

Nora Lighting offers more than

**300**  
Energy Star  
compliant products

**200** and more than  
California T24  
compliant products



**NORA LIGHTING, INC.**

6505 Gayhart St.  
Commerce, CA 90040  
Tel: (800) 686-6672  
Fax: (800) 500-9955  
Email:  
nora@NoraLighting.com  
NoraLighting.com

**INTERNATIONAL SALES:**

6505 Gayhart St.  
Commerce, CA 90040  
Tel: (323) 767-2600  
Fax: (323) 722-3677

**DOMESTIC FACILITIES:**

Boston, MA  
Charlotte, NC  
Cincinnati, OH  
Cleveland, OH  
Dallas, TX  
Hanover Park, IL  
Los Angeles, CA  
Louisville, KY  
Nashville, TN  
New York, NY  
Syracuse, NY  
Tampa, FL

The products shown in this catalog are covered by USA and International patents. Specifications subject to change without notice.

© Copyright 2009 Nora Lighting, Inc. All rights reserved.

member



10M ML-LEDRB1109

\$3.00

Discover the  
**LED advantage.**  
It's good for the planet.  
It's good for you.



Illuminating the *future.*



# GO GREEN with LED lighting!

Reduce your carbon footprint,  
eliminating toxic mercury and  
reduce energy consumption.  
Lighting for the next generation!

## The Benefits of LED:

### Save Energy and Money

LED fixtures are energy efficient light sources that will save both energy and money. As energy prices continue to rise, LED luminaires reduce the cost of air conditioning and become more advantageous to the consumer.

### Long Lamp Life

The Nora Lighting LED recessed fixtures will operate at an estimated 50,000 hours while still performing at 70% of their original lumen output. That is over 17 years!

### Reduced Maintenance

Over the 17-year life span of an LED fixture, an incandescent bulb will need to be changed 25 times versus 1 time for an LED source. The maintenance cost savings are extraordinary.

### Exceed Energy Standards

From local municipalities to the national government, the focus on energy conservation is being driven by the U.S. DOE, tightening state regulations with tough watts/square foot requirements, California Title 24 and the growth of LEED. Green building has reached a new high and LED lighting is at the center of the movement.

### Environmental Impact

LED lighting has no mercury content which is harmful to our natural environment and lakes. Reduce the carbon footprint; using a single LED fixture when compared with a 65W BR30 will save over 2000KG of CO<sup>2</sup> over the life time of the LED fixture.

Low maintenance lighting ideal for Commercial, Retail, Hospitality and Health Care environments



Warm lighting for the home including recessed and under cabinet lighting



Well suited to outdoor and wet locations



## Where can one use Recessed LED lighting?

### ■ Anywhere traditional downlights are used.

LED lighting products compliment a wide variety of applications. With higher lumen output and directing the lumens where it is desired, LEDs are the newest green products being installed throughout homes and commercial businesses. Going green is not just a trend but a movement throughout the world. Just a few ideal applications include:

- Install throughout the home, kitchen downlighting, under cabinet and accent lighting.
- Outdoor applications for wet location, under soffits and other difficult to reach locations. LEDs do not contain UV and thus do not attract bugs. Remember, you don't need to change the LED luminaire for the next 17 years!
- Hospitality and retail applications, LEDs run cool for refrigerator/freezer installations. They are also excellent for perishable foods, or foods effected by UV such as meats.


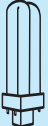

LEDs have become so versatile that they are for any application where saving energy costs and the environment are important factors.

# Save Money and the Environment at the same time!

## The Advantages of SSL:

Lighting accounts for nearly 43% of a building's energy consumption. In fact, lighting consumes 25% of all electrical energy produced and costs have risen at twice the rate of inflation for the last five years. That's why there is a major shift taking place in the demand for and manufacture of efficient lighting products. When comparing incandescent, compact fluorescent and LED sources; LED remains the leader.

### Compare Lamp Properties

	 65W BR30 Incandescent	 18W Compact Fluorescent	 14W LED Source
Annual operating cost for 10 fixtures x 8hr/day x 365 days x \$.10KWH*	\$242	\$108	\$41
Life in hours	2,000	12,000	50,000
Life in years	.67 Years	4.1 Years	17 Years
Number of lamp changes over 50,000 hours	25	4	1
Kilograms of CO <sup>2</sup> emitted over 50,000 hours	2600Kg	820Kg	600Kg
Meets Title 24	No	Yes	Yes
Cone of light footcandles at 8' mounting height, single fixture	4.8 fc	4.4 fc	5.9 fc

\* Including relamping cost

# Energy-Efficacy and Energy Code Compliance

National energy codes are driving the lighting industry to more energy efficient products. Combined with the growth and acceptance of LEED and LEED Home programs lighting products must become more efficient.

- Energy Star programs
- California Title 24
- U.S. Department of Energy
- Other state regulations

Businesses and institutions are demanding new technologies that reduce energy consumption and cost.

## LED Characteristics:

### Higher Kelvin Temp = Higher Lumen Output

An LED's Kelvin temperature (correlated color temperature or CCT) is directly related to its lumen output. The higher the CCT, the cooler the lamp color and the greater the lumen output. The lower the CCT, the warmer the lamp color and the lower the lumen output.



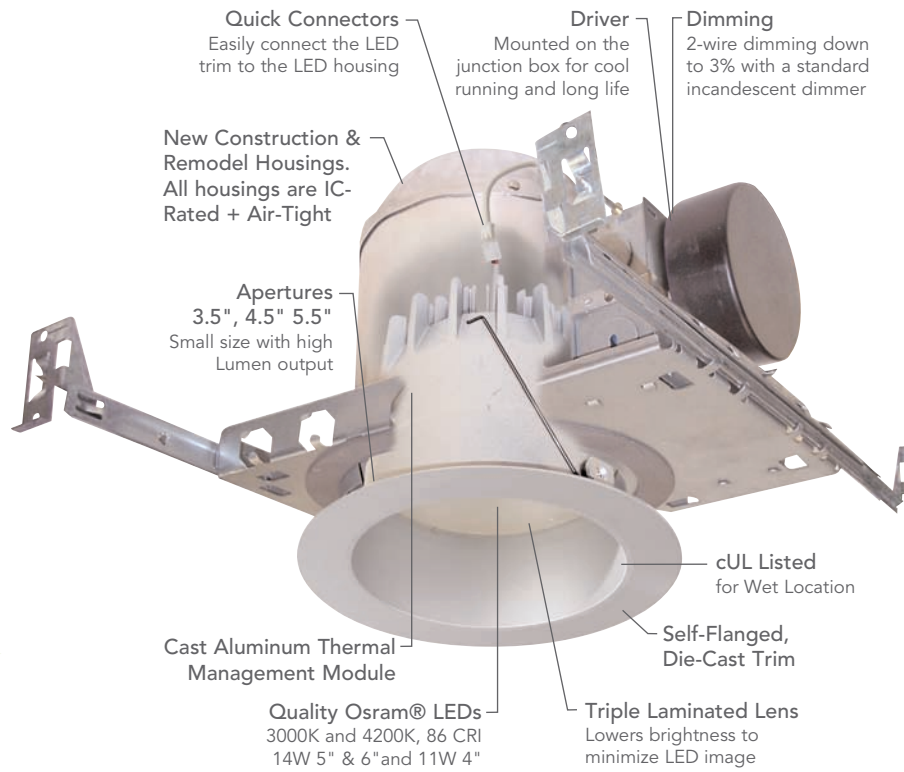
### Higher Color Rendering (CRI) = Lower Efficacy

An LED's Color Rendering is directly related to the amount of red phosphors it contains. The greater the CRI, the greater the amount of Red phosphors. Red phosphors reduce overall output thus reducing efficacy at higher CRI.



# The Nora Lighting family of LED Recessed Luminaires

is designed for use in residential or commercial applications. Available in both new-construction and remodel versions our recessed housings are air-tight and rated for use in insulated ceilings. Integrating Osram® 1.2W LEDs and Exceeding Title 24 high efficacy requirements with savings of over 75% when compared with a 65W BR30. Exceeding industry standards our internal high-reflectance luminance system produces light output among the highest in the industry, up to 730 lumens depending on color temperature and trim selection.



## FEATURES

- Three aperture sizes! Our family of recessed products are available in 3-1/2", 4-1/2" and 5-1/2" apertures for all ceiling heights and applications.
- cUL listed for Wet Location - standard on all products.
- Dimming down to 3%.
- Exceeds high efficacy requirements of California Title 24 - up to 52 lumens per watt.
- Available with 3000K or 4200K CCT, 86 CRI.
- Mercury free which is good for the environment.
- Light output is similar to a 65W BR30 with 75% energy savings over incandescent!
- No flicker or delay like compact fluorescent products, energy efficient LED lighting is the choice for consumers today.
- Our scientifically designed lens diffuses the LED image while providing high lumen output; standard on all trims.
- Three-year limited warranty on the complete luminaire backed by Nora Lighting.



PP

WP

BW

- Recessed fixtures are tested to ASTM-283 air-tight standards and for insulated ceilings.
- State of the art Osram® LEDs are rated at 50,000 hours at 70% lumen maintenance.
- LEDs do not emit ultraviolet or infrared wavelengths that cause fading of artwork and perishable merchandise.
- Does not emit forward heat like traditional light sources.
- Significantly reduces air-conditioning loads and lowers energy demands.
- High efficiency driver with a power factor >.90 with input power of 120V, 60Hz.
- Trim is standard with a self-flanged die-cast trim ring. Flange available in White and Platinum Diffused. Reflector available in White, Black and Platinum Diffused.

## LED HOUSINGS

The Nora Lighting family of LED recessed luminaires is designed for use in residential or commercial applications. Easy-install housings come with the driver mounted directly to the junction box for cool running and long life.

- 5-1/2", 4-1/2" & 3-1/2" Apertures
- 14W available in 6" & 5"
- 11W available in 4"
- cUL Wet Location Listed
- Dimmable
- New Construction & Remodel
- IC Rated
- Airtight

### 6" HOUSINGS



#### NHC-6LEDAT

6" IC Airtight  
Dia: 7-3/8" H: 7-1/2"  
W: 7" L: 10-1/8"



#### NHRIC-6LEDAT

6" IC Airtight Remodel  
Dia: 7-3/8" H: 7-1/2"  
W: 6-3/4" L: 13-3/4"

### 5" HOUSINGS



#### NHC-5LEDAT

5" IC Airtight  
Dia: 6-1/2" H: 7-1/2"  
W: 7-1/4" L: 10-1/2"



#### NHRIC-5LEDAT

5" IC Airtight Remodel  
Dia: 6-1/2" H: 7-1/2"  
W: 6-1/4" L: 13"

### 4" HOUSINGS



#### NHC-4LEDAT

4" IC Airtight  
Dia: 4-7/8" H: 6-3/8"  
W: 8-1/8" L: 12-5/8"



#### NHRIC-4LEDAT

4" IC Airtight Remodel  
Dia: 4-7/8" H: 6-3/8"  
W: 4-3/4" L: 13-1/8"

## LED TRIMS

LED trims come with a diffusing lens that minimizes brightness, while still providing optimal lighting distribution.

### 6" TRIMS



NTR-6LED30 3000K  
NTR-6LED42 4200K  
14W Self-flanged Reflector  
· Overall Dia: 7-3/8"  
· Fits 6" LED Housings  
· 630 lumens @ 3000K  
· 730 lumens @ 4200K

### 5" TRIMS



NTR-5LED30 3000K  
NTR-5LED42 4200K  
14W Self-flanged Reflector  
· Overall Dia: 6-1/2"  
· Fits 5" LED Housings  
· 625 lumens @ 3000K

### 4" TRIMS



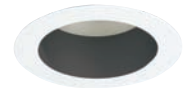
NTR-4LED30 3000K  
NTR-4LED42 4200K  
11W Self-flanged Reflector  
· Overall Dia: 4-7/8"  
· Fits 4" LED Housings  
· 500 lumens @ 3000K



Platinum Diffused Reflector  
Platinum Diffused Trim



White Reflector  
Platinum Diffused Trim



Black Reflector  
White Trim

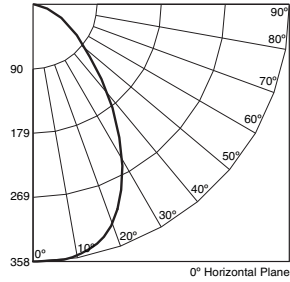
#### ORDERING EXAMPLE (Select one from each column)

ITEM NO.	TRIM SIZE	SOURCE	TEMP.	REFLECTOR FINISH	TRIM FINISH
NTR	4 = 4"	LED	30 = 3000K	B = Black	P = Platinum Diffused
	5 = 5"		42 = 4200K	P = Platinum Diffused	W = White
	6 = 6"			W = White	

Example: NTR-4LED42BW: 4" 4200K LED, Black Reflector, White Trim

### NTR-6LED30WW White Self Flanged Reflector Trim

Lab: Light Laboratory Inc. Test No. LLI 0909-04A Spacing Criteria: 1.08  
LPW: 44 Lamp: 12 3000K LEDs Total Watts: 14.4W Lumens: 630



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	249.69	N.A.	39.6
0-40°	361.05	N.A.	57.3
0-60°	524.85	N.A.	83.3
0-90°	630.13	N.A.	100
90-120°	0	N.A.	0
90-130°	0	N.A.	0
90-150°	0	N.A.	0
90-180°	0	N.A.	0
0-180°	630.13	N.A.	100

#### CANDELAS

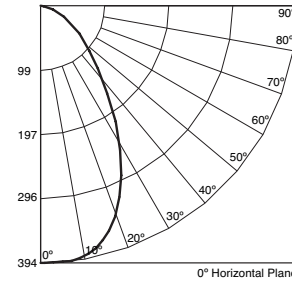
90	0	25.5	286
85	5	22.5	308
75	21	19.5	327
65	44	17	338
55	75	15	345
47.5	108	11	353
42.5	141	9	356
37.5	182	5	358
33	221	0	358
29	257		

#### BEAM & CONE DATA

Mounting Height	F.C. at Center	Circle Diameter
4'	22.4	4.3'
6'	9.9	6.5'
8'	5.6	8.6'
9'	4.4	9.7'
10'	3.6	10.8'

### NTR-5LED30WW White Self-Flanged Reflector Trim

Lab: Light Laboratory Inc. Test No. LLI 0909-04B Spacing Criteria: 1.02  
LPW: 43 Lamp: 12 3000K LEDs Total Watts: 14.4W Lumens: 622



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	262.01	N.A.	42.1
0-40°	368.77	N.A.	59.3
0-60°	522.49	N.A.	84
0-90°	621.81	N.A.	100
90-120°	0	N.A.	0
90-130°	0	N.A.	0
90-150°	0	N.A.	0
90-180°	0	N.A.	0
0-180°	621.81	N.A.	100

#### CANDELAS

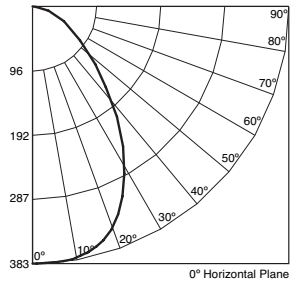
90	0	25.5	288
85	5	22.5	317
75	20	19.5	343
65	40	17	361
55	73	15	372
47.5	102	11	387
42.5	130	9	391
37.5	169	5	394
33	212	0	394
29	253		

#### BEAM & CONE DATA

Mounting Height	F.C. at Center	Circle Diameter
4'	24.6	4.1'
6'	10.9	6.1'
8'	6.2	8.2'
9'	4.9	9.2'
10'	3.9	10.2'

### NTR-6LED42WW White Self Flanged Reflector Trim

Lab: Light Laboratory Inc. Test No. LLI 0809-13A Spacing Criteria: 1.12  
LPW: 52 Lamp: 12 4200K LEDs Total Watts: 13.65W Lumens: 709



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	270.27	N.A.	38.1
0-40°	395.13	N.A.	55.7
0-60°	585.1	N.A.	82.5
0-90°	709	N.A.	100
90-120°	0	N.A.	0
90-130°	0	N.A.	0
90-150°	0	N.A.	0
90-180°	0	N.A.	0
0-180°	709	N.A.	100

#### CANDELAS

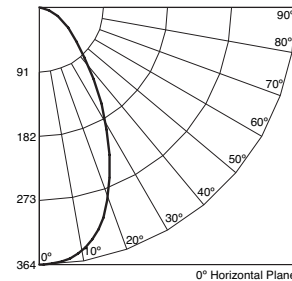
90	0	25.5	313
85	6	22.5	335
75	25	19.5	353
65	52	17	364
55	87	15	370
47.5	127	11	378
42.5	163	9	381
37.5	207	5	383
33	248	0	383
29	284		

#### BEAM & CONE DATA

Mounting Height	F.C. at Center	Circle Diameter
4'	23.6	4.5'
6'	10.5	6.7'
8'	5.9	9.0'
9'	4.7	10.1'
10'	3.8	11.2'

### NTR-4LED30WW White Self-Flanged Reflector Trim

Lab: Light Laboratory Inc. Test No. LLI 0909-04C Spacing Criteria: 0.92  
LPW: 45 Lamp: 9 3000K LEDs Total Watts: 10.8W Lumens: 485



#### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	222.22	N.A.	45.8
0-40°	303.91	N.A.	62.6
0-60°	413.97	N.A.	85.3
0-90°	485.42	N.A.	100
90-120°	0	N.A.	0
90-130°	0	N.A.	0
90-150°	0	N.A.	0
90-180°	0	N.A.	0
0-180°	485.42	N.A.	100

#### CANDELAS

90	0	25.5	231
85	4	22.5	261
75	15	19.5	290
65	29	17	311
55	50	15	325
47.5	71	11	346
42.5	95	9	353
37.5	127	5	361
33	162	0	364
29	197		

#### BEAM & CONE DATA

Mounting Height	F.C. at Center	Circle Diameter
4'	22.8	3.7'
6'	10.1	5.5'
8'	5.7	7.4'
9'	4.5	8.3'
10'	3.6	9.2'

LED photometric results may vary from testing data. To assist the lighting designer in using Nora LED in a lighting layout, the following photometric tables have both lab test data and normalized data to illustrate expected typical performance. Typical photometric data is provided to illustrate expectation of typical performance.

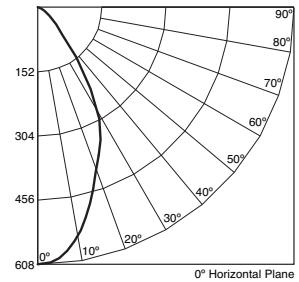
LED photometric results may vary from testing data. To assist the lighting designer in using Nora LED in a lighting layout, the following photometric tables have both lab test data and normalized data to illustrate expected typical performance. Typical photometric data is provided to illustrate expectation of typical performance.

# Nora Lighting's LED Retrofit Module

Introducing Nora Lighting's LED retrofit, our newest addition to our LED family of products. The retrofit unit makes saving energy quick and easy! Exceeding Title 24 high efficacy standards with high lumen output and only 14 watts consumed. Installs easily into most 6" recessed IC and non-IC housings.



**NRMR-6LED30PP** Platinum Diffused Self Flanged Reflector Trim  
 Lab: Light Laboratory Inc. Test No. LLI 0809-02A Spacing Criteria: 0.82  
 LPW: 40 Lamp: 18 3200K LEDs Total Watts: 14.83W Lumens: 600



Zone	Lumens	%Lamp	%Fixture
0-30°	333.73	N.A.	56.1
0-40°	448.31	N.A.	75.4
0-60°	549.54	N.A.	92.4
0-90°	594.81	N.A.	100
90-120°	0	N.A.	0
90-130°	0	N.A.	0
90-150°	0	N.A.	0
90-180°	0	N.A.	0
0-180°	594.81	N.A.	100

90	0	25.5	347
85	3	22.5	379
75	8	19.5	414
65	18	17	449
55	35	15	480
47.5	60	11	537
42.5	88	9	560
37.5	151	5	595
33	231	0	608
29	302		

Mounting Height	F.C. at Center	Circle Diameter
4'	38	3.3'
6'	16.9	4.9'
8'	9.5	6.6'
9'	7.5	7.4'
10'	6.1	8.2'

LED photometric results may vary from testing data. To assist the lighting designer in using Nora LED in a lighting layout, the following photometric tables have both lab test data and normalized data to illustrate expected typical performance. Typical photometric data is provided to illustrate expectation of typical performance.

- 14W LED Retrofit- fits most standard 6" cans
- UL listed for Damp location
- Retrofit is available for medium base installation when using NRA-211
- Title 24 compliant when hardwired and installed in an ICAT recessed housing.
- 3200K CCT with 91 CRI
- 600 lumen output
- Trim finishes available include:
  - WW= white reflector and white flange
  - PW= platinum diffused reflector and white flange

**ORDERING EXAMPLE** *(Select a reflector and flange finish)*

LED RETROFIT	<b>NRMR-6LED32</b>
REFLECTOR	<b>P</b> Platinum Diffused, <b>W</b> White
FLANGE	<b>P</b> Platinum Diffused, <b>W</b> White

Example:  
**NRMR-6LED32WW:** 6" LED Retrofit Module, White Reflector, White Trim

**ACCESSORY**

MEDIUM BASE ADAPTER	<b>NRA-211</b>
---------------------	----------------



# LED Lightbar

Introducing Nora Lighting's new low-profile Under Cabinet lighting fixture. The Lightbar exceeds Title 24 high efficacy requirements and is one of the most energy efficient products in the market, using only 3.3W per foot. Available in three fixture lengths and a variety of mounting options, making it ideal for applications with tight space requirements.



Flush end connectors



Adjustable aiming mounting brackets



### NULB Series

- Title 24 exceeds with 50 lumens per watt
- Consumes only 3.3W per foot
- Each Lightbar includes: (2) NAL-201, (2) NAL-245 & (1) NAL-200
- ETL listed for dry location
- Up to 8' runs with 30W driver & 16' runs with 60W driver
- Available in 3000K and 4200K, up to 175 lumens per foot
- Fixture length 6", 12" & 24"
- Low profile fixture, 3/4" wide by 1/2" deep
- Long life LEDs
- No mercury content

ITEM NO.	LAMPS	LENGTH
NULB-6LED	6 LEDs	6-1/16"
NULB-12LED	12 LEDs	11-3/4"
NULB-24LED	24 LEDs	24-5/8"
NULB-12LED30AKIT	8' LED Lightbar Kit	96"

- 3000K or 4200K
  - Bronze or Natural Aluminum
- Example: NULB-6LED30BZ (6" 3000K Lightbar in Bronze)

IMAGE	ITEM NO.	DESCRIPTION
	NAL-230	30W LED Driver*
	NAL-260	60W LED Driver*
	NAL-202	2" Interconnector Cable
	NAL-206	6" Interconnector Cable
	NAL-218	18" Interconnector Cable
	NAL-238	38" Interconnector Cable
	NAL-258	58" Interconnector Cable
	NAL-207	7" Right Angle Power Line Interconnector
	NAL-212	12" Power Line Interconnector w/ Switch

\* for Hardwire & Dimming options consult factory

# LED Tape Light

Introducing Nora Lighting's LED Tape Light. This energy efficient, very low profile, flexible LED tape is great for accent lighting and cove lighting in displays, bars, lounges and under cabinet lighting. ETL Listed for wet location, the LED tape is also great for building facades. With 18 LEDs per foot it boasts a desirable seamless glow and casts no shadows. Installation is easy with 3M™ adhesive backing or clear acrylic mounting clips.

- ETL Listed Wet Location; including at the pin connection to allow linking of multiple rolls!
- Separable every 20" & cuttable every 4", no soldering required
- Available in 16.4' per roll
- 65 Lumens per foot consuming only 1.5W per foot, exceeds California Title 24
- Colors include: 3000K (30), 4200K (42), Red (R), Blue (B), Green (G) and Yellow (Y)
- Easy to install with pre-applied 3M™ adhesive tape or clear acrylic mounting clips
- Direct plug-in driver, 24W for 16.4' and 45W for up to 33' runs



Separable every 20"

ITEM NO.	DESCRIPTION
NUTP1-16LED	16.4' Tape Light Roll; Specify Color: 30, 42, B, G, R, Y
NUTP1-16LED30/PS	Tape Light Kit includes: (1) 16.4" Roll and (1) 24W driver

IMAGE	ITEM NO.	DESCRIPTION
	NATL-524	24W Direct Plug-in Driver*
	NATL-545	45W Direct Plug-in Driver*
	NATL-509	9" Power Line Interconnector
	NATL-511	11" Power Line Interconnector w/Switch
	NATL-202	2" Interconnection Cable
	NATL-206	6" Interconnection Cable
	NATL-218	18" Interconnection Cable

\* for Hardwire & Dimming options consult factory