datavideo®

CG-300/350
Character Generator

Users Guide

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Installation

This Chapter explains how to install the Software and the Hardware Key (dongle) for the Software. It also describes the type of system that you will need before you can run the program.

System Requirements

Operating system:

CG-300/350 is designed to run under Windows 98 (SE), Windows ME, Windows 2000 or Windows XP. You need one of these operating systems (or later versions) on your computer in order to run the program.

Processor (CPU):

The program will run only on a 1 GHz Pentium (or higher) processor.

RAM:

CG-300/350 will run with as little as 128 Mbytes of system RAM. However it will run very slowly. It is recommended that you have at least 512 Mbytes of RAM.

Hard Disk Space:

You must have a minimum of 80 Mbytes of Hard Disk space to install the program. If you intend to create many Background Graphics, or save a lot of pages as graphic images (i.e. BMP, TGA, etc), make sure that you have enough Hard Disk space available. Saving pages in the Datavideo Page (PAG) format doesn't require large amounts of disk space (approx. 2-4 Kbytes per page) unless logos or textures are added to the pages

CD-ROM:

If you intend to install the software from a CD-ROM, the system must have a CD-ROM drive.

VGA Card:

The VGA Card must be set to either 16 bits per pixel (High Color), 24 bits per pixel (True Color), or 32 bits per pixel (Alpha) mode. If you run your VGA card in High Color mode, the color spreads may not appear smooth on your VGA monitor. This will not affect the quality of the Title Graphics that are produced. They should appear very smooth in 24 or 32 bits per pixel mode. The Program will not run if the VGA mode is set to 8 (or less) bits per pixel.

USB Port:

The computer must have at least 1 unused USB port to install the Hardware Key (Dongle).

Installing the Software

The Program has a **Setup** program to help you setup the software to run on your computer. The files on the install disks are compressed. The only way to make sure that the files are uncompressed correctly is to use the **Setup** program. The software can be installed from either floppy disks, a CD-Rom, or from your hard drive.

Installing from a CD Rom

Insert the Datavideo Software Installation CD-ROM into the CD-ROM drive. If the Install window does not automatically appear after a few seconds, run the "**SETUP.EXE**" program from the CD-ROM. Select the program to install and the system will begin installing the software.

Follow the instructions on the screen until the software is completely installed. When the software is installed, the computer will restart. After the computer is restarted the Hardware Key (dongle) can be installed.

A folder called "**Datavideo**" should now be in the **Programs** menu. There will also be an Icon called **CG-300 or CG-350** on your desktop.

Installing from the Hard Drive

All of the install files must be in a temporary directory to install the software from the hard drive. This temporary directory SHOULD NOT be named **CG-300/350**. Run the "**SETUP.EXE**" program from the temporary directory. The system will begin installing the software.

Follow the instructions on the screen until the software is completely installed. When the software is installed, the computer will restart. After the computer is restarted the Hardware Key (dongle) can be installed.

A folder called "**Datavideo**" should now be in the **Programs** menu. There will also be an icon called **CG-300/350** on your desktop.

Installing the Hardware Key

Once the software is installed and the computer has restarted, the Hardware Key (dongle) can be inserted into one of your computer's unused USB ports. A "Found New Hardware" window will appear the first time that the dongle is inserted. Once this window goes away, the program is ready to run.

Checking the Installation

Run the program to test the installation by opening the **CG-300 or CG-350** folder and double clicking on the **CG** icon, or by double clicking on the **CG i**con on the Desktop. The program's windows should appear after a few seconds.

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CG-300/350 Overview

CG-300/350 is used to create and display title pages. The program is divided into two sections. These are Page Creation and Page Display.

Page creation is done with the "Title Composer". Information about using the Title Composer to create your pages is covered in a separate Manual.

This manual deals with displaying the Title Pages once they have been created. The CG-300/350 program allows you to create a list of pages and then display those pages either automatically or under manual control. Under manual control each page that you have created can be displayed with its assigned page transition. Each page is displayed when you want it, for as long as you want it. The pages are previewed so there is no question as to which page will be displayed next. The pages are displayed when you press the appropriate button/key.

A list of pages can also be setup to automatically sequence. Each page will be displayed with the Page Transition Type, Transition Speed, and Dwell Duration that the user selected for the page. The Pages will continue to automatically sequence until you stop it. This feature is very useful for creating Kiosks and Message Information Channels.

The title pages can contain text (of course), background color boxes, geometric shapes, full-color graphic images as logos, and either a background graphic or background video. The text can be created using TrueType typefaces and can be sized, rotated, and italicized. Each character can have up to two edges and three shadows. The character's edges and shadows can be colorized with a solid color, a vertical color spread, a color gradient (4pt, 5pt, or linear), or with a texture.

Background color boxes can be created any size and position on the screen. They can be colorized with all of the same color options as characters; they can even be made semi-transparent.

Geometric shapes can be created at any size and position on the screen. The roundness of the shape can be controlled and the shape can be made square, completely round (as a circle or ellipse), or anywhere in between. Shapes can be sized, rotated, italicized, edged, and colorized just like any other character.

Chapter 2 - CG-300/350 Overview

Standard graphic format graphics can be loaded as either full-color logos or as a background image. When they are loaded as logos, they can be sized and positioned anywhere on the screen.

On-Air User Interface

If you don't have the software installed yet, please follow the directions in chapter 1.

Start the program just like you would any other program under Windows. After a few seconds the program's User Interface will appear. The first time that you run the program you will be asked to select which Video Format to use when creating your title pages (NTSC, PAL, etc). The software will automatically adjust its user interface to fit your screen. If your screen resolution is set to 1024 by 768, it will appear similar to figure 2-1.

Figure 2-1. Screen Appearance on a 1024 by 768 display.

This User Interface is divided into 7 sections. These sections are Menu Bar, Toolbar, Preview Window, Display List Editor, Control Buttons, Media Catalog, and Status Bar.

Menu Bar
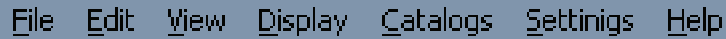
Figure 2-2. Menu Bar

The menu (shown above) is just what you expect in a Windows program. It has a "File" menu that is used to open, create, and save Display Lists. It has an "Edit" menu used for the normal Undo, Cut, Copy, Paste, Insert, Delete, and Edit functions. There is a "View" menu that is used to control how the User Interface appears on the screen. The "Display" menu has selections to control which page is displayed on the output monitor. The "Catalog" menu is used to select what appears in the Media Catalog section. "Settings" menu is for setting Video Format, and User Preferences. The "Help" menu is used to call up the Help text.

Tool Bar

Figure 2-3. Toolbar

The Toolbar (shown above) is a quick way to access common functions. These include commands from the File menu such as Create, Open, and Save Display Lists. The cut, copy, paste, and undo functions from the Edit menu are also included on the toolbar.

Preview Window
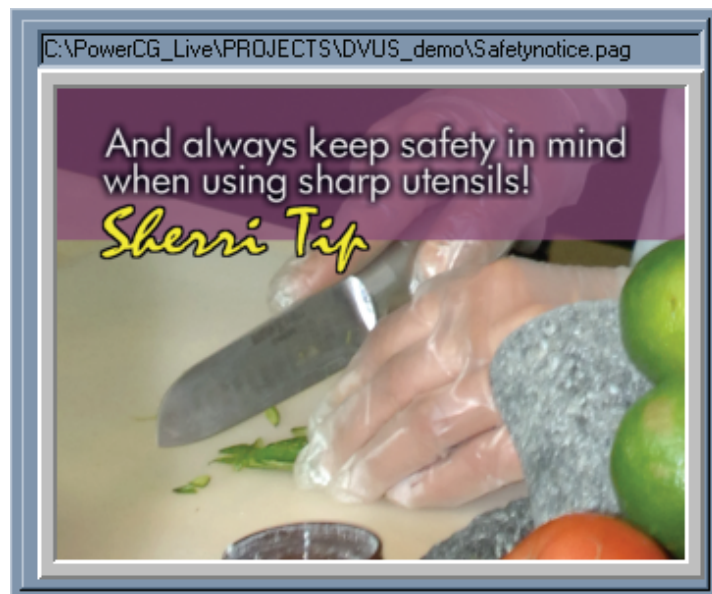
Figure 2-4. Preview Window

The Preview Window (shown above) displays the next page that will appear on the video output. This gives you a confidence check so that you will know whether or not you are about to display the wrong page. The size of this window can be controlled from the "View" Menu.

Display List Editor

Figure 2-5. Display List Editor

The Display List Editor (shown above) is used to create and edit Display Lists. You can Add, Delete, and Duplicate images here. You can also change the order of the images in this window using "drag and drop". This will change the order that the pages will be displayed. You can also randomly select the next page to display for those "last minute" changes.

Control Buttons
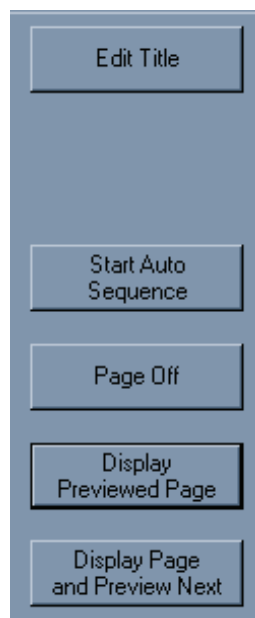
Figure 2-6. Control Buttons

The Control Buttons (shown above) are used to control the Previewed page. The Previewed page can be displayed ON AIR or edited using these buttons.

Media Catalog

Figure 2-7. Catalog Section

The Media Catalog (shown above) is divided into groups based upon the type of images that the software can display. These are Titles, Text Animations, and Graphic Images. These images can be quickly added to the Display List Editor to create a Display List.

The Title Catalog shows the pages in the current project.

The Text Animation Catalog shows the Text Animations that have been created and pre-rendered with the Title Composer.

The Graphic Image Catalog shows the graphic images that are stored in the folders that have been included in the catalog. See "Select Catalog Folders" in Chapter 3 for more information.

Status Bar

Figure 2-8. Status Bar

The Status Bar has a prompt to give you a little more information about a menu or toolbar selection.

Tutorial

Okay, now for some "Hands On". If you don't have the program running yet, start it just like you would any other Windows program.

Before you start composing Title Pages, you will probably create a new project for them. This keeps all of the pages of a Project together, without getting them mixed up with pages from other projects. This is much like creating a new folder in Windows that you create to keep related files together.

Since the subject of creating Title pages will be left to the "Title Composer" manual, we will start with pages that have already been created. Select "Catalogs" from the Menu and select the "Select Title Project" entry. The "Select Title Project" window will appear. Double click "SHOW_OFF" to select the project. The pages that are in the "SHOW_OFF" project will appear in the Title Catalog at the bottom of the screen.

Although not absolutely necessary (unless doing Auto Sequencing), you will probably want to create a Display List before going ON AIR. The easiest way to do this is to double click the pages in the Title Catalog, in the order that you want them to appear.

Create a new Display List by selecting the "File" menu and "New Display List" entry. This will clear the Display List Editor and "Untitled" will appear above it as the name of the Display List. Double Click the "Intro" page in the Title Catalog. It then appears at the first position in the "Display List Editor". If there is a Scroll Wheel on the mouse, you can scroll through the Catalog by placing the mouse over the Catalog and moving the Scroll Wheel. Now double click the following pages in the Title Catalog in the following order: cgpower, introa, introb, intro1, intro1a, intro2, intro2a, intro2b, intro3, and intro3a. Every time that you double clicked a page it should have appeared at the end of the Display List.

Notice that we missed the page "Intro2c". You can add this to the display list using one of two methods. To use the first method, double click on the "Intro2c" page. It appears at the end of the Display List. To place this page between Intro2b and Intro3, move the mouse over the page to be moved in the Display List, press and hold down the left mouse button and drag the page until it is on top of the "Intro3" page, then release the mouse button. The Intro2c page is now placed in front of the Intro3 page, and will be displayed before it in the sequence. To use the second method, move the mouse over the Intro2c page in the Title Catalog, press and hold down the left mouse button and drag the page until it is on top of the "Intro3" page, then release the mouse button.

Congratulations, you just created your first Display List. To save it, select "File" from the menu and select the "Save Display List" entry. Since the Display List hasn't been named yet, the program asks you to enter a name. Name it "SHOW_OFF" and press the "Save" button.

Now it's time to go ON AIR. Press the "Start Auto Sequence" button. The first page in the Display List is displayed on the Video Output, and the next page in the Display List is shown in the Preview Window. After a few seconds the next page will be displayed. These pages are being displayed with the "Page Transition" that was selected when the page was created, at the selected "Display Speed". Each page will appear for the duration specified by the "Dwell Time" of the page.

This sequence will continue until you press the "Stop Auto Sequence" button.

To manually display a page on the Video Output, double click the page that you want to display. The selected page will appear in the Preview Window. Press the "Display Previewed Page" button. This page is then shown on the Video Output. To remove the page from the Video Output, press the "Page Off" button, and the page will be removed. This gives you full random access to any page in the Display List.

Most of the time when displaying pages, you know before hand which order that you want them to appear. This is a good reason to use the Display List. Once the Display List is loaded, preview the first page that you want to show. When you are ready to go ON AIR, press the "Display Page and Preview Next" button. The Previewed page is displayed on the output monitor and the next page in the display list will be previewed. You can continue on through this Display List by pressing this button each time you want the next page to appear. Pressing the <Enter> key on the keyboard's 10 Keypad will also perform this function. This makes ON AIR operation a single key operation. This can really cut down on ON AIR errors.

Preview Window

The Preview Window displays the next page that will appear on the video output. This gives you a confidence check so that you will know whether or not you are about to display the wrong page. The size of this window can be controlled from the "View" Menu.

When you right click in this window, the following menu will appear:
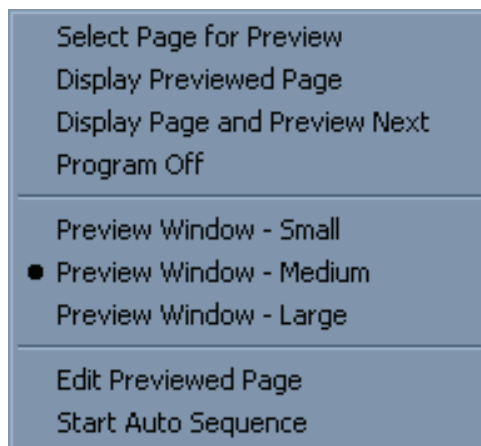
Preview Window Menu

Select Page For Preview:

By Selecting this entry you can select an image to be previewed. This page does not need to be in the title catalog.

Display Previewed Page:

Selecting this entry will display the previewed page on the Video Output using the Display Transition Type and Speed that was specified when the page was composed.

Display Image and Preview Next:

This menu entry will display the previewed page (just like "Display Previewed Page"); it will also preview the next page in the Display List.

Program Off:

This menu entry will remove the current page from the Video Output.

Preview Window Size

Preview Window - Small

Preview Window - Medium

Preview Window - Large:

Use these menu entries to select the desired size of the Preview Window. The size that is currently selected is marked with a "dot".

Edit Previewed Page:

This menu entry allows you to edit the previewed page. Selecting this will start the Title Composer and load the previewed page into it.

Start Auto Sequence:

When this menu entry is selected, the program will start Automatically Sequencing the pages in the Display List. Each page will be displayed with the Page Transition Type and Transition Speed that the user selected for the page. Each page will remain (Dwell) on the Video Output screen for the amount of time that the user specified as the "Dwell Time" for the page.

Display List Editor

The Display List Editor is used to create and edit Display Lists. You can Add, Delete, and Duplicate images here. You can also change the order of the images in this window using "drag and drop". This will change the order that the pages are displayed.

Left Clicking on an image in this window will select the image. Left Clicking on a blank portion of this window will display a window that lets you select a Title Page to add to the Display List.

To change the order of the pages in the Display List, position the mouse over the page that you want to move, press and hold down the left mouse button, move it to another position in the display list, then release the left mouse button. The selected page will be moved to the position that it was dragged to. If you drag the page to the Preview Window, the page will be previewed.

You can also preview a page in the Display List by double clicking on it.

If you right click in this window, the following menu will appear:

Preview Page	
Edit Page	
Add Page	Ins
Remove Page	Del
Duplicate Page	
New Sequence List	Ctrl+N
Open Sequence List...	Ctrl+O
Save Sequence List	Ctrl+S
Save Sequence List As...	
Start Auto Sequence	

Display List Editor Menu

Preview Page:

Select this entry to preview the selected page.

Edit Page:

Select this entry to edit the selected page. This will start the Title Composer and load the selected page into it.

Add Page:

Selecting this entry will display a window that lets you select a Title Page to add to the Display List.

Remove Page:

Use this menu entry to remove a page from the Display List.

Duplicate Page:

Use this menu entry to duplicate the page in the Display List. Once it has been duplicated, you can drag it to another position in the display list. When this is done, the page will display multiple times during the sequence.

New Sequence List:

This will clear the current Display List and create a new one.

Open Sequence List:

Use this entry when you want to work with a Display List other than the one that is currently loaded.

Save Sequence List:

When you have made changes to the Display List, selecting this Menu entry will Save the Display List to disk.

Save Sequence List As:

When you select this menu entry, you will be prompted to enter a name for the Display List. The Display List will then be saved under the new name. The original Display List file will not be changed.

Start Auto Sequence:

When this menu entry is selected, the program will start Automatically Sequencing the pages in the Display List with the Display Transition Type and Speed that was specified when the page was composed. Each page will remain (Dwell) on the Video Output screen for the amount of time that was specified as the "Dwell Time" when the page was created.
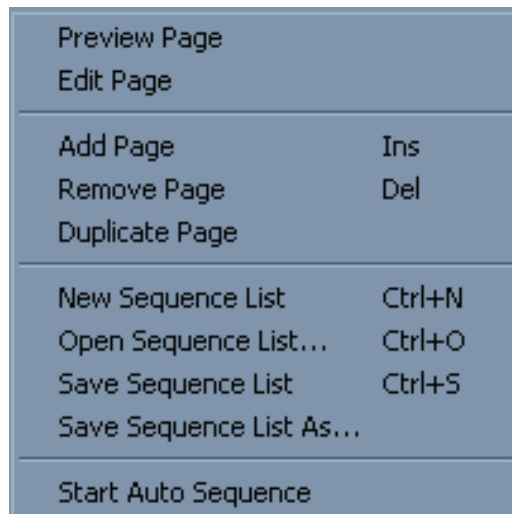
Control Buttons

The Control Buttons are used to control the Previewed page. It consists of the following buttons:

Edit Title:

Press the button to edit the page shown in the preview window. This will start the Title Composer and load the previewed page into it.

Start Auto Sequence:

When this button is pressed, the program will start Automatically Sequencing the pages in the Display List with the Display Transition Type and Speed that was specified when the page was composed. Each page will remain (Dwell) on the Video Output screen for the amount of time that was specified as the "Dwell Time" when the page was created.

Page Off:

Pressing this button will remove the page from the Video Output.

Display Previewed Page:

Pressing this button will display the previewed page on the Video Output using the Display Transition Type and Speed that was specified when the page was composed.

Display Image and Preview Next:

This button will display the previewed page (just like "Display Previewed Page"); it will also preview the next page in the Display List.

Catalog Section

The catalogs are used to quickly select Title Pages, Animation Sequences, and Graphic Images. The Catalog section has three (3) catalog tabs. Each tab selects the catalog that contains each type of image. To use title pages, select the "Title Pages" tab. Select the "Animations Catalog" to use an Animation Sequence. The "Graphics Catalog" is used to select a graphic image to be displayed. Images from each catalog can be intermixed and displayed in any order.

To add an image to the display list, select the catalog that contains the type of image that you want to select, place the mouse over the Picon of the image that you want to use, press the left mouse button, hold it down, and drag it to the desired position in the display list. If you drag it to the Preview window the page will be previewed. Double Clicking on a Picon will add the image to the last position of the Display List.

For more information on the Catalog Section, see chapter 3 "Image Catalogs".
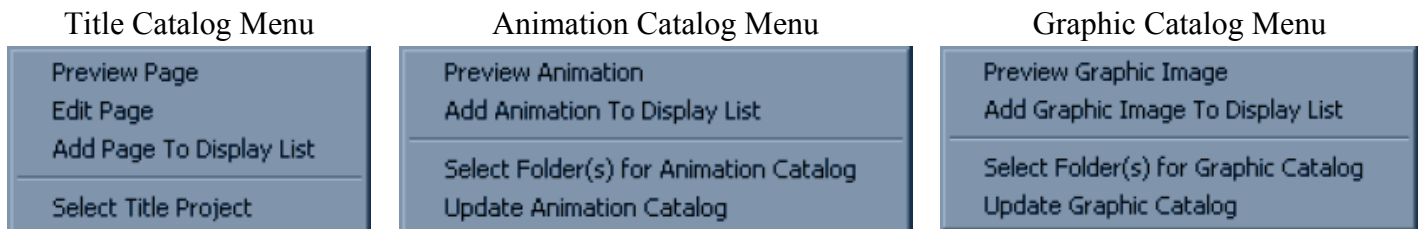
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Image Catalogs

The image catalogs are used to quickly select Title Pages, Animation Sequences, and Graphic Images. The Catalog section has three (3) catalog tabs. Each tab selects the catalog that contains each type of image. To use title pages, select the "Title Pages" tab. Select the "Animations Catalog" to use an Animation Sequence. The "Graphics Catalog" is used to select a graphic image to be displayed. Images from each catalog can be intermixed and displayed in any order.

To add an image to the display list, select the catalog that contains the type of image that you want to select, place the mouse over the Picon of the image that you want to use, press the left mouse button, hold it down, and drag it to the desired position in the display list. If you drag it to the Preview window the image will be previewed. Double Clicking on a Picon will add the image to the last position of the Display List.

When you right click on a catalog window a menu will be displayed. This menu varies depending on the type of Catalog. The menu displayed for each catalog is shown below.

Title Catalog Menu | Animation Catalog Menu | Graphic Catalog Menu

Title Catalog Menu	Animation Catalog Menu	Graphic Catalog Menu
Preview Page	Preview Animation	Preview Graphic Image
Edit Page	Add Animation To Display List	Add Graphic Image To Display List
Add Page To Display List		
	Select Folder(s) for Animation Catalog	Select Folder(s) for Graphic Catalog
Select Title Project	Update Animation Catalog	Update Graphic Catalog

These menus can be used to select images from the catalog, or to configure the catalogs.

Title Catalog

The Title Catalog displays the pages in the current project. Below is a brief description of each menu entry.

Preview Page:

Select this entry to preview the selected page.

Edit Page:

Select this entry to edit the selected page. This will start the Title Composer and load the selected page into it.

Add Page to Display List:

Selecting this entry will add the selected title to the last position of the Display List.

Select Title Project:

This menu entry allows you to change the current Title Project. When you select a new Title Project, the pages currently displayed in the Title Catalog will be replaced with the pages that are in the newly selected Title Project.

Animation Catalog

The Animation Catalog displays Text FX Animation Sequences that have been created and pre-rendered by the Title Composer. Below is a brief description of each menu entry.

Preview Animation:

Select this entry to preview the selected Animation Sequence.

Add Animation to Display List:

Selecting this entry will add the selected Animation Sequence to the last position of the Display List.

Select Folder(s) for Animation Catalog:

Selecting this entry will display the "Select Folders" window. This window is used to select which folders (and subfolders) that contain the Animation Sequences that you want to appear in the Animation Catalog. See the section "Select Catalog Folders" below for more information.

Update Animation Catalog:

Selecting this entry will update the catalog to include any Animation Sequences that have been added to the selected folders as well as any changes made to Animations that are already displayed in the catalog.

Graphic Catalog

The Graphic Catalog displays the Graphics Images that are in the Directories/Folders that have been selected. Below is a brief description of each menu entry.

Preview Graphic Image:

Select this entry to preview the selected Graphic Image.

Add Graphic Image to Display List:

Selecting this entry will add the selected Graphic Image to the last position of the Display List.

Select Folder(s) for Graphic Catalog:

Selecting this entry will display the "Select Folders" window. This window is used to select which folders (and subfolders) contain the Graphic Images that will be displayed in the Graphic Catalog. See the section "Select Catalog Folders" below for more information.

Update Graphic Catalog:

Selecting this entry will update the catalog to include any Graphic Images that have been added to the selected folders as well as any changes made to images that are already displayed in the catalog.

Select Catalog Folders

To select which directories/folders that are to be included in the catalog, right click on the catalog and select the "Select Folder(s) for Catalog" entry from the pop up menu. This will display the "Select Folders" window similar to the one shown below.
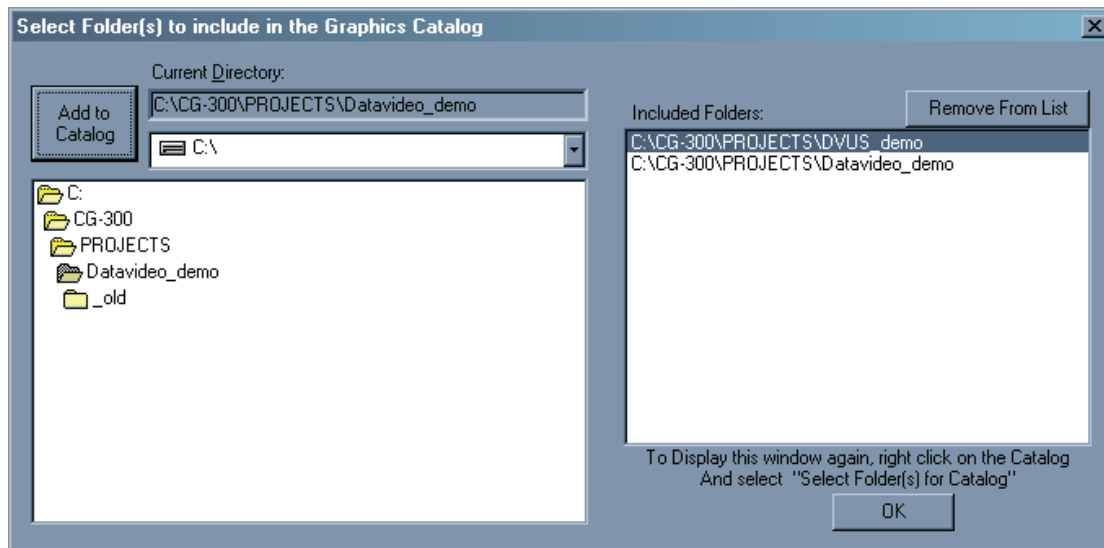
Select Folders window

This window is divided into 2 sections. The left hand section is used to select which directory/folders to include. The right section displays the folders that are currently included in the catalog.

The left section is composed of the following controls:

1. Current Directory box
2. Drive Selection drop down box
3. Folder Selection List
4. Add to Catalog button

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The Current Directory box displays the folder that is currently selected. This is the directory that will be added to the "Included Folders" list when the "Add to Catalog" button is pressed. Select the drive which contains the folder(s) that you want to include from the Drive Selection drop down box, and the folders that are on the selected drive will appear in the Folder Selection List.

When a folder is selected from the Folder Selection List, it is expanded to display all of the sub-folders which are in that folder. The selected folder also appears in the Current Directory box. Select the folder that you want to add to the Catalog and press the "Add to Catalog" button. The folder will then appear in the included folders list in the right hand section of the window.

The right hand section is composed of the "Included Folders" list and the "Remove From List" button. To remove a folder from the catalog, select it in the Included Folders list and press the "Remove From List" button. The folder will be deleted from the Included Folders list.

Once the Included Folders list displays all of the folders that contain the images that you want to appear in the catalog, press the "OK" button. The Select Folders window will disappear and the catalog will be redrawn with the images that are in the folder(s) that you selected.

User Preferences

The "User Preferences" window is used to set preferences that may vary from one user to another. To change the user preferences select the "User Preferences" command from the "Settings" menu. When this is done the "User Preferences" window (such as the one shown below) will appear.
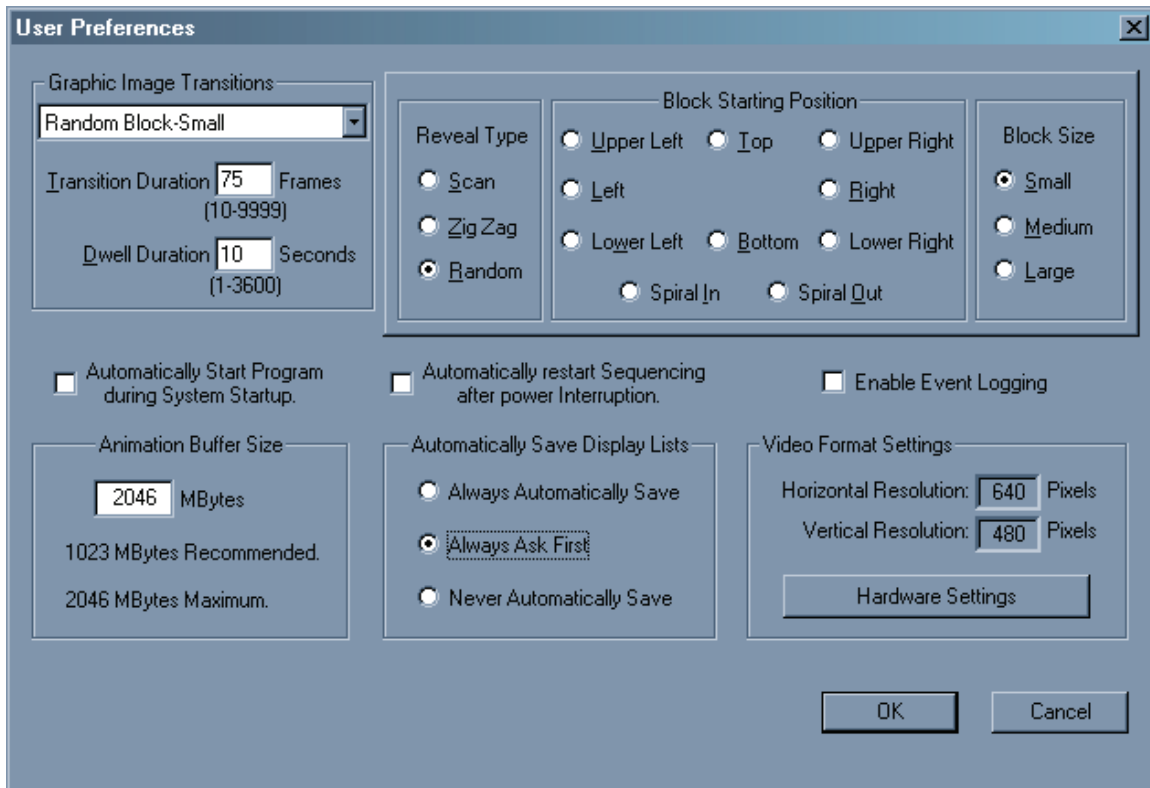
User Preferences Window

The "User Preferences" window is used to set the following User Preferences.

Graphic Image Transition	Select the Transition that will be used for Graphic Images.
Automatic Program Start	Automatically runs the program when windows starts.
Automatic Sequence Restart	Automatically restart sequence after a power failure.
Animation Buffer Size	Size of Memory Buffer for Animations and Video Clips.
Automatically Save Display List	Selects the Automatic Display List Save mode.
Video Format Settings	Selects the Video Format.

Graphic Image Transition

When images are displayed, each image can be displayed with some sort of transition. There are a number of different Transition Types to choose from. You can control how long the Transition takes by setting the Transition Duration. Each image can be set to a different Transition Type, Transition Duration, and Dwell Duration.

When a title page is created, the user selects the Transition Type, Transition Duration (speed), and the Dwell Duration. Standard graphic images don't have this information stored with them. The controls in the "Graphic Image Transition" section of the User Preference Window are used to select these parameters for graphic images.

Not all Transition Types are available in all versions of the programs. Some Transitions require capabilities that are not available in all display cards. The Transition Type drop down box will display the transitions that are available on your system.

Transition Type

There are different categories of transitions for the program. Some categories have only 1 transition type (such as Cut). While other categories have many transition types (such as block transition with 57 types).

The Transition Type drop down box displays the current transition type. It is used to select the new transition type. The drop down box lists every category of transition type available on your system. If there is only one transition type in a category, the name of the transition is listed. Selecting this from the list will select this as the transition type. If there are multiple transition types in the category, the name is followed by 3 dots (...). Selecting one of these from the list will display another window so that you can be more specific about which transition type you want to select.

Once a Transition Type is selected, it will appear in the Transition Type box. For a detailed description of each Transition Type, see the section "Transition Types" later in this chapter.

Transition Duration

The Transition Duration specifies how much time it takes to perform the transition. This controls how fast the image appears when it is displayed. The duration is specified in frames. In NTSC a frame is 1/30 of a second. In PAL a frame is 1/25 of a second.

To change the Transition duration, select the Transition Duration box and enter the new value.

Dwell Duration

The Dwell Duration specifies how long the image will remain on the screen when automatically sequencing images. The duration is specified in seconds. To change the Dwell duration, select the Dwell Duration box and enter the new value. This value is ignored when manually controlling pages.

Transition Types

The categories and the number of transition types they contain are listed below:

| Category	Number of Transition Types
Cut	1
Wipe	8
Block	57
Iris	18
Sparkle	1

The following is a brief description of each transition type in each category.

Cut

When an image is shown with a Cut transition type it comes on immediately (all at once). With a Cut transition type the Transition Duration is meaningless.

Wipes

When "Wipes..." is selected from the Transition Type control, the "Wipe Transitions" window (shown below) will appear.
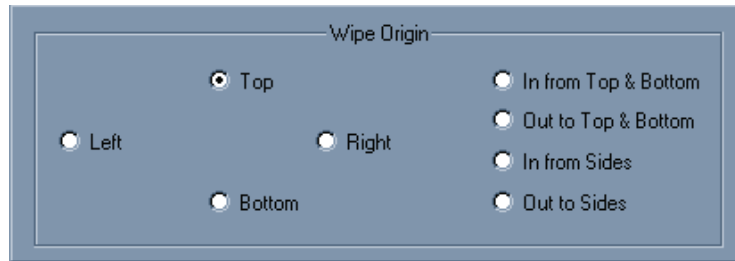
This window shows the various wipe transitions. There are 8 different types of Wipe Transitions. These are:

Wipe from Top to Bottom

The new image begins to appear at the top of the screen and wipes down toward the bottom of the screen. The new image covers the old image.

Wipe from Bottom to Top

The new image begins to appear at the bottom of the screen and wipes up towards the top of the screen. The new image covers the old image.

Wipe from Left to Right

The new image begins to appear at the left side of the screen and wipes towards the right side of the screen. The new image covers the old image.

Wipe from Right to Left

The new image begins to appear at the right side of the screen and wipes towards the left side of the screen. The new image covers the old image.

Wipe In from Top & Bottom

The new image begins to appear at both the top and bottom of the screen and wipes in towards the center of the screen. The new image covers the old image.

Wipe Out from Top & Bottom

The new image begins to appear at the center of the screen and simultaneously wipes up and down towards the top and bottom of the screen. The new image covers the old image.

Wipe In from the Sides

The new image begins to appear at both the left and right sides of the screen and wipes in towards the center of the screen. The new image covers the old image.

Wipe Out to the Sides

The new image begins to appear at the center of the screen and simultaneously wipes both left and right towards both sides of the screen. The new image covers the old image.

Select the desired wipe transition and the type of wipe that is selected will appear in the Image Transition Type drop down box.

Block Transitions

When "Block..." is selected from the Image Transition Type control, the "Block Transitions" window (shown below) will appear:
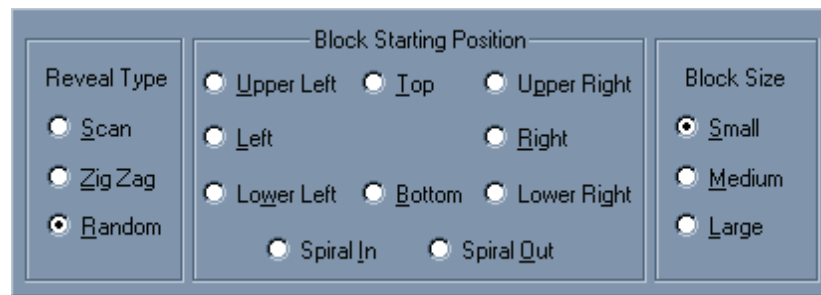
Block Transitions Window.

This window lets you select the various Block Transitions. There are a total of 19 different types of block transitions, and 3 different sizes of blocks, for a total of 57 different Block display types: The basic block transition types are:

Random

The blocks that make up the new image come onto the screen randomly in small rectangles that cover the old image. Select this transition type by selecting the "Random" button in the "Reveal Type" group.

Spiral In

The blocks that make up the new image start to appear at the upper left corner. These blocks are added to the screen in a Spiral In pattern towards the center of the screen in a clockwise direction. Select this transition type by selecting the "Spiral In" button in the "Block Direction" group.

Spiral Out

The blocks that make up the new image start to appear in the center of the screen. These blocks are added to the screen in a Spiral Out pattern towards the edges of the screen in a clockwise direction. Select this transition type by selecting the "Spiral Out" button in the "Block Direction" group.

Scan

The blocks that make up the new image start to appear at the position specified by the Block Direction. The blocks scan across the screen. When the other end of the screen is reached, the next row of blocks is drawn in the same direction as the previous row of blocks. Select this transition type by selecting the "Scan" button in the "Reveal Type" group. Select the starting point and scan direction from the "Block Direction" group. The starting points to choose from are:

From Upper Left Corner
The blocks start to appear in the upper left corner of the screen. Each row of blocks scans left to right/ bottom to top. This continues until the blocks fill in to the Lower Right corner.

From Top to Bottom
The first row of blocks appears at the top of the screen. Each row of blocks scans left to right. This continues until the blocks fill in to the bottom of the screen.

From Upper Right Corner
The blocks start to appear in the upper right corner of the screen. Each row of blocks scans left to right/top to bottom. This continues until the blocks fill in to the Lower Left corner.

From Left to Right
The first row of blocks appears at the left side of the screen. Each row of blocks scan top to bottom. This continues until the blocks fill in to the right side of the screen.

From Right to Left
The first row of blocks appears at the right side of the screen. Each row of blocks scan top to bottom. This continues until the blocks fill in to the left side of the screen.

From Lower Left Corner
The blocks start to appear in the lower left corner of the screen. Each row of blocks scans left to right/top to bottom. This continues until the blocks fill in to the Upper Right corner.

From Bottom to Top
The first row of blocks appears at the bottom of the screen. Each row of blocks scans left to right. This continues until the blocks fill in to the top of the screen.

From Lower Right Corner
The blocks start to appear in the lower right corner of the screen. Each row of blocks scans left to right/top to bottom. This continues until the blocks fill in to the Upper Left corner.

ZigZag

These transition types are similar to the Block Scan transition types. The main difference is, each row of blocks appears in a zigzag pattern. When a row of blocks are drawn, the next row of blocks are drawn in the opposite direction. Select this transition type by selecting the "Zig Zag" button in the "Reveal Type" group. Select the starting point and scan direction from the "Block Direction" group.

Transition Block Sizes

The user can choose between three sizes of the blocks that make up the new image. These are:

Small

The screen is broken up into 4332 blocks. 76 blocks horizontally by 57 blocks vertically.

Medium

The screen is broken up into 972 blocks, 36 blocks horizontally by 27 blocks vertically.

Large

The screen is broken up into 300 blocks, 20 blocks horizontally by 15 blocks vertically.

The size of the block does not affect the Transition Duration. The smaller blocks are just displayed at a higher rate than the larger blocks. Select the block size from the "Block Size" group of buttons.

Select the desired block transition and the selected Block Transition type will appear in the Transition Type box.

Iris Transitions

When "Iris..." is selected from the Transition Type control, the Iris Transitions window (shown below) will appear.
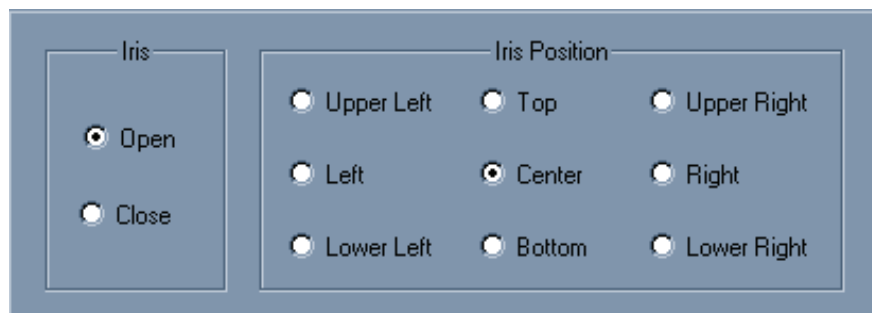
Iris Transitions window

This window lets you select the various iris transitions. To select an Iris Transition, select "Open" or "Close" from the "Iris" group, and select the position from the "Iris Position" Group. Once selected, the selected Iris Transition will appear in the Transition Type drop down box. There are a total of 18 Iris Transitions, 9 Open and 9 Close.

When an image is displayed with an "Iris Open" transition, a rectangular iris appears at the Iris Position. This iris opens to display the new image. With an "Iris Close" transition, a rectangular iris appears around the entire old image and closes towards the Iris Position. This makes the old image disappear and uncovers the new image.

Each Iris transition can happen at any of 9 positions on the screen. These positions are described here:

Upper Left Corner

Open:

A rectangular iris appears in the Upper Left Corner of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the Upper Left Corner of the screen. As the iris closes, the old image disappears and uncovers the new image.

Top of Screen

Open:

A rectangular iris appears in the middle of the top of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the middle of the top of the screen. As the iris closes, the old image disappears and uncovers the new image.

Upper Right Corner

Open:

A rectangular iris appears in the Upper Right Corner of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the Upper Right Corner of the screen. As the iris closes, the old image disappears and uncovers the new image.

Left Side of Screen

Open:

A rectangular iris appears in the middle of the left side of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the middle of the left side of the screen. As the iris closes, the old image disappears and uncovers the new image.

Center of Screen

Open:

A rectangular iris appears in the center of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the center of the screen. As the iris closes, the old image disappears and uncovers the new image.

Right Side of Screen

Open:

A rectangular iris appears in the middle of the right side of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the middle of the right side of the screen. As the iris closes, the old image disappears and uncovers the new image.

Lower Left Corner

Open:

A rectangular iris appears in the Lower Left Corner of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the Lower Left Corner of the screen. As the iris closes, the old image disappears and uncovers the new image.

Bottom of Screen

Open:

A rectangular iris appears in the middle of the bottom of the screen and opens up to display the new image.

Close:

A rectangular iris appears around the old image and closes towards the middle of the bottom of the screen. As the iris closes, the old image disappears and uncovers the new image.

Lower Right Corner

Open:
   A rectangular iris appears in the Lower Right Corner of the screen and opens up to
   display the new image.
Close:
   A rectangular iris appears around the old image and closes towards the Lower Right
   Corner of the screen. As the iris closes, the old image disappears and uncovers the
   new image.

Sparkle

When an image is displayed with a sparkle, each scanline of the new image appears in a
random order. Each new scanline replaces a scanline of the old image.

Automatic Program Start

When the "Automatically Start Program during System Startup" button is checked, the
program will be automatically started whenever Windows starts.

Automatic Sequence Restart

Sometimes when the program is automatically sequencing, the system many restart
because of a power failure. If the "Automatically Restart Sequencing after power
interruption" button is checked, the program will restart the sequence the next time that
the program runs. You must still check the "Automatically Start Program during System
Startup" button to automatically run the program after a power failure.

Animation Buffer Size

Playing Text FX Animations or Video Clips requires large amounts of data every second.
Since most disk drives can't deliver data fast enough, the program needs to load the data
into a buffer before it begins displaying it. A larger buffer can playback longer
Animations and Video Clips, but it also uses more of your systems RAM. Use this
control to select how much of your systems memory you want to use for this buffer.

Automatically Save Display Lists

The program can only have one Display List open at a time. When you open a new one,
the old Display List (or any changes made to it) will be discarded unless it is saved to
disk. When you open a new Display List, or exit the program, the current Display List
can automatically be saved to the disk if it was changed.

Always Automatically Save

This setting will automatically save the Display List to disk (overwriting the original)
without prompting you. Use this setting with caution. Any changes that you make to the
Display List will be saved to disk. You won't have the option of discarding the changes.

Always Ask First

This setting will ask your permission before saving the Display List to disk. If you have not modified the Display List, you will not be asked if you want to save it.

Never Automatically Save

This setting will never automatically save the Display List. All changes to the current Display List that haven't previously been saved will be discarded when you open a new Display List or exit the program.
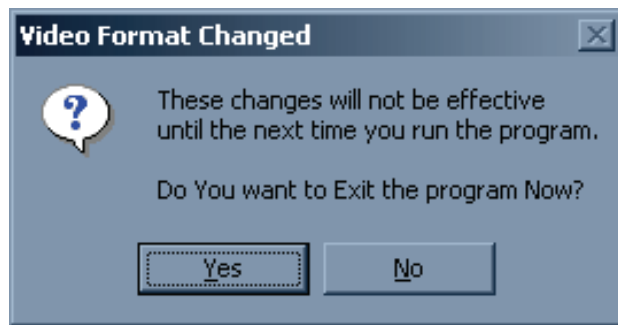
Video Format Settings

The values in "Video Format Settings" indicate the display resolution that the program is currently configured for. Some Display Cards control the Video Format; other cards expect the program to determine the Video Format. If the Display Card that you are using is one that controls the Video Format, a button labeled "Hardware Settings" will replace the "Change Video Format" button in this section. The "Hardware Settings" button will be described later in this chapter. Pressing the "Change Video Format" button will display the "Select Video Format" window (shown below). This window can also be displayed by selecting the "Change Video Format" entry from the "Settings" menu.
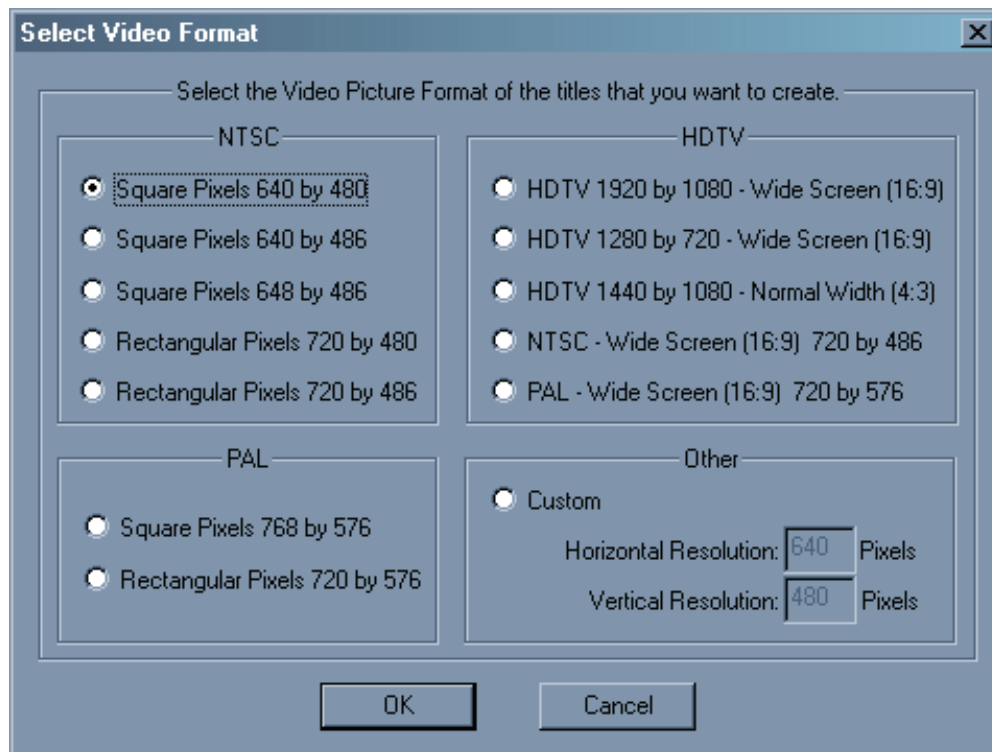
Select Video Format Window

This window lists the standard Video Formats. If you have a High Definition (HD) version of the program, the "HDTV" selections will be enabled. When a standard Video Format is selected, the program configures itself with the required display resolution and pixel aspect ratio (square or rectangular). If none of the standard formats suit your needs, you can select a "Custom" format. When this button is checked you can enter the desired display resolution. The "Custom" format will create square pixels.

The program must be restarted before the Video Format changes will take effect. You will be reminded of this by displaying the "Video Format Changed" Window (shown below). Press "Yes" to restart the program.

Video Format Changed Window
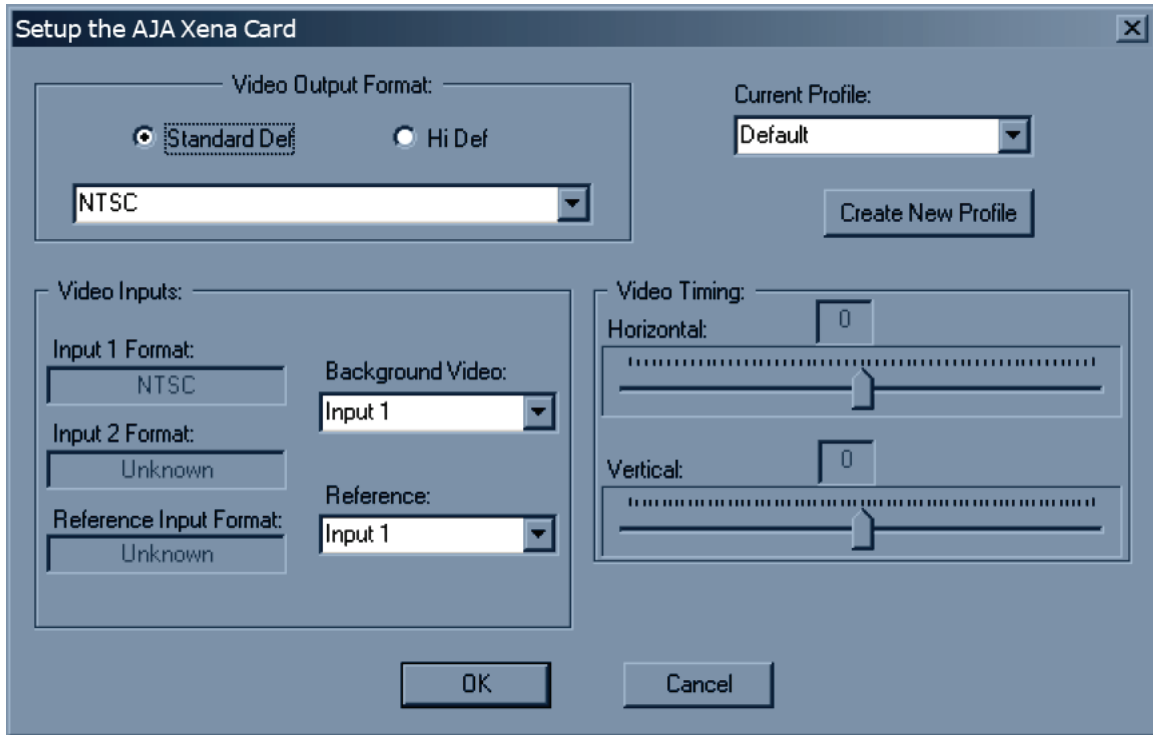
Hardware Settings

Each Display Card must have a Display Driver designed especially to interface the Display Card to the software. Some of these Display Drivers are created by Datavideo and others are created by the Display Card Manufacturers. Each different Display Card has is own unique method of changing Hardware Settings. We will discuss three Display Drivers that are representative of various methods used to change the Hardware Settings.

The three Display Card drivers to be discussed will be:
1. AJA Xena Card (SD and HD)
2. VGA/Scan Converter
3. Multiple VGA adapters using DirectX

AJA Xena Card

The AJA Xena card is manufactured by AJA Video (aja.com). Both Standard Definition and High Definition versions of this card are available. A system may have one of each installed. These cards have Serial Digital Inputs and Outputs as well as a Sync Reference input (1v and 4V). Its Hardware Settings window appears as below:

AJA Xena Card Hardware Settings Window.

The "Video Output Format" section is used to select the Video Output Format (obviously). The Standard Def and Hi Def buttons are used to select which Display Card to use. If either card is not installed, the button for it will be disabled. When a card is selected, the formats that the selected card supports will be placed in the drop down box. The current format will appear. To select a different format, just select it from this list.

Each card has two (2) Video Inputs and 1 Reference Input. The Video format of each of the incoming signal is displayed in the Video Inputs Section. The "Background Video" control has the following selections:

1. Input 1
2. Input 2
3. Black

Use this to select the video that you want to title over.

The Reference control lists the inputs that can be used to synchronize the Video Output to the rest of the facility. It has the following selections:

1. Input 1 - Synchronizes to the Video Signal on Video Input 1
2. Input 2 - Synchronizes to the Video Signal on Video Input 2
3. Free Run - Does not synchronize to any signal.
4. Reference (1.0 Volt) - Synchronizes to the 1 Volt signal on the Video Reference Input.
5. Reference (4.0 Volt) - Synchronizes to the 4 Volt signal on the Video Reference Input.

Video Timing controls are used to adjust the Horizontal and Video Timing of the output in relation to the selected Reference input.

Each card can have multiple Profiles. A Profile is a group of settings that may change from one configuration to the next. You can create as many Profiles as you want. When you select a profile, the settings are automatically changed to the settings that were assigned to the profile.

VGA/Scan Converter

The program will run with just a normal VGA card. However to get NTSC video out of it you will need to use either a VGA card with an NTSC output, or a scan converter that will convert the VGA video to NTSC video. When using the Display Driver for the VGA card, the Hardware Settings window appears as below:
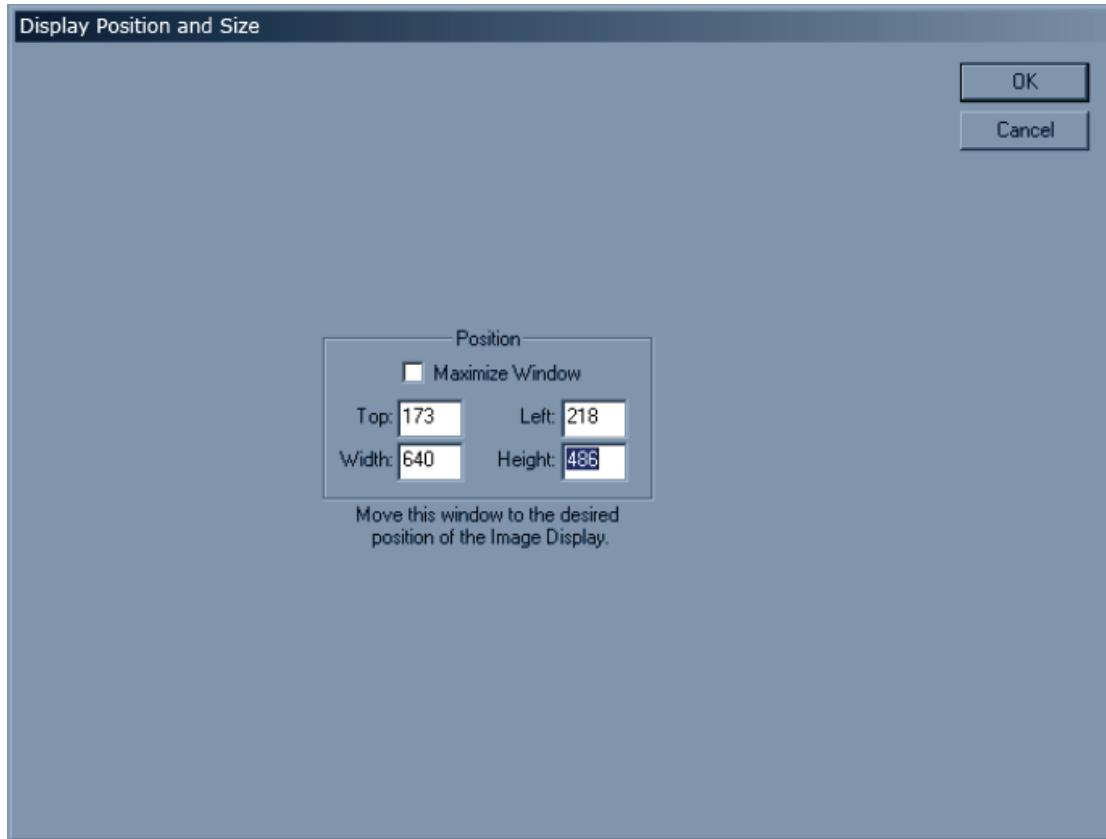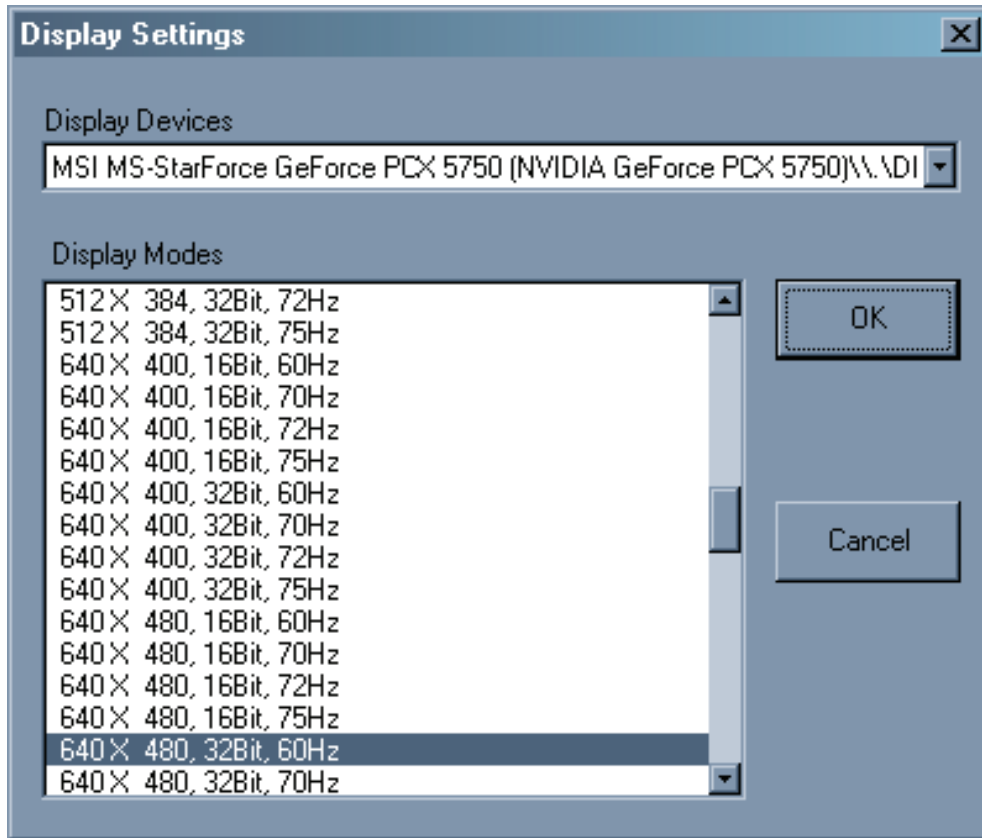

VGA Card Hardware Settings Window.

This window shows where the Video output will be displayed on the output. It can be sized and positioned using this window. If you have multiple Video screens, you can even move it to one of the other screens. Normally this should cover the entire screen, but in some cases you may want to have the Video Output appear at a certain position on the screen. Be aware that when you are displaying pages, this may cover your User Interface if it is on the main screen.

This window can be moved by dragging the Title Bar around the screen or by changing the" Top" and "Left" values. Dragging the edges of the windows will change the size of the window. Changing the "Width" and "Height" values can also change the window size. The Window can be sized to full screen by checking the "Maximize Window" button.

Multiple VGA adapters using DirectX

If you have multiple VGA screens, and DirectX version 6.0 or later installed on your system, you will probably get better performance using this Display Driver than the VGA/Scan Converter driver. However to get NTSC video out of it you will need to use either a VGA card with an NTSC output, or a scan converter that will convert the VGA video to NTSC video. When using the Display Driver for the Multiple VGA cards, the Hardware Settings window appears as below:

Multiple VGA Card (DirectX) Hardware Settings Window.

The "Display Devices" drop down box lists all of the DirectX compatible Display Adapters that are installed on your system. Your main VGA screen has two listings in the drop down box. The "Primary Display Driver" and the actual name of the card that is used by the Primary Display. If you use either one of these as your Display Device, it will cover your user interface while you are displaying pages.

Once the Display Device is selected, the "Display Modes" list displays the Display Modes that are available with the selected Display Device. Select the Display mode that you want and press OK. The program will then adapt itself to the new settings.