iColor Keypad

Set LED light shows and scenes at the touch of a button

with iColor Keypad Effect Manager configuration software, v1.2

PHILIPS

COLOR KINETICS

iColor Keypad

Set LED light shows and scenes at the touch of a button

iColor Keypad is a compact stand-alone lighting controller for intelligent RGB and intelligent white-light LED lighting fixtures from Philips Color Kinetics. This Ethernet-based wall-mounted controller triggers up to eight light shows at the touch of a button. Power over Ethernet (PoE) technology eliminates the need for a separate power source, affording greater freedom of placement, higher reliability, and easy installation.

- Eight onboard effects and eight configurable scenes — iColor Keypad uses onboard lighting effects, eliminating the need for an external data source. Use the iColor Keypad Effect Manager configuration software to select from eight effects and adjust effect settings such as color, speed, and brightness as desired. Store up to eight sets of effects and settings as scenes. Recall scenes at the touch of a button.

- Enhanced color picker — iColor Keypad Effect Manager configuration software offers improved ability to define colors using the RGB or HSV color models, as well as the ability to select shades of white and tinted whites around the black-body curve.

- Power over Ethernet for increased flexibility — The IEEE 802.3af standard for Power over Ethernet (PoE) enables both electrical power and data to be transmitted over a single twisted-pair cable. Shared cabling reduces installation costs, decreases the space required for wires, and affords freedom of placement by eliminating wiring to a power source. iColor Keypad works with any PoE-compliant switch or PoE injector.

- Fingertip dimming and on / off control — Easily adjust brightness of connected lights from 0% – 100%, or turn them on and off.

- Simple installation with a single Ethernet connection — Mounts in a standard U.S. single-gang wall box. Uses a single CAT 5e or better cable for data and power with no additional wiring required.

- Compact design with sleek Decora faceplate — Compact design uses wall space efficiently. Decora faceplate hides mounting hardware for a clean look that blends with a variety of architectural styles.

Controls a Full DMX Universe
iColor Keypad controls one DMX universe of 512 DMX channels.

The Power of Power over Ethernet

The IEEE 802.3af standard for Power over Ethernet (PoE) enables both electrical power and data to be transmitted over a single twisted-pair cable. iColor Keypad is a PoE-compliant powered device that offers you convenience, increased flexibility, and simplified and inexpensive installation,
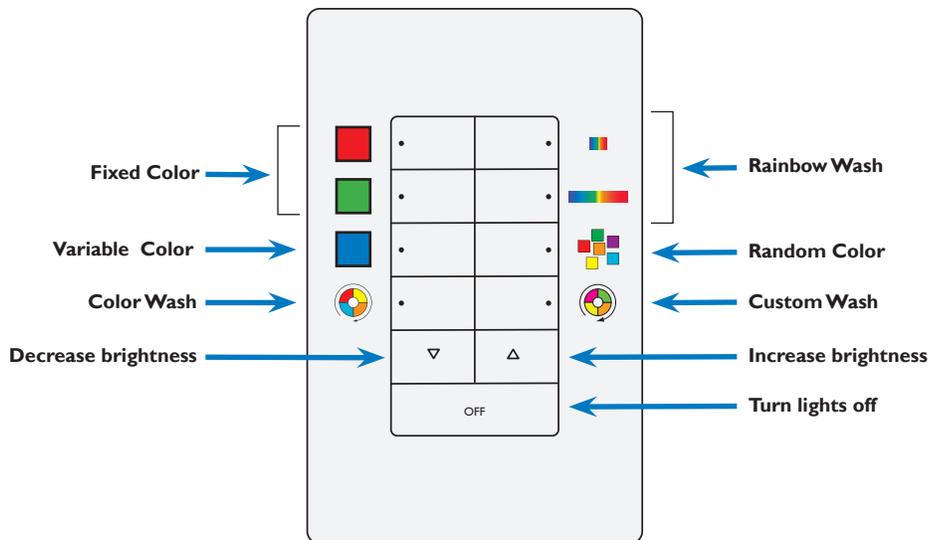
A New Standard of Flexibility

You can use iColor Keypad two ways: with a PoE-compliant Ethernet switch, or with a standard Ethernet switch and PoE injector. Regardless of which method you use, you can position each iColor Keypad up to 328 ft (100 m) from the switch. Since power is delivered over the same wire as the data, you do not need to use additional wiring or position the keypad near an external power source.
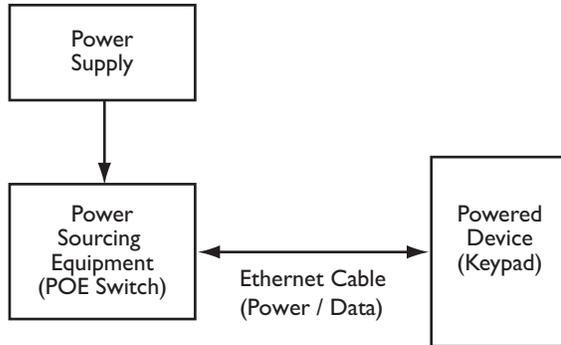
If you're using a PoE switch, you simply connect iColor Keypad to an available port on the switch using a standard Ethernet cable. If you're using a non-PoE switch, you must also attach a PoE injector to the Ethernet cable, You can position the PoE injector near the switch to keep the power and data sources together in the same location, and to give you maximum flexibility in positioning the keypad in a convenient location.
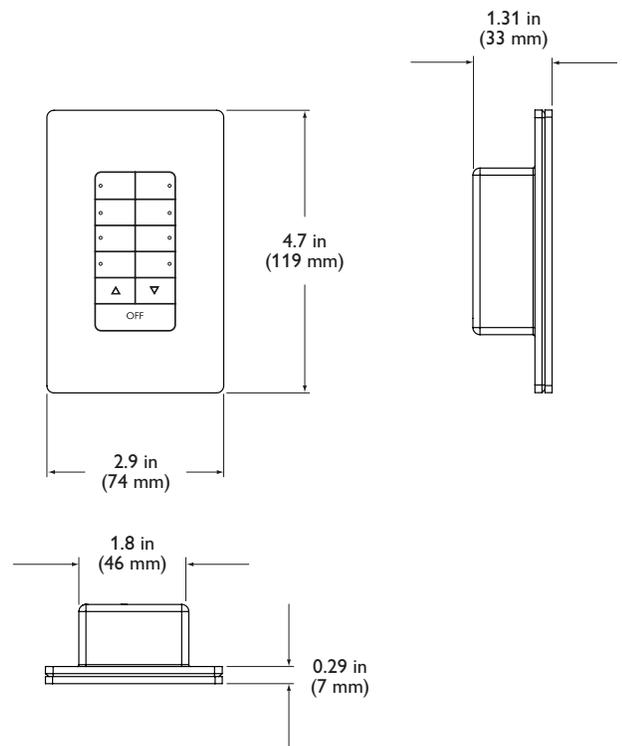
iColor Keypad buttons, showing factory settings

Fixed Color

Variable Color

Color Wash

Decrease brightness

Rainbow Wash

Random Color

Custom Wash

Increase brightness

Turn lights off

Specifications

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

Item	Specification	Details
Control	Ethernet	Minimum 10BASE-T from any PoE- or IEEE 802.3af-compliant Ethernet switch. PoE injector required for use with non-IEEE 802.3af-compliant switches
Physical	Dimensions *(Height x Width x Depth)*	4.7 x 2.9 x 1.31 in (119 x 74 x 33 mm)
	Weight	4.23 oz (120 g)
	Housing	Medium matte white plastic Decora-style faceplate Mounts in single-gang wall box
	Connector / Cable	RJ45 Port, CAT 5e or better data cable (not included)
	Operating Temperature	14° – 104° F (-10° – 40° C)
	Humidity	0 – 95%, non-condensing
Certification and Safety	Certification	CSA, FCC Class B, CE, CQC
	Environment	Indoor rated, IP20

1.31 in
(33 mm)

4.7 in
(119 mm)

2.9 in
(74 mm)

1.8 in
(46 mm)

0.29 in
(7 mm)

Included in the box

iColor Keypad
Software CD
Standard single-gang wall box for use outside of North America
(2) self-threading flat head countersunk M2.5 screws
Decora-style faceplate
Installation Instructions

Keypad and Accessories

iColor Keypad is part of a complete system that includes:

• A PoE-compliant switch to supply data and power to the keypad, or a non-PoE switch with one PoE-compliant power injector per keypad

• CAT 5e or better data cable to connect the keypad to switch or PoE injector

Item		Item Number	Philips 12NC
iColor Keypad		103-000028-00	910503702320
Power over Ethernet Switch	4 Power over Ethernet ports, 8 ports total	120-000084-01	910503702557
Power over Ethernet Injector	North America Power Cord	109-000029-00	910503700383
	Europe Power Cord	109-000029-01	910503700384

Use Item Number when ordering in North America.

Connect to IEEE 802.3af compliant PoE switch or PoE Injector and Ethernet switch
For detailed wiring diagrams visit www.colorkinetics.com/support/wiring/ls_prod.html

< 328 ft (100 m)

< 328 ft (100 m)
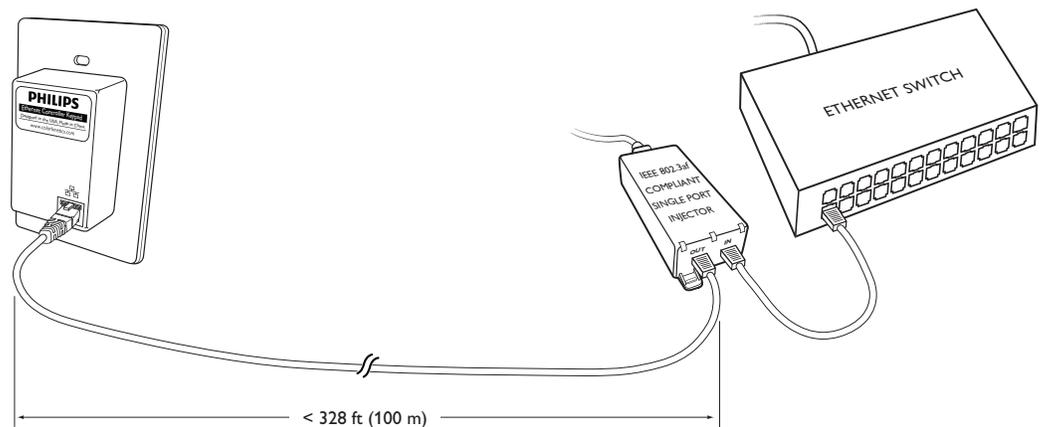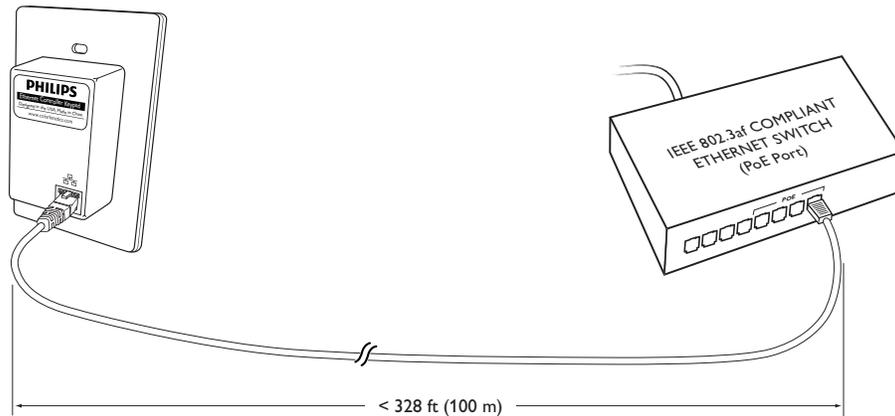
Installation

iColor Keypad can be installed in any Ethernet lighting installation using Data Enabler Pro devices or power / data supplies that support KiNET, the Ethernet lighting protocol from Philips Color Kinetics. Each iColor Keypad button broadcasts a stored, configurable scene to all LED lighting fixtures in your installation.

iColor Keypad requires data and power over a single Ethernet connection. A PoE-compliant Ethernet switch delivers both data and power over a standard CAT 5e or better data cable. Installations with non-PoE switches require a PoE-compliant power source, such as the PoE Injector.

Owner/User Responsibilities

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

�֍ Refer to the iColor Keypad Installation Instructions for specific warning and caution statements.

Prepare the Installation

The positioning of iColor Keypad is generally determined by the installation configuration, especially the locations of fixtures and power sources. Because iColor Keypad does not need to be wired to a power source, it can be installed in a convenient but unobtrusive location.

Create a layout plan that starts with the location of the Ethernet switch and, if applicable, the PoE injector(s), and includes all leader cables, CAT 5e or better data cables, and fixtures. If using a PoE-compliant Ethernet switch, ensure that a switch with an available port is installed in the lighting system. If using a non-PoE Ethernet switch, plan to install the required PoE injector(s) near the switch.

Assemble additional items:

- One CAT 5e or better data cable (unshielded twisted pair with an RJ45 connector, to a maximum length of 328 ft or 100 m) to connect iColor Keypad to an available port on a PoE-compliant Ethernet switch or to a PoE injector

- If using a PoE injector, an additional CAT 5e or better cable to connect the injector to the Ethernet switch, and a power cord to connect the injector to a power source. Refer to the PoE injector's installation or user guide for complete installation instructions.

- If installing iColor Keypad in a junction box in North America, you must use a UL-listed low-voltage junction box for Class II equipment. You can also install the keypad in a multi-gang wall box, or you can flush-mount it using the mounting holes at the top and bottom of the keypad, as allowed by applicable electrical codes at your location.

- The junction box included with iColor Keypad is for use outside of North America. You will need the provided flat-head screws for securing the keypad housing to the junction box.

Included in the box

| |
|---|
| iColor Keypad |
| Software CD |
| Standard single-gang wall box for use outside of North America |
| (2) self-threading flat head countersunk M2.5 screws |
| Decora-style faceplate |
| Installation Instructions |
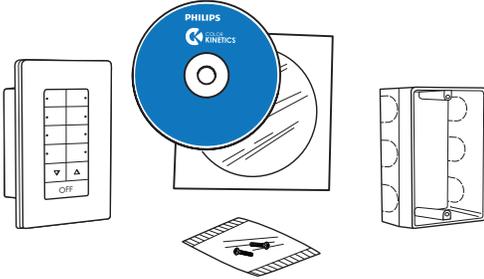
Inspect the Keypad and Accessories

Carefully inspect the box containing iColor Keypad and the contents for any damage that may have occurred in transit.

Mount and Connect the Keypad

Make sure the power is OFF before mounting and connecting iColor Keypad.

1. A UL-listed low-voltage junction box for Class II equipment may be used in North America. The provided junction box is for use outside of North America.

   • Snap out a knock-out on a side that will not be mounted to the structural component.

   • Mount the junction box using hardware appropriate for the mounting surface,
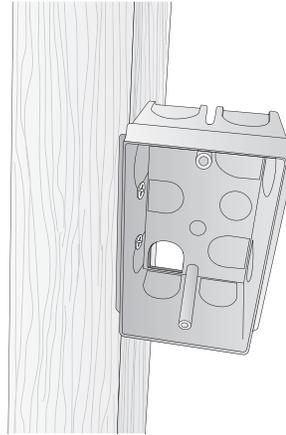
2. Thread CAT 5e or better data cable through the knock-out in the junction box.
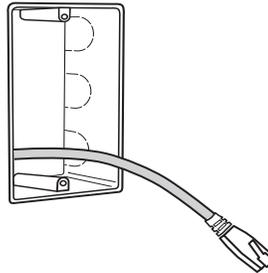
3. Insert the RJ45 connector into the port on the back of the keypad. When the keypad is active, two indicator lamps indicate Ethernet link (green) and Ethernet activity (yellow).
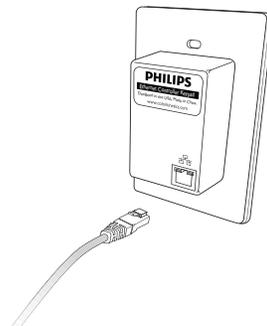
4. Remove the faceplate from the keypad by grasping the top or bottom edge of the faceplate and prying it gently away from the keypad.

5. Align the screw holes in the keypad with the screw holes in the wall box.

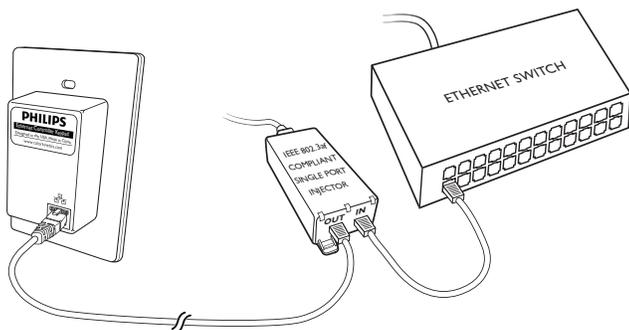6. Use two mounting screws to attach the keypad to the junction box.
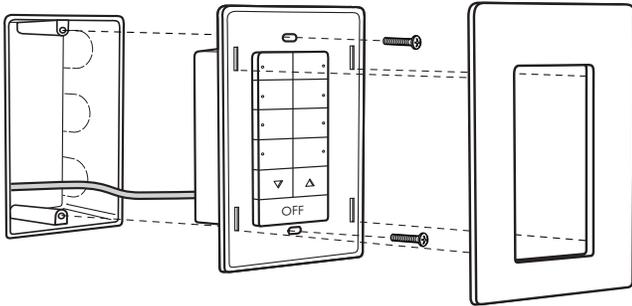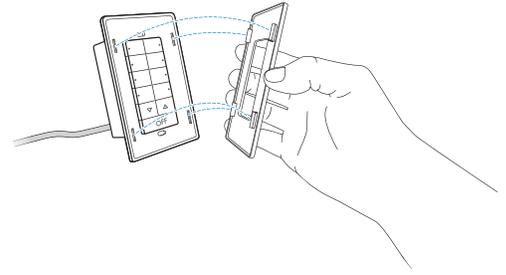
7. Replace the faceplate by pressing it gently onto the keypad until it snaps into place.

Make Cable Connections

Connect the CAT 5e or better data cable to an available PoE port on an Ethernet switch installed in the network.
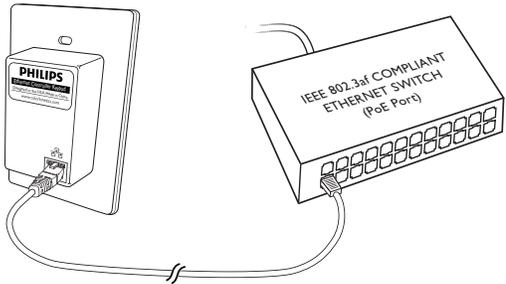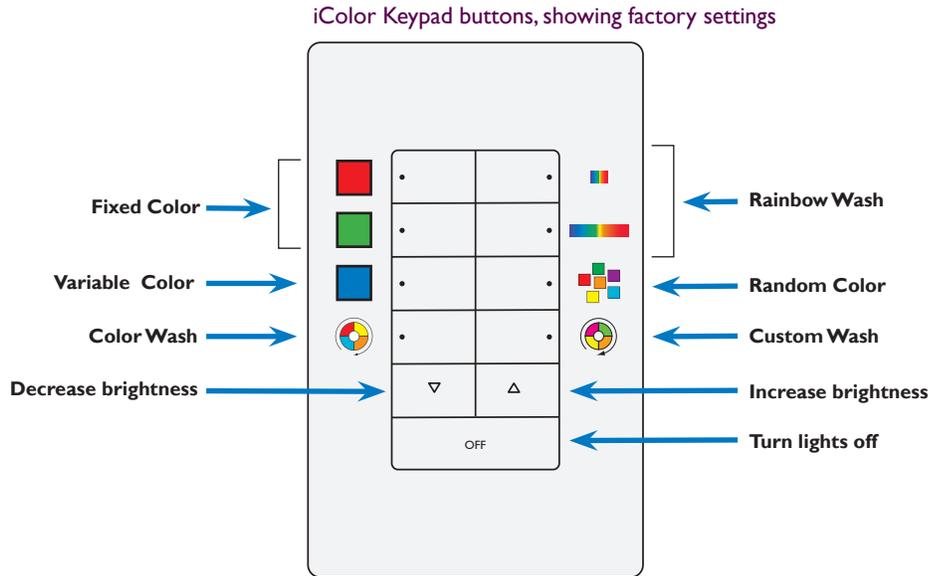

If using a non-PoE Ethernet switch, connect the CAT 5e or better data cable to the output port on a PoE injector. The PoE injector must be connected to the Ethernet switch and AC outlet in accordance with the manufacturer's installation instructions.

Using iColor Keypad

- Press a button to play the scene associated with it. By default, scenes play from the beginning at 100% brightness.

- Use the dimmer controls to adjust the brightness of the show lights from 0% – 100%. Press and hold the dimmer controls to fade up or down.

- Press the OFF button to turn all show lights off. Pressing a scene button turns lights back on (plays the scene associated with the button).

✳ *When playing a scene that uses the Variable Color effect, the dimmer controls adjust the effect hue, not its brightness.*

iColor Keypad buttons, showing factory settings

Fixed Color

Variable Color

Color Wash

Decrease brightness

Rainbow Wash

Random Color

Custom Wash

Increase brightness

Turn lights off

OFF

iColor Keypad Maintenance

Clean the keypad faceplate and buttons with a soft, damp cloth.

Using iColor Keypad Effect Manager

You use the iColor Keypad Effect Manager software to modify the scenes associated with the eight scene buttons, and to configure the iColor Keypad. For instance, you can change the iColor Keypad IP address, name, and DMX universe.

Installing iColor Keypad Effect Manager Software

To use iColor Keypad Effect Manager, install the iColor Keypad Effect Manager software on a Mac or Windows PC with the included CD, then connect the computer to your lighting network.

▶ **To install iColor Keypad Effect Manager software:**

1. Insert the included CD into a drive on a Mac or Windows computer.

2. Navigate to the folder containing the iColor Keypad Effect Manager installation files, and double-click the setup file.

3. Follow the on-screen instructions to install the iColor Keypad Effect Manager software.

✳ *You can always download the latest version of iColor Keypad Effect Manager software from www.colorkinetics.com/ support/downloads/*
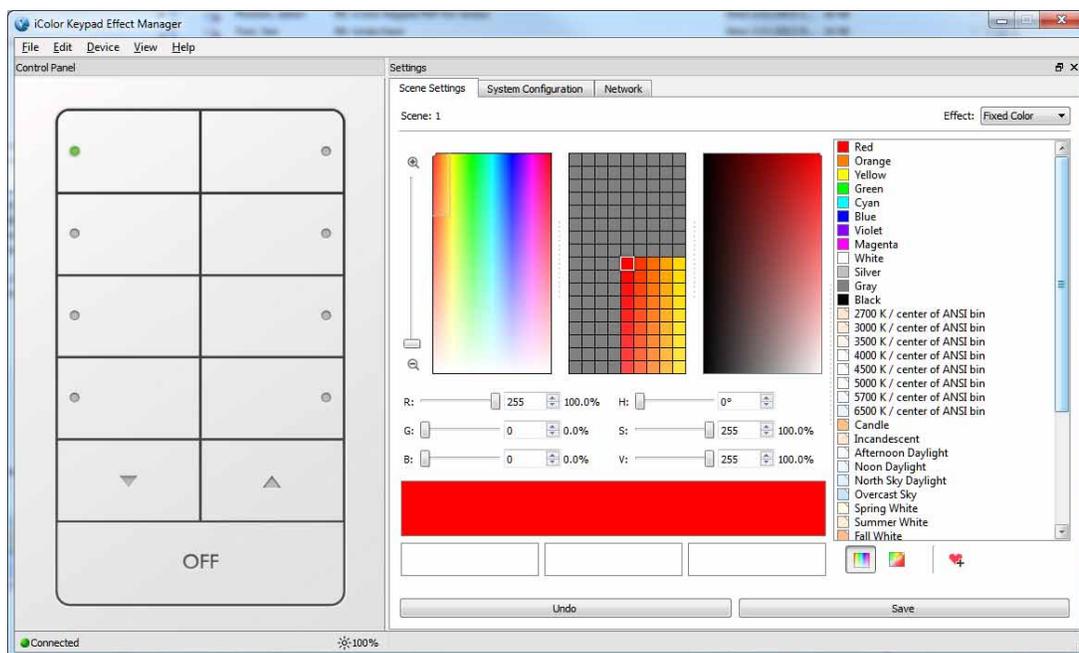
Starting iColor Keypad Effect Manager

To use iColor Keypad Effect Manager, iColor Keypad must be properly installed, connected, and running.

▶ **To start iColor Keypad Effect Manager:**

1. Do one of the following:

   • To start iColor Keypad Effect Manager in Windows, choose Start > All Programs > Philips Color Kinetics > iColor Keypad Effect Manager v1.2 > iColor Keypad Effect Manager.

   • To start iColor Keypad Effect Manager in Mac OS X, go to the iColor Keypad Effect Manager folder in the Applications folder, and double-click the iColor Keypad Effect Manager icon.

   The iColor Keypad Effect Manager window appears.

✳ *To communicate with iColor Keypad, your computer must have a static IP address. In Windows, the first byte of your computer's IP address must match the first byte of the keypad's address (10.x.x.x., 140.x.x.x., and so on). In Mac OS X, you can use any IP address.*

2. If you receive the message "Connection to iColor Keypad timed-out," click OK. You can try to connect to the iColor Keypad again by selecting Device > Discover Device.

If the message reappears, or if the message "Device communication failure. IP address may be invalid" appears in the status bar at the bottom of the iColor Keypad Effect Manager window, verify that iColor Keypad is installed, connected, and running properly, and that your computer's IP address is properly assigned. In Mac OS X, clear the router IP address in your network settings.

Modifying Scenes

A scene consists of a built-in effect and user-editable effect settings. Scenes are associated with iColor Keypad buttons. Effect settings differ depending on the selected effect. For example, you can change the speed and direction of the Color Wash effect, or the temperature of the iW White effect.

▶ **To modify a scene:**

1. Click a button on the left side of the iColor Keypad Effect Manager window. The currently selected button displays a green dot, and the currently associated effect and its settings appear in the Settings panel, on the right side of the window.

2. Click the System Configuration tab in the Settings panel, and select the type of fixture that you're using in your installation from the Fixture drop-down list.

3. Click the Scene Settings tab in the Settings panel.

4. To change the effect associated with the selected scene, select a different effect from the Effect drop-down list.

5. Change the effect settings as desired, as described in "Modifying Effects" below.

6. Click Save.

Modifying Effects

Follow steps 1 – 4 in "Modifying Scenes" above, then follow the steps for the effect you want to modify below. Changes are stored on iColor Keypad. If you modify the effect associated with the scene currently displayed on connected lights, the changes are immediately displayed.

iColor Keypad Effects

▮	Fixed Color	◉	Custom Wash
▦	Variable Color	▦	Random Color
◉	Color Wash	◈	RGB White
🌈	Rainbow Wash	▭	iW White

▶ **To modify the Fixed Color effect:**

1. Select a color using the Color Picker's RGB Range or White Range, as described on pages 15 – 17.

2. Click Save.

▶ **To modify the Variable Color effect:**

1. Select a color using the Color Picker's RGB Range, as described on pages 15 – 17.

2. Click Save.

▶ **To modify the Color Wash effect:**

1. Using the Speed slider, set effect transition time, from 5 seconds to 10 minutes.

2. Set how the direction in which the effect appears to move by clicking Left to Right or Right to Left.

3. Click Save.

iColor Keypad Effects and Their Settings

Fixed Color Displays a single color on all fixtures. iColor Keypad Up and Down buttons adjust scene brightness.

Color Select an effect color using the RGB Range or the White Range

Variable Color Displays a single color on all fixtures. iColor Keypad Up and Down buttons adjust RGB value.

Color Select an effect color using the RGB Range

Color Wash Produces a smooth hue transition on all fixtures simultaneously, progressing through the color spectrum.

Speed Set effect transition time, from 5 seconds to 10 minutes
Direction Set how effect appears to move: Left To Right or Right To Left

Rainbow Wash Produces a smooth transition through the color spectrum. Colors appear to follow each other from fixture to fixture.

Speed Set effect transition time, from 5 seconds to 10 minutes
Width Set the width of the rainbow, from 4 – 35 nodes
Direction Set how effect appears to move: Left To Right or Right To Left

Custom Wash Produces a marching color transition across all fixtures, progressing through two to six selected colors.

Color Bar Add or delete effect colors, from 2 to 6
Color Set each effect color using the RGB Range or the White Range
Speed Set effect transition time, from 1 second to 10 minutes
Width Set the width of each of block of color, from 1 – 32 nodes
Direction Set how effect appears to move: Left To Right or Right To Left

Random Color Displays a sequence of random colors on all fixtures, either fading or snapping from color to color.

Speed Set effect transition time, from 1 second to 10 minutes
Fade Determine whether color transitions fade or snap

RGB White Displays RGB white light on all fixtures, with user-specified color temperature. For color-changing LED fixtures.

Temperature Select cooler or warmer white light
Intensity Set the programmed brightness of the scene, from 0% to 100%

iW White Displays white light on all fixtures, with user-specified color temperature. For two-channel intelligent white (iW) fixtures.

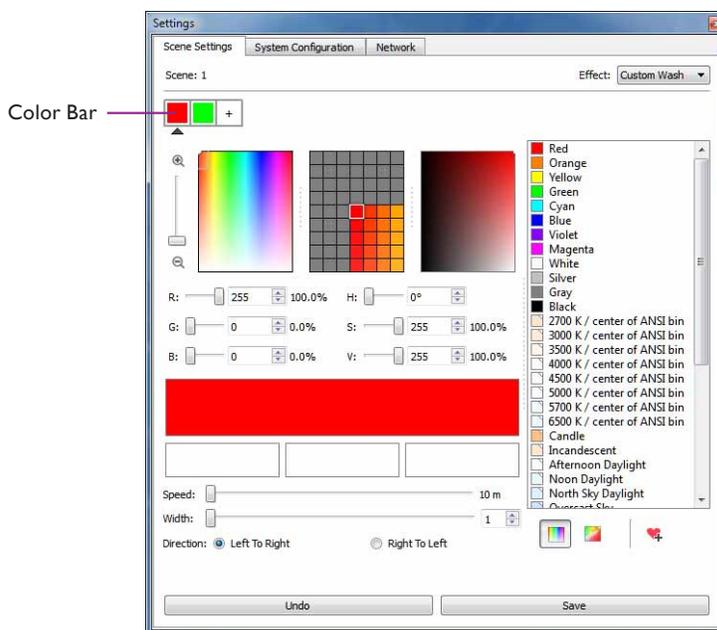**Temperature** Select cooler or warmer white light
Intensity Set the programmed brightness of the scene, from 0% to 100%

► **To modify the Rainbow Wash effect:**

1. Using the Speed slider, set effect transition time, from 5 seconds to 10 minutes.

2. Using the Width controls, set the width of the rainbow, from 4 – 35 nodes.

3. Set how the direction in which the effect appears to move by clicking Left to Right or Right to Left.

4. Click Save.

► **To modify the Custom Wash effect:**

1. Using the color bar, set the effect colors:

   ▪ To add a color to the Custom Wash effect, click the + icon at the right of the color bar (maximum of six colors).

   ▪ To delete a color from effect, right-click a color swatch in the color bar and select Delete Color from the pop-up menu (minimum of two colors).

   ▪ To modify an effect color, select the color in the color bar and use the RGB Range or White Range, as described on pages 15 – 17.

2. Using the Speed slider, set the effect transition time, from 1 second to 10 minutes.

3. Using the Width controls, set the width of each of block of color, from 1 – 32 nodes.

4. Set how the direction in which the effect appears to move by clicking Left to Right or Right to Left.

5. Click Save.

► **To modify the Random Color effect:**

1. Using the Speed slider, set effect transition time, from 1 seconds to 10 minutes.

2. Check Fade to make color transitions fade. Uncheck Fade to make color transitions snap.

3. Click Save.

▶ **To modify the RGB White effect:**

1. Using the Temperature slider, select cooler or warmer white light.

2. Using the Intensity controls, set the programmed brightness of the scene, from 0% to 100%.

3. Click Save.

▶ **To modify the iW White effect:**

1. Using the Temperature slider, select cooler or warmer white light.

2. Using the Intensity controls, set the programmed brightness of the scene, from 0% to 100%.

3. Click Save.

Notes on Fixture Configuration

iColor Keypad broadcasts three channels of DMX data to connected fixtures. To use iColor Keypad with fixture types other than standard three-channel RGB, you must make sure that the fixtures are configured appropriately. You typically perform fixture configuration with QuickPlay Pro addressing and configuration software, or with a fixture's on-board controls. Refer to specific fixture Product Guides for details.

✸ *You can download QuickPlay Pro from www.philipscolorkinetics.com/support/ addressing/*

Make sure that you also select the correct fixture type on the System Configuration tab in iColor Keypad Effect Manager before selecting shades of white and tinted whites with the White Range. The calculations that iColor Keypad Effect Manager performs to arrive at DMX values for these colors differ depending on fixture type. If you change the fixture type, you must re-define and re-save any scenes that use effects with colors selected with the White Range.

✸ *For details on selecting fixture types, refer to "Selecting Fixture Type" on page 19.*

Configuring Color-Changing Fixtures with More than Three Channels

For reliable results, you must configure four-channel, five-channel, and IntelliHue fixtures to work in three-to-*n*-channel mode. For instance, you must configure ColorBlast TRX to work in RGB > RGBAW mode.

Configuring Two- and Three-Channel iW Fixtures

Two-channel iW fixtures, such as iW Burst Powercore and iW Burst Compact Powercore, use one channel of warm white LEDs and one channel of cool white LEDs to produce a range of color temperatures. Three-channel iW fixtures, such as iW Cove MX Powercore and iW Graze MX Powercore, add a channel of neutral white LEDs for greater precision in color temperature and color mixing.

For compatibility with two-channel iW fixtures, most three-channel iW fixtures can be configured to accept two channels of data input. When an iW fixture is in two-channel mode, you can use the IW White effect to adjust the fixture's color temperature (relative warmth or coolness) and intensity. The two channels of data input are automatically mapped to the fixture's three LED channels.

If iW fixtures are in three-channel mode, you can use the color picker's RGB Range to select colors for effects. In three-channel mode, the warm channel maps to Red, the neutral channel to Green, and the cool channel to Blue.

Using the Color Picker

The Fixed Color, Variable Color, and Custom Wash effects feature a color picker with which you can select specific colors of light for color-changing fixtures of three or more channels. The color picker offers an RGB Range for picking colors, and a White Range for targeting or shades or tints of white light.
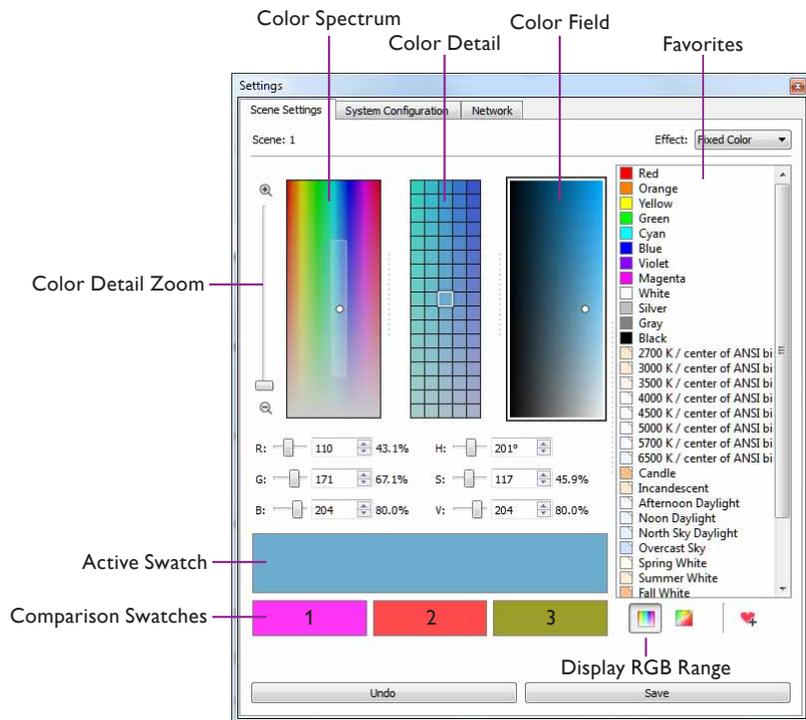
Color Picker: RGB Range
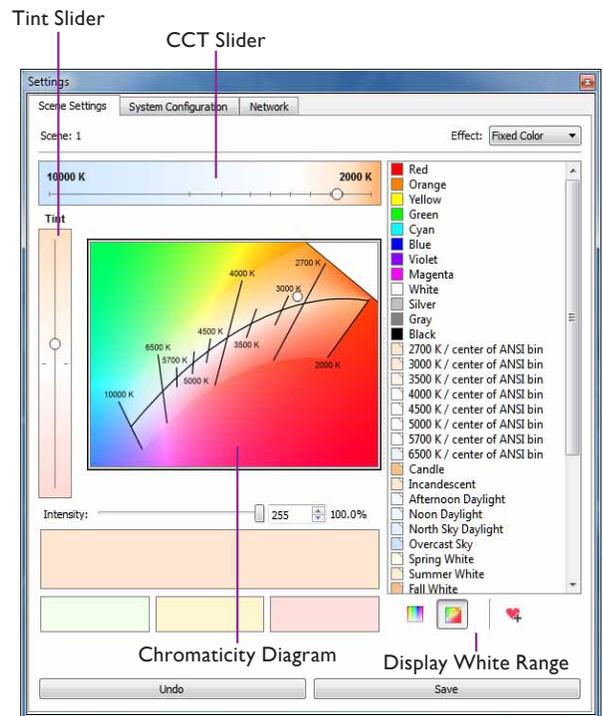
Color Picker: White Range

### Switching Between the RGB Range and the White Range

You can switch between the RGB Range and the White Range using the Display RGB Range and Display White Range buttons. You can also switch between the ranges by clicking items in the Favorites list. RGB colors display the RGB Range, while shades of white or tinted whites display the White Range.

Selecting Colors with the RGB Range

The RGB Range lets you select a specific color using the Color Spectrum, Color Detail, and Color Field controls, or using the sliders for the RGB (red / green / blue) color model or the HSV (hue / saturation / brightness) color model.

The currently selected color appears in the active swatch box. The currently selected color is also indicated on the Color Spectrum and the Color Field by a color point (a white dot), and on the Color Detail control by a highlighted box. You can change the currently selected color by dragging the white dot to a new location on any of the color controls, or by using the RGB and HSV sliders, in any combination. If lights are connected to your system and are turned on, they display the active swatch color.

To make it easier to select and fine-tune specific colors, the Color Detail control displays colors adjacent to the currently selected color. You can adjust the range of colors displayed in the Color Detail control by using the Color Detail Zoom slider. Like on a map, zooming in enlarges the area immediately adjacent to the color point. When you zoom in and out, the white bounding box on the Color Spectrum shrinks or expands to indicate the region displayed in the Color Detail control. The more you zoom in, the less difference between adjacent colors in the Color Detail control.

Zoomed out   Zoomed in
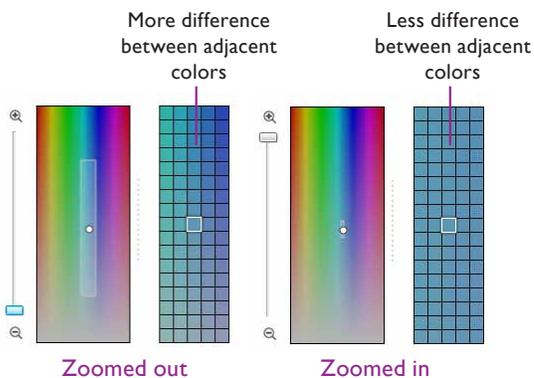
Selecting a Shade of White with the White Range

The White Range targets an area within the CIE 1931 x-y chromaticity space, on which correlated color temperatures (CCTs) for white light are defined. To make it easier to select shades of white light and tinted white light, the White Range constrains color selections to an area along the black-body curve and the iso lines that extend above and below it. To select colors outside of this area, use the RGB Range.
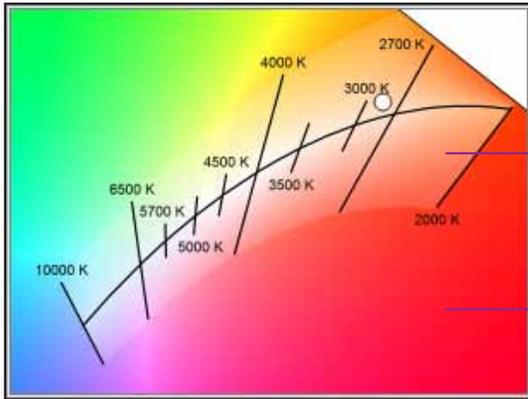
The White Range constrains selections to an area along the black-body curve and the iso lines above and below it

For colors outside the White Range, use the RGB Range

The White Range helps you target shades and tints of white light using color-changing fixtures of three or more channels. Use the iW White effect for selecting color temperatures with IntelliWhite fixtures in 2-channel mode. You can also use the RGB Range with IntelliWhite fixtures in 3-channel mode. Refer to "Notes on Fixture Configuration" on page 14 for more information.

The White Range lets you select a specific shade or tint of white using the Chromaticity Diagram and the Tint and CCT sliders. The currently selected shade of white appears in the active swatch. The currently selected shade is also indicated on the Chromaticity Diagram by a color point (a white dot), and by positions on the Tint and CCT sliders. You can change the currently selected shade by dragging the white dot to a new location on the Chromaticity Diagram, or by using the Tint and CCT sliders, in any combination. The CCT slider moves the color point along the black-body curve, while the Tint slider moves the color point perpendicular to the black-body curve, parallel with the iso lines. If lights are connected to your system and are turned on, they display the active swatch color.

Do not use the Color Picker's White Range with the Variable Color effect.

Keep in mind that the color point and the slider positions make a general indication of CCT and tint, and do not imply or guarantee color accuracy or color consistency across different fixture types. Think of the color point and slider positions as good starting points. If targeting an exact color temperature or x-y coordinate is critical, be sure to use a light meter or other measurement device to test the output of your lighting fixtures.

Color definitions created with the White Range differ depending on fixture type. To re-use shades of white and tinted whites with different fixture types, make sure you save them to the Favorites list. You can then re-load the colors and re-save the effects when you change fixture types.

For details on selecting fixture type, refer to "Selecting Fixture types" on page 19..

Using the Active and Comparison Swatches

Both the RGB Range and the White Range offer active and comparison swatches to make it easier to compare and select colors.
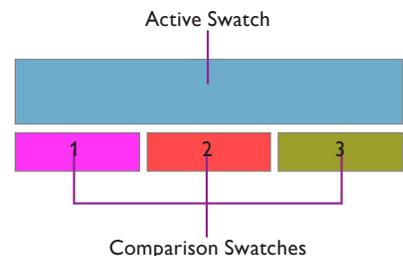
The currently selected color appears in the active swatch. You can also load colors into the active swatch by clicking an item in the Favorites list. You can load colors into the comparison swatches by dragging and dropping them from the active swatch in either view, or from the Color Detail control in the RGB Range view.

When you save settings for the Fixed Color or Variable Color effect, or when you add a color to the Custom Wash effect, iColor Keypad Effect Manager uses the color currently loaded in the active swatch.

Active Swatch

Comparison Swatches
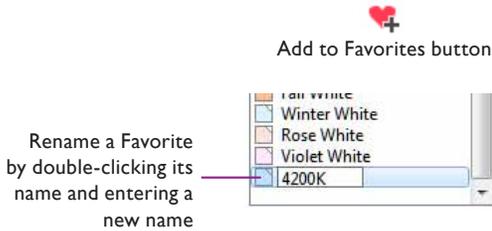
Saving and Undoing Changes to Scenes

When you make changes to scene colors using the color picker, iColor Keypad Effect Manager shows the changes but does not store them on iColor Keypad until you save them.

- To save scene changes and store them on the iColor Keypad. click Save.

- To revert to the previously saved version of the scene, click Undo.

Using and Creating Favorites

By default, iColor Keypad Effect Manager offers a list of Favorites that includes 12 RGB colors and 20 shades or tints of white.

- Clicking an RGB color in the Favorites list displays the RGB Range and loads the color into the active swatch.

- Clicking a shade of white in the Favorites list displays the White Range and loads the color into the active swatch.

- To create a new Favorite, select a color and click the Add to Favorites button. The new Favorite appears with a default name (Color1, Color2, and so on) in the Favorites list.

- To rename a Favorite, double-click the name and enter a new name.

- To delete a Favorite, select the Favorite and press Delete.

Add to Favorites button

Rename a Favorite by double-clicking its name and entering a new name

Fall White
Winter White
Rose White
Violet White
4200K

Color Picker Keyboard Shortcuts

Action	Shortcut
Zoom in and out on the Color Spectrum	Ctrl - + / Ctrl - –
Move the color point on the Color Spectrum, Color Detail, Color Field, or Chromaticity Diagram	↑ / ↓ / ← / →
Increase / decrease zoom on the Color Detail Zoom slider	↑ / ↓
Increase / decrease red on the Chromaticity Diagram	Ctrl - r / Ctrl - Shift - r
Increase / decrease green on the Chromaticity Diagram	Ctrl - g / Ctrl - Shift - g
Increase / decrease blue on the Chromaticity Diagram	Ctrl - b / Ctrl - Shift - b
Increase / decrease CCT on the CCT slider	← / →
Move up and down the Tint Slider	↑ / ↓
Switch between controls without moving the color point	Ctrl - click or Right - click
Copy Comparison Swatch 1 color to the Active Swatch	Ctrl - 1
Copy Comparison Swatch 2 color to the Active Swatch	Ctrl - 2
Copy Comparison Swatch 3 color to the Active Swatch	Ctrl - 3

Changing System Configuration

The System Configuration tab on the Settings panel lets you change iColor Keypad name and IP address, set universe, KiNET mode, the number of lights per port, the number of ports, the fixture type for defining shades of white, and which keypad buttons are enabled.
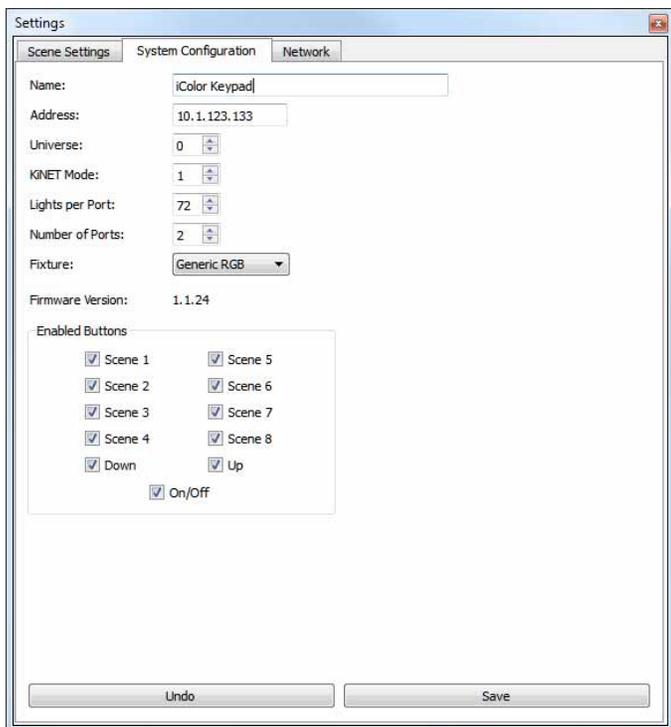
Changing the Keypad Name

You can change the name of an iColor Keypad to uniquely identify it. By default, each keypad is named "iColor Keypad."

► **To change the name of iColor Keypad:**

　1. Click the System Configuration tab on the Settings panel.

　2. Enter a new name in the Name text box.

　3. Click Save.

Changing the Keypad IP Address

Each iColor Keypad comes factory-set with a unique IP address. For convenience, you can change a keypad's IP address.

► **To change the IP address of iColor Keypad:**

　1. Click the System Configuration tab on the Settings panel.

　2. Enter a new IP address in the Address text box.

　3. Click Save.

�֍ *In Windows, make sure that the first byte of your computer's IP address matches the first byte of the keypad's address (10.x.x.x., 140.x.x.x., and so on).*

Setting the DMX Universe

By default, iColor Keypad is set to control DMX universe 0 (zero). All Philips Color Kinetics power / data supplies also come factory-set to DMX universe 0. If the DMX universe of a connected power / data supply has been changed — for example, in a complex installation spanning multiple DMX universes — you must change the Universe setting in iColor Keypad to match it.

► **To set the DMX universe that iColor Keypad controls:**

1. Click the System Configuration tab on the Settings panel.
2. Enter a new universe number (0 – 255) in the Universe box, or use the Up and Down arrows to select a new universe number.
3. Click Save.

Setting the KiNET Mode

KiNET is a high-performance Ethernet protocol engineered by Philips Color Kinetics for LED lighting control. Most Philips Color Kinetics devices can use KiNET version 1 (the default in iColor Keypad). However, sPDS-480ca power / data supplies require KiNET version 2.

► **To set KiNET mode:**

1. Click the System Configuration tab on the Settings panel.
2. Enter 1 or 2 in the KiNET Mode box.
3. Click Save.

Setting the Number of Lights Per Power / Data Supply Port

For KiNET version 1, the Lights per Port setting in iColor Keypad should equal or exceed the number of sequentially addressed nodes connected to the power / data supply. By default, iColor Keypad is set to 72 nodes per power / data supply port, which is sufficient for most installations.

For KiNET version 2 (Data Enabler Pro or sPDS-480ca), set the lights per port to equal the maximum number of nodes connected to a power / data supply port.

► **To set the number of lights per power / data supply:**

1. Click the System Configuration tab on the Settings panel.
2. Enter a new number (1 – 170) in the Lights per Port box, or use the Up and Down arrows to select a new number.
3. Click Save.

Setting the Number of Power / Data Supply Ports

For KiNET version 2 only, the Number of Ports setting in iColor Keypad should equal the number of power / data supply ports with connected lights. (To ensure optimal operation, lights should be connected to power / data supply ports in sequence, starting with port 1 — ports 1 through 5 on an sPDS-480ca, for example.)

► **To set the number of power / data supply ports:**

1. Click the System Configuration tab on the Settings panel.
2. Enter a new number (1 – 16) in the Number of Ports box, or use the Up and Down arrows to select a new number.
3. Click Save.

Selecting Fixture Type

For reliable results, you must select the type of fixture you're using in your installation before selecting and saving shades of white and tinted whites with the White Range in the Color Picker. The calculations that iColor Keypad Effect Manager performs to arrive at DMX values for colors in the White Range differ depending on the number and type of LED channels in the fixtures you're using. If you change fixture type, you must re-define and re-save any scenes that use effects with colors selected with the White Range.

Note that iColor Keypad does not support lighting installations with a mixture of different fixture types. We recommend using iColor Player or iPlayer 3 for reliable control of lighting installations with multiple fixture types.

❋ *To re-use shades of white and tinted whites with different fixture types, make sure you save your colors to the Favorites list. You can then re-load the colors and re-save the effects to work with the new fixture type.*

❋ *You must also make sure that your fixtures are configured properly. Refer to "Notes on Fixture Configuration" on page 14 for more information.*

▶ **To select fixture type:**

1. Click the System Configuration tab on the Settings panel.

2. Select your fixture type from the Fixture drop-down list:

   ▪ Select Generic RGB when using three-channel fixtures such as ColorBlast Powercore, ColorReach Powercore, iColor Cove MX Powercore, and iW Fuse Powercore (in three-channel mode).

   ▪ Select Blaze / Blast TRX when using ColorBlaze TRX or ColorBlast TRX 5-channel fixtures.

   ▪ Select SkyRibbon when using color-changing SkyRibbon fixtures.

3. Click Save.

Enabling and Disabling Keypad Buttons

By default, all iColor Keypad buttons are enabled. To limit access to keypad functions, you can disable any of the eight Scene buttons, the Down and Up buttons for adjusting fixture brightness, or the On/Off button.

▶ **To enable or disable keypad buttons:**

1. Click the System Configuration tab on the Settings panel.

2. To enable a button, check the box next to the button name. To disable a button, uncheck the box next to the button name.
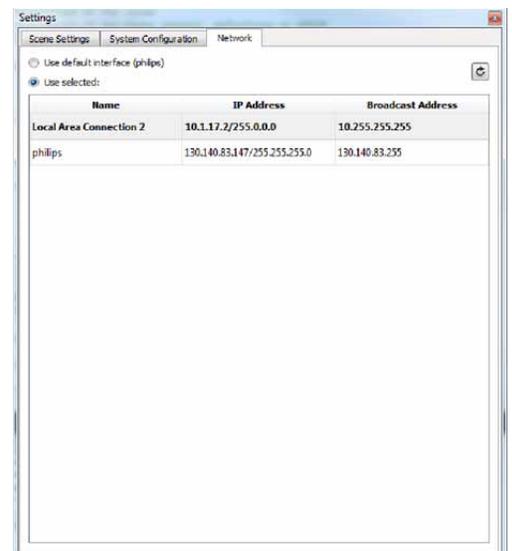
3. Click Save.

Selecting a Network

If your computer has multiple network interface cards (NIC cards) to manage multiple networks, you can select the network on which you want to run your lighting system.

▶ **To select a network:**

1. Click the System Configuration tab on the Settings panel.

2. Do one of the following:

   ▪ Click "Use default interface" to let your computer decide which NIC card to use.

   ▪ Click "Use selected," then select a network from the list.

Restoring Factory Default Settings

You may want to restore the factory default settings for iColor Keypad. Except for IP address and iColor Keypad name, all saved changes to scenes and system settings are overwritten with the default settings.

► **To restore the factory default settings:**

1. Select Device > Restore Factory Defaults.

2. Click Yes to continue and restore default settings.

Saving and Loading Configuration Files

A configuration file (.xml format) contains all scene settings and all configuration information except for iColor Keypad name and IP address. You can save custom settings in a configuration file, then use the file to program multiple devices.

�֍ When loading a configuration file, brightness is automatically set to 100%.

► **To save and load a configuration file:**

1. Select File > Save Configuration File to save a keypad's current settings. Give the configuration file a name and location, and click OK.

2. Select File > Load Configuration File to load saved keypad settings. Navigate to a location containing a valid configuration file, select the file, and click Open.

Updating iColor Keypad Effect Manager Software

iColor Keypad Effect Manager software is periodically updated with new features. You can check for updates whenever you like, or you can set iColor Keypad Effect Manager to automatically notify you of available updates.

✷ You can check for and download new versions of iColor Keypad Effect Manager software at any time by visiting www.colorkinetics.com/support/downloads/

► **To update iColor Keypad Effect Manager software:**

1. Select Help > Update.

2. To check for updates now, click Check Now.

3. To automatically check for updates, check "Automatically check for updates." Enter the frequency you want to check for updates, in days. If you use a proxy server to connect to the Internet, check "Use a proxy to access the internet," then enter the proxy information.

4. Click OK.

Updating iColor Keypad Firmware

iColor Keypad firmware is periodically updated to improve device performance and functionality. To maximize system performance, make sure your iColor Keypad devices are running the most recent version of the firmware.

✷ You can check the version number of the software currently installed on iColor Keypad on the System Configuration tab in the Settings panel within iColor Keypad Effect Manager.

Download iColor Keypad Firmware

If a more recent version of the iColor Keypad firmware is available, download the firmware file (.hex extension):

1. Visit the Firmware Updates page at www.colorkinetics.com/support/downloads/firmware/ to check for the latest firmware version.

2. If a newer firmware image is available, click the link on the Firmware Updates page to download the firmware file to an accessible location on your computer.

Download CK Firmware Updater

To update the firmware image on a iColor Keypad device, you must download and install the CK Firmware Updater application on your computer.

1. Visit the Firmware Updates page at www.colorkinetics.com/support/downloads/firmware/

2. Download the Firmware Updater Utility.

3. Decompress the file to an accessible location on your computer and open it.

4. Run the installer, and follow the on-screen instructions.

Running an iColor Keypad Firmware Update

You can update iColor Keypad firmware using a computer running CK Firmware Updater software.

1. Connect a computer to your lighting network using a standard Ethernet cable.

2. Run CK Firmware Updater.

3. From the Interface Select drop-down list, select Ethernet Controllers.

4. From Device Select drop-down list, select iColor Keypad.

5. Click File Select, navigate to the folder to which you downloaded the firmware file (.hex extension), and click Open.

6. Click Discover. CK Firmware Updater discovers the iColor Keypad devices installed in the lighting network.

7. Select the iColor Keypad device you want to update.

8. Click PROGRAM.

9. Repeat steps 7 and 8 for each iColor Keypad device you want to update.

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