



SYSTEM OPERATIONS MANUAL

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Media POD is the most flexible Digital Signage and Information Channel appliance on the market. It's set-top box design and footprint meets both form and function. The rugged unit features fan-less operation and solid milled metal frame forming a sleek silhouette. Media POD is packed with convenience and versatility including intuitive drag & drop scheduling and simple CG media creation. The Media POD is capable of playing still images of various graphic formats; MPEG1, MPEG2, MPEG4, AVI, VOB, and WMV video formats; live video inputs (composite or Y/C); Microsoft PowerPoint® and Macromedia Flash® movies, HTML and other proprietary formats. Playlists can be Day-Parted or run a continual loop. For a wide range of applications--CCTV, CATV, broadcast video, schools, corporate video, info channels, kiosk, and more--the Media POD delivers composite, Y/C, and RGBHV (Progressive) NTSC or PAL video to your system. Stereo audio output rounds out the display offerings. Media POD is controllable stand-alone or via serial or even the Internet through a stand-alone interface or an integrated web interface (MX-Live). This is your high-quality, low-cost, ultra-reliable media machine.



FEATURES

- Composite or Y/C and RGBHV output
- Composite or Y/C Live Video Input
- Multiple USB and Firewire ports
- NTSC and PAL—4:3 or 16:9
- Stand-alone or remote control software
- Built-in Ethernet Control
- Stereo audio output
- Serial Controllable for System Integration and System Control
- Ruggedized and fan-less chassis
- Microsoft Windows XP Embedded™ based system for security, stability and networkability
- Interactivity Capable (Touch Screens)

ORDERING INFORMATION

Part #	Options
Media POD	None Required

APPLICATIONS

- Interactive Digital Signage
- Touch Screen
- Photo-Classified Channels
- Any television system with need to schedule and playback pages
- Kiosk
- Dormitory, Barracks, Rec Centers, Clubs, TV & Movie Shelters, Tent City, Command Post, Headquarters

*****CAUTION*****

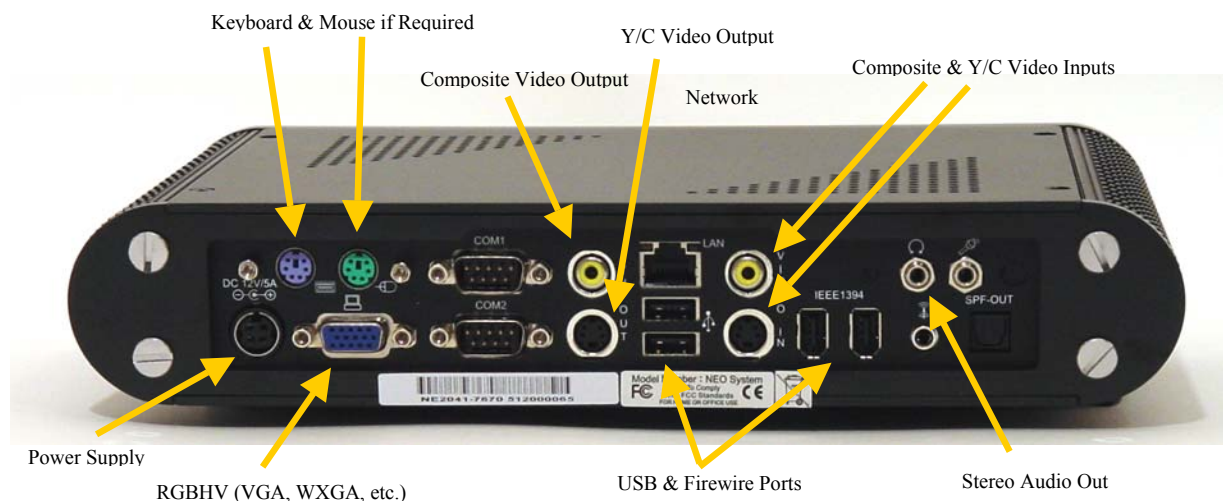
Unit operates on +12 VDC. Inadequate power grounding can result in equipment damage or destruction and could void warranty. Ensure you utilize provided power supply unit only. Use of improper power supply can damage or destroy the unit and will void the warranty.

*******WARNING*******

Lethal operating voltages present at system power supply unit—internal and external units. Completely disconnect main power cord prior to opening cover or removing any panels. Appropriately trained and authorized personnel only should attempt any internal modifications, repairs, or service.

CONNECTIONS

Media POD Mini-Chassis Rear Panel Overview



Standard PC Connections (* = required connection for Media POD normal operation; ** = required for setup or troubleshooting but not for day to day operation—all other connections not marked with ‘*’ or ‘**’ are optional. Note that while Composite Video, Y/C Video and RGBHV video are not “required” for day to day operation, they are the only connectors available for video output; therefore to view your creation at least one of them must be connected to your video distribution system. Audio line out will also be typically used to broadcast sound with your presentations—see the typical wiring diagrams in the quick start section for more details)

**MOUSE: Standard PS/2 style mouse

**KEYBOARD: Standard PS/2 style keyboard

USB 1 & 2: Universal Serial Buss (any number of add-in peripherals such as printer, mouse, keyboard)

COM1 & COM2: Standard RS-232 serial port

AUDIO LINE OUT: Connect with 3/8” Stereo plug to audio amplifier or switcher for audio broadcast over cable or broadcast television system. Required if you desire audio on-air capability.

AUDIO LINE IN: Use 3/8” stereo plug to connect radio receiver, CD player, tape player, etc... to line-in to loop through external audio source over the video presentation. Not normally used in an MPEG player application.

COMPOSITE OUT: RCA connector outputting standard NTSC or PAL base-band composite video. This is the main video output to be used in cable and broadcast video applications.

S-VIDEO OUT: 4-pin Mini-Din connector outputting standard NTSC or PAL base-band Y/C video.

**MON: This is the normal VGA-style connector. It is an industry standard High-Density 15pin connector, used to interface with any computer monitor. Video output of this connector is designed for higher, progressive scan resolution applications (Flat Panel LCD, PDP, CRT PC Monitors or Projectors). This video output is referred to as RGBHV (Red Green Blue Horizontal Vertical (sync pulses)).

NETWORK: This is a 10/100 Base-T LAN connector. Connect your MEDIA POD to your network via this port, to allow for remote control of the device. Factory default setting for the device is DHCP—automatically acquire and IP address. If you are not familiar with setting IP addresses in network capable devices, contact a trained IT professional for assistance.

COMPOSITE IN: RCA connector accepting standard NTSC or PAL base-band composite video.

S-VIDEO IN: 4-pin Mini-Din connector accepting standard NTSC or PAL base-band Y/C video.

*12 VDC: Standard +12 VDC input. Utilize only power supply provided with your unit.

Connect this only when you are ready to run the unit, as it is set to “auto-power” (safety against power outages). As soon as you plug in the AC, the device will power-up, boot-up, and begin to run stored play lists.

MEDIA POD THEORY of OPERATION

The Media POD player itself is a fire-and-forget device. Once you have made the appropriate connections (including video output) and powered up the unit, it will begin to play the last valid playlist unless the playback was terminated prior to power shut-down. In that case, the unit will boot up to the graphical user interface (GUI) screen.

Should Media POD be shut down through normal Embedded Windows XP™ means, you’ll need to power the unit with the front panel momentary power switch.

Out of the box, Media POD has sample pages and playlists installed and active.

*****NOTE*****

Media POD may take up to 60 seconds to complete initialization and begin video playback. Please be patient during this process.

There are three methods of operation with the Media POD: 1.) The first method is to control the device, including creating pages, importing graphics and video, adding audio, creating schedules and managing inventories, directly on the player itself. This is normally referred to as “on-line” operation because any viewers of your content will also view your creation and scheduling. 2.) The device can also be controlled remotely through a network (Ethernet, Internet, LAN, WAN, any of those terms apply) or serially via the copy of controller software included with your unit. The software you use to control the Media POD remotely is the same software running on the Media POD itself—the learning curve is short! 3.) Finally, Media POD comes with a built in Web Interface making it controllable from any location in the world as long as the player and the controller are on the internet—all without any remote software loaded.

To control the Media POD remotely through its GUI, follow the directions below and install the Media POD software on a computer of your choice (with the following minimum requirements):

- Pentium III, AMD or Celeron CPU greater than 200 MHz
- 64 MB Ram
- 100 MB HDD Space
- Network connection capable of reaching the Media POD (see IT if necessary)

Control Software Installation

Insert the CD that came with your Media POD, or your demo CD into your PC (this is your “creation” station, where you will be able to create and schedule your display—DO NOT INSTALL THIS SOFTWARE DIRECTLY ON YOUR MEDIA POD). A splash screen should appear with a button to setup the application—click Install and you should see a setup similar to the screen below (note the version number and name may vary).

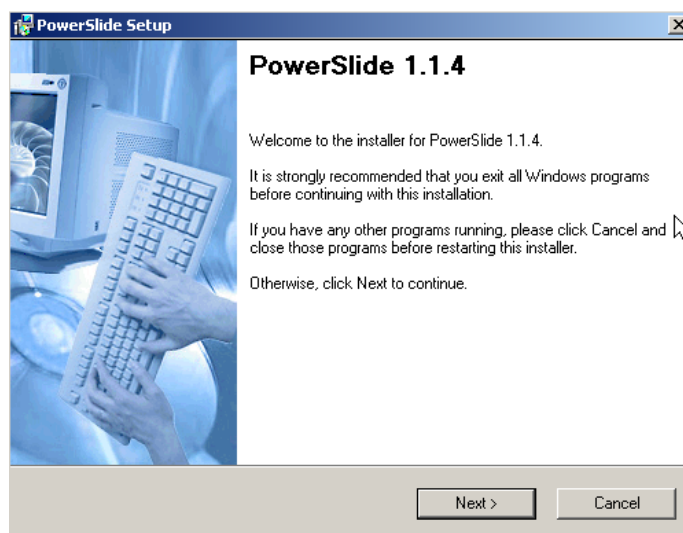
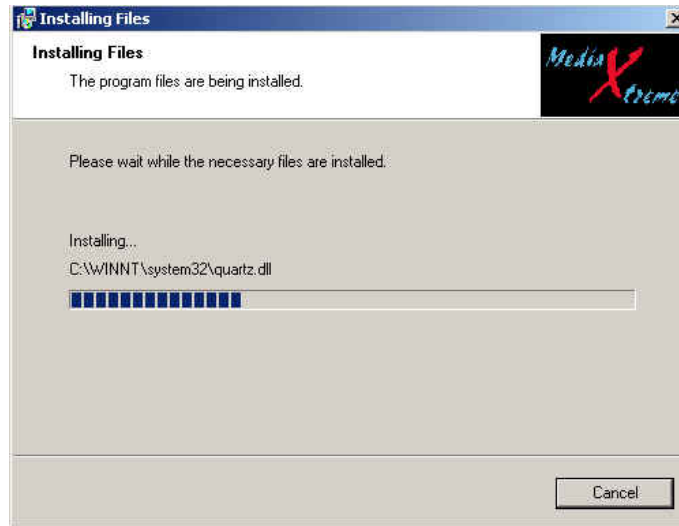


Figure 2

Click NEXT and follow the prompts to complete the installation. You will see a progress bar as shown in Figure 3.



The progress bar will show you the status of the installation. You may cancel installation at any time, and reinstall later if necessary.

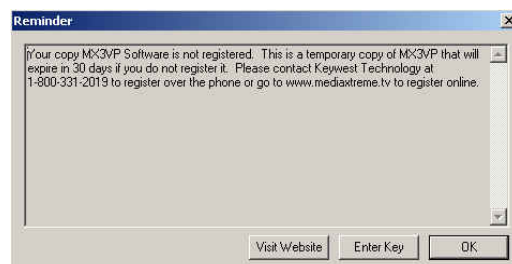
After installation is complete, you'll find the Media POD Scheduler shortcut icon on your desktop (figure 4).



Figure 4

Alternatively you can access the program from your Windows® Start Button or by browsing to the installation directory and clicking the MediaPOD executable file (.exe).

Once software is installed, you are almost ready to begin making Pages, Playlists and Schedules.



The first time you run the software, and each time after until you register your product you will see a registration reminder screen.

If you are not ready to register your software and hardware click OK. You have 30 days from the point of software installation to register. If not registered after 30 days, the software will cease to function—you will have to contact your dealer or Keywest Technology to change registration status.

If you click OK, and run unregistered, you will get one more reminder.



Figure 7

Click NO to proceed, or click YES and enter the security key provided when you registered your Media POD.

Re-registration may be required if significant modifications are made to your creator computer. Contact Keywest Technology with questions.

NOTE

You will not be eligible for telephone technical support until your software and/or hardware is registered—Email support is always available at tech@keywesttechnology.com

SETUP IP

*****CAUTION*****

DO NOT connect any network enabled device directly to a cable modem or DSL modem unless you are in search of worms, trojans, and viruses—the internet is crawling with damaging, infectious programs. Always ensure your devices are connected to a safe and secure firewall router and are on a safe and CLEAN network. If you do not have an IT department, contact Keywest Technology for further assistance in safe connections.

The best connection to make is network. There are several settings and precautions to take. First, ensure you have a keyboard, RGBHV (VGA) monitor, mouse, and active network cable attached to the player—restart the player if any of those peripherals seem to not function.

Once the unit is initialized and you see pages playing, you'll need enter diagnostics mode—press ESC and END keys on the keyboard simultaneously or RIGHT CLICK any attached mouse. You should see the pages stop, and the player ID screen.



If the machine continues to play despite pushing ESC and END, try CTL-ALT-DEL and end the player.

Once you see the Player ID Screen, LEFT-CLICK the mouse anywhere on the screen. The options menu will appear at the top.



Left-Click LOG OFF. A standard Windows XP Embedded Log On Dialogue box will appear.

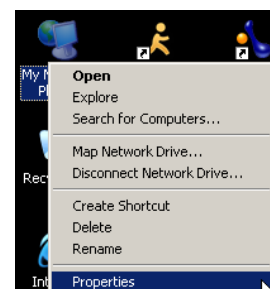
Enter the User Name “administrator” (without the quotes), and leave any other text boxes blank (no password, no domain if available). Note: You may change user passwords, but ensure you remember those changes—Keywest Technology TotalCare will have no way to determine any passwords you may have set.



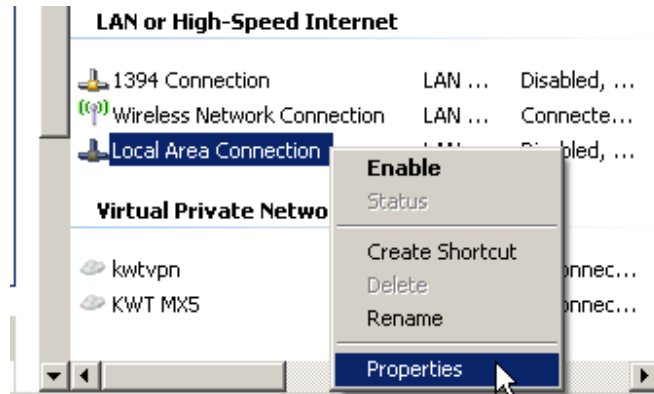
Click OK to proceed to the player desktop.

Locate the MY NETWORK PLACES ICON and right click on it.

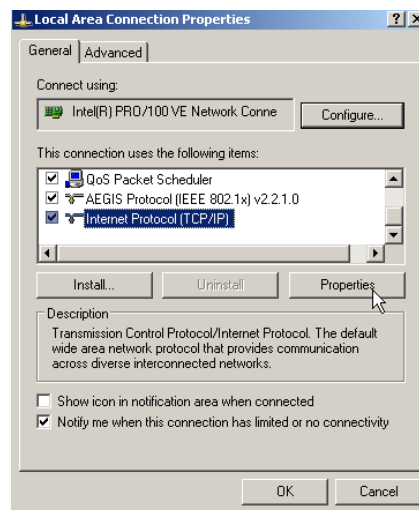
Select PROPERTIES.



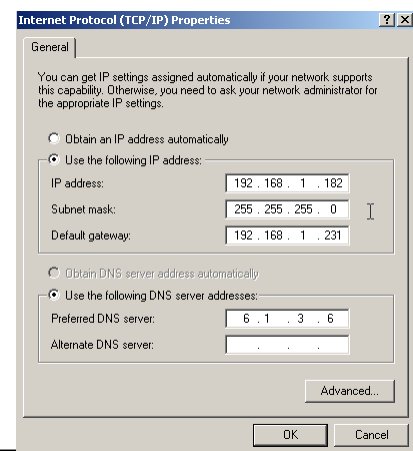
Next, right-click on the Network adapter, and select properties again:



On the network properties page, scroll down to TCP/IP, highlight that, and then left-click on the PROPERTIES button:



There's a decision to make at the next step (if it hasn't already been made) and that is to either run the player with a dynamic or static IP. The best selection for the operator is a static IP address...this is an address that doesn't change unless someone changes it manually. Your IP department will have to assign the Static IP address to you. The second method is Dynamic—this method means the IP address will change each time your system's router resets or possibly every time the Media POD is power cycled. The danger in this method is that you may not know from day to day the

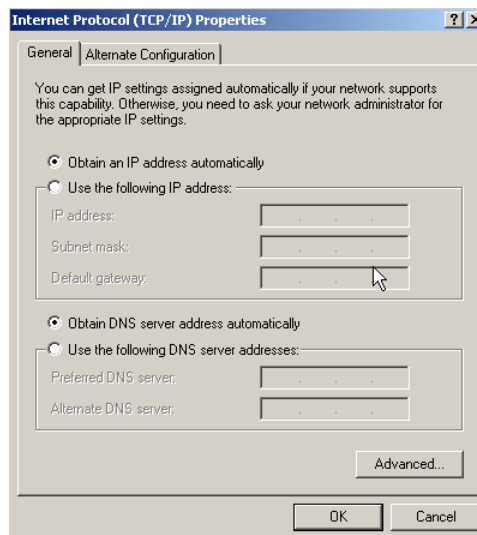


address of the unit you are trying to control. Let's address static IP's first:

A static IP forces you to enter the IP Address and the Subnet Mask (numbers provided to you by those in charge of your network). Gateways and DNS servers are not completely necessary, but would have to be added to facilitate remote troubleshooting from Keywest Technology as well as efficient FTP data transfers from remote sites.

DYNAMIC IPs

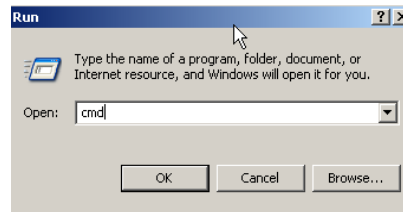
The dynamic IP takes whatever address is assigned by a controlling router...setup the Internet Protocol (TCP/IP) Properties as shown below:



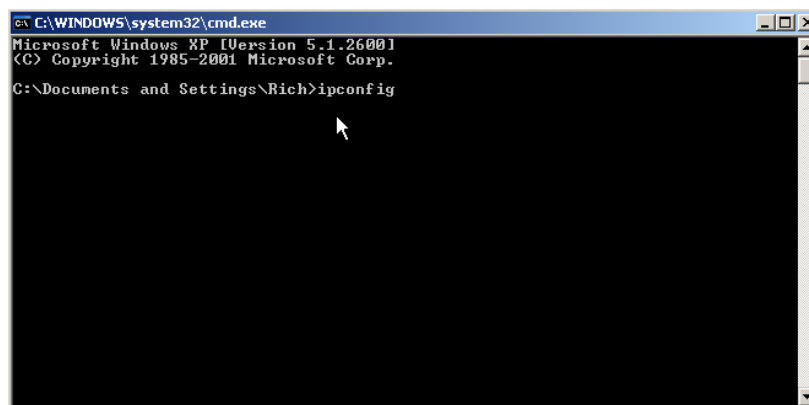
In this case, IPs, subnets, gateways, and DNS servers are all selected by the router...you could operate like this but you may have to check into the unit periodically to verify the IP address...or, if you are on an intranet, you could simply address the unit by its network name. If you go DYNAMIC then, two networking functions you'll need to know after you exit the IP Properties Windows:

DETERMINE YOUR IP ADDRESS

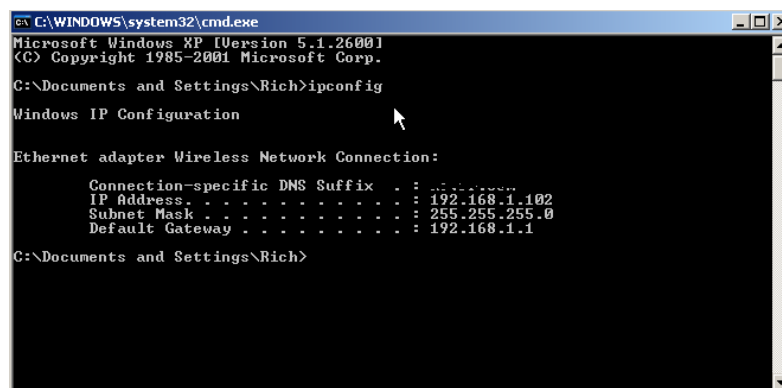
Click on the START button, select RUN, and type cmd in the run window



Next, a COMMAND PROMPT window will appear (affectionately known as a DOS window)...in the command window, type IPCONFIG on the current command line as shown below, then press the ENTER button:



The command window should respond with some important data



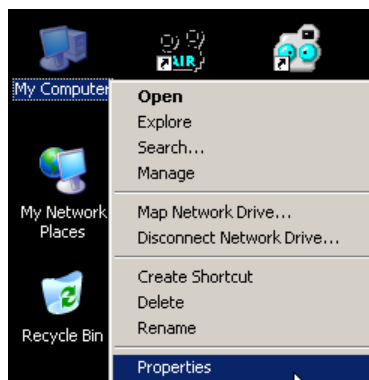
The IP address of your Media POD will be displayed along with the subnet mask and the gateway. Write down this IP address, as we will need it to connect to the player remotely.

VIRUS PROTECTION

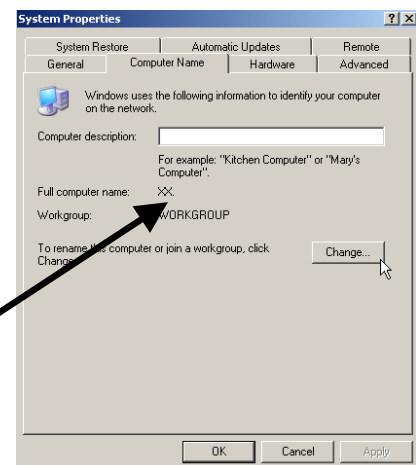
A word about virus protection here...safe computing...the Media POD runs on a Windows XP Embedded platform. This is already safer than other Operating Systems but still any device on an open network needs to be adequately protected by a firewall—a software firewall can potentially interfere with the graphics and transitions, but hardware firewalls have proven to be extremely efficient if properly setup. Hardware routers can be setup to allow only authorized users access to the player. **DO NOT** connect any network enabled device directly to a cable modem or DSL modem unless you are in search of worms, trojans, and viruses—the internet is crawling with damaging, infectious programs. Always ensure your devices are connected to a safe and secure router and are on a safe and CLEAN network. If you do not have an IT department, contact Keywest Technology for further assistance in safe connections.

PLAYER NETWORK NAME

In Dynamic mode, you can address your player by its name rather than an IP address. This will allow you to function on a Dynamic (or DHCP) system without worry of changing addresses. To find or change the name of the player, right-click MY COMPUTER on the desktop.



Next select the COMPUTER NAME tab...there you can either view the name of the machine or change it with the CHANGE button. If you choose to change the IP address, you will be prompted to restart the player—changes will not take effect until you do restart.



Player Name XX

After you have set all the player functions, it will be necessary to start it playing pages again. Click the START button in the lower left corner of the desktop. Select SHUT DOWN then select LOG OFF ADMINISTRATOR and click OK.

The LOG ON dialogue will appear. Enter USER NAME “mediaPOD” (no quotes, one word, no spaces) and click OK. The Media POD ID screen will appear as your last valid schedule is loaded into memory. The schedule will begin playing automatically.

After the IP address is set and the unit is back in playback mode, you can remove the keyboard, monitor, and mouse if you desire. Unless you are going to control the unit in “on-line” mode that is directly on the player itself you will not need those user interface devices.

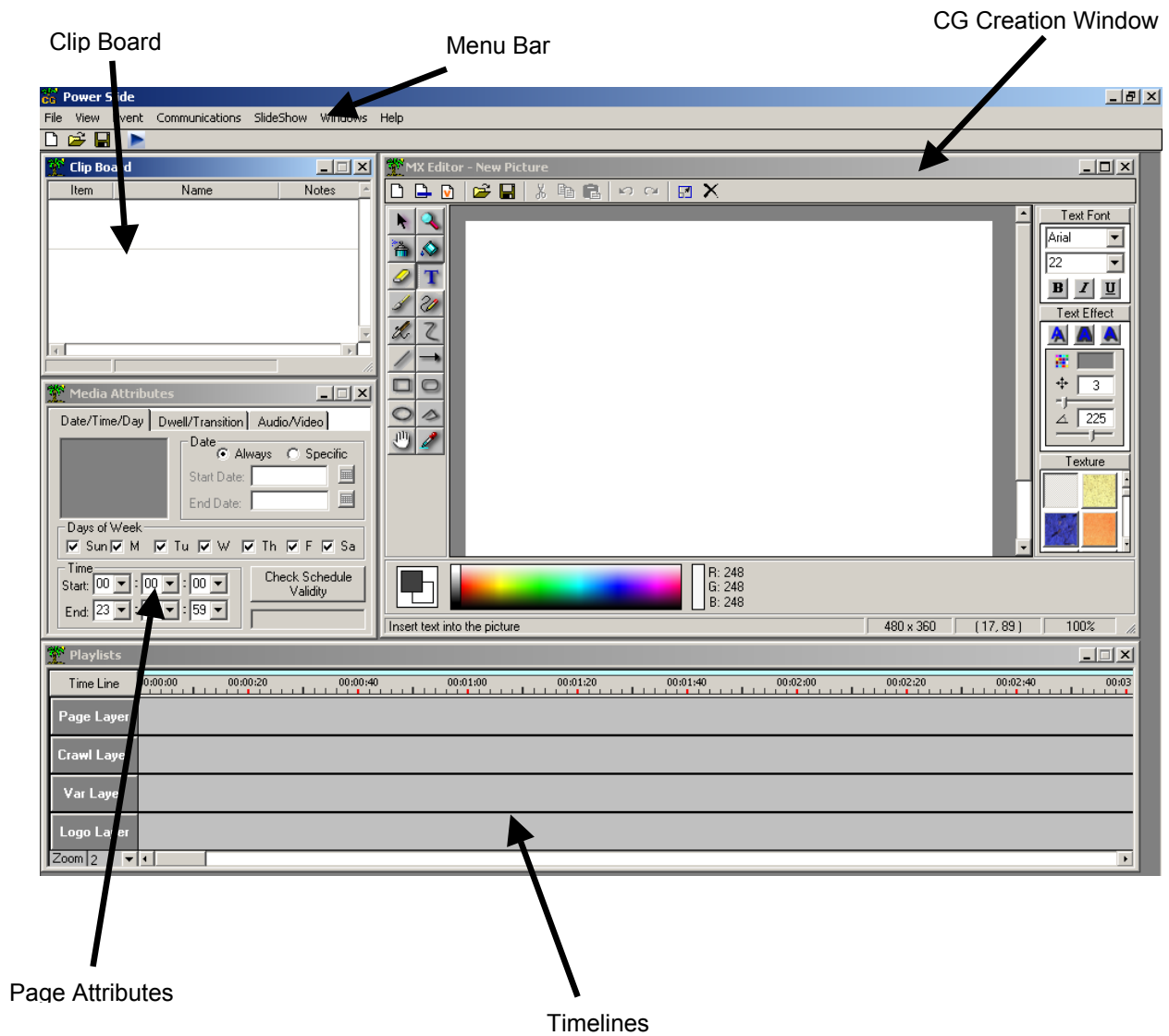
This manual will now cover the creation & scheduling software...all functions apply to remote software as well as the player itself—remember, the software is the same, it’s only a matter of where you create the schedules that determines if you are doing local control or remote control.

CREATION and SCHEDULING

Pages, Playlists, and Schedules

Earlier in the manual, we installed the Media POD Scheduler software on the computer of your choice (given some minimum requirements). That software is the same software that runs the player, giving you the ability to remotely control or locally control the function of the CG.

First things first, we'll need to get acquainted with areas of the GUI:



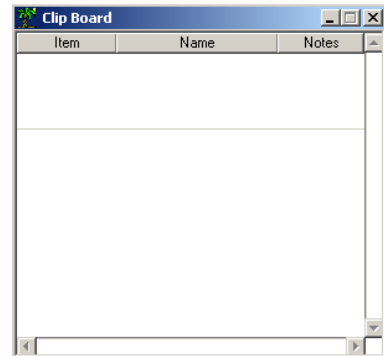
The five “arrowed” sections are just about all there is to it! We will now cover each section so you can get creative.

CLIP BOARD (Import Pages)

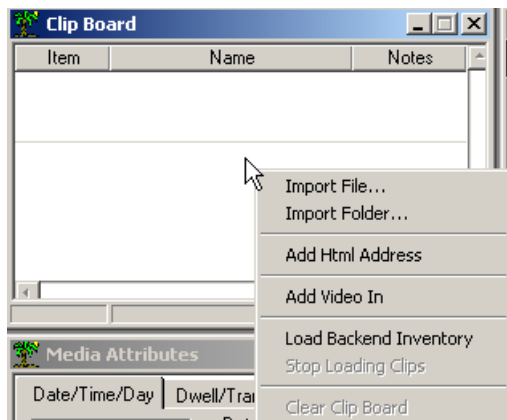
The clip board will come up empty when you start the application.

The clip board is the location pages, movies, crawl pages, and variables are stored for your use in time lines.

You can import your pages to the clip board where they will appear as a thumbnail with a brief text description. This is what we’ll use to drag and drop Playlist order.



To have something to work with, you’re going to need to import some pages or images.



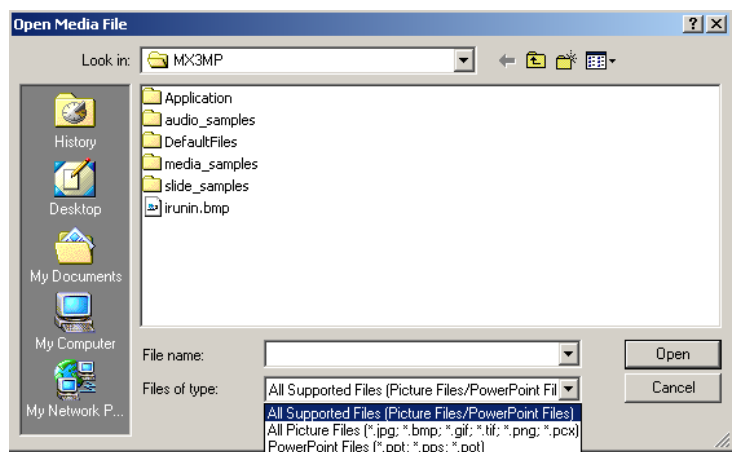
Right Click anywhere within the Clip board and a new menu window should appear. There will be five options to begin with: Import File, Import Folder, Add HTML Address, Add Video In, and Load Backend Inventory.

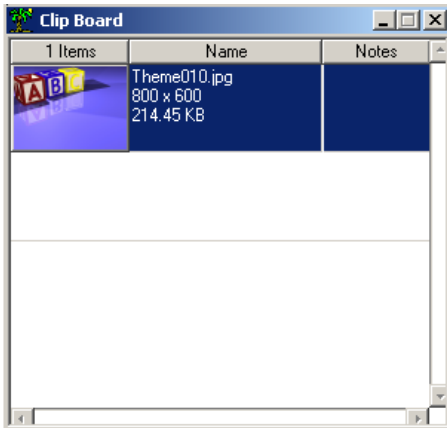
Click IMPORT FILE

The Open Media File file manager window will appear.

On the drop down box, you can see the different formats of pages the Media POD supports.

Browse to the location of your page or image and double-click it, or click OPEN on the file manager window.

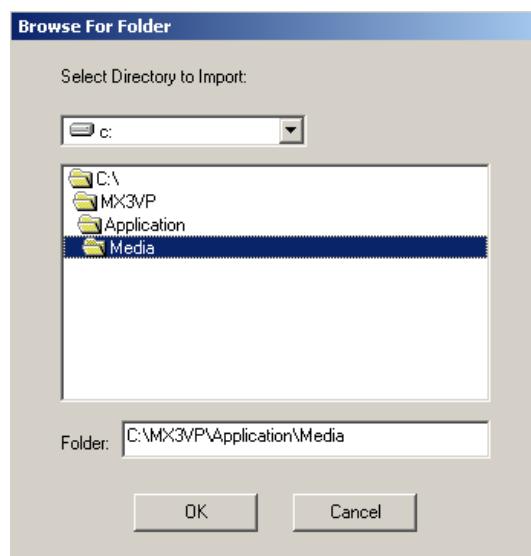




After importing the file/page a thumbnail and a text box that displays name, extension, run time, and actual creation size will be displayed in the clip board.

The listed page is now available for use in a time line.

The next option when right-clicking in the clip board window is Import Folder. Import Folder will import all the video pages contained in the selected folder.

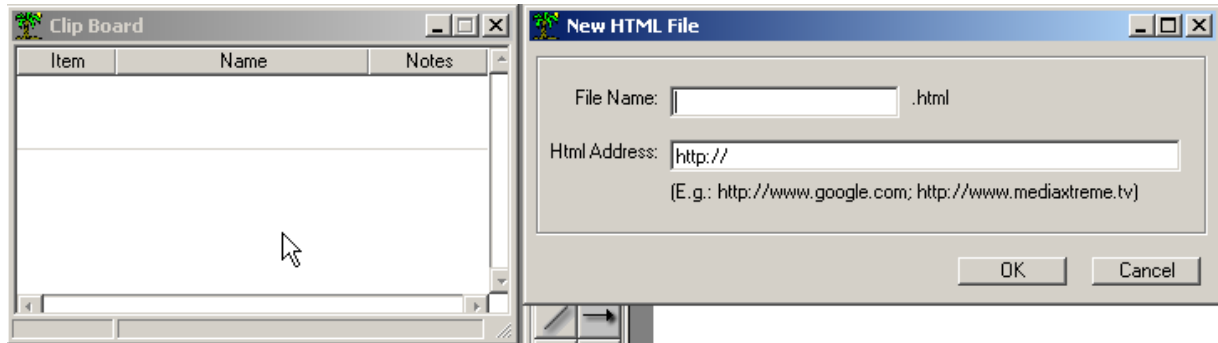


Be careful importing folders...if you instruct the software to download terabytes of MPEG2 video from a server that is exactly what it will attempt to do until your local hard drive is full.

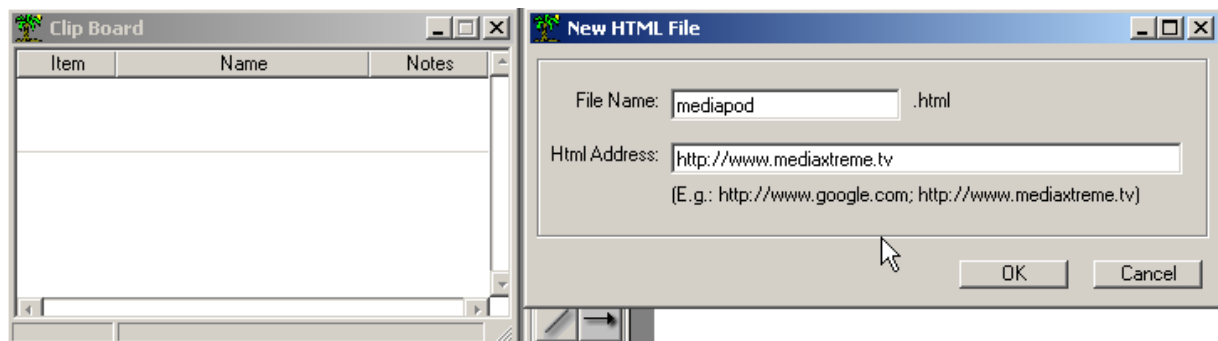
Files can be imported from any connected drive (network drives, local drives, external drives, etc...) allowing for easy file sharing.

The third right-click option is **ADD HTML ADDRESS**. The Media POD is capable of playing back active web pages as well as any other HTML content. This clip board option allows us to

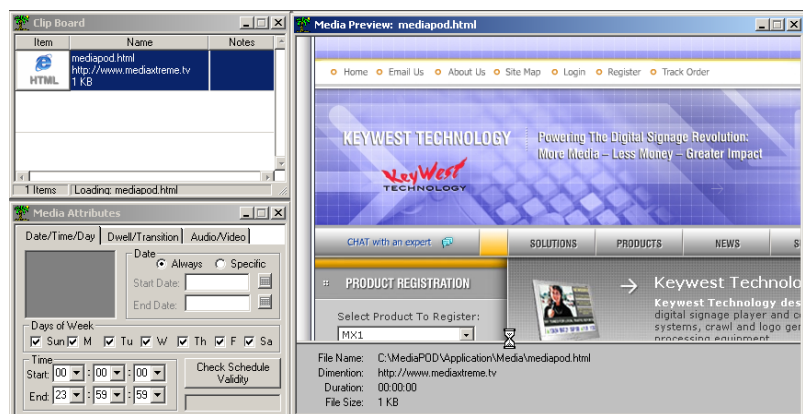
place a virtual website thumbnail in the clip board for use within a time line. Click on ADD HTML ADDRESS



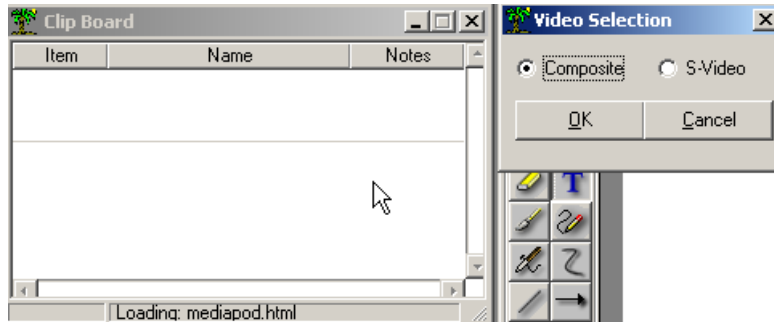
Use the NEW HTML FILE dialogue box to enter a name for the HTML element (this name is of your choosing so you can recognize what HTML content is represented by the virtual thumbnail) and enter the actual HTML address below



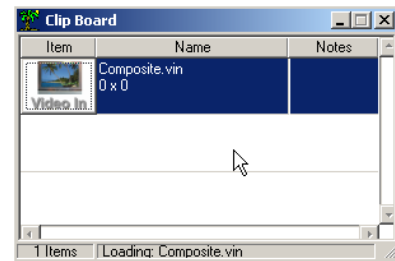
When you click OK, the HTML thumbnail will be entered into the clip board. You may verify the validity of the HTML address by double clicking on the text box to the right of the thumbnail... a live preview window will appear.



The fourth right-click option on the clip board is **ADD VIDEO IN**. Media POD features live Composite or Y/C video inputs. These inputs can be used as PiP windows on other pages or as stand alone live video pages. Just as with HTML, constant thumbnail images are not always available, so creating a generic virtual thumbnail is required. Click **ADD VIDEO IN**



Select Composite or S-Video and click OK. The virtual thumbnail is created and is now available in the clip board for use in timelines.



The fifth element in clip board importation is **LOAD BACKEND INVENTORY**. When you click this option, the GUI will load up the last retrieved inventory list from a player. Each time you connect to a player to send pages and schedules, the software will retrieve a list of available media loaded onto the player. You can also retrieve these lists manually through the communications window which we'll cover shortly. When you select Load Backend Inventory, all media from that inventory list will be loaded into the clip board. This is a very efficient means to manage content that is already on the player. If a piece of content media exists on the player, but doesn't exist on your local computer, instead of an actual thumbnail in the clipboard you will see a file type place holder. Thumbnails can only be created for media that accessed by the local machine (your PC).

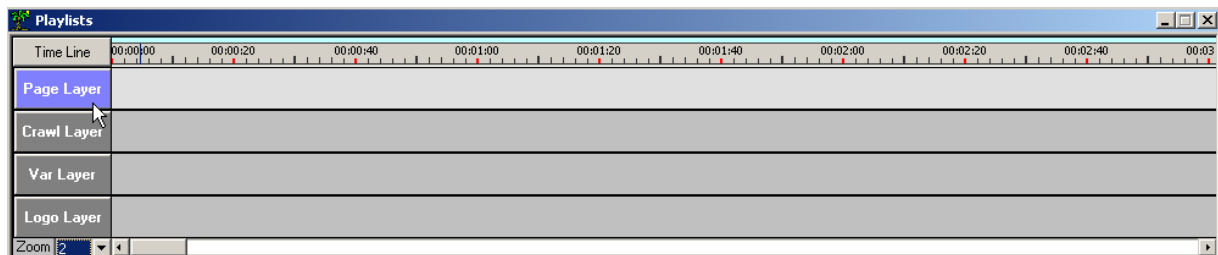
When loading a **BACKEND INVENTORY**, the **STOP LOADING** right-click option on the clip board becomes available. This is used as it says, to halt loading operations.

Also, when the clip board is populated with at least one item, the last right-click option becomes available...**CLEAR CLIPBOARD**—use to remove all clipboard contents.

TIMELINES & PLAYLISTS

The TIMELINE is where you build your Playlists. A Playlist is nothing more than a playout order of your content. The Timeline is “filled” by dragging and dropping media from the clip board.

The Media POD is a multi-layer device, and therefore features multiple timelines.

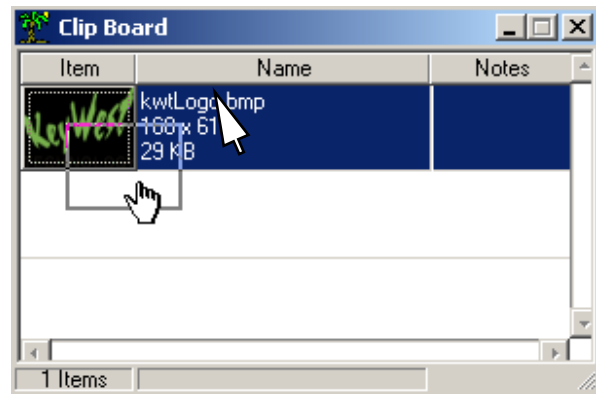


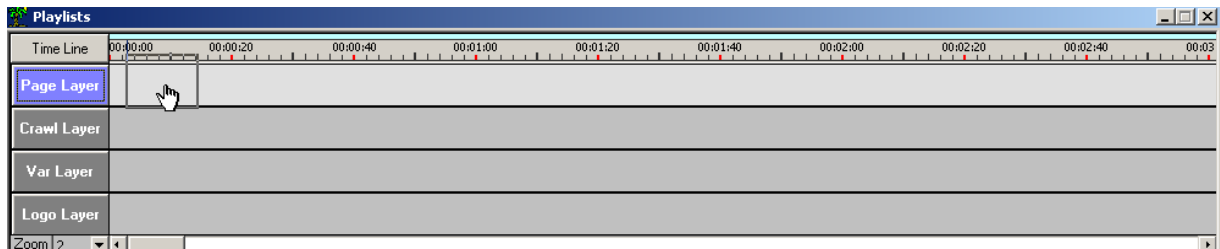
Each timeline is specific to the type of content that is allowed in that layer. Each layer has its own unique set of attributes and functions. We will cover each, but first let's look at the Page Layer.

The Page Layer is the most fundamental layer of a CG. This is where you drag your content or media that is created in the CG window, or in Photoshop®, or in PowerPoint®, or Flash®, Premier®, Vegas Video®...well, you get the idea...this is the basic building block and the base layer of a CG.

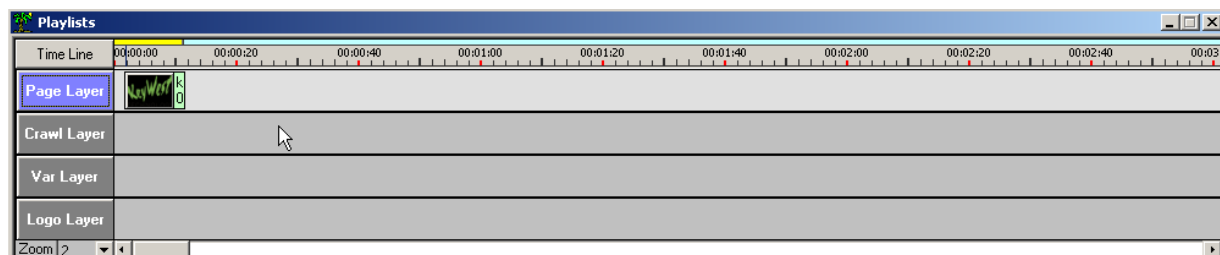
Drag and drop media to your pages layer by using your mouse and left clicking on the image thumbnail in the Clip board. (Note: You must click on the THUMBNAIL, not the text box, and you must hold your left mouse button down while you drag).

“Drag” the piece of content by its thumbnail from the Clip board down to the Timeline, and “Drop” it on any open space on the Page Layer Timeline by releasing your left mouse button.





When you drag a page to the Timeline, it will “rest” on any open space you drop it on by releasing the left mouse button



Don't worry about the open space before the media (if any). That will be compacted by the GUI when the save or play buttons are used...you can drop sloppy!

The page layer supports the following common formats:

Still Graphics:

.bmp: standard Bitmap
 .jpg: standard JPEG
 .gif: standard GIF

Video Files:

.avi: uncompressed video file or MPEG4 such as DivX, 3IVX, H264
 .mpeg: compressed video file, usually MPEG1 video CD
 .mpg: quality compressed video MPEG1, MPEG2, or MPEG4
 .vob: authored DVD chapters/sections
 .wmv: Windows Media Video

Proprietary Formats:

.ppt: PowerPoint© (.pps also)
 .swf: Flash© Movie
 .html: Web Page Content

- .evt: event file created by Media POD
- .cgs: character generator pages created by Media POD
- .vin: Composite or S-Video windows

A Timeline is a PLAYLIST. When you complete a timeline, and save it, it becomes a PLAYLIST that you can include in a schedule, or can simply play by clicking the blue play arrow at the top of the GUI.

It is important to remember that content by itself can't be scheduled to play. It must be part of a PLAYLIST to be activated by a schedule.

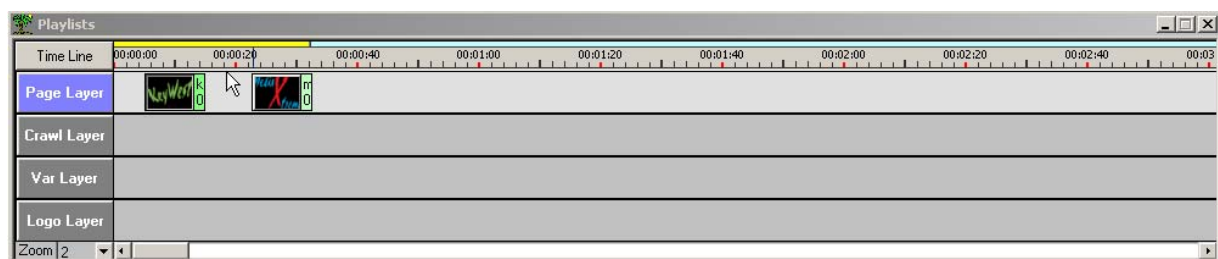
This simple timeline we've created so far is really enough to get on air...yes, it's overly simple and doesn't have a message, but it is indeed a timeline playlist that could be saved, sent, and played.

Of course though, there's much more sophistication we can utilize. You can drag up to 9-hours worth of media per timeline—or nothing at all.

PAGE ATTRIBUTES

As you may notice, when we dragged the media onto the timeline, the text portion of the information flag became not much more than a sliver of useless information. This occurs because the size of the information flag and thumbnail itself is relative to the time the page is set to dwell. By default, anything dragged to the timeline defaults to a dwell time of 10-seconds.

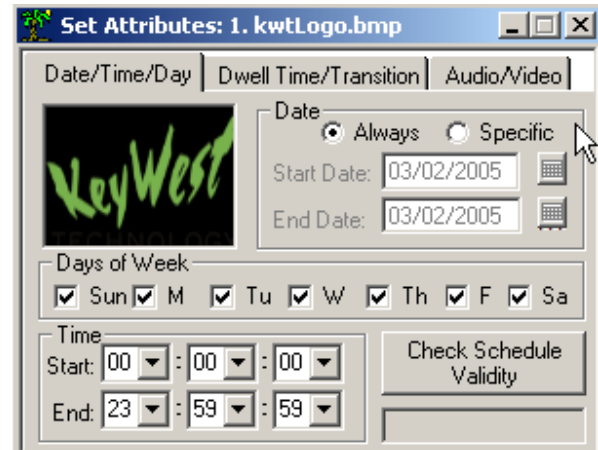
We can change that, as well as set a few other attributes. For tutorial sake, we will go ahead and drag a second media file to the Page Layer.



To select either page for Media Attributes settings, simply click on the thumbnail or information flag. You will then see your page appear in the Attributes window.

There are three tabs we can work with to tweak up the clip—Date/Time Validity, Dwell/Transition, and Audio/Video. We'll use all three to make a truly professional display.

The media attributes window is the location to make schedule specific settings for your pages.

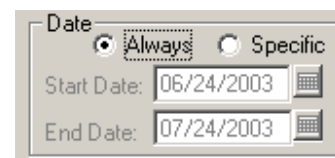


Date/Time Validity

A schedule can consist of many Playlists. Each Playlist will have its own attribute (as in, a Playlist may be scheduled to play a certain day of the week only, or a certain time only). Within the Playlists, are pages. The pages can also have date, day, and time specific settings

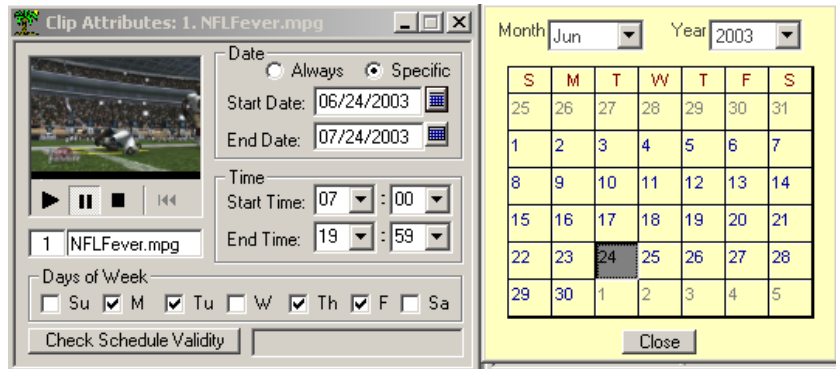
Imagine you have made two Playlists--one for the weekend, and one for weekdays. Perhaps you have a page that you want to only run during the week and only from 7:00 PM to Midnight. You would include that page in your weekdays Playlist, and then use this Attribute Window to set the page Valid only from 7:00 PM to Midnight. When your schedule plays, if the time is outside the 7 – Midnight setting, the page will hibernate, even though it is in the currently active Playlist. At 7:00 PM, it will join the play rotation, until Midnight, when it will return to hibernation again for the next 19 hours.

To make a page active and valid on all dates (this doesn't affect TIME or DAYS), simply click the ALWAYS radio button.



If you want to make it date specific, click the SPECIFIC radio button.

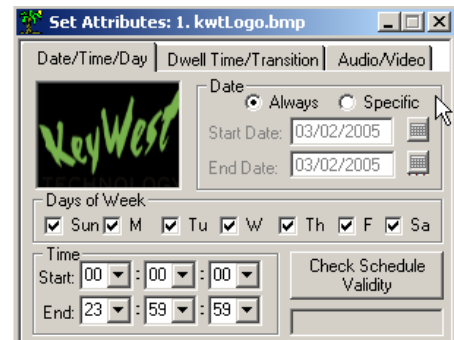
Once you've made the page "SPECIFIC" you will now have to set the date(s) on which the page is valid. You can make it valid for one day or up to the year 2050.



Setting the Date to ALWAYS or SPECIFIC doesn't affect the Day and Time validity. You still need to ensure the days you want the page to play are checked and you do need to make sure the valid times are selected.

To make the page valid 24 hours a day, select a start time of 00:00:00 and end time of 23:59:00.

The MEDIA POD does use the 24-hour clock to keep AM and PM confusion out of the mix.

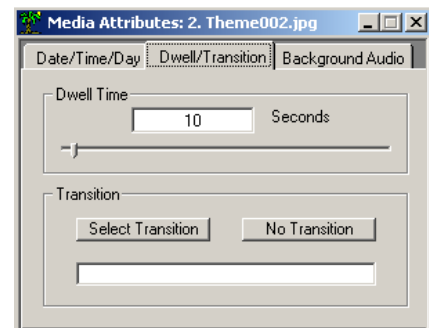


You can use the CHECK SCHEDULE VALIDITY "button" to ensure the attribute selections are indeed valid. An invalid condition, for example, would be something like choosing a page to play on July 4, 2006, but having only Monday and Friday checked. Since July 4, 2006 was a Tuesday, the SCHEDULE VALIDITY will return "INVALID" when you click the button.

DWELL/TRANSITION

In the attributes window, one of the TABS at the top is for DWELL. Dwell refers to the amount of time, in seconds, that a page stays on the screen during playback.

You can set the page to "dwell" from 1 to 32767 seconds (about 9 hours) by typing in the text box, or by clicking on and "sliding" the pager bar.

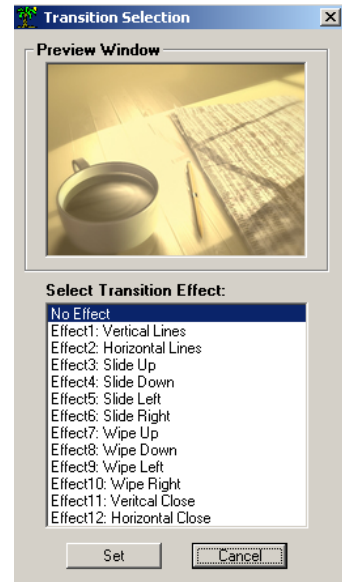


The Dwell window also has provisions for setting the page transition. The transition is the “style” the page uses to enter the screen during playback. Click SELECT TRANSITION to select the style.

You will see a new window, the TRANSITION window.

To select a transition, click in the “radio” button to the left of the desired transition effect.

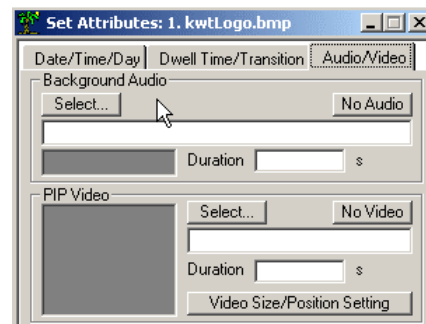
To preview the transition, click on the button containing the transition name (VERTICAL CLOSE for example



AUDIO/VIDEO

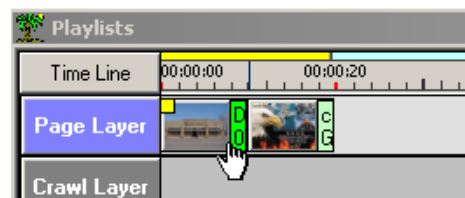
The Attributes window also contains a tab for adding audio or video to a page or set of pages.

Click on the Audio/Video Tab.



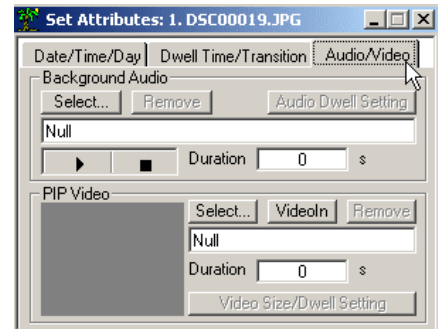
Audio is an effective tool to add to a page. This can be a voice over describing a house that you are trying to sell...the picture on the page alone is nice, but an audio description to accompany it is what makes the sale. Or perhaps adding a musical score to your presentation is enough to keep the viewers entertained enough to watch the entire presentation.

To add audio to a page you must first select the page. Move the mouse over the page you wish to work with and left click to select. The selected page is indicated by the yellow box in its thumbnail upper left corner. The page thumbnail will also appear in the attributes window.

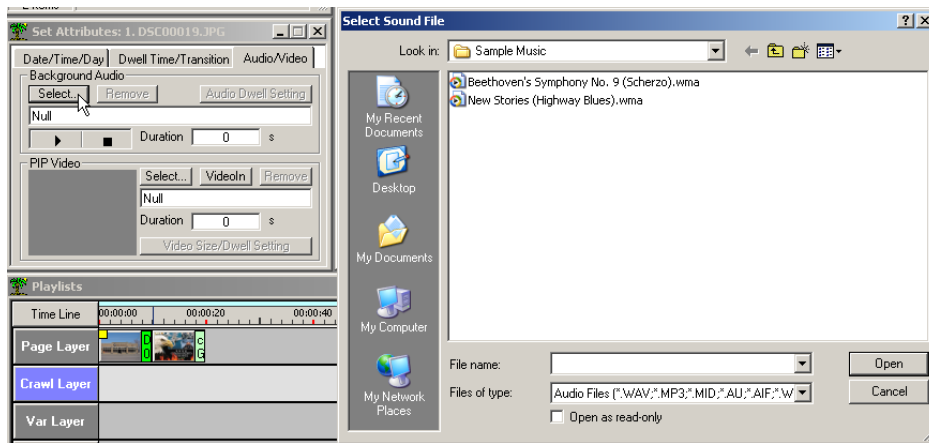


Next click the AUDIO/VIDEO tab in the ATTRIBUTES WINDOW.

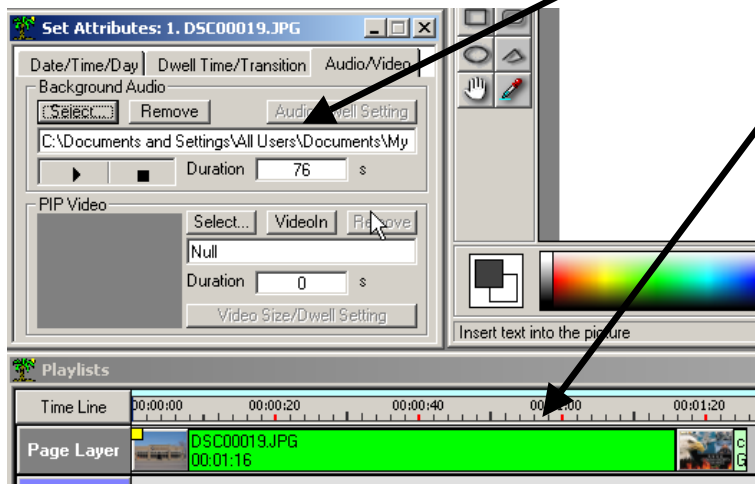
Note when no clip (audio or video) is attached, the path text boxes will indicate NULL and duration times are zeroed.



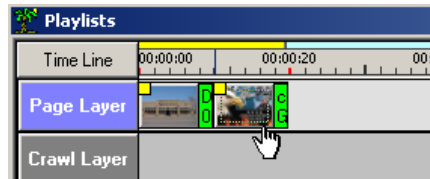
To choose an audio clip to attach click SELECT and browse all connected drives to locate your audio selection.



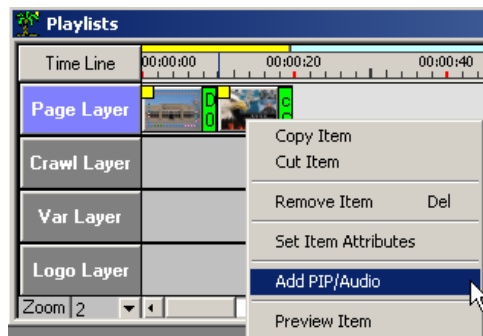
Once the selection is made, the path will be entered in the audio select text box and the dwell time of the page will match the audio clip duration.



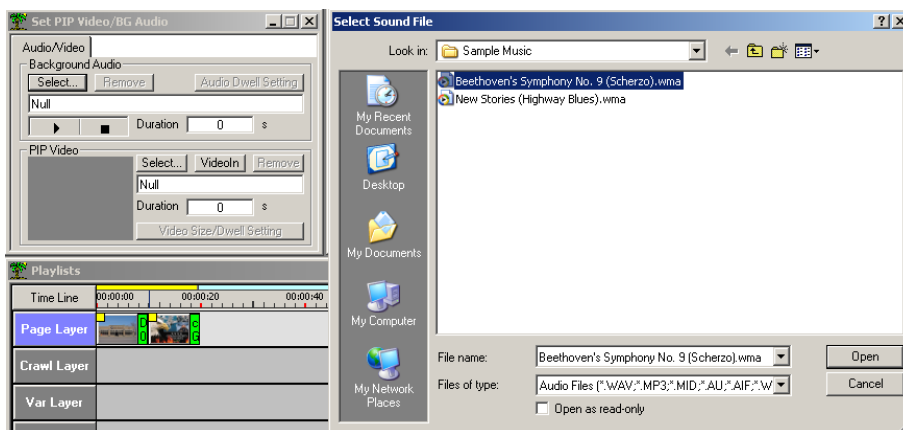
Audio may also be added to multiple pages simultaneously. For example, a multi-page advertisement may include two or more images, but one sound track. Or, you wish to create a simple page montage with audio background. Simply multi-select the CONSECUTIVE pages you wish to add your audio clip to by holding down the SHIFT key on the keyboard while left-clicking with the mouse on each page to include. All pages selected are indicated by the yellow box in the upper left corner of its timeline thumbnail.



Next, RIGHT-CLICK on any selected page and select ADD AUDIO/PIP



The MULTI-SELECT attributes window will become active (be sure all desired pages are selected as indicated by yellow boxes in each thumbnail). Select your desired audio clip.

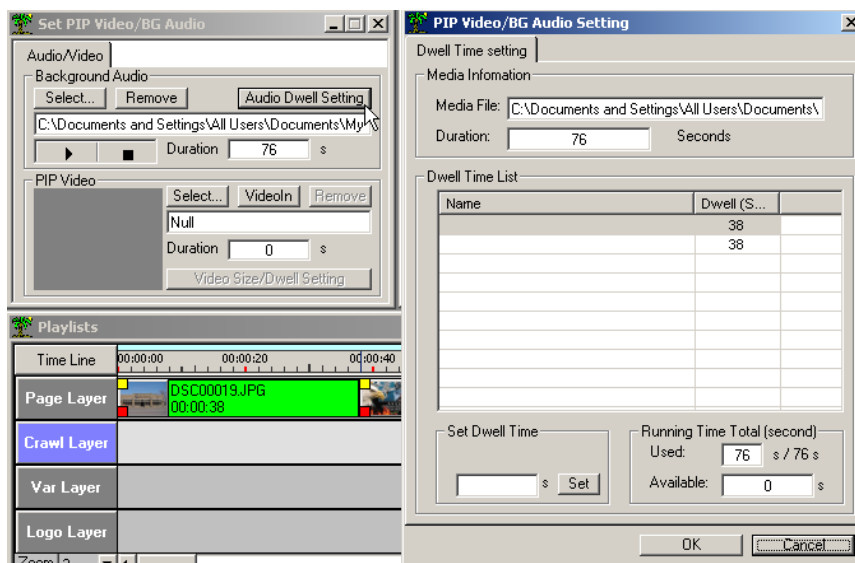


Media POD software automatically equally distributes the audio clip over the selected pages.



In our example, the 76 second audio file is distributed over two pages at 38 seconds each. Also, notice the RED BOX in the bottom left corner of each attached audio page, indicating the link.

There are instances however when you may desire a clip to not be equally distributed over the selected pages. The dwell times can be adjusted. With all attached pages selected, click the AUDIO DWELL SETTING button. A secondary attributes window will open.

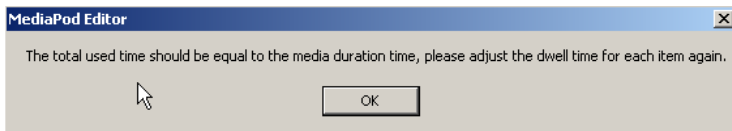
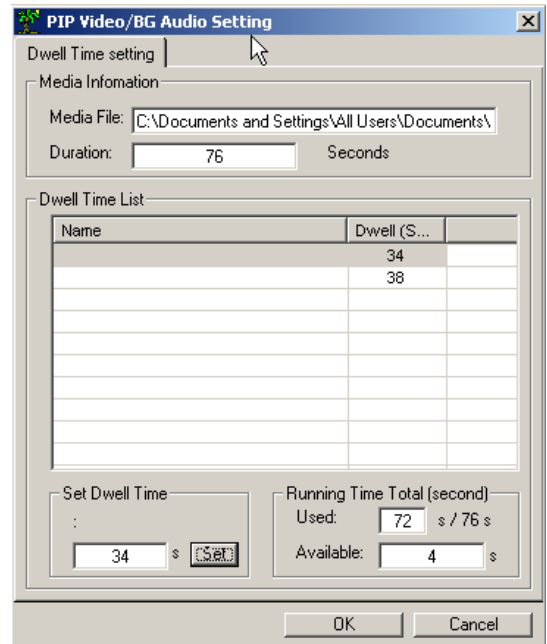


In this window, you may change the dwell of the individual pages within the linked set of pages. Highlight the page you wish to adjust type the new dwell time in SET DWELL TIME and click the SET button.

There are special considerations. Media POD makes the assumption that an audio clip was intended to play for its total duration...in our example that is 76 seconds. If you then reduce the dwell time of one page, you will have to increase the dwell time of other pages to balance the 76 second audio duration.

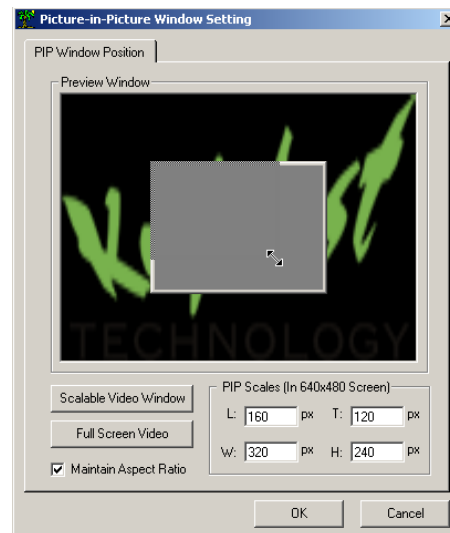
For example, if page one is reduced to 34 seconds, you will see RUNNING TIME TOTAL indicate that there are four seconds of audio still available. Those four seconds must be used. For our example, we would select the second page and increase its dwell time to 42 seconds, thereby balancing the equation.

A warning box will appear if the equation is not balanced prior to clicking OK.



Just as audio can be added to a page, so can video in the form of a Picture-in-Picture window. These videos can be MPG, AVI, VOB, WMV etc...the same formats that can be included in playlists as stand alone “movies”. Also, live video windows (.vin) can be added to pages.

To add a video PiP to a page, click the SELECT button or the VIDEO IN button in the Video section of the attributes window and browse to the desired video file. Once selected click VIDEO POSITIONING AND SIZE.



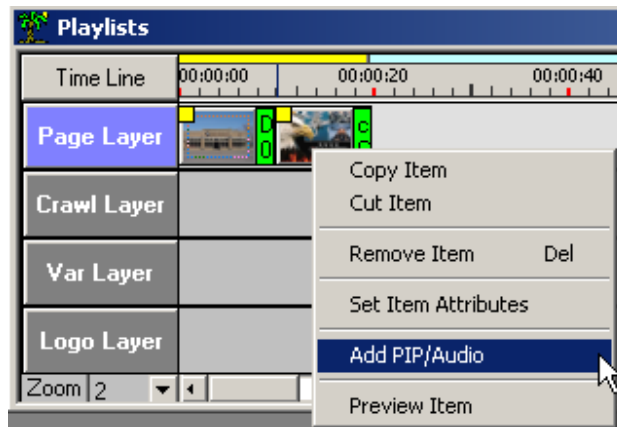
Drag the grey box in size and position to set the window size and position, and then click OK. When this page plays back, now the video window will be filled with your selected video file.

You can create video windows that are standard 4:3 and maintain that by ensuring MAINTAIN ASPECT RATIO is checked...if that box is not checked, you will be able to create any size

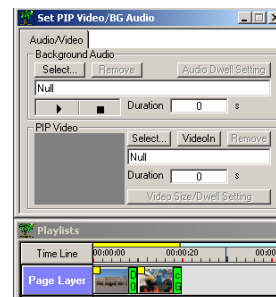
rectangular window—the window will be filled with the video you select regardless of odd sizes and dimensions.

Also as with audio, Video can be added to multiple pages. Select the pages you wish to add video to (must be consecutive pages) by holding the SHIFT key on the keyboard and LEFT-CLICK the pages you wish to link with video. Notice the yellow boxes in the upper left corner of all linked and selected pages.

Next, right click on one of the linked pages and select ADD PIP/AUDIO.



This will activate a linked page attribute window.



Click the SELECT button or the VIDEO IN button to browse to your desired video to attach. If you should choose VIDEO IN, no browsing is required, simply choose COMPOSITE or S-VIDEO and set your duration for the video window.

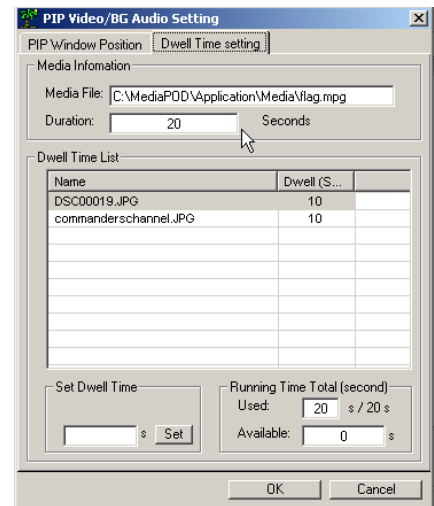


Next, click the VIDEO SIZE/DWELL SETTING button. A secondary attributes window will open. This window will allow you to set the dwell time of each page.

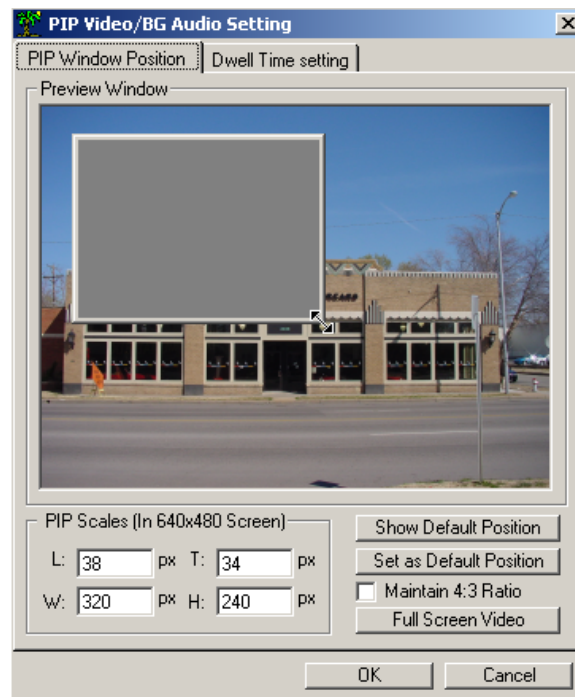
Media POD software assumes the attached video clip was intended to play for its full duration. Therefore, when attached to multiple pages, the duration is equally distributed over all attached pages. In our example, the 20 second video is divided over the two pages at 10 seconds each.

You may adjust the dwell of all the pages, but the end result must be balanced as indicated by a value of ZERO in the RUNNING TIME TOTAL AVAILABLE text box at the bottom right of this attributes window.

Media POD will give you a reminder message if the total duration and page dwell times are not balanced.



Another important facet of adding video to multiple pages is the size and position of that video. Click the PIP WINDOW POSITION tab of the secondary attributes window.



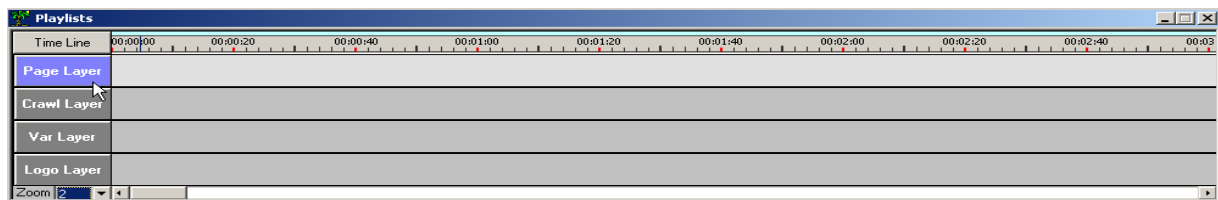
Use the grey PiP box to size and position the attached video by dragging it over the image and dragging the corners to size. A very useful and important tool when attaching video over multiple pages is the SET AS DEFAULT POSITION and SHOW DEFAULT POSITION.

Once you have set a PiP window where you want it to appear on the set of pages with attached video, click SET AS DEFAULT POSITION. This will set the same size and position for all subsequent pages in the group, ensuring your video windows do not jump around in size or position from page to page.

You can also use the SHOW DEFAULT POSITION button to set the same size and position PiP window on all non-attached pages.

Static video windows add a great deal of professionalism to your final output and are highly recommended.

CRAWLS, LOGOS, VARIABLES



CRAWL LAYER

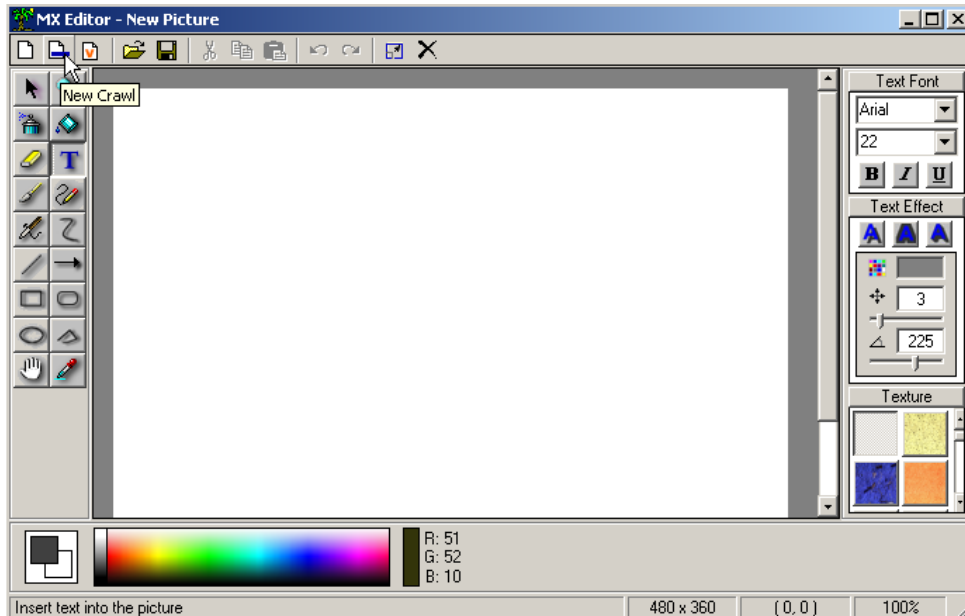
Besides simply playing pages, audio, and video, the Media POD is capable of overlaying a crawl on the display.

Media POD Crawl layers are unique in that they are not simple text lines that move from right to left at a constant rate. Keywest Technology has discovered, as have a lot of users, that constant motion crawls are not always desirable especially in a digital signage application utilizing flat panel displays. These displays tend to have varying refresh rates which can add to negative effects of constant motion crawls such as stuttering.

To bring a higher quality information text line to our users, we have improved our technology to deliver a transitioning TEXT SLIDE CRAWL, eliminating all negative crawl artifacts.

This TEXT SLIDE has several options for direction and speed—the function of the line is to slide the desired text on screen in preset intervals, pause on the page for a time, and then slide off the page—thus presenting a very neat and readable informational text line to all your viewers.

First, creating Text Slide Crawls. Crawls must be created in the CG Editor window. To get started, click on the New Crawl Button.



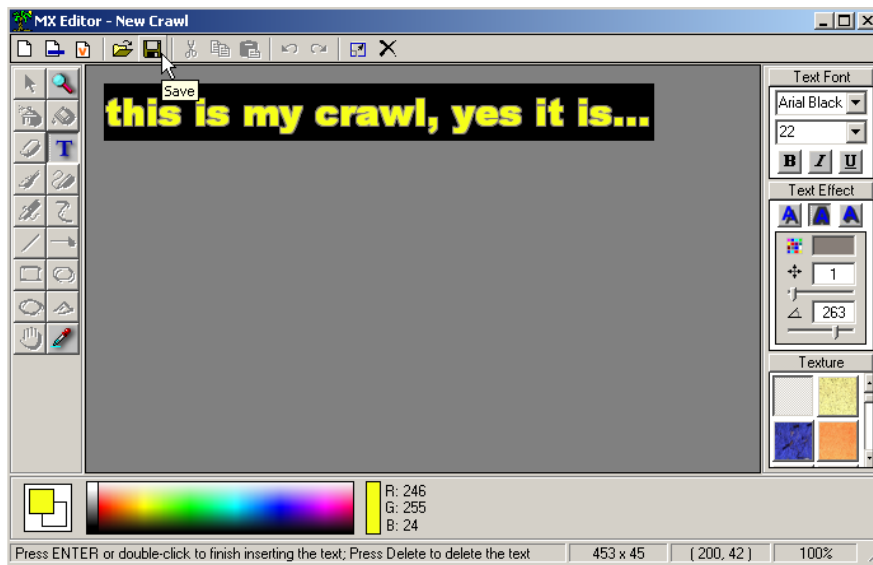
This will open up a new crawl page in which you may create your crawl. On the right edge of the editor window are attributes you can set:

1. Font—this will allow you to chose any True Type font loaded on your PC already (same fonts you use with any Windows program)
2. Size—sets the size in points; number of sizes available depends on the font chosen
3. Bold, Italic, Underline—same functions as word processors
4. Text Effect—add shadows, outlines, or both to text and choose the color of the shadow, or outline
5. Fill—choose a solid fill to generate colors or a texture to create a custom look

With the color picker at the bottom of the screen, you can choose the color of the text (as opposed to color of outline/shadow)

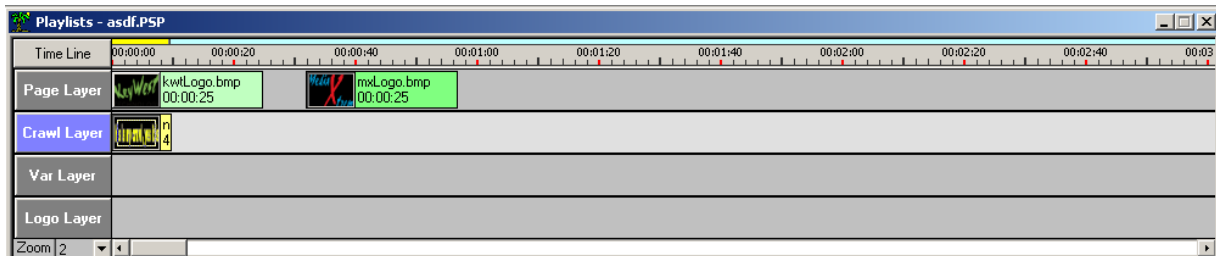


The work left to do amounts to typing text. Once you have your crawl message typed out, click the SAVE CRAWL icon. Note, to segment the slide, use the “|” bar symbol—this will serve as the delimiter in your crawl. Alternately, you can allow Media POD to automatically delimit your crawls based on screen width.

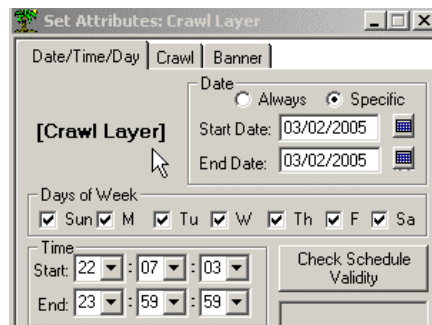
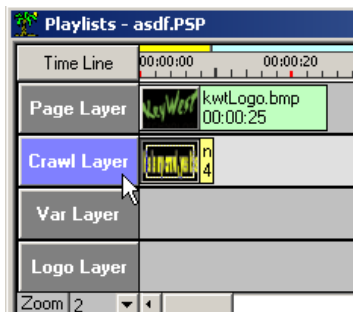


You will now find that your crawl is available as a thumbnail in the clip board. You may now drag it to the CRAWL timeline (and only the crawl timeline).

For practice, create a crawl and drag it to the CRAWL TIMELINE (remember to use the “|” delimiter if you wish to set the segment sizes yourself.)



Now, click the CRAWL LAYER label to activate the crawl ATTRIBUTES window.



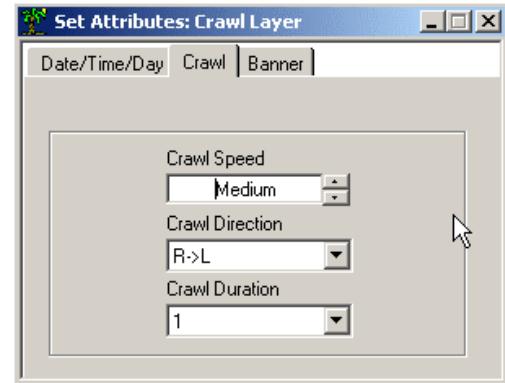
Crawl attributes differ somewhat from page attributes—there are simply different functions to perform as a text slide crawl.

Date/Time/Day Tab allows you to program the crawl, just as with a page, to be valid only on certain dates and/or times, regardless of the entire schedule’s settings.

The next tab is the CRAWL tab...this tab allows you to set crawl speed and direction.

Choose the Crawl Speed, SLOW, MEDIUM, or FAST.

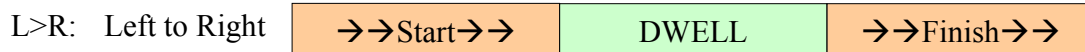
Choose the Text Slide Crawl Direction (Right to Left or Left to Right; Up and Down, or CUT).



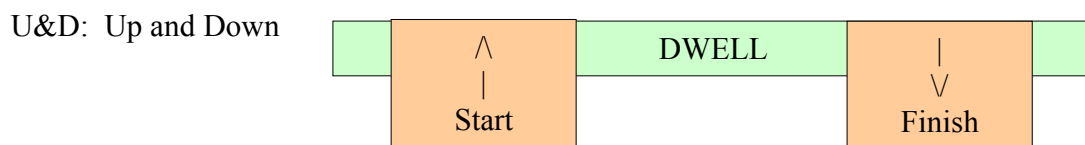
Text Slide Direction Definitions:



Start indicates where the text enters the screen. Dwell indicates where the text pauses on the screen. Finish indicates where the text exits the screen. The speed of START and FINISH is set by CRAWL SPEED SLOW, MEDIUM, and FAST. The duration of DWELL is set by CRAWL DURATION from 1 to 60 seconds.



Start indicates where the text enters the screen. Dwell indicates where the text pauses on the screen. Finish indicates where the text exits the screen. The speed of START and FINISH is set by CRAWL SPEED SLOW, MEDIUM, and FAST. The duration of DWELL is set by CRAWL DURATION from 1 to 60 seconds.



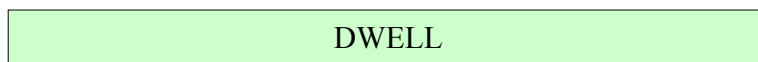
Start indicates how the text enters the screen. Dwell indicates where the text pauses on the screen. Finish indicates how the text exits the screen. The speed of START and FINISH is set by CRAWL SPEED SLOW, MEDIUM, and FAST. The duration of DWELL is set by CRAWL DURATION from 1 to 60 seconds. This action occurs within the CRAWL BANNER.

D&U: Down and Up



Start indicates how the text enters the screen. Dwell indicates where the text pauses on the screen. Finish indicates how the text exits the screen. The speed of START and FINISH is set by CRAWL SPEED SLOW, MEDIUM, and FAST. The duration of DWELL is set by CRAWL DURATION from 1 to 60 seconds. This action occurs within the CRAWL BANNER.

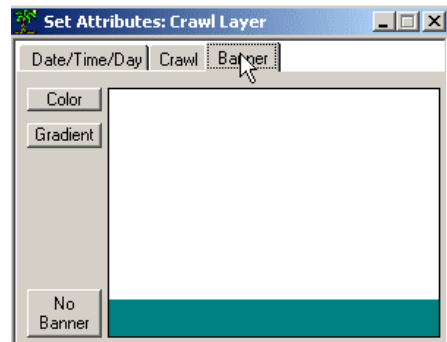
Cut: Cut



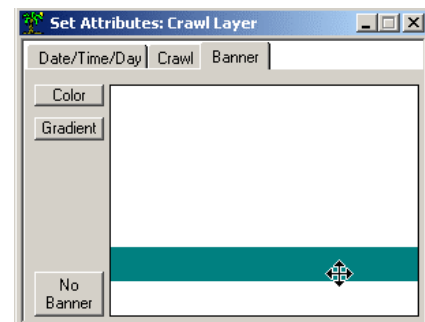
The text appears on screen at the banner location and is replaced by ensuing text in a cut transition—no movement. The duration of DWELL is set by CRAWL DURATION from 1 to 60 seconds.

Text Slide Crawls can also include background banners to ensure the text stands out against the background pages regardless of content. Click the BANNER tab.

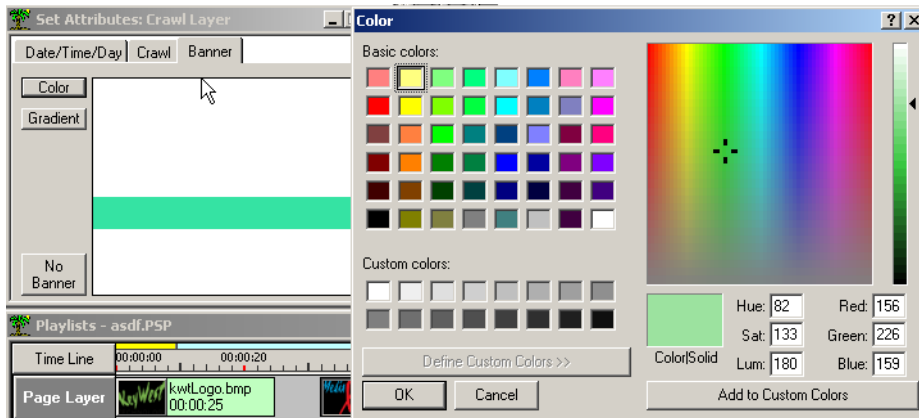
Here, you can set a color banner that will display behind the crawl (banner size is dependent upon font size in the crawl), a collection of colors (gradient) or no banner at all.



The banner position determines the crawl position. Simply click the banner and drag it up or down to set the crawl (and banner) position



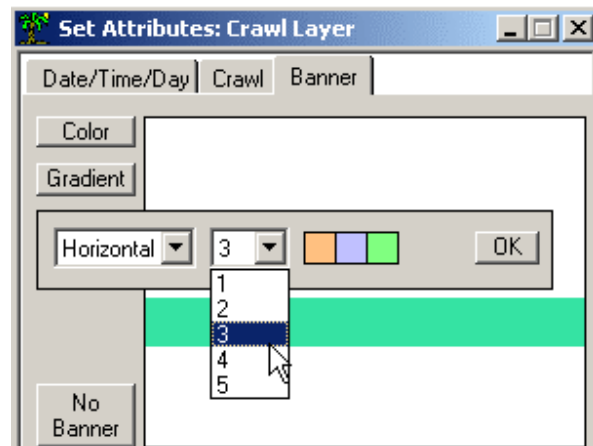
Click Color set the banner color as a solid color.



Click Gradient to set the banner as a gradient.

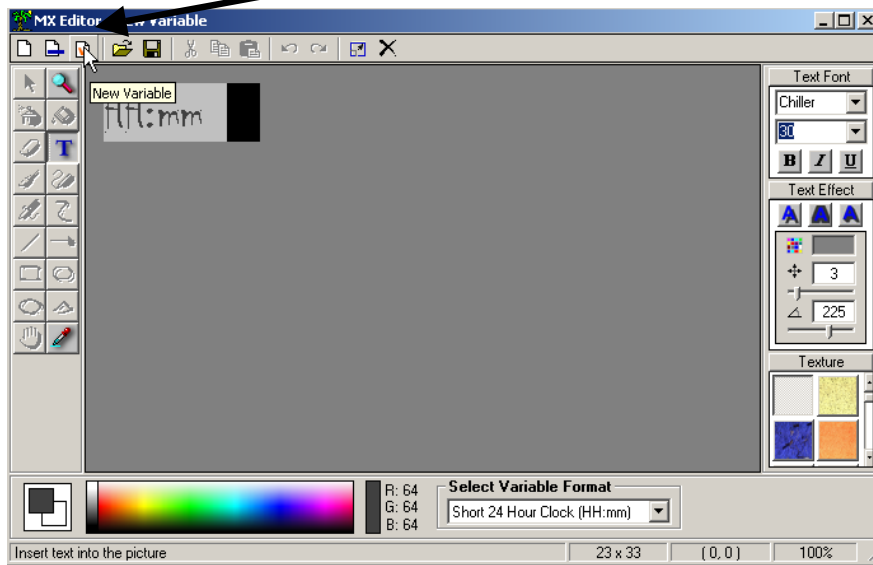
Note that you can change the number of color bars in the gradient and the direction of the bars with the provided drop down boxes.

You can change the color of each gradient bar by clicking on any of the gradient pallet entries and using the color picker.

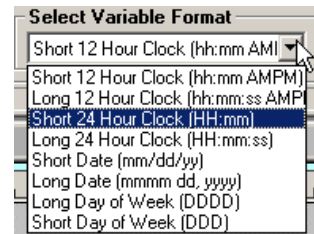


VARIABLE LAYER

The third layer available for use is the Variable layer. This is a very unique layer that allows you to create dynamic elements for your Media POD system. Dynamic elements include various configurations of Time, Date, and Day of the Week. Click the red V in the editor window to create a variable.



Use the drop down SELECT VARIABLE FORMAT function to choose the variable you desire.



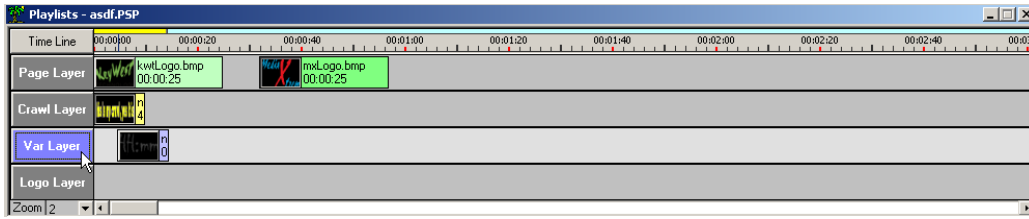
Next, use the same FONT style controls discussed in the creation of crawls to set the FONT, SIZE, COLOR, SHADOWS, and TEXTURES.

Note that it is unimportant where in the CG you create the variable...we will set that a bit later.

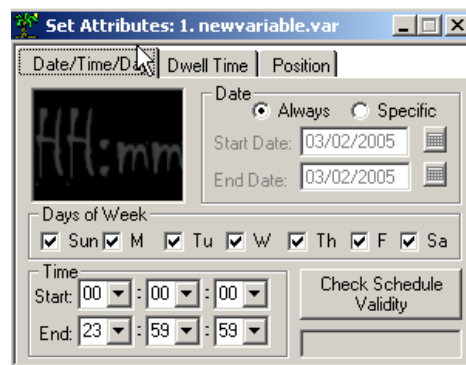
When complete formatting your Variable, click the disk symbol and save it...as in the case of a crawl, it will become a thumbnail in your clipboard, ready for use.



Drag your new variable into the VARIABLE TIMELINE and drop it there.

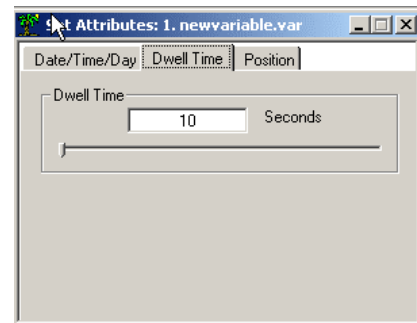


Next click on the Variable's thumbnail on the timeline to activate the attributes window.

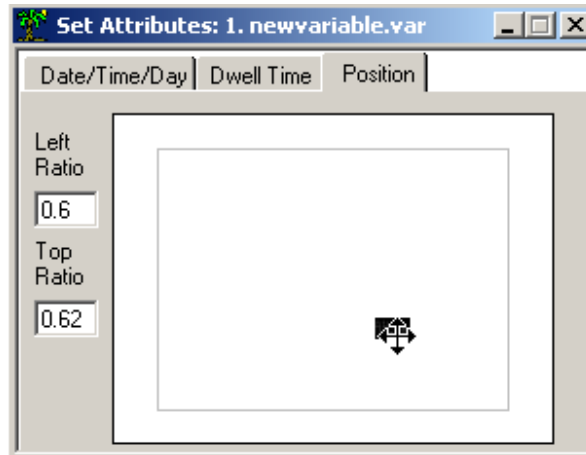


Notice that the Attributes windows are following a pattern. The first tab allows you to set the day, date, and time validity so variables are as easily programmed as a page.

The second tab for a variable allows you to set the dwell, or duration, that the variable will play before moving on to the next item in the timeline.



The third tab in the Variable Layer is the most important—this is where you set the position of the Variable

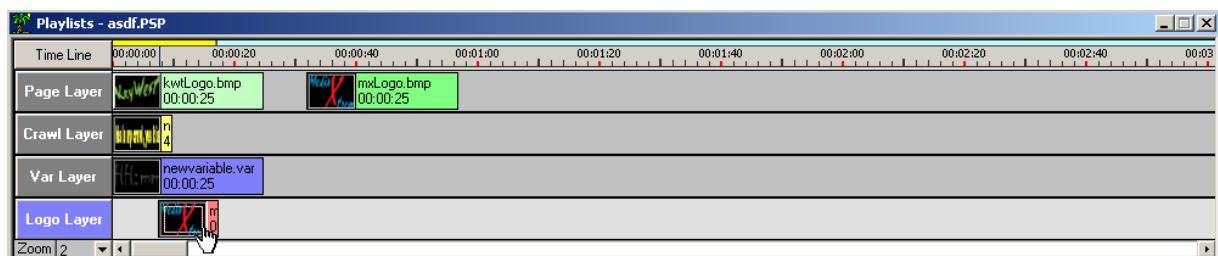


Utilize this tab to drag the variable around the screen... where you drop it is the relative position it will play (as indicated by the Left and Top ratios—which give a percentage of screen position so that actual resolution is unimportant, but relativity becomes the key).

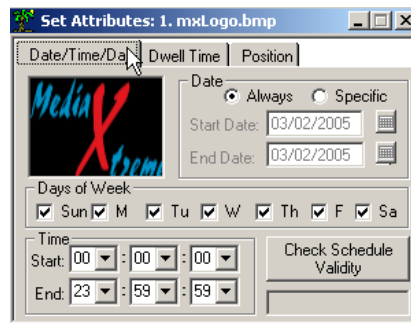
LOGO LAYER

The final layer to cover is the LOGO LAYER. This Layer allows you to place an image anywhere and at any size on the screen as a “bug”... a logo on your screen that can stay as your branding during all playback (including full screen videos).

Drag any suitable graphic file into the LOGO LAYER (bmp, jpg, tiff, gif, pcx, png). NOTE: The Media POD software does not allow you to resize the LOGO... whatever size the image is imported is the size it will playback. Set the logo size in a graphics program such as Photoshop or Ulead, etc...



Click the logo’s thumbnail image on the timeline to activate the logo attributes window.



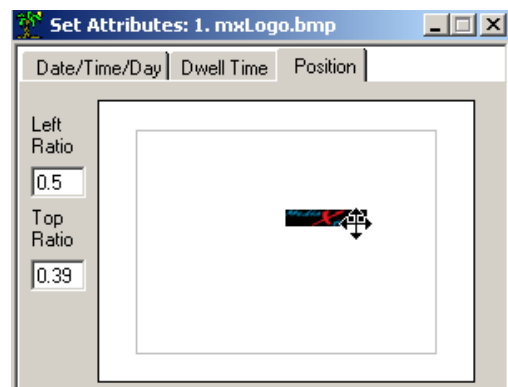
As in the previous layers, the Date/Time/Day tab is used to set time based validity for the Logo.

The next tab, DWELL is used to set the duration of the Logo (it is important to remember that if a timeline has only one entry, it will continue to loop that entry until the schedule/playlist is replaced by something else).

The last tab, POSITION allows you to drag the Logo around anywhere on the screen.

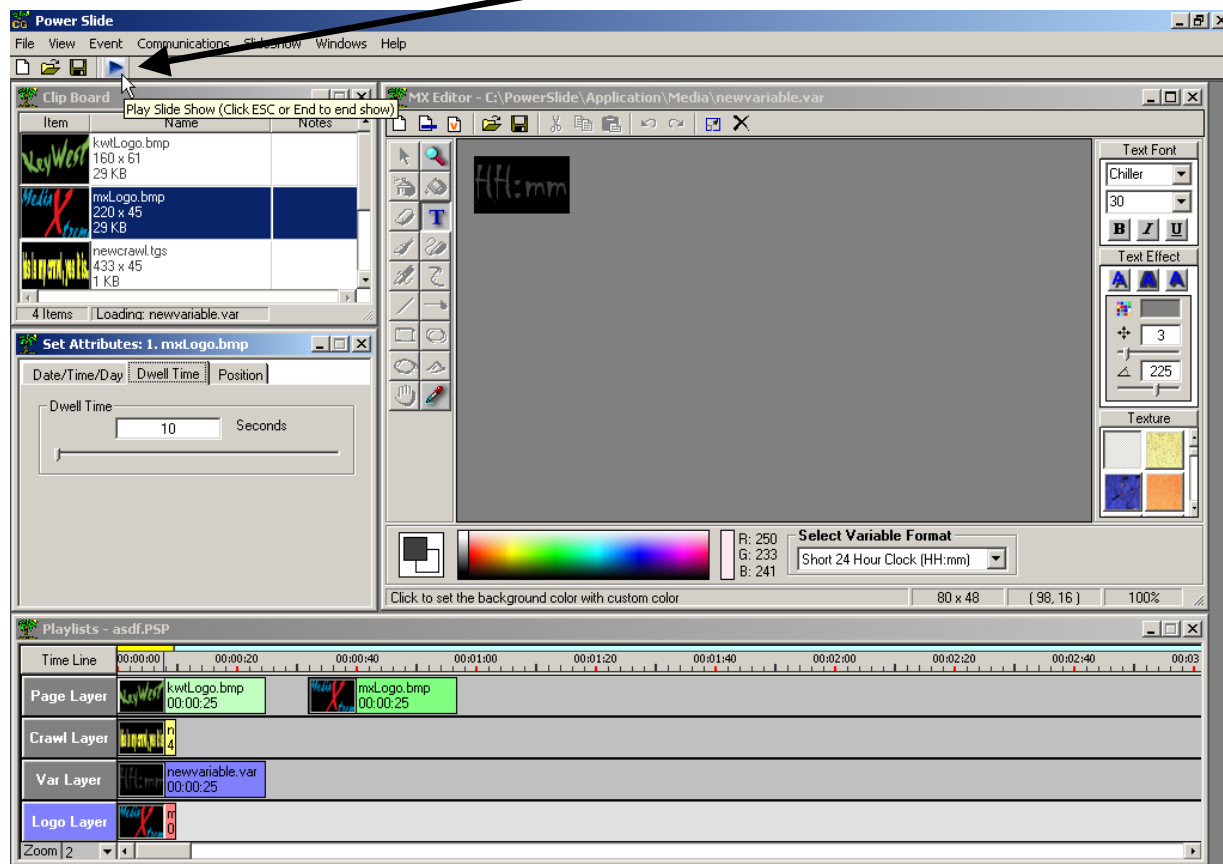
Where you drop the logo is where it will play relatively on the final output.

Also, logo's have the ability to key...any true black (0 Red, 0 Green, 0 Blue) portion of any logo will be keyed out, revealing what is behind—this allows you to create professionally inserted bugs from just about any graphic you may already own!



PLAYING THE SHOW

At this point, you could declare yourself complete...we've added at least one thing to each layer and if we were creating on the Media POD player itself, it would be feasible to click **PLAY** and let it run.



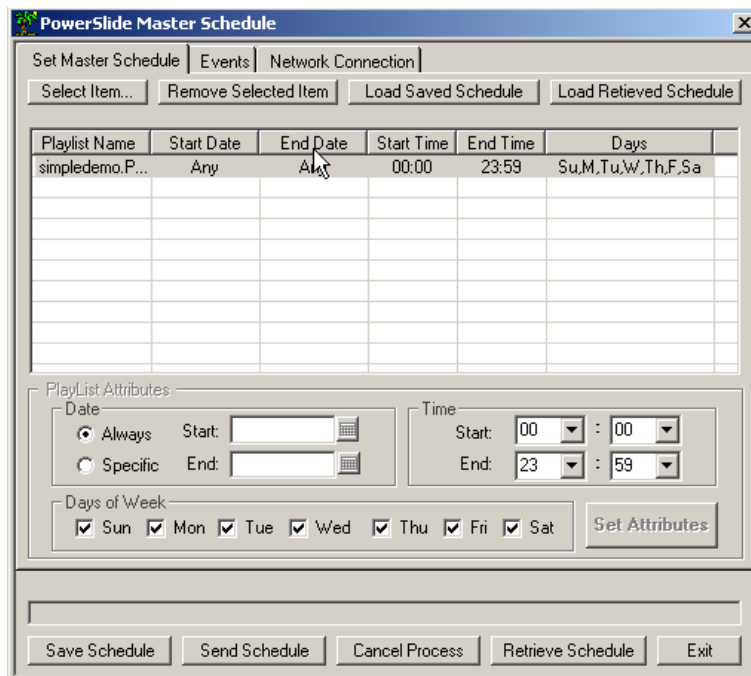
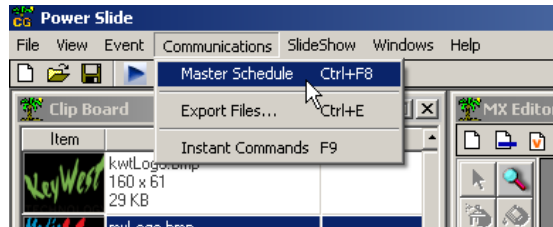
Or, if you are creating on a separate PC, you can click this blue arrow to run a Preview of your show. Either way, the first time you click the blue arrow, you will have to save the playlist and name it (the software will prompt you to do so).

CREATING A SCHEDULE

If you are not running the Media POD in a stand-alone configuration, you will no doubt wish to send your playlists and schedules to the remote device.

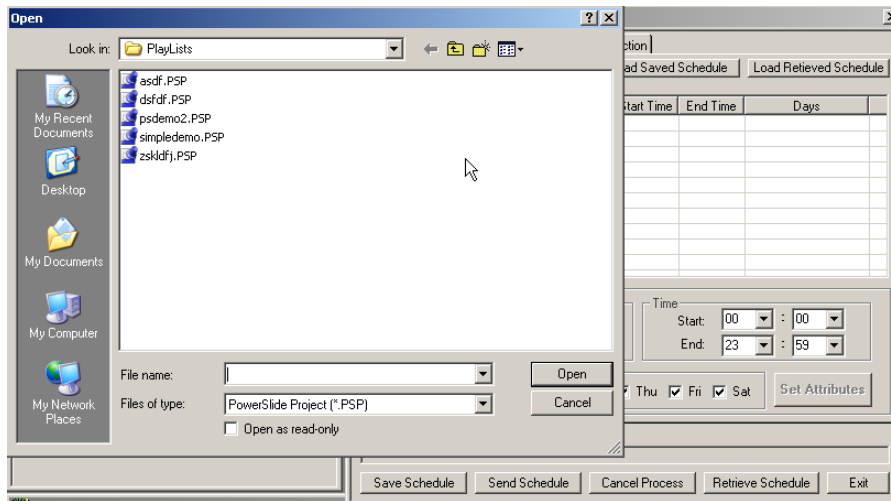
On the MENU BAR, click the COMMUNICATIONS item.

The Scheduler Window will open.



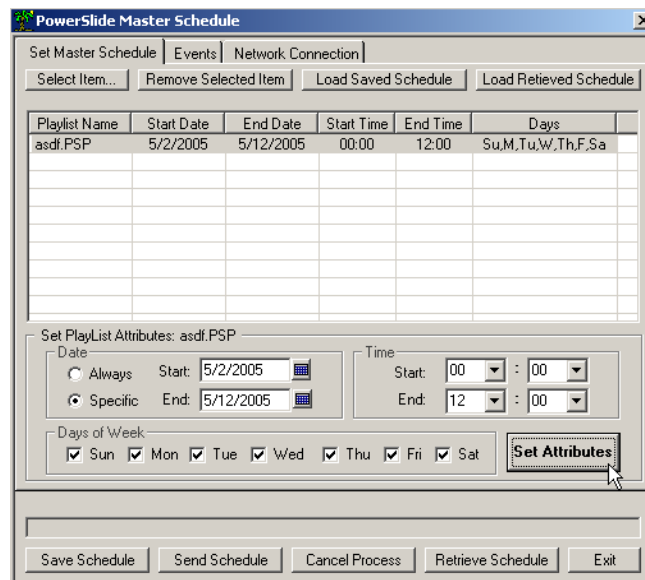
This scheduler has three tabs. Set Master Schedule, Events, and Network Connection. The first step to creating a show based on playlists is to use the first tab.

The first time you do this, you will find the schedule window blank. Click SELECT ITEM to add one of your playlists.

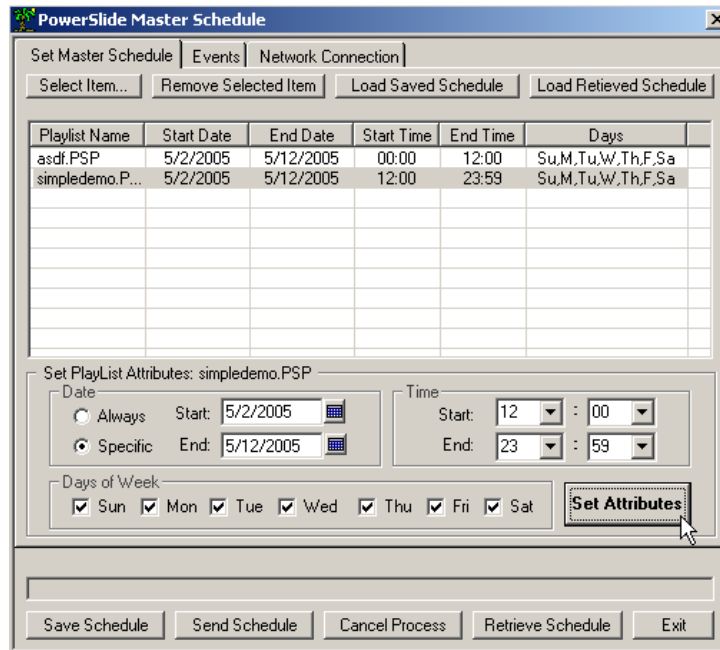


Select the playlist you wish to add from the OPEN dialog window—double-click the playlist name or click OPEN after you’ve selected it.

Next, you will have to set the attributes for the playlist—the days/dates/and times it’s valid...for this manual, a simple playlist that is valid for 10 days and will play from midnight to noon has been entered and set by clicking SET ATTRIBUTES



Now, just so we can see the possibilities, let's add a second playlist to the schedule

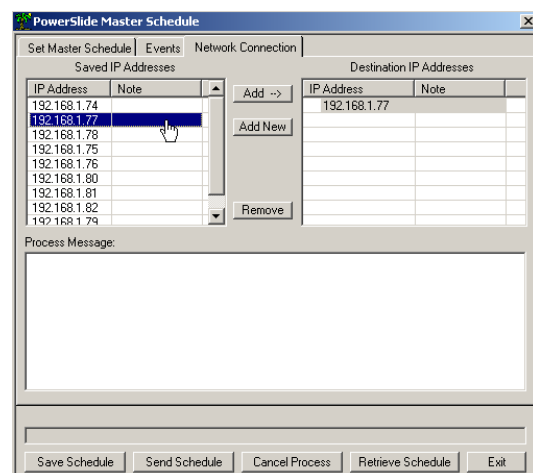


This time we set the attributes as the same 11 day window, but this time set the time to as noon to midnight.

As you've probably already deduced, this schedule, once sent to an MX3-Player, will play "asdf" playlist from midnight to noon, then will switch to the "simpledemo" playlist until midnight rolls back around. Maybe you have different audiences at different times of the day—this scheduling function allows you to target those audiences as you see fit. You can run with one playlist or a hundred—you could program an entire day as though you were a network executive filling timeslots.

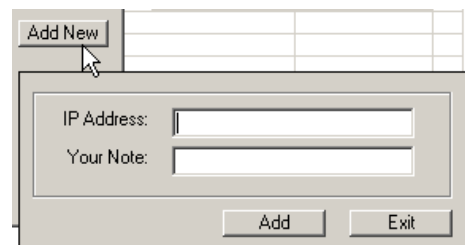
The next step after setting the playlists in the schedule is to transmit them (we are skipping the EVENTS tab for the moment.)

Click the NETWORK CONNECTION tab.

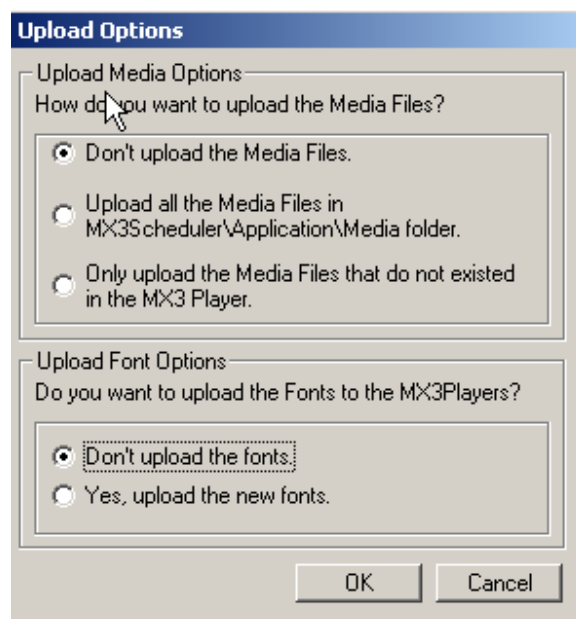


This tab will allow you to transmit your schedule to a remote player—all you need to know is the player's IP address or network name. If you've set things up so, you could even transmit your schedules and content to a player in Juneau while you're relaxing in New Zealand.

You can also transmit the schedule to hundreds of players at once... simply add in multiple IP addresses by clicking ADD NEW. Enter the IP address you're adding and a note if you'd like (the note is only for your convenience to help you remember what display is what!)



Once you've added all your displays, it's time to save the schedule (if you like) and send it. Click the SEND SCHEDULE button to begin transmission.



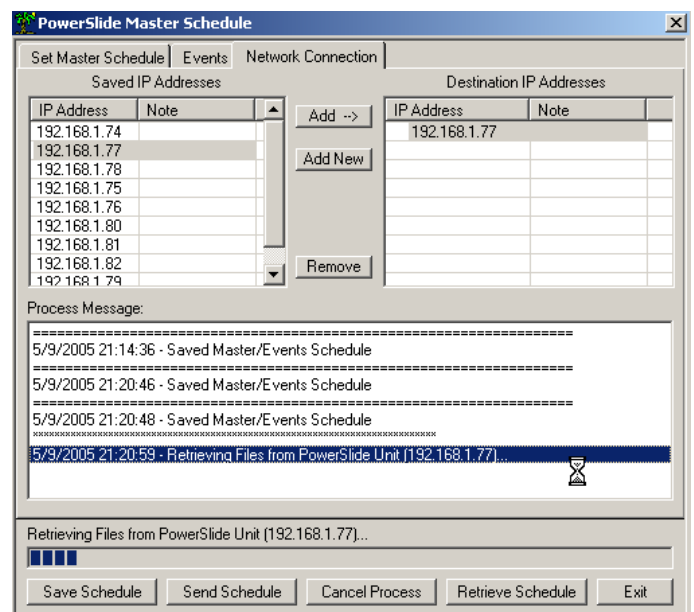
There are several important options to sending a schedule to a remote player. The first is "Don't upload the Media Files." Use this option if you have already transmitted the content to the player and are simply rearranging the playlists and schedules.

The next is “Upload all the Media Files in MX3Scheduler\Application\Media folder. Use this option if you wish to send all of your content to the player regardless if it is in a playlist or schedule.

The final option is referred to as Smart Uploads—this option will send only media files that are not already present on the player...thus potentially saving huge amounts of time while still ensuring all the media is present—use this option as a standard.

The final two selections of sending regard FONTS...unless you are running on a memory short machine, always select “upload new fonts”.

Finally, after you click OK to send, you will get feedback in the sending script window that will inform you of the processes. If sending is a success, ultimately you will receive a green check mark next to each successful IP address, and a red X next to those that failed for some reason.



Once your schedule arrives at the player, you see the green checkmarks, you should see your newly sent playlists running just as you programmed them to run!

EVENTS

The Events tab we skipped earlier while talking about schedules is a very unique function that allows you to control RS-232 controllable devices directly from the Media POD. The first thing you must do to use an event is to create one

Click the EVENT menu item and select EVENT SCHEDULE



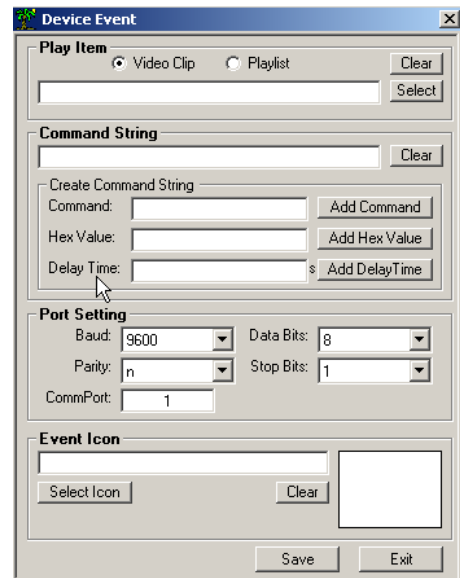
This will open the EVENT CREATOR window.

Here you can create custom RS-232 output. Enter your command string in the COMMAND text box and click ADD COMMAND (for ASCII Commands). Use the HEX VALUE controls to control devices that utilize true hexadecimal commands.

Add delays between commands by typing seconds in DELAY TIME and clicking ADD DELAY TIME.

Set your comm port number and parameters directly in the software.

Choose an icon for your event so you can drop it right into a playlist—or use it in a schedule independently



A completed Event might look like the image on the right.

Here a string has been created that sends out a command “play”, then waits 12 seconds and sends “play” out again. It sends this out Comm Port 1, at 9600 baud, with 8 data bits, 1 stop bit, negative polarity, and no hardware flow control.

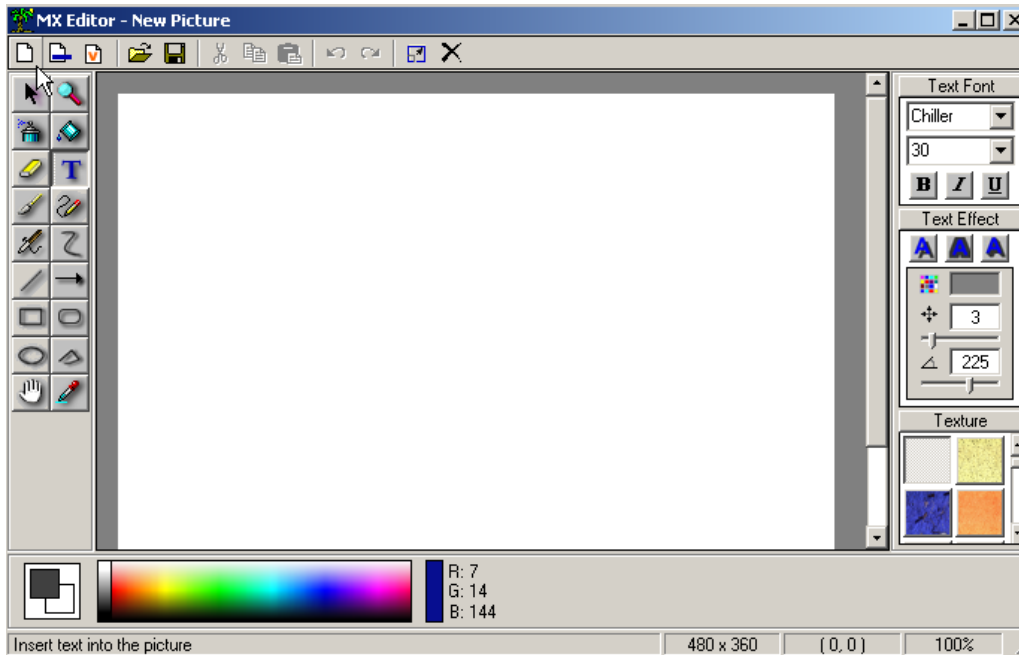
The even has a flag image icon in case we want to drop it into a timeline.



Custom serial events like this are typically used to turn displays on and off, or control lighting effects, or even set input devices on external switchers. The possibilities are virtually limitless.

Character Generator

The Media POD stands apart in many ways...one of those is the inclusion of a simple CG module. Click the NEW PAGE icon in the CG module to begin creating from scratch.



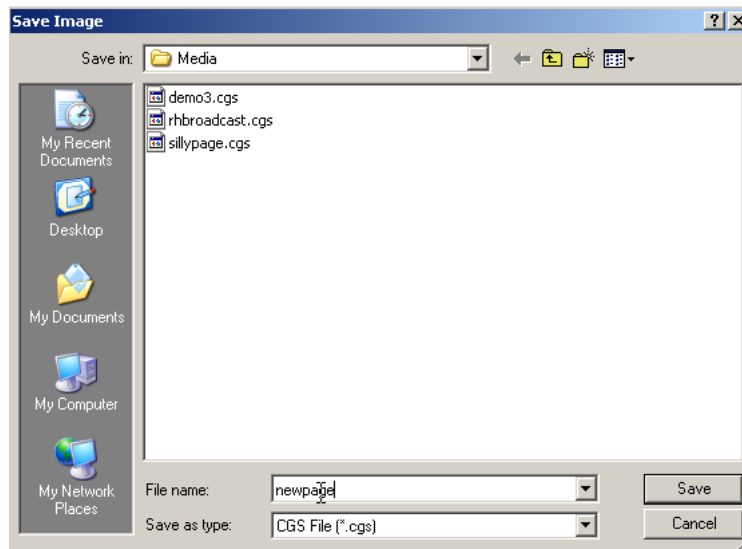
Using the same functions we used with the crawls and variables, you can create content from scratch....add text, draw lines, make boxes, add color background fills, etc....

Or, you can start with an image



To which you can add text or drawing elements, or simply leave it be.

After you have created your page/page, save it by clicking the disk/save image



Note the file format of Media POD created pages is .cgs...these are proprietary formats used only in this application.

APPENDIX A

Valid Video Formats

Output:

Media POD can play back in various formats depending upon the output connector being used.

Composite Out	NTSC or PAL composite base-band video
S-Video Out	NTSC or PAL base-band Y/C video
RGBHV	800 x 600 @ 60Hz (SVGA) 1024 x 768 @ 60Hz (XGA) 1366 x 768 @ 60Hz (WXGA)

Valid Video Clip Resolutions:

Media POD can accept and playback standard definition video clips of various formats.

Category	Approved Values
Compression Format	MPEG1, MPEG2, MPEG4, H.264, WMV, VOB
Maximum Bit Rate	8 Mbps
Recommended Average Bit Rate Maximum	6 Mbps
Minimum Bit Rate	28.8 Kbps
Maximum Clip Resolution	720 x 480 or 852 x 480

Other format possibilities exist but may require additional CODECs to be loaded on the player and your creation computer. Contact Keywest Technology with any problems—this may require that you upload your clips or send your clips via hard media to Keywest Technology for validation.

APPENDIX B

System Configuration

Affected S/N	Hardware Config	Operating System	Initial Software Version	Date Released
POD00001 to POD00024	A	Windows XP Professional SP2	1.0.0	1 May 2006
POD00025 to Current	A	Windows XP Embedded	1.1.5	1 July 2006

Software Change Log

Version **1.1.5**, Issued 1 July 2006: Latest version includes support for interactive touch screens and motion sensors

**KEYWEST TECHNOLOGY
LIMITED WARRANTY**

KEYWEST TECHNOLOGY does hereby declare that the said product be covered under limited warranty for defective materials and workmanship. This warranty is extended to the original purchaser only, for the amount of time indicated below, effective from the original purchase date and subject to the following:

******THIS WARRANTY DOES NOT COVER******

- A. Products that have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, or if repaired or attempted repair performed by anyone other than a service facility authorized to render such service, or if the model or serial number has been altered, tampered with, defaced, or removed

- B. Operational adjustments covered in this manual

WARRANTY PERIOD: 1 Year Parts & Labor

Cut and return the following page to register your product

PRODUCT WARRANTY REGISTRATION

Complete and mail within 10 days of purchase or Register On-Line

Purchaser's Name _____
Title: _____ Phone: _____
Company Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Purchased From: _____
Comments: _____
