



# USER MANUAL

For

## VisionSuite

Version 3.1



Hamilton Digital Designs Ltd.

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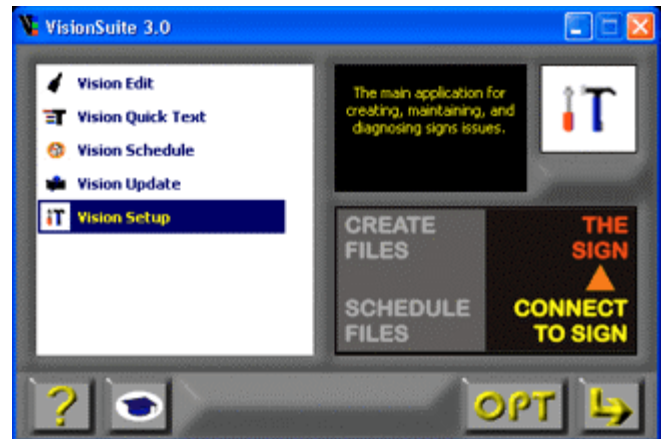
# OVERVIEW

## OVERVIEW

The VisionSuite application and subsequent applications have been developed for ease of use and ease of manageability for your message or video sign system.

Your sign, whether it is a small mono-colored message center or a large multi-colored video system (or something in between), can be controlled, configured and maintained via the applications within the VisionSuite. Depending upon your sign's features, you can use many or all of the applications on most Windows™ based computer systems. (See [Recommended Computer System](#) for more details.)

The main VisionSuite window is shown above. As you move your mouse over the buttons or change the selection within the list, the information region to the right portion of the window updates.



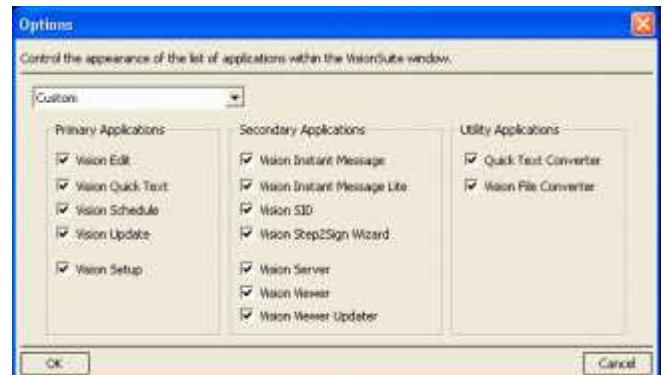
The list to the left contains the applications that are available to you. The four buttons at the bottom of the window are the HTML Help, the Tutorial, the Options Dialog, and Exit.

The Options dialog allows some minor customization for the main VisionSuite application.

By changing the pull-down list, you can select the applications that appear in the main window's list.

The "Custom" selection allows you to specify the exact applications that you see within the main window.

For a basic understanding of how VisionSuite works, follow the step-by-step explanations within the [Tutorial](#). It will guide you through the process of setting up a sign to sending a new schedule to a sign.



## THE APPS

As stated, VisionSuite is a series of applications that are designed to make the process of designing messages, developing a schedule, and updating a sign as easy as possible. Due to the various requirements of our customers, it was decided to develop a variety of applications to meet the variety of needs.

Here is the current list of applications for VisionSuite 3.1:

**Vision Edit** – An application for pixel-by-pixel control of an image for message design. Bitmap & Text control, importing, and effects are available.

**Vision Quick Text** – An application for row-by-row text control message design. Unique text control on a row-by-row basis exists with full frame effects control.

**Vision Schedule** – An application for pick-and-place scheduling of messages. Special graphical time/date control and view of messages allow for ease of use and quick setup of a schedule.

**Vision Update** – An application for the update of schedules and messages to any selected sign. The new Batch Control permits updating of multiple signs at any specified time.

**Vision Setup** – An application for the control and maintenance of displays. Special tools are available for communication tests and sign diagnostics.

**Vision Step2Sign Wizard** – A step-by-step wizard for message design, schedule design, and updating a sign — an all-in-one application.

**Vision Instant Message Lite** – A special application designed for use within sport venues. This is a package with message library control and instant message display on the sign.

**Vision Quick Text Converter** – A converting tool to convert older Vision Quick Text files into newer versions.

**Vision Setup Wizard** – An application to easily set up the most common types of displays.

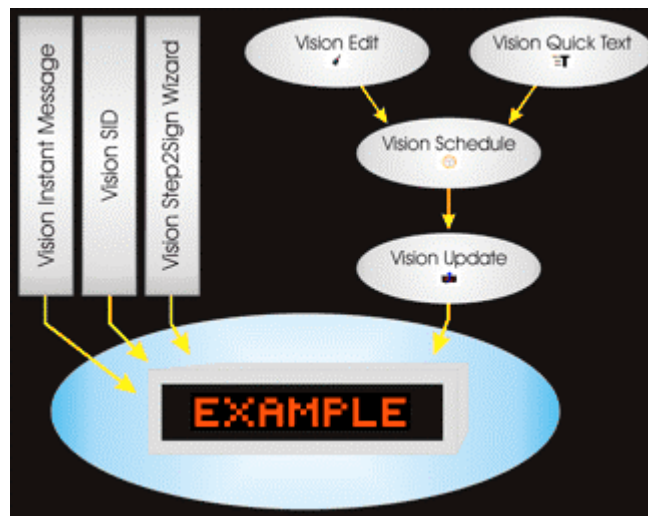
**Vision DVD** – An application for playing DVDs on a Video System.

**Vision File Converter** – An application to convert MSG files to VED files.

**Vision Viewer** – An application to display content on a Video System.

**Vision Viewer Updater** – An application to update content on a Sign PC to which a Video System is connected.

**Vision Server** – An application running on a Sign PC that accepts requests from Remote PCs running Vision Viewer Updater.



## HISTORY

The VisionSuite 1.0/1.1 tools were developed in 2002/2003 for the [Hamilton Digital Designs](#) (hereinafter will be referred to as HDD) product line of signs. It is a software replacement to all standard versions of the DOS H1020 software.

For 2004, version 2.0/2.1 tools were enhanced with improved interfaces and faster communication to/from the sign. Besides the enhancements and improvements of the applications, version 2.0/2.1 of VisionSuite offered a new wizard to facilitate basic needs of some customers.

For 2006/2007, version 3.0/3.1 tools have been enhanced with faster communications, easier to use interfaces, and more features for the brand new multi-shaded signs.

## **BACKWARD COMPATIBILITY**

The VisionSuite tools have been designed to be compatible with the following HDD signs: all New Signs, all H21 Controller based Message Centers, and all H20 Controller based Message Centers (connection via modem only).





# GETTING STARTED

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## INTRODUCTION

"Getting Started" will take you through **10 simple steps** from setting up a new sign to updating the messages at the sign. Once the steps are completed, you will have updated the sign with new messages.

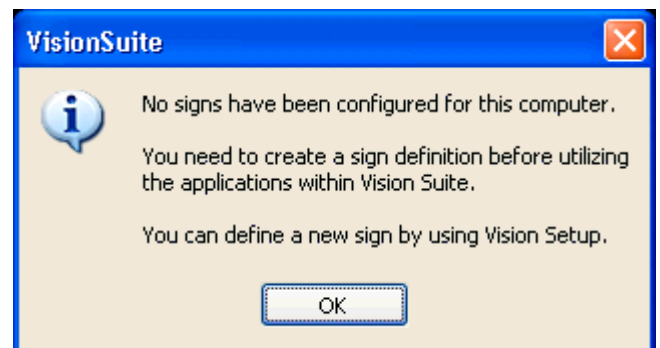
It is assumed that the VisionSuite software has already been installed onto the computer. If the sign has not been installed yet, you can still follow the steps to setup a new sign.

These steps also assume that the sign is a standard Message Centre display with an RS-485 connection to the PC, with a Temperature/Photocell, and a matrix size of 80 x 16 (pixels).

## STEP 1: START VISIONSUITE

When starting VisionSuite for the first time, the following message will appear. The message simply indicates that you need to setup (configure) a sign so that you can use the applications within VisionSuite

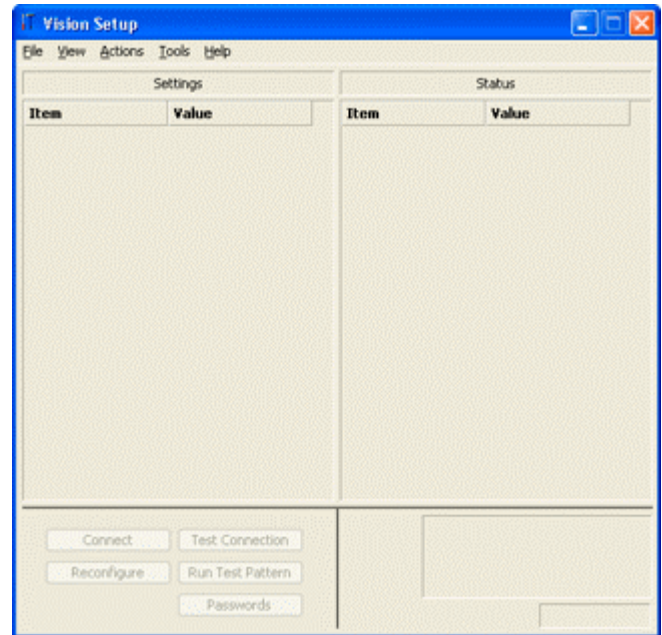
Select **Vision Setup** from the main window (within the left-side list) and then double-click the mouse to start Vision Setup.



## STEP 2: STARTING VISION SETUP

When Vision Setup starts for the first time, it will appear blank (as shown).

Simply select **New Sign** from the *File Menu* at the top left of the window.



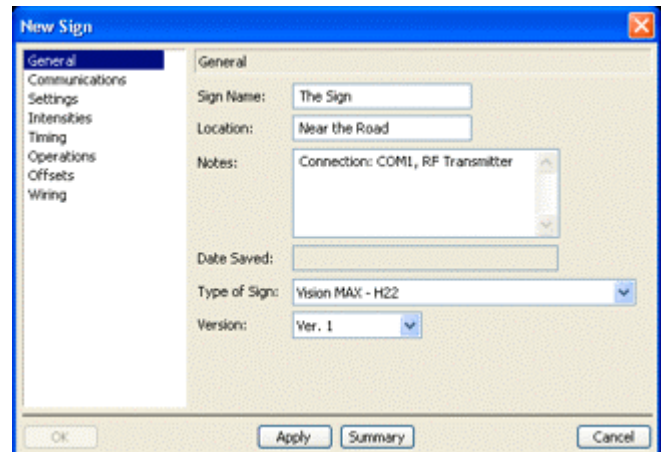
## STEP 3: ENTER GENERAL DATA FOR THE SIGN

When setting up a sign, there are a few basic parameters that need to be entered.

The **Sign Name** and the **Type of Sign** are required items. For a standard Message Centre that has multiple shades, select *Vision MAX - H22*, otherwise, select *Vision MAX - H21*. For this example, it will be assumed that you selected *Vision MAX - H22*.

The **Location** and **Notes** section exist to allow you to clarify the sign's location and/or settings.

Once completed, select the *Communications* item (in the list on the left).



## STEP 4: ENTER COMMUNICATION VALUES

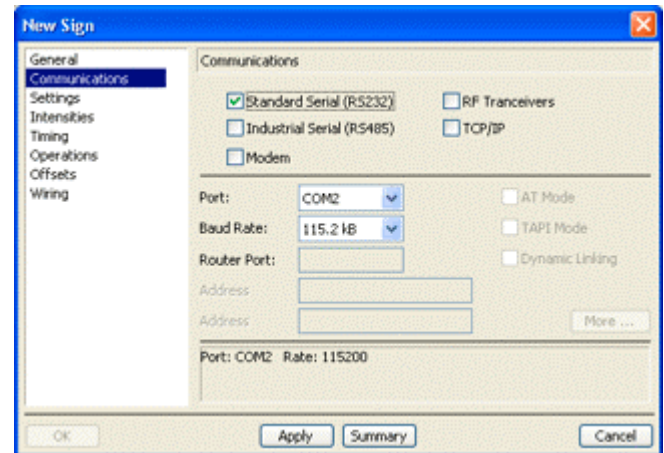
There are a wide range of connection possibilities from the PC to the sign.

For this example, it will be assumed that the sign is wired from the PC via a long cable and an **RS-485** converter.

The **Port** refers to the serial port on the PC that the converter is connected to. For this example, assume that it is **COM1** and that the **Baud Rate** is **115.2 kB**.

The **Address** refers to a setting within the sign. For now, assume that it is **ZERO**.

Once completed, select the *Settings* item on the left.

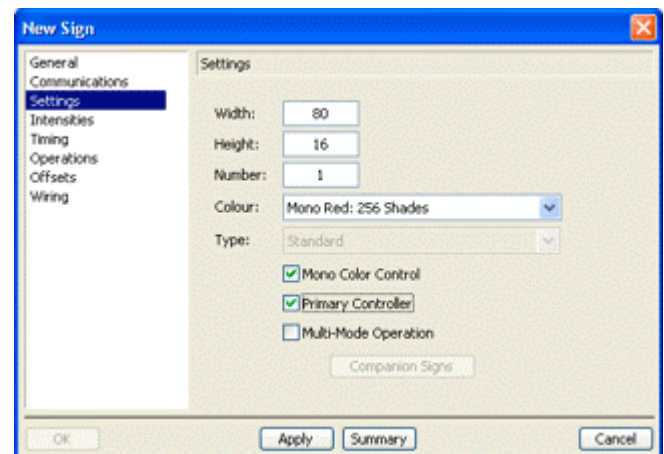


## STEP 5: ENTER MATRIX SIZE AND SETTINGS VALUES

For this example, let's assume the sign is **80** pixels wide and **16** pixels high. This is also referred to as the sign's matrix.

As mentioned earlier, let's set the **Color** setting to **Mono Red: 256 Shades**.

Once completed, select the *Intensities* item on the left.

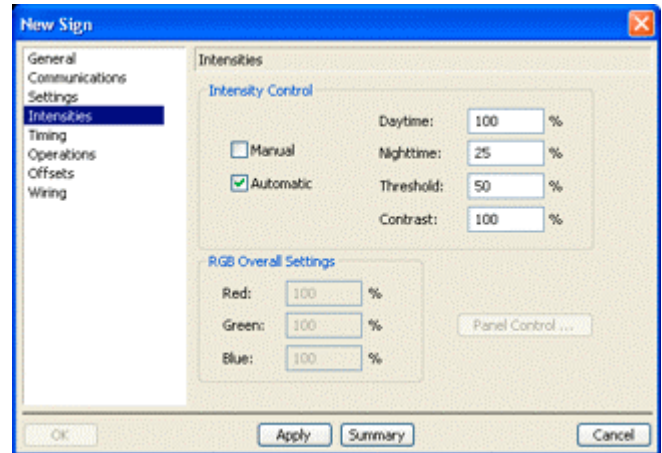


## STEP 6: ENTER INTENSITY VALUES & APPLY

As mentioned earlier, let's assume that the sign has a Temperature/Photocell probe. This device allows the sign to automatically adjust its intensity when it gets dark. So, select **Automatic** and leave the percentages to default values.

Once completed, select the **Apply** button at the bottom. This will save the sign that has just been setup. The software will prompt you with a simple message that indicates the sign is now saved.

Press **OK** within that message and **OK** again within the *New Sign* window.

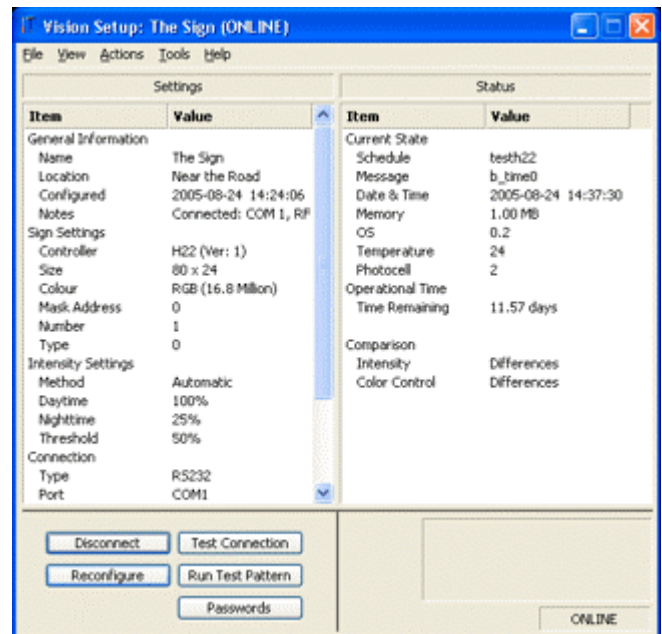


## STEP 7: UPDATE SIGN PARAMETERS

If the sign is attached to the PC and powered on, then Vision Setup will automatically try to connect to it.

Once connected, the sign's parameters may need to be updated. If there is a **COMPARISON** section appearing within the **Status** list, then these parameters are different than what is set at the sign. It is important to update the sign.

To update the sign, go to *Actions*, then *Options*, then *Update All Parameters*. Press the **Update** button in the Update Parameters window.



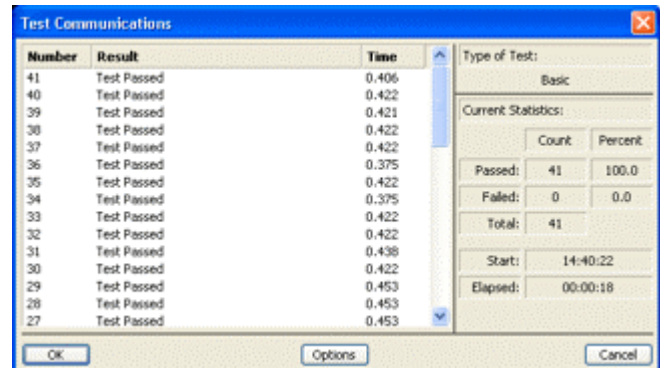
## STEP 8: VERIFY COMMUNICATIONS

If the sign is attached to the PC and powered on, then it's recommended that you test the connection to the sign.

From the main Vision Setup window, select the **Test Connection** button at the bottom-left.

Vision Setup will automatically perform continuous basic communication tests to the sign. This verifies that the sign is working properly and that the PC can communicate to the sign.

Once completed, simply close Vision Setup.



## STEP 9: GO TO VISION STEP2SIGN WIZARD

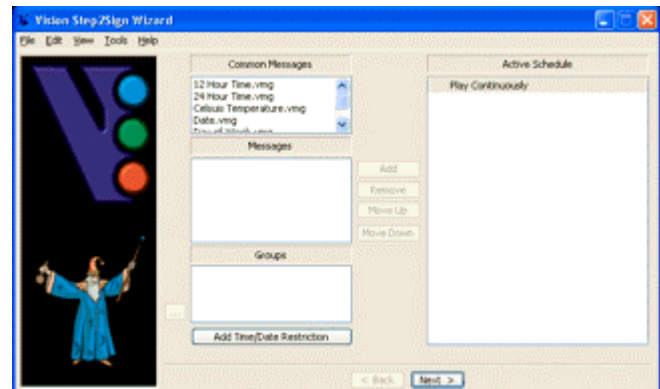
When Vision Setup closes, the main VisionSuite window will open. From there, select Vision Step2Sign Wizard in the list on the left.

Vision Step2Sign is a simple step-by-step application for creating messages & schedules and updating a sign.

When it opens, simply select the **12 Hour Time.vmg** item in the Common Messages and then press the **Add** button. This adds the Time message to the schedule. Also add the **Temperature** message to the schedule list.

Once completed, press the NEXT button at the bottom.

The next window is simply a SAVE schedule window. Press the **SAVE** button. This will automatically step you to the next window.

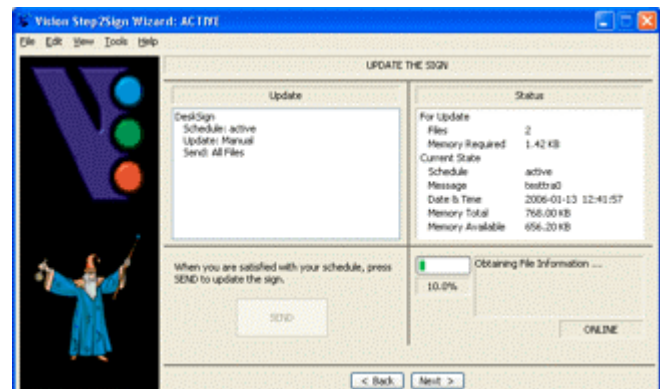


## STEP 10: UPDATE THE SIGN

When the "Update the Sign" step appears, Vision Step2Sign will automatically connect to the sign. After it connects, the SEND button will become available.

Press the **SEND** button. The messages and new schedule will be automatically sent to the sign.

You can now close Vision Step2Sign.



**DONE!!!**

You have successfully configured a new sign and updated the sign's messages and schedule.

**ADDITIONAL INFORMATION**

For further information about the applications, please refer to the User Manual or the Tutorial. The documents are available in PDF format (for printing) or via HTML Help and Tutorial selections within the VisionSuite application.



# VISION SETUP

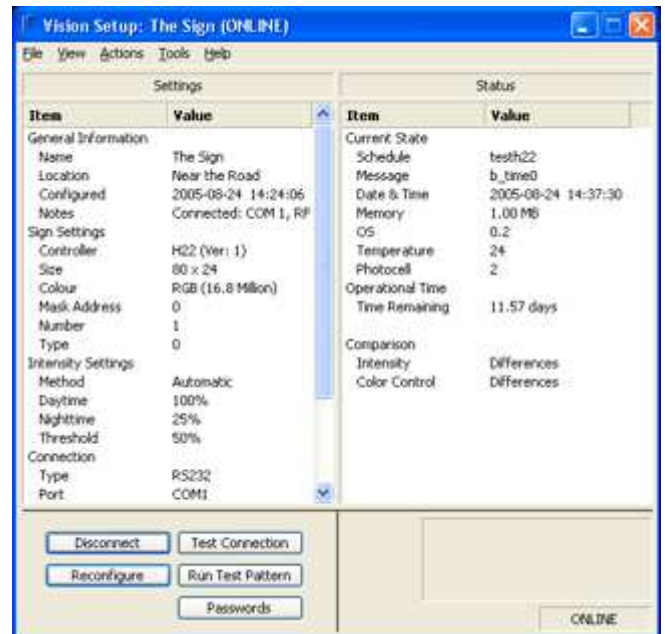
## OVERVIEW

The Vision Setup application allows you to initially configure the sign settings and to directly access the sign for diagnostic & maintenance purposes.

Vision Setup is the first application that must be run after you install VisionSuite. You must first configure a *New Sign* in order for the other applications to be properly initialized. It is also highly recommended to initially test your communications to the sign.

VisionSuite is designed to work with many types of signs. Therefore, it is very important to verify that you have setup VisionSuite properly by ensuring that the sign communicates with the VisionSuite applications.

Vision Setup is designed for setting up and maintaining both Message and Video signs.



## HOW VISION SETUP WORKS

When Vision Setup is used for the first time, the window will appear mostly blank and grayed-out. You can then use the New Sign selection in the File menu to configure a new sign. Once created, you can then test the communications to the sign and initialize the signs settings. The main window is designed to give you information about the sign and to provide a means to diagnose and maintain your sign.

Nevertheless, once the sign is initially setup, you may not need Vision Setup's capabilities. In most normal situations, the default settings within the other communication applications (Vision Update, Vision Step2Sign Wizard, and Vision Instant Message) will handle most basic maintenance requirements.

The menu items give you access to various functions to manage sign and to setup default settings.

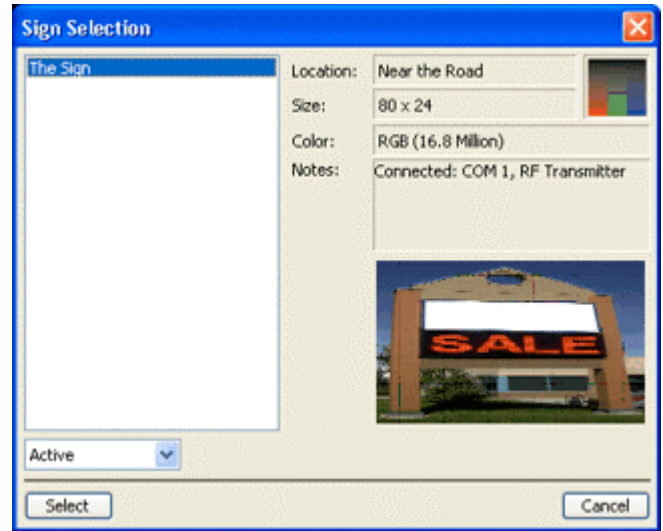
To get a quick understanding of the basic features of Vision Setup, please review the [Examples](#) below or go through the [Tutorial](#).

**OPENING VISION SETUP**

When either more than one sign has been configured for your PC or with a specific application option set, you will see this dialog each time you open a VisionSuite application.

Once the sign has been selected, Vision Setup will automatically attempt to connect to the sign. When no signs have been configured, a blank Vision Setup window will appear with most items disabled. When the selected sign is not available or OFFLINE, a normal window will appear indicating that the sign is OFFLINE.

When CANCEL is pressed, the default blank Vision Setup window will appear.

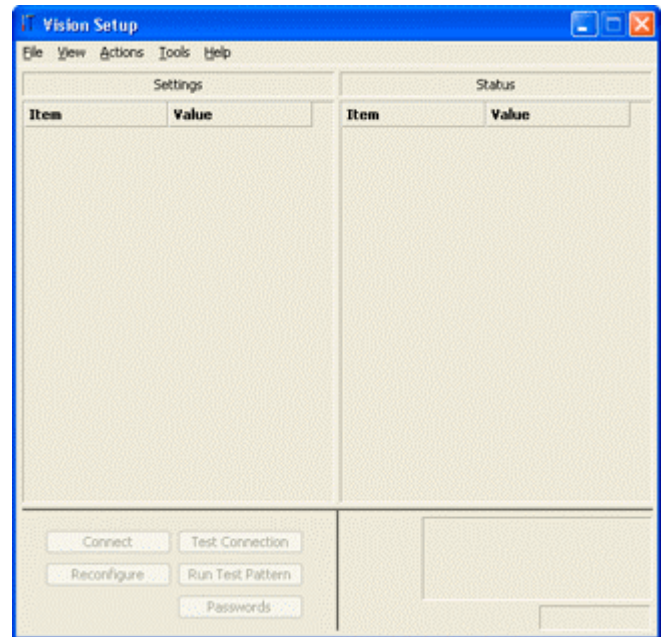


**THE MAIN WINDOW (FIRST TIME)**

When Vision Setup is open for the first time, there will be no signs configured.

All of the regions within the main window will be grayed-out and the title bar will not have a sign name shown.

You will need to enter a New Sign. From the File menu, select New Sign. Below is a complete explanation of the New Sign window.



## THE MAIN WINDOW (ONLINE)

When connecting to an ONLINE sign, the main window will fill with the parameters from the sign. When initially connecting to the sign, the **Communication Status** region (the bottom-right) will update with connection information.

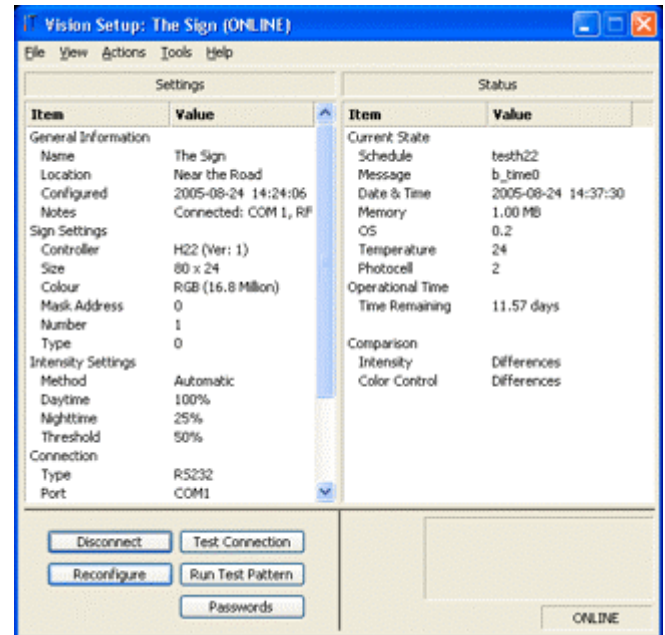
There are several regions within the main window.

The **Settings** region displays most of the information set during the sign's setup.

The **Status** region displays the current information from the sign. Within this region, there may be a Comparison section. This will show any important differences between the settings at the sign and those on the PC.

The **Common Buttons** region which allows you access to a variety of controls (Connect, Reconfigure, Test Communications, Run Test Pattern, and Manage Passwords).

The **Communication Status** region shows connection information.

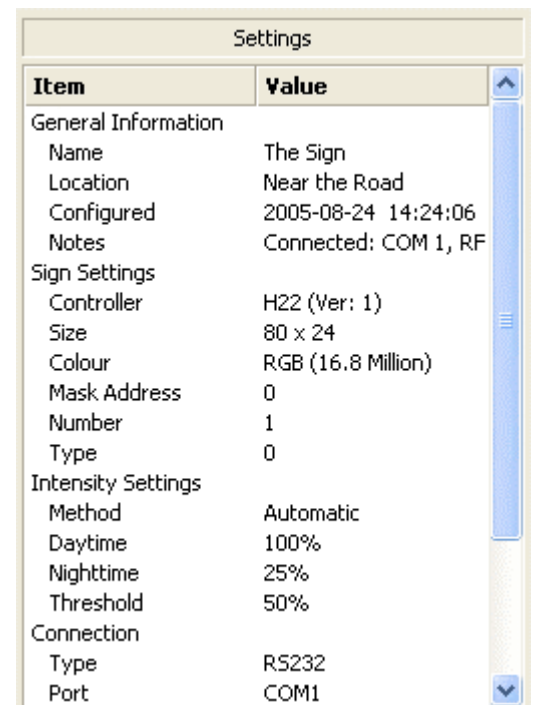


### Settings Region

The left side of the main window displays various items about the sign; *General Information*, *Sign Settings*, *Intensity Settings*, *Connection*, and *Other Settings*.

The various parameters and values shown within these sections represent the majority of the main settings for the sign. These values are read from a special file stored on the PC for the sign's settings.

If the sign is setup properly, these settings should match the corresponding settings stored at the sign.



**Status Region**

The right side of the main window displays various active items at the sign: *Current State*, *Operational Time*, and *Comparison*.

The *Current State* section displays the main items about the sign:

- The current schedule playing
- The current message playing
- The date and time setting at the sign
- The total memory available at the sign for message files
- The current version of the Operating System at the sign
- The current reading of the Temperature at the sign
- The current reading of the Photocell (used for automatic intensity control)

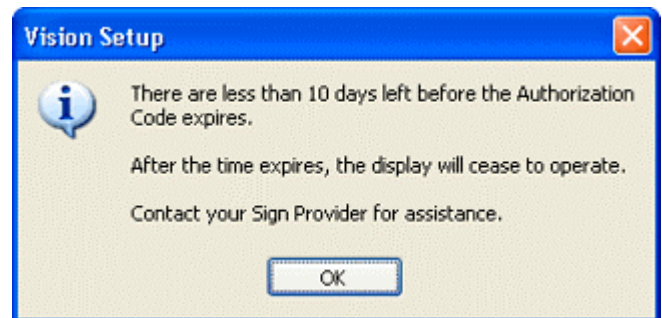
Status	
Item	Value
Current State	
Schedule	3dtext
Message	3dtext0
Date & Time	2005-08-30 11:37:26
Memory	7.32 MB
OS	0.2
Temperature	Not Connected
Photocell	Not Connected
Comparison	
Intensity	Differences
Color Control	Differences

The *Operational Time* section displays the amount of time left for the sign before an Authorization Code must be entered.

**Ten days** (and less) before the “time” expires, a message box will appear whenever the user connects to the sign. **Once the time expires, the sign will no longer respond to updates and the current schedule will stop running.**

The *Comparison* section indicates any “differences” that may exist between the settings on the PC and within the Sign’s memory. The values that are evaluated are:

- Intensity
- Sign Size
- Color Control
- Temperature Offset

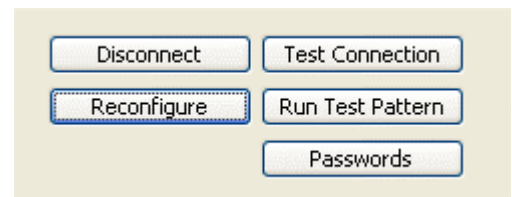


**Common Buttons Region**

There are several buttons in this region that give you access to different features.

The *Disconnect/Connect* button (as the name indicates) allows you to disconnect from a sign that is currently ONLINE and connect to a sign that is not currently ONLINE.

The *Reconfigure* button allows you to change various settings within the



sign's definition file stored on the PC.

The *Test Communications* button allows you to run more complicated communication tests between the PC and the sign.

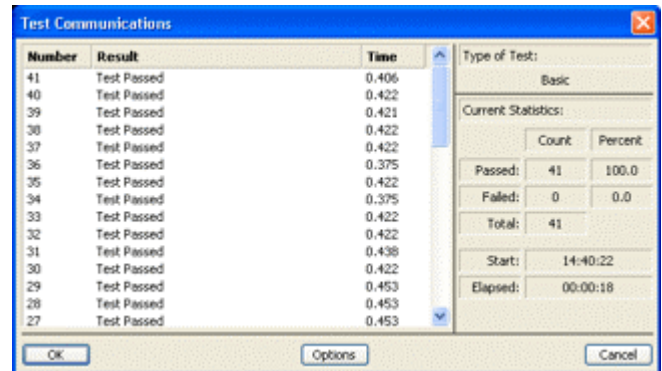
The *Run Test Pattern* button runs a low-level test pattern at the sign. It will indicate if the basic operations and wiring of the sign are working properly.

The *Password* button allows the setting of Hardware and Authorization passwords for the sign.

### Test Communications

Pressing the “*Test Communications*” button displays the dialog shown to the right. When the dialog opens, it automatically begins transmitting test signals to the sign.

For proper communications, you should see a 100% pass rate in the basic communications test. If you see more than 10% failure, you should investigate why this is happening. For more information on determining why you might have a high failure rate in the communications, please refer to the [Troubleshooting](#) section below.

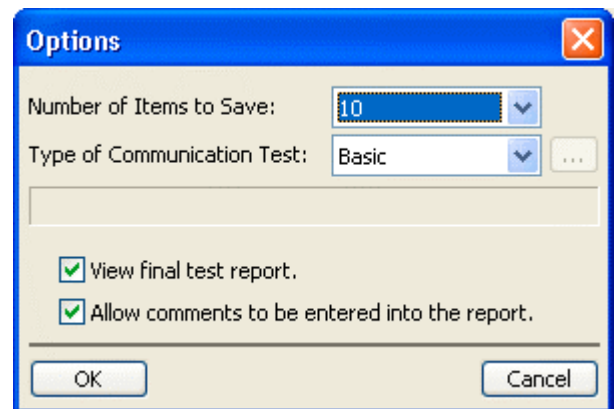


Pressing the “*Options*” button within the “*Test Communications*” dialog, will give you access to several settings.

The “*Number of Items to Save*” is a number representing the number of items recorded within the final report.

The “*Type of Communication Test*” states the type of test used for the test. The selections are:

- Basic – Obtains simple status information about the sign.
- Intermediate – Obtains the file folder information from the sign. Depending on the number of files at the sign, this can take far more time than the basic test.
- Advanced – Transmits a selected file to the sign and then deletes it at the sign. Large files should not be used for this test.



When “*View final test report*” is selected, Vision Setup will produce a report on the communications test.

When “*Allow comments to be entered...*” is selected, you can add in a small comment to the end of the report.

The comment can be of any length that you wish.

The final report that is made is an HTM file. This type of file can be imported into such packages as Microsoft Word™. The file (named TestComm.htm) is stored in the main VisionSuite folder on your computer. The file is only a temporary file and is replaced each time the Test Communications report is generated. If you want to store the file for later use, you can use the **Save As** selection under the File menu when you view the report. You can also use Windows Explorer to copy the file to another location on your computer.

Password

A **Hardware Password** can be set by you (the user) in order to add extra security to the sign. When the password is set, it will have to be entered each time you connect to the sign.

**WARNING:** It is very important to record your passwords. If a “Hardware Password” is lost, a Service Call may be required to clear the password and restore normal operations of the sign.

When clearing the password, you must first enter it with the SET button. After the sign’s electronic controller has confirmed the password, you can come back to this window to press the CLEAR button. The CLEAR button will only be activated if the password has been confirmed by the sign’s electronic controller.

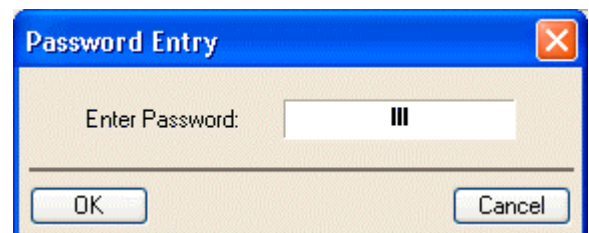
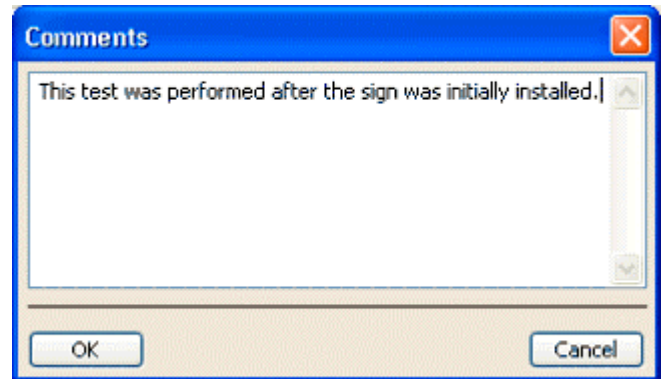
The **Authorization Code** can be entered via the Actions menu.

When the “Set” button is pressed for the “Hardware Password”, the dialog shown to the right appears.

Simply enter your password twice and press the OK button. Upon return to the “Hardware Passwords” dialog, press the OK button. The sign will now be set with the new Sign Password.

If the “Set” button is pressed for the “Hardware Password” when the password has already been set (when the “Active” indicator is shown), the standard “Password Entry” dialog is shown.

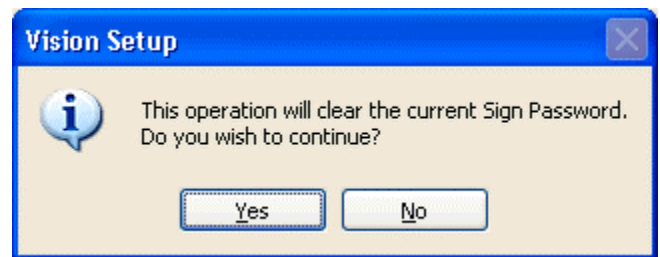
Simply enter the set password and press OK. Access will be granted to the sign if the password is correct.



If the “*Clear*” button is pressed for the “*Hardware Password*” when the password has already been set (when the “*Active*” indicator is shown), the dialog to the right is displayed.

Press **YES** to clear the password.

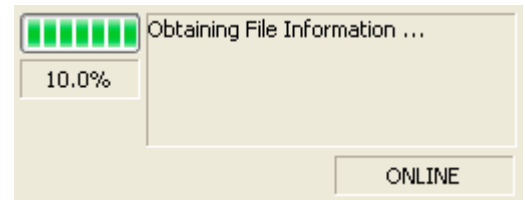
NOTE: In order to clear the password, you must first enter it with the “*Set*” button and press OK to inform the sign that you have “*permission*” to change or clear the password .



### **Communication Status Region**

At the bottom-right of the main window is the *Communication Status* region that indicates the current state of the connection between the computer and the sign.

During the initial connection between the computer and the sign, Vision Setup will obtain the sign’s parameters and file information. Depending upon the link between the computer and the sign, this process can take from a few seconds to a few minutes.



Error messages and other communication events are also displayed within this region. For a complete list of the meaning of particular error messages, please refer to the [List of Communication Errors](#).

During the transfer of files, the “*Abort*” button will be enabled and visible. By pressing the “*Abort*” button, the transfer of the file and all subsequent events for the file transfer will be cancelled.

## **FILE MENU**

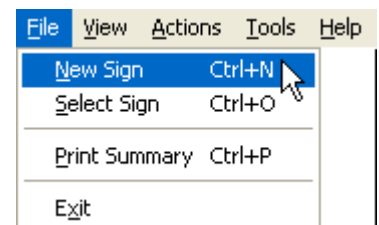
The File menu gives you access to four items:

**New Sign** allows you to create a new sign.

**Select Sign** allows you to select a new sign. If you have several different signs, then you can use this function to access the Sign Selection dialog. Once selected, Vision Setup will disconnect from the current sign and reconnect to the new sign.

**Print Summary** displays an HTML file with information about the sign. This file can be printed to most standard printers.

**Exit** closes Vision Setup.



## **New Sign**

The *New Sign* window has been totally redesigned from the previous versions. On the left side of the window is a list of sections. Each section allows access to a set of features that can be adjusted.

Once the sign has been setup, press the Apply button to save the values to a file on the PC. Afterwards, these saved values will be used to update the sign itself.

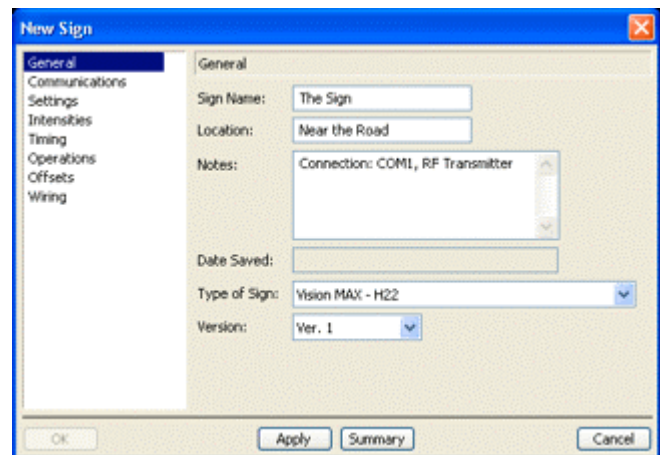
The *Summary* button will produce a simple report showing most of the settings for the sign. Cancel will return you to the main Vision Setup window. OK will also return you to the main Vision Setup window, but it will also automatically try to connect to the sign.

**WARNING:** Various settings can seriously effect the operation of VisionSuite and the communications to the sign. Please **do not** change these values without a clear understanding of the settings.

### **New Sign – General**

The General section contains the basic information about the sign. You can set the following items:

- **Name** – The name of the sign should be something clear and meaningful. It must be less than 64 characters in length.
- **Location** – The location is useful when more than one sign exists. It can describe the general location of the sign with respect to the other signs. It must be less than 64 characters in length.
- **Notes** – The notes section is where you can further describe the sign or the connection to the sign. It must be less than 256 characters in length.
- **Type of Sign** – The VisionSuite software can connect with many different types of signs. This setting describes how the software should communicate to the sign and what range of capabilities the software should allow the user to have access to. **DO NOT CHANGE** this setting without instructions from a qualified technician.
- **Version** – This setting is a sub-setting for the “type of sign”. It further specifies the connection to the sign. **DO NOT CHANGE** this setting without instructions from a qualified technician.



## New Sign – Communications

The Communications section contains the specifications that describe how the PC is connected to the sign. This section is split into three parts.

The top portion shows the five major connection methods. The middle portion shows the various settings possible for each connection method. The bottom portion is a summary of the settings.

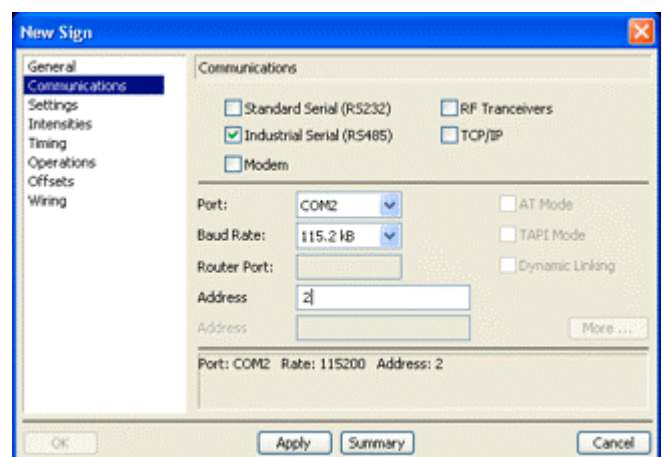
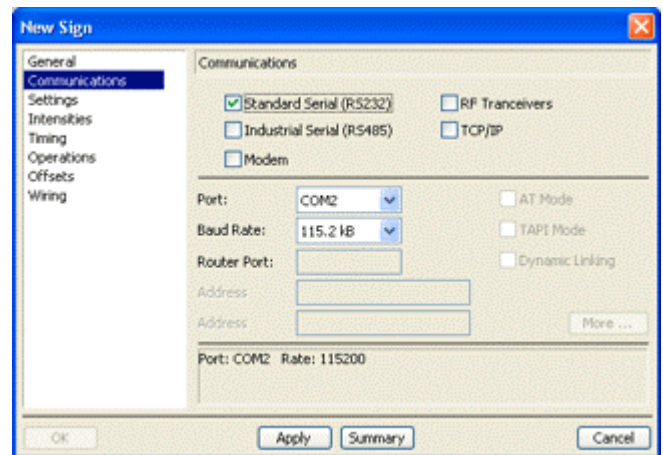
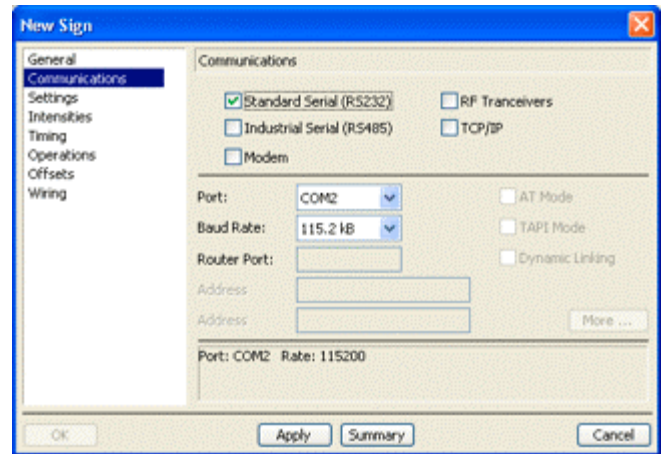
### Standard Serial (RS232)

With a standard serial connection setting, one is normally going through a short cable (less than 20 feet) directly to the sign or to a converter. In addition, a standard serial connection only has two settings: Port and Baud Rate. The baud rate is limited to the type of sign that is being used and the method of communications.

Serial converters come in many forms: RF Transceivers, Ethernet Servers, USB, etc. These are only a small sample of the converters available.

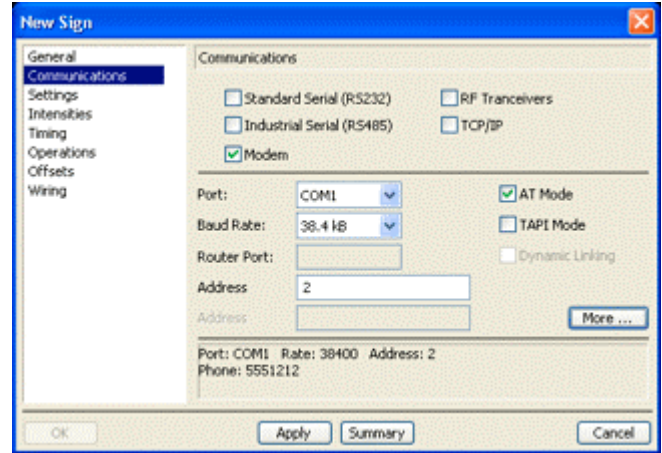
### Industrial Serial (RS485)

With an industrial serial connection setting, one is normally wired from the PC through a short cable (less than 20 feet) to a RS485 converter and then a long wire (less than 4000 feet) to the sign. An industrial serial connection has three settings; Port, Baud Rate and Address. The baud rate is limited to the type of sign that is being used and the method of communications. The address reflects a physical setting in the sign's electronics. This setting is used when there is more than 1 sign connected in a "RS485 Network" of signs. The address designates one sign from another .



Modem (General)

With a modem setting, one is normally wired from the PC through a short cable (less than 6 feet) to an external modem. The modem is then connected to the phone line. At the sign, there is either a land-line modem or a cell-phone modem. A modem connection has several settings that define/control the modem at the PC and the communication requirements for the type of modem at the sign: *Port*, *Baud Rate*, *Address*, *AT Mode*, *TAPI Mode*, and *“More”*. The baud rate is limited to the type of sign that is being used and the method of communications. The address reflects a physical setting in the sign’s electronics. The AT and TAPI modes are two different types of “processes” used to communicate through a modem. The *More* button will allow you to setup the various settings for each mode.

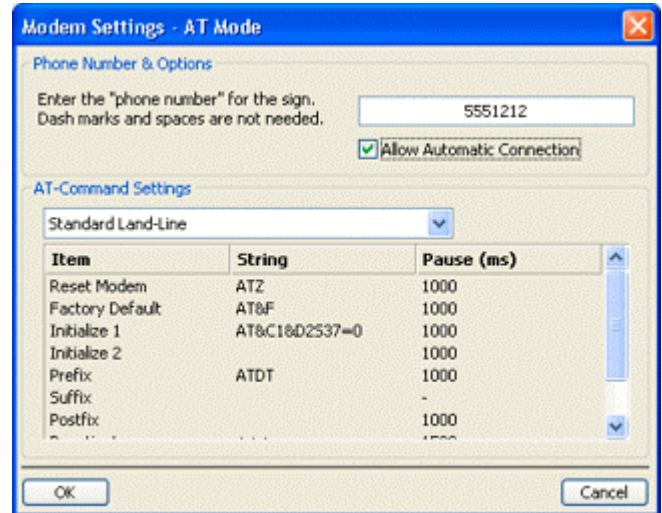


The *AT mode* refers to the use of AT commands for setting up and processing modem communications. The *TAPI mode* refers to use of Windows’ Telephony API for setting up and processing modem communications. Depending upon the type of modem, the version of Windows, and the link to the sign, one mode may be better than the other.

For cell modem communications, it is recommended to use *AT-Mode*. It has been experimentally shown that this mode works more reliably than the *TAPI-Mode*.

Modem – AT Mode

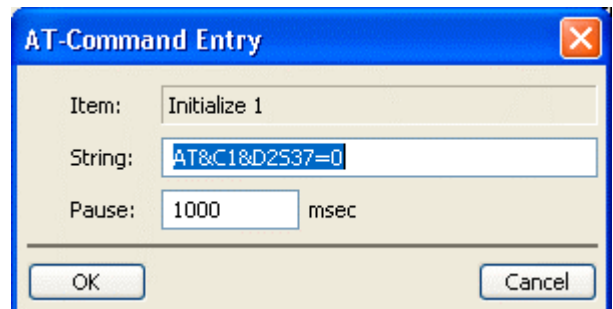
When setting up your connection with a modem in AT-Mode, all you may need to do is enter the exact phone number into the control as shown. Spaces and dash marks are not needed. If you need to enter in a “9” to get an outside line, you can enter it in here or within the “AT-Command Settings” section.



The *“Allow Automatic Connection”* selection specifies that the VisionSuite software can automatically connect to the sign when the user selects the sign (within certain applications). For instance, this can be very useful when using the BATCH MODE within Vision Update.

There are several standard AT-Command Settings that have been predefined. If you need to change the default settings for your situation, then select *Custom* and change the values.

When altering the AT commands for a particular modem or phone system requirement, you should have exact knowledge of the AT command or change that is required. If you double-click on any AT Command setting, a dialog similar to the one to the right will appear.



For a more detailed explanation of these settings, contact Technical Support for assistance.

### Modem – TAPI Mode

In setting up a modem, the modem must be installed correctly within Windows. If your modem does not appear in the list in *Step 1*, then Windows does not recognize the modem properly. Simply reinstalling the modem may correct the problem. (Refer to [Troubleshooting](#) for more assistance.)

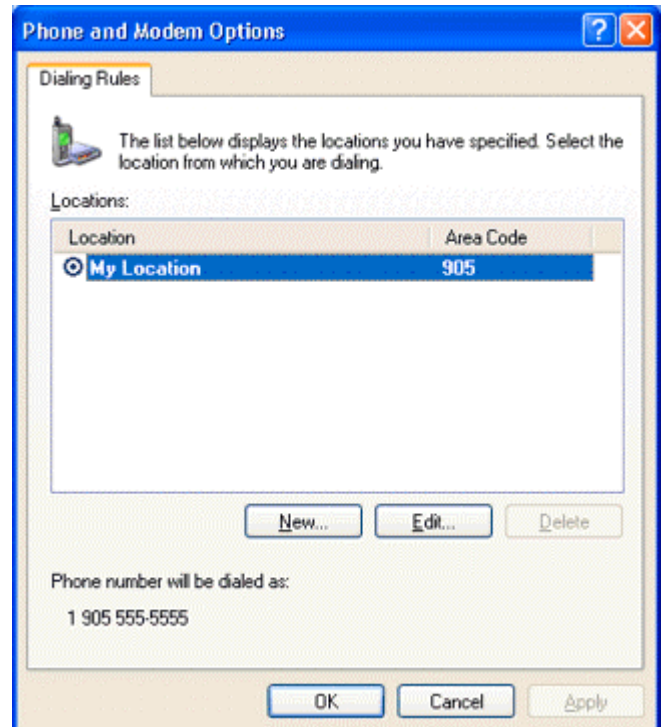
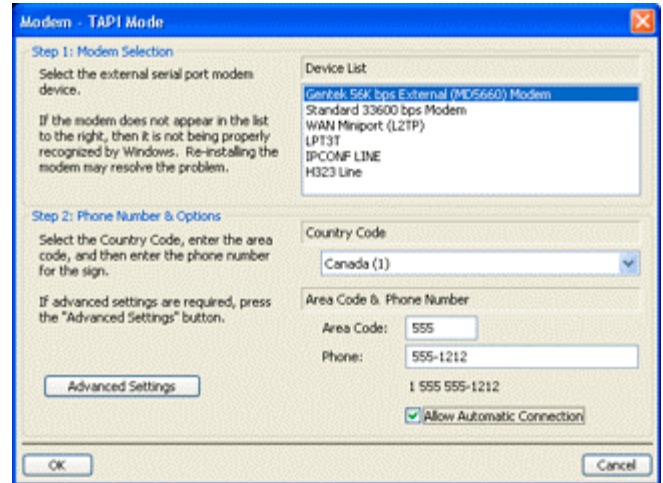
Once the modem has been selected, set the country code, the area code and the specific phone number that the sign is located at. If more settings are required due to your location, select the “*Advanced Settings*” button.

The “*Allow Automatic Connection*” selection specifies that the VisionSuite software can automatically connect to the sign when the user selects the sign (within certain applications). For instance, this can be very useful when using the BATCH MODE within Vision Update.

The “*Advanced Settings*” button will give you access to the standard “Phone and Modem Options” dialog. This is the standard dialog provided within Windows. This dialog can also be accessed via the standard Windows’ Control Panel.

You can setup any number of special settings for your modem and the connection to the sign via this dialog and the following 3 dialogs.

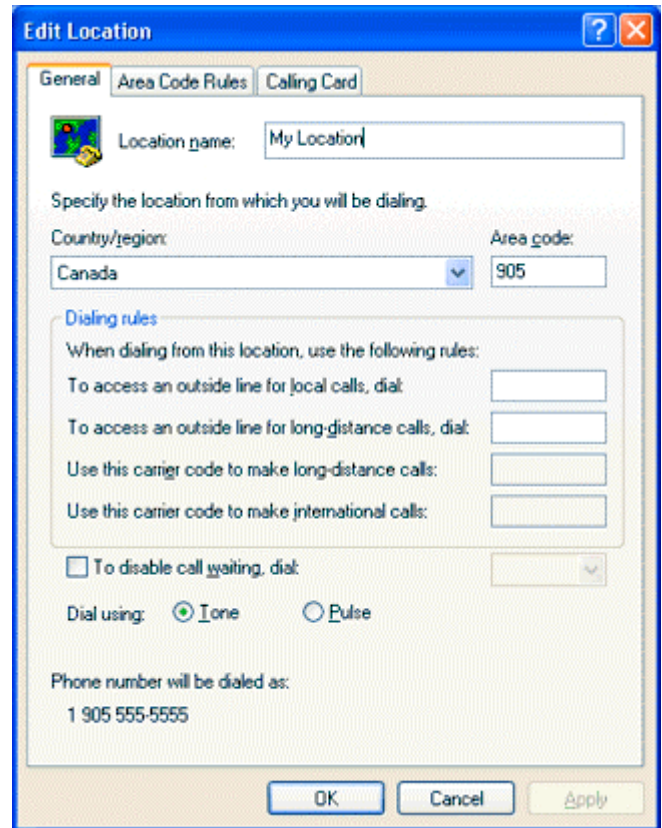
NOTE: The dialog shown to the right is specific to Windows XP Pro. Yours may look slightly different due to your version of Windows.



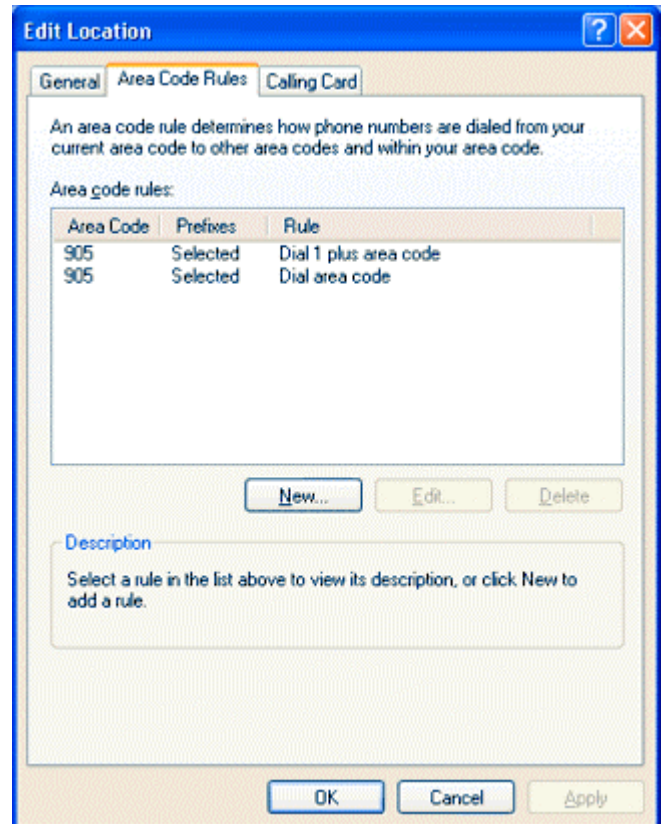
Whether you press New or Edit, you will see a dialog similar to the one shown to the right.

It is composed of 3 tabs. Some modems do provide additional settings than the ones being shown.

The General tab allows you to setup parameters for your current location. If you require a special number to gain an "outside" line, you enter it in this tab.



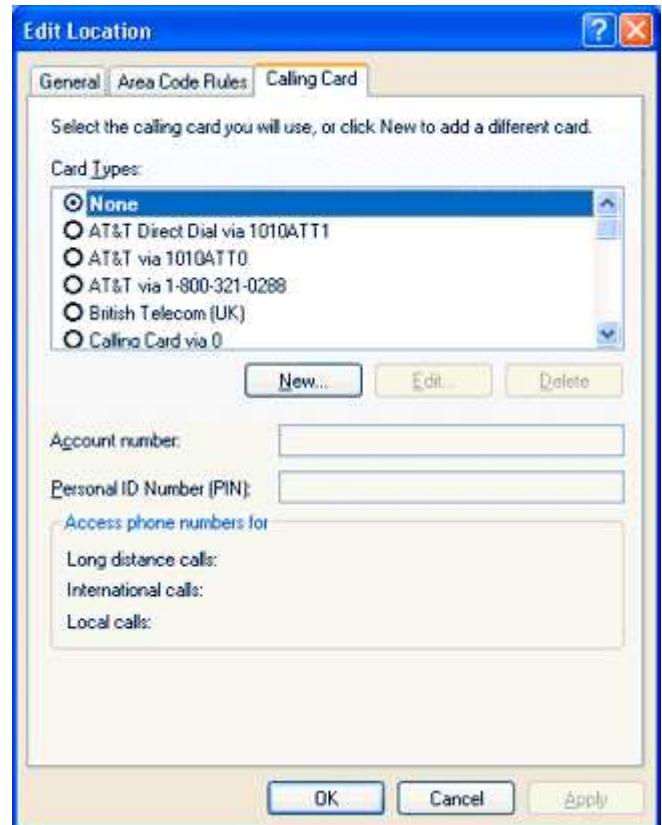
Depending upon your location and the sign's location, you may require special Area Code rules. In some places, the Area Code is dialed along with the normal phone number even with local calls. If this is your situation, you can set the number appropriately.



Finally, some users may utilize Calling Cards (e.g. when they are on-the-road with a laptop).

For proper settings, please contact your Internet service provider and/or your local phone company.

For more information on these modem settings, please refer to your Windows manual and/or the manual that has come with your modem.

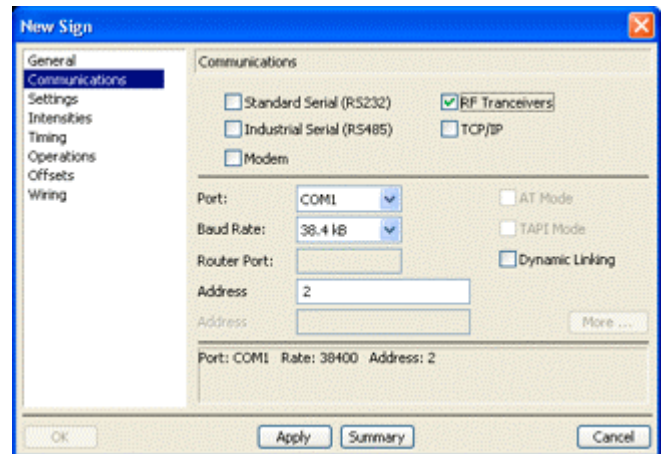


### RF Transceivers

With an RF (or Radio Frequency) Transceiver connection setting, one is normally wired from the PC through a short cable (less than 6 feet) to a RF Transceiver and then a wireless link (less than 10000 feet {*dependent upon the type of antenna used*}) to the sign. The RF Transceivers work as a pair of devices that must be in a Line of Sight of each another. Depending upon the type of RF device, the device can be affected by other wireless devices, tinted windows, walls, trees, and weather (or environmental) conditions.

An RF Transceiver connection normally has four settings; *Port*, *Baud Rate*, *Address*, and *Dynamic Linking*. The baud rate is limited to the type of sign that is being used and the method of communications. The address reflects a physical setting in the sign's electronics.

The dynamic link is not available for VisionSuite 3.0.

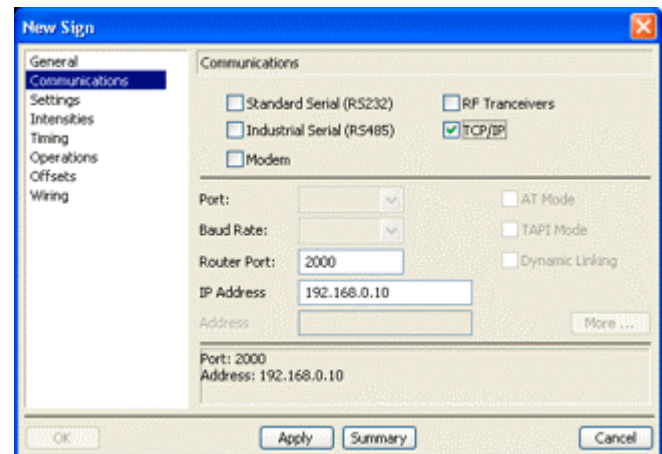


## TCP/IP

With a TCP/IP connection setting, one is normally wired from the PC through a network cable to the network of the company. The sign or appropriate sign software is also connected to the network. The sign or sign software **must be** behind the company's *Firewall protection infrastructure*.

A TCP/IP connection normally has two settings: Router Port, and IP Address.

The TCP/IP is not available for VisionSuite 3.0 .

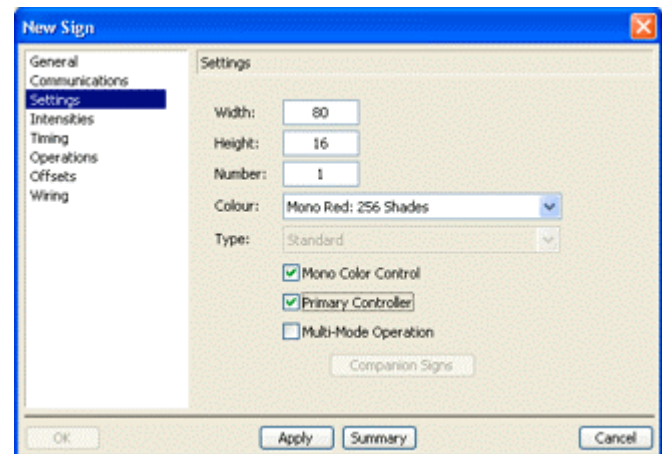


## New Sign – Settings

The Settings section contains the specifications that describe the sign's size, color capability, and pairing. The various items within this section are dependent on the type of sign. Therefore, some items may not be accessible.

The following items can be set in this section:

- **Width** – The sign's width in pixels (or columns). The value must be greater than or equal to 8.
- **Height** – The sign's height in pixels (or rows). The value must be greater than or equal to 7.
- **Number** – The number of signs connected to the sign's electronic controller. This value should normally be 1.
- **Color** – This value is highly dependent upon the type of sign and the LEDs used during manufacturing.
- **Type** – This value is only for certain legacy systems.
- **Mono Color Control** – With certain types of signs, the sign's electronic controller can emulate RGB color for certain types of Monochromatic sign configurations.
- **Primary Controller** – This value indicates that the sign's electronic controller is the main device in a series of controllers.
- **Multi-Mode Operation** – This value is normally used to specify that more than one sign share a common communication link (such as a modem). When selected, the "Companion Signs" button becomes enabled.
- **Companion Sign** – This button allows you to specify the other signs that share the common communication link.

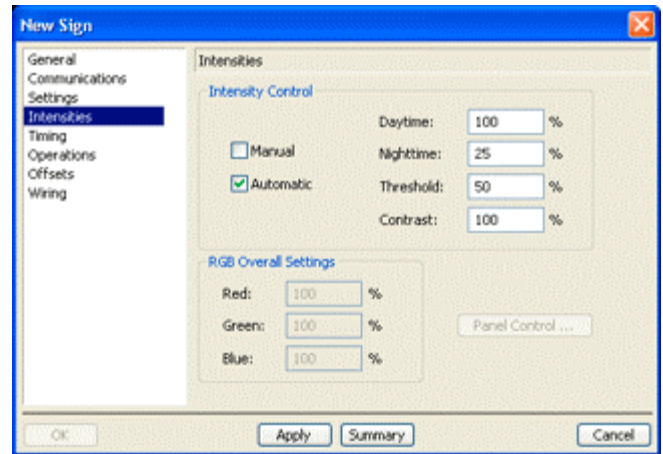


## New Sign – Intensities

The Intensities section contains the specifications required for controlling the intensity & contrast of the sign. The various items within this section are dependent on the type of sign. Therefore, some items may not be accessible.

The following items can be set in this section:

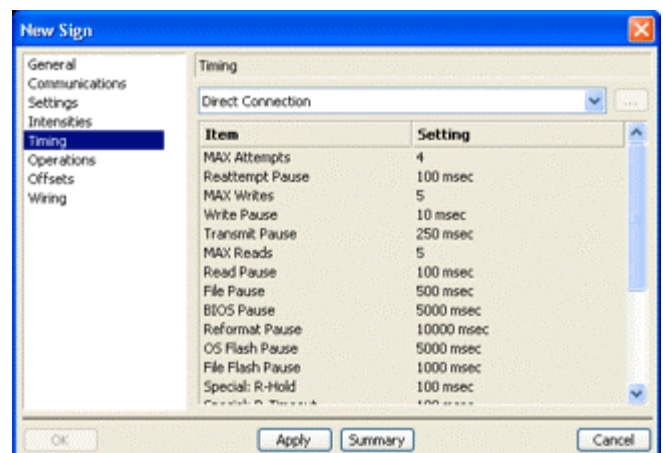
- **Manual/Automatic** – These control how the sign adapts to light. When the sign has a “photocell” device attached to it, this setting should be in automatic mode.
- **Daytime** – For the manual mode, this is the requested intensity level. For the automatic mode, this specifies the overall daytime intensity level of the sign. The daytime intensity occurs when the ambient light goes above the “threshold” value.
- **Nighttime** – For the automatic mode, this specifies the overall nighttime intensity level of the sign. The nighttime intensity occurs when the ambient light goes below the “threshold” value.
- **Threshold** – The level that specifies when day and night values are used. Only available in automatic mode.
- **Contrast** – The contrast of light and dark intensities for the sign.
- **RGB Overall Settings** – These control the overall intensity values for the red, green, and blue LEDs within the sign.
- **Panel Control** – Only available for qualified Service personnel.



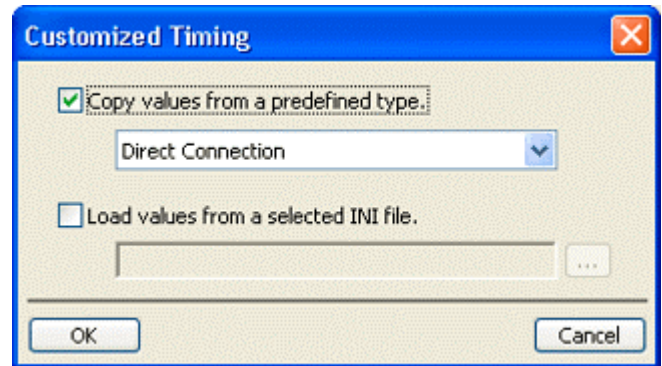
## New Sign – Timing

The Timing section contains the specifications for controlling certain timing constraints in the communication link from the PC to the sign. The various items within this section are HIGHLY dependent on the type of sign and the connection link. These items should only be changed by a qualified Technician or with instructions from Tech Support.

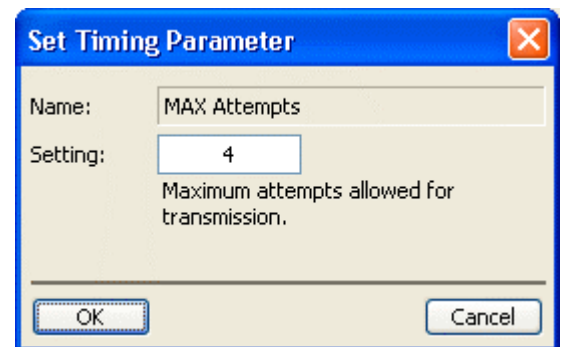
There is several default settings already predefined. If you need to alter the settings, select “*Customized*” from the pull-down list.



When Customized is first selected, a dialog (shown to the right) appears so that you can copy values from a specific predefined setting or load it from a specific file.



Once selected, you can alter the timing parameter by double-clicking on the entry within the list. The “Set Timing Parameter” dialog will appear (shown to the right). Only the Setting parameter can be altered.

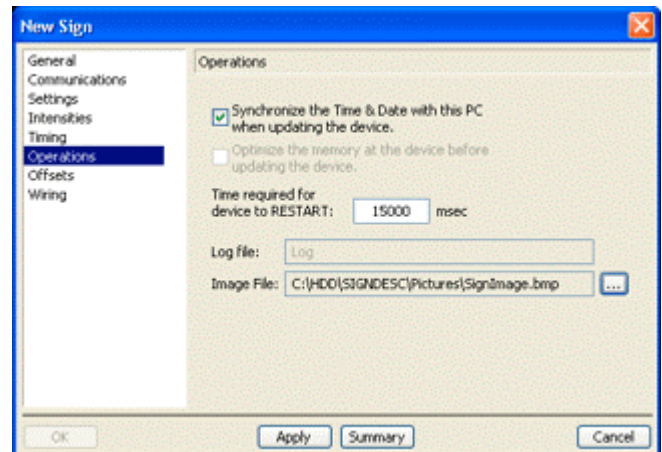


### New Sign – Operations

The Operations section contains a few parameters that control how the PC connects to the sign and how the user “sees” the sign within the software.

The following items can be set in this section;

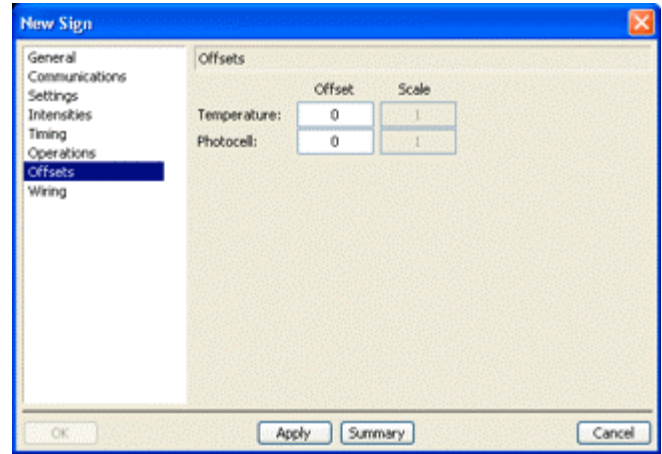
- **Synchronize** – This setting allow the sign to have its internal timing reset every time the schedule and messages are sent to the sign.
- **Optimize** – This setting instructs the sign’s electronic controller to optimized its file storage memory compacted every time the schedule and messages are sent to the sign.
- **Restart Time** – This is the length of time for various software applications to wait when the sign’s electronic controller is restarted via software control.
- **Log File** – When there are separate log files for each sign, this section allows you to specify the log file name for the sign.
- **Image File** – You can assign a bitmap file (BMP) to this specific sign. It can be a visual cue to which sign you need to select within the Sign Selection dialog.



**New Sign – Offsets**

The Offsets section allows control on the offset and scaling of Temperature and Photocell readings at the sign.

These values are dependent upon the type of sign and the type of *Temperature/Photocell Probe* that is attached to the sign .

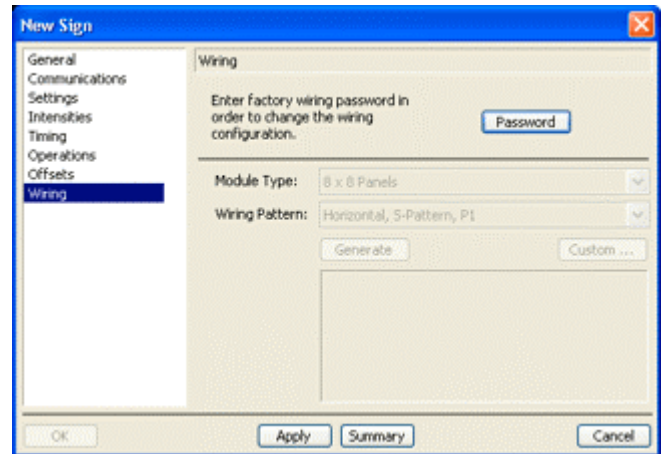


**New Sign – Wiring**

The Wiring section is only available for certain type of signs and can only be accessed with a password.

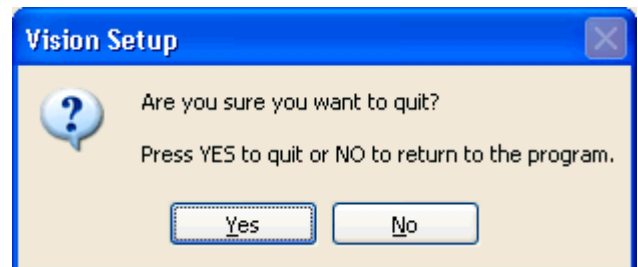
When accessible, there are 16 predefined “*Wiring Patterns*” and 2 predefined “*Module Types*”. When changing the Wiring Pattern, the image at the bottom-right will update to show the type of pattern.

A custom wiring pattern can also be defined.



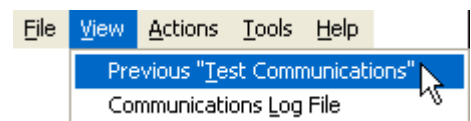
**Exit**

You can exit the application by one of two methods. First, you can select “Exit” from the File menu. Second, you can press the “X” (close) button at the top right of the application. In the second case, a similar dialog as shown to the right appears to ensure that you want to close. By purposely selecting the “Exit” from the File menu, you can bypass this dialog.



**VIEW MENU**

The View menu gives you access various information.



**Previous “Test Communication”** will display the results shown in the TestComm.htm file located in the VisionSuite main folder.

**Communications Log File** will display the current log file. The Log file will only be generated if the Log Options is enabled (see the *Options* section below for more information).

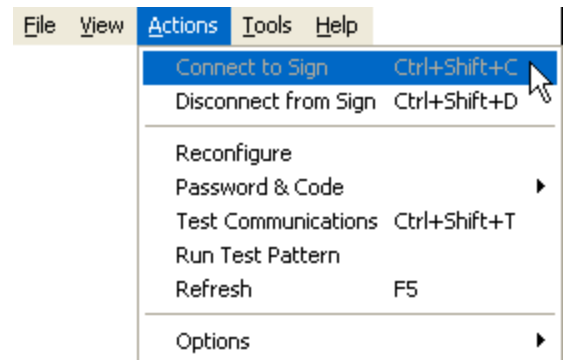
## ACTIONS MENU

The first part of the Actions menu is basically identical to the buttons at the bottom-left of the main window.

The **Password & Code** submenu displays separate selections for Hardware and Authorization password entry.

The **Refresh** selection only updates the Status section on the main window.

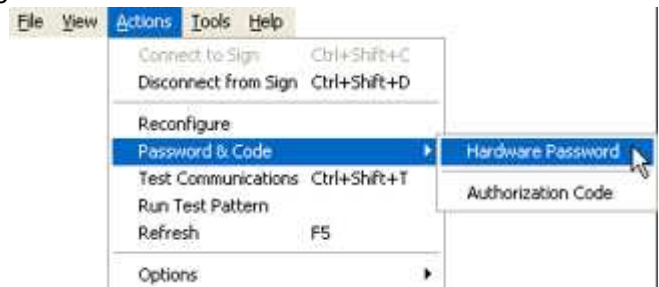
The **Options** submenu displays more actions that may possibly be performed upon the sign.



### Actions - Password & Code

The Options selection shows an extended list of features for the ONLINE sign.

- **Hardware Password** – Allows a user to set, enter, or clear a password for the sign.
- **Authorization Code** – Allows a user to clear an AuthorizationCode that has been set during manufacturing.



### Actions - Hardware Password

A Hardware Password can be set by you (the user) in order to add extra security to the sign. When the password is set, it will have to be entered each time you connect to the sign.

**WARNING:** It is very important to record your passwords. If a “Hardware Password” is lost, a Service Call may be required to clear the password and to restore normal operation of the sign.

When clearing the password, you must first enter it with the SET button. After the sign's electronic controller has confirmed the password, you can come back to this window to press the CLEAR button. The CLEAR button will only be activated if the password has been confirmed by the sign's electronic controller.



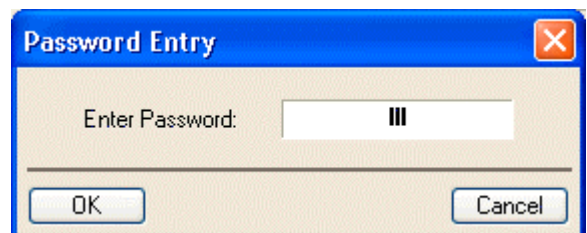
When the “Set” button is pressed for the “Hardware Password”, the dialog shown to the right appears.

Simply enter your password twice and press the OK button. Upon return to the “Hardware Passwords” dialog, press the OK button. The sign will now be set with the new Sign Password .



If the “Set” button is pressed for the “Hardware Password” when the password has already been set (when the “Active” indicator is shown), the standard “Password Entry” dialog is shown.

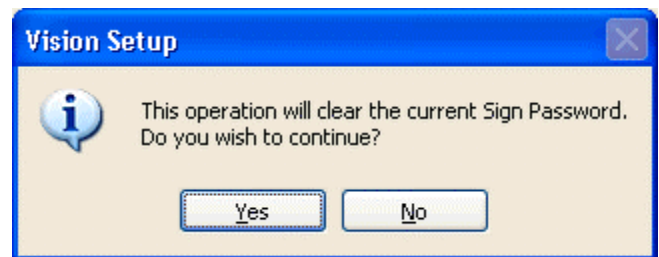
Simply enter the set password and press OK. Access will be granted to the sign if the password is correct .



If the “Clear” button is pressed for the “Hardware Password” when the password has already been set (when the “Active” indicator is shown), the dialog to the right is displayed.

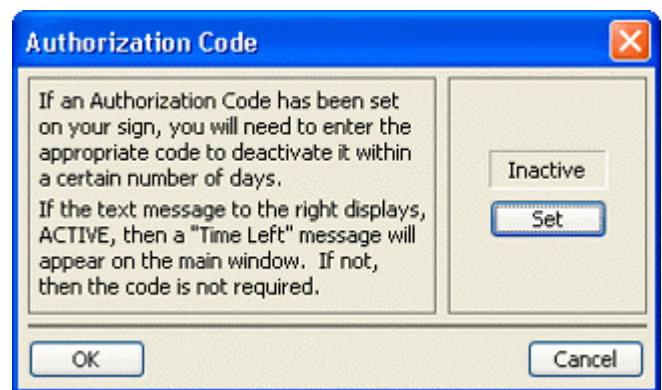
Press **YES** to clear the password.

NOTE: In order to clear the password, you must first enter it with the “Set” button and press OK to inform the sign that you have “permission” to change or clear the password .

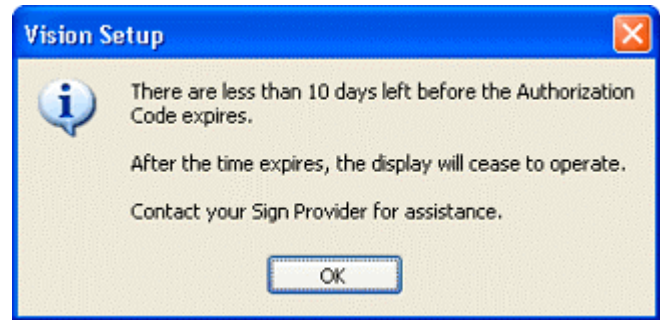


Actions -Authorization Code

The **Authorization Code** is used to add & remove a “**time limit**” to the sign. The time limit is normally set by the manufacturer or Sign Company that you bought your sign from. **If the time limit expires, you will no longer be able to update your sign.**



A warning message will be displayed **10 days** (and less) prior to the expiration time. Before the time expires, you should contact your Sign Provider for assistance.



When the “Set” button is pressed, the “Authorization Password” dialog shown to the right appears.

Simply enter the “Authorization Password” (provided by the Sign Company that you bought your sign from) into the “Enter Password” control. Press the “Tab” key on your keyboard to proceed to the next field. You must then re-enter the password again. Press the “Tab” key again, and the OK button will become enabled.



Press the OK button and then the OK button in the “Set Hardware Passwords” dialog. The sign will then be updated. The “Time Limit” (or “Time Expired”) entry will disappear.

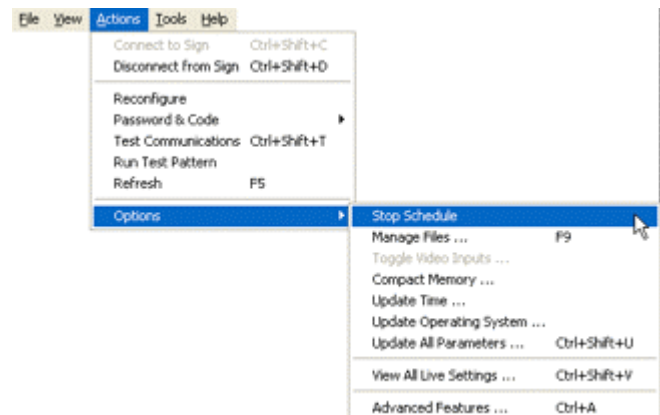
When the AuthorizationCode is not entered properly or does not match the one set in the sign controller, you will see the warning message as shown to the right.



### Actions - Options

The Options selection shows an extended list of features for the ONLINE sign.

- **Stop/Start Schedule** – Allows a user to stop and start the schedule at the sign.
- **Manage File** – This action will display a dialog to allow one to view or delete the files at the sign.
- **Toggle Video Inputs** – Allows a user to toggle a video input for a video system remotely.
- **Compact Memory** – Allows a user to manually optimize the file system memory on a sign’s electronic controller.
- **Update Time** – Allows a user to manually update the time at the sign.
- **Update Operating System** – This action transmits a copy of the operating system to the sign’s electronic controller.
- **Update All Parameters** – This action will transmit all of required settings for the sign’s electronic controller (that are saved on the PC) to the sign.
- **View All Live Settings** – This action allows the user to view the settings at the sign.

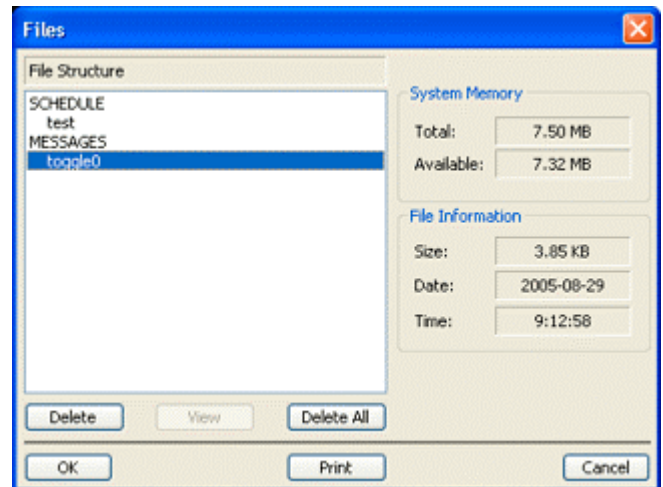


- **Advanced Features** – Depending upon the type of sign, certain advanced features are available.

### Actions - Manage Files

The Files dialog allows you to view the files that are current in the sign's electronic controller's file memory.

- **File Structure** – The list of files at the sign separated off by the type of file.
- **System Memory** – Displays the total and available memory at the sign.
- **File Information** – Displays the size, data, and time of each file at the sign. Some types of signs do not display all of the values.
- **Delete** – Allows you to delete a selected file.
- **View** – Allows you to view a selected file. Not all files can be viewed.
- **Delete All** – Allows you to delete all files at the sign.
- **Print** – Produces a simple report of the file structure. The report can be printed or emailed.



### Actions - Compact Memory

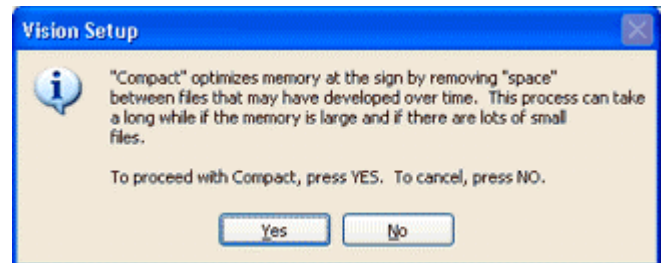
Normally, the operating system at the sign will dynamically optimize the memory when it determines that it's necessary. However, you can force the operating system to perform the memory optimization with this tool.

Depending upon the amount of memory in your sign, this may take anywhere from a few seconds to several minutes.

### Actions - Update Time

The updating of the Time & Date at the sign is a simple operation and does not affect the files at the sign.

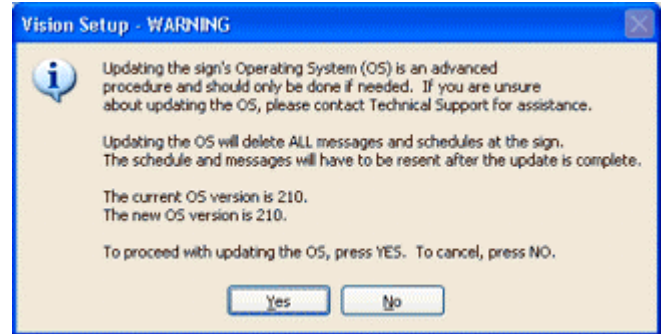
The Time/Date that is sent to the sign is obtained from the PC. If the clock (or time) on your PC is not working properly, you should use a different PC to update the time.



Actions - Update Operating System

The updating of the OS (operating system) at the sign is an advanced procedure and should only be done when needed.

The sending of the OS to the sign can take several minutes depending upon the connection link to the sign. Once the OS has been sent and the sign parameters updated (this process is automatic), the sign will reboot. Depending upon the speed of the sign controller, Vision Setup may see the sign go OFFLINE for a few minutes. You can wait or restart Vision Setup.

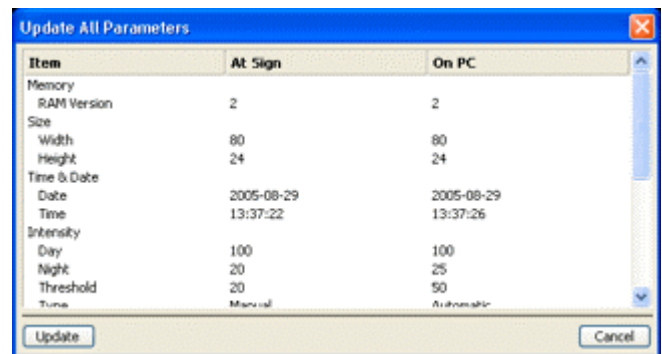


Actions - Update All Parameters

This dialog allows you to view differences in the major settings between the values at the sign and on the PC.

The displayed values will differ for each type of sign.

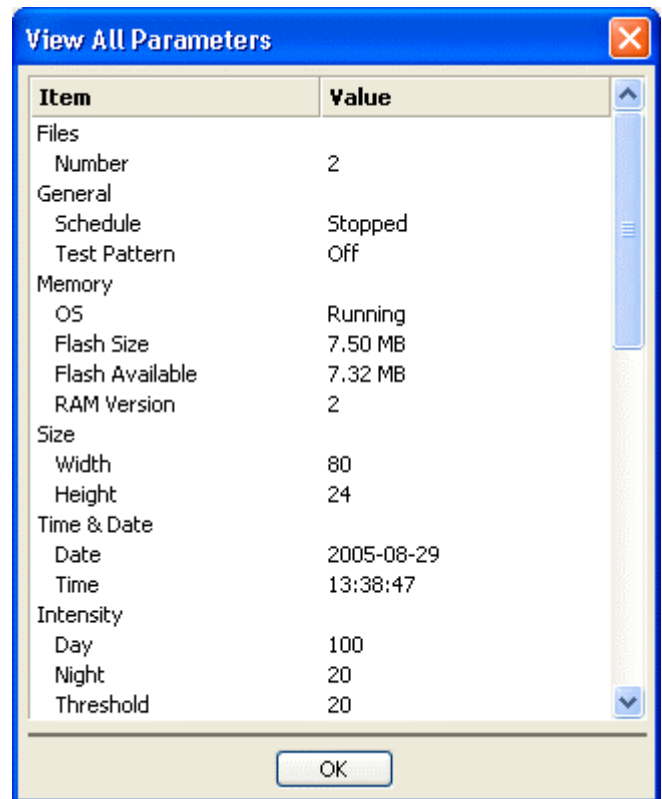
Press the Update button to update the sign. If the software shows the sign as OFFLINE, you can either wait for a few minutes or close Vision Setup.



Actions - View All Live Settings

This dialog only displays the settings and current status of the sign. This is a complete list of all settings at the sign. Only a few of them are normally displayed on the main window.

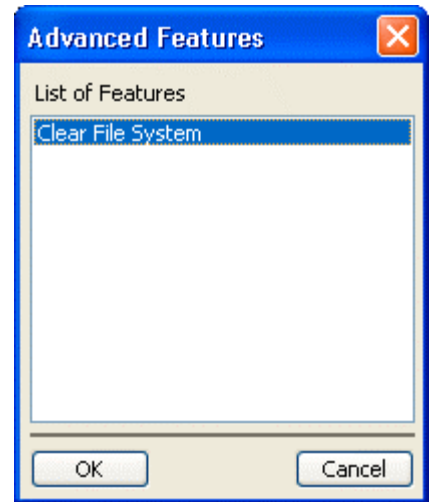
Press OK when finished reviewing the data.



### Actions - Advanced Features

This dialog shows a list of all advanced features available for the particular sign.

Shown at the right, the “Clear File System” feature will delete all files at the sign .



## TOOLS MENU

The Tools menu gives you access to a few basic functions.

**Sign Manager** allows a user to activate, archive, or delete the sign definition files stored on the PC.

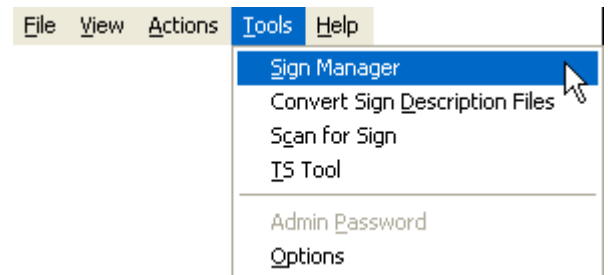
**Convert Sign Description File** tool will convert sign description files from previous versions of VisionSuite into a form that can be used with this version.

**Scan for Sign** tool allows one to scan through a list of serial ports for a specified type of sign.

**TS Tool** (Tech Support Tool) is an undocumented feature.

**Admin Password** is where the Administrator Password can be entered.

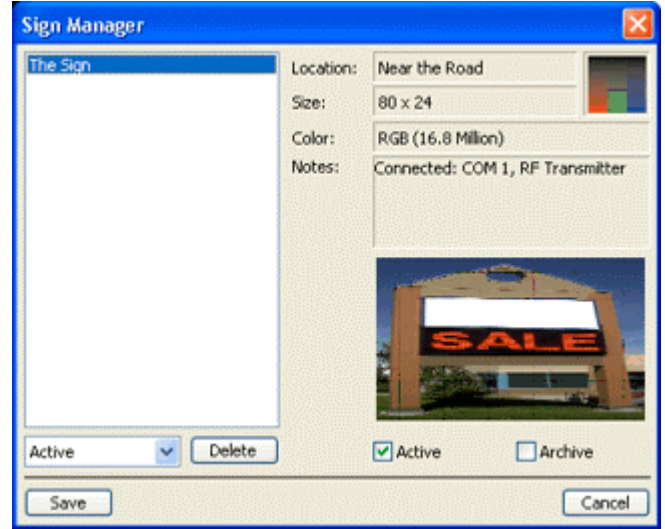
**Options** is where various features for Vision Setup and other applications are maintained.



## **Sign Manager**

When more than one sign exists, there may be a need to archive or delete a previously generated sign definition file. The features of this tool are the following:

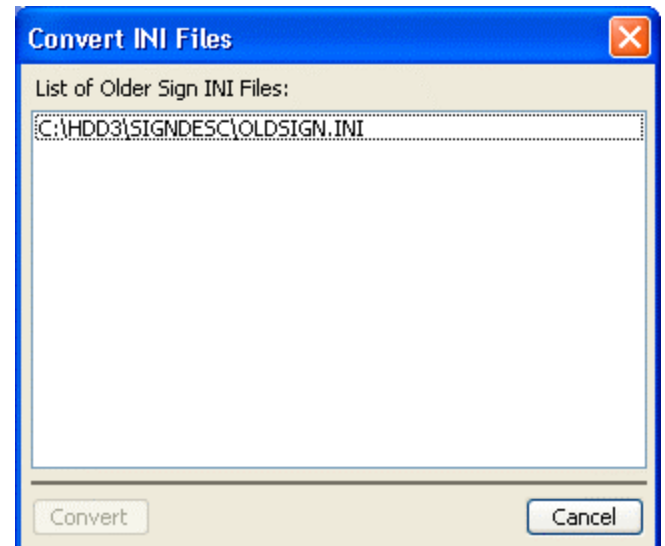
- **List of Signs** – The list of signs with the given setting (i.e. active or archived).
- **Active/Archive** (pull-down list) – Controls the list of signs display.
- **Delete** – This will permanently delete a selected sign.
- **Active** (button) – Allows you set a selected sign to active.
- **Archive** (button) – Allows you set a selected sign to archive.
- **General Information** – The General information about the sign.



## **Convert Sign Description Files**

When moving from a previous version of VisionSuite to the newest version, some additional parameters have been added to the sign description (or sign definition) files.

This tool can select the previous sign description file and convert it to a newer version.



## Scan for Sign

In some situations, during the installing of a new sign, it may be unclear as to which serial port on the PC that the sign is connected. This utility allows the user to scan multiple serial ports for the sign.

The features of this tool are as follows:

- **Type** – Specify the type of sign to scan for.
- **Speed** – Specify the speed of communications that the serial port should be set at for the test.
- **COM Ports** – Specify the start and stop port to scan.
- **Address** – Specify the range of addresses that the sign may be set to.
- **Results** – Displays all of the results of the scanning process.
- **Search** – Starts the scanning process.
- **Stop** – Stops the scanning process.



## Options

The Options for Vision Setup have been greatly enhanced from the previous versions. The list on the left indicate all of the sections of control that are available. Some of these sections only apply to Vision Setup; some, to other applications within VisionSuite.

The sections are as follows:

- **General** – Basic control of certain operational features of the interface.
- **Software Passwords** – Allows for the settings of an Administrative Password for VisionSuite.
- **Connection** – Settings for overall-general operation of VisionSuite communication applications.
- **Logging** – Allows you setup logging.
- **Reports** – Allows you select certain report options.
- **Prompts** – Allows you to enable/disable certain common user prompts.



## Options - General

The General section allows the user to set the following items:

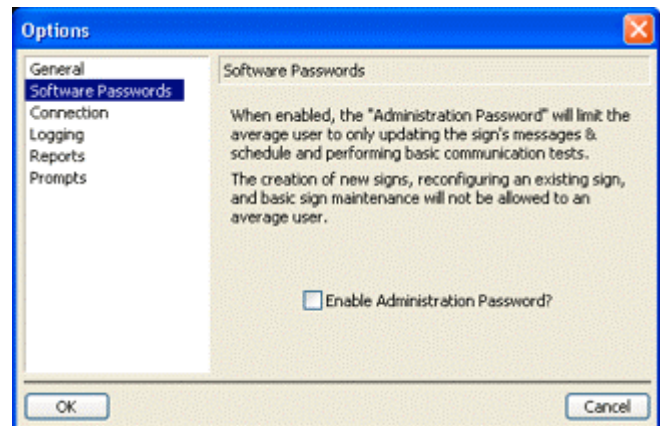
- **Automatic Load** – The last selected sign is automatically loaded the next time the application is used. The Sign Selection dialog is not shown.
- **Show Sign Selection** – The Sign Selection dialog will automatically appear when the application is launched.
- **Show Sign Selection when one** – Normally when there is only one sign description file, the Sign Selection dialog will automatically select the sign and not show the dialog.
- **Show Sign Name** – Display the sign name in the title bar of the application.
- **Show Online** – Display the ONLINE state of the sign in the title bar of the application .



## Options – Software Passwords

The Software Passwords section allows a user to set an Administration Password. Once set, only the Administration Password must be entered in order to gain access to certain feature of the application.

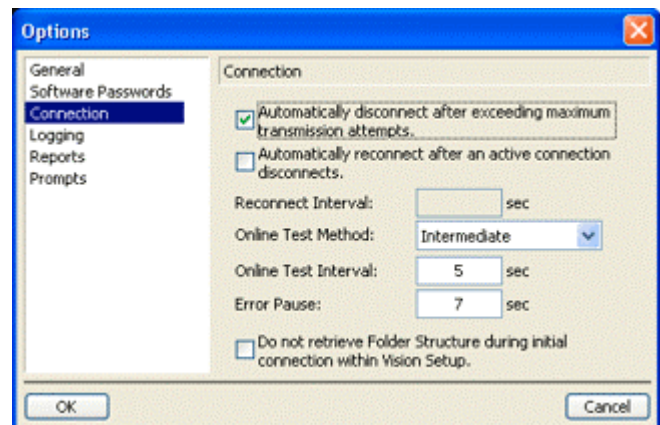
It is very important to keep a record of the password. If the password is forgotten, then a special process must be undertaken to remove the password.



## Options – Connection

The Connection section allows the user to set the following items:

- **Automatic Disconnect** – If the connection to the sign exceeds the maximum number of “re-attempts”, then the software will automatically disconnect from the sign. It is useful to have this selected when initially installing a new sign. It will give a visual cue to whether or not the sign is responding properly.
- **Automatic Reconnect** – If the sign is initially connected and then the connection drops for some reason, the application will automatically reconnect to the sign after “Reconnect Interval” seconds.

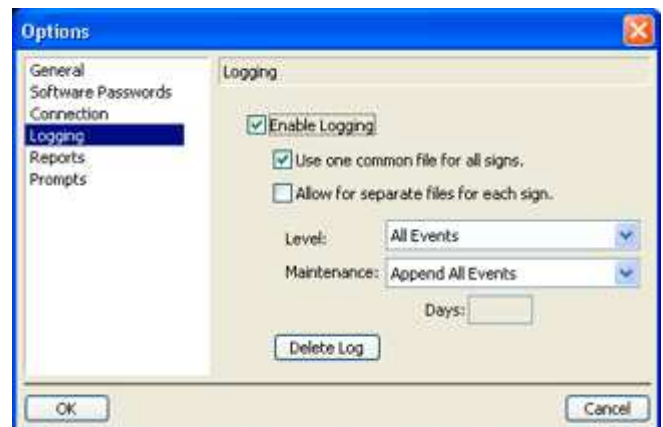


- **Online Test** – There are three online tests; Basic, Intermediate, and Advanced. It is recommended to leave it set to Intermediate.
- **Online Test Interval** – Specifies how often the sign is tested for online state.
- **Error Pause** – The number of seconds that a communication error message will appear in the Communication Status region. Note, that this is a maximum time and not a minimum time. If another message comes along, then the error message will disappear. The Logging Feature can be used to examine recent errors.
- **Do not retrieve ...** - This setting is useful when trying to connect to a sign with a large number of messages. As the number of messages at the sign increase so does the time it takes to read the file information .

### Options – Logging

The Logging section allows the user to set the following items:

- **Enable Logging** – This button enables or disables logging for all signs.
- **Use one** – Normally, one logging file is more than necessary.
- **Allow for separate** – When many signs exist, then it may be useful to separate the log file for each sign. When this is set, the Log File setting should be altered within each sign description.
- **Level** – Specifies what type of events are going to be recorded.
- **Maintenance** – Specifies how the events are added to the log file.
- **Days/Number** – Specifies the number of days or events to retain in the log file.
- **Delete Log** – Automatically deletes all log files.

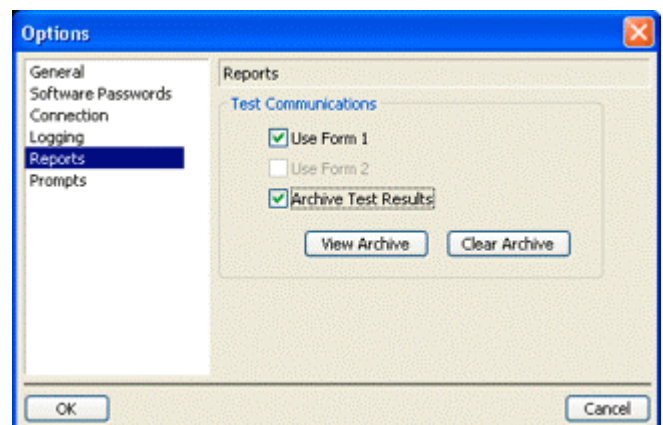


The log files are all stored in the LOGS subfolder of the main VisionSuite installation folder.

### Options – Reports

The Reports section allows the user to set the following items;

- **Use Form 1** – This specifies that the “Form 1” will be used when generating a report for Test Communications.
- **Archive Test Results** – When selected, all test reports that are generated will be stored into an archive folder.
- **View Archive** – Shows a list of all of the archived test results. One can use the list to view the



reports.

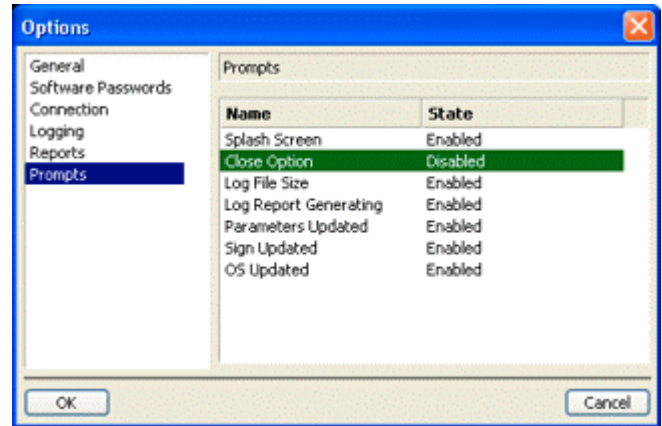
- **Clear Archive** – Clear all of the archive files from the archive folder.

The Test Communication archive files are all stored in the CommTests subfolder of the main VisionSuite installation folder.

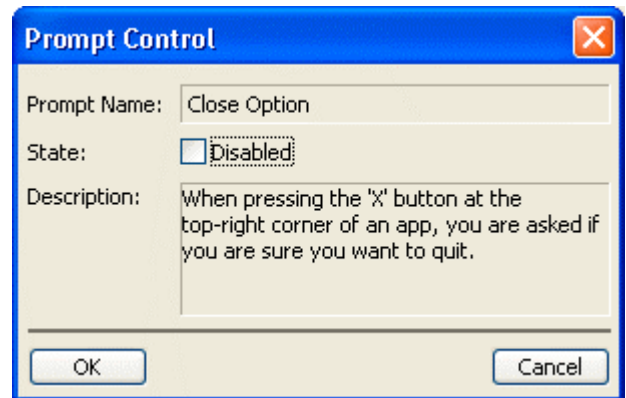
### Options – Prompts

The Prompts section allows the user to enable and disable certain prompts within the applications.

When you want to change a prompts state, double-click the item in the list and the *Prompt Control* dialog will appear.



The *Prompt Control* dialog gives a description of the prompt and allows for the enable/disable of the state.



## FAST KEYS

Below is a list of all of the acceleration keys for access to various features.

CTRL+N	New Sign
CTRL+O	Select a new sign
CTRL+P	Print Summary
CTRL+SHIFT+C	Connect to the sign
CTRL+SHIFT+D	Disconnect from the sign

CTRL+SHIFT+T	Run the Test Communications
F5	Refresh ONLINE Status information
F9	Show Files or Scan for File Information
CTRL+SHIFT+U	Update All Parameters
CTRL+SHIFT+V	View All Live Settings
CTRL+A	Show the Advanced Features dialog

## TROUBLESHOOTING

### I cannot seem to see my modem in the modem list during setup.

This indicates that your version of Windows does not see the modem properly. You may have to update the driver for the modem or reinstall the modem entirely. Depending upon the version of the Windows that you're using, a simple reboot of the computer may resolve the problem. If the problem persists, contact the manufacturer or reseller of the modem for assistance.

### How do I setup my older sign?

If your sign is pre-1997, it may be based on a H20 controller. In this case, you can only connect to the sign via a modem. Direct connection via the parallel port is not available.

### My sign is always OFFLINE. Where is the problem?

When a sign is OFFLINE, the problem may be in one of three areas.

1. Problem with the PC or the configuration of the sign within Vision Setup.
2. Problem with the link between the PC and the sign.
3. Problem within the sign itself.

Listing all of the possible PC problems is beyond this "Troubleshooting" section. In general, if your PC has been working properly and you have not been experiencing any "flakiness" with your PC, then we can generally rule out PC problems as a cause.

The most common Vision Setup mistake which can lead to an OFFLINE status for the sign is setting the Serial Port to the wrong port. Many PCs have two serial ports. In this case, try changing the Serial Port setting to another port.

Link problems can be very complex. However, there are some very common issues that can be examined.

- If your link is via a modem to a "cell-modem connected" sign, the problem may be a very poor cell site connection. This may have something to do with problems within the local cell site or problems within the cell-modem hardware located within the sign.
- If your link is a RS485 converter, then the problem may be in the converter. For certain converters, there are 2 LED lights on them (for Receive and Transmit). If one or both of these lights are constantly ON, then you may have a faulty converter.
- If your link is a wireless device, make sure you have a direct line-of-sight to the sign. Most wireless systems will not work through concrete walls or through tinted windows.
- The final common link issue is a broken or cut cable. The cable may be able to be spliced or replaced depending upon the damage.

Finally, a problem within the sign can occur. When a large electrical storm passes, a sign may get damaged due to lightning strikes. Even when lightning strikes occur a distance away, the shear power of the lightning can cause serious problems to many electrical devices. The LED sign is no exception. No level of electrical protection can protect a sign from a direct lightning strike. Although this type of scenario is rare, it has occurred. The more common sign problem is simple hardware failure due to vibration damage during shipment or installation. This may be as simple as a dislodged connector or a more serious broken board.

In order to determine what the exact problem may be, it is recommended that you do the following;

- Note down when the problem started. Try to recall any “new” events (such as storms or nearby electrical work) in the area.
- Note down the general details about the sign. For instance, when it was purchased, where it's located, and how the sign is connected to the PC.
- Finally, contact your Service Technician provider. Talking through some of these details with a qualified Service Technician will quickly resolve your communication problems.

### **My sign is showing that it is ONLINE. However, I'm getting an error when I connect and none of the controls are available. What's happening?**

With H20/H21 based signs, the most common situation is that the sign has been powered off for more than a week. The operating system at the sign has been lost and must be resent to the sign.

When you connect to the sign, the only button that should be available is the “Update” button next to the OS. Press the Update button and allow the OS to be resent to the sign.

### **I have forgotten the Hardware Password that I've set. What can I do?**

It is VERY important to always record the hardware password that you set. The password is not known to the sign distributor, installer, or the manufacturer.

The password is stored within the electronics of the sign and cannot be reset from your PC without knowing what it is. Therefore, you will require a qualified Service Technician to service the sign and to manually reset the electronics to clear the password. Please contact the company you bought the sign from for further assistance.

### **Where do I enter my “Authorization Code”?**

When connected to your ONLINE sign, from the Actions menu item, select the “Password & Code” and then “Authorization Code”. Enter the password that has been provided, press the TAB key, and enter the password again. Press TAB again and then select OK. The “Time Limit” (or Time Expired) setting will be cleared and you'll be able to use your sign again.

### **The Time Left entry is showing “Require Authorization Password” even though I know I have several days left before I need to enter in the Authorization Code.**

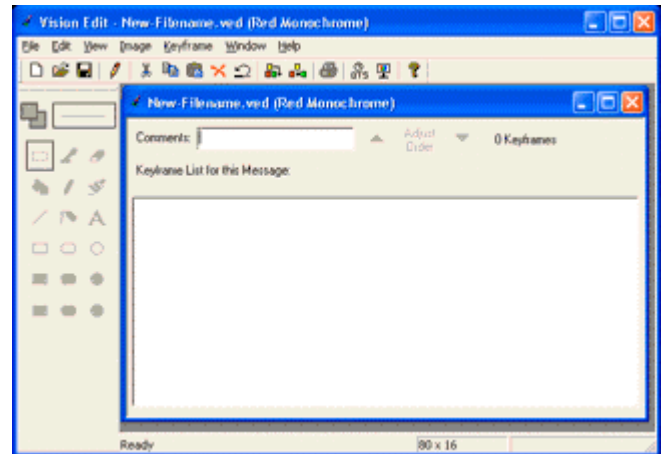
The sign has not expired. You have set a “Hardware Password” and you have not yet entered it. Go to the “Hardware Password” dialog and enter your password. Once completed, the time limit will display as expected.



# VISION EDIT

## OVERVIEW

Vision Edit is the full-featured message editor. It allows you to create virtually any type of LED message, from basic text and line drawing messages, to full blown multimedia messages that include up to date movie technologies and web page content. It allows you to create messages that contain any number of keyframes of content, and to arrange this content in a manner that ensures your message is intelligently organized for eventual scheduling on the sign. Once your masterpiece has been saved, you may preview the message, or send the message to [Vision Schedule](#) for scheduling and exporting to your actual sign hardware.



## HOW VISION EDIT WORKS

This contains a basic list of key features and a brief explanation of them.

- Vision Edit can create messages of mixed content. Messages consist of one or more keyframes, which consist of these types of data:
  - Bitmap (image) data, which may be imported from sources like movie clips or HTML web pages.
  - Time / temperature / news data for live information display on the remote sign.
  - Links to external media such as movie clips or web pages.

These three basic keyframe types allow you to create messages from all sorts of existing media, or start fresh with your own custom message data.

- Industry standard bitmap editing tools allow for easy image maintenance in Vision Edit. If you can use the Microsoft Paint™ program, you can use Vision Edit!
- Vision Edit is capable of importing existing HDD message files from older HDD software. These files types include the 16-bit HDDVision Editor VED files, and the H1020 based MSG files. These files are imported and automatically converted to Vision Edit VED files and allow you to maintain those messages in their new format, hence, your investment in time for older messages is preserved.
- Vision Edit allows for easy insertion, reordering, removal or copy/paste of message content from one message to another. Built in thumbnail mode allows for easy browsing of keyframes in a given message. Intuitive editing

windows allow for multiple message files to be edited simultaneously, giving you the freedom to merge content from many different message files into exciting new messages without recreating them from scratch.

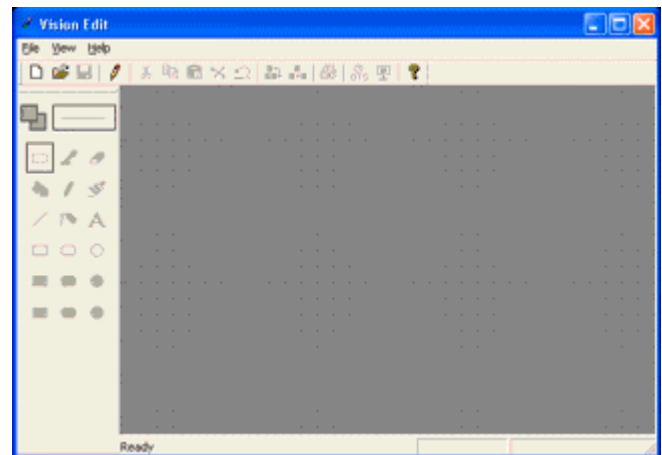
- Vision Edit uses an innovative AVI based preview capability. No longer do you have to distribute specialty software in order to preview your messages prior to approval for use at a remote sign. AVI files are industry standard, hence, upon preview, you may choose to save the AVI file for later use, allowing for easy distribution of preview files in an industry standard format.
- Vision Edit uses the custom “One Touch Scheduling” system, which allows a message to be inserted into a fresh schedule in Vision Schedule with the touch of one toolbar button.

To get a quick understanding of the basic features of Vision Edit, please review the [Examples](#) below or go through the [Tutorial](#).

Vision Edit has “pixel-by-pixel” control and is designed for graphics, animations, and basic text control. In comparison, [Vision Quick Text](#) is for the entering of text files and the control of each row. Depending upon your requirements, Vision Quick Text may be a better choice for you.

## OPENING VISION EDIT

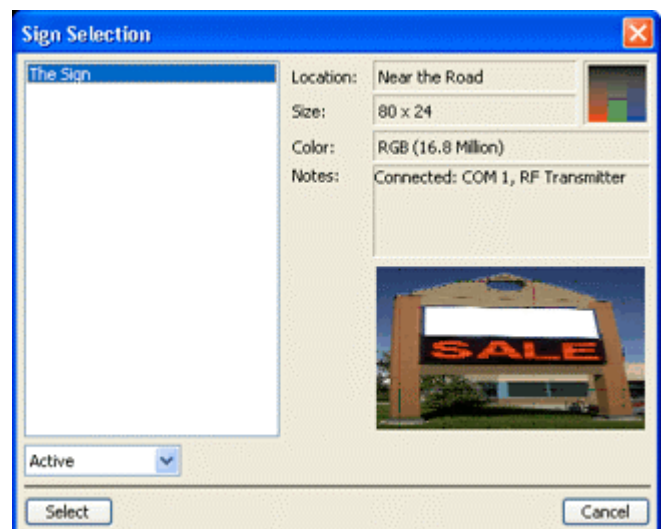
When more than one sign is configured for your computer, Vision Edit starts up with an empty workspace, as shown below. Upon startup, you may click the NEW toolbar icon to create a fresh message, or click the OPEN toolbar icon to load an existing message. All other application options are disabled until an editing session begins.



Vision Edit can create a blank, fresh message. Since a message must have some basic properties associated with the stored content, the first task is to specify the sign type you are designing for. Note that the specific sign you select isn't recorded in the Vision Edit .VED output file. Instead, three important sign characteristics are obtained.

- Sign width in pixels.
- Sign height in pixels.
- Sign color palette characteristics.

These three pieces are obtained by clicking the NEW message toolbar icon, or selecting File | New from the main menu. The standard VisionSuite Sign Selector will appear.

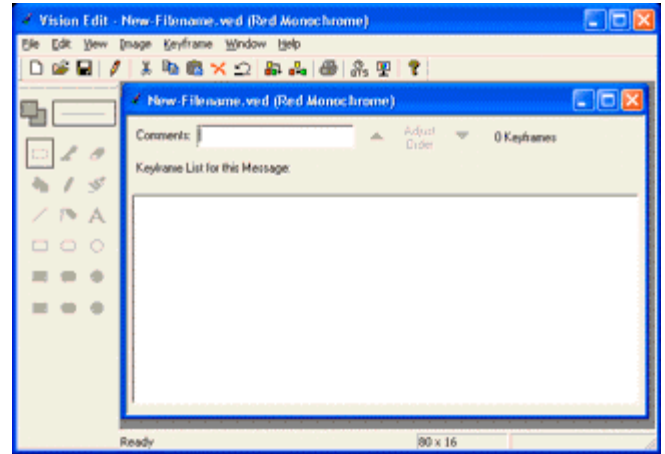


Choose an existing sign that matches the characteristics you wish to design for.

When only one sign is configured, Vision Edit automatically starts a new editing session for you with the sign's settings.

When the editing session begins, the status bar to display the current sign width & height and a blank keyframe list will appear.

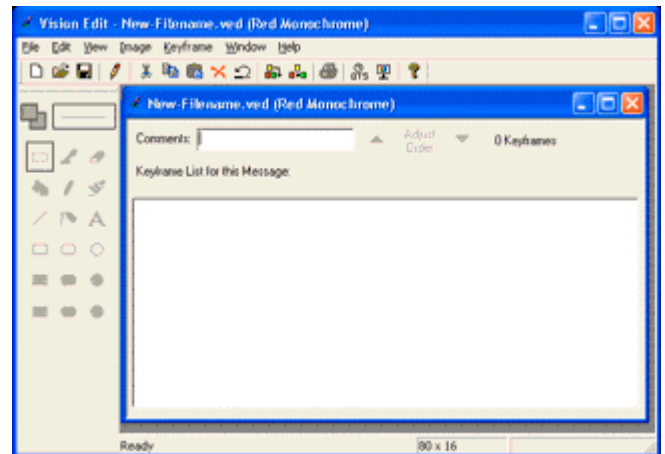
Vision Edit will also display the X-Y position of the mouse and the extents of objects such as circles, rectangles and other objects that have a width and height associated with them, which is helpful in placing graphical content at an exact spot in your bitmap.



## CREATING A MESSAGE

Vision Edit is designed to allow you to add multiple keyframes (or frames) to one message (or file). The “Keyframe List for this Message” section (shown to the right) will display a list of all of the keyframes that you add to this message.

You can add keyframes by pressing the INSERT key on your keyboard, or by clicking either the APPEND or INSERT images on the toolbar as shown in the main user interface image above.



When you append or insert a new frame, the New Keyframe Selection dialog will appear as shown.

A keyframe can be selected from one of the following choices:

A **Bitmap Keyframe** allows you to create virtually any graphical content, including arbitrary text that lies on top of an image.

A **Time/Temp/News Keyframe** allows you to create a message that includes live information, such as the current time and date, the current temperature that the remote sign is measuring, or in the case of a higher end video board, live access to news or financial sources.

An **Animation Keyframe** allows you to manage the animation of a series of bitmaps that may be merged together to create a simple movie. Animations are useful for monochrome signs, which are not well suited to the display of MPG or AVI movie clips.

The **Import Keyframe** options above allow you to create a new bitmap keyframe, with the information in the keyframe already preset by the data you are importing.

The **Link To External Keyframe** options above are useful if you wish to insert into a message all of the frames available in a movie clip (AVI or MPG) or if you wish to link to a web page that may contain content such as Flash or Shockwave. By adjusting the duration of the linked web page, you are able to eventually export the captured content into your outgoing messages to the LED signage. This will be discussed further below.

The **comment** section allows you to enter a unique description for each keyframe. This is optional.

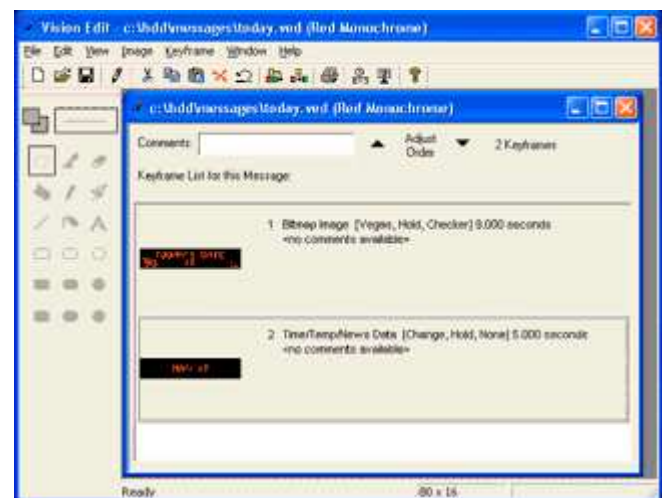
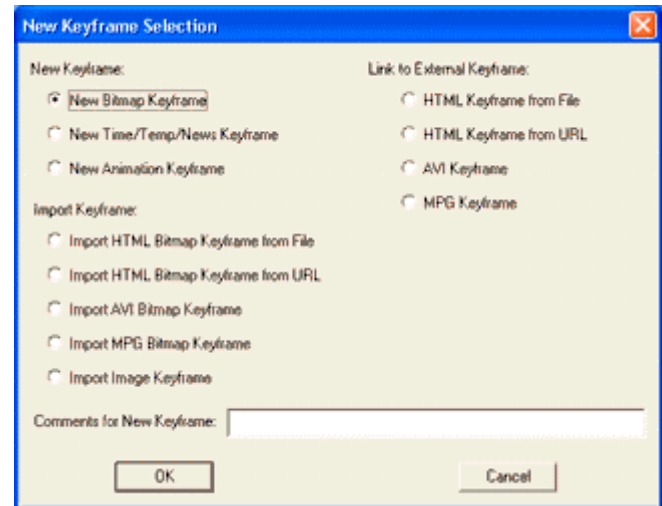
Once you have inserted or appended a keyframe, you will notice that the list of keyframes will automatically expand. It will show either a thumbnail bitmap for your image based keyframes, or an icon showing the nature of the other types of keyframes, so that you can get a feel for your message content at a glance. You can open the corresponding keyframe editing window by double clicking on any keyframe in the list.

You may append or insert messages based on the currently selected keyframe in the keyframe list. Insert will put new keyframes in front of the currently selected element, whereas append will place the new keyframe after the currently selected element.

At any time, you may shuffle keyframe elements around the list using the UP and DOWN arrow buttons in the keyframe view.

You can delete a keyframe from the list by clicking the DELETE button on the toolbar, or by hitting the DEL key on your keyboard. The deletion cannot be undone, so take care you do not select this option by mistake.

You can also use the Edit menu to Cut, Copy or Paste keyframes into the keyframe list. This allows easy manipulation of the keyframe list using Windows standard clipboard operations. You may also cut or copy frames between messages, which allows you to build new messages based on previously created content quickly and efficiently.



You can toggle the icon or thumbnail view by clicking on View menu and selecting the Thumbnails In Keyframe List option. A checkmark will indicate whether thumbnails are currently active or not.

When you are satisfied with a message, you may click the SAVE toolbar button, which will pop open the Save-As file selector where you may choose to overwrite an existing file, or to create a new file. You will be prompted if the name you have chosen already exists in your output folder.

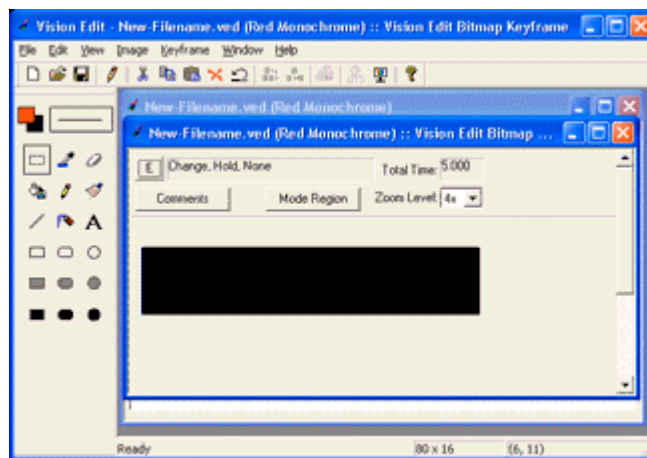
Note that Vision Edit has no restrictions on where you wish to save your content. You are advised to choose an easy to remember location on your hard disk to save your work, for example, C:\HDD\MESSAGES.

Once you've saved your work, you will need to re-save your work whenever you make a change to your message. Changes include the order of keyframes in the list, adding or removing keyframes, making changes to the bitmapped contents of a keyframe, or adjusting the time duration and/or effects of any keyframe. The software will prompt you to save if you attempt to exit with unsaved data, and you may choose to ignore the warnings to exit a message without saving. This is useful if you have "messed up" a message and wish to reload a fresh copy of the original message.

## BITMAP KEYFRAMES

Bitmap keyframes give you pixel-by-pixel control of the image that will appear on the sign.

Vision Edit contains a fully featured bitmap editor that allows for virtually any kind of basic image manipulation, including the ability to paste bitmap data in the clipboard directly into your message. When you open a bitmap keyframe, you will see a window as shown on the right.



As you can see, the current effect selection and total time duration values are visible in the top left corner of the editing window. You are able to adjust the zoom level of the bitmap area so that you can zero in on detailed image information if you like. As your cursor moves about the bitmap editing surface, you will notice that the position indicator will show you the current co-ordinates. Position [1, 1] is in the upper left corner of the window, and the position identified by the bitmap width, height will be shown when you are in the lower rightcorner.

Bitmap keyframes enable the bitmap tools that are normally docked to the left on the bitmap window.

These controls are identical to the controls within Microsoft Paint™.

The following table shows a mapping of the icons shown in the Draw Tools control to the right.

Depending upon the capabilities of your sign and the pixel resolution of your sign, the selection and "smoothness" of the various controls will change.

As one can imagine, a sign that is 640x480 pixels in size can produce a much smoother-looking circle than a sign that is only 100x32 pixels in sign.

Foreground and Background Color Selector		Line Thickness Selector
Clipping Tool	Eye-Dropper Tool	Eraser Tool



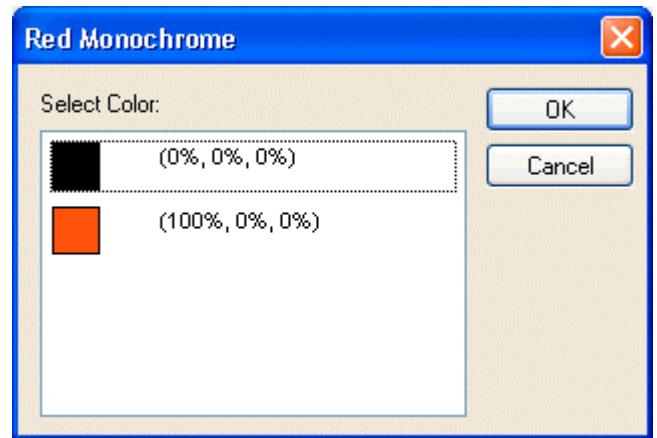
Fill Tool	Freehand Tool	Brush Tool
Line Tool	Airbrush Tool	Text Tool
Outlined Rectangle Tool	Outlined Rounded Rectangle Tool	Outlined Ellipse Tool
Outlined/Filled Rectangle Tool	Outlined/Filled Rounded Rectangle Tool	Outlined/Filled Ellipse Tool
Filled Rectangle Tool	Filled Rounded Rectangle Tool	Filled Ellipse Tool

When you select the color control, the appropriate color selection dialog will appear.

When the sign is monochromatic (one color), the color selection is very basic. The color selection dialog will show a list of colors and the percentage of RED, GREEN, and BLUE used for the color.

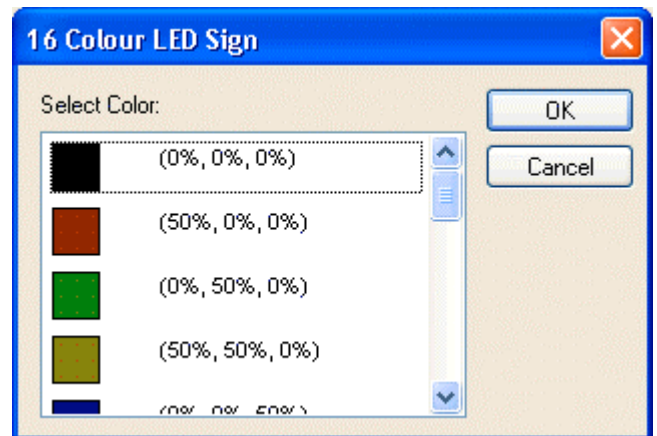
Shown to the right is the two color selection for a Red Monochrome sign.

For a 16 Color LED sign, the number of colors that can be chosen from increases. Correspondingly, the list grows.



The color selections do not necessarily represent the exact colors that the sign will display. The exact colors displayed may be slightly different due to the color wavelength of the LEDs used within the sign.

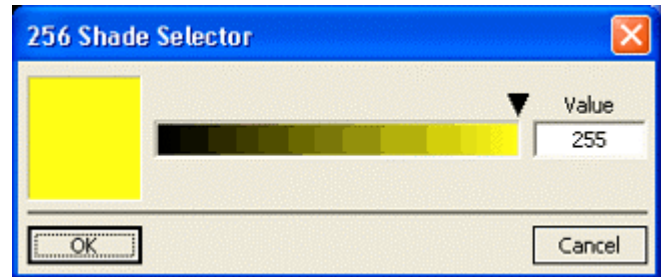
Nevertheless, the selection is “representative” of the colors that the sign will show.



The new 256-Shade signs have the capability of displaying 256 unique shades.

You select the desired color by moving the mouse cursor to the location on the horizontal color-bar and clicking the mouse. You can also enter a value manually within the Value control.

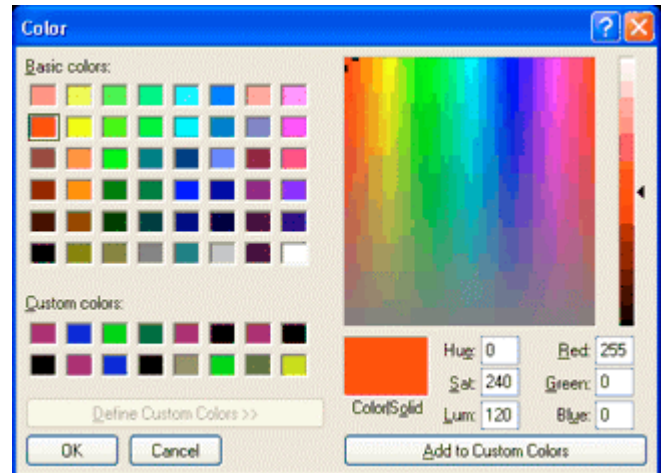
The control shown to the right is for an Amber sign with 256 shades.



When your sign is a full color sign, the color selection is vast. The color selection dialog, shown to the right, is the standard Windows color selector. By default, there are 48 predefined colors, 16 custom colors, and 16+ million other colors from which to select.

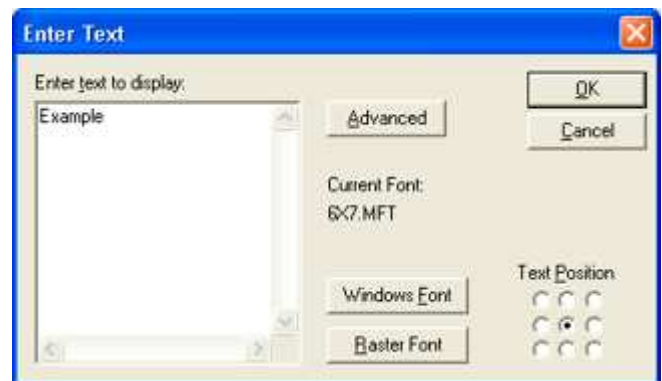
The selection capability within this Windows dialog is based on the color capability of your PC's graphics card and monitor. If your computer can only display 256 colors, this color selection will not be as extensive. Nevertheless, it may be adequate for your sign.

It is recommended that your PC has full color capabilities in order to have full color selection.



When entering text with the Text Control (i.e. the "A"), the following window is displayed. Within this dialog you can:

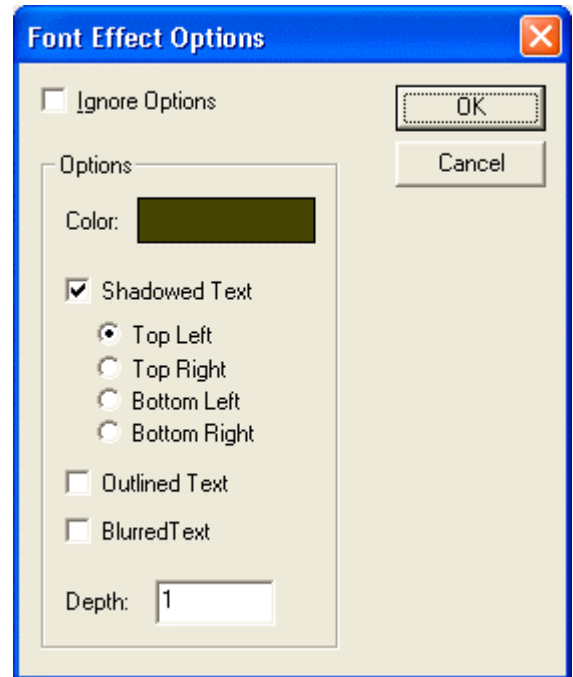
- Enter text within the control on the left.
- Control the position of the text within your selected region with the 9-buttons at the bottom-right.
- Select a Windows or Raster font. {Note: Raster fonts are useful for small matrix signs.}
- With multi-color signs, you can select "Advanced" to apply an effect to the font.



The Advanced button opens the “Font Effect Options” dialog.

The following items can be adjusted:

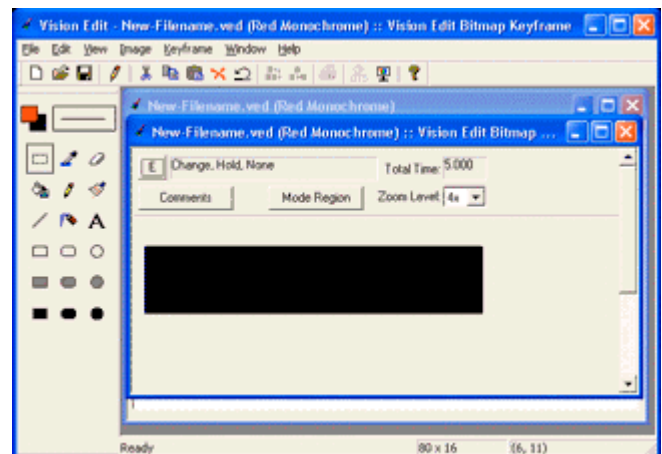
- *Ignore Options* – This enables/disables the font effects.
- *Color* – By clicking the rectangular region, you will gain access to the color control. This will allow you to set the effect color.
- *Shadowed Text* – Enables the shadowing text effect. The four buttons below this selection control the direction of the effect.
- *Outlined Text* – Enables the outlined text effect.
- *Blurred Text* – Enables the blurred text effect.
- *Depth* – Controls how many pixels “deep” the effect is generated.



As with other existing VisionSuite applications, a keyframe will have an ON effect, a HOLD effect, and an OFF effect. Effects are selected using the appropriately named E button.

The COMMENTS button in the bitmap window allows you to insert a commentary string for the current keyframe. This has no playback connotation – it simply is used to help describe individual keyframes from the main keyframe list perspective. By using a simple descriptive string, the main keyframe list can be read easily to help you get a feel for the overall message content at a glance.

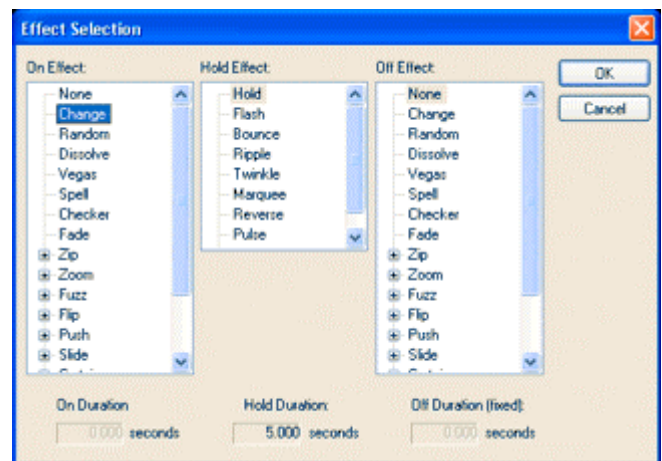
The Zoom Level controls the size of the drawing region. Scrollbars will appear if the region becomes larger than the bitmap window.



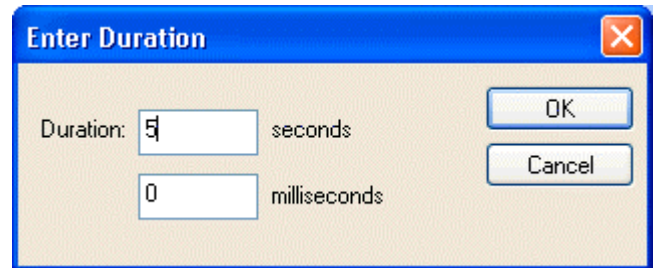
The Effects Selection dialog allows you to control the ON, HOLD, and OFF effects for this frame.

There are more than 50 effects to choose from. By default, the selection is “CHANGE”, “HOLD”, and “NONE” for the ON, HOLD, and OFF effects respectively.

Depending upon the sign, the duration of the certain effects can be altered. For the H20/H21 controller based signs, both the ON and OFF effects have fixed durations. However, in all cases, the HOLD effect’s duration can be changed.

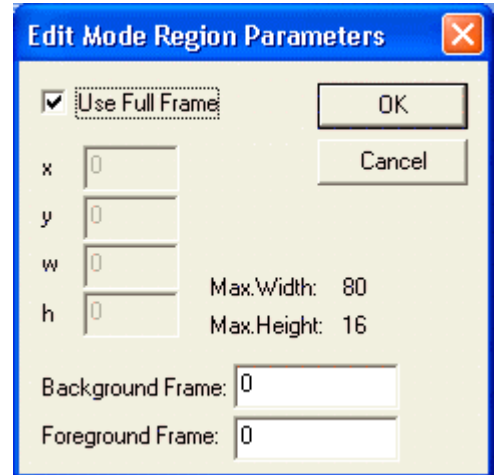


When you double-click the mouse over the duration for the HOLD effect, the “Enter Duration” dialog will appear. You can control the effects time by seconds and milliseconds. The fineness of this control is dependent upon the sign’s controller and the select effect.



From the main bitmap editing window, you will see the MODE REGION button. This is useful if you wish to restrict the effect to a smaller area than the entire keyframe width and height. By default, a given keyframe will have its effect operate over the entire bitmap region. With MODE REGION, you can adjust the area to a smaller rectangle, as well indicate if the image will be blended with a background keyframe (for the ON effect) or with a foreground keyframe (for the OFF effect). Using the above concepts, very sophisticated visual effects can be generated.

Because at design time you may be referencing a keyframe for a foreground or background effect that does not yet exist, no error checking is performed at design time. However, once you schedule and export the message with this keyframe data, the rendering software will do an integrity check to ensure that the keyframe specified for foreground or background does indeed exist, and return with an error message to ensure there is no invalid information being generated.

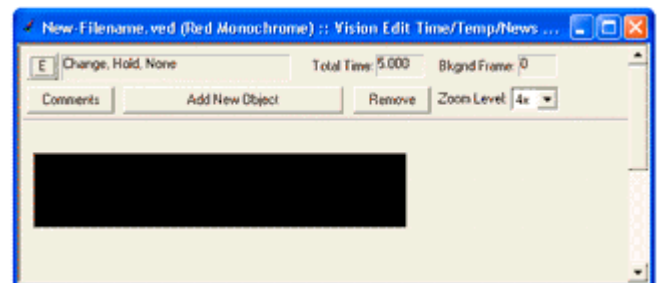


When you’re in a bitmap keyframe, the items within the Image menu become enabled. For more information on these features, please refer to the Image menu section below.

## TIME/TEMP/NEWS KEYFRAMES

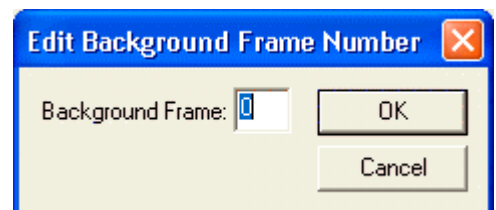
When the “New Time/Temp/News Keyframe” is selected from the New Keyframe Selection, a window similar to the one shown to the right is displayed.

Although similar to Bitmap Keyframes in several ways, Time/Temp/News Keyframe editing window allows you to insert a predefined “object” that instructs the operating system within the sign (or sign computer) to automatically insert a Time, Temperature, or News item. These items are automatically generated.



The familiar effect selection and overall time displays are visible in the top left corner of the TTN editing window. As was the case with the bitmap editor you can click on the effect selector to choose the ON, HOLD, and OFF effects for this TTN keyframe. You can click on the time duration to adjust the hold time, as was the case with the Bitmap Keyframe.

As with Bitmap Keyframes, TTN data can be superimposed on top of a background frame. This can be adjusted by clicking the BK FRAME display. Again, a dialog will appear that will ask you for the keyframe number that you wish to use. As documented above, no error checking is performed at design time. The export from Vision Schedule will indicate if the background number is invalid, and export will be aborted before an error can occur.



The most notable difference with the TTN editor is that you have a drop-list selection of a number of live data elements. These include the follow;

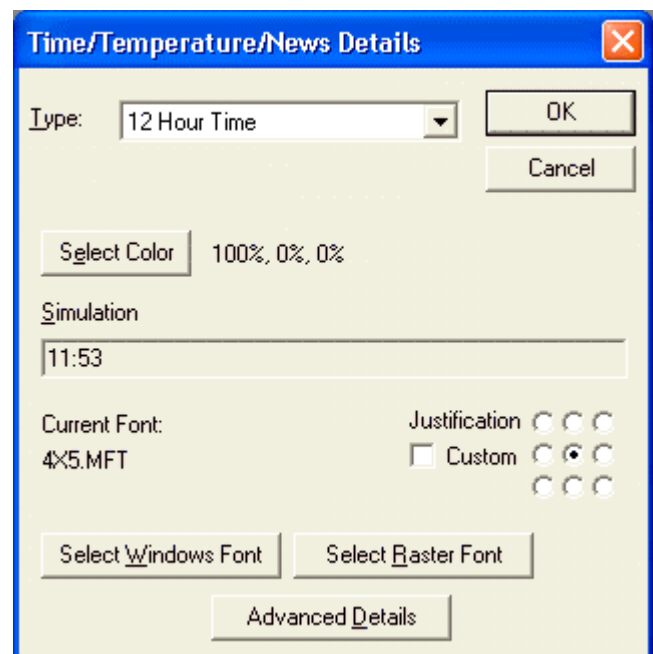
- 12 hour time
- 24 hour time
- Celsius temperature
- Fahrenheit temperature
- Date
- Day of the week

Note that 24-bit HDDVision (i.e. VISCONT controlled) signage will not support “e” or “f” from the above list .

When you wish to insert a given element, click the ADD button. A Details dialog will appear as shown.

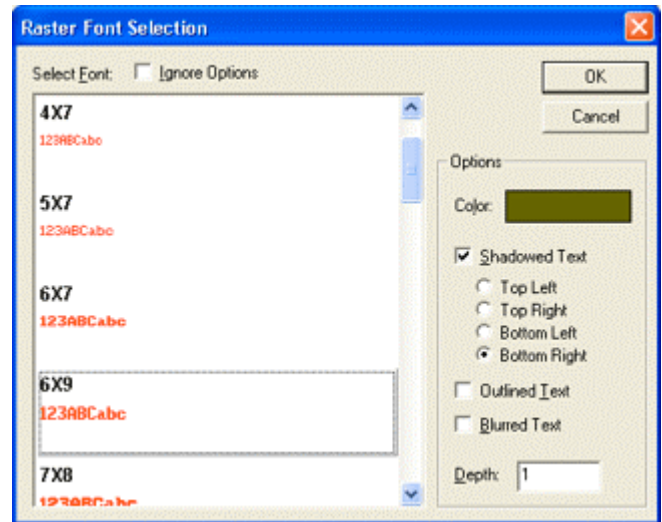
When you add an element, you can make a selection from one of the six TTN data types. You can adjust the font and color of the object with this dialog box. The percentage red, green and blue will be shown after selecting the color. You will see that the TTN object selection you make will adjust the simulated text. Each object has a simulation that is used for justification purposes.

As you can see, you can also “quick adjust” the justification of the object, based on its pre-programmed simulated text. Note that this is a close approximation of how the justification will appear, and the target sign controller may make slight adjustments to the display if the data shown doesn’t quite match the simulated text. For example, if the temperature is “-22C”, and you right justify the text, you may find that the sign controller may lop the “C” off of the display, because there is one additional character in the display compared to the simulated text. It is impossible to predict the actual values displayed at design time, hence, use this feature with this information in mind. When you choose “custom” justification, you will be able to place the object anywhere you wish using the mouse, when you exit this dialog box.

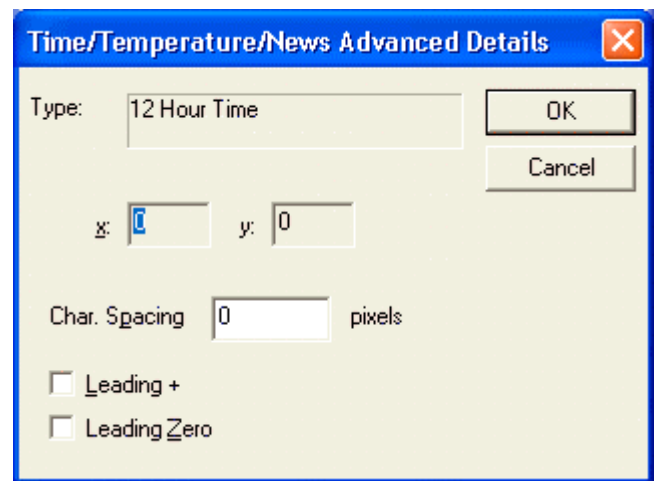


The selection of a font is limited by the type of sign. For instance, most standard message centers are limited to Raster Fonts for Time/Temp/News keyframes. If you use a Windows font (or True-Type Font), it will be automatically substituted with a 4x5 Raster Font .

When selecting a Raster Font, you will see the following dialog. For multi-shaded signs, you will be able to select an adequate shade color and the effect for any Time and Temperature setting.

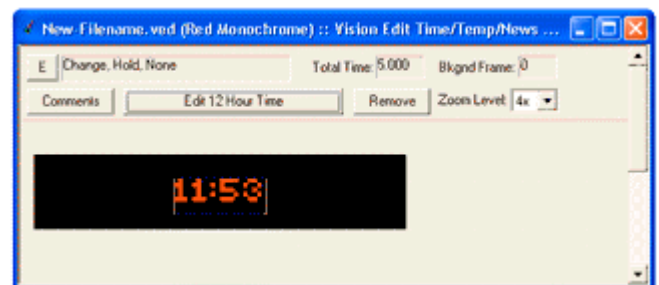


The Advanced button takes you to a screen that adjusts a number of low level features for TTN display, such as the character spacing, leading plus symbol, or leading zero flags.



When editing a Time/Temp/News Keyframe, the window is almost identical except that the “Add New Object” will change to an Edit button when the object is selected.

Therefore, to edit a currently existing TTN element, just select the object with the mouse and then press the Edit button. The dialogs shown above will display without control over the object “type”. If you wish to change an element from a time to date object, remove the element and then add a new object.



You are allowed up to 100 TTN elements in a single keyframe (some older signs are limited to only 10 elements).

This should be more than ample for even the most ambitious live information display. It is recommended that you use this feature sparingly, as having too much content is detrimental to getting your message out to your intended audience.

## **WARNING**

*At the time of writing, export to 24 bit HDDVision compatible signage will not contain Time/Temp/News*

keyframes. Therefore, any TTN elements created using this tool for eventual export to a 24 bit HDDVision sign will not be available in the exported VPY content for that type of sign.

### Workaround

Vision Schedule contains a built in “hook” that allows for the insertion of predefined VPY export files into a schedule. These predefined VPY files are built using the original 16-bit VisEdit program (distributed with your 24-bit HDDVision signage). There are hooks to support the display of Time and Temperature in both Fahrenheit and Celsius. You will be able to build the look and feel of these TTN messages using the older software, and be able to schedule them into Vision Schedule as if they were messages exported from Vision Edit. Consult the Vision Schedule notes for further details on this workaround.

## ANIMATION KEYFRAMES

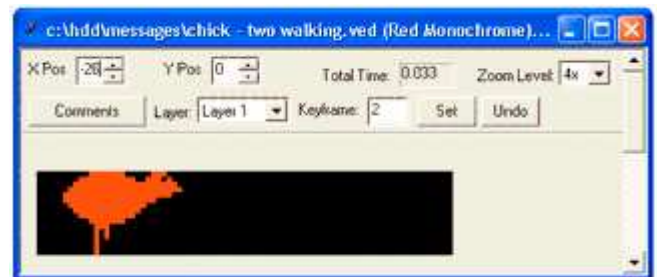
When the “New Animation Keyframe” is selected from the New Keyframe Selection, a window similar to the one shown to the right is displayed.

Vision Edit provides a very basic editor for creating animations. The animation feature has been included in order to support backward compatibility with older systems.

Users of the H1020 software will be familiar with this concept. An animation keyframe consists of one or more non-playable keyframes, which will be merged up to ten layers deep. Each layer can have its own unique keyframe, at its own unique X and Y position, so that the merged series of keyframes create the illusion of movement from keyframe to keyframe.

As this facility has been provided solely for backward compatibility with existing users, other customers should be using more modern animation concepts, such as AVI or MPG linked files to provide animated content for their signage. Although it is possible to build animations using this facility, it is based on an animation concept that is very outdated by today’s standards, and hence, should be avoided unless you must maintain backward compatible animation data.

For more information on how to use this feature, please refer to the animation example.



## IMPORT KEYFRAME OPTIONS

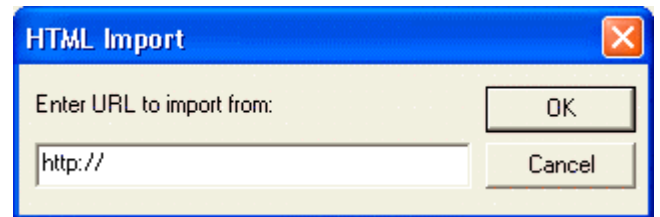
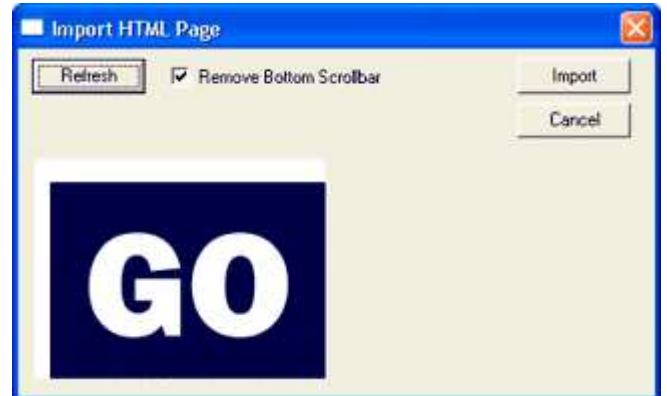
There are several Import Option selections which allow you to import a specific frame within an animation file (AVI or MPEG), a non-animation bitmap file (BMP, JPEG, GIF, etc.), or a portion of an HTML page (from a file or URL).



Vision Edit can import an HTML page either via filename on the local hard drive or from a remote site via URL.

This importing process grabs a snapshot of the HTML page. Once obtained, the image becomes equivalent to a Bitmap Keyframe. The standard Bitmap Keyframe features and settings then apply.

This feature is useful for large signs. Smaller signs may not have the resolution to adequately display the images from HTML sources .



When importing an MPEG or AVI animation keyframe, you can step to the specific frame within the file and then "Import" the single frame.

This importing process extracts only the selected frame. Once obtained, the image becomes equivalent to a Bitmap Keyframe. The standard Bitmap Keyframe features and settings then apply.



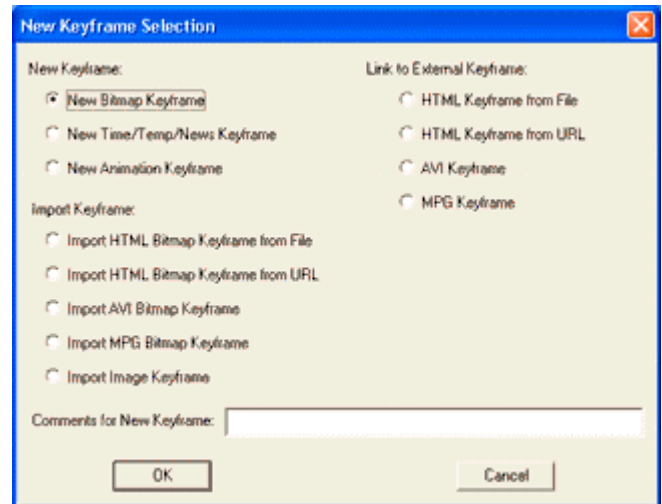
When importing a standard BITMAP file type, such as BMP, JPEG, and GIF, you will first select the compatible file and then see the Import Image dialog (as shown to the right). You can either crop the image (top-left corner of the image) or resize it to the size of the sign.

This importing process converts the file to a standard Bitmap Keyframe. The standard Bitmap Keyframe features and settings then apply.



### LINK TO EXTERNAL KEYFRAME OPTIONS

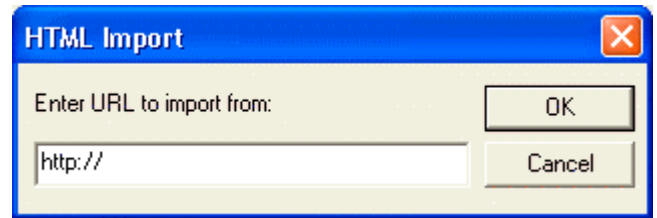
You can also link to an HTML page, AVI files, and MPG files. These are ideal for linking to animation files created in other applications.



Since Vision Edit can link to an HTML file either via filename on the local hard drive, or to a remote site via URL, the HTML Link Editor allows for basic adjustment of how this linkage will occur. When you open this editor, you will be presented with a simple window that shows the duration of the keyframe, the HTML page itself, along with the familiar COMMENTS button.



To adjust the time duration, simply click on the time value and you can enter a new number of seconds and milliseconds for fractional duration. There is a small button with the familiar “refresh” icon. Click the REFRESH button to ensure that the HTML information displayed is correctly updated in the event that the HTML file didn’t load as expected, or is changing externally to Vision Edit. If a bottom scrollbar appears, you can tell Vision Edit to force the removal of this bottom scrollbar, which sometimes improves the appearance of the web page within the width, height dimensions of your LED sign.



Note that the web page in question (entered within the HTML Import dialog) will be converted to an animation of frames for the sign type you are scheduling for. Hence, Vision Schedule will render this linked file into a sequence of frames that will be stored in the exported version of your message, and the exported message will then play back correctly on the remote sign. Hence, do not worry if your remote sign has no Internet access. The linked keyframe is not accessed live on the sign, only the “captured” data will be played on the sign.

Note that you cannot adjust the zoom level of a web page. Only MPG and AVI linkages will allow for the zoomed appearance of their content.

This feature is useful for large signs. Smaller signs may not have the resolution to adequately display the images from HTML sources.

In a similar fashion, Vision Edit can link to external movie clip, either in AVI or MPG format. A similar editing window will appear to show you the raw movie footage you have selected. Again, do not be concerned that the remote sign cannot normally access this type of data. Vision Schedule will ensure that the exported data contains a converted copy of the movie clip, in the native format of the sign you are exporting to. Thus, as a pair of examples, an MPG file will be converted into a MSG file if exporting for the standard message center system and an AVI file will be converted to a VPY file if exporting for the 24-bit (or better) video system.

As before, you may adjust the comments and time duration of the movie clip.



## FILE MENU

The File menu gives you access to the basic functions that control & maintain the file that you are working on.

**New** allows you to create a new Vision Edit file.

**Open** allows you to open an already existing Vision Edit file.

**Import** allows you to open an already existing Vision Quick Text file or a rendered file (MSG files for standard message centers).

**Open for Rescale** allows you to open an already existing Vision Edit file and readjust its resolution.

**Close** allows you to close the current Vision Edit file without exiting the application.

**Save** allows you to save the file you're currently working on.

**Save As** allows you to save the file you're currently working on as a different name.

**Print** allows you to print a basic report on the various keyframes within the file.

**Preview** allows you to preview the file that you're currently working on.

**One Touch Scheduling** will automatically launch Vision Schedule and place the current Vision Edit file into the schedule list.

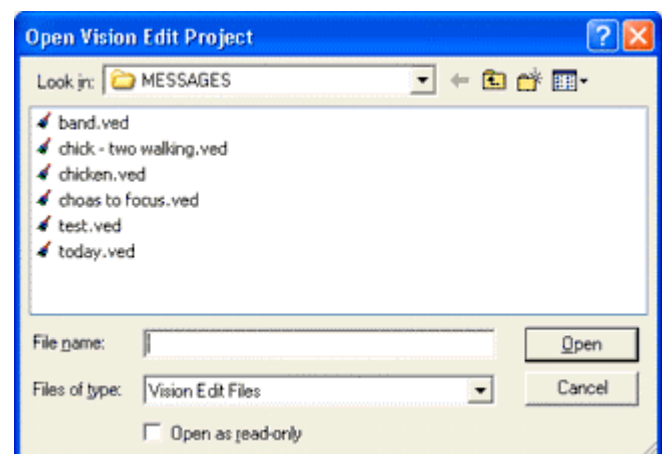
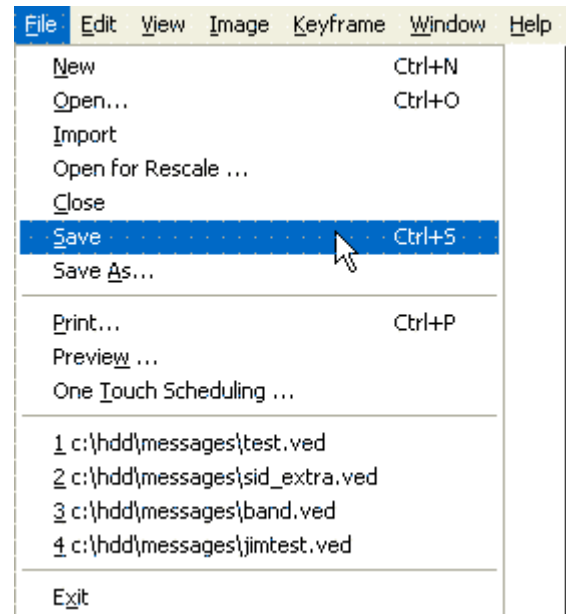
**Most Recently Used** file list allows you to select one of the previous four files that you have been working on.

**Exit** closes Vision Edit.

### Open/Save/Save As

Whether you use Open, Save or Save As, the common File Dialog will appear (shown to the right). The title and the button will be named appropriately.

Note that all Vision Edit files have the file extension of VED.



## **Open for Rescale**

This is handy when you need to take an existing message for a lower resolution sign, and reuse it on a higher resolution sign.

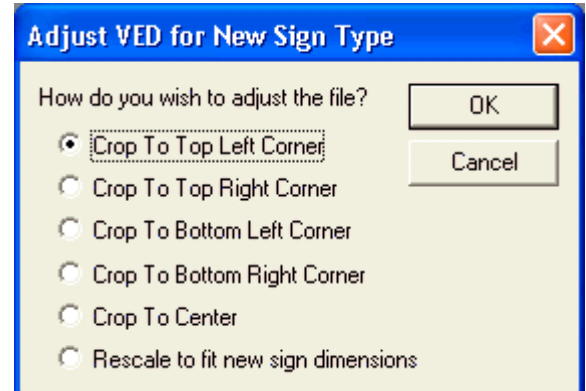
The operation is simple: when you choose this option, the file selector will appear, asking you to for the VED file to load. Upon selection, the sign selector dialog will appear, similar to how you would choose a sign type for a new message. Upon selection of the sign type, a new dialog will appear as shown.

This dialog allows you to adjust the original file's bitmap data into the new resolution for the sign type chosen. The default is to place the original data in the top left corner (crop). This means that if the new sign is larger, the original message bitmap data will be placed into the top left corner of the new message's bitmaps. The remaining "crop" options simply select the location of where the original data will be placed.

If the new resolution is smaller than the previous message resolution, then the "crop" operations will take only the correct number of pixels from the original message's bitmaps. For example it would take the top left corner of the original message bitmaps to the maximum resolution of the new sign type.

The final option will allow you to rescale (stretch or shrink) the original message bitmap data into the new matrix. This may generate either "pixelated" or "blocky" images when stretching, or pixels may be missing when shrinking. However, the original message data will be fully stretched or shrunk into the new resolution, thus keeping the entire message intact.

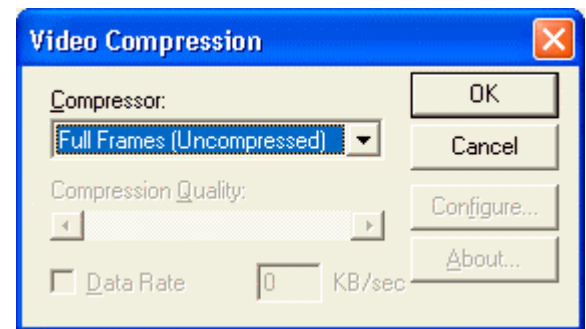
Upon completion of this dialog, the new message will appear, with a blank filename. You must perform a SaveAs operation to save this cropped/rescaled message as a file.



## **Preview**

When selecting Preview for the first time, you will see the Video Compression dialog. Although several "compressor" types may exist on your computer, it is recommended that you use "Full Frames (Uncompressed)".

After selecting this the first time, the dialog will not be shown again.

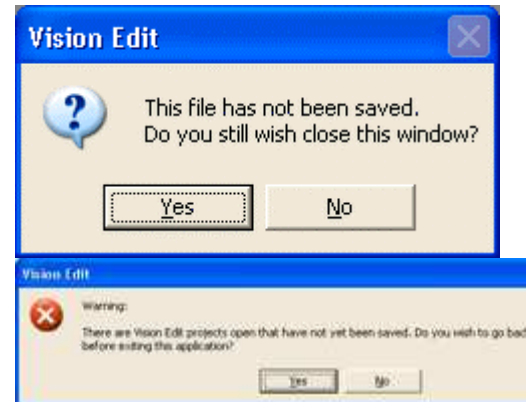


When the Preview window opens, the message will automatically start playing. You can move around the message, pause it, and even save it (if needed). When you're finished previewing the message, simply press the Done button to close the window.



## Exit

You can exit the application by one of two methods. First, you can select “Exit” from the File menu. Second, you can press the “X” (close) button at the top right of the application or current file. In either case, you will see one of the dialogs shown to the right.



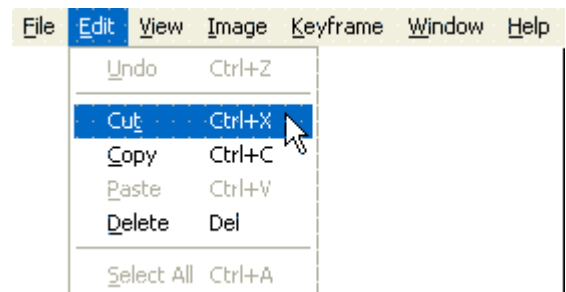
## EDIT MENU

The Edit menu gives you access to functions that control the “how” you edit objects within list of keyframes or within a keyframe itself.

**Undo** allows you to undo a current change. This feature only applies to certain changes. Most features are not undoable.

**Cut, Copy, Paste, and Delete** selections are the standard functions that exist within most editing applications.

**Select All** will select all the objects within a keyframe.



## VIEW MENU

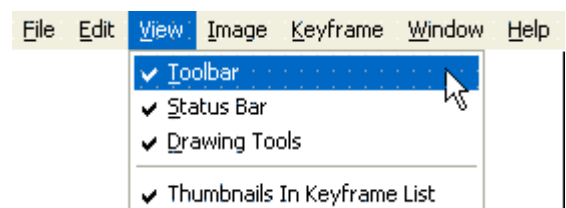
The View menu gives you access to user interface features.

**Toolbar** shows you a set of small icons at the top portion of the main window. These icons are short cuts to various features within Vision Edit.

**Status Bar** shows you a variety of information at the bottom of the main window. This can be especially useful during editing of bitmap keyframes.

**Drawing Tools** is the standard bitmap drawing tools shown to the left on the main window.

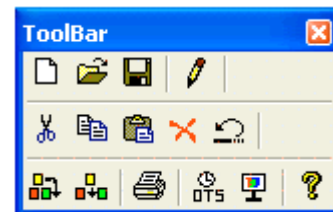
**Thumbnails** are “images” of the keyframe items within the keyframe list.



## Toolbar

When the Toolbar is not “docked” (to the top of the main window), the Toolbar can appear as shown to the right. In order from left to right (and top-down), the icons represent the following features:

- New File
- Open File
- Save File
- Toggle Drawing Tools
- Cut
- Copy
- Paste
- Delete
- Undo
- Add Keyframe After
- Insert Keyframe
- Print
- One Touch Schedule
- Preview
- About Vision Edit.



## IMAGE MENU

The Image menu gives you access to image alteration features. These mainly deal with altering Bitmap Keyframe images.

**Skew** allows you to skew a selected section of a bitmap.

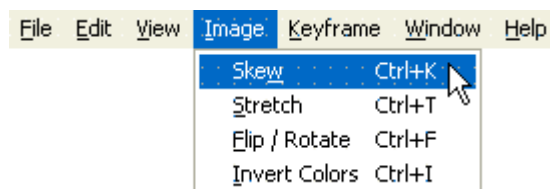
**Stretch** allows you to stretch a selected section of a bitmap.

**Flip / Rotate** allows you to flip or rotate a selected section of a bitmap.

**Invert Colors** allows you to invert the color a selected section of a bitmap.

When within the Bitmap Keyframe, you can use CTRL+A to select the entire bitmap region or use the select tool within the Drawing Tools to select a specific region.

### Skew



A horizontal skew is similar to making a letter “A” italic (i.e. A). In this case, the selected image gets “tilted” in the horizontal direction. Both horizontal and vertical skew are available for bitmaps.

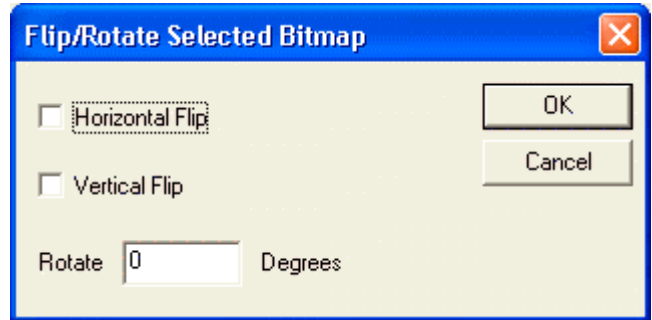
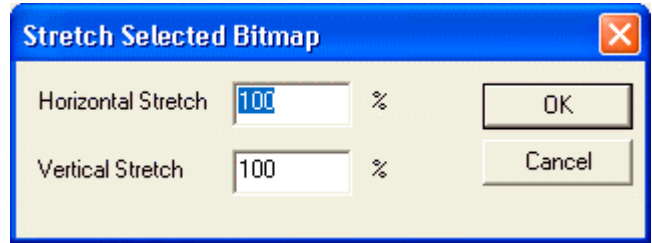
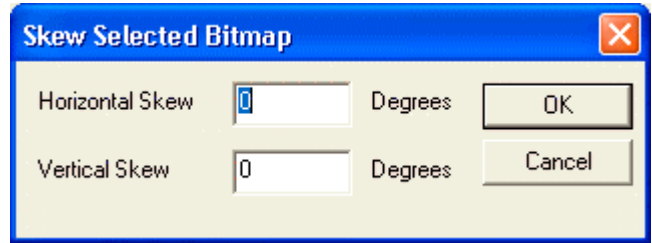
**Stretch**

This tool can be very useful if you want to shrink or expand a particular object.

**Flip / Rotate**

The Horizontal and Vertical Flip features are just a specific example of rotation. This is very useful if you want to create a mirror image of an object.

When rotating a selected object by anything other than 90 degree increments, the object may get severely distorted. Remember that the more resolution you have within your sign, the better the rotation will appear.

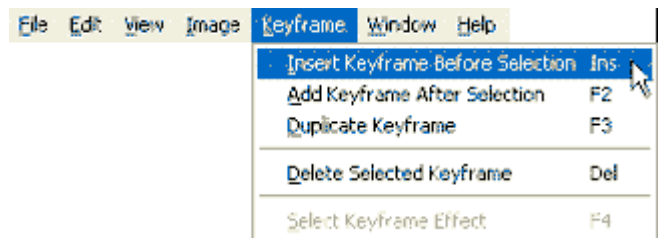


**KEYFRAME MENU**

The Keyframe menu gives you access to features that mainly control the Keyframe List.

Each item is self-explanatory.

The “Select Keyframe Effect” item can only be used within a keyframe in order to have menu access to the effects.



**FAST KEYS**

Below is a list of all of the acceleration keys for access to various features.

- CTRL+N                      New
- CTRL+O                     Open
- CTRL+S                     Save
- CTRL+P                    Print

CTRL+Z	Undo
CTRL+X	Cut
CTRL+C	Copy
CTRL+V	Paste
DEL	Delete selection or Delete keyframe
CTRL+A	Select All
CTRL+K	Skew
CTRL+T	Stretch
CTRL+F	Flip / Rotate
CTRL+I	Invert Colors
INS	Insert Keyframe Before Selection
F2	Add Keyframe After Selection
F3	Duplicate Keyframe
F4	Select Keyframe Effect

## TROUBLESHOOTING

### No exported data from Vision Edit message.

This can be generated in a couple of ways. The Vision Edit file itself may have no keyframes of content. Without content, there can be no exported data for the remote sign!

Another potential issue here is that the keyframe effect may be a combination of "NONE" for the ON effect, or a HOLD duration of ZERO seconds. Since these values are a signal to the remote sign that nothing is to be played for the keyframe in question, this may cause an export attempt to not create any exported content. Simply adjust the ON effect and/or duration to nominal values and try your export again.

Note that the ON effect of NONE is used to indicate that a keyframe has no visual appearance. This is a convenient way to indicate that a given keyframe will be used as either an animation frame (thus controlled via the animation editor), or as a background or foreground frame to be used with another bitmap effect or a TTN frame.

Creating a message that contains only TTN keyframes and exporting this message for a 24-bit HDDVision sign will generate no exported data due to the restrictions documented earlier. Consult the Vision Schedule documentation for details on how to work around this restriction.

### A Vision Edit message does not stop for a long time, or does not play the duration indicated.

This may be caused by a duration that is very long. Since each keyframe has its own independent duration, the combination of many keyframes in a single message could easily create a single message that may take

minutes to play on the remote sign. This is in of itself not a problem. However, it may be an unexpected consequence of a complex Vision Edit message.

Note that some effects, such as SPELL or ZIP may take longer than the nominal 2 second ON/OFF effect duration, as their effect speed is dependent on how many “spell” or “zip” cells are located. Because of this, use the time duration values shown only as an estimate. Future HDD hardware will have stricter timing control than older hardware, and hence, have exact time duration values available for scheduling purposes.

### **Importing or Pasting bitmap data causes colors to “disappear”.**

Again, this is not a software error, but a desirable feature based on the sign characteristics chosen at the time you created the Vision Edit file.

As an example, let us assume that you have created a monochrome message 96 pixels wide by 64 pixels tall. If you paste a full color image of a human face from Corel Draw into a bitmap keyframe, you cannot expect that all the shades from Corel Draw will be transposed into a monochrome image! Instead, the software will try to create an approximation of the original bitmap, using only red and black, as these are the only two colors available on a monochrome sign.

Hence, you will only see red and black pixels after the paste or importation.

Again, this is not an error, but the only reasonable operation to perform, apart from simply disallowing any image data that has color, which is almost impossible to pull in from external sources in today’s day and age of multimedia data.

### **Preview doesn’t show the effects exactly.**

The preview facility is designed to be “sign independent”. How a given effect plays on an H21 versus a 24-bit Video board is dependent on the software that drives each of these hardware components. Thus, it is impossible to create a perfect emulation of either of these two hardware platforms. Instead, a rendition of the effect is generated in an AVI file, which gives you an approximation of how the effect will appear on any external sign.

Again this is simply an approximation. Subtle differences will exist, however, the content will render correctly on the remote sign based on the effect selected, as the real work of rendering the message to the LEDs is done by the remote sign software.

Note that future signage built by HDD will better reflect the look and feel generated by the AVI preview, as the preview rendering will also be used to construct the exported data used by future signage.



# VISION QUICK TEXT

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## OVERVIEW

Vision Quick Text is an application that gives row-by-row text control. It's WYSIWYG (*What You See Is What You Get*) design gives you an immediate view of the frame that you're working on. It's designed to compliment the bitmap-oriented Vision Edit application. Although you can still enter text and position it wherever you wish within Vision Edit, Vision Quick Text provides an easy-to-use and structured row system that allows you to type basic messages.

Vision Quick Text is designed as a basic text editing package for both Message and Video signs.



## HOW VISION QUICK TEXT WORKS

Once the main window has opened, you will have a user interface that will allow you to enter text with a “row-by-row” control. The entering of text is done within the Text Rows region. The remaining controls on the left-side of the main window will give you access to the basic features for the row that you're working on.

The menu items give you access to various functions that can affect various aspects of each row, the frame, and even the entire message file.

To get a quick understanding of the basic features of Vision Quick Text, please review the [Examples](#) below or go through the [Tutorial](#).

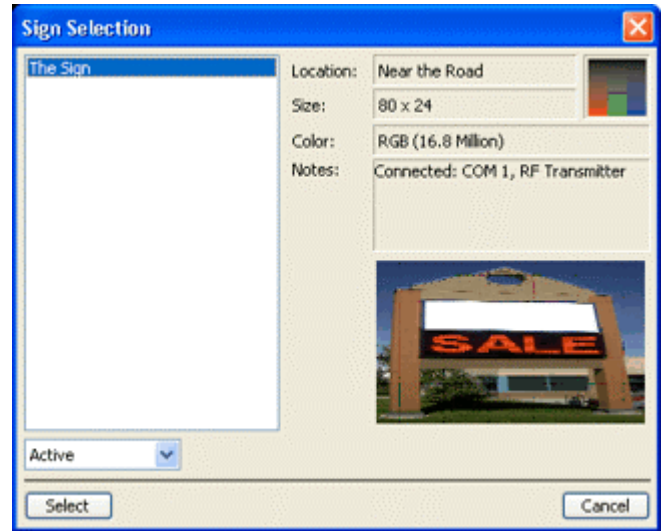
Vision Quick Text sole purpose is for the entering of text files and the control of each row. It is not intended for animation files or graphics of any kind. In comparison, [Vision Edit](#) has “pixel-by-pixel” control and is designed for graphics, animations, and basic text control. Depending upon your requirements, Vision Edit may be a better choice for you.

## OPENING VISION QUICK TEXT

When more than one sign has been configured for your PC, you will see this dialog each time you open a VisionSuite application. If you only have one sign configured for your PC, then it will automatically load as the sign to use. Therefore, you will not see this dialog.

Once the sign has been selected, all of its capabilities are automatically loaded into Vision Quick Text. The uniqueness of the sign is taken into account and the application customizes its interface for the sign.

When CANCEL is pressed, Vision Quick Text will open with a "default sign" which may not be compatible with your current sign.

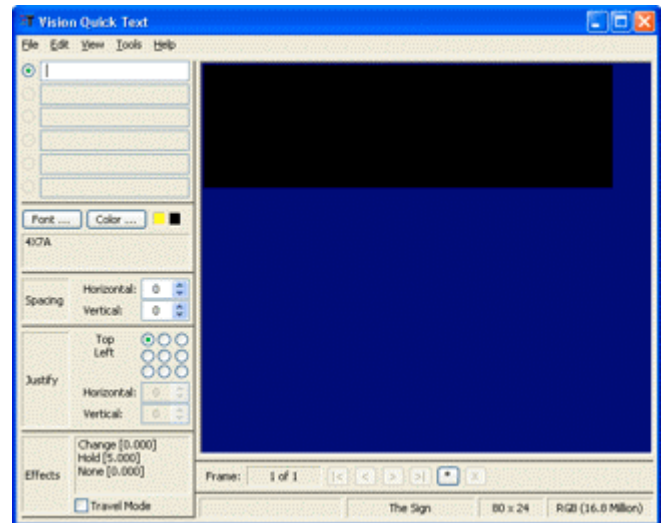


## THE MAIN WINDOW

The main Vision Quick Text window has several regions.

The **view region** is the large black area to the right. It will display the text that you type.

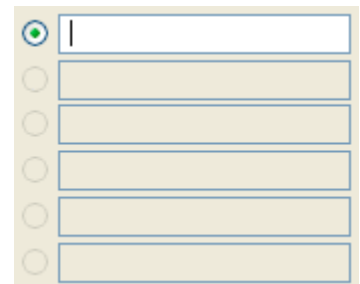
The control region on the left have several areas. The **Text Rows** region is where you type your text; the **Font/Color** region is where you can alter your row's font and colors; the **Spacing** region allows control spacing between letters and lines; the **Justification** region is where you can justify each row; the **Effects** region allows for control of the "travel mode" and view of the current effects; the **Frames** region is where you navigate between each frame; and finally, the **Sign Summary** region is where you can view the type and size of sign that you're working on.



### Text Rows Region

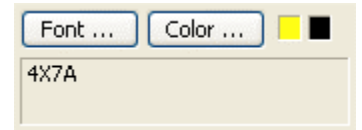
The Text Rows region has up to 6 rows enabled for larger signs. The maximum number of enabled rows is dependent upon the height of your sign. When there are 2 or more enabled rows, you can toggle between the rows by either pressing the circle-button to the left of the text control, click the mouse inside the text control, use the menu controls to toggle to the next (or previous) row, or use a fast key.

When you select a particular row, the other controls within the control region will automatically update with the row's features.



### Font/Color Region

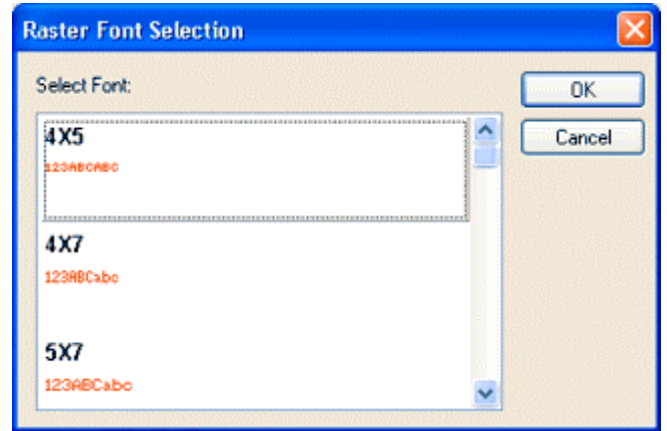
The Font/Color region allows you to see & change the current font and color settings. The font button will either open the Raster Font selection or the TrueType Font selection (Windows Fonts) depending upon the Edit menu selection.



The color button will open a selection control (shown below). From there, you can control the text and background colors. These colors are shown in the color boxes to the right of the color button.

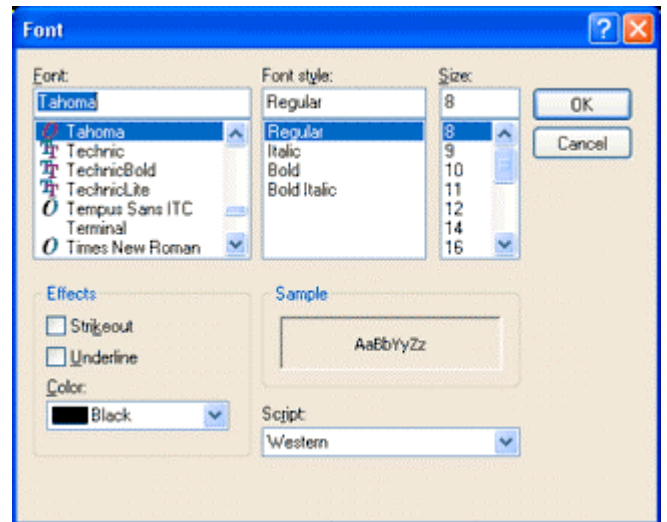
#### Font Selection

When the Edit menu has "Raster Fonts" selected, the dialog shown on the right will appear when the font button is pressed.



The fonts that are displayed are part of the raster font database within the FONT subfolder where VisionSuite was installed.

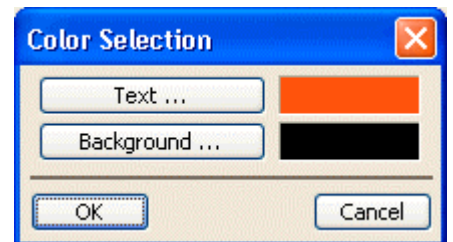
When the Edit menu has "TrueType Fonts" selected, the dialog shown on the right will appear when the font button is pressed.



The fonts that are displayed are part of the TrueType Fonts that are installed on your computer. The listing of fonts is controlled by Windows. For more information on the installation and removal of Windows fonts, please refer to your Windows documentation.

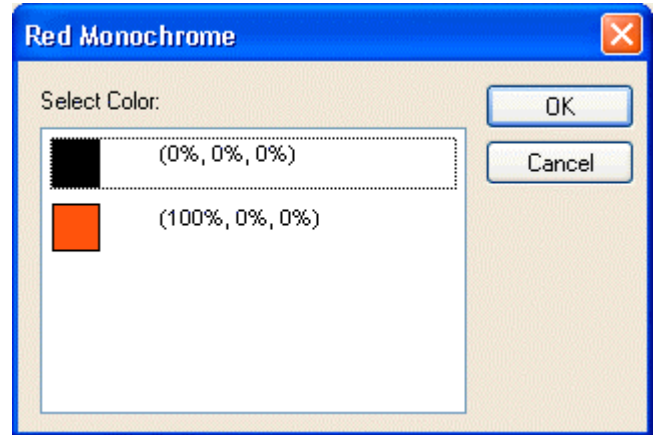
#### Color Selection

When the color button is pressed, the Color Selection dialog will appear. Press either button to select the color for text or the background color for the current row.



When the sign is monochromatic (one color), the color selection is very basic. The color selection dialog will show a list of colors and the percentage of RED, GREEN, and BLUE used for the color.

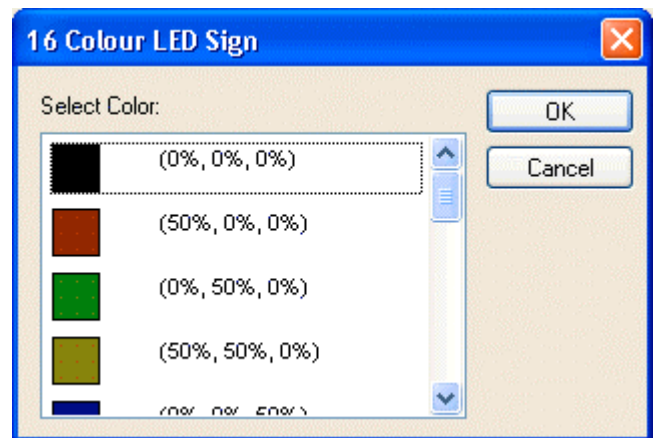
Shown to the right is the two color selection for a Red Monochrome sign.



For a 16 Color LED sign, the number of available colors increases. Correspondingly, the list grows.

The color selections do not necessarily represent the exact colors that the sign will display. The exact colors displayed may be slightly different due to the color wavelength of the LEDs used within the sign.

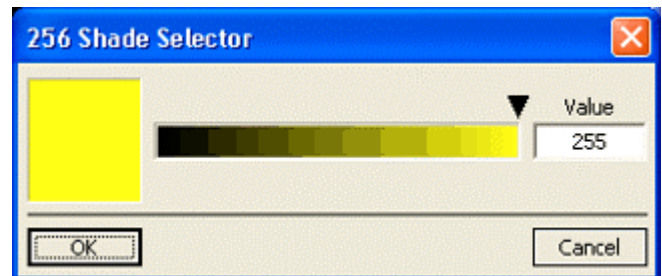
Nevertheless, the selection is “representative” of the colors that the sign will show.



The new 256-Shade signs have the capability of displaying 256 unique shades.

You select the desired color by moving the mouse cursor to the location on the horizontal color-bar and clicking the mouse. You can also enter a value manually within the Value control.

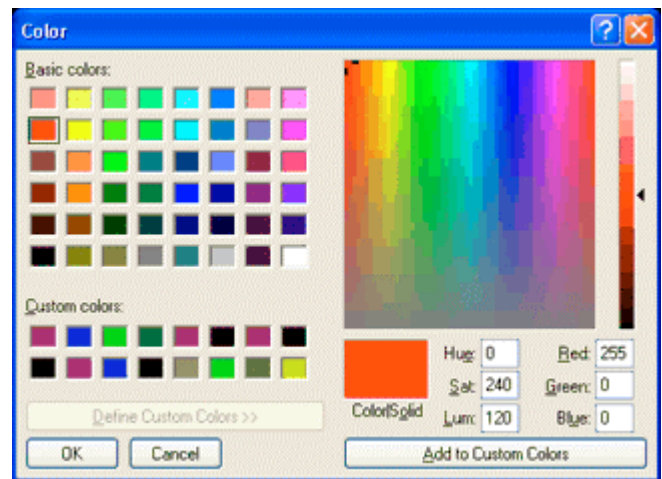
The control shown to the right is for an Amber sign with 256 shades.



When your sign is a full color sign, the color selection is vast. The color selection dialog, shown to the right, is the standard Windows color selection. By default, there are 48 predefined colors, 16 custom colors, and 16+ million other colors to select from.

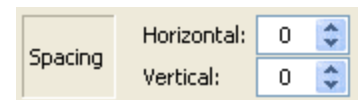
The selection capability within this Windows dialog is based on the color capability of your PC's graphics card and monitor. If you have a computer that only has 256 colors, this display will not be as extensive. Nevertheless, it may be adequate for your sign.

It is recommended that your PC has full color capabilities in order to have full color selection.



**Spacing Region**

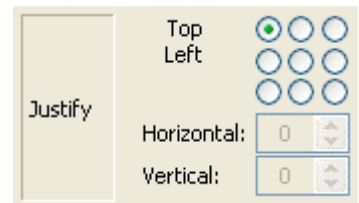
The Spacing region allows you to adjust the spacing of the text within a row. Horizontal spacing controls the spacing between each character. Increasing the value will the characters further apart. Vertical spacing controls the space above and below the text with the row. This can be used to push the text up or down within a row.



**Justification Region**

The Justification region allows you to position (or justify) the text within a row. The 9-button control indicates the location where the text will be justified within the row. When Custom Justification is used, you can control where text is placed within the sign based on pixel location.

When "Travel Mode" is enabled for a particular row, 6 of the circle-buttons are disabled and only vertical justification is available.

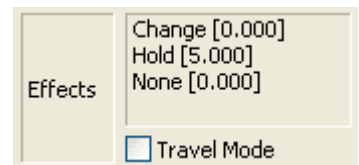


**Effects Region**

The final region is the Effects region.

Here you can view the "Effects" for the entire frame and control the "Travel Mode" for the current row.

Travel mode is a row-by-row effect. The other effects are only for the entire frame.



**Frame & Sign Summary Regions**

The Frames region allows you to move between the various frames within the message. Since Vision Quick Text allows you to create multiple frame messages, you can toggle between the frames with these buttons.



In order from left to right, the buttons are "Go to First Frame", "Go to Previous Frame", "Go to Next Frame", "Go to Last Frame", "Insert a new 'normal' frame after the current frame", and "Delete current frame".

For additional, inserts and frame controls, refer to the Edit menu features.

The Sign Summary information is simply a visual reminder about the sign for which you're designing a message.

## FILE MENU

The File menu gives you access to the basic functions that control & maintain the file you are working on.

**New** creates a new Vision Quick Text file.

**Open** opens an existing Vision Quick Text file.

**Save** saves the file you're currently working on.

**Save As** saves the file you're currently working on as a different name.

**One Touch Scheduling** will automatically launch Vision Schedule and place the Vision Quick Text file (also referred to as the message file or simply the message) into the schedule list.

**Preview** allows you to preview the file that you're currently working on.

**Most Recently Used** file list allows you to select one of the previous four files that you have been working on.

**Exit** closes Vision Quick Text.

### Open/Save/Save As

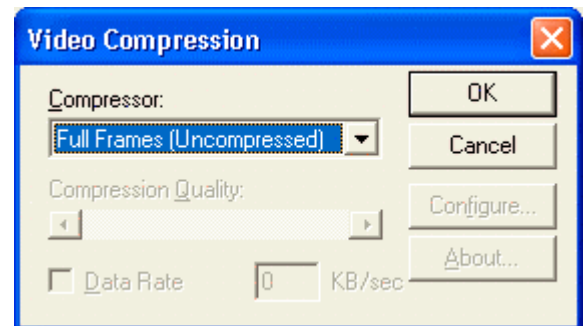
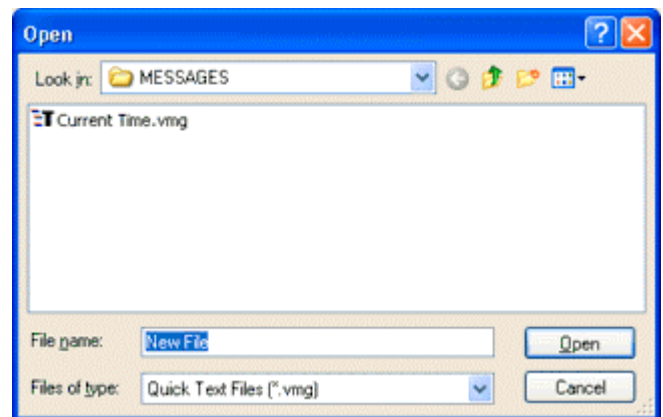
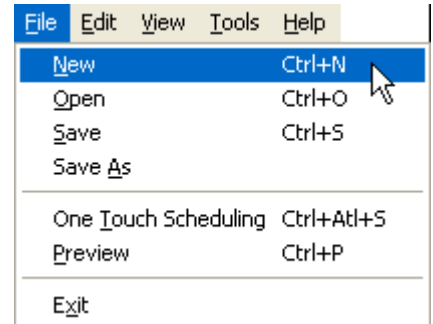
Whether you use Open, Save or Save As, the common File Dialog will appear (shown to the right). The title and the button will be named appropriately.

Note that all Vision Quick Text files have the file extension of VMG.

### Preview

When selecting Preview for the first time, you will see the Video Compression dialog. Although several "compressor" types may exist on your computer, it is recommended that you use "Full Frames (Uncompressed)".

After selecting this the first time, the dialog will not be shown again.

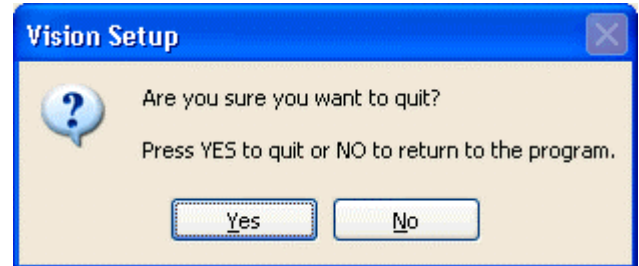


When the Preview window opens, the message will automatically start playing. You can move around the message, pause it, and even save it (if needed). When you're finished previewing the message, simply press the Done button to close the window.



**Exit**

You can exit the application by one of two methods. First, you can select "Exit" from the File menu. Second, you can press the "X" (close) button at the top right of the application. In the second case, a similar dialog as shown to the right appears to ensure that you want to close. By purposely selecting the "Exit" from the File menu, you can bypass this dialog.



**EDIT MENU**

The Edit menu gives you access to functions that control the "how" you edit text within the control regions.

**Font Types** allows you to switch between Raster Fonts (useful for low-resolution signs) and True Type Fonts (useful for high-resolution signs).

**Rows** allows you to select the number of rows to be shown & editable within a frame. The maximum row selection is limited by the matrix size of your sign.

**Clear All Rows** will clear all of the rows within the current frame.

**Go To** items allow you to move between frames.

**Insert Frame** allows you to insert a new frame before or after the current frame. The type of frame can also be selected.

**Delete Frame** deletes the current frame.

**Move Frame** allows you to move the current frame to a different location in the sequence of frames for this message.

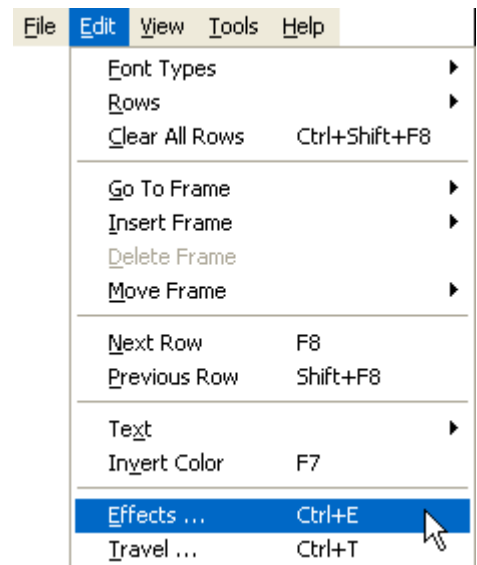
**Next & Previous Row** items allow you to move between rows within the current frame.

**Text** gives you access to the "Custom Justification" feature.

**Invert Color** inverts the text and background colors for the currently select row.

**Effect** gives you access to the Effect Selection dialog. This allows you to set the effects for the frame.

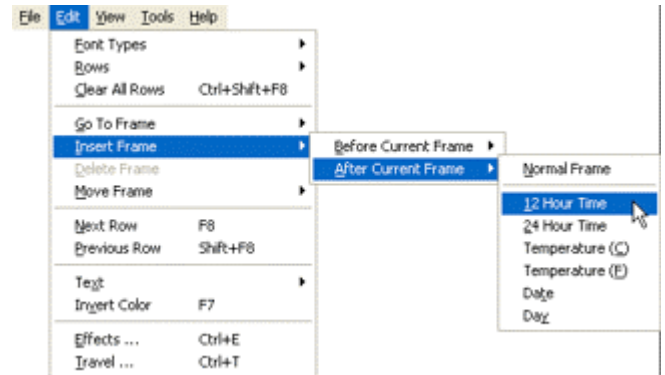
**Travel** gives you access to the Travel Settings dialog. This allows you to set the travel speed and direction for this frame.



**Inserting a Frame**

When inserting a new frame, you can add a Normal frame (for normal text entry) or a Time/Temp frame. A Time/Temp frame can be one of the following; 12 Hour Time, 24 Hour Time, Temperature in Celsius, Temperature in Fahrenheit, Date, and Day of the week.

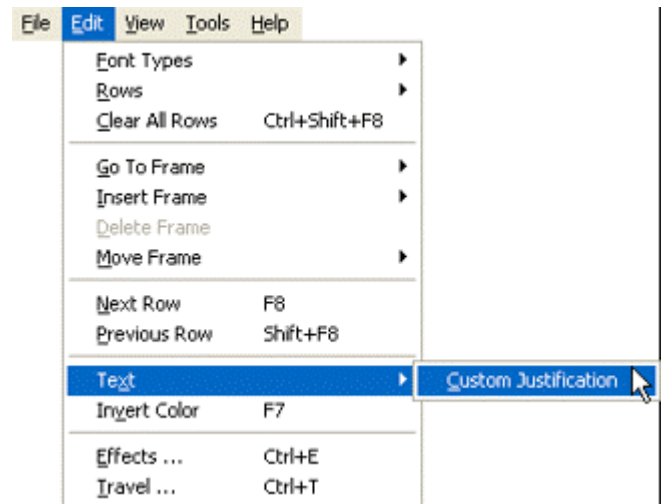
When a Time/Temp frame is added, certain control become disabled (such as, Travel, Invert Colors, Custom Justification, and Multiple Rows). Each Time/Temp frame will display a "Textual Placeholder" that will represent what will be displayed on the sign. The sign's electronics and operating system will dynamically place the appropriate value into these "placeholders" when the message is being played.



**Custom Justification**

When using "Custom Justification", certain features become disabled (namely "travel mode"). This feature is designed to allow you to enter varied fonts within row.

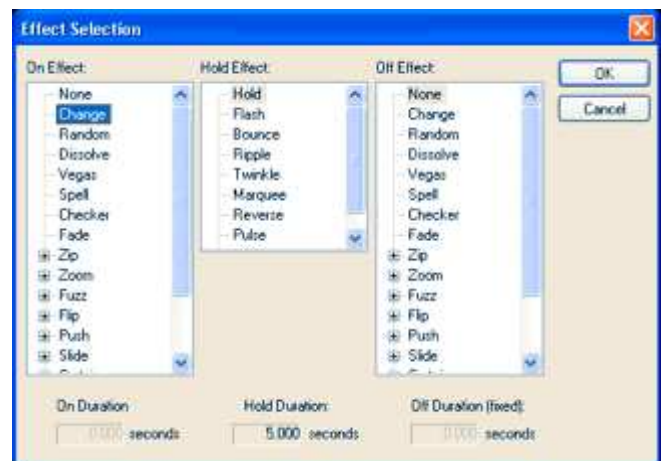
**Effects Selection**



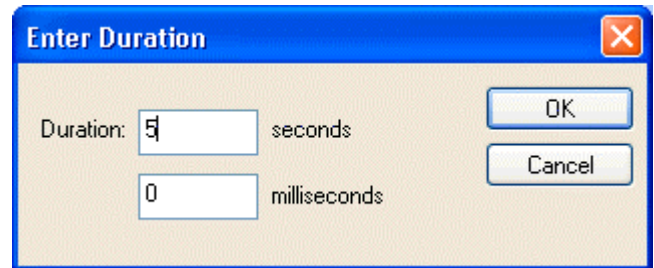
The Effects Selection dialog allows you to control the ON, HOLD, and OFF effects for this frame.

There are more than 50 effects to choose from. By default, the selection is "CHANGE", "HOLD", and "NONE" for the ON, HOLD, and OFF effects respectively.

Depending upon the sign, the duration of the certain effects can be altered. For the H20/H21 controller based signs, both the ON and OFF effects have fixed durations. However, in all cases, the HOLD effect's duration can be changed.



When you double-click the mouse over the duration for the HOLD effect, the “Enter Duration” dialog will appear. You can control the effects time by seconds and milliseconds. The fineness of this control is dependent upon the sign’s controller and the select effect.

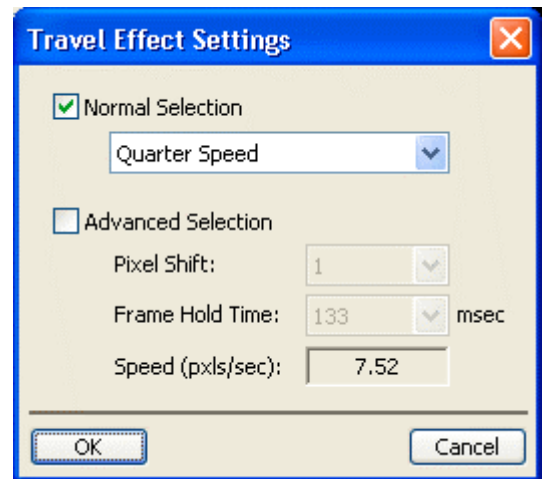


**Travel Settings**

The Travel Effect Settings dialog allows you to control the travel speed and direction for a frame. The Travel Mode can be set or not set per row. However, the speed and direction of travel is common for all rows within the frame.

There are several predefined speed selections. These are accessed by selecting “Normal Selection” and then choosing one of the speeds within the pull-down list.

If you wish to set the speed to another value, then select “Advanced Selection” and choose the distance of each travel step and the time to hold the image at each step. The speed is shown as a guideline to how fast the text will travel.



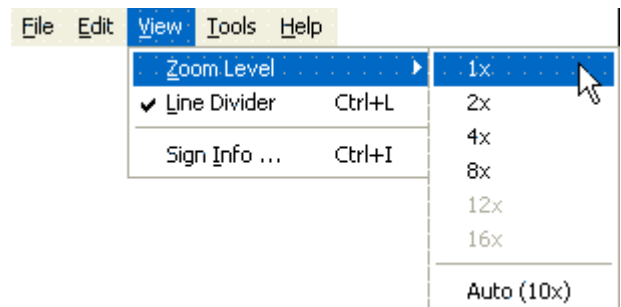
**VIEW MENU**

The View menu gives you access to the functions that control the view region and the view of the selected sign’s information.

**Zoom Level** allows you to set the “size” of the view region. There are 6 preset zoom levels that are enabled based on the screen resolution of your monitor and the size of the sign. The “Auto” level is a maximum zoom level.

**Line Divider** allows you to toggle the presence of a “yellow line” within the view region. The line can assist you in “viewing” the row regions within the sign. The yellow line will not appear within the message when displayed on the sign.

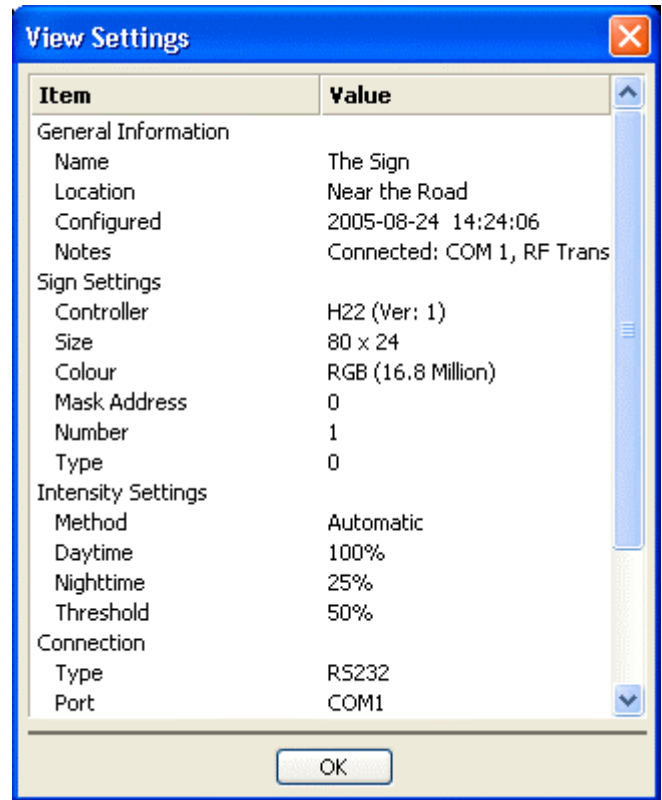
**Sign Info** displays information about the sign.



**Sign Info**

As shown on the right, basic information about the sign is displayed in the Sign Information dialog. The information displayed is equivalent to the information set when the sign was created in Vision Setup.

For more information on the setting up of a sign, please refer to the main [Vision Setup](#) help.



**TOOLS MENU**

The Tool menu gives you access to “tools” for Vision Quick Text.

**File Convert** launches the new [Vision Quick Text Converter](#). It allows you to convert one version of a VMG file to another.

**Options** allows you control over certain default settings for Vision Quick Text.



## Options

The Options dialog now has two sections; *General* and *Defaults*.

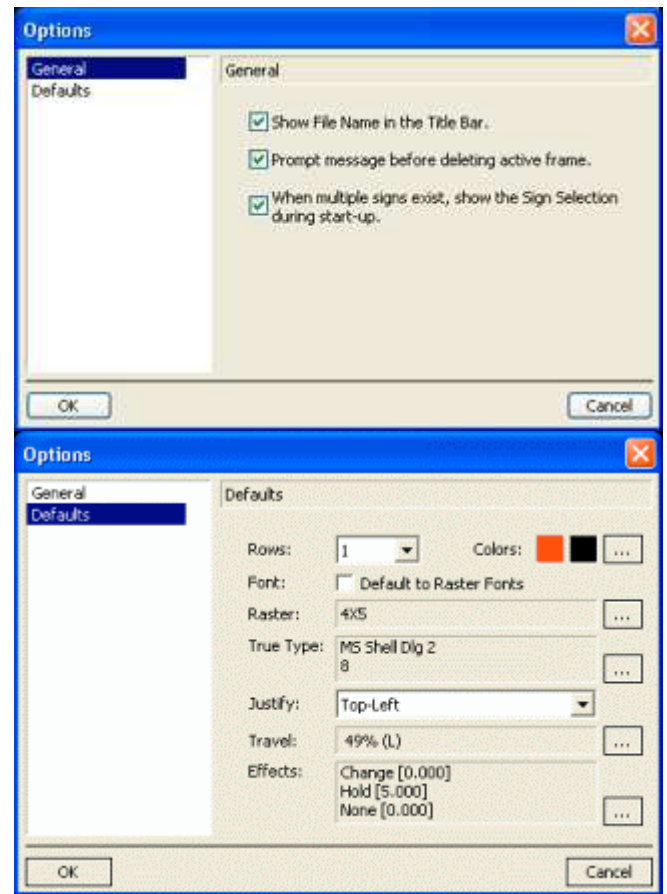
The *General* section allows you to control the basic operation and display of Vision Quick Text.

The *Defaults* section allows you to preset the default settings for each frame. When a new frame is generated, these settings will automatically be used.

It should be noted that the “Travel Settings” preset only set the speed for the traveling effect for each new frame. The travel mode must still be set for a row for these settings to take affect.

These settings are only the initial settings. They can be changed manually for each and every frame.

Below is a list of all of the acceleration keys for access to various features.



## FAST KEYS

CTRL+N	New
CTRL+O	Open
CTRL+S	Save
CTRL+P	Preview
CTRL+SHIFT+F8	Clear All
F8	Next Row
SHIFT+F8	Previous Row
F7	Invert Colors (for current row)
CTRL+E	Effects (display Effect dialog)

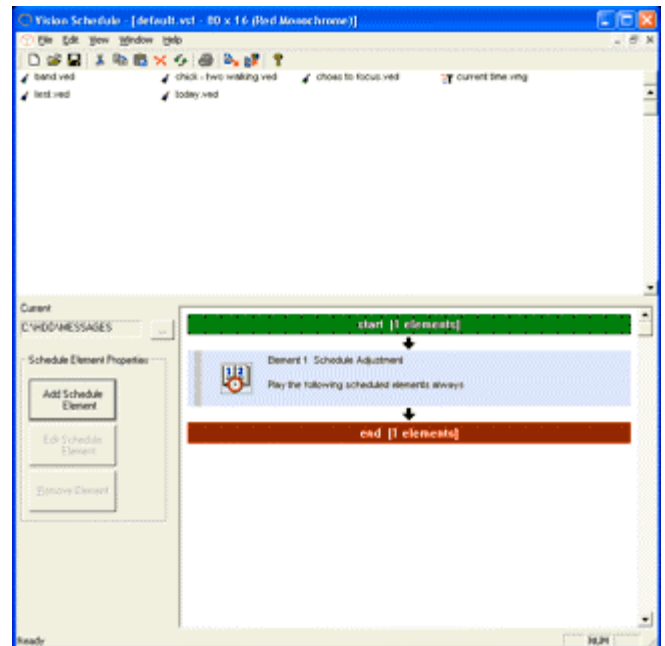
CTRL+T	Travel (display Travel Settings dialog)
CTRL+L	Line Divider (toggle on/off)
CTRL+I	Sign Info (display Sign Info dialog)
CTRL+7	Top-Left Justification (for current row)
CTRL+4	Middle-Left Justification (for current row)
CTRL+1	Bottom-Left Justification (for current row)
CTRL+8	Top-Center Justification (for current row)
CTRL+5	Middle-Center Justification (for current row)
CTRL+2	Bottom-Center Justification (for current row)
CTRL+9	Top-Right Justification (for current row)
CTRL+6	Middle-Right Justification (for current row)
CTRL+3	Bottom-Right Justification (for current row)



# VISION SCHEDULE

## OVERVIEW

Vision Schedule is the drag and drop message scheduler. It allows you to assemble a schedule of any type of LED message for a specific sign type, and export the messages to that sign for download to the sign itself. Vision Schedule allows you to schedule simple main loop content, as well as time restricted content that play only on specific days of the week, or specific date ranges or time ranges. When your schedule is ready, you can export the schedule in a format that is applicable to the specific sign you've chosen, and allow [Vision Update](#) to transfer the exported content to the sign.



## HOW VISION SCHEDULE WORKS

The following is a list of key features and a brief explanation of them:

- Vision Schedule utilizes Vision Edit and Vision Quick Text files (extensions VED and VMG, respectively) as input media to schedule. These media elements can then be arranged in a number of different manners:
  - **Continuous:** each media element in a continuous section will automatically run in a loop unless interrupted by a time restricted schedule.
  - **Time Restricted:** each media element in a time-restricted section will loop only during its prescribed execution time and/or date range. Time restrictions include days of the week, a date range, or a time range.
- Vision Schedule will also allow for interaction with the sign itself, to perform operations such as switching between digital content (VED or VMG messages) or live video content (from a camera or video source). Vision Schedule will also allow for the ability to schedule automated reboots of the remote sign computer as well as the ability to brighten or dim the display at the remote sign via easy to use configuration options.
- Schedules can be printed so that hard copies of scheduled content can be generated.

- Vision Schedule allows messages to be previewed prior to use. This allows you to ensure that the message you wish to use has been edited appropriately before adding it to a schedule.
- Vision Schedule uses simple drag and drop technology, allowing you to insert messages from the file list-box into the schedule as often as required.

To get a quick understanding of the basic features of Vision Schedule, please review the [Examples](#) below or go through the [Tutorial](#).

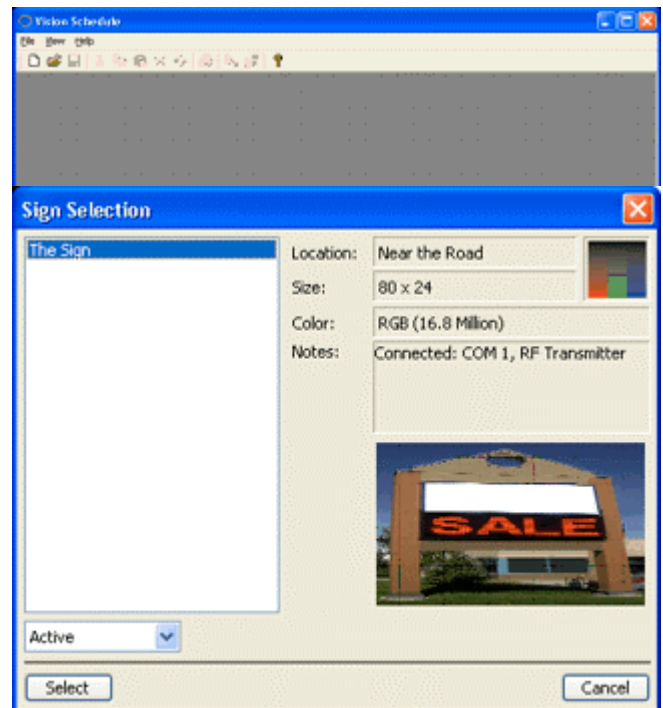
## OPENING VISION SCHEDULE

Vision Schedule starts up with an empty workspace, as shown below. Upon startup, you may click the NEW toolbar icon to create a fresh schedule, or click the OPEN toolbar icon to load an existing schedule. All other application options are disabled until an editing session begins.

Vision Schedule can create a blank, fresh schedule. Since a schedule must be designed to accept media elements that match the basic characteristics of a given sign, the first task is to specify the sign type you are designing a schedule for. Note that the specific sign you select isn't recorded in the Vision Schedule .VSF output file. Instead, three important sign characteristics are obtained.

- Sign width in pixels.
- Sign height in pixels.
- Sign color palette characteristics.

These three pieces are obtained by clicking the NEW message toolbar icon, or selecting File | New from the main menu. The standard VisionSuite Sign Selector will appear. Choose an existing sign that matches the characteristics you wish to design for.



Once you've selected the sign's properties that you wish to design for, a blank schedule editor window will appear.

Note that if you have only one sign type, the above dialog will not appear, as there is no need to request a sign type in this situation. This is a simplification to help streamline the software.

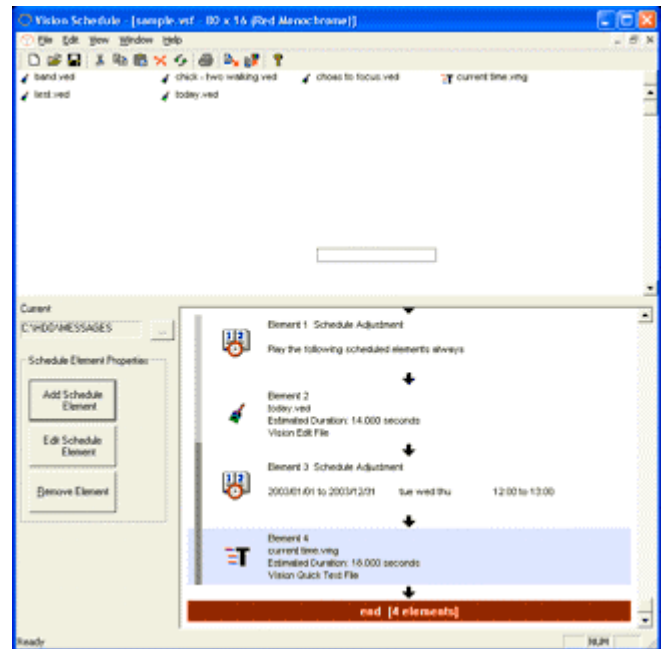
## CREATING A SCHEDULE

The schedule editor window is broken into two main working areas:

- The file listing box (top half of window), and
- The drag and drop scheduler (bottom half of window).

Vision Schedule will display the files of a given folder, from the selection you make in the folder selector portion of the Vision Schedule editing window. Click the “...” button to open a folder browser, and locate the folder that contains your messages. Vision Schedule will always open the folder you last selected. The file listing will only show files that match the characteristics of the sign you are scheduling. Thus, if you are working on an 80x16 red monochrome sign, only VED and VMG files that match that specification will be shown, as obviously, it makes no sense to schedule inappropriate media.

Once a folder has been selected, you may see a display similar to the one shown to the right.



It is useful at this point to save your work if you haven't already done so. Choose the SAVE button on the toolbar, or choose File | Save to invoke the save operation. If the schedule has never been saved before, you will be prompted for a new filename. Type in the name and select the folder you wish to save the schedule to, for example, C:\HDD\MESSAGES and click OK to save after the first save, subsequent save operations will no longer ask for a filename. You can change the name of the file at any time by using File | Save As and entering a new name or destination.

You cannot add new files to the file listing manually. If you need to refresh the display, open the folder browser and locate the same folder again.

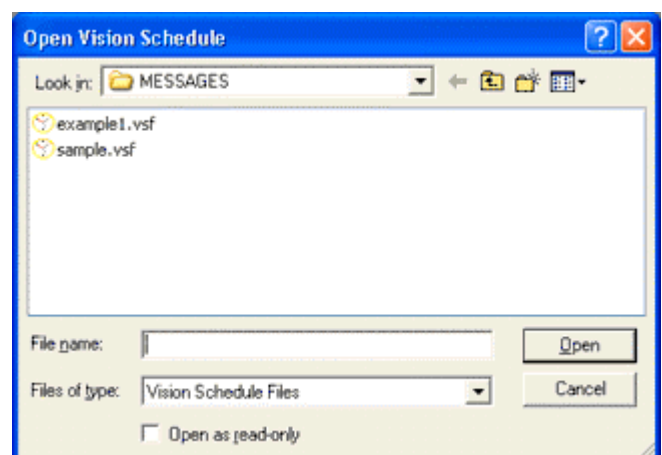
Once you've saved your work, you will need to re-save your work whenever you make a change to your schedule. Changes include the adding, removing or adjusting the order of elements in the schedule.

## LOADING A SCHEDULE

Vision Schedule can also load an existing schedule for editing. Select the OPEN button on the toolbar, or use the File | Open menu to select an existing Vision Schedule file (VSF).

Upon loading a schedule, a window will appear showing the file listing of the currently selected folder, and any scheduled elements already in their correct order.

As above, all of the schedule-editing features are available, including cut, copy, paste, and of course, saving your efforts.



## EDITING A SCHEDULE

Once the file listing is showing the media elements you wish to work with, you may begin to populate a schedule.

As described earlier in this document, there are two main scheduling approaches:

- **Continuous schedule:** all elements in this section of the schedule will loop repeatedly from first to last element, unless superseded by a time/date restricted element.
- **Time/Date Restricted schedule:** all elements in a given time/date restriction will only play according to the rules you provide.

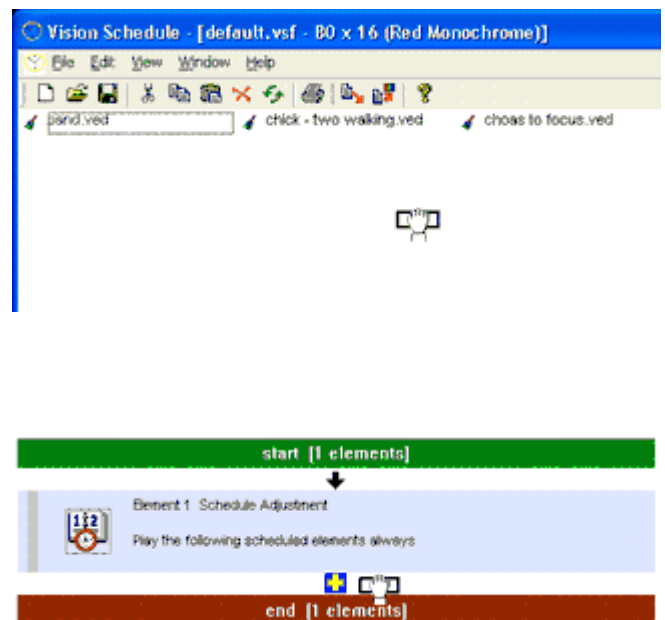
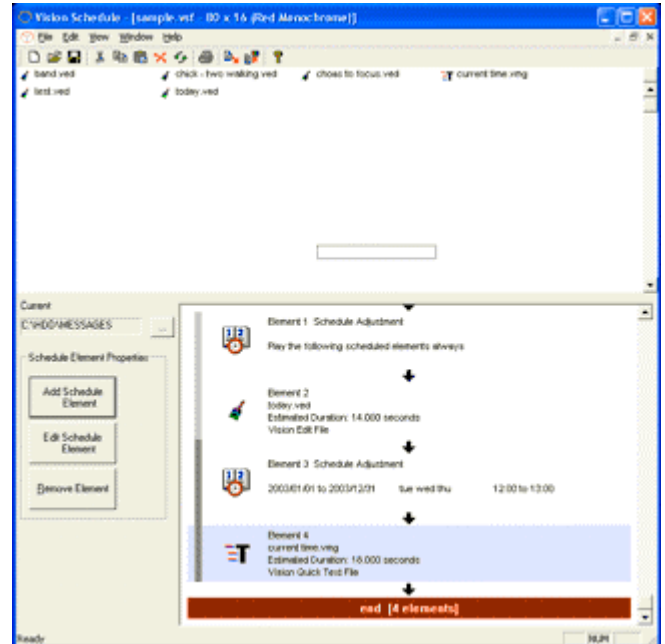
The schedule is automatically pre-populated with one element by default: a marker indicating the start of the Continuous schedule section. This element cannot be removed or edited, as every schedule must contain a continuous section.

To populate this schedule, drag any of the file listing elements into the schedule, wherever you see the “arrow” marker. The arrow indicates the direction the schedule flows, and when the schedule reaches the last element in a given section, it will loop back to the first element in that section and repeat again. As you move the drag cursor overtop of these arrows, when you have located a valid insertion point, the drag cursor will change from a circle with a line through it, to a “plus” symbol indicating that the element can be added to the schedule at this point. If you decide to not drop the element, or you wish to cancel the insertion, simply move the cursor off of the arrow icons marking the insertion points, and release your left mouse button to abort the insertion.

You may also shuffle any of the elements in the schedule. Simply click and drag any element and locate an insertion point where you would like to drop the element. Once dropped, the schedule will remember the new order of the elements.

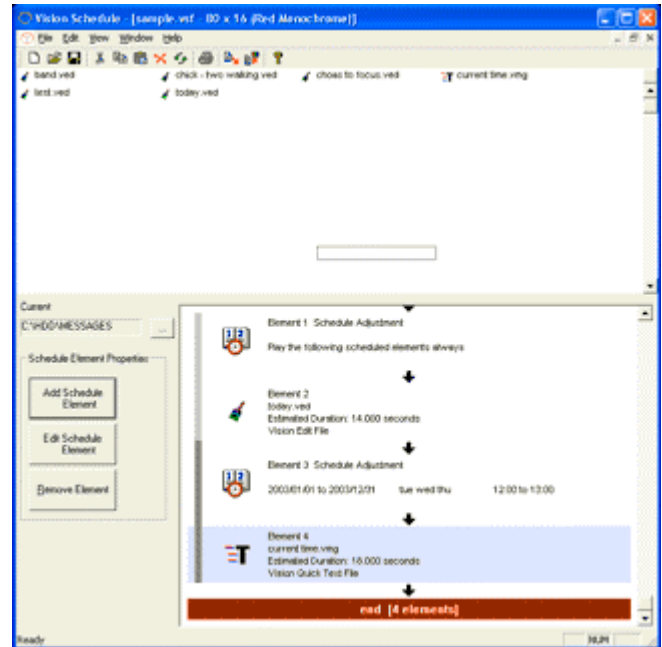
As elements are either inserted or moved, the drag-drop editor will always attempt to keep the highlighted current element in the visible portion of the editor. This is done because it is more than likely the next element for a schedule will be added either in front of or after highlighted element.

You can click once on any schedule element to make it the “current element”, or you can also use your arrow keys when the drag-drop editor has the keyboard focus to move the highlight bar to locate a new “current schedule element”. Once an element is deemed “current”, you can use the keyboard DELETE key, or the Edit menu to remove,



cut, copy or paste elements at this spot in the schedule. You may also use the REMOVE ELEMENT button in the scheduling window to remove the currently highlighted element. As indicated earlier, the Continuous element cannot be removed.

Each section will be denoted visually through the use of an alternating light gray or dark gray bar placed vertically at the left edge of the drag-drop editor. When you add a new time/date restriction into a schedule, the visual indicator will flip to visually illustrate at a glance that the media elements that follow belong to a different schedule section.



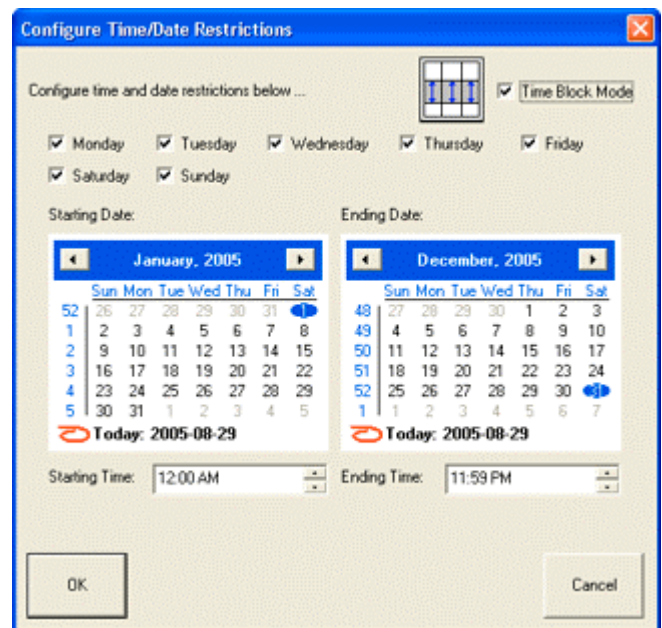
To add a new schedule restriction, locate an appropriate insertion spot to add a new schedule element to the schedule. The schedule element will be added after the currently highlighted element, thus, it's more than likely that new schedule elements are going to be added to the end of a schedule, however, this is not enforced.

Remember that any media elements added after this schedule element will all exhibit the restrictions imposed by this schedule element. Hence, you can have any number of media elements that will play within the restriction imposed by this schedule element. To edit the time and date restrictions, highlight a schedule element, and select the EDIT SCHEDULE ELEMENT button, or simply double click on the appropriate schedule element itself.

There are two types of scheduling; Block and Continuous modes. By default, Block mode will appear in the Configure Time/Date Restrictions dialog.

**Block mode**, as the top-right icon indicates, means that the event is schedule every day between specific times.

**Continuous mode** means that the event is schedule from start time & date to end time & date. Depending upon how you want to schedule events, one method may be better than the other.

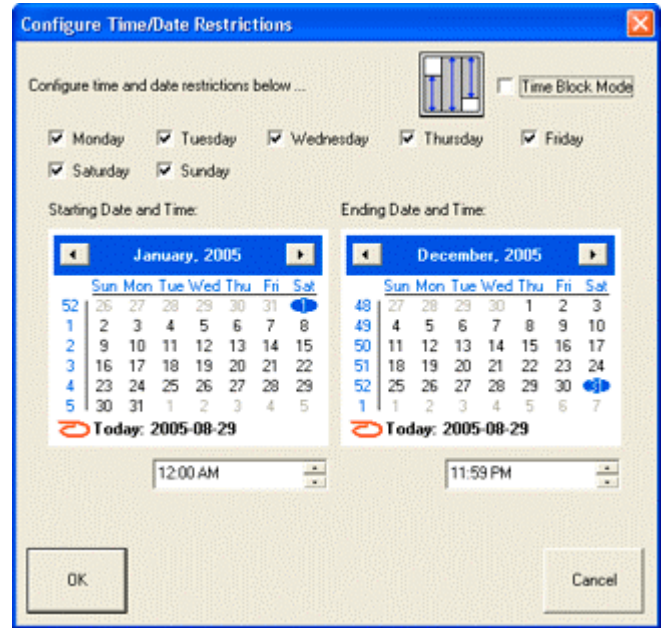


One has control over the following items;

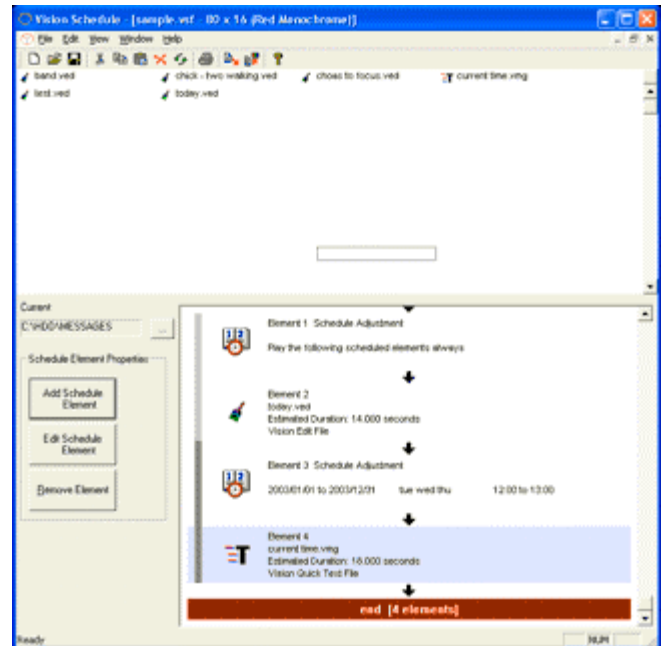
- Days of the week.
- Start and End Date
- Start and End Time

The image to the right is showing the *Continuous* mode; the previous image above shows *Block* mode.

Note that you can remove a schedule element by simply highlighting it, and using the REMOVE button, or using your DELETE key on your keyboard.



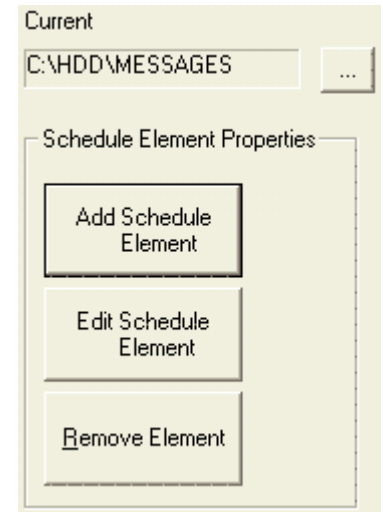
Continue to populate the drag-drop schedule editor with both media elements and schedule elements until you feel you have the schedule set up appropriately. At any time, feel free to use the File | Print option to generate a web based report of your schedule, which you can then save as an HTML file on disk, or print as a hard copy. This allows you to distribute a report of your schedule to other people by simply using the web browser's "Send" option to email or save the file to another destination.



Next to the schedule listing, you will find an area that indicates where messages are to be selected from; the **Current Folder**. By default, Vision Schedule will always start up in the [InstallFolder]\MESSAGES, where messages are normally saved by Vision Edit or Vision Quick Text.

By clicking the “...” button, Vision Schedule will pop up the standard Windows folder browser. You may select any drive/folder combination where VisionSuite compatible messages may be stored.

When you OK your folder selection, the Current Folder selector will display the drive and folder name you have chosen. In addition, the hopper will reload the available compatible messages for the sign type you are scheduling for. Thus, if you are scheduling for a 32x16 Red Monochrome sign, only messages in the selected folder that match that sign type will appear in the hopper. This ensures that you are only able to schedule messages that are appropriate for the current sign type.



## SPECIAL ELEMENTS

Vision Schedule is also capable of scheduling three other types of elements:

- Reboot of sign computer
- Switch to Live Video
- Adjustment of sign computer visual properties such as brightness, etc.

These elements are mostly intended for higher-end video systems.

These elements can be displayed in the file selector by ensuring that files by these extensions appear in the currently selected folder:

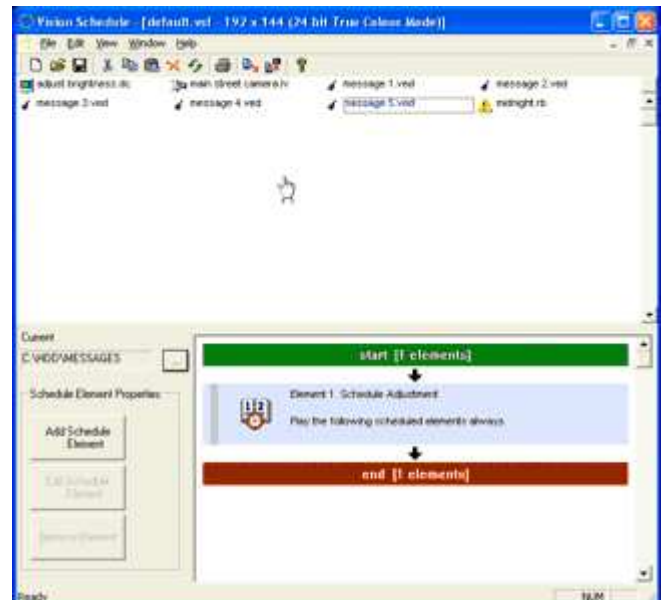
**[filename].RB** – this is a *reboot* file. It is a trigger that can be used to force the remote sign controller to reboot on a scheduled basis. Note that none of the currently supported sign types for HDD can use this feature, as it is meant for future compatibility.

**[filename].LV** – this is a *live video* file. It contains simple text configuration data as follows:

```
[config]
duration=30
```

The above shows the Windows INI style configuration for the live video. It indicates that this object will force a switch to live video, and run the live video for a total of 30 seconds.

**[filename].DC** – this is a *Display Control* file, and can be used to specify brightness and contrast settings for the sign controller. As with the live video object, you can use a Windows INI file specification as follows:



```
[config]
duration=1
brightness=75
contrast=60
extra=
```

The values shown above are percentage of their full values, with a minimum to maximum range of 0 to 100%. Note that you do not need to specify the percent symbol, as the percentage is implied. The extra field will allow for expansion of this capability in the future.

As with Vision Edit and Vision Quick Text media elements, simply drag and drop these elements into the schedule so that they will perform their operations at the desired time. Obviously, elements such as a Reboot element should be used only sparingly and at off-hours, to avoid visual interruptions on the remote sign computer and to avoid having a chance that many observers will witness the restart of the computer.

## FILE MENU

The File menu gives you access to the basic functions that control & maintain the file that you are working on.

**New** allows you to create a new Vision Schedule file.

**Open** allows you to open an already existing Vision Schedule file.

**Save** allows you to save the file you're currently working on. When Export with Save is checked off, the schedule and media files will also be exported.

**Save As** allows you to save the file you're currently working on as a different name.

**Close** allows you to close the current Vision Schedule file without exiting the application.

**Export Schedule and Media** will cause Vision Schedule to render the appropriate schedule and message files for the selected sign. The rendered files will automatically be stored into a special folder on your PC for Vision Update to refer to when you update your sign.

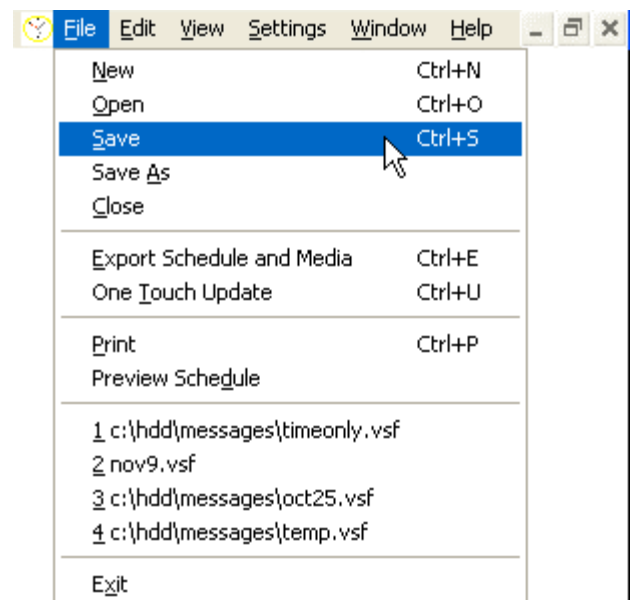
**One Touch Update** will automatically launch [Vision Update](#) and connect you to the sign that you've assigned for the current schedule.

**Print** allows you to print a basic report on the various elements within the schedule.

**Preview Schedule** allows you to preview the schedule on a specific time and date.

**Most Recently Used** file list allows you to select one of the previous four files that you have been working on.

**Exit** closes Vision Schedule.



## **Open/Save/Save As**

Whether you use Open, Save or Save As, the common File Dialog will appear (shown to the right). The title and the button will be named appropriately.

Note that all Vision Schedule files have the file extension of VSF.

## **Export Schedule and Media**

Vision Schedule builds schedule information, however it cannot talk directly to the remote sign, because each HDD remote sign product has their own particular communications schemes and requirements. Part of these requirements is the necessity to convert VisionSuite data into files that are backward or forward compatible with the hardware you wish to send data to. Thus, Vision Schedule is required to perform one final processing step on your scheduled data: EXPORT.

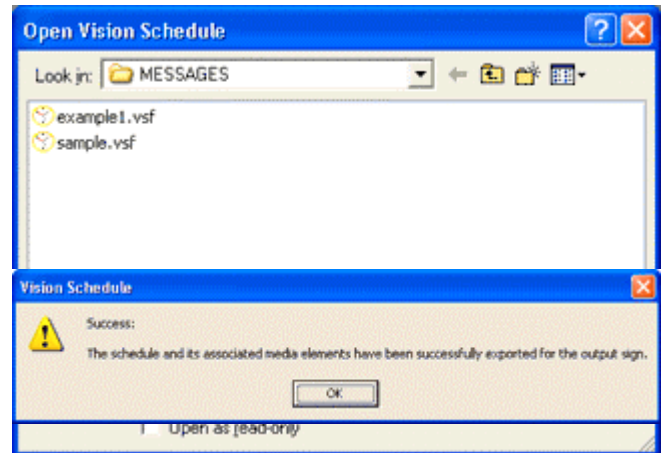
When you are ready to convert your scheduled information to data applicable to your remote signage, choose the File | Export Schedule and Media menu option. This option will first request you for a specific sign type that matches the characteristics of the schedule you have designed for. Note that if you only have one sign type that matches the characteristics of schedule; no dialog will appear asking you for the sign. This final step will extract from the sign database all of the export knowledge that will be needed by Vision Suite to ensure that Vision Schedule schedules, and Vision Edit and Vision Quick Text media elements can be converted correctly into outgoing data for the sign itself.

Once a sign is established, a series of dialogs will appear indicating the process of the export. If any errors are detected, warning dialogs will appear indicating what the problems may be.

If all is successful, no error or warning messages will appear. In a future version, Vision Schedule will immediately launch Vision Update so that this data can be transferred to the sign after export is completed. Currently, if all is well, you will have to use the Vision Suite startup window to launch Vision Update. The exported content is not required for the operation of Vision Edit, Vision Quick Text or Vision Schedule. It is only required for Vision Update to send to the remote sign.

By default, Vision Schedule will always automatically do an export when you save your work. This feature can be enabled or disabled using the File | Export With Save menu selection. A checkmark will appear to indicate whether the feature is on or off at any given moment.

If you have multiple sign types with similar characteristics, you will be required to select the sign type for export purposes. If this is the case, you may wish to disable the Export With Save option to avoid unnecessary sign type selection whenever you save your work, however, you will then need to manually select the Export option to generate data compatible with the physical signage.

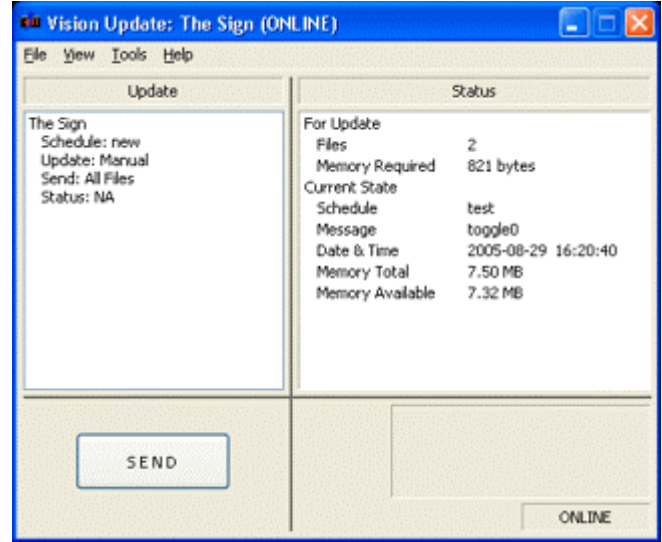


**One Touch Update**

Vision Schedule contains the ability to automatically update your desired signage with the schedule you are currently editing. First, save and export your current work. When this task is completed to your satisfaction, and you have optionally previewed your schedule to ensure it is what you desire, you may choose the File | One Touch Update option (or choose the One Touch Update toolbar button, located beside the Help icon on the toolbar).

This feature will automatically invoke the Vision Update program and begin the job of transferring the exported schedule and media files to the sign designated by the export operation. This minimizes the effort for VisionSuite considerably, as you are now easily able to navigate from message creation straight through to sign updates using this path:

Vision Edit → One Touch Schedule → Vision Schedule → Automatic Export → One Touch Update → Vision Update

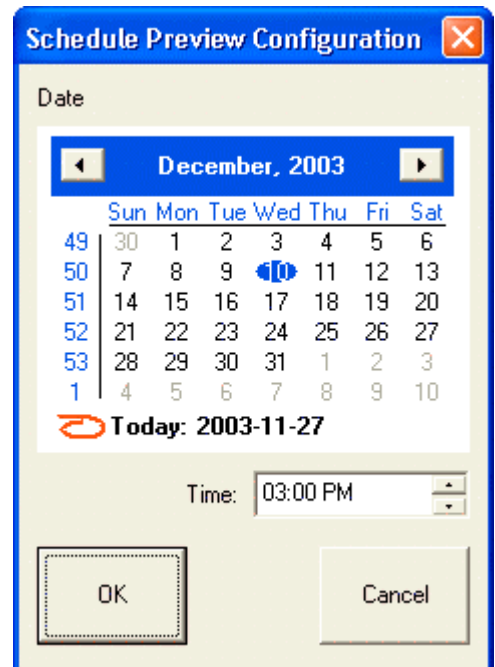


Note that One Touch Update may request for the sign you are updating if multiple signs of the same characteristics as the schedule exist. This is the same process you follow when performing an export.

**Preview Schedule**

Vision Schedule has a handy feature that will simulate what the expected message loop will be at any given day and time. Click the File menu, and choose Preview Schedule. A dialog box similar to the one to the right is shown.

This dialog will allow you to choose the day of the year, as well as the time of day for the simulation.



Based on the selection, Vision Schedule will scan the schedule and its internal time restrictions, and determine the minimum list of files that will play at the date and time selected. You will then see a dialog box similar to the one on the right.

From this dialog box, you can select to preview all of the files in Vision Preview. The preview window will show each message one at a time, and loop back to the start of the play list when complete. You will note that the Preview window will have a “skip” button to allow you to jump to the next message in the play list to quickly scan through your messages.

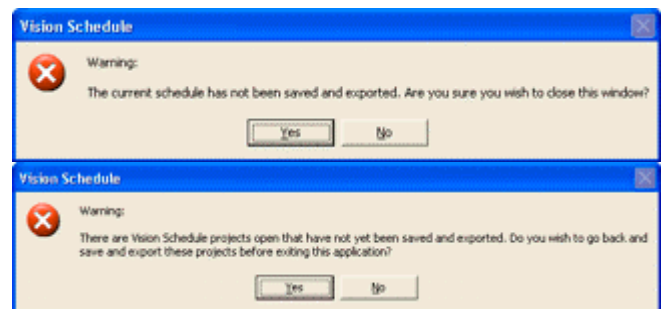
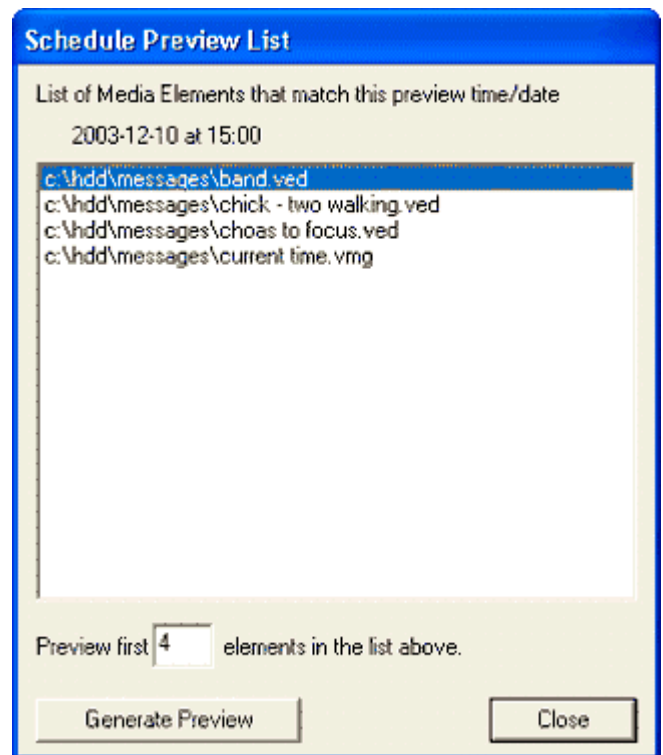
You can select how much of the list is previewed by entering a value in the edit box. Note that you cannot preview zero messages, or more than the total in the list. Vision Schedule will correct your values and proceed to preview the entire list for you.

Note that you may be faced with a situation where no files are available for preview. This may be due to a schedule that has no continuously playing members, with schedule restrictions that prevent messages from playing at specific times of the day. Since the real LED sign will show black at this time, it isn't useful to generate a “black” preview, and hence, a warning message will appear informing you of this situation. This warning is invoked to ensure that you are aware of this situation and that if the schedule was built erroneously, that you will have an opportunity to correct this schedule before exporting.

Note that reboot, live video and display control members of this list cannot be previewed, as they have no apparent visual connotation in terms of message playback. Thus, do not be surprised if the preview window displays warnings about missing message content in that situation! .

## Exit

You can exit the application by one of two methods. First, you can select “Exit” from the File menu. Second, you can press the “X” (close) button at the top right of the application or current file. In either case, you will see one of the dialogs shown to the right.



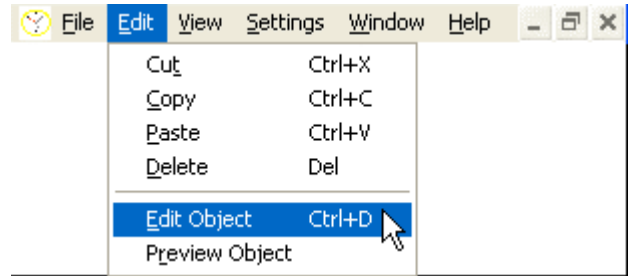
## EDIT MENU

The Edit menu gives you access to functions that control the “how” you edit objects within list of scheduled items.

**Cut, Copy, Paste, and Delete** selections are the standard functions that exist within most editing applications.

**Edit Object** will automatically launch Vision Edit or Vision Quick Text for the appropriate media file that you have just selected. For other special elements, the appropriate dialog box will open to allow you to edit the items.

**Preview Object** will automatically launch the preview the window for the selected file.



## VIEW MENU

The View menu gives you access to user interface features.

**Toolbar** shows you a set of small icons at the top portion of the main window. These icons are short cuts to various features within Vision Schedule.

**Status Bar** shows you a variety of information at the bottom of the main window .

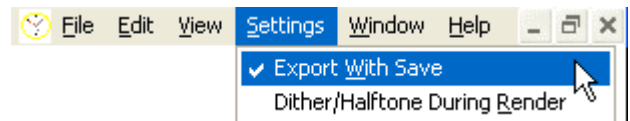


## SETTINGS MENU

The Settings menu gives you access to certain special features.

**Export With Save** will cause Vision Schedule to export the schedule and media files when the current schedule is saved. By default, this is checked.

**Dither/Halftone During Rendering** will instruct the rendering process to generate "dithered" colors when generating messages for monochromatic signs. This may be useful if your sign is a high-resolution monochromatic display and you wish to display colored images.



## FAST KEYS

Below is a list of all of the acceleration keys for access to various features:

CTRL+N	New
CTRL+O	Open
CTRL+S	Save
CTRL+E	Export schedule and media
CTRL+U	One Touch Update

CTRL+P	Print
CTRL+Z	Undo
CTRL+X	Cut
CTRL+C	Copy
CTRL+V	Paste
DEL	Delete selection object from schedule list
CTRL+D	Edit Object

## SUPPORT FOR 24-BIT HDDVISION TIME/TEMP ELEMENTS

As noted in the Vision Edit documentation, VisionSuite will not export TTN keyframes when exporting for the 24bit HDDVision brand of signage.

To get around this particular limitation, the following work around will apply.

- Use the original 16-bit VisEdit message editor supplied with your HDDVision signage to create 3 specific files of these filenames:
  - VPYTIME.VPY - a message that contains ONLY a time TTN element
  - VPYTEMPC.VPY - a message that contains ONLY a Celsius temperature
  - VPYTEMPF.VPY - a message that contains ONLY a Fahrenheit temperature
- Save these VPY files into the folder ASSETS, located inside your installation folder for VisionSuite (for example, C:\HDD\ASSETS). These files are essentially deemed as “pre-exported” data for 24-bit HDDVision sign exports.
- Now that you have TTN elements available as pre-exported data, you can insert media elements into your schedule that will “tie in” with these assets. Use Vision Edit to create 3 dummy (empty) VED files with these filenames:
  - VPYTIME.VED - this ties in with the VPYTIME.VPY file above
  - VPYTEMPC.VED - this ties in with the VPYTEMPC.VPY file above
  - VPYTEMPF.VED - this ties in with the VPYTEMPF.VPY file above

Save these files wherever you normally save your VED files (in the MESSAGES folder, for example). They will now become files you can drag and drop as normal.

- When you drag and drop any of these 3 filenames into the schedule, Vision Schedule will automatically copy the pre-exported VPY files from above into the EXPORT folder, thus, giving 24-bit HDDVision signage the TTN elements it requires.
- You are free to change the look and feel of the pre-exported VPY files using the older 16-bit VisEdit editor. However, only these 3 special files are used, and there will be no provision for further expansion of this

capability as 24-bit HDDVision signage will be phased out and replaced by more powerful video signage in the future.

## TROUBLESHOOTING

Vision Schedule is a robust drag & drop capable editor that completely simplifies the day to day control of scheduling content on a remote sign computer. Modern techniques are employed to ensure that you do not need a large amount of training to perform scheduling operations, however, from time to time, certain issues or problems may arise. Note that these are not errors per-se, however, to the novice user, they may appear as errors, and hence, this section will highlight common editing issues.

### **No exported data from Vision Edit message.**

Vision Schedule does not verify the contents of any media element, hence, it may be possible to schedule an element that has no exportable content!

This can be generated in a couple of ways. The Vision Edit file itself may have no key-frames of content. Without content, there can be no exported data for the remote sign!

Another potential issue here is that the key-frame effect may be a combination of "NONE" for the ON effect, or a HOLD duration of ZERO seconds. Since these values are a signal to the remote sign that nothing is to be played for the key-frame in question, this may cause an export attempt to not create any exported content. Simply adjust the ON effect and/or duration to nominal values and try your export again.

Note that the ON effect of NONE is used to indicate that a key-frame has no visual appearance. This is a convenient way to indicate that a given key-frame will be used as either an animation frame (thus controlled via the animation editor), or as a background or foreground frame to be used with another bitmap effect or a TTN frame.

A similar issue may arise with Vision Quick Text data. If the effect or time duration settings for a VMG file are such that nothing can be exported, warnings will be issued to inform of such an event.

Remember that Vision Edit and Vision Quick Text messages with TTN data being exported for 24bit HDDVision signage will not generate TTN keyframes in the export, therefore use the workaround discussed earlier in this document to work around this issue.

### **How can I set my schedule to only run one day a week at lunchtime?**

As discussed earlier, a time/date restriction will be required. Since there is no date range associated with this restriction, set the calendar date range to start at the beginning of the year and end at the end of the year. Current HDD hardware does not use calendar year information, hence, this approach ensures that every week of the year will be covered using a start/end date of the two extremes of the year. Similarly, if a file is meant to run from the start to the end of a given day, set the time range from midnight to 11:59PM to ensure coverage for the entire day.

### **The remote sign computer is rebooting continuously.**

More than likely, you have inadvertently set up a REBOOT object to run as part of the continuous schedule. Create a time/date restriction, and set up the reboot object to run in a very narrow time range. For example, if you wish the remote sign computer to reboot daily at 4:00 AM (when hopefully there are very few people around to witness the reboot), set up a time/date restriction to run on a daily basis, each day of the year, and set the time restriction to 4:00AM to 4:01AM. This ensures that when this time is reached, the sign computer can trigger a reboot. The rebooting process will always take a couple of minutes to achieve, hence, a 1-minute duration is more than sufficient to trigger such an event. Ensure that your current folder has a reboot file (a file ending with .RB) and drag it after the newly created time/date restriction. The reboot will now occur at the specified time .



# VISION SETUP WIZARD

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## INTRODUCTION

'**Vision Setup Wizard**' allows one to set up a sign in a simple, step-by-step manner. '**Vision Setup Wizard**' is meant to handle the most common types of signs. If the sign to be setup is older or very specialized, it is possible that its characteristics will not be covered by the options presented in this Wizard. In that case, it will be necessary to run '**Vision Setup**' (press '**Cancel**' at any time to exit '**Vision Setup Wizard**').

Before commencing, it would be helpful to gather information about the sign. Read through this section to get an idea of what information is required.

## WELCOME TO VISION SETUP WIZARD

This preliminary step describes how to use the Wizard.

Pressing '**Next**' will advance to the next step of the Wizard. The program will alert you if any of the information is missing or incorrect.

Pressing '**Back**' will go back to the previous step of the Wizard.

Pressing '**Cancel**' at any time allows you to exit the program without setting up the sign.



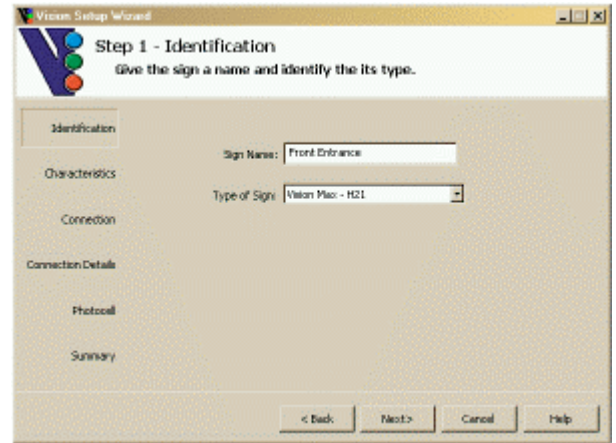
## STEP 1: IDENTIFICATION

In this step you must give the sign a name and identify its type.

**Sign Name** - Give the sign a name. Note: the program disables characters not allowed in a name.

**Sign Type** - There are two options for sign type:

Choose '**Vision Max - H21**' (the most common type) unless the sign can display 256 shades of one color or full color (i.e., millions of colors). In that case, choose '**Vision Max - H22**'.



## STEP 2: CHARACTERISTICS

In this step you must specify the number of pixels wide and high, and the pixel color(s).

**Model Number** - This information is optional. If you enter the model number of the sign, for example **18HDD72X16**, the Wizard will automatically extract the number of pixels wide and high.

**Width in Pixels** - Enter the number of pixels the sign has from left to right.

**Height in Pixels** - Enter the number of pixels the sign has from top to bottom.

**Color Scheme** - Choose the option that describes the color or colors the sign can display.



## STEP 3: CONNECTION TYPE

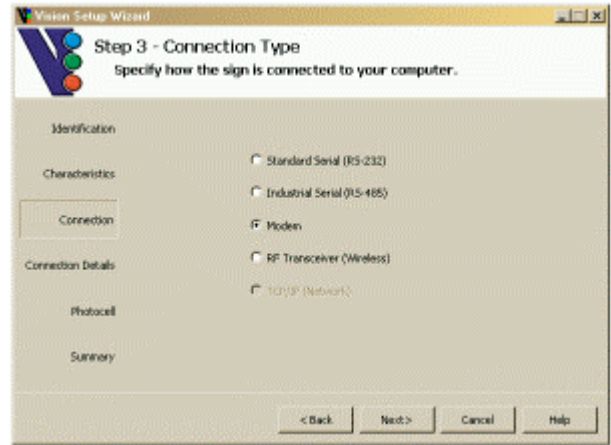
In this step you must specify how the sign is connected to your computer.

**Standard Serial (RS-232)** - Choose this option if the sign is connected directly to your computer via an RS-232 serial port. An RS-232 serial port is usually a nine-pin connector found on the back of your computer. Alternately, the sign could be connected via an RS-232 converter connected to a USB port.

**Industrial Serial (RS-485)** - Choose this option if the sign is connected to your computer via an RS-485 connection. This method of connection is used when the distance to the sign is greater than 20 feet. If the sign is connected via RS-485, the cable coming from the sign will be attached to a small beige box. The box in turn will be connected to the computer. The box will be labeled 'Transio Moxa A53' or something similar.

**Modem** - If the sign is connected via a telephone line, choose this option.

**RF Transceiver (Wireless)** - If there is a wireless connection to the sign, choose this option. Somewhere in the vicinity of the computer will be a small box with an antenna attached.



## STEP 4: CONNECTION DETAILS

In this step you must give further details about the connection to the sign. Note: depending on the type of connection that was previously selected, some of the options below might not be present.

**Serial Port** - No matter what connection type was selected in the previous step, all must eventually connect to the computer via a serial port. If you are unsure which 'COM' port to select, select 'COM1'. If you are using a **Serial-to-USB** converter, select the highest available 'COM' port. If the selection is incorrect, it can always be changed later by running 'Vision Setup'.

**Baud Rate** - 'Baud Rate' is the connection speed to the sign. In most cases, there will only be one available baud rate. If there is more than one selection and you are unsure which to choose, select the lowest baud rate.

**Address** - If more than one sign is connected to a port on the computer, each sign must have a different address. The address of a sign is set at the factory or during installation. If a sign is addressed, it will display its address briefly when first powered on. Enter that number here. If there is only one sign connected, leave the address at '0'.

**Phone Number** - If the sign is connected via modem, enter its phone number here. Brackets and dashes are not required (however, be sure to enter a '1' and/or the area code if required).

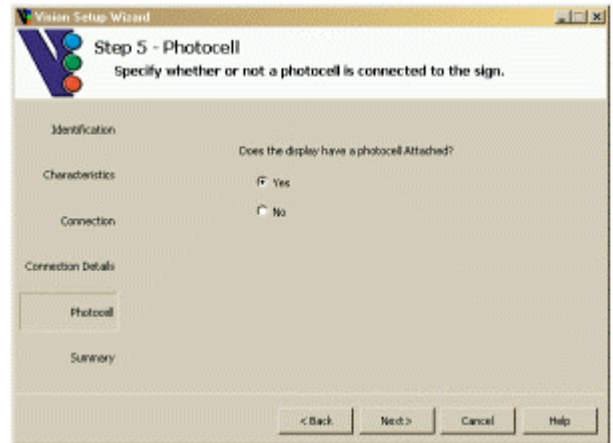
**Land Line/Cell Modem** - Select the appropriate option for the type of phone connection to the sign.



## STEP 5: PHOTOCCELL

In this step you must specify whether or not a photocell is connected to the sign.

A photocell allows the sign to dim during the night for both clarity and power savings. Most signs have photocells attached, so if unsure, select **'Yes'**.



## FINAL STEP: SUMMARY

After the steps have been completed, a summary of all sign information will be shown. Take this opportunity to verify that everything is correct. If not, press **'Back'** one or more times to reach the step in question and correct the settings as needed.

If all information is correct, press **'Finish'**. The sign will be saved for use with other applications in **'VisionSuite'**.





# VISION UPDATE

## OVERVIEW

Vision Update is the core application for updating your sign with new messages and a new schedule. Vision Update provides a straightforward user interfaces to quickly view the sign's current messages, examine the new schedule, view the list of messages, and to update the sign appropriately.

Vision Update is designed as an updating system for only Message signs. Updating Video Systems is accomplished by other means due to the uniqueness of the video systems.



## HOW VISION UPDATE WORKS

When the main window is opening, Vision Update will automatically connect the sign that you've selected and will automatically scan the Export folder where the "to be sent" files are located. Once you are connected to the sign, you can update the sign by simply pressing a Send button. Depending upon the type of communication connection you have to the sign, the rate of updating the sign will vary.

The menu items give you access to various functions to examine the schedule and message list, the files at the sign, and entering passwords for control & access to the sign.

To get a quick understanding of the basic features of Vision Update, please review the [Examples](#) below or go through the [Tutorial](#).

Vision Update's sole purpose is for updating the sign with new messages and a new schedule. It is not intended for complex diagnostics or sign maintenance. For more advanced sign control, please refer to the main [Vision Setup](#) help.

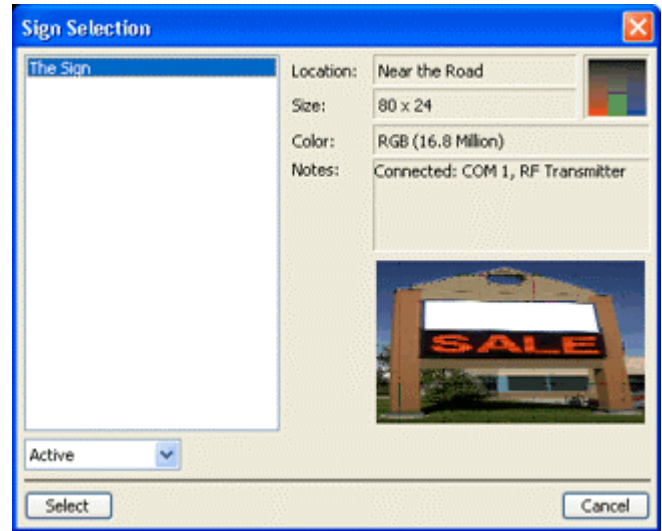
## OPENING VISION UPDATE

When more than one sign has been configured for your PC, you will see this dialog each time you open a VisionSuite application. If you only have one sign configured for your PC, then it will automatically load as the sign to use. Therefore, you will not see this dialog.

Once the sign has been selected, all of its capabilities are automatically loaded into Vision Update. The characteristics of the sign are taken into account and the application customizes its interface for the sign.

Vision Update can be launched in two different ways. First, by selecting the Vision Update button from within the main VisionSuite window. Second, by selection “One Touch Update” within Vision Schedule. When One Touch Update is selected, you will not see the Sign Selection dialog since Vision Update automatically knows which sign your schedule file has been created for.

When CANCEL is pressed, Vision Update will not open and you will be returned to the main VisionSuite window.



## THE MAIN WINDOW

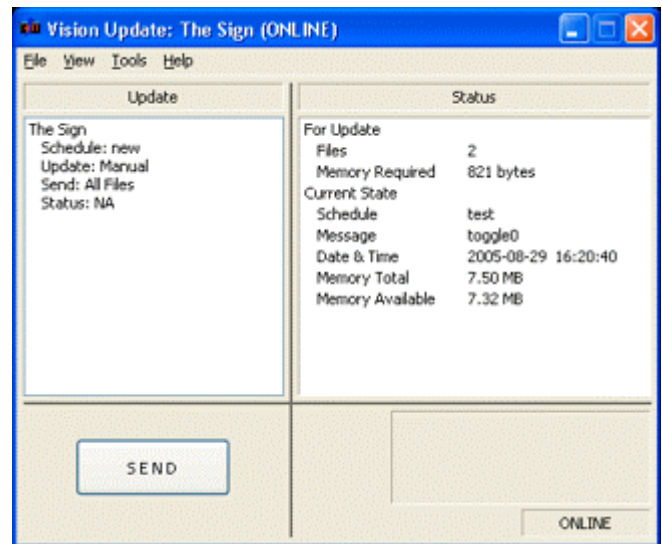
The main Vision Update window has several regions.

The **Update** region shows the name of the new schedule, the type of update process, and the status of the update.

The **Status** region displays the file information on the schedule and messages that need to be sent, the currently playing schedule & message, the current time and date at the sign, and the memory of the sign.

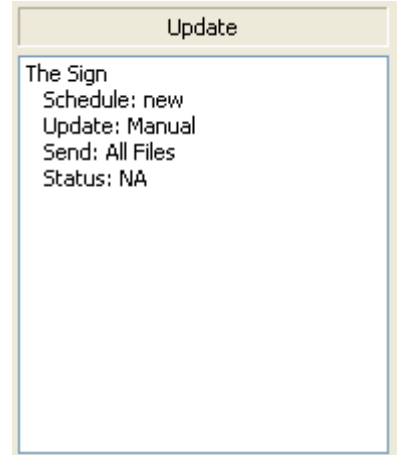
The **Send (or Start)** button which allows you to start the transmission of the files to the sign.

The **Communication Status** region which displays information about the transmissions between the PC and the sign.



**Update Region**

The Update region states the name of the sign, the name of the new schedule, the type of update method (manual or batch modes), the type of “send” operation (currently defaults to SEND ALL FILES), and the status of the update process. Some sign systems will have additional information after these core items.



**Status Region**

This region shows the number of files to be sent, the amount of memory required to send the files, the currently playing schedule & message, the current date & time, and the total & available memory at the sign’s electronic controller.

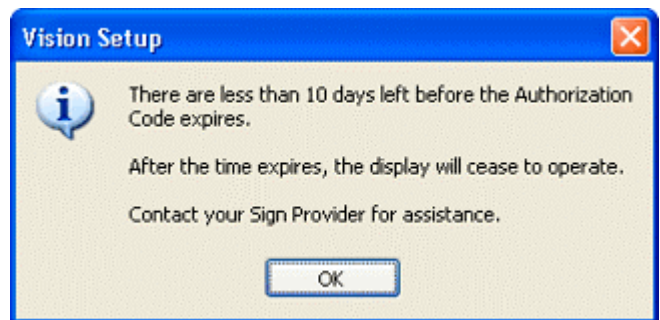
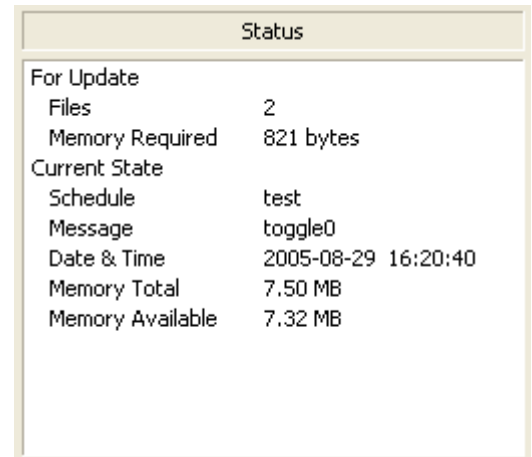
This information is useful for diagnostic purposes:

- Is there enough memory at the sign for the message?
- Is the sign currently running?
- Does the number of files seem reasonable given the schedule that I just saved?

When sending the data, the software will only validate the size of the files. The information provided will verify that you’re updating the sign with the correct files.

The *Operational Time* section contains the amount of time left for the sign before an AuthorizationCode must be entered.

**Ten days** (and less) before the “time” expires, a message box will appear whenever the user connects to the sign. **Once the time expires, the sign will no longer respond to updates and the current schedule will stop running.**

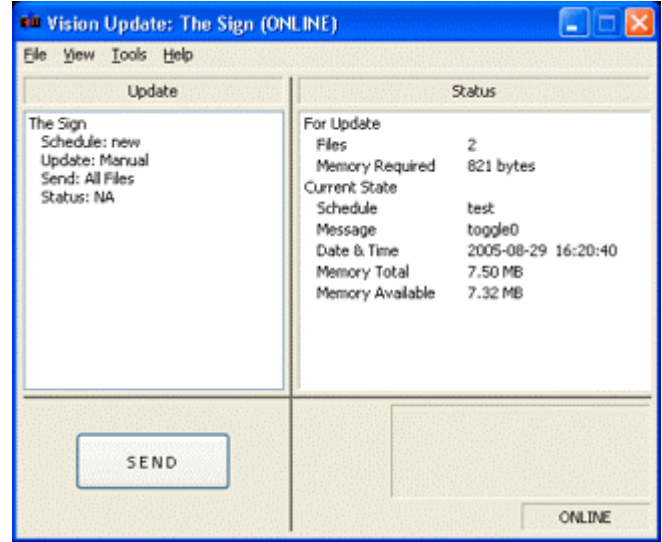


**Send/Start Button Region**

Vision Update operates in two modes; *Manual* and *Batch* modes. The button will be labeled as “SEND” when in Manual mode. You can enter into Batch mode by selecting *Batch Updates* from the Tools menu (see below for more information). When in Batch mode the Send button is renamed to “Start”.

Vision Update will update the sign in the following manner:

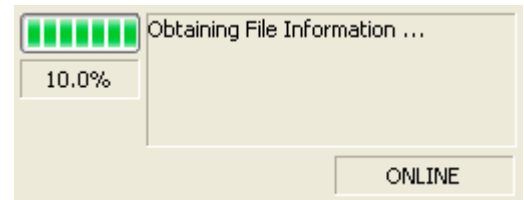
- Stop the Current Schedule
- Delete all files (or specific files)
- Transmit the New Schedule
- Start the New Schedule
- Transmit the New Messages
- Obtain the New File Information



Using this methodology, the sign will start playing the first message that arrives at the sign. This means that the sign is blank for the minimum amount of time.

**Communication Status Region**

As in Vision Setup, this section displays the status of the connection from the PC to the sign. For more information, please refer to the Vision Setup help.

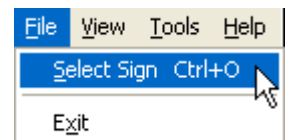


**FILE MENU**

The File menu gives you access to two items:

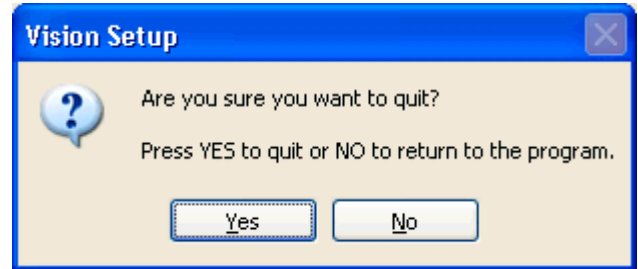
**Select Sign** allows you to select a new sign. If you have several different signs (different matrix size and/or color), then you can use this function to access the Sign Selection dialog. Once selected, Vision Update will disconnect from the current sign and reconnect to the new sign. The new schedule file from the appropriate Export folder will also be read.

**Exit** closes Vision Update.



### Exit

You can exit the application by one of two methods. First, you can select “Exit” from the File menu. Second, you can press the “X” (close) button at the top right of the application. In the second case, a similar dialog as shown to the right appears to ensure that you want to close. By purposely selecting the “Exit” from the File menu, you can bypass this dialog.



## VIEW MENU

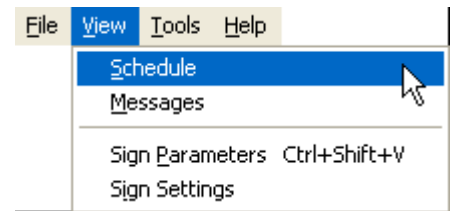
The View menu gives you access to various information.

**Schedule** will display the “text version” of the schedule that will be transmitted to the sign.

**Messages** will display a list of the files within the Export folder that will be transmitted to the sign.

**Sign Parameters** displays the current information about the sign.

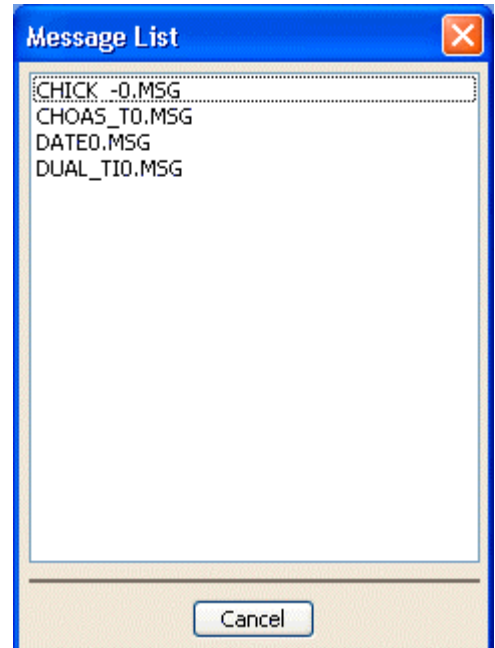
**Sign Settings** displays the some of the sign’s settings saved within Vision Setup.



### Messages

As shown on the right, the list of files is displayed in a very basic manner.

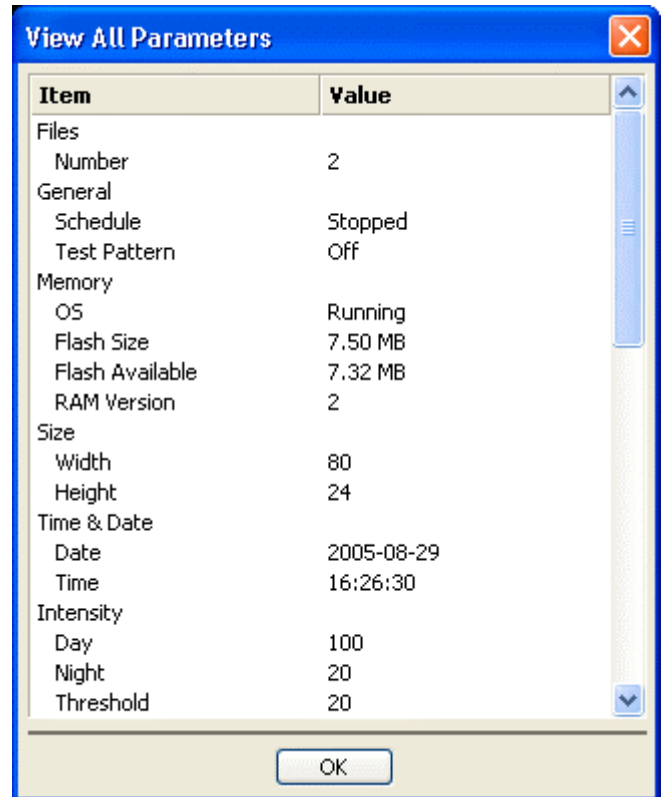
Notice that the names are not the same as those within Vision Schedule. During the “export” of the schedule, the message names are truncated for certain types of signs. Some signs have a limit of 8 characters for message and schedule file names.



**Sign Parameters**

As shown on the right, the current settings of the ONLINE sign are displayed. This is a much more detailed list of information compared to the information shown in the main window.

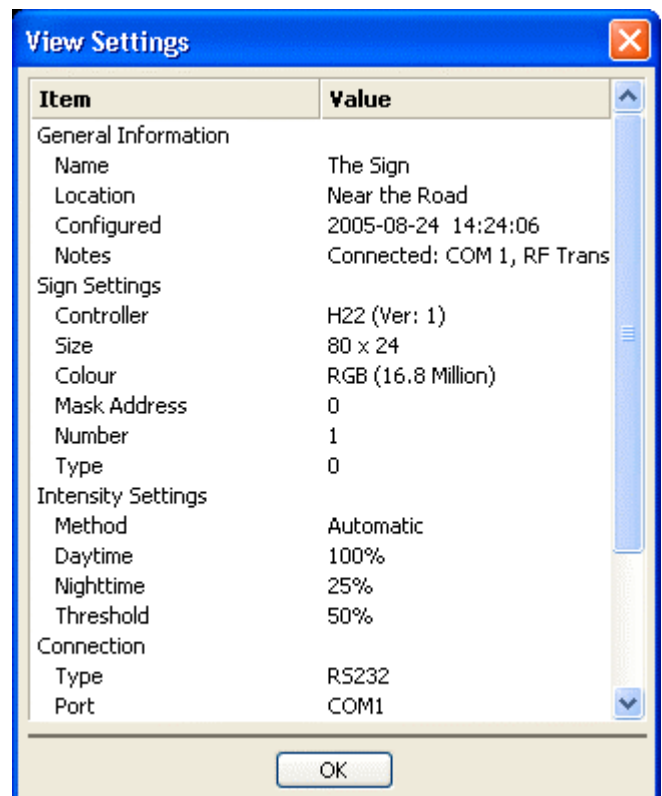
For more information on the setting up of a sign, please refer to the main Vision Setup help.



**Sign Settings**

As shown on the right, most of the basic information about the sign is displayed. The information displayed is equivalent to the information set when the sign was created in Vision Setup.

For more information on the setting up of a sign, please refer to the main Vision Setup help.



## TOOLS MENU

The Tool menu gives you access to the following items:

**Batch Updates:** Select signs to update at some time in the near future.

**Exit Batch Mode:** Exits from batch mode so that Vision Update goes back to the behaviour of updating one selected sign when "Send" is pressed.

**Connect to Sign:** Connect to an OFFLINE sign.

**Disconnect from Sign:** Disconnect from the current ONLINE sign.

**View List of Files on Sign:** Presents a list of all files on the selected sign, including schedule and content.

**Hardware Password:** Enter the hardware password for the sign. This value has also been setup in Vision Setup and saved to the sign.

**Test Communications:** Run the standard Test Communications tool in order to verify connection to the sign.

**Refresh:** Update the "Status" region information on the main window.

**Options:** Control the options for this application.

### Batch Updates

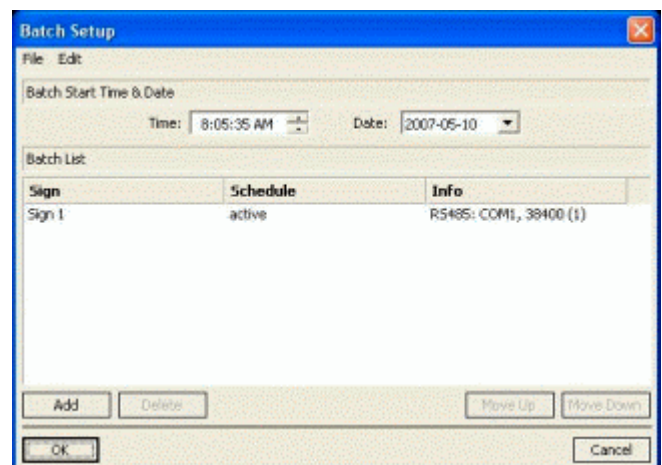
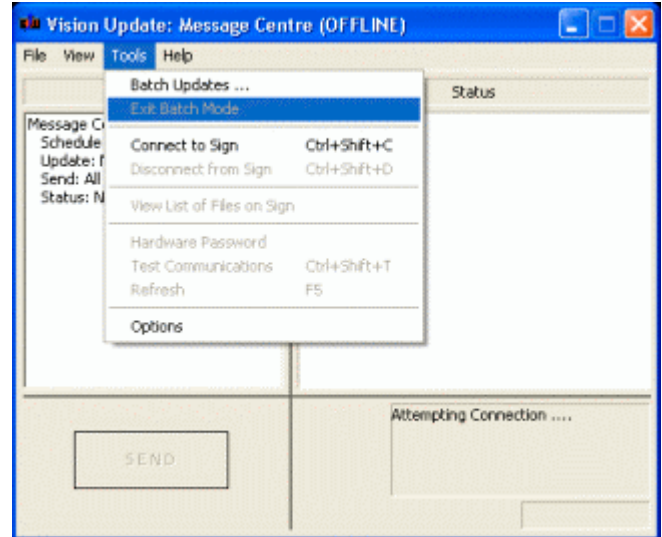
The Batch mode is a new feature to VisionSuite 3.0. It has been designed for updating signage at times that are more convenient for the user.

You can setup a time and date to run the batch process. You can update as many signs as required. Each sign is processed one at a time. If a sign fails to update, the batch process will continue to the next sign.

Press *Add* to select a new sign for the batch process. *Move Up* and *Move Down* will change the order of the signs. *Delete* will remove the sign from the list.

It is very important to make sure that the schedule and messages have been saved properly prior to running the Batch Setup.

Pressing *File* then *Save Batch File* saves the currently selected signs and schedules for later recall. Pressing *File* then *Load Batch File* loads a previously saved batch file.



Pressing *Edit* then *Clear List* clears the list of signs. Previous versions of Vision Update could not update signs in batch mode when the signs had hardware passwords. This has been remedied in the latest version, thereby providing greater security. Pressing *Edit* then *Enter Hardware Passwords* sets hardware passwords for selected signs.

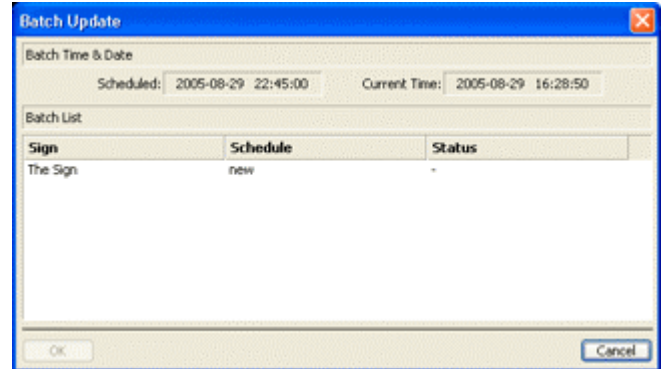
Once the Batch mode signs have been selected, the SEND button on the main window has changed to START.

By pressing the START button, the dialog on the right will appear.

The current time will update once every 5 seconds until the "Scheduled" time occurs.

Afterward, the batch of updates will be processed. The Status column will indicate that the sign is being updated. Once the update is finished, Vision Update will automatically disconnect from the sign.

The Batch Update window will remain open until the CANCEL or OK button is pressed.



**Admin or Hardware Passwords**

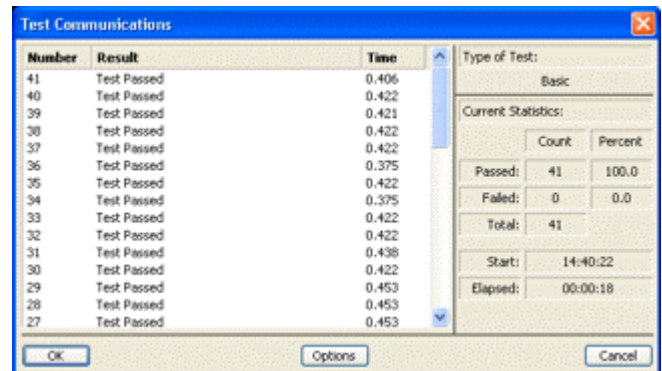
If the Hardware password is set, press "Hardware Password" button and the "Password Entry" dialog will appear. The OK button remains disabled until a password is entered. If the password is incorrect, an appropriate message is displayed.



**Test Communications**

As in Vision Setup, the Test Communications dialog can be used to test the connection to the sign.

For more information on the setting up of a sign, please refer to the main Vision Setup help.



## Options

The Options selections have been greatly enhanced from the previous versions. The list on the left indicate all of the sections of control that are available.

The sections are as follows:

- **General** – Basic control of certain operational features of the interface.
- **Sending** – Basic control on how files are sent to the sign.

### Options - General

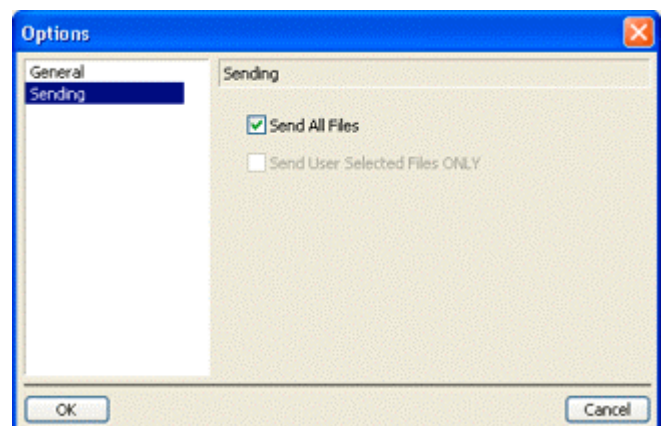
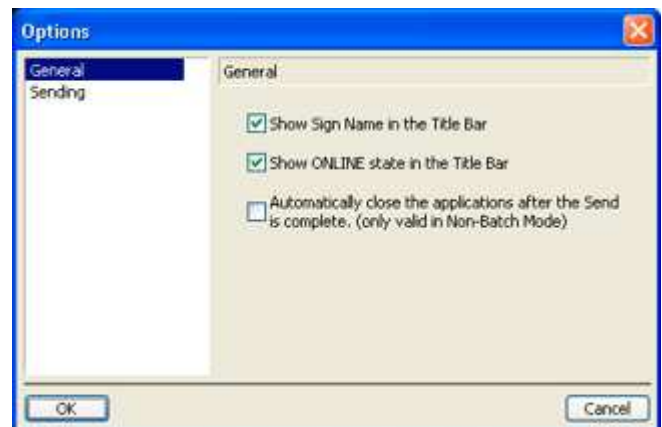
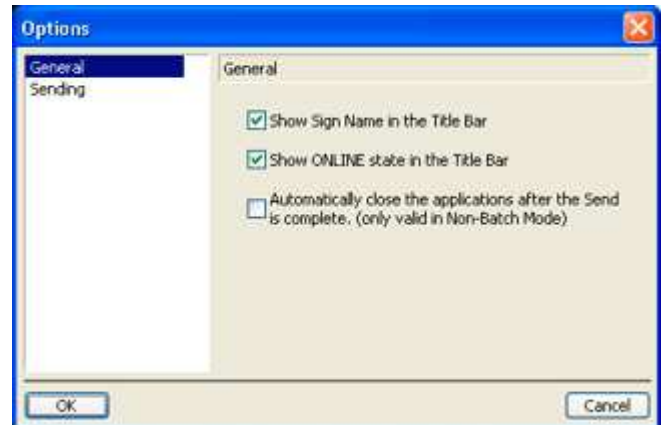
The General section allows the following controls:

- Sign Name – Display the sign name in the title bar as well as within the Update region.
- Show ONLINE – Display the sign's ONLINE status within the title bar.
- Automatically Close – When in Manual mode, close the application once the update has finished.

### Options - Sending

The Sending section allows the following controls:

- Send All Files – This will force the software to automatically delete all files at the sign and copy all new files to the sign.
- Send only Selected – This will disable the deletion of all files at the sign. Only the selected files will be sent to the sign.



## FAST KEYS

Below is a list of all of the acceleration keys for access to various features.

CTRL+O	Select a new sign
CTRL+SHIFT+V	View the list of Sign Parameters
CTRL+SHIFT+C	Connect to the sign
CTRL+SHIFT+D	Disconnect from the sign
CTRL+SHIFT+T	Run the Test Communications
F5	Refresh data within the Status Region

## TROUBLESHOOTING

### **When Vision Update starts, it always shows that my sign is OFFLINE. What is wrong?**

Several items could be wrong. Please refer to the “Troubleshooting” section within Vision Setup for more information on this problem.

### **I cannot update my sign’s operating system from the Vision Update dialog.**

Updating the sign’s operating system can only be performed within Vision Setup. For more information, please refer to the main Vision Setup help.

### **Where do I enter my “Authorization Code”?**

Entering your AuthorizationCode (in order to turn-off the “time left” display) is done within Vision Setup. For more information, please refer to the main Vision Setup help.

### **The Time Left entry is showing “Expired” even though I know I have several days left before I need to enter in the Authorization Code.**

The sign has not expired. You have set a “Hardware Password” and you have not yet entered it. Go to the “Hardware Password” dialog and enter your password. Once completed, the time limit will display as expected.

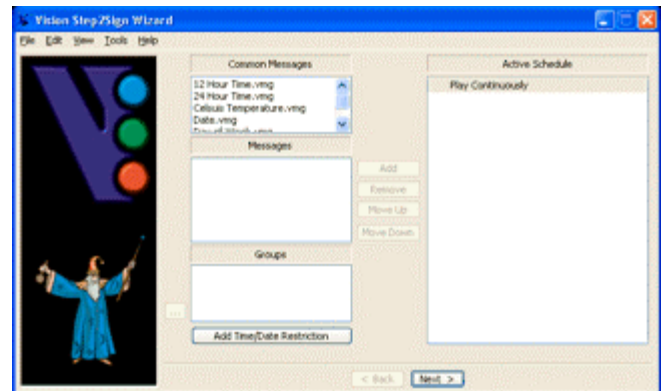


# VISION STEP2SIGN WIZARD

## OVERVIEW

Vision Step2Sign Wizard is an application that steps you through the process of creating messages, creating a schedule, and updating the sign. You may use Step2Sign for all of your messaging needs or use it in combination with the other VisionSuite applications.

Vision Step2Sign Wizard is designed as an updating system for only Message signs. Updating Video Systems is accomplished by other means due to the uniqueness of video systems.



## HOW VISIONSTEP2SIGN WIZARD WORKS

When the first window opens, Vision Step2Sign Wizard steps you through the process of creating & saving a schedule and updating a sign. A simplified method of creating messages is also available. **Next** and **Back** buttons are present to allow you to move between the four major steps within the Wizard.

The menu items give you access to various functions to create messages and groups of messages, access the sign features, and setup options.

To get a quick understanding of the basic features of Vision Step2Sign Wizard, please review the [Examples](#) below or go through the [Tutorial](#).

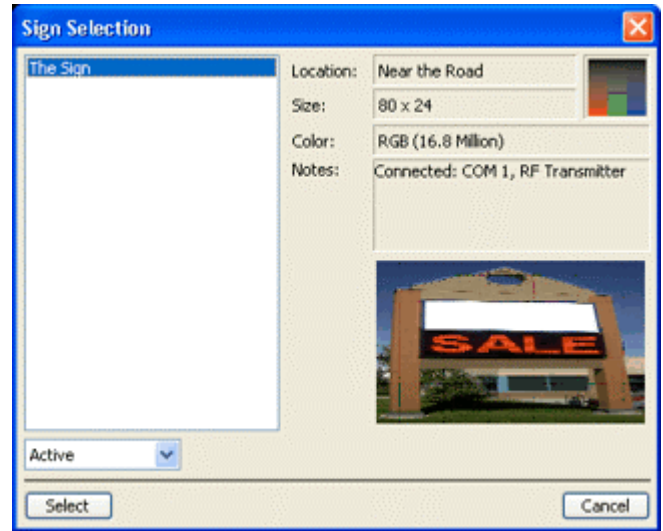
For more advanced message creating and scheduling, please refer to the main help for [Vision Edit](#), [Vision Quick Text](#), and [Vision Schedule](#).

**OPENING VISIONSTEP2SIGN WIZARD**

When more than one sign has been configured for your PC, you will see this dialog each time you open a VisionSuite application. If you only have one sign configured for your PC, then it will automatically load as the sign to use. Therefore, you will not see this dialog.

Once the sign has been selected, all of its capabilities are automatically loaded into Vision Quick Text. The characteristics of the sign are taken into account and the application customizes its interface for the sign.

When CANCEL is pressed, Vision Quick Text will not open and you will be returned to the main VisionSuite window.

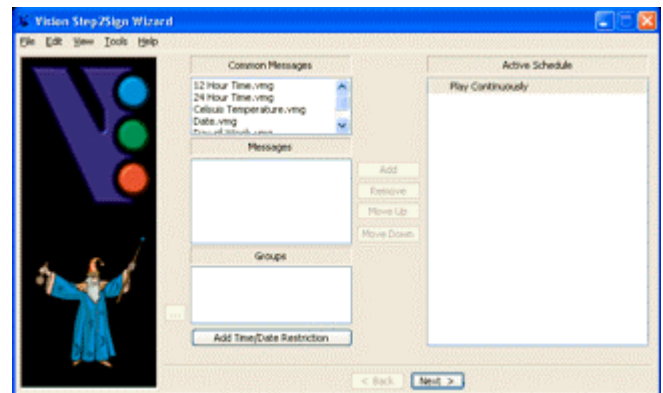


**THE MAIN WINDOW - STEP 1: CREATING A SCHEDULE**

When Vision Step2Sign Wizard opens, the first step is the creation of a schedule.

This window has several regions; the **Common Messages** show the auto-generated messages; the **Messages** show the user created messages; the **Groups** shows the user created groups of messages; the **"Add Time/Date Restriction"** button for adding new time/date ranges; the **Operation Buttons** for adding, removing, and moving messages; and finally, the **Active Schedule** which shows the list of messages and time ranges.

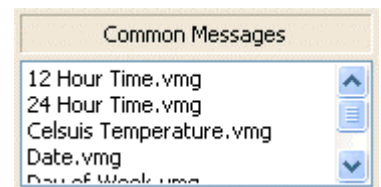
Press the *Next* button to proceed to the saving of the schedule.



**Common Messages**

The list of Common Messages is automatically generated the first time you open Vision Step2Sign Wizard for the particular sign. These messages can be altered within the Wizard.

Therefore, when you first get your sign, you will be able to use these messages to create a schedule and update the sign.



## **Messages**

The list of Messages is generated by the user when any messages are created or added to Vision Step2Sign Wizard.

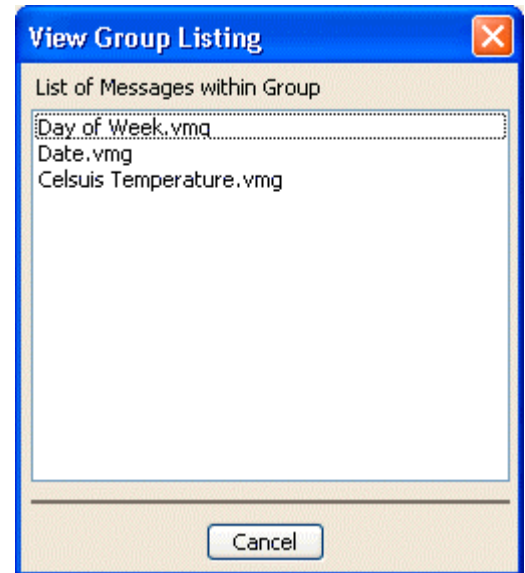
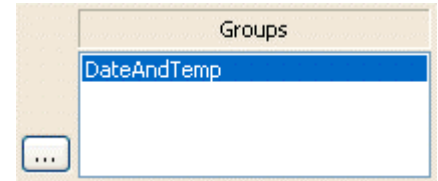
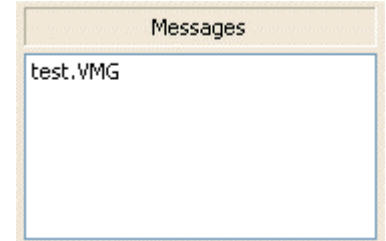
This list of messages resides in a special folder dedicated for the Wizard. Altering any original “added” message will not change the file that has been added to the Wizard.

## **Groups**

The list of Groups is generated by the user when a new group is created (via the Edit menu).

By pressing the “...” button, the View Group Listing dialog appears. As shown, you can quickly view the list of files that have been added to the selected group.

If you wish to edit the group, select the group name within the Groups list and select the “Edit a File” from the Edit menu.



**Add Time/Date Restriction**

By pressing the “Add Time/Date Restriction” button, you will get the “Configure Time/Date Restrictions” dialog which will allow you to enter a new time/date section to the schedule.

The top 7 checkmark buttons indicate the **days of the week** you want the messages to play.

There are two types of scheduling: **Block** and **Continuous** modes. By default, Block mode will appear in the Configure Time/Date Restrictions dialog.

Block mode, as the top-right icon indicates, means that the event is scheduled every day between specific times.

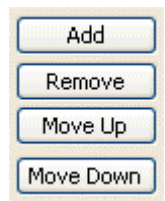
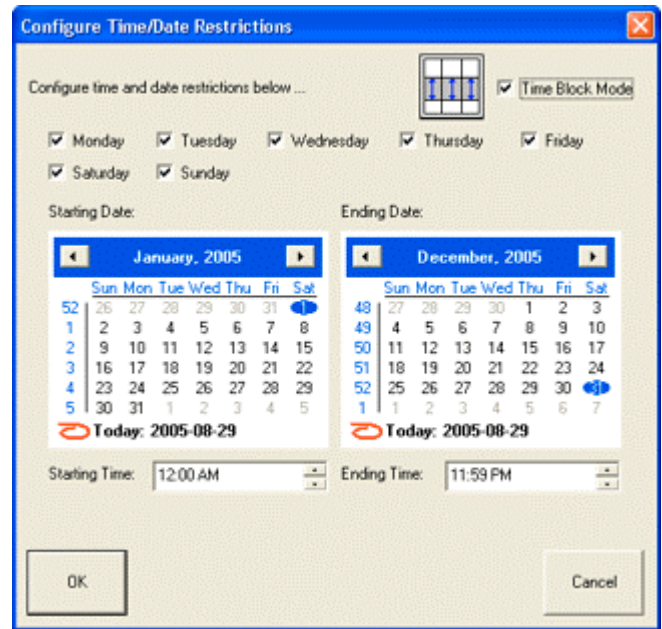
Continuous mode means that the event is schedule from a start time & date to an end time & date. Depending on how you want to schedule events, one method may be better than the other.

For more information, refer to the Vision Schedule help.

**Operation Buttons**

These four buttons allow you to add & remove files from the Active Schedule and move files up & down the Active Schedule list.

Depending upon which file you have selected, the button automatically become enabled or disabled.

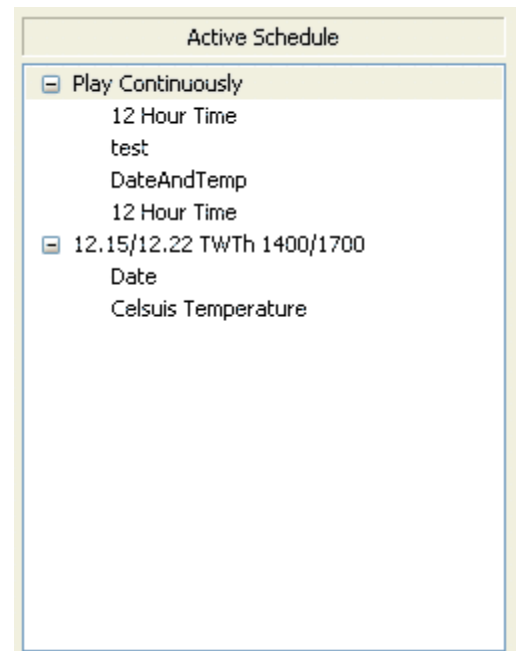


**ACTIVE SCHEDULE**

As within Vision Schedule, the first element within the schedule list is a “Play Continuously” Time/Date restriction. This entry cannot be changed. All messages underneath this entry (up to the next Time/Date restriction) will play all the time.

The other Time/Date restriction shown in the image to the right shows the restriction in an *abbreviated format*. This selection is controlled within the Options dialog under the Tools menu.

The Time/Date restriction shows the start & end date, the days of the week, and the start & end time within each day.

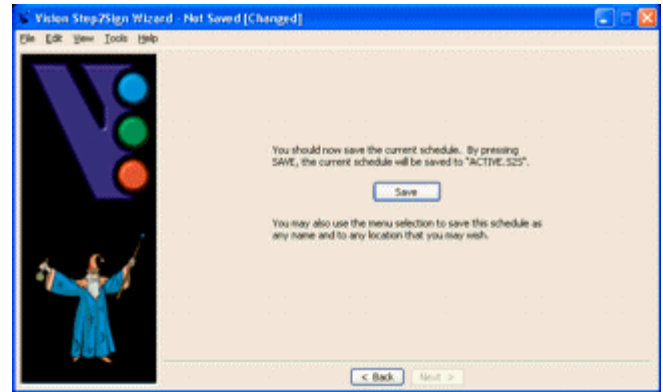


## THE MAIN WINDOW - STEP 2: SAVING A SCHEDULE

Once the schedule has been created, the next step is to save the schedule. Depending upon the options that have been set, this step may not show.

You can either press the SAVE button to automatically save the schedule to a default file or select Save from the File Menu.

Once the file has been saved, the Wizard will automatically proceed to the next step.



When the schedule is saved without any errors, the following message (with the appropriate sign name folder) is displayed.

This message indicates that there were no problems in rendering the messages within the schedule for this sign.



## THE MAIN WINDOW - STEP 3: UPDATING THE SIGN

This is a very basic version of Vision Update. Once the sign connects to the sign, the **SEND** button will become enabled.

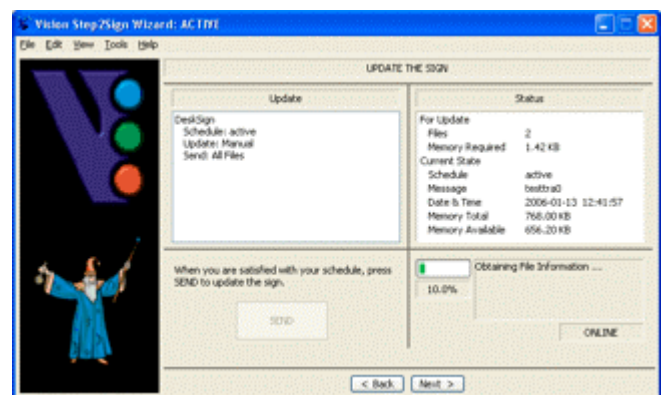
The Wizard is designed to automatically delete all files at the sign before transmitting the new files. This is optional within Vision Update.

As in Vision Update, the sections are very similar:

The **Update** region shows the name of the new schedule, the type of update process, and the status of the update.

The **Status** region displays the file information on the schedule and messages that need to be sent, the currently playing schedule & message, the current time and date at the sign, and the memory of the sign.

The **Send** button starts transmitting files to the sign.

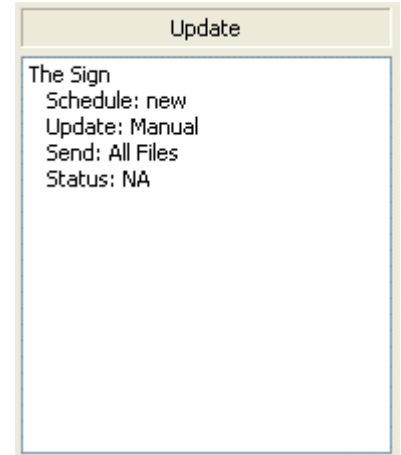


The **Communication Status** region displays information about transmissions between the PC and sign.

Batch Updating is not available within the Wizard.

**Update Region**

The Update region states the name of the sign, the name of the new schedule, the type of update method (manual or batch modes), the type of “send” operation (currently defaults to SEND ALL FILES), and the status of the update process. Some sign systems will have additional information after these core items.

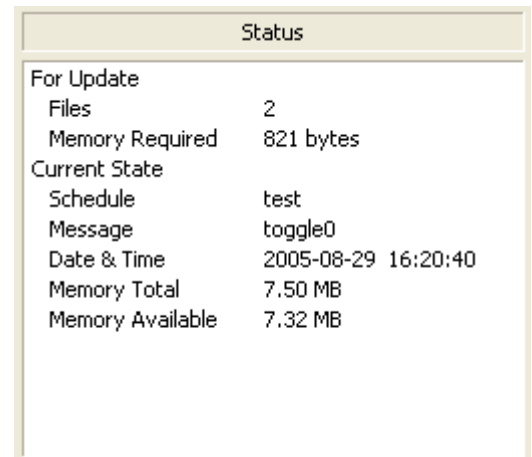


**Status Region**

This region shows the number of files to be sent, the amount of memory required to send the files, the currently playing schedule & message, the current date & time, and the total & available memory at the sign’s electronic controller.

This information is useful for diagnostic purposes, e.g.:

- Is there enough memory at the sign for the message?
- Is the sign currently running?
- Does the number of files seem reasonable given the schedule that I just saved?



When sending the data, the software will only validate the size of the files. The information provided will verify that you’re updating the sign with the correct files.

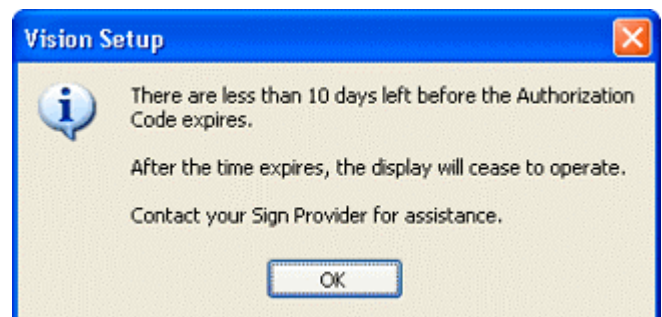
The *Operational Time* section displays the amount of time left for the sign before an Authorization Code must be entered.

**Ten days** (and less) before the “time” expires, a message box will appear whenever the user connects to the sign. **Once the time expires, the sign will no longer respond to updates and the current schedule will stop running.**

Once the sign has been updated, the Wizard displays the following message.

If anything goes wrong during the transmission of the new schedule and messages, errors will display within the status region of the window.

If errors persist, then use Vision Setup to diagnose the communications.



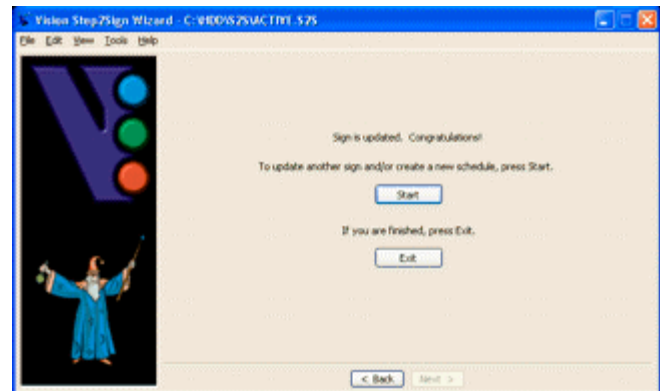
Once the sign has been updated, you can press the Next button to proceed to the final step.



## THE MAIN WINDOW - STEP 4: START AGAIN OR EXIT

The final step is very simple. By pressing **Start**, you will return to the first step. You can reconnect to a different sign or even redo the schedule.

Pressing **Exit** will close the application and disconnect from the sign.



## FILE MENU

The File menu gives you access to the basic functions for the current schedule:

**New Schedule** clears the current schedule.

**Load Schedule** opens a new Step2Sign Wizard schedule file.

**Save Schedule** saves the current schedule.

**Save As New Schedule** saves the current schedule as a different name.

**Export Library** exports the entire Vision Step2Sign Wizard library to another folder.

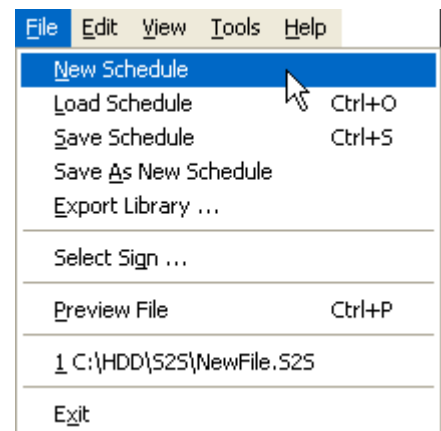
**Select Sign** selects a new sign. If you have several different signs (different matrix size and/or color), then you can use this function to access the Sign Selection dialog.

**Preview File** previews the currently selected file.

**Most Recently Used** file list allows you to select one of the previous four files that have been worked on.

**Exit** closes Vision Step2Sign Wizard.

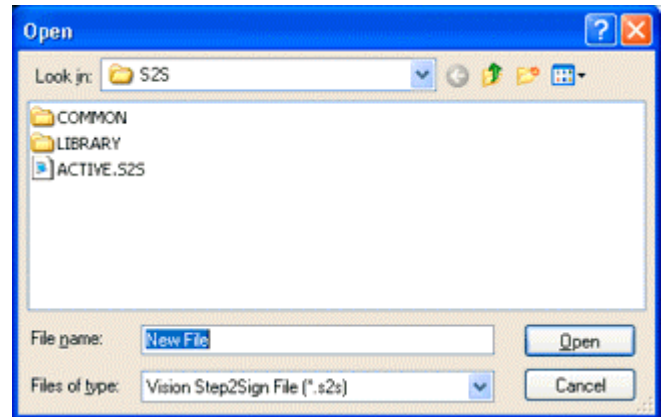
*Note that some of these selections become disabled within steps 2, 3 and 4.*



**Open/Save/Save As**

Whether you use Open, Save or Save As, the common File Dialog will appear (shown to the right). The title and the button will be named appropriately.

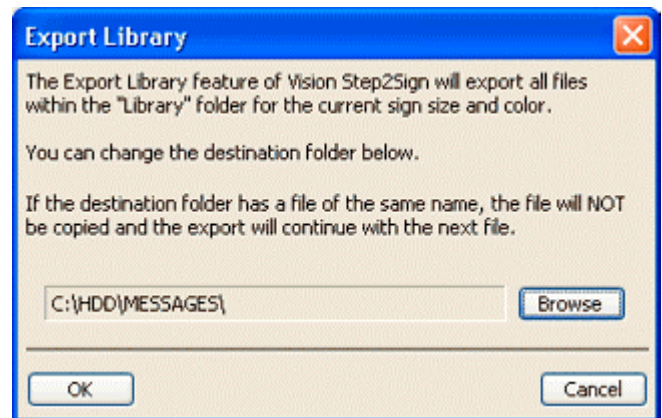
Note that all Vision Step2Sign Wizard schedule files have the file extension of S2S.



**Export Library**

The purpose of this feature is to allow you to migrate from the basic capabilities of the Wizard to the more advanced features within Vision Edit, Vision Quick Text, and Vision Schedule.

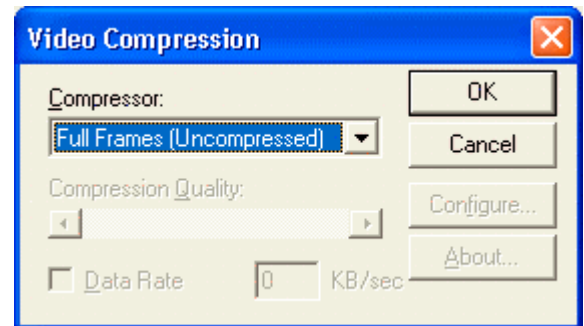
The export process will copy all message files within the S2S folders into desired export folder. Group messages will not be exported since they are only a combination of other messages.



**Preview**

When selecting Preview for the first time, you will see the Video Compression dialog. Although several “compressor” types may exist on your computer, it is recommended that you use “Full Frames (Uncompressed)”.

After selecting this the first time, the dialog will not be shown again.

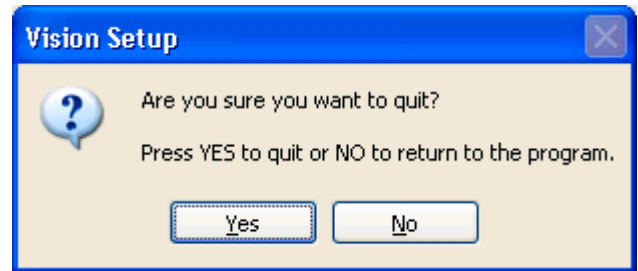


When the Preview window opens, the message will automatically start playing. You can move around the message, pause it, and even save it (if needed). When you're finished previewing the message, simply press the Done button to close the window.



## Exit

You can exit the application by one of two methods. First, you can select “Exit” from the File menu. Second, you can press the “X” (close) button at the top right of the application. In the second case, a similar dialog as shown to the right appears to ensure that you want to close. By purposely selecting the “Exit” from the File menu, you can bypass this dialog.



## EDIT MENU

The Edit menu gives you access to tools for managing your files and schedule.

**Create** allows you to create a New Message or a New Group.

**Add Existing File** allows you to select and add previously created Vision Edit or Vision Quick Text message files.

**Edit a File** allows you to edit the currently selected file.

**Delete a File** allows you to delete the currently selected file.

**Schedule** allows you to add, remove, or move files within the schedule list.

**Refresh Library** allows you to refresh the list of files shown in the various lists within Step 1.

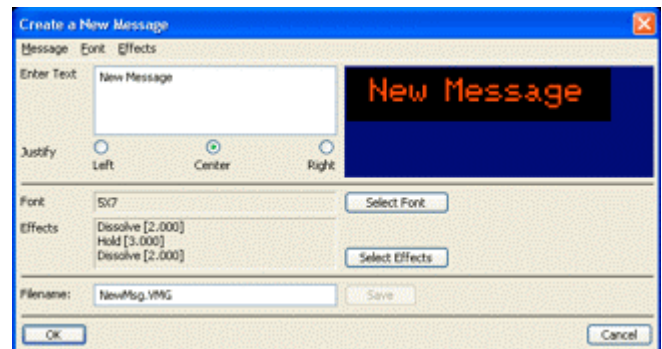
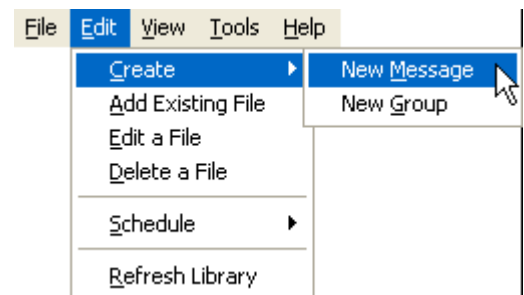
*Note that some of these selections become disabled within steps 2, 3, and 4.*

### Create a New Message

The Create a New Message window is a simplified version of the Vision Quick Text application. You can only enter text and you only have limited row control.

The text that is entered is automatically centered vertically. You have control over the horizontal justification by selecting the *Left*, *Center*, and *Right* buttons.

When entering text (inside the “Enter Text” control), you can press “CTRL+ENTER” to add a new line of text. You do not have row-by-row control as within Vision Quick Text.

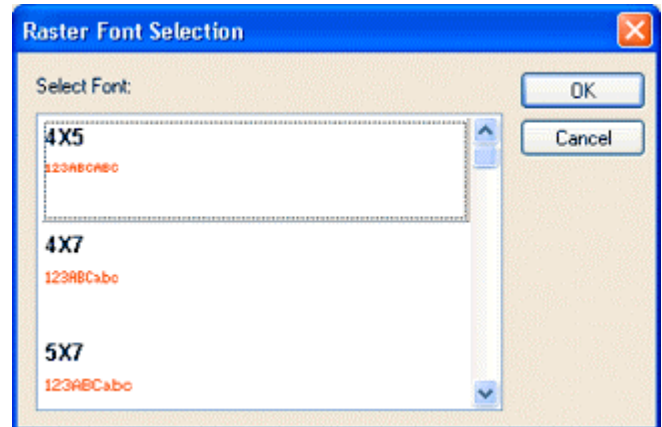


Font Selection

The font selection can be either “Raster Fonts” or “True Type Fonts”. This is chosen from the Menu.

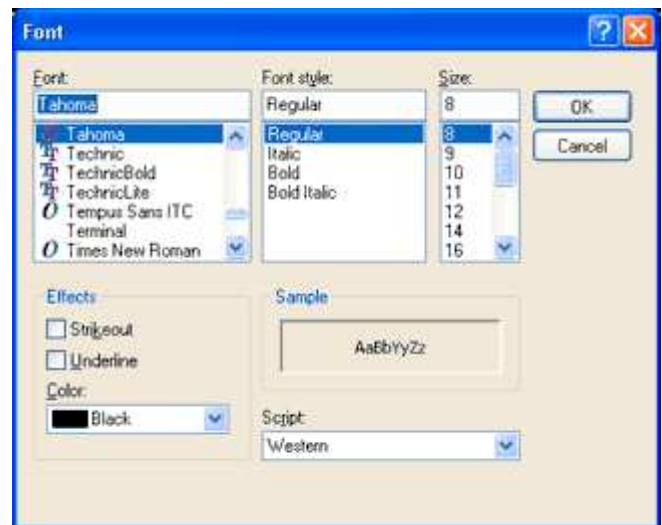
When “Raster Fonts” is chosen, the dialog shown on the right will appear.

The fonts that are displayed are part of the raster font database within the FONT subfolder where VisionSuite was installed.



When “True Type Fonts” is chosen, the dialog shown on the right will appear.

The fonts that are displayed are part of the True Type Fonts that are installed on your computer. The listing of fonts is controlled by Windows. For more information on the installation and removal of Windows fonts, please refer to your Windows documentation.



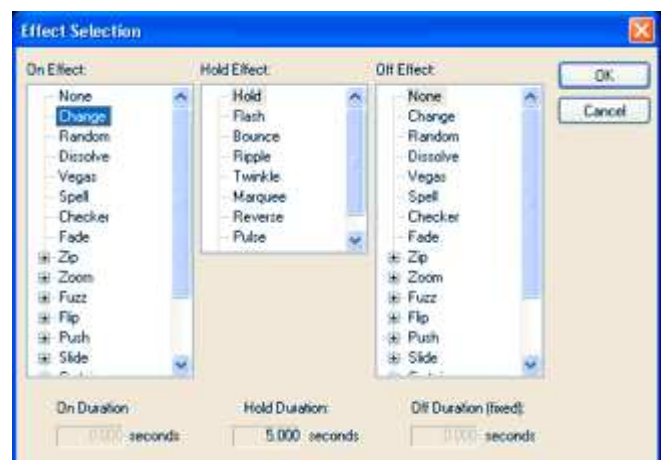
Effects Selection

When the “Select Effects” button is pressed, the dialog shown on the right will appear.

The Effects Selection dialog allows you to control the ON, HOLD, and OFF effects for this frame.

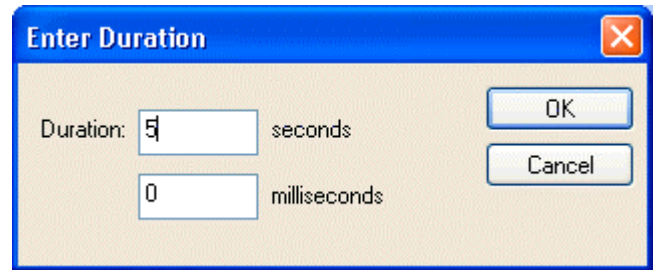
There are more than 50 effects to choose from. By default, the selection is “CHANGE”, “HOLD”, and “NONE” for the ON, HOLD, and OFF effects respectively.

Depending on the sign, the duration of the certain effects can be altered. For the H20/H21 controller based signs, both the ON and OFF effects have fixed durations. However, in all cases, the HOLD effect’s duration can be changed.

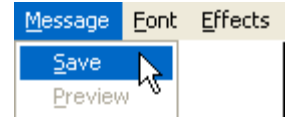


When you double-click the mouse over the duration for the HOLD effect, the “Enter Duration” dialog will appear. You can control the effects time by seconds and milliseconds. The fineness of this control is dependent upon the sign’s controller and the select effect.

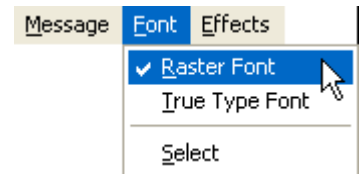
Once you’ve entered in a name for the new message, you can press Save to save the file to the library.



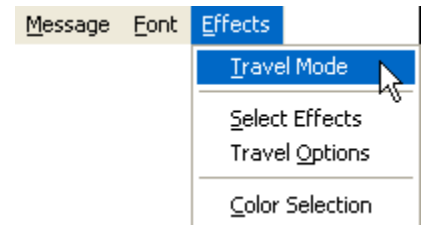
The **Message** menu item allows for *Saving* and *Previewing* of the file.



The **Font** menu item allows for selecting *Raster* or *True Type* fonts and the selection of the actual font. *Select* will show the appropriate font dialog for font selection.



The **Effects** menu item allows for selection of *Travel Mode* and control of normal *Effects*, *Travel Options* and *Color control*.

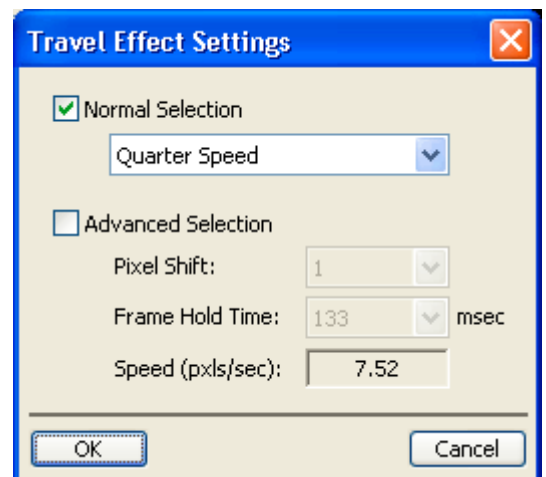


Travel Settings

The Travel Effect Settings dialog allows you to control the travel speed and direction for a frame. The Travel Mode can be set or not set per row. However, the speed and direction of travel is common for all rows within the frame.

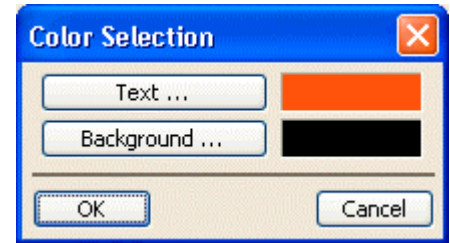
There are several predefined speed selections. These are accessed by selecting “Normal Selection” and then choosing one of the speeds within the pull-down list.

If you wish to set the speed to another value, then select “Advanced Selection” and choose the distance of each travel step and the time to hold the image at each step. The speed is shown as a guideline to how fast the text will travel.



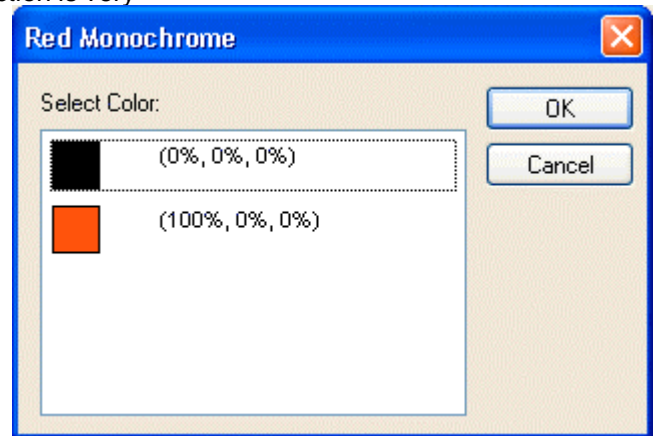
Color Selection

When the color button is pressed, the Color Selection dialog will appear. Press either button to select the color for text or the background color for the current row.



When the sign is monochromatic (one color), the color selection is very basic. The color selection dialog will show a list of colors and the percentage of RED, GREEN, and BLUE used for the color.

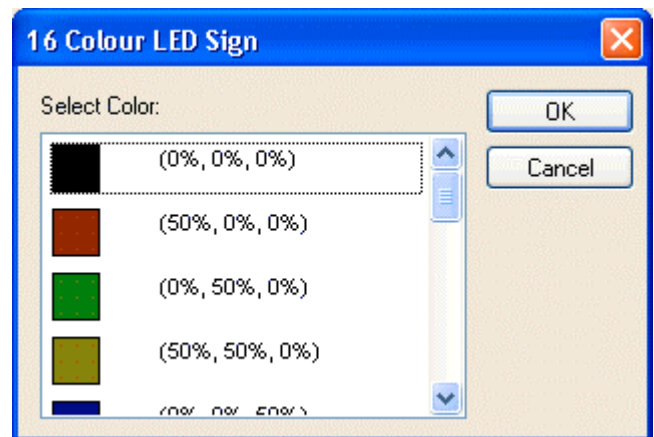
Shown to the right is the two color selection for a Red Monochrome sign.



For a 16 Color LED sign, the number of available colors increases. Correspondingly, the list grows.

The color selections do not necessarily represent the exact colors that the sign will display. The exact colors displayed may be slightly different due to the color wavelength of the LEDs used within the sign.

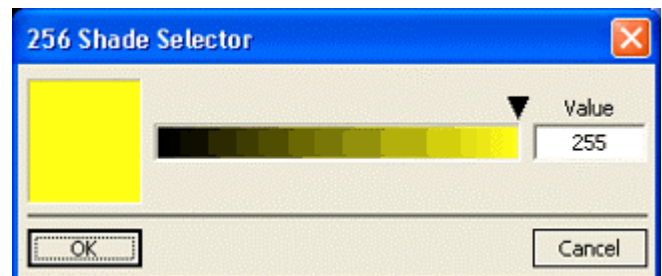
Nevertheless, the selection is "representative" of the colors that the sign will show.



The new 256-Shade signs have the capability of displaying 256 unique shades.

You select the desired color by moving the mouse cursor to the location on the horizontal color-bar and clicking the mouse. You can also enter a value manually within the Value control.

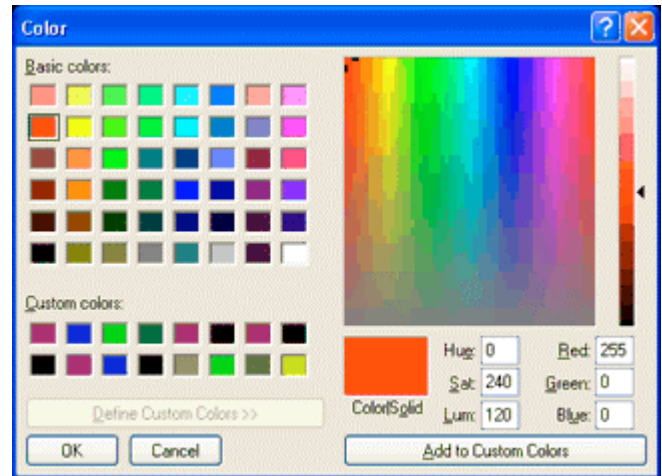
The control shown to the right is for an Amber sign with 256 shades.



When your sign is a full color sign, the color selection is vast. The color selection dialog, shown to the right, is the standard Windows color selection. By default, there are 48 predefined colors, 16 custom colors, and 16+ million other colors to select from.

The selection capability within this Windows dialog is based on the color capability of your PC's graphics card and monitor. If you have a computer that only has 256 colors, this display will not be as extensive. Nevertheless, it may be adequate for your sign.

It is recommended that your PC has full color capabilities in order to have full color selection.

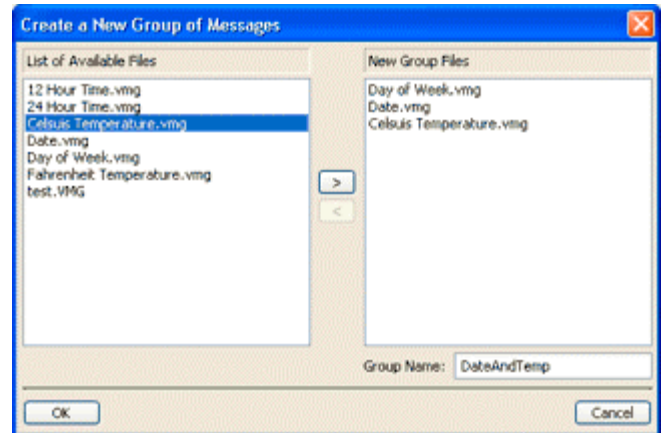


**Create a New Group**

When the window appears, you will have all the message files within "Common Messages" and "Messages" lists shown on the left of the window.

By pressing the right-arrow button, you can add a selected file to the "New Group Files" list. Press the left-arrow button to remove selected files from the group list.

Once a name is given to this new group of messages, you can press the **OK** button to save the group.



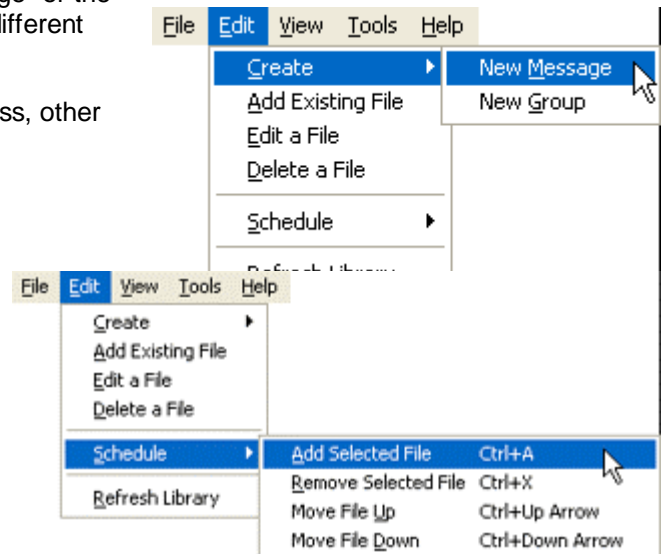
**Edit a File**

When "Edit a File" is selected, either the "Create a New Message" or the "Create a New Group of Messages" dialog will appear (with a different window title).

The name of the file will not be able to be changed. Nevertheless, other file attributes can be altered and the file saved.

**Schedule**

Add, Remove, Move Up and Move Down items are identical to the four buttons in the middle of the Step 1 window.

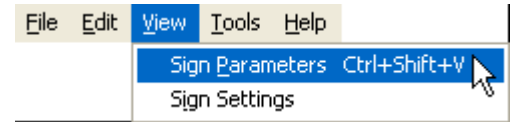


## VIEW MENU

The View menu gives you access to various information.

**Sign Parameters** displays the current information about the sign.

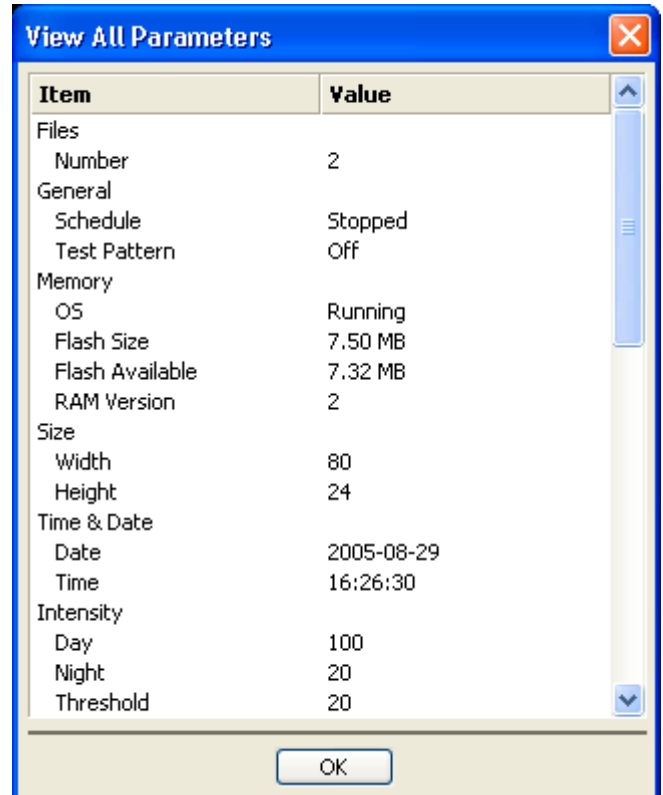
**Sign Settings** display the some of the sign's settings saved within Vision Setup .



### Sign Parameters

As shown on the right, the current settings of the ONLINE sign are displayed. This is a much more detailed list of information compared to the information shown in the main window.

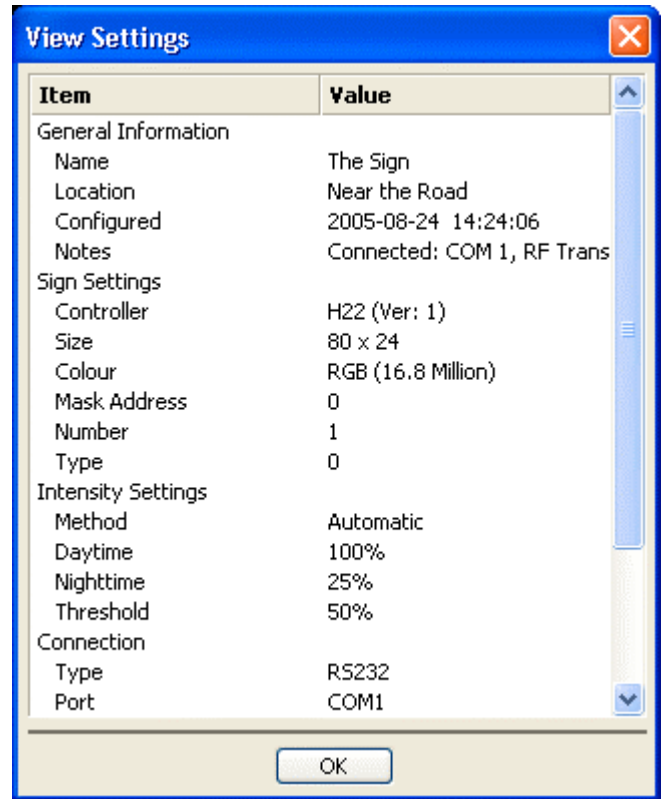
For more information on the setting up of a sign, please refer to the main Vision Setup help.



### Sign Settings

As shown on the right, most of the basic information about the sign is displayed. The information displayed is equivalent to the information set when the sign was created in Vision Setup.

For more information on the setting up of a sign, please refer to the main Vision Setup help.



### TOOLS MENU

The Tool menu gives you access to the following items.

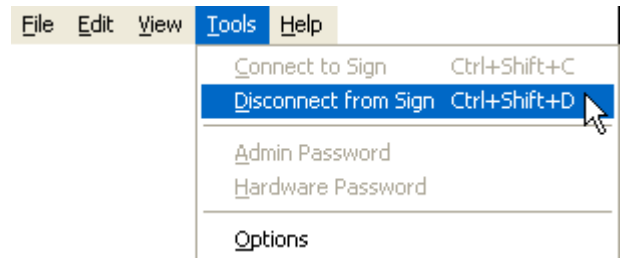
**Connect to Sign** allows the connection to an OFFLINE sign.

**Disconnect from Sign** allows the disconnection from the current ONLINE sign.

**Admin Password** allows the entering of an Administrator Password that has been setup within Vision Setup.

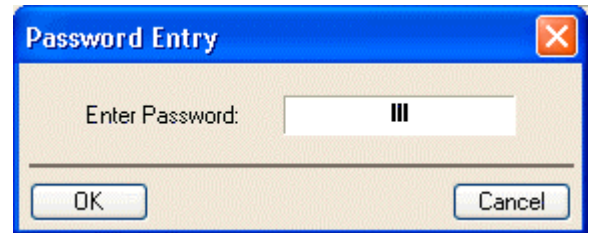
**Hardware Password** allows the entering of the hardware password for the sign. This value has also been setup in Vision Setup and saved to the sign.

**Options** controls the options for this application .



## **Admin or Hardware Passwords**

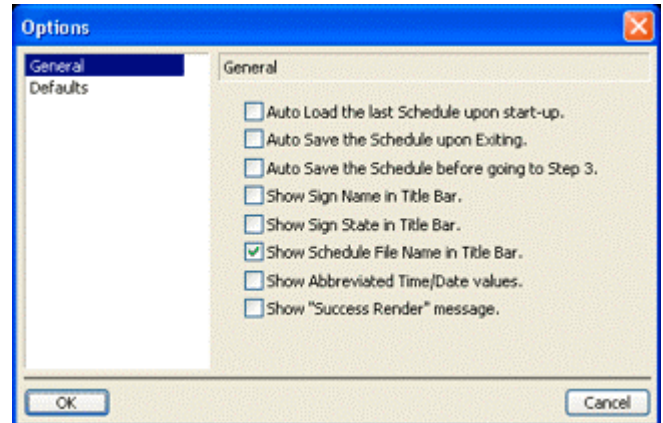
If either the Admin or Hardware passwords are set, just press the appropriate “Enter Password” button and the “Password Entry” dialog will appear. The OK button remains disabled until a password is entered. If the password is incorrect, an appropriate message is displayed .



## **Options**

The Options selections have been greatly enhanced from the previous versions. The list on the left indicate all of the sections of control that are available. The sections are the following;

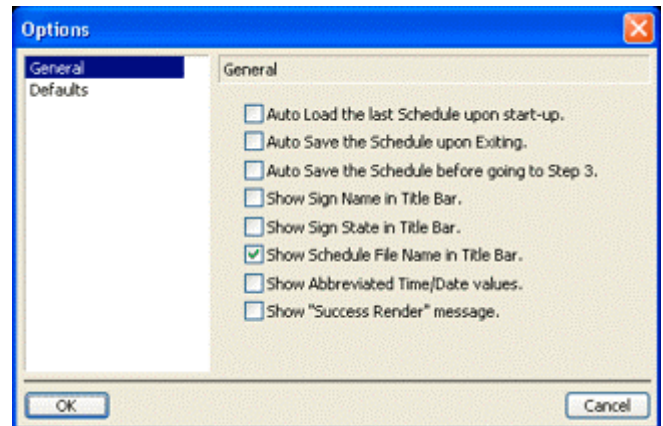
- General – Basic control of certain operational features of the interface.
- Defaults – Basic control on settings for message creation.



### Options - General

The General section allows the following controls:

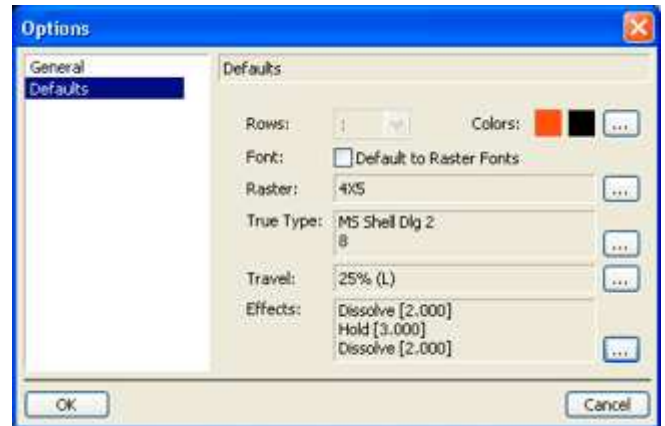
- *Auto Load ...* – Automatically load the last saved S2S file when starting the application.
- *Auto Save ... Exiting* – Automatically save the current S2S file upon exiting the application.
- *Auto Save ... Step 3* – Automatically save the current schedule before going to Step 3. This will make Step 2 invisible to the user.
- *Show Sign Name ...* – Display the name of the active sign within the title bar.
- *Show Sign State ...* – Display whether-or-not the sign is ONLINE or OFFLINE within the title bar.
- *Show Schedule ...* – Display the name of the schedule within the title bar.
- *Show Abbreviated ...* – Display an abbreviated version of the Time/Date Restriction within the Schedule list in Step 1.
- *Show “Success Render” ...* – Display a simple message showing that the new schedule has been properly rendered for the current sign.



## Options - Defaults

The Defaults section allows the following settings for all new Messages created within Vision Step2Sign:

- *Rows* – This control is grayed-out in order to illustrate that Vision Step2Sign does NOT have row control greater than 1 row.
- *Colors* – These indicators and the corresponding button allow the control of colors.
- *Font* – Select between Raster and True Type Fonts.
- *Raster* – Select the default Raster font.
- *True Type* – Select the default True Type Font.
- *Travel* – Select the travel speed.
- *Effects* – Select the effects (modes).



## FAST KEYS

Below is a list of all of the acceleration keys for access to various features.

CTRL+O	Load a new schedule file.
CTRL+S	Save the current schedule file.
CTRL+P	Preview a selected file.
CTRL+M	Display the Create a New Message window
CTRL+G	Display the Create a New Group window
CTRL+A	Add a selected file to the schedule
CTRL+X	Remove a selected file from the schedule
CTRL+Up Arrow	Move item in schedule up one line
CTRL+Down Arrow	Move item in schedule down one line
CTRL+SHIFT+V	View the list of Sign Parameters
CTRL+SHIFT+C	Connect to the sign

CTRL+SHIFT+D

Disconnect from the sign

## TROUBLESHOOTING

### **When Vision Step2Sign Wizard steps to the Update Sign step, it always shows that my sign is OFFLINE. What is wrong?**

Several items could be wrong. Please refer to the “Troubleshooting” section within Vision Setup for more information on this problem. .

### **Where do I enter my “Authorization Code”?**

Entering your Authorization Code (in order to turn-off the “time left” display) is done within Vision Setup. For more information, please refer to the main Vision Setup help.

### **The Time Left entry is showing “Expired” even though I know I have several days left before I need to enter in the Authorization Code.**

The sign has not expired. You have set a “Hardware Password” and you have not yet entered it. Go to the “Hardware Password” dialog and enter your password. Once completed, the time limit will display as expected.

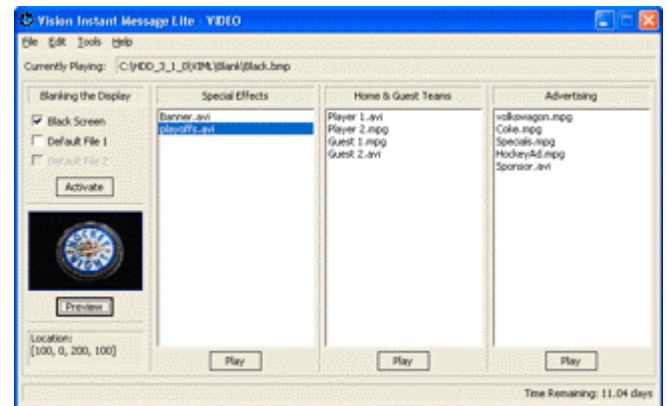


# VISION INSTANT MESSAGE LITE

## OVERVIEW

Vision Instant Message Lite is an application that allows a user to update a DVI-Based LED Video Display. The application allows one to configure two unique lists of media files for instant viewing and a third list that will play uninterrupted (schedule).

Vision Instant Message Lite is designed as simplified version of Vision Instant Message PRO.



## HOW VISION INSTANT MESSAGE LITE WORKS

When the computer is connected to our DVI-Based signage, Vision Instant Message Lite can be configured to display an “image” (a playing media file) anywhere on the video card’s display area. Once configured, the user can then select & play any file within the first two columns and play the whole list of files within the third column.

In normal operation, a user can either double-click on a media file or press the “Play” button beneath the file’s column. The user can preview the file before playing it and even setup 2 unique files to display logos or default images.

The menu items give you access to various features to adjust the list of media files within the columns and the general operation and appearance of the main window.

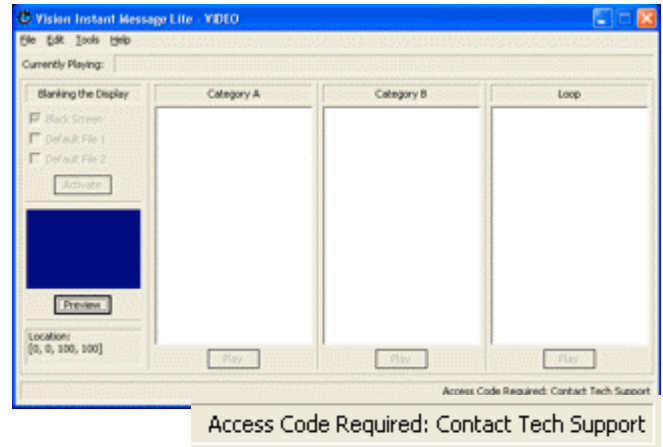
Vision Instant Message Lite (or PRO) provides an operator with the ability to play any media file quickly during a sports event.

**OPENING VISION INSTANT MESSAGE LITE (FOR THE FIRST TIME)**

When Vision Instant Message Lite (or Vision Viewer) is opened for the first time, a majority of the application is disabled. The installer or user must obtain an “Access Code” (also referred to as the “Authorization Code” and “Activation Code”).

Technical Support will step a user through the process of saving the Installation Code and emailing it. Once received, the Technician will email back an Access Code. Once verified, the Access Code will *activate* the application and give *authorization* to the user to use the features within the application.

This activation may be time limited due to contractual agreements.



**THE MAIN WINDOW**

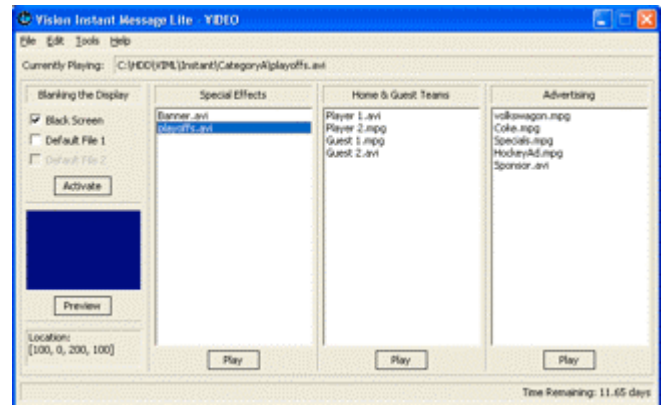
The main Vision Instant Message Lite window has several regions:

The **Blanking the Display** region allows a user to choose a type of image to “blank” the sign.

The **Preview** region allows a user to preview a selected media file.

The **Time Limit** region at the bottom is an indication of “Time Remaining” until the application is deactivated. If this region is blank, there is no time limit in effect.

The **Instant Message** region is composed of two columns of user specified/selected media files.

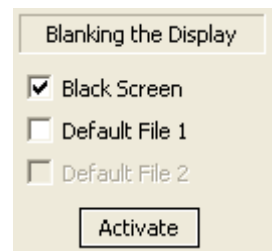


The **Schedule (or Loop)** region contains the media files that can be played in succession.

At the top-portion of the window is the name of the current file playing.

**Blanking the Display**

The user can blank the sign with three different images. The standard BLACK SCREEN is default and always available. Via the Options selection, the user can also specify two unique BITMAP files. For example, these files could be logos or advertisements.



**Preview**

This region allows a user to preview a selected media file. The media file can only be selected within the Instant Message columns (the two left-most columns).

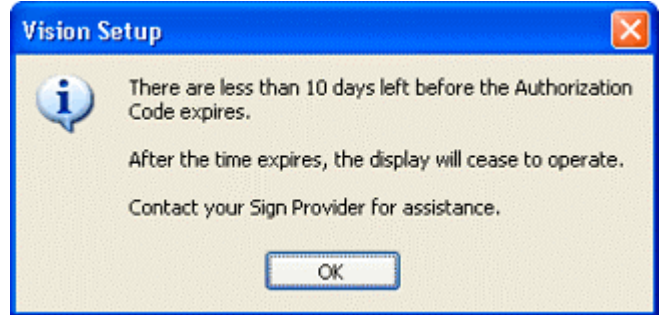


**Time Limit (Access Code)**

The *Time Limit* section displays the amount of time left before the application stops working and an Access Code must be entered.

**Ten days** (and less) before the “time” expires, a message box will appear whenever the user connects to the sign. Once the time expires, the sign and software will no longer respond to updates and the currently playing schedule/message will stop being displayed.

Please see [Vision Instant Message Lite - Installation](#) for information on entering an authorization code.



Time Remaining: 11.04 days

**Instant Message**

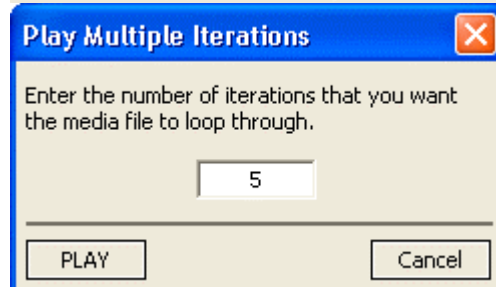
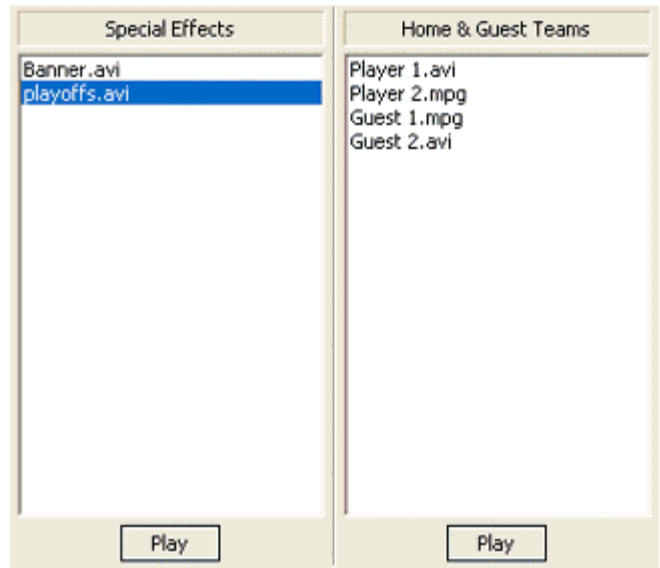
There are two columns available to the user to place media files. Via the Edit menu selection, the user can add, delete, and sort messages from the lists.

When enabled, the user can display a specific media file by either;

- Double-clicking the mouse on the media file will instantly play the media file once.
- Select the media file and then press the PLAY button beneath the column. The Play button will allow the entering of N iterations. The file will play N times.

The playing of a media file will be stopped if the user selects another media file or presses **Activate** for *Blanking the Display*.

There is no limit to the number of files that can be placed within the lists. However, it is recommended that number of messages is kept to a manageable number.



**Schedule or Loop**

The third column can be used to play a set of media files in a continuous loop.

The media files can be added, deleted, and sorted via the Edit Menu.

Once the **PLAY** button is pressed, the other PLAY buttons are disabled. To **STOP** the playing of the media files, one can either press the **STOP** button or press **Activate** for *Blanking the Display*.

There is no limit to the number of files that can be added to the list. The files are played in succession and continuously (until stopped).

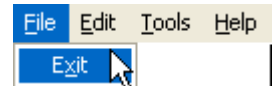
If one changes the list of media files for the schedule (or loop), one needs to "Generate Loop Schedule" (see Edit Menu for more information).



**FILE MENU**

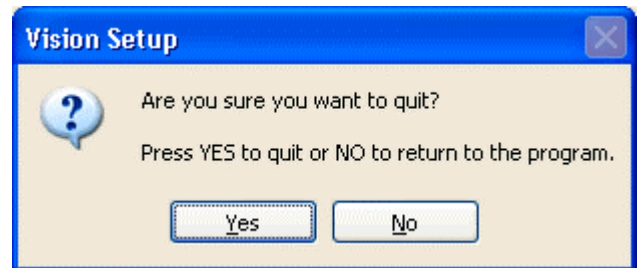
The File menu gives you access to one item.

**Exit** closes Vision Instant Message Lite.



**Exit**

You can exit the application by one of two methods. First, you can select "Exit" from the File menu. Second, you can press the "X" (close) button at the top right of the application. In the second case, a similar dialog as shown to the right appears to ensure that you want to close. By purposely selecting the "Exit" from the File menu, you can bypass this dialog.

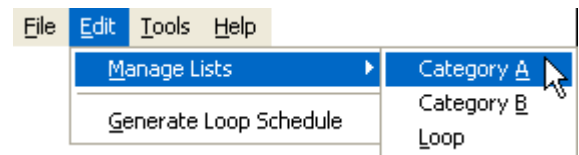


**EDIT MENU**

The Edit menu gives you access to two items.

**Manage Lists** will allow one to manage the media files contained within the three lists.

**Generate Loop Schedule** will generate a new schedule file for the files contained within the LOOP list. Although this is automatically done for the user each time the user presses the PLAY button, this menu selection is here so that more advanced users can inspect the generated schedule file.



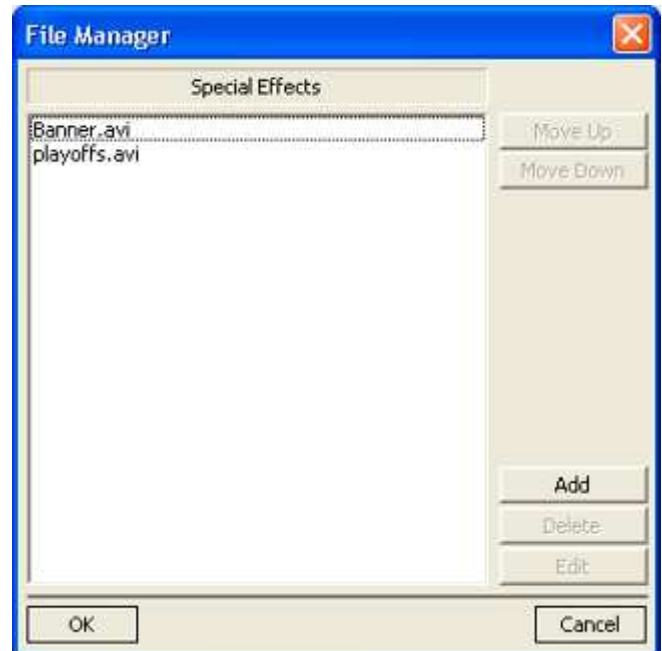
### Manage Lists

For each list of media files, the File Manager window will allow for the adding, deleting, and sorting of files.

The **Move Up** and **Move Down** buttons allow one to sort the media files into a particular order. This is useful when one has many files. The most commonly used files can be kept to the top of the list.

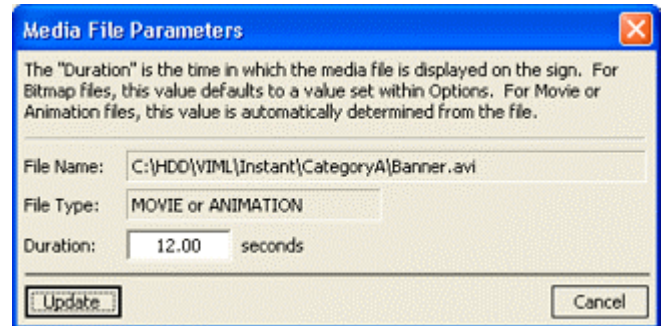
The **Add** button allows one to add a new file; **Delete** will remove a selected file; and **Edit** displays the “Media File Parameters” dialog.

When adding a new file, one can add MPEG, AVI, BMP, JPEG, and HTML files. Once selected, the “Media File Parameters” dialog will appear to display certain information about the file.



### Media File Parameters

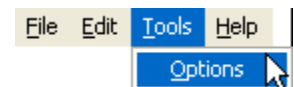
This dialog displays the location of a file, the type of file, and its duration. Obviously, changing the duration will affect how long the file is displayed. Bitmap files have a default time duration set within the Options window. Movie or Animation files are automatically determined from the media file itself.



## TOOLS MENU

The Tools menu gives you access to the following item:

**Options** – Control the options for this application.

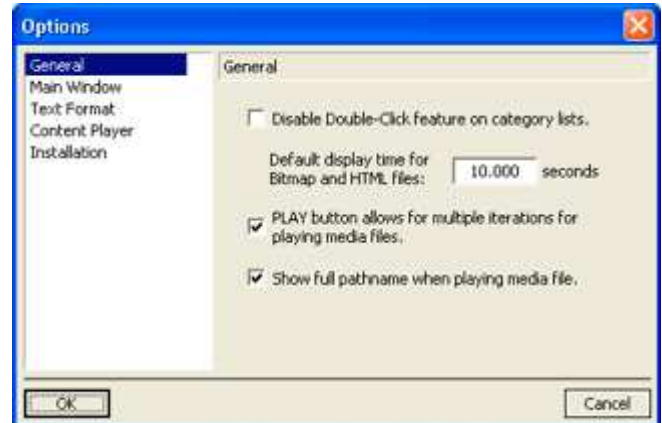


**Options**

The Options selections have been greatly enhanced from the previous versions. The list on the left indicate all of the sections of control that are available.

The sections are the following;

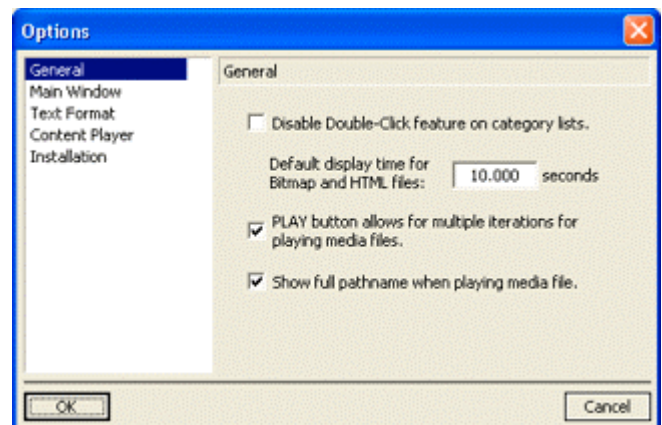
- **General** – Basic control of certain operational features of the interface.
- **Main Window** – Basic control on the look and feel of the main window.
- **Text Format** – Control on how media files are referenced within the application.
- **Content Player** – Control the location of the content player on the video card display.
- **Installation** – Control on the Installation Code and Access Code for application Authorization (also referred to as the “Authorization Code”).



Options - General

The General section allows the following controls;

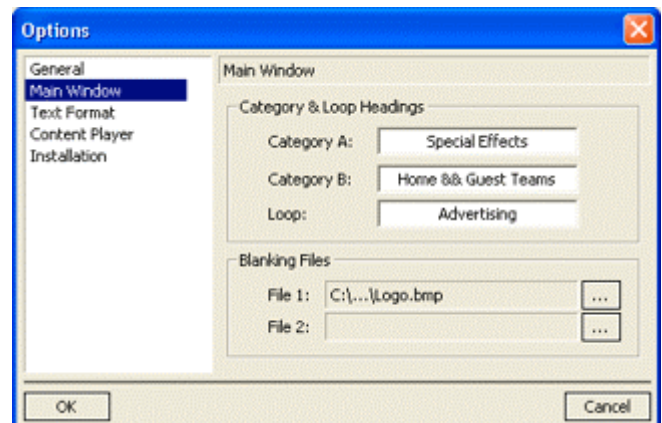
- Disable the double-click operation within the Instant Message columns (A & B).
- The default reference time for any BMP, JPEG, and HTML files added to a column. The value can be over-riden when adding the file (refer to Media File Parameters).
- The Play button at the bottom of columns A and B can either automatically play the selected file once or allow the user to enter in a number of iterations.
- When media file is playing, the complete pathname can be shown.



Options - Main Window

The Main Window section allows the following controls;

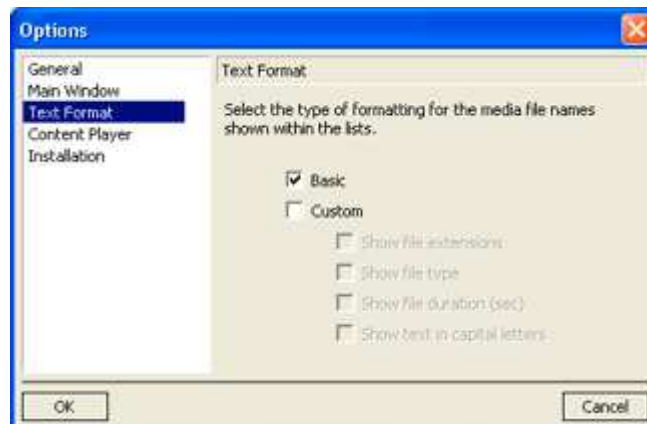
- One can enter in a specific heading for all three columns.
- One can select two BMP files for displaying as a “Blanking” image. Within the Main Window you can select between BLACK and the two files.



## Options - Text Format

The Text Format section allows the following controls;

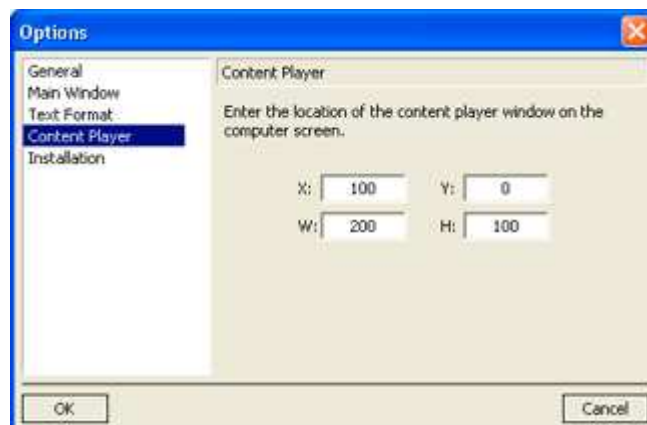
- Basic – This will force a predefined format for all files. The format is the file name and extension. (e.g. *filename.ext*)
- Custom – This will allow one to control what is displayed. The file name is always displayed. One can select from the following: Show the file extension, Show the file type, Show the file duration in seconds, Show the name in capitals.



## Options - Content Player

The Content Player section allows one to enter in the exact location on the PC computer screen where the “content player” will be located.

This location will be used by the DVI-Based video system to show the media files onto the sign.



## Options - Installation





# VISION DVD

## INTRODUCTION

Vision DVD is an application that allows a user to play a DVD on a DVI-Based LED Video Display (DVI stands for "Digital Video Interface", a type of port used to connect video displays to computers). It requires a computer with a DVD drive and an available DVI port. The application allows one to specify two different areas of the screen on which to display the DVD content. This allows, for example, one to preview/cue a DVD on the computer monitor before displaying on the remote LED display.

## GENERAL USE

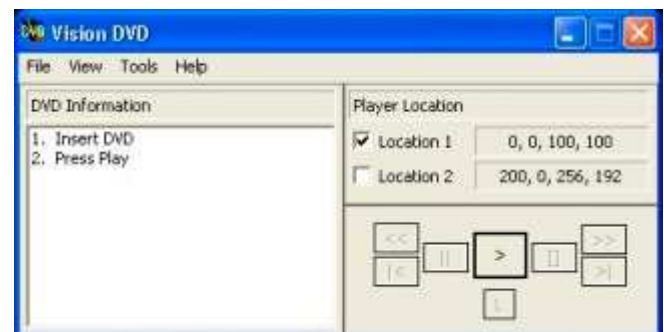
To use Vision DVD, the host computer must be capable of driving two monitors, for example, a desktop computer with two monitor ports or a laptop computer with an external monitor port. The LED Video Display is connected to the second monitor port.



When a computer has two monitors connected, there are a few basic ways to setup what gets shown on each monitor:

1. the entire display can be spread across monitor 1 and monitor 2
2. monitor 2 can be set to mirror monitor 1
3. monitor 2 can be treated as a separate display

When using Vision DVD, monitor 1 and monitor 2 must be setup in either configuration 1 or 2 above.



Vision DVD allows video to be displayed in one of two locations: **Location 1** and **Location 2**. **Location 1** is where the DVD is cued and previewed. **Location 2** maps to where the video is played on the LED Video Display.

Once the locations have been setup, the user can control the DVD using the buttons located on the bottom right-hand side of the application. The buttons mimic those found on traditional DVD remote controls, e.g., **PLAY**, **PAUSE**, and **STOP**.

## SETTING THE VALUES FOR LOCATION 1 AND LOCATION 2

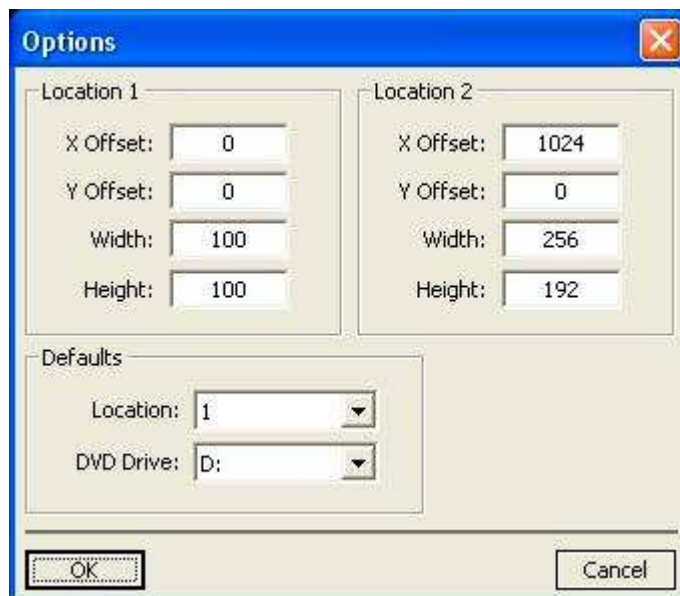
The values for **Location 1** and **Location 2** depend upon how the two monitors are setup:

### **The Display is Spread Across both Monitors**

When the display is spread across both monitors, the LED Video Display will be situated to the right of the computer monitor. Therefore, if the computer monitor has a resolution of 1024x768, the upper left-hand corner of the LED Video Display will be mapped to the 'x' and 'y' co-ordinates of '1024' and '0'.

Assuming, then, that the resolution of the computer monitor is 1024x768, complete the following steps:

1. Select **Options** from the **Tools** menu
2. Enter a value of **0** for both **X Offset** and **Y Offset** under **Location 1**
3. Enter a value of **100** for both **Width** and **Height** under **Location 1**
4. Enter a value of **1024** for **X Offset** under **Location 2**
5. Enter a value of **0** for **Y Offset** under **Location 2**
6. Enter the width in pixels of the LED Video Display for **Width** under **Location 2**
7. Enter the height in pixels of the LED Video Display for **Height** under **Location 2**
8. Press **OK**



**Location 1** (the location for previewing/cueing) will now be at the top left-hand corner of the computer monitor. **Location 2** (the location for the actual LED Video Display) will be setup in the correct position, i.e., to the right of the computer monitor.

Now, when **Location 1** is selected, the DVD will play in the upper left-hand corner of the computer monitor. When **Location 2** is selected, the DVD will play on the LED Video Display.

Note: Since the entire display is spread across both monitor 1 and 2, if the mouse is moved all the way to the right, it might appear on the LED Video Display

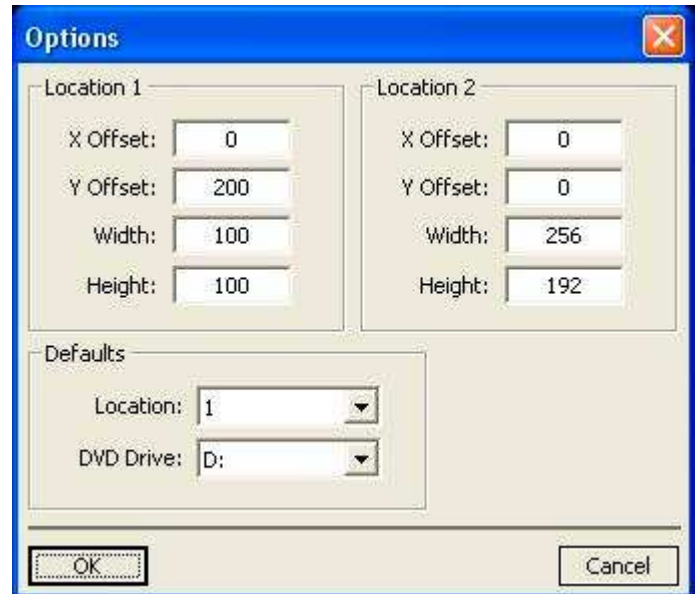
### **Monitor 2 Mirrors Monitor 1**

When monitor 2 mirrors monitor 1, the LED Video Display mirrors what is displayed on the upper left-hand corner of the computer monitor.

Therefore, complete the following steps:

Change the background color of the desktop to black if the LED Video Display must be blank when no DVD is playing (recommended)

1. Select **Options** from the **Tools** menu
2. Enter a value of **0** for both **X Offset** and **Y Offset** under **Location 2**
3. Enter the width in pixels of the LED Video Display for **Width** under **Location 2**
4. Enter the height in pixels of the LED Video Display for **Height** under **Location 2**
5. Enter values for **X Offset** and **Y Offset** under **Location 1** such that they do not interfere with the position of either the **Vision DVD** program or **Location 2**
6. Press **OK**



Now, when **Location 1** is selected (the location for previewing/cueing), the DVD will play in a "safe" area of the main display. When **Location 2** is selected (the location for the actual LED Video Display), the DVD will play in the upper left-hand corner of the main display. This is the correct position for the "mirrored" LED Video Display.

Note: If the mouse or any other window is moved into the area occupied by **Location 2** (the location of the external display), the image of the mouse or window will appear on the LED Video Display.

## **MENU ITEMS**

### **File**

**Exit** - exits the Vision DVD.

### **View**

**Render Status Info** - displays technical information about the DVD device present on the PC. Used mainly for technical support purposes.

### **Tools**

**Options** - sets the default settings for Vision DVD.

**Location 1** - sets the location and size of **Location 1**. See **General Use** above.

**Location 2** - sets the location and size of **Location 2**. See **General Use** above.

**Defaults/Location** - sets the initial location where video is played when Vision DVD launches.

**Defaults/DVD Drive** - selects the drive letter of the DVD drive.

### **Help**

**Contents** - launches the Vision Suite help system.

**About** - displays information about Vision Suite.

## **DVD CONTROLS**

	Play
□	Stop
	Pause
<<	Rewind
	Fast Forward
<	Previous Chapter
	Next Chapter
L	Mark Loop Start/End

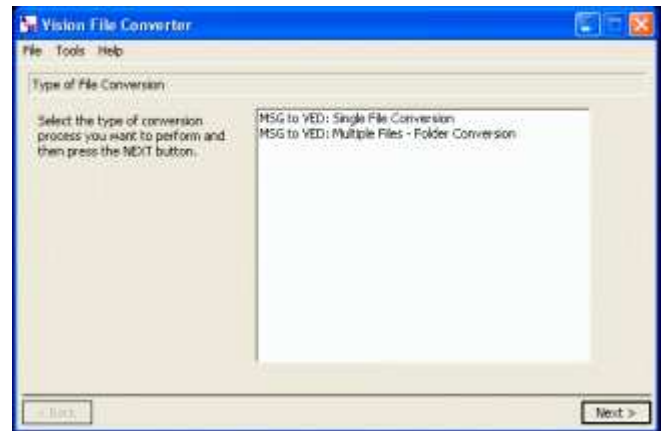


# VISION FILE CONVERTER

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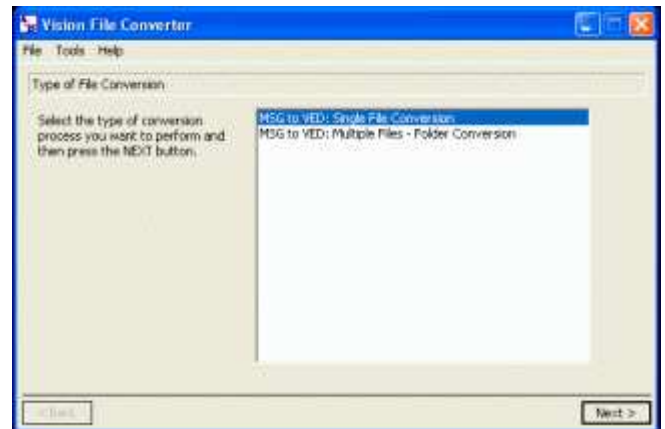
## INTRODUCTION

Vision File Converter is an application that converts rendered MSG files into VED files. The resulting files can be edited in Vision Edit.



## SINGLE FILE CONVERSION

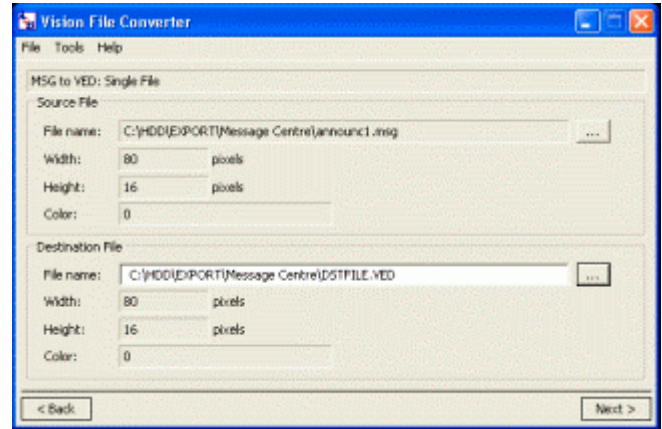
To convert a single MSG file, select **MSG to VED: Single File Conversion** and press **Next** to continue.



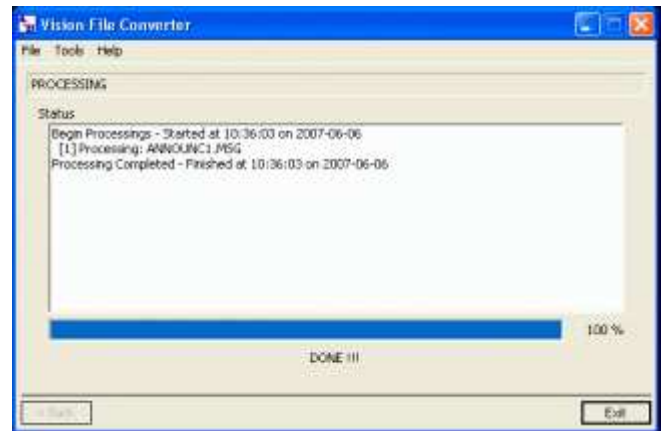
In the **Source File** area of the dialog box, pressing ... will bring up the standard Windows **Open File** dialog box. Select the desired source file and press **OK**. The **Width**, **Height**, and **Color** values are set according to the properties of the source file.

In the **Destination File** area of the dialog box, pressing ... will bring up the standard Windows **Open File** dialog box. Select or enter the name of the desired destination file and press **OK**. The **Width**, **Height**, and **Color** values are set according to the properties of the selected source file.

Press **Next** to convert the selected file.

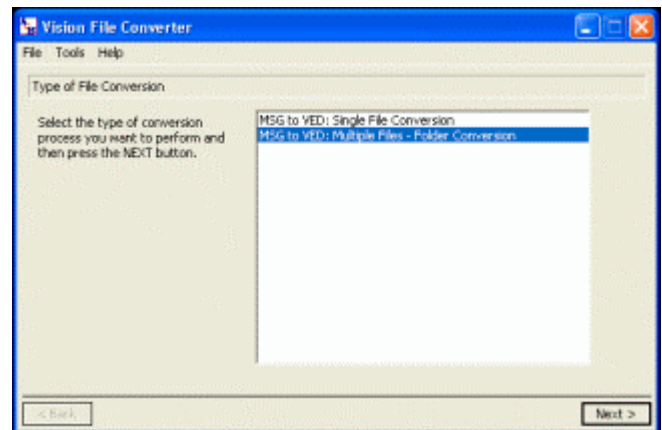


The program will then proceed to convert the selected file. The **Status** region will display information related to the conversion process. When the file has been converted, **DONE!!** will be displayed on the bottom of the dialog. Press **Exit** to exit the program.



## MULTIPLE FILE CONVERSION

Vision File Converter can convert all MSG files in a single directory to VED files. To convert multiple files, select **MSG to VED: Multiple Files - Folder Conversion** and press **Next** to continue.

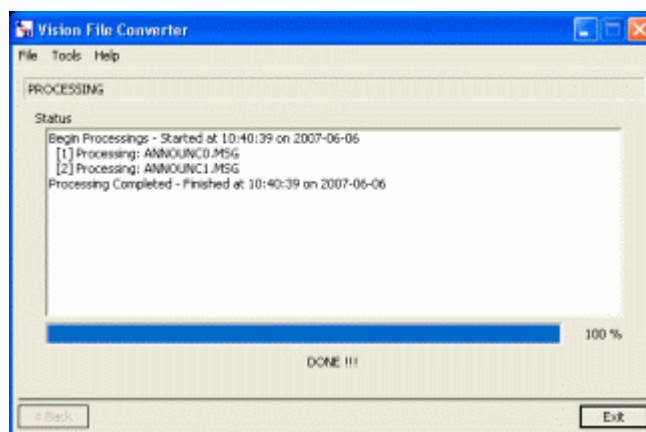
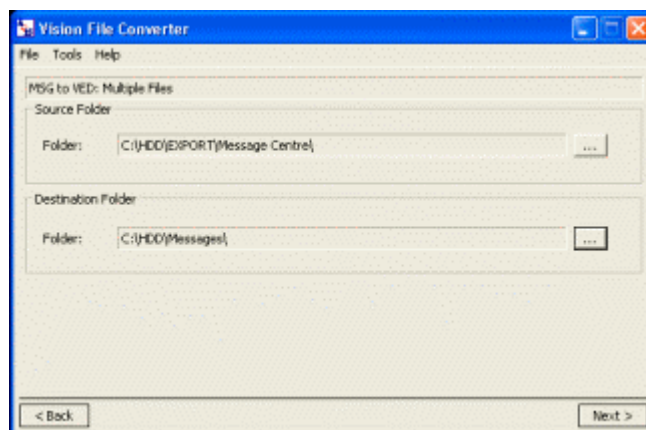


In the **Source Folder** area of the dialog box, pressing ... will bring up the standard Windows **Select Folder** dialog box. Select the desired source folder that contains the MSG files that are to be converted and press **OK**.

In the **Destination Folder** area of the dialog box, pressing ... will bring up the standard Windows **Select Folder** dialog box. Select or enter the name of the desired destination folder where the converted VED files will go and press **OK**.

Press **Next** to convert the files in the selected folder.

The program will then proceed to convert the files. The **Status** region will display information related to the conversion process. When the files have been converted, **DONE!!** will be displayed on the bottom of the dialog. Press **Exit** to exit the program.





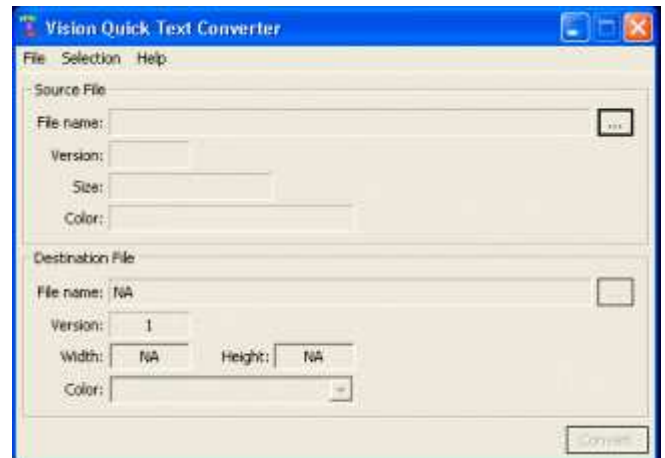


# VISION QUICK TEXT CONVERTER

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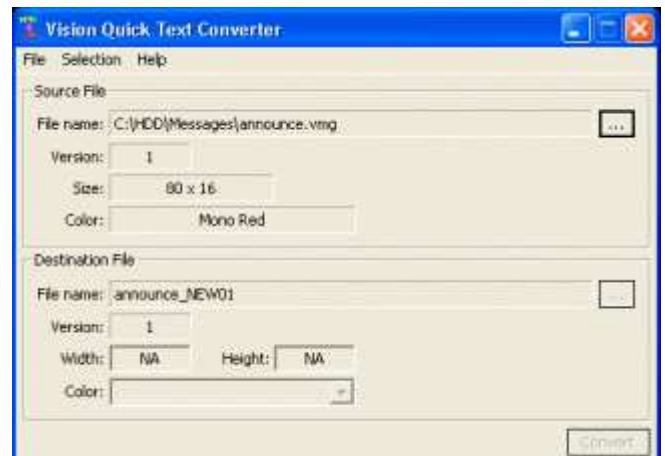
## INTRODUCTION

Vision Quick Text Converter is an application that converts old-format VMG files to new-format VMG files. In the process of conversion, attributes such as width, height, and color can be changed. As well, the program can convert new-format VMG files to new-format VMG files with changed width, height, and color attributes.



## CONVERTING A FILE

To select the VMG file to be converted, press ... in the **Source File** area of the dialog box. This will bring up the standard Windows **Open File** dialog box. Select the file to be converted and press **OK**.



## SETTING THE DESTINATION FILE AND ATTRIBUTES

### Naming the Destination File

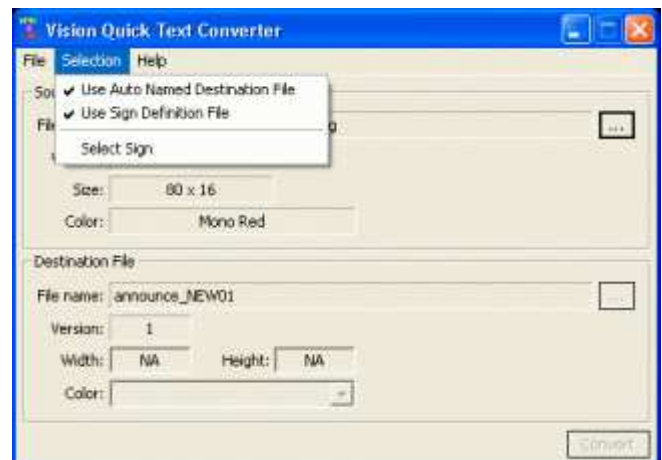
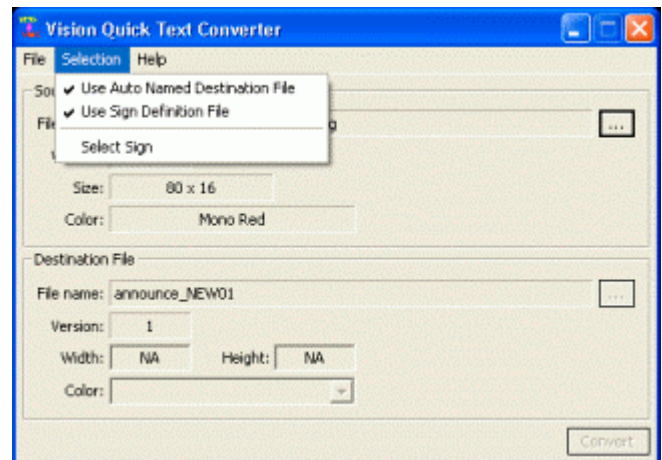
Vision Quick Text Converter can automatically name the destination file. If this is desired, select **Use Auto Named Destination File** under the **Selection** menu. A checkmark beside this menu item will indicate that this option is selected. The file will be saved in the same folder as the source file.

To specify the name and location of the destination file, deselect **Use Auto Named Destination File** under the **Selection** menu. If there is no checkmark beside this menu item, this will indicate that the option is deselected. Pressing ... will bring up the standard Windows **Save File** dialog box. Specify the name and location of the destination file and press **OK**.

### Specifying the Attributes of the Destination File

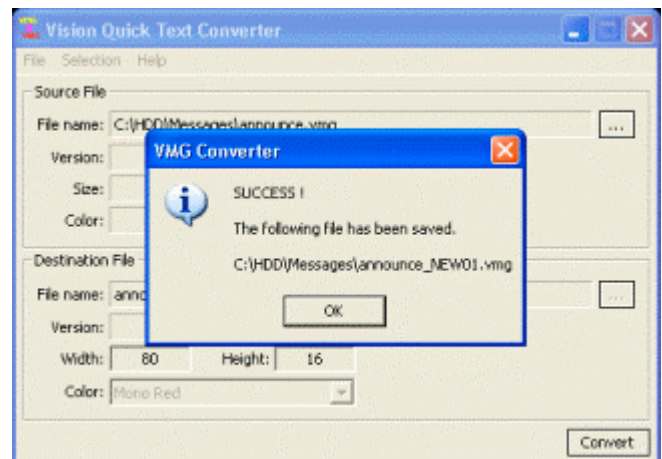
Vision Quick Text Converter can automatically specify the attributes of the destination file based upon sign-type. If this is desired, select **Use Sign Definition File** under the **Selection** menu. A checkmark beside this menu item will indicate that this option is selected. Next, select **Select Sign** from the **Selection** menu. The standard VisionSuite **Sign Selection** dialog will appear. Select the sign with the desired width, height, and color attributes and press **Select**.

To specify the width, height, and color attributes of the destination file, deslect **Use Sign Definition File** under the **Selection** menu. If there is no checkmark beside this menu item, this will indicate that the option is deselected. Enter the desired width and height in the appropriate places and select a color from the available selections.



## CONVERTING THE FILE

Press **Convert** to convert the file. Upon completion a dialog will be displayed indicating the name and location of the converted file. Press **OK** to dismiss the dialog. Another conversion can be performed, if desired.



## EXITING

To exit from Vision Quick Text Converter, select **Exit** from the **File** menu or press the **x** button in the upper-right hand corner of the dialog.





# VISION SERVER

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## INTRODUCTION

Using Vision Server, a number of remote computers connected via a network or modem can send media files for display on a single Video System. For more information on how to set up such a configuration, please see [VisionPRO Systems and Updating Content Remotely](#).

## VISION SERVER REFERENCE

### Main Dialog

#### Status

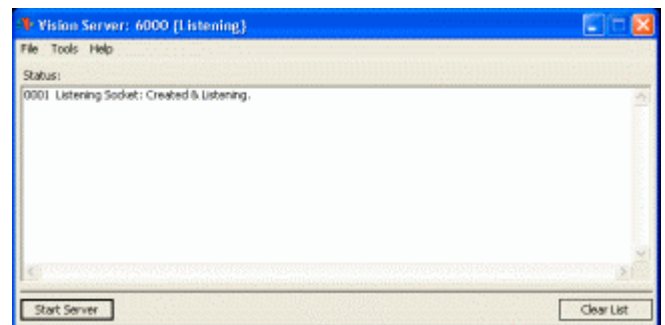
The status area displays status messages relating to server activities.

#### Clear List

Clears the status messages

#### Start Server

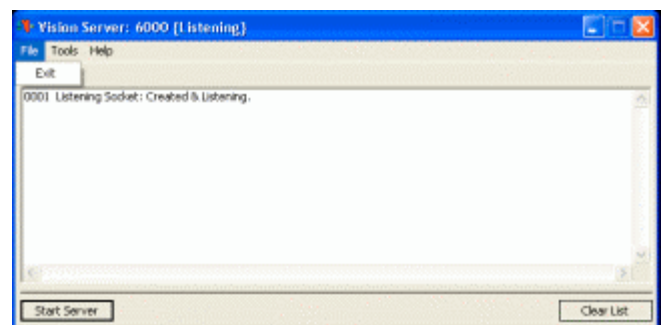
Starts the server. Note, that depending upon various options (described later), the server may already be started upon program launch.



### File Menu

#### Exit

Exits Vision Server



### Tools Menu

#### Options

## General

### Start Server-Listening at Start-up.

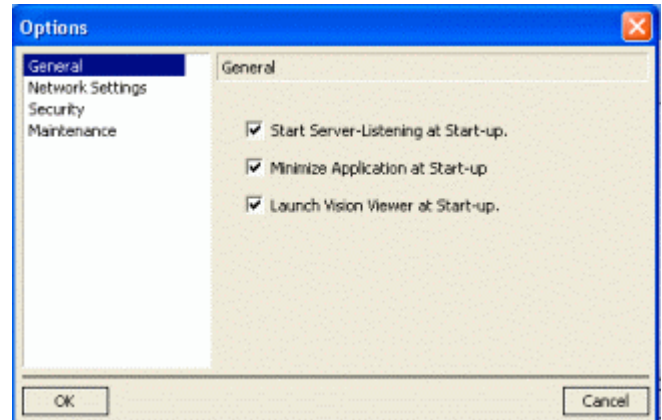
Automatically starts the server when the Vision Server is launched. This is equivalent to pressing the **Start Server** button.

### Minimize Application at Start-up.

Automatically minimizes Vision Server when the program is launched.

### Launch Vision Viewer at Start-up.

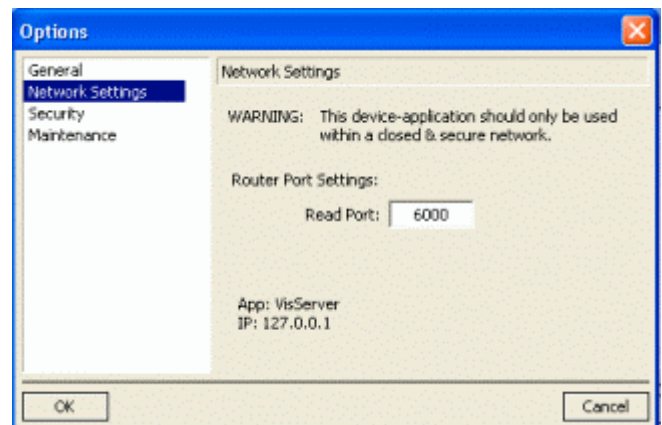
Automatically starts Vision Viewer when Vision Server is launched.



## Network Settings

### Router Port Settings

The port on which Vision Server listens for incoming messages.



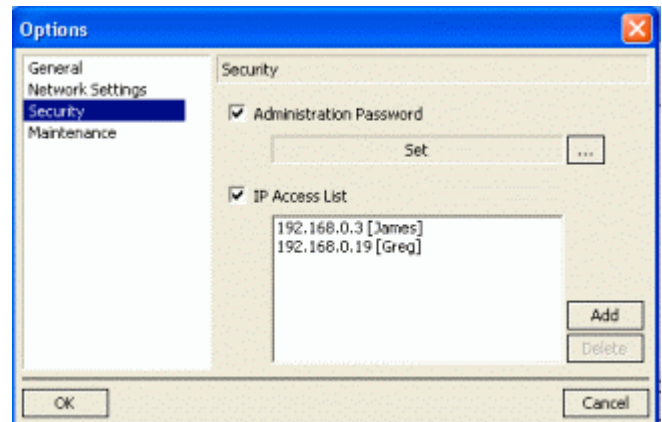
## Security

### Administration Password

This is used to set a password so that all Vision Server operations are password-protected. To set a password, check the box and click the ... button. Enter a password, press tab, enter it again, then press **OK**. To cancel, press **Cancel**. Exit and relaunch Vision Server for password-protection to be in effect. It is recommended to set a password!

### IP Access List

To restrict access to requests from specific IP address, check the box and click **Add** to add an IP address. To delete an IP address, select the address and press **Delete**. It is **highly** recommended to restrict access to only specific IP address!



## Maintenance

### Log Network Communciations

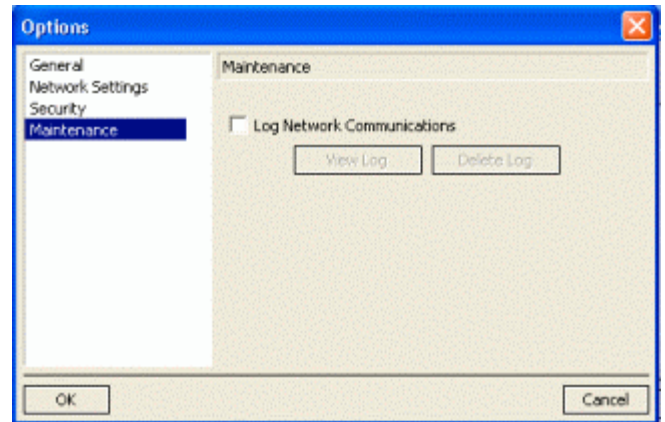
This is used to log network communications for troubleshooting purposes.

### View Log

If logging has been enabled, press this to view the log.

### Delete Log

If a log exists, press this to delete the log.







# VISION VIEWER

## INTRODUCTION

Vision Viewer is an application that plays scheduled AVI, MPEG, and BMP files on a Video System. It is used in conjunction with Vision Server, Vision Viewer Updater, or a program such as Symantec pcAnywhere. For more information on setting up a Video System, please see [VisionPRO Systems and Updating Content Remotely](#).

## INSTALLATION AND ACTIVATION

To install and activate Vision Server, please see the example [Entering an Authorization Code](#)

## ADDING A NEW LAYOUT

In order to play content on a video system using Vision Viewer, a Layout and Content Player must be created. Please see the example [Setting up a Content Player](#) for more information.

## VISION VIEWER REFERENCE

### Main Dialog

#### Settings Area

The area on the left of the main dialog displays the settings for the current Content Player Layout.

#### Content Player Area

The area on the right of the main dialog displays the settings for the selected Content Player. The drop-down list is used to select the Content Player.

#### Play/Stop

This button is used to play and stop the content. If it is greyed-out, the software needs to be activated. Please see "Installation and Activation" above.

#### Show/Hide

This button is used to show and hide the content. If it is greyed-out, the software needs to be activated. Please see "Installation and Activation" above.



**File Menu**

Exit

Exits Vision Viewer

**Tools Menu**

Options

General

**Show Content Player Layout Name in Title Bar**

If this is selected, the name of the currently selected Content Player is displayed in the Title Bar of the program.

**Minimize Application at Start-up**

If this is selected, when Vision Viewer is started, it will be automatically minimized.

Content Players

**Layouts Drop-Down List**

Selects the current Content Player Layout. Checking the box sets the current Layout as the default. The attributes of the currently selected layout are listed underneath the drop-down list.

**Add**

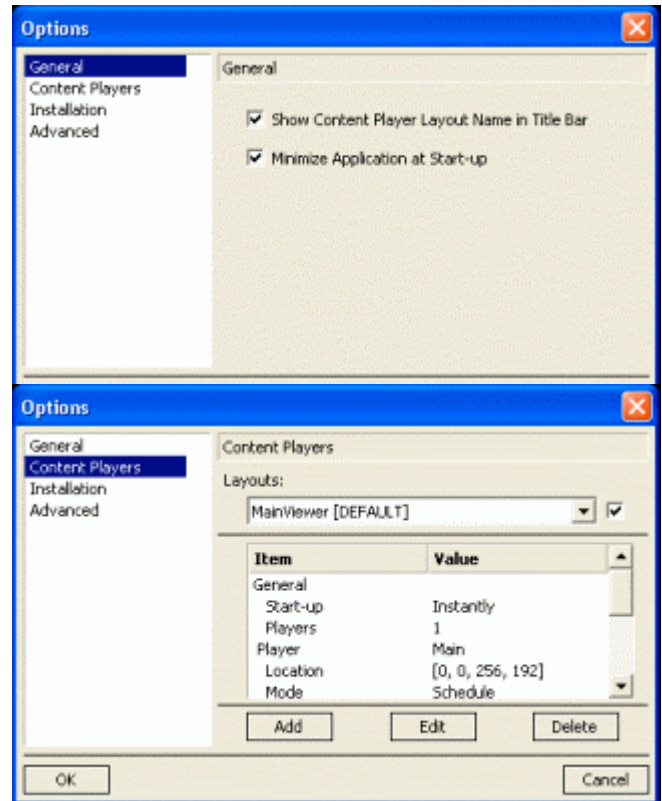
Adds a new layout. See "Adding a New Layout" above for more details

**Edit**

Edits the currently selected layout.

**Delete**

Deletes the currently selected layout.



File Transfers

**Enable File Transfer Feature**

Allows Vision Viewer to refresh the content from files transferred via a remote PC running a program such as pcAnywhere.

**File Transfer Location**

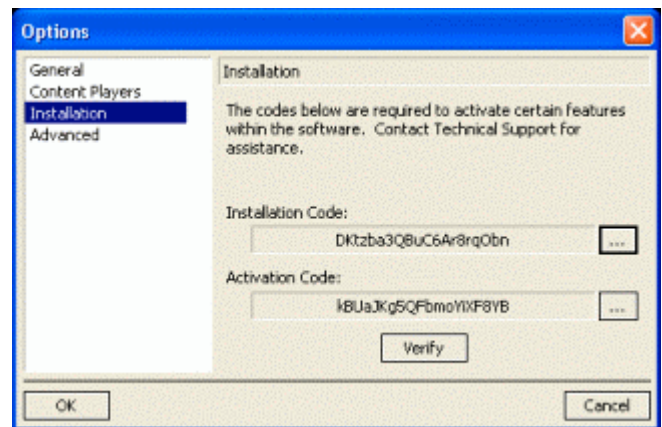
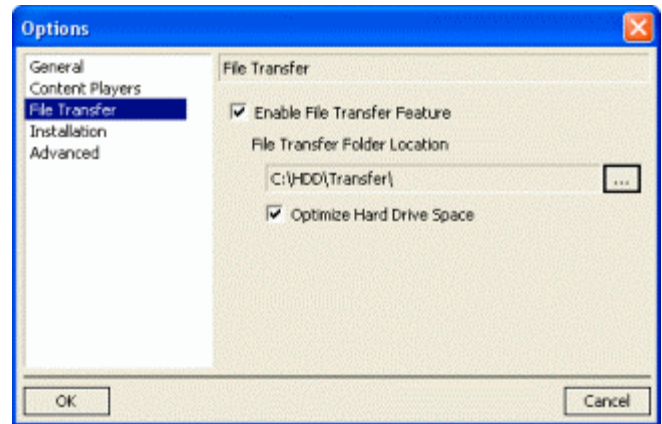
Sets the location where transferred files are stored.

**Optimize Hard Drive Space**

Optimizes the space taken up by the transferred files.

Installation

Please see the example [Entering an Authorization Code](#) for more information.



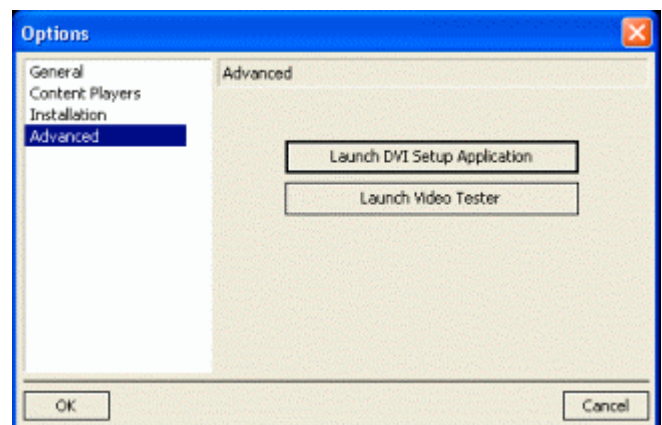
Advanced

**Launch DVI Setup Application**

This launches the Vision DVI-LINK Utility.

**Launch Video Tester**

This launches the Vision Video Tester Utility.





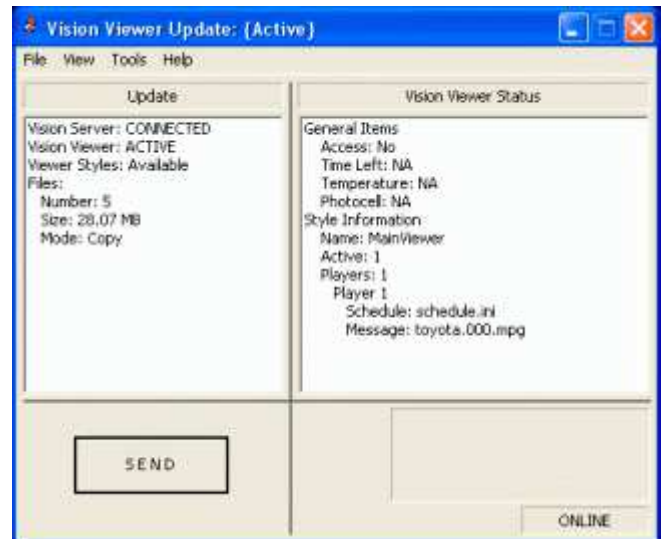


# VISION VIEWER UPDATER

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## INTRODUCTION

Vision Viewer Updater is used to update content on a Sign PC (Video System) running Vision Server and Vision Viewer. For more information on setting up a Video System, please see [VisionPRO Systems and Updating Content Remotely](#).



## SETTING UP VISION VIEWER UPDATER

For information on setting up Vision Viewer Updater, please see the example [Setting up Vision Viewer Updater](#).

## VISION VIEWER UPDATER REFERENCE

### Main Dialog

**Send** - Sends the content of the Sign PC.

## **File Menu**

**Exit** - Exits Vision Viewer Updater

## **View Menu**

**Viewer Status** - Views the status of the Sign PC.

**Viewer Layouts** - Views the Vision Viewer Layouts available on the Sign PC.

## **Tools**

**Convert Schedule** - Converts a schedule created by Vision Schedule to a format usable by Vision Viewer.

**Connect to Vision Server** - Connects to Vision Server running on the Sign PC.

**Disconnect to Vision Server** - Disconnects from Vision Server running on the Sign PC.

**Start Vision Viewer Layout** - Starts content playing on the Sign PC using the currently selected Vision Viewer Layout.

**Stop Vision Viewer Layout** - Stops content playing on the Sign PC.

## **Options**

### General

#### **Auto-connect to Vision Server at start-up.**

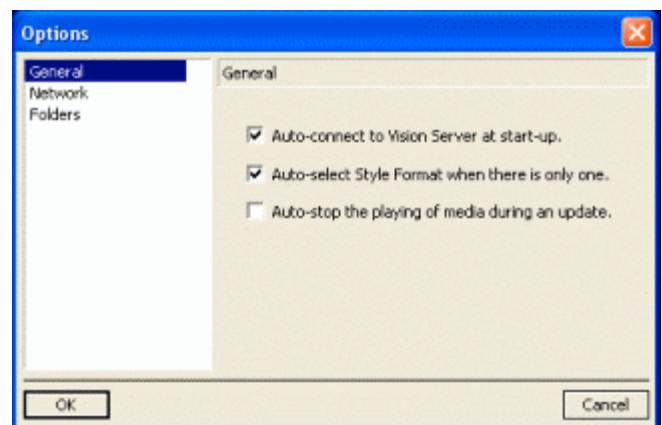
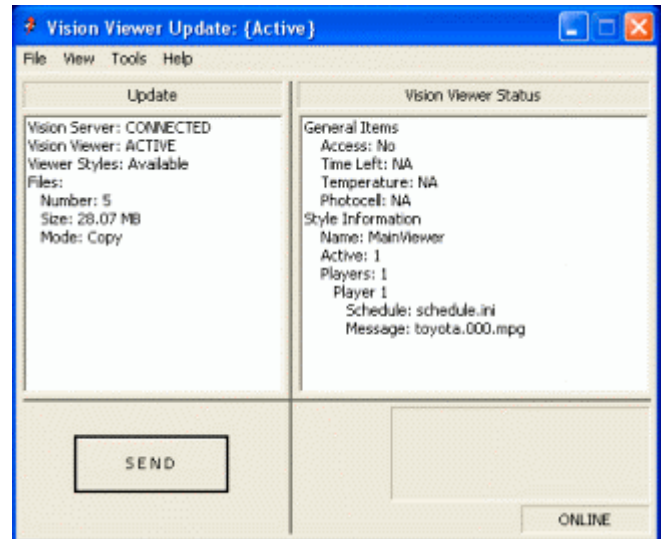
Automatically connects to Vision Server running on the Sign PC when the program is launched.

#### **Auto-select Layout when there is only one.**

When there is only one Layout available in Vision Viewer on the Sign PC, selects this Layout.

#### **Auto-stop the playing of media during an update.**

When the content is updated by pressing "Send", stops Vision Viewer on the Sign PC from playing content.



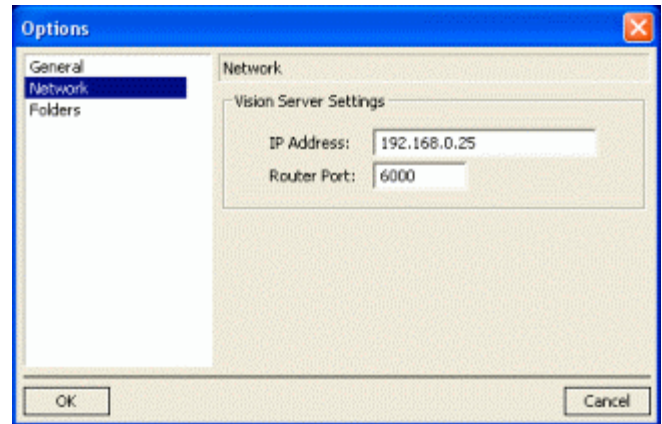
Network

**IP Address**

The IP Address of the Sign PC.

**Router Port**

The port on the Sign PC on which Vision Server listens for incoming messages.



Folders

**Export Folder**

The folder where Vision Schedule places a schedule and content.

**Folder Type**

Either Single or Multiple Content Players. Currently only one Content Player per Vision Viewer Layout is supported.

**Secure file transmission.**

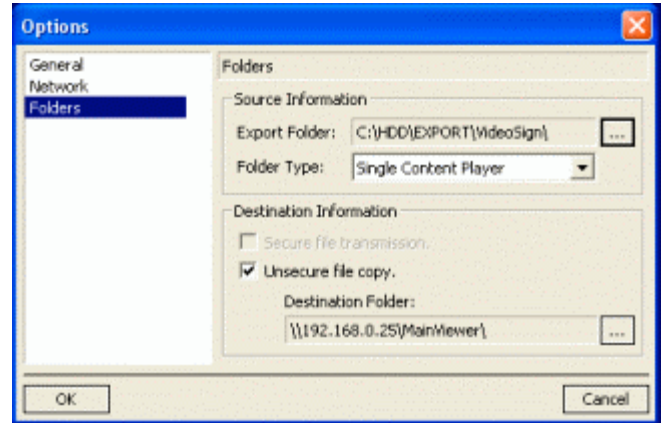
Currently not supported.

**Unsecure file copy.**

Copies content files to the Sign PC as they are.

**Destination Folder**

The folder where content is copied to on the Sign PC.







# APPENDIX I - RECOMMENDED SYSTEMS

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## OVERVIEW

As the world of technology changes, so does the demand placed on computers. VisionSuite is no exception. VisionSuite has many more capabilities than the previous version of software that have allowed users to edit messages and control signs. To this end, VisionSuite requires more computer capabilities than previous generations.

## REQUIREMENTS

The VisionSuite applications have been developed for systems with the following configurations:

Windows™ Operating System	Windows 2000-SP4 / XP (Pro/Home) – SP2 / Vista - SP1
Processor	Pentium IV (or Better)
RAM	256 MB (minimum)
Hard Drive Space	40 MB (minimum)
Video Card	24-bit Color (minimum) for Message Centers 32-bit Color (minimum) for Video Systems
Video Resolution	800 x 600 (minimum)
I/O	Standard Serial port for Message Centers Extra DVI port on video card for new Video Systems <i>PCI-2 card</i> for older Video Systems
Standard Components	Mouse, Keyboard, Color Monitor, CD-ROM, and Floppy Drive

The more complex the image file handling that has to be performed, the more advanced the computer system must be for any realistic performance.

Although any computer running a modern operating system may work, it is always recommended that you contact your sales representative to obtain up-to-date information on computer and operating system compatibility.

## WINDOWS VERSIONS

VisionSuite is designed to work on the following operating systems:

- Windows Vista with SP1
- Windows XP Home and Pro
- Windows 2000

**ADDITIONAL INFORMATION**

Requirements for VisionSuite can change. It is recommended to consult your Sales or Service Representative for the latest information.



## APPENDIX II - ADVANCED TOPICS

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### FOLDER STRUCTURE OF VISIONSUITE

When VisionSuite is installed with to its default folder (C:\HDD), the following folder structure will exist.

#### C:\HDD

- \ASSETS
- \CommTests
- \EXPORT
- \FONTS
- \HELPDOCS
- \INI
- \Logs
- \MESSAGES
- \OS
- \SIGNEDESC
- \S2S
- \TEMP
- \VIM

The **ASSETS** folder contains interim files for older Video systems for backward compatibility.

The **CommTests** folder contains the archived communication test results. An option must be set within Vision Setup for the files to appear within this folder.

The **EXPORT** folder will eventually contain subfolders whose names are the names of your signs. Within these subfolders, Vision Schedule will export the schedule and messages for a given sign.

The **FONTS** folder contains the Raster Fonts (from HDD) for your text message creation.

The **HELPDOCS** folder contains all of the HTML files that compose the Help and Tutorial system.

The **INI** folder contains all of the initialization files for the main applications.

The **Logs** folder contains one or more log files. An option must be set within Vision Setup for the file(s) to appear within this folder.

The **MESSAGES** folder is initially created for you to place your new VED, VMG, and VSF files (created from Vision Edit, Vision Quick Text, and Vision Schedule, respectively). This folder is made for you convenience. You may store your files anywhere.

The **OS** folder is the location where the sign's operating system image files are stored.

The **SIGNEDESC** folder contains two types of files: your sign description (or definition) files and a small data base for color references for the various sign types. The sign description files are denoted with a file extension of INI.

The **S2S** folder contains the files and folders for the Vision Step2Sign Wizard application.

The **TEMP** folder is a “scratch” folder for VisionSuite. The folder can contain various files depending upon the application that writes to (or reads from) this folder. You should not place anything into this folder since its contents are considered to be temporary and can be deleted at any time.

**WARNING:** Do not use the C:\HDD\TEMP folder to store your files. The folder's contents can be deleted at any time.

The **VIM** folder contains the files and folders for the Vision Instant Message application. A specialized library of files is created within the VIM folder when messages are added or created within the application.

## USING THE H1020 SOFTWARE ON A WINXP COMPUTER

One of the many reasons for developing the new VisionSuite was to create a suite of applications that would be fully Windows™ compatible. The older H1020 software was originally developed for the DOS environment. The newer Windows operating systems (Win2k/WinXP) have a different communication port control methodology than within DOS or Win95/98. In the newer versions of Windows, the operating system can take control of the various communication ports (i.e. the serial and parallel ports) in order to maintain system integrity (on various levels). The H1020 software was never designed for this scenario and cannot connect to the signs.

In addition, there are also various graphics issues that can interfere with the proper operation of the H1020 software. These can be numerous and are beyond the scope of this topic.

However, there is a way to connect to a sign and use the old H1020 software while using your WinXP computer (for example). If you reboot your computer with a DOS diskette, you should be able to run the old H1020 software directly from a diskette. This process will bypass the entire Windows operating system.

The process is the following;

- Create a DOS bootable diskette.
- Copy the H1020 software from the CD onto another diskette.
- Place the DOS bootable diskette into the floppy drive and reboot the PC.
- Once at the DOS prompt, place the H1020 diskette into the floppy drive.
- Run the MOUSE batch file by typing MOUSE and then pressing enter.
- Run the main H1020 application by typing H10MAIN and then pressing enter.
- Use the H1020 software as you have done in the past.

There are several items that might interfere with this process.

- If you have a unique monitor or video card that requires advanced Windows drivers to work properly, then this process might not work for you.
- You need to store your messages on the floppy diskette. If you have too many messages (or too large) for the floppy, then this process might not work for you.
- If you have a newer sign system that is not supported with the old H1020 software, then this process might not work for you.

## EXTRAS ON THE CD

With the installation CD, there are several extra items that have been included. On the CD, you will notice the following folder (and subfolder) structure.

### D:\Extras

- \H1020
- \Library
- \PDF Manual

The **H1020** folder contains a copy for the old H1020 software suite for communication to all older sign systems that are not longer supported in the new VisionSuite.

NOTE: The older H1020 software will not communicate with newer electronic control devices (e.g. H22, DVI-LINK, and VPU based signage).

The **Library** folder contains a set of pre-created files for your use in making messages.

The **PDF Manual** folder contains the latest manuals for VisionSuite in PDF format.

## USB CONNECTION TO MESSAGE SIGNS

In a few situations, you may not have a serial port in your computer. Instead, you may only have USB ports. (Note: This can be quite common on mid-high performance laptops.)

You can connect to a standard H21-based message sign via a USB port by using a USB-RS232 converter. Many manufacturers for these converter devices exist. They can be purchased from a wide variety of computer stores. The device normally comes with a Windows driver.

Simply connect the USB-RS232 device to the USB port on your computer. Windows should automatically see the device and ask for a driver. After the USB-RS232 converter has been installed, go to the Device Manager and determine **the COM port** the USB device references. Go to Vision Setup and change the serial port to the appropriate COM port.

USB-RS485 converters work in the same manner.

## MODEM COMMUNICATIONS

Within Windows, there are two methods of connecting to modems (either internal or external versions): use AT commands or Windows' TAPI method. The VisionSuite 2.1 (and greater) applications now allow for both modes.

The TAPI method depends greatly on the version of Windows and the modem being used. The AT command method requires extensive knowledge of the modem's internal AT commands and is a more low-level approach to the modem communications.

Due to the various modems available and backward compatibility issues, it was decided to implement both modes.





## APPENDIX III - ERROR CODES

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The following is the list of current error messages that could occur during communications to the sign. Possible reasons are also noted when appropriate.

### **MOST COMMON ERROR**

31000 Maximum number of reattempts has exceeded.

Possible Reason: The most common reason for this error occurs when the connection between the PC and the sign has been interrupted. The sign has either been powered off, the connection is down (or broken, or powered off), or the sign's electronics are not responding.

### **GENERAL ERRORS**

21002 CRC verification failed.

Possible Reason: The connection to the sign has dropped due to a poor connection with a modem or cell phone. For direct-connect systems, the cable may have been damaged and might require replacing.

21003 Invalid data structure.

Possible Reason: An older version of the software is being used with a newer communications DLL. A reinstall of the software should resolve this problem.

21004 Data structure has an invalid size.

Possible Reasons: An older version of the software is being used with a newer communications DLL. A reinstall of the software should resolve this problem.

The Hardware Password that you have entered is incorrect and all subsequent communications between the sign and the PC will generate this error message. You are trying to CLEAR your old Hardware Password. However, you have not yet SET your current Password. Enter the current Hardware Password and then return to the Password dialog to CLEAR the set password.

21005 Unsupported data structure.

Possible Reason: An older version of the software is being used with a newer communications DLL. A reinstall of the software should resolve this problem.

21006 Invalid header structure.

Possible Reason: An older version of the software is being used with a newer communications DLL. A reinstall of the software should resolve this problem.

21007 One or more arguments are invalid.

Possible Reason: An older version of the software is being used with a newer communications DLL or the access to the DLL does not match with the current design. A reinstall of the software should resolve this problem.

22000 General negative acknowledgement.

## **MODEM: TAPI COMMUNICATION ERRORS**

21203 Unable to allocate memory for the TAPI process.

21300 No Modem

21301 No TAPI registered devices available.

21302 TAPI device is not available.

21303 TAPI connection is not available.

21304 TAPI Communication Event translation error.

21305 TAPI Communication Read error.

21306 TAPI Communication Write error.

21307 Windows Modem Communications Dialog is not available.

21308 TAPI thread has not been created.

21309 The TAPI's selected line doesn't support VOICE and/or DATA capabilities.

21310 The TAPI's selected line doesn't support DATA MODEM and/or DIGITAL DATA capabilities.

21311 Unknown error occurred during TAPI initialization.

21312 Error on TAPI Requested line.

21313 Line is already in use by a non-TAPI application or by another TAPI Service Provider.

21314 Cannot use TAPI device. Unable to use Line.

21315 lineDeallocateCall unhandled error.

21316 lineClose unhandled error.

21317 lineGetTranslateCaps unhandled error.

21318 lineGetCountry unhandled error.

21319 The values in the INI file are invalid.

21320 There is a problem with your Telephony device driver.

21321 Reinitialize Connection - Shutting Down TAPI.

21322 Remove one of your copies of your Telephony driver.

21323 Out of memory. Canceling action.

21324 The TAPI operation failed.

21325 A TAPI resource is unavailable at this time.

21326 LINE CALLSTATE: Unknown device ID

21327 Unhandled LINECALLSTATE message.

21328 lineGetDevCaps unhandled error

21329 LocalAlloc failed in CheckAndReAllocBuffer.

21330 LocalSize returned 0 in CheckAndReAllocBuffer.

21331 lineGetAddressCaps unhandled error.

21332 lineMakeCall unhandled error.

21333 lineDial unhandled error.

21334 lineTranslateAddress unhandled error.

21335 lineGetID unhandled error.

21336 lineShutdown unhandled error.

Possible Reason: These set of errors indicate a problem with the modem device. Ensure that the modem is TAPI compliant (or Windows 2000/XP compliant) and that it has been installed properly. Go to the Windows' Control Panel and test the modem. If communications does not occur reliably, then either the modem does not work properly or the driver for the modem does not work properly under the version of Windows that you are using. Contact the modem manufacturer (or reseller) for assistance.

## **MODEM: AT-COMMAND COMMUNICATION ERRORS**

21400 Unknown/unsupported error from the modem communications.

Possible Reason: Either the modem or the connection to the sign has produced an error that is not supported. The most common reason for this error occurs when the modem at the PC is not working properly.

21401 No carrier detected.

Possible Reason: The most common reason for this error occurs when the phone line connected to the modem at the PC is not working properly.

21402 No dial tone detected.

Possible Reason: The most common reason for this error occurs when the phone line connected to the modem at the PC is not working properly.

21403 No answer.

Possible Reason: The most common reasons for this error are:

- the modem at the sign is not functioning properly,
- the phone line to the sign is not working properly,
- the sign's electronic controller is not working properly, or
- the sign is powered off.

21404 Busy signal received.

Possible Reason: The most common reason for this error occurs when someone else is already connected to the sign.

21405 General communications error.

Possible Reason: This is a general error that occurs when the modem at the PC is not working properly. It is a very rare error.

21406 Connection attempt to sign has timed out.

Possible Reason: The most common reason for this error occurs when modem at the sign is not picking up. This is either a sign that the modem is damaged or that the phone line to the modem is damaged.

21410 Modem is not responding.

Possible Reason: The most common reason for this error occurs when the modem at the PC is not turned on.

## **H21 SPECIFIC COMMUNICATION ERRORS**

22001 Invalid password. (NAK)

22002 File not found. (NAK)

22003 File Memory is FULL. (NAK)

22004 Requested file is in use. (NAK)

22005 Sign is running. (NAK)

22006 Sign is stopped. (NAK)

22007 Requested command is not supported. (NAK)

22008 Transmitted data is invalid. (NAK)

22009 No files exist on the controller. (NAK)

22010 Remote system is busy. (NAK)

22011 File already exists. (NAK)

22012 Authorization password is invalid. (NAK)

22013 Requested sign number is not supported. (NAK)

22014 Transmission packet is corrupt. (NAK)

Possible Reason: These set of errors are generated by the controller within the sign. These errors can occur for a wide range of issues. If any of these errors occur, you may wish to contact Technical Support for further information and assistance.

## **H22-SPECIFIC COMMUNICATION ERRORS**

23001 CRC error within the header.

23002 CRC error within the data block.

23003 Invalid command.

23004 Invalid data.

23005 Invalid sign number.

23006 Invalid password.

23007 Invalid authorization.

23008 Sign is busy.

23009 Sign is inactive.

23010 Command is not complete.

23011 Invalid memory.

23020 Bad packet sequence.

23021 Bad address.

23022 Memory is full.

23023 Transmission is too large.

23024 Multi-packet is not complete.

23025 Invalid version number.

23040 Software general error.

23060 Test of flash has failed.

23061 Test of RAM has failed.

23062 Access to the FPGA has failed.

23063 Temperature / Photocell probe is not responding properly.

23064 DIP switch read error has occurred.

23080 General FPGA hardware error.

23100 File CRC error.

23101 File name is invalid.

23102 No space for file to be stored into memory.

23103 File deletion failed.

23104 File system failure.

23105 File not found.

23106 File in use.

23107 File already exists.

23108 File size is invalid.

Possible Reason: These set of errors are generated by the controller within the sign. These errors can occur for a wide range of issues. If any of these errors occur, you may wish to contact Technical Support for further information and assistance.

## GENERAL OPERATIONAL ERRORS

27000 Invalid password within verification process.

Possible Reason: This is a highly unusual error and indicates that VisionSuite and communications to the sign are not compatible.

## GENERAL DATA TRANSMISSION ERRORS

28000 Write buffer is too large.

28001 Read process is taking too much time.

Possible Reason: These set of errors are generated by the controller within the sign. These errors usually indicate that VisionSuite and communications to the sign are not responding properly. If any of these errors occur, you may wish to contact Technical Support for further information and assistance.

## GENERAL FILE ERRORS (AT THE PC)

29000 File could not be found within the system.

29001 File does not have read permission.

29002 Error occurred while trying to read the file.

29003 File does not have write permission.

29004 Error occurred while trying to write the file.

29005 Invalid file type.

29006 File information is not available.

Possible Reason: These set of errors are usually generated within VisionSuite applications when the user tries to access files on the PC that are not accessible by the user. This may be an indication that the user needs special file access permissions in order to use the files.

## SERIOUS ERRORS

30000 General serious error.

30001 Cannot create an application thread.

30002 Connection exists to device.

30003 Invalid thread version.

30004 Invalid communication type; not supported within the software.

30005 Invalid device mask; not supported within the software.

30006 Communications Thread cannot terminate due to unexpected Windows operation.

30007 Invalid operation code generated.

30008 Write request has exceeded parameter limits.

30200 Unable to create handle.

30201 Unable to access Windows communication state for serial port.

30202 Unable to set Windows communication state for serial port.

30203 Unable to set Windows communications buffer for serial port.

30204 Unable to set Windows communication timing device for serial port.

30205 Unable to close handle.

30308 Unable to create TAPI device thread.

Possible Reason: This set of errors are serious errors and usually indicate that the PC and Windows is not working properly. If any of these errors occur, contact your local IT Personnel for immediate computer assistance.

## **WINDOWS™ GENERATED ERRORS**

The error numbers returned (shown) are greater than ZERO. The following represent the most likely errors returned by Windows.

32 The process cannot access the file because it is being used by another process.

Possible Reason: This can be returned when a file is being accessed by more than one user or application.

87 The parameter is incorrect.

Possible Reason: This can be returned when the serial port communications within Windows has been set to an “odd” state. Simply reboot the PC and the problem should disappear. If the problem persists, please contact Technical Support for assistance.