Snell Advanced Media

K-Manager

Application Software

www.s-a-m.com

Contents

Introduction

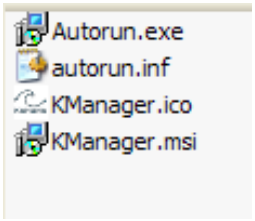
Kahuna Manager is a software application that enables users to:

- Resize and position files images within various SMPTE video standard formats.
- Save files in .SWS format for use by the Kahuna system.
- Preview images to be transferred to or from the Kahuna system.
- Transfer stills or video clips to the Kahuna system.
- Import stills/clips from a Kahuna system.
- Convert an .SWS clip to an .AVI file.
- Convert an .AVI file to individual .BMP frames, and if audio is present, a .WAV file.
- Convert an uncompressed audio .WAV file to an .SWS audio file.

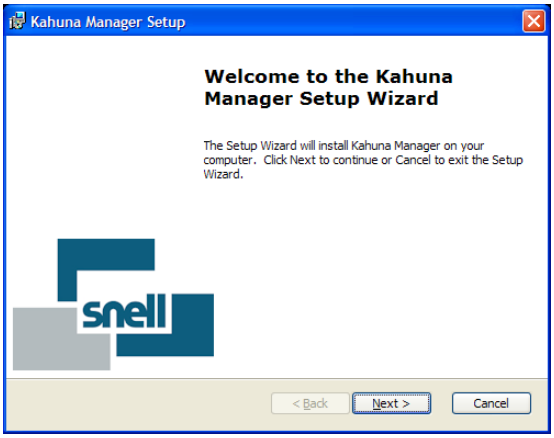
Installing Kahuna Manager

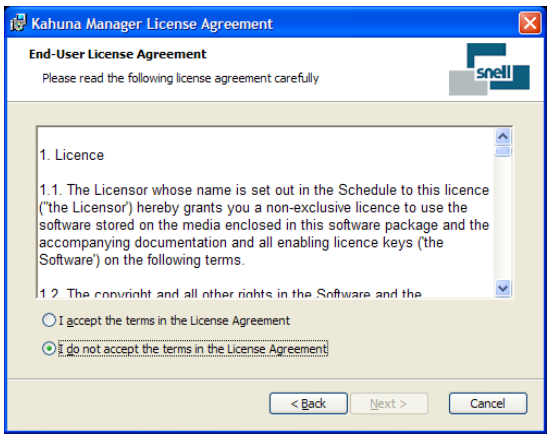
To install the Kahuna Manager software, double click on the Kahuna Manager zipped file and extract all the files to a user defined area on the PC that will run the software, then follow the steps below:

1. The extracted files should be as shown below, double click on the ***KManager.msi*** icon and the software will start to install.

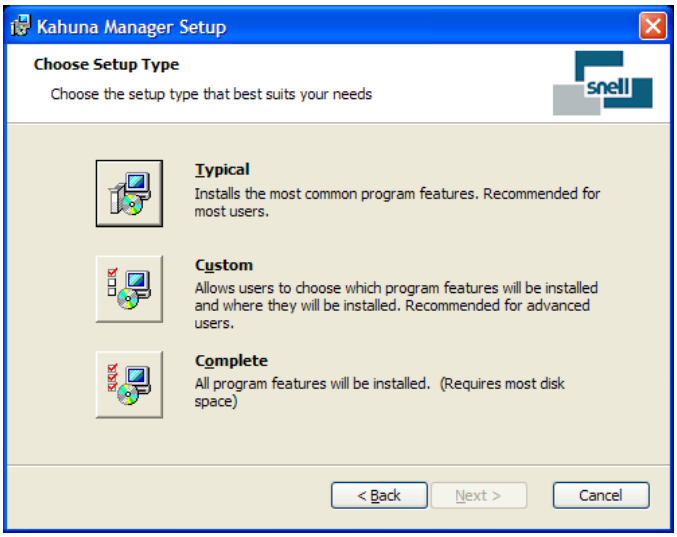


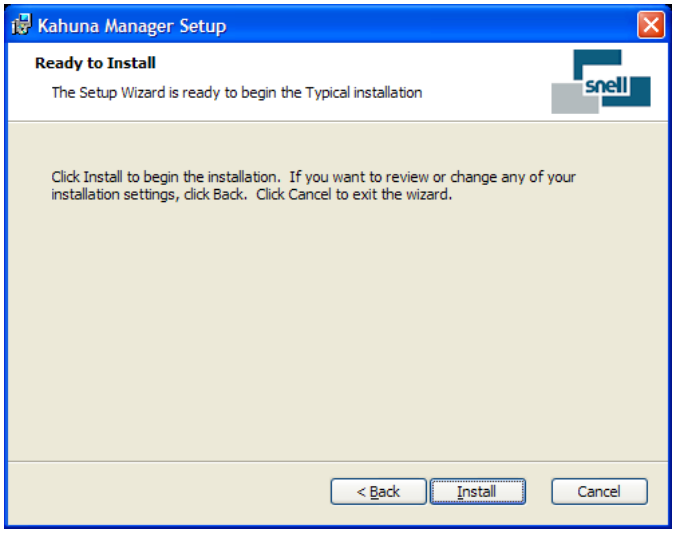
2. When the “Welcome” screen appears press Next, then check the “I accept” end user license agreement and press Next.



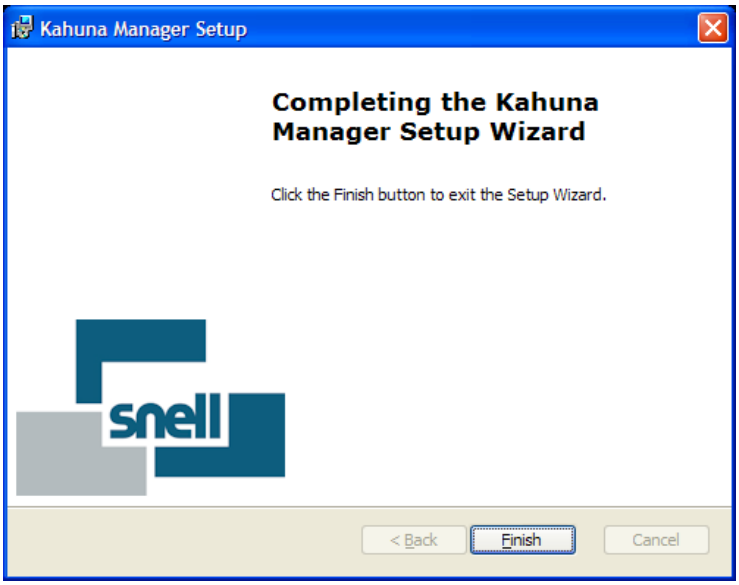


3. Select the type of installation (Typical, Custom or Complete) required and press Next, then in the ***Ready to Install*** menu press Install.



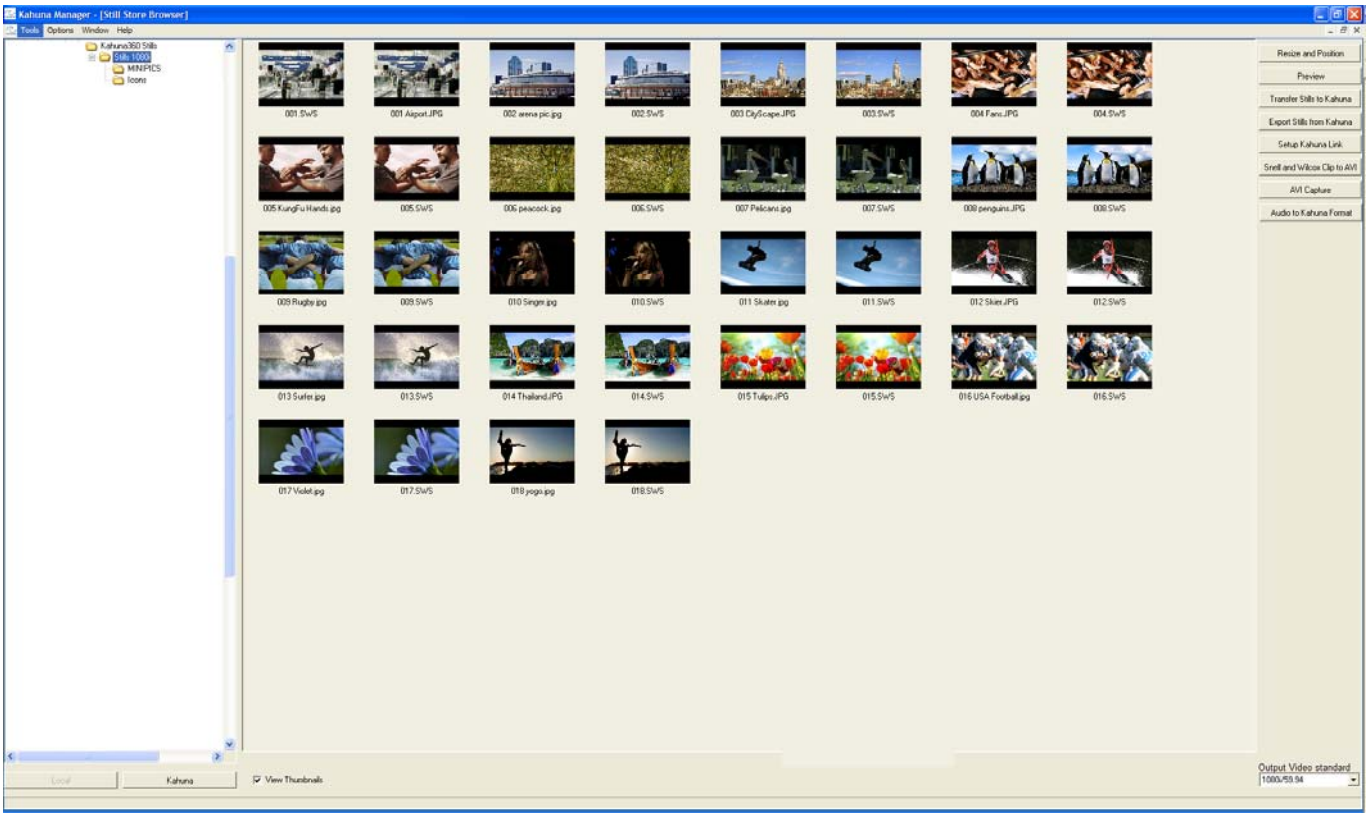


4. Finally press Finish to complete the installation. A Kahuna manager icon will have been placed on the desktop, double click on the icon to start Kahuna Manager software running.



Kahuna Manager Main Menu

Once the Kahuna Manager software is running, the first menu that will appear is the Kahuna Manager main menu. This menu is where the user sets up Kahuna Manager and selects files to convert into .SWS stills and clips.



If Kahuna Manager is going to be networked to a Kahuna mainframe, it is advisable to setup the network link as described in the next section.

Setting up Kahuna Link

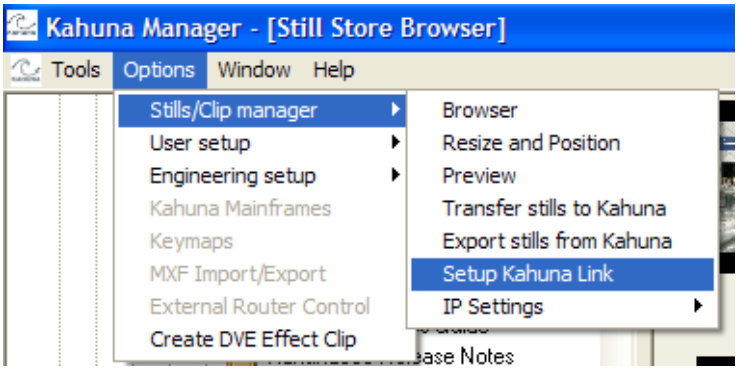
Kahuna link established communications between a Kahuna mainframe and the PC on which Kahuna Manager is installed. This enables stills, video, and audio files to be transferred between Kahuna and Kahuna Manager without the need for an external USB storage device, such as a USB memory stick.

Important Note:

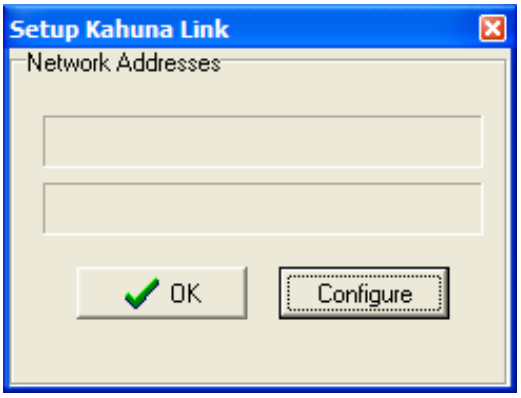
una Manager supports direct access to Kahuna and Kahuna for transferring and rting still and clips via swnfs.

To set up Kahuna Link:

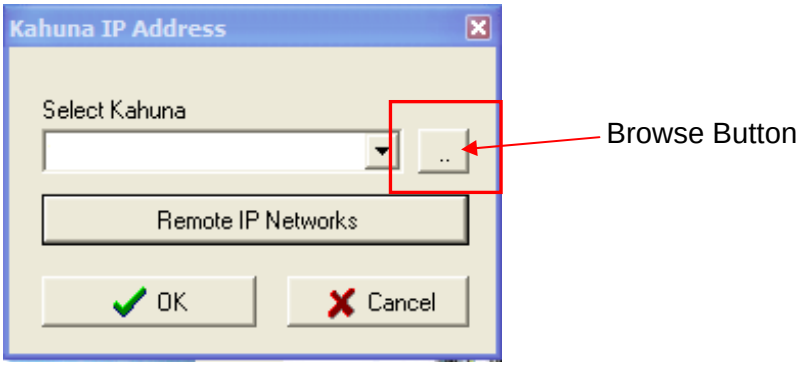
In the main Kahuna Manager menu select "Options>Stills/Clip manager>Setup Kahuna Link"



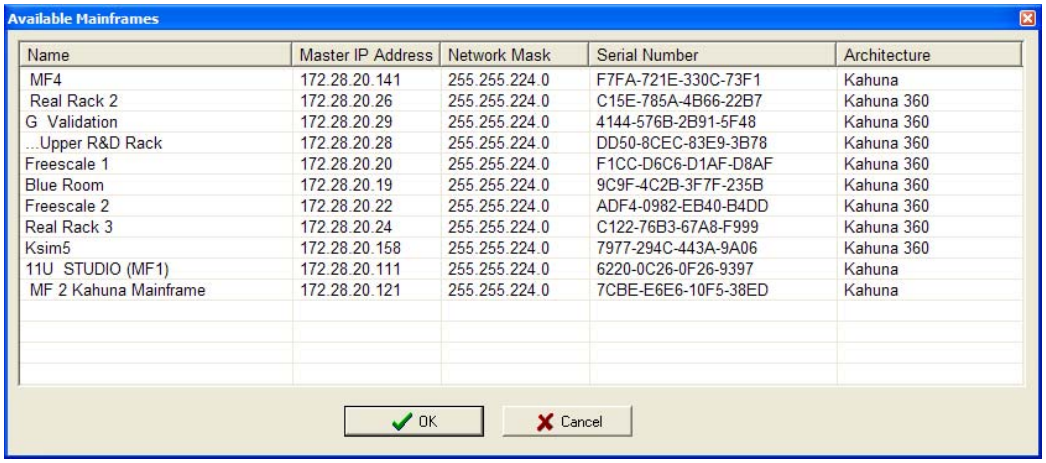
If this is the first the first time that a link has been setup a dialog box stating that there is an error may appear, if this happens click on "OK" and the menu below will appear "Setup Kahuna Link" click on "Configure" and the Kahuna IP Address will be displayed.



The user now has 3 choices, they can enter an IP Address directly into the text entry box and click on "OK", click on the browse button and a new menu (Available Mainframes) will appear – shown on the next page, or click on the **{Remote IP Networks}** button.

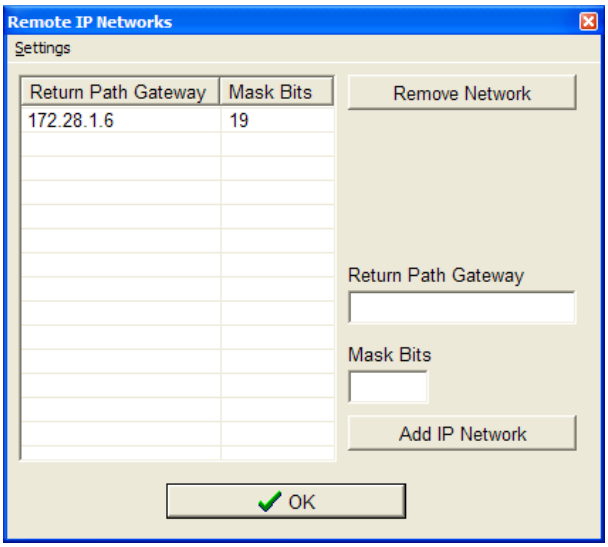


If the Kahuna Manager software is able to see other mainframes on the network then all the available Kahuna mainframes will be displayed in this menu. Click on one of the mainframes and press “OK” to connect to one of the mainframes.

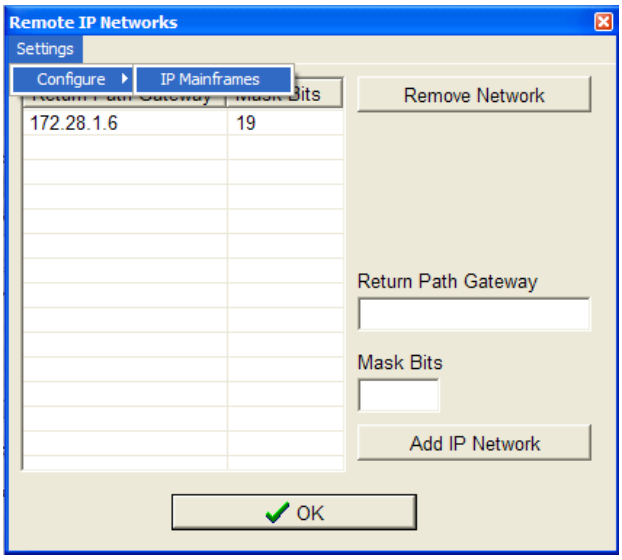


Remote IP Networks

The Mainframes may sit on a different network to the PC. Setting the Mainframes Gateway IP ensures response data finds its way back to the PC.

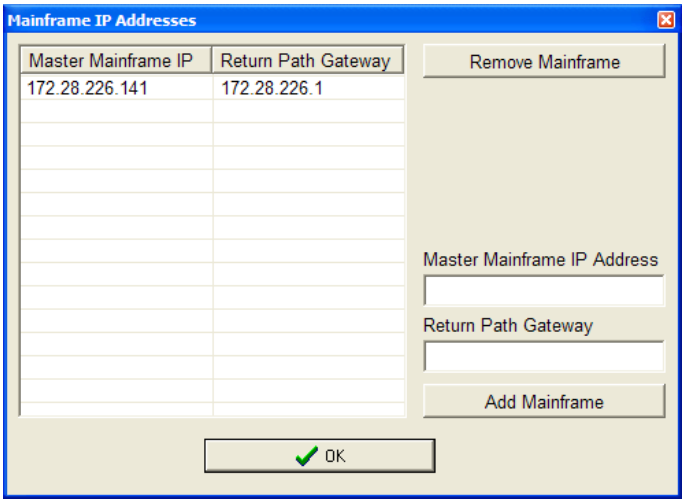


Click on **Settings>Configure>IP Mainframes** (as in the menu below) and the Mainframe IP Addresses menu will appear.



Mainframe IP Addresses

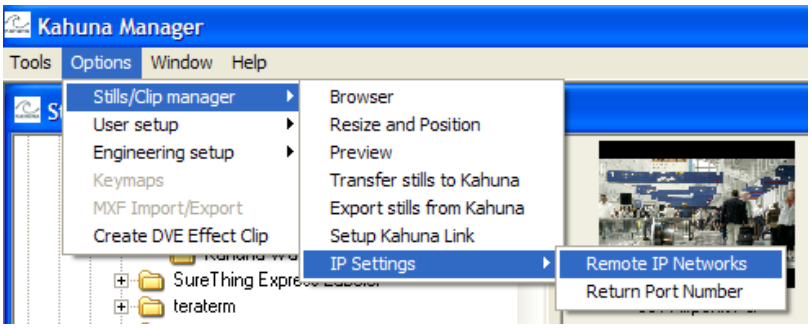
This menu allows the user to manually input a known Master IP Address and corresponding Return Path Gateway. It is only necessary to use this option if the network disallows UDP Broadcasting



Add the master IP Address and Return Path Gateway, and press **{OK}.**
Once back in the Remote IP Networks menu, add the Return Path Gateway address and the Mask Bits, press the **{Add IP Network}** button. Then press **{OK}.**

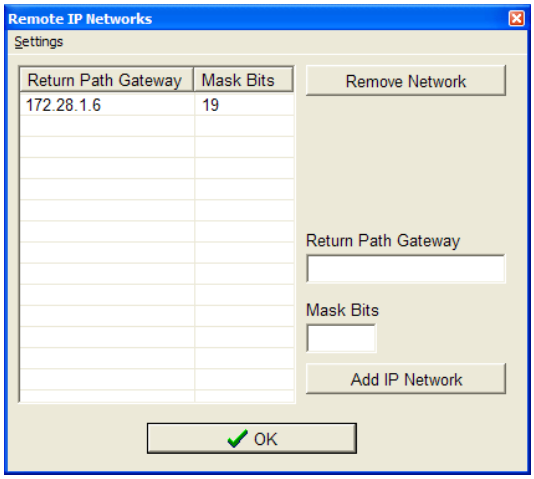
IP Settings – Remote IP Networks and Return Port Number

Kahuna Manager uses a Kahuna File Service (swnfs) to transfer and export stills/clips. The file service needs a heartbeat to ensure efficient communication between Kahuna Manager and a Kahuna or Kahuna Mainframe.

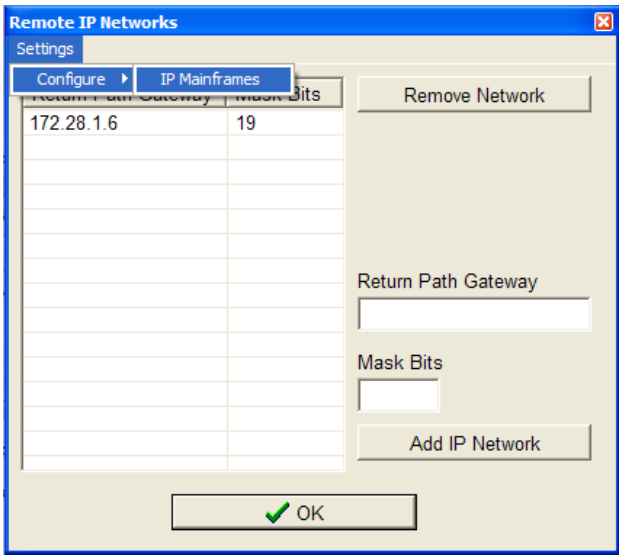


Remote IP Networks

Again this link goes to the Remote IP Networks menu. The Mainframes may sit on a different network to the PC. Setting the Mainframes Gateway IP ensures response data finds its way back to the PC.

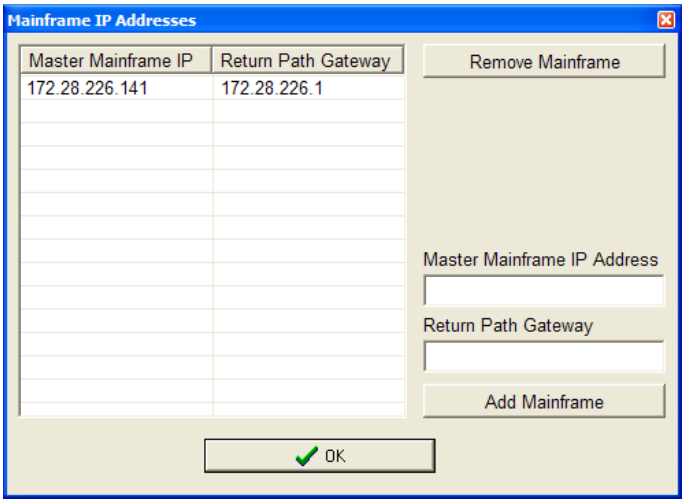


Click on **Settings>Configure>IP Mainframes** (as in the menu below) and the Mainframe IP Addresses menu will appear.

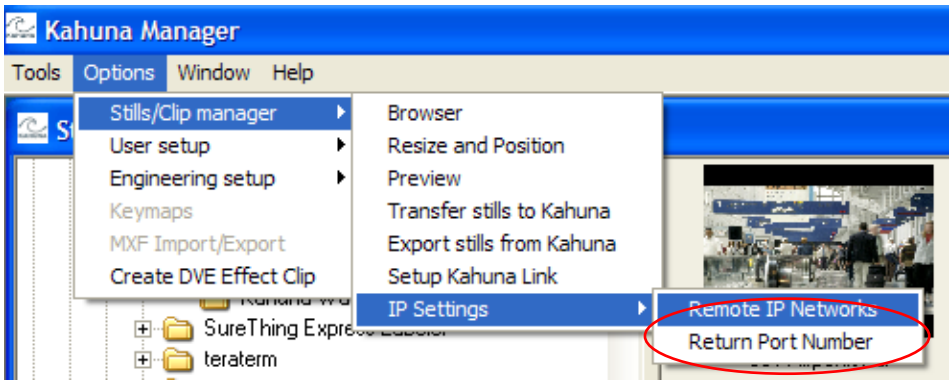


Mainframe IP Addresses

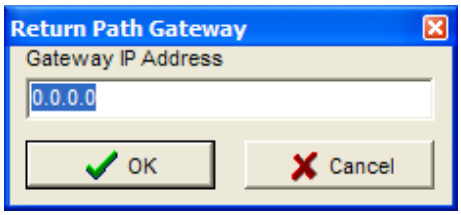
This menu allows the user to manually input a known Master IP Address and corresponding Return Path Gateway. It is only necessary to use this option if the network disallows UDP Broadcasting

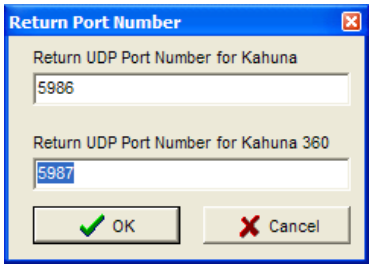


Add the master IP Address and Return Path Gateway, and press **{OK}.**
Once back in the Remote IP Networks menu, add the Return Path Gateway address and the Mask Bits, press the **{Add IP Network}** button. Then press **{OK}.**



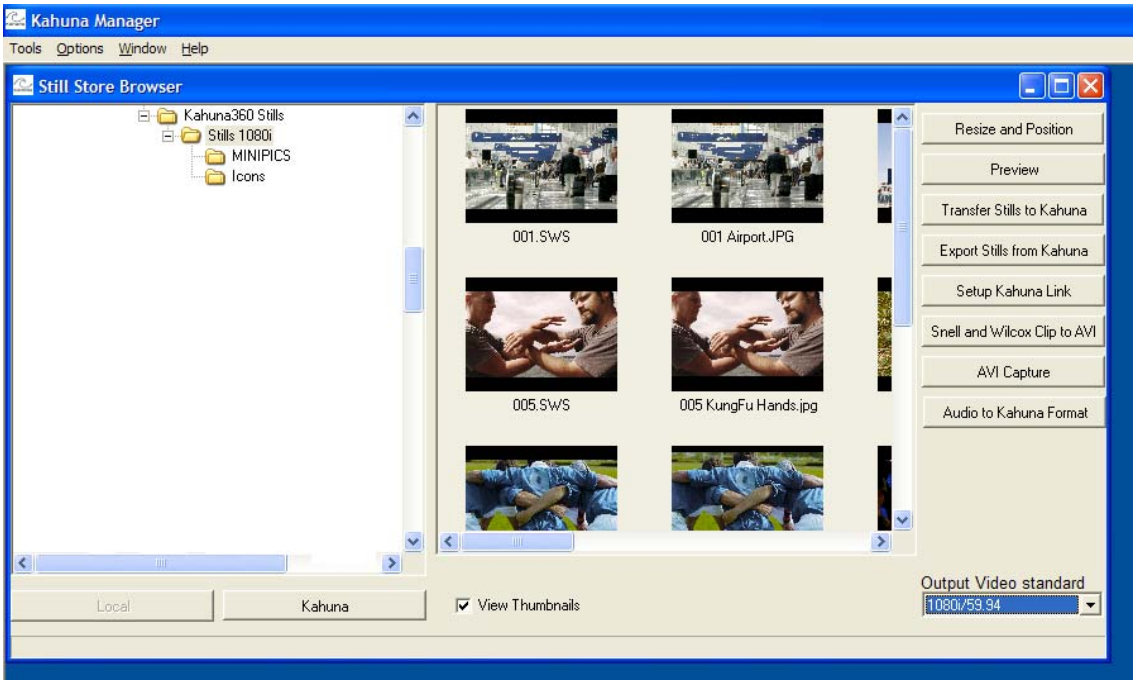
Return Port Number is used to inform the Kahuna Mainframe of its UDP comms port number (used for Kahuna mainframe response messages Default 5986 for Kahuna and 5987 for Kahuna).





Using the Still Store Browser

Use the Still Store Browser to search the current directory, either on the local computer or on the Kahuna mainframe, for stills, video, or audio files. After locating the files, they can be manipulated within various SMPTE video standard formats and saved for use in Kahuna



Browsing for files

The still store browser can browse for files accessible to the local machine, or on the Kahuna mainframe.
To browse for local files:

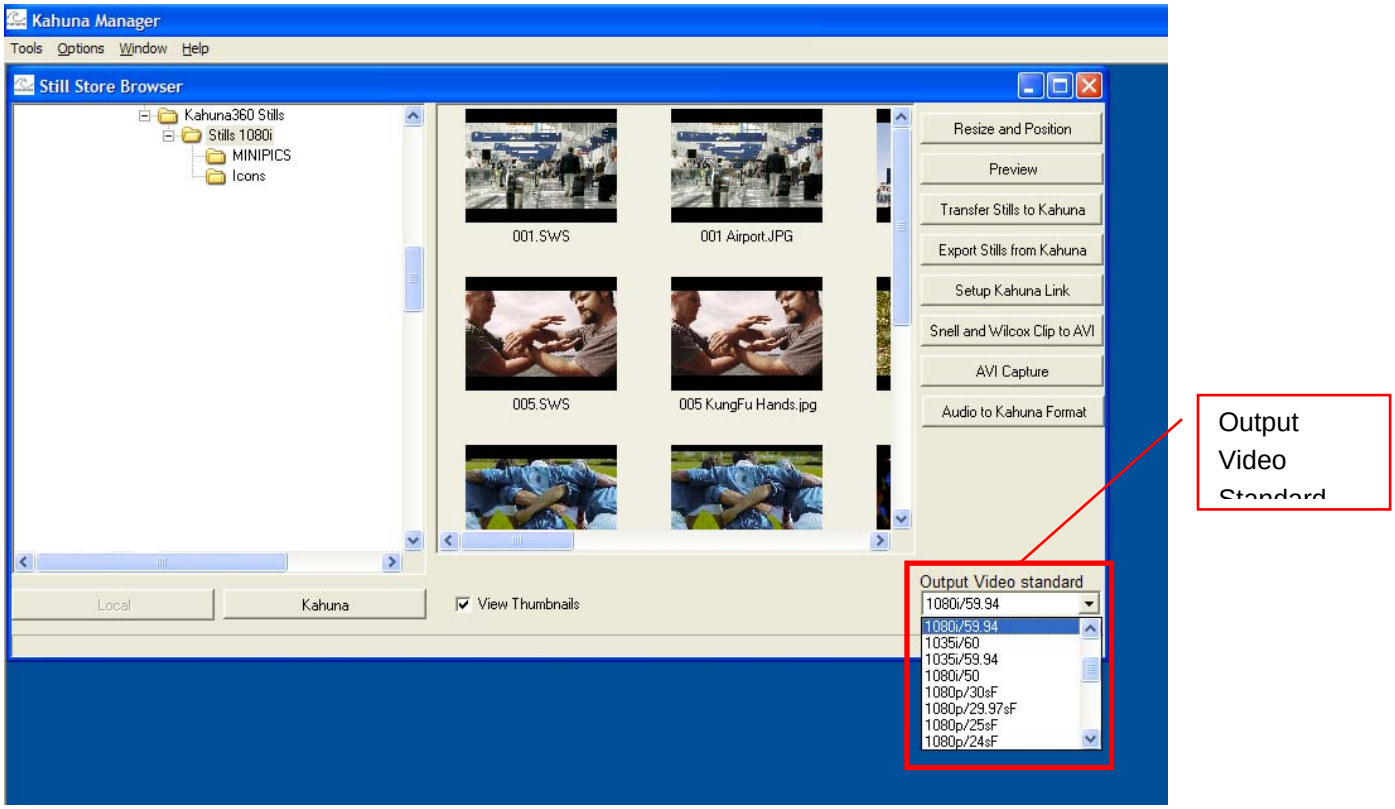
1. Below the folder list on the right of the Still Store Browser window, click **Local**.
2. Use the folder list to navigate to the directory containing the correct files. The files available to Kahuna Manager are displayed in the pane on the left of the Still Store Browser window.

To browse for files on the Kahuna mainframe:

1. Below the folder list on the right of the Still Store Browser window, click **Kahuna**.
2. Use the folder list to navigate to the directory containing the correct files. The files available to Kahuna Manager are displayed in the pane on the left of the Still Store Browser window.

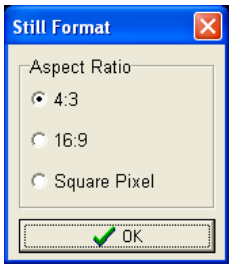
Note: Kahuna Link must be set up before files stored on the Kahuna mainframe can be accessed.

The Resize and Position functions allow images to be manipulated within various SMPTE video standard formats. As well, they allow images to be saved in the .SWS format so that they can be used by Kahuna.
To manipulate images, browse for a file as described previously, and then from the drop-down list, select the required **Output Video Standard**.

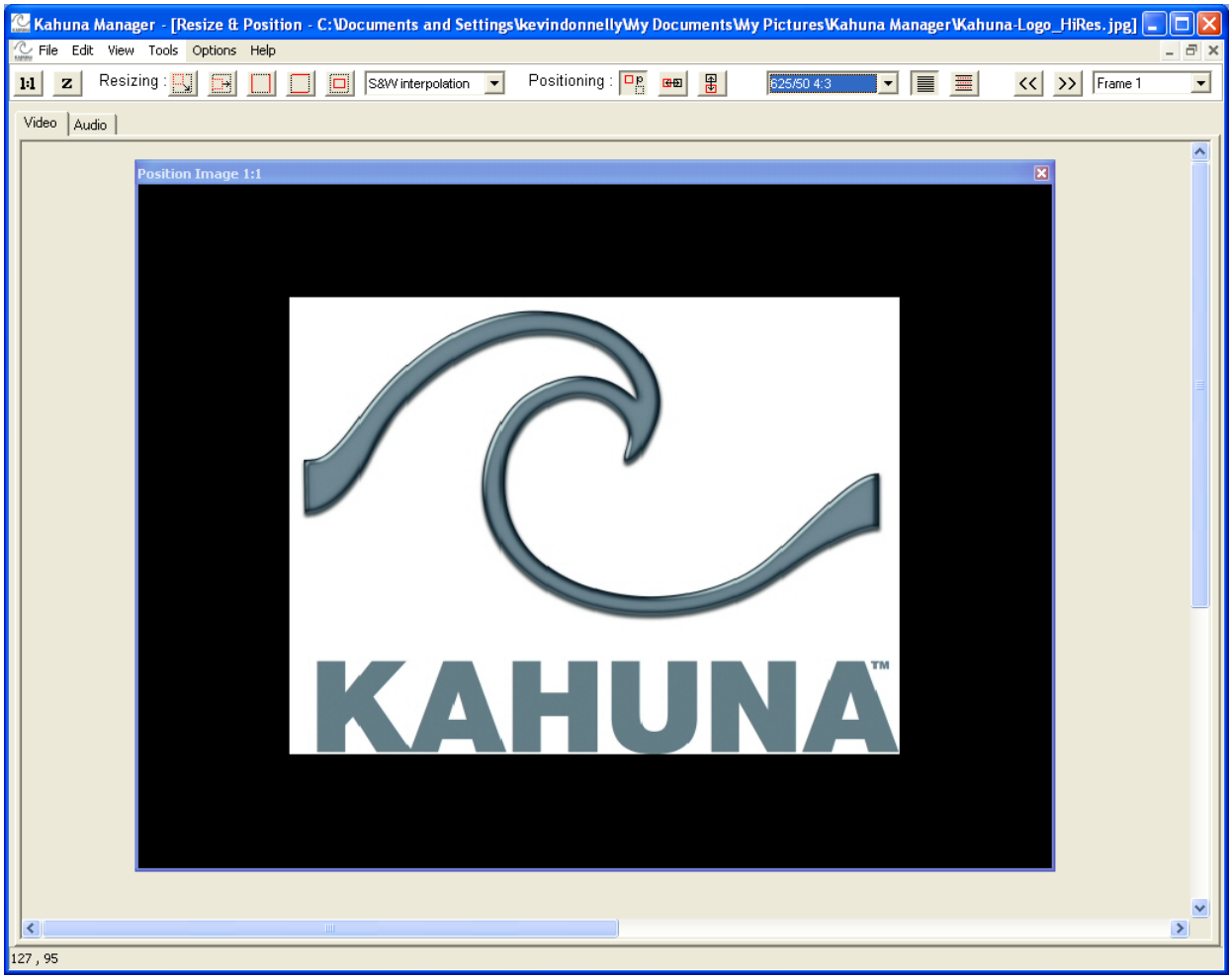


Click the image to be manipulated to select it, and then click **Resize and Position**. Alternatively, double-click on the desired image.

If Kahuna Manager cannot determine the aspect ratio of the selected image, a dialog appears in which the aspect ratio can be selected (4:3, 16:9, or Square Pixel).



The image appears in the Resize and Position window.



Resize and Position Options

Use the resize and position tools to manipulate the image as required. These tools can be accessed by means of the **Tools** menu or by clicking the toolbar buttons.

Menu Option	Toolbar Button	Description
Tools > Resizing > Size		Adjust the entire size of the image, maintaining the aspect ratio, by dragging the bottom right corner.
Tools > Resizing > ASP		Adjust the horizontal size of the image by dragging the right edge.
Tools > Resizing > Full Width		Full Width – the full width of the input image follows the output image width, maintaining the original aspect ratio.
Tools > Resizing > Full Height		Full Height – the full height of the input image is used for the output image, maintaining the original aspect ratio.
Tools > Resizing > Insert		Inserts the input image in the center of the output image.
Tools > Positioning > Position		Adjust the horizontal and vertical position of the image by dragging it.
Tools > Positioning > Pan		Adjust the horizontal position of the image by dragging it.
Tools > Positioning > Tilt		Adjust the vertical position of the image by dragging it.

View options

If the current image has an associated key channel, the fill or key can be viewed by selecting:
View > Fill
View > Fill Audio
View > Key
View > Key Audio
The output image view can be adjusted to either a 1:1 or 1:2 zoom. The zoom options can be accessed by means of the **View** menu or by clicking the toolbar buttons.

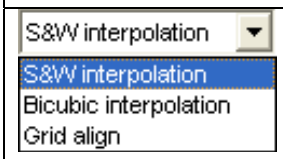
Menu Option	Toolbar Button	Description
View > Normal		Displays the image at its normal size (1:1).
View > Zoom Out		Displays the image at half its normal size (1:2)

If a clip has been loaded for resize, Next Frame, Previous Frame, and a frame selection drop-down list are available. These options can be accessed by means of the **View** menu or the toolbar.

Menu Option	Toolbar Button	Description
View > Previous Frame		Displays the next frame in the clip.
View > Next Frame		Displays the previous frame in the clip.
N/A		Selects a specific frame.

Interpolation options

The image interpolation options are available by means of the drop-down list in the toolbar.

Drop-down list	Option	Description
	S&W interpolation	Implements a special Snellresize interpolator.
	Bicubic interpolation	Implements standard bicubic interpolation when resize occurs.
	Grid align	Aligns the input image gris to the output image. When this option is selected, resizing is disabled.

Input Still Type

By default, images are frame-based. However, when resizing an image that is interlaced, better image resize quality can be obtained by selecting the Interlaced option.

Menu Option	Toolbar Button	Description
Tools > Input Still Type > Frame based		Select this option when working with frame-based images.
Tools > Input Still Type > Interlaced		Select this option when working with interlaced images.

Resetting to Original

To restore an image to its original size and position, from the Edit menu, select **Reset**.

Save Still

The Save Still option is accessed by means of the file menu (File > Save Still) and allows the current image to be saved as:

.bmp
.jpeg
.tga (Targa)
.sws (Snell)

To save a still as a .bmp, .jpeg, or .tga file:

1. From the file menu, select **Save Still**.
   A standard windows save dialog opens.
2. Specify the location to which the file is to be saved, enter a name for the file and from the **Save as type:** drop-down list, select .bmp, .jpeg, or .tga.
3. Click **Save**.

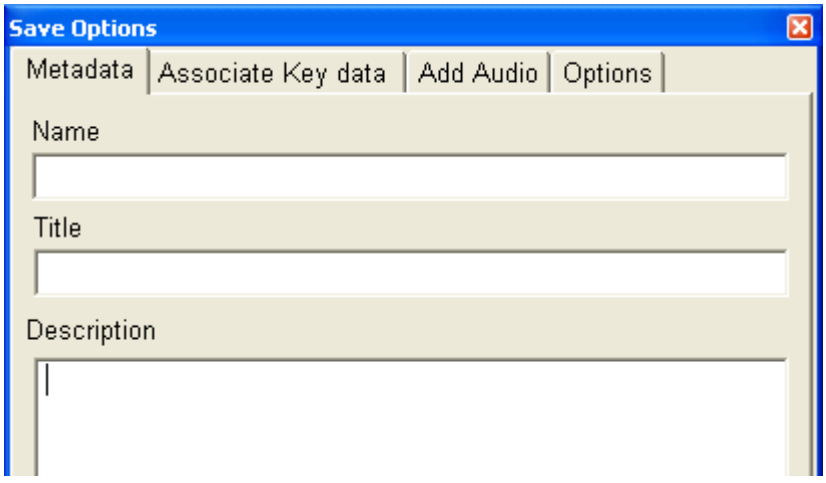
When saving a Snell .sws file, several other items, including audio can be saved in the file.

To save a still as a .sws file:

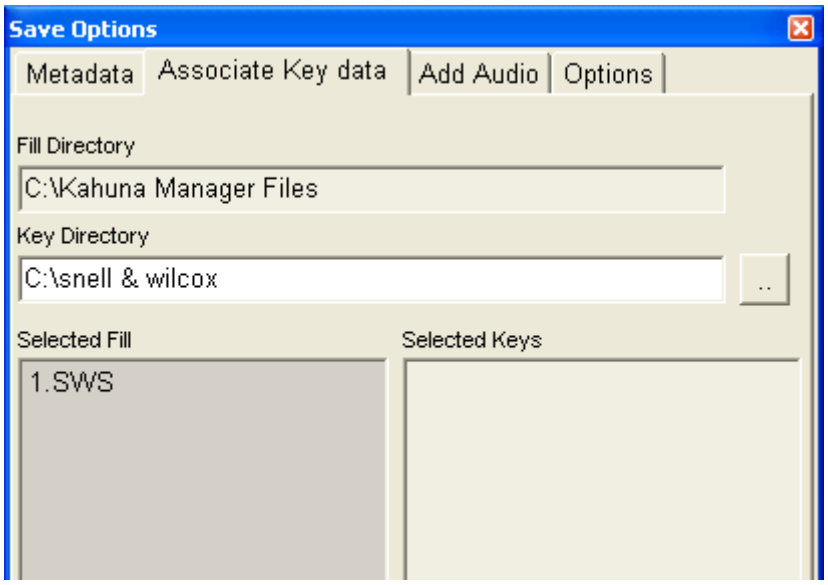
1. From the file menu, select **Save Still**.
   A standard Windows save dialog opens.
2. Specify the location to which the file is to be saved, enter a name for the file and from the **Save as type:** drop-down list, select .sws.

Note: The .sws files may only be named 1 to 999 (for example, 2.sws).

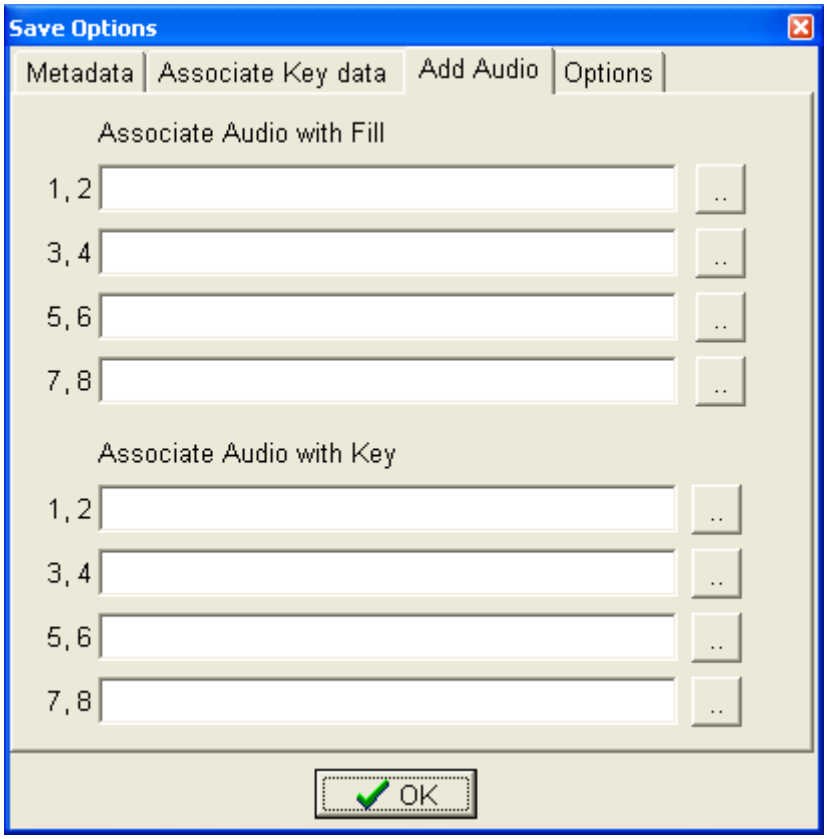
3. Click **Save**.
   The Save Options window opens.
4. (Optional) On the Metadata tab, enter the Name, Title, and Description of the still.



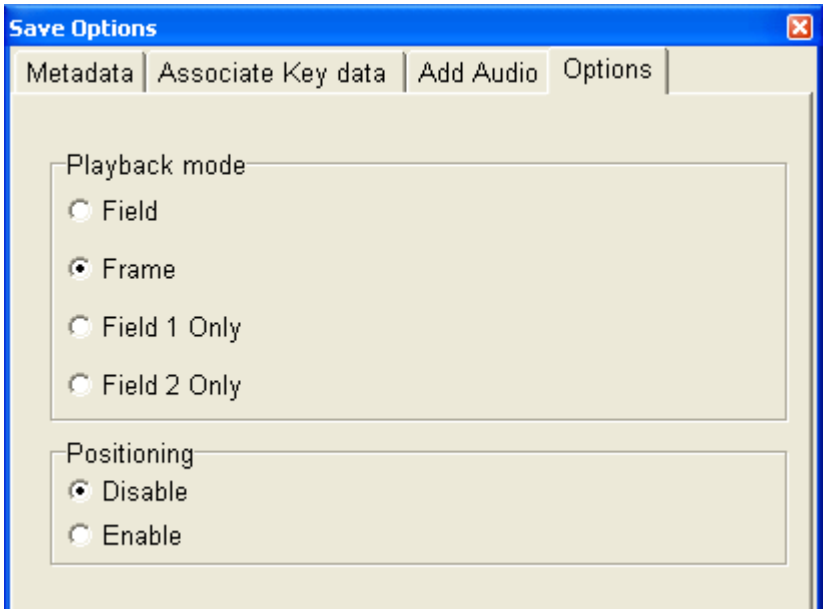
5. (Optional) On the Associate Key data tab, a key channel can be associated with the currently selected fill.



6. (Optional) On the Add Audio tab, .wav and .sws audio files can be associated with fill or key data. Up to eight channels can be divided between each of the four slots.



7. (Optional) On the Options tab, Playback mode specifies how the still should be displayed when loaded on Kahuna (Field, Frame, Field 1 Only, Field 2 Only). The Positioning options (Crop / Panning) can be enabled or disabled.



8. Click **OK**

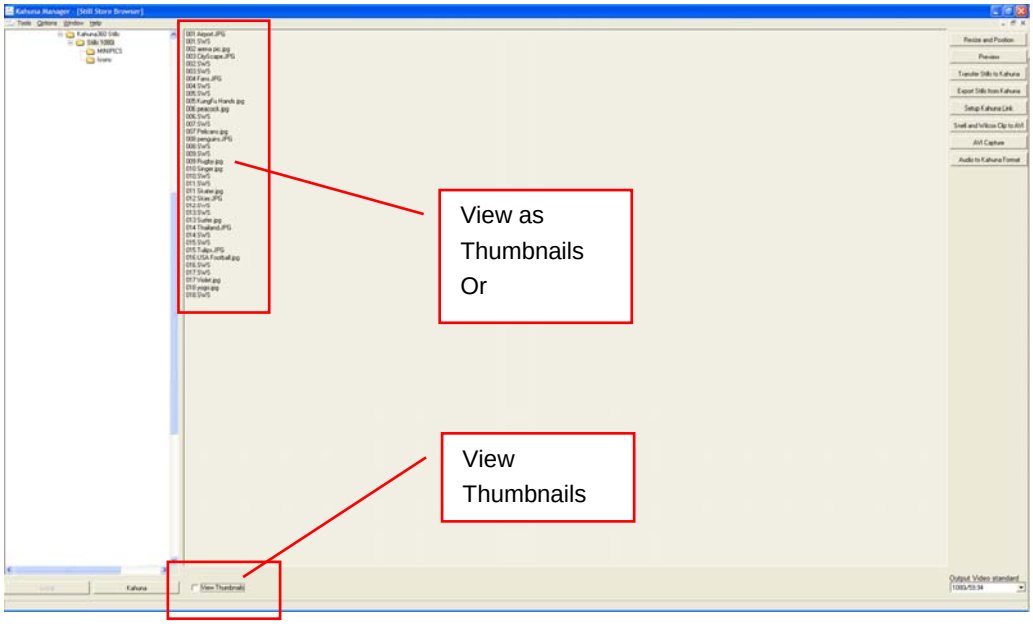
Arranging Images in the Still Store Browser

The order of the stills can be changed in the Still Store Browser. To reorder stills in the Still Store Browser, right-click on a still, select **Arrange** and then select **Move**. When Move is selected, images can be moved by dragging them to the desired position.

To sort the stills in the Still Store Browser into alphabetical/numeric order, right-click on a still, select **Arrange**, and then select **Sort**.
To keep the stills in the Still Store Browser in their present order, right-click on a still, select **Arrange**, and then select **Hold**.

View Thumbnails

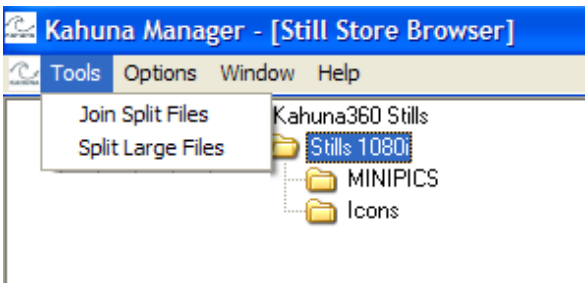
The **View Thumbnails** check box allows the user to view files in the Still Store Browser as Thumbnails (images) or as files (as shown below).



Saving Clips

Exporting Clips via Kahuna GUI Panel to USB device may separate the clip into more manageable files if the clip is very long. This is useful if the USB device happens to be formatted as a FAT32 system.
The following tools provide the user a way of joining or splitting very large clips

Tools



Join Split Files - Kahuna Clips can be quite large depending on the Video Standard. Clips exported from a Kahuna mainframe via GUI Panel will be split into 2Gb files with *_XX extension and then store them in a folder *.SWS (useful for FAT32 systems).
This application will join these files back together. Select folder with split files in and select "**Tools - Join Split Files**"
Split Large Files - Kahuna Clips that are larger than 4Gb in size can be separated into individual files which is useful for storing files on a FAT32 system.

When Save Clip is selected, all of the stills in the currently selected load directory will be taken as a sequence of frames to be converted as a Snell .sws clip, or a sequence of Targa .tga frames.
To save stills as an .sws clip:

1. From the File menu, select **Save Clip**.
   A standard Windows save dialog appears.
2. Specify the location to which the file is to be saved, enter a name for the file and from the **Save as type:** drop-down list, select .sws.

Note: The .sws files may only be named 1 to 999 (for example, 2.sws).

3. Click **Save**.
   The Save Options window opens.
4. Enter the save options (Metadata, Key Data, Audio, Playback mode, Positioning) as required.

When the clip is saved, all of the stills in the current Still Store Browser window are saved as a Snell .sws clip, in the order in which they appear in the browser.

Note: If a clip has been selected for resize and position, the sequence of frames will follow the same sequence as the currently selected clip.

Batch Save

The Batch Save option saves all of the stills in the currently selected load directory as a batch of Snell .sws stills.
To perform a batch save:

1. From the File menu, select **Batch Save**.
   A standard Windows save dialog appears.
2. Specify the location to which the file is to be saved, enter a name for the file and from the **Save as type:** drop-down list, select .sws.

Note: Snell .sws files may only be named 1 to 999 (for example, 2.sws).

3. Click **Save**.
   The Save Options window opens.
4. Enter the save options (Metadata, Key Data, Audio, Playback mode, Positioning) as required.
5. Click **OK**.

Saving Audio Only

If a still or clip has audio associated with it, the audio can be saved separately as an uncompressed .wav file.
To save audio only:

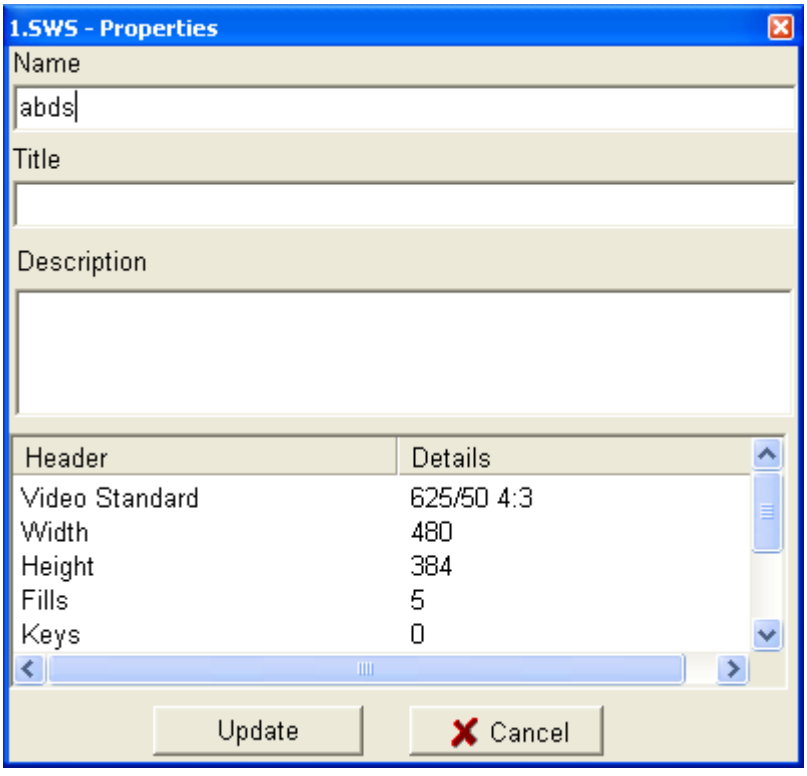
1. From the file menu, select **Save Audio Only**.
   A standard Windows save dialog appears.
2. Specify a name and location for the file, and then click **Save**.
   The file is saved as an uncompressed .wav file.

Viewing and Updating Image Properties

To view the properties of a still or clip in the Still Store Browser, right click on it and select **Properties**.

Properties of .bmp, .jpeg, and .tga files

Properties of .sws files



Certain Snell .sws file properties can be edited from this window. If required, change any or all of the Name, Title, and Description fields, then click **Update**.

Transferring Files to Kahuna

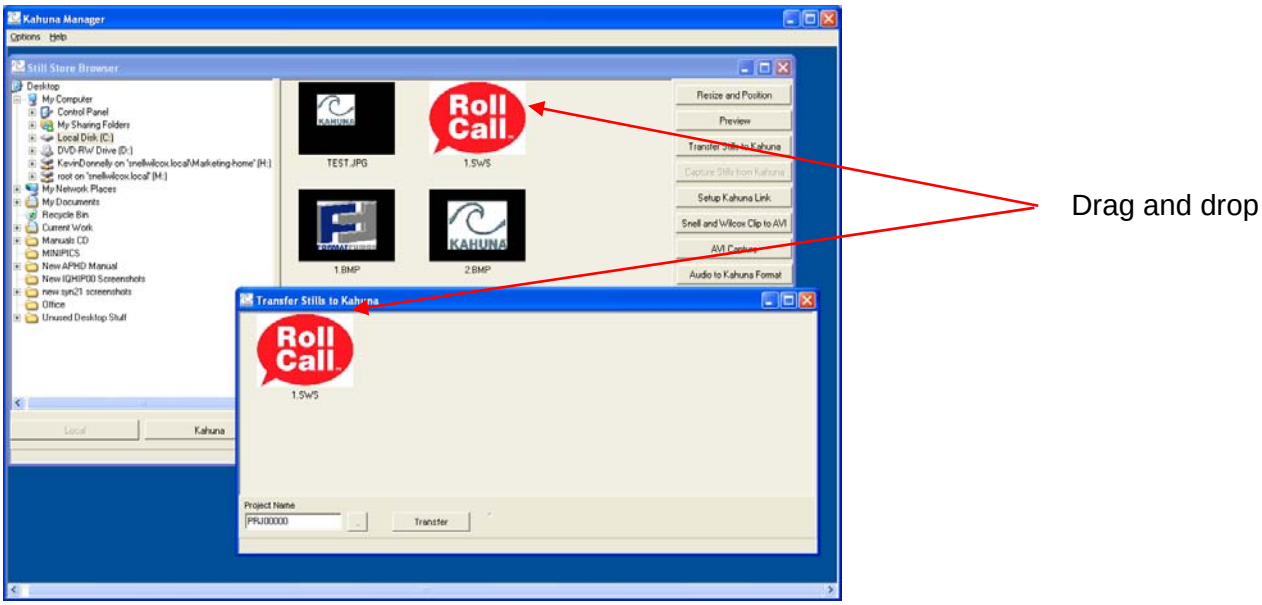
Files can be transferred from the local computer running Kahuna manager to a Kahuna system by means of a USB storage device.
Alternatively, if a Kahuna link has been established between the computer running the Kahuna manager software and Kahuna, files can be transferred using the methods described below.

Note: A Kahuna link must be set up before stills or clips can be transferred to Kahuna using Kahuna link. For more information, see "Setting up Kahuna Link" on page 6.

To transfer files to Kahuna:

1. Click **Transfer Stills to Kahuna**.
   The Transfer Stills to Kahuna window appears.
2. Drag and drop files from the Still Store Browser window to the Transfer Stills to Kahuna window.

   When files are in the Transfer window, right-click on them to remove, reorder, or rename them as required.
3. After moving the required files to the transfer window, enter a Kahuna Project Name, or click ... to browse for one, then click **Transfer**.



Another method of transferring files to Kahuna is as follows:

1. In the Still Store Browser, select the files to Transfer to Kahuna (use Shift + click, or Ctrl + click to select multiple files), and then click **Transfer Stills to Kahuna**.

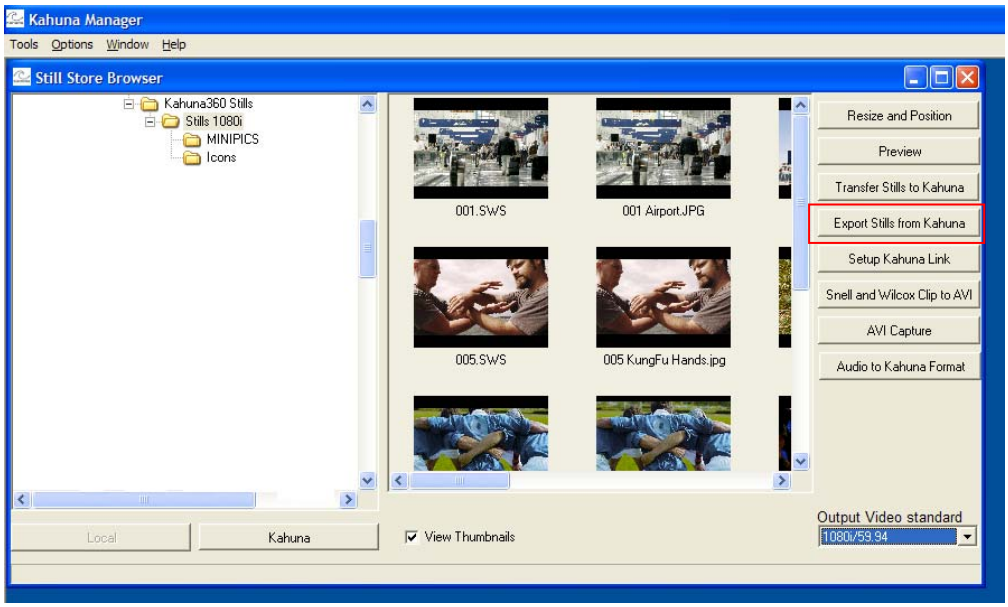
   The Transfer window appears with the selected files in it. When files are in the Transfer window, right-click on them to remove, reorder, or rename them as required.
2. After moving the required files to the transfer window, enter a Kahuna Project Name, or click ... to browse for one, then click **Transfer**.

Browsing and Editing Stills from Kahuna

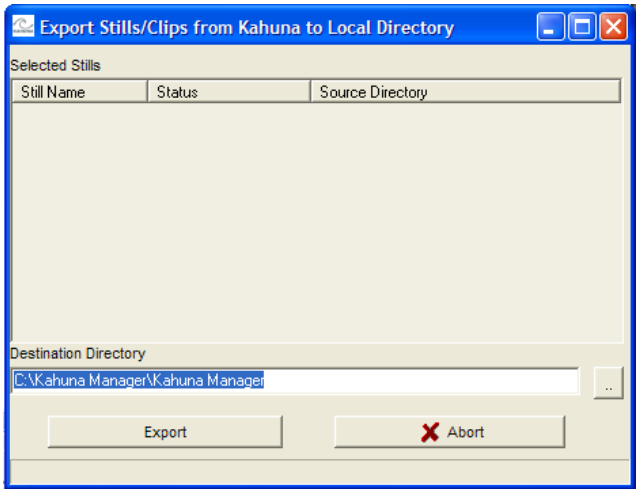
If a Kahuna link has been established between the computer running the Kahuna manager software and the Kahuna mainframe, files on Kahuna can be browsed for and edited in Kahuna Manager.

Note: A Kahuna link must be set up before stills or clips stored on Kahuna can be edited in the Kahuna Manager software.

To browse for files on Kahuna click the **Kahuna** button at the bottom of the Still Store Browser window. This connects to the Kahuna mainframe, and allows a Stills directory to be selected. Stills and clips appear as thumbnail images in the Still Store Browser.
All of the editing options that are available when working locally can be used, with the currently selected still being captured to a temporary directory for editing.



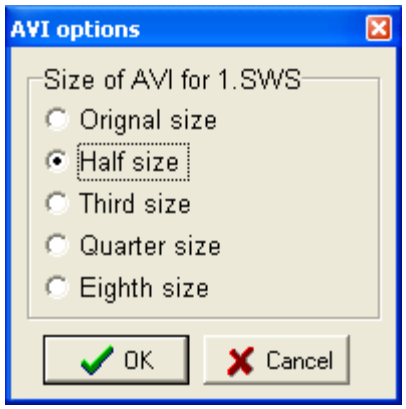
Selecting **Export Stills from Kahuna** opens a window, from which stills and clips can be selected from Kahuna and transferred to a destination directory.



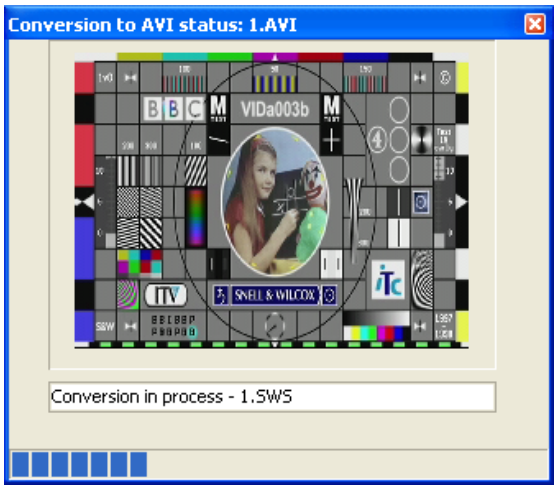
Converting a SnellClip to AVI

The AVI Capture option converts a Snell.sws clip or still to an .avi file and save it in the same directory.
To convert an .sws file to .avi:

1. In the Still Store Browser, select an .sws file, and then click SnellClip to AVI.
   The AVI options window appears.



2. Specify the size of the .avi in relation to the .sws clip and then click **OK**.
   The Conversion to AVI status window appears.



3. When the conversion is complete, a confirmation dialog appears, click **OK** to close the dialog.
   The .avi file is saved in the same directory as the .sws file.

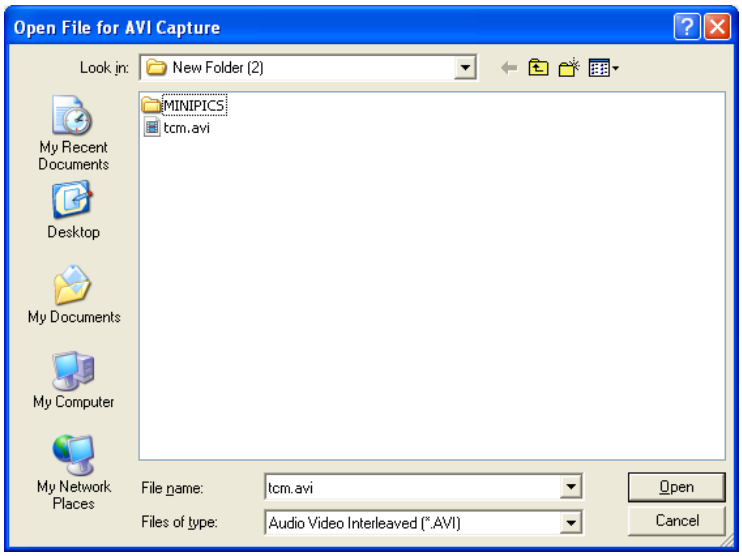
Converting an AVI to Bitmaps

The AVI capture option converts an .avi file to a series of individual frames represented as bitmaps. If the .avi file contains audio, the audio is saved as a single .wav file.

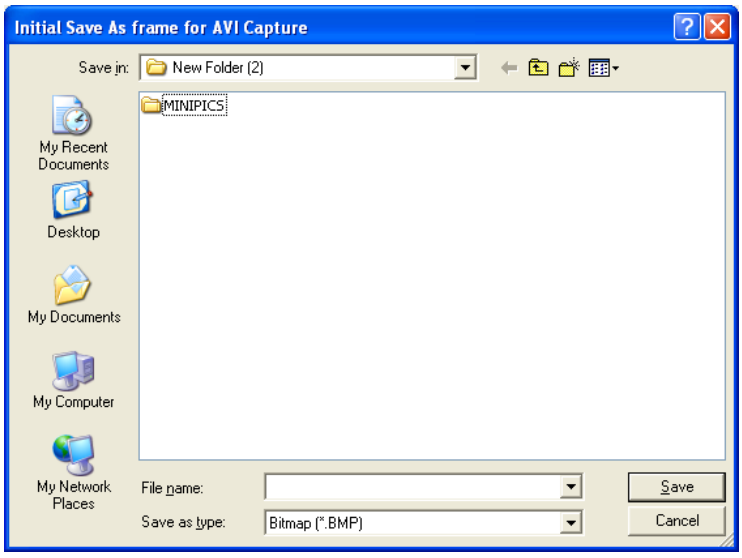
To convert an .avi to a series of bitmaps:

1. Click **AVI Capture**.

The Open File for AVI Capture window appears.



3. Browse for and select the .avi file to convert, and then click **Open**.
   The Initial Save As frame for AVI Capture window appears.



4. In the File Name field, enter a file name.

This file name will have 00001 appended to it and will be used for the first frame; the second frame will have 0002 appended to it and so on. . For example, TEST00001.bmp, TEST00002.bmp, TEST00003.bmp…

If audio is present in the .avi, it will be saved as a .wav file in the same location.

Converting Audio to Kahuna Format

The Audio to Kahuna Format option converts an uncompressed .wav file to a Snell .sws file.

To convert a .wav file to .sws:

1. In the Still Store Browser, select the .wav file to convert, and then click **Audio to Kahuna Format**.
   A Windows Save As dialog appears.
2. Specify a name and location for the .sws file, and then click **Save**.

Note: .sws files may only be named 1 to 999 (for example, 2.sws).

Modifying User Setup Files

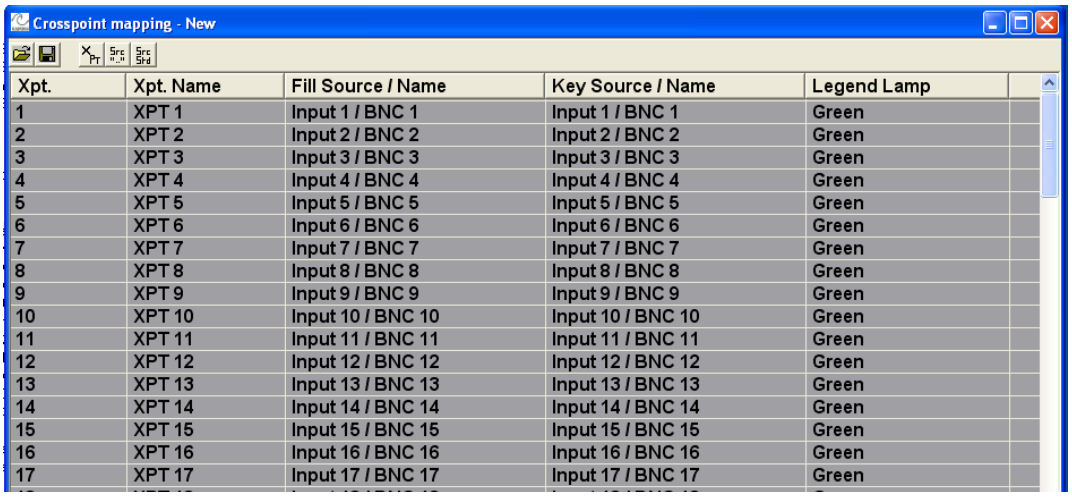
The User Setup options enable user setup files to be modified and saved. A .ucf file can then be transferred to Kahuna by means of a USB storage device.
To access the User Setup functions (Crosspoint Mapping), from the Options menu, select User setup > Crosspoint mapping. This opens a new Crosspoint mapping window.

To open an existing file, click  .

Crosspoint Mapping

The crosspoint mapping option is used to map inputs to crosspoints for each ME, to name the crosspoints and inputs, and make mnemonic button displays.
To set up crosspoint options, from the Options menu, select User setup > Crosspoint mapping.

If the Crosspoint mapping window is not already displayed, click  .

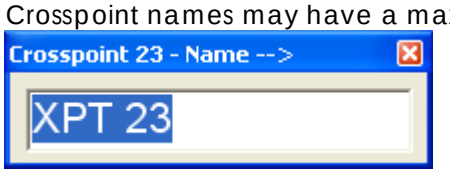


Xpt.	Xpt. Name	Fill Source / Name	Key Source / Name	Legend Lamp
1	XPT 1	Input 1 / BNC 1	Input 1 / BNC 1	Green
2	XPT 2	Input 2 / BNC 2	Input 2 / BNC 2	Green
3	XPT 3	Input 3 / BNC 3	Input 3 / BNC 3	Green
4	XPT 4	Input 4 / BNC 4	Input 4 / BNC 4	Green
5	XPT 5	Input 5 / BNC 5	Input 5 / BNC 5	Green
6	XPT 6	Input 6 / BNC 6	Input 6 / BNC 6	Green
7	XPT 7	Input 7 / BNC 7	Input 7 / BNC 7	Green
8	XPT 8	Input 8 / BNC 8	Input 8 / BNC 8	Green
9	XPT 9	Input 9 / BNC 9	Input 9 / BNC 9	Green
10	XPT 10	Input 10 / BNC 10	Input 10 / BNC 10	Green
11	XPT 11	Input 11 / BNC 11	Input 11 / BNC 11	Green
12	XPT 12	Input 12 / BNC 12	Input 12 / BNC 12	Green
13	XPT 13	Input 13 / BNC 13	Input 13 / BNC 13	Green
14	XPT 14	Input 14 / BNC 14	Input 14 / BNC 14	Green
15	XPT 15	Input 15 / BNC 15	Input 15 / BNC 15	Green
16	XPT 16	Input 16 / BNC 16	Input 16 / BNC 16	Green
17	XPT 17	Input 17 / BNC 17	Input 17 / BNC 17	Green

Modify the Xpt. Name, Fall Source/Name, Key Source/Name, and Legend Lamp Color as required.

Xpt. Name

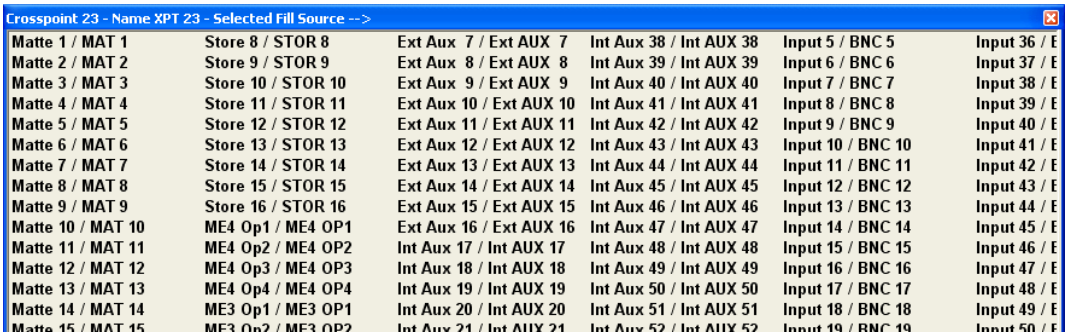
To change a crosspoint name, click on a crosspoint name in the list. A window appears, in which a new name can be typed. Close the window to accept the new name.
Crosspoint names may have a maximum length of 11 characters.



Fill Source/Name

The Fill Source is the signal that provides the Fill when selected on a Key bus or provides the source for background busses.

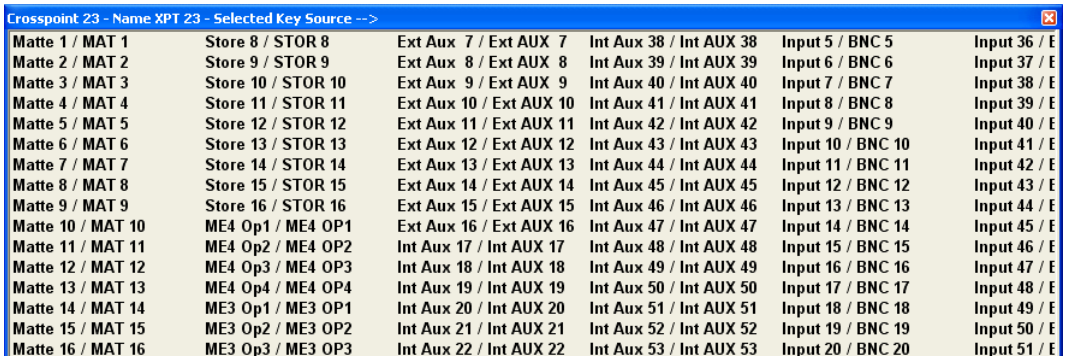
To change the Fill Source/Name, click on a Fill Source in the Crosspoint Mapping window. A list appears, from which a new Fill Source can be selected. Click on a Fill source to select it and close the window.



Key Source/Name

The Key Source provides the Key signal when selected on a Key Bus. It has no effect when selected on a background bus.

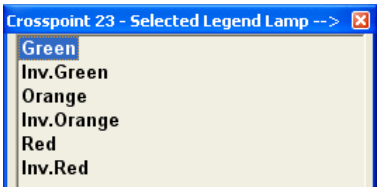
To change the Key Source/Name, click on a Key Source in the Crosspoint Mapping window. A list appears, from which a new Key Source can be selected. Click on a Key Source to select it and close the window.



Legend Lamp

The Legend Lamp allows the mnemonics on the control panel to be color coded, using colored backlights.

To change the Legend Lamp color for a crosspoint, click on a Legend Lamp in the Crosspoint Mapping window. A list appears from which the lamp color can be selected. Click on a color in the list to select it and close the window.



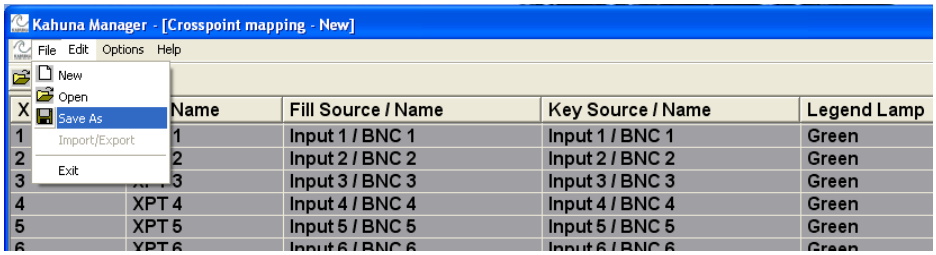
Saving a User Setup File

User Setup files have a .ucf file extension and can be transferred to Kahuna by means of a USB memory device.

To save a .ucf file:

1. From the File menu, select **Save As**.

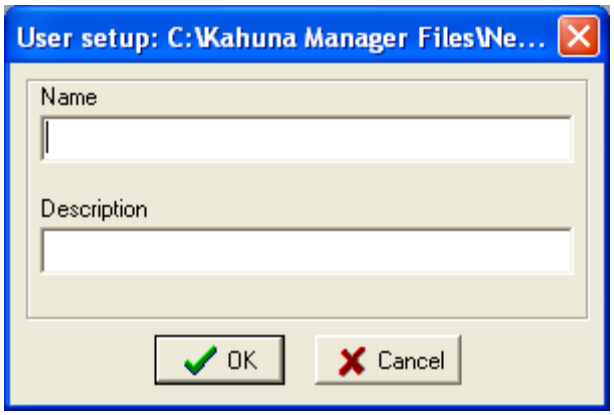
Alternatively, click the  button in the toolbar.



A Windows Save As dialog appears

2. Specify a name and location for the file, and in the **Save as type:** field select **User Setup (*.UCF)**.

The User setup options window appears.



3. Enter a Name and Description for the file, and then click **OK**.

Modifying Engineering Setup Files

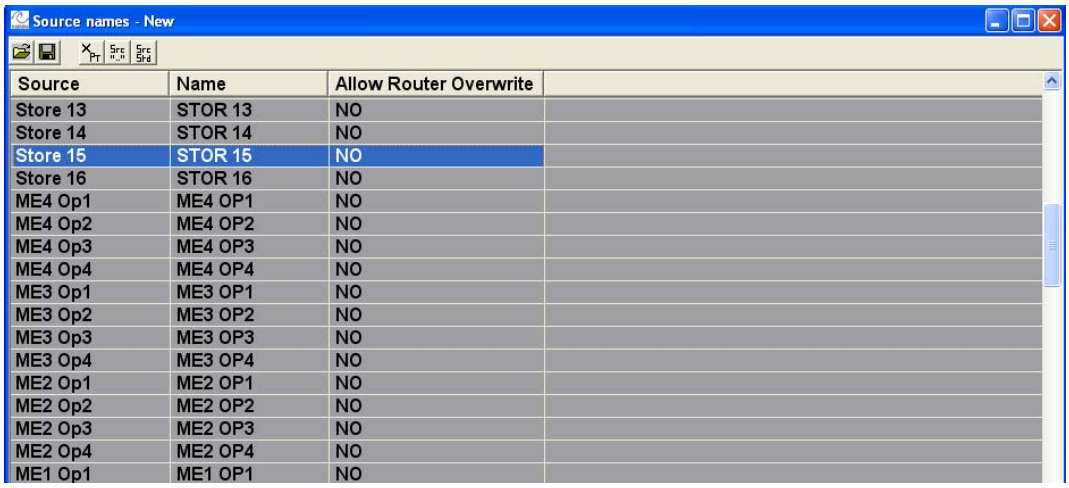
The Engineering Setup options enable engineering setup files to be modified and saved. An .ecf file can then be transferred to Kahuna by means of a USB storage device.

An Engineering Setup file provides the option to rename sources and select a video standard

Source Names

Each input source can be given a name, which is used as a reference to a Fill or Key source.

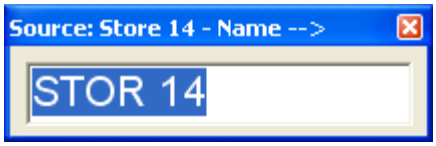
To set up Source Names, from the Options menu, select Engineering setup > Source names.



For each source, modify the Name and Allow Router Overwrite setting as required.

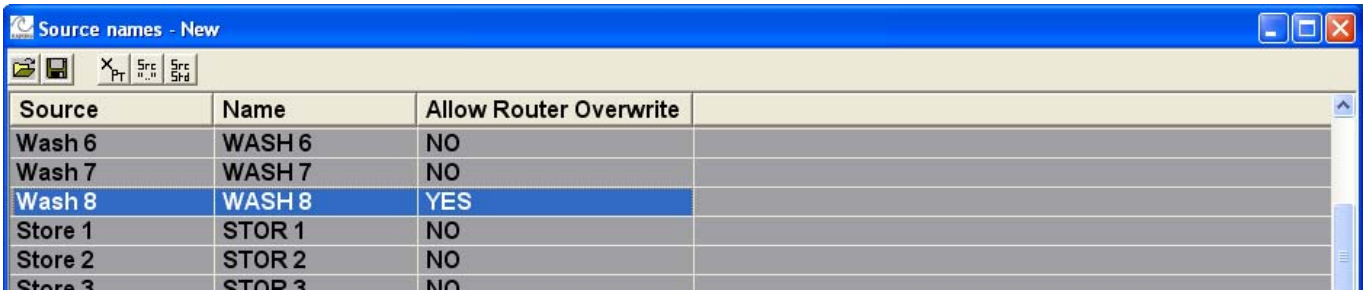
Name

To change the Source Name, click on a Name in the Source Names window. A window appears, in which a new name can be typed. Close the window to accept the new name.



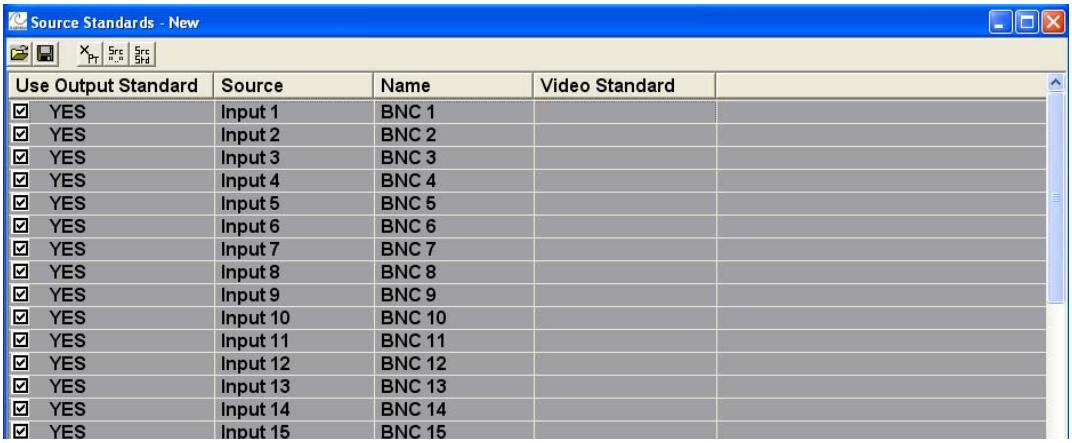
Allow Router Overwrite

When the Allow Router Overwrite option is set to Yes, an external router will be allowed to rename the source.
To change the setting, click on **Yes** or **No** as applicable to toggle the setting.

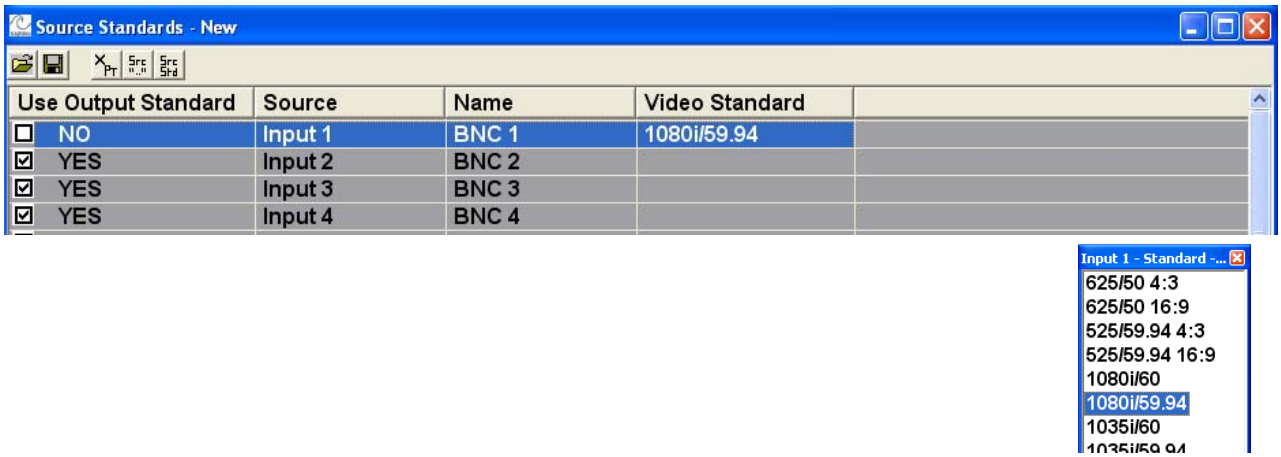


Source Standards

By default, all sources are assumed to be in the default switcher output format. The Source Standards options enable a different video standard to be specified, if required.
To set up Source Standards, from the Options menu, select Engineering setup > Source standards.



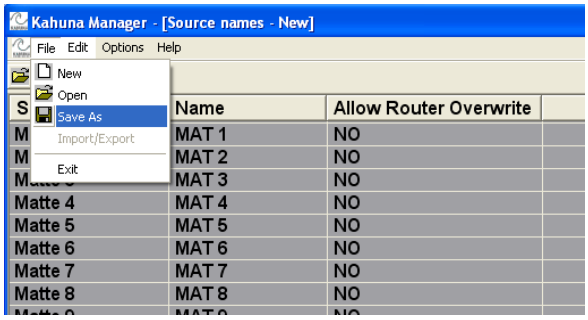
To specify a different video standard for a source, clear the check box in the Use Output Standard column. A video standard will now be displayed in the Video Standard column.



Click the on the video standard to display a list from which a new video standard can be selected. Click on a standard to select it and close the window.

Saving an Engineering Setup File

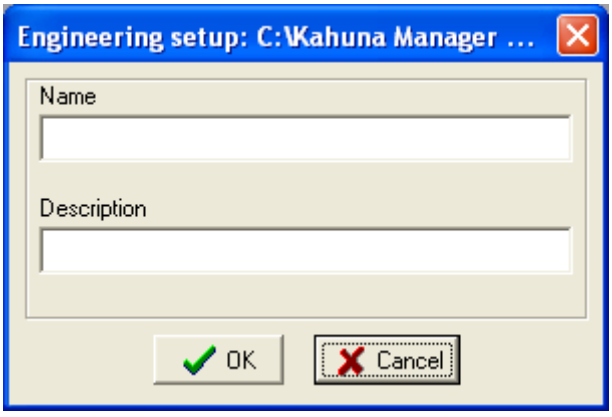
Engineering Setup files have an .ecf file extension and can be transferred to Kahuna by means of a USB memory device.
To save an .ecf file:
From the File menu, select **Save As**.



Alternatively, click the  button in the toolbar.

A Windows Save As dialog appears
Specify a name and location for the file, and in the **Save as type:** field select **Engineering Setup (*.ECF)**.

The Engineering setup options window appears.



Enter a Name and Description for the file, and then click **OK**.

Contact Information

Kahuna Support

Customer Support

For details of our Regional Customer Support Offices please visit the SAM web site and navigate to Support/Customer Support Contacts.

https://s-a-m.com/support/247-support/

Customers with a support contract should call their personalized number, which can be found in their contract, and be ready to provide their contract number and details.

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