shell) app is found in the **/Applications/Utilities** folder.
- **Run Terminal** (it starts in your home directory) **and at the command prompt, type** (followed by pressing Enter; note the spaces):
xattr -rc cdpr8

(The -r flag signifies "recursive" - it will visit every file and folder inside cdpr8, releasing, so to speak, all executable files and apps from Quarantine.)

2. To Install as a new CDP system:

- **In the Finder, double-click on the file "cdpr8install.command" (inside "cdpr8").**
This will configure the required paths for *Soundloom* and for command-line work.
It runs two small shell scripts in the "scripts" folder.
They are only needed for installation. They configure both the "bash" and "zsh" shells.
(You may like to refer to the general CDP Documentation for details on how this works).

3. To Update an existing system:

(We assume this will be "cdpr7" in your home directory).

- **In the Finder, locate the directory "_cdp" inside "cdpr8".**
- **From that directory, drag the programs directory "_cdprogs" to the corresponding directory in your current "cdpr7/_cdp" directory.**
- **Confirm the action to Overwrite/Replace.**
- **Do NOT in this case rename "cdpr7" to "cdpr8",**
as this will break the paths previously set up.

4. Finishing up:

- Users with Admin privileges can drag **soundloomE.app** from **cdpr8** to **/Applications**, as is usual for all apps. Note that this will not overwrite any existing instance of "soundloom.app", as the new version is called "soundloomE.app"..
- However, as *SoundLoom* reads the "hidden" resource file ".sloomrc" (as installed above, or retained from a previous installation), the app can be placed anywhere - e.g. left inside the cdpr8 folder. This is recommended for all "standard" (non-Admin) accounts.
- Optionally, drag the icon to the Dock for convenience.

5. Test the changes:

- **Confirm installation by running any CDP program, e.g.: sfprops from Terminal.**
You may need to close the current Terminal session and start a new one, so that the PATH etc. changes are active.
- If all is well, you will see the appropriate usage message printed to the console.

Your installation is now complete.

6. Check the installation:

Compare your setup with the overview document: **CDP-Check_Installation-MAC.pdf** (to check on what's where). This provides an overview of all the main files in the CDP System, whereby you can check your installation and get orientated regarding all the files and what they do.

7. Offline documentation (optional):

Download **CDPR800documentationPC-MAC.zip** from the CDP Downloads site (see websites below).

Unpack the contents into your **/cdpr8** folder. If you are simply upgrading an existing cdpr7 installation, please delete the previous Release7 **/docs** folder first, as virtually all files have been upgraded for Release 8.)

The documentation unpacks to:

/docs - a folder containing the CDP Reference (/html) and Tutorial documentation (/htmltuts), with several subfolders and other documents and soundfiles. These contents are itemised in **CDP-Check_Installation-MAC.pdf**, where the full setup is listed.

/docs-pdf - a folder containing pdf versions of the CDP Reference Documentation. These files can be very useful should you want to print out specific documents or pages for easy reference. Copy and paste this folder into the /cdpr8 folder.

/MAC – a folder containing documents about the CDP on the Mac, including this one.

Please note that the documentation is also available online: see Websites below.

Getting Started with SoundLoom

You are now ready to go. You can run the CDP System from the *Sound Loom* GUI or via the **Terminal**.

For the *SoundLoom* GUI, you are recommended to start with Archer Endrich's ***SLguide-basic.pdf***, which introduces you to the layout and operation of the GUI, and has two exercises to work through to get you started, one for the Time Domain (sound files) and one for the Spectral Domain (analysis files).

You will find this in the top level of /docs.

Sound Loom is designed as an 'intelligent' interface. Among other things, this means that it 'knows' what inputs should be present to run a given process. If they are not all present in CHOSEN FILES, that process remains greyed out. If this happens when you expect to run a process, double-check the inputs required by looking in the Desk Reference or the HTML Reference Documentation — to do this you may need to figure out the program/process name in these documents that matches the *SoundLoom* name, as they aren't necessarily the same. *SoundLoom* names tend to be more descriptive. (There ought to be a list of all the process names in *SoundLoom* and their corresponding CDP Reference File (= Command line) names, but it hasn't been done yet.)

Trevor Wishart's ***twSoundLoomGuide.pdf*** is also in the top level of **/docs**. with a backup copy in **/doc**. It provides a comprehensive overview of the CDP System as approached via *SoundLoom*.

Working Directory

It would be a good idea to create **your own working directory** and put one or two mono soundfiles in it, e.g., using your initials or a project name as its name.

- If using *SoundLoom*, use **Find Any Directory** to select your directory (Click on **Select**, not Open), then **Grab** a file and **Use on Workspace** as explained in *slguide-basic.pdf*.
- If using the **Terminal**, cd to this directory. Enter **dirs** to get a listing of the soundfiles in your directory. If the list is displayed, your CDP system is working properly. Then try a simple command such as **modify speed 2 yoursoundfileIN>.wav processedsoundfileOUT>.wav -12** to lower the sound by an octave.
- Listen to it with **pvplay processoundfileOUT.wav**. The wav extension is required with **pvplay**, and hearing the lowered sound will confirm that CDP sound transformation processing is up and running.

Input soundfile not recognised

If CDP programs fail to recognise your soundfiles, you can fix this by running **COPYSFX** to make a CDP-compatible copy (which complies with the .wav standard). This is simply done via the Terminal (command line) with **copysfx infile.wav outfile.wav**. (The MAC used to use .aif or .aiff

soundfile formats, but now uses .wav. CDP programs retain whatever sample type the infile is unless overruled by using the **-f** prefix to the outfile name. When converting formats, the extension needs to be specified. Note that the CDP software does not handle mp3 files — these can be converted with a sound editor such as *Audacity*.

Reference Documentation

The Reference Documentation shows the command line usage for the CDP programs. The Home Page is at the top level of **/docs** and is called *home.html*. The Main Index *index.html* is also found at the top level of **/docs**. For handy use, you might want to create an alias for either of these on your Desktop.

Formats of supplementary files

An alias is also recommended for the file *filestxt.htm*, which gives the formats for all the different supplementary text files that CDP programs use — the real power of the system lies in being able to tweak fine detail

Demos

Note the three sets of demonstrations in **/cdpr8/docs/demo**. They will help you get much deeper into sound transformation processing more quickly as they show the operation of the software in considerable detail.

Tutorial Workshops

As you get more familiar with using the CDP System, you may want to delve deeper via three major Workshop tutorials. These can be downloaded from the CDP Website:

<https://www.composersdesktop.com/workshops.html>.

CDPWorkshop1 - 170 + worked examples in 9 program groups with a playlist

CDPWorkshop2 - in-depth study of the TEXTURE Set

CDPWorkshop3 - about transposition and shifting, especially the advanced possibilities in COMBINE,

with additional information about the use of the **-p** and **-f** flags when extracting formants.

NEW: A Learning Manual for CDP by Archer Endrich: 33 separate documents about 5 topics, with many sound examples. It draws upon my experience as a CDP user, covering basic operation, processes that I have found especially useful, and explanations of some things that can be a bit tricky.

Getting Started with CDP

The CDP System is a rich toolkit of many different processes. Some of these may be familiar from other software, but others are more unique and "experimental". To help you get started, we have provided tutorials and other documents within the CDP documentation (TUTORIALS page).

The materials provided approach the software in two ways:

- Describing the available CDP processes, or selections of these, and how you might use them.
- Worked tutorial examples, for use with *Soundshaper*, *SoundLoom* or Command-line, often for all three.

For details see *Introducing the CDP Sound Transformation Programs*, (IntroducingCDP-R8.pdf) which is the main follow-up document to this one. This document also includes general hints and tips on using CDP.

Website Links

- CDP Website: <https://www.composersdesktop.com>
- CDP Downloads: <https://www.unstablesound.net/cdp.html>
- CDP Docs online: <https://www.composersdesktop.com/docs/home.html>
- CDP Users' Forum: <https://www.unstablesound.net/cdpforum>
- Soundshaper download: <https://www.soundshaper.net/dloads.html>
- Trevor Wishart's website: <http://www.trevorwishart.co.uk>
- Richard Dobson's website: <http://www.rwdobson.com>

[Archer Endrich & Richard Dobson - 19 October 2021; updated 28 Sep 2023 for CDP Release 8]