



## ColorDial Pro

Enhanced wall-mounted lighting controller

**PHILIPS**

# ColorDial Pro

## Enhanced wall-mounted lighting controller

ColorDial™ Pro is an Ethernet-based, stand-alone lighting controller and interface for color-changing LED lighting fixtures from Philips Color Kinetics. Featuring an enhanced LCD screen for configuring effects and simple dial-and-button controls, ColorDial Pro offers fingertip triggering of full-color light shows and dynamic lighting effects. ColorDial Pro uses Power over Ethernet (PoE) technology to eliminate the need for a separate power source, affording greater freedom of placement, higher reliability, and easy installation.

- 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. ColorDial Pro works with the PoE-compliant switch or PoE injector offered by Philips Color Kinetics, or with any PoE-compliant switch or injector.
- Simple installation with a single Ethernet connection — Mounts in a standard U.S. single-gang wall box. Uses a single CAT 5e cable for data and power with no additional wiring required.
- Six onboard effects and eight configurable scenes — ColorDial Pro uses onboard lighting effects, eliminating the need for an external data source. Select from six effects, and adjust effect settings such as color, speed, and intensity as desired. Store up to eight sets of effects and settings as scenes, which you can recall at the touch of a button.
- New user-configurable Custom Wash effect — Smoothly transitions through two to six colors of your choice. Effect also lets you set transition speed and direction of movement.
- Expanded addressing — ColorDial Pro controls up to 170 unique light addresses, equivalent to one DMX universe.
- Fingertip dimming and on/off control — Easily adjust brightness from 0% – 100%, or turn connected lights on and off.
- Compatible with Ethernet Controller Keypad — Remotely trigger scenes, adjust brightness from 0% – 100%, and turn connected lights on and off.



### Compact Design with Sleek Decora® Faceplate

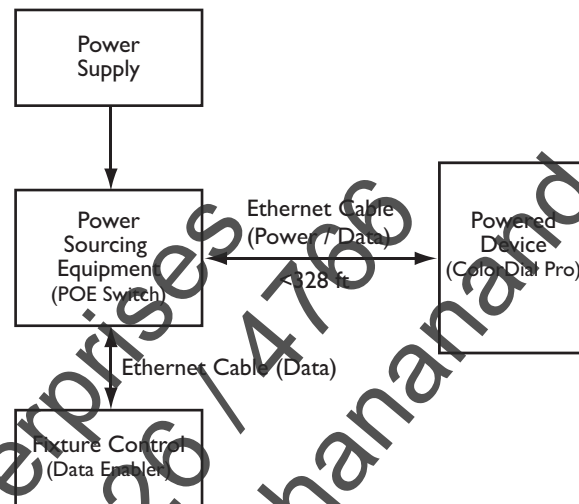
Compact design uses wall space efficiently. Decora faceplate hides mounting hardware for a clean look that blends with a variety of architectural styles.

## 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. ColorDial Pro 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 ColorDial Pro 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 ColorDial Pro 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 controller near an external power source.



If you're using a PoE switch, you can easily install ColorDial Pro using standard CAT-5e Ethernet cable simply by connecting ColorDial Pro to an available PoE port on the switch. If you're using a non-PoE switch, you must also attach a PoE injector to the Ethernet cable for the installation. Positioning the PoE injectors near the switch keeps all power and data sources together in the same location, and gives you maximum flexibility in positioning ColorDial Pro in a convenient location in your installation.

### ColorDial Pro and Ethernet Controller Keypad

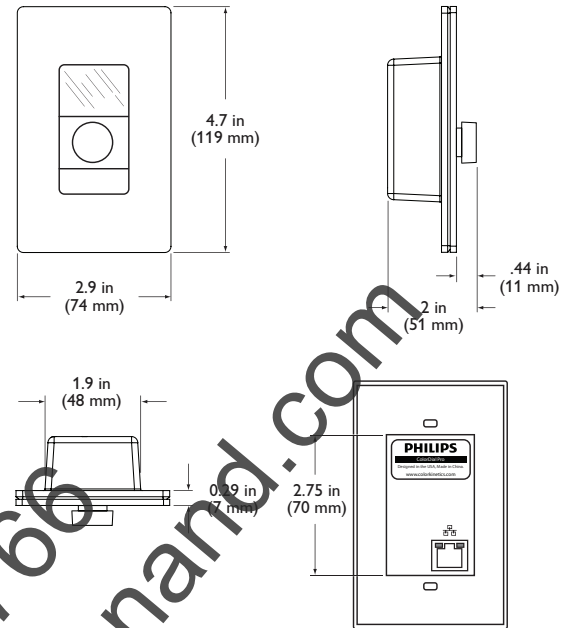
By taking advantage of the communication capabilities of Ethernet, ColorDial Pro gives you ease of installation and unprecedented control of your lighting system. You can use Ethernet Controller Keypad from Philips Color Kinetics to remotely trigger stored ColorDial Pro scenes, adjust fixture brightness, and turn connected fixtures off and on. Like ColorDial Pro, Ethernet Controller Keypad connects to a PoE port on your Ethernet switch.

In this type of configuration, you can install ColorDial Pro in a secure area to limit access and avoid accidental interruption of scene playback, and Ethernet Controller Keypad in a convenient and accessible location.

## Specifications

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

| Item                     | Specification                          | Details  |
|--------------------------|--|--|
| Control                  | Ethernet                               | 10BASE-T from any PoE- or IEEE 802.3af-compliant Ethernet switch. PoE injector required for use with non-IEEE 802.3af-compliant switches |
| Capability               | Supported LED Nodes or Fixtures        | 170 unique light numbers (one DMX universe)  |
|                          | Playback Output                        | Six pre-programmed, modifiable effects   |
|                          | Storage                                | Eight scenes (sets of effects and effect settings)   |
| Physical                 | Dimensions<br>(Height x Width x Depth) | Housing: 4.63 x 3 x 1.5 in (118 x 76 x 38 mm)<br>Faceplate: 4.63 x 3 x .13 in (118 x 76 x 3 mm)  |
|                          | Weight                                 | 2.06 oz (59 g)   |
|                          | Housing                                | Medium matte white plastic Decora® faceplate<br>Mounts in single-gang wall box   |
|                          | Connector / Cable                      | RJ45 Port, CAT 5e Data Cable (not included)  |
|                          | Operating Temperature                  | 14° – 104° F (-10° – 40° C)  |
|                          | Humidity                               | 0 – 95%, non-condensing  |
| Certification and Safety | Certification                          | FCC Class A, CE  |
|                          | Environment                            | Dry Location, IP40   |



## ColorDial Pro and Accessories

### Included in the box

|  |
|--|
| ColorDial Pro  |
| Standard single-gang wall box for use outside of North America |
| (2) self-threading flathead countersunk M2.5 screws            |
| Installation Instructions and User Guide                       |

ColorDial Pro is part of a complete system that includes:

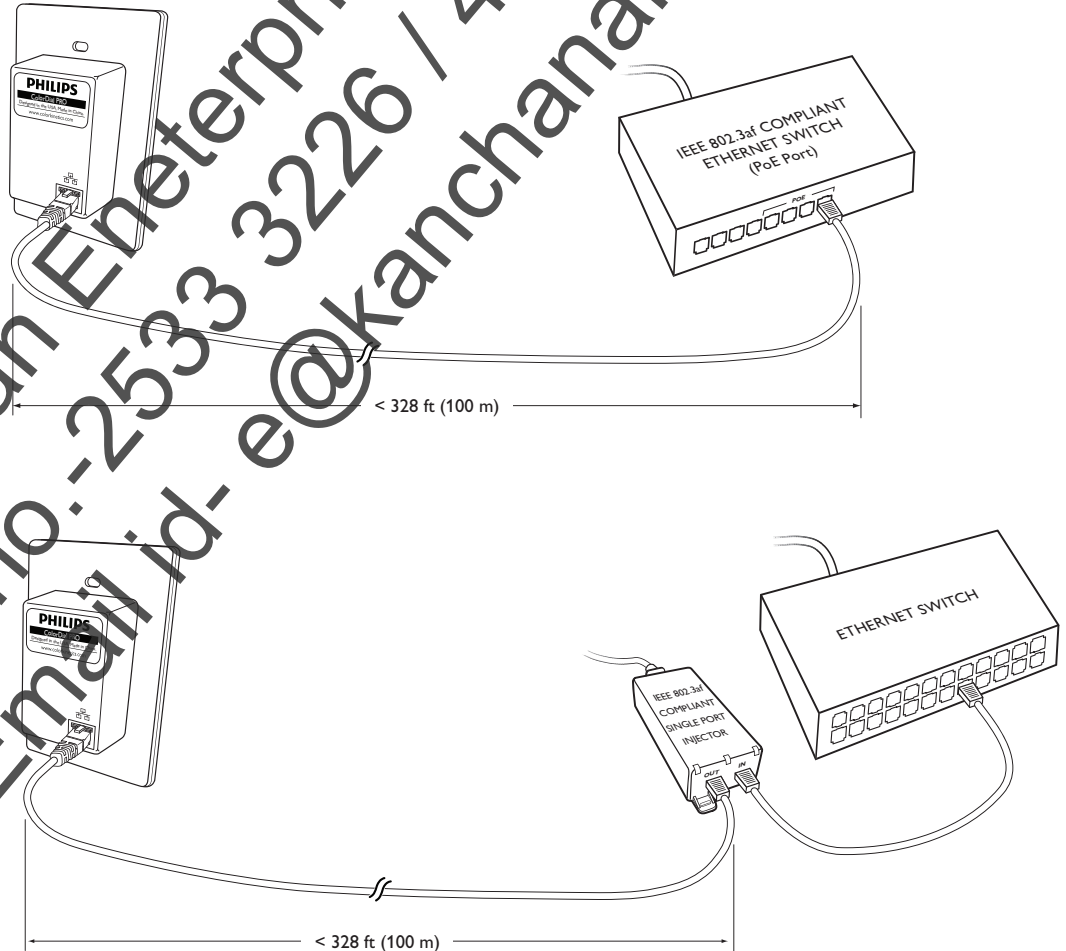
- A PoE-compliant switch to supply data and power to the ColorDial Pro, or a non-PoE switch with one PoE-compliant power injector.
- CAT 5e data cable to connect the ColorDial Pro to switch or PoE injector.

| Item                         | Type                                       | Item Number   | Philips 12NC |
|------------------------------|--|---------------|--------------|
| ColorDial Pro                |  | 103-000025-00 | 910503700790 |
| Power over Ethernet Switch   | 4 Power over Ethernet ports, 8 ports total | 120-000084-00 | 910503700789 |
| Power over Ethernet Injector | North America Power Cord                   | 109-000029-00 | 910503700383 |
|                              | Europe Power Cord                          | 109-000029-01 | 910503700384 |
| Ethernet Controller Keypad   |  | 103-000023-00 | 910503700326 |

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](http://www.colorkinetics.com/support/wiring/ls_prod.html)





# Installation

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

## Owner/User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate ColorDial Pro 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 ColorDial Pro Installation Instructions for specific warning and caution statements.

## Prepare for the Installation

ColorDial Pro is a simple-to-operate lighting controller designed for use with intelligent LED lighting fixtures. With ColorDial Pro, you can play back and modify a set of eight scenes, each of which consists of a built-in effect and user-editable effect settings, on lights that within reside within an Ethernet-based system. Because ColorDial Pro does not need to be wired to a power source, it can be installed in a convenient but unobtrusive location, up to 328 ft (100 m) from the switch.

Ensure that a PoE-compliant Ethernet switch with the necessary number of available ports is installed in the lighting system. For networks with non-PoE switches, ensure that a PoE-compliant power injector is installed for each controller. Make sure that additional components, such as mounting screws and CAT 5e data cables of the appropriate length, are also available.

### Consider these guidelines when planning the installation.

- ColorDial Pro is designed for indoor use only.
- 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 data cables and fixtures.
- Ensure that a free Ethernet switch port is available to connect ColorDial Pro to the lighting system. Installations with non-PoE Ethernet switches require the use of a PoE-compliant power injector.
- If using a non-PoE Ethernet switch, plan to install the required PoE injector(s) near the switch.

## Assemble Additional Items

The following additional items are required to mount and connect ColorDial Pro.

### Wiring and Power Supplies

One CAT 5e Data Cable (unshielded twisted pair with an RJ45 connector, to a maximum length of 328 ft or 100 m) is required to connect ColorDial Pro to an available port on a PoE-compliant Ethernet switch or to a PoE injector. A PoE injector also requires an additional 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.

### Junction Boxes and Mounting Screws

A standard US junction box may be used in North America. The junction box included with ColorDial Pro can also be used outside of North America. You will need the provided flat-head screws for securing the ColorDial Pro housing to the junction box.

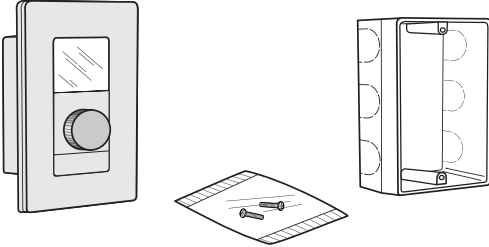
## Included in the box

ColorDial Pro

Standard single-gang wall box for use outside of North America

(2) self-threading flathead countersunk M2.5 screws

Installation Instructions and User Guide



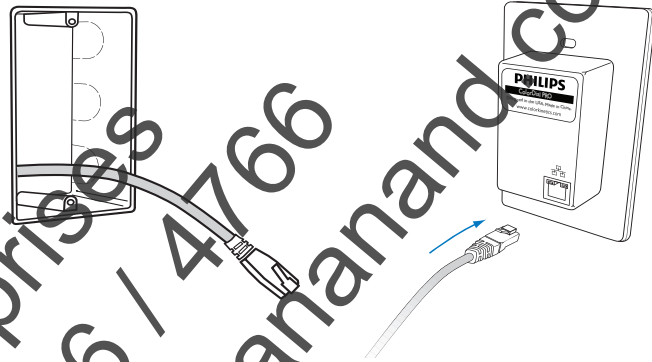
## Inspect ColorDial Pro and Accessories

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

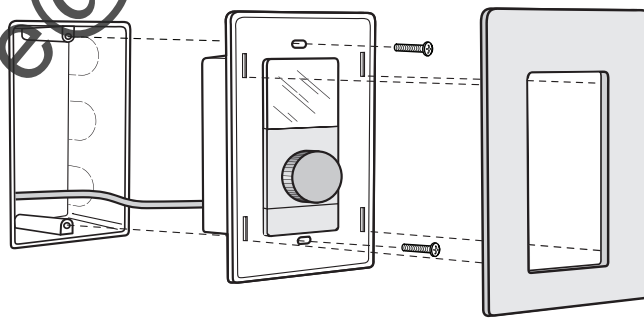
## Mount and Connect ColorDial Pro

Make sure the power is OFF before mounting and connecting ColorDial Pro.

1. A standard US junction box may be used in North America. If using the provided junction box outside of North America, snap out a knock-out on a side that will not be mounted to the structural component.
2. Thread the CAT 5e data cable through the knock-out. Insert the RJ45 connector into the port on the back of the ColorDial Pro. When active, two indicator lamps indicate Ethernet link (green) and Ethernet activity (yellow).



4. Remove the faceplate from ColorDial Pro by grasping the top or bottom edge of the faceplate and prying it gently away from ColorDial Pro.
5. Align the screw holes in ColorDial Pro with the screw holes in the wall box.
6. Use the two provided mounting screws to attach ColorDial Pro to the junction box and into the structural component.



7. Replace the faceplate by pressing it gently onto ColorDial Pro until it snaps into place.

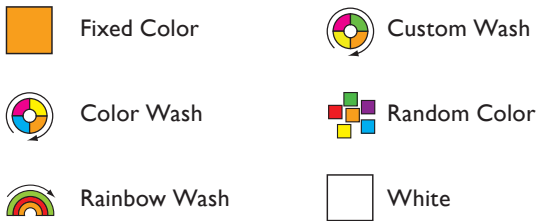
## Make Cable Connections

Connect the CAT 5e data cable to an available port on a PoE-compliant Ethernet switch installed in the network.

If using a non-PoE Ethernet switch, connect the CAT 5e 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 ColorDial Pro

A simple LCD screen provides information on the currently playing scene and the brightness of connected lights (0% – 100%). Together, the rotary dial and faceplate button let you control and modify scene playback, lock ColorDial Pro to prevent accidental interruption of scene playback, and access menus for selecting, editing, and storing scenes and for changing system settings. ColorDial Pro offers six effects:



Effect settings differ for different effects. For example, you can change the speed and direction of the Color Wash effect, or the temperature of the White effect.

For complete instructions on how to use ColorDial Pro, please refer to the ColorDial Pro User Guide. The User Guide is included in the ColorDial Pro box, and it can also be downloaded as a PDF from [www.colorkinetics.com/lsc/controllers/colordialpro/](http://www.colorkinetics.com/lsc/controllers/colordialpro/).

## Triggering ColorDial Pro Scenes with Ethernet Controller Keypad

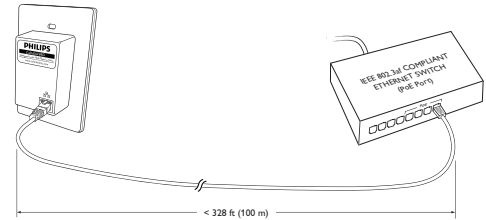
You can use Ethernet Controller Keypad, a wall-mounted, PoE-compliant keypad from Philips Color Kinetics, to trigger ColorDial Pro scenes. Ethernet Controller Keypad gives you direct push-button access to any stored scene without requiring you to scroll through scenes or navigate menus. You can also use the keypad to adjust fixture brightness, and turn connected fixtures off and on.

When you use Ethernet Controller Keypad as your triggering device, you can install ColorDial Pro in a secure area to limit access and avoid accidental interruption of scene playback. For convenient access to scene control, you can install one or more Ethernet Controller Keypads in a single installation. The Show buttons on each Keypad, 1 – 8, trigger the scenes, 1 – 8, stored on ColorDial Pro.

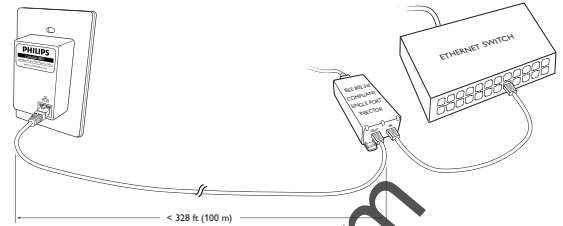
Install Ethernet Controller Keypad within your Ethernet network, following the Ethernet Controller Keypad Installation Instructions, which you can download from [www.colorkinetics.com/lsc/controllers/emckeypad/](http://www.colorkinetics.com/lsc/controllers/emckeypad/)

## Maintenance

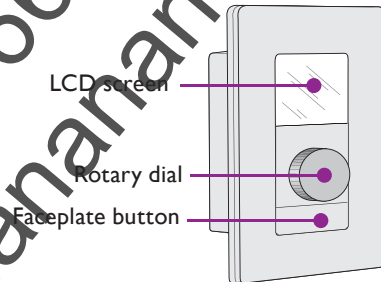
Clean the faceplate and buttons with a soft, damp cloth.



Installation with PoE-compliant Ethernet switch



Installation with non-PoE switch and PoE injector



To use Ethernet Controller Keypad with ColorDial Pro, you must have the most recent firmware installed. You can download the Firmware Updater and the most recent firmware versions from [www.colorkinetics.com/support/downloads/firmware/](http://www.colorkinetics.com/support/downloads/firmware/)



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