iPlayer 3
A compact DMX control solution with advanced light show authoring features
iPlayer 3
A compact DMX control solution with advanced software functionality

iPlayer 3 controller is a compact yet powerful show storage and playback device capable of delivering light shows to installations with up to 1,024 unique DMX addresses. Packaged with ColorPlay 3® light show authoring software, iPlayer 3 is designed to add new levels of sophistication to your installations while eliminating the need for expensive lighting boards and technical programming expertise.

- Easy to use — With onboard factory preset shows, custom show-authoring capabilities, an intuitive LCD interface, built-in light addressing features, and removable SD card storage, iPlayer 3 enables you to spend more time on the creative aspects of lighting design and less time on setup.
- Packaged with ColorPlay 3 light show authoring software — ColorPlay 3 gives you the flexibility to create and manage light shows using fully customizable effects, multi-track editing, effect stacking, and custom transition styles.
- Designed for use with the optional Controller Keypad — Controller Keypad is a wall-mounted user interface providing instant push-button playback of up to eight light shows.
- Supports the optional AuxBox expansion device — AuxBox automatically triggers up to eight iPlayer 3 light shows using any remote triggering device with a dry-contact closure. Via the AuxBox, you can trigger light shows by motion sensors, 3rd party control or sensor systems, and more.
- Control two DMX universes — iPlayer 3 has two DMX output ports, each controlling a DMX512 universe of 512 unique DMX addresses.
- Automate show playback — Set alarms to automatically trigger show playback based on a specific date, day of the week, weekdays, weekends, or an astronomical event, such as sunrise or sunset.

Design, Store, and Play Light Shows
iPlayer 3 factory preset light shows get you started.
Enhance your shows using ColorPlay 3 visual effects and timeline editing features.
Set up fixture groups to enable simultaneous playback of multiple effects at the same time.
Link together a sequence of shows within a single ColorPlay 3 project to create a sophisticated presentation.
ColorPlay 3 Light Show Authoring Software

Smith Campus Center, Pomona College
How better to reinvigorate a dark and uninviting space than with dynamic color-changing light. Philips LED lighting proved just that as part of a major renovation of Pomona College’s Smith Campus Center, intended to be the social hub for students.

What’s in a ColorPlay 3 Light Show
A light show is a set of digital instructions orchestrating how and when your installation produces visual effect. Whether your light show is as simple as one fixture displaying a single color, or as complex as dozens of fixtures each with a unique effect or layers of effects, the goals are the same: to create mood, interest, and impact.

ColorPlay 3 provides 24 customizable effects, including the following:

- Ripple
- Particle
- Burst

ColorPlay 3 offers multiple techniques for editing the appearance and behavior of an effect — you can adjust basic size and shape settings, create unique color palettes, specify transitions, and more. ColorPlay 3 provides you with the flexibility to design light shows based on your creative vision.
Specifications

Due to continuous improvements and innovations, specifications may change without notice.

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical</td>
<td>Input Voltage</td>
<td>100 – 240 VAC, 50 / 60 Hz, 5 W</td>
</tr>
<tr>
<td>Control</td>
<td>Computer Interface</td>
<td>USB 2.0</td>
</tr>
<tr>
<td></td>
<td>External / Auxiliary Interface</td>
<td>Two DMX512 RJ45 ports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two RS-232 9-pin serial ports</td>
</tr>
<tr>
<td></td>
<td>Data Storage</td>
<td>Removable Secure Digital Card drive (256 MB Card included)</td>
</tr>
<tr>
<td>Physical</td>
<td>Dimensions (Width x Depth x Height)</td>
<td>8.2 x 5.4 x 1.3 in (209 x 137 x 33 mm)</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
<td>1.2 lb (0.54 kg)</td>
</tr>
<tr>
<td></td>
<td>Housing</td>
<td>Polycarbonate</td>
</tr>
<tr>
<td></td>
<td>Operating Temperature</td>
<td>14° – 104° F (-10° – 40° C)</td>
</tr>
<tr>
<td></td>
<td>Humidity</td>
<td>0 – 95%, non-condensing</td>
</tr>
<tr>
<td>Certification and Safety</td>
<td>Certification</td>
<td>UL / cUL, FCC Class B, CE</td>
</tr>
<tr>
<td></td>
<td>Environment</td>
<td>Dry Location, IP20</td>
</tr>
</tbody>
</table>

Software Requirements

<table>
<thead>
<tr>
<th>System Requirements</th>
<th>Specification</th>
<th>PC</th>
<th>Mac</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>Operating System</td>
<td>Windows® 2000 / XP / Vista</td>
<td>Mac OS 10.5 or greater</td>
</tr>
<tr>
<td>Hardware</td>
<td>CD Drive</td>
<td>CD-ROM or DVD drive</td>
<td>CD-ROM or DVD drive</td>
</tr>
<tr>
<td></td>
<td>Memory</td>
<td>512 MB RAM</td>
<td>512 MB RAM</td>
</tr>
<tr>
<td></td>
<td>Disk space</td>
<td>60 MB free disk space</td>
<td>60 MB free disk space</td>
</tr>
</tbody>
</table>

### iPlayer 3 and Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Type</th>
<th>Item Number</th>
<th>Philips 12NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPlayer 3</td>
<td>North America Power Cord</td>
<td>103-000019-00</td>
<td>910403327101</td>
</tr>
<tr>
<td></td>
<td>Europe Power Cord</td>
<td>103-000019-01</td>
<td>910503700392</td>
</tr>
<tr>
<td></td>
<td>China (CCC) Power Cord</td>
<td>103-000019-02</td>
<td>910503700738</td>
</tr>
<tr>
<td>Controller Keypad</td>
<td>DB-9 Serial</td>
<td>103-000020-00</td>
<td>910503700223</td>
</tr>
<tr>
<td>AuxBox</td>
<td>DB-9 Serial</td>
<td>103-000021-00</td>
<td>910503700224</td>
</tr>
</tbody>
</table>

Use Item Number when ordering in North America.
Typical Installation Configuration Examples

The following installation scenarios depict two typical lighting installations, each controlled via iPlayer 3.

**iColor Cove QLX Installation**
In this scenario, iPlayer 3 controls an installation designed for indirect lighting. The power/data supply sends data from the iPlayer 3 and supplies power to the fixtures.

**ColorBlast Powercore Installation**
In this scenario, iPlayer 3 controls an installation set up for direct lighting. The Data Enabler Pro sends combines data from the iPlayer 3 and power from a line voltage source.
Prepare for the Installation

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate the iPlayer 3 controller in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with an appropriate electrical inspector to ensure compliance.

Create a Lighting Design Plan and Mapping Grid

- Create a lighting design plan that specifies the appropriate location of each Data Enabler Pro or power / data supply in relation to the fixtures, and fixtures in relation to each other.
- On an architectural diagram or other diagram that shows the physical layout of the installation, identify the locations of all switches, controllers, power / data supplies, leader and jumper cables, and fixtures.
- Select a convenient but unobtrusive location for mounting the iPlayer 3 that will be accessible to a computer via USB connection. If also installing external show selection switches such as Controller Keypad or AuxBox, mount the iPlayer 3 in a location accessible to the maximum serial cable length of 50 ft (15.2 m).
- Verify that the iPlayer 3 mounting location meets environmental specifications for operating temperature range and maximum relative humidity (see page 4).
- Each Philips fixture comes pre-programmed with a unique serial number. As you unpack the fixtures, record the serial numbers in a mapping grid (typically a spreadsheet or list) for easy referencing and addressing. You can address fixtures using an addressing tool, such as iPlayer 3 itself, or in conjunction with a software tool, such as QuickPlay Pro.
- Assign each fixture to a position in the lighting design plan.

Start the Installation

1. Install all data enablers or power supplies and fixtures, including any interfaces with controllers. If your installation calls for jumper cables to add space between fixtures, make sure they are available.

2. If necessary, address your fixtures using an addressing tool, such as QuickPlay Pro.

3. Ensure that all additional parts, including mounting hardware and tools, are available.
Install iPlayer 3

1. Confirm all components received
Take a moment to confirm you have received these iPlayer 3 components:
- iPlayer 3
- Mounting bracket
- Mounting bracket screws
- Power cord (North American or European)
- USB 2.0 cable
- RJ-45 DMX512 data cable
- ColorPlay 3 software CD
- Installation Instructions
- Quick Start Guide

2. Install mounting bracket
Choose a method for mounting bracket installation: quick-release or secure.

Quick-release mounting method
a) With the release tab pointing downward, screw the mounting bracket onto a surface using the innermost screw holes. The outer mounting tabs will not be used and may be snapped off, if desired.
b) Slide iPlayer 3 onto the mounting bracket until it clicks securely into place.

Secure mounting method
a) Slide iPlayer 3 onto the mounting bracket until it clicks securely into place. Using the supplied machine screws, secure the mounting bracket to iPlayer 3.
b) Using the outermost screw holes, install the mounting bracket and iPlayer 3 assembly onto a surface. Secure with screws suitable for mounting substrate.

3. Attach power cable

4. Install ColorPlay 3 software

Windows® Installation
a) Insert the ColorPlay 3 Software CD into the CD- or DVD-ROM drive.
b) Double-click Install ColorPlay 3.exe, located in the Windows folder on the ColorPlay 3 software CD.
c) The Welcome to the ColorPlay 3 Setup Wizard window appears. Click Next to begin the installation. After reading the license agreement, select I Agree to consent to the terms of the license agreement, then click Next to continue.
d) When the Select Installation Folder window appears, accept the default location, or click Browse to select a folder. Click Next to continue.
e) At the Confirm Selection window, click Next to start installation.
f) The Installation Complete window appears. Click Close to exit the wizard.

Mac OS Installation
a) Insert the ColorPlay 3 Software CD into the CD-ROM / DVD drive. The ColorPlay 3 folder icon appears on your desktop.
b) Drag the ColorPlay 3 application icon from the Mac folder on the software CD to the Applications folder on your computer.
5. Connect computer with USB cable
If using Windows, you must install ColorPlay 3 prior to connecting iPlayer 3 to your PC. iPlayer 3 installs the device drivers required for USB connectivity.

6. Attach external show selection devices, as required
   
   **Connect a Controller Keypad**
   a) Unplug the power cord from the iPlayer 3.
   b) Connect the cable end with the 4-pin leads into the back of the Controller Keypad.
   c) Connect the cable end with the DB9 cable connector to serial port 1 or 2 on the iPlayer 3.
   d) As needed, set the Range switch position on the back of the keypad. By default, switch position 0 (zero) sets the keypad to trigger shows 1 – 8.
   e) Reconnect the power cord to the iPlayer 3.

   **Connect an AuxBox**
   a) Unplug the power cord from the iPlayer 3.
   b) Connect the female end of the serial cable to the AuxBox serial port.
   c) Connect the male end with of the serial cable to serial port 1 or 2 on iPlayer 3.
   d) As needed, set the Range switch position on the front of the AuxBox. By default, switch position 0 (zero) sets the AuxBox to trigger shows 1 – 8.
   e) Connect each external triggering device’s two-wire cable to a terminal pair on the AuxBox.
   f) Connect the 24 VDC power cable to the 24 VDC terminals on the AuxBox, then plug it in.
   h) Reconnect the power cord to the iPlayer 3.

7. Connect Lighting Systems with RJ-45 Cable
Each DMX output port controls 512 DMX addresses:

- DMX port 1 controls light universe 1 (DMX addresses 1 – 512). Use DMX port 1 for single-universe installations.
- DMX port 2 controls light universe 2 (DMX addresses 1 – 512).

8. Firmware Update
The iPlayer 3 firmware image is periodically updated to improve system performance and functionality. If your iPlayer 3 is not running the most recent firmware version, it is recommended that you update to maximize system performance. The most recent firmware version can be downloaded from www.colorkinetics.com/support/iPlayer 33/.

1. Launch Configuration Mode by pressing on the iPlayer 3 faceplate.
2. Access the Info menu, then select Version. The screen should display the firmware version in the form v01.00xx b00001
3. If the “xx” value is a lower number than the most recent image on the website, follow the update procedure in the iPlayer 3 User Guide.
Light Show Playback

Out-of-the-box, the iPlayer 3 comes programmed with pre-configured light shows. When you start up the iPlayer 3, it automatically plays the default Color Wash show assigned to preset button 1.

• To play additional shows, press 1 – 1.
• To adjust the overall brightness level of your show, press 1 and 1.
• Press 1 to pause playback and turn all fixtures OFF.

iPlayer 3 Hardware Features

- Current mode and information
- Displays the color appearing on light address 1 (DMX output port 1)
- Adjust brightness level
- Change mode
- Navigate menus
- Pause / Lights Off
- Lights On / Resume
- Cancel menu action
- Select a trigger for show playback

- Access panel for SD memory card and configuration DIP switches
- USB 2.0 port
- Activity LEDs
- Power inlet
- DMX output port 1
- DMX output port 2
- Serial port 1
- Serial port 2
Configuration Menus

You can change the following options via Configuration mode:

**Triggers Menu**

Triggers enable you to assign shows to the Preset buttons on the iPlayer 3, the keypad buttons on the Controller Keypad, or the contact switches connected to an AuxBox. Triggers also specify playback behaviors such as repeat or jump to another show.

**Alarms Menu**

Alarms enable you to automate show playback by specific time, date, day of the week or astronomical event.

**Setup Menu**

The setup menu provides access to port configuration, clock setup, LCD setup, and more.

**Info Menu**

The info menu displays the device firmware version, memory usage, and more.

At any time during playback, press \( \textcircled{1} \) to launch Configuration mode and open the Main Menu. From the Main Menu, press \( \textcircled{1} \) and \( \textcircled{0} \) to scroll through menu options and to access a submenu. To save your changes, continue pressing \( \textcircled{0} \) until you reach the Save Changes menu item, then press \( \textcircled{1} \) a final time to save. Press \( \textcircled{0} \) at any time to cancel the menu action and return to playback mode.

**Example: Changing the Pre-configured Show Assigned to Preset Button 2**

1. Launch Configuration mode, access the Triggers submenu, and then select menu option 2.
2. Access the Show Type submenu, then select **Canned Effect** to open the pre-configured show types.
3. Access the Effect Type submenu, then pick **Cross Fade**, which produces a smooth transition from one solid color to another.
4. Navigate through the effect-specific submenus, specifying properties for start color, end color, hold time duration, fade time duration, and offset (angle).
5. At the Test Effect submenu, preview your show, then press \( \textcircled{1} \) to continue.
6. Select show **Transition** type **Snap** (no transition).
7. Press \( \textcircled{1} \) to save your changes.
**ColorPlay 3 Effects**

- **Fixed Color** — Displays a single solid color simultaneously on all fixtures in a group.
- **Cross Fade** — Creates a smooth transition from one solid color to a second solid color on all fixtures simultaneously.
- **Color Wash** — Creates a smooth transition through a series of solid colors on all fixtures simultaneously.
- **Chasing** — Creates bars of repeated color moving or “chasing” each other in one direction across a grid of fixtures or nodes.
- **Chasing Node** — Displays bands of color that appear to move or “chase” each other in sequence. Colors appear to chase each other from fixture to fixture or node to node.
- **Sweep** — Displays a progressive transition of one or more foreground colors across a solid background color in a sweeping motion across a grid of nodes or fixtures.
- **Sweep Node** — Displays a progressive transition of one or more foreground colors across a solid background color. Foreground colors transition from fixture to fixture or node to node.
- **Sparkle** — Flashes one or more foreground colors at random intervals over a solid-color background, producing a sparkling effect.
- **Streak** — One or more narrow bands of color move across a solid background, following the group’s currently selected node pattern.
- **Spiral** — Produces arcs of color originating from a central point and moving across a grid of nodes in a clockwise or counterclockwise direction.
- **Burst** — Produces concentric rings of color moving either towards the edge of a group or towards a defined focal point.
- **Random Color** — Produces a sequence of two or more randomly generated solid colors simultaneously on all fixtures in a group.
- **Image Fade** — Produces a visual sequence in which one image fades gradually into a second image.
- **Video** — Displays moving images from a digital video sequence.
- **Text** — Scrolls a text message across a solid background color, from right to left.
- **Strobe** — Produces solid pulses of a foreground color over a background color. When the pulses are short in duration, produces an intermittent flashing effect that emulates a strobe light.
- **Ripple** — Displays rings of color moving over a solid background color.
- **Particle** — Produces animated circular shapes of varying sizes over a solid background color. This effect simulates a particle system such as clouds, fire, or rain.
- **Colored Bars** — Randomly displays bars of varying widths and colors over a solid background.
- **Constant Modifier** — Applies a constant change to the hue, saturation, and/or brightness of all visible effects underneath it in a group.
- **Wave Modifier** — Uses different wave patterns to vary the appearance of effects over time. You can vary the hue, saturation, or brightness of all effects underneath it in a group.
- **Fade In Fade Out Modifier** — Gradually fades in or fades out the saturation or brightness of all effects underneath it in a group. The effect can also gradually transition all colors through a range of hues.
- **RGB Range Modifier** — Sets limits on the red, green, and/or blue channels of all effects underneath it in a group.
- **Perlin Noise Modifier** — Overlays a random, smooth-flowing pattern of noise over all effects underneath it in a group.
Creating a Light Show with ColorPlay 3

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 operating your lights.

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.

3. Create Effects
After arranging groups, you can begin assigning effects. Each effect possesses editable properties, including color palettes, start time, timeline 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.

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.

5. Download Shows to the iPlayer 3 and Create Triggers
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.