



# **kronos.factory Version 1.2.03**

## **User Manual**

(C) Derek Cook 2019-2026

[www.xfactory-librarians.co.uk](http://www.xfactory-librarians.co.uk)

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# What's New in knonos.factory 1.2.03 (01/01/2026)

- Application rebuild to stay current with the latest version of Java 21, required libraries and build tools.

## Previous Versions

### V1.2.02 (23/12/2023)

- Provided a workaround for the OSX Java file selector bug that reports a non existent directory when you have double clicked a directory to select it.
- Improved registration process. You now no longer have to quit the program to activate the disabled features once registered and activated.
- Application rebuild to stay current with latest version of Java 17, required libraries and build tools.

### V1.2.01 (20/12/2022)

- You can now double click in a table to select lower level tables rather than using the context menu. (e.g. Program Bank Collection, Program Banks) and knonos.factory will move down to the next level until you get to discrete objects (e.g. Program) You can double click with the ALT key (OPTION key on OS X) held down to traverse upwards
- Fixed a "class cast" exception bug when copying a selection of set lists.
- Fixed a bug in drag and drop (most noticeable in knonos.factory and montage.factory due to file sizes) where drag and drop operations were occasionally failing and providing an error message about copy and paste not being possible.
- Fixed a bug where using the View/Refresh menu option killed drag and drop.
- Updated the status bar's file name display to show a truncated path (with the filename fully visible) if the the full path will not fit in the available space.

### kronos.factory V1.2.00 (08/05/2022)

- Updated how the applications are built. The Java Runtime is now embedded and updated to Java 17 as the minimum version. There is no longer a need for a standalone version of Java to be installed
- New installers for OS X (DMG), PC (MSI) and Linux (DEB) and basic ZIP and TAR packages.
- The OS X DMG package is notarized for compatibility with the OS X security model.

### V1.1.01 (05/07/2020)

- Fixed problem on OS X Mojave and Catalina which was preventing access to protected folders.

### V1.1.00 (18/04/2020)

- The Minimum Java Version is now Java 11, and I have rebuilt the applications with the latest support libraries. Please see the [Java Support](#) page on the website for more details.
- The applications support iMac Retina displays.

### V1.0.00 (01/03/2019)

- First Release

### V0.5.00 (28/12/2018)

- Added in support to migrate between earlier to later PCG file formats
- Wave Sequences further decoded to show the Wave Sequence steps

### V0.4.00 (21/12/2018)

- Completed decoding of 1.0, 1.5, 2.0 and 3.0 PCG formats, and extensive file read/write testing.

### V0.3.00 (13/12/2018)

- First pass of decoding legacy PCG files completed, and general bug fixing

### V0.2.01 (24/09/2018)

- Drag and Drop of Combi Timbres now working
- Corrected problem with import of PCG files that do not correctly set the size of data chunks
- The Application is now built using new build tools and libraries, as some of the ones I was using were obsolete and no longer supported. I am changing these as part of longer time migration plans to Java 9 and above.
- The Minimum Java Version is now Java 8, as Java 7 as Oracle no longer provide public updates to Java 7.

### **V0.2.00 (28/08/2018)**

- Drag and drop editing between files now completed down to Level 3 (e.g. Program, Combi), including copying of referenced objects

### **V0.1.00 (21/02/2018)**

- Drag and drop editing within a file completed down to Level 3 (e.g. Program, Combi)

### **V0.0.02 (28/12/2017)**

- First set of editing features implemented.

### **V0.0.01 (04/12/2017)**

- Improved decoding of referenced objects

### **V0.0.00 (09/09/2017)**

- First version with basic decoding of PCG Files completed

# Installation and Configuration of kronos.factory

kronos.factory is downloaded as a self installing file, so installation is automatic, and for most users little else, if anything, needs to be done to get up and running.

A native installer for Windows is also available.

Simply download the installer from the [x.factory Products Page/a> for your platform \(PC, OS X or Linux\) and run the installer, following the installer prompts.](#)

# Registering kronos.factory

You need to register kronos.factory to allow data to be saved to your computer and for [Library Support](#) to be enabled.

Please refer to the [x.factory Librarian Registration Page](#) for details on how to register kronos.factory.



# Running kronos.factory

Starting up kronos.factory is as simple as starting any application, simply double click on the icon and you're away.

If you have [registered](#) kronos.factory, then the Library will be created (if it doesn't already exist) and opened.

During start-up, a "Splash Screen" is shown. This stays visible until a few seconds after the program has loaded and is ready for use, but can be dismissed at any time by clicking on the Splash Screen.

kronos.factory remembers the size and position of the main window between sessions, so the main window will be sized and positioned as you left it the last time.

## PC

Simply double click on the program icon for the program either in an Explorer shell, or from the desktop if you let the installer place a shortcut there.

You can also select the program from the **Start Menu**. By default, kronos.factory can be found under the **x.factory Librarians** Program Group.

## MAC OS X

Navigate to the **Applications** folder in **Finder** and double click the kronos.factory application.

You can also create "**Aliases**" of the application and place them anywhere you wish, such as on the desktop

To make an alias you can choose any one of the following methods:

- Click the kronos.factory item you have just identified and hold down the mouse button. Then, while holding down the **Command** and **Option** keys simultaneously, drag the item to where you want the alias to appear then let go of the mouse button and finally release the two keys. This will create an alias at your desired location. While dragging, the 'ghosted' item will display a shortcut arrow which will remain on the aliased icon when it has been created.
- Hold down the **Ctrl** key, and then click the kronos.factory item as identified previously. The context menu will be displayed, and one of the choices will be **Make Alias**. Click that option, and then release the key. The kronos.factory alias will appear next to the original item and can be dragged to your location of choice.
- Select the kronos.factory item you identified previously by clicking it once then press **Command-I** (lowercase L). The kronos.factory alias will appear next to the original item and can be dragged to your location of choice.
- Click the kronos.factory item once to select it, and then from the **File** menu, select **Make Alias**. The kronos.factory alias will appear next to the original item and can be dragged to your location of choice.

Note that if your alias does not have a small arrow in the lower left corner then you have not correctly created an alias and have probably just dragged the application launcher to a new location. If so, drag it back to the Application folder and start again.

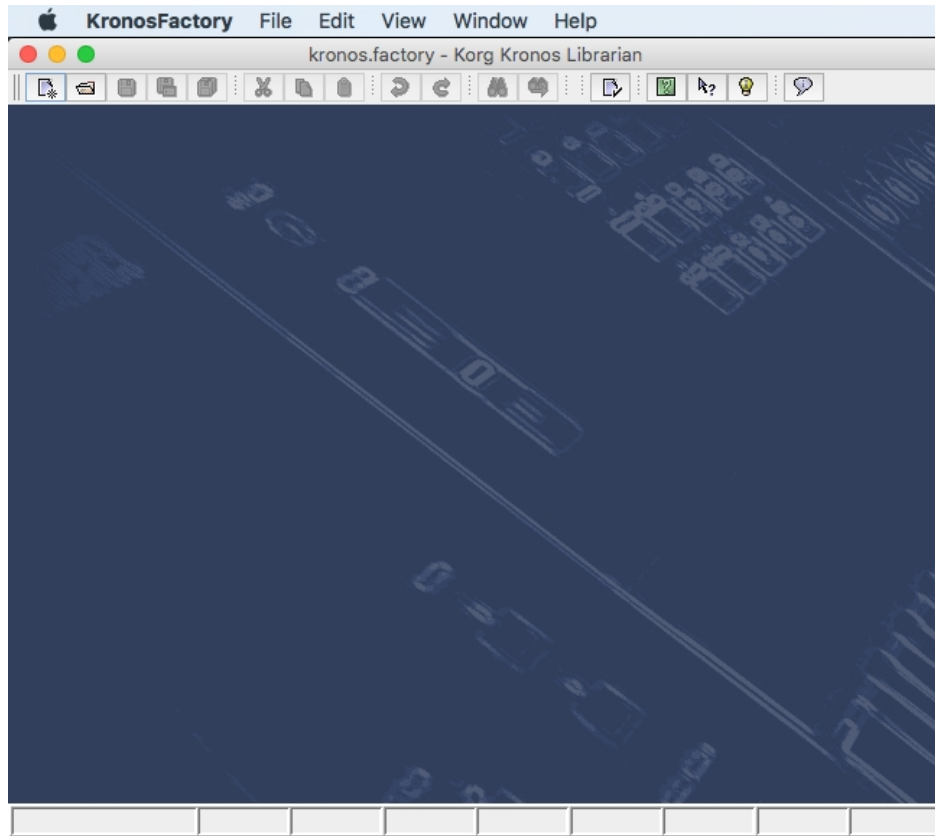
## Command Line

You can also startup kronos.factory from a command shell (e.g. MsDOS). Simply change directory to where kronos.factory is located and type the following:

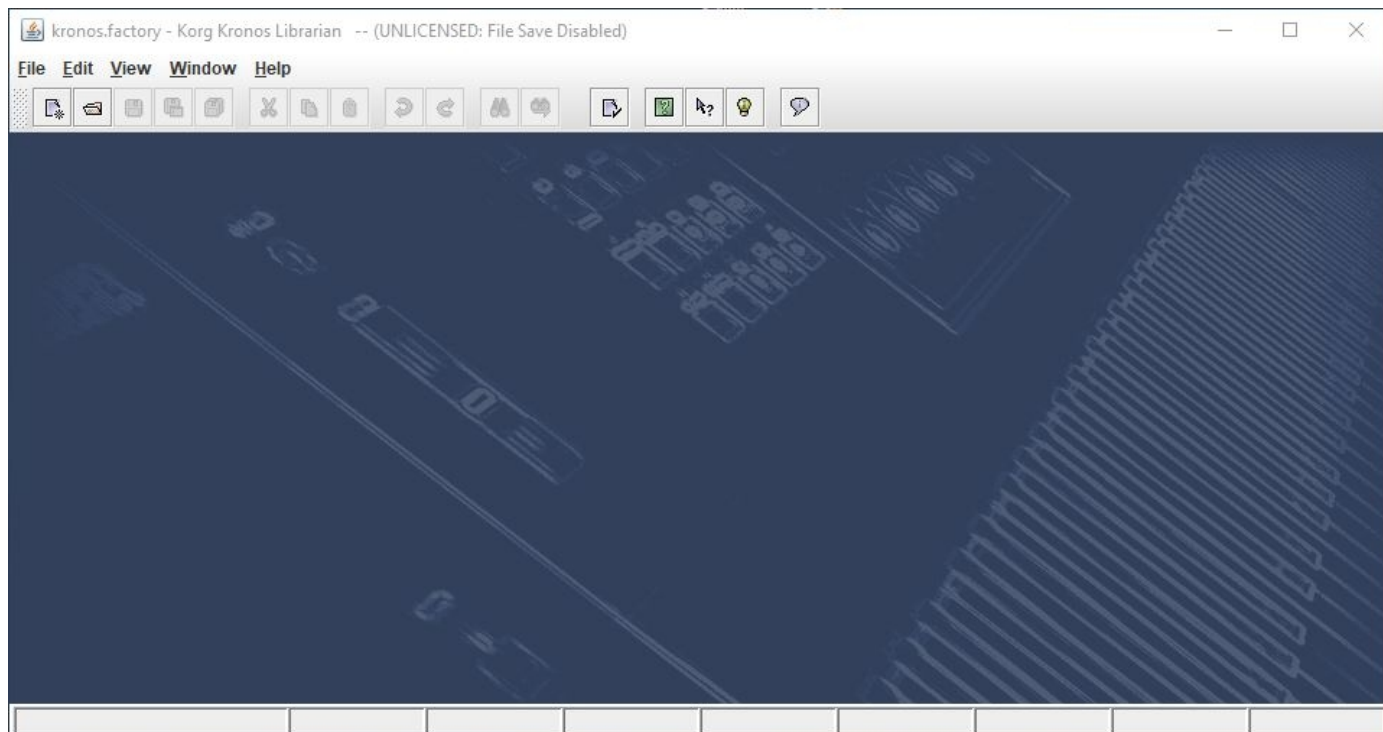
```
java -jar exfactory.jar
```

# The kronos.factory Window

The main kronos.factory window on OS X looks like this



The main kronos.factory window on Windows looks like this



The kronos.factory user interface is a Multiple Document Interface (MDI), which allows you to have more than one file open at a time.

The interface is divided into the now familiar layout of (from top to bottom):

- The Title Bar
- The [Menu Bar](#) (on OS X this appears at the top of the screen)

- The [Tool Bar](#)
- The [Desktop](#)
- The [Status Bar](#)

## Menu Bar

The kronos.factory menu bar provides a means of selecting common operations; typically those that affect a complete file, or those that don't fit naturally upon a context sensitive popup menu.

[Keyboard Shortcuts](#) are provided for common operations.

kronos.factory also provides context sensitive popup menus, which are accessible by right clicking over data shown in a [Child Window](#). Naturally the contents of the popup menus varies according to the type of data over which the menu was popped up.

## Main Menu Headings

The following menu headings are available.

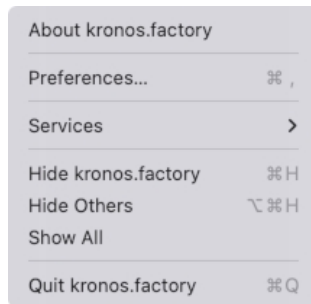


KronosFactory File Edit View Window Help

- [File Menu](#)
- [Edit Menu](#)
- [View Menu](#)
- [Window Menu](#)
- [Help Menu](#)

## The Application Menu

The **Application** menu is available on OS X to provide a native look and feel for OS X users; some menu options from the standard menus are migrated here (where OS X Users would expect them to be).



### About kronos.factory...

This menu provides the standard OS X application menu, with the following kronos.factory specific options along with the standard OS X options for Services (none defined for kronos.factory) and Window control.

Displays the kronos.factory [About Dialog](#), which provides some basic information about the program, such as the version number.

### Preferences ...

Opens the kronos.factory [Preferences Dialog](#).

### Quit kronos.factory

Exits the kronos.factory application.

If any files have been modified and have not been saved, you will be given the option of saving them.

## The File Menu

The **File** menu provides the following options (OS X and Windows versions are shown):

New ...	⌘N	New ...	Ctrl-N
Open ...	⌘O	Open ...	Ctrl-O
Close	⌘W	Close	Ctrl-W
Close All	⇧⌘W	Close All	Ctrl+Shift-W
Save	⌘S	Save	Ctrl-S
Save As ...	⇧⌘S	Save As ...	Ctrl+Shift-S
Save All ...	⌘L	Save All ...	Ctrl-L
Open Work Space...	⌘O	Open Work Space...	Ctrl+Alt-O
Save Work Space ...	⌘S	Save Work Space ...	Ctrl+Alt-S
Export to		Export to	
1: /Development/Kronos/Welsh Floyd/Welsh Floyd.PCG		Exit	
2: /Development/Kronos/Carreg Ddu/Carreg Ddu.PCG		1: E:\Patch Archive\Welsh Floyd\Welsh Floyd.PCG	
3: /De.../KAPRO/KRS-79 EXi Atmospheres/KRS-79.PCG		2: E:\Patch Archive\Carreg Ddu 1\Carreg Ddu.PCG	
4: /De.../Kronos/KRS-54 Virtual Analog/KRS-54.PCG		3: E:\Backups\161226 BACKUP\161226 BACKUP.PCG	
5: /Development/Kronos/Welsh Floyd Small.PCG		4: E:\Kapro\KRS-33 EXi Atmospheres 3\KRS-33.PCG	
6: /Development/Kronos/DRUM PATTERN TEST.PCG			
7: /Development/Kronos/DRUM KIT TEST.PCG			
8: /Development/Kronos/INIT1.PCG			
9: /De.../Kronos/CONTENT TEST/Baseline/Baseline.PCG			

### New ...

Shows the [Create New File](#) Dialog, which allows you to create a new file.

### Open ...

Shows the [Open File](#) Dialog, which allows you to open a specified file.

### Save

Saves a file using its current name.

This option is only enabled if your copy of kronos.factory is [registered](#).

If the file in question is a newly created file, then the [Save File](#) Dialog is brought up to allow a name to be entered.

### Save As ...

Saves the selected file after a name has been entered in the [Save File](#) Dialog.

This option is only enabled if your copy of kronos.factory is [registered](#).

### Save All

Saves all files that have been modified using their current names.

This option is only enabled if your copy of kronos.factory is [registered](#).

### Open Workspace ...

This option allows you to select a previously saved [Workspace](#), which is a Collection of open windows, and their size and position within the main kronos.factory window.

When you select this option, a dialog opens which allows you to select an kronos.factory workspace file (EXW).

### Save Workspace ...

This option allows you to save the current size and position of the main kronos.factory window, and the arrangement of the open windows within kronos.factory to a [Workspace](#) file.

This option is only enabled if your copy of kronos.factory is [registered](#).

## Export to

This feature is currently not supported and is disabled. It will be supported in a future version

If you select one of the export sub options in a licensed version of kronos.factory, you will get the following error dialog



## Exit

This menu option is not available if the host operating system is OS X. On OSX there is a **Quit** menu option in the [kronos.factory Application Menu](#).

Exits the kronos.factory application.








If any files have been modified and have not been saved, you will be given the option of saving them.

## Recently Opened Files

The file menu also contains a list of recently opened files to allow easy access to files that you are currently working upon. The recently open files list appears at the bottom of the file menu.

## The Edit Menu

The **Edit** menu provides the following options:

 Undo	⌘Z
 Redo	⌘Y
Clear Undo Buffer	
<hr/>	
 Cut	⌘X
 Copy	⌘C
 Paste	⌘V
<hr/>	
 Find ...	⌘F
 Find Next	F3
Find Category ...	⇧⌘F
Find Next Category	⇧F3
Goto ...	⌘G

### Undo

Undoes the previous edit stored in the [Undo Buffer](#).

### Redo

Redoes the next edit stored in the [Undo Buffer](#).

### Clear Undo Buffer

Clears the [Undo Buffer](#).

### Cut

Places a copy of the selected Object(s) onto the [Clipboard](#) and deletes the selected Object(s) from the file.

### Copy

Places a copy of the selected Object(s) onto the [Clipboard](#).

### Paste

Copies the Object(s) on the [Clipboard](#) into the highlighted location within the current file. If you cannot perform a paste at this location (e.g. trying to copy a Set List onto a Program) then this menu item is disabled.

### Find ...

kronos.factory supports the ability to find Objects either by name or by category (where an Object supports categories, such as Programs and Combis).

Searches start from the currently selected Object.

Selecting the **Find ...** option brings up the [Find](#) dialog, that allows you to specify the string to search for, along with options that can be used to refine the search.

### Find Next

If you have defined the **Find** criteria within the **Find** dialog, then this option will repeat the search using the same criteria.

### Find Category ...

You can also search by category by selecting **Find Category ...** option, which brings up the [Find Category](#) Dialog.

### Find Next Category

If you have defined the **Find Category** criteria within the **Find Category** dialog, then this option will repeat the search using the same criteria.

### Goto ...

Selecting this option brings up the [Goto](#) Dialog, which allows you to quickly navigate to a numbered Object.



## The View Menu

The **View** menu provides the following options:

✓ Tool Bar ✓ Status Bar	✓ Tool Bar ✓ Status Bar	✓ Tool Bar ✓ Status Bar
✓ No Split Horizontal Split Vertical Split	No Split ✓ Horizontal Split Vertical Split	No Split Horizontal Split ✓ Vertical Split
✓ Tree Table	Left Pane ▶ Right Pane ▶	Left Pane ▶ Right Pane ▶
Refresh	Refresh	Refresh

Note how some of the options change depending on whether or not the [Child Window](#) is split.

When the [Child Window](#) is split the **Left/Top Pane** and **Right/Bottom Pane** menu options have the following sub menu.

✓ Tool Bar ✓ Status Bar	
No Split ✓ Horizontal Split Vertical Split	
Left Pane ▶	✓ Tree
Right Pane ▶	Table
Refresh	

### Tool Bar

When checked the kronos.factory [Tool Bar](#) is visible.

### Status Bar

When checked the kronos.factory [Status Bar](#) is visible.

### No Split

When checked the current [Child Window](#) is not split.

### Horizontal Split

When checked the current [Child Window](#) is split horizontally.

### Vertical Split

When checked the current [Child Window](#) is split vertically.

### Tree

When checked the main/left/top pane in a [Child Window](#) displays data in a [Tree View](#).

### Table

When checked the main/right/bottom pane in a [Child Window](#) displays data in a [Table View](#).

### Refresh

Refreshes all open [Child Windows](#).

This command is provided in case the screen is not properly updated following an edit operation. There are a couple of odd bugs I cannot track down on screen updates. So if you come across them as well, then this command will force a redraw of the windows.

### Preferences ...

This menu option is not available if the host operating system is OS X. On OSX there is a **Preferences...** menu option in the [kronos.factory Application Menu](#).

Opens the kronos.factory [Preferences Dialog](#).

## The Window Menu

The **Window** menu provides the following options:

Tile Horizontal	
Tile Vertical	⌘⇧V
Maximise Windows	⌘M
Restore Windows	⌘R
Minimise Windows	⌘I
Carreg Ddu.PCG	
Welsh Floyd.PCG	

In the example given above, you'll see that after the predefined menu options there are menu options that allow you to select the windows currently open within kronos.factory (Carreg Ddu.PCG an Welsh Floyd.PCG in our example menu).

### Tile Horizontal

Arranges all non-minimised [Child Windows](#) along the horizontal axis.

### Tile Vertical

Arranges all non-minimised [Child Windows](#) along the vertical axis.

### Maximise Windows

Maximises all [Child Windows](#) so that they all occupy the size defined by the desktop.

### Restore Windows

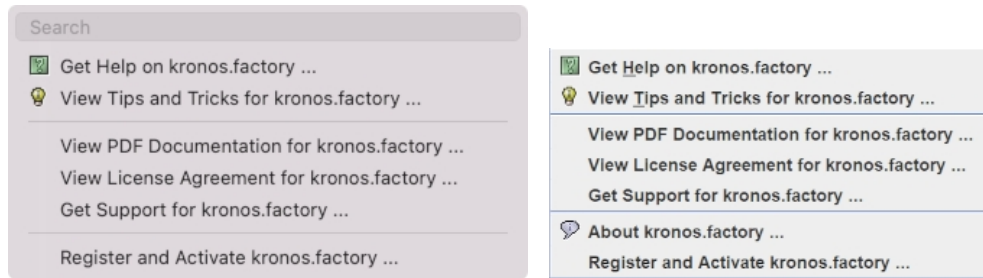
Restores all maximised/minimised [Child Windows](#) to their normal state.

### Minimise Windows

Reduces all [Child Windows](#) to their iconised state.

## The Help Menu

The **Help** menu provides the following options (OS X and Windows versions are shown):



### Search

OS X only. This is a standard OS X Menu function currently not working with kronos.factory. One day....

### Get Help on kronos.factory ...

Displays the kronos.factory [Online Help](#) system.

### View Tips and Tricks for kronos.factory ...

Displays the kronos.factory [Tips and Tricks](#) Dialog.

### View PDF Documentation for kronos.factory ...

Displays the PDF documentation for kronos.factory. Note that there needs to be a registered viewer for PDF files on your system for this command to work

### View License Agreement for kronos.factory ...

Displays the kronos.factory [License Agreement](#) in a dialog box.

### View License Agreement for kronos.factory ...

Provides a link to the [x.Librarian's Support Page](#).

### About kronos.factory ...

This menu option is not available if the host operating system is OS X. On OSX there is an **About kronos.factory** menu option in the [kronos.factory Application Menu](#).

Displays the kronos.factory [About Dialog](#), which provides some basic information about the program, such as the version number.


















### Register and Activate kronos.factory ...

Displays the kronos.factory registration and activation Dialog.


See the [Registration Section](#) for details of how to register kronos.factory.


## Tool Bar

The Tool Bar contains buttons for common operations, such as opening and saving files.

-  Displays the [New File](#) Dialog to allow you to select the type of file to create
-  Displays the [Open File](#) Dialog to allow you to select a file to open
-  [Saves](#) the currently selected file
-  Displays the [Save As](#) Dialog to allow you to select a different name for the currently selected file
-  [Saves](#) all the open files to disk
-  Cuts the selected Objects and places them on the [Clipboard](#)
-  Copies the selected Objects and places them on the [Clipboard](#)
-  Pastes the contents of the [Clipboard](#) to the current selection. If you cannot perform a paste at this location (e.g. trying to copy a Set List onto a Program) then this menu item is disabled
-  [Undos](#) the previous edit
-  [Redos](#) the previous edit
-  Displays the [Find](#) Dialog to allow you to define the search criteria and then search for the first occurrence
-  Searches for the next occurrence of the search criteria defined in the [Find](#) Dialog
-  Displays the [Preferences](#) dialog where you can configure kronos.factory
-  Displays the kronos.factory [Online Help](#) index page
-  Enables [Context Sensitive](#) Help
-  Displays the [Tips and Tricks](#) Dialog
-  Displays the [About](#) Dialog

The Save buttons are only enabled if kronos.factory is [Registered](#).

If the SHIFT key is held down when clicking on the  (Find) button, then the [Find Category](#) Dialog is displayed instead.

If the SHIFT key is held down when clicking on the  (Find Next) button, then a Find Category search is performed instead.

The Tool Bar can be dragged and made a floating toolbar by clicking and dragging the handle to the left of the Tool Bar.

The Tool Bar can also be dragged to a different window border other than the top border.

The Tool Bar can be hidden/unhidden by the **Tool Bar** menu option on the [View](#) menu.

The Tool Bar whilst floating can be docked once more by closing it.

## Desktop

The Desktop portion of the window is where the Kronos data is portrayed. Several files may be opened and shown within [Child Windows](#) upon the Desktop portion of the window. The following example shows three [Child Windows](#) open on the Desktop.

The image displays three child windows from the Kronos factory software, each showing a different view of the data.

**Welsh Floyd.PCG**

Number	Category	Sub Category	Name
014	LeadSynth	Hard	Shine On Lead
015	LeadSynth	Hard	Shine On Sparkle
016	SlowSynth	Bright	Deep Asleep Squares
017	Organ	Drawbar Control	Shine On Upper
018	Organ	Drawbar Control	Shine On Lower
019	Organ	Drawbar Control	Learning To Fly Organ
020	MotionSynth	Motion	Learning To Fly Sweep
021	Organ	Drawbar Control	Coming Back To Life Org
022	LeadSynth	Hard	Wish You Were Here
023	Organ	Drawbar Control	Hey You Organ
024	SlowSynth	Dark	Hey You Poly
025	FastSynth	Short Release	Another Brick Bass
026	SlowSynth	Sweep	Another Brick BPF Sweep
027	Pink Floyd	User 0	Another Brick Lead
028	Organ	Drawbar Control	Another Brick Organ
029	Pink Floyd	User 0	B
030	MotionSynth	Motion	On The Run

**Carreg Ddu.PCG**

Kronos Synth Model

- Set Lists
- Program Banks
  - I-A (EXI)
    - 000 : KRONOS German Grand (Keyboard.A.Piano)
    - 001 : German Dark Grand (Keyboard.A.Piano)
    - 002 : R.Ferrante German Grand (Keyboard.A.Piano)
    - 003 : German New Age Grand (Keyboard.A.Piano)
    - 004 : L.Mays German Grand (Keyboard.A.Piano)
    - 005 : German Grand + VPM (Keyboard.A.Piano)

**KRS-79.PCG**

Number	Category	Sub Category	Name
002	MotionSynth	Motion	Arpeggiator Pad
003	MotionSynth	Rhythmic	KApro E-Motion Touch 1
004	MotionSynth	Motion	KApro E-Motion Touch 2
005	MotionSynth	Motion	KApro E-Motion Touch 3
006	MotionSynth	Motion	Wallop Modeling 1
007	MotionSynth	Motion	Wallop Modeling 2
008	MotionSynth	Motion	KApro Ambi Percolate
009	MotionSynth	Rhythmic	Zero To Hero Motions
010	MotionSynth	Motion	KApro Trance Pad
011	SlowSynth	Dark	Dark Chill Pad
012	FastSynth	Long Release	KApro Sweeping Synh

The [Window Menu](#) provides menu options to:

- Tile (either vertically or horizontally) all [Child Windows](#) that are not iconised
- Minimise all [Child Windows](#)
- Maximise all [Child Windows](#)
- Restore all [Child Windows](#)
- Select a specific [Child Window](#)

When a file is opened, a [Child Window](#) is added to the Desktop Area.

## Child Window

The Child Window provides the **View** upon the data within the file it is associated with.

The Child Window is maximised by default when it is opened, and can be minimised, restored or closed by the buttons to the right of the Child Window's title bar.

The menu options on the [View](#) menu can be used to change the View between a [Tree](#) view and a [Table](#) view, and a Child Window can be either split horizontally or vertically split to show any of the following combinations:

- A [Tree](#) and a [Table](#)
- A [Table](#) and a [Tree](#)
- Two [Trees](#)
- Two [Tables](#)

The default Child Window View applied when a file is opened is set in the [Default View Tab](#) of the [Preferences](#) Dialog.

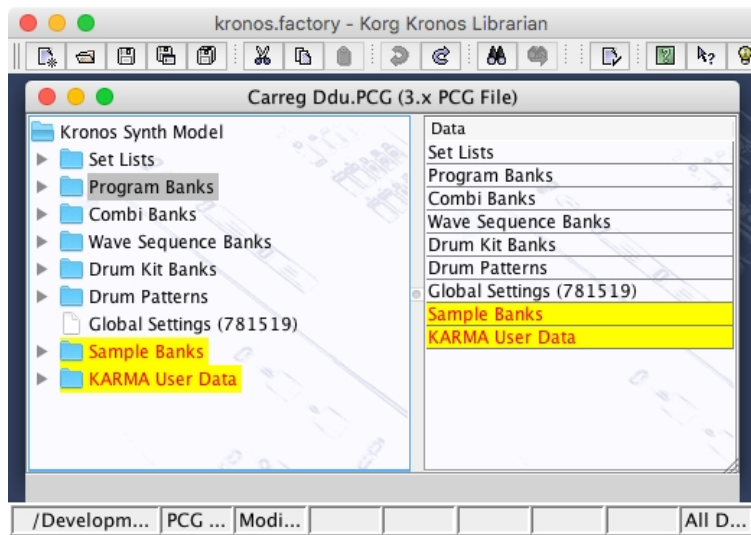
The following example shows a Child Window that is split and showing both a [Tree View](#) and a [Table View](#) on the same data.

The screenshot shows a window titled 'Welsh Floyd.PCG' with a split view. The left pane shows a 'Tree View' of the 'Kronos Synth Model' structure, including 'Set Lists', 'Program Banks', and 'U-AA (EXI)' with sub-items like '000 : The Voice Pad (SlowSynth.Bright)' through '018 : Shine On Lower (Orqan.Drawbar Control)'. The right pane shows a 'Table View' with columns: 'Numb...', 'Category', 'Sub Category', and 'Name'. It lists 27 items, including '000 SlowSynth Bright The Voice Pad' and '026 SlowSynth Sweep Another Brick BPF Sweep'. Items 014 through 026 are highlighted in red text on a yellow background, indicating they are sample or KARMA data.

Numb...	Category	Sub Category	Name
000	SlowSynth	Bright	The Voice Pad
001	LeadSynth	Soft	Ultravox Lead
002	Drums	Perc	SYN Drum
003	Bass/Synth Bass	Synth Bass	Fade to Grey Bass Synth
004	LeadSynth	Soft	Fade To Grey Plucked
005	FastSynth	Short Release	Fade To Grey Bright 1
006	FastSynth	Short Release	Fade To Grey Bright 2
007	LeadSynth	Soft	Fade To Grey Lead
008	Bass/Synth Bass	Synth Bass	Mad World Bass
009	FastSynth	Long Release	Mad World Pulse
010	Bell/Mallet	Mallet	Mad World Marimba
011	Bass/Synth Bass	Synth Bass	AFE Synth
012	FastSynth	Short Release	AFE Vox Humana
013	Pink Floyd	User 0	Shine On
014	LeadSynth	Hard	Shine On Lead
015	LeadSynth	Hard	Shine On Sparkle
016	SlowSynth	Bright	Deep Asleep Squares
017	Organ	Drawbar Control	Shine On Upper
018	Organ	Drawbar Control	Shine On Lower
019	Organ	Drawbar Control	Learning To Fly Organ
020	MotionSynth	Motion	Learning To Fly Sweep
021	Organ	Drawbar Control	Coming Back To Life Org
022	LeadSynth	Hard	Wish You Were Here
023	Organ	Drawbar Control	Hey You Organ
024	SlowSynth	Dark	Hey You Poly
025	FastSynth	Short Release	Another Brick Bass
026	SlowSynth	Sweep	Another Brick BPF Sweep

The [Tree](#) and [Table](#) views support drag [move](#) and drag [copy](#) operations, and the views will automatically scroll whilst drag operations are in progress.

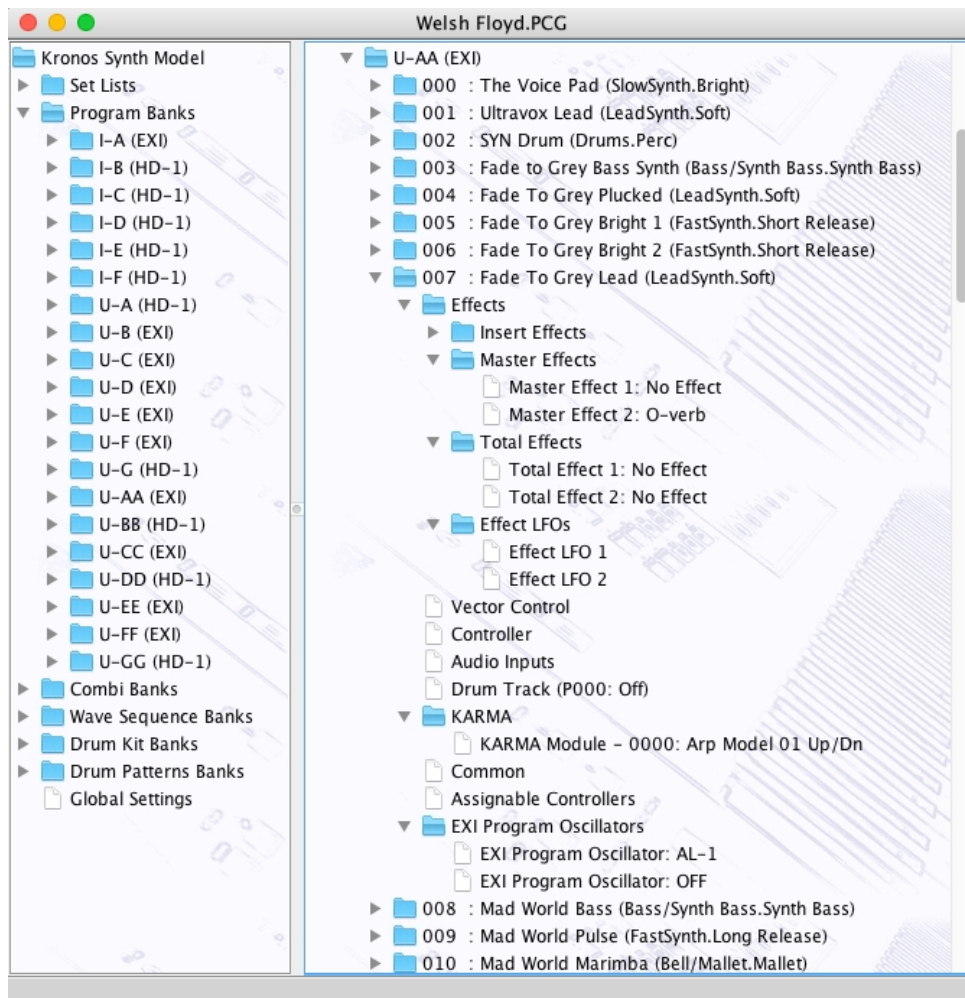
Note that if you have enabled the [Miscellaneous Preferences](#) to load Sample and KARMA files (if they are present) then these are shown, but they are rendered differently in red text and yellow background as shown below. The reason for this is that this data cannot be edited in this version of kronos.factory. It is loaded to provide information for other data in the file. For example, to provide Sample names for what samples the HD-1 Program Oscillators are referring to. Editing will be introduced in future versions for user sample data.





## Tree View

The **Tree View** shows the PCG data as a hierarchical tree, and can show more information than the [Table View](#). The following example shows a split [Child Window](#) with two Tree Views, one collapsed showing the top level **Collections**, including all the available Program Banks, and one showing a Program (U-AA 0007) that has been expanded to show more information on the Program.



Basically, information is shown as a set of hierarchical **Objects**. Objects may have children attached to them, and they themselves may have further child Objects (e.g. a Combi Object, has a child Object for all of its Timbres, and this Object groups all the Timbres).

The basic tree structure is a **Root Object** at the top of the tree under which are various Object **Collections** which themselves contain further data. The top level Collections that can be found under the root node varies upon the file contents

Objects are displayed in one of three colours:

- Black if the Object is not referenced by another Object
- Blue if an Object is referenced by another Object (e.g. a Voice being used within a Performance, or a Sample being used by a Wave)
- Red if the Object is a Sample and it is "empty"

The Tree View allows multiple Objects to be selected, which is useful for performing operations only upon certain Objects. You can only perform operations upon Objects of the same type.

If you wish to perform an operation upon all Objects in a Collection, simply select the Collection containing the Objects.

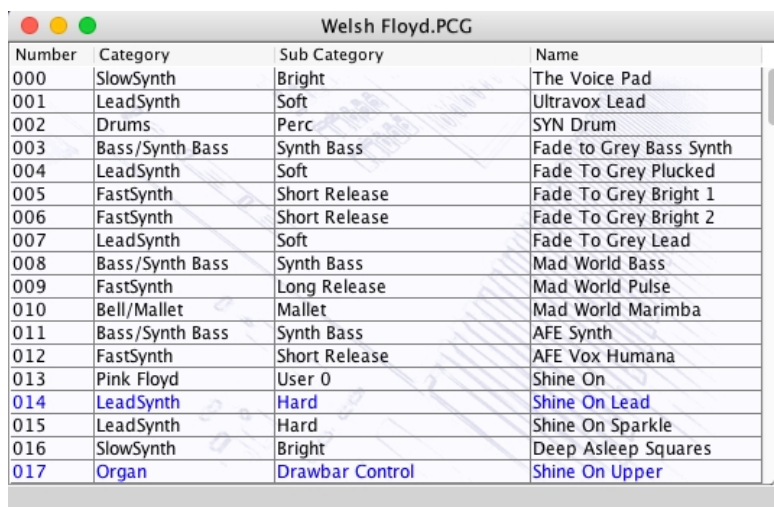
If you right click over an object or selection of objects within the Tree View, a context sensitive popup menu will appear that provides the editing operations that can be performed upon the object(s).

Objects can be [Copied and Moved](#) either within or between Child Window Views using **Drag and Drop**.



## Table View

The Table View provides a more high level overview of the data than the [Tree View](#), and the representation of the data is more compact. The following example shows a [Child Window](#) with a single Table View providing information on a file's Programs in one of the Program Banks.



Number	Category	Sub Category	Name
000	SlowSynth	Bright	The Voice Pad
001	LeadSynth	Soft	Ultravox Lead
002	Drums	Perc	SYN Drum
003	Bass/Synth Bass	Synth Bass	Fade to Grey Bass Synth
004	LeadSynth	Soft	Fade To Grey Plucked
005	FastSynth	Short Release	Fade To Grey Bright 1
006	FastSynth	Short Release	Fade To Grey Bright 2
007	LeadSynth	Soft	Fade To Grey Lead
008	Bass/Synth Bass	Synth Bass	Mad World Bass
009	FastSynth	Long Release	Mad World Pulse
010	Bell/Mallet	Mallet	Mad World Marimba
011	Bass/Synth Bass	Synth Bass	AFE Synth
012	FastSynth	Short Release	AFE Vox Humana
013	Pink Floyd	User 0	Shine On
014	LeadSynth	Hard	Shine On Lead
015	LeadSynth	Hard	Shine On Sparkle
016	SlowSynth	Bright	Deep Asleep Squares
017	Organ	Drawbar Control	Shine On Upper

The Table View can only show one Collection of Objects at a time.

Each row within the table shows one Object.

Objects can be [Copied and Moved](#) either within or between Child Window Views using **Drag and Drop**.

If you right click over an object or selection of objects within the Table View, a context sensitive popup menu will appear that provides the editing operations that can be performed upon the object(s). The cells in a Row that contain the Object **Category** and Object **Name** (if available) can be directly edited by clicking in them.

The context menu also provides the options to select what data view. In the example below, the table is currently showing the INT Wave Sequence Bank, but a selection is being made via the menu to change to the U-A Bank.

You can also double click a high level collection (e.g. Program Bank Collection, Program Banks) and kronos.factory will move down to the next level until you get to discrete objects (e.g. Program). You can double click with the ALT key (OPTION key on OS X) held down to traverse upwards.

(3.x PCG File)

Number	Name
000	19 Orch/Band HITS
001	Ac.Guitar Rhythm 01
002	Air Rotation
003	Alternating Currents
004	
005	
006	
007	
008	
009	
010	
011	
012	
013	
014	
015	
016	
017	
018	
019	
020	
021	
022	
023	
024	Crunch
025	DWGS Clavs
026	Drops
027	E.Piano Klik Selection
028	EP SEQ
029	Evolve
030	Evolving 01
031	Exposure
032	Flashlight
033	Flute SEQ
034	Follow Me
035	Gate Rez
036	Glass-Air
037	Groove
038	Jordan's Bop
039	L Strings Octave
040	Lob Wave

Initialise  
Insert  
Delete

Sort by Name

List References ...

Cut  
Copy  
Paste

Show All Data Banks  
Show Programs  
Show Combis

Show Wave Sequences

Show Drum Kits

Show Drum Patterns

Show Set Lists

Wave Seq Banks

Wave Seq Bank INT

Wave Seq Bank U-A

Wave Seq Bank U-B

Wave Seq Bank U-C

Wave Seq Bank U-D

Wave Seq Bank U-E

Wave Seq Bank U-F

Wave Seq Bank U-G

Wave Seq Bank U-AA

Wave Seq Bank U-BB

Wave Seq Bank U-CC

Wave Seq Bank U-DD

Wave Seq Bank U-EE

Wave Seq Bank U-FF

Wave Seq Bank U-GG

Wave Seq Bank INT

## Status Bar

/Development/Kronos/Welsh Floyd/Welsh Fl...	PCG File	Modified					All Data Banks	Combi Bank
---	----------	----------	--	--	--	--	----------------	------------

The Status Bar provides the following pieces of information (from left to right) for the [Child Window](#) which is currently selected:

- The name of the file currently open, if any. If no file has been selected then this field is blank
- The type of the file
- Whether or not the file has been modified
- If the left/top split pane is a table this indicator identifies what the table is showing (Programs, Combis, etc.)
- If the right/bottom split pane is a table this indicator identifies what the table is showing (Programs, Combis, etc.)

# kronos.factory Program Features

kronos.factory provides the following features:


- [File Operations](#)
- [Undo/Redo Support](#)
- [Clipboard Support](#)
- [Find and Goto Support](#)
- [Editing Features](#)

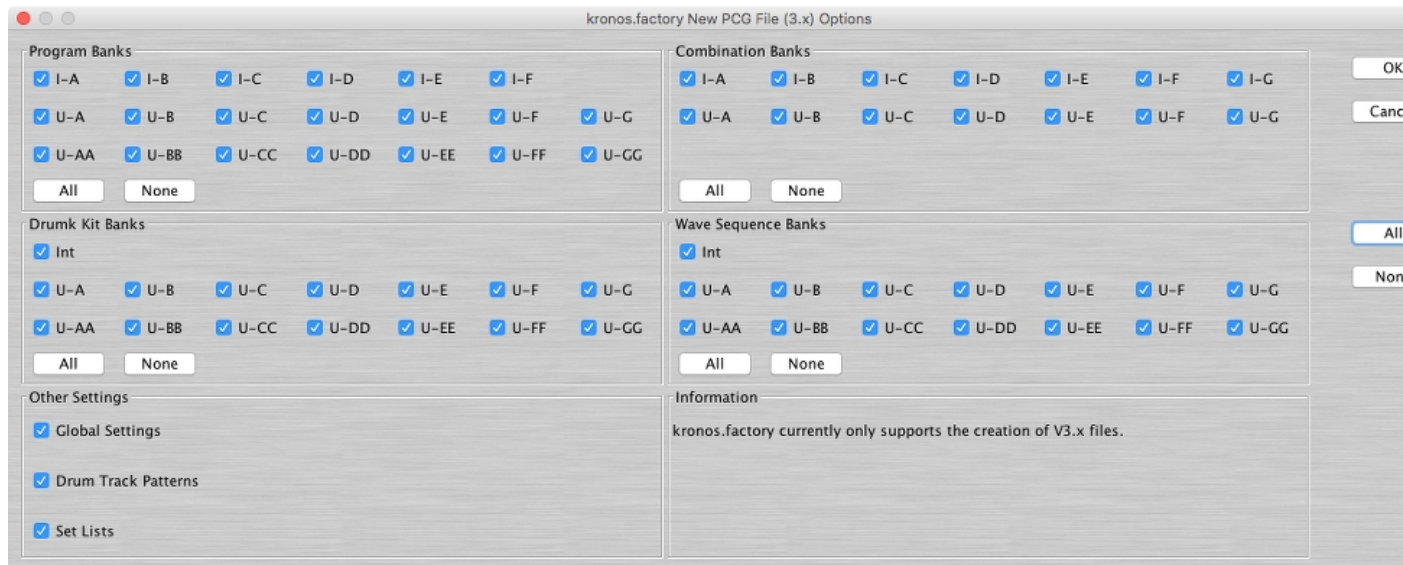
## File Operations

kronos.factory supports the following file operations:

- [Create New Files](#)
- [Open Existing Files](#)
- [Save Files](#)
- [Open and Save Workspaces](#)
- [Export Data](#)

## Create New File

When the **New File ...** option from the [File](#) Menu or the  button on the [Toolbar](#) is selected, the following dialog is shown:



This dialog, which is modelled on the Kronos file save options, allows you to select the banks which are created from the following


- Programs
- Combis
- Drum Kits
- Wave Sequence
- Global Settings
- Drum Track Patterns
- Set Lists

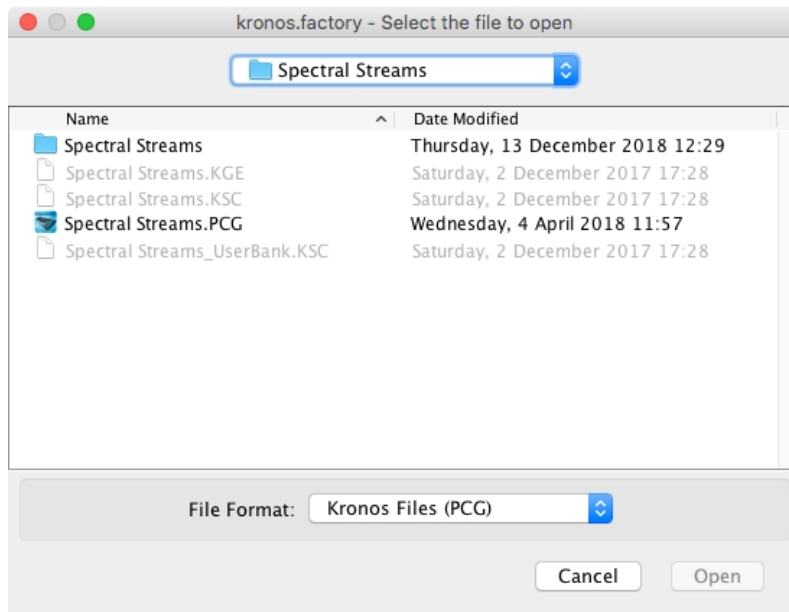
The new data file is given a name in the form of "kronosFactory\_n", where **n** is a number that increments every time a file is created.

Note, this is different from initialising data in a file, as a totally new file is created.

Note, only the creation of 3.x file formats is supported in this release of kronos.factory. If there is sufficient demand, I may add support for the creation of earlier, legacy PCG file formats.

## Open Existing File

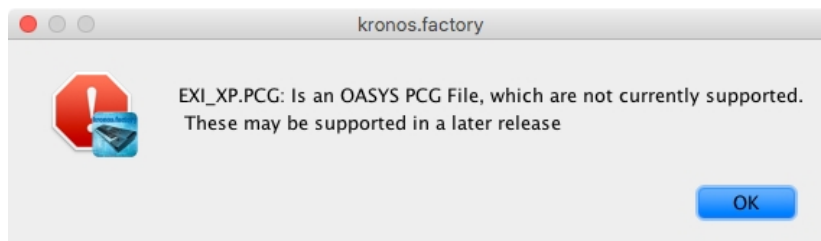
When the **Open ...** option from the [File](#) menu or the  button on the [Toolbar](#) is selected, the following dialog will appear allowing a file to be selected.



Only PCG files are currently supported for loading.

kronos.factory checks to ensure that the selected file is a valid Kronos format file, and an error dialog will appear if the file is not valid.

If the file you are trying to open is an OASYS PCG file, then the following error dialog will be shown, as OASYS files are currently not supported (their file structure is different again). If there is sufficient demand, I may support the import of OASYS files in later releases. In the meantime, you can load them in your Kronos and save them out as Kronos PCG files.



If a file selected for opening is already open, kronos.factory will ask if you want to replace the file that is in memory.

No other PCG files (i.e. for other synth types) are supported.

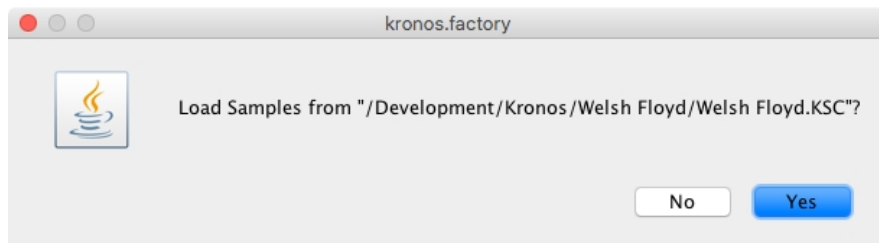
### Loading KSC Files

kronos.factory will also try and load a corresponding Sample (KSC) file if one is present in the same directory as the file you are loading.

Currently KGE and KSC data cannot be edited. This will be supported in a future release. Song files may also be supported in a future release.

The loading of Samples can be controlled by the setting of the **Sample Load Options** drop down in the [Misc Preferences](#) tab in the [Preferences](#) Dialog.

If this option is set to **Confirm**, then the following dialog is displayed:



If the **Sample Load Options** setting is set to **Yes**, then the samples are automatically loaded, and if the **Sample Load Options** is set to **No**, then the samples are not loaded.

### Loading KGE Files

kronos.factory will also try and load the corresponding KARMA Generated Effect (KGE) file if one is present in the same directory as the file you are loading.

Currently KGE and KSC data cannot be edited. This will be supported in a future release. Song files may also be supported in a future release.

The loading of KGE files can be controlled by the setting of the **KARMA Load Options** drop down in the [Misc Preferences](#) tab in the [Preferences](#) Dialog.

If this option is set to **Confirm**, then the following dialog is displayed:



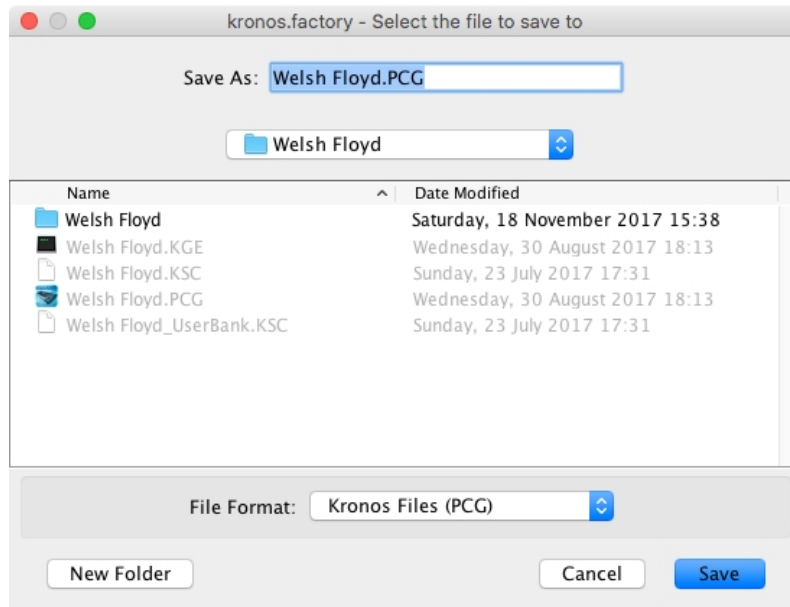
If the **KARMA Load Options** setting is set to **Yes**, then the KGE file is automatically loaded, and if the **KARMA Load Options** is set to **No**, then the KGE file is not loaded.



## Save Open Files

The saving of files is only available if kronos.factory is [registered](#).

When you save a file to disk using: the **Save As ...** command from the [File](#) Menu, or when a file created using the **New ...** command from the [File](#) Menu is saved for the first time, the following dialog appears to allow you to select a name for the file.



## Workspaces

kronos.factory allows you to save the current size and position of the main kronos.factory window, and the arrangement of the open [Child Windows](#) within kronos.factory to a file known as a **Workspace**.

This allows you to save a **Workspace** you are using for future recall at a later date.

The following parameters for each [Child Window](#) are remembered:

- Window size, position and status (normal, maximised or minimised)
- Horizontal/Vertical Splits, including split position
- Pane type(s) (e.g. Tree, Voice Table or Performance Table)
- Tree node expansion status
- Table column widths
- Scroll position of the pane(s)
- Selection state of the tree nodes, or table rows

## Undo Buffer

kronos.factory supports a multi-level Undo/Redo Buffer facility on all edits.

The number of edits which can be stored is 100.

The Undo/Redo commands can be found both within the [Edit Menu](#), and on the [Toolbar](#).

Please note that the undo buffer is global across all open files, and is cleared when any file is closed. This may be improved in later releases.

The undo buffer can be cleared by the selecting the **Clear Undo Buffer** option on the [Edit Menu](#). The intention of this feature is to help cope with low memory situations, as it will free up the memory used by stored edits.

## Clipboard Support

The clipboard works just like the clipboard in other applications. It allows you to place an Object or a copy of an Object upon the clipboard and then paste that Object elsewhere within a file or another file.

You can Cut/Copy either a single Object or a Collection of Objects onto the clipboard.

You can only paste from the clipboard to the current location in a file if it makes sense to do so. For example:

- You cannot paste a Program onto a Combi
- You cannot paste ten Programs at the end of a Program Collection if the selection is at Program 118 or higher

The clipboard is "local" to the application, and only Objects can be placed upon it.

kronos.factory does not support the system clipboard so it is not possible to cut and paste between and other applications. I don't think this is a major drawback because I cannot think of any circumstances where you would wish to do this!

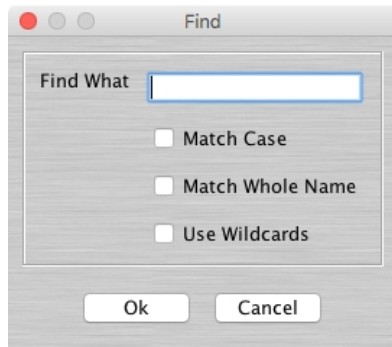
# Find and Goto Facilities

## Find Dialog

kronos.factory supports the ability to find Objects either by name or by category (where an Object supports categories, such as Voices).

Searches start from the currently selected Object.

Selecting the **Find ...** option on the [Edit Menu](#) brings up the **Find** dialog, that allows you to specify the string to search for. In addition there are several options that can be selected



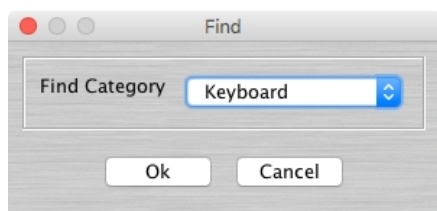
<b>Find What</b>	The text string to search for.
<b>Match Case</b>	If this option is checked then the search is case sensitive. If this option is not checked then the search is case insensitive.
<b>Match Whole Name</b>	If this option is checked then the search string must match the entire name of an Object. E.g. "pan" would match a Voice called "pan", but not a Voice called "pandora". If this option is not checked then the search can match a sub string within a name. E.g. "dor" would match a Voice named "dor" and a Voice called "pandora".
<b>Use Wild Cards</b>	If checked kronos.factory will treat the "Find What" text as a "regular expression" to allow you more control over the search, such as matching text at the start of a name, or the end of a name, words with numbers in, etc.

The regular expression language used for kronos.factory wild card support is the Perl Regular Expression Syntax. Rather than try and write up this powerful syntax myself into the kronos.factory documents, I'll direct you to the [Perl Regular Expression Syntax](#) page for a description of how to use this powerful feature.

## Find Category Dialog

You can also search by category by selecting **Find Category ...** option on the [Edit Menu](#), which brings up the **Find Category** Dialog.

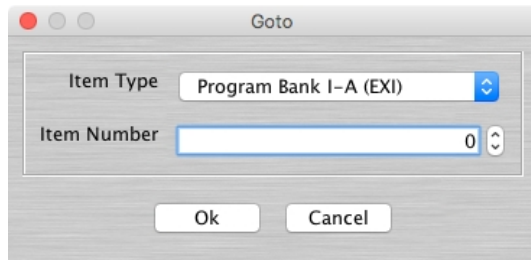
This option allows you to search, for example, for all string Voices in a file (assuming all Voices have been assigned a category). Note: only some Objects (such as Voices and Performances) have a category value.



Simply select the Category from the "Find Category" combo box that you wish to search for, and that's all there is to it.

## Goto Dialog

Selecting this option on the on the [Edit Menu](#) brings up the **Goto** Dialog



<b>Item Type</b>	The type of Object to go to <ul style="list-style-type: none"><li>• The list of types of Objects that can be selected depends upon the contents of the file.</li><li>• If a Table View is selected then you can only go the type of objects shown by the Table</li></ul>
<b>Item Number</b>	The number of the Object to go to.

# Editing Features

kronos.factory supports the following editing features:

- [General Editing Features](#)
- [Synth Editing Features](#)
- [Set List Editing Features](#)
- [Program Editing Features](#)
- [Combi Editing Features](#)
- [Drum Kit Editing Features](#)
- [Drum Pattern Editing Features](#)
- [Wave Sequence Editing Features](#)

## General Editing Features

kronos.factory supports many editing features, some of which are classed as general features that are applicable to all or most Objects.

The general features are described here in one place for convenience:

- [Copy/Move Object](#)
- [Initialise Object](#)
- [Rename Object](#)
- [Insert Object](#)
- [Delete Object](#)
- [List Object References](#)
- [Sort Objects](#)
- [Export Objects](#)
- [Remap Objects](#)
- [Add Objects to Library](#) (note this will be added in a later version)



## Copy/Move Object

kronos.factory makes extensive use of drag and drop for copying and moving Objects.

You can drag copy or move Objects within a file or between files, and you can drag single items or multiple items.

The default drag operation is to move an Object, and there are two types of move operations:

- Moving an Object within its Parent Collection (e.g. moving a Program from location 1 to location 4)
- Moving an Object to a new Parent Collection (e.g. moving a Program from one file to another file)

When you move an Object to a new Parent Collection then the original Object is removed and replaced with an initialised Object of the same type.

To copy an Object using drag and drop, you must have the **DRAG MODIFIER** key held down during the operation. The **DRAG MODIFIER** key is platform dependent. On the PC platform it is the **CTRL** key.

You can tell that a copy operation is in progress as the drag image icon has a + sign visible.

When you drag multiple items they must be of the same type. For example you can drag several Programs, but not Programs and Combis together.

kronos.factory provides the following drag/drop feedback to assist in determining the effects of a drag/drop operation:

- Cursor: Indicates if the move is either a copy or a move, or if the drop is invalid (e.g. trying to drag a Program onto a Wave Sequence)
- Drag image: A simple pictorial representation of what is being dragged
- Drop Point: kronos.factory shows the drop point as either a cue line drawn between Objects if an Object is being moved within its parent (e.g. a Timbre within a Combi), or a cue rectangle drawn around the drop location for all other moves and copy operations which are valid

When a [Child Window](#) is split, Objects can be dragged and dropped between either side of the split point. This is handy, for example, for dragging Objects between the start of a Collection and the end of a Collection.

The [Tree](#) and [Table](#) views will auto-scroll in drag and drop operations, when you move the cursor to either the top or the bottom of the pane and hold it there.

If you drag an Object onto a [Tree View](#) and over a valid parent Object (e.g. a Timbre over a Combi) and the parent Object is collapsed within the Tree, and you hold the cursor over the Parent Object for a few seconds it will automatically expand.

kronos.factory will maintain the references to Objects in a Collection when moving Objects within a file, as follows:

Collection Type	Objects Updated
Combi	Set List Slots
Program	Set List Slots Combi Timbres
Drumkit	HD-1 Program Oscillator Trigger Zones
Drum Pattern	Programs Combis
Wave Sequence	HD-1 Program Oscillator Trigger Zones

For example if you move a Program within a PCG file Program Bank from Location 2 to Location 10, then any Combi Timbres which are referencing Programs at Locations 2 and above will be updated to ensure they still reference the same Programs after the move operation as they were before the move operation.

The ability to update references following a move or to copy referenced Objects during a move to a new file can be selectively turned on or off within the [Preferences](#) Dialog.

## Initialise Object

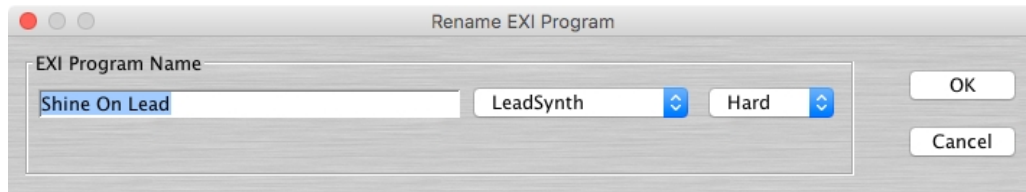
Initialises the selected Object to its default state.

Multiple Objects of the same type can be selected for initialisation.

The **Initialise** command is found upon the **Context Sensitive Menu** in both the [Tree View](#) and the [Table View](#).

## Rename Object

Renames the selected Object using the following dialog:



Only one Object can be selected for renaming.

The dialog will provide drop down lists for selecting a Category and Sub Category values for Objects that support it:

Object Type	Category?
Set List Slot	No
Program	Yes
Combi	Yes
Drum Kit	No
Drum Pattern	No
Wave Sequence	No

The **Rename** command is found upon the **Context Sensitive Menu** in the [Tree View](#)

To rename Objects in the [Table View](#), simply click in **Category Cell** of the required Object to select the Category value from a drop down list, or double click in the **Name Cell** of the required Object to edit the name.

### Insert Object

Inserts an Object into a Collection at the current location.

The **Insert** command is found upon the **Context Sensitive Menu** in both the [Tree View](#) and the [Table View](#).

You can insert more than one Object at a time by selecting multiple Objects prior to executing the **Insert** command.

For example if you wish to insert three Combis at location 10, select Performances 10, 11 and 12 and then execute the **Insert** command.

Note that when you insert one or more Objects, then the commensurate number of Objects at the end of the Parent Collection are removed if required. This is necessary to maintain the correct number of Objects in a Collection.

For example, a Combi Branch Collection in a PCG file can only contain 128 Combis, so if two Combis are inserted into the Collection then two Combis must be removed from the end of the Collection to maintain the correct size.

kronos.factory will maintain the references to Objects in a Collection when inserting Objects, as follows:

Collection Type	Objects Updated
Combi	Set List Slots
Program	Set List Slots Combi Timbres
Drumkit	HD-1 Program Oscillator Trigger Zones
Drum Pattern	Programs Combis
Wave Sequence	HD-1 Program Oscillator Trigger Zones

For example if you insert a Program into a PCG file Program Bank at Location 10, then any Combi Timbres which are referencing Programs in the bank at Locations 10 and above will be updated to ensure they still reference the same Programs after the insert operation as they were before the insert operation.

## Delete Object

Deletes an Object at the current location.

The **Delete** command is found upon the **Context Sensitive Menu** in both the [Tree View](#) and the [Table View](#).

You can delete more than one Object at a time by selecting multiple Objects prior to executing the **Delete** command.

For example if you wish to delete three Combis at location 10, select Performances 10, 11 and 12 and then execute the **Delete** command.

Note that when you delete one or more Objects, then a commensurate number of Objects at the end of the Parent Collection are added if required. This is necessary to maintain the correct number of Objects in a Collection.

For example, a Program Bank Collection in a PCG file must contain 128 Voices, so if two Programs are deleted from the Collection then two Programs must be added to the end of the Collection to maintain the correct size.

kronos.factory will maintain the references to Objects in a Collection when deleting Objects, as follows:

Collection Type	Objects Updated
Combi	Set List Slots
Program	Set List Slots Combi Timbres
Drumkit	HD-1 Program Oscillator Trigger Zones
Drum Pattern	Programs Combis
Wave Sequence	HD-1 Program Oscillator Trigger Zones

For example if you delete a Program from a PCG Program Bank at Location 10, then any Combi Timbres which are referencing Programs in that Bank at Locations 10 and above will be updated to ensure they still reference the same Programs after the delete operation as they were before the delete operation.

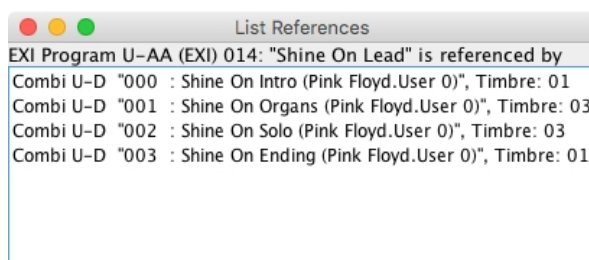
## List Object References

The **List References** command is found upon the **Context Sensitive Menu** in both the [Tree View](#) and the [Table View](#).

The **List References** command is only available if:

- Only one Object is selected
- The Object selected is referenced by another Object, which is indicated by the Object being coloured blue

The references are shown as follows:



The Object being referenced is shown at the top of the Dialog followed by the Objects referencing it.

## Sort Objects

The **Sort** command is found upon the **Context Sensitive Menu** in both the [Tree View](#) and the [Table View](#).

The type of sort operations available depend upon the types of Object being sorted:

Object Type	Sort by Name	Sort By Category
Set Lists	Yes	No
Set Lists Slots	Yes	No
Programs	Yes	Yes
Combis	Yes	Yes
Drum Kits	Yes	No
Drum Patterns	Yes	No
Wave Sequences	Yes	No

In the [Tree View](#) the sort options are accessed via the **Context Sensitive Menu** for the Collection that you wish to sort (e.g. a Program Bank Collection to sort Programs).

In the [Table View](#) the sort options are accessed via the **Context Sensitive Menu** for any Object. The sort can also be initiated by clicking in the **Category** or **Name** column headers.

## Synth Editing Features

kronos.factory supports the following editing operations upon the **Synth Object** within the [Tree View](#) of a [Child Window](#):

- [Move](#)
- [Copy](#)
- [Initialise](#)
- Add - If not all main collections are present in the file (e.g. Program Banks, Combi Banks, etc.) then this menu will be present allowing you to add in the items that are not present
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access these features, right click over the **Synth Object** to activate the **Synth Object's** Context Sensitive Menu.

The **Synth Object** is only shown within a [Tree View](#) and is the first Object in the [Tree View](#).

## Set List Editing Features

### Set List Collection Editing Features

kronos.factory supports the following editing operations upon the **Set List Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- [Sort by Name](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Set List Collection** to activate the **Set List Collection's** Context Sensitive Menu.

### Set List Editing Features

kronos.factory supports the following editing operations upon the **Set Lists** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- [Sort by Name](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Set List Collection** to activate the **Set List Collection's** Context Sensitive Menu.

### Set List Slot Editing Features

kronos.factory supports the following editing operations upon the **Set List Slot Objects** within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Rename](#)
- [Insert](#)
- [Delete](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over a **Set List** or selection of **Set Lists** to activate the **Set List's** Context Sensitive Menu.

You can **DRAG COPY** Programs and and Combis onto Set List Slots to set the references to them.

## Program Editing Features

### Program Bank Collection Editing Features

kronos.factory supports the following editing operations upon the **Program Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- Add EXi Bank - if there are unused banks within the file, then the unused bank names are presented as sub menu items for selection to create a new bank
- Add HD-1 Bank - if there are unused banks within the file, then the unused bank names are presented as sub menu items for selection to create a new bank
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Program Collection** to activate the **Program Collection's** Context Sensitive Menu.

## Program Bank Editing Features

kronos.factory supports the following editing operations upon the **Program Banks** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- Renumber - if there are unused banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow this bank to be renumbered
- [Delete](#)
- Change to EXi Bank (for an existing HD-1 bank) - Changes the bank type. All Programs are initialised.
- Change to HD-1 Bank (for an existing EXi bank) - Changes the bank type. All Programs are initialised.
- [Sort by Name](#)
- [Sort by Category](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Program Collection** to activate the **Program Collection's** Context Sensitive Menu.

## Program Editing Features

kronos.factory supports the following editing operations upon the **Program Objects** within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Rename](#)
- [Insert](#)
- [Delete](#)
- [List References](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over a **Program** or selection of **Programs** to activate the **Program's** Context Sensitive Menu.

In the [Tree View](#) you can drill down further into the structure of a Program. All objects will support:

- [Copy/Move](#)
- [Initialise](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

Where there are several similar objects in a list (e.g. Insert Effects, HD-1 Oscillator Trigger Zones, etc.) then the following options are also available.

- [Insert](#)
- [Delete](#)

You can **DRAG COPY** a single Program onto a Combi Timbre or a Set List Slot to set the reference to the Program.

You can **DRAG COPY** a single Wave Sequence or Drum Kit onto a HD-1 Oscillator Trigger Zone, depending on the oscillator mode to set the reference to the Wave Sequence or Drum Kit. A Drum Kit can only be dropped onto the first trigger zone.

You can **DRAG COPY/MOVE** common data between Programs and Combis, such as effects, controllers, etc.

## Combi Editing Features

### Combi Bank Collection Editing Features

kronos.factory supports the following editing operations upon the **Combi Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- Add Combi Bank - if there are unused Combi banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow banks to be added
- [Cut to Clipboard](#)

- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Combi Collection** to activate the **Combi Collection's** Context Sensitive Menu.

### Combi Bank Editing Features

kronos.factory supports the following editing operations upon the **Combi Banks** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- Renumber - if there are unused banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow this bank to be renumbered
- [Delete](#)
- [Sort by Name](#)
- [Sort by Category](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Combi Collection** to activate the **Combi Collection's** Context Sensitive Menu.

### Combi Editing Features

kronos.factory supports the following editing operations upon the **Combi Objects** within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Rename](#)
- [Insert](#)
- [Delete](#)
- [List References](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over a **Combi** or selection of **Combis** to activate the **Combi's** Context Sensitive Menu.

In the [Tree View](#) you can drill down further into the structure of a Combi. All objects will support:

- [Copy/Move](#)
- [Initialise](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

Where there are several similar objects in a list (e.g. Insert Effects, Combi Timbres, etc.) then the following options are also available.

- [Insert](#)
- [Delete](#)

You can **DRAG COPY** a single Combi onto a Set List Slot, to set the reference to the Combi.

You can **DRAG COPY** a single Program onto a Combi Timbre Slot to set the reference to the Program.

You can **DRAG COPY/MOVE** common data between Programs and Combis, such as effects, controllers, etc.

### Drum Kit Editing Features

kronos.factory supports the following editing operations upon the **Drum Kit Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- Add Drum Kit Bank - if there are unused Drum Kit banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow banks to be added
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)

- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Drum Kit Collection** to activate the **Drum Kit Collection's** Context Sensitive Menu.

kronos.factory supports the following editing operations upon the **Drum Kit Banks** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- Renumber - if there are unused banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow this bank to be renumbered
- [Delete](#)
- [Sort by Name](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Drum Kit Collection** to activate the **Drum Kit Collection's** Context Sensitive Menu.

kronos.factory supports the following editing operations upon the **Drum Kit Objects** within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Rename](#)
- [Insert](#)
- [Delete](#)
- [List References](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over a **Drum Kit** or selection of **Drum Kits** to activate the **Drum Kit's** Context Sensitive Menu.

In the [Tree View](#) you can drill down further into the structure of a Drum Kit. All objects will support:

- [Copy/Move](#)
- [Initialise](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

Where there are several similar objects in a list (e.g. Drum Notes, Trigger Zones, etc.) then the following options are also available.

- [Insert](#)
- [Delete](#)

You can **DRAG COPY** a single Drum Kit onto a HD-1 Oscillator Trigger Zone (the first one only), to set the reference to the Drum Kit.

## Drum Pattern Editing Features

Note: Any editing operating will renumber the drum patterns so that they are consecutively numbered. The reason for doing this is that I could not think of a better way of keeping what is an ordered list in the synth in order when you move Objects, insert or delete Objects, Sort Objects, etc. The PCG file only stores the active drum patterns, so you can have quite large gaps in the numbering. I have assumed that given kronos.factory's ability to adjust the drum pattern references in Programs and Combis, then the precise drum pattern number is not of huge interest to users. I am of course open to suggestions on this!

kronos.factory supports the following editing operations upon the **Drum Pattern Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- Renumber - Renumbers all Drum Patterns, starting from Index 0 and consecutively renumbering them
- [Sort by Name](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)



To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Drum Pattern Collection** to activate the **Drum Pattern Collection's** Context Sensitive Menu.

kronos.factory supports the following editing operations upon the **Drum Pattern Banks** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Rename](#)
- [Insert](#)
- [Delete](#)
- [List References](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Drum Pattern Collection** to activate the **Drum Pattern Collection's** Context Sensitive Menu.

kronos.factory supports the following editing operations upon the **Drum Pattern Objects** within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Insert](#)
- [Delete](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over a **Drum Pattern** or selection of **Drum Patterns** to activate the **Drum Pattern's** Context Sensitive Menu.

You can **DRAG COPY** a single Drum Pattern onto a Program/Combi Drum Track, to set the reference to the Drum Pattern.

## Wave Sequence Editing Features

kronos.factory supports the following editing operations upon the **Wave Sequence Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- Add Wave Sequence Bank - if there are unused Wave Sequence banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow banks to be added
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Wave Sequence Collection** to activate the **Wave Sequence Collection's** Context Sensitive Menu.

kronos.factory supports the following editing operations upon the **Wave Sequence Banks** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- Renumber - if there are unused banks within the file, then the unused bank numbers are presented as sub menu items for selection to allow this bank to be renumbered
- [Delete](#)
- [Sort by Name](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Wave Sequence Collection** to activate the **Wave Sequence Collection's** Context Sensitive Menu.

kronos.factory supports the following editing operations upon the **Wave Sequence Objects** within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Rename](#)

- [Insert](#)
- [Delete](#)
- [List References](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over a **Wave Sequence** or selection of **Wave Sequences** to activate the **Wave Sequence's** Context Sensitive Menu.

In the [Tree View](#) you can drill down further into the structure of a Wave Sequence. All objects will support:

- [Copy/Move](#)
- [Initialise](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

Where there are several similar objects in a list (e.g. Wave Sequence Steps, etc.) then the following options are also available.

- [Insert](#)
- [Delete](#)

You can **DRAG COPY** a single Wave Sequence onto a HD-1 Oscillator Trigger Zone, to set the reference to the Wave Sequence.

## Global Editing Features


kronos.factory supports the following editing operations upon the **Global Bank Collection** shown within the [Tree View](#) or [Table View](#) of a [Child Window](#):

- [Copy/Move](#)
- [Initialise](#)
- [Delete](#)
- [Cut to Clipboard](#)
- [Copy to Clipboard](#)
- [Paste from Clipboard](#)

To access all features other than Move and Copy (which you do via "Drag and Drop"), right click over the **Global Collection** to activate the **Global Collection's** Context Sensitive Menu.

# Preferences

**V1.0 note: Some options listed here are for future program features, so may have no effect in V1.0**

The kronos.factory preferences are accessed via the **Preferences ...** option on the [View](#) menu or the [kronos.factory Application Menu](#) on OS X, or the  button on the [Toolbar](#).

Selecting this option opens a Tabbed dialog with the following tabs which group related parameters:

- [Program Preferences](#)
- [Combi/Timbre Preferences](#)
- [Set List Preferences](#)
- [Wave Sequence Preferences](#)
- [Default View Preferences](#)
- [Miscellaneous Preferences](#)

To view and modify a set of parameters, click on the relevant tab.

Note: The options to update Objects following an Object move within the same file (e.g. **Update Programs after Wave Sequence Move**) also apply when Objects that can be referenced are inserted, deleted and sorted.

Note: The options to copy referenced Objects with "parent" Objects (e.g. moving Programs with Combis) work by:

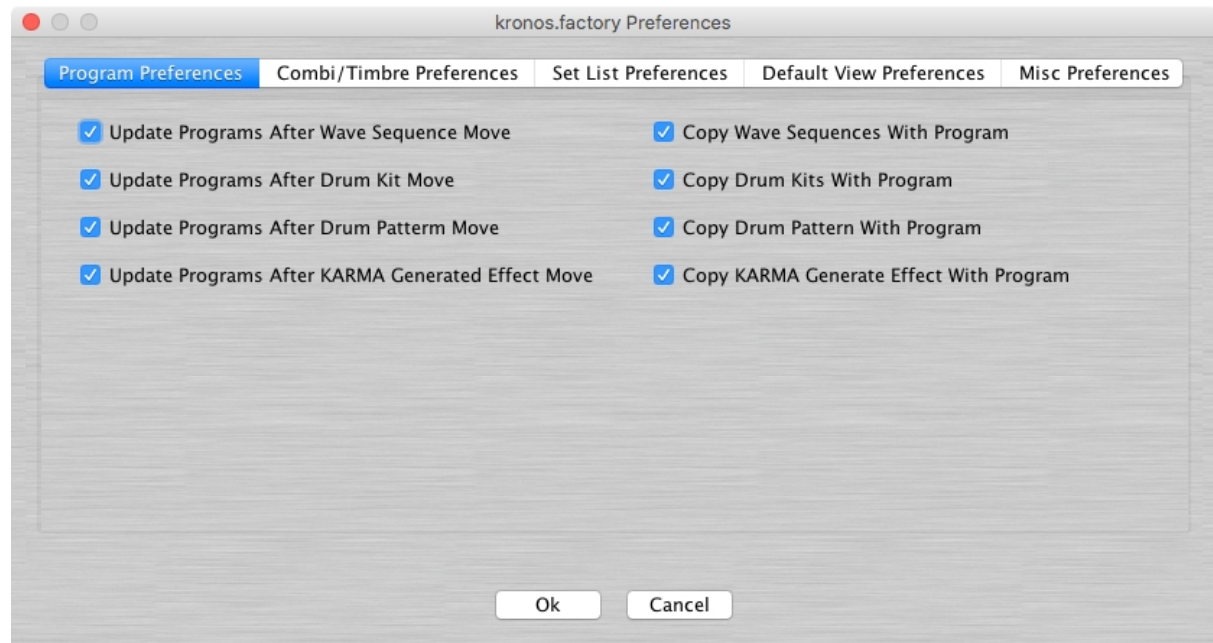
- Checking the destination file to see if the referenced Object exists
- If it does then the parent Object is updated after being moved to point to the existing Object in the destination file
- If not then kronos.factory checks to see if a blank or empty child Object is present in the destination file (e.g. in the case of moving a Program, a blank "INIT PROGRAM" is looked for)
- If a blank Object is found then the child Object is copied and the parent Object is updated after being moved to point to the new Object in the destination file
- If no blank Object is found the kronos.factory gives up. Note this may result in a Partial edit (e.g. it may have only been possible to copy a subset of Objects due to the amount of free Objects in the destination file)
- The child Objects are only ever copied irrespective of whether the parent Object is being moved or copied. This is to avoid the problem that would occur when a child Object is moved (say a Program with Combi 1), where the source child Object (which would have been initialised after the move) is also referenced by other Parent Objects (e.g. another Combi)

All the above options are sensitive to what is being dragged. For example a Combi Timbre, Combi Timbre Branch, Combi, Combi Bank or Combi Banks Branch can be dragged and the necessary Objects will be copied

Finally, it's worth noting that if the options are all set then everything needed is copied. For example if you drag a Set List to a new file, then potentially, Combis used in the Set List Slots, Programs used by the Combis Wave Sequences used by the Programs, etc are all copied. This is a feature I've long been desperate for!

## Program Preferences

The Program Preferences tab is shown below:

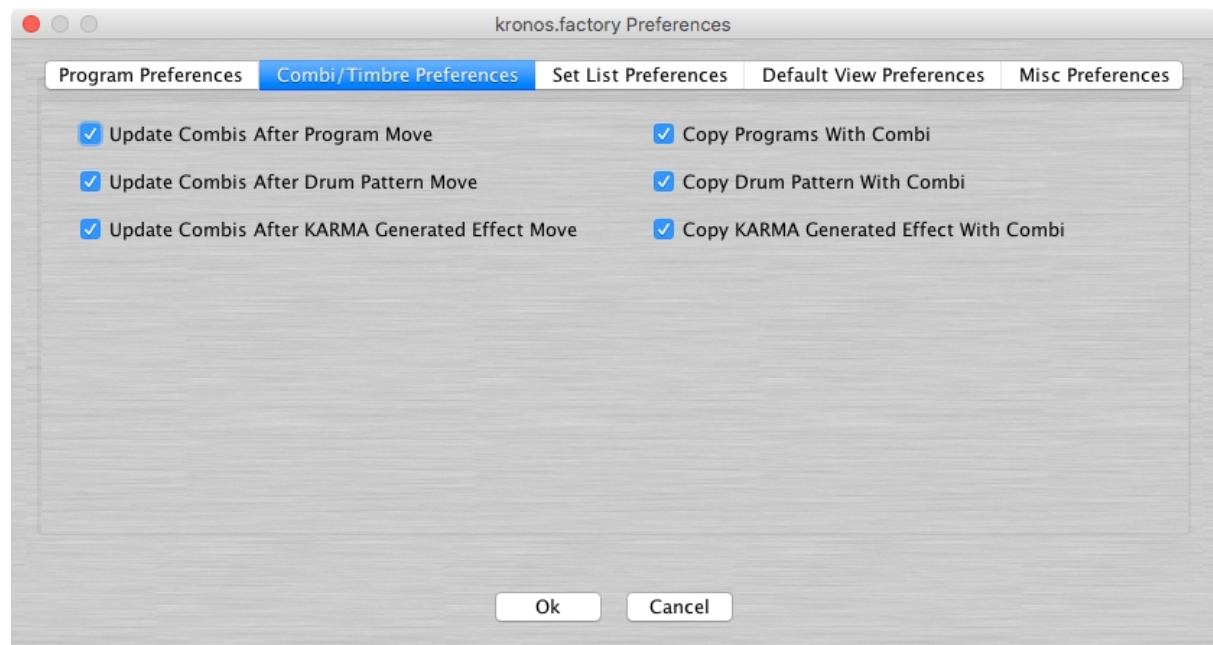


This tab has the following options:

<b>Update Programs After Wave Sequence Move</b>	If you move a Wave Sequence within a PCG file then the Programs that use Wave Sequences are updated to ensure that the correct references to the Wave Sequences are maintained.
<b>Update Programs After Drum Kit Move</b>	If you move a Drum Kit within a PCG file then the Programs that use Drum Kits are updated to ensure that the correct references to the Drum Kits are maintained.
<b>Update Programs After Drum Pattern Move</b>	If you move a Drum Pattern within a PCG file then the Programs that use Drum Patterns are updated to ensure that the correct references to the Drum Patterns are maintained.
<b>Update Programs After KARMA GE Move</b>	If you move a KARMA GE within a PCG file's associated KGE File then the Programs that use KARMA GEs are updated to ensure that the correct references to the KARMA GEs are maintained. NOTE: This setting currently has no effect, as currently KGE files cannot be edited
<b>Copy Waves Sequences With Program</b>	If you move or copy a Program from one PCG file to another PCG file, then any Wave Sequences referenced by the Program are also copied to the destination file if the Wave Sequences are not already present in the destination file.
<b>Copy Drum Kits With Program</b>	If you move or copy a Program from one PCG file to another PCG file, then any Drum Kits referenced by the Program are also copied to the destination file if the Drum Kits are not already present in the destination file.
<b>Copy Drum Patterns With Program</b>	If you move or copy a Program from one PCG file to another PCG file, then any Drum Patterns referenced by the Program are also copied to the destination file if the Drum Patterns are not already present in the destination file.
<b>Copy KARMA GEs With Program</b>	If you move or copy a Program from one PCG file to another PCG file, then any KARMA GEs referenced by the Program are also copied to the destination file's associated KGE File if the KARMA GEs are not already present in the destination file's associated KGE File. NOTE: This setting currently has no effect, as currently KGE files cannot be edited

## Combi Preferences

The Combi Preferences tab is shown below:

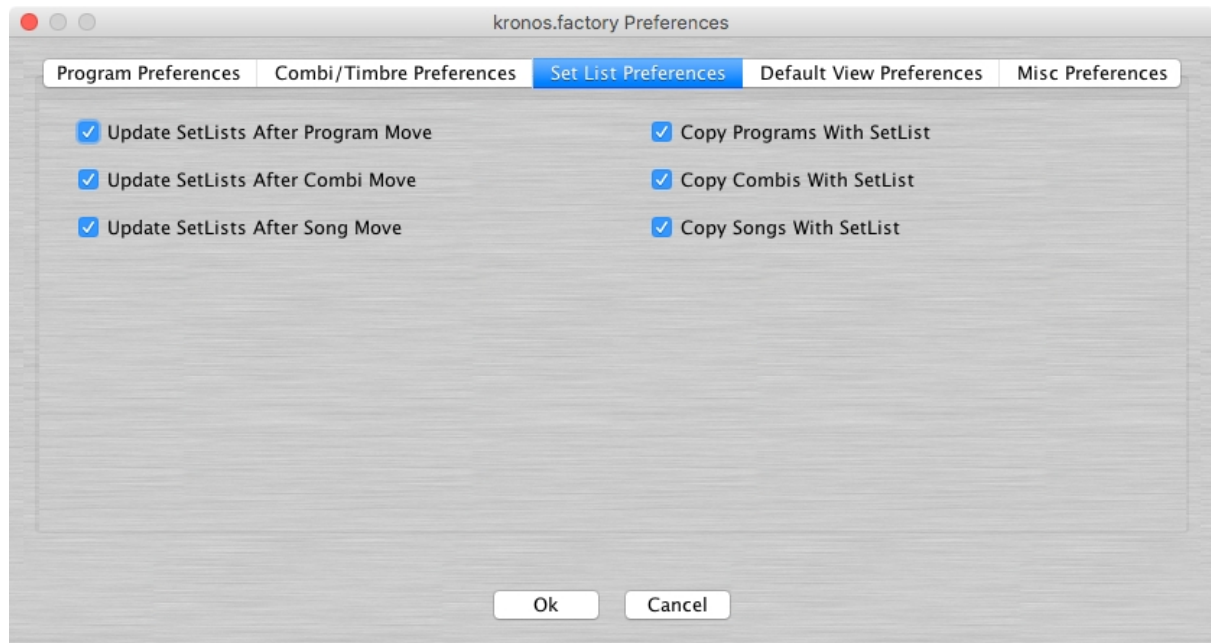


This tab has the following options:

<b>Update Combis After Program Move</b>	If you move Programs within a PCG file then the Combis that reference the updated Programs are updated to ensure that the correct references to the Wave Sequences are maintained.
<b>Update Combis After Drum Pattern Move</b>	If you move a Drum Pattern within a PCG file then the Combis that use Drum Patterns are updated to ensure that the correct references to the Drum Patterns are maintained.
<b>Update Combis After KARMA GE Move</b>	If you move a KARMA GE within a PCG file's associated KGE File then the Combis that use KARMA GEs are updated to ensure that the correct references to the KARMA GEs are maintained. NOTE: This setting currently has no effect, as currently KGE files cannot be edited
<b>Copy Programs With Combi</b>	If you move or copy a Combi from one PCG file to another PCG file, then any Programs referenced by the Combi are also copied to the destination file if the Programs are not already present in the destination file.
<b>Copy Drum Patterns With Combi</b>	If you move or copy a Combi from one PCG file to another PCG file, then any Drum Patterns referenced by the Combi are also copied to the destination file if the Drum Patterns are not already present in the destination file.
<b>Copy KARMA GEs With Combi</b>	If you move or copy a Combi from one PCG file to another PCG file, then any KARMA GEs referenced by the Combi are also copied to the destination file's associated KGE File if the KARMA GEs are not already present in the destination file's associated KGE File. NOTE: This setting currently has no effect, as currently KGE files cannot be edited

## Set List Preferences

The Set List Preferences tab is shown below:



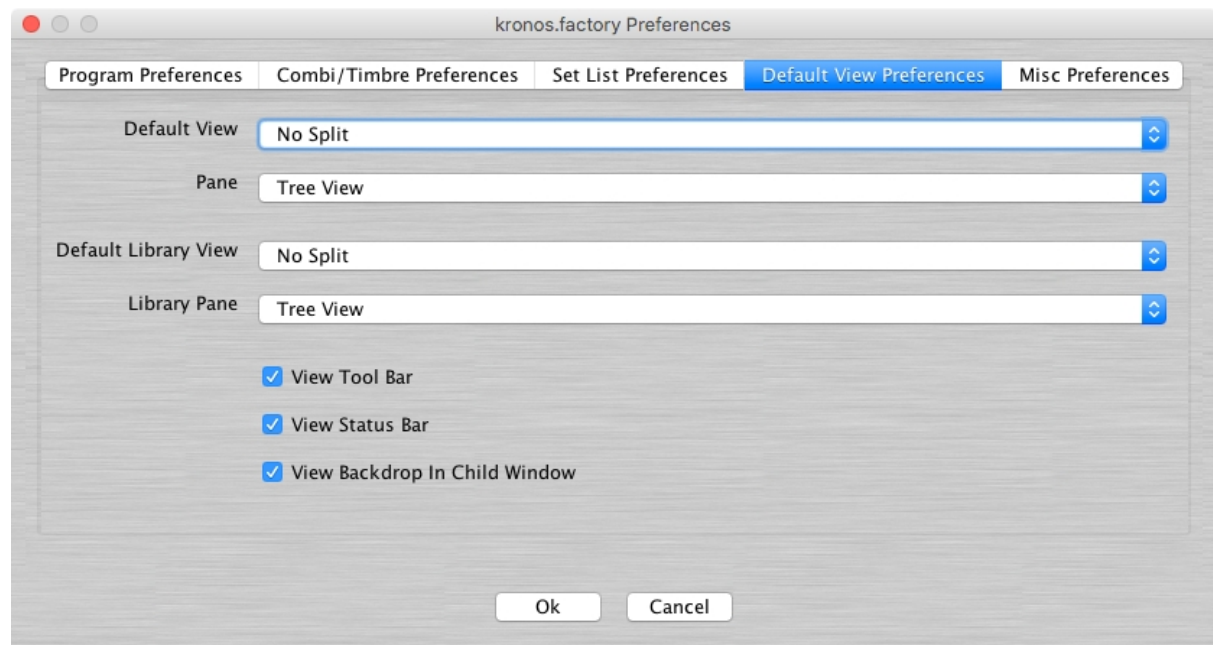
This tab has the following options:

<b>Update Set Lists After Program Move</b>	If you move Programs within a PCG file then the Set Lists that reference the updated Programs are updated to ensure that the correct references to the Wave Sequences are maintained.
<b>Update Set Lists After Combi Move</b>	If you move a Combi within a PCG file then the Set Lists that use Combis are updated to ensure that the correct references to the Combis are maintained.
<b>Update Set Lists After Song Move</b>	If you move a Song within an associated Song file then the Set Lists that use Songs are updated to ensure that the correct references to the Songs are maintained. NOTE: This setting currently has no effect, as currently Song files are not supported
<b>Copy Programs With Set List</b>	If you move or copy a Set List from one PCG file to another PCG file, then any Programs referenced by the Set List are also copied to the destination file if the Programs are not already present in the destination file.
<b>Copy Combis With Set List</b>	If you move or copy a Set List from one PCG file to another PCG file, then any Combis referenced by the Set List are also copied to the destination file if the Combis are not already present in the destination file.
<b>Copy Songs With Set List</b>	If you move or copy a Set List from one PCG file to another PCG file, then any Songs referenced by the Set List are also copied to the destination file's associated song file if the songs are not already present in the destination file. NOTE: This setting currently has no effect, as currently Song files are not supported



## Default View Preferences

The Default View Preferences tab is shown below:



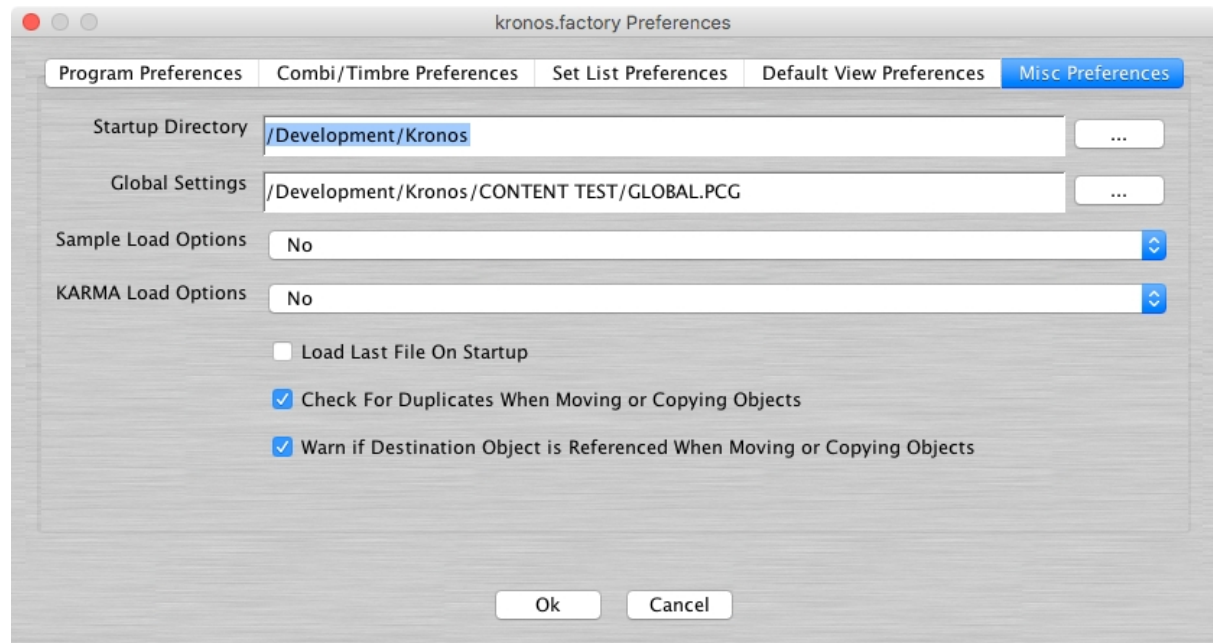
<b>Default View</b>	<p>Defines the type of view that is applied to a Child Window when it is first opened.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• No Split</li> <li>• Horizontal Split</li> <li>• Vertical Split</li> </ul>
<b>Pane/Left Pane/Top Pane</b>	<p>Defines the type of view shown in the single pane of an unsplit view, the left pane of a horizontally split view or the top pane of a vertically split view.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• Tree View</li> <li>• Table View</li> </ul>
<b>Right Pane/Bottom Pane</b>	<p>This control is only visible if the <b>Default View</b> option is set to either <b>Horizontal Split</b> or <b>Vertical Split</b>.</p> <p>Defines the type of view shown in the right pane of a horizontally split view or the bottom pane of a vertically split view.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• Tree View</li> <li>• Table View</li> </ul>

<b>Default Library View</b>	<p>Defines the type of view that is applied to the <a href="#">Kronos Library Window</a> when it is first opened.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• No Split</li> <li>• Horizontal Split</li> <li>• Vertical Split</li> </ul>
<b>Library Pane/Library Left Pane/Library Top Pane</b>	<p>Defines the type of view shown in the single pane of an unsplit view, the left pane of a horizontally split view or the top pane of a vertically split view.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• Tree View</li> <li>• Table View</li> </ul>
<b>Library Right Pane/Library Bottom Pane</b>	<p>This control is only visible if the <b>Default Library View</b> option is set to either <b>Horizontal Split</b> or <b>Vertical Split</b>.</p> <p>Defines the type of view shown in the right pane of a horizontally split view or the bottom pane of a vertically split view.</p> <p>The following options are available:</p> <ul style="list-style-type: none"> <li>• Tree View</li> <li>• Table View</li> </ul>
<b>View Tool Bar</b>	Controls if the toolbar is visible at startup.
<b>View Status Bar</b>	Controls if the status bar is visible at startup.
<b>View Backdrop In Child Window</b>	<p>This option controls if the image backdrop is displayed in Child Windows.</p> <p>You may wish to turn off this option if you find the scrolling of the Child Window is slow on your machine.</p>



## Miscellaneous Preferences

The Miscellaneous Preferences tab is shown below:




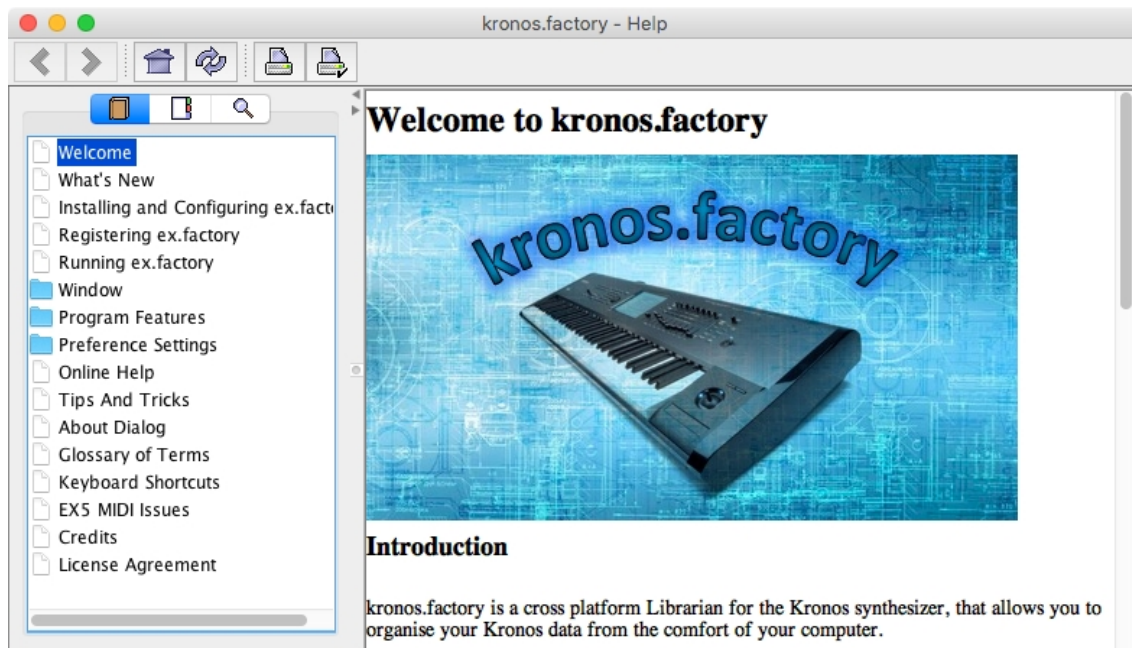
This tab has the following options:

<b>Startup Directory</b>	<p>Allows the startup directory to be specified. Note: no validation is performed on this pathname, so please ensure it is valid. I may add validation later.</p> <p>The [...] button to the right of the field brings up a dialog that allows you to select the directory instead of typing it in.</p>
<b>Global Settings</b>	<p>Specifies the file from which Global Settings will be loaded, to get your Program and Combi Categories and Sub Categories, if the current PCG does not have the Global Settings stored within in.</p> <p>The [...] button to the right of the field brings up a dialog that allows you to select the file instead of typing it in.</p>
<b>Sample Load Options</b>	<p>Determines what kronos.factory does with Sample (KSC) files when loading PCG files, if a KSC file is found in the same directory as the PCG file and with the same name. You can select the behaviour from the following choices:</p> <ul style="list-style-type: none"> <li>• No - Sample files are not loaded</li> <li>• Yes - Sample files are automatically loaded</li> <li>• Confirm - kronos.factory asks you if you wish to load a sample file</li> </ul>
<b>KARMA Load Options</b>	<p>Determines what kronos.factory does with KARMA (KGE) files when loading PCG files, if a KGE file is found in the same directory as the PCG file and with the same name. You can select the behaviour from the following choices:</p> <ul style="list-style-type: none"> <li>• No - KARMA KGE files are not loaded</li> <li>• Yes - KARMA KGE files are automatically loaded</li> <li>• Confirm - kronos.factory asks you if you wish to load a KARMA KGE file</li> </ul>
<b>Load Last File On Startup</b>	<p>Controls if the last file opened in the previous session is automatically loaded when kronos.factory is next invoked.</p>
<b>Check For Duplicates When Moving or Copying Objects</b>	<p>If you move or copy an Object to a destination file and the Object already exists then a warning is presented giving you the option to continue or cancel the operation.</p>
<b>Warn if Destination Object is Referenced When Moving or Copying Objects</b>	<p>If you move or copy an Object and it is overwriting an Object that is being referenced, or you are deleting a referenced Object, then a warning is presented giving you the option to continue or cancel the operation.</p>

# Online Help

kronos.factory provides a full online version of the kronos.factory manual.




If you select **Help ...** from the [Help Menu](#) or the  button on the [Tool Bar](#), the Help Window is opened.









The Help Window works just like a web browser window, so its operation should be quite familiar to you.

The left pane of the Help Window shows a tabbed navigation pane to allow you to quickly navigate to a topic, whilst the right hand pane shows the help topic.

The navigation pane can show three different views, depending on which tab you select:


-  Displays the Table of Contents Navigation Pane, providing a structured list of kronos.factory topics
-  Displays the Index Navigation Pane, providing an indexed list of kronos.factory topics
-  Displays the Search Navigation Pane, allowing you to search the help topics for keywords

The Help Window has the following Tool Bar buttons:

-  Navigates backwards to the last page in the access sequence. If you press and hold the mouse button over this button, you will get a list of accessed pages
-  Navigates forwards to the next page in the access sequence. If you press and hold the mouse button over this button, you will get a list of accessed pages
-  Selects the home page
-  Refreshes the current page
-  Prints the current page
-  Displays the print settings dialog

## Context Sensitive Help

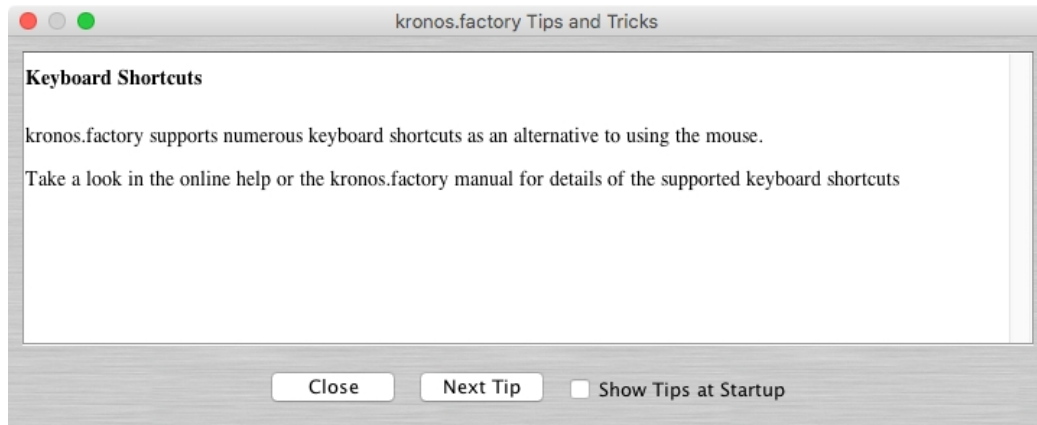
You can access context sensitive help by:

- pressing the your Computer Platform's **Help Key** ( **F1** on the PC platform), which will load the help page associated with the Component within the kronos.factory [Window](#) that currently has **Focus** (is responding to the keyboard and mouse).
- pressing the  button on the [Tool Bar](#) and the clicking over the item of interest

You can press the **Help Key** in any kronos.factory Dialog to access the relevant help page for the Dialog.

# Tips and Tricks

The kronos.factory tips and tricks dialog is shown below:



This dialog has the following controls:

<b>Close</b>	Closes the <b>Tips and Tricks</b> Dialog
<b>Next Tip</b>	Selects the next tip in sequence
<b>Show Tips at Startup</b>	If checked then when kronos.factory starts up, the <b>Tips and Tricks</b> Dialog is automatically opened

## List of Tips and Tricks

Just in case you want the tips and tricks shown by the dialog as one single list, here they are.

### Context Sensitive Help

If you press the **Help Key** ( **F1** on a PC) then you can get context sensitive help, including within Dialogs.

### Keyboard Shortcuts

kronos.factory supports numerous keyboard shortcuts as an alternative to using the mouse.

Take a look in the online help or the kronos.factory manual for details of the supported keyboard shortcuts

### Object Colouring

If an Object such as a Wave or Program is coloured **blue**, then it is being referenced by another Object.

If you right click over a **blue** Object you'll find a "**List References**" context menu, which will show you the Objects that reference this one.

### Find/Find Next Category Tool Bar Buttons

If you hold the **SHIFT** key down whilst pressing the **Find** or **Find Next** tool bar button the operations performed change from:

- **Find** to **Find Category**
- **Find Next** to **Find Next Category**

### Table Sorting

You can sort Tables by clicking in the Table Column headers.

For example, if you click in the Category Column then the Table will be sorted by Category

### You can only DRAG COPY Certain Objects

If you are trying to perform a drag operation on certain data types and are wondering why kronos.factory is not allowing you to perform the drag, try holding down the **CTRL** key during the drag to see if this is then allowed. Holding down the **CTRL** key turns the operation from a **Drag Move** operation to a **Drag Copy** operation.

Sometimes during a drag operation, the only sensible operation that can be undertaken is a copy operation, for example:

## Copying/Moving Objects to a Different File

When you copy an Object to a different file then any Objects it references can also be copied at the same time.

For example if you move a Combi to a new File, then the following Objects are also copied (assuming they are present within the file):

- The referenced Drum Kit if it is a User Drum Kit
- Any User Programs referenced by the Combi Timbres
- Any User Waves Sequences referenced by the Programs

I think you'll agree this is a cool feature!

This feature can be selectively turned off for different Object types if required within the Preferences Dialog.

## Workspaces

kronos.factory allows you to save a Window arrangement as a **Workspace** which you can then recall at a later date.

## Moving Objects within a File

When you move an Object within a file then any Objects that reference the Object type being moved can be updated to ensure they all still reference the correct objects after the move.

For example if you move a Program within a file then all the Combi Timbres are updated

I think you'll agree this is a cool feature!

This feature can be selectively turned off for different Object types if required within the Preferences Dialog.

## KSC File Loading

If you have a KSC file in the same directory as your PCG file with the same name (e.g. mysounds.pcg, mysounds.ksc) then kronos.factory can load that file automatically as part of the PCG data if you have set the **Sample Load Options** in the kronos.factory Preference settings to **Yes**. Setting the same option to **Confirm** will allow you to confirm the choice when the files are loaded.

## KGE File Loading

If you have a KGE file in the same directory as your PCG file with the same name (e.g. mysounds.pcg, mysounds.kge) then kronos.factory can load that file automatically as part of the PCG data if you have set the **KARMA Load Options** in the kronos.factory Preference settings to **Yes**. Setting the same option to **Confirm** will allow you to confirm the choice when the files are loaded.

## "Read only" Data

In this version of kronos.factory, KSC and KGE files can be loaded, but currently the contents of these files are "read only". This means that you can view the contents, but you cannot edit it. kronos.factory will also use the data, for example to display sample names in HD-1 Oscillator trigger zones.

Such read only data is highlighted in red text with a yellow background

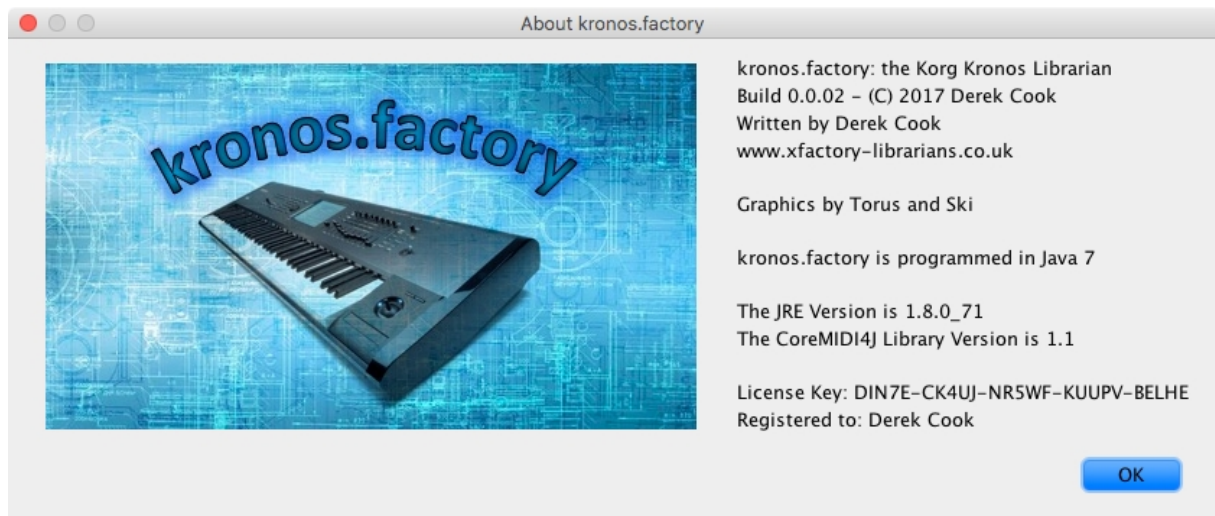
## PCG File Formats

Whilst kronos.factory was written primarily with OS Version 3 files in mind, I have provided legacy OS file support for the older file versions for OS 1.5 and OS 2.0 as a lot of the publicly available Kronos files are provided in these formats.

kronos.factory will preserve the format that a file is in. When you copy data between files of different formats then it is converted to the later format. You can only copy from older to later file formats

# About kronos.factory

The about dialog is shown when the **About ...** option from the [Help Menu](#) or the ⓘ button on the [Tool Bar](#) is selected.



The dialog shows some basic information about the program including the version number and the [License](#) status of kronos.factory.

It also shows which Java Run Time Environment that kronos.factory is running in.

# Glossary

Term	Definition
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# Keyboard Short Cuts

kronos.factory provides many keyboard shortcuts for navigation and performing editing operations.

In general, navigating between components uses these keys:

- **Tab.** Moves keyboard focus to the next component or to the first member of the next group of components.
- **Ctrl-Tab.** Moves keyboard focus to the next component or to the first member of a group of components when the current component accepts a tab (as in text fields, tables, and tabbed panes).
- **Shift-Tab.** Moves keyboard focus to the previous component or to the first component in the previous group of components.
- **Arrow keys.** Move keyboard focus within the individual components of a group of components--for example, within menu items in a menu or within tabs in a tabbed pane.

The shortcuts are divided into the following categories:

- [Keyboard shortcuts for the Desktop and Child Windows](#)
- [Keyboard shortcuts for Tree Views](#)
- [Keyboard shortcuts for Table Views](#)
- [Keyboard shortcuts for Editing within Tree and Table Views](#)
- [Keyboard shortcuts for the Preferences Dialog](#)
- [Keyboard shortcuts for Text Editing Fields](#)

## Keyboard Shortcuts for the Desktop and Child Windows

Action	Keystroke	Notes
New File	Ctrl-N	
Open File	Ctrl-O	
Save File	Ctrl-S	
Save File As	Ctrl-A	
Save All Files	Ctrl-L	
Open Workspace	Ctrl-ALT-O	
Save Workspace	Ctrl-ALT-S	
Tile Horizontally	Ctrl-H	
Tile Vertically	Ctrl-V	
Maximise Windows	Ctrl-M	
Restore Windows	Ctrl-R	
Minimise Windows	Ctrl-I	
Closes Child Window	Ctrl-F4	
Moves Child Window	Ctrl-F7	
Resizes Child Window	Ctrl-F8	
Minimizes Child Window	Ctrl-F9	
Switch to next Child Window on the Desktop	Ctrl-F6	

## Keyboard Shortcuts for Tree Views

Action	Keystroke	Notes
Expands current Object	Right arrow	
Collapses current Object, or moves focus to Parent Object	Left arrow	
Moves focus up one Object	Up arrow	
Moves focus down one Object	Down arrow	
Moves focus to first Object in Tree View	Home	
Moves focus to last Object in Tree View	End	
Moves up one view	Page Up	
Moves down one view	Page Down	
Selects all Object in Tree View	Ctrl-A, Ctrl-/	
Deselects all Object in Tree View	Ctrl-\	
Extends selection down	Shift-down arrow	
Extends selection up	Shift-up arrow	
Extends selection to beginning of Tree View	Shift-Home	
Extends selection to end of Tree View	Shift-End	
Extends selection up one view	Shift-PgUp	
Extends selection down one view	Shift-PgDn	



## Keyboard Shortcuts for Table Views

Action	Keystroke	Notes
Moves up one row	Up arrow Shift-Return	
Moves down one row	Down arrow Return	
Scrolls up one view	Page Up	
Scrolls down one view	Page Down	
Moves focus and view to first cell in the current row	Home	
Moves focus and view to last cell in the current row	End	
Moves focus and view to first cell in the current column	Ctrl-Home	
Moves focus and view to last cell in the current column	Ctrl-End	
Allows editing in a Category cell	F2, Down Arrow	
Allows editing in a Name cell.	F2	
Resets cell to the state it was in before it was edited	Escape	
Selects entire table	Ctrl-A	
Extends selection up one row	Shift-up arrow	
Extends selection down one row	Shift-down arrow	
Extends selection to beginning of table	Ctrl-Shift-Home	
Extends selection to end of table	Ctrl-Shift-End	
Extends selection up one view	Shift-PgUp	
Extends selection down one view	Shift-PgDn	

## Keyboard Editing Short Cuts for both Tree and Table Views

Action	Keystroke	Notes
Undo	Ctrl-Z	
Redo	Ctrl-Y	
Cut	Ctrl-X	
Copy	Ctrl-C	
Paste	Ctrl-V	
Find	Ctrl-F	
Find Next	F3	
Find Category	Ctrl-Shift-F	
Find Next Category	Shift-F3	
Goto	Ctrl-G	
Insert Object	INS	Not allowed on Collections
Delete Object	DEL	Not allowed on Collections
Rename Object	F4	Single Named Object Only
Initialise Object	F5	
List References	F6	Single Named Object Only
Map To Flash	F7	
Map To Ram	Shift-F7	
Export to MIDI Edit Buffer	F8	Single Voice or Performance Only
Export to MIDI Memory	Shift-F8	Voices or Performances Only
Import from MIDI Edit Buffer	F9	Single Voice or Performance Only
Import from MIDI Memory	Shift-F9	Voices or Performances Only

## Keyboard Shortcuts for the Preferences Dialog

Action	Keystroke	Notes
Navigates through tabs	Arrow keys	
Moves from tab to its associated content pane	Ctrl-down arrow	
Moves from content pane to its associated tab	Ctrl-up arrow	

## Keyboard Shortcuts for Text Editing Fields

Action	Keystroke	Notes
Moves insertion point one character to the right	Right arrow	
Moves insertion point one character to the left	Left arrow	
Moves insertion point to beginning of next word	Ctrl-right arrow	
Moves insertion point to beginning of previous word	Ctrl-left arrow	
Moves insertion point to beginning of field	Home	
Moves insertion point to end of field	End	
Submits text entry	Enter, Return	
Extends selection to beginning of line	Shift-Home	
Extends selection to end of line	Shift-End	
Extends selection one character to the left	Shift-left arrow	
Extends selection one character to the right	Shift-right arrow	
Extends selection to next word	Shift-Ctrl-right arrow	
Extends selection to previous word	Shift-Ctrl-left arrow	

# Credits

Thanks go, in no particular order, to:

- Galf2 for assistance in beta testing.
- Korg for making such a fantastic synthesizer in the Kronos

## 3rd party software used in kronos.factory

The following 3rd part software is used to build kronos.factory and provide some program features.

### CoreMIDI4J License

kronos.factory makes use of [CoreMIDI4J](#) to provide MIDI support on OS X, which is issued under the [EPL 1.0 License](#).

### Table Filter License

kronos.factory makes use of [TableFilter](#) by [Luis M. Pena](#), which is issued under the [MIT License](#).

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### Apache Derby License

kronos.factory makes use of [Apache Derby](#) to provide the library function, which is issued under the [Apache 2.0 License](#).

### Apache Log4J License

kronos.factory makes use of [Apache Log4J](#) to provide logging services, which is issued under the [Apache 2.0 License](#).

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### Java Wizard License

The kronos.factory Library Batch Importer makes use of the [Java Wizard Project](#) which is distributed under the [Open Source Initiative Common Development and Distribution License](#).

I have adapted the Wizard software to allow me to display two progress bars in the Wizard. If anybody wishes to have the source code for how I did this, please email me at [supportx@xfactory-librarians.co.uk](mailto:supportx@xfactory-librarians.co.uk) and I will happily provide the adapted source code.

# kronos.factory License

The unregistered version of kronos.factory allows you to evaluate the features of the program, which are fully functional except the File Save, MIDI Export and Librarian features.

However, kronos.factory cannot be included as part of a commercial distribution or on other web sites without the express permission of the Author. I am happy for you to provide links to [www.xfactory-librarians.co.uk](http://www.xfactory-librarians.co.uk), to maximise public access to kronos.factory.

kronos.factory license files are issued to users who have registered kronos.factory, to gain access to the File Save, MIDI Export and Librarian features. If you have been issued with a license key you are not allowed to distribute a license key to other users. Please respect this, and the amount effort I have put into making this application.

You are permitted to install and activate kronos.factory on two computers, for which the license is valid.

If you wish to install and activate kronos.factory on more than two computers, then an additional license can be purchased at 50% of the cost of the main license.

The Author retains the copyright on the program and all of its originally developed features.

## Disclaimer

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I have worked hard to ensure this software works correctly, as I certainly don't want it trashing my data. However, I cannot be held liable for any problems arising as a consequence of you using this software on your computer and your data. You use this product at your risk.

Like all new products, please proceed and evaluate with care, and ensure that all your important data files are backed up before installation and evaluation.

Having gotten that out of the way, if you do encounter any problems, please submit a bug report to [support@xfactory-librarians.co.uk](mailto:support@xfactory-librarians.co.uk), and I will endeavour to provide a fix for any reported problems.

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