

Table of Contents

MX3 2
CONNECTIONS 3
MX3 OPERATION 5
Control Software Installation..... 6
Slides, Playlists, and Schedules 9
SLIDEBOARD (Import Slides) 10
MEDIA ATTRIBUTES 12
DWELL 14
TIMELINES & PLAYLISTS..... 15
PREVIEW WINDOW 16
MENU BAR 17
SCHEDULING 19
APPENDIX A: DVD/CD Option 19

MX3

MX3, or the MediaXtreme 3 MediaPlayer is a compact, yet powerful graphics playback device. The MP is capable of playing slides of various graphic formats (.bmp, .jpg, .tif, .gif, .png, .pcx) as well as Microsoft™ PowerPoint®. The slides can be played on a time/date scheduled basis, as well as a simple continual loop. For a wide range of applications, such as CCTV, CATV, or broadcast video; schools, info channels, kiosk, and more; the MX3 delivers composite, Y/C, and/or RGBHV (Progressive) NTSC video to your system. The unit also outputs stereo audio for a full channel playback capability. The system is controllable via Ethernet utilizing static or dynamic IP addresses, making it a flexible device, accessible throughout the world. This is your high-quality, low-cost, media player in a rock-solid air-cooled frame.



ORDERING INFORMATION

Part #	Options
MX3	Keyboard, Monitor, Mouse, any commercially available software packages

FEATURES

- Composite or Y/C and RGBHV output
- NTSC and up to XGA
- Stand-alone remote control software
- Built-in Ethernet
- Stereo audio output
- Serial Controllable for System Integration and System Control
- Ruggedized and redundant internal cooling with triple-planar air flow.
- Microsoft Windows XP Pro™ based system for security, stability and networkability

APPLICATIONS

- Photo-Classified Channel
- Any television system with need to schedule and playback slides
- Kiosk
- Dormitory, Barracks, Rec Centers, Clubs, TV & Movie Shelters, Tent City, Command Post, Headquarters private or public information server
- Facility Wide Information Systems

*****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 personnel only should attempt any internal modifications, repairs, or service.

CONNECTIONS

MX3 Rear Panel Overview

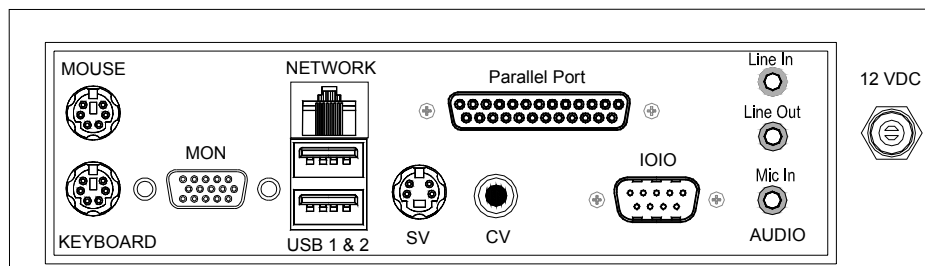


Figure 1

Standard PC Connections (refer to figure 1)(* = required connection for MX3 normal operation—all other connections not marked with ‘*’ are optional)

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)

PARALLEL PORT: Standard printer port

IOIO: 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.

AUDIO MIC IN: Can serve as microphone input or secondary audio source input. Not normally used in an MPEG player application.

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

SV: 4-pin Mini-Din connector outputting standard NTSC 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 not meant for a television, as it is progressive scan component type video (as opposed to composite video on the RCA jack). This normal 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 MX3 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. The unit’s serial number is its network name.

If you must change the IP address in your MX3, contact IT trained personnel.

*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 Slides.

MX3 OPERATION

The MX3 player itself is a fire-and-forget device. Once you have made the appropriate connections (be sure to connect a video connector to something) and powered up the unit, it will begin to play any loaded slide-show.

You’ll also need a network connection to communicate with the device.

Should MX3 be shut down through normal Windows™ means, you’ll need to power the unit with the front panel momentary power switch. To do so, simply press the round, black power switch on the front-right side of the unit and release. You should hear the fans begin to run, and LED indicators on the front panel should illuminate.

Out of the box, MX3 has sample slides and playlists installed and scheduled. These should begin to run after the unit completes it’s boot cycle.

*****NOTE*****

MX3 may take up to 60 seconds to completely boot up, load slides, and begin playing its schedule. Please be patient during this process.

To control the operation of the MX3, follow the directions below and install the MX3 Media Scheduler software on a computer of your choice, with the following pre-requisites:

- Pentium III 200 MHz Processor or greater with MMX support
- 64 MB Ram
- 100 MB HDD Space
- Network connection capable of reaching the MX3 (see IT if necessary)

Control Software Installation

In a computer that meets the basic requirements, insert the CD that came with your MX3, or your demo CD. The application should “auto-run” and show you the Setup “Splash” similar to screen depicted in figure 2.

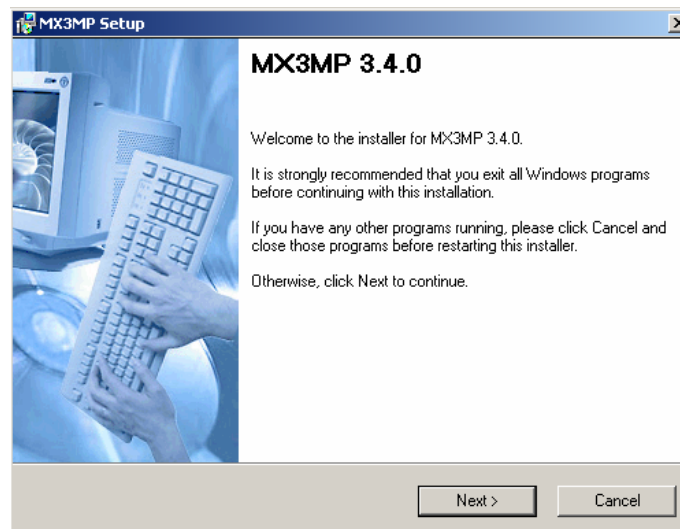


Figure 2

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

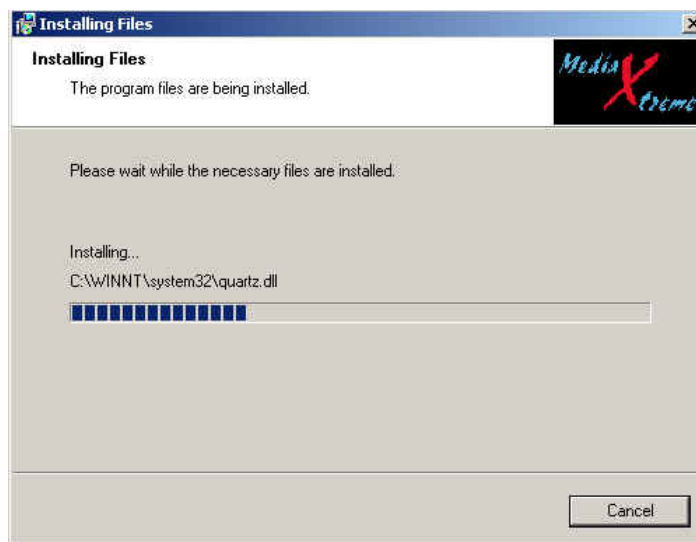


Figure 3

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 MP Scheduler ICON on your desktop (figure 5).



Figure 5

Or, you can access the program from your Windows™ Start Button (figure 6).



Figure 6

Once the software is installed, you are ready to begin making Playlists and Schedules. To open and run the software, click on the icon on your desktop, or access through the START button, or browse to it on your "C" drive.

The first thing you'll see, the first time you run the software, and each time after until you register the software with Keywest Technology, is a reminder screen (figure 8).

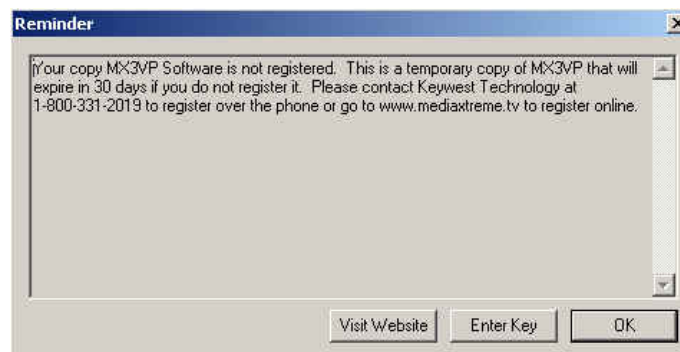


Figure 8

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 until it is registered.

If you click OK, and run unregistered, you will get one more reminder (figure 9).

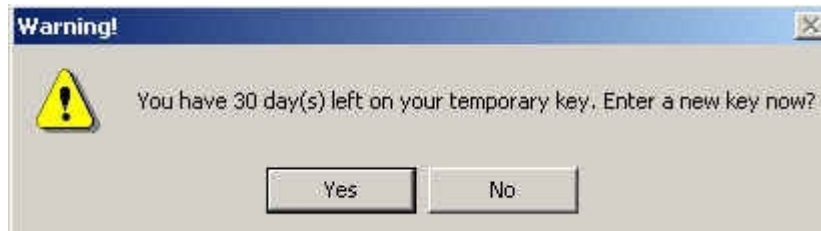
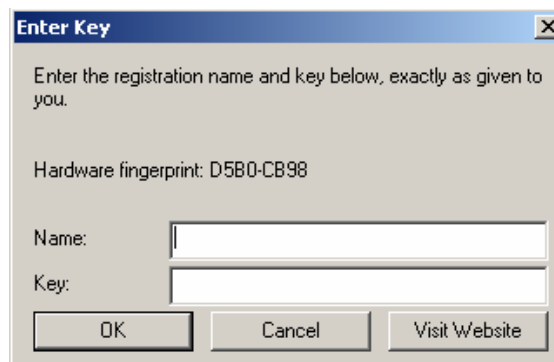


Figure 9

You can click NO and proceed, or you can click YES and enter the security key provided when you register your MX3.

Once you register, you'll never have to do it again unless something changes in the PC operating MX3 Scheduler software--and you are eligible for telephone technical support.

To register, call 800-331-2019 Technical Support . After you are registered, you will receive a security key via email, telephone, or fax. Enter that Key into the Security Key window (which appears if you click YES, or ENTER)

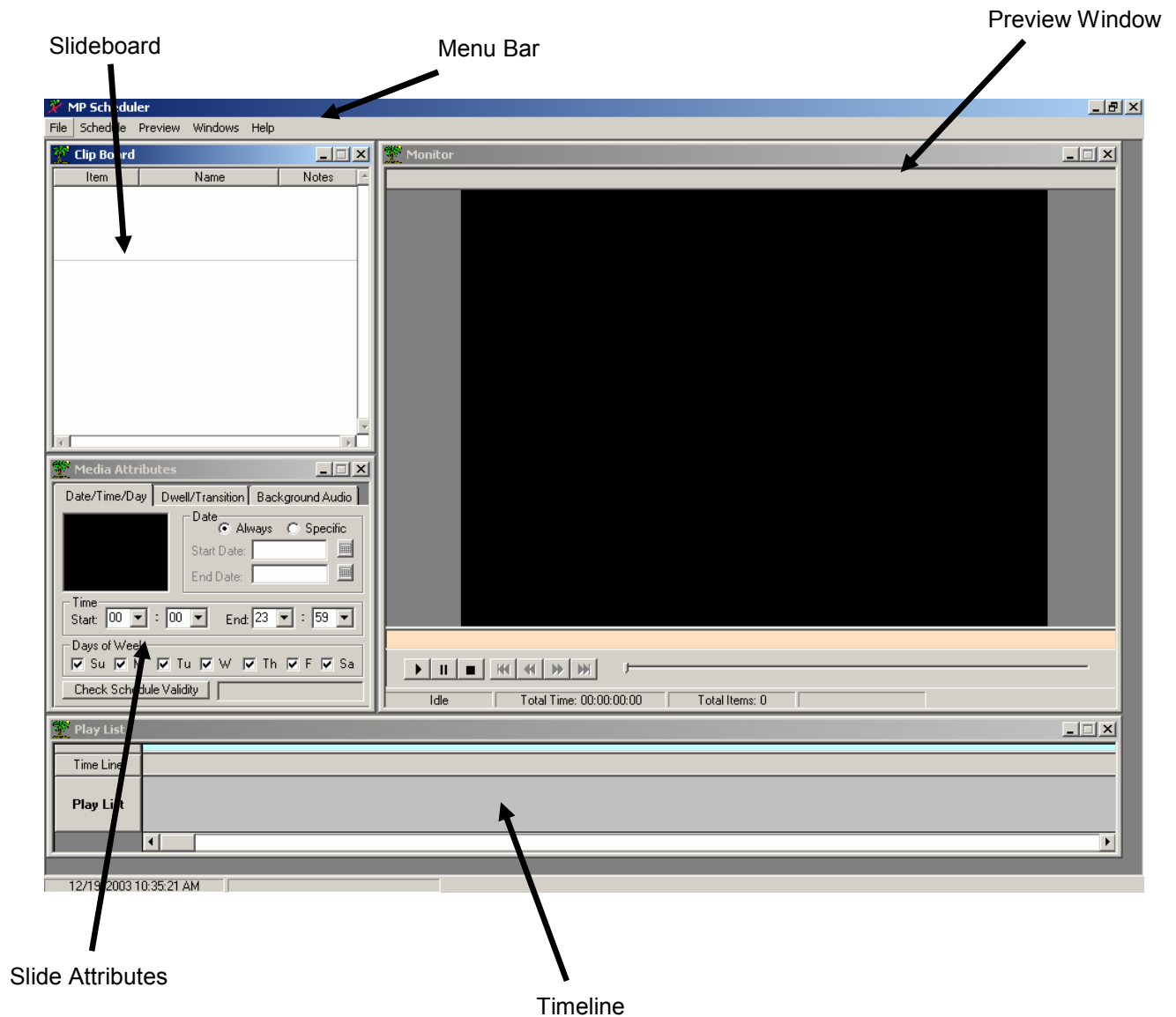


Once you've settled or bypassed the security key issues, you are ready to start making waves!

Slides, Playlists, and Schedules

The main application will open:

Full Screen Application



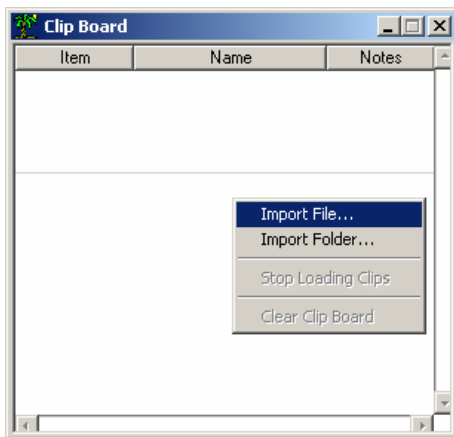
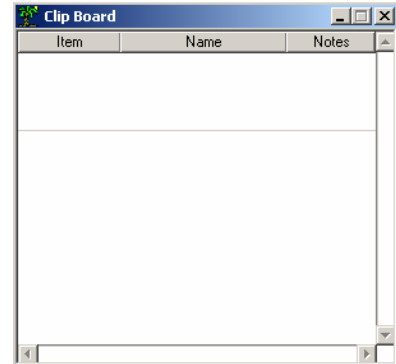
The five “arrowed” sections are all there is to it! We will now cover each section so you can get to playing movies!

SLIDEBOARD (Import Slides)

The Slideboard will come up empty when you start the application. It will be filled with slides if you so choose.

The Slideboard is the location slides are stored for your use in time lines.

You can import your slides to the slideboard 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 slides or images.

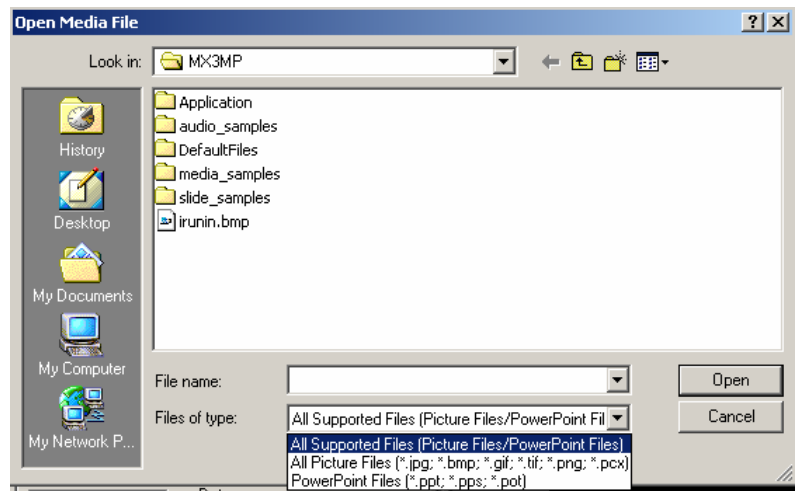
Right Click anywhere within the Slideboard and a new menu window should appear. You will have three options to begin with: Import File and Import Folder

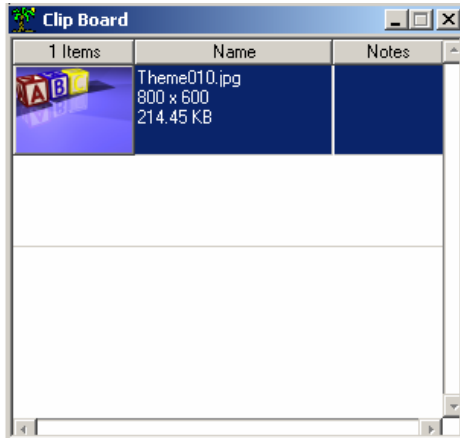
Let's use Import File--Click on it....

The Open Media File file manager window will appear.

On the drop down box, you can see the different formats of slides the MX3 supports.

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

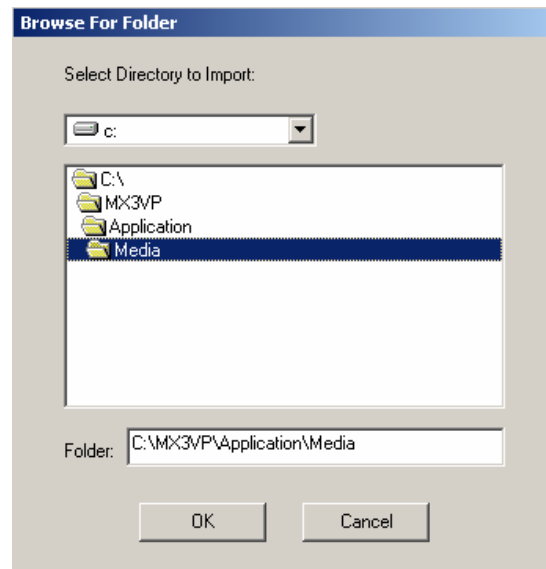




After importing your first file/slide, the sidebar will appear with your slide's "icon" (a thumbnail size screenshot of the slides third second of video), and a text box that displays the slide's name, extension, run time, and actual creation size.

The listed slide is now available for use in a time line. Soon, you'll be dragging and dropping your way across the video world!

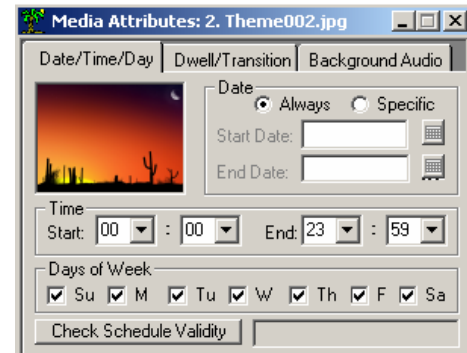
The next option though, when right-clicking in the clip board window, is Import Folder. Import Folder will import all the video slides contained in the selected folder.



MEDIA ATTRIBUTES

The media attributes window gives you a location to make schedule specific settings for your slides.

A schedule can consist of many Playlists. Each Playlist will have it's 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 slides. The slides can also have date, day, and time specific settings

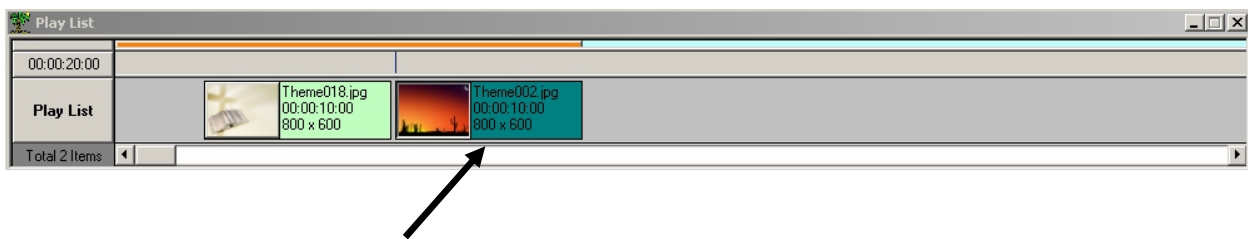


Imagine you have made two Playlists--one for the weekend, and one for weekdays. Perhaps you have a slide that you want to only run during the week, and only from 7:00 PM to Midnight. You would include that slide in your weekdays Playlist, and then use this Attribute Window to set the slide Valid only from 7:00 PM to Midnight. When your schedule plays, if the time is outside the 7 – Midnight setting, the slide 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.

Alright, back to the features of the Attribute Window.

To start, I must jump ahead one step. In order to get a slide to appear in the attributes window (make it the current working slide), it will have to already be included in the timeline (see TIMELINE section for further details on adding slides to the timeline).

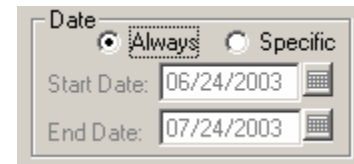
Once the slide is in the Timeline, you can activate it as the current working slide by clicking on its attached information text box.



Notice the arrow is pointing to a slide's information box that is highlighted. Highlight, or select a slide as active by clicking on its information text box.

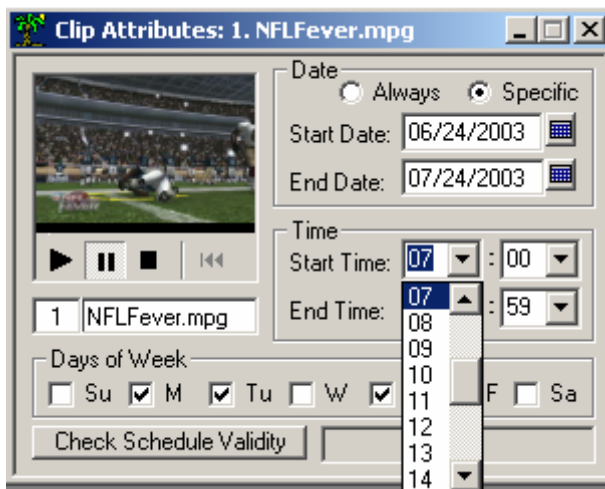
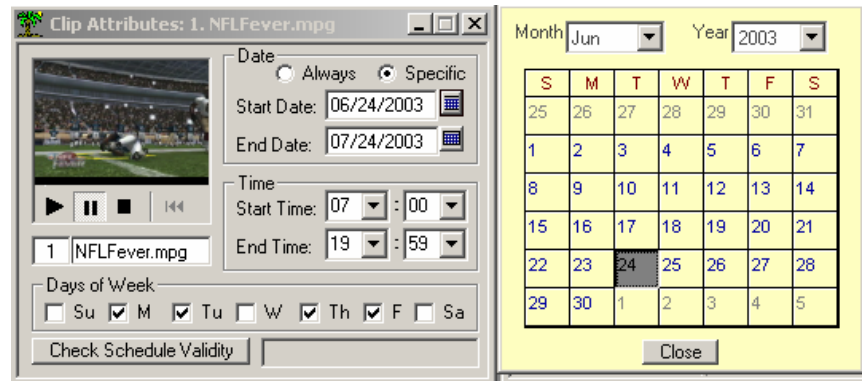
Once you have selected a slide in this manner, you will see that it loads in the attributes window.

The three main categories of attributes are Date, Day and Time. To make a slide active and valid on all dates (this doesn't affect TIME or DAYS), simply click the ALWAYS radio button as in figure 20.



If you want to make it date specific, click the SPECIFIC radio button shown in figure 20.

Once you've made the slide "SPECIFIC" you will now have to set the date(s) on which the slide 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 slide to play are checked and you do need to make sure the valid times are selected.

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

The MX3 does use military time to keep AM and PM confusion out of the mix.

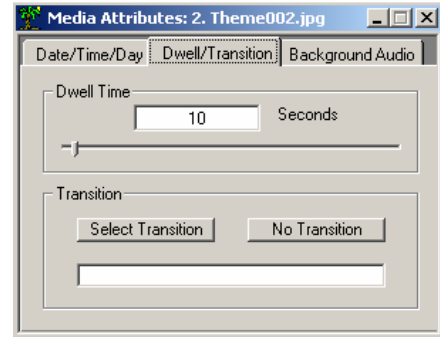
You can use the CHECK SCHEDULE VALIDITY "button" to ensure the attribute selections are indeed valid. An invalid condition, for example, would be something like choosing a slide to play on July 4, 2006, but having only Monday and Friday checked. Since July 4, 2006 is a Tuesday, the SCHEDULE VALIDITY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

DWELL

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 slide stays on the screen during playback.

You can set the slide to “dwell” from 1 to 300 seconds by typing in the text box, or by clicking on and “sliding” the slider bar.

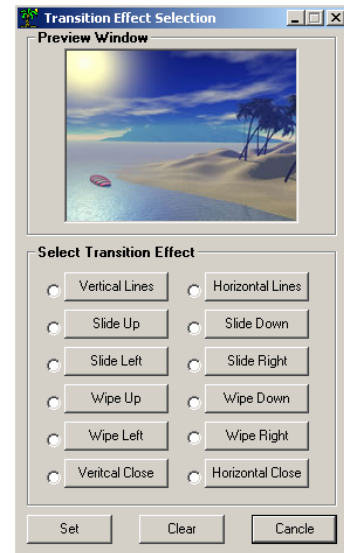
The Dwell window also has provisions for setting the slide transition. The transition is the “style” the slide uses to enter the screen during playback. Click SELECT TRANSITION to select the style.



You will see a new window, the TRANSITION window.

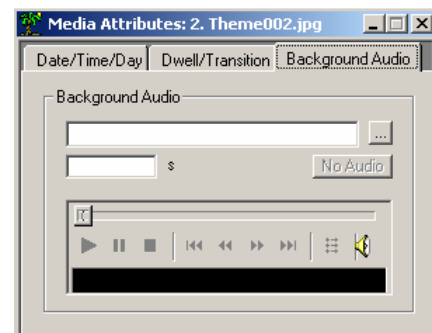
To select a transition, click in the “radio” button to the left of the desired transition effect.

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



The Attributes window also contains a tab for adding audio to a slide or set of slides.

Click on the Audio Tab.



TIMELINES & PLAYLISTS

The TIMELINE is where you build your Playlists. A Playlist is nothing more than an order of movie slides. The Timeline is “filled” by dragging and dropping slides from the Slideboard.

Drag and Drop them by using your mouse and left clicking on the image thumbnail in the Slideboard. (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 slide by its thumbnail from the Slideboard down to the Timeline, and “Drop” it on any open space on the Timeline by releasing your left mouse button.

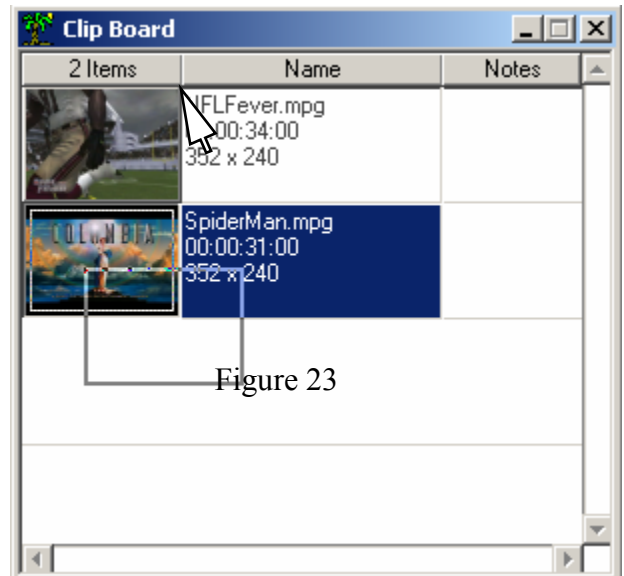


Figure 23

When you drag a slide to the Timeline, it will “rest” on any open space you drop it on.

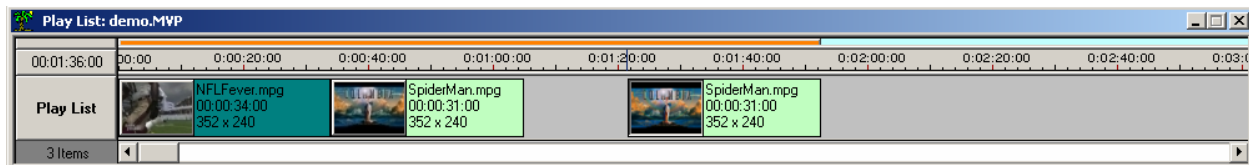
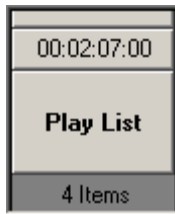


Figure 24

Each Timeline is a PLAYLIST. When you complete a timeline, and save it, it becomes a PLAYLIST that you can include in a schedule.

It is important to remember that Slides alone can’t be scheduled to play. They must be part of a PLAYLIST to be activated by a schedule.

Each timeline is no more than 54 minutes long. This doesn’t limit your playback capability, though, because you can place as many Playlists as you like in a schedule.



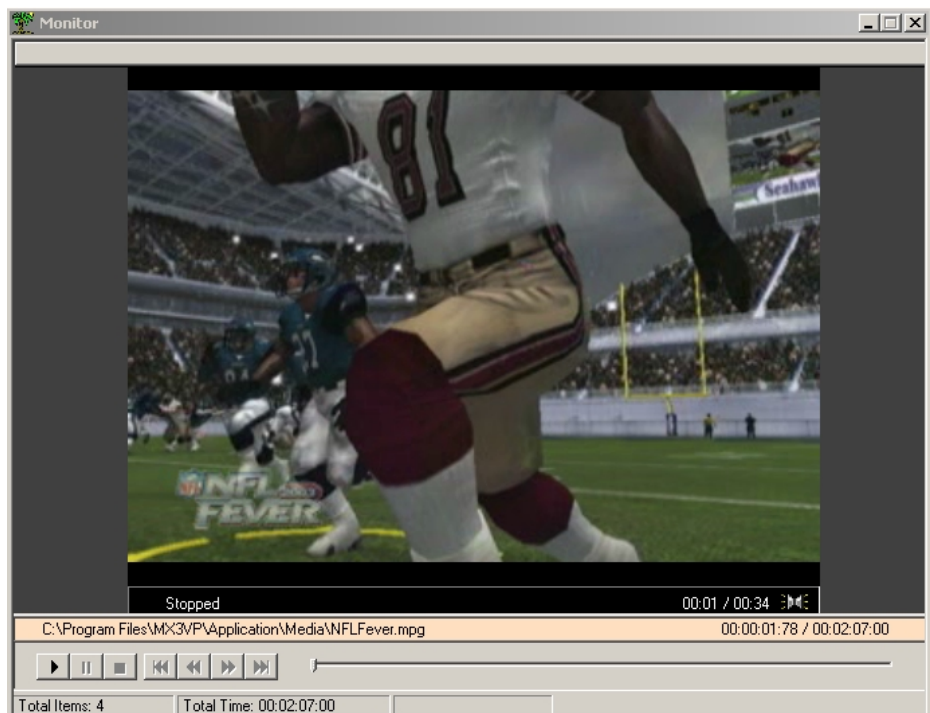
The Playlist window will give visual indications of how many slides are in a Playlist; the duration of the Playlist, and relative size of the slide within the Playlist. It is a chronological list.

Figure 25

Note: A slide of very short duration, as in a second or two, will show up as a thin line on the timeline—slide icon size is relative to its duration

PREVIEW WINDOW

The Preview window is used to view a Playlist



Utilize the DVD-Style player buttons below the preview window to play and cue the Playlist.

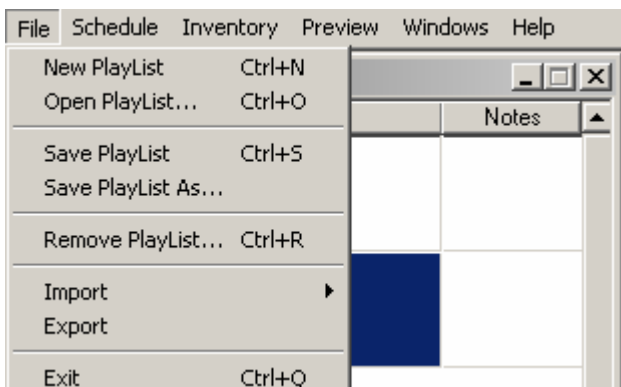
When you select play, you will notice that the Timeline automatically compacts the schedule...the MX3 is designed to avoid “no-video” conditions.

Note: Timeline modifications are not allowed while a preview is playing. You’ll either have to wait for the preview to cease, or stop it manually to make Playlist modifications.

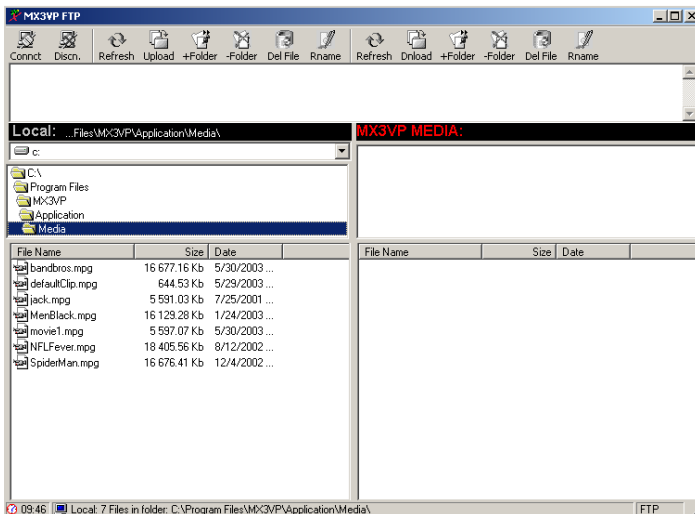
MENU BAR

The menu bar near the top of the application is the same as any other menu bar you’ll find in a Windows© application. The function is click on an item and select a task or subtask from the drop-down list that appears.

Under FILE you will find options as shown on the right. These should be self-explanatory. New Playlist creates a new Playlist; Open, will call up a previously saved Playlist; Save and Save As function like all other Save and Save As functions that you are using; Remove Playlist will remove the Playlist from memory.



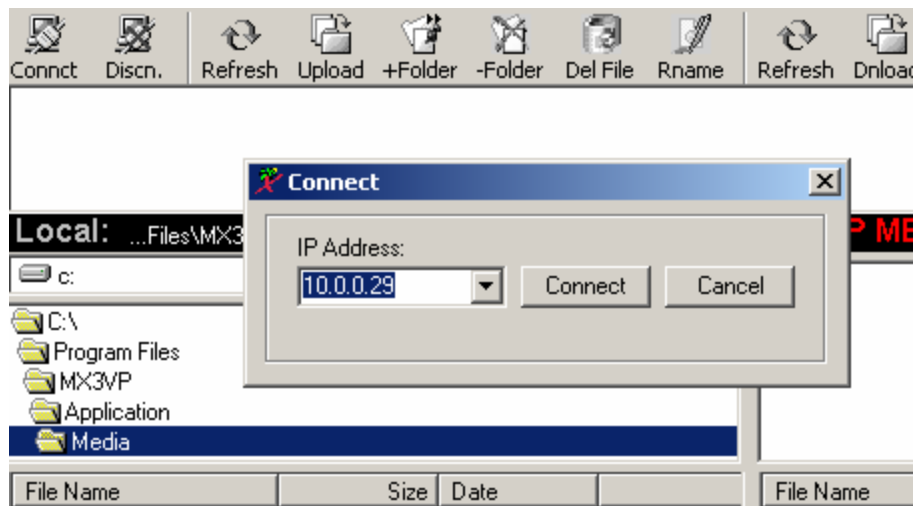
Import and Export do provide specific functions. Import will allow you to import a slide to the Slideboard (just as right-click did, as described above. Export is more complicated.



Export opens another window—a File Transfer Protocol (FTP) window. This function allows you to send your slides to the remote unit. For instance, you have encoded a new MPEG1 slide on your creation station, and you are in sunny Florida--you need this new slide to play at a baseball stadium, during the playoffs, somewhere in the Mid-West. You already know how to schedule that to happen, but how do you get the slide from point A to point B?

FTP is the most efficient means to transfer files over the internet, especially large files like video slides. When you open the export window, you will see the following interface shown above.

Click on CONNECT in the upper left corner, and enter the IP in the CONNECT dialog box.



This should be the IP address you set in the MP player—the same address you entered when first connecting the software to download the Playlist when starting the program.

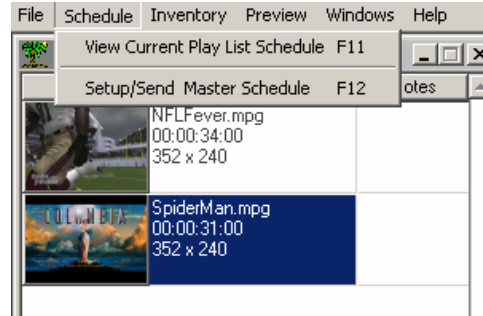
You'll see the block on the right side labeled MX3MP MEDIA in red, fill in with browser information from the player. You can now highlight a file on the left, from your computer, and click the UPLOAD button. The FTP client will upload your file from your computer to your player.

You can include slides that you've sent to the player in your schedules, without having to send the slide each time you send a schedule. This will save you large amounts of time. Use FTP to transfer files as much as you can.

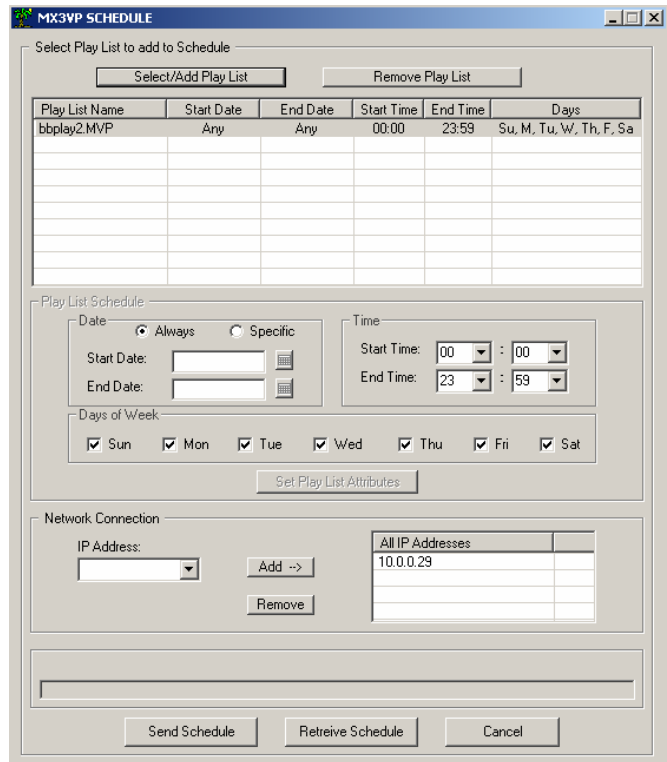
SCHEDULING

Scheduling is what separates the MX3 from just a slide player like Windows Media Player© or QuickTime©.

Click on the SCHEDULE menu item on the menu bar. Then select SETUP/SEND MASTER SCHEDULE or press F12 hot key.

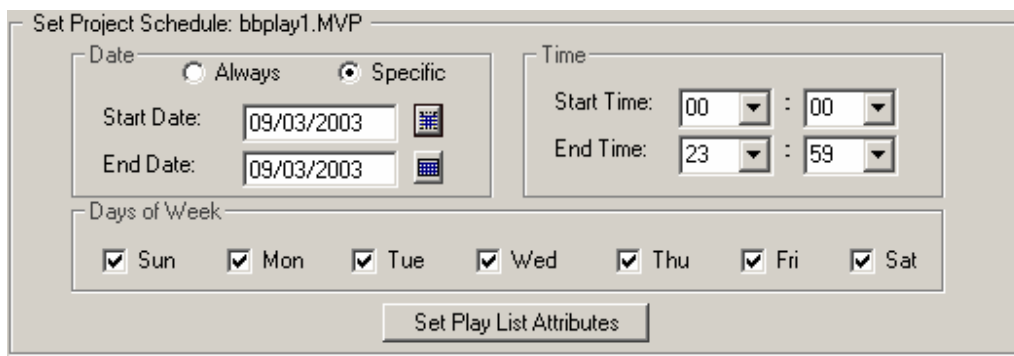


This will open the scheduler.

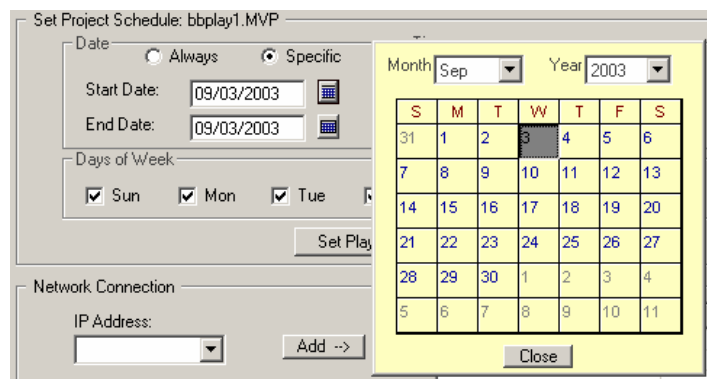


To schedule a Playlist, click the SELECT/ADD PLAYLIST button at the top. Select your Playlist from the opened file browser box. Note Playlists have the extension “MMP”. You can add as many Playlists as you like, and you can repeat Playlists.

After you have added the Playlists, you’ll need to set the attributes/validity for each Playlist in the schedule.



Just as a slide can have attributes, so must a Playlist. You can select a Playlist as always valid, meaning anytime it appears in a schedule, it will play. Or you can set specific date ranges, days of the week and/or times for a Playlist to work within a schedule.



You can specify the valid date range by clicking on SPECIFIC and opening the calendar view.

Use the attributes section to set start/stop times and specific days as well. After you have your attributes set, you MUST click SET PLAYLIST ATTRIBUTES to apply them.

Once you have all of your Playlists selected and attributes set, it's time to send the schedule to the player.

All IP Addresses	
10.0.0.29	

Select the IP address of the Player you wish to send the schedule, and click ADD. If you select multiple IP's, your schedule will be sent to multiple units.

To remove a player from the list, simply remove it from the ALL IP ADDRESSES window.

Now it's time to put the system to work. Collect some slides, send them to your player(s), schedule them and let it fly!

Remember to keep track of how much storage space you've used in the player. You can view this statistic with the FTP client. A rule of thumb to estimate file size is the formula:

File Size (in megabytes) = MPEG data rate (in megabytes per second) x file length (in seconds)/8 (bits per byte)

Ex... 30 second slide with data rate of 2.5Mb/s would be $(2.5 \times 30)/8 = 9.375\text{MB}$

Same slide encoded at 5.0 would be $(5 \times 30)/8 = 18.75 \text{ MB}$

Now, send in your warranty card and register your MP with Keywest Technology!

Thank You!

Appendix A: CD/DVD Option

The CD/DVD Drive option for the MX product line provides an alternate method to load content, playlists, and schedules on the player machines.

The user can create a playlist, schedule, and gather content on their remote scheduler PC, burn those files to a CD or DVD and manually transport to the players—a good alternative if no network connection is available.

To create a scheduler CD or DVD, the user will need some sort of CD or DVD authoring (burning) software. For our examples here, screenshots of Nero Burning ROM© are used, but by no means is that the only software CD/DVD authoring software capable of creating usable scheduler CD/DVDs.

The CD/DVD used to transport data to the player can contain content (media), or playlists, or schedules, or any combination of those three types. If the intent is to transport a schedule that will immediately play after extraction, all three file types will need to be in the root of the CD/DVD.

Step 1:

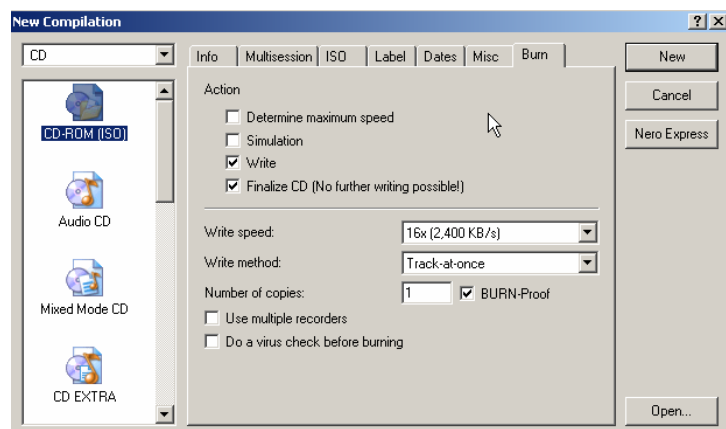
Create a Playlist and Schedule as described previously in this manual; ensure the Playlist and Schedule are saved.

Step 2:

Close your MX Scheduler software

Step 3:

Open the CD/DVD Authoring software and create a new project...ensure the new project finalizes the CD/DVD (no further recording possible).



Step 4:

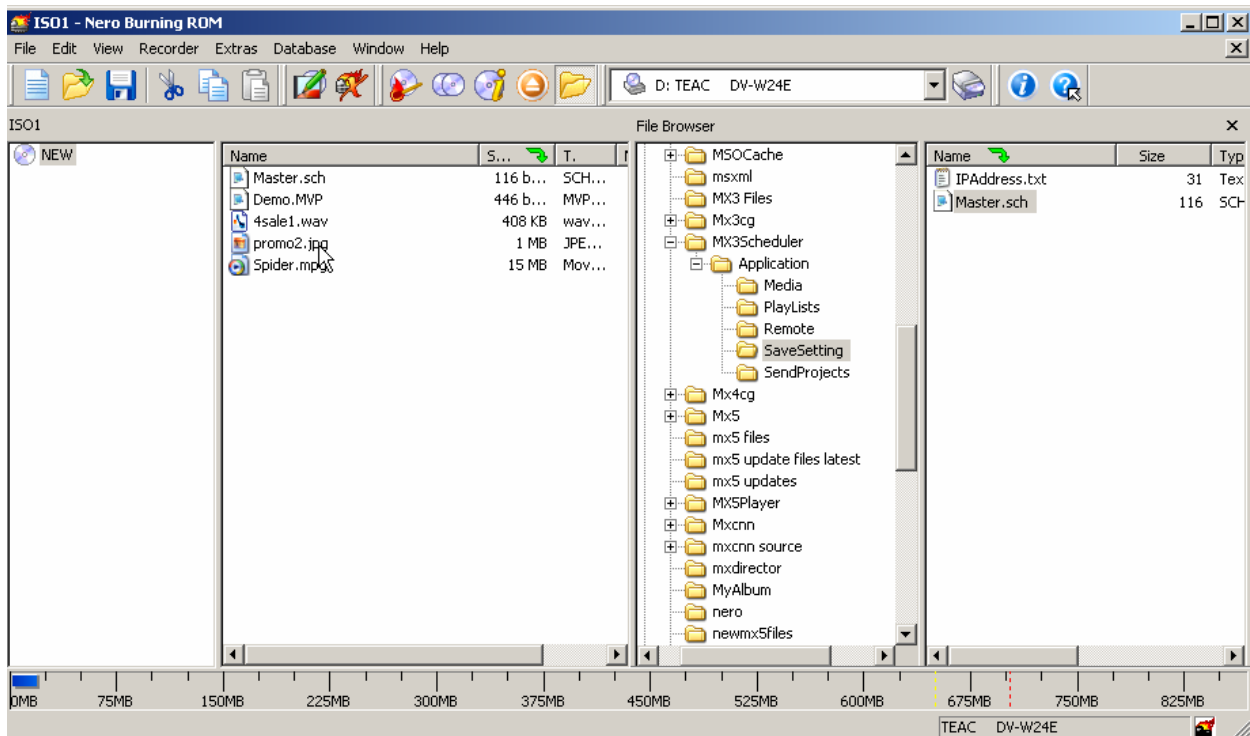
Select the files to be burned to disc and transported to the MX Player--this will be media/content such as bmp, jpg, tga, tiff, gif, pcx, png, mpg, mpeg, vob, avi, swf, ppt, etc...), a playlist (this file will have a “.mvp” extension), and a master schedule (master.sch)—these files are usually located at the following paths:

Playlists: C:\MX3Scheduler\Application\PlayLists

Schedules: C:\MX3Scheduler\Application\SaveSetting

Media: C:\MX3Scheduler\Application\Media

Move your Media, Playlist, and Schedule files into the CD/DVD compilation and burn the disk.



Remember to place the files in the root of the new CD/DVD—no folders and no sub-folders.

Step 5:

Take the burned CD/DVD to the player; ensure the player is running and the MX software is playing pages/media on a current schedule. ****If the MX Player software is not running, auto-extract will not occur****.

Insert the CD/DVD—the MX will extract and distribute files automatically. The Player will eject the CD/DVD when extraction is complete, and will begin playing the new schedule (if dates and times are currently valid).

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: 2 Years Parts & Labor

Cut and return the following page to register your product.

PRODUCT WARRANTY REGISTRATION

Complete and mail within 10 days of purchase

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

PURCHASE DATE: **MO.** **YR.**

MODEL #	SERIAL #	PARTS	LABOR
		2 YRS.	2 YRS.

