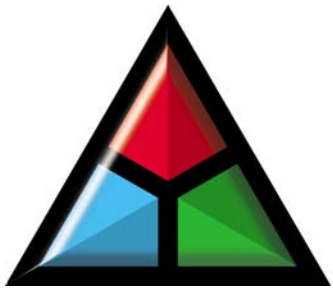

Aavelin

Digital Signage and Video Messaging System

by

MagicBox

User Manual v2.40

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Introduction

The Aavelin Digital Signage and Video Messaging system allows you to create slides and other content on your PC with graphics and text which can then be played back on numerous types of video monitors using the Aavelin unit.

A variety of applications can be served by an Aavelin, including advertising, announcements, schedules, point of sale displays, and more. Use the Aavelin wherever you have one or more monitors that need to display messages in the form of still images, video, and crawling text.

Hardware

The Aavelin unit is a dedicated player in a rugged rack-mount case. It features high quality output, quiet operation, and an easy-to-use interface with a keypad remote control.

The back panel has a variety of connections for attaching various monitors and accessories to the unit. These connectors are described later in this manual.

Software

Each Aavelin unit comes with a copy of MagicBox's "Aavelin Composer" software. This software can be installed onto a Windows (98, NT4, ME, 2000, or XP) computer allowing you to generate pages with backgrounds, text, and images and other content to be displayed on an Aavelin system.

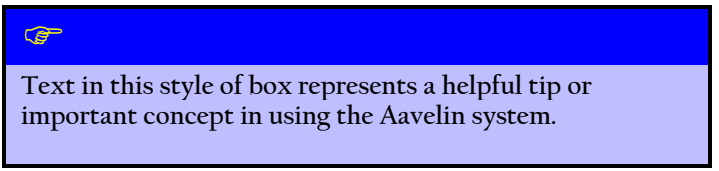
Backgrounds can come from many sources, including other Windows applications, your own scanned photos or digital camera images, the MagicBox background libraries, and more. You can copy and paste text directly into Aavelin Composer from other programs such as Microsoft Word, Corel Word Perfect, Netscape, etc.

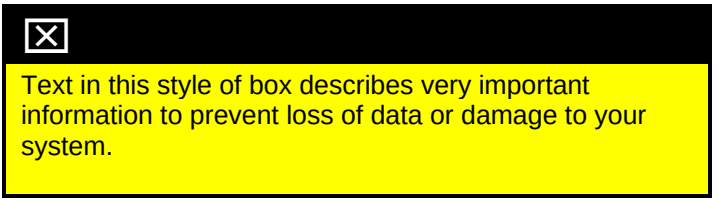
About This Manual

This manual is organized as a reference. Every menu and feature of the Aavelin is described in the order it appears on the program menus. A tutorial section is also provided to familiarize new users with the basic functions of the hardware and getting started with Aavelin Composer.

You should skim through this manual once before setting up your unit or installing your software in order to get an overview of how the Aavelin works. Then, read through each chapter, especially the tutorial, following the examples given. If you need quick reference to particular features, you will find each feature listed in the table of contents.

Throughout the manual, tips and important items will be highlighted in the following manner:





Customer Support

Should you have any questions about installing or using your MagicBox Aavelin system, please call our support line at 541-752-5542, send a fax to 541-752-5614, or write to:

MagicBox, Inc.
1600 SW Western, Suite 130
Corvallis, OR 97333

You can also send email to:

support@magicboxinc.com

Your email inquiries will be answered within one business day, usually the same day. Email is also the best way to communicate with us after hours or on weekends. You may also visit our web site:

www.magicboxinc.com

Bugs

It is said that Murphy was an optimist only because he never had to use a computer. Even the best-tested systems have unexpected problems. We are dedicated to offering high-quality, reliable products.

If you should encounter any unusual difficulties, please try to note the circumstances under which the problem occurred. Try to duplicate the results, if possible. These steps will help us to better isolate and solve the problem. Please contact us right away when you find a bug – if we don't hear about it, we can't fix it.

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Dimension Technologies, Inc. 100 Sample Backgrounds
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Ocala, FL 34479

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Credits

Aavelin Composer Software:
Lead Programmer: Karl Ott
Concepts and Original Design: Bob Richardson
Director / Producer: Karl Frederick, VP of Technology

Aavelin Hardware:
Case Design, Video-Out Hardware: Karl Frederick, VP of Technology

Aavelin Playback Software:
Programming team: Karl Ott, Ashish
Concepts and Original Design: Bob Richardson
Contributing Programmers:
Dianne H., George W., JBQ, John F.,
Leo S., Manuel, the team at Be, Inc.
Director / Producer: Karl Frederick, VP of Technology

Aavelin Documentation:
Original Director/Producer, Original Manual: Bob Richardson
Manual Composition and Revisions: Darin Starr

Executive Producer:

Tom Searcy

Special Thanks:
Garrett Andres
Scott Bowman
Ann Davies
Brad Holland
Ashish
Ramona Perry-Campbell

Warranty

The Aavelin player unit hardware is warranted against defects in parts and labor for a period of one year from the date of purchase. This warranty does not apply to damage caused by misuse or external forces such as power fluctuations, extreme temperatures, exposure to excessive moisture, or other acts of nature.

CD-ROMs, Zip disks, or floppy disks are warranted to be free from media defects for a period of ninety (90) days from the date of purchase.

This warranty does not cover shipping and handling charges for any replacement components or merchandise.

Software License

SOFTWARE PROGRAM LICENSE AGREEMENT
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This license agreement shall be governed by the laws of the state of Oregon.

Standards and Regulatory Compliance Statements

This device has been subjected to laboratory tests by a certified testing facility, and has been found to conform to the following standards and specifications:

UNITED STATES: FCC Part 15 Subpart B Section 15.109 and 15.107 Class A; ANSI C63.4 (1992) method.

CANADA: ICES-003 Class B using : FCC Part 15 Subpart B Section 15.109 and 15.107 Class A; ANSI C63.4 (1992) method.

Federal Communications Commission
(FCC Statement)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed in accordance with the instructions in this manual, harmful interference to radio communication may occur. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

Re-orient or relocate the receiving antenna.

Increase the space between the equipment and the receiver.

Connect the equipment into an outlet on a circuit different from the one to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402 by ordering Stock No. 004-00000345-4.

WARNING:

A grounded-type power cord is required in order to meet the FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

Canadian Doc Notice
For Class B Computing Devices

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'èmet pas de bruits radioélectroniques dépassant les limites applicable aux apparils numéériques de las class B prescrites dan le Règlement sur le brouillage radioélectrique édicté par le ministrère des Communications du Canada.

Important Safety Instructions

The following instructions describe how to prevent physical injury to yourself or others, as well as how to prevent damage to the unit. Read these instructions thoroughly before attempting to install your unit.

1. Please read these instructions thoroughly.

2. Please keep this guide for future use.

3. Please disconnect the device from the main power supply before cleaning. Do not use any liquid or aerosol spray cleaners.

4. To avoid damage to the device, you should only use accessory parts permitted by the manufacturer.

5. The device must be protected against moisture.

6. To set up the device, it must be put in a stable horizontal position. Tipping it over or dropping it may cause injuries. Only use safe setup locations, and follow the setup instructions of the manufacturer.

7. The ventilation openings are used for air circulation which protect the device against overheating. Do not block the ventilation openings.

8. To connect the device, follow the connected load values of the main supply.

9. Due to electrical safety, the wall socket must be equipped with a nonfused grounded conductor contact.

10. The power cable must be positioned in a way that nobody may trip over it. There should be nothing resting on the cable.

11. All instructions and warning remarks on the device must be followed.

12. If the device will not be used for a long time period, you should disconnect it.

13. Absolutely no objects or liquids should enter the device via its openings. This could cause a fire or an electrical shock.

14. Do not open the device unless instructed to do so by an authorized customer service personnel.

15. If any of the following conditions occur, the device must be disconnected from the main power, and it must be checked by a qualified service center:

A. Either the power cable or power plug is damaged.
B. Liquid has entered the device.
C. The device was exposed to moisture.
D. When the device does not operate according to the manual, or you do not achieve any improvement with the aid of the manual.
E. The device has been dropped and/or the casing is damaged.
F. The device gives off excessive heat or a burning smell.
G. When the device shows obvious signs of a defect.

16. For repair, only original spare parts or parts in accordance with the original specifications may be used. Use of unsuitable parts can cause more damage and may void your warranty.

17. Please contact the manufacturer for all questions concerning service and repair.

18. The power outlet must be located in close proximity to the equipment and must be easily accessible.

Hardware Setup

Box Contents

Before you begin setup of your Aavelin unit, make sure that the following components are included in the original packaging:

___ Aavelin Main System Unit

___ Control Keypad

___ Power Cord

___ BNC to RCA Adapter Plug

___ BNC Video Cable

___ S-Video Cable

___ "Aavelin Composer" CD-ROM

___ This User Manual

___ Warranty/Registration Card

Be sure to fill out and send in your registration card as soon as possible. We must have your registration card on file to be able to provide support (except for initial setup support) and product updates.

You may also register by visiting our web site at www.magicboxinc.com

Find a Suitable Location

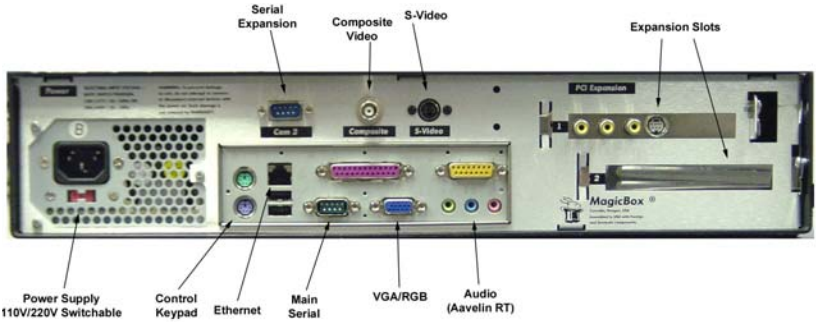
The Aavelin unit should be placed on a stable, flat, level surface.

Take care to ensure that the unit is not placed where it may be easily knocked over, have its cords tripped over, or have liquids spilled into it.

The Aavelin unit warranty does not cover damage caused by accidents or misuse.

Connections

All of the Aavelin's connections are found on the rear panel, shown below.



Aavelin Rear Panel

Your Aavelin system may appear different than the one pictured above.

You must unplug the power cord before adding or changing any connections. Failure to do so may damage your Aavelin unit.

About Television Standards (NTSC/PAL)

Different parts of the world use different television standards.

The standard used in most of North America is called "NTSC".
The standard used in many European countries is called "PAL".

When using Composite or S-Video, the Aavelin can operate in either the NTSC or PAL modes. The mode is set at the factory based on the country to which the unit is shipped. If you need to change this setting, contact MagicBox technical support.

Connect a Monitor

The Aavelin unit supports several different types of display devices as shown below:

The "VGA/RGB" port supports any PC-style RGB monitor or compatible plasma monitor.

The "S-Video" port supports professional video monitors with multipin inputs labeled "S-Video", "S-VHS", or "Y/C".

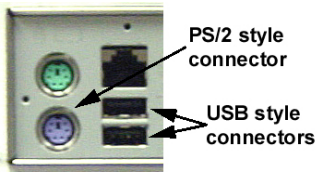
The "Composite Video" port outputs standard composite video which may be connected to a video monitor or a television with "A/V" or "Aux" inputs.

It is recommended that only one output connector be used at a time. The desired output is set in the Aavelin's setup menus.

When the setup menus are being displayed, they are sent to all output connectors. However, only the appropriate output connector displays a broadcast-quality signal.

Connect the Control Keypad

The Aavelin is controlled by a small keypad. Connect this keypad to this connector on the rear of the unit:



Your keypad will either utilize a PS/2 connection or a USB connection. The PS/2 style connector is purple, and is the bottom of the two similar connectors. For USB keypads, either USB connector can be used.

Connect the Ethernet Cable (Optional)

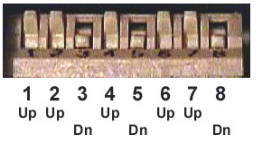
Aavelin units include an Ethernet networking adapter. This connector may be located in the PCI Expansion area on some systems.

If you intend to use the Aavelin unit on a LAN, connect network cable here. (Contact your network administrator to help you identify your network's cable connection if necessary.)

Connect a Modem (Optional)

Aavelin systems have two serial ports. If you wish to use a modem with your unit, (US Robotics Sportster 33.6 or 56K modems are supported), connect it to the COM1 serial port. Use the photo below to identify the correct serial port:

The modem should have its DIP switches set according to the following photo.



Next, connect the phone line from the wall to the modem. Use the plug on the outermost edge of the modem.

Finally, connect the included power supply, and turn the modem on. To ensure proper detection, the modem must be powered on before the Aavelin playback system.

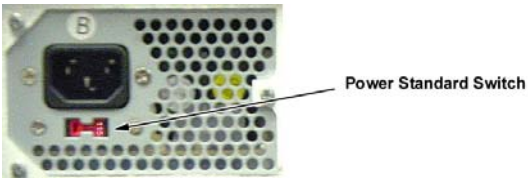
Connect a Direct Serial Cable (Optional)

By using a Null Modem serial cable your Aavelin will support a direct serial connection. Connect the cable from the communications port on the publishing PC to the COM1 serial connector on the Aavelin.

To publish with a serial cable, you must use a Null Modem serial cable, included with your Aavelin. A standard serial cable will not work.

Connect the Power

Once you are sure everything is properly connected, connect the power cable to the rear of the Aavelin unit and then plug it into a power outlet.



The Aavelin system includes a power cord appropriate for the country to which it was originally shipped. If you require a different power cord, contact MagicBox, Inc.

Ensure that the power standard switch (115V / 230V) is set to the correct voltage for your country. Damage could result if the switch is not set properly.

Test the Unit

After connecting a monitor and applying power to your Aavelin unit there will be a brief boot period. Following this brief period, you should see your unit play some sample screens (if it is new) or the default project (if it has been published to previously).

> ☞
>
> **The sample screens will be displayed on the designated connector.**
>
> **If your unit is new, the default output is the Composite/S-Video connector.**

If you have successfully reached this stage, your unit is ready to configure. Follow the steps below under "Configure the Aavelin Unit".

Configure the Aavelin Unit

This section takes you through the necessary steps to configure your unit. Refer to the next chapter, "Aavelin Unit Reference" for more details on the system menus and the control keypad.

Press the "Menu" (Menu) key on the control keypad, and the Main Menu Screen will appear:

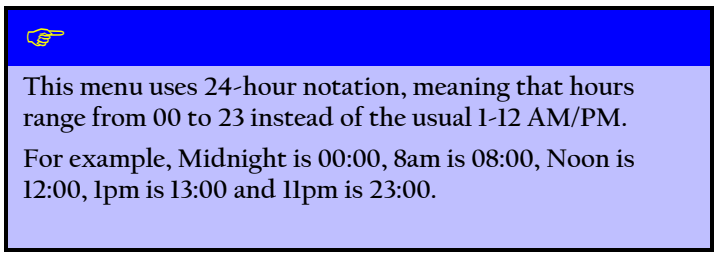
The Aavelin's menus are sent to all video output connectors simultaneously: VGA, Composite, and S-Video, at a resolution of 640x480. This allows the menu to be viewed regardless of what kind of monitor is connected.

After exiting from the Main Menu, the Aavelin will resume unobstructed playback.

Set the Date, Time, and Time Zone

Using the up and down arrow keys (⬆ ⬇), highlight "Set Date & Time" and press the Select (⊡) key. The screen below will be displayed and the date, time, and time zone can be changed.

Use the left and right arrow (⬅ ➡)buttons to select the field you wish to modify, and use the up and down arrow (⬆ ⬇) buttons to change the value of that digit. Press Select (⊡) to move to the Time line, and follow the same procedure to set the values there.



Press Select (⊡) again to highlight the time zone field. Use the up and down arrow (⬆ ⬇) buttons to select the proper zone. With the proper zone highlighted, press the right arrow (➡) to highlight the Set button, and press Select (⊡). The settings are now stored, and pressing the right arrow (➡) followed by Select (⊡) will return you to the main menu.

Because the Aavelin unit uses dates and times to determine when to play certain pages, it is important that you accurately set all of these fields. When creating pages on a PC, starting dates and ending dates, and times can be specified for content scheduling.

Exit the Menu Screen

From the main menu, just press the "Menu" key (Menu) and the menu screen will go away. The Aavelin will now resume playback on its designated output connector.

For more details on the Setup Screen, including the "Network" menu and the "Video Settings" menu, refer to the next section of this manual, "Aavelin Unit Reference."

The network information is under the heading "Network Setup."

Aavelin Unit Reference

Player Unit Capabilities

Playback Capacity

All Aavelin playback units accept pages and other content created using the Aavelin Composer software. The Aavelin unit displays the published pages in the order specified as part of your Aavelin Composer project.

Projects can published to the unit in a number of ways - Ethernet, modem, zip disk, or through a direct serial connection. Once published, the Aavelin retains the projects on its built-in hard drive. The hard drive has a capacity for a nearly unlimited number of images (10,000+). However, capacity may vary depending on other types of content sent.

Ethernet Networking

Aavelin units include an Ethernet network adapter and built-in network software. This allows the units to receive content over a corporate LAN or even the Internet when properly configured.

Ethernet networking can be a complex subject. If you are not familiar with terms such as "TCP/IP", "IP Address", "Subnet Mask", etc., We recommend that you have your Network Administrator assist you with the initial setup of the Aavelin unit.

Modem Transfer

Aavelin units can receive projects via a modem. The Aavelin unit automatically detects a modem when it boots.

MagicBox, Inc. recommends US-Robotics Sportster 33.6K (or faster) modems for use with the Aavelin unit. A preconfigured modem may be purchased directly from MagicBox.

The sending PC must also be equipped with a compatible modem.

Zip transfer

Aavelin units can also receive projects via Zip disk. Once you have published to the Zip disk, simply place the disk in the Aavelin's Zip drive. The Aavelin unit will automatically find the project, copy it to the hard drive, and begin playing it.

Direct Serial transfer

Aavelin units can also receive projects from a direct serial connection. This requires a functional serial port on the publishing computer, and a 'null modem' style serial cable.

To publish with a serial cable, you must use a Null Modem serial cable, included with your Aavelin. A standard serial cable will not work.

Important Considerations

Please keep the following issues in mind when setting up and operating the Aavelin playback unit.

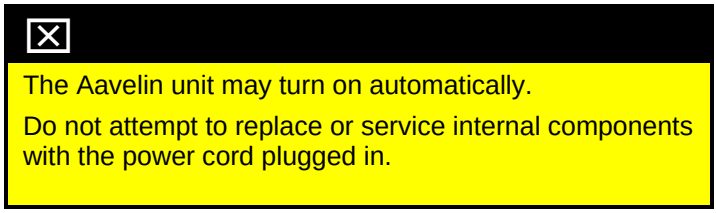
Protect the unit from power loss. An uninterruptible power supply (UPS) is highly recommended.

Although the Aavelin unit has a hard drive for retention of projects and other content, like all electronic devices it is sensitive to the effects of power interruptions and power spikes. If you are in an area where power spikes, surges, brownouts, and interruptions are frequent, it is recommended that you add an Uninterruptible Power Supply to protect your unit and data.

Many inexpensive UPS models are available on the market, or you can contact MagicBox, Inc. directly to order a suitable model.

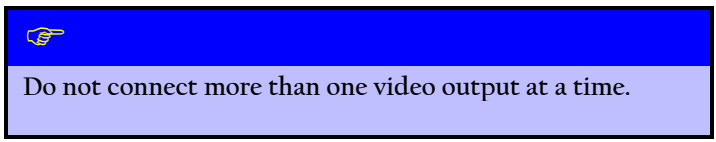
Ensure that the date, time, and time zone are set correctly.

The Aavelin unit takes into account the current date, time, and time zone when playing back pages. When you create pages in Aavelin Composer, you can schedule them to only display at certain times. Because of this, it is important that date and time fields be set correctly on the Aavelin unit. See the previous chapter on setting up the hardware for information on programming the date and time.



The Aavelin unit has a "soft" power switch. When you plug the unit in, it will return to its last power setting, which may have been "on" or "off".

Normally, the unit should be left on all the time, but if you need to turn off the power (for example to connect expansion devices or to ship the unit), press and hold the power button on the front of the case for at least 4 seconds. The unit will shut down, and then you may unplug the power cable.



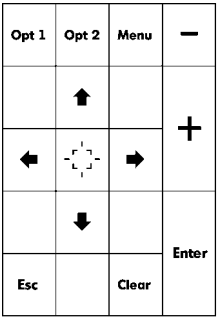
The Aavelin unit supports VGA, Composite, and S-Video output formats. However, for best quality it only can produce one of these signals at a time. The desired output is chosen via the setup menus.

When menus are being displayed, all outputs are enabled so that you may see the menus no matter what monitor is connected. When you exit from the menus, only the designated output will be enabled.

During display of menus, you may notice a slight degradation in video quality. This is normal because the menus are being displayed on all outputs simultaneously. The video signal will return to normal when you exit from the menu screen.

Using the Control Keypad

The Aavelin unit's functions are accessed using the included wired control keypad.



If you intend to use the Aavelin unit purely as an automatic playback device, you will not need the control keypad after choosing your settings. Store the keypad in a safe place where it will not be lost, and where you will be able to find it easily again should you need to change a setting later.

Control Keypad Buttons

Menu

This key will enter and exit the Aavelin unit's menu system. The menu display will be sent to all the video outputs and the VGA connector at a resolution of 640x480.

Exit the menu screen by pressing "Menu" again. The Aavelin unit will resume playback on its specified output connector.

Arrows and Select / Enter

When accessing menus, the arrow keys navigate the menus and change the values of selections.

The Select (⊡) and Enter keys choose a highlighted menu item.

Esc

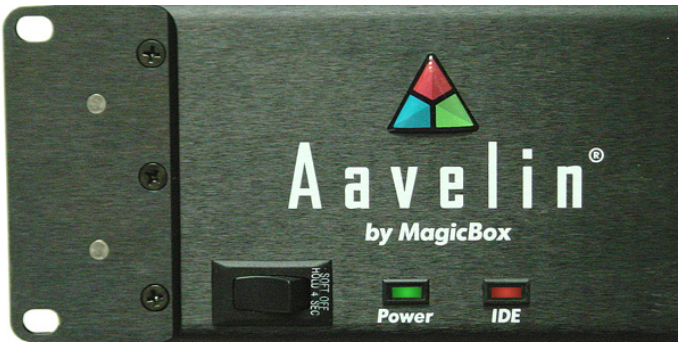
Pressing the ESC key will back up to the previous menu level. If you are in a requester that has a "Cancel" button, pressing ESC is the same as hitting "Cancel".

Opt 1, Opt 2, +, -

These keys are reserved for future expansion.

Starting the Unit

When you first turn the unit on (by connecting the power and momentarily pressing the power switch on the front of the unit)...



Aavelin Front Panel / Power Switch

...you will see the following splash screens as the unit boots. The entire boot process should take approximately 60 seconds.

First Boot Screen

Second Boot Screen

Third Boot Screen

After the boot process is complete, the Aavelin will begin playing pages. If this is the first time your Aavelin unit has been started, it will play a demonstration project. Otherwise, it will play the default project last published from your PC.

The Setup Menus

The setup menus allow you to change some of the settings used by the Aavelin unit. The changes you make are remembered by the unit even after a power failure. To access the menus, press the Menu key (Menu) on the control keypad.

The main menu screen, shown below, should appear. The menus are displayed on all outputs simultaneously. After you exit from the menus, playback resumes on the designated output connector.

Use the up and down arrows (⬆ ⬇) on the control keypad to highlight a menu item. Once the desired item is highlighted, press the Select (⊡) key.

Each of the setup menus is described on the following pages.

Video Settings

The Video Settings menu controls how the Aavelin outputs video during the playback of projects.

Signal Output Connector

Highlight the output connector you will be displaying to, and press the select key. The Aavelin can output its signal on the VGA connector, or as Composite Video or S-Video.

Video Standard

The Aavelin support both NTSC and PAL display standards. Currently this setting cannot be altered from the Video Settings menu. Systems are sent from MagicBox properly configured for the country they will be used in.

Set Date & Time

From the Main menu, highlight "Set Date & Time" and press Select.

The "Set Date and Time" menu, below, will appear:

Because the Aavelin unit uses dates and times to determine when to play certain pages, it is important that you set the date and time. When you create pages on your PC, you can set starting and ending dates and times.

Press the right arrow key to highlight the first 'Date' field.

Use the up and down arrow ( ) buttons to change the value of a field, and use the left and right arrow ( ) buttons to move between fields. The format is YEAR – MONTH – DAY.

Once you have adjusted the numbers to reflect the current date, press Select ( ) to move down to the first 'Time' field.

Use the left and right arrow keys ( ) to select which number you wish to modify, and use the up and down arrow keys ( ) to change the value of that number. The format is HOUR – MINUTES – SECONDS.

This menu uses 24-hour notation, meaning that hours range from 00 to 23 instead of the usual 1-12 AM/PM.

For example, Midnight is 00:00, 8am is 08:00, Noon is 12:00, 1pm is 13:00 and 11pm is 23:00.

Once you have adjusted the numbers to reflect the current date, press Select ( ) to move down to the 'Time' field.

Use the up and down arrow ( ) buttons to highlight the desired time zone, and press the right arrow key ( ) to highlight "Set" and press the Select key ( ).

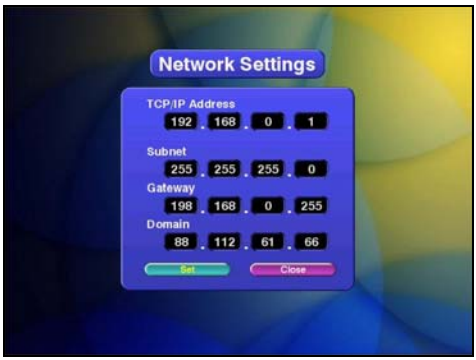
Press the right arrow key again and select to return to the main menu.

Network Settings

All Aavelin units feature built-in support for Ethernet networking.

> Ethernet networking can be a complex subject. If you are not familiar with the meaning and implementation of terms like "TCP/IP", "IP Address", "Subnet Mask", etc., then we recommended that you have your network administrator assist you with these menus.

All network settings are adjusted by selecting the "Network Settings" menu from the Main Menu screen:



> All 4 fields on this panel must be populated to use the TxStream Data Service.

TCP/IP Address

Use the left and right arrow keys (⬅ ➡) to select which number you wish to modify, and use the up and down arrow keys (⬆ ⬇) to change the value of that number. When you are finished, press the Select key (⊡) to move down to the Subnet entry.

Subnet Mask

In some networks, setting just the TCP/IP address may be sufficient. However, in more complex networks, a "Subnet Mask" is required.

Set the Subnet value to the one used on your network the same way you entered your TCP/IP address. (This value is provided by your network administrator.)

It is important that the Subnet match the Subnet of your network, or communication with the Aavelin unit may not work.

When you are finished, press the Select key (⚄) to move down to the Gateway entry.

Gateway

In some networks, setting just the TCP/IP address may be sufficient. However, in more complex networks, a "Gateway" value is required.

Set the Gateway value to the one used on your network the same way you entered the previous two addresses. (This value is provided by your network administrator.)

If you are installing the Aavelin unit behind a router, the router address must be entered in the Gateway setting before the Aavelin will talk across the router.

When you are finished, press the Select key (⚄) to move down to the Domain entry.

Domain

In some networks, setting just the TCP/IP address may be sufficient. However, in more complex networks, a "Domain" value is required.

Set the Domain value to the one used on your network the same way you entered the previous three addresses. (This value is provided by your network administrator.)

If you are installing the Aavelin unit behind a router, the Domain Server address must be entered in the Domain setting, or the Aavelin may not be able to find other machines on the network.

When you are finished, press the Select key (⚄) to highlight 'Set' and press the Select key again to save your settings. Press the right arrow key followed by the Select key to return to the main menu.

Verifying the Network Setup

Once the Aavelin networking hardware has been connected and its settings have been configured, your Network Administrator should verify that the network is operating properly.

To verify that data can reach the Aavelin unit, use a PC on the same network. Open an MS-DOS prompt on the PC, then type in a "ping" command:

```
ping x.x.x.x
```

Substitute your IP address for the "x.x.x.x" shown above. For example, if the IP address of your Aavelin unit is "10.1.1.4", then you should type:

```
ping 10.1.1.4
```

If your network connection is successful, you should see results similar to the following:

```
C:\Windows>ping 10.1.1.4
Pinging 10.1.1.4 with 32 bytes of data:

Reply from 10.1.1.4: bytes=32 time<10ms TTL=255
Reply from 10.1.1.4: bytes=32 time<10ms TTL=255
Reply from 10.1.1.4: bytes=32 time<10ms TTL=255
Reply from 10.1.1.4: bytes=32 time<10ms TTL=255
Reply from 10.1.1.4: bytes=32 time<10ms TTL=255

Ping Statistics for 10.1.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss).
```

If a connection cannot be established between the Aavelin and your networked PC, you should repeat the hardware and software setup steps, verifying your settings. Pay particular attention to the Aavelin's IP address and Subnet value.

If the above test still fails, have your Network Administrator contact MagicBox, Inc.

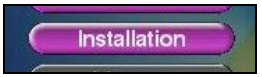
Updating the Unit's Software

Occasionally, MagicBox will issue upgrades to the Aavelin software. These upgrades are issued on CD-Rom and available from MagicBox upon request. Use the following procedure to update your Aavelin with one of these CD's.

Do not disconnect the power from your unit during the upgrade process. Although the unit is designed to survive a power failure during the upgrade process, a power interruption at exactly the wrong time can permanently damage your unit.

Playback Update Procedure

Press the Menu key (Menu) on the control keypad to display the Aavelin menu. Use the arrow keys to highlight the 'Installation' button and press the Select key (⚄).



At this time, insert the CD-Rom labeled '**Aavelin Playback Update**' into the CD-Rom drive of the Aavelin. After a few seconds, you will hear the disc spin-up, and the red IDE light and the green activity light on the CD-Rom drive will blink. When this happens, press the Select key (⚄) while 'Update from CD' is highlighted.

The CD-Rom activity and red IDE lights will blink rapidly while the update is performed. This procedure will take approximately 60 to 90 seconds – afterwards, the CD-Rom drive will automatically eject the disc, and the application will be restarted.

When the Aavelin has completed its restart, press the Menu key (Menu) to verify that the new version was installed successfully.

Store the Playback Update CD-Rom in a safe location. In emergency situations it can also be used as a repair disc.

Aavelin Composer Installation

Requirements

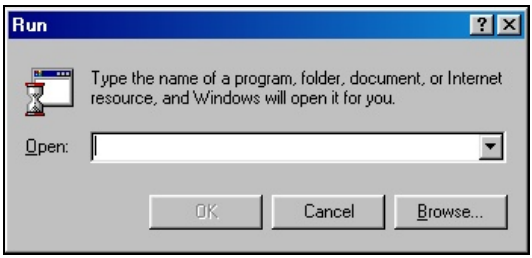
To install the Aavelin Composer software, your computer must meet the following requirements:

- 150MHz Pentium-Class CPU or better
- 32MB RAM
- 50MB Hard Drive Space (15MB for "Compact" Install)
- CD-ROM Drive
- Super VGA card with True Color (24-bit or 32-bit) modes (800x600 or higher desktop resolution required)
- Color Monitor
- Windows 98, NT4, ME, 2000, or XP

Starting Setup...

Insert the "Aavelin Composer" CD into your CD-ROM drive. On most Windows machines, the CD should automatically launch the installer. If Auto-Run is disabled on your machine, perform the following:

Click on the "Start" button on the Windows Taskbar. Click on "Run..." The following window will appear:



Type in the letter of your CD-ROM drive (such as D:\ or E:\ ), and "SETUP.EXE". For example, if your CD-ROM drive is Drive E, you would type:

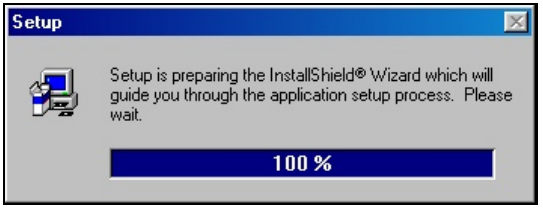
```
E:\SETUP.EXE
```

If you do not know the drive letter of your CD-ROM, you can click on "Browse..." and find the SETUP.EXE program using the menus that appear.

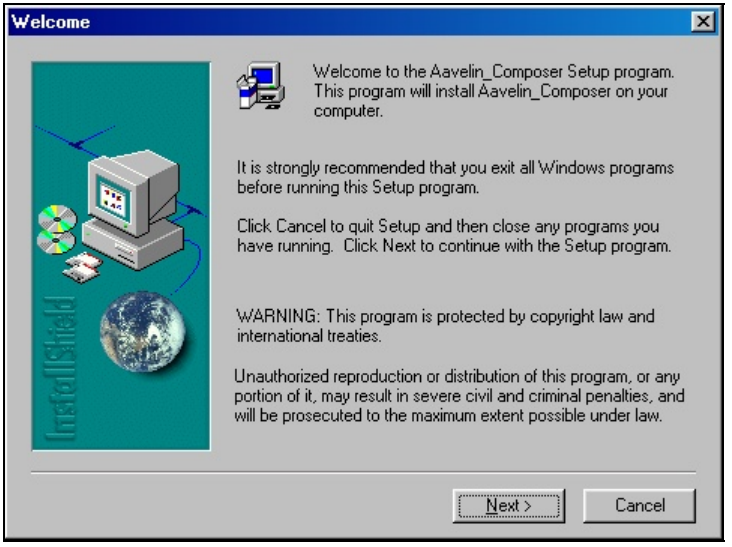
Once you have entered/found the setup program, click "OK" and it will be launched.

Using Setup

When the setup program first runs, it will take a few seconds to prepare its files for installation. During this time, you will see the following progress window:



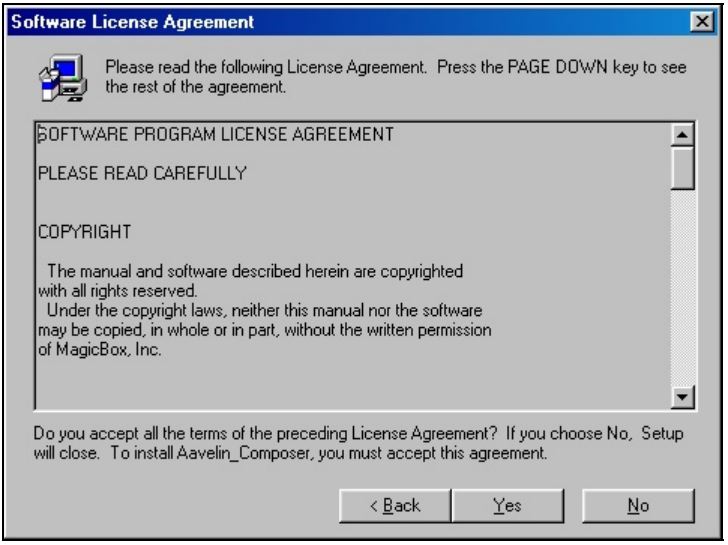
After this is complete, the InstallShield® Wizard will be started. The first InstallShield® Wizard page is shown below:



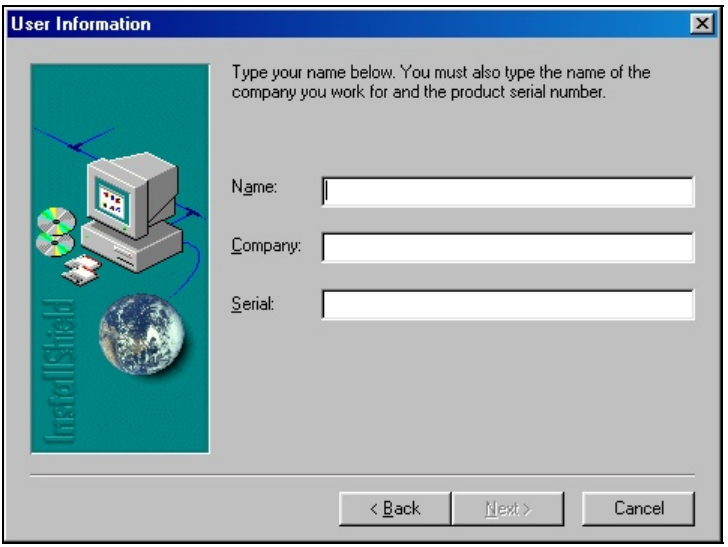
This page shows copyright information and also informs you that you should shut down any Windows programs before continuing.

When you are ready to continue, click "Next ›".

The Wizard will now display the software license agreement for Aavelin Composer. This software license agreement is also printed in the Introduction section of this manual.



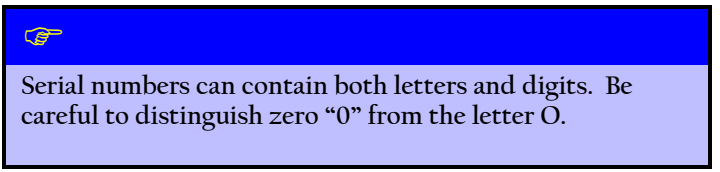
After you have read the license agreement, click "Yes" if you want to continue. Clicking on "Yes" constitutes your acceptance of the terms of the license agreement. After you click "Yes", the following will appear:



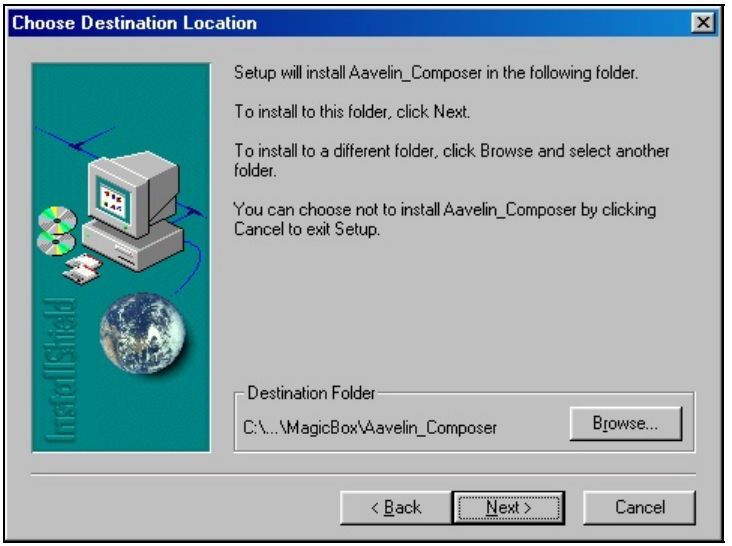
Enter your name and your company. If this installation is for personal use and you do not have a company name, enter "Personal."

Before you can continue with the installation, you must enter your Aavelin Composer serial number.

This 11-digit number is printed on your CD-ROM. It will begin with the letter 'A' and be in the format 'AXX-XXXX-XXXX', where 'X' can be either a number or a letter. Do not confuse this with the serial number of your Aavelin player unit itself.



Once you have entered a valid serial number, you will be taken to the following screen:



Here you may choose an installation directory on your hard drive for the Aavelin Composer software. Normally you do not need to change this value and can click "Next ›" to continue.

You will now be given three choices of how to install the software:

Typical

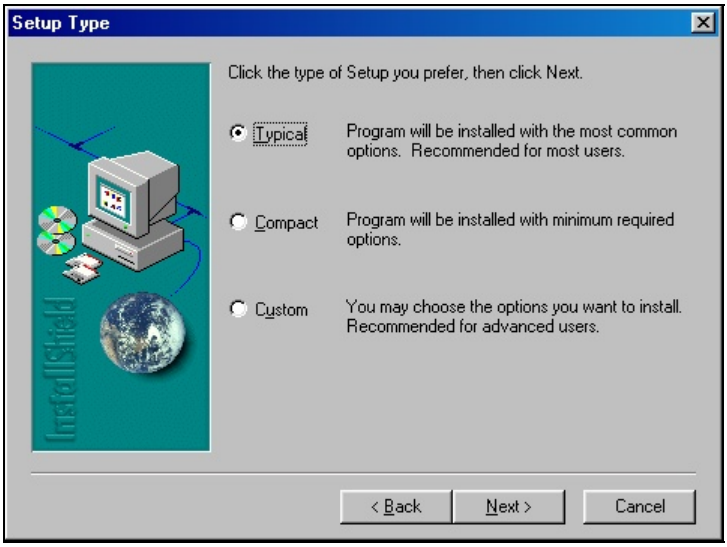
This option will install the Aavelin Composer program, high resolution versions of the included backgrounds, and the sample/tutorial projects.

Compact

This option will install the Aavelin Composer program and low resolution versions of the included backgrounds.

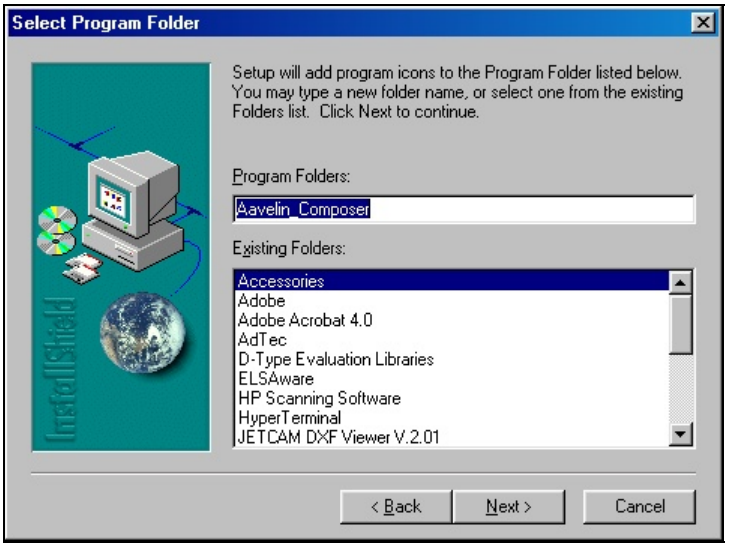
Custom

This option will let you select individual components to install.



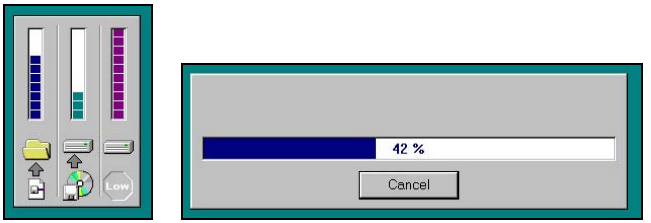
After you have selected "Typical", "Compact", or "Custom", click on "Next >" to continue with the installation. If you have selected "Custom", you will be given a menu of components to install.

Next, the Wizard will ask for the name to use for the Program Group containing Aavelin Composer:



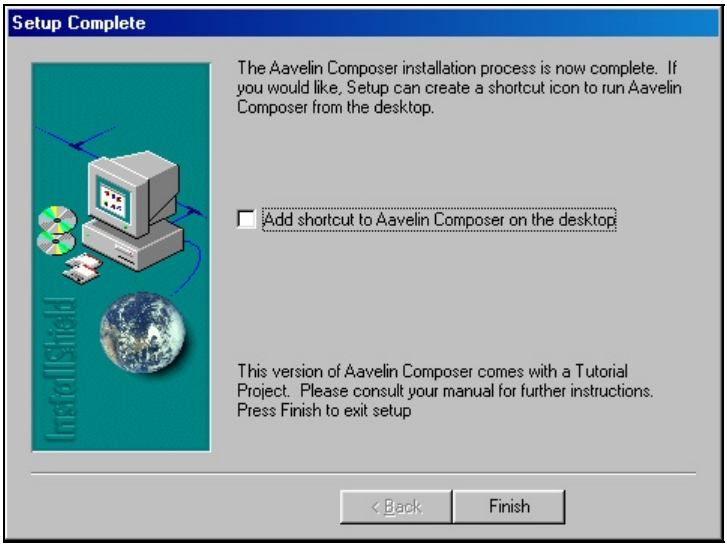
This is normally called "Aavelin Composer", and will be placed inside the "MagicBox" Program Group – you only need to change the selection if you want to use your own custom Program Group. Click on "Next" to continue.

The InstallShield® Wizard will now begin copying files from the CD to your computer. During this process, you will see progress information displayed similar to the images below:



Depending on the speed of your computer and the installation options you have selected, this process will take 15 seconds to a couple of minutes to complete.

After all of the files have copied, you will see this final InstallShield® Wizard screen:



Normally, the installation process just creates a Program Group entry under the windows "Start" button. However, you can choose to have a shortcut icon placed directly onto your desktop by clicking on the checkbox in this menu. When you are done, click "Finish" and the installation process will be complete.

See the next sections ("Aavelin Composer Setup" and "Aavelin Composer Tutorial") for information on how to launch, configure, and begin using the Aavelin Composer software.

Aavelin Composer Configuration

This section will describe how to launch the Aavelin Composer software and configure the program's settings.

Launching Aavelin Composer

To launch the Aavelin Composer software, use these steps:

Click on the Windows "Start" button on the taskbar.

Click on "Programs"

Click on "MagicBox", and finally...

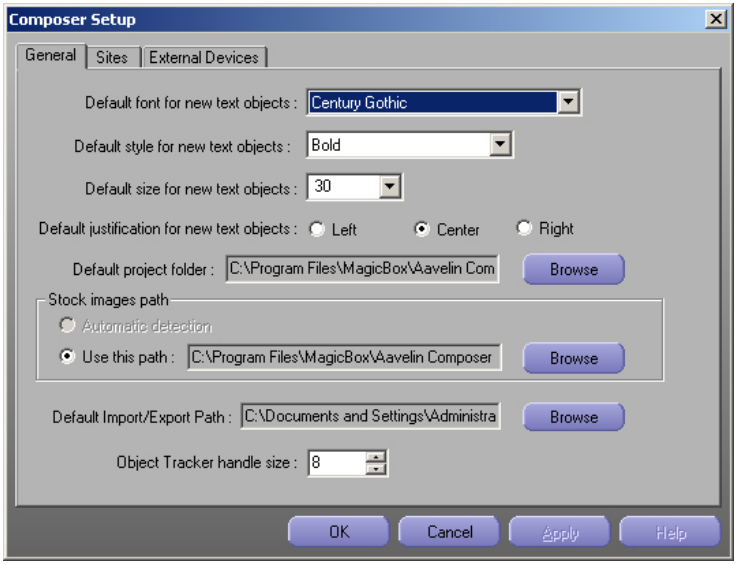
Click on "Aavelin Composer"

The program will launch, and you should see a main menu screen similar to the one below. (The exact size and appearance of menus and text will vary depending on your Windows desktop resolution.)

The main menu has the following choices: "New Project", "Open Project", "Delete Project", "Publish", "Setup", "About", and "Exit".

The Setup Menu

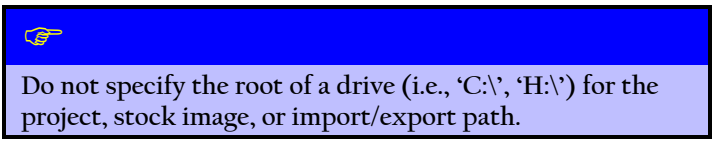
Click on "Setup" from the main menu to enter the setup menu. You will see a window similar to the one below:



The General Tab

The General tab, shown above, allows you to set the default font style, size, and justification. This saves time if you have a favorite font, as you won't have to change it every time you create a new page or paragraph. The factory setting is "Arial", "40", and "Center".

You can also specify the exact location of project storage, stock images, and Import/Export files (.MBT files); for example, if you are configuring Aavelin Composer to run from a network server. Normally, these fields are set automatically by the installation program and don't need to be changed.



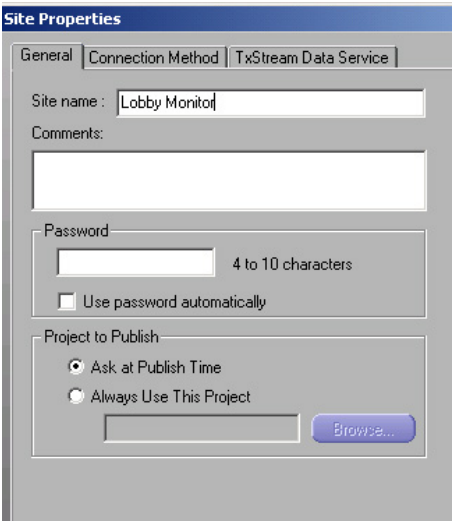
Do not specify the root of a drive (i.e., 'C:\', 'H:\') for the project, stock image, or import/export path.

The "Object Tracker" size controls the thickness of the "handles" of objects in the Page Editor. You can increase this size to make the handles easier to grab for users with disabilities.

The Sites Tab

The Sites tab is where Aavelin Composer is configured to publish completed work to your Aavelin unit(s). When you first install Aavelin Composer, the list of sites under the sites tab will be empty:

Click on "Add" to create a site description. You will be presented with the following window:



The first thing to do is type in the site's name. In the example above, "Lobby Monitor" has been entered. Use whatever short word or phrase that best describes your Aavelin unit's location.

Below the site name you may type in whatever brief comment information you'd like, such as a mailing address or contact name and phone number.

The “Password” section allows you to password protect your Aavelin, so only authorized users can publish to it. Here you can choose to have Aavelin Composer send the password automatically. Your Aavelin’s password is defined on the Sites tab of the setup dialog (explained in the “Completing Site Setup” section).

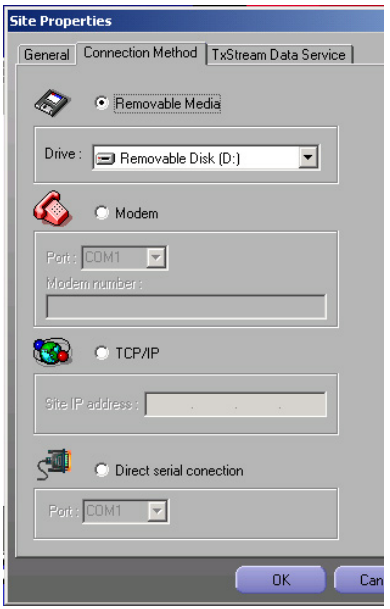
The “Project to Publish” section allows you to select a project file to always publish to this site. This will save you a step at publish time, but only if you always use the same file.

If you do not plan on always using the same file, leave “Ask at Publish Time” selected. (If this is your first time using Aavelin Composer, then you probably have not created a project yet, so skip this step and come back later if you want to change this setting.)

Connection Methods

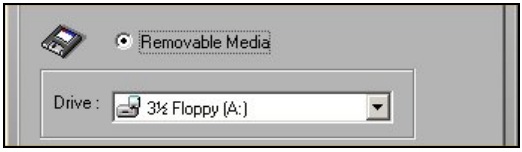
Depending on the way each Aavelin unit is connected, there are different ways to set up each site description.

Click on the “Connection Method” tab and then select one of the following four types:



Removable Media Sites

The “Removable Media” publish method is for Aavelin units that are not connected to your PC via serial cable, modem, or Ethernet networking.



At publish time, you will be prompted to insert a removable disk (such as a Zip disk), and the pages for your project will be automatically copied to that disk.

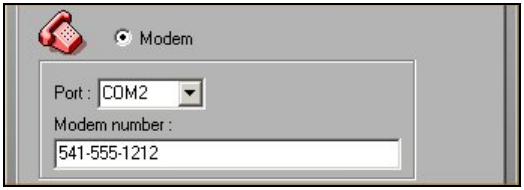
Direct Serial Sites

The "Serial" publish method is for Aavelin units connected directly to your PC via a serial cable. Select the "COM" port that corresponds with the cable connection.

At publish time, Aavelin Composer will automatically connect with the Aavelin unit and send over the pages of your project.

Modem Sites

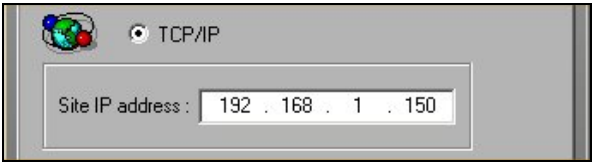
The "Modem" publish method is for remote Aavelin units that are accessed over the phone using your PC's modem. Select the "COM" port to which your modem is connected, and enter the phone # (including any long-distance or outside line access #'s you normally dial) of your Aavelin unit's modem.



When publishing, Aavelin Composer will automatically dial the modem and send your project's pages to the Aavelin unit.

Network Sites

The "Network" publish method is for Aavelin units that are connected to your corporate LAN or to the Internet.

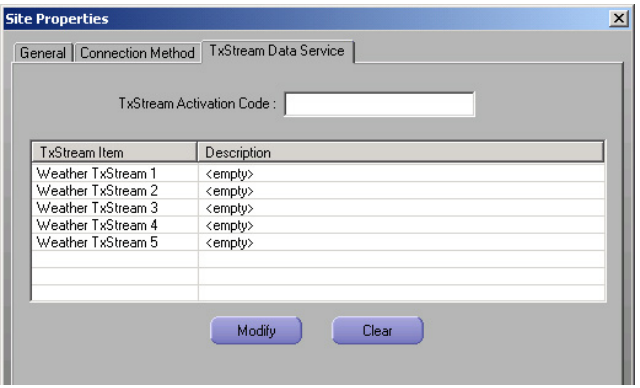


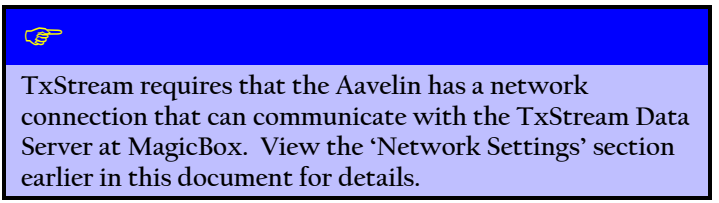
Enter the IP address of the unit. This must be the same address that has been programmed into the Aavelin unit at setup time. If you do not know this address, obtain it from your Network Administrator.

When publishing, Aavelin Composer will automatically connect to the Aavelin unit across the network and send your project's pages.

TxStream Data Service

TxStream is a subscription Data Feed Service from MagicBox. Using TxStream, customizable weather forecasts for a specific geographic region can be displayed as crawling text on screen.



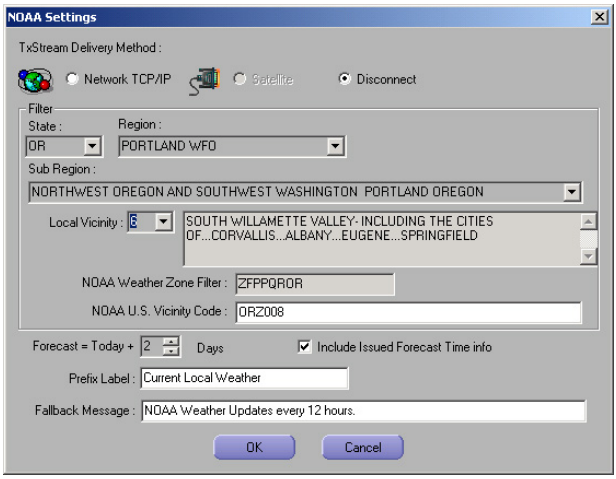


TxStream Activation Code

This code is provided by MagicBox when a subscription is started. If this code is absent or invalid, service from the TxStream Data Server will be denied.

Weather TxStream (1-5)

TxStream allows you to define 5 different geographical areas to receive weather forecasts for. To select an area, click on 'Weather TxStream 1' to highlight it and click on the 'Modify' button.



TxStream Delivery Method

Currently, 'Network TCP/IP' is the only valid option. This will connect directly to the TxStream Data Server. Select 'Disconnect' if you wish to completely disable the TxStream item.

State, Region, Sub-Region

Begin by selecting the state whose data you wish to receive. The 'Region' list will be populated with available regions for that state. In some cases, regions from bordering states may be shown if there is a densely populated area nearby. Select the appropriate Sub-Region next, if more than one is available.

Local Vicinity

This field lists the actual cities/towns for which the weather data is valid. Find your city by browsing through the Vicinity list. Not all cities may be listed – if yours is not, select the closest available city.

NOAA Weather Zone Filter

This field is a product of the selections made earlier and cannot be modified. This is displayed for informational purposes only.

NOAA U.S. Vicinity Code

This shows the code derived from the Local Vicinity selection made earlier. These values may be changed periodically by NOAA – if it does, you can replace this code with the name of a city in the 'Local Vicinity' field (simply cut & paste from one field to the other). Changing this field is recommended if the Fallback Message (see below) is displayed for an extended period of time.

Forecast = Today + X Days

Change this value to define the length of the forecast. Allowable values are 0 (today only) to 7 (8 days total forecast).

Include Issued Forecast Time Info

If this option is checked, the date/time information of the forecast will be displayed between the Prefix label (see below) and the actual forecast data.

Prefix Label

This is the text label that will be displayed at the beginning of the forecast.

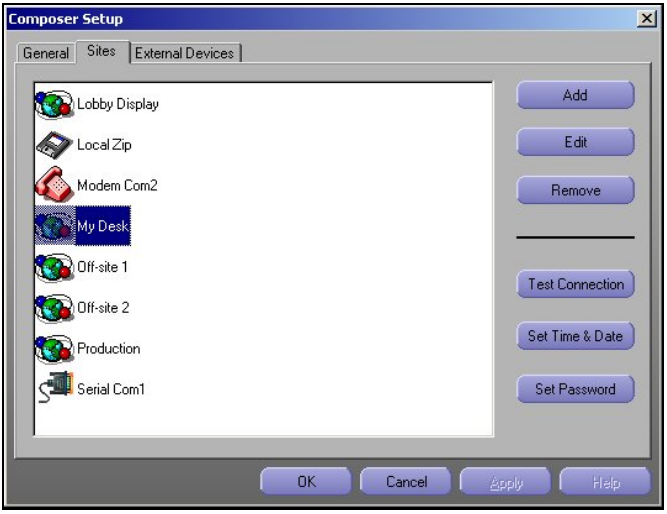
Fallback Message

This is the text string that will be displayed if no forecast data is available. This can happen if updated satellite data has not been received by the TxStream Data Server, or if service has been denied (invalid activation code, etc).

Once a TxStream item has been completely defined, you can choose to display it in an Overlay Region within a project (see the section titled 'Overlay Region Tab' for further information on this). You can then publish the project to the site and your forecast data will be displayed.

Completing Site Setup

After you have set up your site's name, preferences, and connection method, click on "OK". You will be returned to the setup window with the Sites tab still selected. Now your site name(s) will appear in the list, similar to below:



The names of the sites will be listed in Alphabetical order, and an icon will appear next to each site name indicating the connection method selected:

Removable Media

Direct Serial

Modem

Network

Test Connection

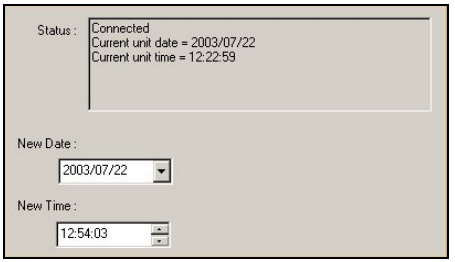
At this time you can test a connection to ensure your PC can talk to the Aavelin. Select a site, and click on the "Test Connection" button. If successful, you will see a screen containing this information:

If your test is not successful, double-check all hardware connections, and refer to the Troubleshooting section later in this manual.

Set Date & Time

Aavelin Composer can also be used to set the date & time of your Aavelin system. This is useful if your Aavelin is remotely located, or in other situations where it may be difficult to access the system menus through the Aavelin's keypad.

Select a site, and click on the "Set Date & Time" button.



Composer will connect to the Aavelin and display the date and time currently set. Make any adjustments necessary, and click on the "Set" button.

Set Password

The Aavelin system can be password protected, allowing only authorized users to publish content. By default, Aavelin systems are shipped with no password. If you wish to set one, simply select your site from the list and click on the "Set Password" button.

Aavelin Composer will then connect to the system and see if a password is already set. Since this system does not have a password set currently, Composer simply prompts you for a "New Password". Type in your desired password (4-character minimum), re-type it in the field below, and click on the "Set Password" button.

If there is already a password set, Aavelin Composer will prompt you for it before allowing any changes.

To remove password protection from an Aavelin system, simply click on the "Clear Password" button.

Aavelin Composer Tutorial

This section will introduce you to the main concepts in creating pages for the Aavelin unit using the Aavelin Composer software.

Be sure that you have already installed and configured the software using the instructions in the previous two chapters.

The instructions on launching the program are repeated below for first-time users:

Launching Aavelin Composer

To launch the Aavelin Composer software, use these steps:

Click on the Windows "Start" button on the taskbar.

Click on "Programs"

Click on "MagicBox", and finally...

Click on "Aavelin Composer"

The program will launch, and you should see a main menu screen similar to the one below. (The exact size and appearance of menus and text will vary depending on your Windows desktop resolution.)

The main menu has the following choices: "New Project", "Open Project", "Delete Project", "Publish", "Setup", "About", and "Exit".

The Tutorial Project

Your Aavelin Composer installation automatically includes a sample Tutorial Project. This section uses the Tutorial Project to convey the basic operation of the Composer software.

The conclusion of this tutorial features the process of publishing the finished project to your player unit. If your player unit is not set up nearby, you can still perform this tutorial, but you will not be able to fully complete the section on "Publishing".

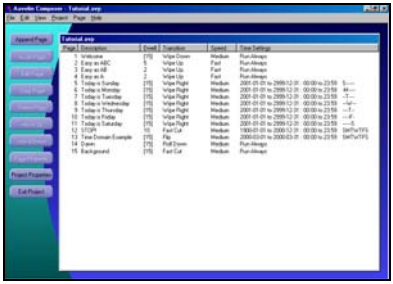
Opening the Tutorial Project

A "Project" is a collection of pages and additional materials created for display on the Aavelin unit. This tutorial works with a project that has already been created. After completing this tutorial, you will be ready to create your own projects from scratch.

Click on "Open Project". You should see a list of existing projects similar to the one below:

Click on "Tutorial.avp" to select the tutorial project. Then, click on "Open".

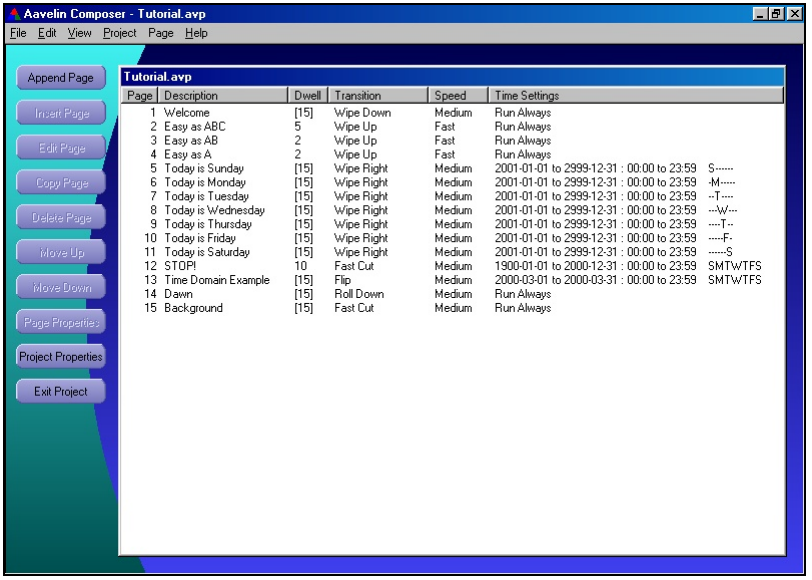
The project will now load, and you should see the Project Editor screen, which will be similar to one of the two samples shown below:



The Aavelin Composer software can display your project to you in “List Mode” or “Thumbnail Mode”. In List Mode, you can see all of your pages presented in a list. In Thumbnail Mode, you view actual images of your pages in a grid.

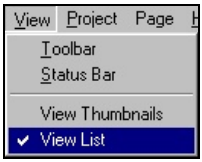
You may use either mode your prefer – the remainder of this tutorial will use List Mode.

A closer view of the List Mode:



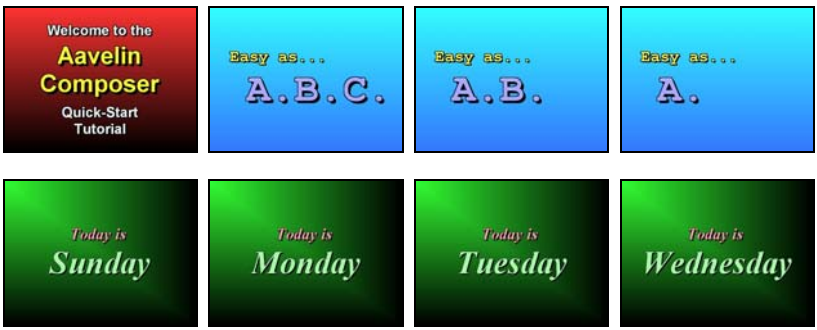
A closer view of the Thumbnail Mode:

To change the mode between, click on the "View" menu at the top of the screen and select the desired setting.



The Tutorial Pages

The tutorial consists of fifteen pages, shown below:



The Project Editor

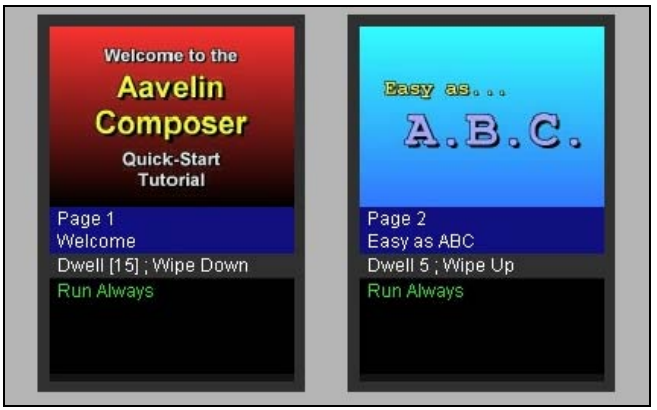
The Project Editor displays a list of all the pages in your project. This list is in the order that the pages will appear when played.

The tutorial project contains fifteen pages.

Tutorial.avp

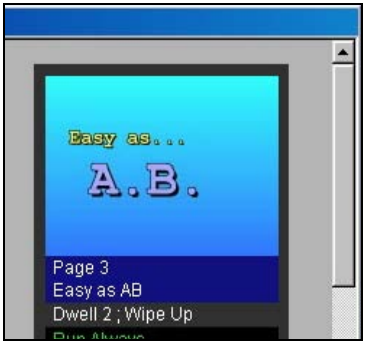
Page	Description	Dwell	Transition	Speed	Time Settings
1	Welcome	[15]	Wipe Down	Medium	Run Always
2	Easy as ABC	5	Wipe Up	Fast	Run Always

Project Editor List View Data



Project Editor Thumbnail View Data

The Project Editor list shows the number and name of each page, the duration and transition effect, and other information relating to the scheduled dates and times for a particular page.

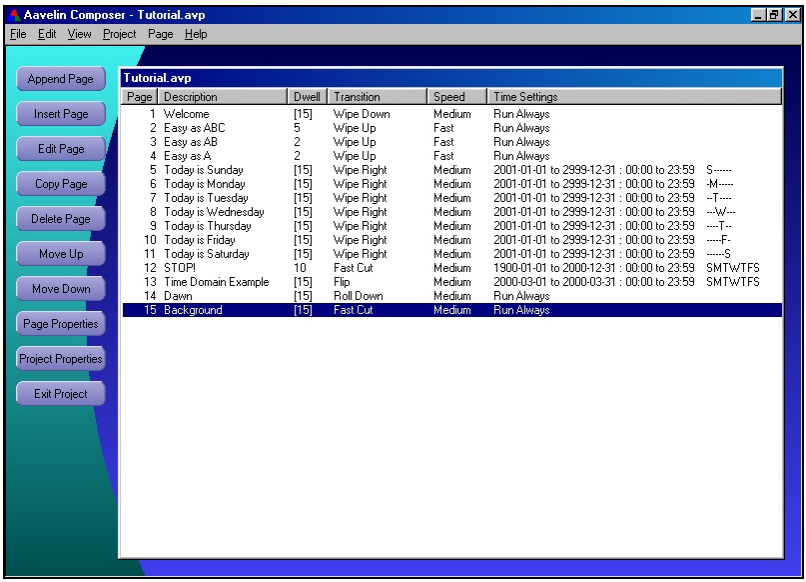


If there are more pages than will fit in the view, you can use the scroll bars at the right and bottom to navigate through the list or thumbnails.

Selecting a Page

To select a page you want to work on, simply click the mouse once on that page's entry in the list. For this example, click on Page #15 – "Background", which is the last page in the tutorial.

The entry will now appear highlighted like this:

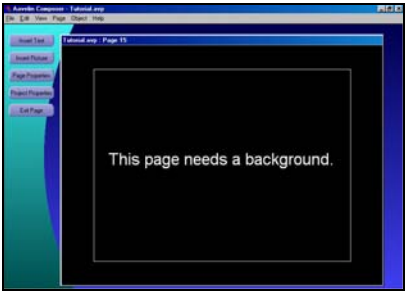


To work on the selected page, click on the "Edit Page" button on the left of the screen. Alternately, you can double-click on an entry in the list.

You will now be taken to the Page Editor screen where you can change the appearance of a particular page.

The Page Editor

The Page Editor is the main workspace where you can create and modify pages. You should now see the layout of Page 15 of the Tutorial, a simple black page that says "This page needs a background."



Technically speaking, this page does have a background – a plain black background. In this example, you will change the background to something new. But first, a few words about the Page Editor environment.

The Control Buttons and Menu Bar

Most of the work in the Page Editor is accomplished by using the Control Buttons and the Menu Bar.

The Control Buttons

The Menu Bar

Each of the above control buttons and menus will be described later in this manual. This example will focus on the Page Properties button shortly (don't press it just yet).

The Page Properties Control Button

The Safe Text Area Guides

Notice that besides the black background and the "This page needs a background" text, there is a thin white rectangle:

This rectangle represents what is called the "Safe Text Area", or sometimes the "Safe Title Area."

Computer monitors and television screens are somewhat different in how they display images. A computer monitor shows you the entire image, usually surrounded by a thin black border. On a television screen, however, the image is stretched slightly so that it goes past the plastic bezel of the picture tube, creating the appearance of a picture that goes from edge to edge without any border. This process is known as "Overscan".

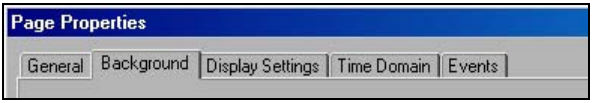
The problem with overscan is that no two TVs are adjusted the same, and will "waste" varying amounts of display area. This means that any text you have near the edge of a display, although it may look OK on *your* TV, might get chopped off on a different one.

This problem has led video professionals to define what is known as the "Safe Text Area". Text placed inside this area will show up for sure on any TV that isn't terribly out of alignment. In Aavelin Composer, this area is represented by the thin rectangle.

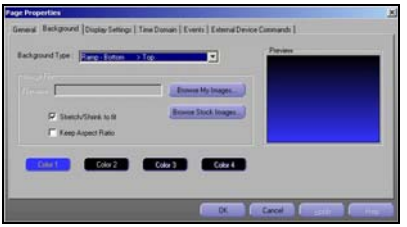
Changing the Background

To modify the background, click on the "Page Properties" button (shown below), or simply double-click on an empty area of the page.

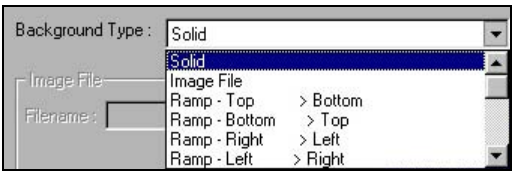
The Page Properties dialog will open. Click on the "Background" tab if it isn't already selected.



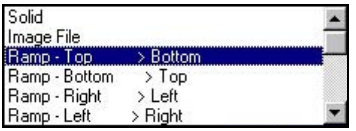
The Page Background tab controls the appearance of the "background" of the page – the area where no text or other images appear:



There are many types of backgrounds available. To see the list of background types, click on the arrow of the pull-down menu:



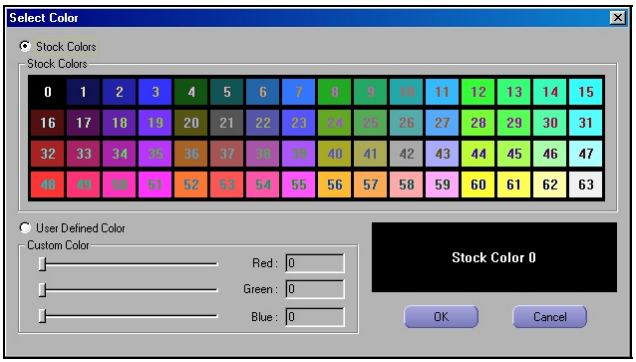
A pull-down menu like the one above will appear. Click on the background type "Ramp - Top › Bottom". A "Ramp" is a gradual change from one color to another across the screen, in this case from top to bottom.



Notice that along the bottom of the Page Background dialog, there are four sets of color buttons – "Color 1" through "Color 4". These buttons control which colors will be used to draw a ramp background.

Some ramp styles use four colors. The "Ramp Vertical" style uses just two. "Color 1" is the top of the screen, and "Color 2" is the bottom.

Currently, "Color 1" and "Color 2" are set to black. Click on the "Color 1" button. A Color Selector like the one below will appear:



Aavelin Composer lets you select from a palette of 64 predefined colors designed to look good on video. You can also design your own custom colors – see the reference section of this manual for details.

Click on Color 11 – a medium shade of blue. Then, click on "OK" to confirm your selection. You can also double-click on your chosen color as a short cut.

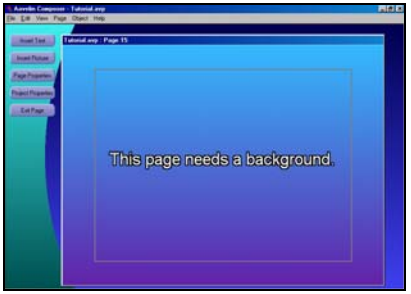
You will now be back at the Page Background dialog. Notice that the color swatch beneath the "Color 1" button has changed to blue, representing your color choice.

Click on the "Apply" button to see how this will affect the page's background. You should now see a background that starts out as blue at the top and gradually changes to black at the bottom.

Now click on “Color 2”. Another Color Dialog will appear. This time, click on color 18, a medium purple, and click “OK”.

Click the “Apply” button again, and now the background will ramp (continuously change) from blue at the top to purple at the bottom. Feel free to try other color combinations and ramp styles.

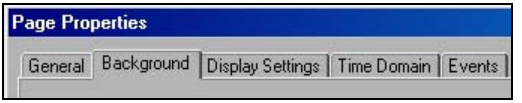
When you have finished experimenting with the ramp backgrounds, click “OK” to return to the Page Editor.



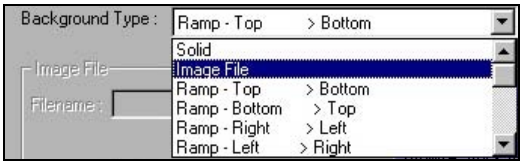
You can now see the whole image without the Page Properties dialog in the way.

The Page Background can also be from an image file, instead of just a solid color or ramp. The Aavelin Composer software includes 100 backgrounds to get you started, but you can use backgrounds from just about any common file format. Aavelin Composer will recognize images with the following extensions: .BMP, .JPG, .JFIF, .PCD, .PCX, .PNG, .TNG, TIF, .WMF, and .WPG.

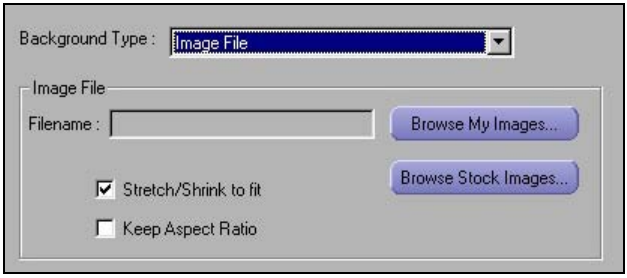
Click on the Page Properties again (or just double-click on an empty part of the page), to return to the Page Properties dialog and select the Page Background tab:



This time, select “Image File” from the Background Type pull-down menu.

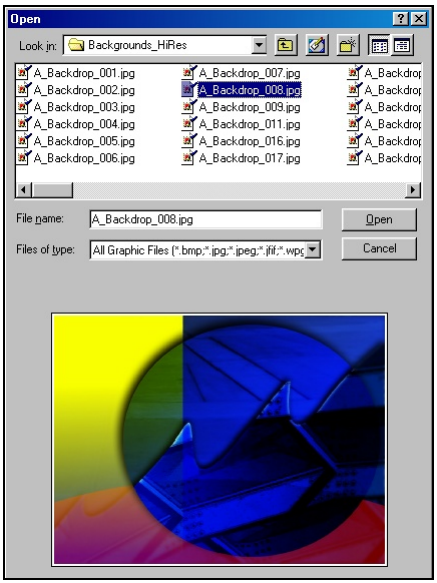


Notice that the controls in the Image File area (such as “Browse”) become enabled:

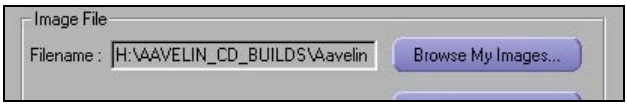


Click on the "Browse Stock Images" button to select a background file. A File dialog will appear. If this is the first time you have run Aavelin Composer, you may need to locate the folder containing the included backgrounds.

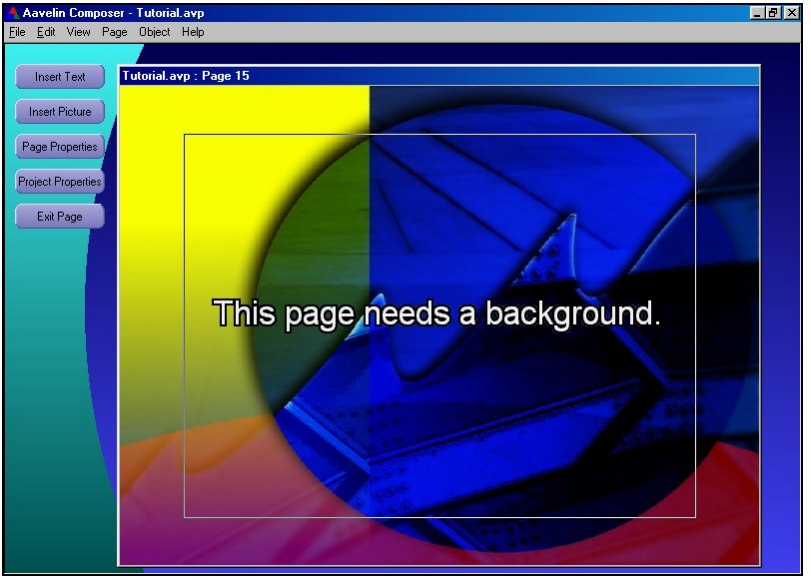
Look for a folder named "Backgrounds_HiRes", "Backgrounds_LoRes" or similar. Double-click on the folder once you have it located to reveal the folder's contents. Your File dialog should now appear similar to the one below:



Click on "A_Backdrop_008.jpg", then click "Open". You will be returned to the Page Background dialog, and note that your selection is now shown in the file name space.



Click on "OK" to return to the Page Editor and see your selected background.



Changing the Text

Now that your page contains a background, it is time to change the text that says "This page needs a background."

Items of text on the screen are referred to as "Text Objects". Every Text Object can contain its own message, and have its appearance (color, font, etc.") and position. This example page has just one text object.

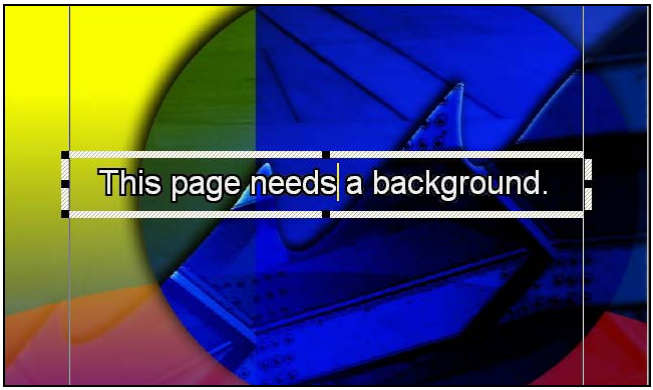
To select an object, simply click on it once with the mouse. In this case, just move the mouse anywhere over the text, "This page needs a background" and click once. The text will become highlighted like this:

The thick outline box shown above is called the "Tracker Control". It allows you to adjust the position and margins of a Text Object.

Try moving the text around – just click and hold the mouse down anywhere along the white edge (not the black boxes) of the Tracker Control and drag the mouse around. Let go when the text is where you want it.

Move text by dragging the WHITE edges of the Tracker Control

To edit the contents of this Text Object, just click once inside the selected object, right at the end of the word "needs". A blinking cursor will appear.



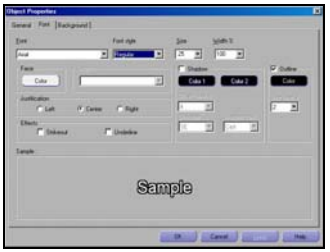
Press the backspace key a few times until the word "Needs" is gone. Now type "has" using the keyboard. The text will now read "This page has a background."

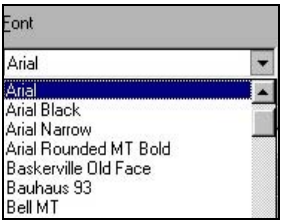
Once you are done editing, click on an empty part of the page to make the tracker control go away. Notice that the Text Object has changed to reflect your alterations.

You can also change the size of the tracker control by dragging the corners (the black boxes). This will affect the margins and "word wrap" of the text inside the object.

Text Properties

Every text object has a collection of "Properties" that affect the appearance of the text, such as font style, size, color, outline, and shadow. To access the Font Properties dialog, simply double-click on a selected text object, or "right click" using the right mouse button and then select "Properties › Font".





Feel free to experiment with the text properties, including changing the font and color, and then click "OK" or "Apply" to see how they appear on the page and are affected by the tracker control.

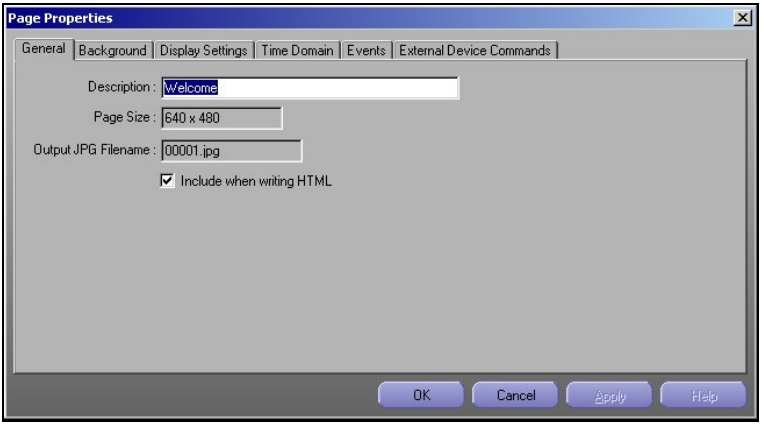
When you are done editing this example page, click on the "Exit Page" control button on the Page Editor screen, and you will be returned to the Project Editor.

Page Properties

Every page in a project has what are called "Properties." These are settings other than those that control the actual contents of the page. For example, the duration a page appears and the transition effect used are page properties.

Click on the first page in the list – "Welcome" – and then click on the "Edit Page" command button. You will be taken to the Page Editor:

Now click on the Page Properties command button and the Page Properties dialog will appear:

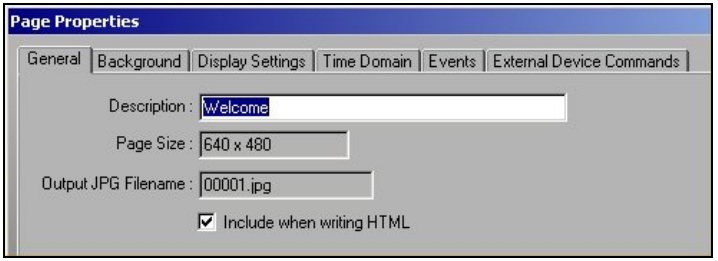


The Page Properties dialog is divided into multiple tabs.

Some tabs may not be present for certain types of pages; however, you will usually see tabs for "General", "Background", "Display Settings", "Time Domain", "Events", and "External Device Commands".

General

The "General" tab allows you to name the page and see some statistics about that page.



Description

This is a short description of the contents of your page. This description shows up in the Project Editor next to the page number.

The description does not go "On the Air"; instead, it is for your own reference when trying to find a particular page in a large project.

Page Size and Output JPG Filename

All pages will indicate a Page Size. This is the resolution of the JPEG file that is output by Aavelin Composer and displayed on the playback system. This resolution is determined when the project is created, and cannot be changed afterwards. This is useful information if you intend to use the JPEG file in other programs outside of the Aavelin system.

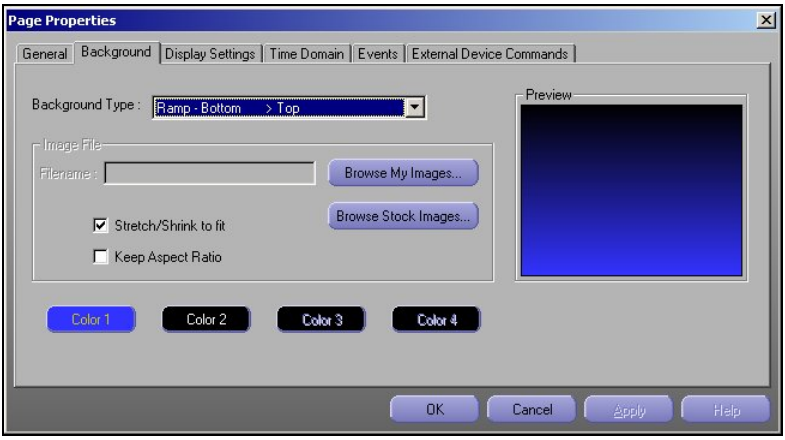
The actual name of the file is shown as well, allowing you to locate that file on your hard drive.

Include When Writing HTML

Aavelin Composer Professional writes pages as HTML files as well. Uncheck this box if you don't want the page written as HTML.

Background

The "Background" tab, if present, allows you to change the appearance of the page's background.



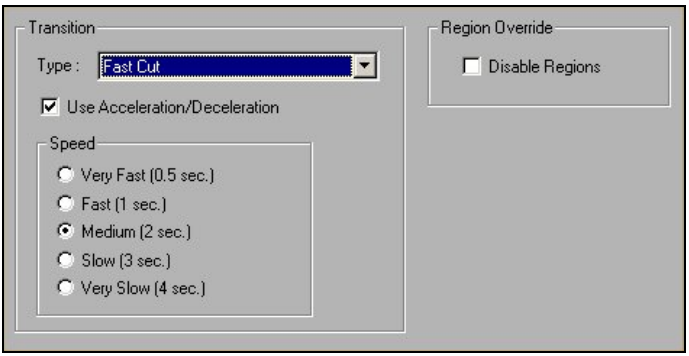
This tab was described earlier in this tutorial in reference to the "This Page Needs a Background" page.

If a page is created as an "RT Video Overlay" page (Aavelin RT200 only), the background tab will appear as a "Video Overlay" tab. View the Aavelin RT200 section for further information.

Display Settings

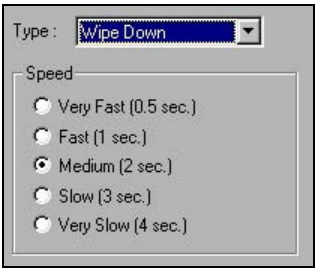
The "Display Settings" tab contains settings for the transition effect that is used to bring the page on-screen, and the speed of that transition.

From here you can also disable regions (crawl lines) for the particular page.



Transitions

As each new page is displayed by the player, it can appear to "wipe" onto the screen using several different methods. The Transition Type pull-down menu allows you to select from these different methods.



The "Fast Cut" transition means to have an instantaneous switch from one page to the next. If 'Random' is selected, a random transition and transition speed will be selected for the page.

The Transition Speed determines how fast a page appears to wipe onto the screen when played. If you are using the "Fast Cut" transition, the speed is ignored.

Disable Regions

Check this box to turn off the display of crawl regions for the selected page.

Time Domain

The "Time Domain" tab allows you to control when a page is allowed to appear by date and time of day.

To make a page appear at an exact time, see the section called "Events" following this one.

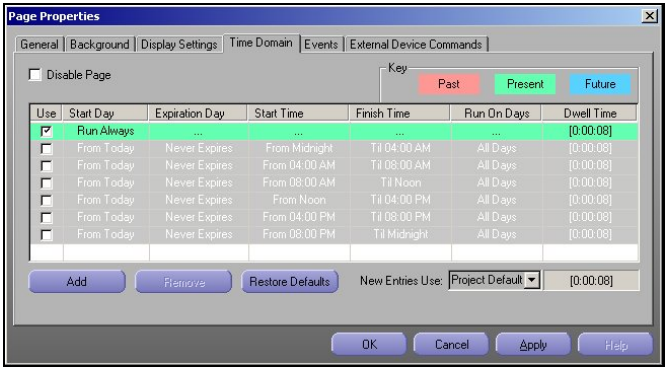
For example, using Time Domain, a page can be scheduled to play...

...only on weekends

...only between 8:00am and 2:00pm

...for 15 seconds during the day, and 30 seconds and night.

Time Domain in Aavelin Composer is very powerful and flexible, allowing for multiple scheduling conditions and scenarios.



By default, a page is set to "Run Always" upon being created, meaning that the page shows up each time the playback system repeats through the project. With Time Domain, you can direct pages to follow a schedule – playing only during allowed times.

Each row in this table can be thought of as an additional filter. Composer will look at the first row and determine if the entry is valid. If it is, the page is allowed to play. If not, Composer continues searching for a valid entry.

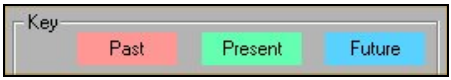
Aavelin Composer Standard allows for 3 entries, while Professional supports up to 10.

Disable Page

Check this box to disable the page completely. All other options will be greyed-out when this is checked.

Key

The top-right corner of the page shows the color-coded key used to display the status of a particular time domain range.



If a range is set to expire on Saturday at 8:00am, then at 8:01am that range will display in Composer as red. Current ranges will display in green, and those specifying future dates will show in blue.

Use

The "Use" checkbox will enable or disable a specific range.

This can be useful to dramatically change a pages scheduling with just a few clicks of the mouse.

Start Day / Expiration Day

Aavelin Composer allows you to schedule pages with regard to date. If a page is set to "Run Always", Composer will not allow you to place scheduling restrictions on it. You can either add a new time domain range, or take the existing "Run Always" range and change it.

Click on the "Run Always" entry to highlight it.

With it highlighted, click on it once again, and the following control box will be displayed.

Uncheck "Run Always", and click on the dropdown box to reveal the scheduling calendar.

Use the left and right arrows at the top of the calendar to find the appropriate month, and then click once on the desired date to select it. For this example, October 9, 2003 has been selected as the beginning date for this page.

Click anywhere off of the date select control, and you will see the effect these changes have made.

The selected start date is shown, and the Expiration Date is set to "Never Expires". Click on the line again to highlight it, and click once on "Never Expires" to bring up the expiration date control.

Uncheck "Never Expires", and use the calendar tool to select the expiration date for the page.

Start Time / Finish Time

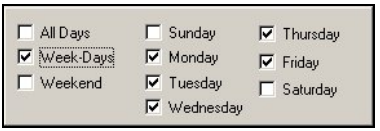
Aavelin Composer allow you to restrict pages with regard to time. Select the range you wish to modify, and click once on the "Start Time"

The hour, minute, and second (if enabled) fields can be selected independently. The up and down arrows to the right can be used to change the highlighted value (alternatively, the up and down arrow keys on the keyboard can be used, and numbers can be typed in specifically as well).

If you do not want a page to be time-restricted, set the start time and finish time to 12:00 AM (midnight). The "Finish Time" control provides a "Til Midnight" button for convenience.

Run on Days

Finally, Aavelin Composer allows you to schedule pages with regard to Day of Week. Click once on your range to select it, and click on the "Run on Days" field to bring up the day selector.



Select the days you want the page to display by putting a check in the box to their left. The "All Days", "Week-Days", and "Weekend" checkboxes will select the associated days automatically.

Dwell Time

The far right column of the time domain table shows the Dwell Time, or page duration – and allows you to change it.

Click once on the desired range to highlight it, then click on the Dwell Time field to bring up the dwell time selector.

When first created, a page will be set to "Use Project Default" (discussed in the Project Properties section). Uncheck that and then modify the dwell time as desired.

New Entries Use...

When adding new Time Domain ranges, the default Dwell Time will be assigned depending on the selection here.

When set to "Project Default", new Time Domain entries will be added with that value (the project default dwell time is set in Project Properties, discussed later).

When set to "Page Specific", new Time Domain entries will be added with the value assigned here. In the example above, new entries will be created with a dwell time of 15 seconds. Clicking on the specified time will display the time selector, allowing you to modify it.

Time Domain Example

Time Domain in Aavelin Composer can be as simple or sophisticated as necessary. A single range can be created specifying that a page is only to play on Thursdays, or multiple ranges can be used providing a large number of allowable play times, each with unique dwell times.

Use	Start Day	Expiration Day	Start Time	Finish Time	Run On Days	Dwell Time
☑	From Today	Thru 02/17/04	From 09:00 AM	Til 12:30 PM	. M . W . F .	[0:00:08]
☑	From Today	Thru 02/17/04	From 09:00 AM	Til 12:30 PM	. . T . T . .	0:00:15

This is a fairly basic multi-entry example of how Time Domain can be used.

Both entries specify that this page will play from Today, expiring on February 14, 2004, and playing between the hours on 9:00AM and 12:30PM during that date range.

The first entry adds the further condition that on Mondays, Wednesdays, and Fridays, the page will display for 8 seconds (the project default, noted with the dwell time in brackets).

The second entry will cause the page to play for 15 seconds on Tuesdays and Thursdays. In this example, the page will not be displayed on Saturdays or Sundays.

See the end of the this section for more time domain examples.

Spanning Multiple Days with Time Domain

If a page has scheduling needs that span several days, additional things need to be considered.

As an example, examine the following entry:

☑	From 04/07/04	Thru 04/29/04	From Noon	Til Noon	All Days	0:00:14

At a glance, it may appear that this page will become valid at noon on April 7, 2004, and expire at noon on April 29, 2004.

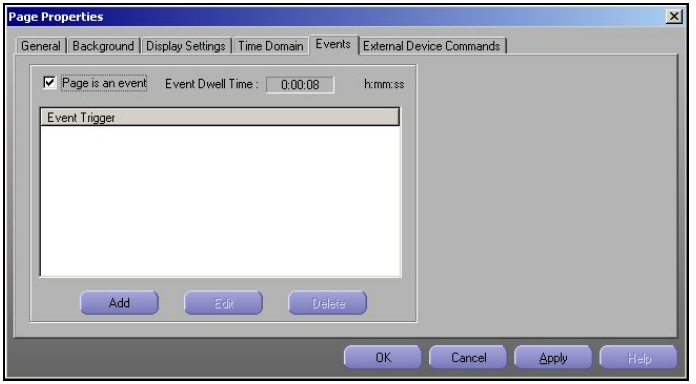
Composer sees the page differently however – the beginning and ending times are associated with a single day. In this case, on every day in the specified range, this page will be valid for 1 second (12:00:00-12:00:01). To make this example behave as desired, Composer needs to have 3 separate entries, like this:

☑	From 04/07/04	Thru 04/07/04	From Noon	Til Midnight	All Days	0:00:14
☑	From 04/07/04	Thru 04/29/04	From Midnight	Til Midnight	All Days	0:00:14
☑	From 04/29/04	Thru 04/29/04	From Midnight	Til Noon	All Days	0:00:14

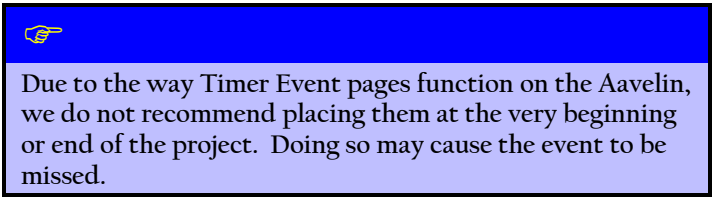
A Midnight-Midnight range is unique in Aavelin Composer, as it does span multiple days. The first and third rows in this example are used as an 'opener' and a 'closer' – if we just wanted this page to play between April 7 and April 29, regardless of time, only the middle entry would be necessary.

Events

While Time Domain defines when a page is allowed to play, an Event defines an exact time that a page will play.



One page can contain many distinct events.



Page is an Event

Check this box to enable Events for a page. Event triggers will then have to be added (see below). An event page will not play as part of the normal page rotation, instead only playing at the specified trigger times.

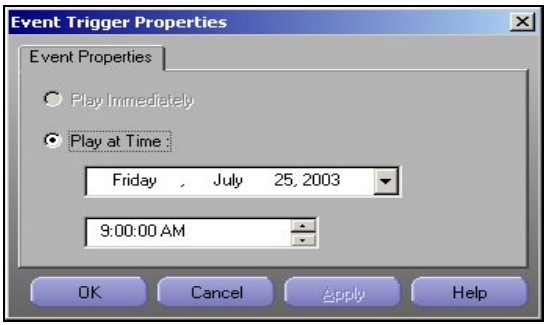
Event Dwell Time

This defines how long the page will be displayed on the playback system when triggered by an event. This value is equal to the dwell time of the first valid entry on the Time Domain tab.

Event Trigger

When the "Page is an Event" box is check, you will be able to add Event Triggers. An Event Trigger is a data and time combination that specifies when the page will be displayed. A page can support several distinct triggers.

Click on the "Add" button to display the Event Trigger Properties.

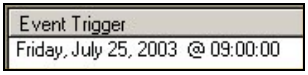


Clicking on the arrow to the right of the Date field will display the calendar control, where a date can be selected.

Use the arrow buttons at the top to select the desired month, and click on the day the page will be displayed.

Below the date selector is the time selector. The hour, minute, and second fields can be selected individually, and their value can be adjusted with either the up and down arrow keys, or the buttons to the right.

When finished, click on the "OK" button, and the Event Trigger will be added.



Ensure that the date, time, and time zone are set properly on the playback system. Failure to do so may result in event pages not displaying at the assigned times. Refer to the "Set Date & Time" section earlier in this manual.

External Device Commands

From this tab, commands can be assigned to trigger external devices supported by the Aavelin.

VTR/DVD Control

The Aavelin, when used with the optional DVD/VTR control module, support scheduling and control of multiple DVD/VTR units. Refer to the "Aavelin VTR/DVD Infra-Red Control Module" section for further information.

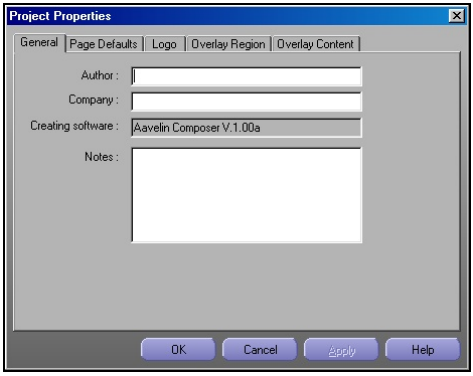
Adtec MPEG Player

The Aavelin can also issue commands to Adtec MPEG players, allowing for the incorporation of encoded MPEG content into a project. Refer to the "Aavelin RT Video Pass-Through" section for further information.

Project Properties

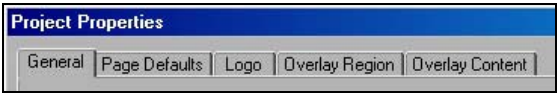
In addition to every page having its own properties, the Project itself has a set of properties.

Click on the "Project Properties" button and the Project Properties dialog will appear:



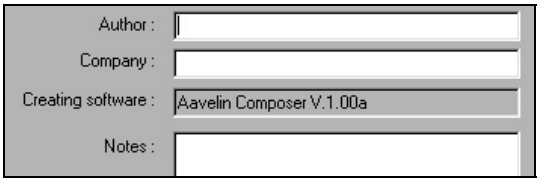
The Project Properties dialog allows you to edit supplementary information about your project, set the default dwell, and define content that displays over the top of all pages, such as crawl lines (referred to as "Overlay Regions").

General Tab



Author / Company / Notes

These fields allow you to indicate who created this project, and enter any notes you want to keep.



These fields are for your reference purposes and will not display on the Aavelin player unit.

Creating Software

These fields tell you what program created this project.

In the future, other utilities besides Aavelin Composer may be able to output Aavelin projects.

Page Defaults Tab

Page Dwell Time

The default "Page Dwell Time" is the duration all pages in a project will be set to when first created, until they are individually set to a user-defined duration. See the description earlier in this tutorial about page durations.

Try changing this value to 12. When you leave the Project Properties menu, all pages using the default dwell will have changed from 15 (the current setting) to 12.

You can tell which pages are set to use the default dwell by looking at the "Dwell" column in the list. Any page using the default dwell will have its dwell value shown in brackets.

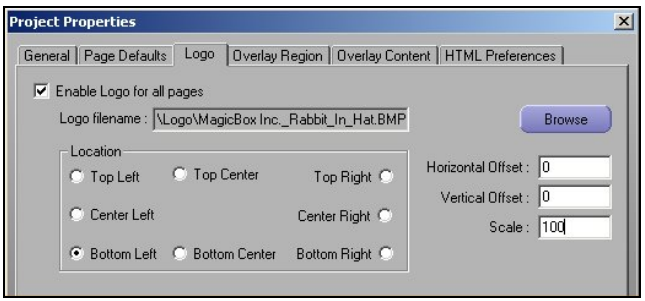
Page Size

This is a reference value that indicates the output resolution of all the pages in the current project. This value is set during project creation and cannot be changed.

Logo Tab

The logo tab allows you to insert a static logo image on screen that will be present throughout the entire project. Allowable image types are .BMP and .JPG.

Check the "Enable Logo for all pages" box, and click on the "Browse" button to select your logo image.



Location

This is the starting on-screen location for the logo image. Placement can be fine tuned using the Horizontal and Vertical Offset values.

Horizontal/Vertical Offset

Allows for more precise placement of a logo image. Horizontal offset will move the image up by the specified number of pixels, and Vertical offset will move the image to the right by the specified number. Only positive numbers are allowed. The default value for both fields is 0.

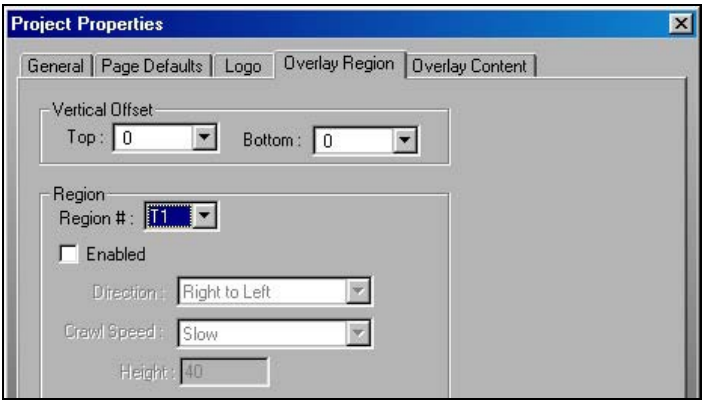
Scale

Controls the size of the logo image, with the value being expressed as a percentage (i.e., 100 is the images original size, 200 is double the original size). The default for this value is 100.

Overlay Region Tab

The Aavelin system has the capability to display continuous messages that are superimposed over all (or most) pages in a project. These are referred to as "Overlay Regions".

Overlay Region messages can be simple crawling or fixed text strings, the date and time, or live weather information (using either the optional weather station or the TxStream data service).



A common example would be a "Crawl Line" – an area at the top or bottom of the screen with text continuously scrolling from right to left.

The Aavelin allows for up to 4 independent crawl regions to be displayed at once; a maximum of two at the top of the display (T1 and T2), and two and the bottom (B1 and B2).

Vertical Offset Values

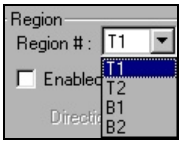
If your crawl region appears slightly outside of the viewing area on a television, you can use the Vertical Offset tool to bring them into view.

Top – This value determines the number of pixels the top regions (T1 and T2) will be moved down from the top edge of the display. The value effects both T1 and T2.

Bottom – This value determines the number of pixels the bottom regions (B1 and B2) will be moved up from the bottom edge of the display. The value effects both B1 and B2.

Enabling and Defining a Region

Using the pull-down menu, select a region and click on the "Enabled" checkbox. This turns on the selected region.



Once a region has been enabled, the options below it can be modified.

Direction

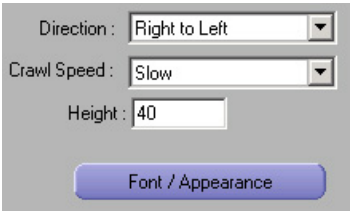
The direction a crawling region item will travel. At this time, only 'Right to Left' is available.

Speed

The speed the crawling region items will crawl at. This value is the same for all region items in a specific region.

Height

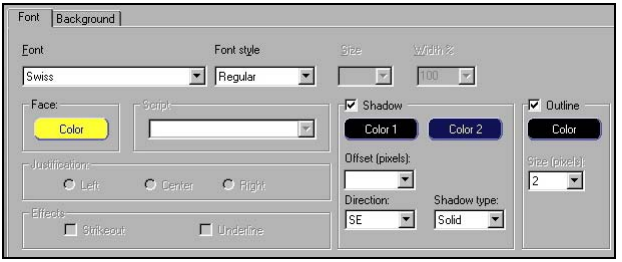
The height, in pixels, of the region. The default value is 40. It is important to note that this is not the point-size of the font, but the size of the entire region. The font-size adjusts automatically to fill the region size, as defined here.



Next, click on the 'Font/Appearance' button to define how the region content will look.

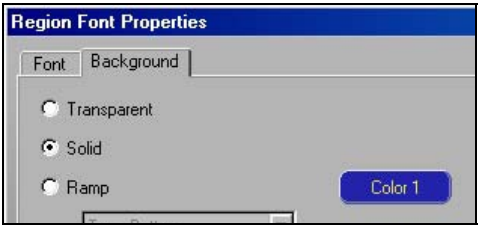
Region Font / Appearance

This Font dialog works in much the same way as with Text Objects in the Page Editor.



Font type, style, outline, and shadow can all be customized.

The Background tab of this dialog defined the region's backdrop.



Available choices are Transparent (no background), Solid (one color), Ramp (two colors), and Pattern (two colors).

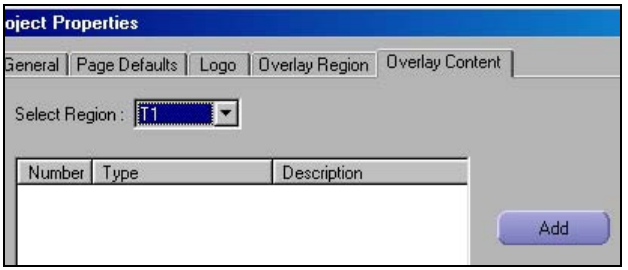
Click "OK" from the dialog to confirm your selections and return to the "Overlay Region" tab.

Click "OK" from the dialog to return to the "Overlay Region" tab.

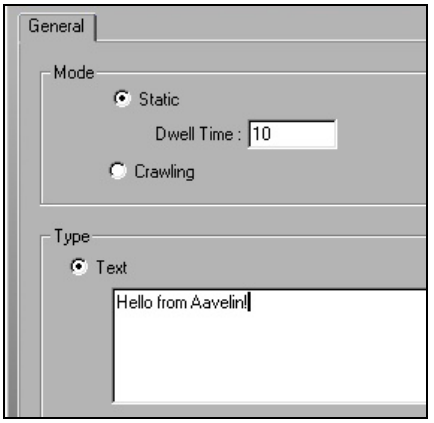
Enabling and Defining the appearance of a region is the first step. The second and final step is creating the text and variables to display in that region.

Overlay Content Tab

The Overlay Content tab is where text messages and system variables can be placed in a region. Only regions that have been checked 'Enabled' from the Overlay Region tab will be available for editing here. An enabled region can have several different items in it – for example, a scrolling message followed by a static 'Welcome' message, followed by the date & time.



Select an enabled region from the drop-down box at the top of the tab. Click on the "Add" button to create a new message for this region.



Mode

Static: The region item will be centered on the screen for the specified dwell time, and will not move. After the specified dwell time, the next region items will be displayed. If there is only the one region item, it will remain on screen without interruption.

Crawling: The region item will crawl across the screen from right to left, at the speed defined on the Overlay Region tab. When the message disappears off the left edge of the screen, the next region item will be displayed. If there is only the one region item, it will be repeated.

Type

Select the type of message you want to display.

Text: Type in the desired text message. This message can be as long or short as desired. Text can be copied from another program (word processor, etc) and pasted into this field as well.

System Variable: Display one of the pre-defined system variables. Available options are as follows:

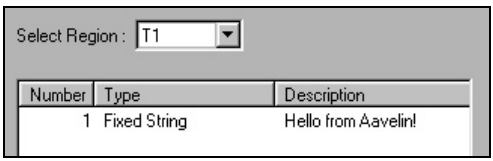
Date & Time (12 or 24 hour)

Date & Time with Seconds (12 or 24 hours). This option is not available if mode is set to crawling.

Weather – these items are described in detail in the section titled 'Aavelin Weather System Reference'.

TxStream: Select a TxStream item – as defined in Site Setup (see 'TxStream Data Service' within the 'Aavelin Composer Configuration' section). Select the TxStream item that matches what you defined previously in Site Setup (Weather TxStream 1, 2, etc). Selecting a TxStream item will change the mode to crawling.

Press 'Ok' and the region item will be added to the list.



Multiple items can be added and they will be displayed in sequence, as the message scrolls off the left edge of the screen (for crawling items) or as the dwell time expires (static items).

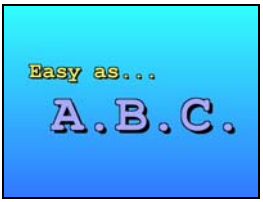
Now click on "OK" to exit from the Overlay Content dialog. You will be returned to the Project Editor.

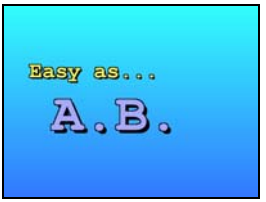
Double-click on any page thumbnail or list entry. You will enter the Page Editor where you can view or edit your page. Note that the Page Editor now shows that you have Overlay Regions enabled, and it shows their color/appearance:

When you publish this project later in this tutorial, you will see your overlay regions in action on the Aavelin player unit.

Reordering Pages

You may have noticed earlier in this chapter how some of the pages seemed out of order. In particular, the following three pages:





When played back, first "ABC" would appear, then just "AB", and finally "A".

Page	Description
1	Welcome
2	Easy as ABC
3	Easy as AB
4	Easy as A
5	Today is Sunday

This exercise will show you how to change the order of pages. When done, these three example pages will come up in the right order.

Notice that the Project Editor screen has two buttons labeled "Move Up" and "Move Down". These buttons allow you to move a selected page up or down in the list of pages, thereby changing the order of pages.

First, click on the "View" menu and select "View List". Your list should look like this:

Page	Description	Dwell	Transition	Speed	Time Settings
1	Welcome	[15]	Wipe Down	Medium	Run Always
2	Easy as ABC	5	Wipe Up	Fast	Run Always
3	Easy as AB	2	Wipe Up	Fast	Run Always
4	Easy as A	2	Wipe Up	Fast	Run Always
5	Today is Sunday	[15]	Wipe Right	Medium	2001-01-01 to
6	Today is Monday	[15]	Wipe Right	Medium	2001-01-01 to
7	Today is Tuesday	[15]	Wipe Right	Medium	2001-01-01 to
8	Today is Wednesday	[15]	Wipe Right	Medium	2001-01-01 to
9	Today is Thursday	[15]	Wipe Right	Medium	2001-01-01 to
10	Today is Friday	[15]	Wipe Right	Medium	2001-01-01 to
11	Today is Saturday	[15]	Wipe Right	Medium	2001-01-01 to
12	STOP!	10	Fast Cut	Medium	1900-01-01 to
13	Time Domain Example	[15]	Flip	Medium	2000-03-01 to
14	Dawn	[15]	Roll Down	Medium	Run Always
15	Background	[15]	Fast Cut	Medium	Run Always

Start by clicking once on Page 4 – currently "Easy as A." Next, click the "Move Up" button once. The page will move up one in the list to become Page 3 – bumping the old Page 3 down to Page 4. Your list should now appear like this:

Page	Description	Dwell	Transition	Speed	Time Settings
1	Welcome	[15]	Wipe Down	Medium	Run Always
2	Easy as ABC	5	Wipe Up	Fast	Run Always
3	Easy as A	2	Wipe Up	Fast	Run Always
4	Easy as AB	2	Wipe Up	Fast	Run Always
5	Today is Sunday	[15]	Wipe Right	Medium	2001-01-01 to

Now click "Move Up" one more time, and your page will move to Page 2. The phrase "Easy as A." is now the first of those three pages:

Page	Description	Dwell	Transition	Speed	Time Settings
1	Welcome	[15]	Wipe Down	Medium	Run Always
2	Easy as A	2	Wipe Up	Fast	Run Always
3	Easy as ABC	5	Wipe Up	Fast	Run Always
4	Easy as AB	2	Wipe Up	Fast	Run Always
5	Today is Sunday	[15]	Wipe Right	Medium	2001-01-01 to

Things still aren't quite right, though. The order is now "Easy as A", "Easy as ABC", and "Easy as AB". Click on Page 3 – currently "Easy as ABC":

Page	Description	Dwell	Transition	Speed	Time Settings
1	Welcome	[15]	Wipe Down	Medium	Run Always
2	Easy as A	2	Wipe Up	Fast	Run Always
3	Easy as ABC	5	Wipe Up	Fast	Run Always
4	Easy as AB	2	Wipe Up	Fast	Run Always
5	Today is Sunday	[15]	Wipe Right	Medium	2001-01-01 to

Now click the "Move Down" button once, and the page will move to Page 4:

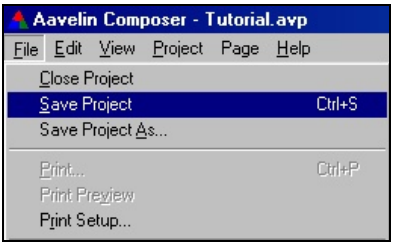
Page	Description	Dwell	Transition	Speed	Time Settings
1	Welcome	[15]	Wipe Down	Medium	Run Always
2	Easy as A	2	Wipe Up	Fast	Run Always
3	Easy as AB	2	Wipe Up	Fast	Run Always
4	Easy as ABC	5	Wipe Up	Fast	Run Always
5	Today is Sunday	[15]	Wipe Right	Medium	2001-01-01 to

At this point, all three pages are in the correct order, and when played back in the player, the illusion of the letters "A", "B", and "C" appearing one at a time will be created.

Saving Your Work

By now you've made a lot of changes to the project. It is important to save your work as you go along so that if the power fails or your computer has problems, you don't lose all the changes you have made.

To save your changes to the project, you can either exit from the project editor (you will be asked if you want to save the changes), or you can click on the Save option under the "File" menu.



Save your work now by clicking on the "File" menu and then on "Save".

More Time Domain Examples

This tutorial contains more pages which use the Time Domain feature under Page Properties. Consider the following pages:

These seven pages show up in the Project Editor like this:

5	Today is Sunday	[15]	Wipe Right	Medium
6	Today is Monday	[15]	Wipe Right	Medium
7	Today is Tuesday	[15]	Wipe Right	Medium
8	Today is Wednesday	[15]	Wipe Right	Medium
9	Today is Thursday	[15]	Wipe Right	Medium
10	Today is Friday	[15]	Wipe Right	Medium
11	Today is Saturday	[15]	Wipe Right	Medium

Although there are seven pages, when you play back the project on the Aavelin Unit, only one of the pages will show up. This is because the time domain settings for each page are set to specific days of the week.

The page that says "Today is Monday", for example, only has "M" selected in the "Run on Days" column under the Time Domain tab.

You can see the Time Domain settings of all these pages in the Project Editor by scrolling the list view to the right (if necessary). You should see the following columns:

Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	S------
Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	-M-----
Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	--T----
Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	---W---
Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	----T--
Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	-----F-
Wipe Right	Medium	2001-01-01 to 2999-12-31 : 00:00 to 23:59	------S

Each of the above pages is set to run from January 1, 2001 through December 31, 2999 (essentially forever), but with only the appropriate day of the week set. For example, the "Today is Wednesday" page shows up with "- - - W - - -". The dashes indicate the other days of the week which are not set.

This technique is useful for pages that need to appear on a weekly rotation. For example, a restaurant can display the appropriate daily special, or a night club could display the appropriate regular DJ or band.

You can also set pages to expire automatically after a certain date. Once a page has expired, it still exists until you actually delete it, so it is very easy to re-activate a page if necessary. Consider the following page:

13	Time Domain Example	[15]	Flip	Medium

Ordinarily, this page would appear as:

You may have noticed that this page did not show up when played during the initial tutorial project on the Aavelin unit. This is because the page's time domain settings are currently like this:

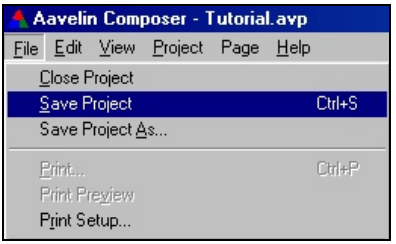
This page is set to run from March 1, 2000 to March 31, 2000, a time period that has already passed. This page still exists, and still takes space in the project, so now that it has expired it should either be deleted, or set to run again. For this example, set the page to run again.

First, click on the pages' entry in the list. Now, click on "Page Properties". Then click on the "Time Domain" tab.

Using the calendar controls, change the expiration date of the page to some day in the future – or simply click on the "Never Expires" box.

When you update the Aavelin unit with the new version of this tutorial project (see "Publishing" on the next page), this page should now appear as part of the run.

Save your work now by clicking on the File menu and then on "Save".

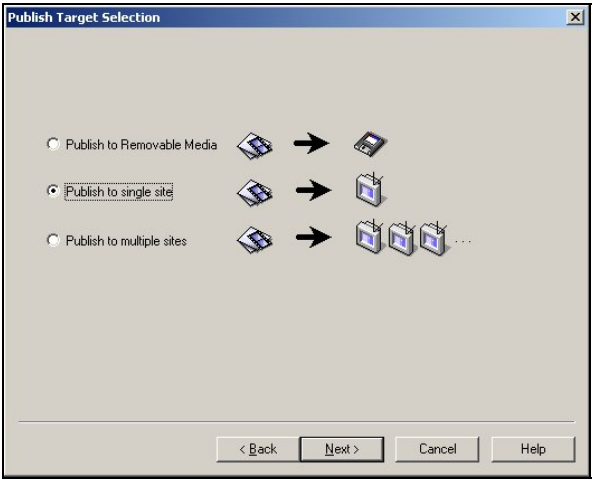


Publishing to an Aavelin Unit

Now that you have completed the tutorial exercises, you can play back the results on the Aavelin unit. The process of transferring a project to the Aavelin unit is called "Publishing".

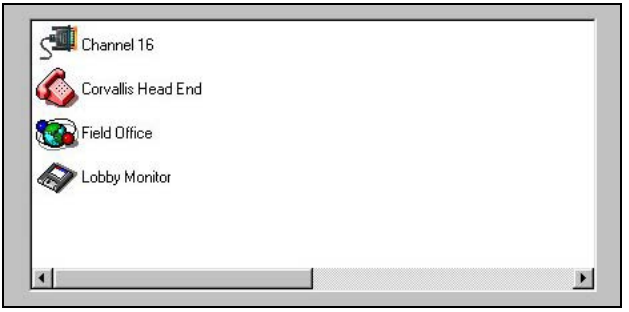
To publish a project file, click on the "Publish" button from the main menu.

The Publish Wizard will now appear. The first step in the Publish Wizard is selecting if you want to publish to removable media, to a single site (Aavelin Composer supports sending projects to multiple Aavelin units. Each unit is referred to as a "site".), or to multiple sites in one publish session:

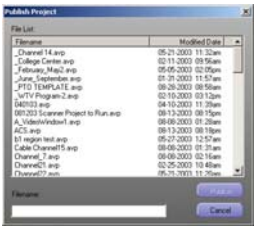


For the purposes of this tutorial, select the "Publish to Single Site" method and then click "Next." The other publish methods are described in the Reference section of this manual.

The Publish Wizard will now ask you to specify a destination site for publishing. (You should have created an entry for your site earlier in the Setup section of this manual). Select your site from the list.

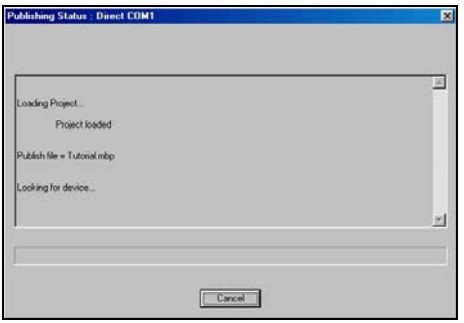


Now click on "Finish". A file dialog will appear asking you to select a file to publish.



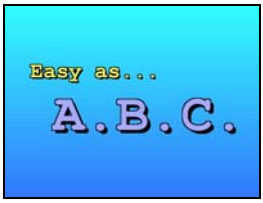
As a convenience, the most recently opened project will already be selected. You can also just double-click on the file name as a shortcut.

The software will now start the publishing process. A progress window will appear:



The contents of the progress window will vary depending on the publishing method for your site. You should see that the software is attempting to contact your unit, and the names of the files being sent. If your site uses "Removable Media", then you will be asked to insert a disk for copying.

When the Aavelin unit receives and plays back your project, it should resemble the one below. The "Today is Sunday" page will be the one matching the current day of the week.



You have now completed the Aavelin Composer tutorial and are ready to begin creating your own projects. Feel free to experiment further with the tutorial by changing the text and backgrounds of the pages.

Creating Your Own Project

Once you are comfortable with performing all of the modifications to the tutorial project, you are ready to create your own project.

Generally, if you own only one Aavelin unit, you will probably stick with just one project for all your work. Owners of multiple Aavelin units usually have one project for each unit, although sometimes the same project will be sent to two or more units.

From the Main Menu in Aavelin Composer, select "New Project."

You will now be given some basic options before you can begin creating pages.

Project Title

Give the project an appropriate name. This will be for your reference only.

Display Type (Aspect Ratio)

4x3: Standard aspect ratio for most display types. Select this unless the project will be displayed on a widescreen video monitor.

16x9: Widescreen aspect ratio for specialized displays.

Display Orientation

Landscape: Standard orientation. Select this unless you the project will be displayed on a tilt-axis display.

Portrait: For tilt-axis displays. Select Portrait (left) or Portrait (right).

Resolution

4x3 Aspect Ratio Resolutions:

640x480 – Default resolution, ideal for broadcast signals. Use this resolution if Composite or S-Video output will be used.

800x600 – High resolution output, ideal for VGA output displays.

16x9 Aspect Ratio Resolutions:

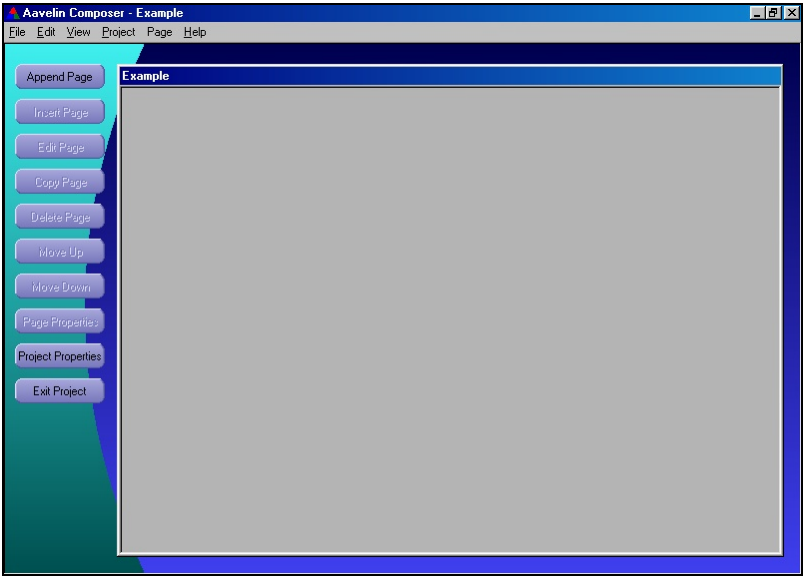
848x480 – Low resolution widescreen display

852x480 – Alternate low resolution widescreen display

1066x600 – High Resolution widescreen display

Note: If portrait orientation was selected, the numbers in the resolutions will be reversed (i.e., 480x640 instead of 640x480).

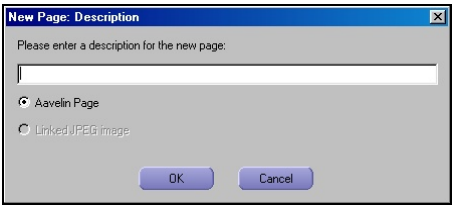
You will now be taken to the Project Editor. Remember to set your preference under the "View" menu for "View List" or "View Thumbnails", depending on whether you prefer to work with thumbnail images or with a detailed list.



Unlike the tutorial project, this project will be empty.

To create new pages for your project, simply click on "Append Page". You will be taken to the page editor, where you can perform all the steps you learned in the tutorial, including choosing a background, adding text objects, selecting transitions, and specifying a time domain.

When you click on "Append Page", This is the "New Page Description" window. It allows you to enter a short description of your page, which can be useful for locating your page in the list of pages. Some users prefer to enter the name of a client or other additional info about the page.



You can add more pages later using the "Append" or "Insert" functions, and save your work by clicking on the "File" menu and then "Save". The very first time you save, you will be prompted again for the Project Name, in case you have decided to change it.

Importing & Exporting Pages

Aavelin Composer allows you to import and export pages. This makes it easy to share pages between different projects, locations or both.

Exporting Pages

When exporting pages, the content is written to an import/export file (XXXXXXXX.MBT). This file contains all information about the exported content – text, object placement, page scheduling, as well as custom fonts and images. All of this information is retained when a page is imported back into a project.

To export a page, select a page and click on the 'Export' button. Alternatively, you can right-click on a page and select 'Export' from the context menu. The following dialog appears:

-Append to existing import/export file: This adds the selected page to an existing .MBT file. One .MBT file can contain multiple exported pages. After selecting this, you will be prompted to select an .MBT file to append to. The default folder for .MBT files is specified in Composer setup.

-Create new import/export file: Creates a new .MBT file. Additional pages can be added as desired. After selecting this, you will be prompted for a location and filename to create. The default folder for .MBT files is specified in Composer setup.

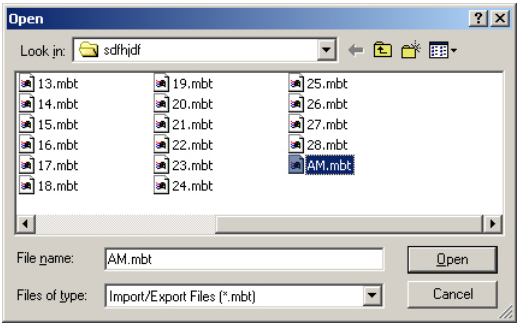
-Abort: Cancels the export function.

Importing Pages

Once a page – or collection of pages – has been exported, the .MBT file can be transported to another system, imported into a different project, or both.

Importing a page or pages from one of these .MBT files is very simple. Open the project you wish to import to, and click on the 'Import' button.

This will open a file requester – select the .MBT file you wish to Import and click 'Open'



The pages contained in the .MBT file will be appended to the end of the project. If a page is selected in thumbnail or list view, the imported pages will be inserted before the selected page.

Video Overlay pages cannot be exported or imported at this time.

Using Multiple Copies of Aavelin Composer on a Network

It is possible to install multiple "seats" of Aavelin Composer on various computers in an organization, so that several users can work on projects and share information.

This chapter details the information your Network Administrator needs to set up Aavelin Composer properly in such cases.

Before attempting to set up a multiple-machine installation, you may wish to contact MagicBox, Inc. to discuss your application and determine that Aavelin Composer will do what you require.

Requirements and Restrictions

Aavelin Composer will work in a multi-machine installation if the following criteria are met:

File Sharing and Separate Installation

All of the computers which will have Aavelin Composer must be on the same LAN. Aavelin Composer opens files using the standard Windows mechanisms. "File Sharing" must be enabled between the machines and the server.

Designate a "Server"

One machine should be used to store all projects, background files, and user images. Select a machine which will always be turned on and always accessible on the network. This machine will be called the "Server".

It is not necessary to install Aavelin Composer on the server machine... it will just be used to store project files and images.

Users on other computers will access files which are stored on this machine, so it is important that it remain powered on and connected to the LAN at all times.

Do Not Use "Local" Image Files

Users who wish to add an image file or background to a project should copy that file to a designated area on the server. If they use a file which is on their local hard drive, it will not be available when other users attempt to open the project, which could cause undesirable results as images disappear from pages.

Use Common Fonts

Windows stores fonts locally on a machine. Ensure that all of the fonts on one machine are also installed on all of the other machines. (Observe copyright and royalty restrictions when copying fonts.)

If an individual user wishes to add a font for use in Aavelin composer, that font will have to be installed on all machines.

One User at a Time for a Particular Project

While a user has a particular project open, other users should not attempt to open or edit the same project. In such cases, the last person to save "wins", and any other changes will be lost.

Publishing Sites

The "Sites" tab in the setup menu will have to be configured for each machine running Aavelin Composer. If you add a new Aavelin unit or change its site parameters (phone # or IP address), you will have to change the Site setup in each copy of Aavelin Composer.

Installation

Use the following instructions when installing Aavelin Composer onto multiple, networked machines.

Create a Directory on the Server

Create a new directory which will later be used to hold Aavelin projects and user files. We suggest:

C:\MagicBox\Common

Enable file sharing (read and write) for this directory. Other computers on the network will need access to this folder using the exact same path in all cases. We suggest using "Map Network Drive" and picking a free letter common to all computers. For example, other computers might see the above "C:\MagicBox\Common" simply as drive "M:".

Within this folder, create three subfolders, called “Artwork”, “Backgrounds”, and “Projects”, such that you have the following hierarchy:

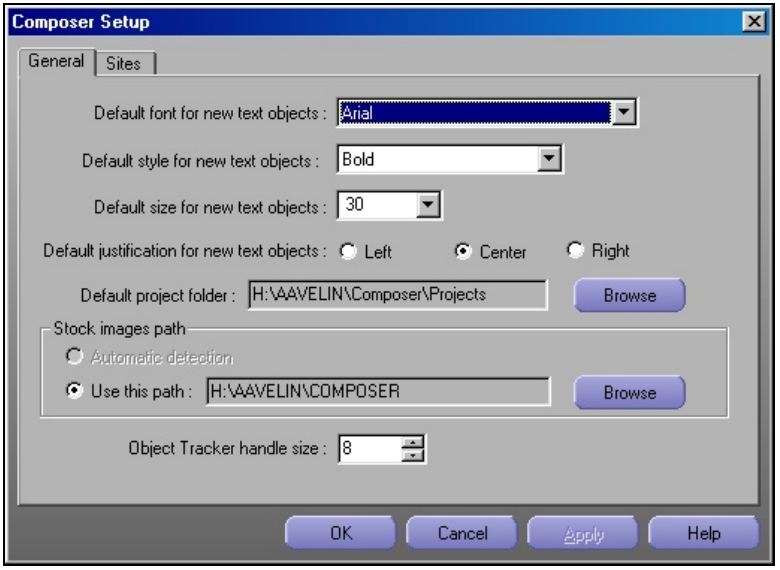
C:\
    MagicBox\
        Common\
            Artwork\
            Backgrounds\
            Projects\

The “Artwork” folder will be used for user-supplied images, clip-art, photos, etc. The “Background” folder will be used for the MagicBox-supplied backgrounds (or any you wish to add), and the “Projects” folder will be used by Aavelin Composer to store the actual projects.

Install Aavelin Composer on the First User Machine

Install Aavelin Composer using the normal installation CD and use the default choices as you install.

After Composer has been installed, run it and click on the “Setup” button. You will see the following menu:



The values you will be modifying are “Default Project Folder” and “Stock Images Path.”

Default Project Folder

The "Default Project Folder" is where Aavelin Composer will work with saved projects. This should be set to point at the server.

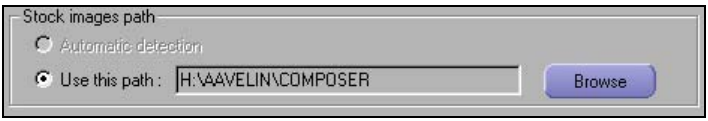
If you followed our example and used the drive letter "M:" to point at "C:\MagicBox\Common\" on the server, then you should set this path to: "M:\Projects\".

Stock Images Path

The "Stock Images Path" is where Aavelin Composer will go to look for backgrounds.

At this moment, there are no backgrounds on the server, because you have just installed the first copy of Aavelin Composer on this local user machine.

Take a moment (using Windows Explorer) to find the background files installed on this user machine (usually in "C:\Program Files\MagicBox\Aavelin_Composer\Free_Backgrounds_Hi_Res\") and copy all of them to your server's new Backgrounds folder.



Once the background files have been copied, you can set Aavelin Composer's stock images path to the Backgrounds folder on the server. If you used our example of mapping the drive letter to "M:", then this setting would be "M:\Backgrounds".

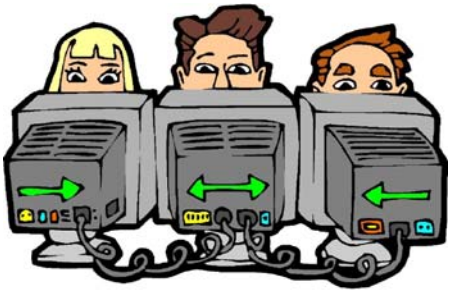
Install Aavelin Composer on Subsequent User Machines

Once Aavelin Composer has been installed on the first user machine, and all of the backgrounds copied, you may install your additional seats of Aavelin Composer on other user machines.

Note that a separate license and install CD must be purchased for each user machine. The license does not permit installation of one copy of Composer onto multiple machines, nor does it permit more than one simultaneous user in a single-machine installation (such as attempting to run Aavelin Composer from one server installation.)

After installing the CD, set the "Default Project Folder" and "Stock Images" path to precisely the same as in the first installation. Any variation in server path or drive letter may cause problems.

Advise Your Users



Ensure that all users of Aavelin Composer are aware of the limitations mentioned at the beginning of this chapter. Once users are in the habit of saving all their raw materials to the common areas of the server, and understand that only one user at a time may edit the same project, usage of Aavelin Composer should go smoothly.

MagicBox, Inc. technical support is available for each seat of Aavelin Composer purchased. The individual user of a seat of Aavelin Composer is welcome to contact MagicBox, Inc. for Composer-related questions. Your Network Administrator should be the one to contact MagicBox in the event of networking installation difficulties or issues related to file sharing.

Aavelin Composer HTML

Aavelin Composer is available in a special optional version that can automatically create HTML web pages based on your project.

Checking your Composer Version

You can tell if you have the HTML version of Aavelin composer by looking at the main menu screen. If it says "Aavelin Composer Professional" (see the picture below), then you have the HTML version.

If you do not have the HTML version and wish to upgrade, contact MagicBox, Inc. for pricing and availability.

Having an HTML version of your project is a handy way to allow more people to see your pages. The same pages that are running individually on TV can be viewed all at once in a web browser, and the person browsing can then select an individual page to magnify and read.

How it Works

Web pages are a combination of text pages in the "Hypertext Markup Language" (HTML) and image files. HTML is reasonably easy to learn, but linking a bunch of pages together into a cohesive whole can be time consuming and error-prone.

Aavelin Composer HTML was designed to completely automate the process of web page generation and make it an "invisible" part of the project creation project. Now, as you create and save your project in the usual way, a web page is generated automatically which you may then copy to your web server.

All of the pages in Aavelin composer are essentially big image files in the JPEG file format. This file format is also the very same image format used on the web. In Aavelin Composer HTML, whenever you click on the 'Write HTML' button on the HTML Preferences tab, an HTML file is generated that, when viewed, shows a collection of thumbnails representing the pages in the project, with built-in links to the full size versions of each page. The full-size version is actually a small HTML file that displays a centered image of the JPG file.

This HTML files are saved in the same directory as your Aavelin project. For example, if your Aavelin Composer was installed in the standard way under Windows 98, then project files are created in individual folders under

```
C:\Program Files\MagicBox\Aavelin\Projects\
```

If you have a project called "Channel33", then the HTML files and all the associated JPEG files can be found in:

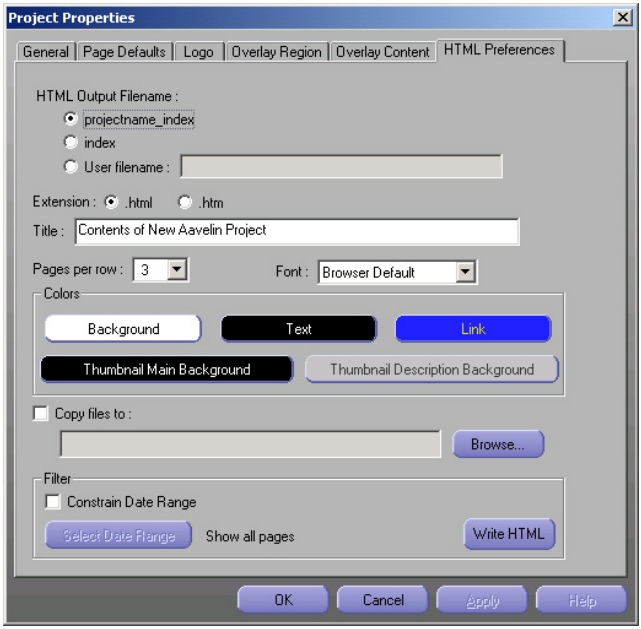
```
C:\Program Files\MagicBox\Aavelin\Projects\Channel33\
```

You may then copy these files to your remote web server using your favorite FTP program, or, if your web server is located directly on your LAN, you can instruct Aavelin Composer to copy all the files automatically every time you save.

HTML Preferences

Each Aavelin project has its own set of preferences for the web page appearance and other related particulars. You may not need to edit or change these from the default values, however by changing them you can create your own customized web page look.

To change a project's HTML preferences, click on "Project Properties", then click on the "HTML" tab to see the HTML Preferences panel shown on the following page:



Here are descriptions of each of the above options:

HTML Output Filename

The main HTML file (the place where most users will start browsing) is named here.

By default, the file will be named with your project name, an underscore, and "index". (For example, "tutorial_index.html"). The project name is forced to lower case because most web servers are case sensitive and most users tend to type in lower case when typing web addresses.

If your web site does not have a default "index.html" file, use the 2nd choice, which will name the main file "index" without including your project name.

Or, if you have a specific file name in mind, use the "User Filename" option. Be aware that the user filename will let you enter either upper or lower case characters. Traditional web practice is generally to make all filenames lower case. Do not add a file extension (such as .html) here, as this will be added automatically (see the below).

For any of the filename choices, either ".html" or ".htm" will be appended to all HTML files generated by Aavelin composer. Select the extension most commonly used on your particular web site. If you do not know, then use "html" which is the most common.

Title

The title text is what is displayed at the top of the main web page (as well as in the window title of the user's web browser.)

By default, this title is filled in as "Contents of" and your project name, but you may substitute any text you wish to be displayed.

Pages per row

The "Pages per row" value controls how many thumbnail images of your Aavelin pages are displayed per row in the web browser.

If you expect that most people that will be browsing your site are using web browser windows sized about 640x480, you don't want to have too many pages per row. A value of 3 or 4 typically works well.

Font

Specifying fonts for web pages can be tricky because not all users have the same fonts, and supplying fonts on your web site that can be downloaded can be tricky because of compatibility and copyright issues.

The "font" pull-down menu provides a short list of fonts that are common to most all web browsers.

Leave the setting at "browser default" if you want the end user's own font preferences to take precedence.

(This setting doesn't affect your actual Aavelin pages. They will show up with all the fonts and graphics just like you used when creating them.)

Colors

These settings affect the colors used in the HTML documents. (The actual colors of your Aavelin pages are unchanged.)

MagicBox recommends that you do not change these settings at first. Wait until you have created and viewed your first web page and understand where the files show up and how they appear. Changing colors to the wrong settings can sometimes lead to web pages that appear invisible (for example, white text on a white background.)

The "Background" setting is the main web page background. The "Text" setting is for any text in the HTML page.

The "Link" setting controls the color of the borders around the thumbnail images that the user can click to zoom into a page. (Visited links will appear slightly darker, and active links that the user is clicking on will temporarily appear slightly lighter.)

All thumbnails are arranged in a table with one color surrounding the thumbnail and another around the textual description of the thumbnail. "Thumbnail Main Background" and "Thumbnail Description Background" control these colors.

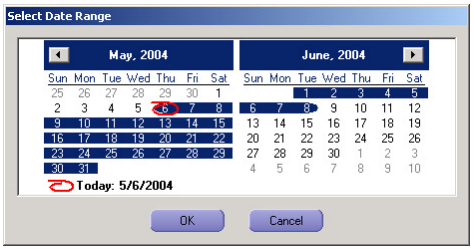
Copy files to

If your web server is on your LAN, or if you want to share these files with users who have access to a different folder on your machine, you can optionally specify a folder where all the HTML files and JPG files will be copied every time they are updated.

Click on the browse button to specify the output folder. (Make sure that the "Copy files to" box is checked if you want this feature to be active).

Filter

Check the 'Constrain Date Range' box if you wish to restrict your HTML content to a specific range of days. Once checked, click on the 'Select Date Range' button to open the calendar control.

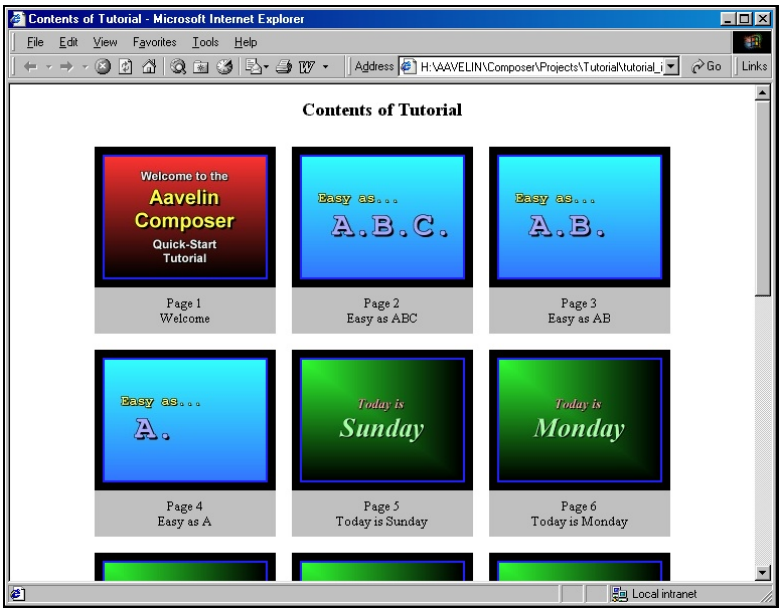


Click on the desired beginning date and drag the selection to the desired ending date. The date range can be up to 6 weeks. Press 'Ok' when finished.

Click on the 'Write HTML' button to generate (or update) the HTML pages for the project. Note: the project must be saved prior to writing HTML.

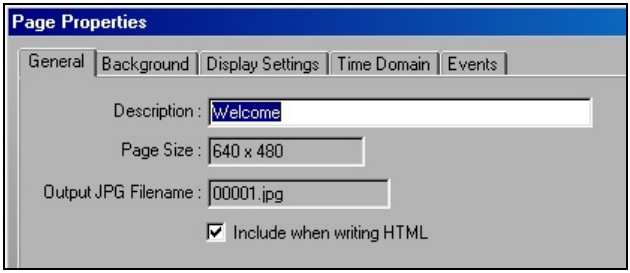
Example Output

Below is a screen shot of the web page generated for the "Tutorial" project using the default Aavelin Composer HTML settings.



Omitting Specific Pages

Sometimes you may not want a page from your project to show up in the HTML version. For example, a page that is still being constructed.



To omit a particular page, go to the "Page Properties" dialog for that page, and then remove the checkbox next to "Include when writing HTML".

Help with HTML

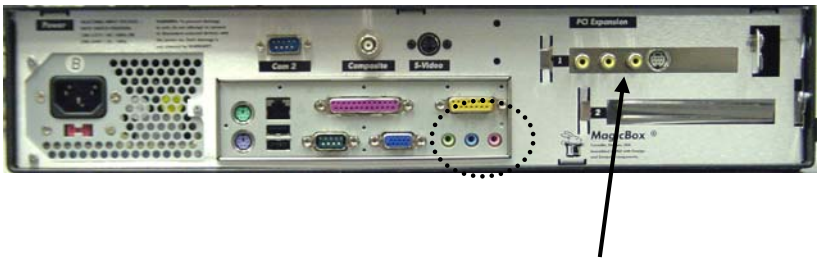
There are endless varieties of web server configurations in the world, and many ways of coding and linking HTML documents into a larger web site.

MagicBox provides support for the general use of Aavelin Composer HTML, but cannot provide support for integration of the final HTML output into a larger web site. We recommend contacting your company's webmaster or network administrator to see how to best integrate Aavelin Composer's HTML output into your site.

Aavelin RT Video Pass-Thru

This section is an introduction to using the Aavelin RT system with Video Pass-Thru hardware.

Aavelin RT Unit Hardware:



The default video input connector is Composite Input 1 (see arrow).

Aavelin RT's Video-In card can be installed in PCI Expansion 1 (shown), 2, or oriented vertically to the left of the PCI expansion area. Variances are aesthetic only.

Audio Pass Thru is available with the Aavelin RT system on selected pages. Both Line In and Line Out may be connected.

Input is through the blue "Line In" audio connector. Output is through the Green "Speaker Out" audio connector.

Audio connection is optional. In future releases, automatic audio "ramping" will allow audio to pass only when a Video Pass-Thru page is displayed. Audio cables with a 3.5mm jack are necessary to connect to the audio input and output source.

Aavelin RT Audible Boot Notification

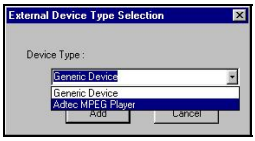
At 20 seconds in to boot-up, the Aavelin RT system outputs a brief sound file from the Speaker Out connector. When the Aavelin media services are fully functioning you will hear this sound just before the Aavelin playback engine is launched.

Aavelin Composer Software – External Device Setup

In order to incorporate video pass-through into a project, Aavelin Composer must be setup to recognize appropriate pass-through devices.

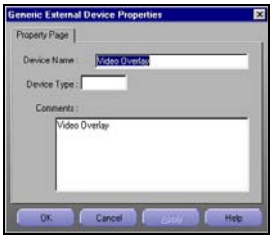
After launching Aavelin Composer, click on the “Setup” button and select the “External Devices” tab.

Select the Add button to add a Video Pass-Thru Device to the Composer software. Select Generic Device or Adtec MPEG Player.

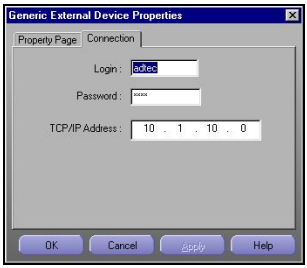


Select Adtec MPEG Player only if you have an Adtec Soloist or Edje device. For all other pass-through devices, select “Generic Device”.

Once the Device Type has been selected, a name for the device must be entered. If “Generic Device” was selected, enter “Video Overlay” as the device name. If Adtec MPEG Player was selected, enter a name that is descriptive of the device and its location. This will simply be the name the device is referred to elsewhere within Aavelin Composer.



If Adtec MPEG Player was selected, there will be a “Connection” tab here as well.

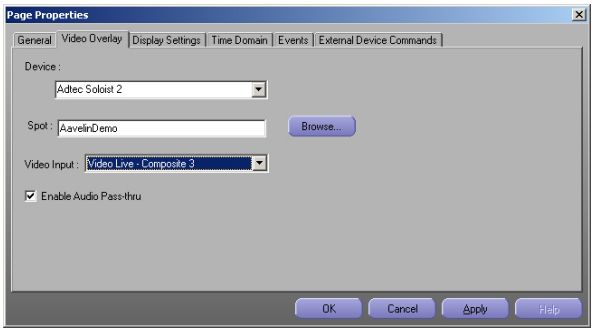


Enter the Login and Password, followed by the TCP/IP address of the Adtec Player Unit. If necessary, refer to the documentation from Adtec for assistance. OK all panels to confirm the new device.

Adtec MPEG Player features are supported where the Aavelin RT unit and the Adtec MPEG unit are connected to a TCP/IP network. You may still update the Aavelin RT system through any connection type (TCP/IP, Modem, Serial, Zip disk). Communication over TCP/IP between the Aavelin and Adtec device is required, however. The TCP/IP connection is necessary for the Aavelin RT unit to cue and play MPEG spots with millisecond accuracy. Maximum network latency between Aavelin RT and Adtec devices is 200 milliseconds.

Adding a Full-Screen Video Overlay

With a Project Open, Click on Append Page. A new panel appears. Select "RT Video Overlay" to display video full-screen. Then, OK. The new page will be created, and the Page Properties dialog will be displayed. Select the "Video Overlay" tab.



Select the Device created in the previous section. For Generic, select the name previously given - Video Overlay. If an Adtec MPEG player was selected as the device, the browse button will be enabled and you must select a clip. Refer to the section below titled "Selecting an MPEG Clip from an Adtec Device".

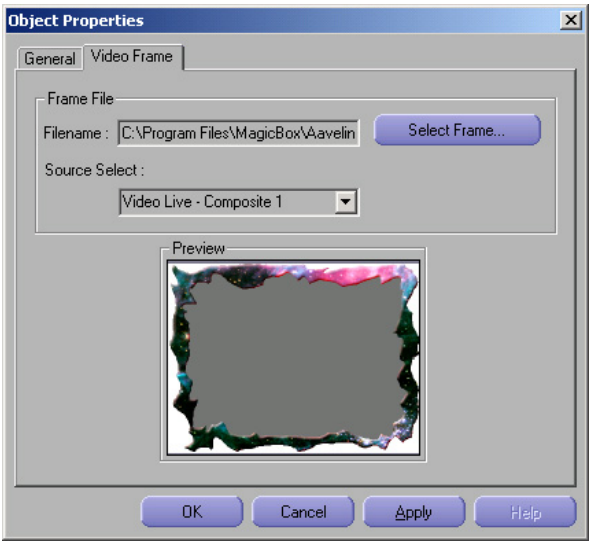
The 'Video Input' field is used to select the input connector on the Aavelin that the device is attached to. Select S-Video, Composite 1, 2, or 3.

Check the 'Enable Audio Pass-Through' box if the source audio is passing through the Aavelin and you wish to hear it when the page is displayed.

Adding a Video Overlay Window

Video overlay content can also be displayed in a window on a normal Aavelin page. In the page editor, you will see this button:

A dialog will appear allowing you to select a frame for the video object, as well as the source input.



The white area of the preview will be transparent when viewed on the page. The grey area in the center of the image will show the video feed coming into the selected input. Once either Apply or OK is pressed, the object will be inserted into the page editor view.

> **Video Frame objects will always be displayed on top of other items on the page. Text cannot be placed over a video frame object. Only one video frame object can exist on a page.**

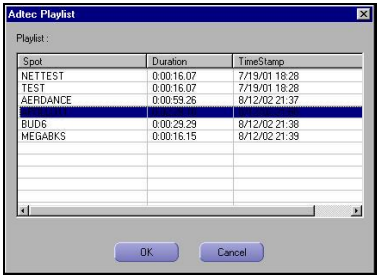
If you wish to play a clip from an Adtec player in a video window, click on the Insert Video Clip button:

Or, click on Page Properties and select the External Device Commands tab. Click on 'Add' and select 'Adtec MPEG Player', and follow the steps below to select the desired clip. Once inserted, the selected clip will be sized and positioned to match the video frame.

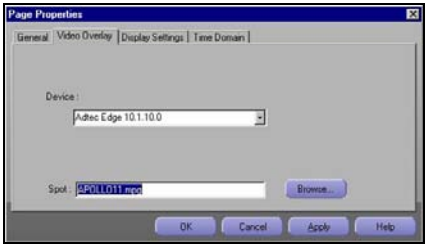
Selecting an MPEG Clip from an Adtec Device

The Browse button will attempt to connect to the Adtec MPEG player. If a successful connection can be made (it is on your network) a file listing will show all of the spots available on the specified Adtec Device, along with their running times.

After successful connection to the Adtec MPEG player, a window opens with a listing of the MPEG files on the Adtec Device.



The Spot name, Duration and file Time Stamp will be shown. Select a file from the list and press OK.



Once the Spot is selected, it will be displayed in the Spot field.

Additionally, the page dwell time will have been modified to match the duration of the selected MPEG file. Click on the Time Domain tab to verify.

Finalizing Pass-Through Content

Full-Screen Overlay pages are prominently displayed at the project's thumbnail view. Pages that are type Generic Video, will be listed as "Video Pass-Thru".

The Adtec MPEG Spot will be listed after the Page number. Followed by the new User Specified duration.

Publish the finished project to the remote Aavelin RT system to see the Adtec MPEG spot or Generic Video page included in the project playback.

Pages that have Generic Video specified will key through the live video source. The process is similar to a chroma key used in television production. If a source is not physically connected to the Aavelin, a blue screen will be displayed.

Video Overlay pages support page transitions and region settings, like normal pages. Video Overlay pages key through any text that was specified on the page. This includes logo bugs and region information.

Display of crawl information keyed over video, similar to the cable news networks, is now supported with Aavelin RT.

Aavelin VTR/DVD Infra-Red Control Module

This section will explain how to use the Aavelin AV100 and AV200 RT systems with the VTR/DVD Control Option.

Throughout this section, we will use the term VTR to describe a Video Tape Recorder. This term is interchangeable with the term VCR, which stands for Video Cassette Recorder. The VTR term is a bit broader, in the sense it includes all devices that use video tape.

DVD is an acronym for Digital Versatile Disk; commonly referred to as Digital Video Disk.

Contents:

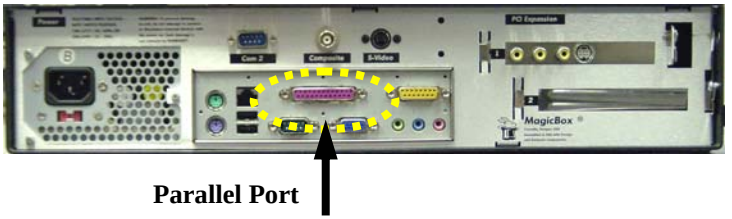
- Aavelin Infra-Red VTR/DVD Switchbox
- Parallel Male/Male Extension Cable for device interconnection
- 2-Sided Adhesive Tape

> ☞
>
> **The Aavelin Infra-Red Switchbox is designed to attach only to the MagicBox Aavelin Unit's Parallel port. Connection with any other port, to a user PC or otherwise, could cause damage and void the warranty of either the Aavelin Infra-Red Switchbox, the Aavelin Unit or both.**

Hardware Setup and Attachment

First remove power from the Aavelin AV100 or AV200 RT system.

Attach the 6-foot Parallel extension between the Infra-Red Switchbox Input/Output connector and the rear of the Aavelin's Parallel Port.



Next make sure the switchbox is selected to the setting marked Infra-Red .

The Infra-Red emitters are labeled 1, 2, etc. Depending on the hardware installed, the Aavelin Playback system can support up to 7 Infra-Red emitters.

Route Emitter 1 to your VTR/DVD player. Look closely at the front panel of the VTR/DVD you want to control. The Emitter should face directly to the VTR/DVD's Infra-Red Receiver. Adhesive panels have been attached to provide for a permanent fit.

Route the other Emitters, labeled 2, etc. to the corresponding VTR/DVD unit.

Turn on the VTR/DVD unit(s). If you need to loop the Aavelin Video output through the VTR's Video Input connector, attach those cables now. When looping through, be sure the VTR(s) are set to Line Input, not TV Input. Some VTR / DVD combo players have several outputs; see the Manufacturer's manual for information on which video inputs and outputs are best used for your application.

Power up the Aavelin unit. The Aavelin will resume normal playback operation in about 90 seconds.

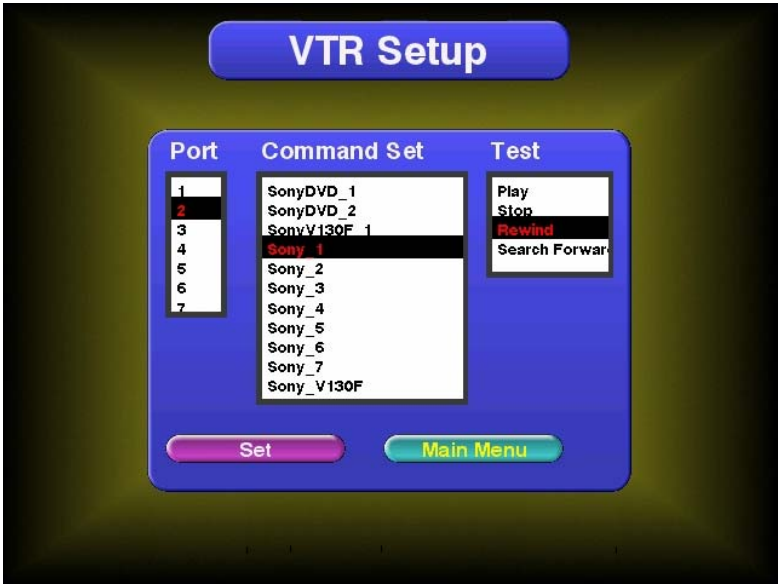
After power-up, if there continues to be no display, check cable routing; especially if the cables are routing through the VTR/DVD. This can be a common source of trouble. This problem is resolved by referring to the VTR/DVD Manufacturer's instructions for setting the Video Input.

Aavelin Playback VTR Playback Setup

With the Aavelin system Powered Up and running, press the Menu key on the keypad. This will bring up a Main Menu. Proceed by selecting the External Devices option.

The VTR setup menu, similar to the picture below, will appear. Use the Up, Down, Left and Right arrows to navigate this menu.

There are three panels to configure.



1) Select the Port. The port is defined by the output Infra-Red emitter that is affixed to the face of the VTR/DVD unit. Use the Right arrow to move to the Command Set panel.

2) Select the Command Set for your VTR/DVD unit. The list is organized by Manufacturer. There are dozens of types of VTR/DVD code sets. We have included categories for most VTR codesets. Locate the VTR/ DVD that most closely matches your type. In the case of Sony, as most listings, there are several code sets. Test similar code set names to find the one that best matches the VTR/DVD unit in use. Try several of the available listings to find a match. For example, Sony_1, Sony_2, Sony_3, etc.

Use the Right arrow to move to the Test panel.

3) Select the command to issue as a test. Press the Select (⊡) key on the keypad to issue the highlighted command to the VTR/DVD unit. While in the Test panel, try out the functions of the selected Command Set. When the correct code set is issued, expect to see corresponding action on the VTR/DVD player; similar as if the devices Infra-Red Remote was used.

Continue with the three steps, setting up each emitter and VTR/DVD with the corresponding code set. When the "Set" button is selected, the Port and Command Set selections are saved to the Aavelin unit's internal Hard Drive.

Controlling when the Aavelin unit issues real-time commands to the VTR/DVD is performed in the Aavelin Composer Software.

Special Note about DVD Players

There are just a few code sets for DVD players. If you find a Manufacturer's category is missing, try the same Manufacturer's VTR code sets. The Aavelin system incorporates an update system for adding new code sets. VTR and DVD player remote code sets can be updated for a nominal fee.

Contact us at support@magicboxinc.com with the Manufacturer's name, model number and any related information to your application. We may ask that you send in the remote to us so we can compare code sets, or create one to match the vendor's remote.

Special Considerations for Aavelin and VTR/DVD Interconnection

Aavelin AV100 and AV200 RT units support VTR/DVD equipment attached separate from the Aavelin unit, or in a method called Video Downstream. To use Video Downstream with a DVD player, it must be one of the newer VTR/DVD combo players. Several models are available from mainstream manufactures.

Video Downstream is a process in which the VTR/DVD can switch in and out the video that is intended to play. When the VTR/DVD is not playing a video signal, the Aavelin's video will pass right through it. When a Video Tape or DVD is intended to play, the VTR/DVD will switch from the Aavelin video, to the VTR/DVD's video output.

Hints On Connecting Video Cables for Video Downstream

Video Downstream is best described as a video flow. This is a process where video originates from the Aavelin unit and passes through a VTR/DVD, ready for final distribution.

A video signal is output from the Aavelin playback unit, and enters the VTR via the VTR's Video Input. Then the VTR's Video Output connects to a monitor or other distribution equipment.

Hints On Connecting Video Cables for Video Upstream

Aavelin AV200 RT systems have the added capability to use a mode called Video Upstream. This is where the VTR/DVD video is fed into Aavelin's Video Input hardware. When a VTR/DVD event is called, a Video Pass Through page can be revealed where VTR/DVD video is encoded and mixed with the video from Aavelin system.

The added capability is that Static and/or Crawl messages can be mixed live, on top of the Video signal. The Aavelin AV200 RT systems can be used with any VTR and DVD players, and do not require the connected device be a VTR/DVD combo system.

See the manual addendum supplied with the Aavelin AV200 RT unit for an overview of the connection enhancements to the Aavelin AV200 RT system.

Aavelin Composer Event Examples For Controlling a VTR/DVD Unit

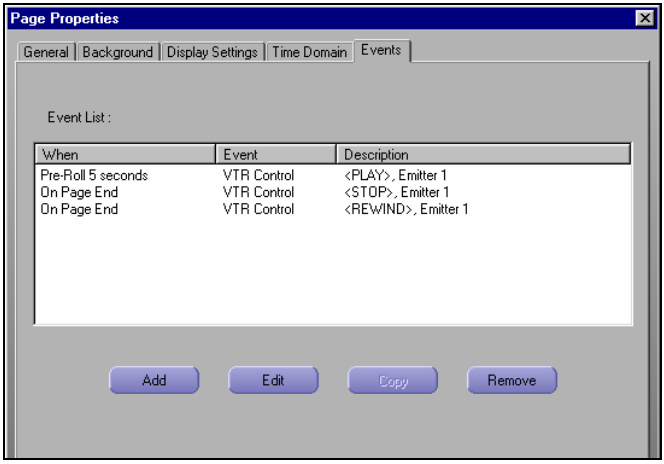
The Aavelin Composer version 2.20 and later adds the ability to include a VTR/DVD event inside a Composer project. This section shows what a finished VTR/DVD Event would look like. The next section describes the steps to create an event sequence.

The Aavelin Infra-Red hardware module *is required* for VTR/DVD deck support. In order for the Event to be issued to a VTR/DVD unit, the Aavelin Infra-Red hardware module *must* be attached to the corresponding Aavelin unit.

Inside Aavelin Composer, open a project. Select the page that will be issuing the VTR/DVD commands.

Using the mouse, select "Page Properties" from the Aavelin Composer menu. Select the "Events" tab to "Add" or "Edit" an event.

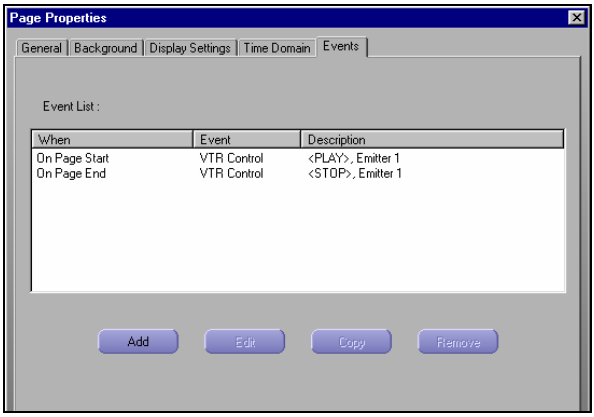
Below is a picture of a typical VTR event sequence.



A ‹PLAY› command is issued on emitter port #1. This command is set to Pre-Roll 5 seconds before the page is shown on the playback system.

The VTR will continue in PLAY mode. In this example, when a page duration of 60 seconds is complete, "On Page End", the STOP command is issued to emitter port #1, followed by a REWIND command to emitter port #1. The REWIND event is needed as a VTR tape is a sequential access medium. This event re-cues up the VTR Tape for the next Play Event.

Below is a picture of a typical DVD event sequence.



First the Play command is issued on emitter port #1. This occurs immediately as the page begins showing. Pre-Roll is not necessary for most DVD players, as less time is needed to begin playing from a DVD disk.

The DVD will continue in PLAY mode. In this example when the page duration of 60 seconds is complete the STOP [On Page End] command is issued to emitter port #1. There is no need for the REWIND event, as a DVD disk is a random access medium. The DVD player is immediately able to play the video segment from the beginning track.

Triggering a VTR/DVD unit

Inside Aavelin Composer, open a project. Select the page that will be issuing the VTR/DVD commands. Using the mouse, select "Page Properties" from the Aavelin Composer menu. Select the "Events" tab to "Add" or "Edit" an event.

Set the Dwell Time on the Time Domain tab.

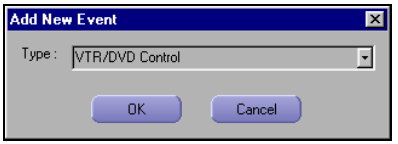
By properly setting the page duration, the length of the video segment will match the time the VTR/DVD player is playing the segment.

In this example, we are using 2 minutes and 10 seconds. When the VTR/DVD segment is finished, playback will resume showing the next page in the project's sequence.

In situations where the VTR/DVD unit's video is routed in a way other than Video Downstream or Video Upstream methods, the Project Default page time is irrelevant; as we're not counting on page timing accuracy to control the VTR/DVD.

Use this method when Aavelin's video output will not be interrupted from view. When using VTR/DVD events in this way, we recommend not using the Pre-Roll feature for Page Events.

Next, select the External Device Commands Tab. Select "Add" to include a new event. Select VTR/DVD Control, and select "OK".

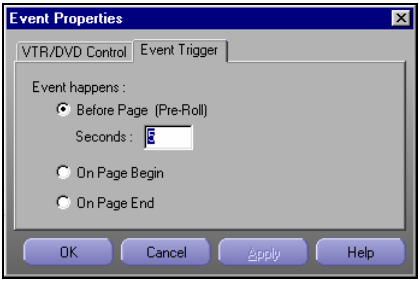


Using the Event Properties page, add a Play event.

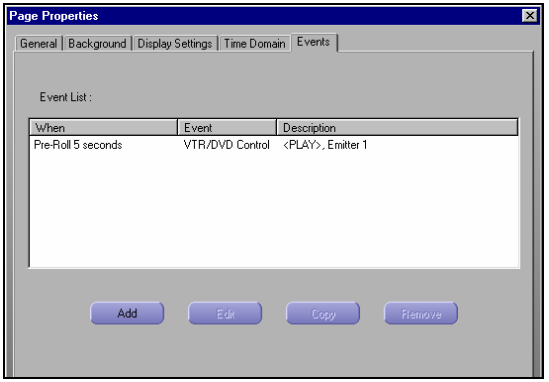
Change the Emitter number to match the emitter of the VTR/DVD unit attached to the Aavelin. In this example we use Emitter 1.

Select the Event Trigger tab.

For Play events, a Pre-Roll can be specified. Pre-Roll is useful for Video Tape Recorders, as a tape transport mechanism takes as much as 5 seconds from idle to load the video tape and synchronize tape speed with the VTR's servos. It may take some experimentation to find a suitable Pre-Roll for your VTR deck. With Pre-Roll, the Event page should "Play" close to the same time the VTR is actually playing the videotape.

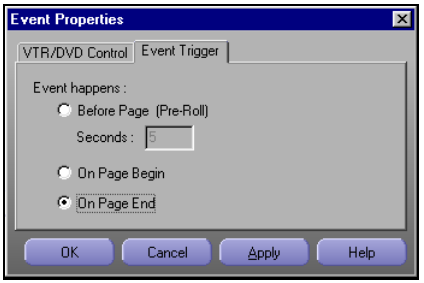


Keep in mind a VTR/DVD event can also be selected to trigger On Page Begin or On Page End. Select "OK" to accept the new Event.

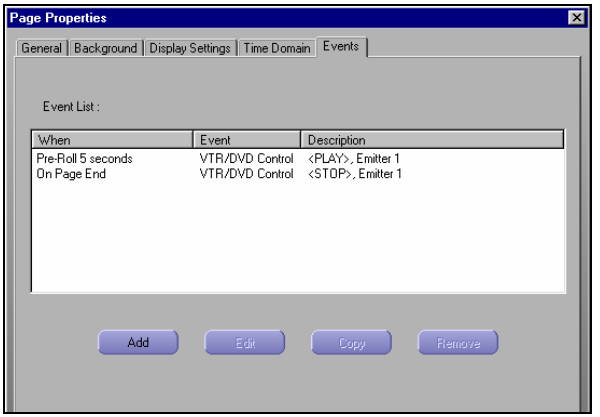


The Events tab shows the new Play Event with a Pre-Roll of 5 seconds.

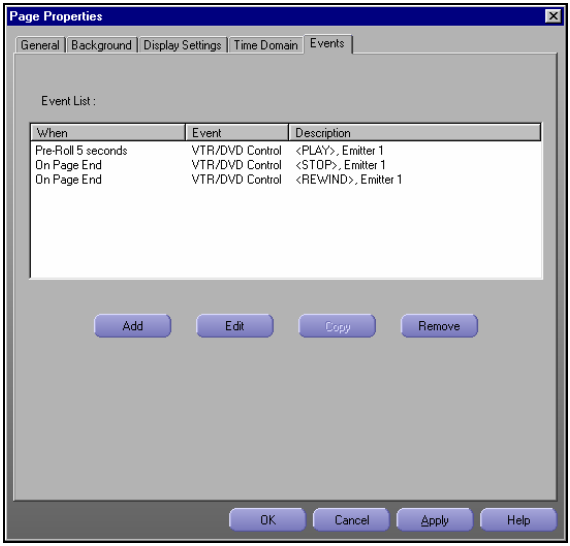
Most VTR/DVD events also need a STOP command. Use the "Add" feature to add the STOP event. Use the Event Trigger tab to specify "On Page End". Select "OK" to accept the new STOP command for Emitter 1.



The Events Tab now shows the Play Event with Pre-Roll and the Stop event On Page End.



Add a Rewind Event in the same way. Here is the result:



Select "OK" to accept all of the new VTR Control Events.

Recall that Emitter 1 was specified in the Aavelin Playback VTR Set section. In this way there is no need to be concerned with which type of VTR/DVD was specified on Emitter 1. The only item that is important is which command to send.

With the Event programmed, video will play for 2 minutes and 10 seconds. At which time the STOP and Rewind commands will be issued to the same Infra-Red emitter.

Keep in mind this example is the most basic type of event.

Several events for several different VTR/DVD Emitters can be combined into the Event list.

Specifying Pages To Run at Specific Dates and Times: Timer Events

Refer to the section earlier in this manual regarding "Timer Events" for precise control of VTR/DVD command scheduling.

In Thumbnail view, Timer Event pages are indicated by a Yellow Bar .

Aavelin Weather System Reference

This section will explain how to use the optional Weather Station with the Aavelin system.

The Weather Station is a collection of sensors that attach to a centrally located junction box. Also attached to this junction box is an Ultimeter, which provides local display of the weather data. This Ultimeter also connects to a communications port on the Aavelin, allowing weather data to be displayed within a project.

This section provides a quick reference of the steps needed to properly install the Aavelin Weather System. For complete documentation of the Weather Station's features, refer to the manual enclosed in the Ultimeter box.

Included in the Aavelin Weather Station:

- Ultimeter 800 (Basic) or Ultimeter 2100 (Deluxe)w/stand
- Junction Box w/Power Adapter and Mounting Bracket
- Temperature Sensor
- Anemometer (Wind Vane) w/3 Cups
- Junction Box Cable
- Rain Gauge
- Aavelin Data Logger Cable
- Humidity Sensor (Deluxe only)

Before You Start

Take a few moments before installation to do the following:

Set the Ultimeter's date & time – This is outlined on page 24 of the weather station's manual.

Set the Ultimeter's leap year – This is outlined on page 24 of the weather station's manual.

Set the Barometric Pressure – This is outlined on page 25 of the weather station's manual.

Plan the installation – Suggested cable lengths and some additional tips can be found on page 15 of the weather manual.

Installing the Aavelin Weather Station

Installing the Aavelin Weather Station is done in just a few steps. The indoor hardware (Junction Box and Ultimeter) must be installed in sensible locations, and many of the Sensors have specific requirements to ensure accurate collection of weather data.

Installing the Junction Box

The Junction Box is the central piece that all other devices in the Weather System attach to. It must be installed indoors, and near a power outlet. Once attached to the wall with the mounting bracket, plug in the AC power adapter.

Connecting to the Ultimeter

Connect the Junction Box and Ultimeter using the cable provided.

This cable uses a connector that is slightly wider than the connectors used for the weather sensors, and will only plug in to 1 port on the Junction Box. Attach the other end to the port on the underside of the Ultimeter.

As you attach sensors to the Junction Box, verify that the Ultimeter is able to display the appropriate data. Page 3 of the Weather System manual describes the function of each key on the Ultimeter.

Installing the Temperature or Humidity Sensor

The Temperature or Humidity Sensor connects to the port on the Junction Box indicated by this icon:

☞

The Deluxe Weather Station includes the Indoor/Outdoor Humidity Sensor. With the Humidity Sensor attached to the Junction Box, the Temperature Sensor is not used. Attaching the Temperature Sensor to another port on the Junction Box will result in incorrect weather data.

Refer to page 17 of the Weather Station manual for specific mounting and sensor placement tips.

Installing the Anemometer (Wind Vane)

The Anemometer connects to the port on the Junction Box indicated by this icon:

Refer to pages 12 and 19 of the Weather Station manual for additional information on the Anemometer.

Installing the Rain Gauge

The Rain Gauge connects to the port on the Junction Box indicated by this icon:

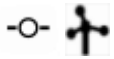
Ensure that the Rain Gauge is installed in a location where rainfall will be completely unobstructed.

Connecting to the Aavelin

Weather Data is delivered to the Aavelin using the included Aavelin Data Logger Cable.

Connect one end of the cable to the port on the side of the Ultimeter, and plug the other end into the port labeled COM2 on the back of the Aavelin.

Once the connection is made, press and hold the following keys together for 3 seconds:



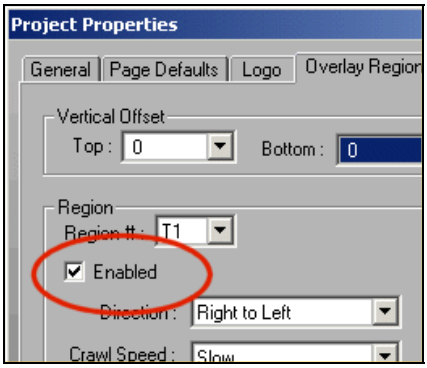
The display should blink approximately 3 times, and return to normal. The Ultimeter is now set to output Serial Data in a way that the Aavelin can understand.

Using the Weather Station with Aavelin Composer

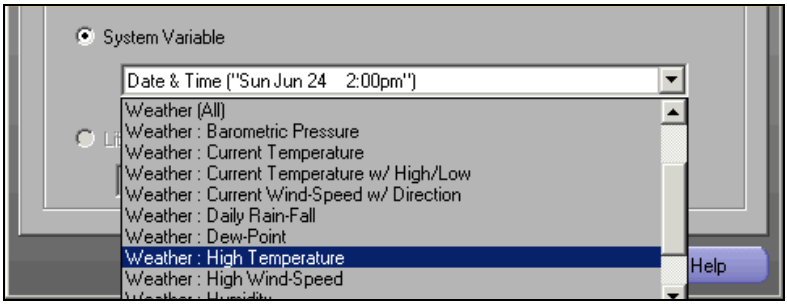
With the Weather Station hardware installed, the final step is to configure the project to display the desired weather data.

Weather information on the Aavelin is displayed in Overlay Regions, or Crawl Lines. For more information on Overlay Regions, view the "Project Properties" section earlier in this manual.

Open the project that the weather data will be shown in, and click on the "Project Properties" button. Select the "Overlay Region" tab. Enable the region that the weather data will be placed in by checking the "Enabled" box.



Now select the "Overlay Content" tab. Select the enabled region from the drop-down box at the top, and click on the "Add" button. Select "System Variable", and the list of available weather fields can be viewed.



Weather (All): Displays the current temp with Hi/Low, Wind Speed/Direction, high wind speed, humidity, and barometric pressure.

Barometric Pressure: Weather Deluxe only. Displays the current barometer value with direction indicator. This value requires that an initial barometric pressure reading be programmed into the Ultimeter (see above).

Current Temperature: Displays the current temperature.

Current Temperature w/ High/Low: Display the current temperature along with High/Low values for the current day.

Current Wind-Speed w/ Direction: Displays the current wind-speed along with the wind direction.

Daily Rain-Fall: Displays the daily rainfall in inches.

Dew-Point: Weather Deluxe only. Displays the current dew point value. This value requires that an initial barometric pressure reading be programmed into the Ultimeter (see above).

High Temperature: Displays the high temperature value for the day.

High Wind-Speed: Displays the high wind-speed reading for the day

Humidity: Weather Deluxe only. Displays the current humidity reading.

Low Temperature: Displays the low temperature reading for the day.

Monthly Rain-Fall: Displays the cumulative rain-fall for the current month.

Wind Chill: Displays the calculated wind chill value. This value is only valid if the current temperature is below 45 degrees, and the current wind-speed is above 5mph. If these requirements are not meant, the wind chill value will be skipped during playback.

Frequently Asked Questions

I cannot publish using a direct serial connection

Direct serial publishing requires the use of a Null Modem serial cable. A standard "straight-through" serial cable will not work. An appropriate cable can be ordered directly from MagicBox, Inc.

Can I set the Aavelin to operate in DHCP mode on my network?

MagicBox, Inc recommends using a static IP address when configuring the Aavelin for use on a network. For further assistance, contact technical support.

I installed the Aavelin behind a firewall and cannot publish.

Ethernet publishing traffic to the Aavelin happens on port 427. This port must be open between the publishing PC and the Aavelin

What image types are supported by the Aavelin?

Aavelin Composer will recognize images with the following extensions: .JPG, .JFIF, .PCD, .PCX, .PNG, .TGA, .TIF, .WMF, .WPG, .BMP, .JP2, and .GIF. Currently only static .GIF images (non-animated) are supported.

Can I preview my project in Composer before publishing it to the Aavelin?

Aavelin Composer does not have a specific preview function at this time.

I am having difficulties getting my logo to display transparently.

Logo images use the color green (RGB value 0, 255, 0) as the transparency key color. Any area of the image that you wish to show as transparency will need to be filled with this color. View the following URL for an example of the MagicBox, Inc logo, as used in the Factory Demo project:

http://magicboxinc.com/downloads/aavelin/beta/MagicBoxInc._Rabbit_In_Hat.BMP

My time domain pages are not expiring as I want them to

Time domain ranges that span multiple days need special consideration. Refer to the section titled "Spanning Multiple Days with Time Domain".

What are the power consumption specifics of the Aavelin?

USA 120V Service at 60 Hz
Peak Amp Draw 0.75 A 90 Watts
Normal Amp Draw Below 0.62 A 74.4 Watts

Can I use content from Microsoft PowerPoint in a Composer project?

PowerPoint allows you to save a presentation as a series of .JPG images – these images can these be used within Composer. Look for this under 'Save As...' within PowerPoint.

Dew Point and Barometric Pressure weather values are not displaying

The Ultimeter included with the Weather Deluxe option requires that an initial reference barometer reading be programmed in. See the Weather System Reference section for further details.

When should Time Domain be used versus Events?

Time Domain is ideally used when a normal rotation page is to expire after a certain date, or only be valid during certain hours of the day.

Event pages are more precise – they do not display aside from the times they are programmed to; they are not a part of the normal page rotation. These pages often have Infra-Red control commands attached to them, for automated scheduling of VCR decks, etc.

I receive 'Unknown Error' message while publishing over TCP/IP

This is generally an indication of dropped network packets, frequently caused by very brief network outages. These message can also occur if a network is at peak capacity, during high traffic hours. Contact your network administrator to see if network conditions can be improved.

Can a project currently on the Aavelin be retrieved for editing?

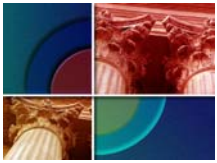
Content can only be sent to the Aavelin, not retrieved from it. For this reason, MagicBox highly recommends backing up the projects on your PC regularly.

How can I tell if my software is current?

MagicBox regularly issues software updates for the Aavelin. Details about the currently available software release can be found on our website. Visit http://www.magicboxinc.com and click on the 'Update' button.

Aavelin Bundled Backgrounds

The following backgrounds are included as part of your standard Aavelin Composer installation. Promotional "Demo" versions of Aavelin Composer may ship with fewer backgrounds than are shown here.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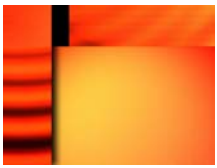
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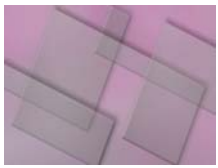
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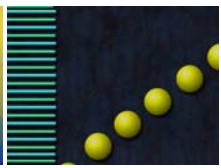
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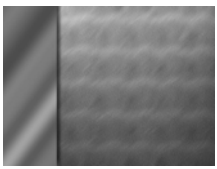
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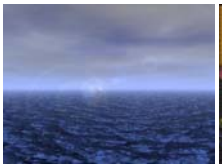
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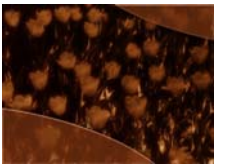
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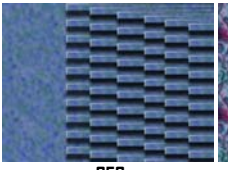
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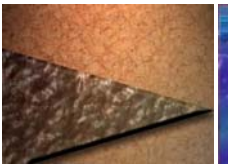
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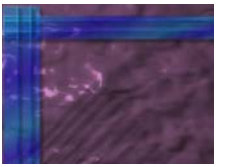
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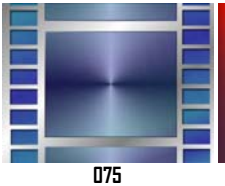
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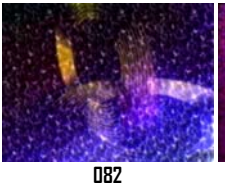
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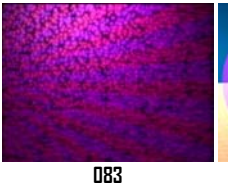
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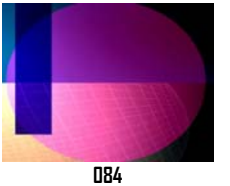
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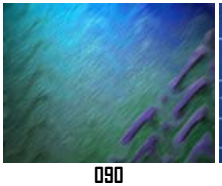
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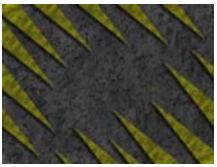
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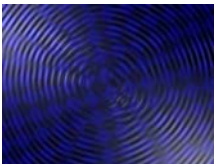
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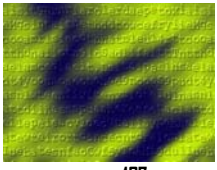
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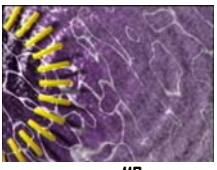
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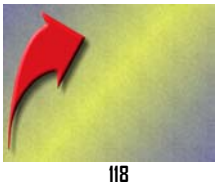
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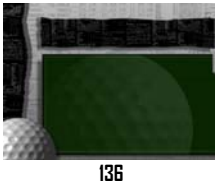
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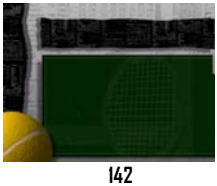
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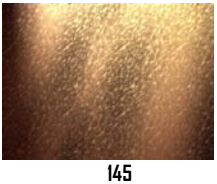
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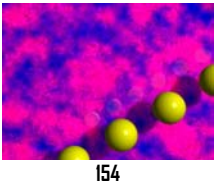
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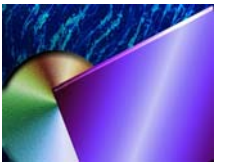
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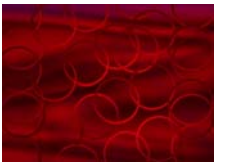
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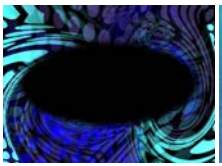
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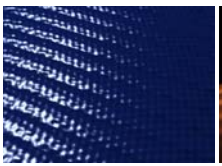
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