



# HARMONY

TOON BOOM HARMONY 12.2.1  
**Paint Preferences Guide**



## Legal Notices

Toon Boom Animation Inc.  
4200 Saint-Laurent, Suite 1020  
Montreal, Quebec, Canada  
H2W 2R2

Tel: +1 514 278 8666  
Fax: +1 514 278 2666

[toonboom.com](http://toonboom.com)

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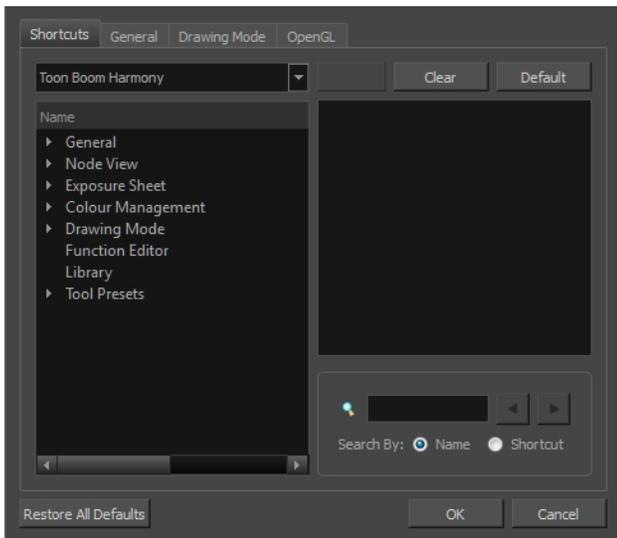
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# Chapter 1: Introduction to Preferences

The Preferences dialog box lets you adjust preferences to suit your work style, allowing you to work more efficiently.



The Preferences dialog box is divided into the following tabs:

- Shortcuts
- General
- Drawing Mode
- OpenGL

**NOTE:** Some preferences require you to exit and restart the application, or close a view and reopen it.

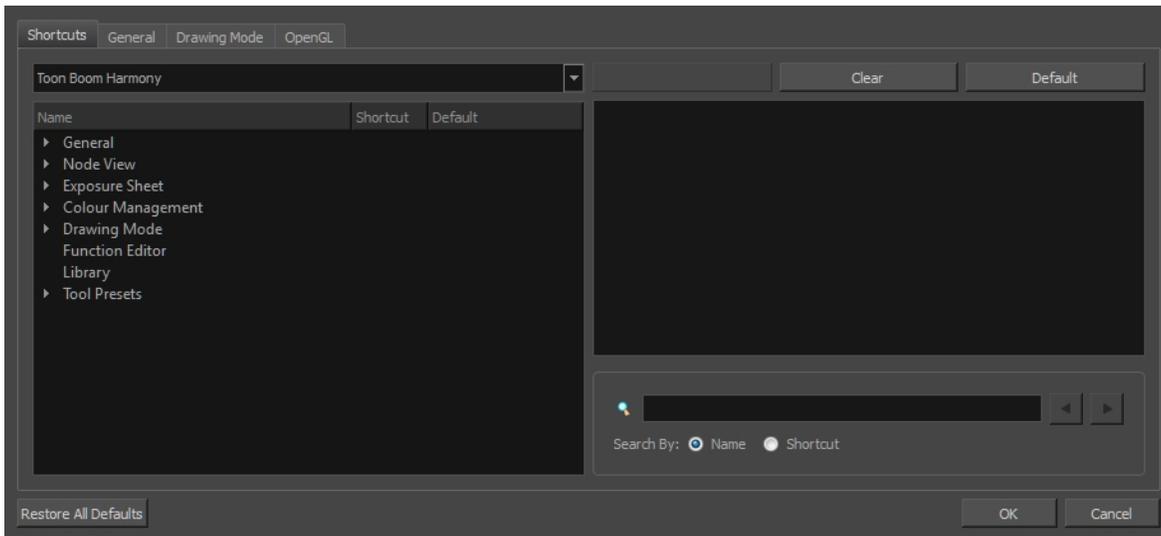
## How to access the Preferences dialog box

Do one of the following:

- ▶ From the top menu, select **Edit > Preferences** (Windows/Linux) or **Stage Paint > Preferences** (Mac OS X).
- ▶ Press **Ctrl + U** (Windows/Linux) or **⌘ + U** (Mac OS X).



## Shortcut Preferences



To speed up your work, all of the keyboard shortcuts can be customized. You can even choose other software keyboard shortcut sets.

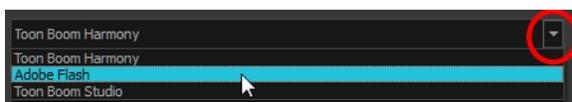
In Toon Boom Harmony, you can choose a set of default keyboard shortcuts you are familiar with. You can choose between the following:

- Adobe Flash
- Toon Boom Harmony
- Toon Boom Studio

You can also customize most of the shortcuts and use the search feature to find particular shortcuts.

### How to switch keyboard shortcut sets

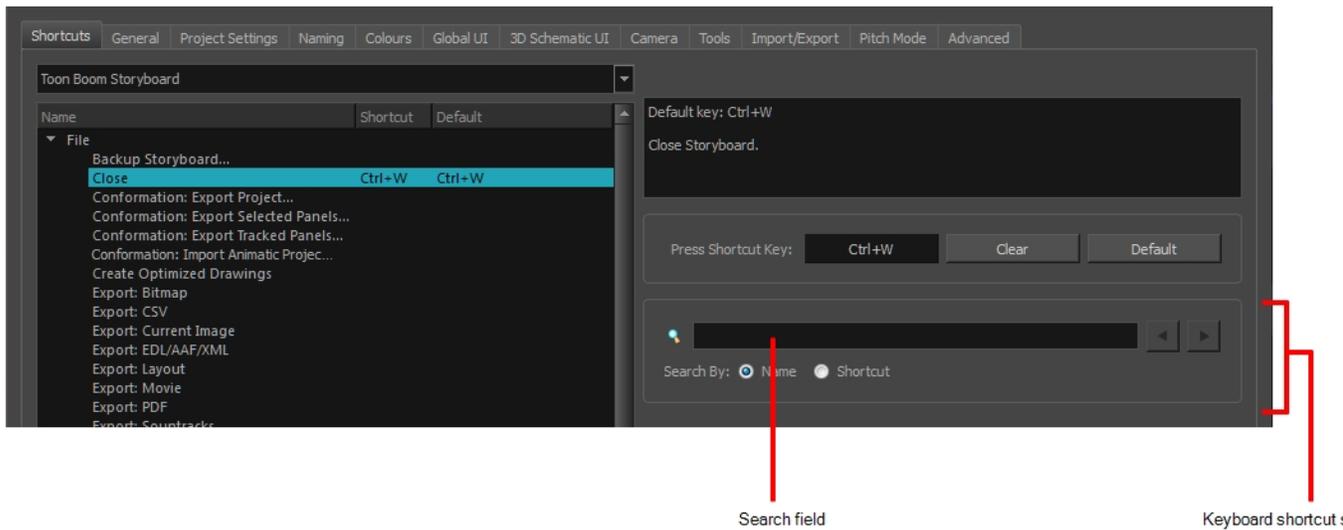
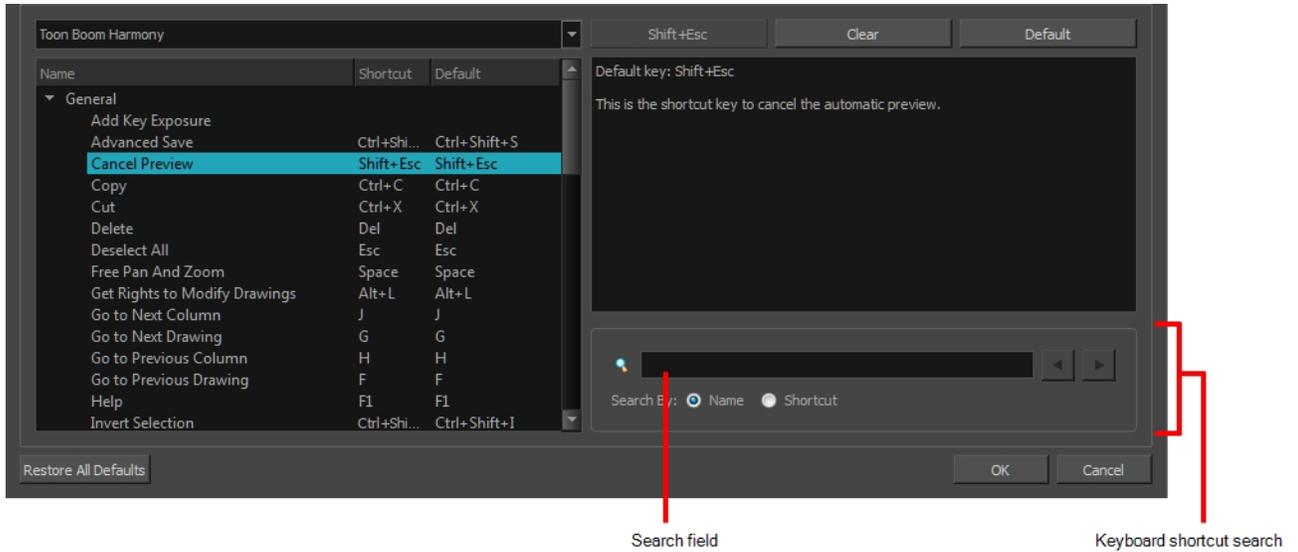
1. Do one of the following:
  - ▶ Windows: Select **Edit > Preferences**
  - ▶ Mac OS X: Select **Stage Paint > Preferences**.
  - ▶ Press **Ctrl + U** (Windows/Linux) or **⌘ + U** (Mac OS X).
2. In the Preferences dialog box, select the **Shortcuts** tab.
3. From the Shortcut Set list, select the desired set.



### How to search for a keyboard shortcut

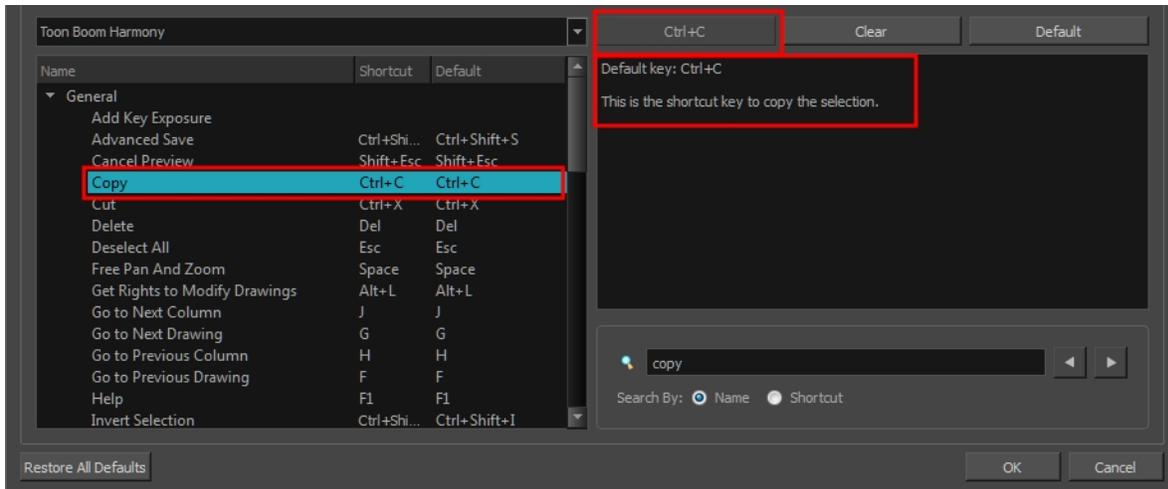
1. In the keyboard shortcut search section, select an option:
  - ▶ **Name** to search for a keyboard shortcut by its name.

- ▶ **Shortcut** to search for a keyboard shortcut by its actual keys that activate the shortcut.



2. In the Search field, enter the name of a keyboard shortcut or its shortcut keys.

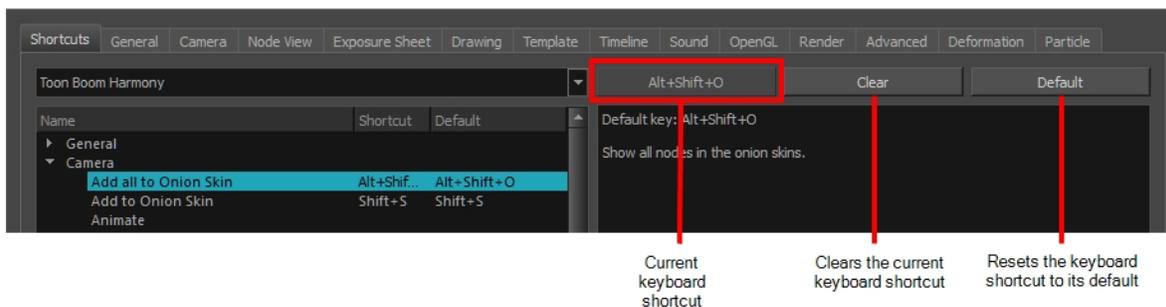
The keyboard shortcut is highlighted in the left pane. Its shortcuts is displayed on the right pane.



3. If desired, set a different keyboard shortcut.
4. Click **OK**.

### How to set a keyboard shortcut

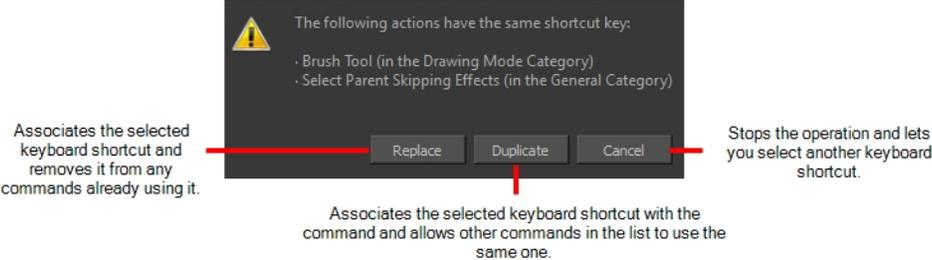
1. Do one of the following:
  - ▶ Windows: Select **Edit > Preferences**
  - ▶ Mac OS X: Select **Stage Paint > Preferences**.
  - ▶ Press **Ctrl + U** (Windows/Linux) or **⌘ + U** (Mac OS X).
2. In the Preferences dialog box, select the **Shortcuts** tab.
3. In the left pane, select a category and then select a command to modify.
4. In the right pane, click the keyboard shortcut.



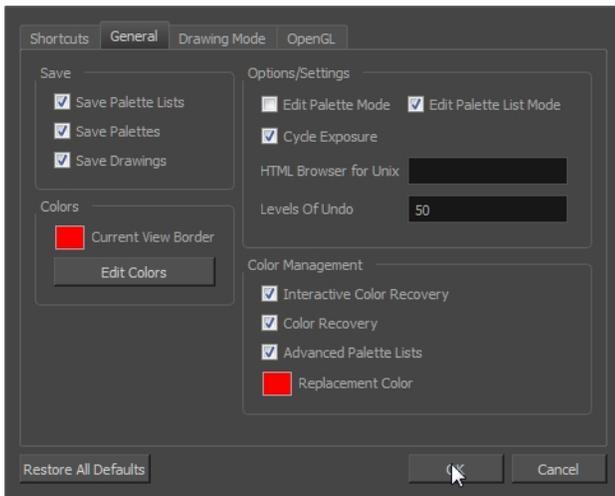
5. Use the keyboard to set a new shortcut.
  - ▶ To remove a command's current keyboard shortcut, click **Clear**.
  - ▶ To return a command's keyboard shortcut to its default, click **Default**.
6. Click **OK**.

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If a keyboard shortcut is already in use, the Conflict Detected dialog box will appear notifying you of the command to which it is already associated. You can continue to associate the shortcut or cancel the operation and choose another command.



## General Preferences

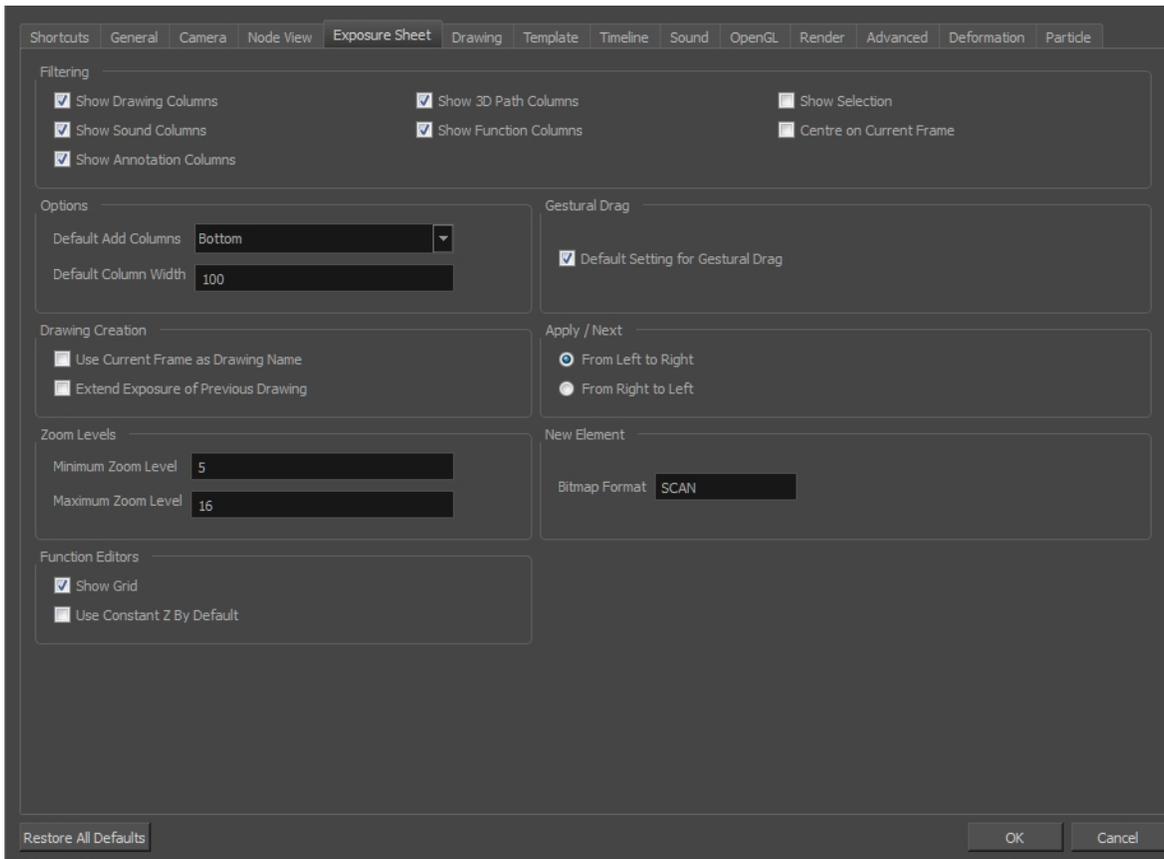


To customize your interface, you will use some of the preferences located in the General tab as well as the Camera tab.

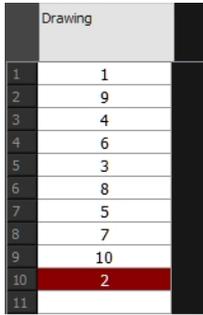
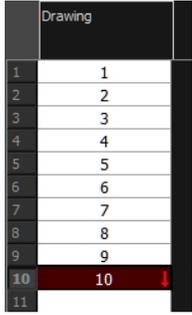
Parameter	Description
Save	<p><b>Save Palette Lists:</b> When set to "Yes", this preference saves all palette lists you have modified when the Save command is activated. When set to "No", the Save command will not save the palette lists and you will have to use the Save command to save them.</p> <p><b>Save Palettes:</b> When set to "Yes", this preference saves all palette you have modified when the Save command is activated. When set to "No", the Save command will not save the modified palettes and you will have to use the Save command to save them.</p> <p><b>Save Drawings:</b> When set to "Yes", this preference saves all drawings you have modified when the Save command is activated. When set to "No", the Save command will not save the modified drawings and you will have to use the Save command to save them.</p>
Colours	<p><b>Current View Border:</b> Sets the colour of the frame around the workspace view you are currently using, also known as focus. By default, the colour is red. Click on the red colour swatch to select a new colour in the Colour Picker window.</p> <p><b>Edit Colours:</b> Click on the Edit Colours button to open the Colours window.</p>
Options/Settings	<p><b>Edit Palette Mode:</b> Default value for Edit Palette Mode.</p> <p><b>Edit Palette List Mode:</b> Default value for Edit Palette List Mode.</p> <p><b>Cycle Exposure:</b> Make navigation in the Xsheet View wrap-around from the last frame or the last column to the first.</p> <p><b>HTML Browser for Unix:</b> This option is used to view the online help on Linux machines. Enter the command to launch the browser, including the path if necessary.</p> <p><b>Levels of Undo:</b> Determines the number of actions retained by the Undo</p>



## Exposure Sheet Preferences

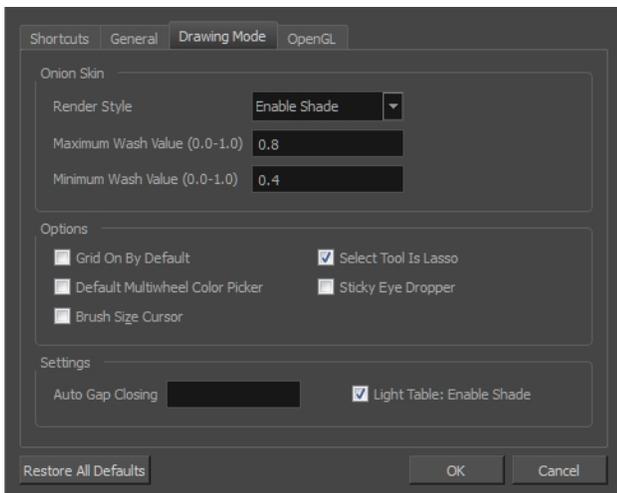


Parameter	Description
Filtering	<p>These preferences are used to display or hide certain layer types in the Xsheet view.</p> <p><b>Show Drawing Columns:</b> Displays the Drawing layers in the Xsheet view.</p> <p><b>Show Sound Columns:</b> Displays the Sound columns in the Xsheet view.</p> <p><b>Show 3D Path Columns:</b> Displays the 3D Path columns in the Xsheet view.</p> <p><b>Show Function Columns:</b> Displays the Function columns layers in the Xsheet view.</p> <p><b>Show Selection:</b> Sets the Show Selection option On or Off by default in the Xsheet view.</p> <p><b>Centre on Current Frame:</b> Turns auto-centering on or off when playing back a scene. Auto-centering is used during sound breakdown with the ShuttleXpress device.</p>
Options	<p><b>Default Add Columns:</b> The default position where the new column will be added.</p> <p><b>Default Column Width:</b> The default width value for the new column being created.</p>
Drawing Creation	<p><b>Use Current Frame as Drawing Name:</b> Automatically names the drawing corresponding to the frame position. This avoids numbering conflicts while</p>

	<p>animating.</p>  <table border="1" data-bbox="662 222 865 537"> <thead> <tr> <th></th> <th>Drawing</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td></tr> <tr><td>2</td><td>9</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>4</td><td>6</td></tr> <tr><td>5</td><td>3</td></tr> <tr><td>6</td><td>8</td></tr> <tr><td>7</td><td>5</td></tr> <tr><td>8</td><td>7</td></tr> <tr><td>9</td><td>10</td></tr> <tr><td>10</td><td>2</td></tr> <tr><td>11</td><td></td></tr> </tbody> </table> <p>For example, using the default preferences, you start with the first drawing on frame 1, this drawing is called 1. You then draw the extreme position drawing on frame 10, this drawing is called 2. Next, the in-between pose is drawn on frame 5, this drawing is called 3 and so on.</p> <p>At the end, you have a sequence like this: 1-9-4-6-3-8-5-7-10-2.</p>  <table border="1" data-bbox="662 785 854 1100"> <thead> <tr> <th></th> <th>Drawing</th> </tr> </thead> <tbody> <tr><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td></tr> <tr><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td></tr> <tr><td>8</td><td>8</td></tr> <tr><td>9</td><td>9</td></tr> <tr><td>10</td><td>10</td></tr> <tr><td>11</td><td></td></tr> </tbody> </table> <p>Instead, using the Use Current Frame as Drawing Name option, each drawing is automatically named by its frame number and the sequence looks like: 1-2-3-4-5-6-7-8-9-10.</p> <p><b>Extend Exposure of Previous Drawing:</b> When drawing on a blank frame, a new drawing is created and the timing is extended from the previous exposed drawing.</p>		Drawing	1	1	2	9	3	4	4	6	5	3	6	8	7	5	8	7	9	10	10	2	11			Drawing	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	
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Zoom Levels	<p>You can set the minimum and maximum zoom levels to view the Xsheet, depending on the number of columns and rows in the project. Once you set a level, close and reopen the Xsheet so the new values take effect.</p> <p><b>Minimum Zoom Level:</b> Lets you set the lowest level of zoom. Choose a value between 1 and 6.</p> <p><b>Maximum Zoom Level:</b> Lets you set the highest level of zoom. Choose a value between 14 and 20.</p> <hr/> <p><b>NOTE:</b> You can set a keyboard shortcut to view the entire Xsheet.</p>																																																
Function Editors	<p><b>Show Grid:</b> When selected, the grid is displayed by default when opening the Function Editor.</p> <p><b>Use Constant Z By Default:</b> When selected, the Constant Z option will be enabled by default in the Function Editor.</p>																																																

	<p>Constant Z means that even when creating Motion keyframes, the Z function will use Stop-Motion keyframes and will not be interpolated, this can be very useful for cut-out animation. The Constant Z feature only works with 3Dpaths.</p> <p>You can also enable the Constant Z option directly in the Function Editor or Function view for specific functions.</p>
Gestural Drag	<b>Default Setting for Gestural Drag:</b> This is the default value enabling gestural dragging of cells in the Xsheet view.
Apply/Next	<p><b>From Left to Right:</b> When clicking the <b>Apply/Next</b> button in the Xsheet view Column Properties, the next column to be displayed in the Column Properties will be the one on the right.</p> <p><b>From Right to Left:</b> When clicking the <b>Apply/Next</b> button in the Xsheet view Column Properties, the next column to be displayed in the Column Properties will be the one on the left.</p>
New Element	<b>Bitmap Format:</b> By default, when you create a new empty bitmap column, it will use the file format indicated in the field as the new column format. The default value is SCAN, which means that it is set for scanned-in drawings.

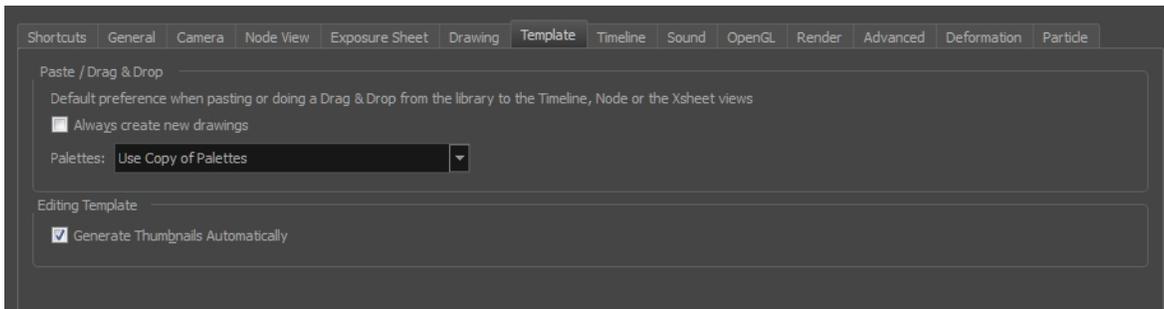
## Drawing Mode Preferences



Parameter	Description
Onion Skin	<p><b>Render Style:</b></p> <ul style="list-style-type: none"> <li>• <b>Normal:</b> The onion skinned drawings is displayed in washed out colours.</li> <li>• <b>Enable Shade:</b> The previous onion skinned drawings are displayed in washed out red shades and the next onion skinned drawings are displayed in washed out green shades.</li> <li>• <b>Outlines Only:</b> The onion skinned drawings are displayed as outlines only.</li> </ul> <p><b>Maximum Wash Value (0,0-1,0):</b> The maximum washed-out value for onion skinned drawings.</p> <p><b>Minimum Wash Value (0,0-1,0):</b> The minimum washed-out value for onion skinned drawings.</p>

Options	<p><b>Grid On By Default:</b> When opening the Drawing view, the grid displays automatically.</p> <p><b>Default Multiwheel Colour Picker:</b> Displays the Multiwheel Colour Picker window instead of the regular Colour Picker.</p> <p><b>Brush Size Cursor:</b> When this option is enabled, the brush tool displays the brush size as a circle around the cursor.</p> <p><b>Select Tool is Lasso:</b> When this option is enabled, the Select tool behaves as a lasso selector. When this option is disabled, the Select tool behaves as a rectangle selector.</p> <p><b>Sticky Eye Dropper:</b> Keeps the Colour Picker's Dropper tool active until it is released by clicking the Dropper icon again.</p>
Settings	<p><b>Auto Gap Closing:</b> The values for automatic gap closing while painting drawings are: 0 = Disabled, 1=Small, 2=Medium, 3=Big</p> <p><b>Light Table: Enable Shade:</b> When enabled, the drawings appearing in the Light Table are displayed in washed out colours in the Drawing view. When this option is disabled, the drawings appearing in the Light Table are displayed using normal colours. This option is for the Drawing view only.</p>

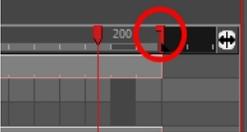
## Template Preferences



Parameter	Description
Paste/Drag & Drop	<p><b>Always Create New Drawings:</b> By default, when you import timeline templates in the right section of the Timeline view, to stack them, the system will analyze and create only the non-existing drawings and only expose the existing ones. When enabled, this option automatically creates new drawings for every one of them that is exposed.</p> <p><b>Palettes:</b></p> <ul style="list-style-type: none"> <li>• <b>Ask User:</b> When dropping a template into a scene, the system will ask if you want to link the palette to the original or create a local copy in the scene.</li> <li>• <b>Use Original Palette:</b> The system will automatically link drawing elements to the original palette file. If the original palette is not encountered a local copy will be created.</li> <li>• <b>Use Copy of Palettes:</b> The system will automatically create a local copy of the palette in the scene.</li> </ul>
Editing Template	<p><b>Generate Thumbnails Automatically:</b> Automatically create thumbnails for the template when you want to see the thumbnails in the Library or when saving a template modification.</p>



## Timeline Preferences

Parameter	Description
Defaults	<p><b>Show Groups:</b> Displays the Group layers in the Timeline.</p> <p><b>Show Effects:</b> Displays the Effect layers in the Timeline.</p> <p><b>Show Sound:</b> Displays the Sound layers in the Timeline.</p> <p><b>Show Sound Waveforms:</b> Displays the imported sounds waveform in the Timeline.</p> <hr/> <p><b>NOTE:</b> You can always toggle the visibility of the waveform in the Timeline view by adding the Show Sound Waveform button from the Toolbar Manager. This button will work whether you have the Show Sound Waveform option enabled or disabled in the Preferences panel.</p> <hr/> <p><b>Show End of Scene Marker:</b> Displays the red bracket that delineates the end of your scene in the Timeline view. If you know that many different hands will be working on your scene, you may want to deselect this option so the scene length is not increased or decreased by accident.</p>  <p><b>Reduce Indentation:</b> When this option is enabled, the horizontal indentation for parented nodes in the Timeline is reduced to optimize the amount of space taken in the Timeline. When you have a cut-out character and there is a long cascade of parented nodes, you can enable this option so the Timeline (left side) does not have expand too wide to see all your nodes.</p>
Paste/Drag & Drop	<p><b>Add Keyframes at Beginning and End:</b> Copies and pastes a set of frames that includes an interpolated sequence between two keyframes, but only extracts a partial section. Under normal circumstances, cutting and pasting a function without either the start or end keyframe would render the function null. This option caps the partial function with a new keyframe when you perform the paste.</p> <p><b>Overwrite exposures and keyframes during drag and drop:</b> If the area on which you are dropping a selection contains exposures and/or keyframes, they are overwritten by the content you are selected by dragging.</p>

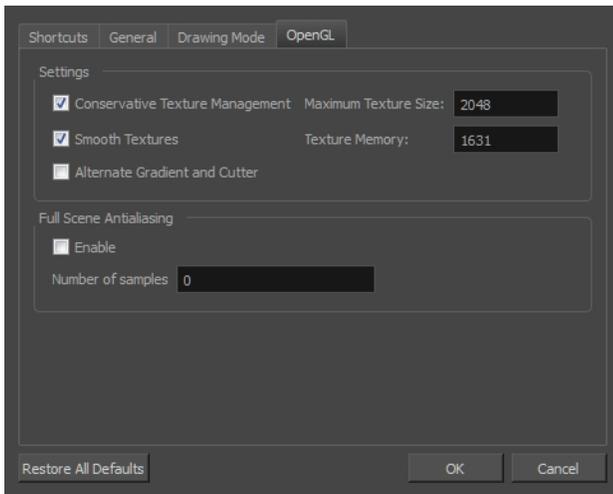


## Sound Preferences

Parameter	Description
Settings	<p><b>Analog Sound Scrubbing:</b> Switches from digital to analog sound scrubbing.</p> <p><b>Analog Jog Speed:</b> Lets you control the sensitivity of the jog slider or dial. Choose a value between 1 and 20. The higher the jog speed value, the slower you can scrub to have the sound play at an average pace.</p> <p><b>Analog Jog Dampening:</b> Lets you choose a value between 1 and 100 for the Analog Jog Dampening. The higher the value, the less precise Harmony is at responding to the jog's changes in speed. However, the more smooth the play back is using the jog slider or dial.</p>

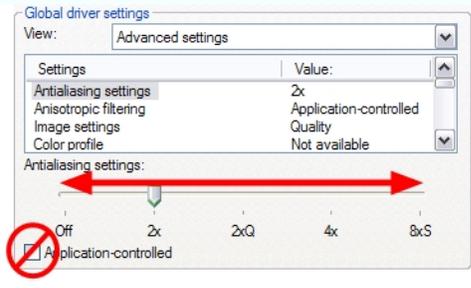


## OpenGL Preferences



Parameter	Description
Settings	<p><b>Conservative Texture Management:</b> Turns on and off conservative memory management for bitmap texture files. Performance will improve when this is enabled. If disabled, you will have a better on-screen rendering of bitmap files at the expense of slower performance.</p> <p><b>Smooth Textures:</b> Smooths out the pixels of bitmap images when zooming in; this improves bitmap image quality.</p> <p><b>Alternate Gradient and Cutter:</b> This is an alternative way to disable write in the OpenGL Backbuffer, required for some video cards (i.e. GeForce FX5200). Do not enable this option unless you are experiencing problems with gradients and cutters in OpenGL.</p> <p><b>Maximum Texture Size:</b> The size that the bitmap file will be reduced to when using the Conservative Texture Management.</p> <p><b>Texture Memory:</b> The amount of temporary memory used to store bitmap texture files.</p>
Full Scene Antialiasing	<p>The Full Scene Antialiasing is generated by your computer's graphic card. It provides a smooth line display in OpenGL. This antialiasing will not only antialias your drawings but all the different views in the interface.</p> <p>This option lets you see smooth lines as you draw as well as an antialiased drawing area. You can change the value of the Full Scene Antialiasing using the Preferences dialog box to fit the current level used in the Camera or Drawing view.</p> <p><b>Enable:</b> By default, this option is off. Select to turn on the Full Scene Antialiasing option. You'll need to restart Toon Boom Harmony.</p> <p><b>Number of samples (For Mac OS):</b> Enter the number of samples you want to be used for the antialiasing process. The number of samples is basically equivalent to the amount of time a pixel will be enlarged to calculate the antialiasing. This technique is called <i>supersampling</i>. The higher the number of samples, the better the antialiasing quality will be, but the longer it will take to calculate. The recommended value is 4.</p>

**NOTE:** If you are using Windows or Linux, you must enable your graphic card's antialiasing parameter. Refer to user guide of your graphics card. For example, the parameters for an NVIDIA GeForce card may look like this:



## Render Preferences

Parameter	Description
Preview Options	<p><b>Enable Blur:</b> Renders blur effects derived from the Blur-Directional, Blur-Radial, and Blur-Variable in the Render View window.</p> <p><b>Enable Line Texture:</b> Renders line texture in the Render view.</p>
Preview Images	<p><b>Cache Size in RAM (in Mb):</b> Cache size in RAM for intermediate preview images (Mb).</p> <p><b>Cache Path and Capacity on Disk (in MB):</b> If this field is left empty, Harmony's temporary directory will be used to offload intermediate images. There is no disk usage limit for the temporary directory.</p> <p>When you specify a folder, you must type in the capacity (in MB) inside the path. Use the following method: path;capacity in MB; example: C:\user\tmp_image_folder;2000;</p> <hr/> <p><b>NOTE: The specified folder must already exist. If there is an error in the path, Harmony's temporary directory will be used. You can also specify a RAM drive in the path.</b></p>
Multi Threading	<p>This lets you specify the level of parallel processing done during the final image calculation (soft-rendering). Allowing parallel processing speeds up the soft-render process.</p> <p><b>Number of Rendering Threads:</b> Lets you specify the number of parallel processes during the soft-render process. A value of 1 disables the multi-threading process because it specifies that only one rendering thread will be used during the process. The maximum number of threads is 64. The recommended starting value is 2 threads per CPU core, meaning that if you are using a 2 Quad Core CPU, the preferences should initially be set to 16 threads.</p>
GPU	<p><b>Enable Graphic Card Acceleration:</b> Optimizes the rendering blurs by using the GPU's acceleration capabilities. This option is on by default. Not all cards support this acceleration.</p>