

Kinoma Producer

Version 1.1

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Introduction

Kinoma Producer is an easy to use tool for converting digital media files into Kinoma format that can be played back on Palm handhelds. Kinoma Producer provides the ability to convert many common video, audio, still image, and animation file formats into the Kinoma format. Kinoma Producer goes beyond audio and video encoding by providing control over the presentation of the video including background image, background color, and layout of the elements.

System Requirements

Kinoma Producer is available for both Windows and Macintosh computers.

Windows system requirements

- Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, or Windows XP
- 16 MB of memory
- 5 MB of free disk space

Kinoma Producer requires QuickTime to be installed. QuickTime is preinstalled on many PCs. You can download QuickTime free of charge at <http://www.apple.com/quicktime/download>. Either select “recommended install” or ensure that “QuickTime Authoring Components” is selected in the custom installation. QuickTime Pro is not required for Kinoma Producer.

Macintosh system requirements

- Mac OS 8.6 with CarbonLib 1.0.4, Mac OS 9, or Mac OS X
- 64 MB of memory
- 5 MB of free disk space

Kinoma Producer requires QuickTime. QuickTime is preinstalled on all Macintosh computers. To make sure you have the most up-to-date version, please visit <http://www.apple.com/quicktime/download>. Either select “recommended install” or ensure that “QuickTime Authoring Components” is selected in the custom installation. QuickTime Pro is not required for Kinoma Producer.

Installation

After ensuring that you have QuickTime installed on your computer, run the Kinoma Producer installer application.

Windows Installation

Run the installer application called “Kinoma Producer Setup.exe”. Follow the on-screen instructions to install the application.

Macintosh Installation

Run the installer application called “Kinoma Producer Installer”. Follow the on-screen instructions to install the application.

Uninstalling Kinoma Producer

To remove Kinoma Producer from your computer, follow the instructions below.

Windows Uninstall

- Open the Control Panels window on your computer.
- Select “Add or Remove Programs.”
- Select Kinoma Producer from the list of programs and click “Change/Remove”.

Macintosh Uninstall

- Locate the Kinoma Producer folder on your hard disk.
- Drag the folder to the trash icon on your desktop.

Upgrading from a Trial Version

Kinoma Producer is available in a limited trial version. In trial versions, some features may be limited or disabled. These restrictions are all removed in the full version of the product. You can purchase the full version of Kinoma Producer on-line at <http://www.kinoma.com/purchase>.

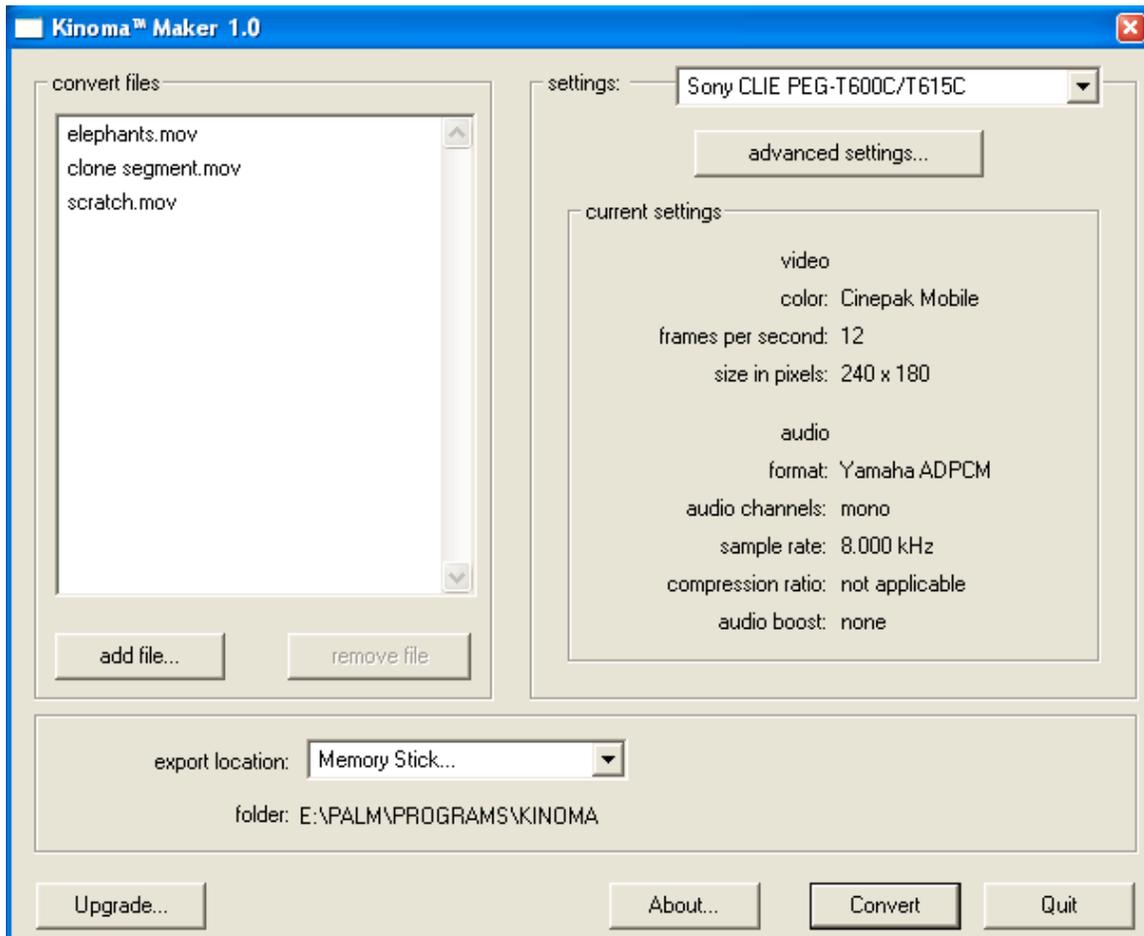
The full version of Kinoma Producer removes all the restrictions of the trial version. The full version of Kinoma Producer includes:

- Use of the Kinoma Producer for an unlimited period of time for encoding an unlimited number of clips
- No restrictions on the duration of clips encoded
- Full access to Advanced Settings dialog providing full screen encoding, access to all encoding parameters, and the ability to include a background image with the video.
- Batch encoding for automated encoding of multiple clips at the same time

Using Kinoma Producer

When you launch the Kinoma Producer application, it will briefly display a splash screen. If you have entered a serial number the user name and serial number will be displayed on the splash screen. If you are using a trial version of Kinoma Producer, the number of days remaining in the trial is also displayed. The splash screen will automatically close after a few seconds, or you can click the window to close it immediately.

After the splash screen is closed, the main Kinoma Producer screen is displayed. This screen provides access to all the features of Kinoma Producer, enabled you to specify which media files to encode and the encoding options.



Selecting Files to Encode

In the top left area of the main Kinoma Producer screen is an area labeled “convert files” which contains a list of the files to be encoded. There are several ways to add files to this list:

- Click the “add file...” button to display a file selection dialog. Select the files you wish to encode.
- Drag and drop files into the list area.
- You can also drag and drop files on the Kinoma Producer application icon.

To remove a file from the list, click on the file name to select it and then click the “remove file” button. To select multiple files, hold down the control key when you click on Windows, or the shift key on Macintosh.

Kinoma Producer supports a wide range of file formats for encoding into the Kinoma format. A complete list of the support file formats is provided in the “Source File Formats” section.

All files in the list will be encoded using the same encoding settings. If you want to encode files with different settings, you will need to encode them in multiple batches.

Selecting Encoding Settings

In the top right area of the main Kinoma Producer screen is an area labeled “settings”. This area is used to configure the encoding settings.

At the top of this area is a pop-up menu that lists media encoding presets. These presets have been designed for optimal performance for each handheld device listed. For example, in the screen shot shown encoding presents for a Sony CLIÉ T615C handheld have been selected.

Note: For the Sony CLIÉ NR70, three presets are provided. These allow content to be encoded in portrait mode, landscape mode with clockwise rotation, and landscape mode with counter-clockwise rotation.

While the preset encoding parameters are appropriate for most content and situations, sometimes it is useful to be able to specify the audio and video encoding parameters directly. Click the “advanced settings” button to bring up the comprehensive encoding settings dialog. The settings available in this dialog are explained in detail in the section “Advanced Settings for Encoding and Presentation”.

A summary of the current encoding settings is displayed beneath the Advanced Settings button.

Selecting Output Location

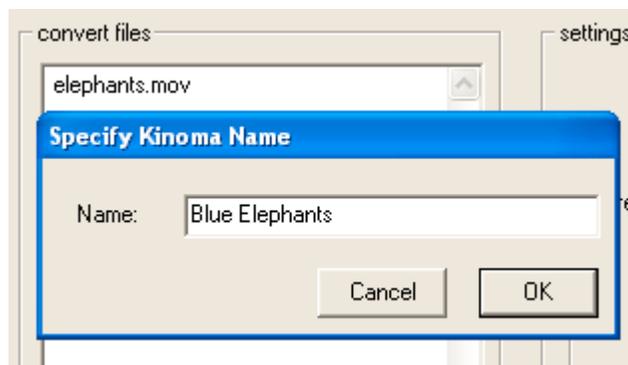
In the area below the encoding settings and list of files to encode is a pop-up menu label “export location”. Use this pop-up menu to select where the encoded files should be placed. The follow options are available:

- **Source Folder.** Encoded files will be placed in the same directory as the folder where the original source file is stored.
- **HotSync Folder.** Encoded files will be placed in the install folder so that the next time you perform a HotSync operation they will be transferred to your Palm handheld. Kinoma Producer will display a dialog window to allow you to specify which user to install the encoded content for. If you have a recent versions of Palm Desktop and a handheld that supports external storage (such as SD Memory or Memory Stick) you will also be given a choice as to whether the encoded content should be installed in the handheld's memory or on the handheld's external storage.
- **Memory Stick.** Encoded files will be placed on a Memory Stick. The files will be placed in the path “\palm\programs\kinoma\” so that they can be found by the Kinoma Player.
- **Removable Storage.** Encoded files will be placed on a removable storage device. This setting is useful for loading encoded content directly on to an SD Memory card or Compact Flash device.
- **Other.** Displays a directory selection dialog to specify where the encoded content should be stored.

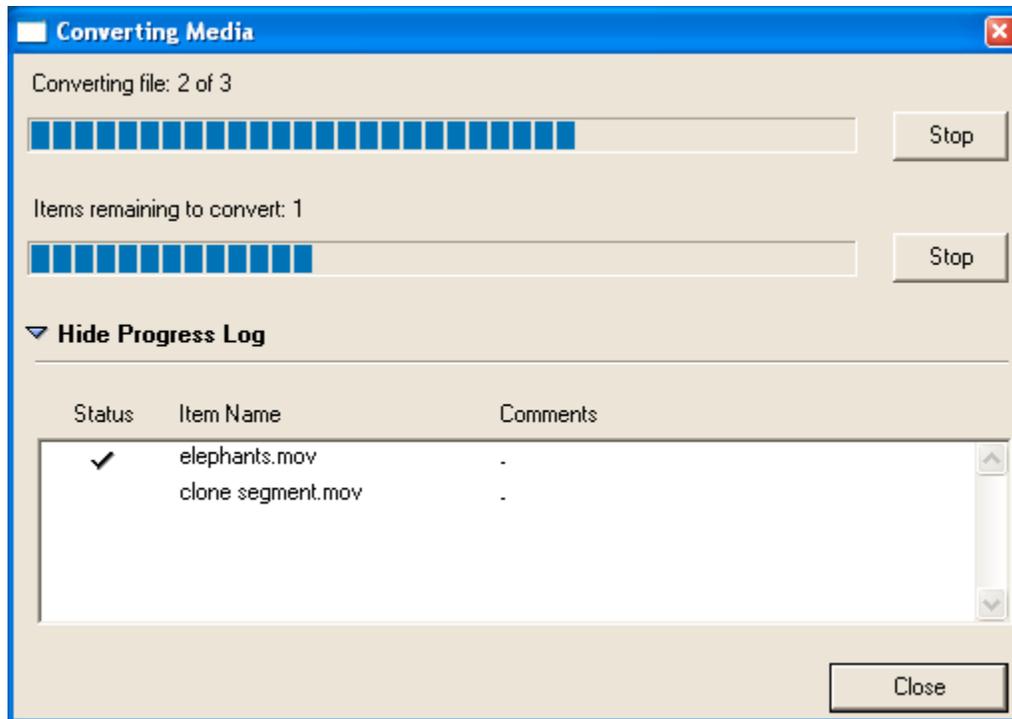
Encoding Files

After you have selected which files to encode, the encoding settings to use, and where to store the encoded files you are ready to start encoding. To start encoding, click the “Convert” button in the bottom right corner of the main Kinoma Producer window. When you click the “Convert” button all the files added to the “convert files” list will be encoded.

If you are encoding only one file, Kinoma Producer gives you an opportunity to specify the name of the clip to be displayed in Kinoma Player. By default, the name displayed is the file name with any file extension removed. For example, if the source file name is “elephants.mov”, the name displayed in Kinoma Player is “elephants.” In the example below, the display name is set to “Blue Elephants” instead of the default name.



Next, the Converting Media window will appear to display the progress in encoding these files.



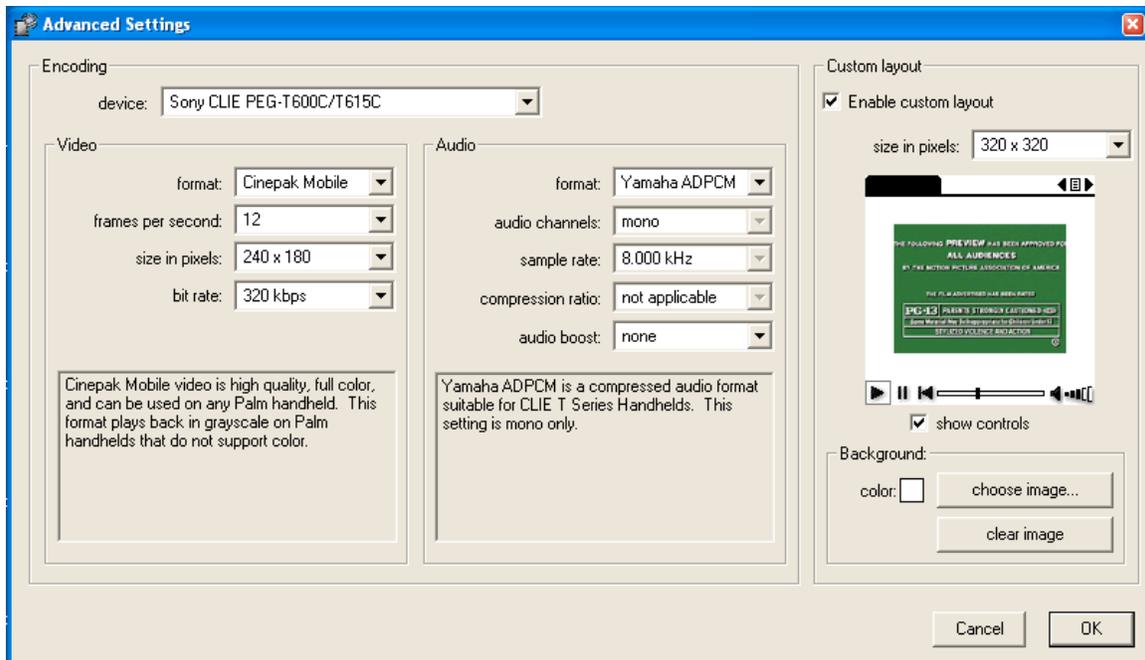
The converting media window displays the status of the encoding operation. At the top of the window, it displays the progress in encoding the current clip. To halt encoding of only this file, click the stop button to the right of the progress bar.

Below the clip progress bar is another progress bar which indicates the overall progress towards encoding all of the files selected. To halt encoding of all files, click the stop button to the right of the progress bar.

In the status area, a log of all files that have been encoded is displayed. The file currently being encoded is at the end of the list. To show or hide the progress log, click the triangle control above the status area.

Advanced Settings for Encoding and Presentation

The Advanced Settings dialog is accessed by clicking the “Advanced Settings...” button in the main Kinoma Producer window. It provides complete control over all the encoding and presentation options in the Kinoma Producer application. The Advanced Settings window is shown below.



The Advanced Settings window is divided into a number of different sections. The top level sections are “Encoding” settings on the left and “Custom layout” or presentation settings on the right.

Encoding

At the top of the Encoding settings is a pop-up menu to select the handheld device profile that the encoding is targeted for. These presets are a good place to start, so select the preset which most closely matches the target device. As changes are made to the various elements within the Encoding settings, this pop-up menu will change to “Custom” to indicate that no preset is being used.

Within the Encoding settings are two sub-sections, one for video and one for audio. Each begins by presenting a pop-up menu to select the format of the encoded data. This format represents the algorithm that will be used to encode or compress the audio and video. Each encoding format is best suited to a particular device or type of content. Kinoma Producer displays a short description of each format after it is selected. Within the audio and video sub-sections are a number of different options which will be applied to the selected encoding format. Not all options are available for each encoding format. Those options which do not apply to the currently selected encoding format are disabled.

Video Encoding

Kinoma Producer offers five video encoding formats in addition to a “none” option which will result in no video being included in the encoded file.

- **Cinepak Mobile.** Cinepak Mobile is the most advanced video encoding format included in Kinoma Producer. It is designed to provide great quality, high frame rate color video on a wide range of Palm handhelds. Cinepak Mobile is the only encoding format that is appropriate for use in hi-resolution display modes such as 240x180, 320x240 and 320x320.
- **Black & White.** Black & White is useful for content which consists entirely of black and white pixels. It can be displayed on any Palm handheld device.
- **4 Grays.** 4 Grays is useful for content intended for playback only older Palm handhelds which cannot support more levels of gray, including the Visor Deluxe and Palm III.
- **16 Grays.** 16 Grays is appropriate for most gray scale Palm handhelds. It provides good quality and performance.
- **Color – Legacy.** Color – Legacy is a format which is provided to enable color content to be encoded in a format which is compatible with the gMovie Player. Cinepak Mobile provides higher quality and better performance and should be used for all color encoding.

Within the video format settings section there are a number of options for controlling how the video is encoded.

- **Frame per second.** This option selects the number of frames per second of video in the encoded file. Typically this should be set to a value of 8, 10, or 12 which is the frame rate that most Palm handhelds can reliably play. However, at smaller frame sizes or on more recent devices frame rates as high as 30 are possible. Selecting the “best” frame rate option will cause Kinoma Producer to encode each frame in the source movie. This is useful for content with a variable frame rate or at a frame rate not listed in the “Frames per second” pop-up menu.
- **Size in pixels.** This option selects the size of the frame output to the encoded file. If the aspect ratio of the source content does not match the aspect ratio selected, the source video will be adjusted to fit. For full screen sizes (160x160 and 320x320) the source video’s size is adjusted by removing (or cropping) the edges to make it square. For all other sizes, the source video’s size is adjusted by scaling it proportionally to fit within the requested size.
- **Bit rate.** This option selects the target bit rate for the video portion of the encoded file. The “Bit rate” option is only available for the Cinepak Mobile video encoding format. Typically the “Bit rate” option should be set to 240, 320, or 400kbps. Larger values may not play back reliably from external storage devices, and smaller values may not provide adequate quality.

Note: Encoding video so that it looks as good as possible can be a difficult task. Because of this, Kinoma Producer includes presets for most Palm handheld devices. The device presets provide good quality reliable results for most common situations and eliminate the need to directly change the encoding settings for most situations. However, it may be possible to achieve better results by making appropriate adjustments to the video encoding settings.

Audio Encoding

Kinoma Producer offers four audio encoding formats in addition to a “none” option which will result in no audio being included in the encoded file.

- **Uncompressed.** The uncompressed audio encoding format applies no audio compression algorithm to the audio placed into the output file. This format is used for audio played back using the limited audio capabilities of the Palm’s Dragonball microprocessor. It is compatible with a wide range of Palm handhelds.
- **ADPCM.** The ADPCM audio encoding format creates audio which is compatible with most Palm handhelds. It is compatible with the same Palm handhelds as the Uncompressed audio format. ADPCM provides good quality compression. Because the audio is compressed, it makes greater performance demands at playback than the Uncompress audio format.
- **CLIE Audio.** The CLIE Audio encoding format is a very high quality audio compression algorithm developed by Sony. It is supported on some Sony CLIE handhelds. CLIE Audio is the only audio format supported in Kinoma Producer that handles stereo audio. CLIE Audio is also supported by the Sony plug-in Audio Adapter.
- **Yamaha ADPCM.** The Yamaha ADPCM audio encoding format provides about the same compression ratio and quality as the ADPCM audio encoding format. However, the Yamaha ADPCM audio encoding format can only be played back on Palm handhelds that contain a Yamaha audio chip. This includes some Sony CLIE handhelds and Handspring handhelds with a Springboard module containing a Yamaha audio chip.

Note: Unfortunately because of differences in Palm handheld hardware configurations, there is no single audio encoding format which works on all Palm handhelds. This means that it is important to know which devices the content will be viewed on before it is encoded. The most widely supported formats are ADPCM and Yamaha ADPCM.

Note: The speaker on many Palm handhelds is designed to play back only alert tones, not digital audio. As a result, audio playback can be quiet or distorted. This issue is being resolved with many recent Palm handhelds providing better quality speakers and/or a dedicated audio chip.

Within the audio format settings section there are a number of options for controlling how the audio is encoded.

- **Audio channels.** The “Audio channels” pop-up menu controls the whether the encoded audio stream contains mono or stereo audio. CLIE Audio is the only audio encoding format that supports stereo.
- **Sample rate.** The “Sample rate” pop-up menu controls the same rate that the audio is encoded at. Higher sample rates generally provide increase quality with better reproduction of high frequency sounds. However, higher sample rates also

- have greater storage requirements and require more processor power at play back time.
- **Bit rate.** For the CLIÉ Audio encoding format only the “Sample rate” option is renamed “Bit rate”. CLIÉ Audio is always encoded at 44.1khz. The “Bit rate” pop-up menu selects the target bit rate of the audio in the encoded file. Larger values provide increased quality at the expense of increased storage requirements.
 - **Compression ratio.** The “Compression ratio” pop-up menu selects how much compression should be applied when using the Yamaha ADPCM audio encoding format. Typically this should be set to 4:1 to give the smallest file size, but can also be set to 2:1 to provide greater quality.
 - **Audio boost.** The “Audio boost” pop-up menu provides a way to increase the overall volume level of the encoded audio. This can be useful because the built-in speaker on many Palm handhelds is quite small. By increasing the audio level while encoding, it is possible to make the audio sound better during playback on these devices. However, boosting the audio level can also cause distortion of the audio so test carefully after applying this setting.

Custom Layout

The panel on the right side of the Advanced Settings dialog allows a custom layout to be created for the encoded movie’s presentation. The location of the movie can be set, along with a custom background color and even a background image. To enable complete control of the presentation, the user interface of Kinoma Player can even be hidden.

In the following sections, each element within the Custom Layout panel is described.

Enable Custom Layout

To use the custom layout capabilities of the Advanced Settings, the feature must first be enabled. To do this, check the Enable Custom Layout check box.

The default setting is not to use a custom layout. When no custom layout is selected, only the movie will be included in the output file. To uses features such as background color and background image, first enable the custom layout feature.

Size in Pixels

The Size in Pixels pop-up menu specifies the overall area of the custom layout. Four choices are available.

- **160 x 160.** This setting works with all Palm handhelds.
- **320 x 320.** This setting works with all Palm handhelds that support hi-resolution display mode. At the time of this writing, this is only Sony CLIÉ handhelds.
- **320 x 480.** This setting works with all Palm handhelds with a 320x480 hi-resolution display mode. At the time of this writing, this is only Sony CLIÉ NR series handhelds.

- **480 x 320.** This setting works with all Palm handhelds with a 320x480 hi-resolution display mode. This setting rotates the layout 90 degrees for playback in “widescreen” mode. At the time of this writing, this is only Sony CLIE NR series handhelds.

Layout Area

The layout area is where the location and size of the movie and background image are set. To position the movie and background image, click on the object to move and drag to the desired position. To resize the movie or background image, click in any corner of the object and drag to the desired size.

Show Controls

The Show Controls check box controls whether the custom layout area leaves space for the normal Kinoma Player user interface. Unchecking Show Controls will provide a larger area for the custom layout.

Note: Files encoded with Show Controls unchecked will be opened in Kinoma Player with no user interface visible.

Background Color

Click on the color box labeled “color” to set the background color for the custom layout. The background color will be used in any area not covered by user interface elements, the movie, and the background image.

Choose Image

Click Choose Image to select a background image to use in the custom layout. Kinoma Producer automatically scales the image to fit within the custom layout size selected. The size and position of the background image can be modified in the Layout Area. Most common image file formats can be used as background images. The Source File Formats section lists the supported still image formats supported in Kinoma Producer.

Clear Image

Click Clear Image to remove the background image currently in use in the custom layout.

Source File Formats

Kinoma Producer supports a wide range of file formats for encoding into the Kinoma format.

Tip: Kinoma Producer supports all audio and video formats supported by QuickTime. QuickTime also provides a plug-in architecture that enables third parties to integrate

support for their own file formats. If you have any third-party audio or video file format plug-ins installed, Kinoma Producer will make use of these. For example, within the DICOM image format is widely used in the medical community. A plug-in supporting DICOM images is available at <http://www.escape.gr/dicom/>.

Video File Formats

- AVI
- DV
- MPEG-1 – Requires QuickTime 5 or better to be installed.
- MPEG-4 – Requires QuickTime 6 or better to be installed.
- QuickTime

Note that both AVI and QuickTime are extensible file formats which can contain audio and video encoded in a wide variety of compression methods. These compression methods are known as “codecs”. While Kinoma Producer supports the most common of these, you may encounter some content encoded in an unsupported format.

Animation File Formats

- GIF
- Macromedia Flash – Flash 5 is supported with QuickTime 6 installed. Only the Flash animation is converted. Any audio or interactivity is ignored.
- FLC

Audio File Formats

- AIFF
- AU
- WAV

Sill Image File Formats

- BMP
- JPEG
- Photoshop
- PICT
- PNG
- Targa
- TIFF

Encoding a Sequence of Image Files

Kinoma Producer can be used to encode a sequence of image files into a single presentation. This capability can be used convert a collection of photographs captured with a digital camera into a single Kinoma format encoded file. It can even be used to

convert PowerPoint slide presentations into a portable format for playback on Palm handhelds using Kinoma Player.

To convert a sequence of image files using Kinoma Producer, simply add the first file in the sequence to the list of files to be encoded in the main Kinoma Producer window. These image files can be in any still image format supported by Kinoma Producer as described in Source File Formats. The files must be named in a consistent manner, ending in numbers. For example, “my picture 001.jpg”, “my picture 002.jpg”, “my picture 003.jpg”. Kinoma Producer will automatically detect the sequence of image files.

When working with a sequence of images, Kinoma Producer assigns each image a duration of one second.

Note: To encode a single image that is part of a numbered sequence, make a copy of the file in a different folder. This will prevent Kinoma Producer from detecting the image sequence.

Note: All the images in the sequence should have the same aspect ratio. Kinoma Producer creates the encoded movie with the aspect ratio of the first image the sequence. All other images will be stretched to match the resolution of the first image in the sequence, and consequently may appear distorted if they do not have the same the aspect ratio as the first image.

Encoding PowerPoint slides

Kinoma Producer can encode PowerPoint slides in the Kinoma format for playback on Palm handhelds. Because Palm handhelds typically have significantly smaller screens than most PC's, it is recommended that PowerPoint presentations be created with a smaller slide size or larger font size to ensure readability on Palm handhelds. When working with standard size templates an 80 point font works well for titles together with a 48 point font for body text.

To encode PowerPoint slides, the slides must first be exported from PowerPoint. After exporting the slides from PowerPoint, they can be encoded in Kinoma Producer. The steps for exporting slides from PowerPoint are different for Macintosh and Windows computers.

Exporting PowerPoint Slides on Windows

The following steps describe how to export PowerPoint slides on Windows. They are based on the Office XP version of Microsoft PowerPoint.

1. Open the presentation in PowerPoint
2. From the File menu select “Save As...”

3. From the “Save As Type” menu select either “JPEG File Interchange Format” or “PNG Portable Network Graphics Format”. Selecting JPEG will typically result in smaller file sizes with marginally lower image quality than PNG.
4. Navigate to the directory to save the images in, assign a name of the images, and click “Save”.
5. PowerPoint will display a dialog asking “Do you want to export every slide in the presentation or only the current slide?” Select “Every Slide”.
6. After PowerPoint completes the export operation, the sequence of images is ready to be encoded in Kinoma Producer following the instructions described in “Encoding a Sequence of Image Files.”

Exporting PowerPoint slides on Mac OS X

The following steps describe how to export PowerPoint slides on Macintosh. They are based on the Office:mac 2001 version of Microsoft PowerPoint.

1. Open the presentation in PowerPoint.
2. From the File menu select “Make Movie...”
3. Enter a file name for the movie file and choose a location to save the QuickTime movie file. Click “Save” to begin the export operation.

Note: It is recommended that the “Use current settings” radio button be selected (this is the default).

Note: It is recommended that no transitions are used in the PowerPoint presentation to be converted as they may greatly increase the size of the encoded file.

4. After PowerPoint completes the export operation, the QuickTime movie file is ready to be encoded in Kinoma Producer following the instructions described in “Using Kinoma Producer.”

Exporting PowerPoint Slides on Mac OS 9

The following steps describe how to export PowerPoint slides on Mac OS 9. They are based on the Office 2001 version of Microsoft PowerPoint.

1. Open the presentation in PowerPoint
2. From the File menu select “Save As...”
3. From the “Save As Type” menu select either “JPEG File Interchange Format” or “PNG Portable Network Graphics Format”. Selecting JPEG will typically result in smaller file sizes with marginally lower image quality than PNG.
4. PowerPoint will display an options button in the save dialog asking “Do you want to export every slide in the presentation or only the current slide?” Select “Every Slide”.

5. Navigate to the directory to save the images in, assign a name of the images, and click “Save”.
6. After PowerPoint completes the export operation, the sequence of images is ready to be encoded in Kinoma Producer following the instructions described in “Encoding a Sequence of Image Files.”

Product Support

Support for Kinoma Producer is available to customers of who have purchased Kinoma Producer or received it as part of an OEM bundle. A list of frequently asked questions and their answers is available on-line at

<http://www.kinoma.com/faq>

Please check this page first for the fastest answers to your questions. If the frequently asked questions page doesn't answer your questions, you can send email to support@kinoma.com. Japanese customers can email their questions to support-j@kinoma.com. Please include your name and Kinoma Producer serial number with your question to verify that you are an owner of Kinoma Producer. Most support email questions will be answered within 48 hours of being received. Email support is available for the first 90 days after purchasing Kinoma Producer.

Note: We are unable to respond to support queries from customers using the trial edition of Kinoma Producer.