



yesco®

PRISMVIEW
Operation Manual



PRISMVIEW

TABLE OF CONTENTS

Introduction.....	5
Chapter 1 Message.....	6
Getting Started.....	6
Creating a New Message.....	7
Zoom Option.....	7
Entering Text.....	8
Justifying Text.....	9
Selecting Current Font.....	10
Adding Frames.....	10
Color Background.....	11
On/Off Mode, Hold Time.....	11
Frame Navigation.....	14
Deleting, Copying and Inserting Frames.....	15
Inserting a Bitmap.....	16
Simulate Message.....	16
Timing a Message.....	16
Saving a Message.....	17
Editing an Existing Message.....	18
Deleting Messages.....	18
Copying Messages.....	18
Simulating a Message.....	19
Exit.....	19
Chapter 2 Scheduling Messages.....	20
Play List.....	20
Play List Schemes.....	21
Operating Hours.....	21
Schedule Messages.....	22
Multiple Schedules.....	25
Schedule Cards.....	25
Message List.....	26
Setting Play Dates and Times.....	27
Card Navigation and Options.....	28
Testing a Schedule.....	29
Saving a Schedule.....	29

Chapter 3 Displaying Messages on the Sign.....	30
Updating the Sign.....	30
Deleting Messages from the Host and Remote.....	31
Instant Play.....	31
Viewing the Sign.....	33
Pwinoutput.....	34
Chapter 4 Message Options and Graphic Mode.....	35
Bulb Mode.....	35
Marquees Mode.....	35
Static Top Line.....	35
Graphics Mode.....	36
Draw.....	36
Line Draw.....	37
Circle Draw.....	37
Square.....	37
Wintext.....	38
Text.....	39
Flood.....	39
Move.....	39
Merge Mode.....	40
Wrap Around.....	40
Copy.....	40
Cut.....	41
Paste.....	41
Invert.....	41
Eyedropper.....	41
Convert Color.....	42
Copy Frames.....	43
Merge Frames.....	43
Merge Variations.....	44
Merging a Selected Object.....	44
Shade Image.....	44
Flipping and Image in a Frame.....	46
Clearing Graphic Images from the Frame.....	46
Kill Levels.....	46
Chapter 5 Animation Ideas and Hints.....	47
Suggestions From Those with Experience.....	47
Shading and Highlights.....	47
Squashing and Stretching.....	48
Background.....	51
Endless Loops.....	52
Gradated Background.....	52
Moving Landscapes.....	53
Animated On/Off Modes.....	53
Dissolving Text.....	54
Traveling.....	54
Character Animation.....	54
Sources for Ideas.....	55

Animation Programs.....	55
Chapter 6 Time and Temperature	57
Creating Time and Temperature Message.....	57
Setting Time on the Sign.....	58
Offsetting Temperature on the Sign.....	58
Chapter 7 Importing.....	59
Importing a Graphic or FLI/FLC into a Message.....	59
Importing a Message.....	60
Importing a Message into an Existing Message.....	60
Importing a Message into a New Message.....	60
Importing and Editing templates.....	61
Importing an AVI File.....	63
Gamma Settings.....	64
Exporting a Message to an AVI.....	65
Chapter 8 Video.....	66
Chapter 9 Auditing.....	67
Appendix.....	68
Appendix A Fonts.....	68
Appendix B Graphics.....	74



PRISMVIEW

Welcome to PrismView. PrismView software is the brains behind your display, providing the ability to create and edit text and animated messages, schedule messages with simplicity or chronological precision, and also manage the physical operation of the display. Having all of the necessary functions to manage the display in one software package makes operation of the display easy and as concise as possible. In addition, PrismView's compatibility with other graphic and animation files allows you the flexibility to use other familiar software for your production needs.

When working with PrismView, two computers are generally used. The Host is the computer used to create and edit messages and manage the scheduling of messages. The other computer is the Remote computer, which is physically connected to and controlling the display. When the editing or creation of messages or schedules is completed, the Host computer contacts the Remote computer and transfers any new or edited information to the Remote computer. This process is called an update. Once the update is finished, the sign will begin operating with the changes and terminate the current connection.

There is more than one configuration of host and remote set up. One is a Host and Remote that are connected with modems via a phone line. RF modems can also be used if there is a direct line of sight from the Host to the Remote. Another is with network cards and fiber cable running between the Host and the Remote. A last option is a dedicated Host that also has the Remote software loaded. In this setup, the Host needs to be physically close to the sign, since it is hooked to the sign via a wire or fiber cable.

Introduction

This manual gives step-by-step instruction on using PrismView software. With each function, there are generally mouse and keyboard commands. You will be instructed to click on a button or option with the mouse. You will see the function listed in bold caps along with an icon representing the button or menu. The keyboard commands will be listed in bold. These commands generally use the Control key along with a letter. Just hold down the Control key and then press the letter at the same time. There is also a third way to perform a function. This is the pull down menus that are found at the top of the screen. These will be listed in bold with the keystrokes underlined. Use the option that is most comfortable for you. You may even find that you will use a combination of both the mouse and keyboard for many of the functions. At times, you will see a Note on a function. This is a helpful hint on how a function works or why something should be done a certain way.

The PrismView HELP file is also available. It offers detailed instructions and tips. It can be found at the top of the menu bar on the Main Menu and the Edit Menu.

Many of the PrismView buttons have information notes about their particular functions. If a note is available, it can be access by holding the mouse pointer over the button.

Chapter 1 Messages

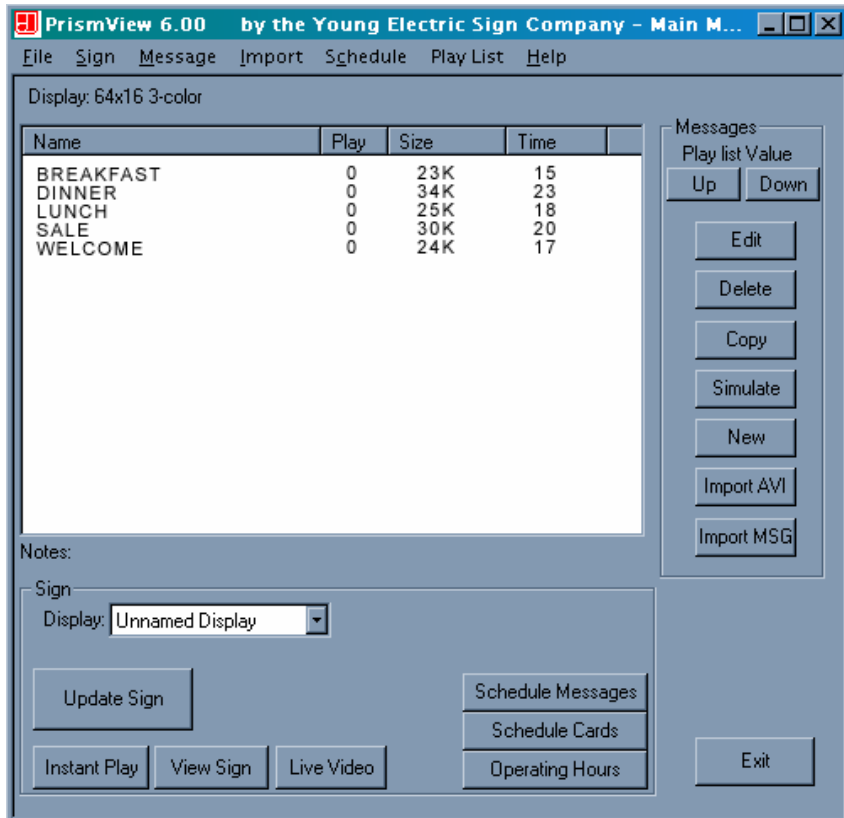
A message is a series of frames containing text and/or graphics that can be either stationary or animated. It is best to create individual messages for each event to be displayed on the sign.

Getting Started

1. When turning on the computer for the first time, the Windows screen will appear. Locate the PrismView Icon and double click on it with the left mouse key. This will start the program.

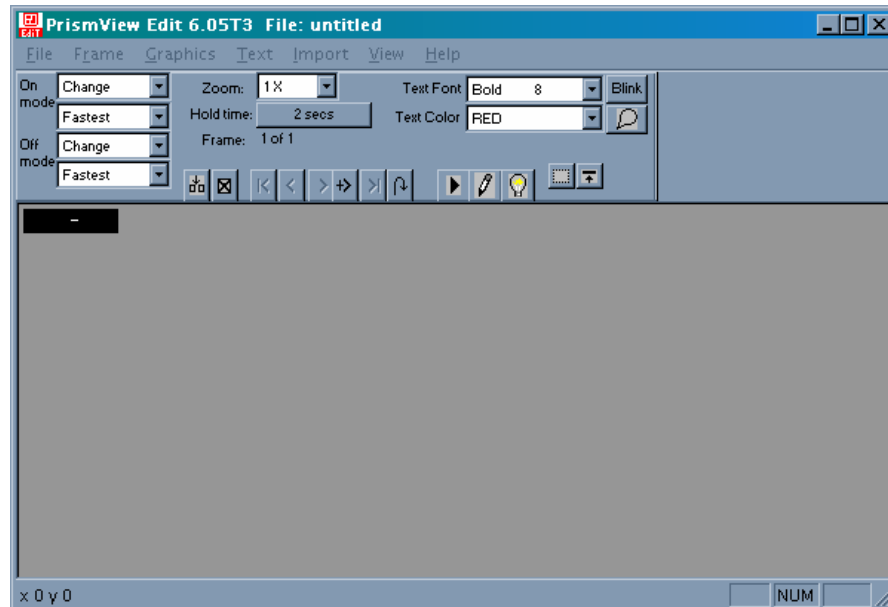


2. The Prism View Main Menu is the central access point for all the operations necessary to create and edit messages, generate schedules and communicate with the sign. The buttons on the Main Menu gives the user quick access to the most commonly used function. Both the commonly used and less commonly used functions can be access from the drop down menus at the top of the Prism View Main Menu screen.



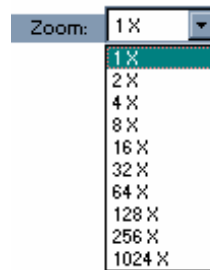
Creating a New Message

1. To make a new message, click on the **NEW** button or select **Message** and **New Message** or **Ctrl N**.
2. This will bring up the Main Edit Menu.



Zoom Option

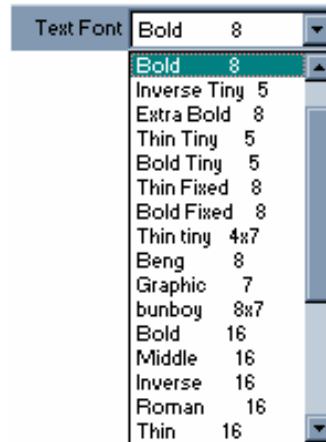
- A. The frame area (working area) can be sized larger or smaller. To change the size, select the **Zoom** drop down menu. A selection of different sizes will appear.



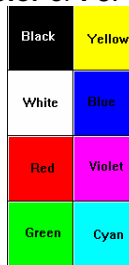
- B. Select the appropriate size needed. The size will differ according to whether the Bulb or Smooth mode has been selected.

Entering Text

- A. There are two ways to enter text in a message. The first is the automatic text mode and the second is Text from the Graphics Menu. The Text from the Graphics Mode is discussed in chapter 4. Before typing, the font style and size need to be selected. Click on the **TEXT FONT** pull down menu or select **T**ext and **S**et **F**ont and **C**olor or **F8**. A listing of all the fonts and sizes available in the text mode are shown to choose from. Move the highlight bar down the font list by using the mouse and clicking on the up and down arrows next to the fonts. The number next to each font style denotes the character height in pixels/bulbs. Bold, thin, italic refer to the style or thickness of the font.



- B. Font colors can be selected by clicking on the **TEXT COLOR** pull down menu, or select the **T**ext option and the **S**et **F**ont and **C**olor or **F8**. Select a font color using the mouse.



- C. The default mode is static text. To use blinking text, depress the Blink Button located next to the Text Font Selection or select **T**ext and **B**linking **T**ext or **Ctrl K**. All text typed with the Blink button depressed will flash. To turn this option off, click on the Blink button and return it to its raised position.



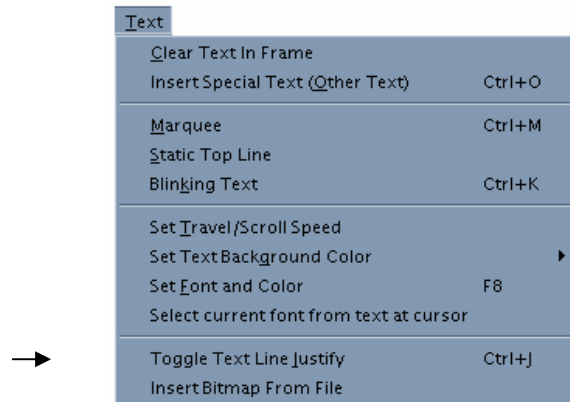
Note: Font size, color and blinking options need to be selected before entering text. Once text has been entered, it cannot be changed. If changes need to be made, the text will have to be backspaced or cleared from the frame. Make the font and color changes, then re-type the text.

- D. Type in the first line of text as “Welcome.” The text will automatically be centered in the frame.



Justifying Text

1. To justify a line of text to the left, select the **T**ext option and **Toggle Text Line Justify** or **CTRL J**.
2. To justify a line of text to the right, select the **T**ext option, then **Toggle Text Line Justify** or **CTRL J**. The line will automatically justify to the left first, repeat the steps again and it will right justify. A third time will justify the text back in the center.

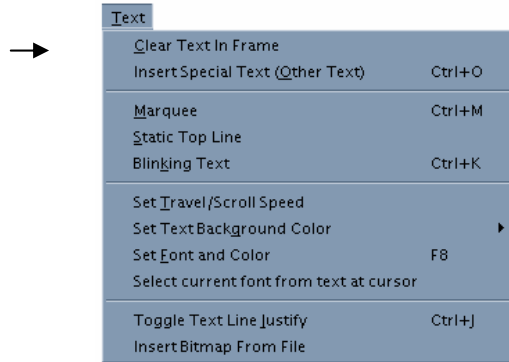


3. Once the first line of text has been entered, press **ENTER** or the down arrow key and the cursor will go to the next line. Now type “to the” or “to” as the second line of text. The size of the sign and the size of the font will determine the amount of text that can be entered in the frame.



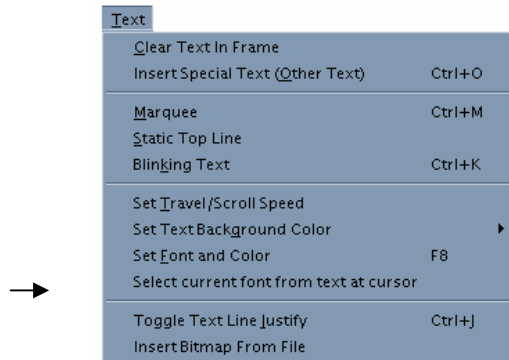
Note: If any of the text runs off the right side or the bottom of the visible frame, the words will scroll or travel across the frame from right to left or bottom to top depending on which direction the text runs off the frame. If this is not the desired effect, make sure all text fits within the visible area of the frame. If there is more text than will fit on one frame, a second frame will need to be created for the remaining text, or a smaller text size will need to be chosen.

4. If any text information needs to be cleared from the frame, delete the unwanted information by using the backspace key. To clear all the text in the frame, select **Text** and **Clear Text in Frame**.



Selecting Current Font

1. If you have changed fonts somewhere in the message and need to use a font that was previously used, just place the cursor in the line of text that you need and select **Text** and **Select Current Font From Text at Cursor**.



Adding a New Frame

- A. To add a new frame, click on the **ADD A FRAME** button or the **F**rame option then **Frame Forward With Add** or **Ctrl PgDn**. This places a new frame after the current frame. In the center of the Options Menu is an area that tells you what the current frame is and how many frames are in the message. It should now read Frame 2 of 2.



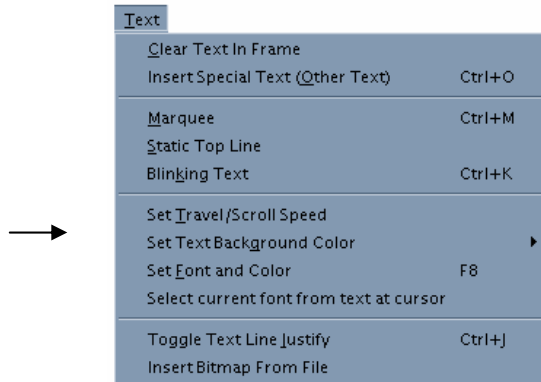
- B. Type the name of the business or facility on this frame.



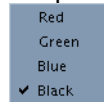
- C. If there is more information than will fit on two frames, add another frame and continue typing. The font style, size and color can be changed if desired.

Color Background

- A. To add color to the background, select **T**ext and then **S**et **B**ackground **C**olor.



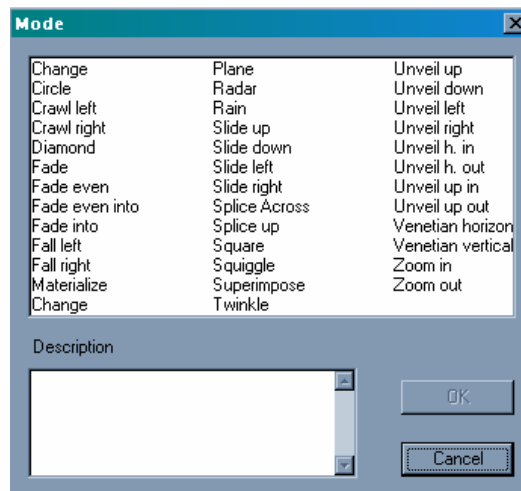
- B. A second menu will ask what color the background should be. If the sign is black and white, there will not be background color options. Chose a color for the background.



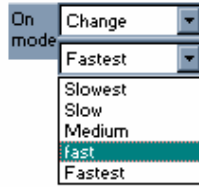
Note: Select a color that does not clash with the text and will allow the text to stand out. The text does not stand out well if the colors of the background and the text are similar color.

On Off Modes, Hold Time

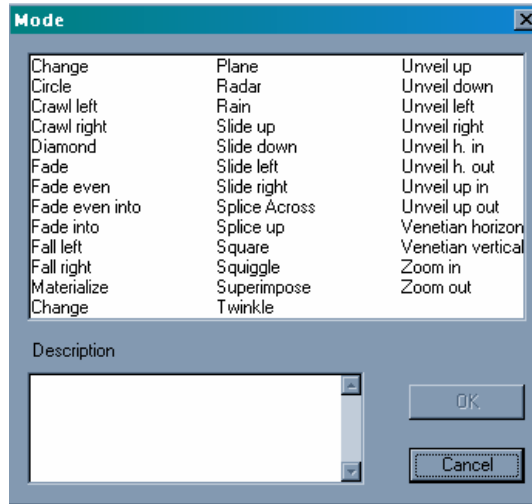
- A. Next, set the On and Off Modes for each frame. The On and Off Modes are how each frame will come into view. Click on the **ON MODE** or select the **F**rame option and **S**et **O**n/**O**ff **M**ode or **F**9. There are many different options available. Try a few of the options to see which works best for the information in the frame. Different modes can enhance the desired overall effect of the message. The default setting is change.



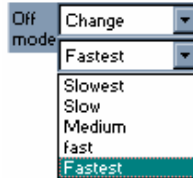
- B. The speed of the On Mode can be adjusted from fastest down to slowest. This can be done by clicking on the button below the On Modes or the **Frame option** and **Set On/Off Modes**. The default setting is Fastest.



- C. Now, select the **OFF MODE** or select **Frame and Set On/Off Mode** or **F9**. The same options are available for the Off Modes as for the On Modes.

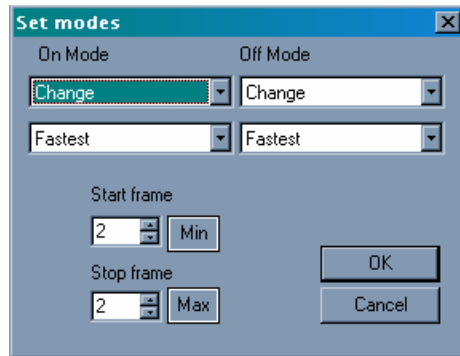


- D. The speed for the Off Mode can also be adjusted.



Note: A good rule of thumb is to leave the Off Mode as Change on all frames but the last. Using an off mode leaves a moment of black before the next frame will appear. If all frames are left as change for the Off Mode, and Materialize is on the last frame, a break will be seen at the end of the message before the next message starts displaying.

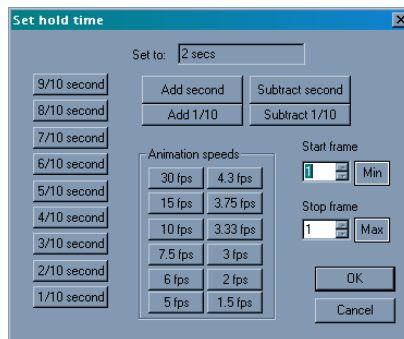
- E. On and Off Modes can be set for a range of frames by selecting **Frame** and **Set On/Off Modes** or **F9**.



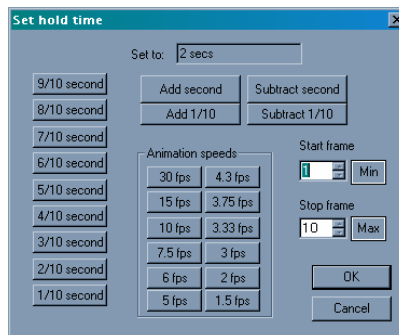
- F. The next thing to change is the Hold Time. The Hold Time is how long the frame will remain stationary on the display before the next frame appears. The default Hold Time is 2 seconds. If there is a lot of information on the frame, it will need a longer Hold Time. The ideal time is just enough to read the information in the frame. Too little time may cause information to be missed. If it is too long, then the viewer may become bored and look away. Click on the **HOLD TIME** button or the **Set Hold Time** option or **F3**.



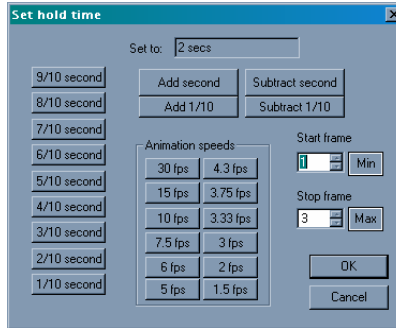
- G. The Hold Time options are now on the screen. The Hold Time for the current frame can be adjusted by 1 second or a tenth of a second simply by clicking on the appropriate button.



- H. Hold times can be applied to one, all or a series of frames. To apply the same Hold Time to all the frames, select the desired Hold Time and then change the **Start Frame** to frame 1 and select **Max** for the Stop Frame. Press OK when done.



- I. If only frames 1 through 3 are to have the same Hold Time, type 1 as the **Start Frame** and 3 as the **Stop Frame**.



- J. The animation speeds and the 10's of seconds are primarily use in animations. Animations require faster hold times than 1 second. The animation speeds are number of frames per second. Video frame rate is 30 fps.

Frame Navigation

- A. To move back a frame, click on the **PREVIOUS FRAME** button or select the **F^urame** option and **F^rame Backward** or the **PgUp** key.



- B. To go forward a frame, click on the **NEXT FRAME** button or select the **F^urame** option and **F^rame Forward** or the **PgDwn** key.



- C. There is also the option of going to the first frame by using the **FIRST FRAME** button or select the **F^urame** option and **G^o to First Frame** or using the **Home** key.



- D. To go the last frame use the **LAST FRAME** button or select the **F^urame** option and **G^o to Last Frame** or the **End** key.



- E. To move to a specific frame, click on the **GO TO** button or select the **F^urame** option and **G^o to Frame** or **Ctrl G**. Type in the frame number.



Deleting, Copying and Inserting Frames

- A. If a frame needs to be deleted, click on the **DELETE FRAME** button or select the **Frame** option and **Delete Current Frame** or **Ctrl D**.



- B. A series of frames can also be deleted by selecting **Frame** and **Delete Frames**. Enter the first frame to delete and the last frame to delete.

The 'Delete frames' dialog box contains the following fields and controls:

- Start frame: 2
- Stop frame: 2
- Skip count: 1
- Buttons: OK, Cancel

- C. To copy a frame, select **Frame** and **Copy Frames** or **Ctrl C**. A menu will ask what frames should be copied. Enter the frame number where the copying should begin and end, where the copied frames are to be inserted. If 1 is in the area for Skip Count, it means that every frame from the Start Frame to the Stop Frame will be deleted. If the Skip Count number is 2, then every other frame will be deleted.

The 'Copy frames' dialog box contains the following fields and controls:

- Start frame: 1
- Stop frame: 1
- Insert At: 1
- Number of repeats: 1
- X offset: 0
- Y offset: 0
- Buttons: OK, Cancel

1. If more than one copy of the frame(s) is needed, type in the desired number of repeats in the **Number of Repeats** area.
 2. The **X** and **Y Offset** can be used move the copied frames to a different position in the frame area, type in the desired coordinates. An example of this would be to have an arrow move across the frame. Draw the arrow on frame 1. Input the Start and Stop Frame as frame 1. Type in the X and Y coordinates of how the arrow is to move across the frame.
- D. If a new frame needs to be inserted in the middle of the message, move to the frame that will come after the inserted new frame. Click on the **INSERT FRAME** button or select the **Frame** option and **Insert Frame** or **Ctrl I**. A new frame appears where the original was and the original moves forward to the next frame.



Inserting a Bitmap

Bitmaps can be placed into a message.

- A. Place the cursor in the frame where the bitmap is to be placed.
- B. Select **T**ext and then **I**nsert **B**itmap from **F**ile.
- C. Use the menu to navigate to the location of the file that is to be use. Go to the file, select it and click on **O**PEN.
- D. If the bitmap is too big or too small, make adjustments to the original file and re-import it.

Simulate Message

- A. A message can be viewed on the monitor before it is saved and sent to the sign. To watch the message play as it would on the sign, click on the **P**LAY button or select the **V**iew option and **P**lay **M**essage.



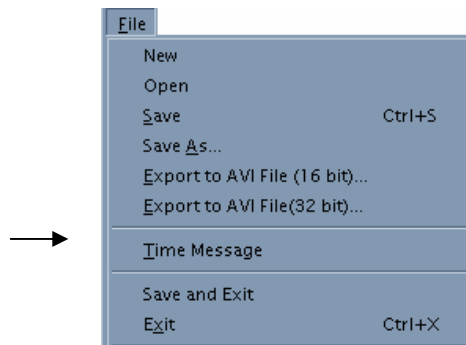
- B. This will run continuously until the **S**TOP button is clicked or select the **V**iew option and **S**top **P**laying **M**essage is selected.



Note: Changes that are made to a message need to be made while the message is in the stopped state. Changes made while the message is playing will not be retained.

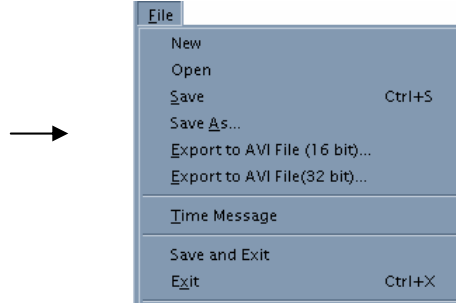
Timing a Message

- A. To get the running time of a message, select **F**ile then **T**ime **M**essage. A box will appear with the length of time it takes the message to run from the first frame to the last.

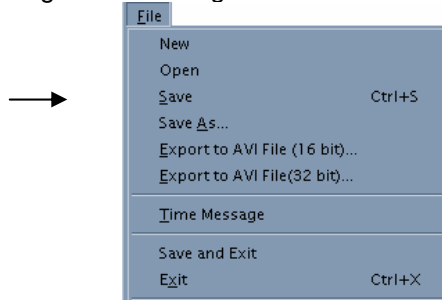


Saving a Message

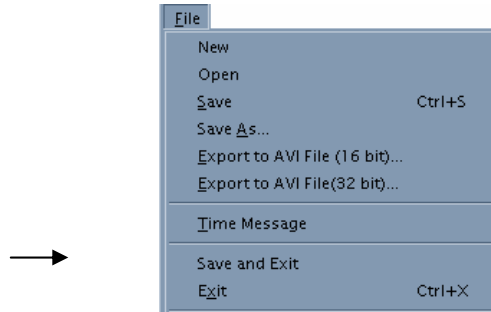
- A. To save a message, click on **F**ile and select the option of **S**ave **A**s. A name for the message needs to be typed into the **F**ile **N**ame option. This saves the message under the given name, but does not close the file so it can still be edited.



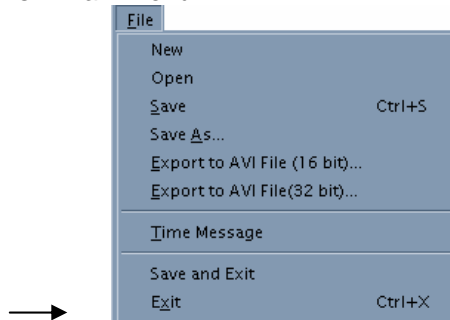
- B. To save a message while working, select **F**ile and **S**ave or **Ctrl S**. It is a good idea to periodically save a message as it is being edited.



- C. To exit a message and save it, click on **F**ile and select **S**ave and **E**xit. This will save the message and return to the Main Menu.

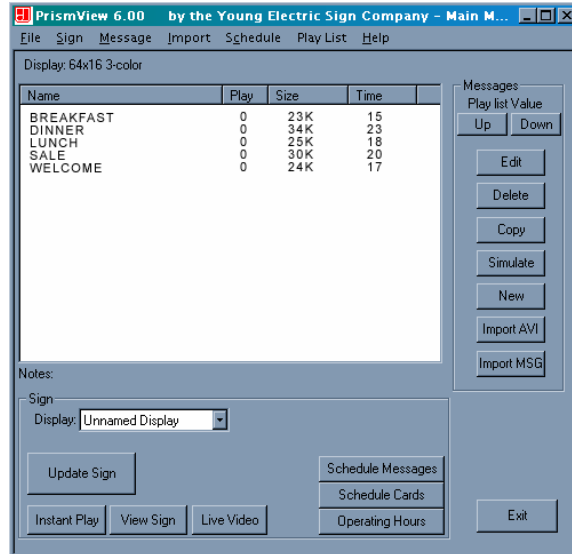


- D. To exit a message without saving, click on **F**ile and select the option of **E**xit or **Ctrl X**. You will return to the Prism Main Menu.

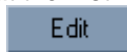


Editing an Existing Message

1. If an existing message needs to be edited, highlight the message name in the PrismView Main Menu.



2. Click on the **EDIT** button or select the **M**essage option and **E**dit Message or **Ctrl E**. This will open the message in the editor, starting at the first frame.



Deleting Messages

1. To delete a message from the sign, it needs to be selected in the PrismView Main Menu. Place the highlight bar over the message that is to be deleted.
2. Click on the **DELETE** button or select the **M**essage option and **D**elete Message or **Ctrl D**. When the sign is updated, the message will be deleted from the sign as well as from the Host computer.



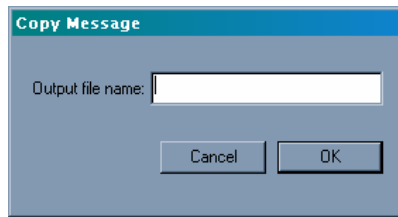
Note: Do not delete the message from the Windows Explorer. This will only delete it from the directory on the Host computer. The next time the sign is updated, the computer will see the message at the sign, and not at the Host. It will then send a copy of the message back to the Host. Deleting the message from the PrismView Main Menu will delete the message from the Host and tell the computer to delete the message on the next update.

Copying Messages

1. A message can be copied from the PrismView Main Menu. Highlight the message to be copied.
2. Click on the **COPY** button, or select the **M**essage option and **C**opy or **Ctrl C**.



3. A dialog box will ask for the Output Name. This is the name that the copied message will have. Type in the name. Now there are two copies of the same message with different names.



Note: Copying a messages is useful for retaining the original animations for use in later animations. By crating a copy, the original will be available at a later date.

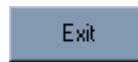
Simulating a Message

Simulating a message allows a message to be viewed before it is sent to the sign.

1. From the PrismView Main Menu, highlight the message that is to be viewed.
2. Once highlighted, click on the **SIMULATE** button or select **M**essage and **P**lay **M**essage or **Ctrl M**.
3. The message will display on the Host computer. It will play continuously until the **X** in the upper right corner is clicked or **F**ile and **E**xit or **Ctrl X** are selected.

Exit

1. To exit the PrismView software and return to the Windows screen, either click on the **EXIT** button or select **F**ile and **E**xit.



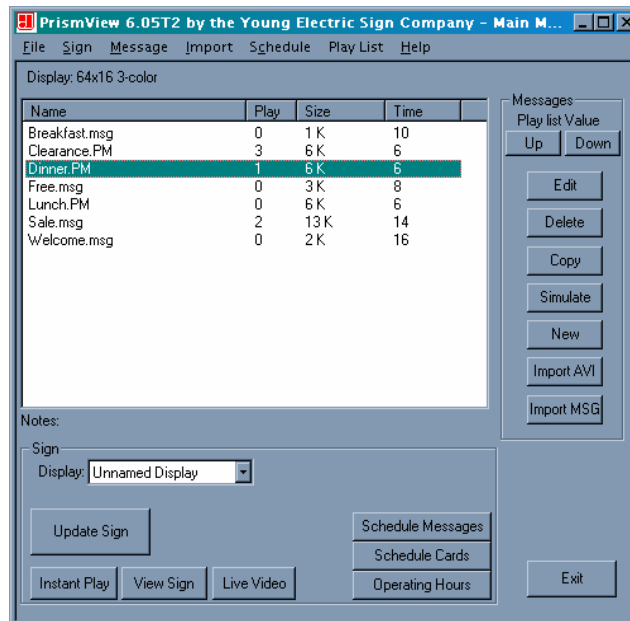
Chapter 2 Scheduling Messages

There are three different ways to display messages on the sign. The first is the Play List. This allows a group of messages to be displayed in no specific order with no specified times or dates. The second is Schedule Messages. Schedule Messages allows messages to be scheduled individually at specific times of the day, days of the week and on specific dates. The third is the Schedule Cards. Schedule Cards allows messages to be grouped together and then displayed in a specific order on specific dates and times. There is a hierarchy to these scheduling options. If there are messages in a Schedule Card that can display on a given day, neither the Schedule Messages nor the Play List will display. If there are messages in a Schedule Message that can display, then any messages in a Play List will not be displayed. So the order goes from Schedule Cards to Schedule Messages and then to the Play List.

Play List

The Play List is made up of the messages listed in the PrismView Main Menu. The Play List allows each message to have a unique play. A high number will display more often while a 0 will not display at all. The messages are displayed in a random order. The computer tries not to have the same message display back to back unless it is the only message selected.

1. The Play List is accessed from the PrismView Main Menu. Notice that the messages listed in the Main Menu have an option of Play to the right of the name. This is currently set at 0. To display a message, move the highlight bar over the message to be displayed.
2. To have this message play once, click on the **PLAY LIST VALUE** and **UP** Button on the right of the Main Menu or select the **Message** options and **Increase Play List** or **PgUp**. Notice that this brings the Play option up to 1. If the message is to display often, the number may need to be higher than 1.



3. If the value needs to be decreased or changed back to 0, move the highlight bar over the message and click on the **PLAY LIST VALUE DOWN** button or select the **Message** options and **Decrease Play List** or **PgDwn**. This will lower the value.

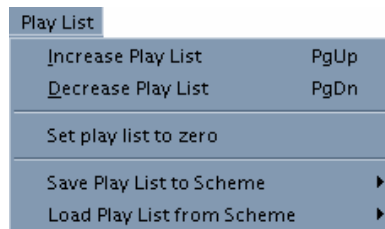


4. To have the sign run the Play List, the sign must be updated. See the Update Sign section following Schedule Messages and Schedule Cards.

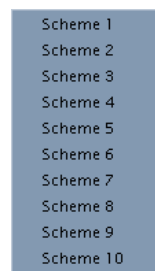
Note: The Play List will only display messages during the times set in the Operating Hours.

Play List Schemes

- A. Prism can save up to 10 different Play Lists. Once a grouping has been made with Play List Values that may need to be reused again, select **Play List** and **Save Play List to Scheme**.



- B. Select a Scheme number and the current playlist settings will be saved to that scheme.



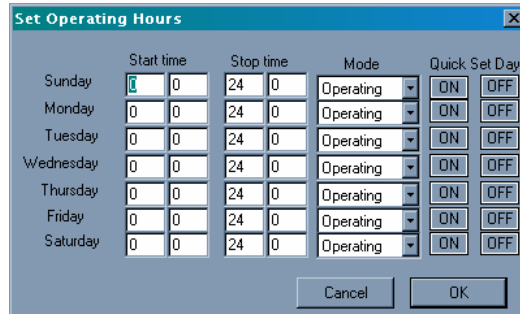
- C. To use a saved Play List Scheme, select **Play List** and **Load Play List from Scheme**.
- D. Select the desired Scheme.
- E. To reset a **Play List** that is shown on the Main Menu, select **Play List** and **Set Play List to Zero**.

Operating Hours

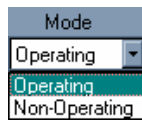
- A. Operating Hours tell the sign when it will and will not display messages that are on the Play List. To access, select the **OPERATING HOURS** button or select the **Schedule** options and **Set Operating Hours** or **Ctrl O**.



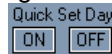
- B. The Set Operating Hours dialog box will appear. This is where the hours and days of the week the sign will play or not play are set. If 00 is entered for a Start Time and 00 for a Stop Time, the sign will not run at all. If it is set at 00 for a Start Time and 24 for a Stop Time and Operating is selected, the sign will run 24 hours a day.



- C. Next to the times, there is a Mode option that allows the hours entered to be either Operating Hours or Non-Operating Hours. If the sign is not to run from midnight to 6 am, then 00 would be the Start Time and 6 00 as the Stop Time, and Non-Operating Hours would be selected. This can also be done by having 6:00 as the Start Time and 24:00 as the Stop Time and Operating Hours would be selected.



- D. The last option available is the Quick Set. This allows an entry to be enabled or disabled for the entire day. Once the operating hours are set, exit back to the main menu.



Note: If you are using Schedule Cards or Schedule Messages, Operating Hours will have no effect. Operating Hours used only in conjunction with the Play List

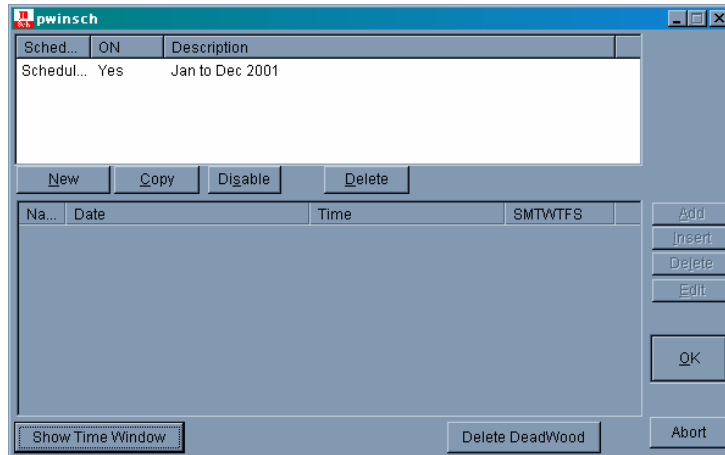
Schedule Messages

The Schedule Messages option allows individual messages to be scheduled to play at specific times of the day, days of the week and dates from one schedule. Each message is given specific times that it can be played. The order in which the messages are listed in a schedule is also the order in which they will be displayed. The schedule is read starting with the top message. If that message's dates and times allow it to be played, it will play once. The schedule then moves to the next listed message. If this message can be played, it will also be played once after the previous message. The schedule reads one message at a time, once it has reached the bottom of the list it starts over at the top. The Schedule Messages has priority over the Play List, but is a lower priority than Schedule Cards. In a case where a Schedule Card and a message scheduled with the Schedule Messages overlap, the information in the Schedule Card will be displayed, not the information in the Schedule Messages.

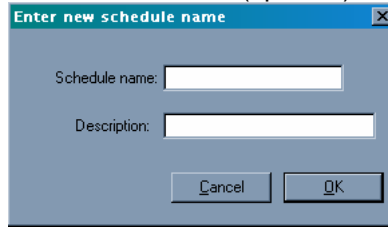
1. To use Schedule Messages, click on the **SCHEDULE MESSAGES** button at the bottom of the PrismView Main Menu.



- This will bring up the menu for Schedule Messages. Click on the **NEW** button or **Alt N**. This will allow a new schedule to be made.



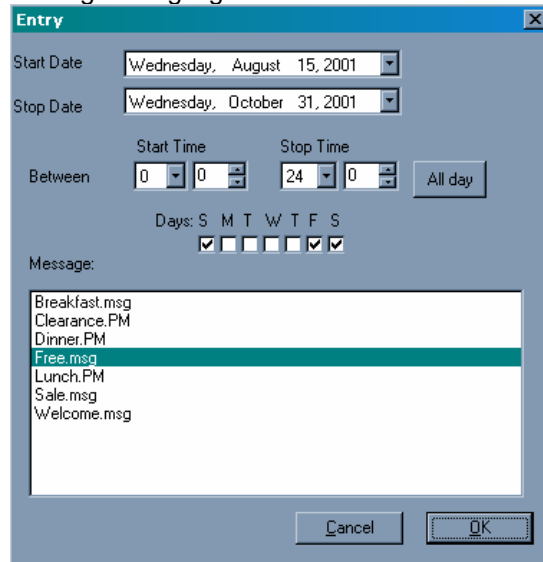
- A second dialog box will appear asking for a name. Type in an appropriate name for the schedule and add a description of the schedule (optional) and **click OK**.



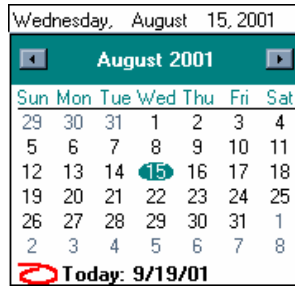
- Now the messages need to be entered into the schedule. Click on the **ADD** button at the bottom of the menu or **Alt A**. This allows a message to be selected.



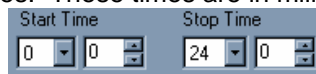
- Select a message by moving the highlight bar over the name.



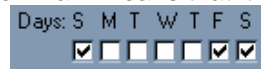
- The START and STOP dates need to be entered. Click on either selection and a calendar comes up so the dates can be changed. Click on the needed date. If the calendar needs to be moved forward or backwards a month, click on the arrows at the top of the calendar, the left one goes back a month, the right one goes forward a month. The default setting for the date is the current days date.



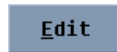
- Next, set the start and stop times. These times are in military hours.



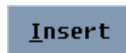
- Make the appropriate selection for the days of the week the message should play by clicking on the box below the day. A check mark means that it will play on that day of the week.



- A message may need to have changes made to its display dates and hours. To do this, place the highlight bar over the message and click once or select the **EDIT** button at the bottom of the menu or **Alt E**. This brings up the dialog box that allows for the dates, times and message name to be edited.



- Messages can be inserted into the list by placing the highlight bar over the message that the inserted message is to come before. Click on **INSERT** or **Alt I**. Select the new message that is to be placed in the schedule and ENTER.



- To delete messages from a schedule, place the highlight bar over the name of the message and click on the **DELETE** button or **Alt D**. This removes the message and moves any messages below it to move up one space.



- If a message needs to be moved up or down in the schedule, place the highlight bar over the name and click and drag the messages to the appropriate location.
- Messages in the list can be copied, cut and pasted into different locations in the list. Highlight the name and **Right Click** with the mouse. Select either **Cut** or **Copy**. Move the highlight bar to the position that the message is to be pasted and **Right Click** with the mouse again and select **Paste**.
- Messages can be added to a schedule many days in advance of their actual Start and Stop dates.

15. To see how the Schedule Messages will interact with the Play List or Schedule Cards, click on the **SHOW TIME WINDOW** button at the bottom of the Schedule Messages menu. This window lists what will display on the sign on any given day.

Show Time Window

16. The **DELETE DEADWOOD** button on the right will clear out any messages that have been deleted from the Main Menu but still remain in the Schedule Messages.

Delete Deadwood

17. Once all the messages have been entered, Press **OK**. If **ABORT** is selected, a dialog box will come up asking "Are you sure you want to quit without saving?"

Multiple Schedules

More than one schedule can run at a time when using Schedule Messages. The schedules will appear in order from top to bottom in the order they have been entered.

- A. To add a second Schedule, click on the **NEW** button or **Alt N**. A dialog box will ask for the name of the new schedule. As many new schedules can be added as needed. This schedule will be placed after the last entered schedule.

New

- B. If a schedule needs to be deleted, place the highlight bar over the schedule that is to be deleted and click on the **DELETE** button or **Alt D**. This will remove the schedule and move any schedules listed below to move up.

Delete

- C. A schedule can be copied by placing the highlight bar over the schedule that is to be copied. Click on the **COPY** button or **Alt C**. A dialog box will appear asking for a name of the new schedule.

Copy

- D. A schedule can also be disabled instead of being removed from the list of schedules. This allows the schedule to be used at a different time without deleting it from memory. Place a highlight bar over the schedule that is to be disabled and click on the **DISABLE** button or **Alt S**. The schedule is disabled if the word No appears under the column listed On. It is not disabled if Yes appears under the On column.

Disable

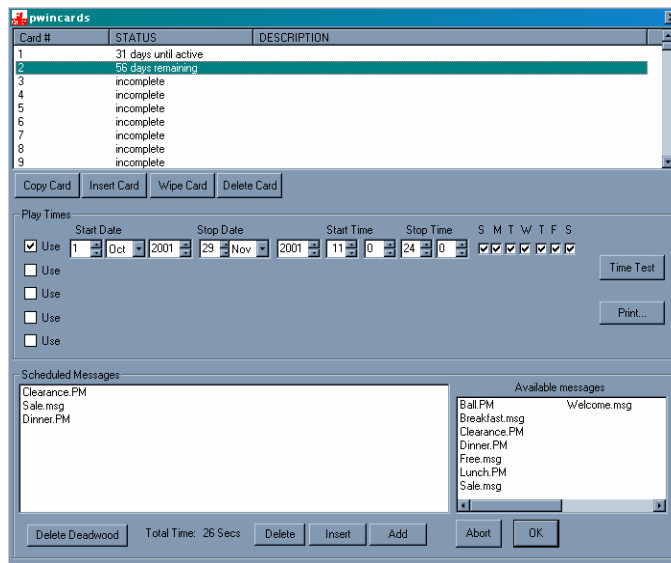
Schedule Cards

Schedule Cards allows a group of messages to be created which will display in a specific order on a specified date, time and day of the week. Numerous schedule cards can be utilized. As an example, if each day of the week had a different group of messages that needed to be displayed, Schedule Cards can be created for each day of the week. To get started, it might be helpful to make a list of messages that will display on the sign and the days they are to be displayed. Group messages together that have the same display dates and times. This will help in deciding which messages should be entered on which cards.

1. To get started, click on the **SCHEDULE CARD** button or select the **Schedule** option and **Edit Schedule** or **Ctrl S**.

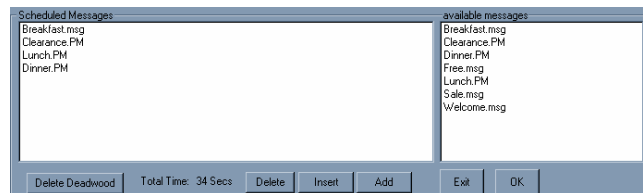
Schedule Cards

2. The Schedule Card Menu will appear. The cards are listed numerically in the top portion of the menu. Place the highlight bar over card one.

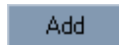


Message List

- A. Now, the messages will now need to be entered into the **Scheduled Messages** list for this schedule. One thing to keep in mind is that the group of messages in this area will be displayed as a group during the specified dates, times and days noted above in the Play Time area. To enter messages, click in the **Available Messages** list area.



- B. Now, select a message to be placed in the Message List. Highlight the message that is to be entered into the Message List. Then click on **ADD**. Notice that the message now appears in the Message List area. If there is already a list of messages, any message added will go at the end of the list.



- C. Keep adding the messages that need to display during the same period of time. As messages are added, they are placed one after the other. The messages display in the order from top to bottom and left to right. They will be displayed in the exact order they have been entered.
- D. If a message needs to be deleted from the list, move the highlight bar over its name and click on **DELETE**. This will remove the message from the schedule only, not from the Main Menu.



- E. If a message needs to be inserted in the middle of the list, place the highlight bar on the message that the inserted message is to come before. Highlight the message that is to be inserted from the available list and click on **INSERT**. A message may be placed in the list more than once.



- F. Messages in the list can be copied, cut and pasted into different locations in the list. Highlight the name and **Right Click** with the mouse. Select either **Cut** or **Copy**. Move the highlight bar to the position that the message is to be pasted and **Right Click** with the mouse again and select **Paste**.

- G. The **DELETE DEADWOOD** button on the right will clear out any messages that have been deleted from the Main Menu but still remain in the Schedule Messages



Setting Play Dates and Times

- A. Once all the messages are entered for the card, the Play Times will need to be set. Go to the first line in the Play Messages section and click on the **USE** button. This will activate the first line of date, time and day options.

	Start Date	Stop Date	Start Time	Stop Time	S	M	T	W	T	F	S
<input checked="" type="checkbox"/> Use	1 Oct 2001	29 Nov 2001	11:00	24:00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Use											
<input type="checkbox"/> Use											
<input type="checkbox"/> Use											
<input type="checkbox"/> Use											

- B. Enter the **START DATE** by clicking on the box and a cursor will appear. Type in the day, month and year that this group of messages should start displaying.
- C. Now enter the date for the **STOP DATE**. This is the last day that this group of messages should display.
- D. The next items to enter are the **START TIME** and **STOP TIME**. This is the time of day that the group of messages should display.
- E. The final item option is the days of the week. A check mark in the box below the day indicates that the messages will display on that particular day. If there is not check mark on a specific day, the message will not display on that day of the week.
- F. The group of messages listed on a schedule card can be scheduled multiple times. Notice that there are five time slots in the **PLAY TIMES** area. Each slot can designate a different period of time that the grouped messages can be displayed.

Card Navigation and Status

A. To make a second card for the next set of messages, click on the next card. This will bring up Card 2 options. Different messages and new days, dates, and times can be entered on the new card.

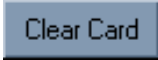
B. If a card needs to be copied, click on **COPY CARD**. It will ask where the current card should be copied too.

A rectangular button with a blue gradient background and a thin black border. The text "Copy Card" is centered in a white, sans-serif font.

C. A new card can be inserted by clicking on **INSERT CARD**. The new card will be placed before the current card.

A rectangular button with a blue gradient background and a thin black border. The text "Insert Card" is centered in a white, sans-serif font.

D. A card can be cleared of its information and settings by clicking on **CLEAR CARD**.

A rectangular button with a blue gradient background and a thin black border. The text "Clear Card" is centered in a white, sans-serif font.

E. A card can be deleted by clicking on **DELETE CARD**.

A rectangular button with a blue gradient background and a thin black border. The text "Delete Card" is centered in a white, sans-serif font.

Note: When there is more than one Schedule Card, the card with the highest number has the highest priority and is the one that will be displayed. Make the lower number cards, such as 1 and 2, the default group of messages so that when the higher number ed card's dates, day of the week and times expire, the lower number card will activate and the sign will not be blank. The computer looks at the highest number on the Schedule cards. The dates, times and days of the week match the current time, it will display that card and not at the lower numbered cards. If it can't play the card, it keeps looking at the cards from the highest number to the lowest and will display the first one matching the time, date and day parameters.

F. The status of a card is listed next to the card number under the status column. The status will tell you if the card is in use, how many days, are remaining or if it will be in use in the future. This column will also indicate whether or not a card is incomplete or disabled.

G. Cards can be disabled and saved for future use. Just double click on the status section next to the number of card to be disabled.

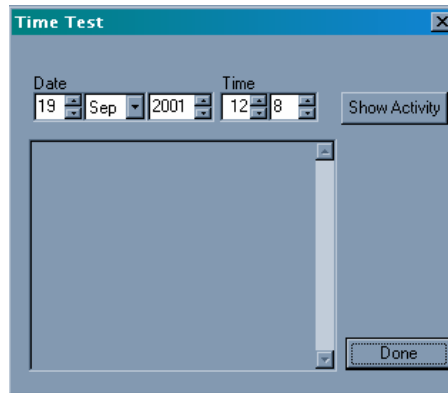
Printing a Schedule

A. There is an option to print the schedule cards. Click on the **Print** button in the Schedule Cards menu.

A rectangular button with a blue gradient background and a thin black border. The text "Print..." is centered in a white, sans-serif font.

Testing a Schedule

- A. There are times that a list of what will play on the sign at a particular time is needed. To do this, select **SCHEDULE CARDS** from the main PrismView Menu.
- B. Once in the Schedule Card menu, click on the **Test Time** button.
- C. This brings up a dialog box that asks for specific date and time a listing is needed. Enter the date and time.



- D. Then select **SHOW ACTIVITY**. Show activity will give a listing on the screen of exactly what will show on the sign at the given date and time.

Saving Schedule Cards

- A. To save the cards and exit back to the main menu, click on the **OK** button in the lower right corner of the menu.
- B. To exit without saving the message, click on the **ABORT** button. A menu will ask if you want to exit without saving.

Chapter 3 Displaying Messages on the Sign

When messages and schedules are made on the Host computer, the new information needs to be transferred to the Remote computer at the sign. Everything that has been created or edited since the last time the sign was updated will be sent to the Remote with the next update. The messages will not display on the sign unless they have been entered in the Schedule Cards, Schedule Messages or the Play List. The sign can also be run by Instant Play. Instant Play can only be used while a connection with the sign is made, it is not meant for long-term use. While connected with the Remote, a message is selected from the Host and will override the Schedule Cards, Schedule Messages and the Play List until the connection is disconnected.

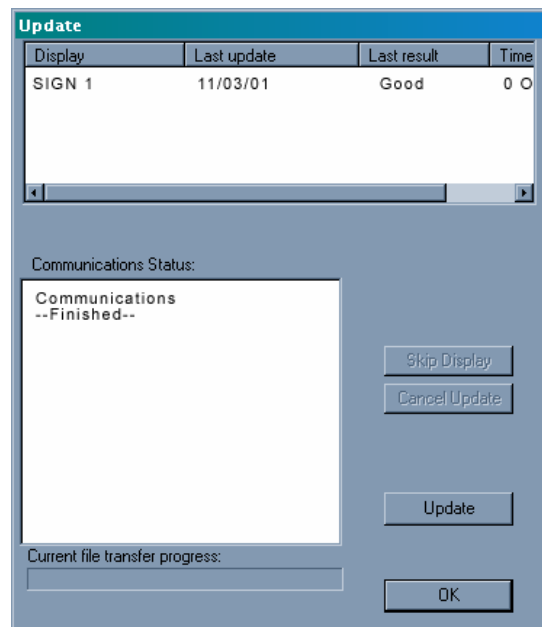
Updating the Sign

1. To update the sign click on the **UPDATE SIGN** button or select **Sign** and **Update** or **Ctrl U**.



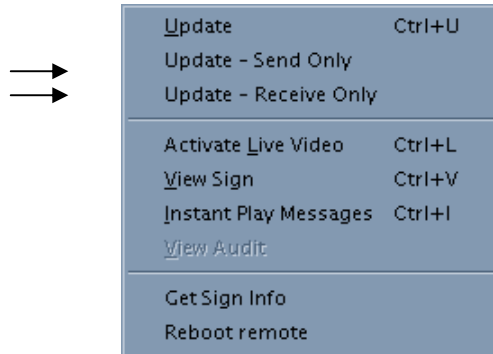
Update Sign

2. The Update Menu allows you to transfer new messages and schedules to the sign. If there is more than one display to be updated, the desired signs can be selected in the upper portion of the menu.



3. Simply click on the **UPDATE** button or select the **Sign** option then **Update** or **CTRL U**. The sign will be called and all the new and/or edited messages will be sent to the Remote at the sign. Any messages that are at the Remote and not on the Host will be sent back to the Host computer.
4. Once the update is complete, the connection to the sign will be automatically disconnected. Press **OK** to exit the Update Menu.

5. If messages are to be sent to the sign, but no messages are to be received back, select **Sign** and **Update-Send Only**. If messages need to be retrieved from the sign, but no messages are to be sent, select **Sign** and **Update-Receive Only**.



Deleting Messages from the Host and the Remote

At some point, messages will need to be deleted from the Host and Remote. The main reason for deleting messages is that they have become outdated or obsolete.

- A. To delete a message, go to the PrismView Main Menu. Move the highlight bar over the message that is to be deleted. Click on the **DELETE** button or select the **Message** option and **Deletion** or **Ctrl D**.
- B. This will not remove the message from the Host and the Remote until an update is done. Once this has happened, the message will be deleted on both the Host and Remote computers.

Note: If a message is to be deleted from the sign, but is to be used at a later date, it is best to copy the message to a disk, and then delete the message from the Main Menu. Retrieve the message from the disk when it is needed again.

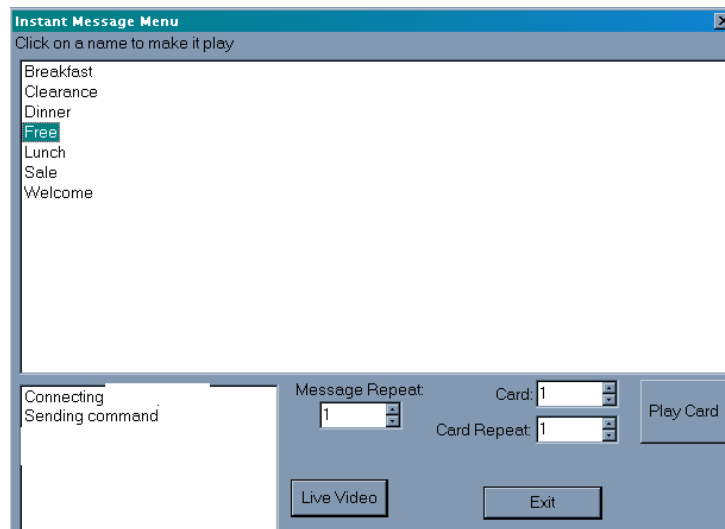
Instant Play

Instant Play allows individual messages or a group of messages to play instantly while the Host is connected to the Remote. Instant Play can be accessed from the PrismView Main Menu. Instant Play can be a good choice to use during a sporting event. It allows for quick changes in what is being displayed on the sign.

1. Click on the **INSTANT PLAY** button or select the **Sign** option and **Instant Play** or **Ctrl I**. This automatically connects with the sign.

Instant Play

- Once connected, a menu will appear with the messages available to display. At the bottom of the menu is an option for **Number of Repeats**. Enter in the number of times the message is to be displayed. Click on the message that is to be displayed. It is now displayed on the sign.



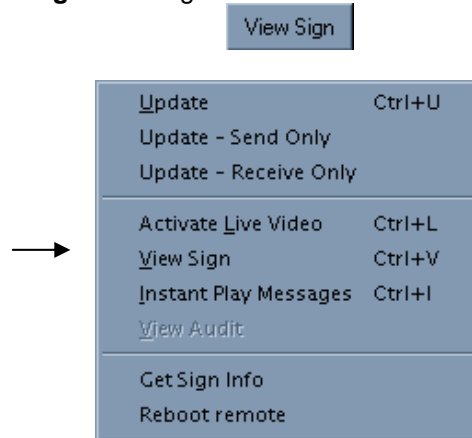
- To Instant Play a second message, enter the number of times the message is to be repeated and select the second message. It will begin to display, replacing the previously selected message.
- If more than one message is to display at a time, click on the first message, and then hold down the Ctrl key while selecting the second message.
- A Schedule Card (a group of messages) can be displayed through Instant Play. Select the card number that is to be displayed and the number of times it is to repeat. Then click on the **PLAY CARD** button. This can be done at any time while connected.



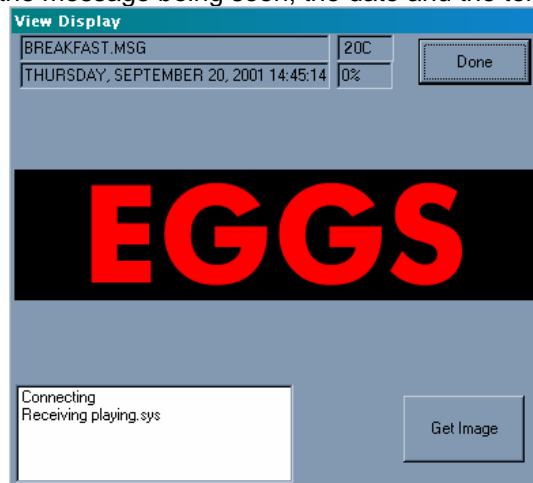
- A Schedule Card can be stopped at any time by selecting a message to be displayed.
- If nothing is selected in the Instant Play Menu, messages selected in the Play List will be displayed. The messages in the Play List can be used as a default, so the sign won't be blank while using Instant Play.
- To end the Instant Play, click on the **OK** button. This will disconnect from the sign and bring back to the main menu. The sign will go back to displaying from the Play List, Schedule Messages or the Schedule Cards.

Viewing the Sign

1. The Sign can be viewed at any time by clicking on the **VIEW SIGN** button or by selecting the **Sign** option and **View Sign**. The sign is then connected.



2. Once the connection is made, an image of the sign is seen. Other information seen in the menu is the name of the message being seen, the date and the temperature.

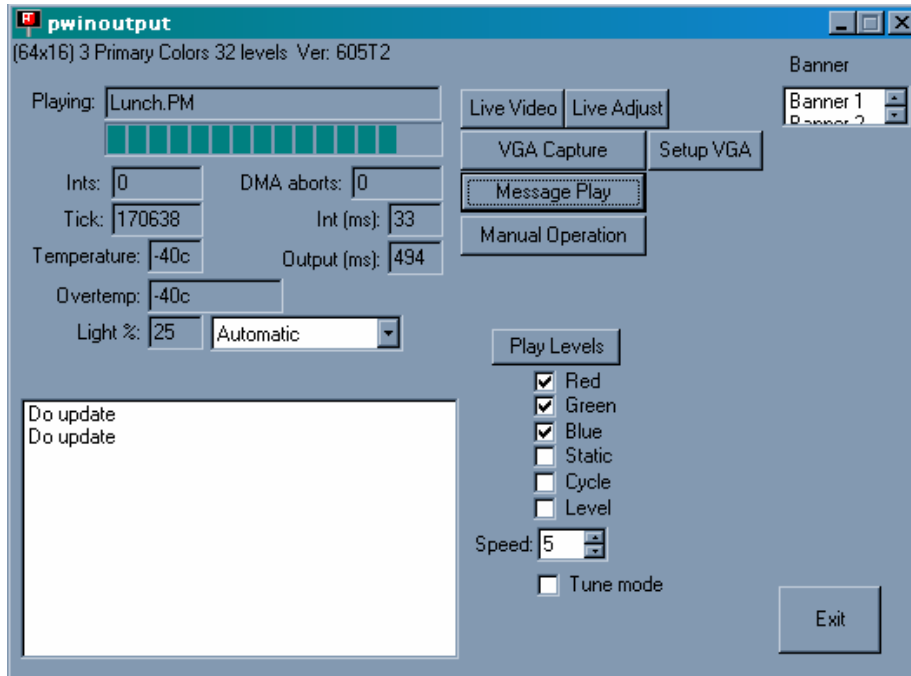


3. A new image from the sign can be viewed by clicking on the **GET IMAGE** button.
4. To disconnect, click on the **DONE** button.

PWINOUTPUT

If the sign is a dedicated Host/Remote, this option will be used. A dedicated Host/Remote is a Host computer that also has the Remote functions loaded on it. The computer of a dedicated Host/Remote should not be turned off, but the monitor can be when not in use.

On a dedicated Host/Remote, the Pwinoutput menu will load automatically when the computer is turned on. The icon for Pwinoutput will be seen along the bottom task bar of windows. Pwinoutput requires little interaction with the operator. If it will be used, the operator will be trained by YESCO staff as to its operation.



Chapter 4 Graphic Mode and Message Options

By using the Graphics Mode and some of the available editing options, appealing and eye-catching messages can be created. Graphics and animations can be created using these tools.

Graphic Tools From the Main Edit Menu Bar

Bulb Mode

- A. SMOOTH MODE blends the pixels together. The Bulb Mode allows the message to be viewed as bulbs. To switch to **BULB MODE**, click on the Light Bulb Button that is to the right of the Next and Previous Frame buttons.
- B. To turn it back to **SMOOTH MODE**, just click on the button again.



Marquee Mode

- A. To have running lights around the edge of the sign, click on the **MARQUEE MODE** button. This button is found to the right of the BULB MODE button.
- B. The button is an On/Off toggle.

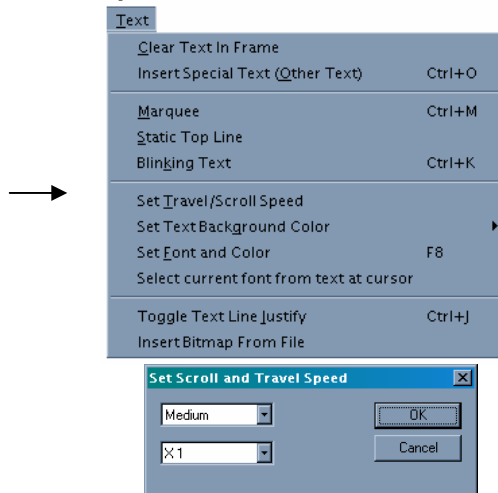


Static Top Line

- A. To have the top line of text static and have the lower portion scroll either right to left or top to bottom, click on the **STATIC TOP LINE** button found to the right of the MARQUEE MODE. If more text has been entered than fits in the visible frame area, it will either run off the right or the bottom of the frame. The second line will scroll right to left if it runs over the right margin, or top to bottom if the second and third lines runs below the bottom margin.

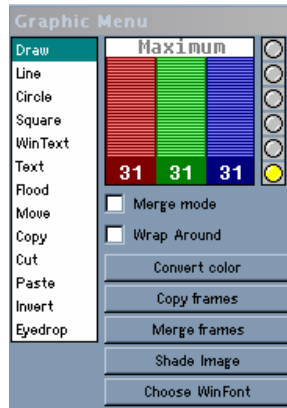


- B. Once the line has been set as static, the travel/scroll speed can be set by selecting **Text** and **Set Travel Scroll Speed**.



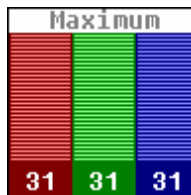
Graphics Mode

1. Drawing and animation is done in the Graphics Mode. To use this mode, create a new or edit an existing message. Once the Message Editor has been opened, click on the **GRAPHICS** button.



Draw

- A. To draw, click on the **DRAW** option.
- B. Move the mouse cursor to the frame and hold down the left mouse key. Drag the cursor across the frame and a line or pixels will show up where the mouse has been.
- C. To draw with individual pixels or bulbs, just click with the mouse and don't drag. This will turn on one individual pixel/bulb at a time.
- D. To change color, just click on the color bars. To bring a color level to black, click on the number below the color. To raise a color to its highest level, click in the Maximum area above the color. To select something between the highest and lowest options, click on the color bar itself. The higher the bar, the higher the color level.



- E. Now go back to the frame and draw with the new color. Either click on individual bulbs or drag the mouse cursor to change the color.

- F. To draw with a thicker or thinner line, click on the circles to the right of the color bars. If one is yellow, the drawing tool is 1 pixel wide. If three are yellow, then the line is 3 pixels wide. This application applies to many of the other options in the GRAPHICS MODE.



- G. If some of the color needs to be erased, place the mouse cursor over a pixel/bulb and press the SPACE BAR. This will erase one individual pixel/bulb at a time. To do a larger area, change all colors on the palette to 0. Drawing in the black color mode is the same as erasing.
- H. If it is going to be a large area to erase, change the bulb width to a wider setting.

Line

- A. To draw a line, click on the **LINE** option.
- B. Move the mouse cursor onto the frame without clicking. Place the cursor where the line is to begin. Click with the **LEFT MOUSE KEY** and let go, do not drag the mouse with the key clicked.
- C. Now move the cursor to where the line is to end and click a second time with the **LEFT MOUSE KEY**. A line has been drawn.
- D. If the **LEFT MOUSE KEY** has been clicked once and the beginning point needs to be reset, click with the **RIGHT MOUSE KEY**. This resets the cursor and it can be placed in another position.
- E. The line color can be changed by selecting the color before drawing the line.
- F. The thickness of the line can be made wider by clicking on the line thickness circles in the GRAPHICS Menu.

Circle

- A. To draw a circle, click on the **CIRCLE** option.
- B. Move the cursor to where the center of the circle is to be. Once there, click with the **LEFT MOUSE KEY** and let go. Move the cursor out and the circle gets bigger. Once the desired size and shape have been selected, click again with the **LEFT MOUSE KEY**.
- C. If the center of the circle needs to be reset, click with the **RIGHT MOUSE KEY** before clicking with the left key a second time.

Square

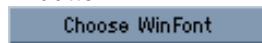
- A. To draw a square, click on the **SQUARE** option.

- B. Move the cursor to the frame and place the cursor by clicking with the **LEFT MOUSE KEY** where one of the corners of the square is to be. Let go of the mouse key.
- C. Move the cursor to drag out the desired size of square. Click with the **LEFT MOUSE KEY**.
- D. To reset the square, click with the **RIGHT MOUSE KEY** before clicking with the left key a second time.

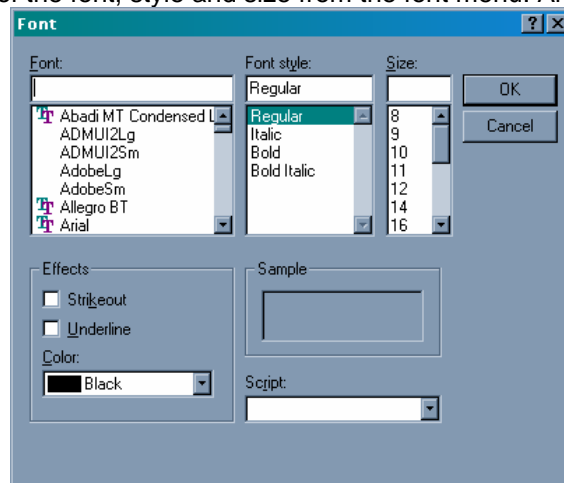
Win Text

This option allows the Windows fonts on the computer to be used in a message. Any fonts that can be loaded into the computer via the Windows Control Panel for Fonts can be used.

- A. Click on the **CHOOSE WINFONT** button.



- B. Make a selection of the font, style and size from the font menu. And press **OK**.



- C. Select the **WINTEXT** option from the Graphic Menu.
- D. Move the cursor to the frame and click once with the **LEFT MOUSE KEY**. This does not place the text, it just allows for the text to be created.
- E. Type the text for that line.
- F. Move the text to the desired position without clicking the mouse key until the text where it should be placed. Once there, click with the **LEFT MOUSE KEY**. With this option, text can be placed anywhere in the frame.
- G. To reset, click with the **RIGHT MOUSE KEY**.
- H. If the size and style of the selected Winfont are not correct, don't place the text with the left mouse key, just select **CHOOSE WINFONT** again, make the appropriate changes and type in the information again.

Text

Entering text in the Graphics Mode allows the text to be positioned anywhere on the frame without the fixed lines of Text Mode.

- A. Text will be entered using the Graphics Mode. Click on the **TEXT** option.
- B. Move the cursor to the frame and click once with the **LEFT MOUSE KEY**. This does not place the text, it just allows for the text to be created.
- C. Type the information for that line.
- D. Move the text to the desired position without clicking the mouse key until you have the text where it should be placed. Once there, click with the **LEFT MOUSE KEY**. With this option, text can be placed anywhere in the frame.
- E. To reset, click with the **RIGHT MOUSE KEY** before clicking with the left key to place text.

Flood

- A. Flood fills an area with a specified color. First, click on the **FLOOD** option.
- B. Go to the color bar and select the color that will be used to flood.
- C. Move the cursor to the frame, place it over the area to be filled and click with the **LEFT MOUSE KEY**.

Note: Flood works best with an area that has been defined such as a circle or a square. The object to be filled needs to have a solid outline. If it does not, then the color will flood the inside of the object and also the surrounding area by way of a hole in the outline. An entire frame can be flooded at one time by clicking in the frame before any information has been entered. A frame can also be flooded after the text or objects have been inserted. The centers of letters such as "A" or "O" may not flood; the centers may have to be individually flooded.

Move

- A. The MOVE option moves an object or text that was created in the Graphics Mode from one place to another within the frame or to another frame. Click on the **MOVE** option.
- B. Move the cursor to the outer edge of the object that is to be moved. A box will need to be drawn around the object.
- C. Starting at a corner of the object, click with the **LEFT MOUSE KEY** once and then move the cursor to the opposite corner of the object. Do not hold the mouse key down. If the box is started in the upper left corner, move diagonally to the lower right corner. Notice a box is now surrounding the object.
- D. If the box needs to be reset before moving the object, click with the **RIGHT MOUSE KEY**. Move the cursor to the beginning point and click again with the **LEFT MOUSE KEY** to start the box again.
- E. Once the box is around the object, click with the **LEFT MOUSE KEY**.

- F. Move the object to where it is to be placed without clicking the mouse key until it is in the desired position. Once there, click with the **LEFT MOUSE KEY**.
- G. If the object is to be placed on another frame, use the **PAGE UP** and **PAGE DOWN** keys or the **NEXT** and **PREVIOUS** buttons to move to the desired frame.
- H. Resetting with the **RIGHT MOUSE KEY** can be done, but all information in the box will be lost unless it is done before the second click with the **LEFT MOUSE KEY**.

Merge Mode

1. When placing a an object that has been moved, cut or copied, the area of the box is opaque. Anything that the box is placed over will not show through. To make the box transparent when placing it, the **MERGE MODE** needs to be checked. This is found below the color bar selection. This will need to be checked before the box is placed around the object to be moved. This makes any black in the block transparent.

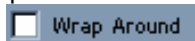


2. To make the box opaque again, uncheck **Merge Mode**.

Wrap Around

Wrap Around allows for an image to be copied or moved in multiple form. If the word "welcome" is moved to the right in the frame with the "e" going off the right margin, the "e" will appear on the left side of the frame.

1. Click on the **Wrap Around** option.



2. Either move or copy an image in a frame. Move the mouse around the frame. You will see that as you move the image in the box off to the side of the frame, you will see the edge appear on the opposite side of the frame. Move the box to the desired location and click with the **LEFT MOUSE KEY** to place the multiple images.
3. Click on **Wrap Around** to turn the option off.

Copy

- A. The COPY option makes a copy of an object so it can be moved to another position. Click on the **COPY** option.
- B. Move the cursor to the outer corner of the object to be moved. Click with the **LEFT MOUSE KEY**.
- C. Move the cursor to the opposite corner so that the box is around the object.
- D. If the box needs to be reset, click with the **RIGHT MOUSE KEY** before the second click with the **LEFT MOUSE KEY**.
- E. Once the box is around the object, click with the **LEFT MOUSE KEY**.
- F. Move the object to the desired location and click with the **LEFT MOUSE KEY** again.
- G. The MERGE MODE also works with the COPY options as it does with the MOVE option.

- H. Once an object has been copied, it is placed on a clipboard for future use. It will be overwritten once another object has been either copied or cut.

Cut

- A. The CUT option allows an object to be cut from the frame. Click on the **CUT** option.
- B. Move the cursor to the outer corner of the object to be cut. Click once with the **LEFT MOUSE KEY**.
- C. Move the cursor to the opposite side of the object so that the box is surrounding the object. Click with the **LEFT MOUSE KEY**. The object is now cut from the frame and placed on a clipboard.
- D. If the box needs to be reset, click with the **RIGHT MOUSE KEY** before the second click with the **LEFT MOUSE KEY**.

Paste

- A. The **PASTE** option allows the object that has been either copied or cut to be pasted onto the frame. Click on the **PASTE** option.
- B. Move the cursor to the frame and click with the **RIGHT MOUSE KEY**. The object will now appear in the frame.
- C. The object has not been pasted yet. Move the object to the desired position and click with the **LEFT MOUSE KEY**. The object is now pasted to the screen.
- D. The object can be pasted a second time by clicking with the **RIGHT MOUSE KEY** again, moving it to the desired position and then pasting it by clicking with the **LEFT MOUSE KEY**.
- E. The Merge Mode works with the PASTE option as it does with MOVE and COPY.

Invert

- A. INVERT will make a box of information switch colors. If the sign is black and white, it will invert the black to white and the white to black. If the sign is color, a red will become teal, green will become purple and blue will become yellow. What happens is the sign turns off the active color and turns on the remaining colors in the pixel. To use this, click on the **INVERT** option.
- B. Move the cursor to the outer edge of the area to be inverted. Click with the **LEFT MOUSE KEY**.
- C. Move the cursor to the opposite side of the object or area and click with the **LEFT MOUSE KEY** again. The area has now been inverted.
- D. If the box needs to be reset, click with the **RIGHT MOUSE KEY** before the second click with the **LEFT MOUSE KEY**.

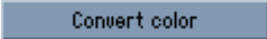
Eyedropper

- A. The EYEDROP will read the color of an object or area already in the frame. Click on the **EYEDROPPER** option.

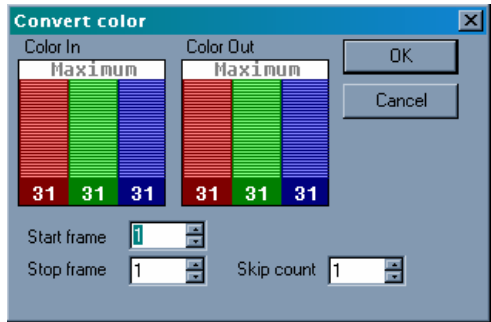
- B. Move the cursor to the area of the desired new color. Click with the **LEFT MOUSE KEY**. Notice that the color bar has changed to the color that was just selected with the Eyedropper.
- C. Drawing, flooding or typing text can now be done in the new color.

Convert Color

- A. CONVERT COLOR changes an existing color in the frame to another color. Click on the **CONVERT COLOR** option, or select the **Graphics** option and **Convert Color**.



- B. The Convert Color menu shows two color selections, COLOR IN and COLOR OUT. COLOR IN is the color that is to be changed and COLOR OUT is the color that it will be changed to. COLOR IN always starts with the color last used. If necessary, change COLOR IN to the desired color by moving the color levels up or down.



- C. Change the **COLOR OUT** to the new color.
- D. Enter the frame number(s) that the Convert Colors should occur on.
 1. If frame 1 is to be changed, the START FRAME will be 1 and STOP FRAME will be 1. The SKIP COUNT will be 1.
 2. If frames 1 to 5 are to be changed, 1 would be the START FRAME and 5 would be the STOP FRAME, the SKIP COUNT would be 1.
 3. If every third frame from frame 1 to frame 30 is to be changed, the START FRAME would be 1, the STOP FRAME would be 30 and the SKIP COUNT should be 3.

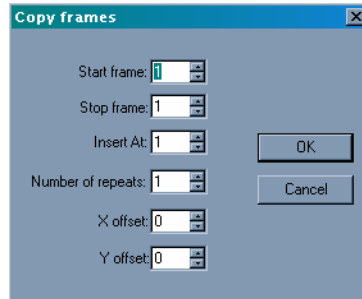
Note: Using the Eyedropper to select the color to be converted first will automatically apply that color as the Color In when using Convert Colors.

Copy Frames

- A. COPY FRAMES copies one frame, a given number of frames or a series of frames. Click on **COPY FRAMES** or select the **Frame** option and **Copy Frames**.



- B. A dialog box will ask for the START FRAME and the STOP FRAME. Enter the numbers that are to be copied.



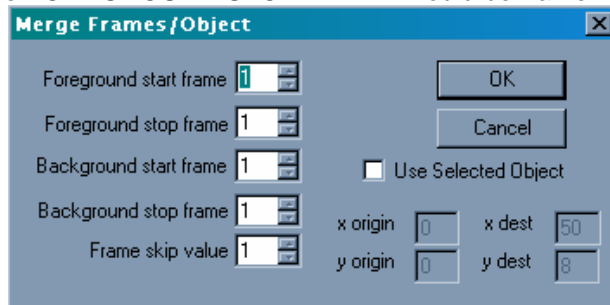
- C. Enter the frame number where the copied frames are to be inserted. The copied frames will be inserted after the frame number that is entered in the INSERT AT option.
- D. To copy a series of frames multiple times, such as repeating frames 1 to 3 a total of 5 times, enter 1 as the START FRAME, 3 as the STOP FRAME, 3 as the INSERT AT and 5 as the NUMBER OF REPEATS. This will create six copies of frames 1 through 3, the original plus five new copies.

Merge Frames

- A. MERGE FRAMES allows frames to be layered one on top of the other. Think of it as foregrounds and backgrounds. Start with a frame that would be the foreground with an object in it (frame 1) and a second frame that would be the background (frame 2). Click on the **MERGE FRAMES** option or select the **Graphics** option and **Merge Frames**.



- B. The dialog box asks for the FOREGROUND START FRAME. This would be frame 1. In this example, the FOREGROUND STOP FRAME would be frame 1 also.



- C. Next enter the BACKGROUND START FRAME. This is frame 2. The BACKGROUND STOP FRAME would also be frame 2.

- D. Leave the FRAME SKIP VALUE at 1 and click Ok. Frame 1 has now been layered over frame 2. The merge takes place on the background frame. The foreground frame is left intact.

Merge Frame Variations

1. If frames 1 through 8 are a background scene and frames 9 through 16 are a foreground, the FOREGROUND START FRAME would be 9 and the FOREGROUND STOP FRAME would be 16. The BACKGROUND START FRAME would be frame 1 and the BACKGROUND STOP FRAME would be frame 8. This would place frames 9 through 16 on top of frames 1 through 8.
2. If the foreground needs an outline around it as it is merged with the background, the foreground will need to be shaded first using the steps to shade an image. Once the frame or frames are shaded, convert the black outline of the object to a level 1 gray. This color is dark enough that it will not be seen easily. The next step is to convert the shaded color background to black. The end result is an image that has a low level gray outline with a black background. Merge the foreground with the background.
3. If a foreground should appear on every third frame, enter a skip frame value of 3. This will place the foreground on every third frame.

Merging a Selected Object

A selected object can be merged onto background frames with motion.

1. Make the desired number of frames that will be needed. This number will depend on how fast and how far the object is to travel.
2. Turn on the MERGE MODE option.
3. Place the object in the first frame and then copy the object using the graphics mode.
4. The object should now be a part of the cursor. Select **Graphics** and then **Merge Frames/Object**.
5. Make sure the USE SELECTED OBJECT is checked as being on.
6. Type in the first frame number that the object is to be seen on as the BACKGROUND START FRAME and type in the last frame as the BACKGROUND STOP FRAME.
7. Give the X and Y coordinates where the object is to originate in the first frame, and then the X and Y coordinates for the destination in the last frame. Press **OK**. The object will appear in all the given frames with movement from the originating X and Y coordinate to the X and Y destination in the last frame.

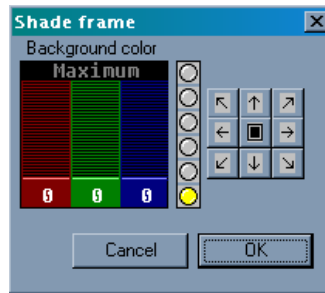
Shade Image

- A. SHADE IMAGE allows an outline or shadow to be placed around an object in a frame with a colored background. The first thing that needs to be done is to place a background color on the frame. This can be done two different ways.

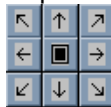
- B. The FLOOD option is one way the background can be changed from black to another color. Select a color other than black for the background. Then FLOOD the area. If there are any areas left black as in the middle of an O, or A, FLOOD them also.
- C. The other option is to use the CONVERT COLOR option. Convert the black background to the new color. This option takes care of any enclosed areas of text in one step, unlike FLOOD.
- D. Once the background is colored, click on **SHADE IMAGE** or select the **Graphics** option and **Shade Graphics**.



- E. A dialog box will appear that asks for the color that is to be shaded. This is the color that background color that the shade will be applied on top of. Make any changes to the color bar if needed.



- F. Next, select the type of shadow. The options include Outline, and eight different directional variations. If the arrow pointing to the upper left is selected, the result would be a drop shadow to the upper left. Multiple directions can be selected at one time.



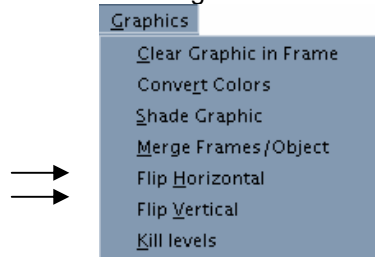
- G. Now select the thickness of the shadow. This is selected by changing the number of pixels that are turned on. If only one is yellow, then the outline will only be one pixel thick. If four are yellow, then the outline will be four pixels thick.



Note: All outlines are done as pure black or all color levels at 0. This is why the background needs to be changed to a color other than pure black, otherwise the shadow wouldn't be visible. In many cases, a shaded image is to be merged onto another frame. In order to retain the shading, the shade (pure black) must be converted to a color other than black, say a level one red. Then the colored background will need to be converted to black.

Flipping an Image in a Frame

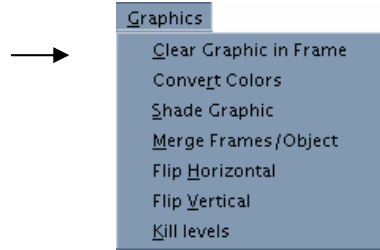
- A. To flip the image in the frame horizontally, select **Graphics** and **Flip Horizontal** or **Tab**. This will flip all the information in the sign from the left to the right and the right to the left.



- B. To flip the image from top to bottom, select **Graphics** and **Flip Vertically**.

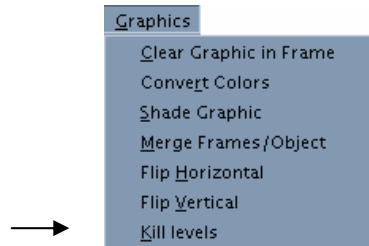
Clearing Graphic Images from the Frame

- A. If all the graphic information on a frame needs to be cleared, select **Graphic** and **Clear Graphic in Frame**. The frame will now be blank.

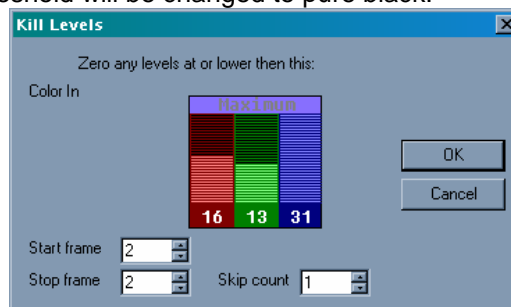


Kill Levels

- A. The option allows the user to zero out colors at a given level. Select the **Graphics** option and **Kill Levels**.



- B. A menu asks for the level at which the color(s) are to be taken down to zero. Input the highest level that needs to be “killed” or taken to zero. This color and any colors with levels below this threshold will be changed to pure black.



- C. If this applied to more than one frame, enter the desired **START AND STOP FRAMES** and any **SKIP COUNT** that applies.

Chapter 5 Animation Ideas and Hints

The following chapter will introduce animation and graphics techniques that give messages greater impact and excitement. They range from simple to complex. These will not be step by step instructions, but guidelines on how to achieve a certain effect or animation. The directions may need to be altered slightly depending on the size of the sign. If the sign is large, the objects can usually be bigger and more detailed and some movements may require more frames.

Suggestions from those with Experience

In a seminar given on animation by the creators of the California Raisins, one of the key pieces of advice dealt with movement. When animating an inanimate object, the movement should be exaggerated. If the movements of the Raisins were subtle, normal movements, they would seem sedate and unbelievable. The movements don't need to be contained within the viewing area. If the Raisin needs to jump, and the shot is too close to show all of the movement, just move the Raisin up and out of the viewable area. To enhance the jump, add shadow below him as his body moves up and out of the viewable area. Also, when he crouches to build momentum for the jump, exaggerate his crouch down, just as when he lands, show the impact on the body as it hits the ground.

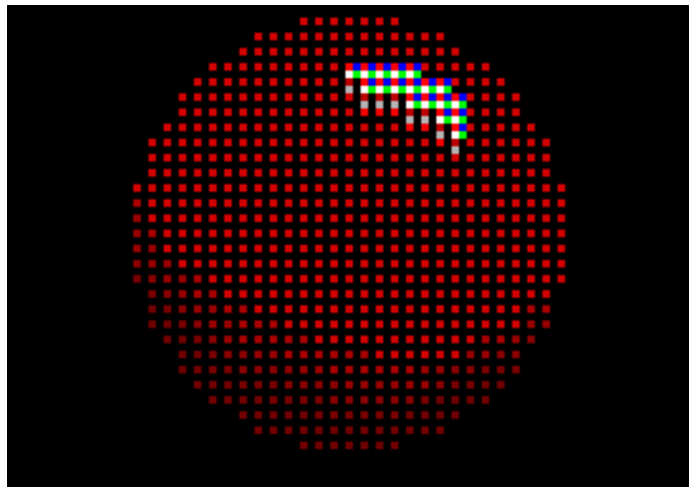
A hint from Disney is to watch the movements of an object or figure from real life to help develop the motion for the animated figure. When creating Snow White, they used an overweight older man as a guide line for Doc. There is a scene where Doc dances, so they had the man dance. They watched the exact movements of his body, especially his stomach and then replicated the movements in the animation. This helped to make the dancing Doc look as real as possible. When you have the chance, look at the things around you for ideas on movement and incorporate them into your animation.

Shading and Highlights

Many graphics drawn on the computer can look flat and unrealistic. One way to enhance the graphic and make it look more realistic is to add highlights and shading to certain areas.

1. Make a red ball that is quite large, at least 16 to 64 pixels high, depending on the size of the sign. If the sign is black and white, make a gray ball. Make the ball by using the Circle Mode and fill it using the Flood Mode. It is best to select the color red or Grey first before drawing the circle. This way the outline will be the correct color and so will the flood.
2. Now the highlight and shaded areas need to be determined. To help visualize this, think of a ball sitting on the desk in front of you. The ball would have a highlight. This highlight's location is determined by where the lights are in the room. If the light is directly above the ball, then the highlight will be in the middle of the ball toward the top. If the light is above the ball to the left, then the highlight will be in the upper left part of the ball. The shadow will appear at the bottom of the ball if the light is directly above. If the light is to the left of the ball in the ceiling, then the shadow will be around the bottom of the ball, curving up the right side just a bit. Once you have visualized the highlights and shadows, they will need to be reproduced.
3. First, start with the shadow at the bottom of the ball. Change the color in the Graphics Menu to a low intensity gray if the ball is gray, or a low red if the ball is red. Turn on the Draw tool. Now draw on the bottom of the circle. Do not go outside the edge. Make two rows of dark red or a dark gray. Make sure to taper the edge of the shadow down to one row where it goes up the side of the ball.

4. Change the color in the Graphic Mode to a brighter white or red, but not up to full intensity yet. Repeat the drawing, making sure that the color goes next to the previous one, moving up the ball.
5. Repeat this again using a color a bit more intense than the last. Think of this as gradating the color of the shadow from a dark color at the bottom of the ball to a more intense color, as the gradation gets closer to the center and top of the ball.
6. Now, the highlight will need to be added. Select white, full intensity, even if the ball is red. Draw a curved rectangle on the ball where the highlight would be. The edge may be gradated to a slightly less intense color.
7. Look the ball over a few times to see if there are any areas that need to be touched up or changed. Below is an example of what the finished product should look like.



8. To take this one step further, place the ball on a colored background. Add a shadow from the ball to the background. It should go in the opposite direction of the light source. The shadow on the background should not be gradated since the ball produces a solid shadow.

Note: This technique of highlighting and shadowing can be used on other objects as well; just think about where the light source is coming from. Place the shadows toward the bottom and opposite the light source, unless the light source is coming from the bottom. Place the highlight on the side the light source is coming from.

Squashing and Stretching

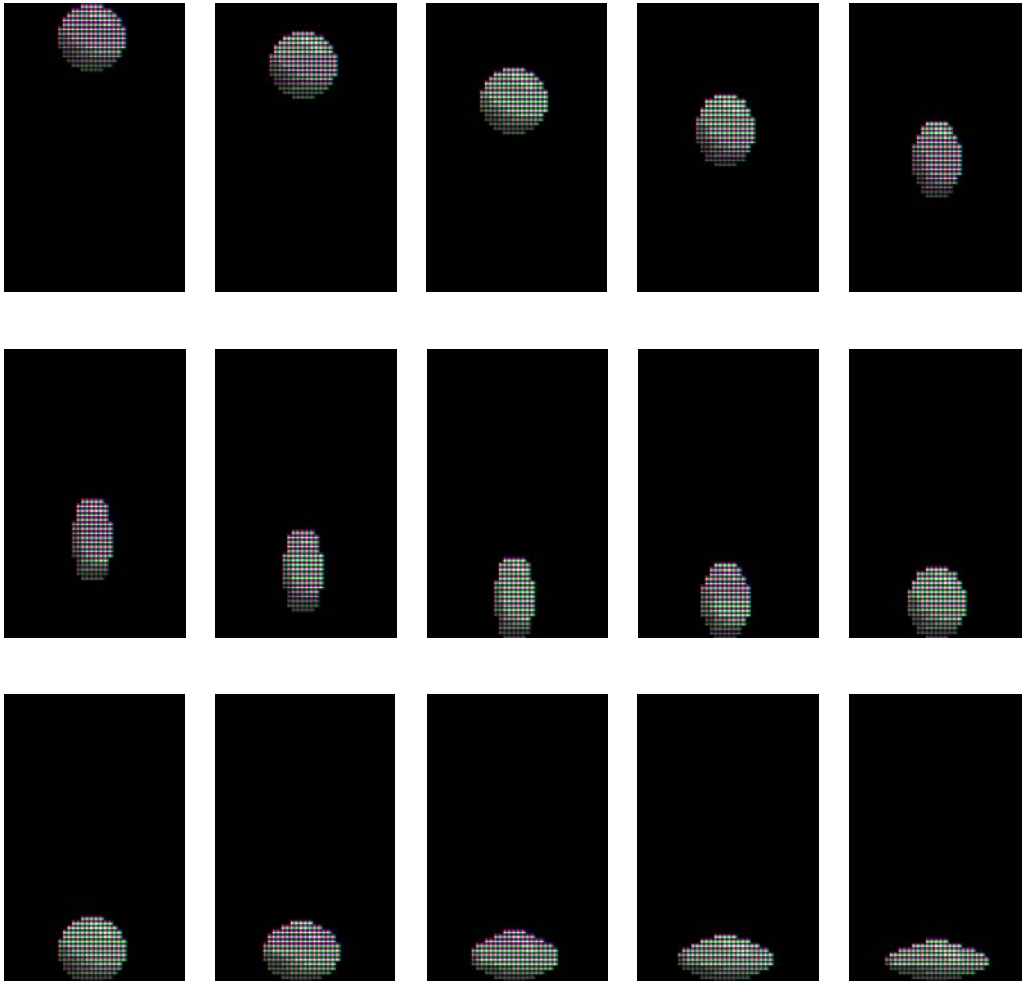
Squashing and stretching an object can also help add life to an animation. Think of the movement as a ball hits the ground, it compresses and squashes out to the sides. As it bounces back up, it stretches and elongates. Then as it nears the top of the bounce, it returns to its normal, round shape. While these movements may be exaggerated, they do help the ball look almost lifelike.

1. Draw a ball that will fit in the sign and have enough room to bounce up and down. Try using the shadowing and highlighting that was discussed above. Place it at the top of the frame, just touching the upper edge of the frame.
2. Add some blank frames after the current frame. Add enough to have the ball bounce to the bottom of the frame and squash out

3. Move back to the frame where the ball is. Click the Merge Mode on. Using the Copy Mode, copy the ball and move it straight down from the original ball. The distance should be about half of the ball's height. Using the keyboard, so the placement of the ball is not lost, press Page Down. This will move to the second frame, bringing the ball with it. Paste the ball by clicking with the left mouse key.
4. Repeat the step again, moving the ball down half of its height and moving it to the next frame and pasting it there.
5. There should now be three frames of the ball moving down. On the third frame, select the Move Mode. Draw a block around the bottom half of the ball and move the lower half of the ball down a pixel. Paste it at the desired location.
6. There should now be a black area between the upper and lower halves of the ball. Select the Draw Mode and fill in the area between the two halves to make an oval.
7. Now, go back to the Move Mode and draw a block around the left side of the ball only going about a quarter of the way in from the left side. The left quarter of the ball should now be in the block. Move the left quarter of the ball in towards the center of the oval one pixel and paste it there.
8. Repeat this to the right side, moving the right quarter in one pixel towards the center of the ball and pasting.
9. Some drawing and/or erasing may need to be done to smooth out the edges as the movement of the sides and bottom take place.
10. Copy the ball. Move it down half of its original height as before, move to the next frame and paste the ball on the new frame. Repeat the steps of moving the lower half of the ball down a pixel and then moving each of the sides in one pixel each.
11. Repeat this a few more times or until the bottom of the ball is touching the bottom of the frame. If the steps have been repeated a few times, but the ball is still not near the bottom of the frame, continue moving the ball down half of its height, pasting it in a new frame without moving in the sides or bottom. Continue this until the ball is resting on the bottom of the frame.
12. Now, the ball will need to start compressing and squashing. Copy the ball that is touching the bottom of the frame. Move it to the next frame, making sure it is in the same position.
13. Using the Move Mode, draw a block around the left third of the ball and move it out two pixels and paste it there.
14. Do the same with the right side, moving it out two pixels to the right.
15. Using the Draw Mode, fill in the area left from moving the sides out.
16. Go back to the Move Mode and move the top quarter of the ball down a pixel and paste. Draw a block around the top three quarters of the ball and move it down a pixel and paste. Draw or erase any areas that may need to be smoothed out.
17. Copy the ball and move it to the next frame, keeping it in the position of resting on the bottom of the frame. Repeat the steps of moving the sides out and the top down a few more times.

18. At this point, the animation is half done. The second half is just a repeat of the first half, but in reverse order. To repeat this in reverse order, go to the second to the last frame and select Frame and Copy. The second to the last frame will need to be copied once and placed after the last frame.
19. Move back a frame and copy it once, placing it after the last frame. The steps will need to be repeated, moving back to frame two. Do not copy the first frame, it will just be a repeat of the first back to back when the animation is run.
20. The next step is to set the hold times. Set them for 4 frames a second or less. For the frames where the ball is resting on the bottom of the frame, stretching out may need to be at a faster rate.
21. Once the Hold Times have been given, simulate the message to see how it runs. It should run as a continuous loop, bouncing up and down. If the rates need to be faster or slower, adjust them accordingly.

Below is an example of what the first half of the animation should look like.



Backgrounds

Backgrounds, whether they are stationary or moving can add interest and continuity to an animation or message. There are many different types of backgrounds that can be made. The following section will go through a few of them.

Moving Objects: Some animations and messages lend themselves to having objects floating, zooming, or spinning in the background or foreground. If there is a message about a concert or something musical, notes and/or instruments can float through the background. If it's for a Chili Cook Off, how about some red and green peppers moving through the background?

1. The first thing to think about is the objects that will move through the background. The layer that is furthest away needs to be made with the smallest objects, since the further away something is, the smaller it appears. Also, the colors should be darker since things at a distance are fuzzier and less distinct. Draw the objects in the frame spacing them appropriately.
2. The next layer should have objects that are a bit larger and more colorful than the last layer. Draw this layer on another frame.
3. The third layer should even be bigger and more brilliant than the last. Draw this layer on another frame.
4. If there are more than 3 layers, just keep making the objects bigger and brighter.
5. To make the layers move, start with the furthest back layer. Using the Copy Mode, place a block around the whole frame and copy it. Match the objects with the current frame and move the copied objects to the desired position, up, down, right, left, or diagonally a few pixel spaces, say 2 to 6 spaces depending on how fast the layer is to move. Keep track of how many pixel spaces the frame has been moved.
6. Using the keyboard, add a second frame, Ctrl Pg Dn and paste the frame here.
7. Using the paste option, bring up the frame again.
8. Repeat the steps of placing the copied objects on top of the current frame and moving it to the desired new location and then adding a frame and placing it.
9. Keep doing this until the objects have been moved off the frame.
10. Repeat these steps to the other layers. One thing to keep in mind is that objects closer to the viewer move faster than those that are further away. So, if in the last set of frames, the object moved up at a rate of 4 pixels per frame, try moving the next, closer layer at a rate of 6 or 8 pixels per frame. Increase the pixel rate for layers that are closer to the viewer.
11. Once all the layers have been moved, they need to be prepared for merging. To make the foregrounds stand out from the backgrounds, the objects closer to the viewer can have some outlines to them. To do this, convert the black background on all the frames to another color, say red.
12. Now apply a Shadow to all the frames. Choose the direction of the shadow and the depth.
13. The Shadow or black outline around the objects will need to be converted to a level 1 or 2 gray. The easiest thing to do is convert the black on all the frames to a level 1 or 2. This is done so that the outline will be recognized during the Merge. If the outline stays black, the software will not recognize it, and the outline will be gone after the merge. Changing it to a 1

or 2 makes it a valid color (but one that is not easily seen.) This outline may not be visible to the eye, but the software does recognize it the low color level.

14. Next, the red background will need to be removed, so convert it from red to black. The end result is a series of frames that contain the object with a dark gray (nearly black) outline.
15. Start merging the frames. First, merge the furthest away background as the Background frames, starting with the first one and ending with the last and the second furthest background will be the Foreground frames. Enter in the first frame number and the last of the Foreground frames. Merge them together. The result will be the two furthest away layers as a set of frames.
16. Merge the third layer as the Foreground frames on top of the frames with the first two layers as the Background frames.
17. Keep merging all the layers one on top of the other until they are all done. The end result will be a moving background of objects. The furthest away layer will be the smallest and slowest. The closest will be the biggest and fastest.
18. The frames will need to have On/Off Modes assigned to each one along with Hold Times. Simulate this. Make the necessary adjustments to achieve the desired effect.

Endless Loops

An endless loop is a moving background or image that has no beginning or end. Think of it as a roll of wallpaper, there is no end and no beginning. The loop could be as simple as a gradated color from right to left that moves, or a panning background.

Gradated Background

- A. If using a gradated background of blue, have the first 4 columns on the left a low level of blue. Make the next 4 columns to the right of that an intensity just a bit higher. Keep raising the intensity up a bit as the columns move to the right, until the frame is full.
- B. Copy the frame once.
- C. Use the Move Mode and place a block around the whole frame. Move the colored background to the left four pixels and place it there. When moving the contents of a frame, it is best to keep the contents moving at a consistent rate. This helps keep the image moving at a smooth pace.
- D. There should now be a column of black, four pixels wide on the right side of the frame. Fill this in with the color that is the second highest in intensity to the left of the black column. The frame should now be filled with shades of blue. What is being done here is a gradation of reverse color.
- E. Copy the frame once.
- F. Repeat step 5 again, moving the blue in the frame to the left four pixels and filling in the black column on the right with the next lowest level of blue.
- G. Keep repeating the above steps until the last frame is the one that would come before the first frame.
- H. Give all the frames On/Off Modes of change and Hold Times of 4 frames a second.

- I. Simulate the background. As this runs, there should be no visible break from the beginning and the end. This is an endless loop.

Moving Landscapes

- A. Draw some clouds in a frame, filling most of the frame. When drawing the clouds, have one run off the left side. Put what would be its other side on the right side of the frame. Have a cloud or two in the middle of the frame.
- B. Copy the frame.
- C. Using the Move Mode, place a block around the frame and move it 4 pixels to the left.
- D. There is now a column of black on the right side of the frame. This area needs to be filled in with the four pixels that are on the left side of the previous frame. Move back to the previous frame.
- E. Using the Copy Mode, place a block around the left column of four pixels. Copy them and move back to the next frame
- F. Place the block on the right side of the frame.
- G. Copy the frame.
- H. Go back to the previous frame and copy the column of four pixels on the left side.
- I. Go back to the next frame and place the block on the right side of the frame.
- J. Continue copying the frame and moving the clouds to the left and filling in the right side with the contents of the left side of the previous frame. Do this until the rotation of the clouds is complete.
- K. Give each frame On/Off Modes of Change with a hold time of 6 frames a second.
- L. Simulate the animation. The end result should be a moving background of clouds with no visible beginning or end.
- M. If the clouds are moving too fast, decrease the Hold Times. If they are moving too slow, increase the Hold Times.
- N. Another option to perform this function would be the use of the WRAP AROUND MODE.

Animated On/Off Modes

The next step to the moving background is adding text over the top. The text could be added over the top using the Merge Frames option. The only problem is that the text would take on the same On/Off Modes and Hold times as the background. Should the text just pop on, or should it dissolve or travel into view? The following steps go through both of these options.

There are other ways of having the text come into view besides dissolve and travel. Some other ideas are to have one letter can pop on one at a time or they can fall into place from different directions. Its usually easiest to start working with the final frame and work backwards. Use your imagination.

Dissolving Text

- A. Make the necessary frames containing the needed text. One important thing to consider is the number of frames in the background and their Hold Times. If the frames in the background have a hold time of 4 frames a second, how many frames of the text will be needed? If the text needs to be seen for 2 seconds, there will need to be 8 frames of the same frame of text. Make the necessary number of frames for all the text.
- B. To dissolve the text, make an extra frame of the text at the beginning.
- C. On the first frame, erase some of the pixels randomly from the text.
- D. Copy this frame and move to the first of the two frames. Remove more pixels.
- E. Keep copying the frames and removing pixels until there is nothing left of the word. If the word is to appear quickly, remove more pixels using fewer frames. Or if it is to appear slowly, use more frames with fewer pixels being removed from each frame.
- F. Repeat this to the end of the frames to make the text dissolve away. If this is simulated, the word or words will dissolve onto the frame and staying up for two seconds and then dissolving off.

Traveling

- A. Make the required number of frames to have text appear for the desired length of time.
- B. Go to the first frame, and insert a new frame before it. Go back to the first frame of the text, and go into the Copy Mode. Place a block around the text, copy it and move it in the desired direction, moving a few pixels at a time. Remember that the larger the movement, the faster the text will move. Copy the text, and move it to the first frame.
- C. Repeat these steps until the text has reached its desired starting position, usually off the edge off the frame.
- D. If the text needs to have an outline once it is on top of the background, convert the black background to a different color, Shade the text, convert the black shadow to a level 1 or 2, then convert the colored background back to black.
- E. Merge the text on top of the moving background, using the text frames as the Foreground frames.

Character Animation

Character animation can be the most difficult type of animation. It involves drawing a character and making it move and look believable. Some things need to be considered before drawing. How realistic is the character supposed to be? Is he supposed to be funny or serious? Other things to consider are how does he look from the side and from the back?

Once these things have been decided, start drawing him. The easiest thing may be to draw him on paper first, then transfer him to the computer, either drawing him by hand or using a scanner. Make him as simple as possible. The resolution on a sign isn't equivalent to the resolution of a

computer monitor. Also, it is difficult to reproduce all the small details when he moves. The first drawing of the character should be in the position that he will be the majority of the time.

If the character is going to walk, think of the movement that is needed. Do only the legs move, or does the whole body move with him and if so how? Watch someone walk. Does their head stay in one place or does it move up and down? There are some animation books on the market that show guidelines for the head, shoulders, and legs.

To get started on the character walking, draw the character in a key position. Make a copy of this original frame. Now make small adjustments to the second frame such as picking up a foot, swinging an arm and shoulder. The smaller the adjustments, the more frames that will be needed and the smoother the movement will be. Copy this frame. Move to the next frame and continue making small adjustments. Once a complete rotation of movement has been done, copy the frames in a series a few times. The result is a character walking continuously.

Once you have animated a character walking, try other movements such as jumping, running or skipping. If you have difficulties moving the whole body, try a close up of the feet moving, and then change scenes to a close up of the head. Use your imagination when moving from scene to scene.

Sources for Ideas

The following is a list of sources for animation ideas.

Animation Books: There are several of these books on the market. Some of the books give actual information on creating animation; others give helpful hints in such things as movement of people. Some even give characters drawn in step-by-step increments.

Commercials: Some of the commercials on television give good examples of animation, both character and text. The story lines can also be good; they are short and simple, just as animation on an electronic sign should be.

Cartoons: Saturday morning cartoons show good examples of character animation. They usually show good use of exaggerated movement. When Wiley Coyote gets hit over the head with a hammer, quite a few things happen. First, his head flattens out, and his body scrunches up, then pops back up. His head may then sway from side to side with birds circling. To us, this is more believable than a hammer hitting his head and nothing else happening.

Coloring Books: These are a great source for simple characters. The characters are usually easy to identify with a few intricate details.

Animations on the Internet: The animations found here are usually simple, but eye catching. Take note of the characters that are used and what they are used for.

Other Programs

There are numerous other programs on the market that can help enhance the messages on the sign. Sometimes, to achieve a certain look, more than one program will be used. The following is a list of programs and the functions they perform. This list is not all inclusive. One thing all the programs have in common is that they are Windows based. Some of the programs are simple and others are very complex.

3D Studio Max: 3D animation software. Allows for the creation and animation of 3D objects. Different camera angles and light sources can be used.

Adobe Illustrator: Vector based illustration program. 2D objects can be created with this program.

Adobe PhotoShop: Raster based illustration program. 2D objects can be created with this program.

Adobe Premiere: This is a video editing program with capabilities of adding text.

After Effects: 2D animation and compositing program.

CorelDraw: Vector Illustration program. 2D objects can be created with this program.

CorelPhotoPaint: Raster based illustration program. 2D objects can be created with this program.

Crystal 3D Impact 3D animation program.

Dreamweaver: Animation Program

Flash: Animation Program used extensively for Internet animations.

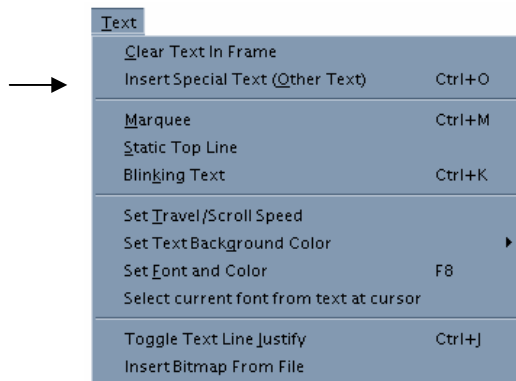
Free Hand: Illustration program.

Lightwave: This is a 3D animation program. There is a portion of the program which is a modeler which allows for creation of 3D objects. The layout portion of the program allows the objects to be animated while using different light sources, camera angles and movements.

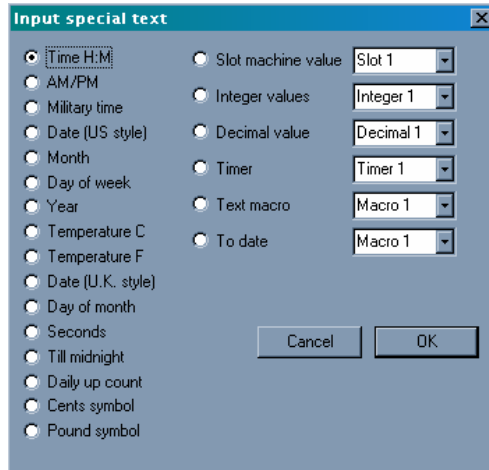
Chapter 6 Time and Temperature

Creating Time and Temperature Messages

1. Time and temperature can be placed on a frame and displayed on the sign very easily. First, edit or make a new message.
2. Select a font for the time and temperature.
3. Select the INSERT SPECIAL DATA option. This is found below the BLINK option, or select the **Text** option and **Insert Special Text (Other Text)** or **Ctrl O**.



4. Once selected, a list of options will appear. Select one of the time options. The selection will appear in the center of the frame in the font that has been selected.



5. More information can be entered from this menu on the same frame or on a second frame by repeating the above steps. Once the message has been sent to the sign, the Remote will update the dates and times automatically.

Note: If gaming information such as a progressive amount is involved, then the options on the right of the Input Special Text dialog box will be used. Special hardware and/or software may need to be added to the system to allow it to work. If there are any questions, please call your YESCO representative.

Setting Time at the Sign

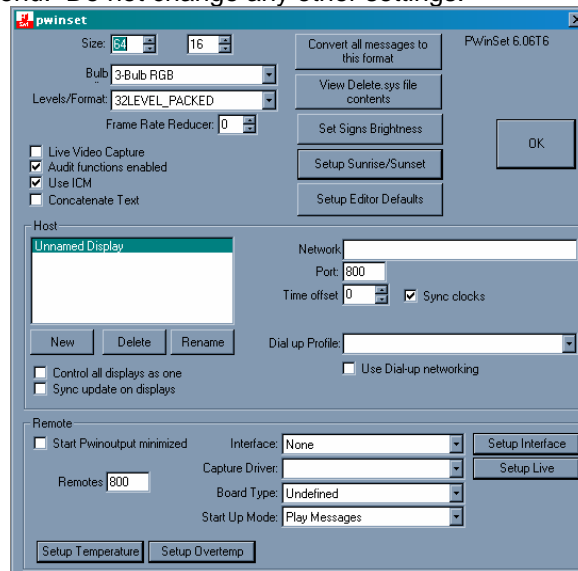
The time on the sign should not need to be adjusted. The time on the Remote is set from the Host every time an update is done

- A. Set the time on the Host computer by clicking on the time in the lower right corner of the monitor.
- B. Update the computer. The time should now be reset. If it is not, call your local YESCO representative.

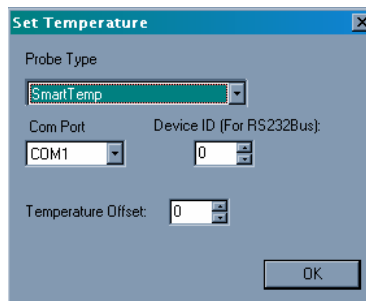
Offsetting the temperature on the Sign

If the temperature is consistently off by a given number of degrees, it may need to be adjusted.

- A. Go to the Windows Explorer Menu and go to the specific directory that has the PrismView software. This is usually the Prism directory.
- B. Find the file called PWINSET.exe and open it.
- C. Click on the **SETUP TEMPERATURE** button in the Remote Section in the lower left corner of the menu. Do not change any other settings.



- D. Type in the amount the temperature needs to be offset and click on **OK** and **OK** again to close PWINSET.

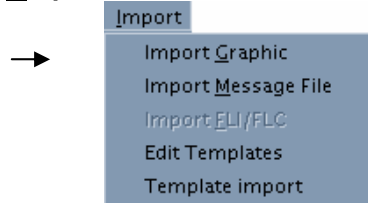


- E. Go back to the PrismView software and update the sign. The temperature should now be reset.

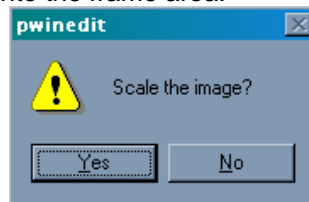
Chapter 7 Importing

Importing A Graphic into a Message

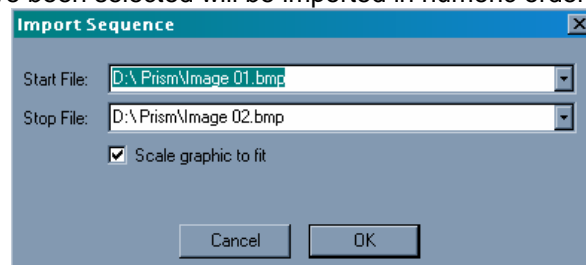
1. Make a graphic that is saved as either a .bmp, .pcx or .tga file in another program and save it to the Host computer.
2. Open the message that the graphic or .fli/flc is to be placed into and move to the frame that is to come after the imported graphic.
3. Go to **I**mport and **I**mport **G**raphic.



4. Move to where the file is located on the computer and select it.
5. A dialog box will ask whether or not to **Scale the Image**. If the file was made in the same aspect ratio as the sign, it does not have to be scaled. If it was made in a different aspect ratio, it may be scaled. This will "fit" the file into the frame area. The file will either be stretched or compressed to fit into the frame area.



6. If the .bmp is part of a series of bitmaps that have been named numerically, such as 01.bmp and 02.bmp, the software will ask which .bmp is to be the first and which is to be the last. The .bmps that have been selected will be imported in numeric order.

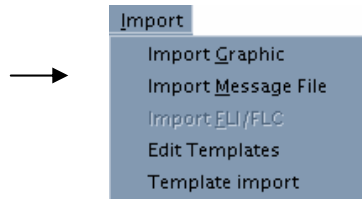


Importing a Message

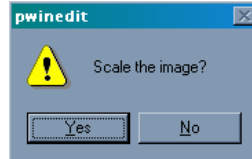
Importing a message allows a message to be imported from another location or sign size into the current directory or message. The message can be imported into an existing message or into a new message.

Importing a Message into an Existing Message

- A. To import a message into an existing message, an existing message will have to be edited. Move to the frame that the imported message is to come after.
- B. Select **I**mport and **I**mport **M**essage. Go to where the message is stored and select it.

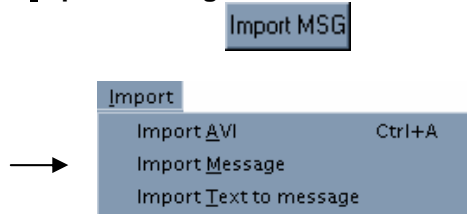


- C. A dialog box will ask whether or not to Scale the Image. If the two messages are the same size, height and width, answer no. If they are not the same size, Scale the Image. This will force the import message into the size of the existing message. The imported information is now placed on the frames after the current frame.



Importing a Message into a New Message

- A. From the PrismView Main Menu, click on the **IMPORT MESSAGE** button or select the **I**mport option and **I**mport **M**essage.

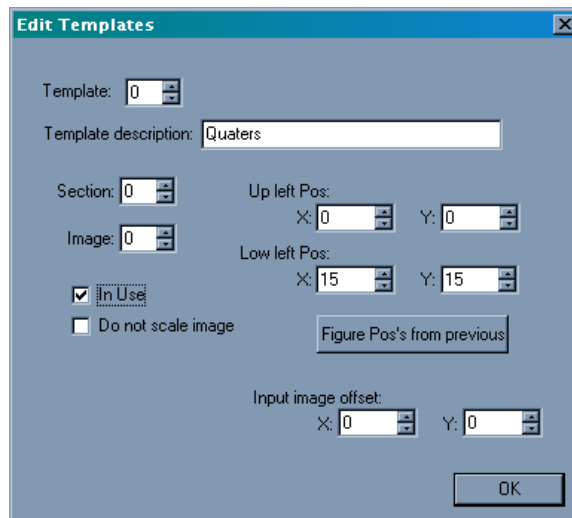


- B. Go the directory where the message is stored and highlight the message and click on **OPEN**. The message will be imported into the current directory of PrismView.

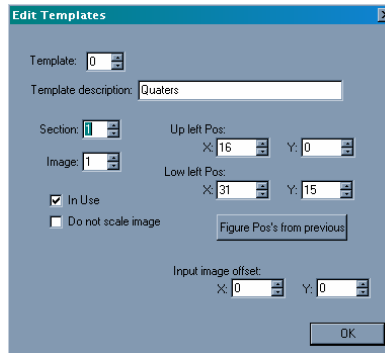
Importing and Editing Templates

Some situations call for a sign to be broken into different sections. The sections can be of the same or different sizes. Multiple combinations of sections can be saved and used easily. Bitmaps, avis and other messages can then be placed in the sections.

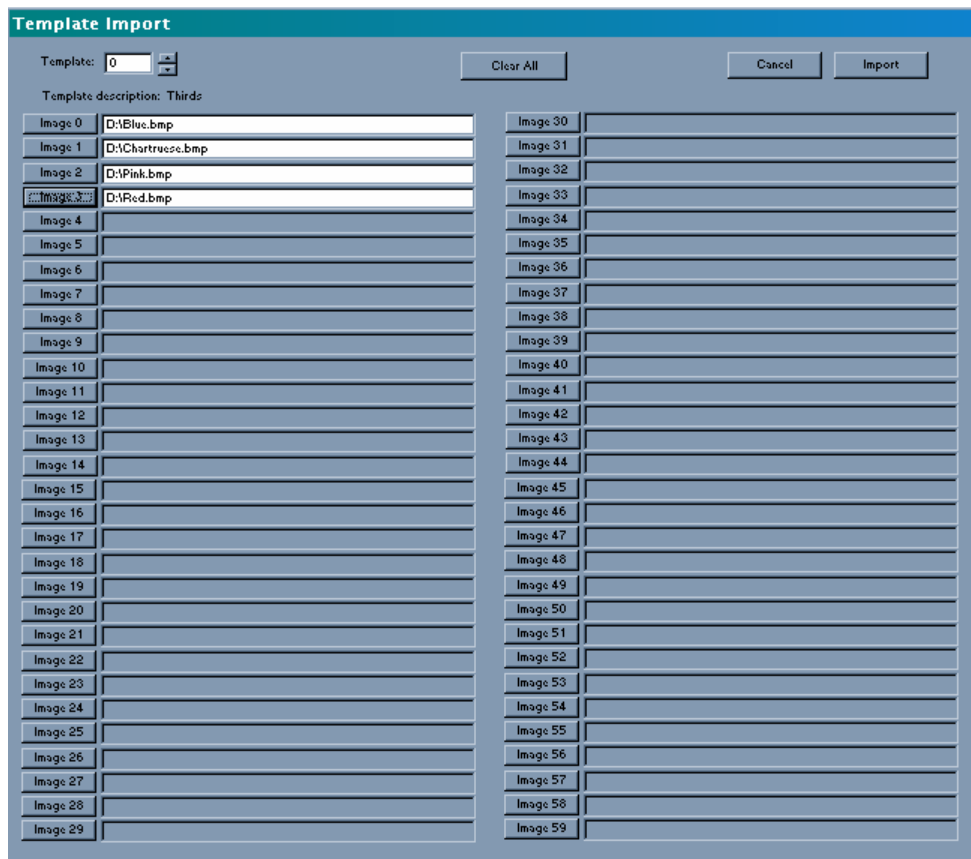
1. First, decide how the sign is to be broken up into sections. Make a note of the X and Y coordinates at the bottom of the frame where these sections are to start and stop.
2. Make a new message, or edit the message where the templates are to be used. If using an existing message, go to the frame where the images are to be placed.
3. Select **I**mport and then **E**dit **T**emplates.
4. The Template Number is in the upper left corner. All the numbers for the Templates and their positions start with 0, not 1. Each Template number can have different image and size settings. Start with number 0. Give a description to the Template such as a description of the breakdown or of what is to be placed into the sections such as Quarters or advertisers. Any description can be used.
5. As an example, say the sign is 64 pixels wide by 16 high and is to be broken into quarters. Section 0 would be the first quarter. The positions on the upper left would start out at X: 0 and Y:0 and the lower left would be X:15 and Y:15. The Image will be 0 for this example, but could be any number, as will be see in the Template Import Menu. Have the **In Use** option checked. These settings will have the first image placed in the furthest left quarter of the sign. If the image needs to be scaled to fit into the desired area, do not check the **Do Not Scale Image** option. To have a certain area of an image be imported without scaling the entire image, select **Do Not Scale Image** and adjust the **Input Image Offset** Coordinates. If an image is to be used needs to be offset within the Section, give the X and Y offset coordinates in the lower right of the menu.



- Now go to Section 1, the second quarter of the sign. Use Image 1. The easiest way to set the positions if the sections are the same size is to click on **Figure Pos's from Previous**. This will automatically figure the position settings for the current section from the previous section. If the setting is to be a different size, you will have to calculate what the coordinates will be and enter them.



- Complete Sections 2 and 3 as you have for Section 0 and 1 and click on **OK** when finished.
- To select the Images to be used in each Section, select **Import** and **Template Import**.
- Using Template 0, notice that Images 0 to 3 can have image names placed in them. To place an image in Image 0, click on the **IMAGE 0** button. Select the appropriate file.

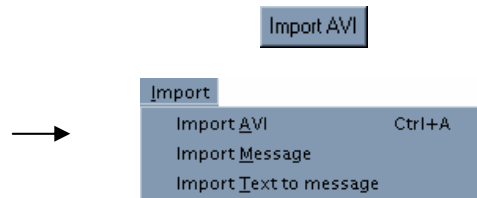


- Do the same for Images 1 to 3.

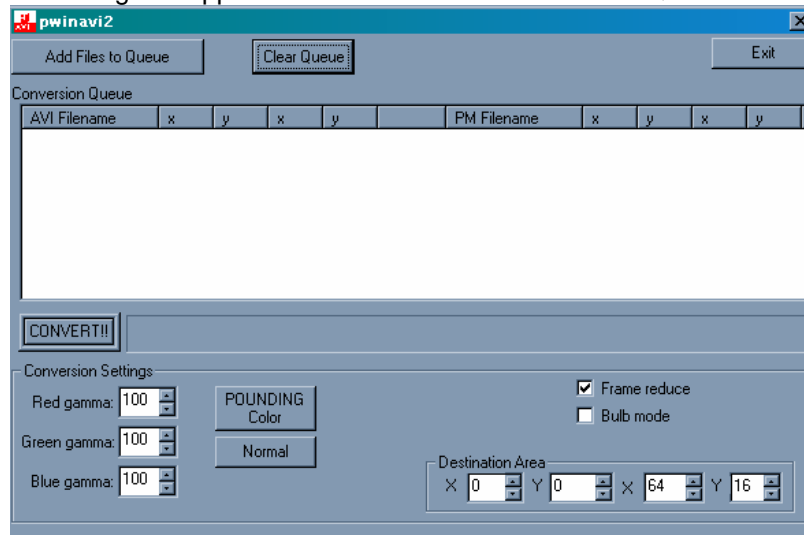
- When finished, click on the **Import** button. The images will now be placed in the message. If the images are bitmaps, only one frame will be used. If they are avis or messages, then the appropriate number of frames will be created. If a combination of bitmaps, avis and messages are used, the appropriate number of frames will be created for the avi or message, and the bitmaps will also be placed on those frames.
- If the Images in a Template need to be cleared, click on the **CLEAR ALL** button.

Importing an AVI File

- An .avi file can be converted into a message. To do this, go to the PrismView main menu. Click on the **IMPORT AVI** button or select the **Import** option and **Import AVI** or **CTRL A**.



- An Import AVI dialog box appears. Click on the **ADD FILES TO QUEUE** button.

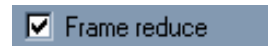


- Go to where the file is located, select the file and click on **OPEN**.
- The avi is now listed in the Conversion Queue. X and Y coordinates are also given. These coordinates allow for a portion of the .avi frame to be converted or the whole frame area. The first set of X and Y coordinates in the Source area refer to a starting point in the upper left corner of the .avi and the second set refer to the lower right corner of the image. If the whole .avi is to be converted, there is no need to change the coordinates. The X and Y coordinates in the destination is where the image will be placed in the frame

5. To use only a specific area of the avi, double click on the file name once it has been placed in the queue. The first frame of the file to be converted will now be seen. Use the mouse to Click and drag over the desired area to be converted. Once the area has been selected, close the avi. The area selected will now be seen in the coordinates of the avi file name. You may also use the Area Menu to select the center of the avi file in the exact pixel dimensions of the sign.
6. Add as many files to the queue as needed.
7. Next, if the display is a color wedgebase or color high voltage sign, select **BULB MODE**. If the sign is an LED or Monochrome Wedgebase, do not select this option.



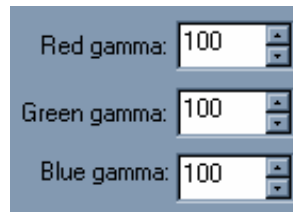
8. Select the **FRAME REDUCE** option if needed. This compresses identical sequential frames of an avi into a single message frame that holds for the appropriate duration. This option reduces file sizes.



Gamma Settings

Gamma Settings allow for the Red, Greed and Blue levels to be raised or lowered for an individual file when it is being converted from an avi.

- A. The normal setting for each color is 100. To reset any levels that have been changed, select **NORMAL**.
- B. To raise the levels to their highest setting of 400, select **POUNDING COLOR**.
- C. The levels can be changed individually by raising or lowering each one.



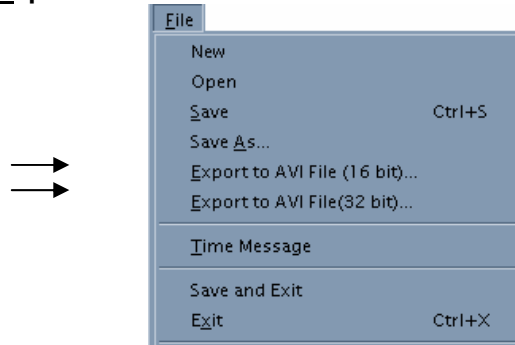
- D. Now select **CONVERT**. The .avi is now converted to a message file.



** These gamma adjustments can influence a files contrast. Lower gamma levels will in many cases increase the contrast while higher gamma levels will decrease the contrast. Sign content typically requires higher contrast.*

Exporting a Message to an AVI

1. A message can be exported in the form of an AVI. To do this, select the message that is to be exported.
2. Select **F**ile and **E**xport to AVI File either 16 bit or 32 bit.



3. A dialog box will appear asking where to export the file. Select the directory in which the message is to be exported.

Chapter 8 Video, Live and Prerecorded

Some signs have the option to display live video. If the sign has this option, please look over the following section. If you are interested in this option, please call the local YESCO salesperson.

If the sign has the capabilities to display live video, the Host and Remote have been set up and configured by YESCO before the time of delivery. The items needed to display live video are a video card installed in the remote (done by YESCO), and a live video feed hooked up to the remote.

1. First hook up an RCA feed from the video source into the Remote computer.
2. If using a VCR, queue the tape to the appropriate place and pause. You may need to queue the tape to a few seconds prior to the desired footage.
3. From the Host, live video will need to be activated. This is done by clicking on the **LIVE VIDEO** button or selecting **Sign** and **Activate Live Video** from the PrismView Main Menu. Start the live video source. Special planning may be needed if timing is a crucial issue.
4. Once the option has been selected, the information being fed to the sign from the video source will automatically be displayed on the sign.



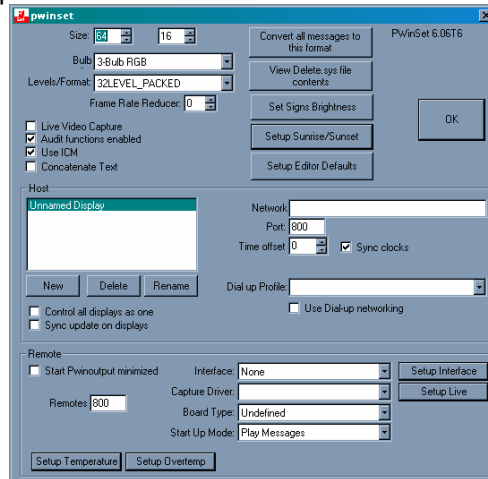
5. To end Live Video, click on disconnect.

Note: Close ups and high contrast footage when using live video.

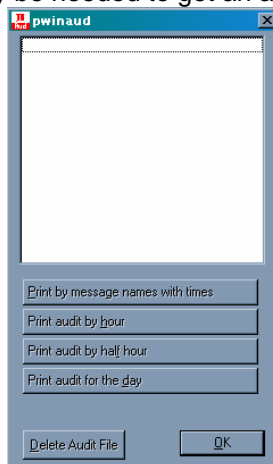
Chapter 9 Auditing Messages on a Sign

There are times when a listing of what has run on the sign is needed. This is called an audit.

1. To start the audit, it must be turned on in the PWINSET.exe menu. PWINSET.exe is accessed from the Windows Explorer menu. Open Windows Explorer and go to the directory where PrismView is loaded. Locate the PWINSET.exe and open it.
2. To turn the function on, put a check mark in the box **AUDIT FUNCTIONS ENABLED**. This is found on the upper left portion on the menu.

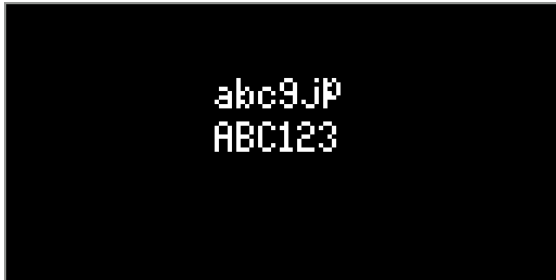


3. Now close PWINSET.exe by clicking the **OK** button. Do not change any other settings in this menu unless otherwise instructed by a YESCO representative.
4. To view a file, go to PrismView main menu and select **Sign** and **View Audit**. This brings up the audit menu. You can view the messages that have been displayed by scrolling through them. An update of the sign may be needed to get an accurate audit.

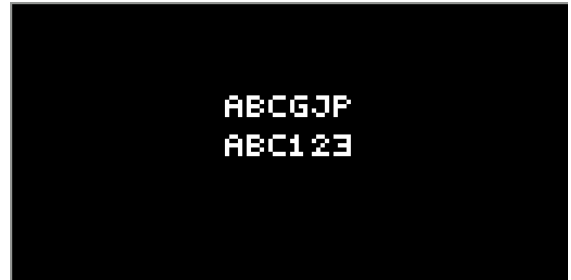


5. If the Audit needs to be printed, select the print function which suites your needs best, by the hour, half hour or the day.
6. To delete the audit file and start a new one, click on **DELETE AUDIT FILE**.
7. To exit, click on **OK**.

Appendix A Fonts



Thin Tiny 4X7



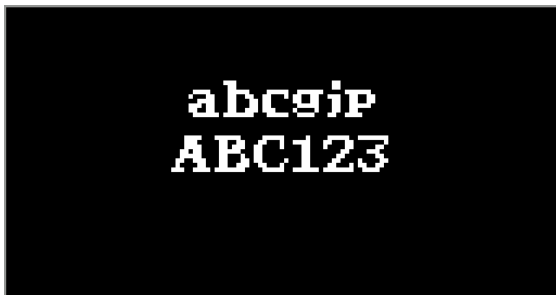
Bold Tiny 5



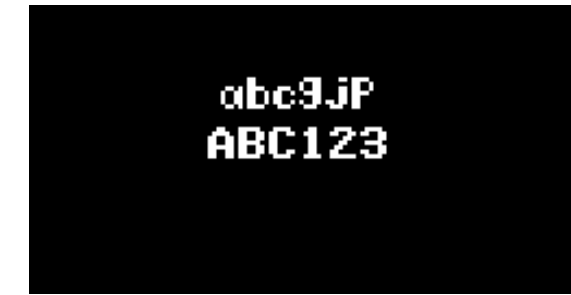
Inverse Tiny 5



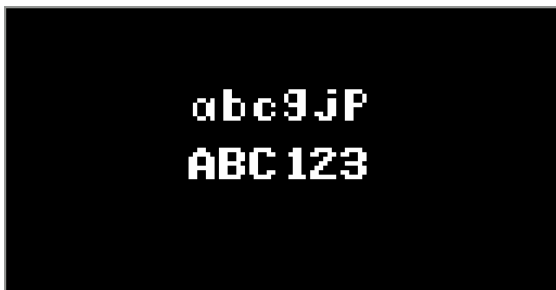
Thin Tiny 5



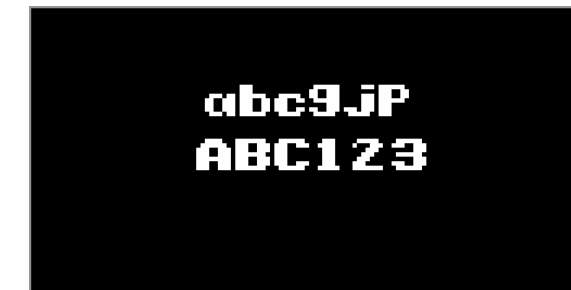
Ben 8



Bold 8



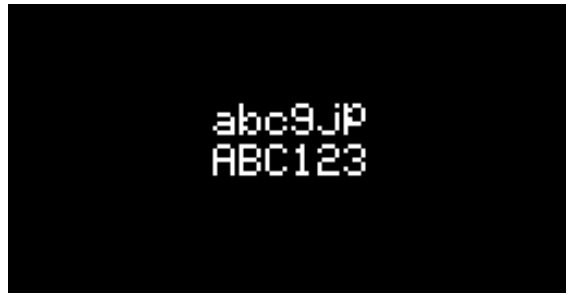
Bold Fixed 8



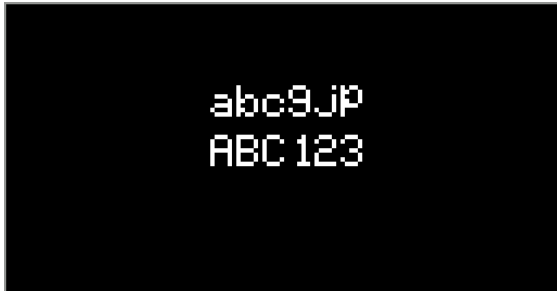
Extra Bold 8



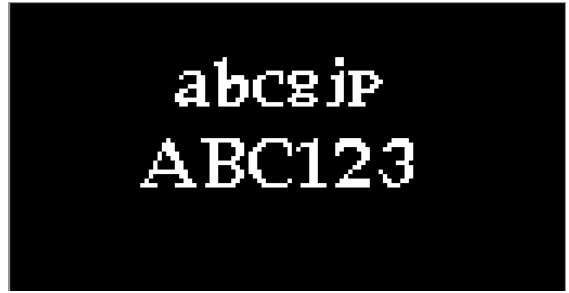
Extra Wide 8



Thin 8



Thin Fixed 8



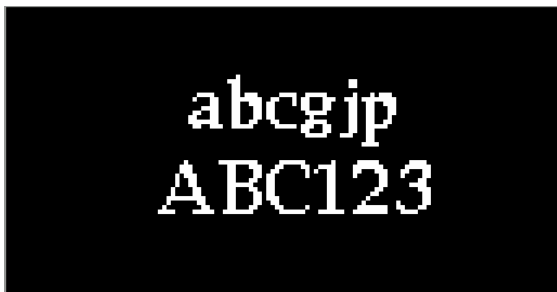
Antig 11



Bold 11



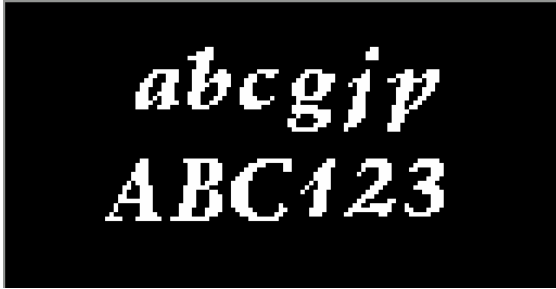
Tech 11



Antig 12



Tech 12



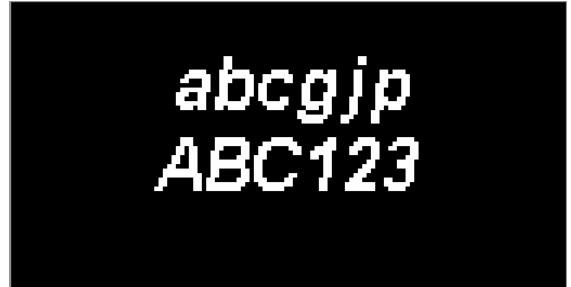
Schnie 14



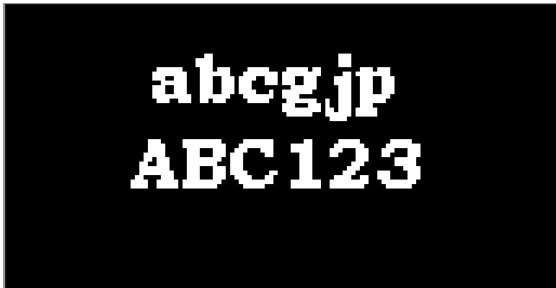
Litho 15



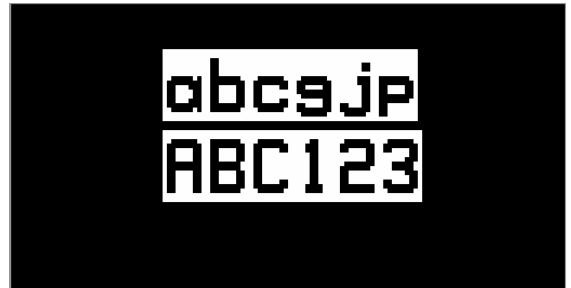
Bold 16



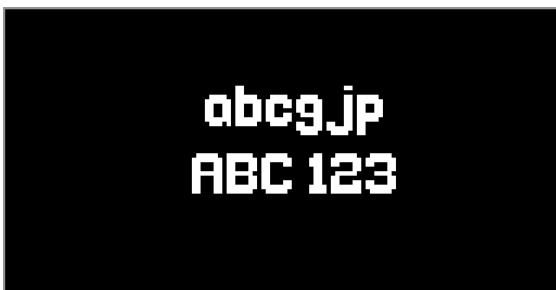
Bold Italic 16



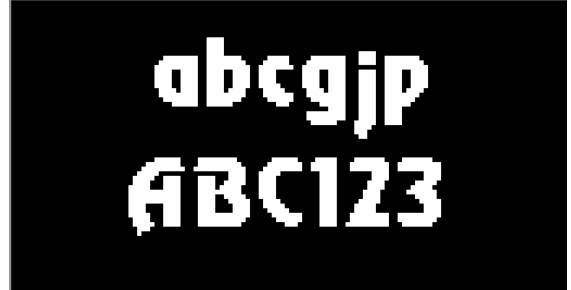
Bookman 16



Inverse 16



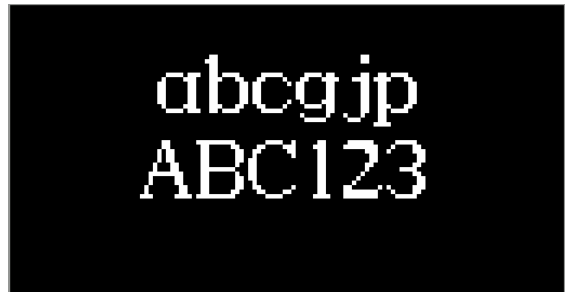
Middle 16



Revu_D 16



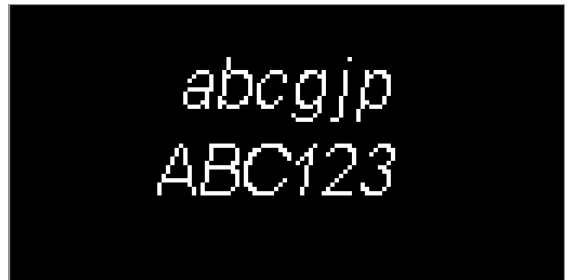
Revue 16



Roman 16



Thin 16



Thin Italic 16



Ariel 17



Tech 18



Schnie 20



Human 22



Compac 23



Tech 23



Antig 24



Bookman 24



Full Height 24



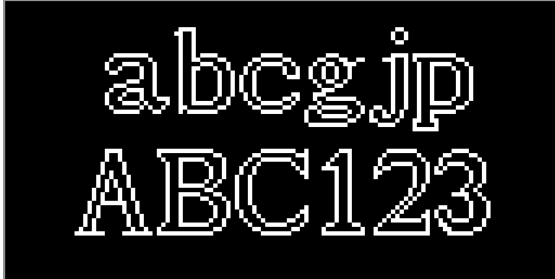
Litho 24



Prestige 24



Roman 24



Roman Beam 24



Roman 32

Appendix B Graphics

7 High Graphics



a=Television



b=Water Skier



c=Squirrel



d=Skier



e=Pay Loader



f=Paper Clip



g=Ship



h=Sun



i=Truck



j=Sailboat



k=Duck



l=Bell



m=tank



n=Cue and Ball



o=Rocket



p=Turtle



q=Rabbit



r=Candle



s=Cake



t=Camel



u=Bus



v=Butterfly



w=Buggy



x=Witch on a Broom



y=Telephone



z=Shark Fin



A=Pacman



B=Key



C=Whale



D=Gun



E=Pipe



F=Lamp



G=Firetruck



H=Helicopte



I=Airplane



J=Motorcycle



K=Boat



L=Musical Notes



M=Chicks



N=Wrench



O=Bulldozer



P=Champagne Glass



Q=Rhino



R=Knife and Fork



S=Flag



T=Train



U=Key



V=Graduation Cap



W=Star



X=Camera



Y=Lion



Z=Horse and Buggy



1=Hammer



2=Guitar



3=Ship



4=Car



5=Tractor



6=Heart



7=Truck



8=Duck



9=Clover



0=Bicycle



!=Ghost



@=Football



#=Owl



\$=Mouse



%=Golf Club and Ball



^=Football and Post



&=Dog



*=Eyes



(=Moose



)=Snow Plow



-=Trumpet



_=Terrier



==Football Helmet



+=Snail



`=Reindeer and Sled



~=Snowmobile



[=House



{=Cat



] =Lawn Mower



)=Heart



\=Electrical Cord



|=Baseball Player



;=Umbrella



: =Ice Skate



'=Present



"=Car



,=Airplane



<=Elephant



.=Fish



>=Jack-O-Lantern



/=Reindeer



?=Truck

11 High Graphics



a=Kangaroo



d=Car



g=Keyboard



j=Truck



m=Helicopter



p=Left Arrow



s=Pipe



v=Star



y=Faucet



B=Guitar



E=Sailboat



H=Trumpet



b=Basketball



e=Ice Skate



h=Hand Pointing Right



k=Alligator



n=Right Arrow



q=Bell



t=Valentine



w=Football



z=Tractor



C=Heart



F=Light Bulb



l=Scissors



c=Hand Pointing Left



f=Bone



i=Left Arrow



l=Lamp



o=Umbrella



r=Cross



u=Television



x=Snowflake



A=Key



D=Rabbit



G=Dollar Bill



J=Car



K=Mitten



L=Telephone



M=Christmas Tree



N=Bicycle



O=Camera



P=Motorcycle



Q=Owl



R=Diamond



S=Left Arrow



T=Clock



U=Wrench



V=Pigs



W=Airplane



X=Train



Y=Tennis Racquet



Z=Flower



1=Turkey



2=Rocket



3=Hat



4=Hammer



5=Eyes



6=Oar



7=Keyboard



8=Trombone



9=Lion



0=Raindrop



!=Pacman



@=Apple



#=Key



\$=Flag



%=Elephant



^=Duck



&=Pointing Finger



*=Fish



(=Lamp



)=Van



-=Pencil



_=Right Arrow



==Van



+=House



`=Bird



[=Tricycle



{=Bag of Money



] =Basketball



\=Zipper



|=Right Arrow



=Hot Air Balloon



: =Batter



'=Bus



"=Anchor



,=Musical Notes



<=Jet



. =Golf Club & Ball



>=Ghost



/=Camel



?=Crown

24 High Graphics



a=Vacuum



b=Camera



c=Jack-O-Lantern



d=Duck



e=Candle



f=Window



g=Door



h=Keyhole



l=Rocket



j=Computer



k=Left Finger



l=Eye



m=Lion



n=Knife



o=Anchor



p=Right Finger



q=Fence



r=Mouth



s=Turkey



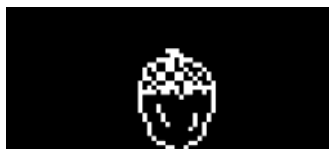
t=Bell



u=Zipper



v=Gate



w=Acorn



x=Unicorn



y=Castle



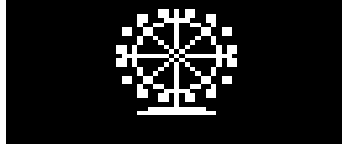
z=Apple



A=Butterfly



B=Pen



C=Ferris Wheel



D=Shopping Cart



E=Tree



F=Clock



G=Telescope



H=Flower Pot



I=Chess Board



J=Fire Hydrant



K=Television



L=Church



M=Light House



N=8 Ball



O=Grandfather Clock



P=Leaf



Q=House



R=Dollar Bill



S=Fish



T=Squirrel



U=Rabbit



V=Chair



W=Car



X=Sundae



Y=Horse



Z=Stage Coach



1=Streetlight



2=Faucet



3=Lamp



4=Radio



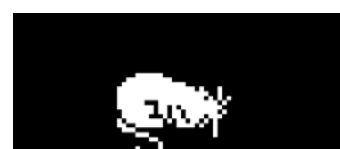
5=Pliers



6=Ant



7=Guitar



8=Rat



9=Snail



0=Star



!=Flag



@=Sleigh



#=Cat



\$=Igloo



%=Owl



^=Trumpet



&=Dove



*=Pig



(=Dog



)=Airplane



-=Elephant



_=Paint Can & Brush



+=Musical Note



[=Dice



{=Hammer



] =Ship



}=Glasses



\=Umbrella



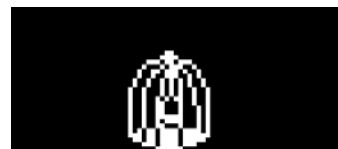
|=Ostrich



;=Bicycle



: =Light Bulb



'=Birdcage



"=Drum Set



,=Target



<=Heart



. =Helmet



>=Telephone



/=Key



?=Traffic Light

32 High Graphics



a=Camera



b=Gate



c=Window



d=Shark Fin



e=Start



f=Light Bulb



g=Rain



h=Radio



l=Snake



j=Butterfly



k=Musical Notes



l=Ship



m=Flag



n=Space Shuttle



o=Airplane



p=Basketball Hoop



q=Turkey



r=Heart



s=Trojan



t=Bowling Pins



u=Owl



v=Unicorn



w=Lighthouse



x=Stage Coach



y=Basketball



z=Telephone



A=Car



B=Fish



C=Clock



D=Tank



E=Hand



F=Umbrella



G=Apple



H=Golf Ball



I=Dog



J=Jack-O-Lantern



K=Balloon



L=Hour Glass



M=Baby



N=Horse



O=Eye



P=Horn



Q=Tree



R=Weathervane



S=Computer



T=Cannon



U=Head



V=Lamp



W=Rabbit



X=Finger



Y=Dog House



Z=Field Goal



1=Goose



2=Mug



3=Snail



4=Champaign Glass



5=Eagle



6=Balloons



7=House



8=Baby



9=Television



0=Ant



~=Bell



{=Pac Man



=Stop Sign



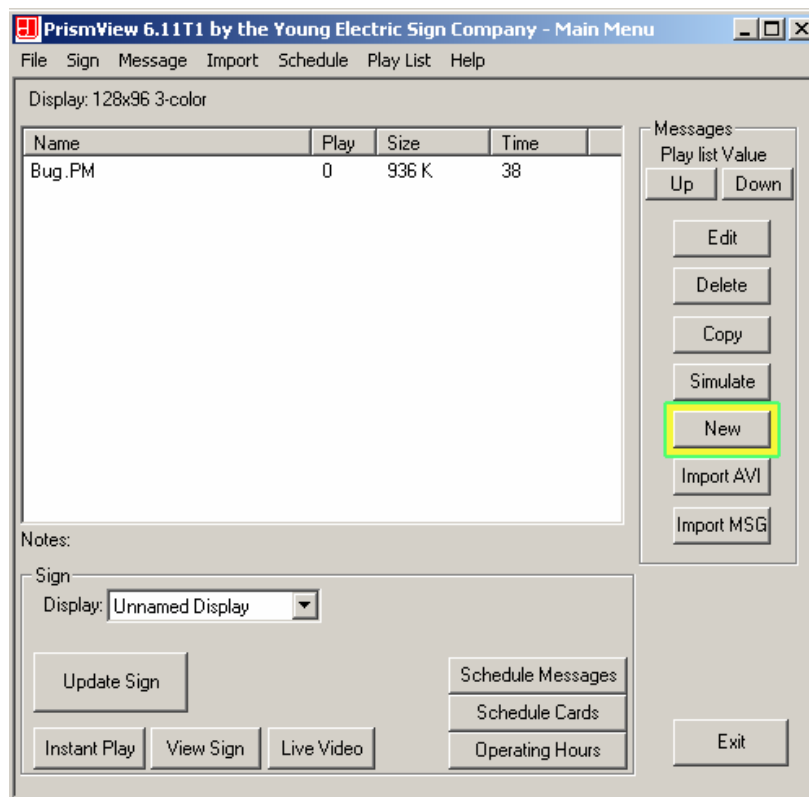
|=Sailboat

PRISMVIEW QUICK START GUIDE

The process of creating, scheduling and transferring a message to your electronic display is extremely easy to accomplish and understand. There are many “bells and whistles” that can make the process seem more intimidating than it needs to at first. To introduce first time users to the general concepts of producing and managing content for electronic signs, this Quick Start Guide will briefly step through the three basic operations involved in electronic sign management. First we will create a message, then we will schedule it and, finally, we will transfer the new information to your sign.

Creating A Message

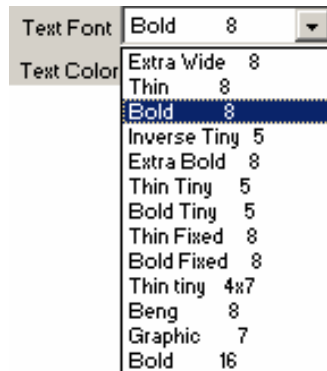
From the PrismView main menu, click the NEW button located on the right hand side.



The Pwinedit window will appear with its default settings. The black box with the blinking white line is your working representation of the sign. This will be your workspace. You may zoom in if it appears too small on your screen. Choose one of the multiplier options next to ZOOM and find a comfortable working space for yourself. In this example we're going to create a simple two-frame text animation. Note that there are many different menus, buttons and options. These options can greatly enhance what text or imagery you're going to put on your sign. Once you feel comfortable with the basic procedure, play around with some of these options to see how they affect your message.

For now, we'll concentrate on choosing a font, typing in copy, adding another frame and saving the message.

1. Next to TEXT FONT are the Prismview Font options. Click on the down arrow next to Bold 8 and a list of the available fonts will appear. Note that smaller sign sizes, below 32 pixels high, will have fewer available fonts. Let's pick a font that will work for everybody. Choose Extra Bold 8 and let's get typing.



2. Remember that all signs are not the same size, so in this example it is quite possible that the text we type in may appear very small. Type in the word WELCOME. If you have a monochrome sign it will be white and if you have a color sign it will default to red. For color signs, the choice of color needs to be done before typing the word. So, if you wanted yellow text, you would have to erase WELCOME choose the TEXT COLOR Yellow and then retype WELCOME.

3. For multiple lines displays you could hit return and type your next line in the same font and color or choose a different style. For this example we'll imagine that we have one line of text only. In order to welcome someone specific, we need to add another line. In the bar of frame navigation buttons, find the right pointing arrow with the + sign inside it.



Click once on this button and you will create a new frame that comes after the frame we just typed the word WELCOME on.

4. Choose a different font style if you'd like and let's welcome LARRY to our sign. However, let's make the word Larry flash. Click the button labeled BLINK to the right of the TEXT FONT selector. Everything typed in with the Blink toggle on will be blinking. If this truly annoying to you, quickly click the BLINK button again and turn it back off. Type in Larry either blinking or non-blinking.

5. Let's review your work. Press the PLAY button.




6. Pretty simple. Welcome holds for 2 seconds and then is followed by Larry for 2 seconds. Press the PLAY button again, which is now a square for STOP.
7. Go to the FILE > SAVE AS and choose a name for your message. After the message is saved let's go to FILE > EXIT and find out about scheduling.

Scheduling Your Message

1. Scheduling your message to play on your electronic sign can be very simple. With one mouse click you can basically “turn on” a message. Or, it can be as complex as setting various date, time and order preferences for a specific message.
2. The first scenario is a form of scheduling called the PLAYLIST. The playlist is adjusted with the buttons labeled UP and DOWN located in the top right corner of the main menu.

Name	Play	Size	Time
welcomejune.PM	0	1 K	4
welcomejerry.PM	1	1 K	2
welcomerobert.PM	0	1 K	4



The screenshot shows a window titled "Messages" with a "Play list Value" label and two buttons, "Up" and "Down". The table above shows the data for the playlist.

3. After selecting a message in the main window, press UP to add it to the playlist. It's initial value will be one, indicating that the message will be played once per rotation. A rotation is defined as the total number of messages “flagged” to play. Pressing the Up button again will increase the Play value numerically with each click. For messages that need to be displayed more often than the others, you can increase their frequency by increasing their Play value.
4. Messages with a 0 in their Play column are currently not in the playlist and will not play on the sign. To take a message out of the playlist rotation, select the message and press the Down button until the number in the Play column is 0.
5. To take advantage of the more precise scheduling features of PrismView, you will need to use Schedule Messages or Schedule Cards, chapter 4 of the PrismView manual.

Updating Your Sign

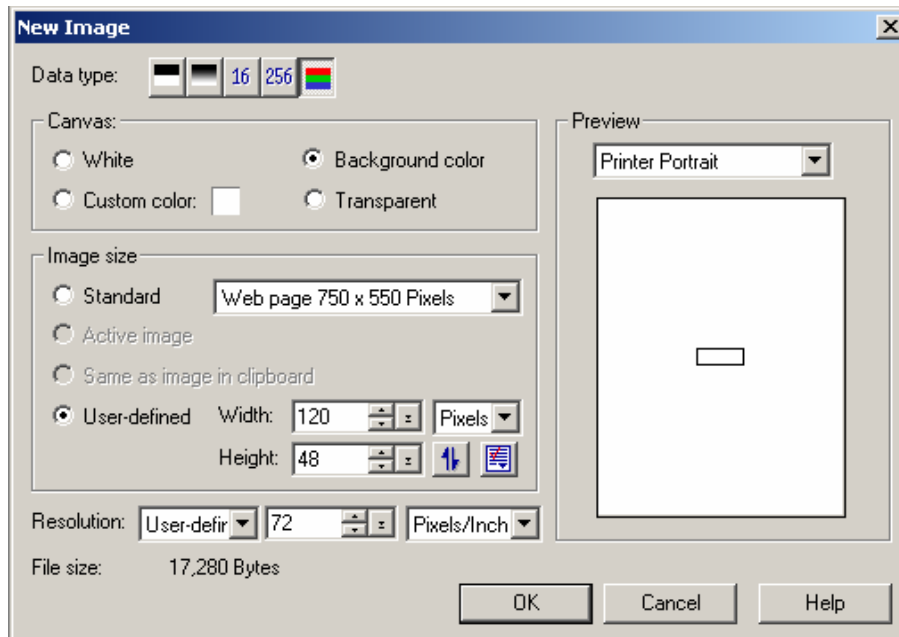
1. To send the new message to the sign with the playlist information, simply click on the UPDATE button in the lower left corner of the main menu. The update menu will automatically connect to the sign and send out all the new or recently edited messages along with any playlist or schedule information.
2. If you have more than one sign, you will have to select to either have individual signs updated or all signs updated, then click on the update button.
3. Once the update is complete, the connection to the sign is automatically disconnected and the program returns to the Main Menu.

CREATING FILES IN PHOTO IMPACT FOR PRISMVIEW

File Dimensions

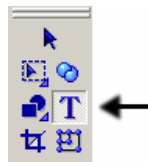
The dimensions of the Photo Impact file need to be set to reflect the PrismView sign size. This needs to be done when you make a new file/image in Photo Impact.

To do this, select **FILE** and **NEW** and **NEW IMAGE**. Select the data type as RGB and set the Canvas to the setting that you would like to work with. Next, select the Image size by selecting **USER DEFINED** and enter the width and height. The width and height should be the same as the sign size. Also select Pixels as the type of measurement. Nothing needs to be done in the selection of resolution.

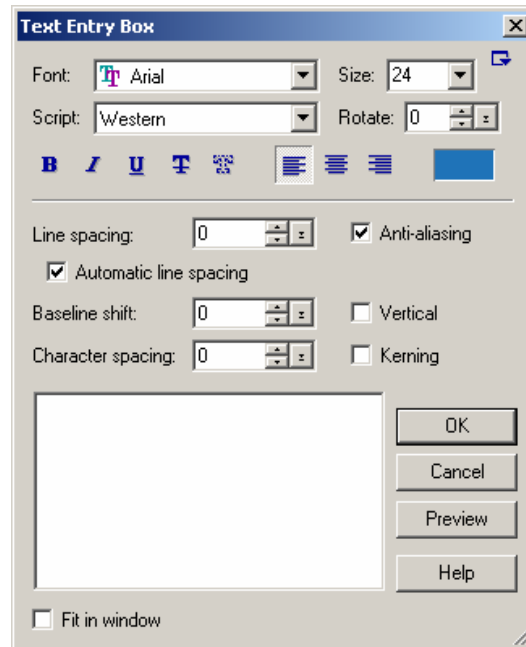


Entering Text

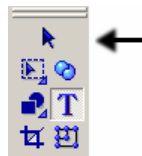
To enter text, select the text tool from the tool box on the left side of the screen.



Once the Text tool has been selected, move the cursor to the image area and click once. A Text Entry menu will allow you to enter the text for that image, along with text style, size, spacing, etc. Enter the information that is needed for that image. Once the text has been entered into the menu, click **OK**.



If the text needs to be moved from its current position to another, you will need to use the Pick Tool. To access the Pick Tool, click on the arrow in the upper portion of the Tool Box. Use the mouse or the arrow keys to move the text to the desired position.



To edit existing text, go to the Layer Manager Menu (see next section) and right click on the layer that is to be edited. Select the option of Edit Text. The Text Entry menu that was used to enter the text is now available to make text changes to the existing text.

Note: More than one layer of text can be used in an image.

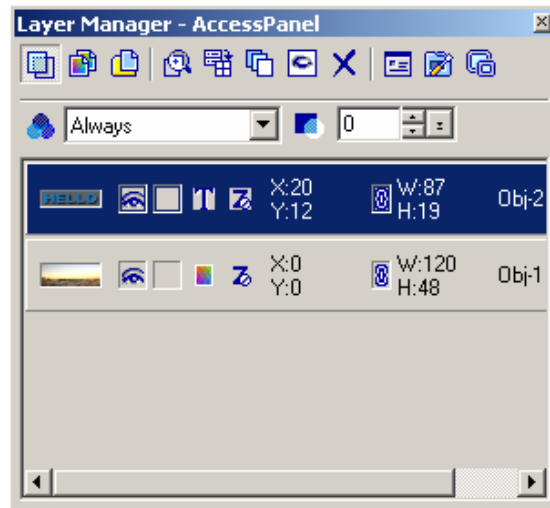
Accessing Layers

To access the Layers Menu, click on the Layers icon in the upper right corner of the screen.



The Layer Manager Menu will be placed at the bottom right of the screen. The menu will show the layers that are being used in the file. Information is given on each layer as to its size, type and other parameters. To access any of the parameters of the layers, right click on the layer and make a selection from the listed options.

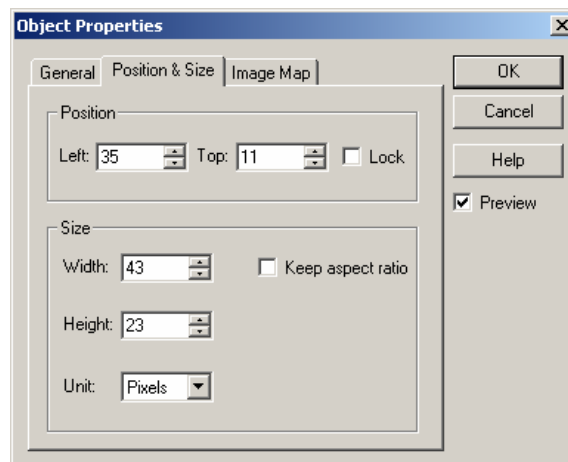
The layer that appears as the top layer is the one that is listed at the top of the list in the Layer Manager. To reorder the layers, simply click and drag the layer to the desired position.



Inserting Images into the File

If an image is to be inserted into the image as a background or some other element, it can be easily done. Go to the **OBJECT, INSERT IMAGE, FROM FILE** and select the desired file. The image can be moved in the image area in the same manner as text by using the pick tool. Make sure the layer to be moved is the one highlighted in blue in the Layer Manager Menu. To change the selected layer, simply click on the desired layer.

If the object needs to be resized, right click on the layer in the Layer Manager and select **PROPERTIES** and **PROPORTION AND SIZE**. Make the desired changes to the layer.



Creating Your Own Images and Backgrounds

Backgrounds and images can be easily created in Photo Impact. There are many options and many tools that can be used. Your best bet at learning all the tools and how to use them to create back grounds and images would be to use the manual for Photo Impact or the tutorials that can be downloaded from the Ulead Photo Impact website www.ulead.com. Go to the section on Downloads and then Tutorials. There are many different subjects to choose from.

Saving the Files to the Proper Format

It is a good idea to save your images both as Photo Impact files (for future editing or use) and as bitmap or targa files that can be imported into PrismView.

To save the files, select **FILE** and **SAVE**. Give the image a name and select the directory in which it is to be saved. Save the image as a Photo Impact file first so that the layers and options are retained for future editing.

Once that is done, save the file as a bmp by selecting **FILE** and **SAVE AS**. Select **BMP** as the file type and select the directory in which it is to be saved.

Importing Images into PrismView

To import a graphic into PrismView, you must open the message in which the image is to be placed. Go to the frame where the image is to be inserted. Make sure the frame is blank, insert a blank frame if needed.

Select **IMPORT** and **IMPORT GRAPHIC**. Select the file that is needed. Answer yes or no to the question of scale image.

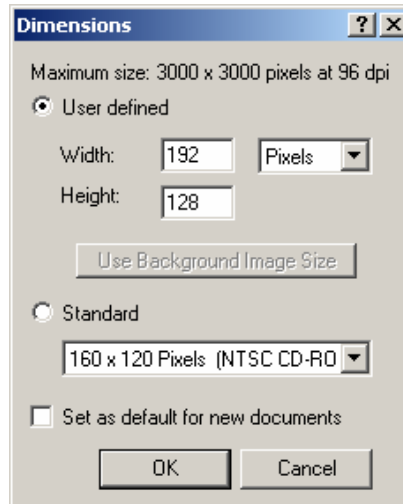
If the file is part of a numbered sequence, make the selection as to how many of the images are to be imported and select whether or not to scale the image.

Please see Chapter 7 of the PrismView manual for further information on importing bitmaps into PrismView.

CREATING FILES IN COOL 3D FOR PRISMVIEW

File Dimensions

The dimensions of the Cool 3D file need to be set to reflect the Prism sign size. This needs to be done before you start creating images in Cool 3D. To do this, go to the **IMAGE OPTION** on the menu bar in Cool 3D. Select **DIMENSIONS** and select **USER DEFINED**. The height and width should reflect the sign size and use Pixels.



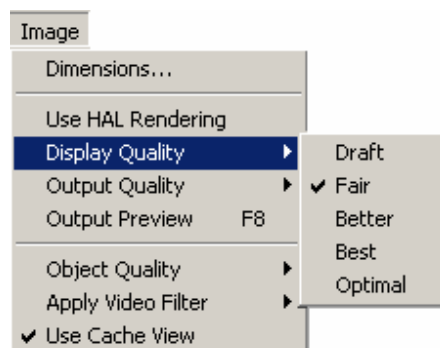
You will also need to set the frame rate to 30 frames per second for the file. This option is found on the tool bar above and to the right of the editing area.



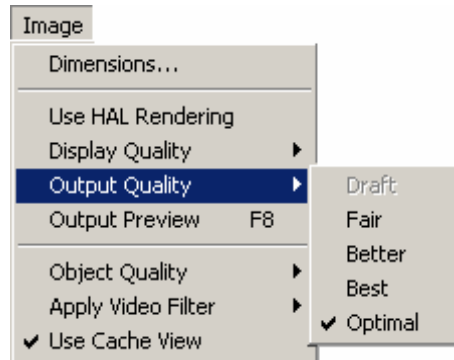
Note: If the sign size is less than 32 high, such as 16 high, the height and width of the file will need to be doubled in Cool 3D. Cool 3D has a limitation on file size. Files need to be a minimum of 32 pixels high. If you double the height and width, Prism will automatically scale the file to the correct size when the file is transferred to Prism.

File Quality

Display Quality determines the quality of the images when the file is being created and rendered while experimenting with different effects and movement. The lower the quality, the quicker the movement and the screen, but the images may look a bit rough. The higher quality is nicer to look at, but could slow the computer down.

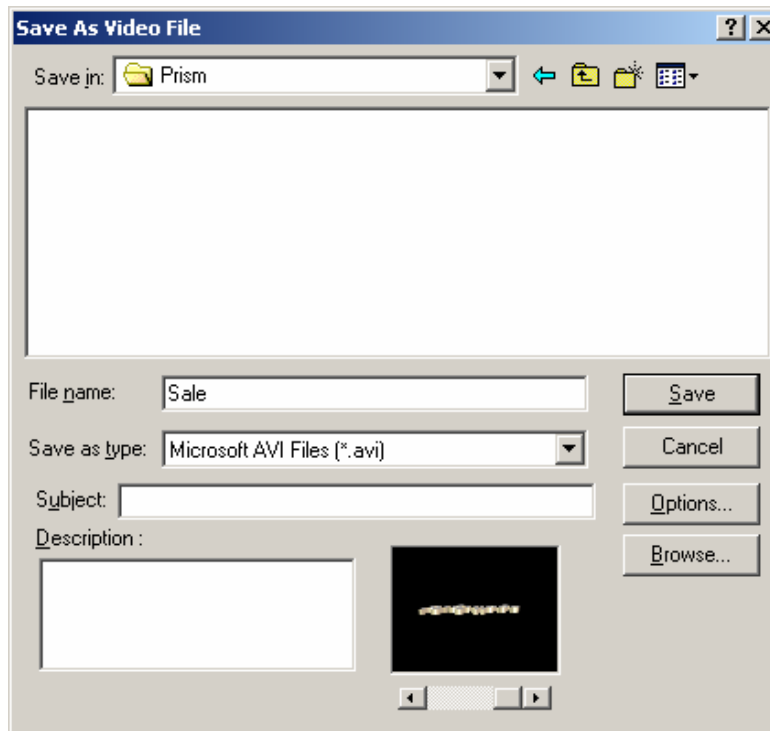


Output Quality refers to the quality of the file when it is finally rendered to an avi. The option that should be selected for this will be either best or optimal for the final rendering. If you are just experimenting with effects and movement, it can be set at a lower quality to speed up the render time.

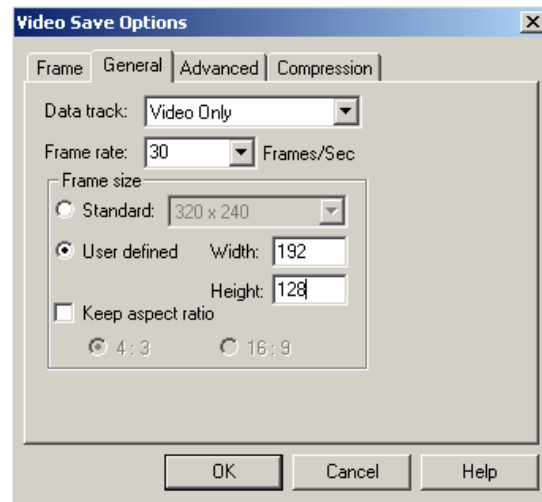


Creating an AVI for PrismView

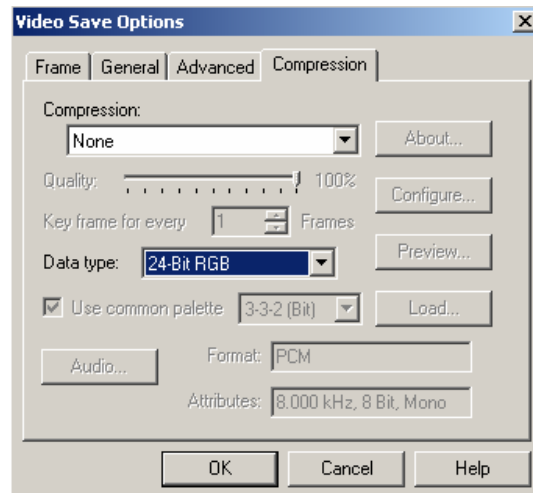
Once you have created the animation you want, you will need to make the animation into an avi. To do this, select **FILE** from the menu, select **CREATE ANIMATION FILES** and then select **VIDEO FILES**. You will need to give the file a name and create it as an avi file. Make sure that the file is saved to the appropriate directory.



The output size will also need to be set. To do this, select **OPTIONS** from the Save As Video File menu. Select the **GENERAL MENU** tab. Make sure the options are set for **VIDEO ONLY**, **30 FRAMES A SECOND** and the size is **USER DEFINED** with the same size as those used to create the file.



Avis that are to run in Prism, need to be rendered with a compression setting of **NONE** or **MICROSOFT VIDEO 1**. If None is selected, have the Data type set at 24 bit. If Microsoft Video 1 is selected, the settings need to be 30 frames a second, 16 bit color and 100% for quality.



The file will render to the file name and directory that have been selected. Go to the directory and double click on the file. This will run the file so you can view it. Once you have the file as a finished piece, move or copy it to the Prism directory if it is not already there. Once the file is in the directory, it will show up in the PrismView Main Menu. If the file needs to be made into a Prism Message, use the PrismView option of Convert to AVI. For information on this procedure, see the PrismView Manual.

QUICK START GUIDE & BASIC TUTORIAL– COOL 3D

Before we get started, follow the procedures in “Creating Files in Cool3D for PrismView. Next, make sure that you adjust the frame rate (fps) to 30. For this tutorial, let’s set the frames to 150. This will result in an animation that is 5 seconds long. Calculating how many frames you’ll need for your animations is really very easy. Simply multiply the duration in seconds by the frames per second (fps) and you’ll come up with the necessary amount of frames. In our example, we multiply 5 seconds with 30 fps and get 150 frames

3D Text

While Cool 3D is not limited to simply creating 3D text, it is one feature of the software that will prove extremely useful in developing exciting animations for your electronic display. Follow the steps below for an introduction to creating a simple spinning 3D logo.

Step One: New File

Select NEW from the File menu.

The first thing we have to do is decide what text we are going to use. In this example we have two text objects: "COOL" and "3D".

On to creation...

There are three ways to open the insert text box:

- Go to Edit/Insert Text
- Press F3
- Select the "Insert Text" button from the standard toolbar.

You have the field open? Good. In this example we'll use the Comic Sans MS font, 24-point, ALL CAPS. When you have the settings ready, type "COOL" into the field and press OK. The word "COOL" just appeared in your document. Now repeat this process, but type "3D" this time. It should look like this:



Note: Check the Select an Object field on the standard toolbar. You should see three choices: (Group), COOL, and 3D.

Step Two: Adding Color

This part is easy. I guarantee you'll stay within the lines:

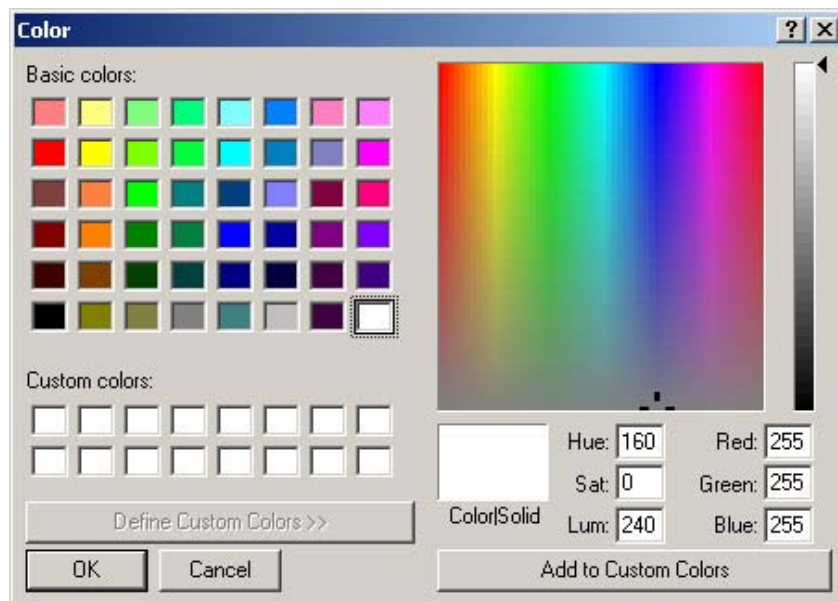
1. Select "**COOL**" from your Select an Object field (or you can just click on the word in your document.)
2. Select the **Light & Color** option in your Easy Palette (bottom left). Hint: It's under **Object Style**. If your Easy Palette isn't displayed go to View/Easy Palette.

3. The **Adjust:** field should say Surface. Click on the box to the right of that says **Color** above it. This will open the color palette.

You can now choose a **purple** from the basic palette or drag the cross hairs across the color field until you see a color you like. Press **OK**.

Monochrome Displays

In creating 3D text for monochrome or one color displays (Amber, Red, Green, White), you will get your best results working in shades of gray. The easiest way to generate shades of gray is to select either white or black (instead of the colors mentioned above) and then use the slider at the far right of the color picker to generate the appropriate level of gray. You may be tempted to work all in one color such as red if you have a red display. However, the way the software generates the red on the sign is though brightness not color. Therefore, the most efficient way to do it is using shades of gray.



While contrast is important in generating animations for a full-color display, you need to pay extra attention to contrast when generating animations for monochrome displays. For instance, having the text be a bright white over a dark shaded background will give you good readability. Likewise, a very bright background would be contrasted well with very dark or black text. It really depends on the criteria you have in mind for your animation. To achieve clarity on signs you need contrast. 99% of the time clarity is essential. The majority of the time your audience is passing by rather quickly and your message needs to be delivered clean and quickly. If subtlety is your focus, contrast becomes less of an issue. However, you run the risk of losing a good portion of your audience if you are too subtle. You can still create incredible action with crisp, clear, and high contrast animations. This will definitely attract attention and make sure your message is read.

As mentioned in the setup procedures for using Cool3D with your electronic sign, it is essential that you create image dimensions that reflect your signs. If you don't, the animations will be distorted and may not look like what you viewed on your computer monitor. A couple of examples are:

For a 128 x 96 sign, choose your dimensions in the unit of pixels and select 128 for width and 96 in height. That one is pretty easy.

For a 72 x 16 sign, select double those values using the pixel unit. You should have 144 for width and 32 for height.

For the smaller displays, (16 to 32 high) be sure to fill your screen with the text as much as possible. Larger displays have more leeway, but the smaller ones need the text as large as possible in order to be read. You can have them move on to the screen from small to large as a dramatic effect, but when they are in the position that you want your audience to read them make 'em big.

This is what it should look like:



Now let's add some color to the 3D:

1. Select "**3D**" from your Select an Object field.
2. Repeat steps 2 thru 4, but instead of purple, choose **blue**

This is what it should look like:



Step Three: Making the Text 3D

All right, hold on. I'm getting there. This part isn't quite as easy as adding the color, but still not too difficult. We haven't tried to make it move yet.

1. Select "COOL" from the Select an Object field.
2. Choose **Bevel** from your Easy Palette.
3. In the Attribute Toolbar, you will see a field title **Bevel Mode**. Go there and select **Flat**.
4. Now you'll notice the four fields (We're going to ignore the **Precision** field for now) to the right of the Bevel Mode field. If you want to play with them right now, open up a new document, enter any text and mess around with each setting to see what it does. For now we'll set each field accordingly:
 - **Extrusion:** 50 - Extrusion makes your text appear "deep." The higher the number, the deeper the text.
 - **Weight:** 10 - This is easy. Increase the weight and your letters get fatter.

- **Border:** 100 - This decides the curvature of your bevel. The higher the number, the more curvature.
- **Depth:** 100 - This makes the bevels appear longer. The higher the number, the longer the bevel.

I really hope yours looks like this (or somewhat close will do):



Same as setting the color, repeat the above process after selecting "3D" from the Select an Object field. Your document should now look like this:



Yeah, I know. They look a lot alike right now but they're different.

Step Four: Adding Animation

First we need to position the COOL, so that the 3D can spin around it (Right now, they're in the same place.):

- Select "COOL" from the Select an Object field.
- Click on the **Move Object** tool (The hand with the glove on it) on the Standard Toolbar.

Note: The Move Object tool moves the object selected along the X and Y-axis (left - right; up - down) by clicking the left mouse and dragging it across the document. It moves it along the Z-axis (forward and backward) by clicking the right mouse and dragging it up and down. Up moves it backward. Down moves it forward.

- Now that you know that, move COOL backward until the number in the Z position field is 100.

Here's what this looks like:



This is where the animation begins:

- Select 3D from the Select an Object field.
- Go to your Easy Palette and select **Motion** (Several effects will show up to the right of the palette)
- Select the one in the middle of all of them. (If the grid were the Brady Bunch, this one would be Alice).
- Double click it.

This has applied the movement to your animation, but in order to preview it, you have to hit the play button on the animation toolbar. This is what it should look like:



The only difference is that when you hit play, it only goes around once. Hit the **Loop Tool** on the Animation Toolbar to see it spin continuously.

Step Five: Coordinating Movement

All we have left now is getting the COOL to move toward us and adding a spinning green coffee cup, and then you will be a [Ulead COOL 3D](#) master*.

First, let's make that COOL move.

- Select COOL from the Select an Object field.
- Select the **Move Object** tool from the Standard Toolbar
- Click the right mouse and push up until COOL is very small and behind the 3D.
- Without letting up on the right mouse, pull the mouse down until COOL comes at you and is in front of 3D.
- Press the **Play** button to preview.

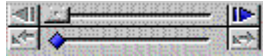
Note: You can play with it a little here to see what it does. If you don't like the steps you take you can always undo them.



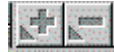
It should look like this:

Let's insert that crazy green coffee cup now.

- Go to your Easy Palette and select **Object**.
- Select the Coffee icon from the gallery. You'll know you have the right one, if it says coffee in the Select an Object field.
- Go to **Color & Lighting** and make it green (You know how to do this.)
- Set the **Bevel Mode** and all of the **Bevel** settings the same as COOL and 3D. (You know how to do this, too.)
- Select the **Move Object** tool and move the cup backward so that it is lined up with COOL.
- At key frame 1 (on the timeline Control), insert the coffee cup.
- On the **timeline Control**, move the Control Slider to the last key frame.



Timeline Control



Add/Subtract Key Frame

- Click the **Add Key Frame** button to add a key frame.
- On the **Standard Toolbar**, click the **Rotate Object** button.
- Click the left mouse and move it straight up until the coffee cup completes one revolution.

Let's see what happened:



See, that wasn't so bad. You can also make it dance and sing**, but you're on your own for that.

*Not a master, but not a total rookie.

**It can't sing.

Now that you have completed the tutorial and learned how to make your text 3D and mobile, let's look at some other features. Here's what they do. Play with them a bit and see for yourself:

- **Number of Frames:** The more the frames, the smoother the animation (but the bigger the file).
- **The Camera Option:** This allows you to change the angle that you view your text.
- **Lighting:** You have four lights. You can turn them on and off; you can position each one to add different effects.
- **Key Frames:** These allow you to divide your animation into different segments. To do this simply choose a frame where you want the action completed, and select the Add Key Frame button on your Animation Toolbar. A diamond will appear on your animation timeline where you have placed your key frame. Active key frames are blue. Inactive ones are gray. If you want to delete a key frame, simply use the Delete Key Frame button.

If you enjoyed this tutorial, Ulead offers other tutorials from their website www.ulead.com.

USING YOUR WINTV CARD TO CAPTURE VIDEO FOR PRISMVIEW

WinTV is a video capture card that allows you to connect a video source (VCR, Video Camera, etc.) to your computer and record whatever is playing on the video source to a computerized file. Through WinTV, these files are called AVI files. If you want to put video on your sign, you will use the WinTV software to *capture* the video and then copy it or save it to the sign directory. Video sources can be varied, but as long as you can connect an RCA cable from the video source, such as a video camera, to your computer you should be able to record or capture the footage. The following steps will help you perform a video capture and prepare it for use on your electronic sign.

1. Verify that you have a video source plugged into your WIN TV card. The device that is playing your video should be connected to the WIN TV card using a standard RCA cable. Connect one end of the cable into the video out jack on you video source and the other end into the yellow colored jack on the back of your computer. If you are using a multi-cable, make sure you use the same colored connector at each end.
2. Double click the WinTV 2000 icon on your desktop or access the application via the Start menu.
3. In order to record video to your computer you need to open the Remote Control interface. This is accomplished by clicking on the button labeled **RC** in the lower right-hand corner of the WinTV 2000 window. The Remote Control interface opens to the right of the window. *Fig 1-1*



Figure 1-1

4. Make sure you have VID selected as your source in the LCD section. If not, simply toggle the green SOURCE button until VID is activated. Press PLAY on your video source to verify that you have video signal. You should see it in the WinTV 2000 screen. *Fig. 1-2*



Figure 1-2

5. If it is not already extended, press the **Advanced Controls** button to access the record options and the record button. *Fig. 1-3*



Figure 1-3

6. In the Advanced Controls section you simply follow the steps listed under VCR.
7. Press 1. FILE and create a filename to record the video to. Unlike many software programs where you create something and then save it to a filename, you must first create a file where the captured video can be saved. You can create the file in any folder. If you'd like, navigate to the prismhost folder on your computer and type a filename in.

8. Before pressing the OPEN command, make sure your Frame Rate is set to 30.00 and that Capture Audio is not checked. If you are capturing large files either in duration or in pixel dimension (640x480), adjusting the video buffer to it's maximum setting of 1000 will allocate more of the computer's resources to capturing the footage. This decreases the chance of dropped frames and increases the successful capture. It is suggested that while capturing video footage you close other applications. *Fig. 1-4*

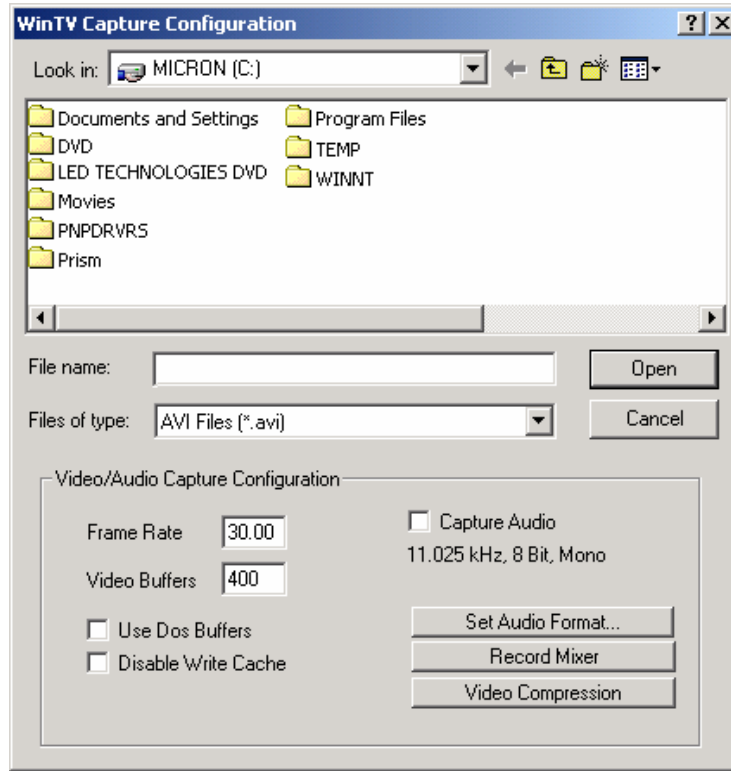


Figure 1-4

9. Press the Video Compression button at the bottom and select Full Frames (Uncompressed). Uncompressed footage is larger in file size, but it retains millions of colors where some compressors do not. This also keeps the captured footage at its highest quality. Most of the electronic signs manufactured by YESCO run in millions of colors. If you don't need the highest quality or are comfortable using only thousands of colors, you may choose a compressor such as Microsoft Video 1. If you are unclear about what the best compressor is for your particular system use Full Frames or call YESCO and get a recommendation. *Fig. 1-5*

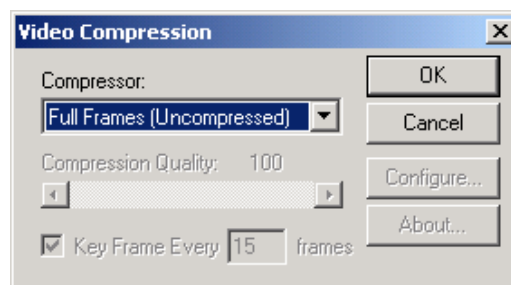


Figure 1-5

10. Select OK and then OPEN at the Capture Configuration screen.

11. Press 2. FMT as shown in Figure 1-3. The format screen provides options for capturing at various image dimensions. (Fig. 1-6) The quick buttons of Full, 1/2 and 1/4 give three standard pixel dimensions. It is important that you know the pixel dimensions of your display for this selection. If you have forgotten, open the PrismView Main menu and look just below the FILE menu dropdown. You should see a width and height dimension such as 192x144 3-color. The first number is your width and the second, the height. Once you have these numbers memorized, return to the WinTV format adjustments and select that dimension or, as in most cases, select the dimension that is the first step bigger than your sign's dimensions. In addition to the three standard buttons, a dropdown menu is accessible next to the current pixel dimensions. This dropdown gives you a broader selection of dimensions. As an example, if your sign were 192 x 144 you would want to use the dropdown menu and select 240x180.

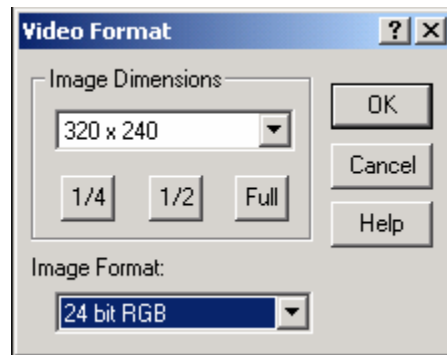


Figure 1-6

NOTE: In most cases, the practice of capturing video at slightly larger than your display size is effective. However, there are cases where capturing at different pixel dimensions may be suitable. These will be mentioned once we enter the IMPORT AVI function in the PrismView software

12. You are now set to record video. Depending on your device, you may want to rewind about 5 seconds before the start of the segment you want to capture. This gives you time to press PLAY on the video device and then the 3. REC on the WinTV software (Fig. 1-3). If you're all ready to record, let's give it a shot. Press PLAY on the video device and the 3. REC on the WinTV software. Once you've captured the entire video segment, hit the ESC key to end recording.
13. To review the captured video, press 4. PLAY and the captured video will play back in a Media Player window. Close this window when you've reviewed the material.

NOTE: If you are planning to capture segments in excess of one minute in duration, it might be wise to break them up into segments of one-minute or less. Also, unless your astonishingly accurate in the time you press record and the time you press ESC to stop, you might want to record some excess on either end to make sure you've got everything you wanted. You can clean up the ends when you import the material into a Prism Message.

14. Enter the PrismView software via the Pwinmain icon on your desktop. If you created your capture file in the prismhost directory you will see a reference to it in the content region. This video file can be scheduled and played on your sign as is. However, there are a few steps you might want to consider to achieve the best results. Fig. 1-7

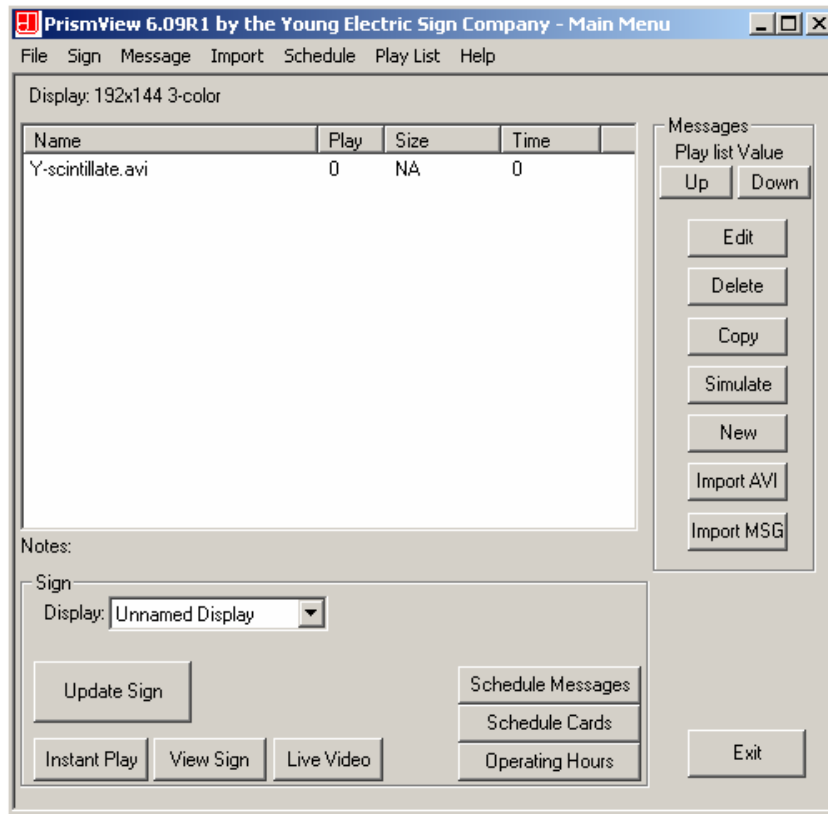


Figure 1-7

15. Press IMPORT AVI. Import AVI converts an AVI into a Prism Message. You cannot edit an AVI through the PrismView software but you can edit a Prism Message. While we do suggest making major adjustments to AVI files in an external software package, there are some minor adjustments you can make through the IMPORT AVI screen. Fig. 1-8

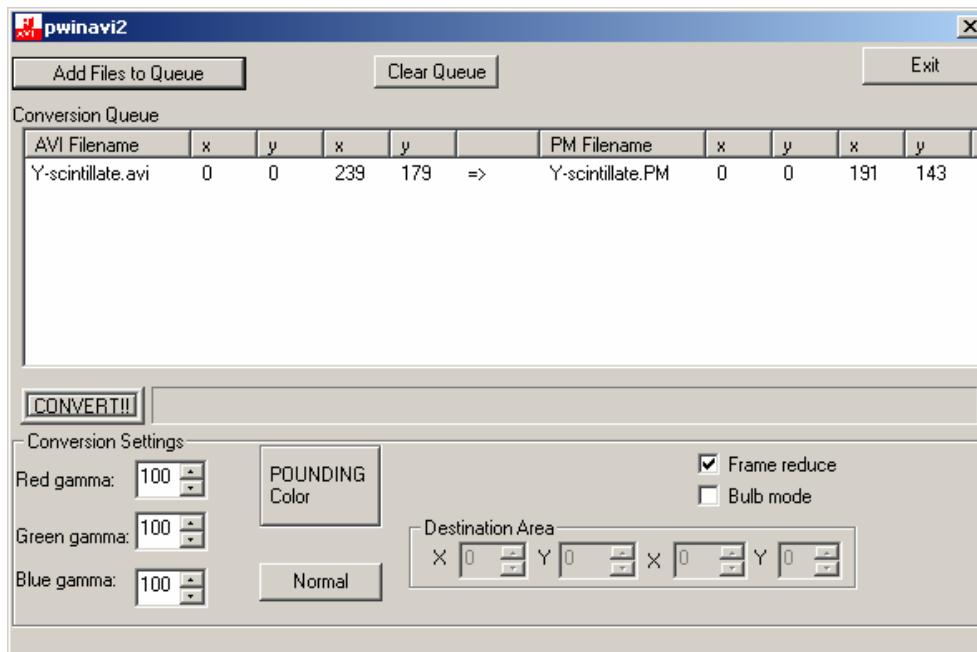


Figure 1-8

16. Press the Add Files to Queue button and select the AVI captured with WinTV. The AVIs dimensions are listed to the left and the converted PM (Prism Message) dimensions are listed to the right. (The reason that the second x and y numbers are 1 less than would be expected for both files is because the (0,0) coordinate is considered to have a value.) If we were to press the CONVERT button with the default values, the AVI at 240x180 would be shrunk down to a PM at 192x144. In some cases, this is fine. However, there may be times when you wish to convert only a certain area of the AVI. Click on the AVI file to access the Area Selection Menu.

** Because not all sign dimensions retain the same aspect ratio of television (some are much wider than a standard television screen), there is a possibility that when you convert an AVI straight from WinTV and use the default settings in the IMPORT AVI screen, you will get significantly stretched images. In most cases, these are unacceptable results. To avoid this, utilize the Area Selection Menu and select an area of the AVI in a width to height ratio that closely resembles your signs. For instance, a video file captured at 320x240 would be stretched when run on a signs of dimensions 256x96.*

17. The Area Selection Menu allows you to drag out a selection box to determine the portion of the AVI file you want converted. To optimize your selection for a particular frame, use the navigation buttons at the bottom and pause it on the desired frame before making your selection. (Fig. 1-9) A coordinate indicator will appear along the top menu bar to help you make detailed selections. If you wish to select the exact sign dimension from the center of the AVI, use the Area dropdown menu and select CENTER. If after making a selection you decide you'd like to convert the entire AVI, use the FULL option accessed under the AREA dropdown menu.



Figure 1-9

18. After choosing a specific area to be converted into the PM file, use the X box in the upper right hand corner to close the window. The IMPORT AVI screen will adjust to show you the selected coordinates. Fig. 1-10. For our example, we used the CENTER option under Area.

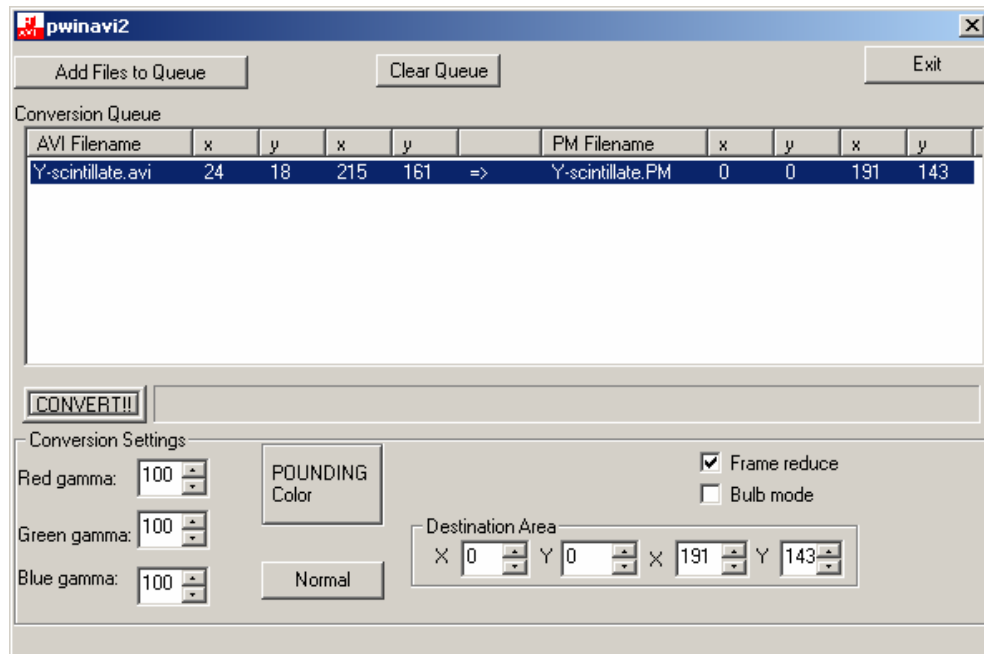


Figure 1-10

19. Press the CONVERT button and the AVI will be imported to a PM file. Note that you can setup up the IMPORT AVI feature to do more than one AVI file at a time. Each AVI can have individual import specifications.
20. Once you have converted the AVI file into the PM format it is editable within the PrismView software. Perhaps you would like to delete frames from the end or beginning, or maybe you just wanted a particular segment of the AVI to merge with some copy.

WinTV and the IMPORT AVI feature in PrismView can make generating dynamic and exciting content easy. The combination of the two tools will help make your electronic display an effective and impactful advertising medium.