Electronic Theatre Controls, Inc.

Composer
Control
System

User's Guide

Automated Lighting Control System

Version 3.1.3

Copyright

Trademarks

Software License Agreement

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If you do not agree to the terms of this agreement, do not open the Compact Disc package. Promptly return it unopened to the place where you obtained it.

ETC, Incorporated
3030 Laura Lane
Middleton, WI 53562
U. S. A.

Limited Warranty

Electronic Theatre Controls, Inc. (ETC) warrants to the original owner or retail customer (Customer) that during the warranty period ETC will repair or replace its products that are defective in materials or workmanship under normal use and service, subject to the terms of this limited warranty. The warranty period shall begin on the date of delivery of portable system or on the date of energization of a permanently installed system, and shall continue for the following periods: (a) one year, for all Irideon products, and (b) two years, for all other ETC products. Warranty is limited to (60) days from shipment for purchase of demo or loaner products.

Warranty does not cover any product or part of a product subject to accident, negligence, alteration, abuse or misuse, or any accessories or parts not supplied by ETC. Warranty does not cover "consumable" parts such as fuses, lamps, color media, or components warranted directly to the owner by the original manufacturer. ETC's warranty does not extend to items not manufactured by us. Freight terms on warranty repairs are FOB ETC factory or designated repair facility. Collect shipments or freight allowances will not be accepted.

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This written warranty is intended as a complete and exclusive statement of the terms thereof. Prior dealings or trade usage shall not be relevant to modify, explain or vary this warranty. Acceptance of, or acquiescing in, a course of performance under this warranty shall not modify the meaning of this agreement even though either party has knowledge of the performance and a chance to object.

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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. Additionally, all types of DMX devices may be operated by the Composer system.

Composer Hardware Components

The Composer system is a modularized control system consisting of a Windows based application for system configuration, programming, and playback, and a system controller. The system controller may be comprised of:

- A PC and Master Control Processor (MCP) for more complex systems.
- A PC, MCP, and remote control stations for maximum flexibility and convenience.

Master Control Processor

The MCP is a rack-mount or wall-mounted unit that manages both the remote control stations and the lighting fixtures by acting as a remote central processing unit for the control of the system. The MCP can receive downloaded data from the PC and store this data after the PC has been removed from the system

Remote Control Stations

Remote control stations allow for manual control of the programmed actions. There are several types.

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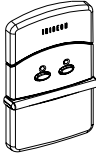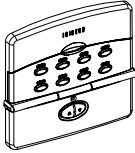
8 Button and 2 Button Recall Stations

The recall stations act as a remote control for invoking programmed actions. They are provided with LED indicators to reflect status.
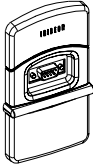
Receptacle Station

The receptacle station allows for remote connection of the PC to the MCP via a DB9 connector.

-
-
- **Receptacle Station** for

Closure Station

The closure station provides for the installation of remote sensors and/or switches to activate a programmed event. The user provides the sensors and/or switches.
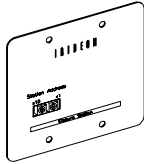
-
-
- **Closure Station** for remote sensor/switch

Key Switch

The key switch provides local security to 8 and 2 button recall stations and closure stations. The switch allows you to turn the remote control station "on" or "off", thereby enabling or disabling system control from that station.
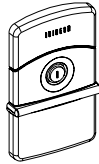
-
-
- **Key switch** for locking recall

Communications

Communication between the luminaires and the control system is carried on two data lines or buses. The lighting device bus connects the MCP or PC to the lighting devices themselves. The control bus, in conjunction with the MCP, supports remote control station input for manual playback.

Personal Computer

The Windows based PC is provided by the user. It is used with Composer Software to define all programmed actions, including presets, sequences, remote control station templates, event lists, global scripts, global templates, schedules, and the calendar. 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. Such behavior includes which remote control station buttons recall which programmed actions, as well as the daily schedule of actions that occur under clock/calendar control.

Composer Software Components

The system software consists of two major sections: operating software for the MCP and a Windows based PC application software.

MCP Operating System

The MCP operating software runs in the MCP hardware. Although you never interact directly with this software, it is important to understand that the operating system must be running properly before you can perform any action that requires MCP intervention.

MCP software is already installed in the hardware, residing in non-volatile memory. If for some reason the integrity of this operating system becomes suspect, you may update the unit with a new version from a PC at any time. This capability also allows for future upgrades.

The Composer software automatically polls the MCP to verify that the latest operating system is being used. If the operating system is not the latest version, the system prompts the user to update the Composer software. This is useful when upgrading your system.

PC Application Software

The Windows based PC application software is the part of the system with which you directly interact. The software also allows you to program recall stations, schedule lighting events, and transfer information between the PC and the MCP.

About This Manual

This manual describes all operational information associated with the Composer software application. The manual does not provide detailed descriptions of the Composer hardware components such as the MCP, remote control stations, or 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 four 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 MCP and directions for backing up your system room files.

Appendixes are located at the end of this guide and cover sample lighting systems applications, color settings, and a glossary.

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.

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

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 appears 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:

AR5™ Wash Luminaire Owner's Manual

The *AR5 Wash Luminaire Owner's Manual* (ETC part number 7092M1002-v1 or 7092M1003-v2) 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 lamp replacement).

AR50™ Wash Luminaire Owner's Manual

The *AR50 Wash Luminaire Owner's Manual* (ETC part number 7092M1007) provides a detailed reference on the AR50 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 lamp 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 lamp 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).

Composer Control System Owner's Manual

The *Composer Control System Owner's Manual* (ETC part number 7090M1008) provides a detailed reference on the Composer control system. The document addresses the physical and logical considerations for all non-luminaire subsystems, including the MCP, the control bus, remote control stations, and system-wide testing and validation. 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.

Technical Assistance

ETC, Inc. Corporate Headquarters

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

Phone: **608-831-4116**
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: 8:00 AM to 5:00 PM Central Time.

Phone: **608.831.4116**
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.

608.836.1736

Telephone

ETC, Inc. technical support hours are: 8:00 AM to 5:00 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.

Phone: **608.831.4116**
Toll Free: **800.688.4116**

When you call, please have your computer, your documentation in hand, and are 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 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 (in conjunction with an MCP) then you may wish to consider the following:

- You will 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 MCP.
- 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 CD and save the lighting data that you program onto your hard drive or 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 licenser; 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 application, and complies with standards established by Microsoft for such applications. As a result, there are no special 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. Pentium Processor, 75MHz

2. 16Mb RAM

3. 15 Mb available hard disk space

4. Unused serial comm port

5. VGA color display

6. Compact Disc drive

7. Mouse or other pointing device

8. Windows operating system loaded

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. PDA devices that utilize the serial port may have to be temporarily disabled.

Software Installation

To install Composer software:

1. Make sure PC is turned on and Windows is running.

2. Close all applications.

3. Locate sealed plastic bag containing Compact Disc.

Note: If you have not already done so, read license agreement at front of this manual. If you agree to license agreement terms, tear open plastic bag and remove Compact Disc.

Tip: For important information regarding this software release, please refer to the Composer Software v3.1.3 Release Notes enclosed with your software package.

4. Insert the Compact Disc into the CD drive on your PC.

5. <Double-click> on My Computer

6. <Double-click> on Compact Disc drive

7. <Double-click> on "Setupex" and follow the prompts in the illustration program to complete the install.

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 or directly to the MCP. Refer to the Composer Control System Owner's Manual (ETC part number 7090M1008) for details on the physical connections for the Receptacle Station.

System Connection

If you have luminaires in multiple rooms, you will probably have a Receptacle Station for the PC-to-MCP 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 MCP using a standard DB9 serial extension cable. You can, though, connect directly to the MCP using the PC CONNECT connector located on the front panel of the MCP.

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.

Note: You must use a serial cable that has all pins connected straight through.

To connect to MCP:

1. Place your PC near MCP and connect one end of DB9 serial extension cable (not supplied) to serial port of your PC.

2. Connect other end of cable to the MCP connector labeled PC CONNECT.

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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, the MCP and remote control stations (if applicable) are mounted and connected, and all address settings are known. Refer to the installation instructions and owner's manuals for additional information.

From Windows Start Menu

1. At Windows taskbar, <click> Start button.

2. <Click> on Programs

3. <Click> on Composer

From Shortcut on Desktop

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

Configuring Your System
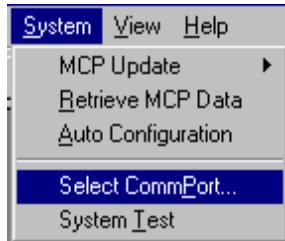
Setting Comm Port

If the software does not respond, 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.
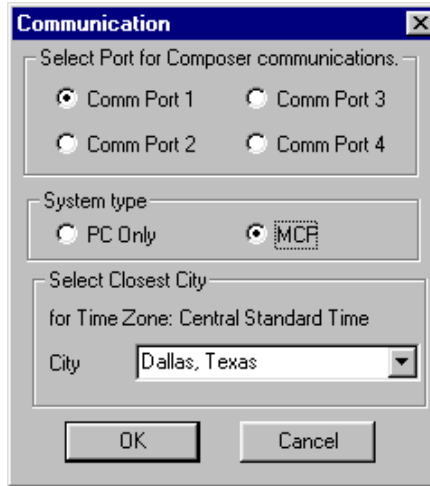
3. At Select Port for Composer communication. Field, <click> radio button associated with comm port you want to use.

4. In System type field, <click> radio button that specifies whether your system is PC Only or based on MCP.

Note: PC only systems can be used for temporary systems and for demonstration purposes.

5. In Select Closest City field, <click> down arrow to open selection window and select city closest to your location to establish time zone information.

Note: Composer Software version 3.1.3 no longer supports the Astronomical time clock function. The time zone setting is used in the conversion of older versions of Composer Software that utilized the Astronomical time clock settings.

6. <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.

While the test is active, the LED's on all remote control stations will blink in a regular pattern. Check each station to ensure that the communications link is good.

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, choose System Test. The check mark will disappear indicating system test is disabled.

System View Help
- Time/Date
- Retrieve MCP Data
- Auto Configuration
- Select CommPort...
- System Test

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. Once a project has been created, rooms are opened and configured luminaires assigned to them. Rooms are simply designations to divide luminaires into manageable areas, such as Dining Room and Lobby, or Display Window One and Display Window Two.

Configuration information includes the name, address, and device type for both luminaires and remote control stations.

The Lighting system can be configured by either use of the Auto Configuration feature or by opening a project and configuring items individually.

Auto Configuration

The Auto Configuration feature creates files of all configurable items (luminaires and remotes) by polling the communication lines to see what equipment is installed.

To enable auto configuration:

1. Start Composer application.

2. From System menu, choose Auto Configuration.
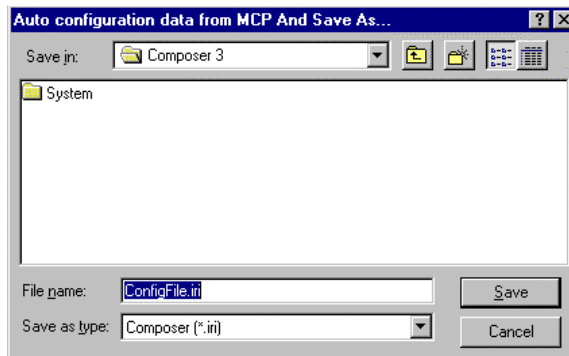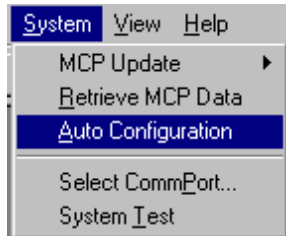
3. Enter name for configuration file (or project) or accept default.

4. <Click> Save or press Enter to save file. Auto configuration dialog box appears. <Click> Start.
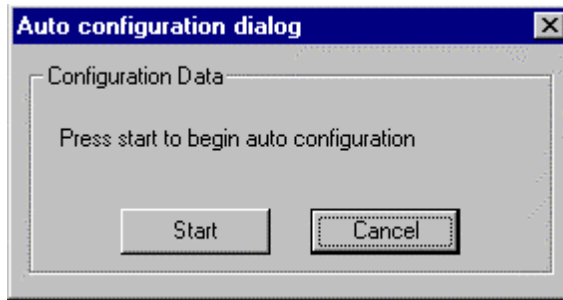
5. When Configuration Data message reads: Completed Auto Configuration Successfully, <Click> OK.

The configuration list identifies the devices connected via comm lines. Names for luminaires and remotes will be listed with default names. Names can be changed to more meaningful references to make identification easier.

To change configured item name:

1. At the Configuration List, right mouse <click> on item to be changed (luminaire or remote).

2. Select Modify Luminaire or Remote as appropriate.

3. Type preferred name and <click> OK.

Naming Conventions

Names may be up to 25 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. The default name for DMX devices is the word DMX followed by a unique number. The default name for remote control stations are the words Remote Station followed by a unique number.

Thumbwheel Addresses

Every device connected and configured in your Composer 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.

Remote control stations and lighting devices can have the same address. This is because the two communicate across different buses. The lighting devices communicate via the luminaire bus, while remote control stations are connected to the MCP via the control bus.

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.

   "Save As" dialog appears.
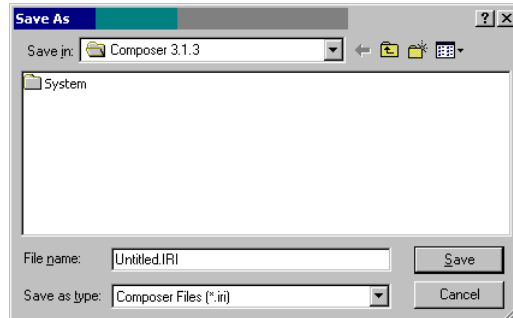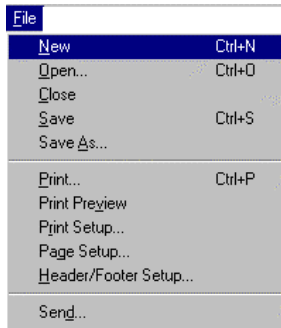
3. Enter name for project or accept default name.

4. <Click> Save or press Enter to save project.
   New Configuration Options dialog appears.
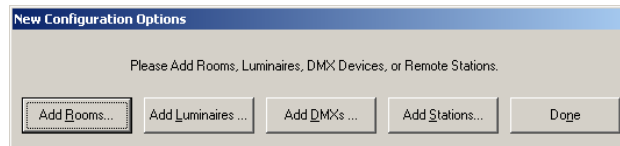
5. You must first add a room to which luminaires will be assigned before the luminaires are added.

Adding Luminaires

1. At New Configuration Options dialog, <click> on Add Luminaires… Luminaire Configuration dialog appears.
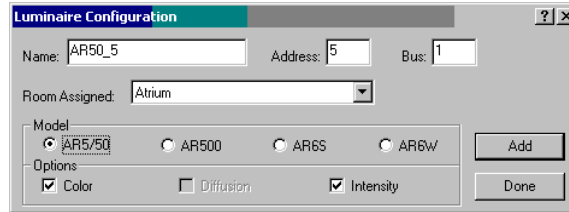
2. At Name: field, enter name for luminaire or accept default name.

3. At Address: field, enter address assigned to luminaire or accept default address. Address must match address entered onto thumbwheel address switch on the luminaire.

4. At Bus: field, enter bus device the luminaire is connected to or accept default bus.

5. At Room Assigned: field, select room assignment from the previously created room(s).

6. At Model field, <click> on radio button for luminaire type to be added.

7. At Options field, <click> on options contained in luminaire being added. Options vary based on luminaire model selected.

8. <Click> Add button to add luminaire configuration to system and to reset Luminaire Configuration dialog to allow for more luminaires to be added.

9. When all luminaires are added, <click> "Done" to return to New Configuration Options dialog.

10. <Click> "Done" if no remotes or DMX devices are to be added.

Adding DMX Devices

If using DMX devices instead of, or in addition to ETC luminaires, the DMX devices will have to be added. The process is similar to adding luminaires.

1. At New Configuration Options dialog, <click> on Add DMXs… DMX Configuration dialog appears.
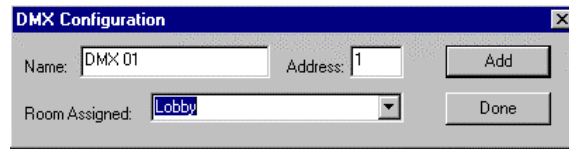
2. At Name: field, enter name for DMX device or accept default name.

3. At Address: field, enter address assigned to DMX device or accept default address. Address must match address entered on DMX device.

4. At Room Assigned: field, select room assignment from previously created room(s).

5. <Click> Add button to add DMX device configuration to system and to reset DMX Configuration dialog to allow for more devices to be added.

6. When all DMX devices are added, <click> "Done" to return to New Configuration Options dialog.

7. At New Configuration Options dialog, <click> on "Done" to return to main Composer screen.

Adding Remote Control Stations

If using Remote Control stations, the stations will have to be added. The process is similar to adding luminaires.

The lighting actions caused by remote control station events are specified by data in a template. You may change templates from one day and time to the next by scheduling template assignments.

Until a given template is explicitly assigned to a remote control station, the Composer system relies on a default template to specify station behavior. You may change the default template at any time from the Remote Control Station Configuration dialog.

Note: If you do not specify a default template, the Composer system will display [No Template] as the default template. You will have to manually assign a default template.

To add remote control stations:

1. At New Configuration Options dialog, <click> on Add Stations… Remote Control Station Configuration appears.

2. At Name: field, enter name for remote control station or accept default name.

3. At Address: field, enter address assigned to remote control station or accept default address. Address must match address entered on thumbwheel address switch of remote control station.

Note: When creating a new room, there are no templates yet. Just ignore default template field. You can specify it later.

5. At Room Assigned: field, select room assignment from previously created room(s).

6. At Type field, <click> on which type of remote control station is being added.

7. At Default Template: field, select template that is to be used by remote control station.

8. <Click> Add button to add remote control station configuration to system and to reset Remote Control Station Configuration dialog to allow more stations to be added.

9. When all remote control stations are added, <click> "Done" to return to New Configuration Options dialog.

10. At New Configuration Options dialog, <click> "Done" to return to main Composer screen.

Modifying Luminaire, DMX Device, or Remote Control Station Configuration Data

The process to modify your configuration data for luminaires, DMX devices, and remote control stations is essentially the same.
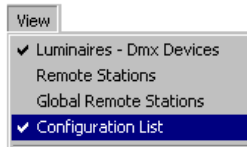
1. At View menu, choose Configuration List. A list of configured items appears at bottom of screen.

2. Place cursor over item to be modified and <click> right mouse button. Select Modify Luminaire, Modify DMX Device, or Modify Remote Station.

Alternately, from System Menu, select Configure and then item to be modified.
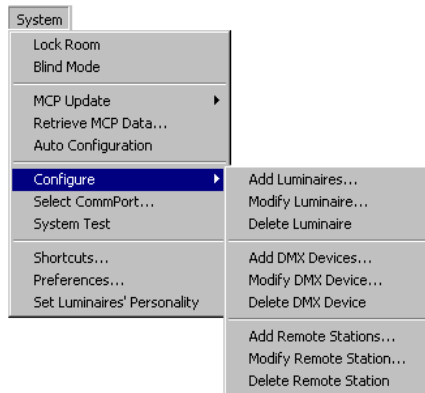
3. Change configuration data as necessary.

4. <Click> OK or press Enter key when done.

Removing Luminaire, DMX Device, or Remote Control Station From a Room

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

1. At Configuration list, right mouse <click> on device to be removed or unassigned from room.

System List	Type
Luminaire 01	AR5/50 - COL/INT
Luminaire 02	AR5/50 - COL/INT
Luminaire 03	AR5/50 - COL/INT
Luminaire 04	AR5/50 - COL/INT
Luminaire 05	AR5/50 - COL/INT
Luminaire 06	AR5/50 - COL/INT
Luminaire 07	AR5/50 - COL/INT
Luminaire 08	AR5/50 - COL/INT
Luminaire 09	AR5/50 - COL/INT
Luminaire 10	AR5/50 - COL/INT
Luminaire 11	AR5/50 - COL/INT
Luminaire 12	AR5/50 - COL/INT

Add Luminaires…
Modify Luminaire…
Delete Luminaire

Add DMX Devices…
Modify DMX Device…
Delete DMX Device

Add Remote Stations…
Modify Remote Station…
Delete Remote Station

Assign To…..   ▶
Unassign From Room

Removing (or un-assigning) an item from a room allows the item to remain in the system configuration for use in another room. Deleting an item from the configuration table will remove it from the system completely.

Deleting Luminaire, DMX Device, or Remote Control Station From Configuration Data

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

Deleting an item from the Configuration List removes it, and its associated data, entirely from the system. Once removed from the Configuration List, the item will need to be added back before it can be re-assigned for use by another room.

1. At Configuration List, right mouse <click> on device to be deleted from project.

System List	Type
Luminaire 01	AR5/50 - COL/INT
Luminaire 02	AR5/50 - COL/INT
Luminaire 03	AR5/50 - COL/INT
Luminaire 04	AR5/50 - COL/INT
Luminaire 05	AR5/50 - COL/INT
Luminaire 06	AR5/50 - COL/INT
Luminaire 07	AR5/50 - COL/INT
Luminaire 08	AR5/50 - COL/INT
Luminaire 09	AR5/50 - COL/INT
Luminaire 10	AR5/50 - COL/INT
Luminaire 11	AR5/50 - COL/INT
Luminaire 12	AR5/50 - COL/INT

Add Luminaires...
Modify Luminaire...
Delete Luminaire

Add DMX Devices...
Modify DMX Device...
Delete DMX Device

Add Remote Stations...
Modify Remote Station...
Delete Remote Station

Assign To.....   ▶
Unassign From Room

2. At menu, <click> on either Delete Luminaire, Delete DMX Device, or Delete Remote Station. Warning dialog will appear for confirmation of deletion.

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.
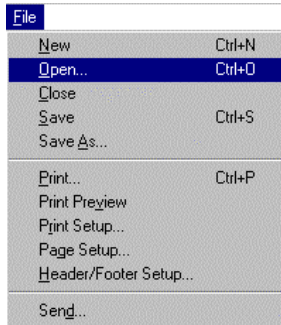
Tip: You can open an existing project by selecting project name from File menu numbered recently used list.
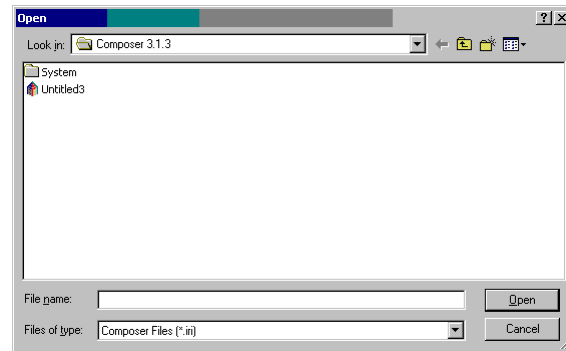
3. Navigate to directory where project is stored.

4. <Click> on name of project to be opened and then <click> on Open.

    Alternately, <double-click> on project name to open.

Adding Rooms

When the system is initially configured, a room was created into which all luminaires and remote stations were assigned. It may be desirable to add additional rooms and divide the luminaires and remotes for better management of lighting assets.

Creating Additional Rooms

1.   At main toolbar, <click> 🔳 to add a new room.

2.   Name room or accept default. When all desired rooms have been added, select Done.
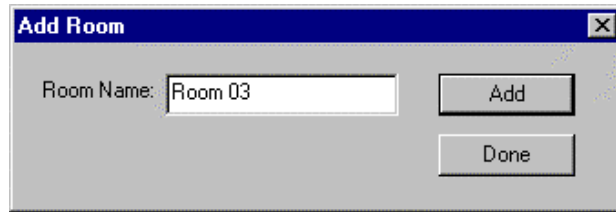
Adding Luminaires, DMX Devices, or Remote Control Stations to Existing Project

You can add luminaires, DMX devices, and remote control stations to existing projects several ways using the configuration dialogs. You modify or delete devices as mentioned above.

1. Make sure desired project is open.

2. Make sure configuration list is open. At View menu, choose Configuration List.
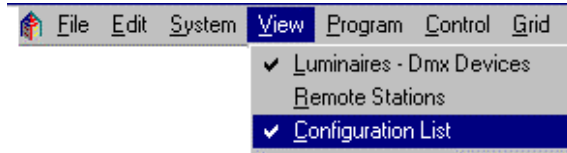
3. At System menu, choose Configure.
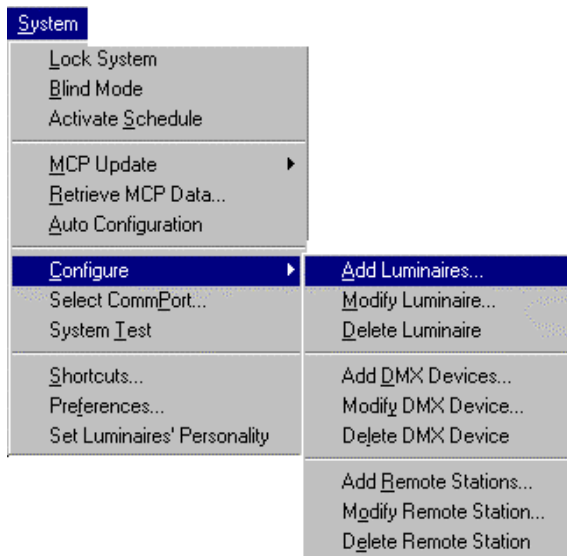
4. <Click> on Add Luminaire, Add DMX Device, or Add Remote Stations. Configuration dialog will appear.

5. Enter new device configuration data as necessary.

6. <Click> Add button to add configuration data to system and to reset configuration dialog to allow for more devices to be added.

7. When all devices are added, <click> Done to return to main Composer screen.

8. Repeat Steps 3 through 6 for other types of devices.

Assigning Luminaire, DMX Device, or Remote Control Station to New Rooms.

1. At Configuration List, right mouse <click> on the item to be added.

2. Select Assign To and the Room to which the item is being added. A luminaire, DMX Device, or Remote Control Station can be assigned to only one room at a time.

System List	Type
Luminaire 01	AR5/50 - COL/INT
Luminaire 02	AR5/50 - COL/INT
Luminaire 03	AR5/50 - COL/INT
Luminaire 04	AR5/50 - COL/INT
Luminaire 05	AR5/50 - COL/INT
Luminaire 06	AR5/50 - COL/INT
Luminaire 07	AR5/50 - COL/INT
Luminaire 08	AR5/50 - COL/INT
Luminaire 09	AR5/50 - COL/INT
Luminaire 10	AR5/50 - COL/INT
Luminaire 11	AR5/50 - COL/INT
Luminaire 12	AR5/50 - COL/INT
Luminaire 13	AR5/50 - COL/INT
Luminaire 14	AR5/50 - COL/INT
Luminaire 15	AR5/50 - COL/INT

Add Luminaires…	
Modify Luminaire…	
Delete Luminaire	
Add DMX Devices…	
Modify DMX Device…	
Delete DMX Device	
Add Remote Stations…	
Modify Remote Station…	
Delete Remote Station	
Assign To….. ▶	Global Room
Unassign From Room	Room 01

Getting Familiar with Composer Software

Main Toolbar

New button	

New button
Use this button to open a new room file.

Open button
Use this button to open an existing room file.

Select Room Menu
Use this drop-down menu to select rooms.

Add Room button
Use this button to create a new room.

Delete Room button
Use this button to delete a room.

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.

Event Tools button
Use this button to open the event tools screen. This screen contains all of the tools needed to store, edit, and delete events.

Template Tools button
Use this button to open the template tools screen. This screen contains all of the templates.

Playback Tools button
Use this button to display the necessary
windows for playback. These include the
Presets and Sequences lists, the grid, and
the Playback Status window.

Global Script Tools
Use this button to open the global script
tools screen. This screen contains all of the
tools needed to store, edit, and delete
scripts.

Global Template Tools
Use this button to display tools necessary to
assign Global Scripts and/or individual room
instructions to remotes.

Schedule Tools button
Use this button to open the schedule tools
screen. This screen contains all of the tools
needed to schedule your events to a specific
time.

Calendar Tools button
Use this button to open the calendar tools
screen. This screen contains all of the tools
needed to schedule your events to a daily or
special days calendar.

Store button
Use this button to store a preset, sequence,
template, schedule, event, global script, or
global template. 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, sequence, template, schedule, event, global script, or global template under a different name. Store As is used when you have used an existing preset, sequence, template, schedule, event, global script, or global template 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 preset, sequence, template, schedule, event, global script, or global template.

Undo Delete button
Use this button to undo a delete of preset, sequence, template, schedule, event, global script, or global template.

Help Topics button
Use this button to open and start the on-line help system.

Playback Toolbar

Playback Preset button
Use this button to playback a single selected preset.

Playback Sequence button
Use this button 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.

Synchronize button
Use this button to synchronize all selected fixtures. This will allow you to bring luminaires that are not moving in time identically to a synchronized form.

Send Home button
Use this button to send all selected devices to their Home position. The Home position is a preset that you can create that allows you to program a preset with your lighting devices starting from a known position. In addition, this is the position luminaires will go to after a hard reset or after calibration.

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.

Lockout button
Use this button to lock out a system from any intrusion.

Blind button
Use this button to use the Composer software in blind mode. Blind mode allows you to program your system without having the luminaires actually move.

Editor Toolbar

Remove Item button
Use this button to remove an item from an active editor list; for instance, a preset from the sequence main body.

Clear button
Use this button to clear all of the contents of a window, for instance all of the contents of the Sequence Main Body.

Add Global Script
Use this button to add a Global Script to a listing.

Add Power Cmd button
Use this button to add a power command to turn a luminaire on or off.

Add Schedule Cmd button
Use this button to add a schedule command. You can disable a schedule for a specified amount of time, disable a schedule, or enable a schedule that has been disabled.

[icon] Add Remote Station Cmd button
Use this button to add a remote control
station command. You can assign a
template to the station, lock a station for a
specific length of time, lock a station for an
indefinite length of time, or unlock a station
that has been locked.

[icon] Add Sequence button
Use this button to add a sequence to a
listing or to add a sequence command. You
can recall a sequence using the preset
follow times, reset a sequence to the first
preset, or step a sequence to the next
preset.

[icon] Add Preset button
Use this button to add a preset to a listing.

[icon] Add Event button
Use this button to add an event to a listing.

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
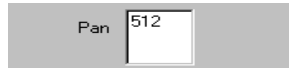the handle increments and decrements the
parameter value by 5 points, respectively.

Slider Control
<Click> on slider handle and
hold. Move slider to
increment or decrement
parameter value.

Direct Entry

Some Composer screens allow you to directly enter a parameter value in the value field under or next to a slider control. <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.

Parameter Value Field
<Click> in field and enter numeric value. Then click outside field or press Tab key to affect 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.

Crosshairs Control
<Click> on crosshairs and hold and move to roughly positions lighting devices.

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.

Increment/Decrement Buttons
<Click> on minutes or seconds and then click on buttons to right to increment or decrement timing values.

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.

Delay Timing Check Boxes
<Click> on box or I, F, C, B
letters to enter check in box
or remove check.

Adjacent list items.

Non-adjacent list items.

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, F, C, B 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 items that is 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 - Dmxs list, you must have your mouse pointing in the Luminaires - Dmxs list.

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

Grid Description

The grid is a spreadsheet-like representation of the data assigned to your configured lighting system components. Each column represents the data that were entered during the configuration of your system. In addition, manual control data is also displayed. The manual controls data can be edited from the grid by <clicking> on the box. You can then enter a numerical value in the box to edit the field. You can also check the delay timing parameter components located at the far right.

When you change your page setup configuration for printing, the grid will display the changes when you select Print Preview from the File menu. There are also grid display buttons available during print preview.

	Name	Bus	Adr.	Type	Int.	Focus			Color						Beam	Transition Times				Delay				
						Pan	Tilt	FP #	Blue	Amb.	Mag.	W1	W2	GI		I	F	C	B	Time	I	F	C	B
Luminaire 01	1	1	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 02	1	2	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 03	1	3	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 04	1	4	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 05	1	5	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 06	1	6	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 07	1	7	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐
Luminaire 08	1	8	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	☐	☐	☐	☐

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. In addition, if you <double-click> on the gray space inside the window, the list will become a free-floating window, allowing you to place the window wherever you wish. <Double-click> on the title bar a second time to replace the window to its default position. By modifying the size of the windows, as many editors and windows can be opened at the same time as needed. Note that the more windows that are open, the smaller each window can be for all to still fit on your monitor screen.

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 1,000:

- Maximum number of presets per room.
- Maximum number of sequences per room.
- Maximum number of templates (per template type).
- Maximum number of event lists per room (with each list containing a maximum of 1000 actions).

The maximum number of schedules is limited to 254.

The maximum number of actions (preset, sequence, event, etc.) per schedule is 255.

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. When creating presets containing DMX devices, the intensity controller is used for setting only parameter data, based on the selected channel.

When creating presets containing DMX devices, the intensity controller is used for setting all parameter data, based on the selected channel.

Preset Tools

Preset tools button on main toolbar.

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.
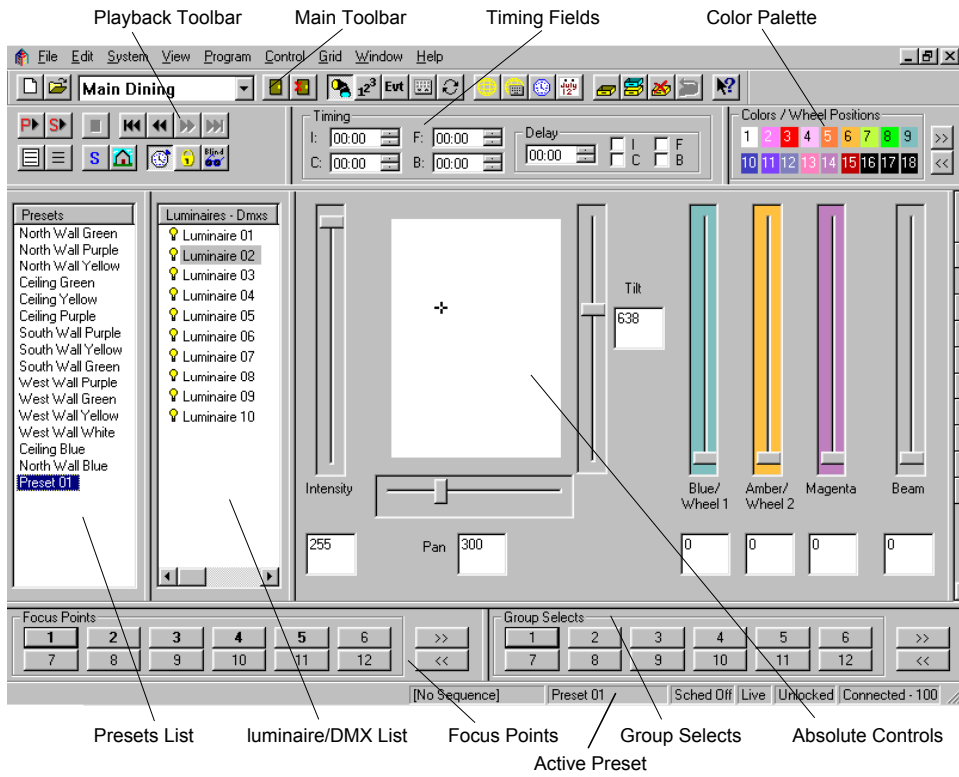
Starting Preset Tools

1. Make sure that Composer application is running and your lighting project file is open. Ensure desired room is selected.

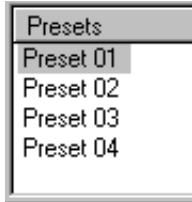2. At main toolbar <click> button. Preset tools screen appears.

Alternately, from Program menu, choose
Presets.

Getting Familiar with Preset Tools

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
- Relative controls
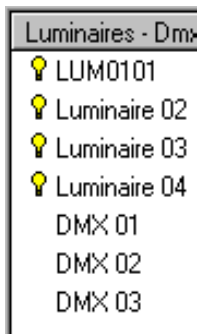- Luminaires - Dmxs list
- DMX Devices list.

Playback Toolbar   Main Toolbar   Timing Fields   Color Palette

Presets List   luminaire/DMX List   Focus Points   Group Selects   Absolute Controls

Active Preset

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.

-
-
- **Presets** list window contains names of

Luminaires - Dmxs List

As you assign luminaires and DMX devices in your room file, they will be available from the Luminaires - Dmxs list window. Only the names of rooms assigned luminaires and DMX devices appear in the list.

Group Selects

Group Selects are user defined groupings of luminaires. This feature allows the user to select a pre-defined list of luminaires. For example: If a grid layout of 36 luminaires were arranged as six rows of six luminaires each, separate group selects might be established for each row and for each column of luminaires. These 12 group selects would allow the user to select all luminaires within a single row or column with a single mouse <click> and then change their color or position simultaneously. A total of 36 defined group selects may be saved and stored in memory for each room.

Focus Points

Focus Points are user defined positions that specific luminaires have been focused as starting points from which presets may be defined. Preset positions

-
-
- **Luminaires - Dmxs** list window contains names and configuration data

may be based on these focus points. If a focus point is changed, all presets based on that focus point will also change. As an example: A number of presets have been defined to highlight a display, based on a focus point. The decision is then made to re-position the display. All previously defined presets can be shifted to the new display location by simply redefining the focus point on which the presets were based. A total of 36 defined focus points may be saved and stored in memory for each room.

Absolute Controls/Relative 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.

There are two types of controls to set in the parameters: absolute and relative controls. Absolute controls are the default controls displayed. Relative controls can be displayed by selecting Relative Controls from the Control menu.

Relative Controls   Absolute Controls
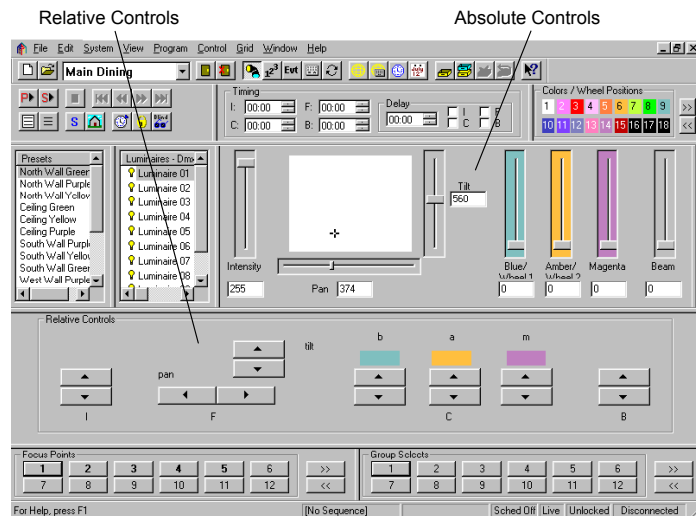
The main difference between these controls is that absolute controls will change all selected device parameters to the same value, while relative controls increment each parameter value by the same value.

As an example, say two luminaires have tilt values of 200 and 300 respectively. Using the absolute controls, if you select the two luminaires and change the tilt value to 350, both luminaires will now show the tilt setting at 350. If you were using the relative controls and increment the tilt value by 50, the luminaires would have tilt values of 250 and 350.

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.

Intensity can be specified in percent or absolute values. As a percentage, 100 steps are provided from zero to full intensity. For absolute values, the intensity motor has 256 steps, allowing smoother fades.

DMX device values are set using the intensity control.

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 luminaires 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 discrete 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 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.

Beam is specified as a percentage, providing 100 individual steps from zero to full diffusion. The beam motor has 256 stepped positions, allowing smooth transitions with imperceptible stepping.

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 and Blind Programming

There are two modes used for programming: live and blind. 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. Blind mode is used when you cannot be in the space to observe your lighting changes. You may specify all lighting parameters off-line and then later, fine-tune your presets during a live mode programming session.

Reminder: Your computer must be connected to the MCP via a Receptacle Station before you can program in live mode.

When you start the preset tools, the system will automatically default to live mode. To enter blind mode <click> on button or select Blind Mode from System menu.

Although it may seem at first that there is little that you can do without direct access to the lighting system, you will find that much of your work can actually be accomplished quickly through programming in blind mode. For example, you could configure your system and create a project file and create custom colors.

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.

Blind Mode Programming Benefits

- You need not be present at site to effect changes.
- You can perform certain repetitive tasks more quickly without distraction of lighting changes.
- You don't interfere with normal use of site (for instance meetings can go on) and remote stations continue to operate.
- You can create or edit sequence, schedules, or calendars completely off-site.

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 luminaires previous position (previous preset), a Home preset, or a Focus Point.

Home Preset

- Use button to send lighting devices to known Home position

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. The Home preset is available on the playback toolbar through the 🏠 button.

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.

When you <click> on the 🏠 button, the selected lighting devices will go to the Home preset. Any timing values assigned to the preset will also be invoked.

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 Default Presets.
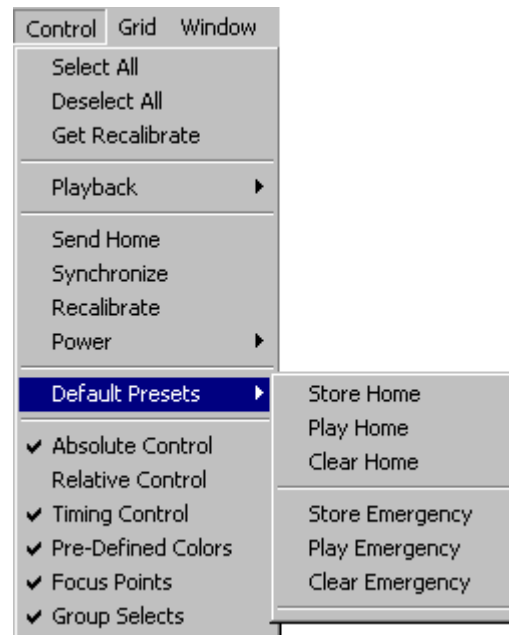
4. Select Store Home. Preset is now assigned to
    ⌂ button.

    Alternatively, you can select Play Home from
    Control menu Default Presets 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. <Click> on ⌂ button to play back Home
    preset.

3. Manipulate manual controls to edit Home preset
    to desired values.

4. From Control menu, choose Default Presets.

5. Select Store Home. New preset values are
    assigned to ⌂ button.

To delete Home preset:

1. Make sure that preset tools screen is started and playback toolbar is displayed.

2. From Control menu, choose Default Presets.
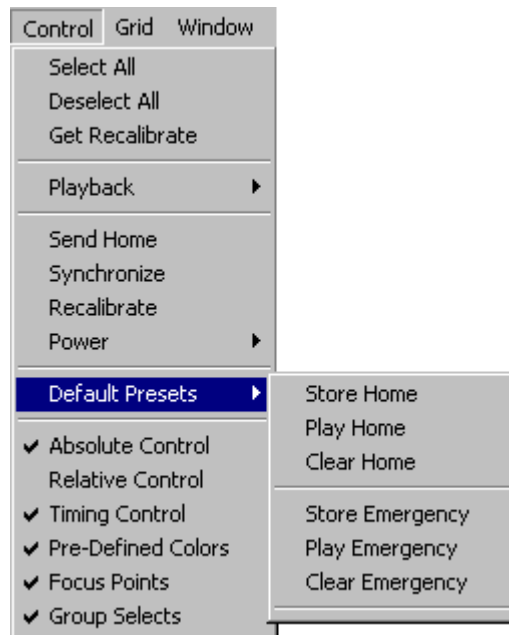
3. Select Clear Home. Home preset is cleared.

    <Clicking> button will return to default parameters of full intensity, no color, and pan and tilt position of 512.

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

Creating Group Selects

1. Make sure that preset tools screen is started.

2. Select all luminaires to be controlled as a group. Use Shift key for adjacent items in a list. Use Ctrl key for non-adjacent items in a list.

3. Select an unused Group Select button (or a previously assigned button if you wish to over write it) and right mouse <click> the button. At the sub menu, select New Group Select.

4. Enter name for Group Select or accept default name. Give the new Group Select a unique name; you cannot have two Group Selects that have same name.

5. Press Enter or <click> OK. Group Select is assigned to button.

CAUTION: If Group Select is deleted, there is no undo feature.

Creating Focus Points

1. Make sure that preset tools screen is started.

2. Starting from a Home preset or any other preset, select luminaires and adjust pan and tilt parameters to achieve desired point of focus. Focus Points retain only pan and tilt information, so it is not necessary to set other parameters.

3. Select an unused Focus Point button (or a previously assigned button if you wish to over write it) and right mouse <click> the button. At the sub menu, select New Focus Point or Update Focus Point, as appropriate. Update will overwrite previous setting.

4. Enter name for Focus Point or accept default name. Give Focus Point unique name; you cannot have two Focus Points that have same name.

5. Press Enter or <click> OK. Focus Point is assigned to button.

New presets may now be assigned based on this Focus Point. When Focus Point is modified, all presets created based on that Focus Point would change.

Note: If Focus Point is deleted, there is no undo feature.

Lighting Parameters
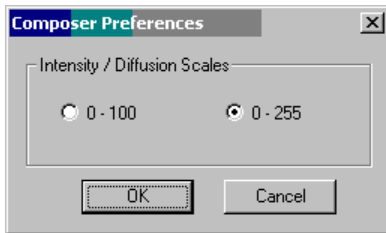
Display intensity and beam values based on 0 - 100 percent or 0 - 255 absolute values (for greater resolution).

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. The system default preference is to assign all parameter values based on 256-step values. You can change the setting on which to base your intensity and beam parameters to 0 to 100 percent from the Preferences… selection from the System menu.

The following sections will assume the default 256-step scale preference is selected.

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 channels 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. When using relative controls each selected luminaire will be modified by same value.

Manipulate slider with mouse for continuous control over intensity.

Intensity

113

Type desired intensity value or view current setting in white text box.
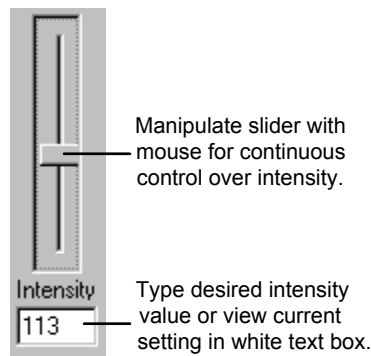
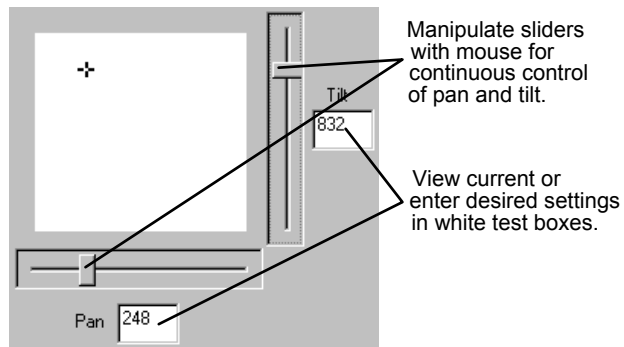**To assign intensity value to lighting device:**

1. From Luminaires - Dmxs 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 represent 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.

Note: The crosshairs position at exact center of the white area, which represents the halfway positions of the pan and tilt motors (512 position).

Manipulate sliders with mouse for continuous control of pan and tilt.

View current or enter desired settings in white test boxes.

To set luminaire pan and tilt position:

1. From Luminaires - Dmxs list, 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. Refer to the Color Settings Appendix at the back of this manual for a listing of several dozen additional colors and their settings as well as a log for recording color settings you may create.

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.

Manipulate slider with mouse for continuous control over saturation.

Type desired saturation value or view current setting in white text box.
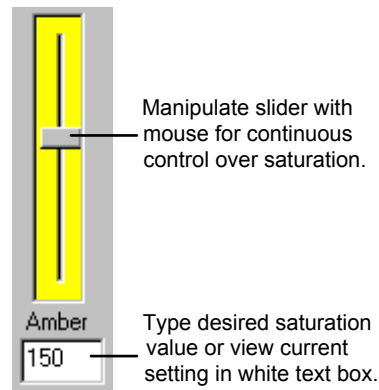
Luminaires With Discrete Filters (Effects Wheels)

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.

Manipulate slider with mouse for control of filters (effects wheels).

Type desired wheel position value or view current setting in white text box.
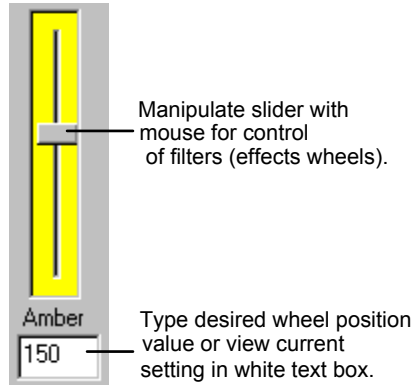
Custom Colors

To create a new custom color:

1. From Luminaires - Dmxs list, select one or more luminaires.

2. Manipulate color saturation sliders to achieve desired color.

3. <Click> on color palette Custom Colors advance button. A blank page of color buttons appears.

4. Right mouse <click> an unused button. Select New Custom Color.

Colors / Wheel Positions

New Custom Color...
Delete Custom Color...

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

Define Custom Color

AR5 / AR500 Colors
Blue: Amber: Magenta:
171   191   0

AR6 / AR7 Wheel Positions
☐ Wheel 1: N/A
☐ Wheel 2: N/A

Color Well
Name:
Kermit Green

Screen Chip: Setup Chip >>

OK   Cancel
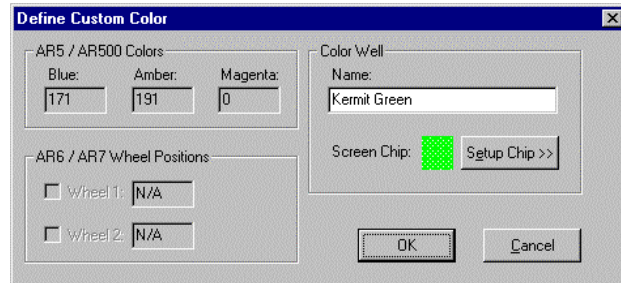
6. For AR6 luminaires, check box indicating which wheel position custom setting applies to.

7. <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.

Color

Basic colors:

Custom colors:

Define Custom Colors >>

Color|Solid

Hue: 160   Red: 128
Sat: 0   Green: 128
Lum: 120   Blue: 128

OK   Cancel   Add to Custom Colors
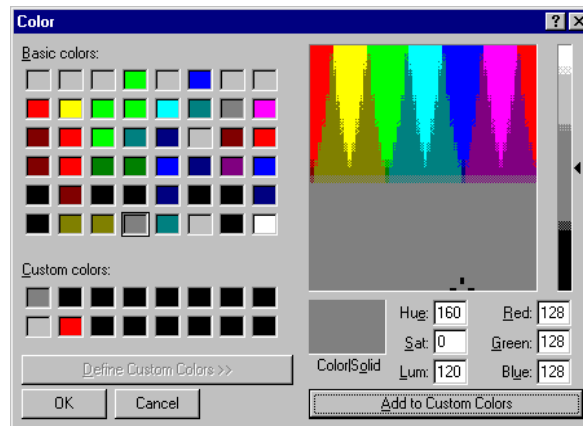
8. <Click> on color to assign as screen chip. You may <click> on Basic colors, Custom colors, or from color table at right of dialog.

9. <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 and 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.
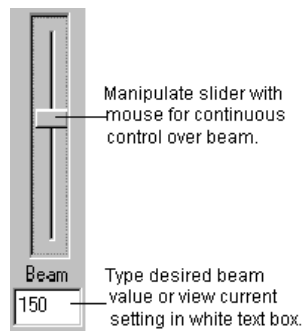
Timing Values

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.
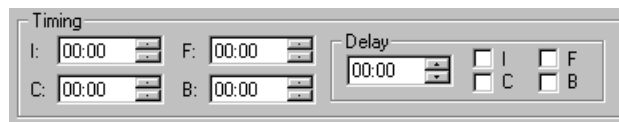
All timing values are entered in minutes and seconds and can be specified individually for all four lighting parameters: intensity (I), color (C), focus (F), and beam (B).

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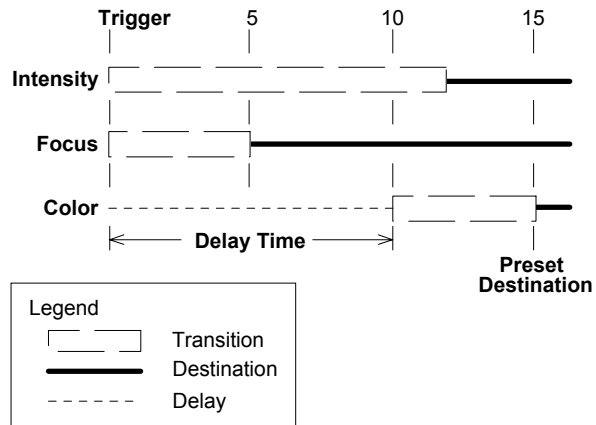
The behavior of the example when the preset is recalled is as follows:

- 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 cannot 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 icon] (Delete) button. Deletion warning dialog appears.
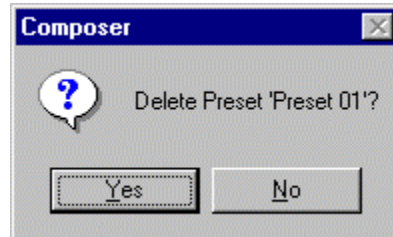
Alternately, you can select Delete Preset from mouse popup menu.

Alternately, you can select Delete from Edit menu.

CAUTION: Once preset is deleted, it will be deleted from all sequences, templates, schedules, global scripts, global templates, and event lists. 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 icon] (Undo Delete) button on main toolbar to undo deletion.

Recalibrating Lighting Devices

Luminaires can be programmed to recalibrate by using the "Get Recalibrate" feature in the control menu. To ensure proper execution a certain set of parameters in a specific order must be programmed. The selected luminaires will recalibrate when all of the predefined conditions are met.

In conjunction with the parameters obtained from "Get Recalibrate" the luminaires must also have their lamps powered off.

A series of actions, illustrated in example below, will assist you to recalibrate your selected luminaires periodically, utilizing the schedule feature within the control system.

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

Step 1: Write a Preset

- Activate the Preset tools
- Select the Luminaires to be recalibrated
- From the Control menu, choose "Get Recalibrate"
- Store Preset
- Name the preset in a fashion that denotes it is a recalibration preset

Step 2: Schedule

- Activate the Schedule tools
- <Click> on the desired time then <click> the "Add Power Command" . The "Light Switch Dialog" box will appear.
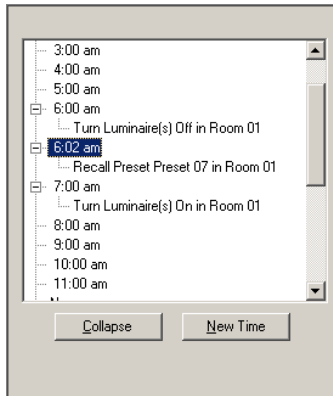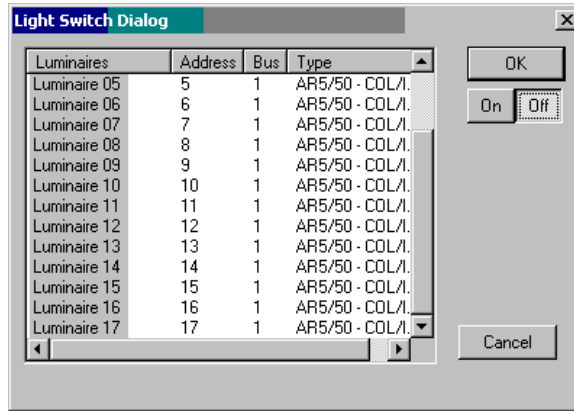
- Select the luminaires to be recalibrated
- Choose "Off"
- <Click> OK

Step 3: Create New Time

- <Click> "New Time" button from the Schedule Editor and enter the desired New Time. Two minutes after the time chosen for Step 2 is sufficient. <OK>
- Drag and drop the newly created Preset onto the New Time.

Step 4: Lamp power "On"

- Create a new time at least 10 minutes after the time chosen in Step 3 allowing for proper lamp cool down. This new time should be when you want the lamps to turn on.
- <Click> the "Add Power Command" . The "Light Switch Dialog" box will appear.
- Select the luminaires that are to be turned back on.
- Choose "ON"
- <Click> OK

Step 5: "Store AS"

- <Click> Store As button
- Name the schedule

- See Chapter 7 for more information regarding Schedules.

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 Default Presets.
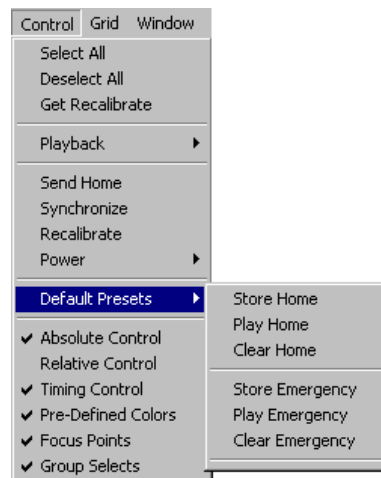
4. Select Store Emergency.

    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 Default Presets from Control menu and then choosing Play Emergency.

3. Adjust manual controls to edit Emergency preset to desired values.

4. From Control menu, choose Default Presets.

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 Default Presets.

3. Select Clear Emergency. Emergency preset is cleared.
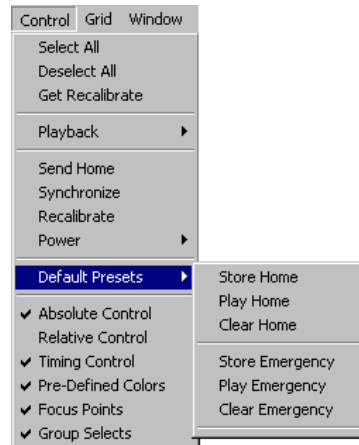
CAUTION: Once cleared, there is no undo feature for emergency preset.

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), preset follow times, looping logic, and the end state.

Sequences may be automatic or stepped. Playback of a sequence is, by default, automatic. Each preset runs sequentially until the sequence is fully executed. Stepped sequences allow each preset to be executed by a button press from a remote control station. The process for creating sequences is identical for stepped and automatic sequences. The only difference is the method of playback. Stepped sequences are useful for theater-like shows, where presets are treated like cues, and a remote control station button provides the "Go Next" function.

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> 1^{2^3} 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

- Loop fields

- Sequence End State fields

- Presets list.
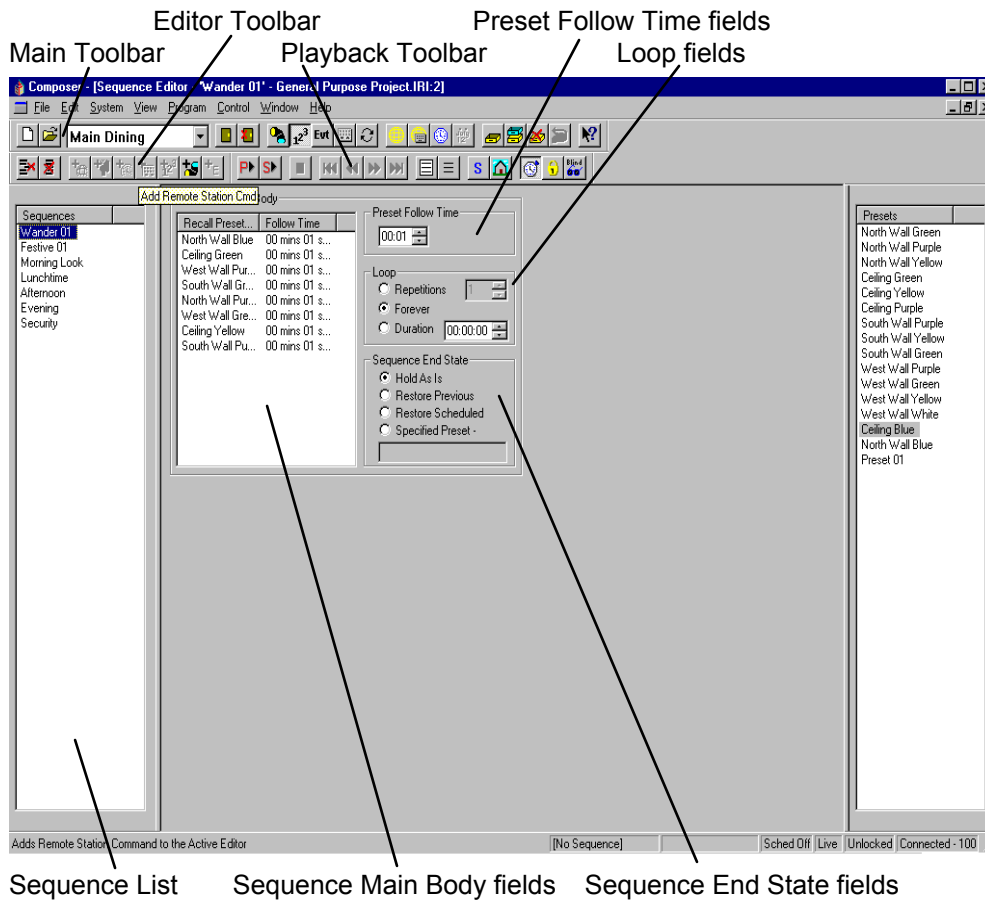
Main Toolbar   Editor Toolbar   Preset Follow Time fields

Playback Toolbar   Loop fields

Sequence List   Sequence Main Body fields   Sequence End State fields

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.
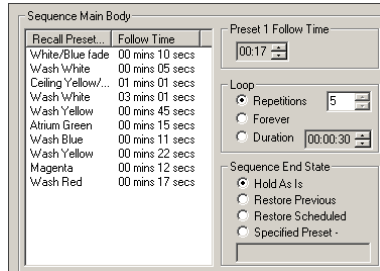
Sequence Main Body

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 1000 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.

Note: A stepped sequence ignores follow time and instead is executed by the next button push.

Looping Logic

Looping logic is used to define the number of times or length of time that a sequence is to be repeated. Use the radio buttons to the right of the sequence main body data area to specify your looping options for the sequence. The looping logic applies to the entire sequence and not to individual presets. The default setting for looping logic is forever.

Repetitions   Allows a sequence loop a specified number of times. This gives you a controlled sequence that will exit in a predictable way. The number of repetitions must be at least one, as that number represents the first time through the main body. The maximum number of repetitions is 255.

Forever   Allows looping of the sequence indefinitely. Only four actions will interrupt a sequence when Forever is selected:

- You push a remote control station button, thereby activating a new preset or sequence.

- A station closure activates a new preset or sequence.

- A scheduled calendar activity activates a preset or sequence.

- You push ■ (Stop) button on playback toolbar.

Duration   Allows looping of the sequence for a specified length of time, regardless of any repetitions. When you select Duration, you will have to enter the length of the duration in hours, minutes, and seconds. The maximum duration is 23 hours 50 minutes 00 seconds.

End State

Once the sequence is completely executed, including any looping, the sequence adopts its end state. Use the radio buttons to the right of the Sequence Main Body to specify your end state option for the sequence. The default end state is Hold As Is.

Hold As Is	This end state will leave your lighting system in the same configuration that exists when the last preset is executed.
Restore Previous	This end state will restore your lighting system to the preset that was running before the sequence was executed.
Restore Scheduled	This end state will restore your lighting system to schedule that was running before the sequence was executed.
Specified Preset	This end state will restore your lighting system to a specific preset.

Creating and Managing Sequences

To create a sequence, you will first assemble the order of the presets and assign follow times and then assign looping logic and an end state.

Creating Sequences

1. Make sure that Composer application is running and that required project file is open.

2. At main toolbar, <click> 1^{2^3} 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.

    Alternately, you can <click> on preset to be added and then <click> button on editor toolbar.

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. At Loop, enter looping logic you desire for entire sequence.

8. At Sequence End State, specify how you want sequence to look after it is completely executed.

9. Store your sequence.

    a. <Click> button if you want to overwrite existing sequence. Overwrite warning dialog appears.
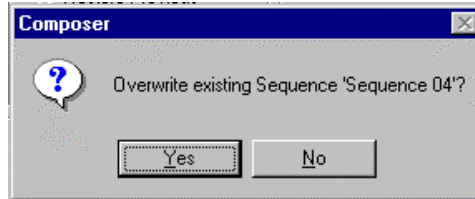
    At dialog box, <click> Yes to overwrite sequence. <Click> No to dismiss dialog and not overwrite sequence.

    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.
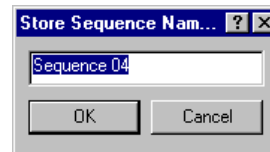
    Enter sequence name or accept default name and <click> OK.

Editing Sequences

You edit an existing sequence much the way you created it. <Click>ing 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 open, 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.

   c. Modify Loop setting and/or Sequence End State.

Note: If you attempt to select a different sequence after creating or changing another, Store Changes warning dialog appears.
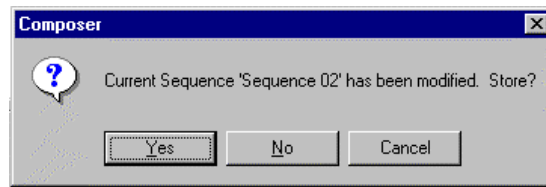
<Click> Yes to overwrite existing sequence. If you <click> No, overwrite warning dialog appears.

4. Store your sequence changes by <clicking> on

     button. Overwrite dialog appears.
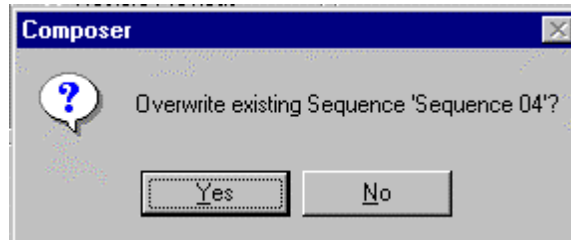
<Click> Yes to overwrite existing sequence and save changes or <click> No to dismiss dialog without saving changes.
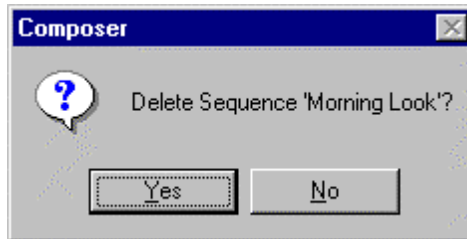
Deleting Sequences

Sequences can be easily deleted. Unlike adding or editing sequences, you do not have to have the sequence tools open to delete a sequence. You just have to be able to view the Sequences list. You can view the Sequences list from any Composer screen by selecting Sequences from the View menu.

To delete sequence:

1. Make sure Sequences list is visible. If it is not, from View menu select Sequences.

2. At Sequences list, <click> on sequence to be deleted.

CAUTION: Once sequence is deleted, it will be deleted from all templates, schedules, global scripts, global templates, and events. If you undo deletion, sequence will be added back to Sequence list, but not into the activities utilizing the sequence. You will have to edit each to add the sequence back in.

3. At main toolbar, <click> on button. Deletion warning dialog appears.

<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.

Stepped Sequences

Sequences can be assigned to button presses at a remote control station. Each button press will advance the sequence one step (or one preset). A stepped sequence has its constituent presets executed one after the other, just as with an automatic sequence, but only when a remote control station button is triggered. This provides manual control over sequences from the button stations. Remember that a stepped sequence ignores follow times.

Note the following for stepped sequences:

- If a second recall station button is pressed before the first preset reaches its target state, the second preset begins its transition immediately, halting the partially complete preset in mid-transition

- If the sequence is interrupted by a press of a different button or by a clock/calendar event, and the button associated with the sequence is then pressed again, the sequence will start over from the beginning. The system exhibits no memory of its position within a stepped sequence that is interrupted.

- If the sequence looping logic specifies Loop Forever, the sequence will never reach its end state. Rather, a press of the button from the final preset starts the sequence over with the first preset. The sequence main body thus repeats indefinitely. This is a good method for providing a circular queue of multiple presets via a single button.

- If the sequence looping logic specifies a certain number of repetitions, multiple button presses will repeat the sequence until the specification is met. After the last time through, the sequence will adopt its end state, ignoring subsequent button presses.

- If the sequence looping logic specifies duration, multiple button presses will repeat the sequence

until the duration time is up. Once the timer is exhausted, the sequence will adopt its end state, halting the sequence in mid-transition and ignoring subsequent button presses.

For Example:

Stepped sequences are useful where a 2 Button remote control station configuration is used. Consider the following scenario:

1. A sequence of presets called "fashion show" represents a list of lighting looks that will be played sequentially as lighting cues for a show.

2. The sequence is dropped onto one button of the 2 button remote control station with the Step Sequence to next preset station command. This button will be used to step the sequence through the cues during the show.

3. The sequence is dropped onto a second button with Reset Sequence to first preset command. This button will reset the lighting system to the top of the cue list.

4. The operator presses the first button to run rehearsals or the show. To start over, the operator presses the second button.

5. For long or complex shows, the lighting might be broken into four separate sequences. An 8 Button recall station could then be used since it supports four Step Sequence to next preset and four Reset Sequence to first preset commands, allowing easy management of the show.

Note: This example also applies to momentary closure switches. By using two DMX channels connected to non-dims, one to step through a sequence and the other to restart the sequence, you can achieve automatic control.

Creating Stepped Sequences

1. Create sequences as described earlier.

2. Assign sequence to template button as described earlier in this chapter.

3. At Sequence Commands screen, select Reset
    Sequence to first preset. This will provide a
    button to reset sequence to its beginning.

4. Assign sequence to a different template button
    and at Sequence Commands screen, select
    Step Sequence to next preset. This will be the
    button to step the sequence through the
    individual presets.
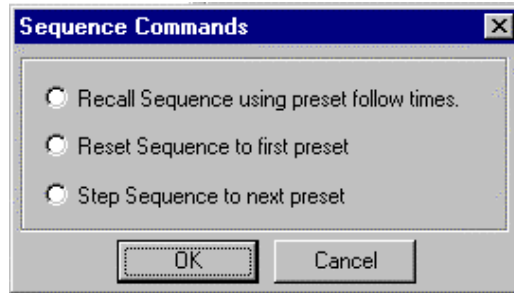
Event Lists

Events are very similar to stepped sequences. Event
Lists are composed of presets, and sequences. The
individual steps may initiate an individual preset or
an entire sequence. Each step will initiate the next
sequence or preset designed into the event list.

1. Using the events button **Evt** on the toolbar,
    activate the Events editor screen.

2. Drag and drop presets and sequences into the
    events main body and save in the same method
    as when creating presets and sequences.

3. Open templates as described in the Creating
    New Template section of this chapter.

4. Assign events from the Events list to the
    template using the same technique described
    earlier for assigning sequences.

Chapter 4. Templates

Templates are used to assign actions to remote control stations. The remote control station provides control capability to those people who will be occupying the space and recalling the lighting looks. There are five different remote control stations:

- 2 button recall station
- 8 button recall station
- Closure station
- Receptacle station
- Key station.

Note: The receptacle station and key station are not programmable remote control stations and do not have to be configured.

The template specifies one or more actions that will occur when buttons are touched or when switches toggle. A single template contains all actions associated with every button or switch at a given remote control station. Only one template may be assigned to a station at one time.

A template itself does nothing. You must assign it to a remote control station. Changing templates is usually done with the clock/calendar, although you may also use buttons or switches to assign templates.

Lighting Actions/System Commands

There are two kinds of actions that can be assigned to a template: lighting actions and system commands. Lighting actions recall presets, sequences, or event lists and system commands change an internal system state. Although multiple

commands are allowed, you may drop only one preset, sequence, or event list into an action list.

System commands include power on/off, new template assignment, and lock/unlock stations, and schedule enable/disable.

8 Button and 2 Button Remote Control Stations

Button stations are used to manually execute events that are programmed to the buttons. When you build one or more templates for one of the button stations, you are specifying what will happen when you press one of the buttons.

Closure Stations

Closure stations are designed for automatic operation, supporting many types of dry contact switches, either momentary or maintained. By connecting these switches to your closure station, programmed lighting actions may be triggered when the switches are opened or closed by normal daily activities.

Some of the switch placements and types that may effectively control lighting via closure stations include:

- Opened or closed doors
- Partition switches associated with room dividers
- Photo beams
- Motion detectors
- Floor mat switches.

Receptacle Stations

Receptacle stations are wall-mounted communications links to the Composer control system. By connecting your PC to this station, you may control your lighting system via Composer software. Although this component is a remote control station, you cannot assign a template to it. It just needs to be configured so that an address can be assigned to it.

Station Configuration

Note: You must configure a remote control station before you can assign a template to it.

As physical devices, remote control stations must be configured in much the same way as luminaires. Configuration entails specifying a name for each physical remote control station, as well as its physical address and type. Refer to Chapter One for configuration procedures.

Template Tools

The template tools are used to create and edit remote control station templates. You build a remote control station template by dragging a lighting action onto a template button or by adding station commands.

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

Starting Template Tools

1. Make sure that Composer application is running and your lighting project file is open.

2. At main toolbar click ⌨ button. Template tools screen appears.

   Alternately, from Program menu, choose Templates.

Getting Familiar with Template Tools Screen

In addition to the main toolbar, the template tools contains several windows that open by default to allow for creating, editing, and maintaining your templates:

- Editor toolbar

- Templates list

- Remote Control Stations list

- Presets list

- Sequences list

- Remote control station action list

- Template Type fields.

- Event list

Main Toolbar   Editor Toolbar   Remote Station Action list   Preset list

Local Stations list   Event list   Template list   Sequence list
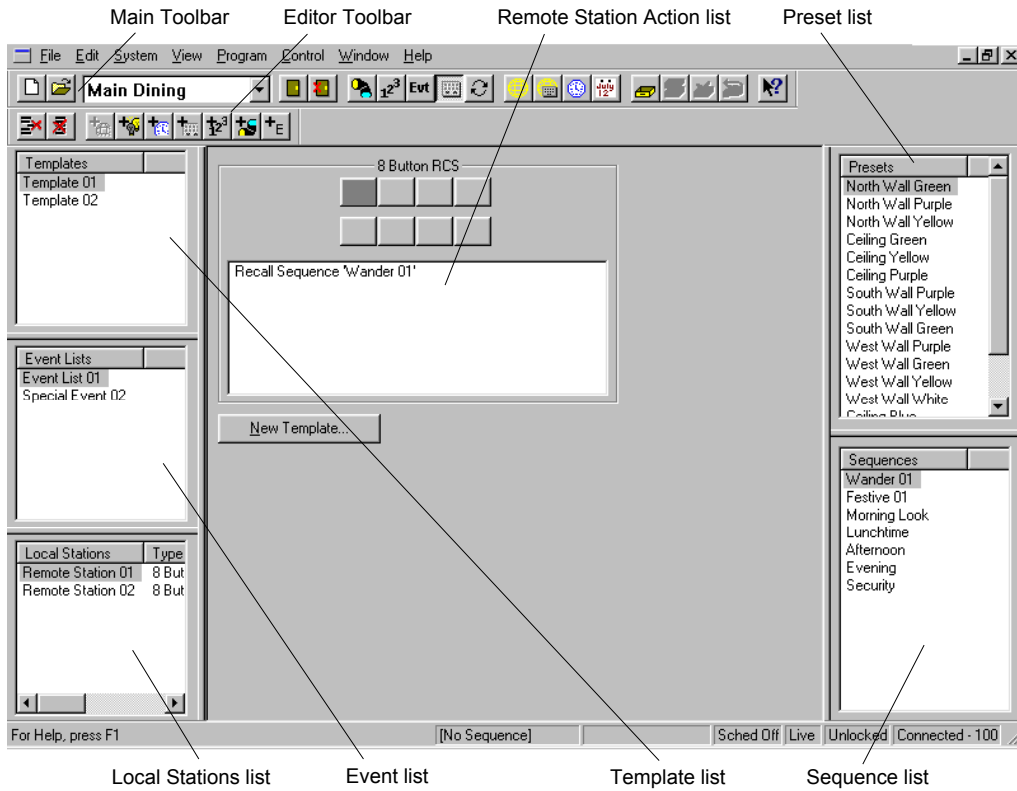
Remote Station Action List

The remote station action list is located under the graphic representation of the remote control station. The action list displays all of the events for which a recall station button is assigned. Items are added to the action list by selecting them and dragging and dropping them into the action list.

Editor Toolbar

In addition to the Remove Item and Clear buttons, the editor toolbar contains the station command buttons. These buttons allow you to add power, schedule, and remote station commands, and to add presets, sequences and events to the action list.

Add Power Command Button

Use this command to turn lighting devices on or off. You can add two power commands to each recall station button: one for power on and one for power off. You can control the power to individual or all lighting devices. A secondary dialog will appear with you select this command to select the operation you want to complete.

Select the luminaires from the list on the left and then click on the "On" or "Off" buttons. Then select individual luminaires or groups of luminaires. Click OK to complete the operation and dismiss the dialog.

To edit a power command list, double click on the action item in the action list. Light Switch Dialog will reappear.

Add Schedule Command Button

Use this command to add a schedule command to a recall button or closure station. When the schedule command button is activated, a secondary dialog box appears to have you select the type of schedule command.

The Disable Schedule for field allows you to disable a schedule for a specific length of time, in hours and minutes. The maximum time allowed for a schedule to be disabled is 23 hours 50 minutes.

The Disable Schedule command disables a schedule indefinitely. The only way to re-enable a schedule when the Disable Schedule command is used is with the Enable Schedule command.

The Enable Schedule command enables a schedule to begin running.

<u>Add Remote Station Command Button</u>

Use this command to add a command that controls the operation of a remote control station. When you drag and drop a remote control station name onto a button or into the action list, a secondary dialog appears to have you select the type of remote station command.

The Assign Template field allows you to assign a specific template to the specified remote station when triggered from a recall (remote) or closure station. When you select this command you must enter the template name in the field to the right. The drop-down arrow will allow you to scroll through your template names.

The Lock Station for command allows you to lock a station for a specific length of time. A locked station will not allow any manual control. This is usually used to prevent tampering with lighting controls. When you click on this radio button, you will have to specify the length of time in hours and minutes. The maximum length of time for locking a station with this command is 23 hours and 50 minutes. You can unlock a locked station using the Un-Lock Station command.

The Lock Station command is used to lock a station for an indefinite length of time, essentially permanently locking the station. The only way to unlock a station that has been locked using the Lock Station command is with the Un-Lock Station command from another remote station or with MCP hard reset.

Use the Un-Lock Station command to allow station control of recall and closure stations locked using the Lock Station for and Lock Station commands.

Add Sequence Button

Use this button to assign a sequence to a recall or closure station. Use this command to allow for stepped sequences from a recall or closure station. When you drag and drop a sequence name onto a button or into the action list, a secondary dialog appears to have you select the method of playback for the sequence.

The Recall Sequence using preset follow times radio button recalls the sequence with the follow time enabled. This is the default condition for recalling sequences from a recall or closure station. The preset follow times were assigned from the sequences tools screen.

The Reset Sequence to first preset selection allows you to have a running sequence reset to the first preset of the sequence. This command allows you to step through a sequence after resetting it to the beginning.

The Step Sequence to next preset command is used to create stepped sequences. When this command is enabled, button pushes from a recall station will individually step through the preset assigned to the sequence on that button.

Add Preset Button

Use this button to assign a preset to a button on a recall or closure station. When clicked, this button assigns the active preset shown in the Presets list. You use this button as you would if you were dragging and dropping a preset onto a button or into the action list.

Add Event Button

Use this button to assign an event to a button on a recall or closure station. When clicked, this button assigns the active event shown in the Event list. You use this button as you would if you were dragging and dropping an event onto a button or into the action list. Event Commands appears as a secondary dialog, allowing you to select the method of playback (automatic or stepped).
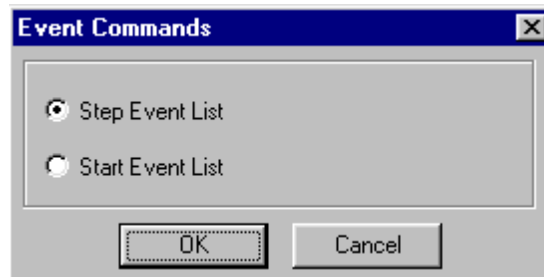
Template Types
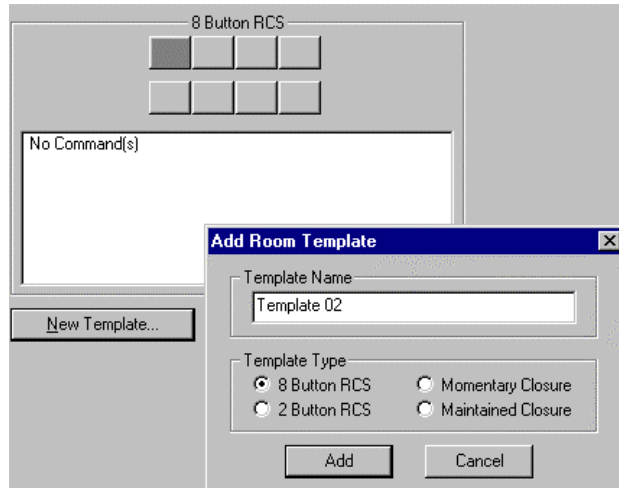
After selecting New Template, the Add Room Template window appears.

Use these radio buttons to select the type of remote control station for which you are creating a template. Note that only those remote control stations that can have a template assigned are listed in the Template Types fields.

8 Button and 2 Button Recall Stations

These graphics represent the eight buttons and the two buttons on these recall stations. You can assign lighting actions and station commands to the active button by dragging and dropping. You can also drag and drop lighting events or assign station commands in the action list box located under the graphic. Click on a button to make it active. Although you can only assign one preset or sequence to a buttons, you can stack several station commands onto a button.

Maintained Closure Station

This closure station template allows for lighting events or station commands to be assigned to eight switches, with each having an open ( ) and closed ( ) condition.

As an example, you could use this closure station template when you want to have two lighting looks for a room behind a door. When you open the door (open switch position) the lighting devices come on and maybe trigger a sequence. When you close the door (closed switch position) power could be turned off to all luminaires.

Momentary Closure Station

This closure station template allows for lighting events or station commands to be assigned to eight switches. For these switches, the event is triggered by the action of the switch, regardless of its position.

As an example, you could use this closure station template when you want to have a lighting look for an entry way. When someone steps on the welcome mat (activating the switch) you could have your lighting system power on and execute a preset.

Templates List

As with presets and sequences, you will refer to your templates by name, with the names of stored templates shown in the Templates list. Only one template can be assigned to a remote control station, even though you can have several templates that will work at an 8 button recall station, for instance. When you first start a project, no templates exist. Once you have more templates than will fit in the window, a scroll bar automatically appears.

Creating and Managing Templates

Whenever the template tools are open a template is always selected as the active template. All editing activities apply to this selection. The rules for the active template are as follows:

- The name of the active template is highlighted in the Templates list.

- When you select an existing template (by pointing and clicking on its name) that template becomes active.

- When you create a new template, the new template becomes active.

Creating New Template

1. Make sure that Composer application is running and that required project file is open. Ensure desired room is selected.

2. At main toolbar, click button to open template tools.

3. Select New Template button. At Template Types, click on radio button for type of remote control station for which you will be creating template. Click Add. Remote control station template graphic appears.
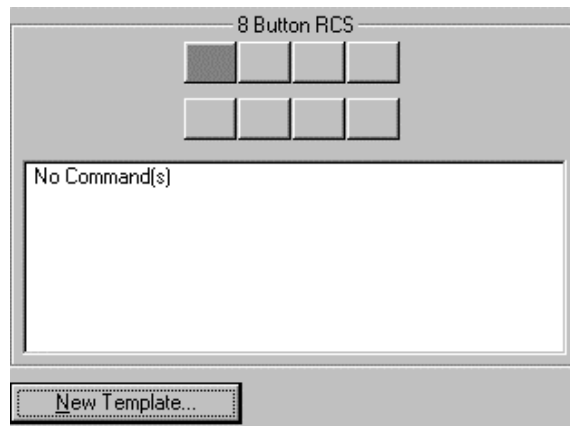
4. Select items and drag and drop them onto template buttons or into action list.

    Alternately, click on desired editor toolbar station command button. Complete associated dialogs.

5. Remove events from action list by clicking on event in action list and clicking ⬛ button.

    Remove all events from action list (all button assignments) by clicking ⬛ button.

6. Click ⬛ button to store template

Editing Existing Template

1. Make sure that Composer application is running and that required project file is open. Ensure desired room is selected.

2. At main toolbar, click ⬛ button to open template tools.

3. At Templates list, click on template name to be edited to make it active. Template button graphic appears.

4. Toggle through buttons or action lists and make changes as necessary.

5. Add actions by dragging and dropping or by using editor toolbar command buttons.

6. Remove individual actions using ▣ button and clear all button assignments (or all of action list contents) using ▣ button.

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

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

7. Store template.

    a. Click ▣ button if you want to overwrite existing template. Overwrite warning dialog appears.

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

    b. If you do not want to overwrite existing template, click ▣ button to store template as another name. Store Room Template dialog appears.

Store Room Template...

Template 03

OK   Cancel

Enter template name or accept default name and click OK.

Deleting Templates

Unlike other template operations, to delete a template you have to select it from the Templates list. This can be done from any Composer application screen by selecting Templates from View menu.

1. Make sure that Composer application is running and that required project file is open.

2. At Templates list, select template to be deleted.

3. At main toolbar, click ⬛ button. Alternately, click on right mouse button to bring up mouser popup menu and select Delete Template. Deletion warning dialog appears.

Delete button on toolbar.

Composer

? Delete Template 'Template 02'?

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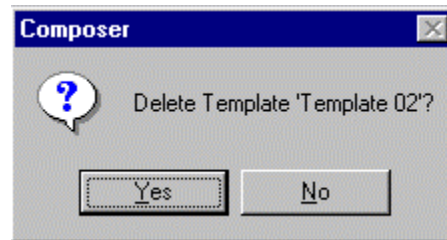
4. Click Yes to continue with delete. Click No to dismiss window and not delete template.

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

Default Templates

A default template is the remote recall station assignments that are active when other specific templates are not invoked. The template representing the actions most often desired would typically be assigned as default.

1. Create desired templates as described in previous sections.

2. Select desired remote station to house default template and click on right mouse button. Assign Default Template dialog appears.

    Assign Default Template...

    Click on dialog to assign. Assignment dialog pop-up appears.

RCS Default Template Assignment		
Name: Remote Station 01	Address: 1	OK
Default Template: [No Template] ▼		Cancel
	Template 01	
Room Assigned:	Template 02	
	[No Template]	
Type		
● 8 Button ○ 2 Button ○ Closure ○ Receptacle		
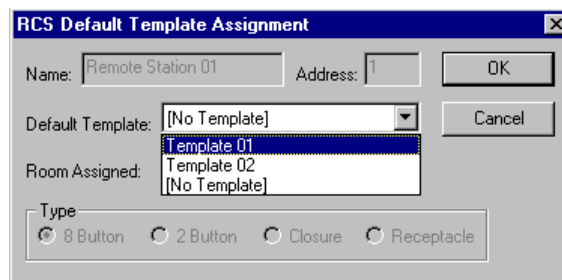
3. Select desired template from Default Template List.

Chapter 5.
Global Scripts

A global script represents a series of actions such as presets, sequences, power commands (individual luminaire on/off for bulb only), local and global recall station commands (lock, unlock, assign template), and global schedule commands (enable/disable schedule). The contents of global scripts may be pulled from any room.

You may have up to 1000 global scripts. A given script can contain a maximum of 1000 separate system activities.

Global scripts may be automatic or stepped. Playback of a script is, by default, automatic. Each preset or sequence runs one after the other until the script is fully executed. Stepped scripts allow each activity to be executed by a button press from a remote control station. The process for creating global scripts is identical for stepped and automatic scripts. The only difference is the method of playback. Stepped scripts are useful for theater-like shows, where presets and sequences are treated like cues, and a remote control station button provides the "Go Next" function.

Note: Presets are single lighting looks (position and color with or without timing). Sequences are a series of presets with timing values, played one after the other. Event lists can be a combination of presets and sequences played one after the other and run from a template on a local recall station. Global Scripts are a grouping of presets or sequences that have been assigned to individual rooms and combined to allow simultaneous control over multiple rooms. Other than events, any of the above lighting activities (presets, sequences, global scripts) can be assigned to a schedule to be activated based on a predetermined time.

As an example, in a hotel environment where lights have been installed in numerous rooms (such as lobby, gift shop, buffet breakfast area, and conference area), each room will likely have been programmed to produce different lighting effects. All can be

run simultaneously by creating a global script and assigning it to the schedule to be activated at a predetermined time.

Global Script Tools

The global script tools are the tools that you use to create and edit scripts. 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 scripts. The file contains your system configuration and all of the actions that will be required to create scripts.

Starting Global Script Tools

1. Make sure that Composer application is running and your lighting project file is open. Ensure desired room is selected.

2. At main toolbar click 🌐 button. Global script tools screen appears.

Getting Familiar with Global Script Tools Screen

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

- Global Scripts list

- Presets list

- Local Stations list

- Global Stations list

- Sequences list
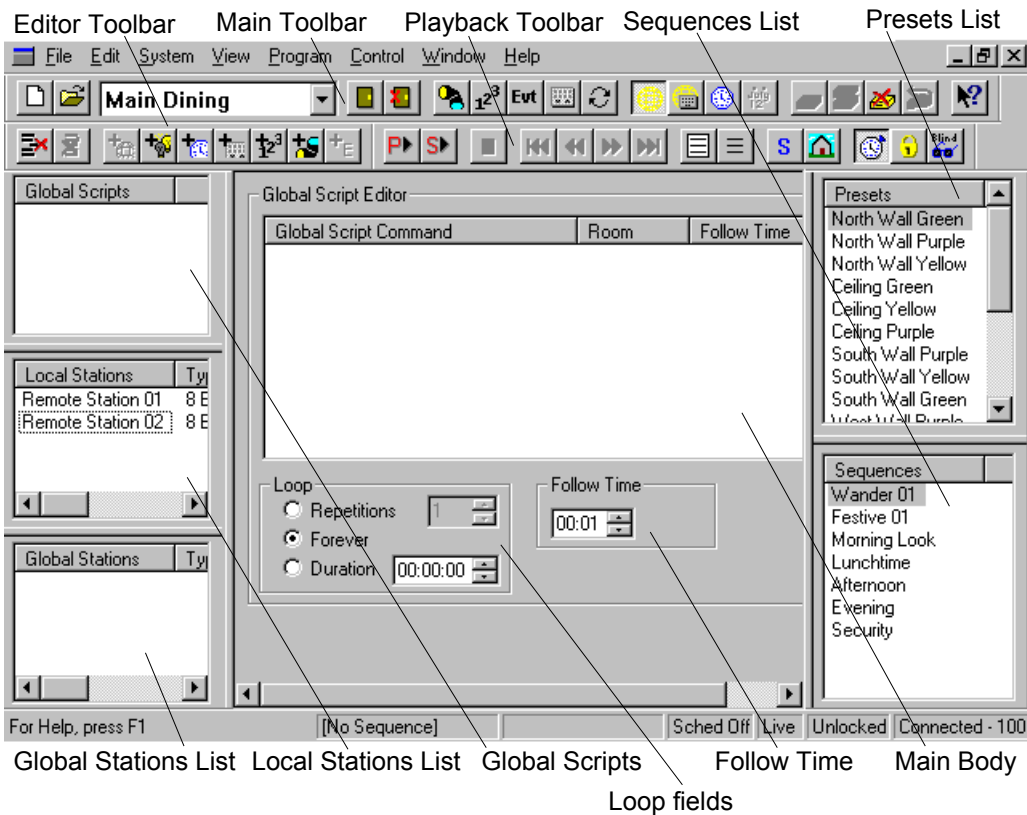
Editor Toolbar   Main Toolbar   Playback Toolbar   Sequences List   Presets List

Global Stations List   Local Stations List   Global Scripts   Follow Time   Main Body

Loop fields

Global Scripts List

As you create new global scripts you will name them, accumulating a growing list of scripts, all displayed in the Global Scripts list. Once you have more scripts than will fit in the window, a scroll bar automatically appears. Each time you start the scripts tools, the first script is selected.

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.

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-
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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.

Remote Stations Lists (Local and Global)

As with presets and sequences, you will refer to your remote control stations by name, with the names of configured stations shown in the Remote Stations list. Once you have more templates than will fit in the window, a scroll bar automatically appears.

Global Scripts Main Body

You create scripts by dragging preset, sequence, and event names from their lists into the global scripts main body and then assigning a follow time and looping logic. The order in which the presets and sequences are listed in the scripts main body is the order in which they are played back. A total of 1000 activities can be added to the global scripts main body.

Global Scripts Follow Time

The follow time determines the length of time that the script is to play before the next activity is executed. During that time, the activity can, in fact, play a preset/sequence, wait, or have the following activity begin its execution before the current activity has been completely executed. The default follow time is 1 second.

The follow time begins counting at the moment the activity first begins. For this reason, you need to

-

make sure that your script follow time is equal to or -greater than the total timing of the activity. Otherwise, the following activity may begin before the currently playing activity is completely executed.

Note: A stepped activity ignores follow time and instead is executed by the next button push.

•
•
• **Loop** fields assign looping logic for entire script.

Looping Logic

Looping logic is used to define the number of times or length of time that a script is to be repeated. Use the radio buttons to the right of the script main body data area to specify your looping options for the script. The looping logic applies to the entire script and not to individual activities. The default setting for looping logic is forever.

Repetitions   Allows the script to loop a specified number of times. This gives a controlled script that will exit in a predictable way. The number of repetitions must be at least one, as that number represents the first time through the main body. The maximum number of repetitions is 255.

Forever   Allows looping of the script indefinitely. There are only two ways to interrupt a script when Forever is selected:

- The user locks the room from Composer.

- The user assigns a disable command to a local or global template station or a schedule.

Note: If using a local station to disable, only a local station command will
 re-enable.
If using a global station script command to disable, MCP controller commands will be disabled, but local "Forever" sequences will continue until a local preset command ends the "Forever" instruction. Global disables must be globally re-enabled.

Duration   Allows looping of the script for a specified length of time, regardless of any repetitions. When you select Duration, you will have to enter the length of the duration in hours, minutes, and seconds. The maximum duration is 23 hours 50 minutes 00 seconds.

Editor Toolbar

In addition to the Remove Item and Clear buttons,
the editor toolbar contains the station command
buttons. These buttons allow you to add power,
schedule, and remote station commands, and to add
presets, sequences and events to the action list.

Add Power Command Button

Use this command to turn lighting devices on or off.
You can add two power commands to each recall
station button: one for power on and one for power
off. You can control the power to individual or all
lighting devices. A secondary dialog will appear with
you select this command to select the operation you
want to complete.

You select luminaires from the list on the left and
then click on the On or Off buttons. You can select
individual luminaires or groups of luminaires. Click
OK to complete the operation and dismiss the
dialog.

To edit a power command list, double click on the
action item in the action list. Light Switch Dialog will
reappear.

Add Schedule Command Button

Use this command to add a schedule command to a recall button or closure station. When the schedule command button is activated, a secondary dialog box appears to have you select the type of schedule command.

The Disable Schedule for field allows you to disable a schedule for a specific length of time, in hours and minutes. The maximum time allowed for a schedule to be disabled is 23 hours 50 minutes.

The Disable Schedule command disables a schedule indefinitely. The only way to re-enable a schedule when the Disable Schedule command is used is with the Enable Schedule command.

The Enable Schedule command enables a schedule to begin running.

Add Remote Station Command Button

Use this command to add a command that controls the operation of a remote control station. When you drag and drop a remote control station name onto a button or into the action list, a secondary dialog appears to have you select the type of remote station command.

Select Recall Station Command

Remote Station: Remote Station 02

- ● Assign Template   Template 01
- ○ Lock Station for   00:00
- ○ Lock Station
- ○ Un-Lock Station

OK   Cancel

The Assign Template field allows you to assign a specific template to the specified remote station when triggered from a recall (remote) or closure station. When you select this command you must enter the template name in the field to the right. The drop-down arrow will allow you to scroll through your template names.

The Lock Station for command allows you to lock a station for a specific length of time. A locked station will not allow any manual control. This is usually used to prevent tampering with lighting controls. When you click on this radio button, you will have to specify the length of time in hours and minutes. The maximum length of time for locking a station with this command is 23 hours and 50 minutes. You can unlock a locked station using the Un-Lock Station command.

The Lock Station command is used to lock a station for an indefinite length of time, essentially permanently locking the station. The only way to unlock a station that has been locked using the Lock Station command is with the Un-Lock Station command from another remote station or with MCP hard reset.

Use the Un-Lock Station command to allow station control of recall and closure stations locked using the Lock Station for and Lock Station commands.

Add Sequence Button

Use this button to assign a sequence to a recall or closure station. You use this command to allow for stepped sequences from a recall or closure station. When you drag and drop a sequence name onto a button or into the action list, a secondary dialog appears to have you select the method of playback for the sequence.

The Recall Sequence using preset follow times radio button recalls the sequence with the follow time enabled. This is the default condition for recalling sequences from a recall or closure station. The preset follow times were assigned from the sequences tools screen.

The Reset Sequence to first preset selection allows you to have a running sequence reset to the first preset of the sequence. This command allows you to step through a sequence after resetting it to the beginning.

The Step Sequence to next preset command is used to create stepped sequences. When this command is enabled, button pushes from a recall station will individually step through the preset assigned to the sequence on that button.

Add Preset Button

Use this button to assign a preset to a button on a recall or closure station. When clicked, this button assigns the active preset shown in the Presets list. You use this button as you would if you were dragging and dropping a preset onto a button or into the action list.

Creating and Managing Global Scripts

Whenever the global script tools are open, a script is always selected as the active script. All editing activities apply to this selection. The rules for the active script are as follows:

- The name of the active script is highlighted in the Global Scripts list.

- When you select an existing script (by pointing and clicking on its name) that script becomes active.

- When you create a new script, the new script becomes active.

Creating New Global Scripts

1. Make sure that Composer application is running and that required project file is open. Ensure desired room is selected.

2. Make sure that global scripts tools are open.

3. Select items and drag and drop them onto Global Script Editor main body. Items appear in script list in order of selection and playback sequence.

   Alternately, click on desired editor toolbar station command button and complete associated dialogs.

CAUTION: Using ![button] button clears all scheduled activities from entire script.

4. Remove activities from action list by clicking on desired item and clicking ![button] button.

   Remove all activities from entire script by clicking ![button] button.

5. At Script Main Body, click on the action item desired to make it active.

6. At Step Follow Time, enter follow time (minutes and seconds) desired for action duration.

7. Continue adding actions (and follow times) to Script Main Body until script is complete.

8. At Loop, enter looping logic desired for entire script.

9. Store script.

    a. Click ▱ button to store. Store Global Script Name dialog box appears. Name script or accept default.

Store Global Script Nam... ✕

Grand Opening Script 01
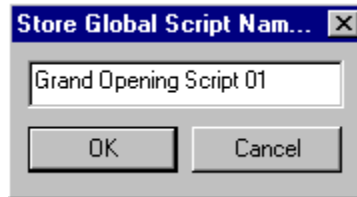
    [OK]   [Cancel]

Click OK to store script. Click Cancel to disregard store command.

    b. If new script is based on existing script and you do not want to overwrite existing script, click ▱ button to store script as another name. Enter script name or accept default and click OK.

Editing Existing Global Script

You edit an existing script much the way you created it. Clicking on the script in the Global Script list displays the Script Main Body and its assignments.

To edit script:

1. Make sure that Composer application is running, the required project file is open, and global script tools are started.

2. At Global Scripts list, click on script to be edited. Scripts Main Body and its components are displayed.

3. Make changes to Script Main Body as necessary.

    a.   Add actions by dragging and dropping them from desired action lists.

        Remove individual actions by clicking on action and at playback toolbar, clicking button.

        Remove all (clear) actions from Script Main Body by clicking on button at playback toolbar.

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

    b.   Modify Step Follow Time by clicking on action to make action active, and then adjusting follow time.

    c.   Modify Loop setting.

Note: If you attempt to select a different script after creating or changing another, Store Changes warning dialog appears.
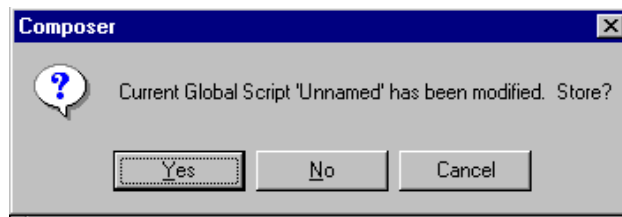
Click Yes to overwrite existing script. If you click No, overwrite warning dialog appears.

4.   Store your script changes by clicking on button. Overwrite dialog appears.
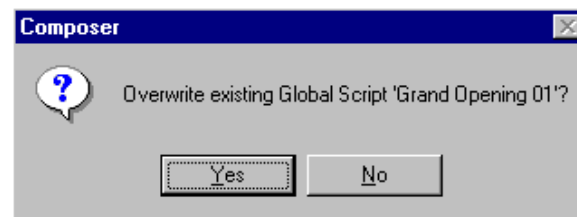
Click Yes to overwrite existing sequence and save changes or click No to dismiss dialog without saving changes.

Deleting Global Scripts

Global Scripts can be easily deleted. Unlike adding or editing scripts, you do not have to have the scripts tools open to delete a script. You just have to be able to view the Scripts list. You can view the Scripts list from any Composer screen by selecting Global Scripts from the View menu.

To delete script:

1. Make sure Global Scripts list is visible. If it is not, from View menu select Global Scripts.

2. At Global Scripts list, click on script to be deleted.

CAUTION: Once script is deleted, it will be deleted from all schedules and global templates. If you undo deletion, script will be added back to Global Scripts list, but not into the activities utilizing the script. You will have to edit each to add script back in.

3. At main toolbar, click on ![icon] button. Deletion warning dialog appears.
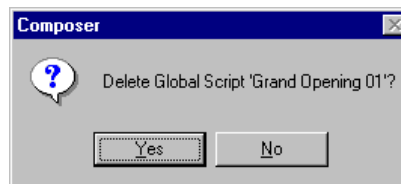
Click Yes to continue with delete. Click No to dismiss window and not delete sequence.

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

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-
- **Delete** button on

Assigning Global Scripts to Templates

Global Scripts may be assigned to Global templates or to schedules as an effective way to fully utilize the Composer system's capabilities. Refer to chapters on Templates and Schedules for details on performing these operations.

Stepped Scripts

Tip: Sequences may be used in either automatic or stepped mode according to how they are activated. Edit the sequence to include the appropriate follow times, even if it's primarily intended to be stepped.

Scripts can also be assigned to button presses at a remote control station. Each button press will advance the script one step (or one action). A stepped script has its constituent actions executed one after the other, just as with an automatic script, but only when a remote control station button is triggered. This provides manual control over scripts from the button stations. Remember that a stepped script ignores follow times.

Note the following for stepped scripts:

- If a second recall station button is pressed before the first action reaches its target state, the second action begins its transition immediately, halting the partially complete prior action in mid-transition.

- If the script is interrupted by a press of a different button or by a clock/calendar activity, and the button associated with the script is then pressed again, the script will start over from the beginning. The system exhibits no memory of its position within a stepped script that is interrupted.

- If the script looping logic specifies Loop Forever, the script will never stop. Rather, a press of the button from the final action starts the script over with the first action. The script main body thus repeats indefinitely. This is a good method for providing a circular queue of multiple actions via a single button.

- If the script looping logic specifies a certain number of repetitions, multiple button presses will repeat the script until the specification is met. After the last time through, the script will halt, adopting its last action.

- If the script looping logic specifies duration, multiple button presses will repeat the script until the duration time is up. Once the timer is exhausted, the script will adopt its most recently executed action, halting the script in mid-transition and ignoring subsequent button presses.

Creating Stepped Scripts

1. Create scripts as described earlier in this chapter.

2. Assign the script to the template button as described earlier in this chapter.

3. At Global Scripts Commands screen, select Reset Global Scripts to first command. This will provide a button to reset the script to its beginning.

4. Assign the script to a different template button and at the Global Script Commands screen, select Step Global Script to the next command. This will be the button to step the script through the individual commands.

Select Global Script Command

- Enable Global Script using follow times
- Disable Global Script
- Step Global Script to next command
- Reset Global Script to first command

OK   Cancel

Chapter 6.
Global Templates

Global Templates are used to assign actions to global remote control stations. Templates, as discussed in a previous chapter, control single rooms. Global Templates allow the user to control multiple rooms from one remote control station. The contents of any individual room can be added to a global template for control of that room. A remote control station is a physical device, consisting of one or more switches or manual buttons. The remote control station provides control capability to those people who will be occupying the space and recalling the lighting designs. There are five different remote control stations:

- 2 button recall station
- 8 button recall station
- Closure station
- Receptacle station
- Key station.

Note: The key station is not a programmable remote control station and does not have to be configured.

The global template specifies one or more actions that will occur at all lighting locations when buttons are touched or when switches toggle. A single template contains all actions associated with every button or switch at a given remote control station. Only one template may be assigned to a station at any given time. A remote control station must be dedicated to either templates or global templates, and cannot be used to control both.

A template itself does nothing. You must assign it to a remote control station. This is usually done with the clock/calendar, although you may also use buttons or switches to assign templates.

Lighting Actions/System Commands

There are two kinds of actions that can be assigned to a global template: lighting actions and system commands. Lighting actions recall presets or sequences and system commands change an internal system state. Although multiple commands are allowed, you may drop only one preset or one sequence or one event into an action list.

System commands can also be assigned to global templates. These commands include power on/off, new template assignment, and lock/unlock stations, among other commands.

8 Button and 2 Button Remote Control Stations

Button stations are used to manually execute events that are programmed to the buttons. When you build one or more global templates for one of the button stations, you are specifying what will happen when you press one of the buttons.

Closure Stations

Closure stations are designed for automatic operation, supporting many types of dry contact switches, either momentary or maintained. By connecting these switches to your closure station, you may design lighting events that are triggered when the switches are opened or closed by normal daily activities.

Some of the switch placements and types that may effectively control lighting via closure stations include:

- Opened or closed doors
- Partition switches associated with room dividers
- Photo beams
- Motion detectors
- Floor mat switches.

Receptacle Stations

Receptacle stations are wall-mounted communications links to the Composer control system. By connecting your PC to this station, you may control your lighting system via Composer

software. Although this component is a remote control station, you can not assign a template to it. It just needs to be configured so that an address can be assigned to it.

Station Configuration

Note: You must configure a remote control station before you can assign a template or global template to it.

As physical devices, remote control stations must be configured in much the same way as luminaires. Configuration entails specifying a name for each physical remote control station, as well as its physical address and type. Refer to Chapter One for configuration procedures.

Global Template Tools

The global template tools are the tools that you use to create and edit remote control station templates. You build a remote control station template by dragging a lighting action onto a template button or by adding station commands.

You must have one of your project files open and configured before you can work with global templates. The file contains your system configuration and all of the remote control stations, sequences, and presets that will be required to create the global templates. You will move from room to room as you assign actions to the global template.

Starting Global Template Tools

1. Make sure that Composer application is running and your lighting project file is open.

2. At main toolbar click [icon] button. Global template tools screen appears.

    Alternately, from Program menu, choose Global Templates.

Getting Familiar with Global Template Tools Screen

In addition to the main toolbar, the template tools contains several windows that open by default to allow for creating, editing, and maintaining your global templates:

- Editor toolbar
- Global Templates list
- Global Scripts list
- Presets list
- Sequences list
- Events list
- Local Remote control station list
- Global Remote control station action list
- Global Template Type fields.

Main Toolbar   Editor Toolbar   Global Template Action list   Sequences   Presets   Global Scripts

Global Stations list   Local Stations list   Global Templates list   Events list
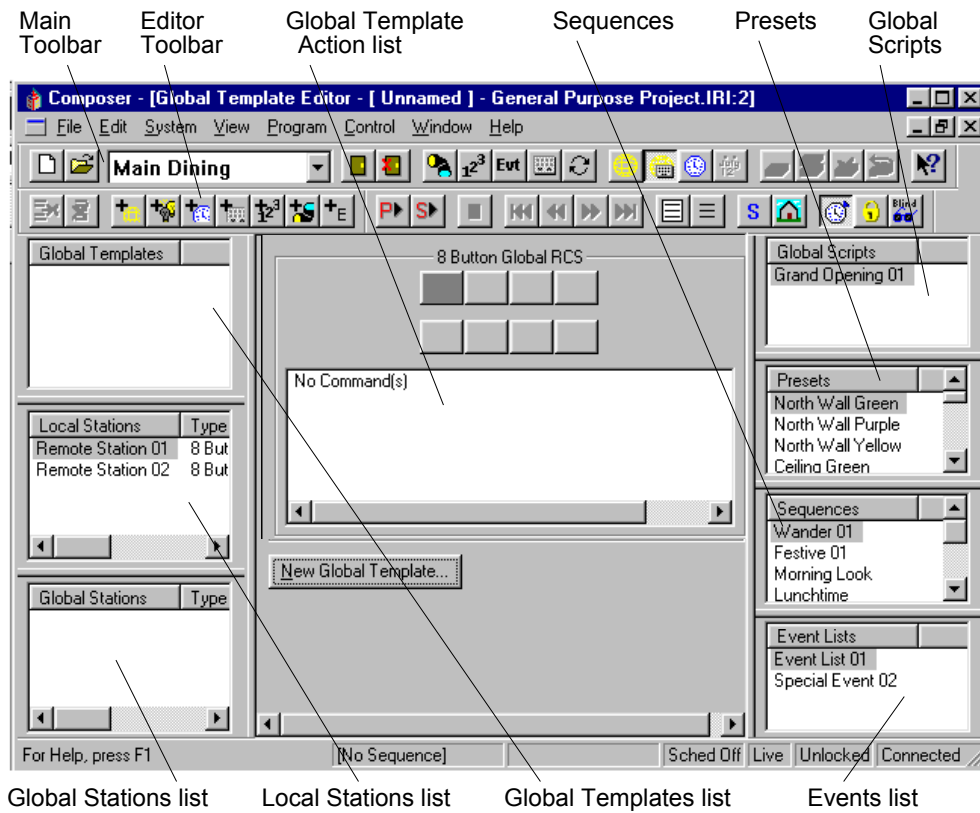
Global Template Action List

The global template action list is located under the graphic representation of the remote control station. The action list displays all of the actions for which a recall station button is assigned. Items are added to the action list by selecting them and dragging and dropping them into the action list.

Editor Toolbar

In addition to the Remove Item and Clear buttons, the editor toolbar contains the station command buttons. These buttons allow you to add Global scripts. power, schedule, and remote station commands, and to add presets, sequences and events to the action list.

Add Global Script

Use this button to assign a global script to a button on a recall or closure station. Global Scripts are used only in conjunction with Global Templates and schedules.

Add Power Command Button

Use this command to turn lighting devices on or off. You can add two power commands to each recall station button: one for power on and one for power off. You can control the power to individual or all lighting devices. A secondary dialog will appear with you select this command to select the operation you want to complete.

Select luminaires from the list on the left and then click on the On or Off buttons. You can select individual luminaires or groups of luminaires. Click OK to complete the operation and dismiss the dialog.

To edit a power command list, double click on the action item in the action list. Light Switch Dialog will reappear.

Add Schedule Command Button

Use this command to add a schedule command to a recall or closure station. A secondary dialog appears to have you select the type of schedule station command.

The Disable Schedule for field allows you to disable a schedule for a specific length of time, in hours and minutes. The maximum time allowed for a schedule to be disabled is 23 hours 50 minutes.

The Disable Schedule command disables a schedule indefinitely. The only way to re-enable a schedule when the Disable Schedule command is used is with the Enable Schedule command.

The Enable Schedule command enables a schedule to begin running.

Add Remote Station Command Button

Use this command to add a command that controls the operation of a remote control station. When you drag and drop a remote control station name onto a button or into the action list, a secondary dialog appears to have you select the type of remote station command.

Select Recall Station Command

Remote Station: Remote Station 02

◉ Assign Template   Template 01
○ Lock Station for   00:00
○ Lock Station
○ Un-Lock Station

OK   Cancel

The Assign Template field allows you to assign a specific template when triggered from a recall or closure station. When you select this command you must enter the template name in the field to the right. The drop-down arrow will allow you to scroll through your template names.

The Lock Station for command allows you to lock a station for a specific length of time. A locked station will not allow any manual control. This is usually used to prevent tampering with lighting controls. When you click on this radio button, you will have to specify the length of time in hours and minutes. The maximum length of time for locking a station with this command is 23 hours and 50 minutes. You can unlock a locked station using the Un-Lock Station command from the schedule or another station.

The Lock Station command is used to lock a station for an indefinite length of time, essentially permanently locking the station. The only way to unlock a station that has been locked using the Lock

Station command is with the Un-Lock Station command or with MCP hard reset.

Use the Un-Lock Station command to allow station control of recall and closure stations locked using the Lock Station for and Lock Station commands.

Note: Be careful when using the Lock Station command. It is possible to lock yourself out of the station.

Add Sequence Button

Use this button to assign a sequence to a recall or closure station. You use this command to allow for stepped sequences from a recall or closure station. When you drag and drop a sequence name onto a button or into the action list, a secondary dialog appears to have you select the method of playback for the sequence.

The Recall Sequence using preset follow times radio button recalls the sequence with the follow time enabled. This is the default condition for recalling sequences from a recall or closure station. The preset follow times were assigned from the sequences tools screen.

The Reset Sequence to first preset selection allows you to have a running sequence reset to the first preset of the sequence. This command allows you to step through a sequence after resetting it to the beginning.

The Step Sequence to next preset command is used to create stepped sequences. When this command is enabled, button pushes from a recall station will individually step through the preset assigned to the sequence on that button.

Add Preset Button

Use this button to assign a preset to a button on a recall or closure station. When clicked, this button assigns the active preset shown in the Presets list. You use this button as you would if you were dragging and dropping a preset onto a button or into the action list.

Add Event

Use this button to assign an event to a button on a recall or closure station. When clicked, this button assigns the active event shown in the Event list. You use this button as you would if you were dragging and dropping an event onto a button or into the action list.

Template Types
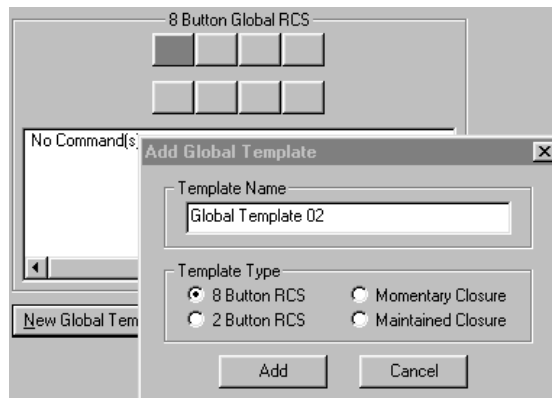
After selecting New Template, the Add Global Template window appears.

Use these radio buttons to select the type of remote control station for which you are creating a global template. Note that only those remote control stations that can have a template assigned are listed in the Template Types fields.

8 Button and 2 Button Recall Stations
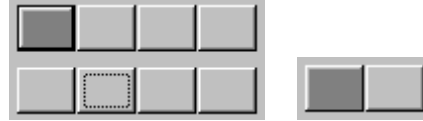
These graphics represent the eight buttons and the two buttons on these recall stations. You can assign lighting events and station commands to the active button by dragging and dropping. You can also drag and drop lighting events or assign station commands in the action list box located under the graphic. Click on a button to make it active. Although you can only assign one preset or sequence to a buttons, you can stack several station commands onto a button.

Maintained Closure Station

This closure station template allows for lighting events or station commands to be assigned to eight switches, with each having an open (   ) and

closed (   ) condition.

As an example, you could use this closure station template when you want to have two lighting looks for a room behind a door. When you open the door (open switch position) the lighting devices come on and maybe trigger a sequence. When you close the door (closed switch position) power could be turned off to all luminaires.

Momentary Closure Station

This closure station template allows for lighting events or station commands to be assigned to eight switches. For these switches, the event is triggered by the action of the switch, regardless of its position.

Global Templates List

As with presets and sequences, you will refer to your global templates by name, with the names of stored templates shown in the Global Templates list. Only one template can be assigned to a remote control station, even though you can have several templates that will work at an 8 button recall station, for instance. When you first start a project, no templates exist. Once you have more templates than will fit in the window, a scroll bar automatically appears.

Remote Stations List

As with presets and sequences, you will refer to your remote control stations by name, with the names of configured global stations shown in the Global Remote Stations list. Once you have more remote control stations than will fit in the window, a scroll bar automatically appears.

Creating and Managing Global Templates

Whenever the global template tools are open a template is always selected as the active template. All editing activities apply to this selection. The rules for the active template are as follows:

- The name of the active template is highlighted in the Global Templates list.

- When you select an existing template (by pointing and clicking on its name) that template becomes active.

- When you create a new template, the new template becomes active.

Creating New Global Template

1. Make sure that Composer application is running and that required project file is open.

2. At main toolbar, click button to open global template tools.

3. Select New Template button. At Template Types, click on radio button for type of remote control station for which you will be creating template. Click Add. Remote control station template graphic appears.
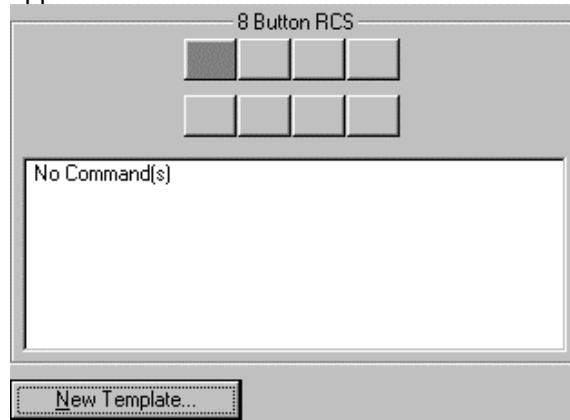
4. Ensure desired room is selected from main toolbar.

5. Select items and drag and drop them onto template buttons or into action list. Command dialog boxes open when adding sequences, events, scripts, templates, schedules, and power commands (anything but presets).

    Alternately, click on desired editor toolbar station command button. Complete associated dialogs.

6. Remove actions from action list by clicking on event in action list and clicking ▤× button.

    Remove all actions from action list (all button assignments) by clicking ▤ button.

7. Click ▤ or ▤ button to store template. Store Room Template… dialog appears.

    Store Room Template...   ✕

    | Template 03 |

    | OK | | Cancel |
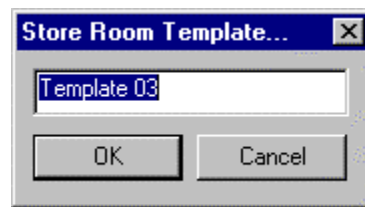
8. Enter template name or accept default name and click OK.

Editing Existing Template

1. Make sure that Composer application is running and that required project file is open.

2. At main toolbar, click ⊞ button to open global template tools.

3. At Global Templates list, click on template name to be edited to make it active. Template button graphic appears.

4. Toggle through buttons or action lists and make changes as necessary.

5. Add activities by dragging and dropping or by using editor toolbar command buttons.

6. Remove individual actions using button and clear all button assignments (or all of action list contents) using button.

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

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

7. Store template.

   a. Click button if you want to overwrite existing template. Overwrite warning dialog appears.

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

   b. If you do not want to overwrite existing template, click button to store template as another name. Store Room Template

dialog appears.

Store Room Template...

Template 03

OK   Cancel

Enter template name or accept default name and click OK.

Deleting Templates

Unlike other template operations, to delete a template you have to select it from the Global Templates list. This can be done from any Composer application screen by selecting Global Templates from View menu.

1. Make sure that Composer application is running and that required project file is open.

2. At Global Templates list, select template to be deleted.

3. At main toolbar, click [icon] button. Alternately, click on right mouse button to activate popup menu and select Delete Template. Deletion warning dialog appears.

Delete button on toolbar.

Composer

? Delete Global Template 'Global Template 01'?

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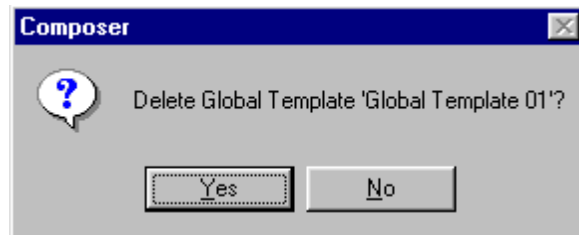
4. Click Yes to continue with delete. Click No to dismiss window and not delete template.

Click [icon] button to undo global template deletion.
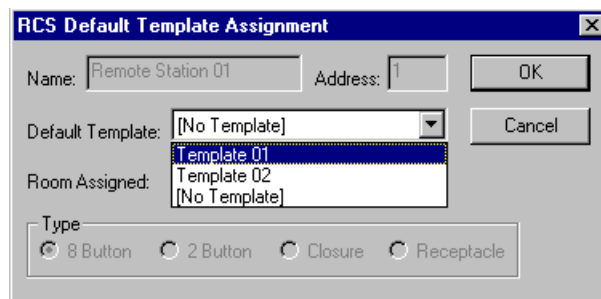
Default Templates

A default template is the remote recall station assignments that are active when other specific templates are not invoked. The template representing the actions most often desired would typically be assigned as default.

1. Create desired templates as described in previous sections.

2. Select desired global remote station to house default template and click on right mouse button. Assign Default Template dialog appears.

Assign Default Template...

Click on dialog to assign. Assignment dialog pop-up appears.

RCS Default Template Assignment

Name: Remote Station 01   Address: 1   OK

Default Template: [No Template]   Cancel

Template 01
Template 02
[No Template]

Room Assigned:

Type
○ 8 Button   ○ 2 Button   ○ Closure   ○ Receptacle

3. Select desired template from Default Template List.

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Chapter 7. Schedules

As its name implies, a schedule is a collection of dates and times with their associated lighting events. The system schedule begins at midnight and continues until the following midnight. You can specify the configuration so that the schedule, for example, will run through several days or just one special day. You can also schedule events to occur on a regular basis.

Once you have scheduled all of your lighting activities, you must assign the schedule to the calendar. If you do not assign a schedule to the calendar, the schedule will not run.

Once you activate the schedule, it will run the lighting system automatically, without any intervention. The only way to de-activate the schedule is to assign a Disable Schedule command to a remote control station or to download a project file that does not contain any calendar information.

You may have up to 254 schedules. A given schedule can contain a maximum of 254 separate system activities.

Note: If you are upgrading from a previous version of Composer Software that utilized the Astronomical time clock function to trigger a command, saving the show file in Composer Software version 3.1.3 will hard code the sunrise and sunset times for the day that the show is saved.

Schedule Tools

The schedule tools are the tools that you use to create and edit schedules. 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 schedules. The file contains your system configuration and all of the activities that will be required to create schedules.

Starting Schedule Tools

1. Make sure that Composer application is running and your lighting project file is open.

2. At main toolbar click button. Schedule tools screen appears.

    Alternately, from Program menu, choose Schedules.

Getting Familiar with Schedule Tools Screen

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

*   Schedules list

*   Scheduled Times field

*   Presets list

*   Remote Stations list

*   Sequences list

*   Collapse button

*   New Time button

*   Room list

*   Global Scripts list
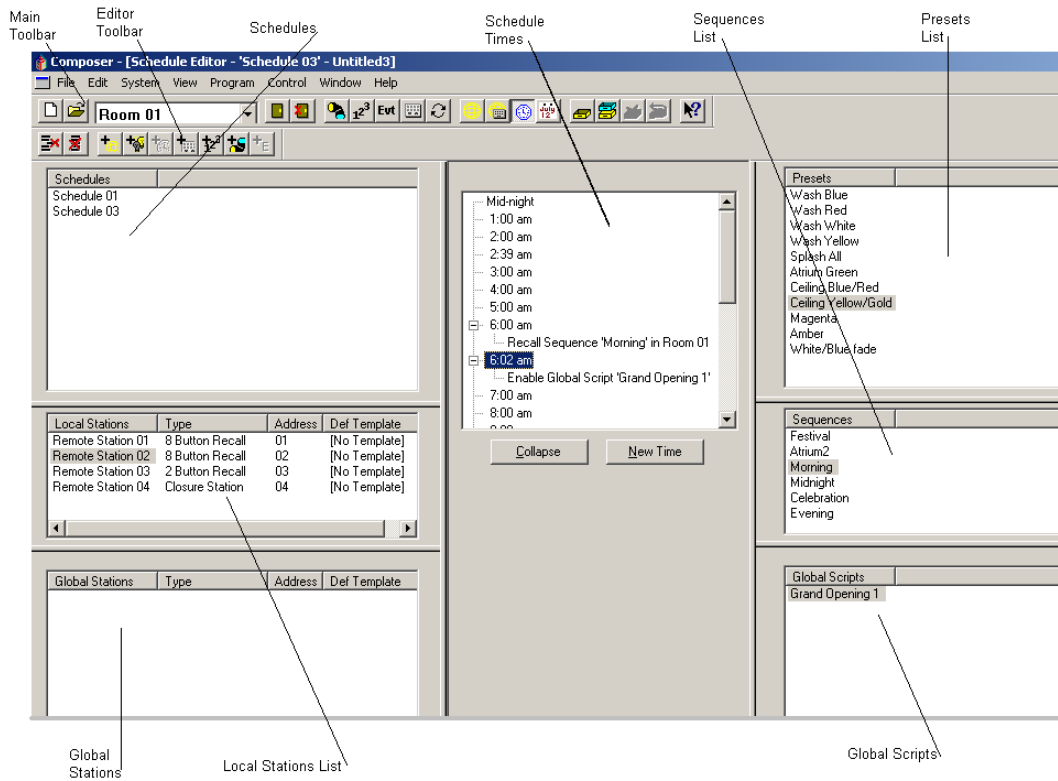
Schedules List

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

Scheduled Times Activities List

Drag and drop preset, sequences, remote station, or global script commands on the schedule time for which you want them to begin. The default time settings are all on the hour except for the sunrise/sunset features. To view the events assigned to a time, click on the plus (+) sign. Collapse the events for a specific time by clicking on the minus (-) sign. To schedule your event for a time

that is not displayed, click on the New Time button to create a new time. A secondary dialog appears to create the new time.

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.

Global Scripts list

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

Global Remote Stations List

As with presets and sequences, you will refer to your global remote control stations by name, with the names of configured stations shown in the Global Remote Stations list. Once you have more templates than will fit in the window, a scroll bar automatically appears.

Local Remote Stations List

As with presets, sequences, and global remote stations, you will refer to your local remote control stations by name, with the names of configured stations shown in the Local Remote Stations list. Once you have more templates than will fit in the window, a scroll bar automatically appears.

- 2:00 am
- 3:00 am
  - Unlock Station Remote
- 4:00 am
- 5:00 am
- 6:00 am
  - Recall Sequence 'Sequ

-
-
- **Expand** button displays activities assigned to scheduled time. Click on minus (-)

```
   2:00 am
 ⊞  3:00 am
   4:00 am
   5:00 am
 ⊞  6:00 am
```
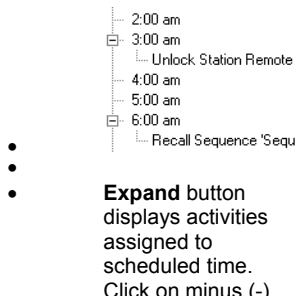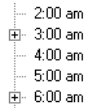
Collapse button hides activites list. Click on plus (+) sign to view scheduled

Collapse/Expand Button

Click here to collapse or expand the Scheduled Times events list. The scheduled events will appear under the time. A plus (+) sign shows you that there are events scheduled for that time. Click on the plus sign to expand the list. Click on the minus sign (-) to collapse the events for that time.

New Time Button

Click here to create a time that is not displayed in the Scheduled Times event list. The default time settings are all on the hour. Use the New Time dialog to create a time that is not displayed and add it to the Scheduled Times list.

Creating and Managing Schedules

Whenever the schedule tools are open a schedule is always selected as the active schedule. All editing activities apply to this selection. The rules for the active schedule are as follows:

- The name of the active schedule is highlighted in the Schedules list.

- When you select an existing schedule (by pointing and clicking on its name) that schedule becomes active.

- When you create a new schedule, the new schedule becomes active.

Creating New Schedule

1. Make sure that Composer application is running and that required project file is open and in correct room.

2. Make sure that schedule tools are open.

3. Select items and drag and drop them onto Scheduled Times activity list times. Items appear in activity list in expanded form.

4. Multiple rooms may be controlled from a single schedule by changing active room and dragging items onto schedule.
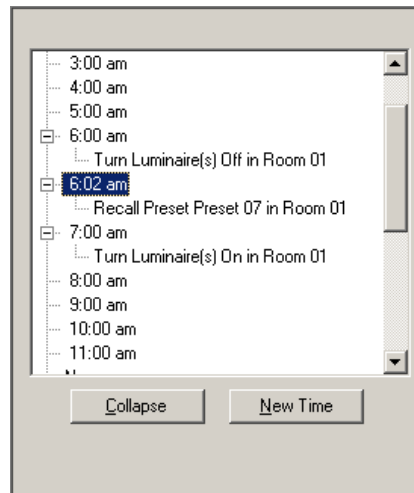
Alternately, click on desired editor toolbar station command button and complete associated dialogs.

CAUTION: Using ⏳ button clears all scheduled activities from entire schedule, not just those activities from a specific time.

---

4. Remove activities from activity list by clicking on schedule item and clicking 🗙 button.

    Remove all activities from entire schedule by clicking ⏳ button.

5. If desired schedule time is not on hour, or you wish to create new time, click New Time button. New Time dialog appears.
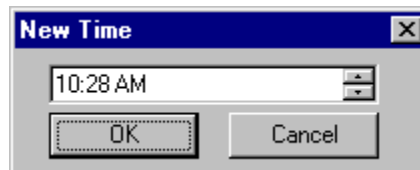
6. At New Time dialog data field, enter time for which schedule event is to begin or accept default time. (Default time is current time when dialog is opened.)

7. Click on OK to add new time. Time is added to activity list times.

8. Click or button to store schedule. Store Schedule Named… dialog appears.

Store Schedule As...

Schedule 01

OK   Cancel
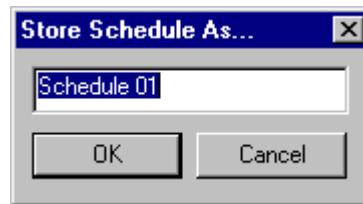
9. Enter schedule name or accept default name and click OK.

Editing Existing Schedule

1. Make sure that Composer application is running and that required project file is open.

2. At main toolbar, click button to open schedule tools.

3. At Schedules list, click on schedule name to be edited to make it active. Scheduled Times activity list appears for selected schedule.

4. Add actions by dragging and dropping or by using editor toolbar station command buttons.

5. Multiple rooms may be controlled from a single schedule by changing active room and dragging items onto schedule. Refer to Global Templates chapter for adding Global Scripts to Schedules.

6. Remove individual activities using button and clear all schedule assignments using button.

7. Store schedule.

   a. Click ⬛ button if you want to overwrite existing schedule. Overwrite warning dialog appears.
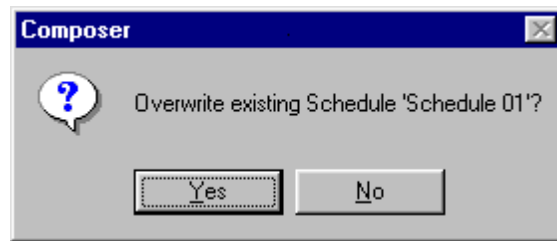
      At dialog box, click Yes to overwrite schedule. Click No to dismiss dialog and not overwrite schedule.

   b. If you do not want to overwrite existing schedule, click ⬛ button to store schedule as another name. Store Schedule As… dialog appears.
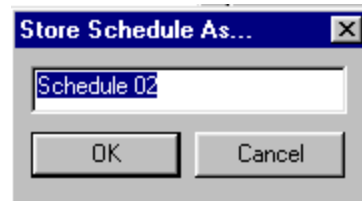
      Enter schedule name or accept default name and click OK.

Note: If you attempt to select different schedule after creating or changing another, Store Changes warning dialog appears.
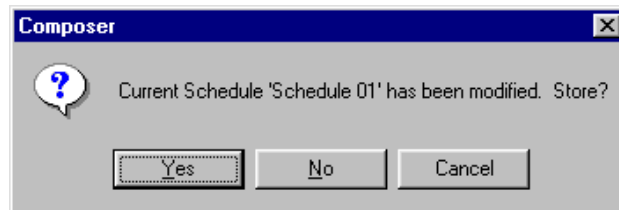
Click Yes to overwrite existing schedule. If you click No, overwrite warning dialog appears.

Deleting Schedules

Unlike other schedule operations, to delete a schedule you have to select it from the Schedules list. This can be done from any Composer application screen by selecting Schedules from View menu.

1. Make sure that Composer application is running and that required project file is open.

2. At Schedules list, select schedule to be deleted.

3. At main toolbar, click ![button] button. Alternately, click right mouse button to bring up mouse popup menu and select Delete Schedule. Deletion warning dialog appears.
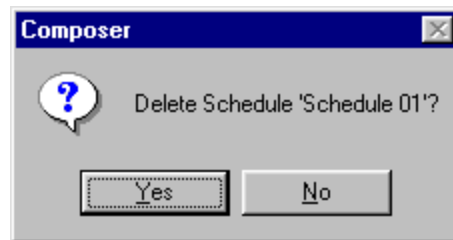
Click Yes to continue with delete. Click No to dismiss window and not delete template.

Click ![button] button to undo schedule deletion.

Assigning Templates

Template reassignment in a schedule is an effective way to fully utilize the Composer system's capabilities. When you assign a remote station command to the schedule you haven't made a physical assignment. Instead, you have scheduled the assignment for the future. When the clock/calendar is activated, the selected template will be assigned to the selected recall station at the scheduled date and time.

Note: For other recall station commands refer to Template chapter.

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Chapter 8. Calendar

The calendar contains schedules that can be assigned to occur on a regular or irregular basis. The schedules are dropped onto a weekly or monthly calendar. If schedules are not stored to the calendar, the schedules will not run.

Daily Repeating Schedules

The clock/calendar subsystem within the MCP, keeps track of the day, date and time. Because the subsystem knows whether it's Monday, Tuesday, or any other day, it is able to look up a daily schedule associated with the correct day.

Daily schedules are referred to as repeating, since they repeat every week without any intervention or rescheduling.

You can name your repeating schedules in any way that you like. An obvious method is to create a schedule with the name Monday, Tuesday, and so forth. With seven daily schedules, you can ensure that your lighting always behaves the way you want. Some simple systems use the same schedule for every day of the week. In this case, you can name the schedule "lighting" and assign it to all seven days. Similarly, you can create two schedules—one called "weekdays" and one called "weekends" with the goal of managing your facility during working versus resting days.

Special Days/Holidays

A special schedule is one that runs on a given date as opposed to a given day. You may build a schedule called "Christmas," for example, and then drop it onto December 25. Regardless of the day of the week that it falls on, the Christmas schedule will run on Christmas Day.

365-Day Calendar

The clock/calendar holds 365 days of schedule information. The year-long calendar is a rotating schedule, that is, new days appear in the future as old days fall away in the past.

Calendar Tools

Calendar Tools button on toolbar.

The calendar tools are the tools that you use to create and edit your system calendar, which is used to run stored schedules. 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 the calendar. The file contains your system configuration and all of the schedules that will be required to create the calendar.

Starting Calendar Tools

1. Make sure that Composer application is running and your lighting project file is open.

2. At main toolbar click button. Calendar tools screen appears.

    Alternately, from Program menu, choose Calendar.

Getting Familiar with Calendar Tools Screen

In addition to the main toolbar, the calendar tools contains two windows that open by default to allow for creating, editing, and maintaining your calendar:

- Schedules list

- Daily and Special Days calendars.
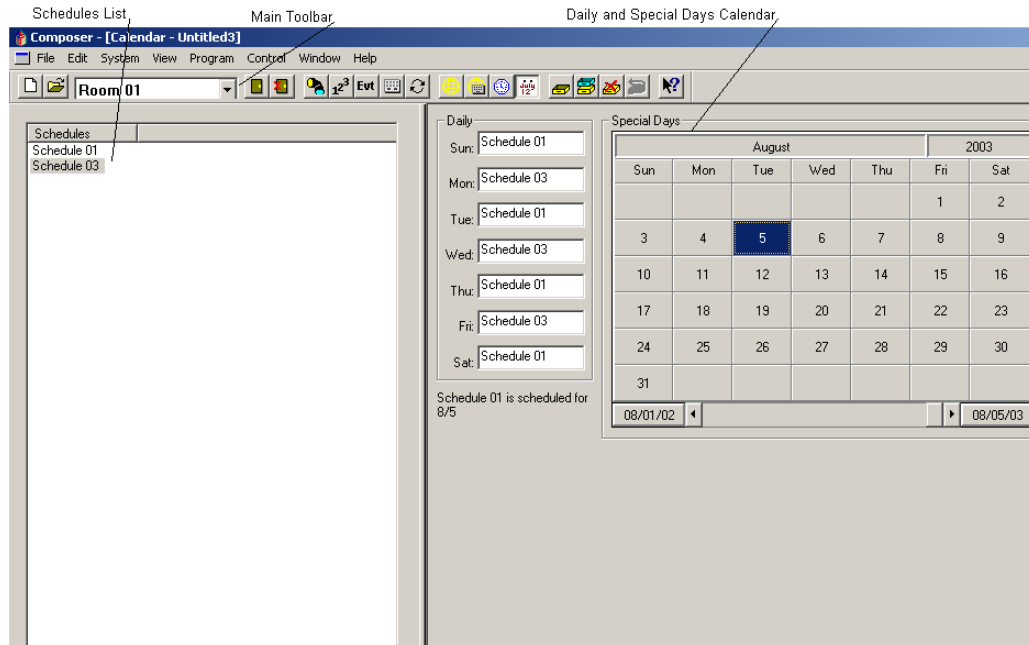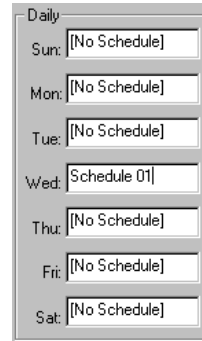
Schedules List

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

Daily and Special Days Calendar

The Daily calendar represents the seven fixed days of the week. You should assign your scheduled events that occur on a daily or regular basis onto this calendar. For example, if after business hours on every Friday you want to turn off all of the lights, you would assign the appropriate schedule to the Friday assignment of the Daily calendar.

```
┌─Daily──────────────────┐
│ Sun: [No Schedule]     │
│                        │
│ Mon: [No Schedule]     │
│                        │
│ Tue: [No Schedule]     │
│                        │
│ Wed: Schedule 01       │
│                        │
│ Thu: [No Schedule]     │
│                        │
│  Fri: [No Schedule]    │
│                        │
│ Sat: [No Schedule]     │
└────────────────────────┘
```

The Special Days calendar is used for schedules that will occur on a given date (as opposed to a day of the week). Special Days schedules do not repeat. When the assigned date for the schedule occurs, the schedule runs in place of the daily repeating schedule that would normally run for that day of the week. A text message located under the Daily calendar indicates what is assigned to the Special Days calendar. On that date, the special schedule will run instead of a repeating schedule that may be assigned to that day of the week.

Manipulating Calendar

You may select among days, months and years on the calendar device by manipulating the scroll control at the bottom of the display.
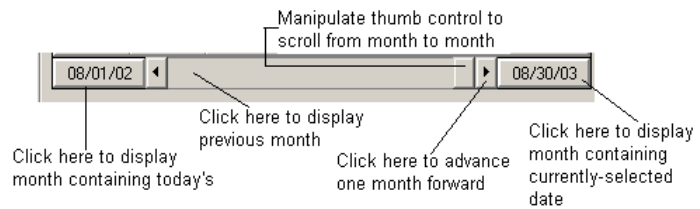
Creating Calendar

1. Make sure that Composer application is running and that required project file is open.

2. Make sure that calendar tools are open.

3. Select schedule and drag and drop it onto calendar.

   a. For daily or repeating schedules, drop schedule onto Daily calendar.

b. For singular or irregularly timed events, drop schedule onto Special Days calendar. Schedule name appears in field.

4. Drag and drop other schedules onto Daily or Special Days calendars. Once activities are dropped onto calendar, they are automatically stored. Special Days calendar will display days having schedule in yellow.

5. Delete schedule from Daily calendar by highlighting schedule name and then pressing keyboard Delete key. Delete schedule from Special Days calendar by clicking on day for which schedule is to be deleted and then pressing keyboard Delete key.

Chapter 9.
Manual Playback

Playback means to put all the pieces of your design together and to begin running the finished result, either automatically or manually.

You will often play back your design by turning control over to the scheduler, allowing the clock/calendar to specify which events will occur at what time.

You must transfer all programming data to the MCP. Then, the scheduler automatically takes over, assigning templates to remote control stations and activating any scheduled action.

Playback Tools

Playback Tools button on toolbar.

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.

Starting Playback Tools

1. Make sure that Composer application is running and your lighting project file is open.

2. At main toolbar <click> (Playback Tools) button. Playback tools screen appears.

    Alternately, from Program menu, choose Playback.

Getting Familiar with Playback Tools Screen

In addition to the main and playback toolbars, the playback tools contain windows that open by default to allow for playing back presets and sequences:

- Presets list

- Grid

- Playback Activity window

- Sequences list.

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.

Grid

The grid is a spreadsheet-like device that displays all of your programming data.

	Name	Adr.	Type	Int.	Focus			Color						Beam	Transition Times					
					Pan	Tilt	FP #	Blue	Amb.	Mag.	W1	W2	Gl		I	F	C	B	Time	
⚲	Luminaire 01	1	AR5/50 - COL/DIF	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 02	2	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 03	3	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 04	4	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 05	5	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 06	6	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 07	7	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□
⚲	Luminaire 08	8	AR5/50 - COL/INT	255	512	512	None	0	0	0	0	0	0	0	00:00	00:00	00:00	00:00	00:00	□

The programming data are listed at the top of the columns and the luminaire names and their parameter values are displayed on the left. Clicking on the cells of the spreadsheet allows you to edit the data in the cells without having to use the preset tools.

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.

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 playback 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.

5. At playback toolbar, <click> on ▶ (Playback Preset) button to playback preset. Progress of preset is displayed in Playback Activity window.
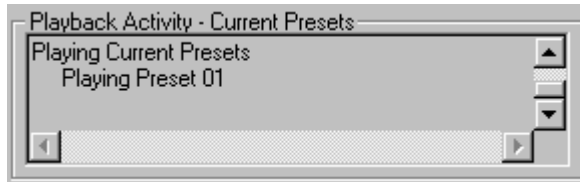
Sequence Playback

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 playback 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.

5. At playback toolbar, <click> on S▶ (Playback
    Sequence) button to playback sequence.
    Progress of sequence is displayed in Playback
    Activity window.

    Playback Activity - Sequence 'Sequence 01'
    Playing Preset 02 - Pause 1 second(s)
    Playing Preset 03 - Pause 1 second(s)
    Playing Preset 02 - Pause 1 second(s)
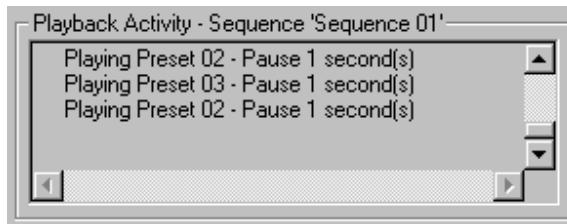
    To step through the sequence <click> ■
    (Stop) button, then <click> ▶▶ (Step Forward)
    and ◀◀ (Step Back) buttons.

    To advance to the end state of 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.

Synchronizing Lighting Devices

There may be times that your lighting system is operating on MCP data and not data from the Composer software running at the PC. This situation could occur, for instance, if a recall station button is pushed. When the recall station button is pushed, the MCP activates the action assigned to that button push. That lighting action most likely will not be what is currently running at the PC.

The easiest way to get your lighting system running from the PC accurately is to synchronize the luminaires. You use the playback toolbar [S] (Synchronize) button to synchronize the selected luminaires. When you push the [S] button, the Composer software selects all lighting devices in your room and then sends to them the current lighting parameter values displayed on the PC. This could be a specific preset setting that may be active, or it could be an interim lighting look that you were working on when you clicked on the [S] button.

The easiest way to avoid having your lighting system move to an authorized or untimely schedule event is to lock out all input to the MCP. This will allow you to program or edit your project file from the PC without having a remote control station command or button push change the lighting parameters you are setting at the PC. You can lock out all data input to the MCP (lock all communication from remote control stations and schedule) by <clicking> on the [🔒] (Lockout) button.

To synchronize luminaires:

1. Make sure that Composer application is running and that required project file and desired room are both open.

2. At playback toolbar, <click> on [S] button. All luminaires will move to parameter values displayed in grid.

Note: All luminaires in a room will be synchronized when button is clicked, not just selected or moving luminaires.

To lockout lighting system changes:

1. Make sure that Composer application is running and that required project file is open and correct room selected.

2. At playback toolbar, <click> on button. Composer system will now only allow data input from PC station.

Starting/Disabling Scheduler

When you download your room file to the MCP, your calendar schedules will begin to run automatically.

When active, the clock/calendar automatically triggers lighting events as they are scheduled. For as long as you have a schedule assigned to a calendar loaded in the MCP, the schedule will run. A Disable Schedule command should be assigned to a remote control station. Use of this command is the only way to stop a schedule once it is running.

Refer to chapter on Data Transfers and Backups for the procedure to download your project file to the MCP.

Chapter 10.
Data Transfers and Backups

There are several Composer software system operations, including transferring data to and from the MCP and backing up your project files.

After your lighting project file is complete, you must download your file to the MCP. The scheduler will automatically begin running, and continue to run uninterruptedly.

MCP Data Transfer Operations

There are several MCP operations that are activated from the Composer software:

- Download programming data to MCP.

- Retrieving data from MCP.

- Setting MCP clock/calendar from PC.

Downloading Programming Data to MCP

You must transfer your programming data to the MCP to initiate playback. Your MCP must possess its operating software, as well as the configuration and programming data that you develop, for playback. You may also wish to ensure that the date and time are set correctly, and to validate the behavior of your remote control stations.

As soon as all programming data have been transferred, the MCP automatically starts its schedule and waits for the first scheduled activity according to the current date and time.

There is no need to explicitly start the MCP system. As soon as all data are transferred successfully, you may disconnect the PC.
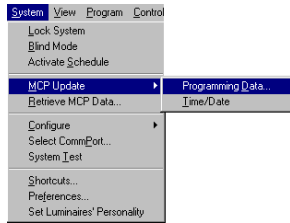
To transfer data to MCP:

1. Make sure that Composer application is running and your lighting project file is open.

2. At System menu, choose MCP Update. Then select Programming Data from drop-down menu. Transfer Data dialog appears.

3. <Click> on ⬚Start⬚ button to begin data transfer process. The data transfer progress bar dialog appears.

Note: You may stop transfer of data to MCP at any time by clicking ⬚Abort⬚ button.

4. When data transfer is complete, transfer complete dialog appears.
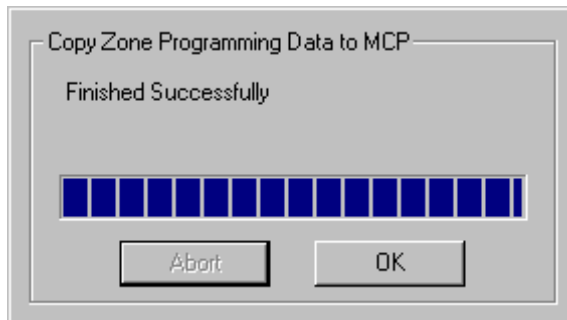
5. When transfer has finished successfully, <click> on OK.

Tip: Transfer time will vary depending on size of file. If your communications link is noisy, transfer may be slower. If transfer is very slow or appears to stop altogether, there may be something wrong with your data connection. Abort transfer and locate problem before proceeding.
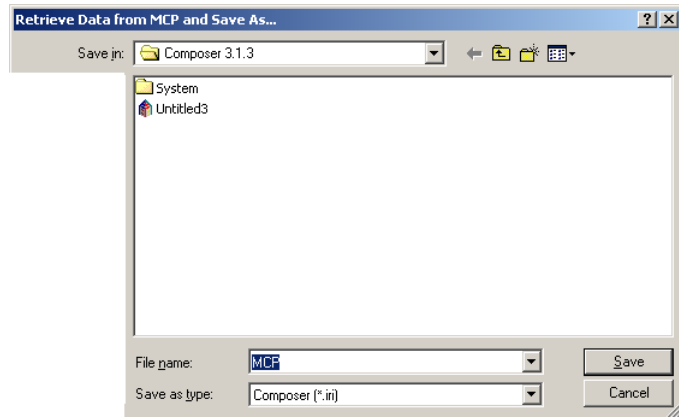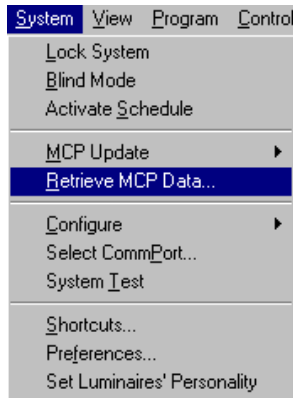
Retrieving Data From MCP

A project file can be retrieved from the MCP. This transaction is useful, for instance, if you have the Composer software loaded on more than one PC and want to download a project file to the other PCs. Once the data transfer is complete, the project file can be edited and re-stored to the MCP.

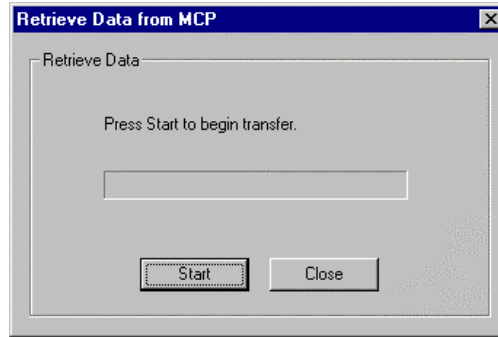**To retrieve data from the MCP:**

Note: Project file does not have to be open to update MCP time/date or retrieve MCP data.

1. Make sure that Composer application is running.

2. At System menu, choose Retrieve MCP Data… Retrieve Data from MCP and Save As… dialog appears.

Select appropriate directory and file name.

3. <Click> on [Save] button or press Enter. Retrieve Data from MCP dialog appears.

Retrieve Data from MCP

Retrieve Data

Press Start to begin transfer.

[Start]   [Close]

4. <Click> [Start] button to begin data transfer.

5. When data transfer is complete, the Retrieve Zone Programming Data from MCP dialog will display Finished Successfully. <Click> OK to dismiss dialog.

Retrieve Zone Programming Data from MCP

Retrieve Data

Finished Successfully

Transferred 10 blocks

[Abort]   [OK]
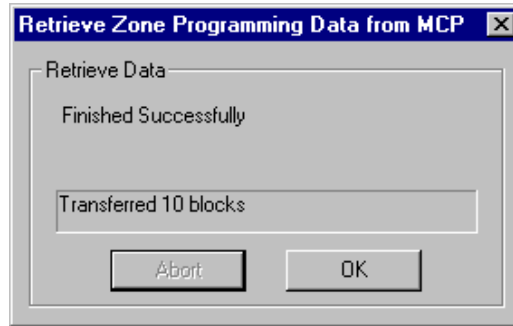
Setting Clock/Calendar From PC

It is important that the MCP know the correct date and time. You can set the MCP clock/calendar directly from your PC at any time.

**To set clock/calendar from PC:**

1. Make sure that Composer application is running.

2. At System menu, choose MCP Update. Then select Time/Date from drop-down menu. MCP is immediately updated. There will no confirmation displayed at PC.

3. At MCP front panel LCD, verify that time/date has updated to that of your PC.
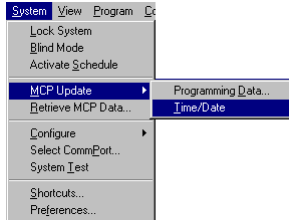
Backing Up Project Files

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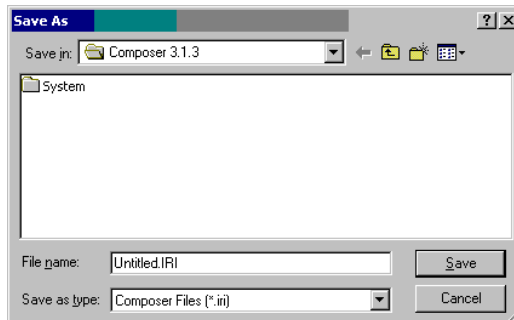
2. Navigate to drive where you want to store file (or select floppy diskette drive; usually A: drive) and assign name for file or accept default name.

3. <Click> Save to save file.

PC Shutdown and Disconnect

Once you have programmed your lighting system and are satisfied with its performance, you can disconnect your PC if you are using an MCP system.

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 serial connector.

4. At PC, disconnect other end of serial cable.

5. Shut down computer.