

Electronic Theatre Controls, Inc.

Composer Lite
**Control
System**

User's Guide

Automated Lighting Control System

Version 1.7

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ETC, Incorporated
3030 Laura Lane
Middleton, WI 53562
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ETC, Inc. warrants to Purchaser that for a period of (12) months from date of installation, but not more than (18) months from date of shipment, the Products shall be free from defects in materials and workmanship under normal use and service. Warranty is limited to (60) days from shipment for sample Products or Products used for rental. ETC, Inc.'s sole responsibility under this warranty shall be to repair or replace, at ETC, Inc.'s option, any nonconsumable part which is defective, malfunctions, or otherwise fails to perform its intended function, when used in a manner consistent with its intended function, provided that customer obtains return authorization in advance from ETC, Inc. and ships prepaid any part of the products to be repaired or replaced under the Limited Warranty to ETC, Inc. or, at ETC, Inc.'s option, to its authorized repair center, within the Limited Warranty period. ETC, Inc. shall not assume any responsibility for any labor expended or materials used to repair any equipment without ETC, Inc.'s prior written authorization. ETC, Inc.'s sole obligations and Purchaser's sole remedy for any Product that is defective, malfunctions, or otherwise fails to perform its intended function when used in a manner consistent with its intended function pursuant to the Limited Warranty is repair and/or replacement of the Product. ETC, Inc. is not responsible for damage to its products through improper installation, maintenance, use, or attempts to operate product above its rated capacity or voltage, intentionally or otherwise, or for unauthorized repairs.

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Introduction

The IRIDEON® Composer™ control system is a hardware/software system designed to give you complete control to design, manage, and update an automated lighting system. It is a powerful, yet friendly application that connects you with your lighting system components. The Composer system is designed to maximize the full potential of IRIDEON® multi-parameter luminaires.

Composer Hardware Components

The Composer Lite system is a modularized control system consisting of a Windows 95/Windows 98 based application for system configuration, programming, and playback, and a system controller.

A Composer Lite system shall consist of : one PC and at least one Irideon Luminaire but is limited to no more than 31 Irideon Luminaires. The PC will require a RS232 to RS485 adapter for communications. (ETC part # 7090B7078).

Communications

Communication between the luminaires and the control system is carried on one data line or bus. The lighting device bus connects the PC to the lighting devices themselves.

Personal Computer

The PC is provided by the user. It is used to define all programmed actions, including presets and sequences. Using the Composer software, you will program your lighting “looks” (the Intensity, Focus, Color, and Beam of your lighting components) as well as all system behavior.

Composer Software Components

The system software consists of : operating software for the PC application software running under Windows 95 or Windows 98.

PC Application Software

The Windows 95/98-based PC application software is the part of the system with which you directly interact. The software also allows you to program presets and sequences and transfer information between the PC and the luminaires.

The left-hand margins occasionally provide comments, cross-references, or a quick reference.

About This Manual

This manual describes all operational information associated with the Composer Lite software application. The manual does not provide detailed descriptions of the automated lighting fixtures themselves. Refer to the associated owner's manuals for additional information on those components.

Organization

The chapters are organized in the order in which you will require them. The major tasks associated with the Composer software rely on editing tool sets, one for each category of design activity. One chapter is devoted to each of these editing tool sets.

The Getting Started chapter describes how to load and start the Composer software and also provides information on manipulating the software's toolbars and menus.

The Playback chapter then explains how to put your design components together into a running system.

The Data Transfers and Backups chapter describes all data transfer operations for the Luminaire communication and directions for backing up your system files.

Symbols and Conventions

Left-Hand Margin

The left-hand margins occasionally provide comments, cross-references, or a quick reference. Key points and features may be pulled into the margin for quick access. This allows certain major points to catch your eye and lead you through the section quickly. They may provide shortcuts, or they may simply point to another section of the manual. As an example, the first sentence of this paragraph appears as a comment on this page.

Tips, Notes, and Cautions

Special comments, or areas that demand extra close attention, are flagged throughout this manual with separating lines and a boldface leading keyword.

Tip: When you scan a set of instructions, pay attention to information separated by lines, as shown here. It may save you some time, or help you avoid some common mistakes.

As shown above, tips are highlighted and set out from the text. You will find explanatory notes, shortcuts, and cautions displayed in the same manner.

Fonts

Words or phrases that appear on the PC keyboard or application display, either in pull-down menus or dialog boxes, as well as hardware labels appear in Arial font, like this.

Related Documents

In addition to this user's guide, the following documents are related to the ETC, Inc. product line:

ETC, Inc. Applications Guide

The *ETC Application Guide* (ETC part number 7090M1009) provides useful guidelines and worksheets to help you understand the capabilities of automated lighting and plan your installation. In addition to specification and installation overviews, the document provides numerous ideas, example installations, and rules of thumb that help you make the most of your lighting system.

AR5™ Wash Luminaire Owner's Manual

The *AR5 Wash Luminaire Owner's Manual* (ETC part number 7092M1003) provides a detailed reference on the AR5 luminaire. Fully illustrated, the manual gives step-by-step procedures for site preparation, physical mounting, address configuration, power and control cabling, testing and troubleshooting, and field maintenance procedures (including bulb replacement).

AR6™ Recessed Luminaire Owner's Manual

The *AR6 Recessed Luminaire Owner's Manual* (ETC part number 7093M1000) provides a detailed reference on the AR6 luminaire. Fully illustrated, the manual gives step-by-step procedures for site preparation, physical mounting, address configuration, power and control cabling, testing and troubleshooting, and field maintenance procedures (including bulb replacement).

AR500™ Exterior Wash Luminaire Owner's Manual

The *AR500 Wash Luminaire Owner's Manual* (ETC part number 7091M1005) provides a detailed reference on the AR500 luminaire. Fully illustrated, the manual gives step-by-step procedures for site preparation, physical mounting, address configuration, power and control cabling, testing and troubleshooting, and field maintenance procedures (including bulb replacement).

Technical Assistance

ETC, Inc. Corporate Headquarters

Electronic Theatre Controls, Incorporated
3030 Laura Lane
Middleton, WI 53562

Toll Free: **800.688.4116**
Fax: **608.836.1736**

Technical and Sales Support

There are several avenues of support as you plan, purchase, install, and program your lighting system.

ETC, Inc. Sales Department

ETC, Inc. sales hours are: 9:00 AM to 6:00 PM Central Time.

Toll Free: **800.688.4116**
Fax: **608.836.1736**

Your Dealer

ETC, Inc. also has a network of authorized dealers. Please call the ETC, Inc. Sales Department for information about contacting an authorized dealer in your area. Your authorized dealer has been thoroughly trained and equipped to assist you with your automated lighting needs. Contact your dealer first if you have any technical questions. For your convenience, write the name, address, and phone number of your dealer here:

Name: _____

Address: _____

City: _____ State: ____ Zip: _____

Phone: _____ Fax: _____

Technical Support

If your dealer can't help you with your specialized questions, feel free to contact ETC, Inc. Technical Support.

E-Mail

Ask questions and receive detailed answers from the Technical Support Department. Just send e-mail to the address listed below. You will receive a reply by e-mail.

Service@etcconnect.com

Fax

You can fax questions or comments to ETC, Inc. Just send a fax to the number listed below. You will receive a reply by fax.

Attention: Technical Service

608.836.1736

Telephone

ETC, Inc. technical support hours are: 9:00 AM to 6:00 PM Central Time. If you call after hours, you may leave voice mail. The voice mail activates a pager, so please indicate clearly if your problem is an emergency. ETC, Inc. cannot guarantee a response outside of working hours, but emergency calls can generally be handled within a reasonable time.

Toll Free: **800.775.4382**

When you call, please be at your computer, have your documentation in hand, and be prepared to provide the following information:

- Product serial number used for registration.
- Product version number, found by choosing **About** from the **Help** menu in the Composer LITE application.
- The type of computer you are using (including processor type, speed, amount of memory, type of display, etc.).
- Exact wording of any messages that appear on your screen.
- What you were doing when the problem occurred.
- How you tried to solve the problem.

Software Installation

Operating Recommendations

If you plan to use the PC temporarily then you may wish to consider the following:

- You may want to carry the PC into the working space when you manipulate the lighting system.
- If your installation includes more than one PC receptacle, you may wish to move from location to location.
- Once you are finished with your programming, you must download all information to the Luminaires.
- After downloading the lighting program, your PC is no longer needed.

Bear in mind that you may need to make changes to your system in the future, and therefore, may need to have a PC available to you again. If you rent or borrow your PC, be sure to secure both the Composer program diskettes and save the lighting data that you program onto diskettes. Should you need to re-install or update your system in the future, you will then be in possession of all required materials.

License Agreement

You are purchasing a license to use the Composer software. The software is owned by and remains the property of ETC, Inc. and its licensor; is protected by international copyrights; and is transferred to the original purchaser and any subsequent owners of the software media for their use only on the license terms set forth in the license agreement printed for easy access at the front of this document.

Be aware that opening the packaging and/or using the software indicates your acceptance of these terms. If you do not agree to all of the terms and conditions, or if after use you are dissatisfied with the software, return the software, manuals, and any partial or whole copies within thirty days of purchase to the party from whom you received it for a refund, subject to the terms of the ETC, Inc. return policy.

System Requirements

You will use the software described in this manual to program your lighting system. The software is a Windows 95/98 application, and complies with standards established by Microsoft for such applications. As a result, there are minimum requirements for the type of computer that is needed, and you should experience little difficulty in installing and running the software.

Minimum requirements for PC:

1. Intel 486-based, 33 MHz processor
2. 8 Mb RAM
3. 15 Mb available hard disk space
4. Unused serial comm port
5. VGA color display
6. 3.5" high-density disk drive (1.44 MB)
7. Mouse or other pointing device
8. Windows 95/98 operating system loaded

Recommended PC enhancements:

1. Intel Pentium-based, 75 MHz or better processor
2. 16 Mb or more RAM
3. 30 Mb or more available hard disk space

The enhancements are not necessary, but will make your PC run more quickly, thereby streamlining your work.

Tip: If you connect a mouse to a serial port, be sure that you have another serial port available to make the system communications link.

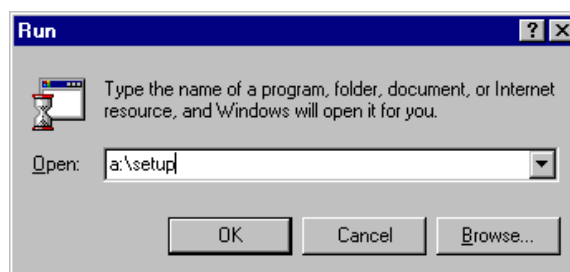
Software Installation

To install Composer software:

1. Make sure PC is turned on and Windows 95/98 is running.
2. Close all applications.
3. Locate sealed plastic bag containing distribution diskettes.
4. If you have not already done so, read license agreement at front of this manual. If you agree to agreement terms, tear open plastic bag and remove distribution diskettes.
5. Insert diskette labeled **Disk 1** into 3.5" floppy disk drive on your PC. This drive is usually drive A:.

Note: If your floppy drive is not drive A:, substitute your drive name for A: in command.

6. At Windows 95/98 taskbar, click on Start button and then click on Run... Run dialog appears.



7. Type `a:\Setup` in the text box.

Alternately, you may click **Browse...** to navigate to correct drive. Then select appropriate choices to locate your floppy drive and double-click on **setup** icon to open it.

8. Click **OK** or press **Enter**.
9. Follow instructions on screen, inserting each diskette into drive when prompted.

PC Connection

You must physically connect your PC communication (comm) port to the lighting system before you can control your lighting system. The connection is via a Receptacle Station.

System Connection

If you have luminaires in multiple rooms, you will probably have a Receptacle Station for the PC-to-Luminaire connection in each location to aid in programming. The station should be mounted in a convenient location so that you can use your PC freely. The receptacle is a standard female DB9 connector, allowing you to make a direct connection to the station using a standard DB9 serial extension cable.

To connect to Receptacle Station:

1. Place your computer in convenient location and connect one end of DB9 serial extension cable (not supplied) to serial port of your PC.
2. Connect other end of DB9 serial extension cable to Receptacle Station. Note that connector requires specific orientation.

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Chapter 1.

Getting Started

Starting Composer Software

Before you begin programming your lighting system, you should ensure that your luminaires are installed, all cabling is run and tested, and all address settings are known. Refer to the installation instructions and owner's manuals for additional information.

From Windows 95/98 Start Menu

1. At Windows 95/98 taskbar, click Start button.
2. Click on Programs.
3. Click on Composer Lite.

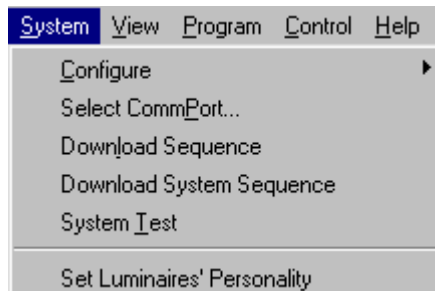
From Shortcut on Desktop

1. At desktop Composer shortcut icon double-click left mouse button.

Configuring Your System

Setting Comm Port

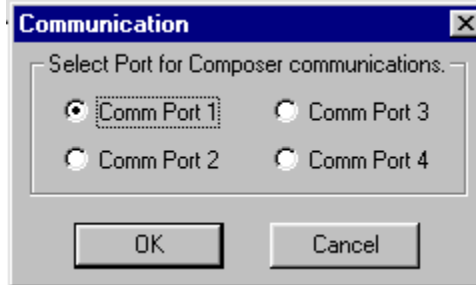
If the software does not respond you may need to access the communications setting dialog from the System menu.



To set or change comm port:

1. Make sure Composer application is running.

2. From System menu, choose Select CommPort... Communication dialog appears.



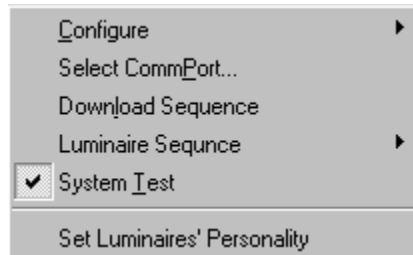
3. At Select Port for Composer communication. field, click radio button associated with comm port you want to use.
4. Click OK or press Enter.

System Test

Use System Test, to test your system to ensure that the communications link is valid. The test also validates the installation and proper operation of the luminaires and the entire control system.

Tip: System test will continue to run until disabled.

While the test is active, all luminaires move through a predefined series of actions that exercise every fixture parameter. Make note of any fixtures that are not behaving correctly.



To enable system test:

1. Make sure Composer application is running.
2. From System menu, choose System Test. Check mark indicates system test is active.

To disable system test:

1. From System menu, select System Test. Check mark disappears, indicating system test is disabled.

Creating A New Project

Before you can work with your automated lighting system, you must create a project and configure it by telling the system which hardware you are using within that project. Configuration information includes the name, address, and device type for luminaires.

Tip: You will find that you can locate and select your luminaires more easily later if you give them meaningful names.

Naming Conventions

Names may be up to 20 characters in length and consist of letters, numbers, and all printable special characters including spaces.

The default name for luminaires is the word **Luminaire** followed by a unique number.

Thumbwheel Addresses


Every device connected and configured in your Composer Lite system has a physical switch setting that identifies the unique control channel to which the device is assigned. This switch setting is referred to as the address.

You should have a record of the address for all devices installed in your system. Without this record, you will have to physically open each device to read the switch setting. Refer to your owner's manuals for additional information on addresses.

The master luminaire is addressed as "63". Slave luminaires are addressed as "01" through "99" but may not be addressed as "00" or "63". Composer Lite systems are limited to 31 luminaires.

There may be only one Master Luminaire.

Opening a Project

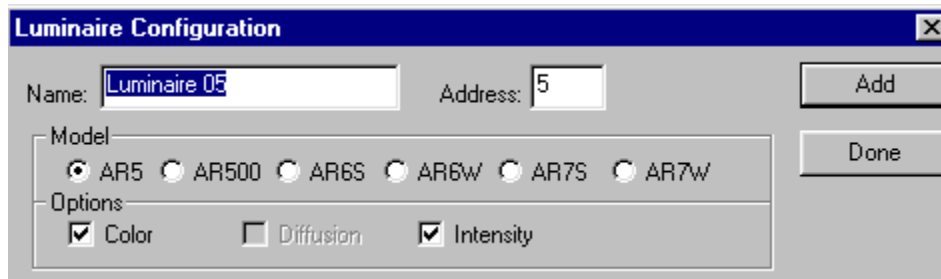
1. Start Composer application.
2. At main toolbar, click  button to open new project.

Alternately, you can select **New** from **File** menu.

Adding Luminaires

Composer Lite will automatically create a MASTER Luminaire with an address of "63". Composer Lite will default the MASTER to an AR5 with color and intensity.

1. At New Configuration Options dialog, click on Add Luminaires... Luminaire Configuration dialog appears.



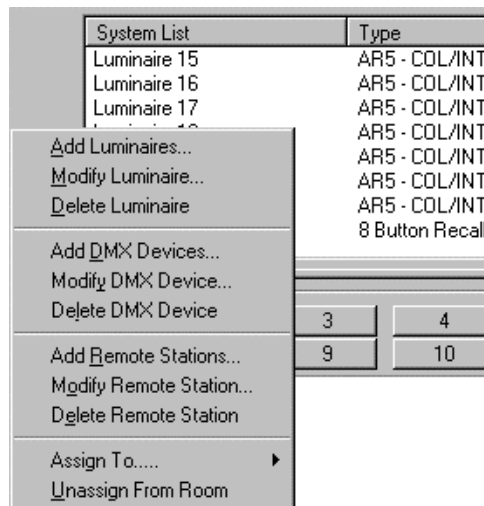
2. At **Name:** field, enter name for luminaire or accept default name.
3. At **Address:** field, enter address assigned to luminaire or accept default address. Address must match address entered onto thumbwheel address switch on luminaire.

4. At **Model** field, click on radio button for luminaire being added.
5. At **Options** field, click on options contained in luminaire being added. Options vary based on luminaire model selected.
6. Click **Add** button to add luminaire configuration to system and to reset **Luminaire Configuration** dialog to allow for more luminaires to be added.
7. When all luminaires are added, click **Done** to return to main **Composer Lite** screen.

Modifying Luminaire

The process to modify your configuration data for luminaires.

1. Left click on **System**.
2. Left Click on **Configuration**.
3. Left click on **Modify Luminaire**.




Removing Luminaire

To remove the device you have to be able to view the device name from the configuration list (to select it).

1. Left click on **System**.
2. Left click on **Configuration**.
3. Left click on **Delete Luminaire**.
4. Left click **Yes** in the dialogue

Opening Existing Project

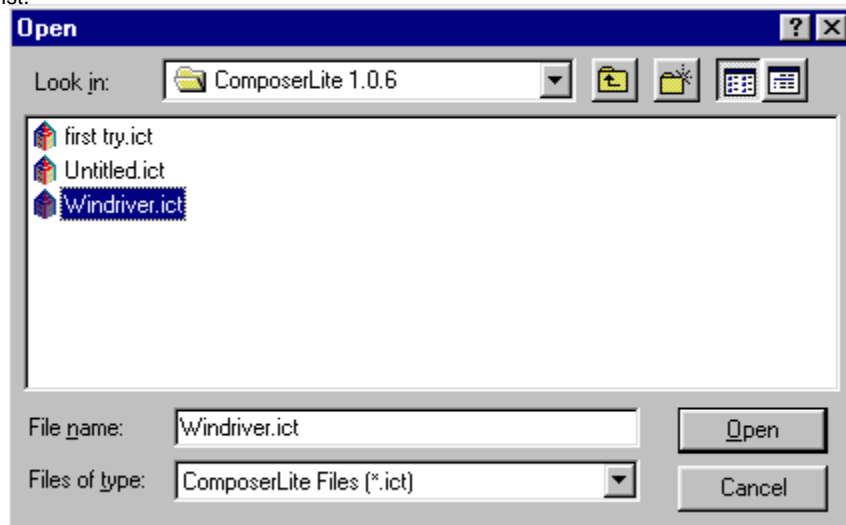
A project is considered existing if you have opened a file and assigned a name to it -- even if you did not add any luminaires or remote control stations.

1. Start Composer application.
2. At main toolbar, click  button to open existing project.

Alternately, you can select Open from File menu.

Open dialog appears.

Tip: You can open an existing project by selecting project name from File menu numbered recently used list.



3. Navigate to directory where project is stored.
4. Click on name of project to be opened and then click on Open.
Alternately, double-click on project name to open.

Adding Luminaires

You can add luminaires to existing projects.

1. Make sure desired project is open.
2. Right Click on Luminaire List.
3. Left click on Add Luminaire.
4. Select the correct luminaire type and options.
5. Left click on Add or Done.



Getting Familiar with Composer Software

Main Toolbar



New button

Use this button to open a new file.



Open button

Use this button to open an existing file.



Preset Tools button

Use this button to open the preset tools screen. This screen contains all of the tools needed to manipulate your lighting system and to store, edit, and delete presets.



Sequence Tools button

Use this button to open the sequence tools screen. This screen contains all of the tools needed to store, edit, and delete sequences.



Store button

Use this button to store a preset, or sequence. **Store** will overwrite any existing stored features. **Store As** will store it as a different name.



Store As button

Use this button to store an existing preset or sequence under a different name. **Store As** is used when you have used an existing preset or sequence as the basis for a new one and you don't want to overwrite the original stored item. **Store** will overwrite the active item.



Delete button

Use this button to delete a preset or sequence.



Undo Delete button

Use this button to undo a delete of a preset or sequence.

Playback Toolbar



Playback Preset button

Use this button to playback a single selected preset.



Playback Sequence button

Use this button to playback a single selected sequence.



Stop button

Use this button to stop a sequence during playback.



Go To First Item button

Use this button to go to the first preset in a selected sequence.



Step Back button

Use this button to step back through the presets of a selected sequence.



Step Forward button

Use this button to step forward through the presets of a selected sequence.



Go To Last Item button

Use this button to go to the last preset of a selected sequence.



Select All button

Use this button to select all items.



Deselect All button

Use this button to deselect all items.

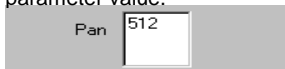


Activate Timing button

Use this button to either activate or turn off timing when playing back presets and sequences. This will allow you to view a preset or sequence that may have a long timing value without having to wait for the time to elapse.

**Slider Control**

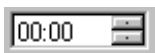
Click on slider handle and hold. Move slider to increment or decrement parameter value.

**Parameter Value Field**

Click in field and enter numeric value. Then click outside field or press Tab key to affect change.

**Crosshairs Control**

Click on crosshairs and hold and move to roughly position lighting devices.

**Increment/Decrement Buttons**

Click on minutes or seconds and then click on buttons to right to increment or decrement timing values.

**Delay Timing Check Boxes**

Click on box or I, F, C, B letters to enter check in box or remove check..



Composer Software Controls

Slider Controls

Some Composer screens contain slider controls for varying lighting parameter values. To move the slider, point to the slider handle and click on the left mouse button. Then, while holding down mouse button, move handle to increment or decrement value. A corresponding numeric value will be displayed in the value field under or next to the slider. Clicking on the gray space before and after the handle increments and decrements the parameter value by 5 points, respectively.

Direct Entry

Some Composer screens allow you to directly enter a parameter value in the value field under or next to a slider control. Just click in the value field and type in the desired value. Then click outside the field, or press the Tab key to exit the field and affect the change.

Crosshairs Control

The pan and tilt values can be roughly approximated using the crosshairs control on the preset tools screen. The crosshairs show on an X-Y axis, the rough position of the luminaires. The axis does not truly represent up and down or left and right, and should therefore, be used to roughly position your lighting devices.

Use the crosshairs by pointing at the plus-sign-shaped crosshairs (+) and clicking the left mouse button. Then, while holding down mouse button, move crosshairs to roughly position lighting devices.

Make fine adjustments to the pan and tilt positions using the pan and tilt sliders or direct entry fields.

Increment/Decrement Buttons

Several Composer screens use increment and decrement buttons to make parameter changes, especially for timing values. For timing values, use the buttons by clicking on either the minutes or seconds and then clicking on the top or bottom button to increment or decrement the timing value. If you do not click on the minutes or seconds, the system default is to change the minutes first. For other fields using increment/decrement buttons, click on the top or bottom button to increment or decrement the value.

Alternately, you can click on the minutes or seconds values and use the up and down keyboard cursor positioning keys to increment or decrement the timing value. Press the Tab key to move through timing value fields.

Lastly, you can click on the minutes and seconds values and directly enter a value from the keyboard to assign timing values.

Delay Timing Check Boxes

The Delay timing check boxes are used to assign delay timing to particular parameters. The entered delay time will only be assigned to those parameters for which the check box is checked. Click on the box or I (Intensity), F (Focus), C (Color), B (Beam) letters to enter a check in the box or remove a check.

Selecting Items From Lists

To select group of contiguous (adjacent) items:

1. At list window, click on item to be selected.

2. While holding keyboard **Shift** key, using left mouse button, click on last item. All contiguous items from the first- to the last-selected are highlighted.
3. Release **Shift** key and click again to deselect group.

To select group of discontinuous items (items that are not adjacent):

1. At list window, click on item to be selected.
2. While holding keyboard **Ctrl** key, using left mouse button, select another item. Both items are selected.
3. Continue to hold **Ctrl** key and click on items to be selected. Each selected item is highlighted.
4. Hold **Ctrl** key and click on highlighted selected items to deselect them.
5. Release **Ctrl** key and click again to deselect entire group.

Mouse Popup Menus

Several Composer screens contain windows that have mouse popup menu choices available. For those windows that have the popup menu available, in all instances, to bring up the popup menu, you need to click on the right mouse button with the cursor pointing in the window. For instance, to call up the popup menu for the **Presets** list, you must have your mouse pointing in the **Presets** list. For the **Luminaires** you must have your mouse pointing in the **Luminaires** list.

The popup menu choices are all also available through the main toolbar, playback toolbar, or main screen drop down menus.

Screen Placement and Sizing

When you start the Composer software, you will be able to open several different tools screens. These screens have smaller separate windows that open when you start the tools. You can selectively open and close any of the windows by selecting the windows from the **View** menu. Items that you want to view will have a check mark next to them. You may size the windows as desired using the split bars that separate the windows.

System Limits and Boundaries

The range of allowable settings is typically limited to the range 0 to 1,000.

The following elements are limited to 255

- Maximum number of presets.
- Maximum number of sequences.

Chapter 2.

Presets


A preset is a user-defined lighting look that specifies all controllable parameters for each device in your system. You will use the Composer preset tools to define this preset look. The act of defining a look is referred to as programming the preset. In general, a preset consists of lighting, timing and delay time parameters.

Preset Tools

The preset tools are the tools that you use to create and edit presets. The tools are available from the toolbar and from the drop-down menus.

You must have your project file open and configured before you can work with presets. The file contains your system configuration, including the types and addresses of your luminaires, and so it is required for the system to communicate with the lighting devices.

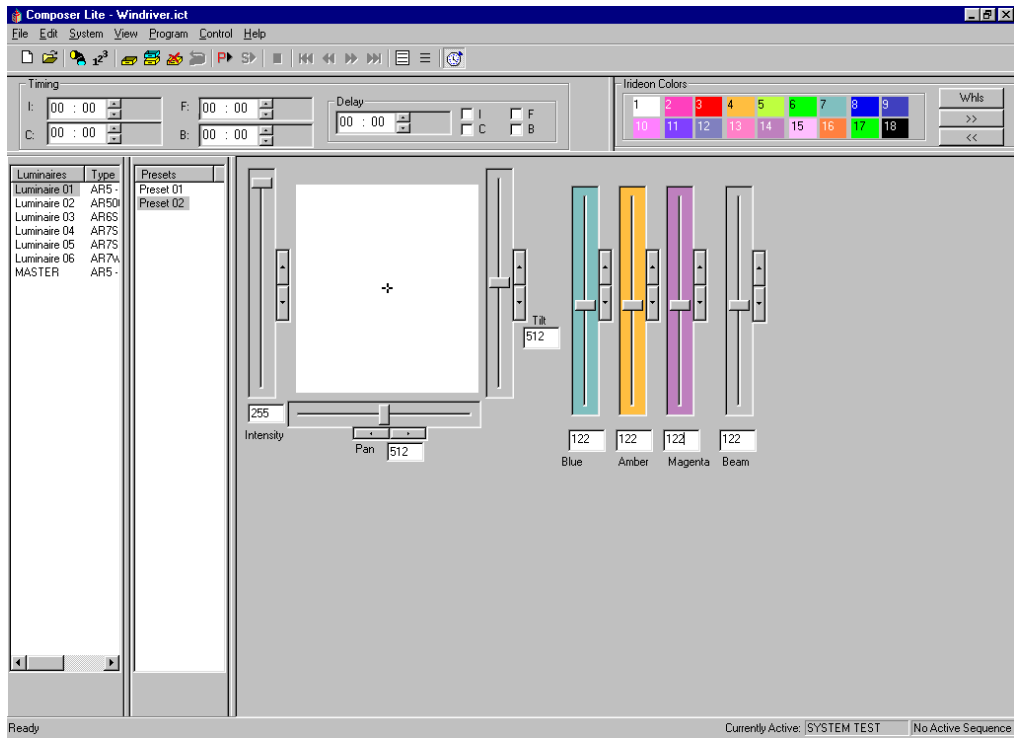
Starting Preset Tools

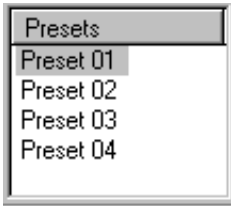
1. Make sure that Composer application is running and your lighting project file is open.
2. At main toolbar click  button. Preset tools screen appears.
Alternately, from Program menu, choose Presets.

Getting Familiar with Preset Tools Screen

The preset tools contains several windows that open by default to allow for manual control of your luminaires:

- Main toolbar
- Presets list
- Timing fields
- Playback toolbar
- Color palette
- Absolute controls





Presets list window contains names of all stored presets.

Presets List

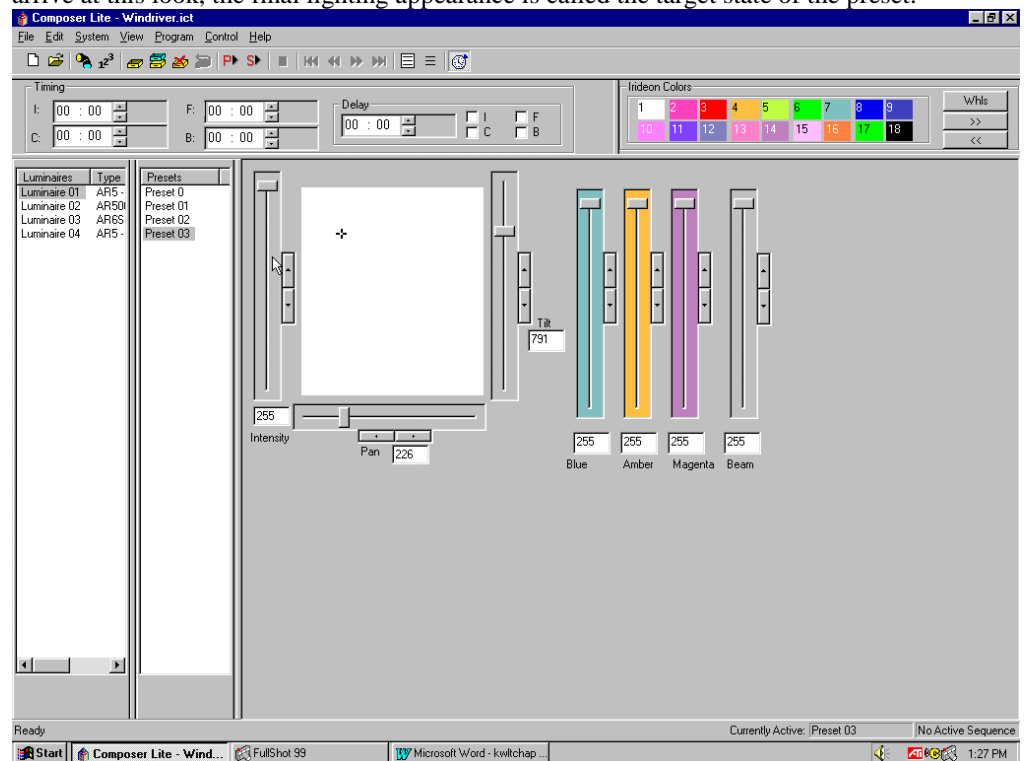
A preset is a user-defined lighting look that specifies all controllable parameters for each device in your system. You will assign values to each luminaire parameter to create the lighting look you desire. The names of all stored presets appear in the **Presets** list. As you create new presets you will name them, accumulating a growing list of presets, all displayed in the **Presets** list. Once you have more presets than will fit in the window, a scroll bar automatically appears.

Note: To select another preset, double click on the desired preset. The name of the active preset is displayed at the bottom of the screen.

Absolute Controls

When you program a preset, you first specify the intensity, focus (position), color, and beam setting for each device in your system. You access the preset tools to make changes to these parameters.

These settings together constitute the appearance of your lighting after all of the devices have adopted their programmed positions. Since the devices must pass through a transition to arrive at this look, the final lighting appearance is called the target state of the preset.



Intensity

The intensity parameter specifies the brightness of the light emerging from luminaires. An opaque mechanism within the instrument is used to interfere with the light beam. When open (full intensity), the mechanism does not interfere with the beam. When closed (zero intensity), the mechanism fully interferes with the beam, completely blocking the light.

Focus

The focus of a luminaire is determined by its pan and tilt positions. For ETC luminaires with moving heads one stepper motor pans the fixture in a circular direction about the base, moving the head horizontally through a 360° range. A second motor tilts the fixture around a pivot point centered in the yoke, moving the head vertically through a specific range determined by

the type of luminaire in use. For ETC recessed luminaires, a moving mirror reflects the light beam along an X and Y axis performing the pan and tilt functions.

Focus is specified as a numeric value between zero and 1023 for each of the pan and tilt parameters. Although the motors themselves provide somewhat fewer physical positions, this represents a logical range of 1024 stepped positions, providing control that is both smooth and precise.

Color

Color is specified by the luminaire's color parameter. Some luminaires contain fixed color filters that are introduced into the light beam to change color. Other luminaires rotate color filters into the light beam. In its open position, the color mechanism passes all wavelengths (white light).

For the three-color filter color mechanisms, the blue, amber, and magenta filters appear in series, each affecting the beam as it is passed from the previous filter in the series. The combined result of the three stages produces the final color mix.

Each color motor has 256 stepped positions, providing millions of possible color settings. Color is specified as three numeric values, each between zero and 255. There is one value for each of the three color filters.

For luminaires utilizing fixed color filters, a color wheel containing eight discreet filters and one open position is used. Two standard color wheels are available: one saturated color wheel and one pastel color wheel.

Beam

Only luminaires that are equipped with a diffusion mechanism support beam control. The beam parameter specifies the size and sharpness of the beam emerging from such luminaires. A motor passes diffusing panels into the light beam. When open (normal wash), the panels do not interfere with the light path, providing a collimated beam. When fully closed (maximum diffusion), the blades fully interfere with the light path, providing the widest beam angle allowed by the lens.

Transition Time Parameters

After specifying the target state, program the timing parameters, values that control the transitions between looks, to finish programming a preset. The transition time is the specified time during which each device moves from its current state to its target state.

Presets include a separate transition time for each lighting parameter of the luminaire. The value represents the amount of time that the luminaire will take to change a given parameter from its current position to the new position specified by the preset. Since it may be in any position when instructed to go recall a preset, the luminaire itself calculates the motor speeds required to move each parameter from its current to its target state.

There can be a separate transition time for Intensity, Focus, Color, and Beam.

Delay Time Parameters

In addition to the transition time, you can specify a delay time to specific luminaires. The delay time is a waiting time that allows lighting parameters to start their transition later than others.

The delay timer begins when a triggering action first recalls the preset. After the delay time has passed, those parameters marked for delay begin their transitions. You enter a delay duration in a data field and then click in parameter check boxes to select the parameters to be delayed. Any combination of Intensity, Focus, Color, and Beam can be marked for delay.

Live Programming

When you are programming in live mode, you have direct, real-time access to your lighting system. Your feedback is the behavior of the luminaires themselves.

Reminder: Your computer must be connected to the Luminaires.

Live Mode Programming Benefits

- You can manipulate intensity, focus, color, and beam parameters directly.
- You can store current, visible state of all luminaires as named preset.
- All operations are immediately reflected in behavior of selected instruments.
- Luminaires in selected presets adopt preset target state.
- If preset time value has been entered, newly-selected presets move to their target state according to specified transition time.

Creating and Managing Presets

The names of your presets appear in the **Presets** list window. Parameter changes only apply to an active preset. A preset is active if it is selected (highlighted) from the **Presets** list. You may highlight any preset by pointing at the preset name and clicking. You can playback the preset by double-clicking on the name. If you click the right mouse button while pointing in the **Presets** window, you can playback, store, or delete presets.

As you program your lighting looks into the system, you may find it convenient to create a preset from the luminaire's previous position (previous preset), a **Home** preset.

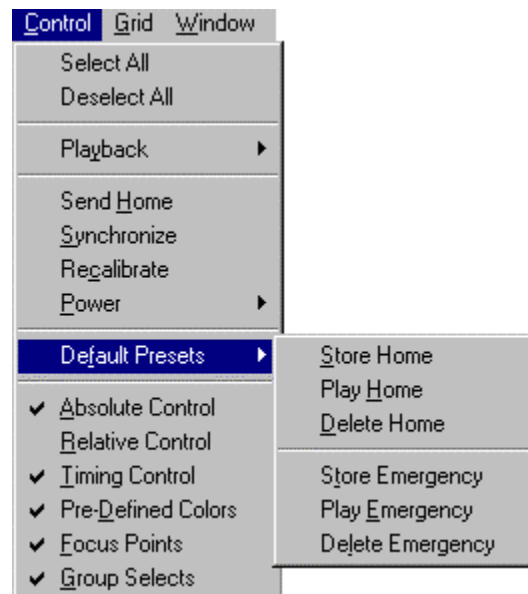
Home Preset

You may want to start programming your system from a known state. This state can be the default **Home** position preprogrammed into your ETC luminaire or a personally-designed default **Home** state that you can store as the **Home** preset

For ETC luminaires, the **Home** position is stored in the luminaire. It does not receive this preset data from the control system. The **Home** preset is used as the preset that the lighting devices will go to when they have finished calibrating.

To create Home preset:

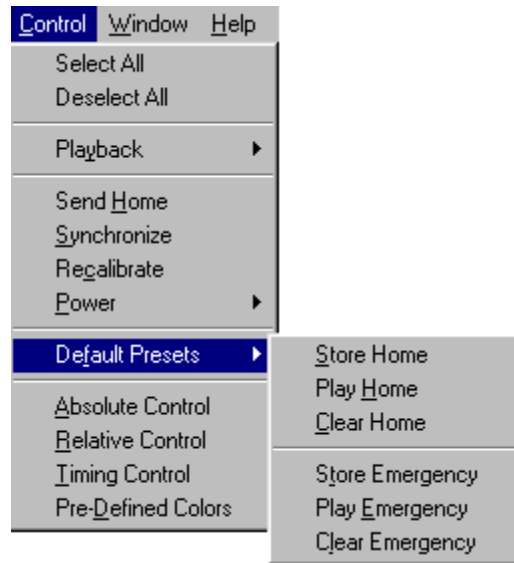
1. Make sure that preset tools screen is started and playback toolbar is displayed.
2. Manipulate manual controls to create Home preset.
3. From **Control** menu, choose Home Preset.



4. Select **Store Home**.
5. Alternatively, you can select **Play Home** from **Control** menu Home Preset, **Play Home** to send selected lighting devices to Home preset values.

To edit Home preset:

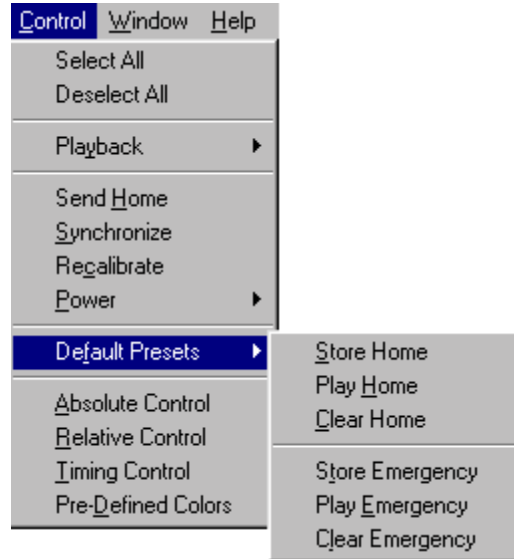
1. Make sure that preset tools screen is started and playback toolbar is displayed.
2. Manipulate manual controls to edit Home preset to desired values.
3. From Control menu, choose Home Preset.



4. Select Store Home. New preset values are assigned.

To delete Home preset:

1. Make sure that preset tools screen is started and playback toolbar is displayed.
2. From Control menu, choose Home Preset.



3. Select Delete Home. Home preset is cleared.

Note: Once cleared, there is no undo feature for home presets.

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Lighting Parameters

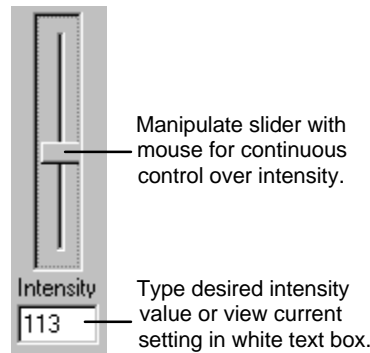
You will spend most of your time working directly with the lighting parameters as you create and edit presets. The preset tools provide a unique tool for manipulating each lighting parameter.

Setting Intensity

The preset tools **Intensity** manual control is used to express the brightness of the selected devices. The intensity control is graduated into 256 discrete steps, where 0 is fully dimmed and 255 is brightest.

You may select luminaires individually to specify exact intensity relationships on a device-by-device basis. You may also select multiple channels, allowing you to adjust the intensity of several devices simultaneously.

Note: Remember that when using absolute controls the parameter value displayed in the box corresponds to the selected lighting device. If more than one lighting device is selected, the data corresponds to the first selected luminaire in the list.



To assign intensity value to lighting device:

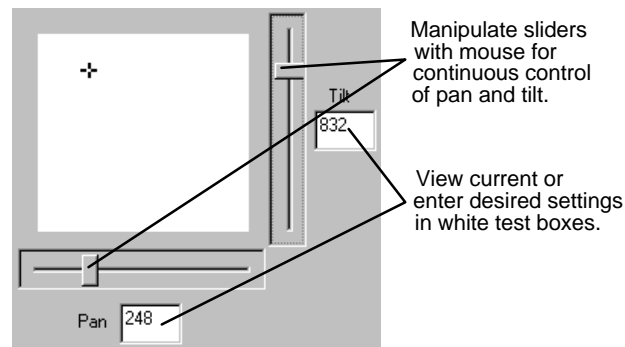
1. From Luminaires list, select luminaires for which intensity is to be manipulated.
2. At Intensity manual control, set intensity to desired value.

Specifying Focus

The preset tools represents focus as a pair of values, one for the pan position and one for the tilt position. Each motor control is graduated into 1024 discrete steps, where 0 is beginning of travel and 1023 is end of travel.

You will usually individually select lighting devices to specify exact focus positions on a device-by-device basis. You may also select multiple lighting devices, allowing you to move groups of fixtures. The focus controls exhibit the same behavior, whether you have selected one or several luminaires.

For reference, note that the crosshairs position at exact center of the white area represents the halfway positions of the pan and tilt motors (512 position).



To set luminaire pan and tilt position:

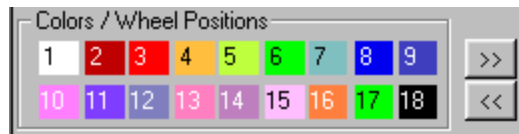
1. From **Luminaires** select luminaires for which pan and tilt positions are to be manipulated.
2. At **Pan** and **Tilt** sliders or focus crosshairs, move luminaires to desired position.

Assigning Color

The preset tools can control color for lighting devices that utilize separate blue, amber, and magenta color filters and for those that utilize discrete color filters. There are two sets of manual controls that can be used to assign color to lighting devices: the color palette and the blue, amber, and magenta color saturation sliders.

Color Palette

The color palette contains easily selectable standard and custom colors. The standard colors used by the Composer system are preprogrammed at the factory.



The standard colors are viewed on the first page of the color palette. Additional custom colors can be created and stored to the color palette on different pages.

The buttons can page you forwards and backwards through the pages to allow you to display the color you want to select. When you bring up a new color palette page, the colors assigned to that page will be visible on your desktop. There are a total of three color palette pages.

Luminaires Utilizing Blue, Amber and Magenta Filters

For luminaires with separate blue, amber, and magenta color filters, these filters can be combined to produce far more colors than shown on the standard palette.

Luminaires With Discrete Filters (Effects Wheels)

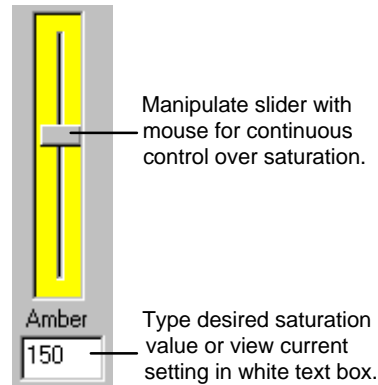
For luminaires with discrete color filters, the color palette serves a slightly different role. Effects Wheel #1 (typically color) has nine positions, controlled by the nine color/wheel positions shown on the top row of the color palette. Effects Wheel #2 (typically image patterns) also contains nine positions, controlled by the nine color/wheel positions shown on the bottom row of the color palette. In the case of both effects wheels, position number 1 is open (no color and/or no pattern). The second and third color palette pages may be customized to store unique filter wheel positions. It is possible to store a filter position that is between two discrete filters producing a unique color effect derived from each of the two filters.

Color Saturation Sliders / Wheel Control

The color saturation sliders / wheel controls are used to select desired colors. The controls perform this task in different ways, depending on which type of color system is used in the luminaire to be controlled. In luminaires with separate blue, amber, and magenta color filters, the sliders control the color saturation of each filter. In luminaires with discrete filters, the blue and amber sliders each control a filter wheel to move a chosen filter into the light path.

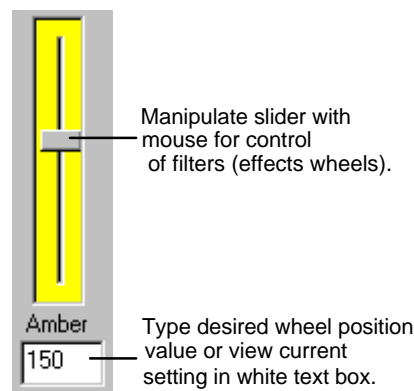
Luminaires Utilizing Blue, Amber and Magenta Filters

There are three color saturation sliders, one for each main color component: blue, amber, and magenta. Each of the three color sliders is graduated into 256 discrete steps, where 0 is lowest color saturation and 255 is maximum color saturation.



Luminaires With Discrete Filters (Effects Wheels)

For luminaires with discrete filters (color and/or pattern effects wheels), the Blue and Amber Color Saturation Sliders serve a different purpose. The color sliders are graduated into 256 discrete steps. The blue slider controls rotation of effects wheel 1 and the amber slider controls rotation of effects wheel 2. The magenta slider serves no purpose in this type of luminaire. As the sliders are moved from positions 0 through 255 the effects wheels turn. Between positions 1 and 215, the wheels rotate, allowing for specific filter selection or split filter selection to produce two colors at the same time. Position 216 allows the wheel to spin continuous, in one direction at the fastest available speed. The wheel spins at different speeds based on the slide position selected and slows as the slider approaches 235. At position 236, the wheel reverses direction and spins at its slowest speed. The speed increases as the slider position number increases until it reaches maximum speed at 255. These continuous spin effects allow for constantly changing color and/or pattern projection.



Custom Colors

To create a new custom color:

1. From **Luminaires** select one or more luminaires.
2. Manipulate color saturation sliders to achieve desired color.

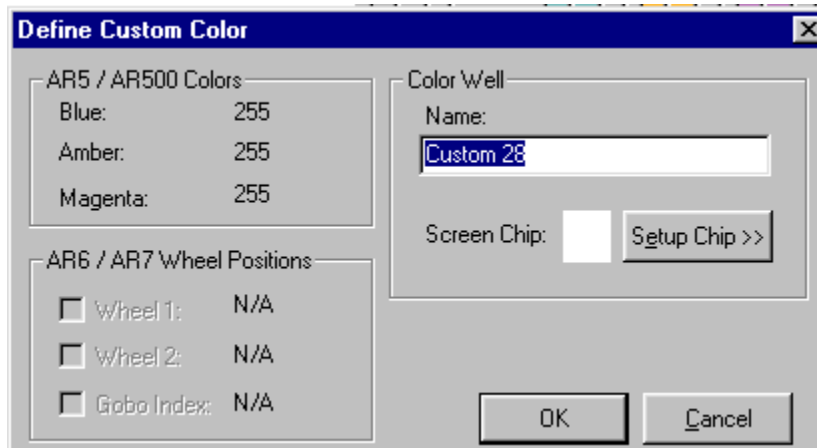
- Click on color palette Custom Colors advance button. A blank page of color buttons appears.



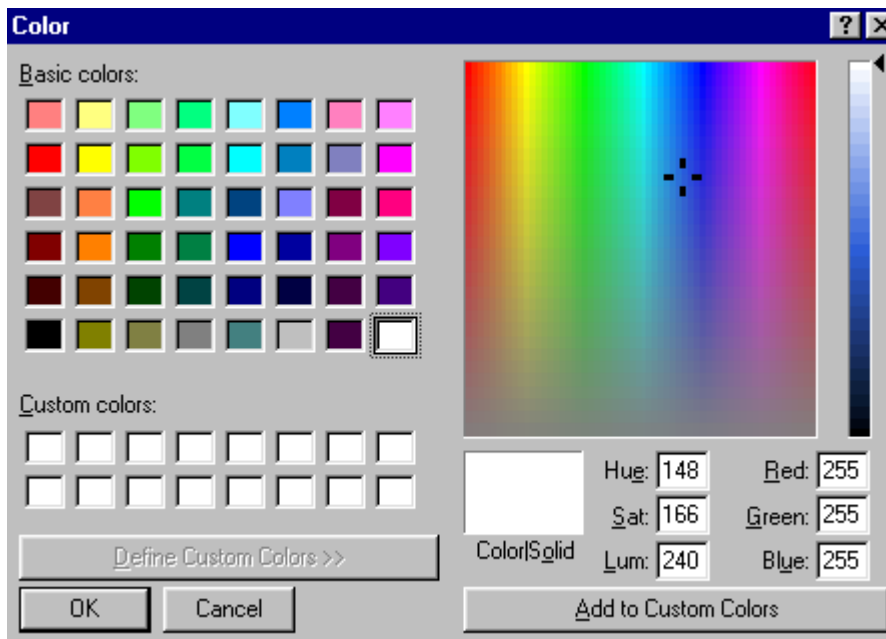
- Right mouse click an unused button. Select **New Custom Color**.



- At **Name:** field, enter name for color or accept default name. You must have unique name for each custom color.



- For AR6 luminaires, check box indicating which wheel position custom setting applies to.
- Click on **Setup Chip>>** to create screen color chip. This provides the opportunity to color the chosen custom button to help identify locations of custom colors created. Color dialog appears.



- Click on color to assign as screen chip. You may click on **Basic colors**, **Custom colors**, or from color table at right of dialog.
- Click on **Add to Custom Color**. Then click on **OK** to return to **Define Custom Color** dialog.

10. At Define Custom Color dialog, click on OK to dismiss dialog and return to main Composer screen.

To delete a custom color:

1. Right mouse click on custom color to be deleted.
2. Select Delete Custom Color. Once deleted, there is no undo feature.



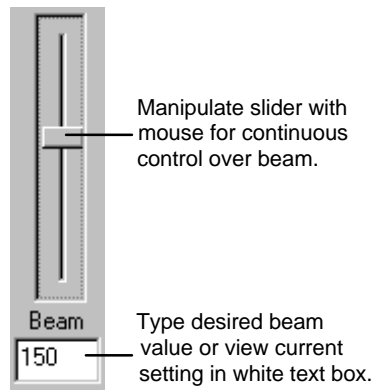
Adjusting Beam

(For luminaires with diffusion control)

The beam parameter specifies the size and sharpness of the beam emerging from the lighting device. When the setting is zero (normal wash), the diffusion mechanism does not impinge on the light path. The result is a normal, collimated beam. When the setting is maximum diffusion, the widest beam angle allowed by the lens is provided.

The preset tools expresses beam control as a value of maximum diffusion. The diffusion control is graduated into 256 discrete steps, where 0 is least diffusion and 255 is maximum diffusion.

You may select lighting devices individually to specify exact beam edge characteristics on a device-by-device basis. You may also select multiple channels, allowing adjustment of the diffusion for several devices simultaneously.



Timing Values

Timing values are set to tell a preset how long it should take to make a transition. That is, the time it should take to go from one look to another.

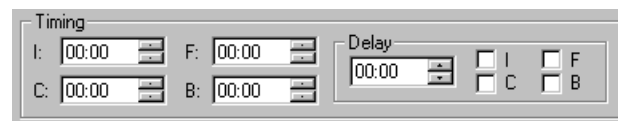
Timing is composed of two components: the transition time and the delay time. The transition time is the time that it takes for a preset to fully execute. For example, if you assign a timing value to color, so that the color changes from red to yellow in 10 seconds, then 10 seconds is the transition time.

Note: Luminaires utilizing fixed color filters may have to pass through unintended colors in their transition from one color to another. This should be taken into account when setting transition times.

You can also specify a delay time, which is the length of time a parameter will wait before executing the start of the parameter transition. For example, if you set the color timing for 10 seconds and then also specify a delay time for color of 5 seconds, when the preset is executed the lighting device will wait 5 seconds before beginning the color change.

Reminder: It is important to remember that the total timing for this preset is 15 seconds, 10 for the color transition and 5 seconds for the delay. When creating sequences you will need to specify a preset follow time, which needs to be as long as the total timing for a preset to ensure that the preset is fully executed.

All timing values are entered in the Timing section of the preset tools screen or in the grid.




All timing values are entered in minutes and seconds and can be specified individually for all four lighting parameters: **I** (Intensity), **C** (Color), **F** (Focus), and **B** (Beam).



A single delay time is specified in minutes and seconds and then the specific lighting parameters to be delayed have their check box marked. All or none of the parameters can be delayed.

The maximum duration for any timing value is 59 minutes 30 seconds. Resolution for timing values is as follows:

Timing	Resolution
1 sec. Through 4 min 15 sec	1 second resolution
4 min. 16 sec. - 42 min. 20 sec.	10 second resolution
42 min. 20 sec. - 59 min. 30 sec.	1 minute resolution

Preset Playback With and Without Timing

When you select a preset, all luminaires respond by moving to their target state. They will do so with or without their specified times values according to whether the  button is pressed.

When the  button is pressed (the default setting), timing is activated, meaning that when you playback the preset, all timing values will be fully activated. When you press the  button again to turn off timing, when a preset is executed, there will be no timing associated with it. This allows you to test your system without having to wait up to 1 hour for a preset to be fully executed. When timing is turned off, each parameter will complete its action as quickly as it can

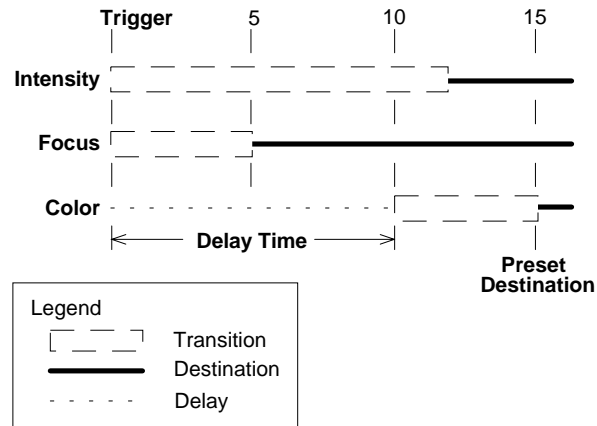
Timing Example

The following illustration represents an example of the relationship between transition and delay times for a preset. The illustration shows the behavior of the system if timing settings were specified as such:

Transition times:

- Intensity - 12 seconds
- Focus - 5 seconds
- Color - 5 seconds


Delay time applied to color parameter: 10 seconds



The behavior of the example when the preset is recalled are as follows:

- At the moment when preset is executed, intensity and focus begin their transitions immediately.
- The transition is from the current motor position to the final target state.
- Focus reaches its target after 5 seconds.
- Intensity reaches its target after 12 seconds.
- Color does nothing until the 10-second delay is complete.
- After the delay time, color begins its transition.
- Color transition time is 5 seconds.
- The entire preset reaches its target in 15 seconds.

Creating New Preset Based on Home Preset

1. Make sure that preset tools screen is started.
2. Starting from Home preset, select luminaires and adjust lighting parameters to achieve desired effect.
 - a. Set intensity values.
 - b. Set pan and tilt positions.
 - c. Set blue, amber, and magenta color saturation, or select color from color palette.
 - d. Set beam values.
 - e. Assign timing, both transition and delay as necessary.
3. At main toolbar, click  (Store As) button to store preset. Store Preset Named... dialog appears.
4. Enter name for preset or accept default name. Give preset unique name; you can not have two presets that have same name.


5. Press **Enter** or click **OK**. Preset name is added to **Presets** list.

Creating New Preset Based on Existing Preset

Frequently, you will want to base a new preset on the values of another preset, one that looks much like the preset that you want to create. This enables quicker editing.



1. Adjust lighting parameters to achieve desired effect.

Note: When you use **Store As**, changes to original preset are not stored with that preset. They are only stored in new preset.

2. At main toolbar, click  (**Store As**) button to store preset with new name.
The **Store Preset Named...** dialog appears.
3. Enter name for preset or accept default name.
4. Click **OK** or press **Enter**. Preset name is added to **Presets** list.

Editing Existing Preset


At times you may want to edit existing presets. To do so, just start the preset tools, click on the preset to be edited from the **Presets** list and make your changes. You can then save the changes to overwrite the existing preset name or assign a new name to create a new preset.

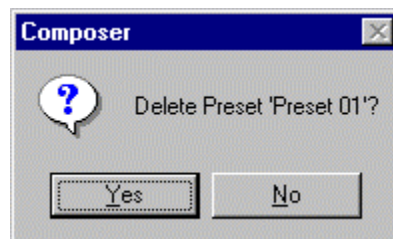
1. At **Presets** list, click on preset to be edited.
2. Manipulate lighting parameters to achieve desired effect.
3. At main toolbar, click  button to overwrite preset or click  button to store preset with new name.

Alternately, you can select **Store Preset** from mouse popup menu.

Deleting Presets

At times you may want to delete existing presets. When you need to, there are three ways in which to do so.

1. At **Presets** list, click on preset to be deleted.
2. At main toolbar, click on  (**Delete**) button. Deletion warning dialog appears.




Alternately, you can select **Delete Preset** from mouse popup menu.

Alternately, you can select **Delete** from **Edit** menu.

CAUTION: Once preset is deleted, it will be deleted from all sequences. If you undo deletion, preset will be added back to **Presets** list, but not into the activities utilizing the preset. You will have to edit each to add the preset back in.

3. Click **Yes** to complete preset deletion. Press **No** if you change your mind and don't want to delete preset.

If you delete preset by mistake, you can click on  (Undo Delete) button on main toolbar to undo deletion.

Tip: Use the recalibrate feature to correct the positioning of a luminaire that loses its place or is knocked out of position.

Recalibrating Lighting Devices

Luminaires contain their own internal calibration routines. You may invoke this routine from the **Recalibrate** menu selection from the **Control** menu.

When selected luminaires are calibrated, they move all of their motors through a pre-defined calibration sequence. At the conclusion of the sequence, the luminaires adopt their **Home** position.

Note: The calibration sequence takes about 15 seconds. During calibration, luminaires do not respond to any commands.

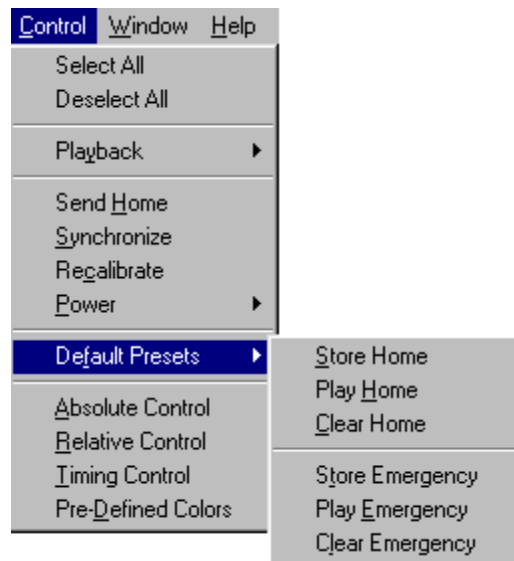
Emergency Preset

The **Emergency** preset is similar to the **Home** preset in that it is also stored in an ETC luminaire. If programmed, the **Emergency** preset is automatically invoked when the luminaire loses control communication for five minutes. When that happens, assuming power is still provided to the lighting system, the lighting devices will assume the **Emergency** preset position.

If there is no emergency preset programmed, the lighting devices will remain in their current state until the control signal has been restored.

To create **Emergency** preset:

1. Make sure that preset tools screen is started and playback toolbar is displayed.
2. Adjust manual controls to create **Emergency** preset.
3. From **Control** menu, choose **Emergency Preset**.



4. Select **Store Emergency**.

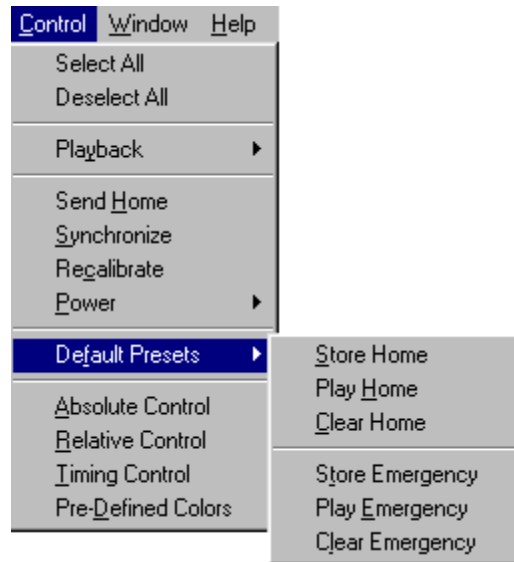
You can select **Play Emergency** from **Control** menu **Default Presets** to send selected lighting devices to **Emergency** preset values.

To edit **Emergency** preset:

1. Make sure that preset tools screen is started and playback toolbar is displayed.
2. Play back **Emergency** preset by choosing **Emergency Preset** from **Control** menu and then choosing **Play Emergency**.
3. Adjust manual controls to edit **Emergency** preset to desired values.
4. From **Control** menu, choose **Emergency Preset**.
5. Select **Store Emergency**. New preset values are assigned as **Emergency** preset.

To delete Emergency preset:

1. Make sure that preset tools screen is started and playback toolbar is displayed.
2. From Control menu, choose Emergency Preset.



3. Select Delete Emergency. Emergency preset is cleared.

Note: Once deleted, there is no undo feature for emergency preset.

Chapter 3.

Sequences


A sequence is a collection of presets that are recalled one after another—in sequence—to create a dynamic lighting effect. Sequences are managed using the sequence tools. A sequence is made up of the sequence main body the list of presets and preset follow times.

Sequence Tools

The sequence tools are the tools that you use to create and edit sequences. The tools are available from the main toolbar and from the drop-down menus.

You must have your project file open and configured before you can work with sequences. The file contains your system configuration and all of the lighting events that will be required to create sequences.

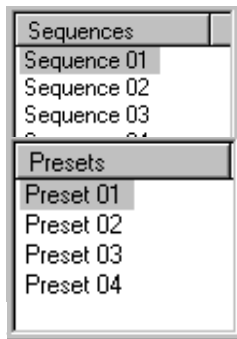
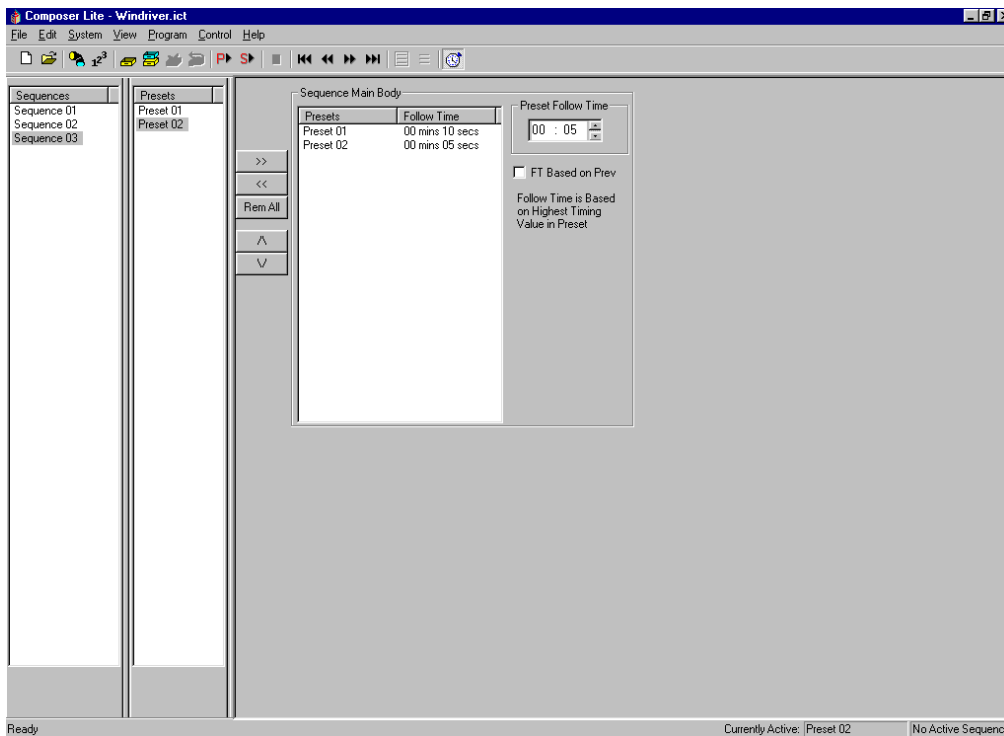
Starting Sequence Tools

1. Make sure that Composer application is running and your lighting project file is open.
2. At main toolbar click  button. Sequence tools screen appears.
Alternately, from Program menu, choose **Sequences**.

Getting Familiar with Sequence Tools Screen

In addition to the main and playback toolbars, the sequence tools contains several windows that open by default to allow for creating, editing, and maintaining your sequence:

- Editor toolbar
- Sequences list
- Sequence Main Body field
- Preset Follow Time fields
- Presets list.



Sequences list window contains names of all sequences.
Presets list window contains names of all presets.

Recall Preset	Follow Time
Preset 01	00 mins 01 s...
Preset 02	00 mins 01 s...
Preset 03	00 mins 01 s...
Preset 04	00 mins 01 s...
Preset 05	00 mins 01 s...

Sequence Main Body lists names and order of presets to be included in sequence.



Preset Follow Time is entered in minutes and seconds.

Sequences List

As you create new sequences you will name them, accumulating a growing list of sequences, all displayed in the Sequences list. Once you have more sequences than will fit in the window, a scroll bar automatically appears.

Presets List

As you create new presets you will name them, accumulating a growing list of presets, all displayed in the Presets list. Once you have more presets than will fit in the window, a scroll bar automatically appears.

Sequence Main Body

You create sequence by dragging preset names into the sequence main body and then assigning a preset follow time, looping logic, and the sequence end state. The order in which the presets are listed in the sequence main body is the order in which they are played back. A total of 255 presets can be added to the sequence main body.

Preset Follow Time


The follow time determines the length of time that the preset is to be active before the next preset is executed. The default follow time is 1 second.


The follow time begins counting at the moment the preset first begins to play. For this reason, you need to make sure that your preset follow time is equal to or greater than the total timing of the preset. Otherwise, the following preset may begin before the currently playing preset is completely executed.

Creating and Managing Sequences


To create a sequence, you will assemble the order of the presets and then assign follow times.

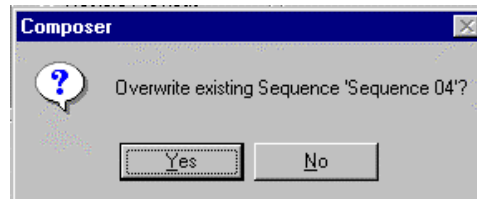
Creating Sequences

1. Make sure that Composer application is running and that required project file is open.
2. At main toolbar, click  button to open sequence tools.
3. At Presets list, click on first preset to be in sequence and while holding left mouse button, drag and drop preset name into **Sequence Main Body**. Cursor changes to show plus (+) sign to show preset name is being copied into **Sequence Main Body**.
4. At **Sequence Main Body**, click on the preset name to make it active.
5. At **Preset Follow Time**, enter follow time (minutes and seconds) for preset.
6. Continue adding presets (and their follow times) to **Sequence Main Body** until sequence is complete.


Remove presets from **Sequence Main Body** by clicking on preset name in **Sequence Main Body** and clicking  button.

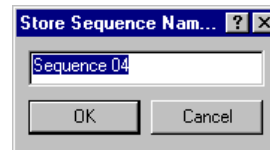
Clear all presets from **Sequence Main Body** by clicking  button.

7. Store your sequence.
 - a. Click  button if you want to overwrite existing sequence. Overwrite warning dialog appears.



At dialog box, click **Yes** to overwrite sequence. Click **No** to dismiss dialog and not overwrite sequence.

- b. If you based your sequence on an existing sequence and you do not want to overwrite existing sequence, click  button to store sequence as another name. **Store Sequence Named...** dialog appears.



Enter sequence name or accept default name and click **OK**.

Editing Sequences

You edit an existing sequence much the way you created it. Clicking on the sequence in the Sequences list displays the Sequence Main Body and its assignments.

To edit sequence:

1. Make sure that Composer application is running, required project file is open, and sequence tools are started.
2. At Sequences list, click on sequence to be edited. Sequence Main Body and its components are displayed.
3. Make changes to Sequence Main Body as necessary.

- a. Add presets by dragging and dropping them from Presets list

Remove individual presets by clicking on preset and at playback toolbar, clicking



button.

Remove all (clear) presets from Sequence Main Body by clicking on

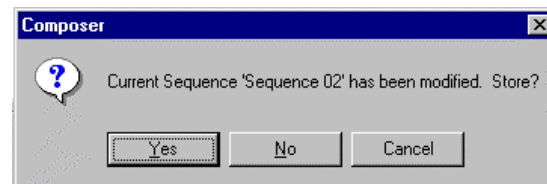


button at playback toolbar.


Reorder presets by dragging and dropping presets to new position. New position will be under (after) highlighted preset.

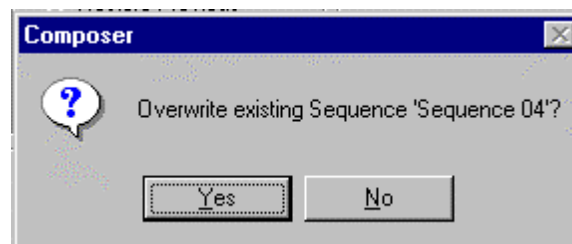
- b. Modify Preset Follow Time by clicking on preset to make preset active, and then adjusting follow time.

Note: If you attempt to select a different sequence after creating or changing another, Store Changes warning dialog appears.



Click **Yes** to overwrite existing sequence. If you click **No**, overwrite warning dialog appears.

4. Store your sequence changes by clicking on  button. Overwrite dialog appears.




Click **Yes** to overwrite existing sequence and save changes or click **No** to dismiss dialog without saving changes.

Deleting Sequences

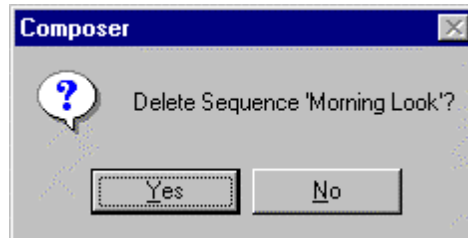
Sequences can be easily deleted. You just have to be able to view the Sequences list.

To delete sequence:


1. Make sure Sequences list is visible At Sequences list, click on sequence to be deleted.
3. At main toolbar, click on  button. Deletion warning dialog appears.



Delete button on toolbar.



Click Yes to continue with delete. Click No to dismiss window and not delete sequence.

If you delete sequence by mistake, you can click on  (Undo Delete) button on main toolbar to undo deletion. Activities utilizing the sequence will not be restored.

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Chapter 4.

Playback

Playback means to put all the pieces of your design together and to begin running the finished result, either from Composer Lite or by downloading a sequence to the Luminaires.

Playback Tools

The playback tools are the tools that you use to playback and edit presets and sequences, and view your playback progress. The tools are available from the main toolbar and from the drop-down menus.

You must have your project file open before you can playback your programming work. The file contains your system configuration and all of the stored programming data that will be required for playback.

Preset and Sequence Playback


Playback is important not only for lighting, but also for testing. In general, it is important to fully test your system, both with and without timing enabled, to make sure that the system and your luminaires are performing as anticipated.


The playback toolbar contains the playback buttons.





The first two buttons are used to playback a preset and a sequence, respectively. The other buttons are used to reset the sequence to the first preset, step backward, step forward and to advance to the last item, respectively.

It is important to remember that when you playback a preset or sequence that you also playback the timing values stored with the event. You can turn off the timing for playback, which can be especially useful when test and checking out your programming data.

You use the  (Activate Timing) button to turn timing on and off. When timing is turned off, the lighting parameters move to their end state as quickly as possible. For sequences, this means that presets can be stepped as quickly as it takes for the luminaires to achieve their end

state. The default state for the  button is with timing enabled. You have to click it one time to disable timing.


Preset Playback

When you playback a preset, the other playback buttons allow you to scroll through and play back your presets. When used to step through the playback of a sequence, the  (Step Forward) button would step to the next preset in the sequence. When you playback a preset, the  button plays back the following preset from the Presets list.

To playback preset:

1. Make sure that Composer software is running and that required project file is open.
2. Make sure that Preset tools are open.
3. At Presets list, click on preset to playback to make it active.

Note: When you playback a preset, all timing values will also be played back. For presets with long timing values, playback could take a very long time.

4. If preset is to be played back without timing, at playback toolbar, click  button.


Sequence Playback




When you playback a sequence, you can play back the sequence with full timing and follow times, or you can stop automatic playback and begin manually stepping through the sequence a preset at a time.


To play back sequence:

1. Make sure that Composer software is running and that required project file is open.
2. Make sure that Sequence tools are open.
3. At **Sequences** list, click on sequence to playback to make it active.

Note: When you playback a sequence, all timing values will also be played back. For sequences with long timing values, playback could take very long time.

4. If sequence is to be played back without timing, at playback toolbar, click  button.

To step through sequence, click  (Stop) button And then click  (Step Forward) and  (Step Back) buttons.

To advance to the last preset of a sequence, click  (Go to the Last Item) button.

To reset sequence to first preset, click  (Go to the First Item) button.

Edit sequence as needed as you step through it using sequence tools.

Chapter 5.

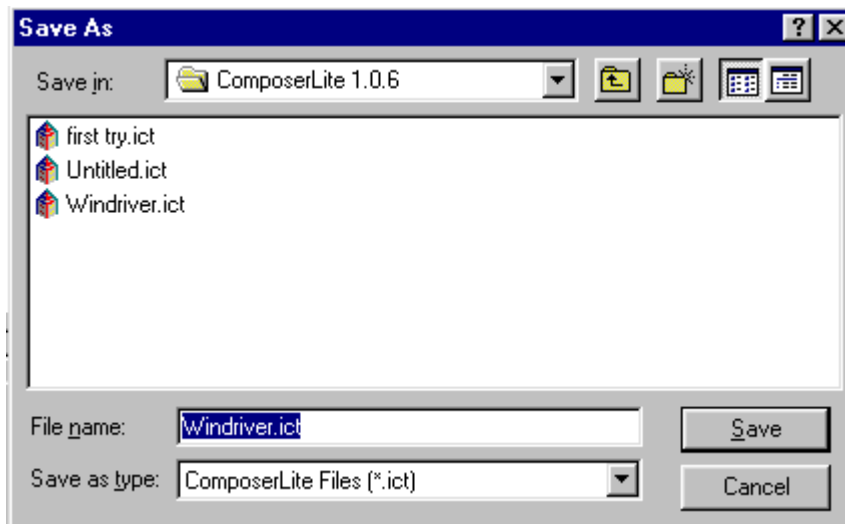
Data Transfers

Once you have completed your programming Composer Lite allows you to save your work, disconnect the PC and have your system operate automatically.

Saving Project Files

Although the Composer software saves your project changes on-the-fly, the system does not create a backup copy. In case of a malfunction of your PC (for example, a sudden loss of power or other graceless exit), you should keep a backup copy of the show file on another PC or on a 3.5" floppy diskette.

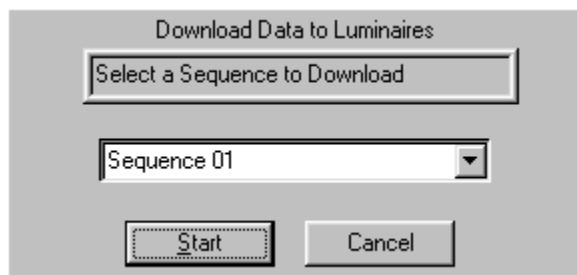
1. From the File menu, choose **Save As**. **Save As** dialog appears.



2. Navigate to drive where you want to store file (or select floppy diskette drive; usually A: drive) and assign name for file or accept default name.
3. Click **Save** to save file.

Downloading a Sequence to Luminaires

1. Left click on **System**
2. Left Click on **Download Sequence**
3. Left Click **Start**
4. Left click **Finish**



Stand alone operation (No PC Connected)

Once a sequence has been downloaded to a system the PC may be removed. Please follow PC shutdown procedures. To run sequence:

1. Set Master Luminaire to address 63. (AR6 – all dip switches to ON).
2. Master Luminaire sends commands to each Luminaire in system.

Communications Lost




If communication is lost for five minutes between a Master Luminaire and a Slave Luminaire(s) – Luminaires(s) will go to their previously programed Emergency Preset until communication is restored.

PC Shutdown and Disconnect

Once you have programmed your lighting system and have downloaded the information to the luminaires and are satisfied with its performance, you can disconnect your PC.

To shut down and disconnect PC:

Note: Be sure to copy your project file to a backup diskette to protect against data loss or corruption.

1. If Composer application is running with an open project file, at File menu, select Close.
Alternately, you can click on  button to close file.
2. At main Composer application screen, at File menu, select Exit.
Alternately, you can click on  button to exit Composer application.
3. At wall-mounted programming receptacle remote control station, disconnect connector.
4. At PC, disconnect other end of cable.
5. At Windows 95 taskbar, click  button and choose Shut Down...
6. When shut down is complete, remove power to PC.

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