



## INSTALL SOUNDSHAPER and CDP

This section is for those who have downloaded Soundshaper (**Soundshaper\_FULL.zip**) from the Ensemble-Software website ([soundshaper.net](http://soundshaper.net)).

If you have installed the **CDPRelease8\_PC** package downloaded from the CDP Downloads page, then you can ignore this section and proceed to the next section **CONFIGURE SOUNDSHAPER**.

- **FULL INSTALLATION:** unzip the downloaded zip file **SoundshaperFULL.zip** into any folder, e.g. \Downloads.  
This includes the latest CDP software, as well as Soundshaper.
- **SOUNDSHAPER INSTALLER:** click on the self-extracting installation file **InstallSoundshaper6.exe**.  
At the prompt, choose a folder within which to extract the files.

**This is your base CDP-folder. Take a note of it, as you will need it to configure Soundshaper.**

The default shown is the recommended base CDP-folder **C:\cdpr8**:



You can browse to a different drive or folder and place the files elsewhere if you like, e.g. in **E:\CDP** or **E:\Soundshaper**.

- If the selected folder does not exist, it will be created for you.
- Click **Unzip**. The installation extracts CDP programs to a subfolder called **\_cdp\\_cdprogs** and Soundshaper's files to a subfolder called **\Soundshaper6**.  
It also extracts data files to a subfolder called **\TXT**.
- **Please ensure that the full path to Soundshaper has no spaces.**

### In general, with Soundshaper and CDP:

- **Avoid folder paths with spaces.** This is because CDP programs run in a command-line environment, where such spaces may produce errors.
- Use only ASCII characters when naming folders (and possibly also files).
- CDP and Soundshaper do not use the Windows Program Files folder or the Windows Registry.

# INSTALLING AN UPDATE OR UPGRADE

The process is virtually the same as above, using the appropriate supplied installer .exe file.

## Before downloading:

- Optionally make a copy of your existing datafiles folder (e.g. <CDP-folder>\TXT) so that your own datafiles are not overwritten.

### Download the update/upgrade:

- Download and unzip the Update zip file (SoundshaperUD.zip), or Upgrade zip file (SoundshaperUG.zip), as appropriate.

### Double-click on the installer .exe file:

- Choose the CDP base folder (e.g. C:\CDPR8) to extract files into.  
If upgrading from CDP Release 7, allow the installer to create a new CDPR8 folder.
- Files of the same name that are to be replaced will be overwritten. Other files are untouched.
- New datafiles for CDP8 will be placed in <CDP-folder>\TXT.  
If that is not where you keep your datafiles, please copy the new subfolders to your own datafiles folder.

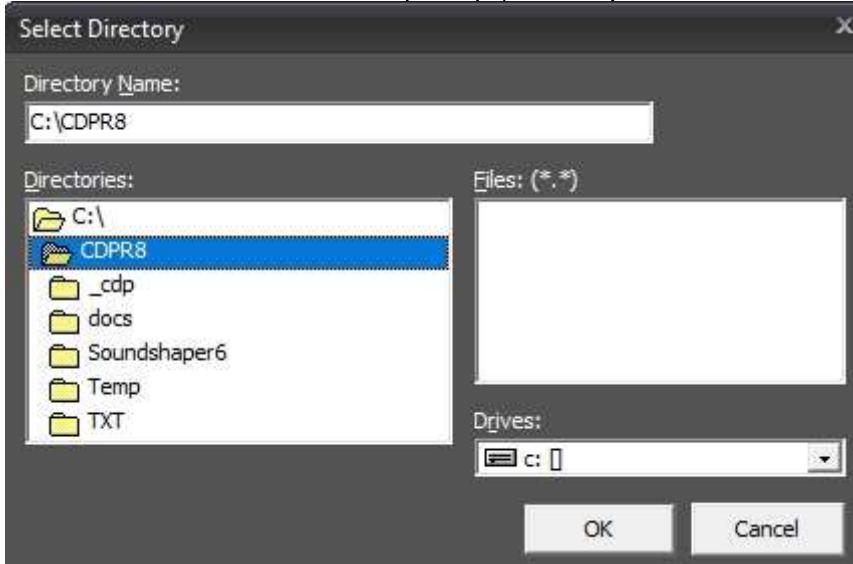
# CONFIGURE SOUNDSHAPER

Soundshaper uses a configuration file rather than the Windows Registry. When starting Soundshaper for the first time, you need to select various essential folders, so that the program can operate correctly.

- Double-click on **Soundshaper.exe** within your Soundshaper6 folder. You are asked to confirm that you have already installed CDP. Then this dialog appears:



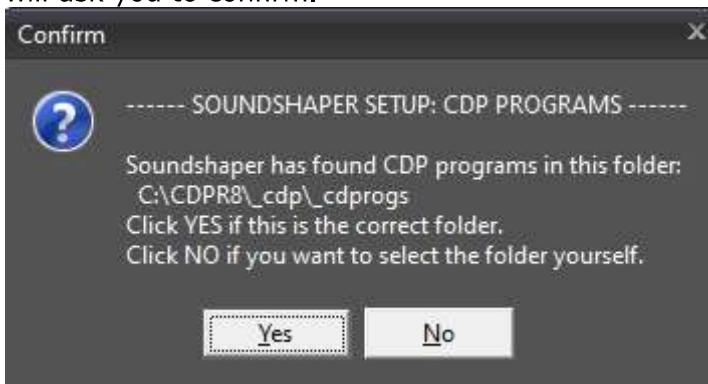
- **1. CDP FOLDER:** At the first prompt, select your CDP base folder (e.g. **C:\CDPR8**).



This is a folder selector, which starts in the level above \Soundshaper6. If the folder shown is NOT the one in which you have installed CDP and Soundshaper, then browse to the correct folder and select it.

**For Soundshaper to work correctly, it must know where to find the CDP base folder.** If you are not sure, close the program and re-start when you can select it successfully.

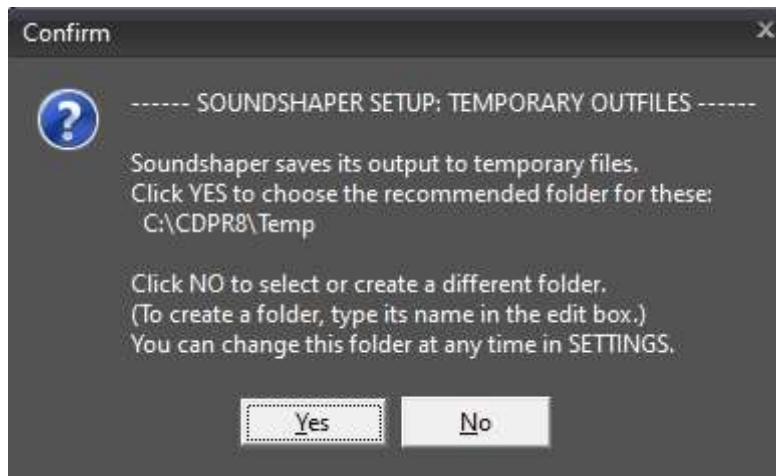
- **2. CDP PROGRAMS:** Soundshaper looks for the CDP programs folder and if it finds it, it will ask you to confirm.



If Soundshaper cannot find CDP programs, this is probably because you have not selected the correct CDP base folder.

Soundshaper will ask you to close the program and try again.

- **3. OUTPUT FILES:** Soundshaper asks you to select or create a **TEMPORARY OUTFILES** folder for output (sound)files.

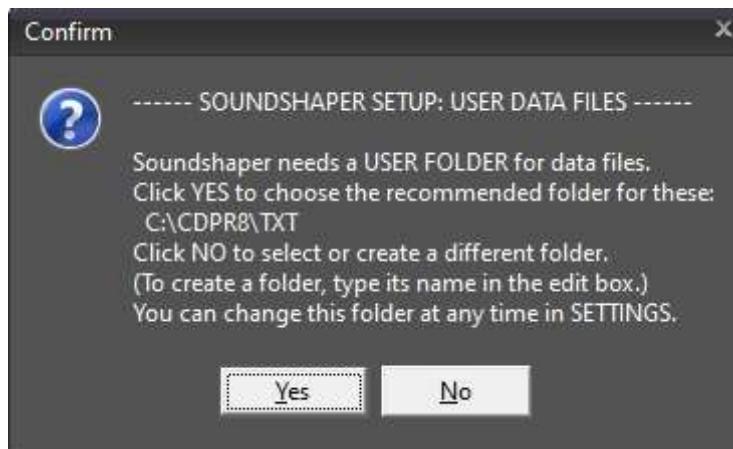


The default for this is **<CDP-folder>\TEMP**, but it can be a folder on any drive, e.g. **E:\TEMP**, **E:\SOUNDS\TEMP** etc. In fact, it is generally a good idea to put sounds on a different drive from Windows, if possible.

This folder path is stored in Soundshaper's **Settings** and can be edited there, as necessary. Any name is acceptable, **provided the path to the folder has no spaces. Otherwise the CDP programs will not run.**

TIP: If you have an SSD drive, use this for maximum speed.

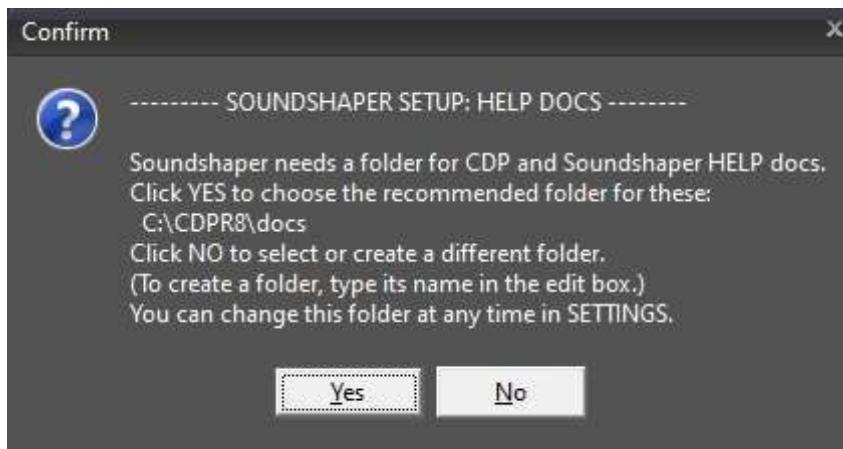
- **4. USER DATA:** This folder has already been created and populated as **\TXT**, in parallel with the folder **Soundshaper6**, that is, either within the **CDP folder** or the alternative you chose for extracting Soundshaper.
- The prompt asks you to confirm its location and suggests **<CDP-folder>\TXT**:



Browse as necessary to the correct folder and confirm. You can rename or relocate this folder later in **Settings**.

However, note that any supplied updates to datafiles and presets will be set up to install automatically into **<CDP-folder>\TXT**.

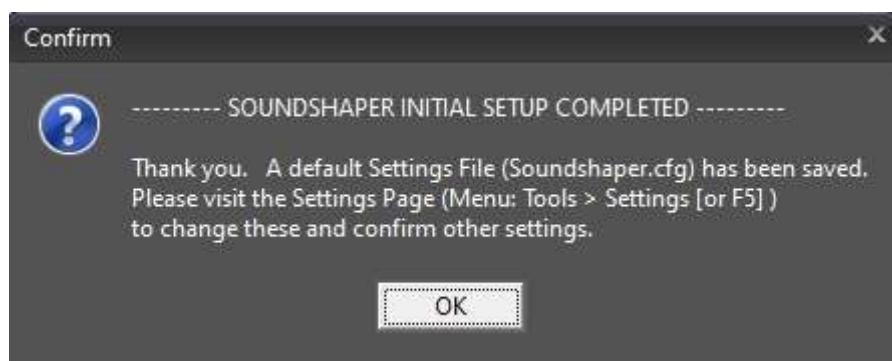
- **5. HELP DOCS:** This folder is principally for the CDP documentation, which CDP normally installs in <CDP-folder>\docs. The prompt should reflect this:



**This folder can be set later in Settings, if necessary.**

You are best to select \docs as the documentation folder, even if you have not yet downloaded the documentation or prefer to access the documentation online. When you click on a CDP program name within Soundshaper, it links to the **online** CDP documentation, if you have ticked Option 12 "Online CDP Help", otherwise it uses the stored docs, so it needs to know where these are located. The Soundshaper manual, when installed, should also be stored within this folder: \docs\Soundshaper.

When you have finished, Soundshaper creates a default Settings file **Soundshaper.cfg** in your Soundshaper6 folder:



## THIS COMPLETES THE BASIC INSTALLATION

However, you should now visit Soundshaper's Settings Page – see **Options | Settings (F5)** – to consider what other settings should be made, and save these to your Settings file.

**See the next section for details.**

You should especially consider setting a current **Project Folder**, which is used for quick loading and saving of files.

# SOUNDSHAPER SETTINGS & OPTIONS

The Settings Page is accessed from Soundshaper's Main Page in **OPTIONS | SETTINGS** (or F5), or by clicking the **SETTINGS Icon** in the Toolbar.

## INTRODUCTION

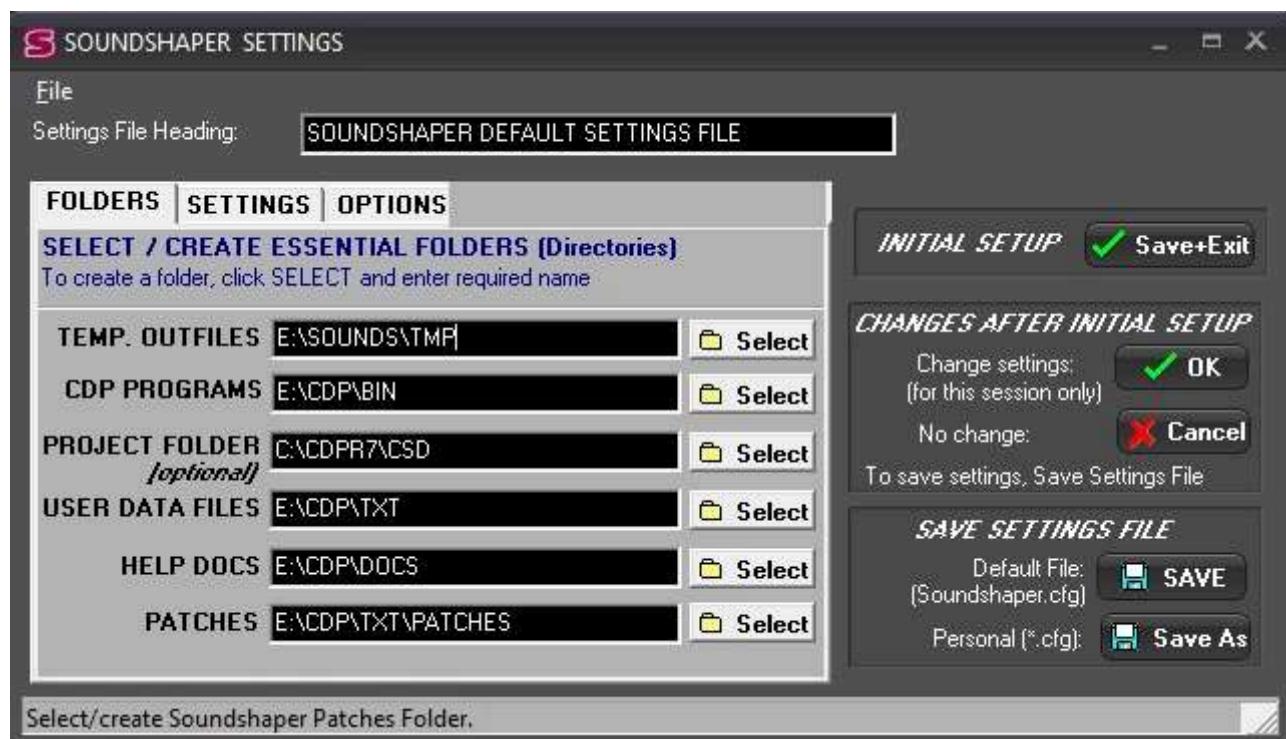
Soundshaper saves all of its settings to the Settings file **Soundshaper.cfg**. These settings are loaded to the **SETTINGS PAGE** on startup. A basic version of **Soundshaper.cfg** is created when you start Soundshaper for the first time.

The **SETTINGS PAGE** displays current settings, initially the contents of the basic Settings file. On setting up Soundshaper, you should edit this information as necessary and save it to **Soundshaper.cfg** (see **SAVING SETTINGS** below).

## OPTIONS

Included under SETTINGS are various **Options**, which are mirrored on the Main page: **Options Menu**. These can be changed during a session, as can other items in **SETTINGS**. Changes to **SETTINGS** can then be saved to file, if you wish.

## FOLDERS TAB



Soundshaper reads the following essential folders (directories) from its Settings file (**Soundshaper.cfg**). Most of these are subfolders of your CDP base folder, e.g. **C:\cdpr8** (called the **<CDP-Folder>** here). When you start Soundshaper for the first time, you have to enter the CDP base folder.

**To select a folder, click the SELECT button and browse to the folder.**

**To create a folder that does not yet exist, click SELECT and enter the path of the folder.**

- **TEMP. OUTFILES:** pre-set to **<CDP-Folder>\TEMP**. You can change it here. The folder into which Soundshaper's **Temporary Output files** are written. These files are cleared when you clear a patch or close the program. You should save output that you want to keep to some other folder. It is a good idea to keep sounds on a separate drive or folder, well away from Windows, so that accumulating soundfiles does not clog up Windows and any Windows crash doesn't affect your precious sounds. The location is unimportant, as long as Soundshaper knows where it is. **Avoid spaces in the folder path.**

**N.B. It is essential that Soundshaper can save files to this folder.** The program checks for write permissions and attempts to remove any read-only restrictions that the folder might have.

- **CDP PROGRAMS:** pre-set to <CDP-Folder>\\_cdp\\_\\_cdprogs. NORMALLY DO NOT CHANGE THIS.

The CDP programs ( .exe) are now installed to this fixed location.

In the above screenshot, the CDP Programs folder has been re-located. This works fine, as long as Soundshaper knows where it is.

**Soundshaper cannot operate correctly without a path to the CDP programs. There must be no spaces in the path.**

- **PROJECT FOLDER (optional):** pre-set to the **TEMP. OUTFILES** folder as an initial default only.

The Project Folder is linked to the Option "Use Project Folder" – see **OPTIONS** tab below. It can be changed at any time. The Project Folder is given priority for File-Open and File-Save operations. It is normal to re-set it to whatever project you are currently working on.

You may find it more convenient to store project datafiles within your Project Folder (or a subfolder of it), rather than in \TXT.

The Project Folder can also be changed on the Main Page, for immediate use within the current session (see **File | Select Project Folder** or Shift+Ctrl+F5). That does not change the folder selected here under **Settings**, which is mainly for saving to the Settings file **Soundshaper.cfg**.

Please note that **TEMP. OUTFILES** is simply an initial default setting, **not** a recommendation. The *Temp. Outfiles* folder is intended for Soundshaper's temporary files, not permanent ones.

- **USER DATA FILES:** the **USER FOLDER**, preset to <CDP-Folder>\TXT. You can change or rename it here.

This is an essential folder, used by Soundshaper as a central repository to store default data files, presets, patches, and other settings.

Default data files are kept in sub-folders named after each process (e.g. <User-Folder>\Blur). You can keep your own variants in these sub-folders or elsewhere, such as a Project Folder, as you choose. The location of the User Data folder is unimportant, as long as Soundshaper knows where it is. **Avoid spaces in the folder path.**

In a multi-user setup, each user should have his/her own **User Folder**, specified in a Personal Settings File (see below).

The User Folder can also be changed on the Main Page, for immediate use: see **File | Select User Data Folder** (or Ctrl+D). That does not change the folder selected here under **Settings**. Note that if the folder is changed, default datafiles and presets will not be found. While you might change the folder for a specific purpose, it is better to keep the central repository of files intact in one place and switch the Project Folder, as required.

- **HELP DOCS:** preset to <CDP-Folder>\Docs. This is the base sub-folder for the offline CDP documentation.

The Soundshaper manual should also be placed in this folder for links between the two to work, i.e. <CDP-Folder>\Docs\Soundshaper.

This folder could be placed elsewhere, but it is normal to keep all CDP folders together within the CDP base folder.

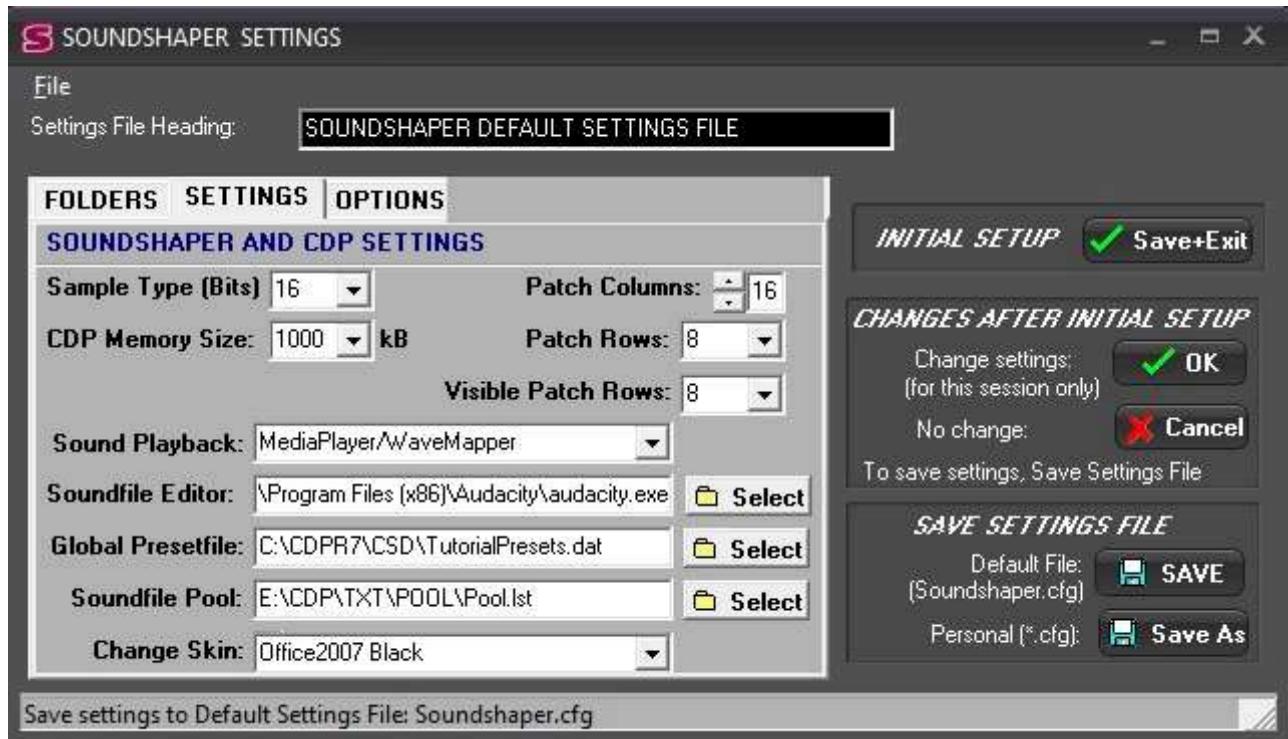
- **PATCHES:** preset to <User-Folder>\Patches. You can change it here.

This is a general folder for saving Soundshaper patches – chains of processes and their parameter values.

Project-specific patches are often best placed in a Project Folder, or in a process subfolder of the User-Folder, but this folder allows you to store general ones in the same place.

**N.B. If you change this folder, the default one will still be used by Soundshaper and will re-generate as necessary.**

# SETTINGS TAB



The **Settings Tab** contains settings for CDP and Soundshaper:

- **SAMPLE TYPE (bits):** the selection here is between **Integers** ('16') and **Floating-point** ('32').  
The values offered are 16 and 32: '32' stands for 32-bit floating-point. '16' stands for Integers: 16-bit/24-bit/32-bit, so "16-bit" is not to be taken literally.  
When a soundfile is selected in Soundshaper, it is converted to a temporary **.wav** file (.aif/.aifc sources are converted to .wav).
  - If you have selected '32' here and your source is an Integer type (e.g. 16-bit 44.1KHz), it will be converted to 32-bit Floating Point internally, before being processed.
  - If you have selected '16' here and your source is Floating-Point, it will be converted to 24-bit Integer (the default), before being processed.
  - Otherwise, the type is preserved, as CDP operates on the basis of **OUTFILE\_TYPE = INFILE\_TYPE**.For example, a 24-bit/96KHz Infile will normally be processed to give a 24-bit/96KHz Outfile.
- **CDP MEMORY SIZE:** Default: 1000kB (1 MB). This is a **CDP ENVIRONMENT VARIABLE**. If a particular CDP program will not run for lack of memory, alter the Memory size temporarily and click OK to quit the page.  
To alter it permanently, save the Settings to the **Soundshaper.cfg** file.
- **PATCH COLUMNS:** Choose how many Patch columns you want for the Patchgrid (max. 99). The default is 16.  
This value can be changed during a session, provided that the Patchgrid has been cleared first.  
Only 12 will be displayed at any one time: use the scrollbar to access the others.
- **PATCH ROWS:** Choose how many Patch rows you want for the Patchgrid (max. 16). The default is 8.  
This value can be changed during a session, provided that the Patchgrid has been cleared first.
- **VISIBLE PATCH ROWS:** Choose how many Patch rows you want to be visible at any one time. The default is 8.  
The other rows are accessed by scrolling down (max. 16: must be <= **PATCH ROWS**).

- **SOUND PLAYBACK:** Use the default setting **MediaPlayer/WaveMapper** if possible. This selects whatever you chose as your default audio output in Windows' CONTROL PANEL and enables Soundshaper's internal Player to use this output.

The other values in the drop-down box have been found by reading the available output devices on your system. These numbers may be needed if you want to use the CDP programs **PAPLAY** (for soundfiles) or **PVPLAY** (for soundfiles and .ana files).

- **SOUNDFILE EDITOR (optional):** Browse to select an optional external soundfile editor here, e.g. Audacity.

The external editor is launched from the menu item **Tools | External Soundfile Editor**

(shortcut **F2**), or by clicking the external editor icon in the toolbar: 

For further details, see **External Editor**.

In addition, you can send a soundfile to up to 10 different programs via the **FAVOURITES** list.

- **GLOBAL PRESETFILE (optional):** Optionally select any preset file you wish to be global. This is linked to the Option "Use Global Presets" – see **OPTIONS** tab below.

Selecting a file here does not mean that you have selected to use Global Presets, nor does it stop you selecting a different Preset file on the Main page or a Parameter Page when needed.

- **SOUNDFILE POOL:** pre-set to <USER-FOLDER>\POOL\Pool.lst.

This is the default Pool File that will be loaded into the File List on startup. Initially, the list will be empty.

The File List appears in the **Files Panel** on the Main Page and is a quick way to load faourite files or those you accumulate during a project.

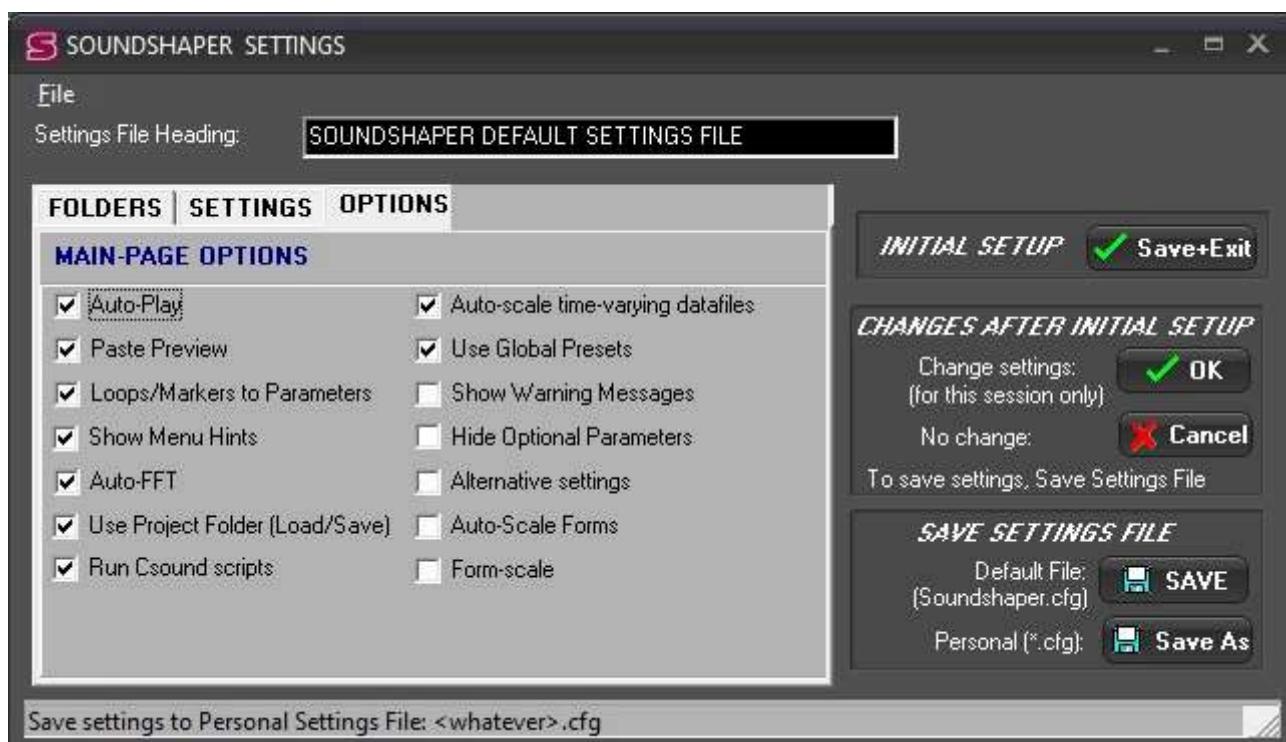
You can load a new list into the **Files Panel**, as required (e.g. by Drag+Drop).

- **CHANGE SKIN:** a drop-down list of the available Skins, or "Themes". The current default, Office2007 Black, is pre-selected.

You can also change the Theme on the Main Page: **File | THEME**.

## OPTIONS TAB and MAIN PAGE: OPTIONS

The checkboxes on the **OPTIONS Tab** are mirrored on the Main Page menu: **OPTIONS**. Here you can set the default option settings which are loaded from the Settings file **Soundshaper.cfg** on startup.



**Changes made here are reflected on the Main Page, after closing the Settings Page**  
(unless you click CANCEL).

**Changes to Options on the Main Page are sent to the Settings Page, when you next visit it.** If you do not do so, and do not save altered Settings during a session, any Option changes made on the Main Page apply only to the current session and are lost on Exit.  
**The keyboard shortcuts below refer to the Option settings on the Main Page.**

- **AUTO-PLAY** (Shift+F1): **Recommended**

If set, soundfiles and analysis files are played immediately when selected or created.

- **PASTE PREVIEW** (Shift+F2): **Recommended**

Used when processing part of a sound or (spectral) file, using Loop Points or Markers (see **Process Segment**). If this is set, then the processed segment is displayed in context (as it will sound within the original file) prior to selecting **PASTE**. If not set, only the processed segment is displayed.

- **LOOPS / MARKERS TO PARAMETERS** (Shift+F3): **Recommended**

Sends relevant times from Loops or Markers to the Parameter Page, if **Process At Loops** or **Process At Markers** is chosen.

This is for 'timed' processes for which the whole file is used, but which have one or more times as parameters, e.g. START and END times. Soundshaper knows which these are and sends the Loop or Marker times automatically. For details see **Process Segment: Timed Processes** and also **Appendix: Timed Processes**.

- **SHOW MENU HINTS** (Shift+F4): **Normally set**

If set, Main-page Process menu items are accompanied by a Hint, displayed in the Status Panel at the bottom of the page, and also in the Title Bar. The Hint gives a brief description of the process, which can help you choose whether it is suitable or not. A separate panel shows the corresponding CDP function name. Clicking on this panel links to the appropriate CDP Help file.

- **AUTO-FFT** (Shift+F5): **Normally set**

If set, this option allows spectral analysis files (**.ana**) to be converted into soundfiles for playing purposes. You might switch it off if the output **.ana** file is likely to be very long and you are going to process it further in the frequency domain.

- **USE PROJECT FOLDER** (for Load/Save) (Shift+F6):

**If set**, selecting File Open or Save starts in the Project Folder you selected in the Folders tab. This option can be set even if you have not selected a Project Folder (other than \TEMP).

**If not set**, Open/Save operations begin in the last-used folder. This can have advantages if you have opened a source file by drag and drop from a folder open in File-Explorer, and then processed it: the folder selected for saving the result will be the same one.

- **AUTO-SCALE TIME-VARYING DATAFILES** (Shift+F8): **Normally set**

Setting this option checks the Auto-Scale checkbox on the Parameter Page. (Checking Auto-Scale on the Parameter Page does not affect the setting on the Main Page or here, however.)

The option causes the time-values of breakpoint files to be re-scaled in proportion to the final value, which is adjusted to the end of the file.

When auto-scaling is not appropriate (especially if the last time-point was not at the end), you can uncheck the option on the Main Page, or on the Parameter Page before loading the datafile. However, having it pre-set here saves setting it every time it would be useful.

The option has no effect on text files that are not recognised as being time-varying (even if they consist of a series of times).

- **USE GLOBAL PRESETS** (Shift+F9):

Checking this option allows a selected preset file to be "global", that is, to be applied to every parameter page. As only those presets relevant to the process are actually displayed, a global preset file permits a collection of presets from a number of processes to be available wherever they apply.

You can nominate the global preset file in the Settings tab (see above), but you can also assign it on the Main page.

This option is the 'enabler', over-riding the local preset file for each process. You can also switch it on or off on the Parameter Page with the local option **Use Global Presets** (Shift+F9).

- **SHOW WARNING MESSAGES** (Shift+F10): **Normally not set**

If **not** set (the default), CDP Warning messages will not be shown in the Report Window.  
If the option is checked, you will get interesting technical gems such as:

**WARNING: Negative frq(s) in source data: rectified.**

**CDP Error Messages are always shown and are unaffected by this option.**

- **HIDE OPTIONAL PARAMETERS** (Shift+F11):

If set, CDP's Optional Parameters are hidden on the Parameter Page.

You can also switch the option on or off on the Parameter Page with the local option **Hide Optional Parameters** (Shift+F11).

**Hidden parameters cannot be read, so are not used in the process, even if included in a preset.**

- **ALTERNATIVE SETTINGS: Normally not set**

This option does not appear on the Main Page, but is set in **SETTINGS | Options**.

On startup, if the option has been saved to the default Settings file (Soundshaper.cfg), the user can select an alternative settings file (.cfg). See **PERSONAL SETTINGS FILES** below.

- **AUTO-SCALE FORMS:** Legacy option: normally not set

On some older PC systems and resolutions, the forms and most Soundshaper components were better presented if rescaled.

The option was designed to achieve this.

**Do not set both Form-Scale and Auto-scale..**

- **FORM-SCALE: Legacy option: normally not set**

On some older PC systems and resolutions, the form needed to be re-scaled, but not the components on it.

With more recent versions of Windows, this is probably not an issue.

**Do not set both Form-Scale and Auto-scale..**

**Windows 8 scaling:** apparently, by default Windows 8 uses a 150% scaling of fonts on high resolution laptops. You need to switch this off for Soundshaper to look right.

# SAVE SETTINGS

Use the buttons at the right of the **SETTINGS PAGE** to save settings, either to file, or just for the current session:



- **INITIAL SET-UP:** click the **SAVE and EXIT** button.  
If a **Soundshaper.cfg** file exists, a dialog asks if you want to save/overwrite it. Click YES.
- **SAVE DEFAULT FILE:** click the **SAVE** button.  
A dialog asks if you want to save/overwrite any existing **Soundshaper.cfg** file. Click YES.
- **PERSONAL SETTINGS FILE:** click the **SAVE AS** button.  
Save the settings to a filename of your own choice.  
See **PERSONAL SETTINGS FILE** below.
- **CHANGE SETTINGS FOR THIS SESSION:** click the **OK** button.  
The settings are saved and applied by Soundshaper, but are not saved to file and are lost on Exit.
- **NO CHANGE:** click the **CANCEL** button. Any changes made to Settings are lost.

## PERSONAL SETTINGS FILES

If you wish, you can edit Soundshaper's default settings and save these to an alternative Personal Settings File with any name.

You can load alternative settings from a Personal Settings File in two ways:

- On the SETTINGS page, select **File | Open Personal Settings File** or **Ctrl+F**. Then click the **OK** button for the settings to take effect for the current session (only).  
**OR**
- In **SETTINGS | Options**, check the **Alternative settings** option. Save this (with other settings) to the default Settings file **Soundshaper.cfg**.  
When Soundshaper starts up, it always reads the default file **Soundshaper.cfg** first and expects its essential folders to exist. Then, if the **Alternative Settings** option has been set, it will open a file-selector to enable an alternative Settings file to be loaded.

This facility was really designed for multiple users within an institutional setting, where each user has his/her own Temp. Outfiles folder, User Folder and Option choices. However, Personal Settings Files can also be useful for different projects, if these have different folders and options from each other.