iCOLOR COVE NXT

INSTALLATION GUIDE

COLOR KINETICS®

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GETTING STARTED

Welcome to a more colorful world brought to you by Color Kinetics.

This guide contains important information not only on operating your new iColor Cove NXT, but also on using it safely. For your protection, please read it carefully before embarking on your colorful adventure. There are very few rules, but those that exist are there for your safety. This guide will show you how to get the most out of your cove lighting.

Included In This Box
- (1) iColor Cove NXT light fixture
- (1) Fixed Position Mounting bracket
- Installation Guide

Additional Items Needed
- Mounting Hardware: #6, pan-head screws (2 per fixture)
- PDS-150e Power Supply, ITEM # 109-000008-01. One PDS-150e is needed for every 24 feet of iColor Cove NXT.
- iColor Cove Cable Harness, ITEM # 108-000013-00 (12-clip) or ITEM # 108-000014-00 (16-clip).
- Tools (screw gun, pliers, wire cutters, small, flat screw driver)

Optional
- iColor Cove NXT light fixture ITEM # 101-000007-00

SCOPE OF THIS USER GUIDE
The goal of this user guide is to explain in an easily understood language the necessary steps to install iColor Cove NXT and assure peak performance. Its intended use is for reference only, by a fully qualified electrician or technician. This document should never be considered a substitute for any provision of a regulation or state and/or local code.

IDENTIFICATION AND WARNINGS OF SAFETY HAZARDS

In accordance with ANSI Z535.4-2002 the following system of identifying the severity of the hazards associated with the products is used:

"DANGER" Imminently hazardous situation which, if not avoided, will result in death or serious injury.

"WARNING" Potentially hazardous situation that, if not avoided, could result in death or serious injury.

"CAUTION" Potentially hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.

DANGER: Ensure that main power supply is off before installing or wiring iColor Cove NXT and PDS-150e power/data supply. Failure to adhere to these instructions will result in death or serious injury.

WARNING: iColor Cove NXT and PDS-150e power/data supply must be installed by a qualified electrician or technician in accordance with NEC and relevant local codes. Failure to comply could result in death, serious injury, or property damage.

WARNING: Do not attempt to install or use iColor Cove NXT or PDS-150e until you read and understand the installation instructions. Failure to adhere to these instructions could result in serious injury or property damage.

WARNING: Do not use iColor Cove NXT if any cables are damaged. Doing so can result in death, serious injury, or property damage.

CAUTION: iColor Cove NXT has no serviceable parts. Do not attempt to open the fixture. Doing so will result in property damage and void the warranty.

CAUTION: iColor Cove NXT is rated for indoor/dry use only. Do not install outdoors or in high, condensing humidity areas. Doing so will result in property damage and void the warranty

CAUTION: Do not use sharp tools near or on the fixture lens. Doing so will result in property damage and void the warranty.

CAUTION: Do not hot swap. Ensure that power supply is off before connecting or disconnecting fixtures. Hot swapping will result in property damage and void the warranty.

NOTE: The instructions and precautions set forth in this user guide are not necessarily all-inclusive, all conceivable, or relevant to all applications as Color Kinetics cannot anticipate all or unique situations.

OWNER/USER RESPONSIBILITIES

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate iColor Cove NXT in such a manner as to comply with all state and local laws, ordinances, regulations, and the American National Standards Institute Safety Code.

PLAN THE INSTALLATION

The nature of iColor Cove NXT installation requires in-depth planning to ensure timely, successful installation and operation with minimal complications and down time.

INSTALLATION CONSIDERATIONS
- Consult an Electrical Inspector to approve all wiring plans.
- Refer to local and state codes for installation compliance.
- Address fixtures prior to installation. Refer to *Addressing iColor Cove NXT*.
- Create a Mapping Grid. Use this grid to record serial numbers and addresses for easy reference.
- Employ Color Kinetics Application Engineering Services.

INSTALLING iCOLOR COVE NXT

WARNING: iColor Cove NXT should be installed by a qualified electrician or technician in accordance with NEC and relevant local codes.

INSTALLATION METHODS
Before installing iColor Cove NXT fixtures:

- Measure the cove area to be lit, and determine the number of six- and twelve-inch fixtures needed. The best lighting effect is produced when the fixtures are butted end to end. Pull cable taught between mounting brackets to ensure end-to-end fit. See Fig. 1.

Fig. 1

Pull cable taught between mounting brackets to ensure end-to-end fit.

STEP 1: DETERMINE THE LOCATION OF THE POWER SUPPLY
- Determine a location out of direct view for the power supply(s).
  - One PDS-150e power/data supply is needed for every 24 feet of iColor Cove NXT fixtures.
  - The power/data supply can be located up to 50 feet (15 m) from the first light in the fixture series.

WARNING: Ensure the power is off before installing iColor Cove NXT. Failure to do so can result in serious personal injury and major property damage.

STEP 2: MARK PATH
- Using a pencil or chalk line, mark a centerline path for the fixtures to follow. Fixtures can be installed on a horizontal or vertical surface to accommodate your lighting environment.

Note: The mounting brackets are designed with a channel to manage the cable harness. Cable management should be considered when installing the mounting brackets.
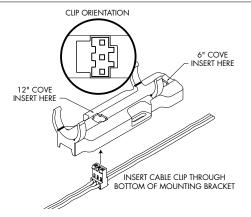
STEP 3: INSTALL CABLE HARNESS
- Run the cable harness along the mounting bracket path. From the bottom of the mounting bracket, insert the connector and snap into place. For 12 inch fixtures push the clip into the slot located at the center of the mounting bracket. Use the slot located near the end of the mounting bracket for 6 inch fixtures. See Fig. 2.

Note: Ensure the clip is aligned correctly before snapping into place. Refer to the Clip Orientation in Fig. 2.

CAUTION: Proper alignment of connector clip is necessary to ensure proper fixture installation and connection.
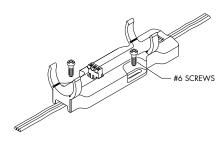
Fig. 2

CLIP ORIENTATION
12" COVE INSERT HERE
6" COVE INSERT HERE
INSERT CABLE CLIP THROUGH BOTTOM OF MOUNTING BRACKET

STEP 4: INSTALL MOUNTING BRACKETS
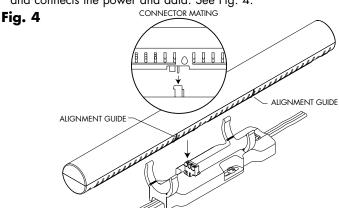- Using two #6, pan head screws, attach the mounting brackets along the centerline path. See Fig. 3.

Note: The 1/2-inch slotted screw holes allow for fine adjustment of the mounting bracket.

Fig. 3

#6 SCREWS

STEP 5: INSTALL AND CONNECT FIXTURE
- Using the alignment ribs on the fixture as an aid, and verifying the mating direction for the connector, position the fixture and snap into the mounting bracket. The alignment ribs mate to the edge of the bracket clamps. This simple step mounts the fixture and connects the power and data. See Fig. 4.

Fig. 4

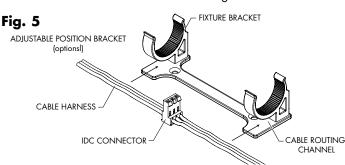
CONNECTOR MATING
ALIGNMENT GUIDE
ALIGNMENT GUIDE

- Continue connecting and mounting light fixtures to complete your fixture installation.

Tip: If all connectors on the harness are not used, terminate the cable harness by cutting it to length near the last connected light. Ensure that exposed wire ends do not make contact with each other or any other objects. This removes unused connectors which could affect the performance of your lights.

Optional: An adjustable position mounting bracket is available for installation that require post-installation rotation of the fixture.

If using the adjustable position mounting bracket, install the mounting bracket along the centerline path, using #6 flat head screws, before running the cable. Refer to the "light points up" and "light points down" indicators on the mounting bracket for the best installation for your application. When running the cable, utilize the cable harness channel. See Fig. 5.

Fig. 5

ADJUSTABLE POSITION BRACKET (optionsl)
FIXTURE BRACKET
CABLE HARNESS
IDC CONNECTOR
CABLE ROUTING CHANNEL

Tip

Tip: When using the adjustable position mounting bracket, if installation location or conditions prevent you from center mounting the light fixtures, you can slide the bracket to accommodate the light and the surrounding surface ensuring that the mounting bracket does not cover or obstruct the mounting cable. If necessary, you can cut the mounting bracket to create two individual brackets.

STEP 6: CONNECT LIGHTS TO THE POWER SUPPLY

• Once the lights are attached to the harness and positioned in the mounting brackets, attach the cable harness to the power supply, see Fig. 6. Refer to the PDS-150e Installation Guide for complete wiring and installation instructions.

The installation is complete and you are ready to begin enjoying your new Color Kinetics iColor Cove NXT lights.

ADDRESS iCOLOR COVE NXT

The iColor Cove NXT fixtures are pre-addressed to light number 1 at the time of manufacture and can be re-addressed using the on-board dipswitches. Additionally, each fixture is programmed with a serial number making serial addressing possible via a Zapi 1.5 or Serial Addressing Software (SAS). Using one of the follow methods address each fixture prior to installation.

ZAPI 1.5: Use Color Kinetics Zapi 1.5 to reset the DMX address for each serial number. Refer to the Zapi User Guide for step-by-step addressing instructions.

SAS: Use Color Kinetics SAS to reset the DMX address for each serial number using a PC with iPlayer 2 or a PC with Smart Jack 3. Download the Serial Addressing Software and instructions from http://support.colorkinetics.com.

DIPSWITCHES: Following the instructions below, use the on-board dipswitches to address each fixture.

If you are using a DMX512 controller, Color Kinetics Synchronizer or another external controller to control your iColor Cove, set switches 10, 11 and 12 OFF on every segment of Cove. You may assign each light a unique DMX address.

In the following table, the symbol ■ indicates the switch should be ON. See Fig. 7.

If any problems occur during usage, unplug the product immediately and call or email:
Color Kinetics Technical Support Group:
1-888-FULL RGB or 617-423-9999 or
http://support@colorkinetics.com

Fig. 6

Fig. 7

SOURCE LIFE

Color Kinetics illumination products utilize high brightness LEDs as the illumination source. LED manufacturers predict LED life of up to 100,000 hours MTBF (mean time between failure), the standard used by conventional lamp manufacturers to measure source life. However, like all basic light sources, LEDs also experience lumen depreciation over time. So while LEDs can emit light for an extremely long period of time, MTBF is not the only consideration in determining useful life. LED lumen depreciation is affected by numerous environmental conditions such as ambient temperature, humidity and ventilation. Lumen depreciation is also affected by thermal management, current levels, and a host of other electrical design considerations.

Color Kinetics systems are expertly engineered to optimize LED life when used under normal operating conditions [ambient temperature: -4° F to 104° F (-20° C to 40° C), humidity: 0-95% non-condensing humidity, adequate ventilation and air volume.] Long-term operation outside of these ranges or conditions, or at the upper limits of these ranges or conditions, may subject the product to further degradation of the LED source life, or in extreme cases, failure of internal components. Source life information is based on LED manufacturers' data, as well as other third party testing.

WARNING

Do not open, alter or tamper with the product case. This will void the manufacturer's warranty. To avoid electrical shock, never open the iColor Cove NXT case. Do not attempt to service the electronic components yourself. Non-expert handling may damage the product and cause injury to the user.

DMX Address Table (Fig. 7)

LIGHT NO.	DMX ADDRESS NO.	BINARY NO.
1	1	0
2	4	3
3	7	6
4	10	9
5	13	12
6	16	15
7	19	18
8	22	21
9	25	24
10	28	27
11	31	30
12	34	33
13	37	36
14	40	39
15	43	42
16	46	45
17	49	48
18	52	51
19	55	54
20	58	57
21	61	60
22	64	63
23	67	66
24	70	69
25	73	72
26	76	75
27	79	78
28	82	81
29	85	84
30	88	87
31	91	90
32	94	93
33	97	96
34	100	99
35	103	102
36	106	105
37	109	108
38	112	111
39	115	114
40	118	117
41	121	120
42	124	123
43	127	126
44	130	129
45	133	132
46	136	135
47	139	138
48	142	141
49	145	144
50	148	147
51	151	150
52	154	153
53	157	156
54	160	159
55	163	162
56	166	165
57	169	168
58	172	171
59	175	174
60	178	177
61	181	180
62	184	183
63	187	186
64	190	189
65	193	192
66	196	195
67	199	198
68	202	201
69	205	204
70	208	207
71	211	210
72	214	213
73	217	216
74	220	219
75	223	222
76	226	225
77	229	228
78	232	231
79	235	234
80	238	237
81	241	240
82	244	243
83	247	246
84	250	249
85	253	252
86	256	255
87	259	258
88	262	261
89	265	264
90	268	267
91	271	270
92	274	273
93	277	276
94	280	279
95	283	282
96	286	285
97	289	288
98	292	291
99	295	294
100	298	297
101	301	300
102	304	303
103	307	306
104	310	309
105	313	312
106	316	315
107	319	318
108	322	321
109	325	324
110	328	327
111	331	330
112	334	333
113	337	336
114	340	339
115	343	342
116	346	345
117	349	348
118	352	351
119	355	354
120	358	357
121	361	360
122	364	363
123	367	366
124	370	369
125	373	372
126	376	375
127	379	378
128	382	381
129	385	384
130	388	387
131	391	390
132	394	393
133	397	396
134	400	399
135	403	402
136	406	405
137	409	408
138	412	411
139	415	414
140	418	417
141	421	420
142	424	423
143	427	426
144	430	429
145	433	432
146	436	435
147	439	438
148	442	441
149	445	444
150	448	447
151	451	450
152	454	453
153	457	456
154	460	459
155	463	462
156	466	465
157	469	468
158	472	471
159	475	474
160	478	477
161	481	480
162	484	483
163	487	486
164	490	489
165	493	492
166	496	495
167	499	498
168	502	501
169	505	504
170	508	507