ColorPlay 3

Light show authoring software for iPlayer3
Version 1.4

User Guide

PHILIPS

Contents

Chapter 10: Configuring Shows

Chapter 11: Tutorial

Glossary

Index

Chapter 1

Introduction

Welcome to ColorPlay 3

ColorPlay®3 is the light show authoring software that controls the entire family of Philips SSLS professional light fixtures. Paired with the iPlayer®3 controller from Philips SSLS, ColorPlay 3 gives you the complete ability to tranforms spaces, achieve your design goals, and incite imagination.
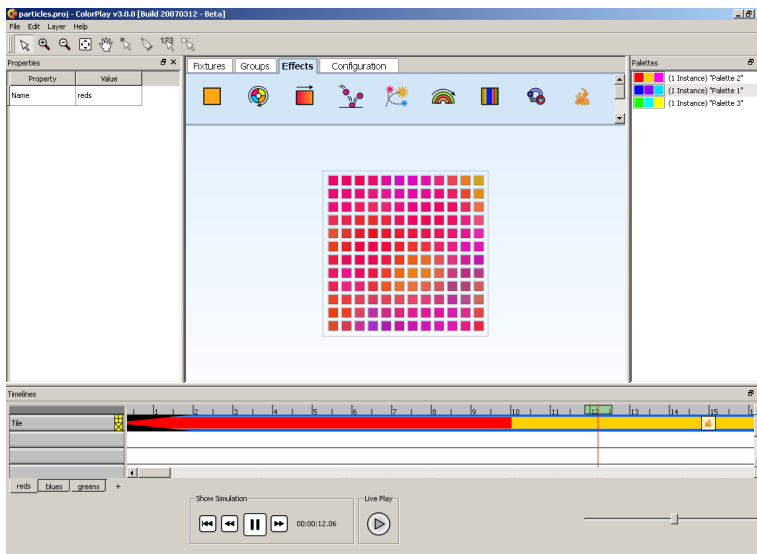
Key Features of ColorPlay 3

ColorPlay 3 enables you to create and manage color-changing light shows. With ColorPlay 3, you can:

- Create dynamic light shows and original lighting effects
- Perform visual effect editing either onscreen or live on a network of fixtures
- Download light shows to a controller and manage your show files remotely
- Manage multiple shows within each ColorPlay 3 project

ColorPlay 3 Design

Developed with an intuitive interface, ColorPlay 3 is intended to help you focus on the design and visual impact of your shows rather than setup. Using ColorPlay 3, you can create light shows without a lighting board, programming language expertise or specialized knowledge of the DMX512 protocol.

DMX512 Compatibility

Light shows designed with ColorPlay 3 are fully DMX512-compatible for use with all Philips Solid-State Lighting Solutions light fixtures.

What's New in ColorPlay 3

You'll find the following new features and improvements in ColorPlay 3:

- iPlayer 3 controller support
- Fully redesigned interface, with convenience features
- Seven new effects, including an editable particle effect
- Visual effect editing via *live* preview feature
- Custom color palettes
- Advanced properties editing
- Multiple shows per ColorPlay 3 project

About This Guide

This user guide contains step-by-step installation instructions, tutorials, and detailed information about all ColorPlay 3 features and commands. Note that ColorPlay 3 is a cross-platform software application – all functions are identical on compatible Mac OS and Windows® computer systems.

Technical Support Contacts

Contact Philips Solid-State Lighting Solutions' technical support if you experience problems with ColorPlay 3 software:

Phone

888.Full.RGB, press option 3 (toll free US, Canada and Mexico)

617.423.9999, press option 3 (toll worldwide)

Email

technicalsupport@colorkinetics.com

Web

www.colorkinetics.com/support/

Chapter 2

Installation

Installing ColorPlay 3

This chapter covers how to install the ColorPlay 3 software on compatible Windows® and Mac OS computer systems.

Before you install the ColorPlay 3 software, close all running applications, disable virus protection and ensure your computer meets the following system requirements.

System Requirements

Windows®	Mac OS
Windows® 2000 / XP / Vista	Mac OS 10.4 or greater
512 MB RAM	512 MB RAM
60 MB free disk space	60 MB free disk space
CD-ROM or DVD drive	CD-ROM or DVD drive

Note: The ColorPlay 3 Windows® installer automatically installs the device drivers necessary to use the iPlayer 3 in conjunction with ColorPlay 3. You must install the ColorPlay 3 software on your Windows® computer before connecting the iPlayer 3 to the USB port on the computer. Mac OS computers do not need device drivers to work in conjunction with the iPlayer 3.

Installing ColorPlay 3 for Windows®

1. Insert the ColorPlay 3 Software CD into the CD- or DVD-ROM drive.

2. Double-click Setup.exe located in the Windows folder on the ColorPlay 3 Software CD.

3. When the Welcome to the ColorPlay 3 Setup Wizard window appears, click Next to begin the installation.
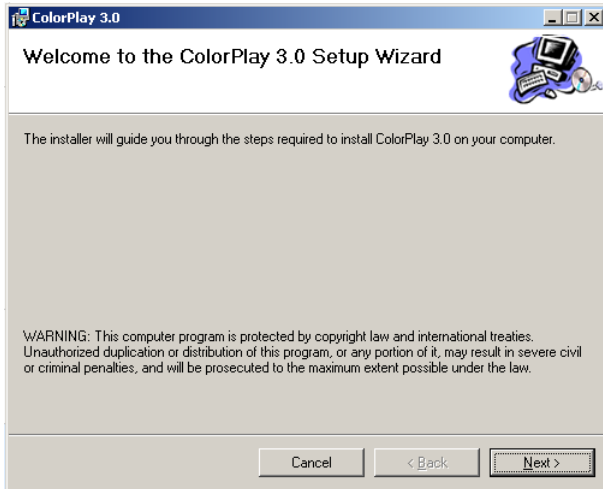
4. After reading the license agreement, select I Agree to consent to the terms of the license agreement and then click Next to continue.
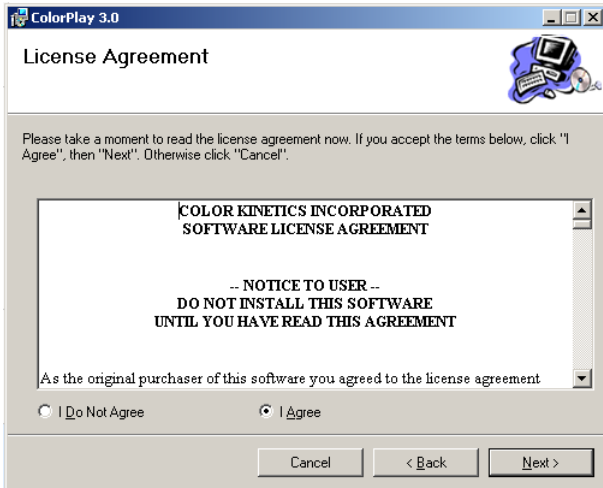
5. When the Select Installation Folder window appears, accept the default location
(`C:\Program Files\Philips SSLS\ColorPlay 3`), or click Browse to make your own
folder selection.
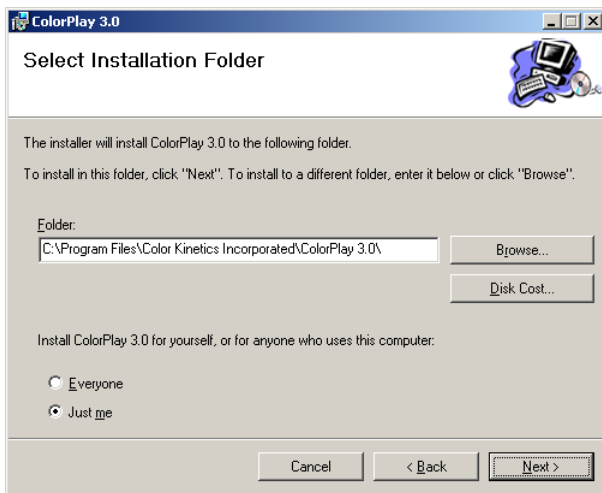
You can specify user permissions at the Select Installation Folder window. Accept the default
user permissions setting, Just Me, or select Everyone to allow all local users access to
ColorPlay 3.

Click Next to continue.

Note: If you are uncertain about the available space on your computer system, click
DISK COST to compare the available free hard drive space to the required drive space.

6. At the Confirm Selection screen, click Next to start ColorPlay 3 file installation.
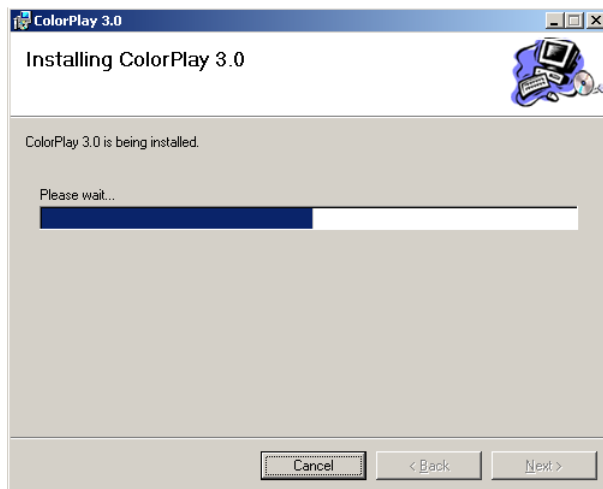
7. When the Installation Complete screen appears, click Close to exit the installation wizard.
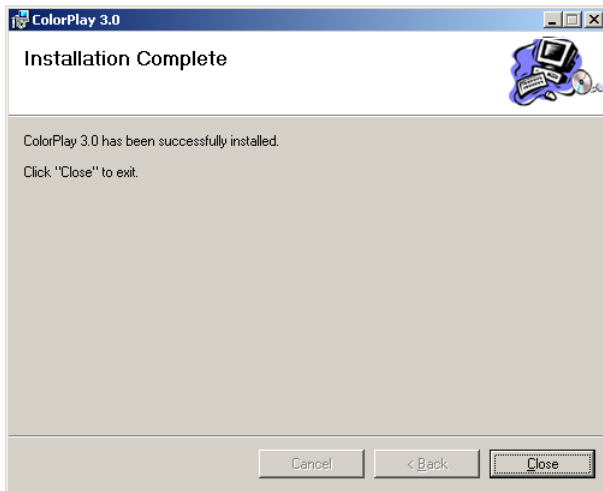
ColorPlay 3 is now installed on your computer system.

Installing ColorPlay 3 for Mac OS

1. Insert the ColorPlay 3 Software CD into the CD- or DVD-ROM drive. The ColorPlay 3 folder icon appears on your desktop.

1. Drag the ColorPlay 3 application icon from the Mac folder on the CD-ROM to the Applications folder on your computer.

2. ColorPlay 3 installation is complete

Note: The ColorPlay 3 license agreement will appear on-screen the first time you launch the application. Follow the instructions to consent to the terms of the license agreement before continuing.

Chapter 3

ColorPlay 3 Basics

ColorPlay 3 Basics

This chapter describes:

- Launching ColorPlay 3
- The components in a ColorPlay 3 light show
- The workflow from light show concept to implementation

Launching ColorPlay 3

To Start ColorPlay 3 in Windows®

Choose Start>Programs>Philips SSLS>ColorPlay 3>ColorPlay 3

To Start ColorPlay 3 in Mac OS

In the APPLICATIONS folder, ColorPlay 3 subfolder, double-click the ColorPlay 3 icon.

What's in a ColorPlay 3 Light Show

A light show is a set of digital instructions orchestrating how and when your installation produces illumination. Whether your light show is as simple as one fixture displaying a single color, or dozens of fixtures each with a unique effect or layers of effects, the goals are the same: to create mood, interest, and impact.

A ColorPlay 3 light show contains four main elements:

- *Fixtures* correspond to the physical layout of your installation
- *Groups* synchronize fixtures for node ordering and effects
- *Effects* are dynamic patterns of light applied to groups
- *Configuration* contains playback instructions

Workflow

Step 1: Map Fixtures

Each ColorPlay 3 show begins as a virtual map of light fixtures. To start designing your show, you must plot, or *map*, fixtures on a grid. The map represents your installation and enables ColorPlay 3 to send instructions to the iPlayer 3 controller operating your lights. (See *Chapter 5: Mapping* for details.)

Step 2: Arrange Groups

Next, you must arrange the mapped fixtures into groups. Groups coordinate the show, enabling you to rapidly select and move multiple fixtures, change node ordering to match your installation and assign effects across multiple fixtures simultaneously. (See *Chapter 6: Groups* for details.)

Step 3: Create Effects

After arranging groups, you can begin assigning effects. Each effect possesses editable properties, including color palettes, start time, duration, and more. Note that effects are applied to groups; to assign an effect to a fixture, that fixture must be part of a group. Note also that you can assign more than one effect to each group. (See *Chapter 7: Effects* for details.)

Step 4: Simulate and Test Your Light Show

Next, you simulate and refine your show with the *timeline editor*. The timeline editor contains multiple tracks, or *rows*, which enable you to quickly adjust effect properties, modify effect transitions, and manage multiple effects applied to the same group. The timeline editor contains the playback controls used for previewing your show on-screen or running your show live on installation fixtures. (See *Chapter 8: Timeline Editor* and *Chapter 9: Previewing Shows* for details.)

Step 5: Download Shows to a Controller

The final step in creating a ColorPlay 3 project has two stages: first you download your show files to an iPlayer 3 and then you configure your show playback instructions by creating triggers and alarms. (See *Chapter 10: Configuring Shows* for details.)

Chapter 4

The ColorPlay 3 Environment

Exploring the ColorPlay 3 Environment

The ColorPlay 3 environment contains the following main areas: the *mapping area*, the *properties panel,* the *color palettes panel*, and the *timeline editor*. This chapter will familiarize you with these areas and the controls contained in each, introduce you to ColorPlay 3 tools and menus, and help you understand the terminology used throughout this user guide.
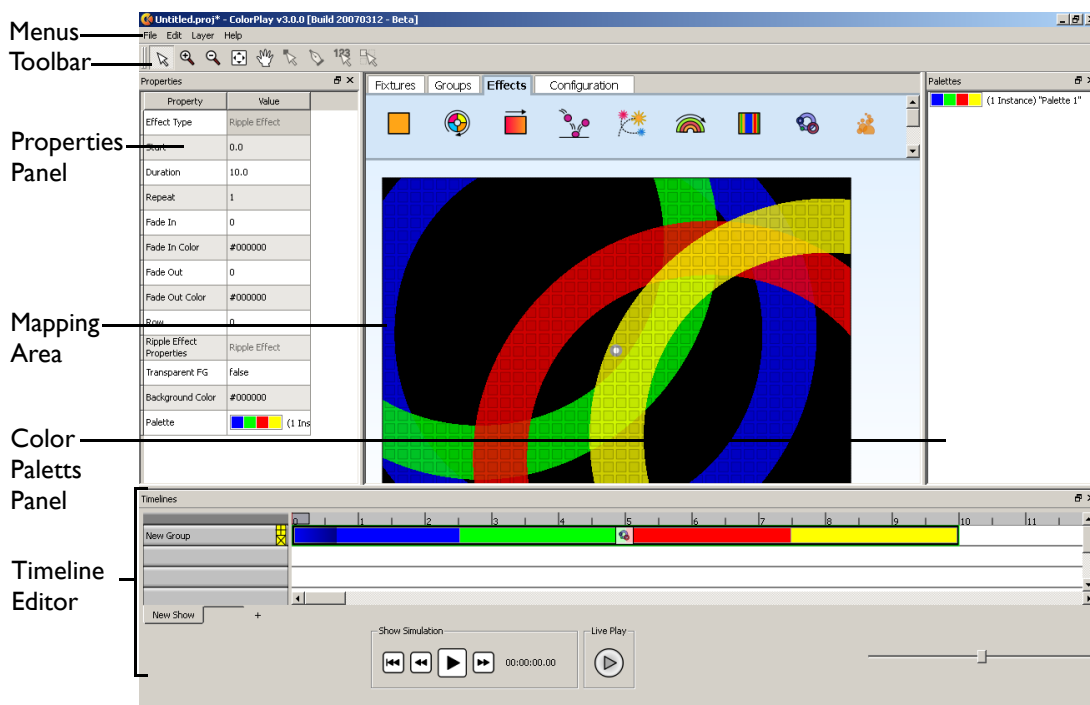
Mapping Area

The mapping area enables you to map virtual fixtures that correspond to your real-world layout, group those fixtures, assign effects, and view on-screen simulations of your shows.

The mapping area contains the following tabs, or *layers*:

*   **Fixtures** layer (see page 12)
*   **Groups** layer (see page 13)
*   **Effects** layer (see pages 14-15)
*   **Configuration** layer (see page 16)

Fixtures Layer

The *fixtures layer* appears by default when you launch ColorPlay 3. In the fixtures layer, you can map your installation by plotting fixtures on the mapping area.

Fixture Palette ——

Mapping Area —— Workspace
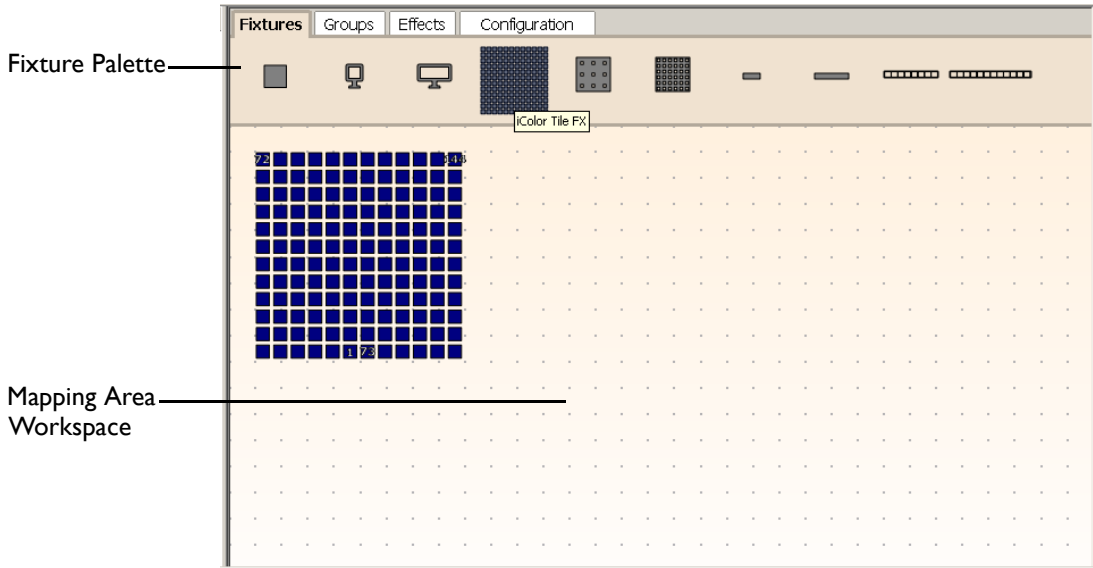
Fixture Palette

You can select from the following Philips SSLS light fixtures via the *fixture palette*:

	RECTANGULAR FXURE		ICOLOR MODULE FX 6:36
	COLORBLAST 6		ICOLOR COVE 6
	COLORBLAST 12		ICOLOR COVE 12
	ICOLOR TILE FX		COLORBLAZE 48
	ICOLOR MODULE FX 6:9		COLORBLAZE 72
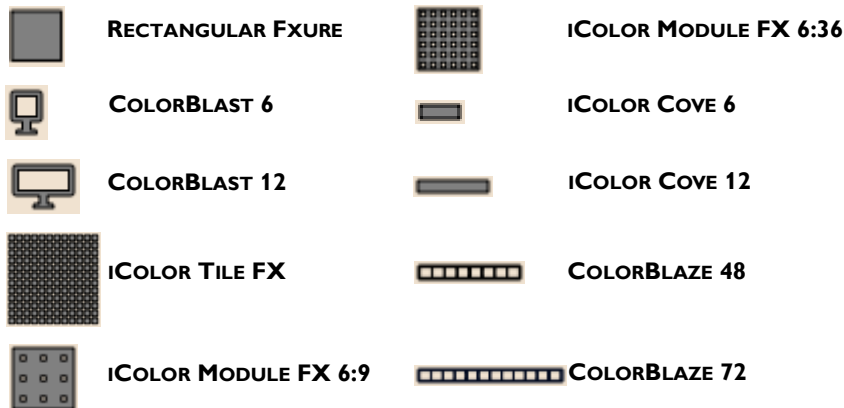
Note: If the particular fixture you are using is not shown in the fixture palette, choose the fixture that mostly closely matches the type of fixture in use.

Mapping Area Workspace

Fixtures placed on the mapping area workspace correspond to the layout of your real-world lights.

Fixture Properties Panel

The *fixtures properties panel* enables you to rename fixtures, reposition fixtures with precision and change fixture addresses.

Groups Layer

Click the Groups tab to open and display the *groups layer*. In the groups layer, you coordinate the show by assigning each fixture to a group, multiple fixtures to a group, or portions of fixtures to a group.

Fixture Palette —
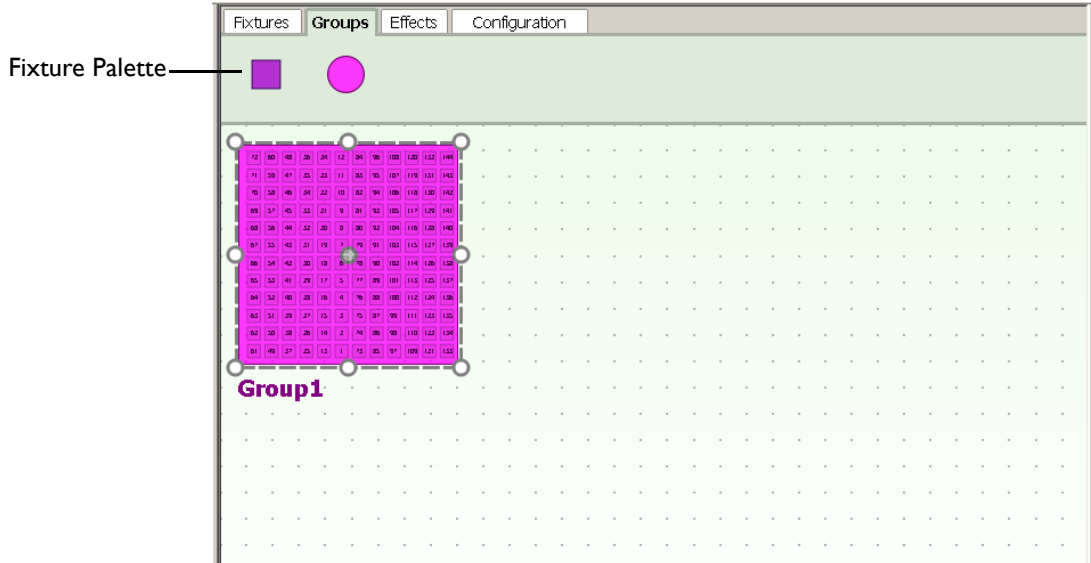
Group Palette

You can select from the following group types via the *group palette*:

New rectangular group icon

New circular group icon
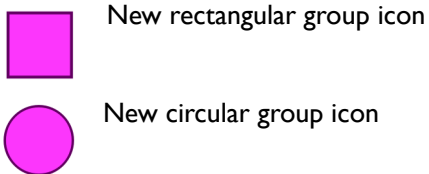
As needed, you can reposition the group shape icons in the group palette.

Group Properties Panel

The group properties panel allows you to rename groups and precisely reposition groups on the x/y axis of the mapping area.

Node Pattern Tool
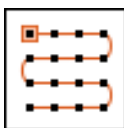
The *node pattern tool* enables you to select from a variety of preset node patterns, which change the starting node and directional sequence applied to certain effects, such as Streak.

Effects Layer

Click the Effects tab to open and display the *effects layer*. Using the effects layer, you can assign one or more effects to each group.

Effect Palette

Group1
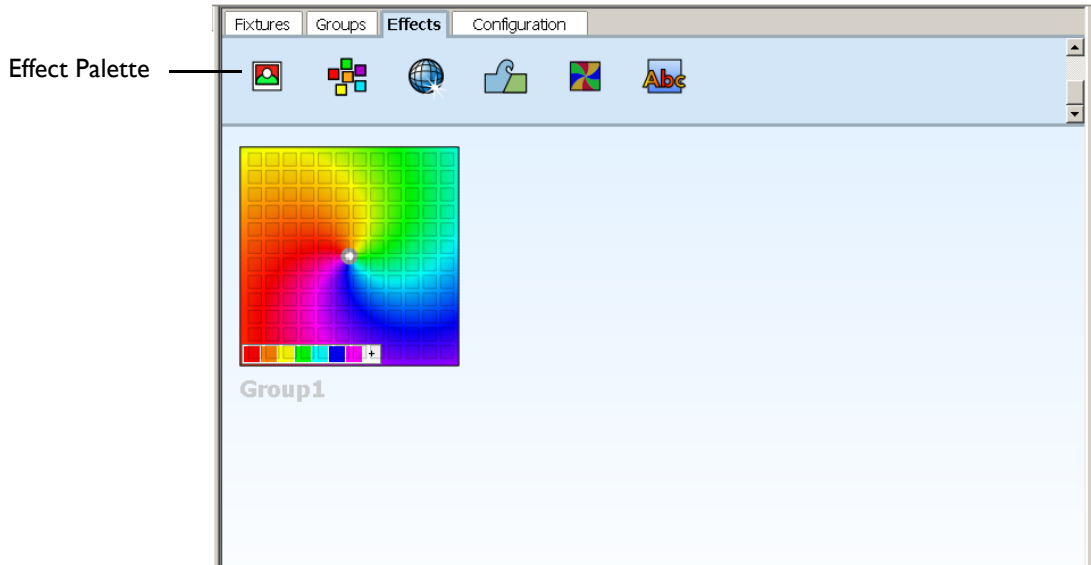
Effect Palette

You can choose from the following ColorPlay 3 effects in the *effect palette*:

Fixed Color		Chasing		Image Fade		Text	
Color Wash		Colored Bars		Random Color			
Cross Fade		Ripple		Strobe			
Streak		Particle		Sweep			
Sparkle		Burst		Spiral			
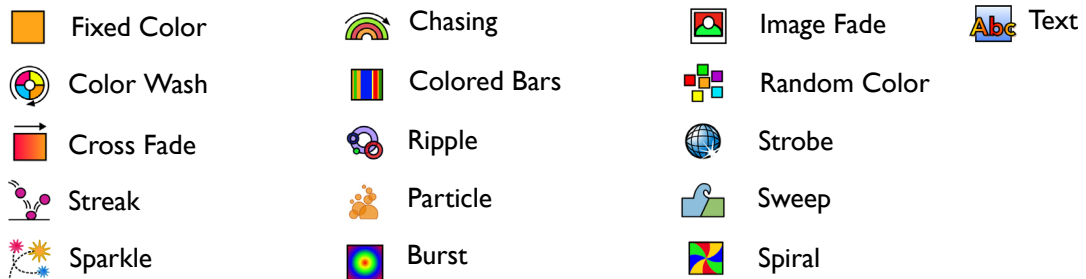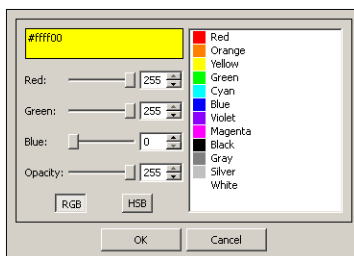
Color Picker

The *color picker* enables you to add, remove, and customize effect colors. There are 16 million possible colors from which to choose and also a transparency setting, which is used when stacking multiple effects onto the same group.

Color Palettes Panel

The *color palettes panel* stores the library of the color palettes associated with each effect. As you make changes to an effect by adding, removing, or customizing colors via the color picker, the color palettes panel updates automatically.

The color palettes panel also enables you to duplicate palettes, select all instances of effects in the show using the same palette and apply a palette across multiple effects simultaneously. All palettes in the color palettes panel are stored automatically when you save your ColorPlay 3 project.

Note: The palettes stored in the color palettes panel are available to all shows in a project.

Effect Properties Panel

The *effect properties panel* enables you to customize effects. You can change default effect properties including start time, duration, rate of repetition, transition parameters, and more. If an effect has unique properties, you can also adjust those settings via the properties panel. (See *A List of ColorPlay 3 Effects and their Properties* on pages 38-46 for details.)

Properties Disc
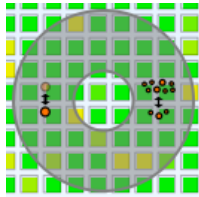
 Certain effects, such as the particle effect and spiral effect, have unique advanced properties. The *properties disc* appears when you mouse-over an effect with unique properties and enables you to customize those properties on-screen.

Effect Rotation

 Several ColorPlay 3 effects display a *rotation tool* when you mouse-over the focal point of the effect. You can change the direction of the effect by rotating the effect around its focal point using this tool.

Note: Some effects allow you to move the position of the focal point and alter the origin of the effect.

Configuration Layer

Connect Button
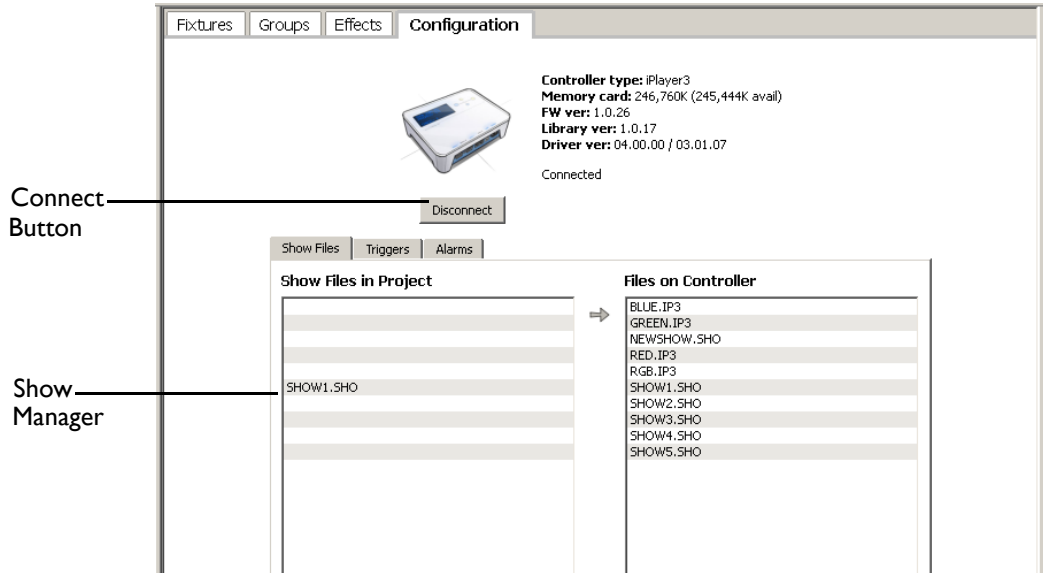
Show Manager

Click the Configuration tab to open and display the *configuration layer*. The configuration layer enables you to set up your shows for playback, download shows to a controller, manage remote files, and upload shows.

Selecting a Controller

By default, ColorPlay 3 is designed to work with the iPlayer 3.

Connecting to a Controller

ColorPlay 3 automatically detects the iPlayer 3 controller connected to your computer system and displays the connection state in the Configuration layer.

Working with Triggers

You can designate new triggers, edit triggers, duplicate triggers, and delete triggers in the *show manager*. You can also import and export trigger files in the show manager.

Show Manager

The *show manager* enables you to download shows, manage show files on a connected controller and upload shows.

Timeline Editor
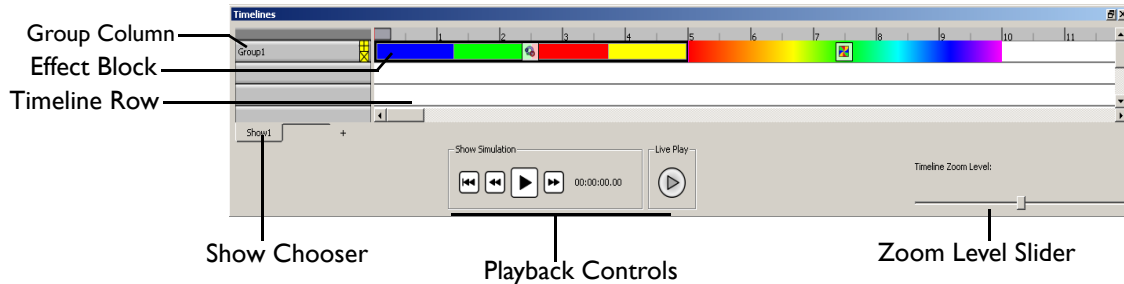
The *timeline editor* enables you to fine-tune effects and preview your shows. It contains the following areas: group column, timeline rows, simulation playback controls, and show chooser.

Group Column

When you create a new group, that group automatically appears in the *group column* of the timeline editor. You can easily rename, duplicate or delete a group in the group column. Note that each group in the column corresponds to one row on the timeline.

Timeline Rows

Each time you assign an effect to a group, an effect block automatically appears on the timeline row. Using the effect block, you can change the duration of the effect, move the starting frame, adjust effect transitions, and more. Mouse-over either end of an effect block to display the following controls:

The effect block *resize handles* enable you to shrink or stretch effect duration

The *transition handles* enable you to change how rapidly effects fade in/fade out. You can use the transition handles to turn Off effect transitions

Timeline Zoom Level Slider

For long-duration effects, you can use the timeline *zoom level slider* to resize the timeline scale for easier viewing.

Show Chooser

Each ColorPlay 3 project can contain multiple shows. Use the show chooser to add or delete a show. Each time you add a show, a new tab appears on the *show chooser*. Click the show tabs to switch between shows and right-click to delete a show.

Double-click to rename a show.

Simulation Playback Controls

You can control on-screen or live playback of a show using the following playback controls:

Control	What it Does
▶ **Play**	Play the current show
⏸ **Pause**	Pause the current show
⏩ **Fast Forward**	Fast forward through the current show
⏪ **Fast Reverse**	Fast reverse through the current show
⏮ **Jump to Start**	Jump to the beginning of the show
▭ **Show Playhead**	Control frame-by-frame playback
▷ **Live Play**	Connect to a controller for playback on your physical fixture layout. Once connected, use the playback controls listed above

Toolbar
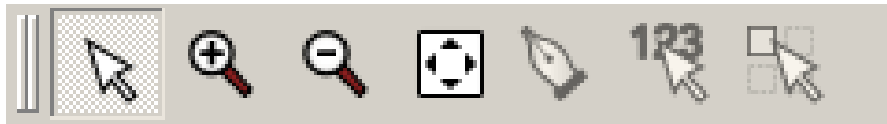
The *pointer* is the default tool in ColorPlay 3. When the pointer is active, ColorPlay 3 is in selection mode. Click on any tool to make that tool active, and then, when finished with the tool, click on the pointer button in the toolbar to return to selection mode.

Pointer

Use the pointer to make menu selections, select and move objects, click icon buttons and more.

Zoom In

With the zoom in tool selected, click the mapping grid to zoom in.

Zoom Out

With the zoom out tool selected, click the mapping area to zoom out.

Zoom To Fit

Click the zoom to fit tool to automatically resize the mapping area, displaying all fixtures and groups.

Drag Layer

Using the drag layer tool, you can click and then drag the mapping area to reposition it on-screen.

Change Node Order

The change node order tool is available in the groups layer. With the change node order tool active, click individual nodes to manually designate a node order. Continue clicking to assign the rest of the nodes.

Clone Fixture

The clone fixtures tool is available in the Fixtures layer. With the clone fixtures tool active, click a fixture and then drag to create multiple instances of that fixture.

Menus
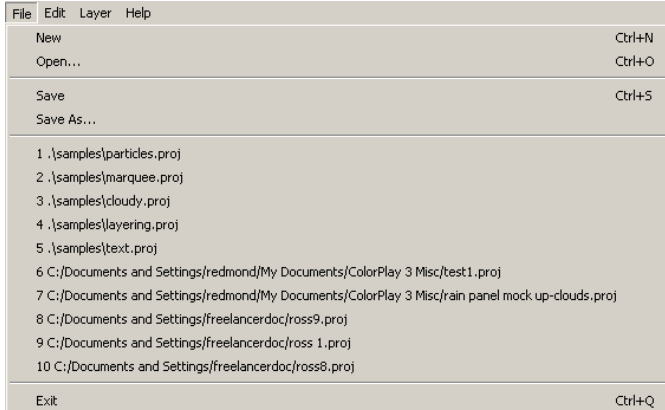
FILE MENU	ALLOWS YOU TO
New	Create a new ColorPlay 3 show
Open...	Open an existing show
Save	Save the current show
Save As...	Save your show to a location
Save Controller Image*	Copy and save an image of the SD flash memory card on the iPlayer 3 controller to a file on your computer system.
Load Disk Image*	Load an existing SD Card image from your computer system (imports triggers and alarms into current project)
Exit	Quit and exit the application

* Menu option available in the Configuration layer.

EDIT MENU	ALLOWS YOU TO
Undo	Undo the last command
Redo	Redo the last command
Cut	Remove the selection and copy it to the clipboard
Copy	Copy the selected object to the clipboard
Paste	Insert the object from the clipboard
Delete	Remove the selected object
Select All	Make multiple selections
Preferences	Edit ColorPlay 3 appearance and actions. See page 22, *Editing ColorPlay 3 Preferences*

LAYER MENU	ALLOWS YOU TO
Fixtures	Open the Fixtures layer
Groups	Open the Groups layer
Effects	Open the Effects layer
Configuration	Open the Configuration layer

HELP MENU	ALLOWS YOU TO
Help Contents	Launch online Help
Keyboard Shortcuts	View a list of ColorPlay 3 hotkeys
About	View version information

Keyboard Shortcuts

CONTROL	ACTION
P	Pointer tool
[+]	Zoom in tool
[-]	Zoom out tool
F5	Zoom-to-fit tool
H	Drag layer tool
O	Change Node Order tool
Ctrl + Spacebar	Zoom in
Ctrl + Alt + Spacebar	Zoom out
Spacebar	Drag layer
F7	Render current show
F1	Open Help contents
Ctrl + Z	Undo
Ctrl + Y	Redo
Ctrl + N	New show
Ctrl + O	Open show
Ctrl + S	Save the current show
Ctrl + Q	Quit and exit ColorPlay 3

Standard Shortcuts

Fixtures Layer Shortcuts

CONTROL	ACTION
C + click & drag	Clone fixture
Shift + click on fixtures	Select multiple fixtures

Groups Layer Shortcuts

CONTROL	ACTION
Alt + click	Select group below currently selected group

Timeline Editor Shortcuts

CONTROL	ACTION
Double-click effect	Autofill available timeline space
Shift + click multiple effects	Select multiple effects
Shift + drag effect's right resize handle	Move the right-bordering fixture while resizing

Editing ColorPlay 3 Preferences

Preferences are the values applied to a feature, command,or tool each time it is used. ColorPlay 3 lets you customize these values to meet your individual preferences.

To open the Preferences dialog box, choose EDIT>PREFERENCES.
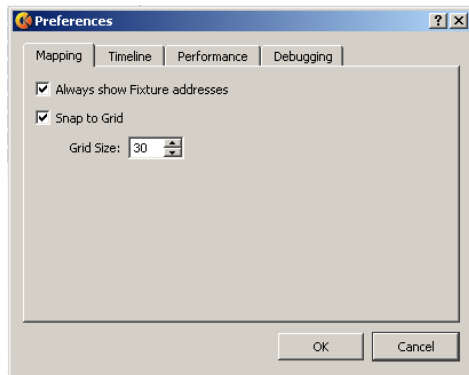
ColorPlay 3 preferences fall under the following groups, represented by tabs: mapping, timeline, and performance. Click a tab to open a group. Click OK within a tab to save your changes or click CANCEL to exit.

TIMELINE PREFERENCE	WHAT IT DOES
Loop While Simulating	Use the checkbox to enable or disable show looping

MAPPING PREFERENCE	WHAT IT DOES
Always Show Fixture Addresses	Use the checkbox to show or hide the fixture addresses
Snap to Grid	Use the checkbox to enable or disable fixture and group snap to grid
Grid Size	Enter a size for the mapping area

Chapter 5

Mapping

The Mapping Process

Building a light map is the first step in creating a ColorPlay 3 light show. This chapter will guide you through the process of creating light maps, customizing fixture properties, and understanding how fixture addresses correspond to your real-world installation.

Displaying the Fixture Layer
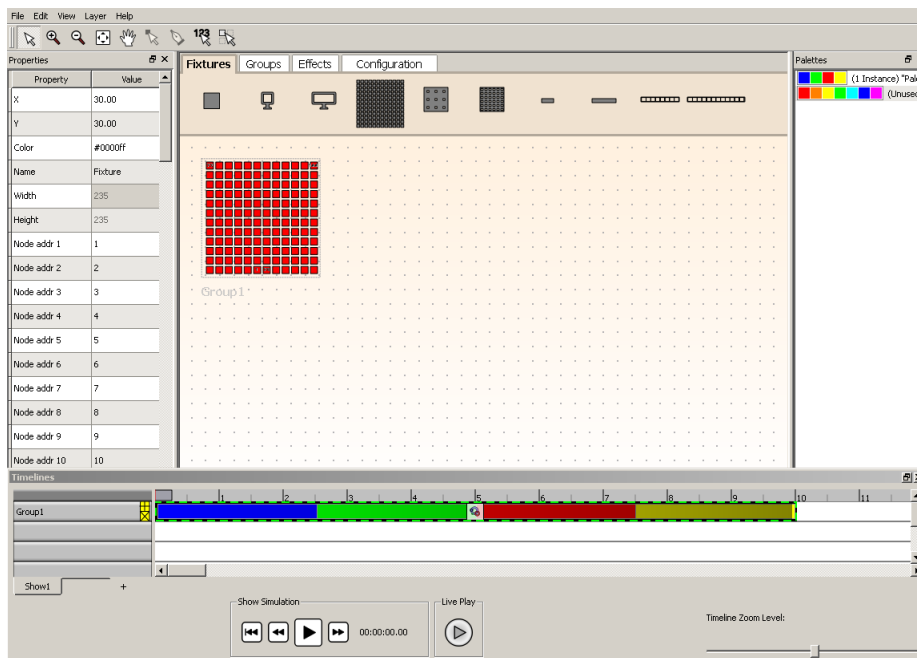
When launched, ColorPlay 3 displays the fixture layer by default. You use the fixture layer mapping area to create a virtual representation of your fixtures—the type, quantity, and layout. As you are working in ColorPlay 3, you can return to the fixture layer at any time by clicking the Fixtures tab or by selecting LAYER>FIXTURES.

Mapping Your Fixtures

Light maps enable ColorPlay 3 to create the instructions used by the iPlayer 3 controlling your installation. Mapping fixtures is as easy as dragging and dropping fixture icons from the fixture palette to the mapping area and then configuring fixture addresses.

Note: When creating a light map, to ensure that the show you create on the mapping area matches the live output on your physical fixtures, the ColorPlay 3 fixture addresses must correspond with the addresses of your physical layout. Refer to the light fixture User Guides for instructions on addressing the Philips SSLS fixtures in your layout.

Mapping Light Fixtures

1. Drag-and-drop a fixture icon from the fixture palette onto the mapping area.

2. Continue adding fixture icons until you have completed your light map.

3. As needed, change the fixture addresses to match your installation (see below).

   Each time you place a fixture icon on the mapping area, ColorPlay 3 automatically assigns the next available *fixture address*. You must map each fixture icon to match the corresponding physical light in your layout.

Changing a Fixture Address in ColorPlay 3

1. Select a light fixture.

2. In the properties panel, click the **Node Addr** property field.

3. Enter the value corresponding to the fixture address or DMX channel number used in your installation.

Working with Fixtures

Selecting Fixtures

Click any fixture icon on the mapping area to select that fixture. The selected fixture will then appear highlighted in red. You can easily select multiple fixtures:

- [Shift] + click or drag a rectangle around multiple fixture icons
- [Ctrl] + [A] to select all fixtures

Moving Fixtures

To move a fixture, select a fixture icon, and then drag that fixture icon. You can move multiple fixtures simultaneously:

- [Shift] + click or drag a rectangle around multiple fixture icons, and then drag to move
- [Ctrl] + [A] to select all fixtures, and then drag

Cloning Fixtures

You can easily duplicate light fixtures in ColorPlay 3:

- Press and hold the [C] key, then click and drag
- Select the clone fixture tool, then click and drag

Deleting Fixtures

Click a fixture and then select EDIT>DELETE.

Associating a Fixture with an iPlayer 3 Output Port

By default, ColorPlay 3 assigns fixtures to iPlayer 3 output port 1. To change the output port associated with one or more fixtures:

1. Right-click one or more fixtures

2. Select ASSOCIATE...

3. Select a port from the list

4. Click OK

Note: Port associations are color-coded. If a fixture is associated with port 1, the fixture will appear as one color in the mapping area. If a fixture is associated with port 2, that fixture will appear as a different color in the mapping area.

Editing Fixture Properties

Select a fixture icon to display that fixture's settings in the properties panel. You can use the properties panel to move the fixture position, change the default name and configure the fixture address. Note that some properties are fixed and for viewing only.

Naming a Fixture

Name	Fixture

Each fixture receives the default name 'fixture'. To change the fixture name, first select the fixture and then enter a new name in the **Name** property field.

Setting the Fixture Address

Node addr 1	146

As you add fixtures to the grid, each fixture receives the next available fixture address. To change the fixture address, first select the fixture and then enter a new number in the **Node addr** property field(s).

Understanding DMX Channel Numbers and Fixture Addresses

Every Philips SSLS light fixture has a *DMX channel number*, also called a *DMX address*, which is typically set when a fixture is installed. Each fixture actually listens to three sequential DMX channels: one for red, one for green and one for blue. However, the DMX channel number only refers to the first of the three channels.

To properly map your installation, the DMX channel number of the physical fixture must correspond to the fixture address assigned in ColorPlay 3.

As you add fixture icons to the mapping area, ColorPlay 3 automatically assigns the next available fixture address to each light. The following table shows examples of the DMX channels that correspond to each ColorPlay 3 fixture address.

FIXTURE ADDRESS	DMX CHANNEL NUMBER
1	1
2	4
3	7
4	10
5	13
6	16
7	19
...	...

Chapter 6

Groups

Creating Light Groups

Once you have mapped your fixtures, creating light groups is the second step in the show design process. This chapter will guide you through the process of creating groups, working with groups and customizing groups.
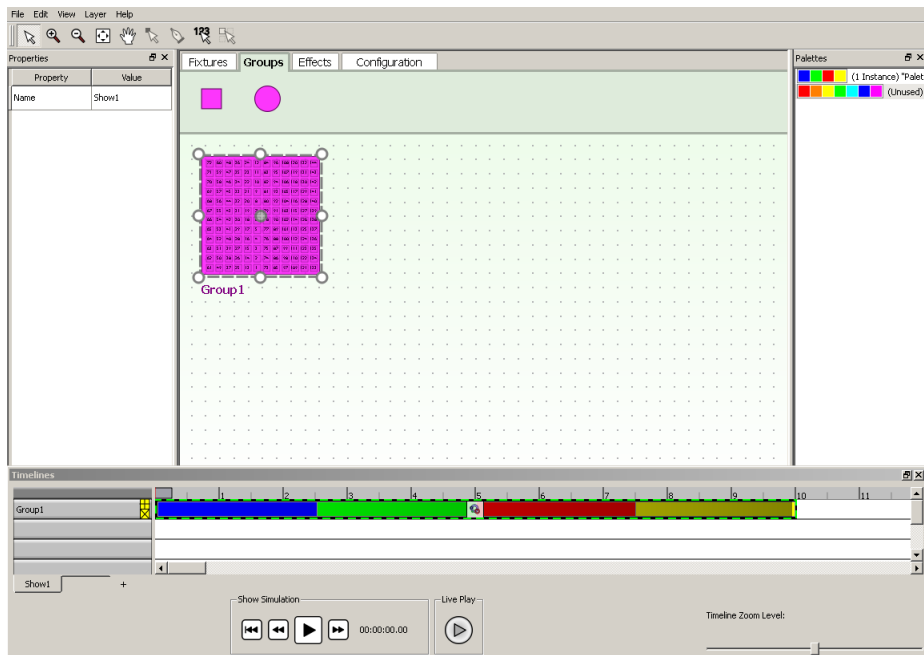
After mapping your installation, click the Groups tab to display the Groups layer. You can return to the Groups layer at any time by clicking the Groups tab or by selecting LAYER> GROUPS.

Creating New Groups

1. Drag-and-drop, or double-click, a group icon from the group palette onto the mapping area. You can select from multiple group shapes.

2. Drag the group over one or more fixtures, or resize the group using the resize handles to cover multiple fixtures (see below, *Resizing a Group*).

Working with Groups

Selecting a Group

If you only have placed one group on the mapping area, that group is always selected. With multiple groups present on the mapping area, click any group shape to select that group. The selected group will appear shaded in magenta. Note that you can only select one group at a time.

Moving a Group

You can click anywhere on the shaded area of a group and then drag to reposition that group.

Resizing a Group
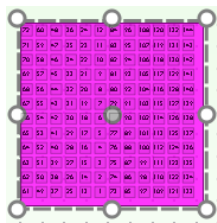
You can click and drag any of a group's perimeter handles to resize that group. Drag the middle handles to resize either horizontal or vertical scale. Drag a corner handle to resize both horizontal and vertical scale at the same time.

Note: Press [Shift] while dragging a corner handle to maintain the group's proportions.

Duplicating a Group

You can easily duplicate lights in ColorPlay 3:

- Press and hold the [C] key, then click and drag a group to duplicate that fixture once or in multiple.

- Right-click a group and then select **Duplicate**.

Deleting a Group

- Click a group and then select EDIT>DELETE to permanently delete that group.

- Right-click a group and then select **Delete**.

Editing Group Properties

Select a group to display that group's settings in the properties panel. You can use the group panel to change the group position and default name.

Naming a Group

Each group receives a default name. To change the group name, first select the group and then enter a new name in the **Name** property field.

Moving a Group via Group Properties

You can move a group via the properties panel. Click the **X** property field and then enter a new value to change the group's horizontal position on the mapping area. Click the **Y** property field and then enter a new value to change the group's vertical position.

Setting Node Order

Node Ordering Mode

Click the *node ordering mode tool* to enter node ordering mode. In node ordering mode, the group color changes from magenta to blue; you can click individual nodes to manually change their node values. Continue clicking on nodes to create a node order. When finished, click the pointer tool to return to selection mode.

Using the Node Pattern Tool
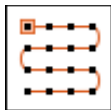
The *node pattern tool* appears when you mouse-over the upper-left corner of a group. The node pattern tool enables you to select from a variety of pre-set node patterns, which change the starting node and directional sequence applied to certain effects, such as Streak.

Note: Click a corner of the node pattern tool to change the designated starting node.

Removing Odd-Numbered Nodes

Within a group, you can exclude odd-numbered nodes/fixtures covered by that group:

1. Right-click a group

2. Select REMOVE ODD NUMBERED NODES

Removing Even-Numbered Nodes

Within a group, you can exiled even-numbered nodes/fixtures covered by that group:

1. Right-click a group

2. Select REMOVE EVEN NUMBERED NODES

Using the Drag Layer Tool

The drag layer tool helps you pan the mapping area. With the pointer tool over the mapping area, press and hold the [Spacebar] to activate the drag layer tool. With the drag layer tool active, click and drag to reposition the mapping area view. Release the [Spacebar] to return to selection mode.

You can also press the zoom to fit keyboard shortcut, the [F5] key, to automatically resize the mapping area to show all fixtures, groups and effects.

Saving Your Work

To save your progress, select FILE>SAVE.

Chapter 7

Effects

Creating and Working with Effects

Creating effects is the third step in the show design process. This chapter covers assigning effects, working with effects, and effect customization. For details on advanced techniques such as effect stacking and effect layering, see *Chapter 8, Timeline Editor*.

Displaying the Effects Layer
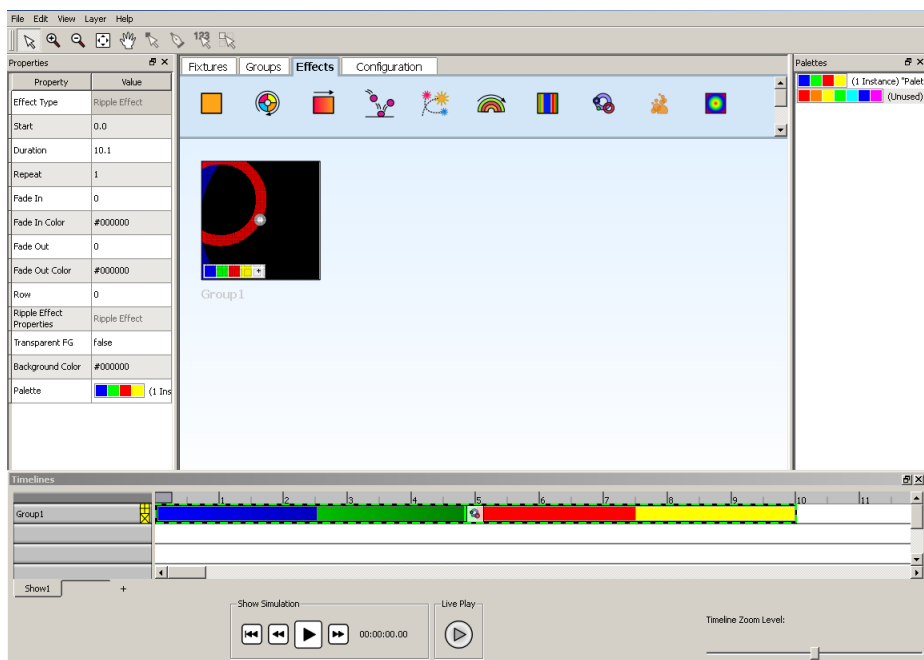
After creating groups, click the Effects tab to display the Effects layer.

You can return to the effects layer at any time by selecting an effect block in the timeline editor, by clicking the Effects tab, or by choosing LAYER>EFFECTS.

Creating Effects

Each effect you assign possesses multiple editable properties.

Note: All effects are applied to groups; to assign an effect to a fixture, that fixture must be part of a group.

Assigning Effects

There are two ways to assign effects:

a) Drag-and-drop an effect icon from the effect palette to a group on the mapping area. You can select from 16 unique effects. Note that you can also double-click an effect icon to automatically assign that effect to the most recent group on the mapping area.

b) Drag-and-drop an effect icon onto a timeline row in the timeline editor. Note that the timeline row must correspond to a group in the group column.

Note: You can customize placement of effect icons within the effect palette. For example, if plan to frequently use the Text effect in your project, you can drag-and-drop that icon to the far left of the effect palette for quick access.

Working with Effects

Selecting an Effect

To select an effect, click the effect block in the timeline editor. Once selected, you can customize group properties, change the effect priority, and more.

Cutting, Copying, and Pasting Effects

- Select an effect and then choose EDIT>CUT to remove an effect from a group and place it on the clipboard.
- Select an effect and then choose EDIT>COPY to duplicate an effect and place it on the clipboard.
- Select a group and then choose EDIT>PASTE to assign an effect from the clipboard to a group.

Deleting an Effect

To delete an effect, select the effect and then choose EDIT>DELETE.

Customizing Effect Properties

There are multiple techniques for editing the appearance and behavior of an effect: you can use the properties panel, the properties disc, the color picker, the color palettes panel, or the effect block in the timeline editor. To view effect properties and on-screen controls in detail, see *A List of ColorPlay 3 Effects and Their Properties* on pages **38-46**.

Using the Properties Panel

•Each effect has editable properties. Select an effect to display that effect's property values in the properties panel. You can use the properties panel to change the standard effect properties, which include the following: start time, duration, repeat, fade in interval, fade in color, fade out interval, and fade out color.

Note: Some properties are fixed and for viewing only.

Editing Effect Properties

To modify an effect property, click the corresponding field and enter a new value. For example, to change the effect duration (the length of time, in seconds, for one complete cycle of the effect), click the **Duration** field and then enter a new value.

Editing Advanced Effect Properties

Some effects have advanced, editable properties. For example, you can customize the character **Height** value of the Text effect. Modifying an advanced property value is the same as modifying a standard property value.

Using the Properties Disc

Focal Point

Advanced Property Controls
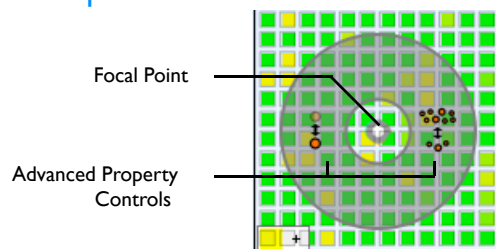
The properties disc provides on-screen control of advanced properties, for the effects that have them. To display the properties disc, mouse-over the focal point of the effect. Then, you can use the properties disc controls:

1. Move the pointer over the slider, toggle control, or rotation arrow within the disc.

2. Drag the arrow slider *OR* click to toggle the property On/Off *OR* drag the rotate tool.

Effect Colors

Using the Color Picker

Every effect lets you specify at least one color, and most effects let you specify multiple colors. An effect's color scheme is called its *color palette*. You can change the color palette via the color picker, which gives you over 16 million color choices.

Adding a Color to an Effect
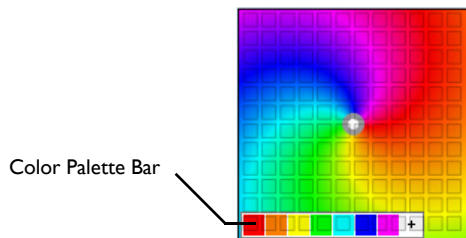
Color Palette Bar

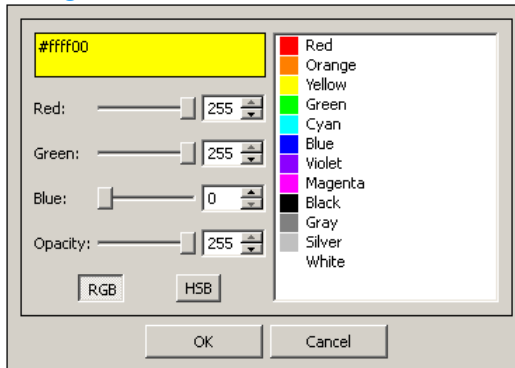1. Select the effect block in the timeline editor.
2. On the effect in the mapping area, click the color palette bar [+] symbol to add a new color.
3. When the color picker dialog opens, do one of the following to specify a color:
- Click a color swatch
- Enter red, green, and blue values, from 0 to 255.
- Click HSB to open the advanced color picker
4. Click OK.

Changing an Effect Color

1. Select the effect block in the timeline editor.
2. On the effect in the mapping area, click a color on the color palette bar to modify that color.
3. When the color picker dialog opens, do one of the following to specify a color:
- Click on one of the color swatches
- Enter red, green, and blue values, from 0 to 255.
- Click HSB to open the advanced color picker.
4. Click OK.

About Transparency

You can use the opacity slider control in the color picker to set the transparency level of a color. If you create a transparency level less than 100% for a color, that color will 'show through' effects assigned to the same group.

Removing a Color

1. Select the effect block in the timeline editor.

2. On the effect in the mapping area, click and drag a color from the color bar off the effect.

Changing the Background Color

Some effects have a solid background color. To change the background color, click anywhere on that background color (excluding the color picker panel and the properties disc) and then use the color picker to make a selection.

Using the Color Palettes Panel
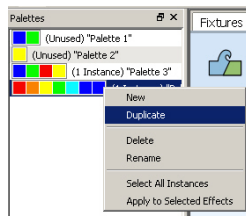
The color palettes panel stores a library of the color palettes associated with each effect. As you make changes to an effect by adding, removing, or customizing colors via the color picker, the stored color palettes update automatically.

Applying a Palette to Selected Effects

1. Select one or more effects.

2. Right-click a palette to display the color palette menu.

3. Chose APPLY TO SELECTED EFFECTS.

Creating a New Palette

1. Right-click a color palette.

2. Choose NEW.

Deleting a Palette

1. Right-click a color palette.

2. Choose DELETE.

Note: You cannot delete a color palette that is in use.

Duplicating a Palette

1. Right-click a color palette.

2. Choose DUPLICATE.

Renaming a Palette

1. Right-click a color palette.

2. Choose RENAME.

Selecting All Effects Using a Palette

1. Right-click a color palette.

2. Choose SELECT ALL INSTANCES.

Working with Effect Blocks

You can change an effect's **Start Time** and **Duration** properties by moving, shrinking and stretching the effect block in the timeline editor. You can also create and modify effect transitions via the effect block in the timeline editor. See *Chapter 8, Timeline Editor* for details on working with effect blocks.

A List of ColorPlay 3 Effects and Their Properties

Each effect has *standard* properties, which are listed in the table below. Certain effects also have *advanced* properties, which are described on the following pages.

You can edit standard properties via the properties panel. For effects that have advanced properties, you can edit those properties via the properties panel or by using the slider and toggle controls on the effect's properties disc.

To modify an effect's default color palette, click the palette and then click the [+] symbol to open the color picker.

Note: Some properties are fixed and for viewing only.

Standard Effect Properties

Effect Type	Display the effect name.
Start Time	Specify the start time.
Duration	Set how long the effect will last.
Repeat	Specify the number of times the effect will repeat over the course of the effect duration of the effect. The default setting is one repeat cycle.
Fade In	Set the duration of the fade-in transition.
Fade In Color	Set the starting color of the fade-in transition. Double-click to open the color picker and make a selection.
Fade Out	Set the duration of the fade-out transition.
Fade Out Color	Set the ending color of the fade-out transition. Double-click to open the color picker.
Row	Change the effect priority by changing its row.

Fixed Color
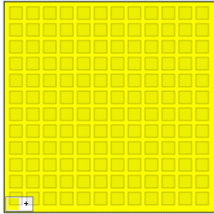
The Fixed Color effect is a static display of one solid color.

Palette: The default color palette contains one color. Use the color picker to change the default color.

Color Wash
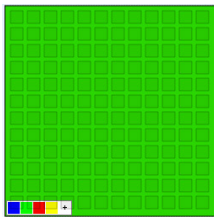
The Color Wash effect is a smooth transition progressing though a series of solid colors. Each color fades into the next.

Palette: The default color palette contains four colors.

Cross Fade
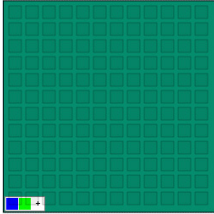
The cross fade effect is a smooth transition from one solid color to another.

Palette: The default color palette contains two colors.

Streak

Streak produces an animated visual effect with one or more narrow lines of color running over a solid background.

Palette: The default color palette contains two foreground colors.

Streak Advanced Properties

Streak Width: Change the number of nodes covered by each streak. By default, a streak is six nodes by one node in area.

Streak Count: Change the number of color streaks in the effect. By default, the streak count starts at **1**.

WrapAround: Click the Wrap Around toggle in the properties disc to activate effect wrapping. By default, the Streak effect does not wrap.

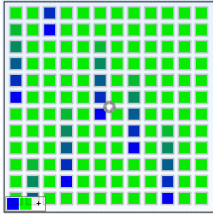**Background Color:** Click the bar on the bottom of the effect to open the color picker and change the background color.

Sparkle
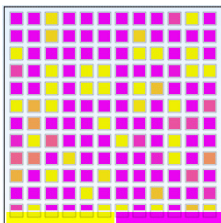
The Sparkle effect flashes foreground color at random intervals over a solid-color background, producing a sparkling visual effect.

Palette: The default color palette contains one foreground color. You can change the foreground color with the color picker.

Sparkle Advanced Properties

Start Color: Change the foreground color.

Background Color: Change the effect background color.

Density: Modify the quantity of nodes covered by the foreground color at any given time during the effect duration. By default, the Density value is **.25** of total nodes.

Fade: Fade determines the change in particle transparency over the duration of the effect. The default value is **15**, meaning the particle becomes completely transparent by the end of an effect cycle.

Chasing

The Chasing effect creates bars of repeated color moving in one direction. This effect displays colors that appear to chase each other from fixture to fixture.

Palette: The default color palette contains two colors.

Chasing Advanced Properties

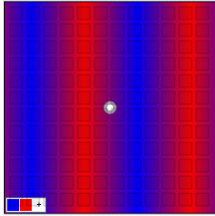**Repeat Line**: Decrease the value to make the color bar width smaller. Increase the value to make the color bars wider. By default, the Repeat Line value is **250**.

Angle: Change the angle of the color bars. By default, the bars are vertical (**0** degrees).

Static: Freeze the effect frame at **0**.

Colored Bars
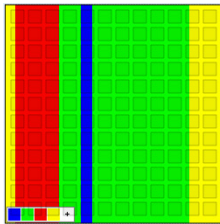
The Colored Bars effect randomly displays bars of varying widths and colors over a solid background.

Palette: The default color palette contains four colors. Use the color picker to change the default colors or add colors.

Colored Bars Advanced Properties

Background Color: Change the effect background color.

Ripple
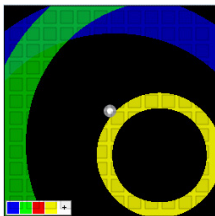
The ripple effect displays rings of moving color over a solid background color.

Palette: The default color palette contains four colors.

Ripple Advanced Properties

Transparent FG: You can create a transparent foreground in the Ripple effect. By default, the rings are solid colors. By toggling the Transparent FG property to **True**, the rings become transparent and show through the effect on the next row in the timeline editor.

Background Color: Change the background color.

Particle
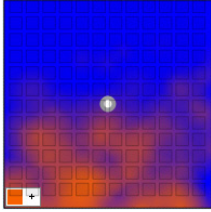
The Particle effect produces animated circular shapes of varying sizes over a solid background color. This effect simulates a particle system such as clouds, fire, or rain.

Palette: The default color palette contains one foreground color. Use the color picker to change the default color, or add colors.

Particle Advanced Properties

Transparent FG: A foreground transparency value of **True** enables the Particle effect to 'show through' other effects.

Density: Density controls the quantity of particles produced by the effect. The default value is **.5** within a range of 0 to 1.

Angle: Change the direction of particle movement. By default, the particles move vertically (**90** degrees).

Velocity: Velocity determines the speed of particle movement. The default value is **1**.

**Particle Size**: Particle Size determines the size of individual particles. The default value is **.25** within a range of 0 to 1.

Jitter: By default, the jitter value is **5**. As particles move along their path, jitter creates random particle oscillation.

Decay: Decay determines the change in particle size over the duration of the effect. The default value is **.75**, meaning the particle size will reduce by 100% over the duration of the effect.

Fade: Fade determines the change in particle transparency over the duration of the effect. The default value is **1**, meaning the particle becomes completely transparent by the end of an effect cycle.

Effect Height: The default value is **1** within a range of 0 to 1. Effect height determines what percentage of the group is covered by the effect. For example, a value of .5 covers 50% of the group.

Background Color: Change the background color.

Burst
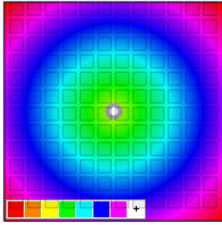
The Burst effect produces circles of concentric color originating in the center and moving towards the outer edge of a group.

Palette: The default color palette contains seven colors.

Burst Advanced Properties

Burst Radius: The radius property determines the spacing of each color circle. By default, the radius value is **250**. Increase the radius value to increase the spacing of each color circle, or decrease the radius value to decrease the spacing of each circle.

Center X: The center horizontal position effects burst offset.

Center Y: The center vertical position effects burst offset.

Focal Point X: Change the focal point horizontal position.

Focal Point Y: Change the focal point vertical position.

Image Fade
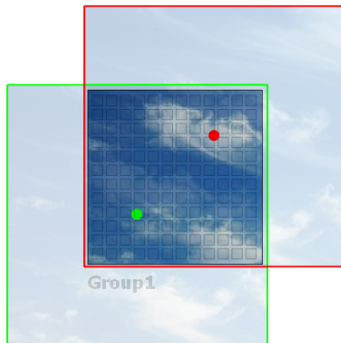
The Image Fade effect produces a visual sequence where one image morphs gradually into a second image. When setting up an Image Fade effect, you can select from JPG, BMP, and PNG files or use the default images.

Image Fade Advanced Properties

Start Image: Enter a path to an image file, for example:
`C:\Documents and Settings\\My Documents\clouds.jpg`

Start X: Specify the center point horizontal value (Start Image).

Start Y: Specify the center point vertical value (Start Image).

Start Width: Leave the default value of **-1** to maintain the source image's width value.

Start Height: Leave the default value of **-1** to maintain the source image's height value.

End Image: Enter a path to an image file.

End X: Specify the center point horizontal value (End Image).

End Y: Specify the center point vertical value (End Image).

End Width: Leave the default value of -1 to maintain the source image's width value.

End Height: Leave the default value of **-1** to maintain the source image's height value.

Note: Double-click on the Image Fade effect within the mapping area to browse and select image file paths.

Random Color
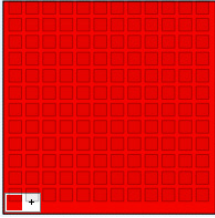
The Random Color effect produces a series of randomly generated solid colors at specified intervals.

Palette: The default palette color contains one color.

Random Color Advanced Properties

Seed: Starting point for random color generation.

Fade Time: Fade creates a timed transition from random color to random color. By default, the fade value is 0 (no transition).

Strobe
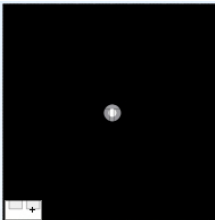
The Strobe effect produces solid pulses of
a foreground color over a background color. The flashes are short in duration, producing a bright, intermittent effect that emulates a strobe light.

Palette: The default color palette contains one color, the strobe color.

Strobe Advanced Properties

On Time: Change the duration of each foreground color pulse. By default, the value is **.3** frames (seconds).

Offset: Change the time between color pulses.
The Offset value is **.0** frames by default.

Background Color: Change the background color.

Sweep
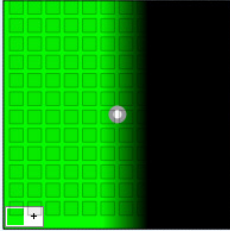
The Sweep effect is a progressive transition of a solid foreground color across a solid background color in a sweeping motion.

Palette: The default color palette contains one color, the foreground color.

Sweep Advanced Properties

Fade Line: Change the fade line value to increase or decrease the amount of fade applied to the leading edge of the foreground color. The default value is **50**.

Angle: Change the time between color pulses.

Background Color: Change the background color.

Spiral
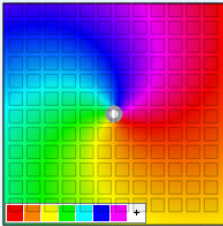
The Spiral effect produces arcs of color originating in the center of a group and moving in a clockwise direction.

Palette: The default color palette contains seven colors.

Spiral Advanced Properties

Radius: Change the radius value to increase or decrease the spacing between spiral arms. The default value is **100**.

Center X: Change the horizontal position of the focal point.

Center Y: Change the vertical position of the focal point.

Arm Count: Change the Arm Count value to increase or decrease the number of arms in the spiral, per color. The default value is one.

Static: Freezes the effect frame at **0**.

Text
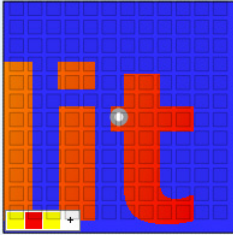
The Text effect scrolls a text message across a solid background color.

Palette: The default color palette contains three foreground colors by default. The foreground colors produce a gradient color effect on the text.

Text Advanced Properties

Text: Enter a text message.

Text Height: Change the height of the text. By default, the text height is **.9** within a range of 0 to 10.

Center X: Change the horizontal position of the focal point.

Center Y: Change the vertical position of the focal point.

Background Color: Change the background color.

Chapter 8

Timeline Editor

Using the Timeline Editor
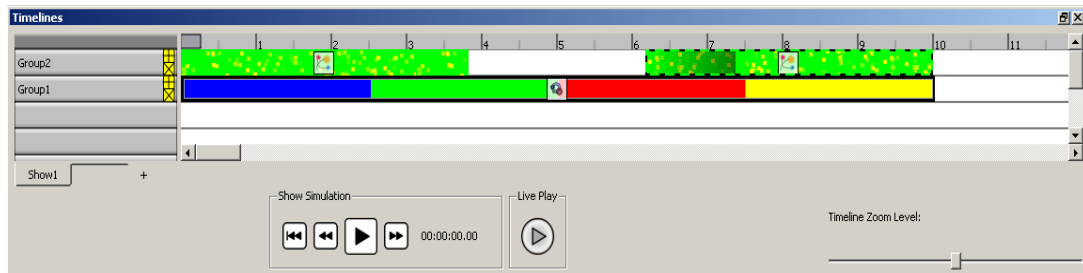
The timeline editor enables you to refine your shows by adjusting effect start time and duration, stacking multiple effects on the same fixture, layering effects, and more. This chapter details how to use the timeline editor groups column, timeline rows, and group blocks.

Groups Column
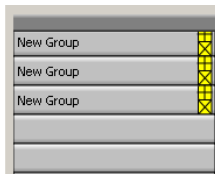
The groups column allows you to work with existing groups, move groups, duplicate groups, and delete groups.

Adding a Group

Each time you create a group in the groups layer, that group automatically populates the groups column.

Moving a Group

In the groups column, click and then drag a group to a different slot.

Duplicating a Group

In the groups column, next to the group you want to duplicate, click the [+] symbol.

Note: This creates a duplicate group associated with the same fixtures as the source group, to which you can stack additional effects. See *Effect Stacking* on page 50 for details.

Deleting a Group

In the groups column, next to the group you want to delete, click the [X] symbol.

Renaming a Group

With the Groups layer active, in the properties panel, enter a new group name in the Name property field.

Timeline Rows

Each group, when created, is assigned to the groups column. Additionally, a corresponding row in the timeline is created. As you assign effects to the group, those effects populate the timeline row.

Timeline Units

The units in the timeline are called *frames*, each of which corresponds to one second.

Start Time and Duration of Effects

Each effect has a start time and a duration in the timeline, which determine when the effect begins and how long it lasts. The left edge of the effect block represents the start time, which is established but the position of the block. The right edge represents the end time, which establishes the duration.

Effect Priority

Effect priority enables you to create stacked and multi-layered effects by assigning more than one effect to the same fixture at the same time.

Priority corresponds to an effect's position in the timeline rows. For example, the first row has the highest priority, the second row has the second-highest priority, and so on.

Effect priority is in use by ColorPlay 3 only when stacked effect durations are the same or overlap. When multiple effects are assigned to the same fixture at the same time, the effect with the higher priority dominates the effect(s) with lower priority. Lower-priority effects are only visible in the following situations:

- The higher-priority effect duration ends and the lower-priority effect duration continues.

- The higher-priority effect has transparency. In this case, the lower-priority effect will show through the transparent areas of the higher-priority effect.

Changing Effect Priority

Click inside an effect block and then drag the effect block upward one or more timeline rows.

Changing the Timeline Scale

If you are creating long-duration effects, you can use the timeline zoom level slider to increase or decrease the quantity of frames visible.

Working with Effect Blocks

Selecting a Single Effect Block

Click inside an effect block to select that block.

Selecting Multiple Effect Blocks

Hold [Shift] and then click inside multiple effect blocks to select those blocks. Once selected, you can move and resize effect blocks simultaneously.

Moving and Resizing Effect Blocks

1. Select an effect block. When the quad arrow appears, drag the effect block until its left edge is positioned at the desired start time in the timeline.

2. Click the right edge of the effect block. When the double arrow appears, nudge it until the resize handle is visible. Drag the resize handle to stretch the effect block until it reaches the desired duration in the timeline.

Note: You can double-click inside an effect block to autofill empty timeline space existing before the effect start time.

Cutting, Copying and Pasting Effect Blocks

• To cut an effect, double-click inside an effect block and then choose EDIT>CUT.

• To copy an effect, double-click inside an effect block and then choose EDIT>COPY.

• To paste a copied effect, choose EDIT>PASTE.

Deleting an Effect Block

• To clear an effect, click inside an effect block and then press the [Delete] key, or choose EDIT>DELETE.

Creating Timeline Transitions

To Use the Transition Slider

Mouse-over either end of an effect block to display the following controls:

 The effect block resize handles enable you to shrink or stretch effect duration

 The transition handles enable you to change how rapidly effects fade in/fade out. You can use the transition handles to turn off effect transitions.

Effect Stacking

Effect *stacking* is the process of assigning multiple effects to the same group at the same time, where any gaps in the topmost timeline row enable effects with lower priorities to become visible.

*   To stack effects, duplicate an existing group in the groups column.

*   Add an effect to the duplicate group's timeline row.

*   Adjust the duration of the effect block(s) on the original timeline row to create a gap, which enables the effect on the duplicate group timeline row to show through.

Stacking Rules

*   Gaps allow the next priority effect to propagate upward.

*   An effect block on an empty row does not appear (no group).

Effect Layering
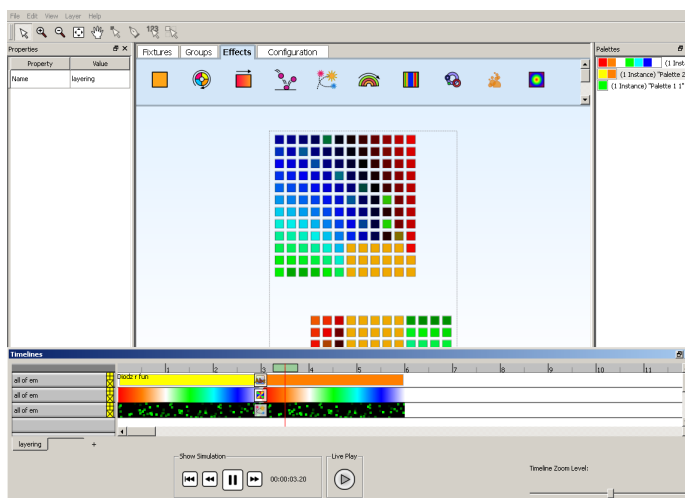
Effect *layering* is the process of assigning multiple effects to the same group at the same time, where the effects mix together.

- To layer effects, use transparency in an effect with a higher priority, so that other effects with lower priorities can show through.

Note: Not all effects have transparency properties. See *A List of Effects and Their Properties* on pages **38-46** for details.

Using the Show Chooser

Each ColorPlay 3 project may contain multiple shows. You can use the show chooser to add a show or delete a show. Each time you add a show, a new tab appears on the show chooser.

- Click the show tabs to switch between shows.

- To rename a show, click the Fixture tab, click in the Name property Value field, and then enter a new show name. You can also double-click on the corresponding tab in the show chooser to rename a show.

Chapter 9

Previewing Shows

Previewing Shows

ColorPlay 3 enables you to visualize and test your shows in real-time. As you assign new effects, edit effect properties and configure effect durations, you can see the changes immediately by playing your show either on-screen or live on your physical fixture layout.

To preview a show, simply use the playback controls located in the timeline editor.

Show Simulation

Playback Controls

You control both on-screen and live simulation using the playback controls in the timeline editor.

Also, for previewing your show in fine detail, you can "scrub" simulation playback back and forth manually with the playhead.

Previewing a Show On-screen

- Press the PLAY button in the playback controls to begin the simulation.

- Use the fast forward, fast rewind, jump to start and pause buttons to control playback.

Simulating a Show with *Live Play*

- Ensure that a controller is physically connected and active.

- Press the LIVE PLAY button in the playback controls to initiate live playback mode.

- Use the play, fast forward, fast rewind, jump to start and pause buttons to control playback, as you would with an on-screen simulation.

Previewing Multiple Shows

- Use the show chooser to switch between shows.

- Follow the playback instructions above.

Chapter 10

Configuring Shows

Show Configuration

Now that you have authored one or more shows by mapping fixtures, creating groups and assigning effects, you are ready to use ColorPlay 3 in conjunction with iPlayer 3.

ColorPlay 3 enables you to interface directly with iPlayer 3. From the Configuration layer, you have the tools to download shows, set triggers (show playback behaviors), set alarms (show playback times), upload files, and manage files.

Displaying the Configuration Layer
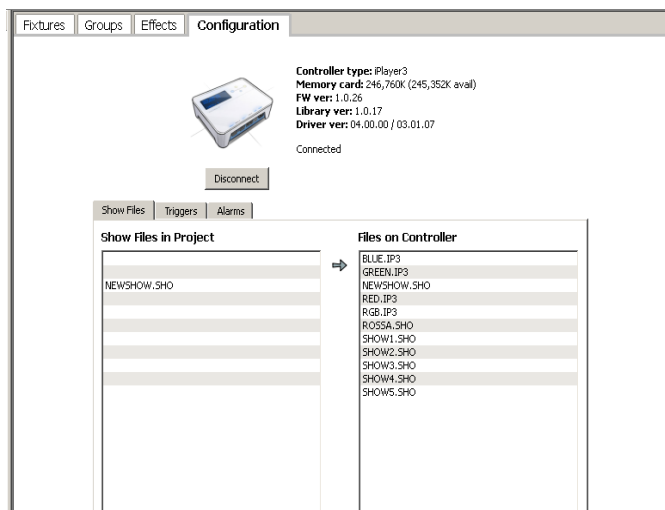
After authoring one or more shows, click the Configuration tab to display the Configuration layer. You can return to the Configuration layer at any time by clicking the Configuration tab or by selecting LAYER>CONFIGURATION.

Connecting to and Disconnecting from a Controller

Connecting to a Controller

Once you have connected ColorPlay 3 to a controller device, you can view controller information, download shows, download triggers, manage files, and upload files. To connect to a controller:

1. Connect a supported controller to your PC via USB.

2. Select the corresponding controller type from the drop-down list. The default device type is iPlayer 3.

3. Click CONNECT to connect ColorPlay 3 to the controller device.

Note: The iPlayer 3 automatically enters USB mode when connected to ColorPlay 3. While in USB mode, you cannot preview shows or access other standard iPlayer 3 operational modes. Disconnect the iPlayer 3 from ColorPlay 3 to preview shows and resume normal operation.

Disconnecting from a Controller

1. Click DISCONNECT.

   Once disconnected, the iPlayer 3 exits USB mode and ColorPlay 3 displays a *Disconnected* status in the Configuration layer.

Controller Information

When a controller is connected to your computer system, ColorPlay 3 displays the connection state and controller information:

Controller Type	Displays connected controller model
Memory Card	Displays total memory and available memory
FW Ver	Displays iPlayer 3 firmware version
Library Ver	Displays software library version
Driver Ver	Displays iPlayer 3 driver version
Status	Displays controller connection status

Downloading Shows to iPlayer 3

After connecting to a controller, you are ready to configure the shows in your project and download them to the controller.

Preparing Shows for Download

Show Files Tab

Project Column

Controller
Column

Show Files	Triggers	Alarms

Show Files in Project ⇒ **Files on Controller**

Show Files in Project:
NEWSHOW.SHO

Files on Controller:
BLUE.IP3
GREEN.IP3
NEWSHOW.SHO
RED.IP3
RGB.IP3
ROSSA.SHO
SHOW1.SHO
SHOW2.SHO
SHOW3.SHO
SHOW4.SHO
SHOW5.SHO
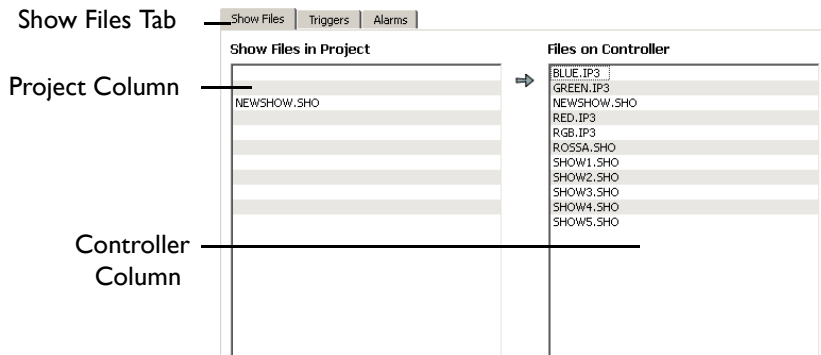
When you open the Configuration layer, the *file manager* appears (Show Files tab) by default. You download your show files to a controller via the file manager.

Downloading Shows

1. Select one or more show files and then click the COPY SELECTED SHOWS TO CONTROLLER arrow button to begin downloading.

2. Once fully downloaded, show files appear in the *controller column* of the file manager with an *.SHO file extension.

Rendering Shows Manually

When you download show files, ColorPlay 3 automatically renders those files (converts them to a format usable by the controller). You can also manually render show files, as needed:

1. Right-click one or more show files in the project column.

2. Select RENDER SELECTED SHOWS.

Setting and Downloading Triggers

After downloading shows to iPlayer 3, you are ready to set triggers. Triggers are numbered 1 - 256 and specify show playback parameters including which show file to play and how a show behaves after one playback cycle (e.g. repeat).
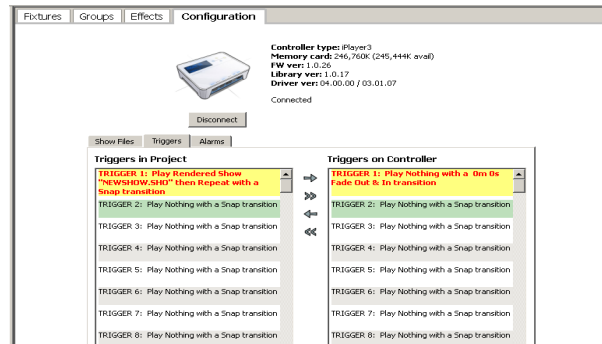
To open the *trigger manager*, click the Triggers tab in the Configuration layer.

Setting Triggers

1. Double-click a trigger in the left column to open the trigger setup dialog.

2. Select a trigger number from the drop-down list.

3. Select Rendered Show... from the drop-down list. This displays the show files in your ColorPlay 3 project (you can also select from several preset iPlayer 3 effects, or select Nothing to set an empty trigger).

4. Select a show file.

5. Select a show behavior (Repeat, Fade to Black, or Jump to Show) from the dropdown list.

6. Click anywhere outside of the trigger setup menu to close it.

Downloading Triggers to iPlayer 3

After setting one or more triggers, you are ready to download those triggers to the iPlayer 3. Note that new triggers (project column) not matching those on the iPlayer 3 (controller column) appear highlighted in red until downloaded.

Copying Selected Triggers to Controller

1. Select one or more triggers in the left column of the trigger manager.

2. Click COPY SELECTED TRIGGERS TO CONTROLLER.

Copying All Triggers to Controller

1. Click COPY ALL TRIGGERS TO CONTROLLER.

Deleting a Trigger

1. Right-click a trigger in the left column of the trigger manager.

2. Select DELETE TRIGGER.

About Trigger Numbers

There are 256 trigger numbers from which to choose. Trigger numbers one through five correspond to the show preset buttons on the faceplate of the iPlayer 3.

The iPlayer 3 preset buttons provide quick access to the first five triggers. However, you can access all 256 triggers via the iPlayer 3 menu system. See your *iPlayer 3 User Guide* for details.

Setting and Downloading Alarms

After downloading triggers to iPlayer 3, you are ready to set alarms. Alarms specify when triggers should be activated. For example, an alarm can be set for every Monday at 5:00:00 p.m. or for an astronomical event such as every day at sunset.

An alarm activates an associated trigger, which in turn plays one or more shows and specifies show transitions. To open the *alarm manager*, click the Alarms tab in the Configuration layer.
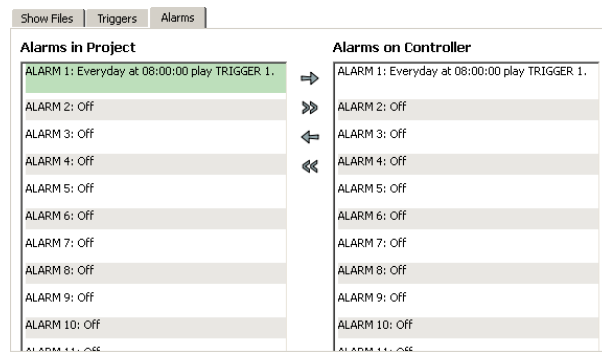
Setting an Alarm

1. Double-click an alarm row in the left column to open the alarm setup dialog.

2. Select an alarm type from the drop-down list.

3. Select a time type (Time of Day or Astronomical)

4. Enter a time of day or astronomical event.

5. Associate a trigger number with the alarm via the Play Trigger selection box.

Turning off an Alarm

1. Double-click an alarm in the left column to open the alarm setup dialog.

2. Select Off from the Alarm Type drop-down list.

Downloading Alarms to iPlayer 3

After setting one or more alarms, you are ready to download those alarms to the iPlayer 3. Note that new alarms (project column) not matching those on the iPlayer 3 (controller column) appear highlighted in red until downloaded.

Copying Selected Alarms to a Controller

1. Select one or more alarms in the left column of the trigger manager.

2. Click COPY SELECTED ALARMS TO CONTROLLER.

Copying All Alarms to a Controller

1. Click COPY ALL ALARMS TO CONTROLLER.

Deleting an Alarm

1. Right-click a trigger in the left column of the trigger manager.

2. Select DELETE ALARM.

Managing Files

Working with Show Files

The file manager enables you to manage files on the iPlayer 3 and on your PC. Click the Show Files tab to open the file manager.

Downloading Saved *.SHO File from PC to iPlayer 3

1. Open the file manager.

2. Right-click anywhere in the right column.

3. Click ADD FILE...

4. Browse and select a saved *.SHO file on your PC.

5. Click OPEN

Deleting File on iPlayer 3

1. Open the file manager.

2. Select one or more files in the right column.

3. Click DELETE and then click YES at the prompt.

Saving File (Upload) on PC

1. Open the file manager.

2. Right-click a file in the right column.

3. Click SAVE...

4. Select a destination folder on your PC.

5. Click SAVE.

Saving File on PC in DMX File Format

1. Open the file manager.

2. Right-click a file in the left column.

3. Click SAVE...

4. Check the Also Write DMX Data box.

5. Select a destination folder on your PC.

6. Click SAVE.

When you select the Also Write DMX data checkbox, ColorPlay 3 saves three files: <filename>.SHO; <filename>_port1.dmx; *and* <filename>_port2.dmx. The created DMX files are compatible with certain controllers, including the Philips SSLS iPlayer®2.

Chapter 11

Tutorial

Introduction

This tutorial is a hands-on approach to creating light shows with your Philips SSLS fixtures. The shows that you can create using ColorPlay 3 are limited only by your imagination. Each task-oriented lesson in this tutorial introduces you to options and techniques that can be applied to fixture layouts of all sizes.

Before You Begin the Tutorial

Familiarize yourself with the ColorPlay 3 environment and user guide. Refer to Chapter 4, The ColorPlay 3 Environment, for details on the software interface.

To start ColorPlay 3, do the following:

Windows©

From the START menu, choose Programs>Philips SSLS>ColorPlay 3>ColorPlay 3

Mac OS

In the Applications folder, ColorPlay 3 sub-folder, Double-click the ColorPlay 3 icon.

Lesson 1: Create a Cross Fade Effect Light Show

The goal of this lesson is to create a Cross Fade Effect light show and download the show file to your controller. In this task-oriented exercise, you will learn to map light fixtures, arrange groups, assign effects, test the show, and download the show to your controller.
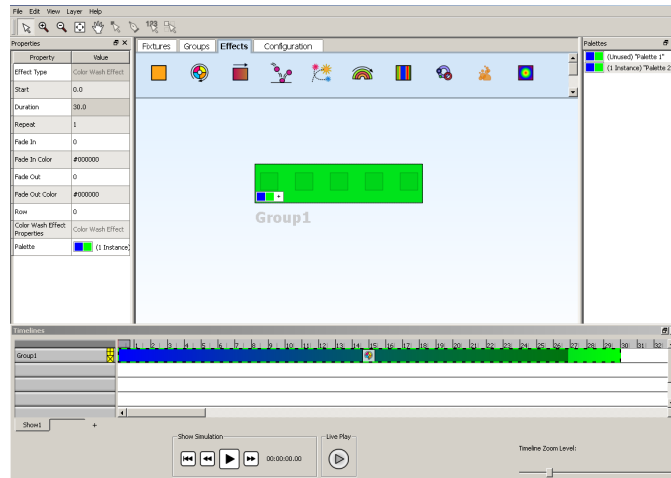
Map Fixtures

Purpose: Set up map for your light show. In this example, the Rectangular Fixture is used. For actual applications, map the fixtures that correspond to you actual layout.

Task 1: Map a fixture. By default, ColorPlay 3 displays the Fixtures layer. If the Fixtures layer is not active, click the Fixtures tab. From the fixture palette, drag-and-drop the **Rectangular Fixture** icon onto the mapping area.

Task 2: Clone the fixture. To create multiple clones of the fixture in the mapping area, right-click the fixture and then select the **Clone...** menu item. Enter a value of [**5**] in the **Columns** field and then click **OK** to create four cloned fixtures (five fixtures total).

Task 3: Resize the mapping area. When you map a large fixture layout, you may need to resize the view of the mapping area. Click the **Zoom To Fit** button in the Toolbar to automatically resize the mapping area and show all fixtures, as needed. Use the Drag Layer tool to reposition the fixtures in the mapping area.

Task 4: Save your work. Select FILE>SAVE. Within the SAVE PROJECT dialog box, select a location from the SAVE IN field, enter "Cross Fade" in the FILE NAME field, and then click SAVE.

Arrange Groups

Purpose: Arrange mapped fixtures into groups. Groups enable you to rapidly select and move multiple fixtures, change node ordering to match your installation and assign effects across multiple fixtures simultaneously.

Task 1: Open the Groups layer. Click the Groups tab to display the Groups layer.

Task 2: Create a new group. For a fixture to be part of a light show, it must be covered by a group. Drag-and-drop the **Rectangular Group** icon from the Group palette onto the mapping area.

Task 3: Resize the group. Using the resize handles on the perimeter of the group, resize the group so that it covers all five Rectangular fixtures.

Assign a Lighting Effect

Purpose: To assign effects to the group. In this exercise, you will assign an effect and adjust its appearance by editing effect properties.

Task 1: Open the Effects layer. Click the Effects tab to display the Effects layer.

Task 2: Assign the Cross Fade Effect. Drag-and-drop the **Cross Fade Effect** icon from the Effect palette onto your group in the mapping area.

Task 3: Change effect duration. In the properties panel, click in the **Duration** value field. Enter a value of [**30**] to increase the effect duration.

Task 4: Resize the timeline editor view. Click-and-drag the Timeline Zoom Level slider, and also click-and-drag the slider below the timeline rows, until the entire effect duration is visible in the timeline editor.

Task 5: Change effect appearance. Click the [**+**] symbol on the Color Palette Bar located on the lower-left of the effect to open the Color Picker. Select **Orange** to add that color to the cross fade and then click **OK**.

Simulate and Test Your Light Show

Purpose: To simulate a virtual on-screen show display, or play your show live to the actual lights. In this exercise you will use the Mapping Area to preview and test your light show before you download it to your controller.

Task 1: On-screen simulation. With the Effects layer open, click the **Play** button in the timeline editor show simulation controls.

Task 2 (optional): Live Play simulation. Ensure that your fixtures are set up properly and the controller is connected to ColorPlay 3 on your computer system. Click the **Live Play** button to begin testing your new show on your fixture layout.

Note: If the fixtures in ColorPlay 3 have been correctly mapped to correspond to your real-world layout, the ColorPlay 3 show matches the on-screen simulation.

Download Shows to a Controller

Purpose: To download your newly created Cross Fade Effect show, assigned triggers, and alarms to your iPlayer 3 controller.

Task 1: Stop Simulation Playback. If the show simulation is still running, press the **Stop** button in the timeline editor playback controls.

Task 2: Open the Configuration Layer. Click the Configuration tab to open the Configuration layer.

Task 3: Connect to controller. With your iPlayer 3 controller attached to your computer system via a USB cable, click the CONNECT button in the Configuration layer.

Task 4: Download show to controller. In the left column of the file manager, select the show you just created. Click the COPY SELECTED SHOWS TO CONTROLLER button.

Task 5: Create and download a trigger. Click the Triggers tab. Double-click TRIGGER 1 in the left column. In the Trigger options dialog, select TYPE: RENDERED SHOW. Select PLAY: <show file name>. Leave all other settings at their default values.

Click anywhere outside of the Trigger options dialog, highlight the trigger you just created, and then click the COPY SELECTED TRIGGERS TO CONTROLLER button.

Task 6: Create and download an alarm. Click the Alarms tab. Double-click ALARM 1. In the Alarm options dialog, select ALARM TYPE: EVERY DAY. Select TIME TYPE: time of day and then enter 8:00:00 AM. Click anywhere outside of the Alarm options dialog, highlight the alarm you just created, and then click the COPY SELECTED ALARMS TO CONTROLLER button.

Task 7: Save your work. Select FILE>SAVE.

The show file, assigned trigger, and associated alarm are now downloaded to your iPlayer 3 controller. After disconnecting from ColorPlay 3, press the Preset #1 button on your iPlayer 3 controller to view your show.

Lesson 2: Create a Stacked Effects Light Show

The goal of this lesson is to create a light show featuring stacked effects so as to demonstrate effect *priority*. In this task-oriented exercise, you will learn to assign multiple layers of effects to a single group of fixtures.
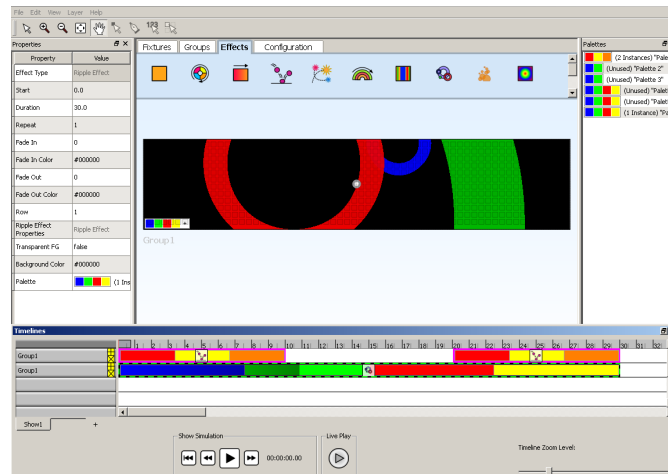
Open the Show File

Purpose: Open the show file you created in the last lesson.

Task 1: Open show file. Select EDIT>OPEN... Select the `Cross Fade.proj` file and then click Open.

Create a Row of Effects

Purpose: To assign multiple effects, on the same timeline, to the fixtures and group created in the previous lesson.

Task 1: Open the Effects layer and select the cross fade effect group. Click the Effects tab if the Effects layer is not active.
In the timeline editor, click the Cross Fade Effect in the Group 1 row.

Task 2: Resize the timeline view. As needed, use the Timeline Zoom Level slider and the slider below the timeline rows to resize the view until the entire effect duration is visible.

Task 3: Change the effect duration. Click the Duration value filed in the properties panel and change the duration to [**10**].

Task 4: Copy the existing effect. With the Group 1 Cross Fade Effect selected, press [ctrl]-[c] to copy and then press [ctrl]-[v] to paste the copied effect in the same row. In the properties panel **Start** value field, enter [**20**].

Create a Stacked Effect

Purpose: To assign an additional effects, on a different timeline row, to the fixtures and group created in the previous lesson.

Task 1: Duplicate Group 1. In the Groups column on the left side of the timeline editor, click the [**+**] icon next to **Group 1**.

Task 2: Stack an effect. Click-and-drag the **Strobe Effect** icon to the second row of the timeline editor, to populate the new, duplicate group.

Task 3: Resize the Strobe Effect. Click the Strobe Effect in the timeline editor to select. In the properties panel, enter a **Start** value of [**0**], a Duration value of [**30**], and a **Repeat** value of [**50**].

Task 4: Save your work. Select FILE>SAVE.

Simulate Your Light Show

Purpose: To simulate your show on-screen so as to view the nature of stacked effects.

Task 1: On-screen simulation. With the Effects layer open, click the **Play** button in the timeline editor show simulation controls.

Note how stacked effects behave. The effects on timeline row one have priority over the effect in timeline row two. However, if there is a gap in timeline row one, the effect in row two temporarily gains priority.

Glossary

address	See *channel*.
advanced properties	Some effects have customizable properties known as advanced properties. For example, you can modify the Text Effect's text height advanced property.
brightness	Also known as intensity or luminance. A measure of the rate of flow of light energy (luminous flux) per unit area leaving a surface in a particular direction.
channel	Also known as "DMX channel", which, for the purposes of this guide, is synonymous with "DMX address". Any DMX light show, including shows designed with ColorPlay 3, sends data to the fixtures using up to 512 separate channels. The DMX Channel Number assigned to a fixture in ColorPlay 3 must match the DMX address on the fixture itself. Since each Philips SSLS fixture uses three channels, (one each for red, green, and blue,) the DMX Channel Number indicates the first of three consecutive DMX channels that the fixture receives.
color	The impact of light source colors is determined by the combination of three factors: hue, saturation, and luminance. Hue indicates whether a color looks red, orange, yellow, green, blue, violet, etc. Saturation represents how pure a color is, and luminance (brightness) identifies how strong the color is. ColorPlay 3 includes a color picker to help you choose from over 16.7 million possible colors.
color sweep	The Sweep effect is a progressive transition from one color to another in a sweeping motion. The Sweep can be set to give the appearance of a back and forth color change or a one direction sweep across the fixture group.
color wash	A Color Wash effect produces a smooth transition in hue, progressing through the visible color spectrum: red, orange, yellow, green, blue, indigo, violet.
configuration layer	The configuration layer is a tab on the mapping area that enables you to set up your shows for playback, download shows to a controller, manage remote files, and upload shows.
cross fade	The Cross Fade effect is a smooth transition, back and forth, between two colors. The effect slowly increases the intensity of one color of light while simultaneously reducing the intensity of the other color.
DMX, DMX512	DMX is a shortened form of *digital multiplex*. It describes a standard method of data transmission that makes possible the interconnection of lighting control equipment by different manufacturers. The DMX512 protocol was developed in 1986 by a committee of the USITT (United States Institute for Theater Technology) to provide a standard digital interface with which to control dimmers from lighting consoles. See also *channel*.

effect block	An effect block is the effect displayed in the timeline editor. The effect block represents an effect's start time and duration.
effects layer	The effects layer is a tab on the mapping area that enables you to assign effects to groups.
effect stacking	Effect *stacking* is the process of assigning multiple effects to the same group at the same time, where any gaps in the topmost timeline row enable effects with lower priorities to become visible.
end color	This effect property lets you define the ending color of the cross fade effect. For instance, if a cross fade goes from red to blue, the start color property would be set to red and the end color would be set to blue.
fixed color	The fixed color effect allows the static display of any one of 16.7 million possible colors. Fixed color is generated by blending (or independently displaying) any of the primary colors (Red–256 shades of red, Green–256 shades of green, and Blue–256 shades of blue). White light will be produced when all colors (Red, Green and Blue) are added together.
fixture	Also known as a light fixture.
fixture address	The unique numerical value assigned to each fixture.
fixtures layer	The fixtures layer is a tab on the mapping area that enables you to map fixtures.
groups layer	The groups layer is a tab on the mapping area that enables you to cover fixtures with groups.
HSB	Acronym for hue, saturation, and brightness. In the HSB color model, all colors are defined by their hue, (the wavelength which determines how similar it is to one or a combination of the perceived colors red, yellow, green or blue,) saturation, (the amount of white light mixed in,) and brightness, (the intensity of the color.)
	ColorPlay 3 includes an HSB color picker.
LED	(Light Emitting Diode) The source of light used by Philips SSLS fixtures. An LED is a p-n junction, solid-state diode that emits light through the combination of specially prepared high purity semiconductor material and two additives. One additive produces negatively charged output (excess electrons) and the other produces positively charged material (a shortage of electrons, or holes, which act as positive charges).
live playback	The process of testing your light show on your fixture layout.
mapping area	The workspace area of the ColorPlay 3 interface. Contains the fixtures, groups, effects, and configuration tabs.
random color	Each Random Color effect produces a randomly generated set of colors at user definable speeds. Colors step (in discrete increments) from one hue to the next in increments of at least 25% of the color spectrum so no two colors in a row will have similar values.
RGB	Acronym for red, green, blue. In the RGB color model, all colors are produced by combining various levels of red, green, and blue.
	ColorPlay 3 includes an RGB color picker.
	See also: color
render show	Convert a ColorPlay 3 show into a format readable by your controller device.

saturation	This refers to the purity of color, or the amount of white light which has been mixed into a color. More technically, it describes how much of a color is near the dominant wavelength. Primary colors are fully saturated, while pastels are less saturated.
starting color	Allows the user to define the beginning color of an Effect. For instance, if a Cross Fade goes from red to blue, the Starting Color Variation would be set to red and the Ending Color would be set to blue. Each time the unit is repowered with this Effect, it will begin with red.
streak	The Streak effect is a pulse of light that moves across a background color.
strobe	The Strobe effect produces a series of light flashes. Very short, bright flashes can produce a "stop action" effect, where actions seem intermittent.
strobe rate	Refers to the number of flashes per second, or how many times in one second the light is illuminated.
timeline editor	The section of the ColorPlay 3 interface containing the groups column, timelines, and show playback controls.

Contents