

# Dark to Light® Photocontrols

Product Reference Guide



## / DTL®

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### The Dark to Light Difference.

Throughout the United States and around the world, Dark To Light (DTL) is recognized by the industry as a provider of high-quality, cost-effective electronic photocontrols for utility, commercial, and municipal customers.

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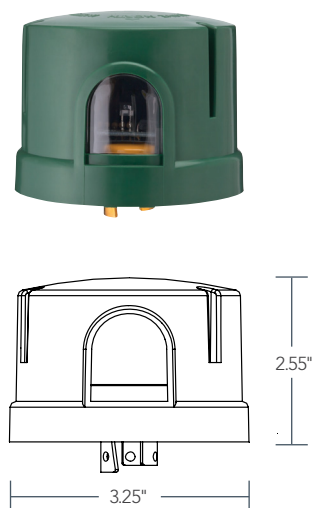
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The DLL Elite long-life photocontrol was designed specifically for use with LED fixtures. With a design life of 20+ years and superior in-rush current and surge-protection features, the DLL Elite supports the extended life and low maintenance benefits associated with LED.

## Frequently Ordered Numbers

**DLL127 1.5 J50**

**DLL127 1.5 BK J50**

## Intended Use

- LED

## Mechanical Characteristics

- Dimensions: ø3.25", Ht.: 2.55"
- Cover Thickness: 0.1"
- Double thick cover
- Conformal coded printed circuit board

## Electrical Characteristics

- Operating voltage: Voltage 120 to 480 VAC, 60Hz
- Load rating: 1000 watts, 1800 VA ballast
- Surge rating: 1280J/40kA utility or 2120J/40kA UL listed
- Average power consumption: <0.5 watts @ 120V

## Operating Characteristics

- Sensor type: Silicon, IR filter optional
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C
- Failure Mode: Fail On or Fail off

## Regulatory Listings

- ANSI C136.10
- ROHS compliant
- UL listed to U.S. and Canadian safety standards
- Surge rated in excess of ANSI C136.10

## Warranty

- 10 years

## DLL Standard Colors

	Non-UL	UL
<b>Multi-Volt (120-277V)</b>	Green	Blue
<b>347V</b>	Green	Green
<b>480V</b>	Yellow	Yellow

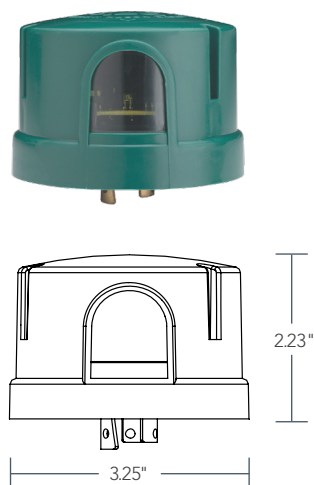
## Ordering Information

Series Code & Voltage	Failure Mode	Turn-On Level (fc)	Filter	Certification	Cover Color	Package Quantity
<b>DLL127 120-277V</b>	<b>[blank]</b> Fail On <b>F</b> Fail Off	<b>1.5</b> ANSI Std.	<b>[blank]</b> Std. Operation <b>IR</b> IR Filtered Silicon	<b>[blank]</b> Std. <b>CUL</b> CULus	<b>[blank]</b> Std. <sup>1</sup>	<b>JU</b> 1 Unit
<b>DLL127 347V</b>					<b>BK</b> Black <sup>2</sup>	<b>J12</b> 12 Units
<b>DLL127 480V</b>					<b>BR</b> Brown <sup>2</sup> <b>GR</b> Green <sup>2</sup> <b>GY</b> Gray <sup>2</sup> <b>BL</b> Blue <sup>2</sup> <b>YL</b> Yellow <sup>2</sup>	<b>J50</b> 50 Units

## NOTES

1. No color substitutions for UL models.

2. Non-standard custom colors are non-stock items. Available in J12 and J50 only. Consult customer service.



The DSS Series photocontrol was designed for the rigors of electronic and solid state lighting equipment, including LED, electronic HID, and induction luminaires. The enhanced filtered silicon light sensor does not "see" LED illumination, simplifying installation in areas with high ambient light or closely spaced LED fixtures.

### Frequently Ordered Numbers

**DSS124F 1.5 TJJE J50**

**DSS124N 1.5 TJJE J50**

#### Intended Use

- LED

#### Mechanical Characteristics

- Dimensions: ø3.16", Ht.: 2.23"
- Cover Thickness: 0.05"

#### Electrical Characteristics

- Operating voltage:  
Voltage 120 to 277 VAC, 60Hz
- Load rating:  
1662 VA @ 277V, 720 VA @ 120V, 6A MAX
- Surge rating:  
640J/9.5kA
- Average power consumption:  
0.7 watts @ 120V; 2.4 watts @ 277V

#### Operating Characteristics

- Sensor type: LED Blind Silicon
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C ambient
- Failure Mode: Fail On or Fail off

#### Regulatory Listings

- ANSI C136.10
- ROHS compliant
- Surge rated in excess of ANSI C136.10

#### Warranty

- 6 years

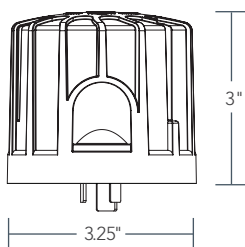
#### ANSI Color Codes

<b>Multi-Volt (120-277V)</b>	Green
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### Ordering Information

Series Code & Voltage	Failure Mode	Turn-On Level (fc)	- Time Delay - Surge Protection - Enhanced Ambient Sensing	Package Quantity
<b>DSS124</b> 120-277V	F Fail Off* N Fail On	<b>1.0</b> Energy Saver <b>1.5</b> ANSI Std. <b>2.6</b> IES Recommended <b>8.0</b> Metro-High Ambient	<b>TJJE</b> - 3-6 Sec. Turn-Off Delay - Dual MOV's - LED Tuned Photo Sensor	<b>J12</b> 12 Units <b>J50</b> 50 Units

**Notes** \*Not acceptable for use with more than three LED drivers with supply voltage of 277V



#### DCR Remote

A unique custom part number is required to order the DCR Remote. To obtain your custom part number, please submit your request to [DTLTechSupport@AcuityBrands.com](mailto:DTLTechSupport@AcuityBrands.com)

The DTL Connect Series photocontrol and remote allows the user to enable and disable the photocontrol from the ground. This solution is ideal for difficult-to-access area and security lights.

#### Frequently Ordered Numbers

**DCC127 1.5 M50**

#### Intended Use

- LED
- HID

#### Mechanical Characteristics

- Dimensions: 3.25", Ht.: 3.0"
- Cover Thickness: 0.1"
- Double thick cover
- Conformal coded printed circuit board

#### Electrical Characteristics

- Operating voltage: Voltage 120 to 277 VAC, 60Hz
- Load rating: 1000W/1800VA
- Surge rating: 1280 Joules/10kA utility or 2120 Joules/40kA UL listed
- Average power consumption: 0.7 watts @ 120V; 2.4 watts @ 277V

#### Operating Characteristics

- Sensor type: Silicon
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C ambient
- Failure Mode: Fail On

#### Regulatory Listings

- ANSI C136.10
- ROHS compliant
- UL listed to U.S. and Canadian safety standards
- Surge rated in excess of ANSI C136.10
- FCC

#### Warranty

- 10 years

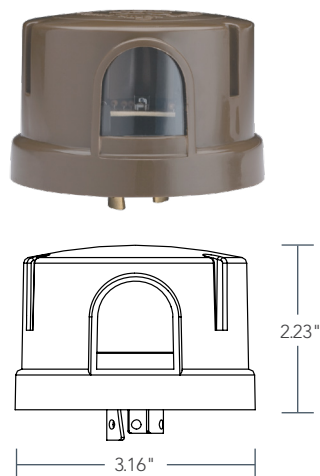
#### ANSI Color Codes

Multi-Volt (120-277V)	Black	Blue
347V	Green	Green
480V	Yellow	Yellow

#### Ordering Information

Series Code & Voltage	Failure Mode	Certification	Cover Color	Package Quantity
<b>DCC127</b> 120-277VAC <b>DCC347</b> 347V <b>DCC127</b> 480V	1.5 ANSI Standard	<b>[blank]</b> Std. <b>CUL</b> CULus	<b>[blank]</b> Std. <sup>1</sup> <b>BK</b> Black <sup>2</sup> <b>BR</b> Brown <sup>2</sup> <b>GR</b> Green <sup>2</sup> <b>GY</b> Gray <sup>2</sup> <b>BL</b> Blue <sup>2</sup> <b>YL</b> Yellow <sup>2</sup>	<b>M50</b> Master pack 50 <sup>3</sup>

**Notes** 1) No color substitutions for UL models 2) Non-standard custom colors are non-stock items. Consult customer service. 3) Non-standard multiples of 50 may be ordered.



The DP Series photocontrols utilize premium components and silicon light sensors which resist long-term drift of the turn-on level. This series includes the utility-preferred 1704 and 1707 cost-effective, but extremely robust, control for non-LED fixtures.

### Frequently Ordered Numbers

**DP124 1.5 TJ J50**

**DP124 1.5 TJBK J50**

**DP124 1.5 1704 J50**

**DP124 1.0 1707 J50**

### Intended Use

- HID

### Mechanical Characteristics

- Dimensions: ø3.16", Ht.: 2.47"
- Cover Thickness: 0.05"
- Standard Color: ANSI Std. Colors

### Electrical Characteristics

- Operating voltage: 105 to 530 VAC, 50/60Hz
- Load rating: 1000 watts, 1800 VA ballast
- Surge rating: 320 Joules/9.5kA
- Average power consumption: 0.5 watts @ 120V

### Operating Characteristics

- Sensor type: Silicon
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C ambient
- Failure Mode: Fail On

### Regulatory Listings

- ANSI C136.10
- ROHS compliant

### Warranty

- Warranty:  
8 years on  
DP124 1.5 1704  
DP124 1.0 1707  
6 years on all  
other models

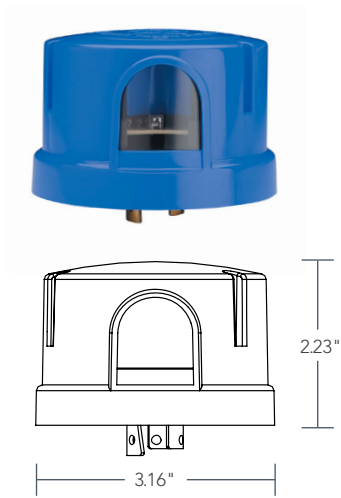
### ANSI Color Codes

Multi-Volt (120-277V)	Dark Blue
<b>347V</b>	Green
<b>480V</b>	Yellow
<b>1704</b>	Brown
<b>1707</b>	Black

## Ordering Information

Series Code & Voltage	Turn-On Level (fc)	Time Delay/Surge Protection	Cover Color	Package Quantity
<b>DP124</b> 120-277V (105-305)	<b>1.0</b> Energy Saver	<b>TJ</b> 2-5 Second Turn-Off Delay 320J/9500 Amp MOV	<b>blank</b> Std Color ANSI	<b>J12</b> 12 Units
<b>DP240</b> 240V (185-305)	<b>1.5</b> ANSI Standard		<b>BK</b> Black	<b>J50</b> 50 Units
<b>DP347</b> 347V (300-400)	<b>2.6</b> IES Recommendation		<b>BR</b> Brown	
<b>DP480</b> 480V (420-530)	<b>8.0</b> Metro-High Ambient		<b>P</b> Upward facing	
	<b>35</b> FAA <sup>1</sup>			
Series Code & Voltage	Turn-On Level (fc)	Utility	Package Quantity	
<b>DP124</b> 120-277V	<b>1.5</b> ANSI Standard	<b>1704</b>	<b>J12</b> 12 Units <b>J50</b> 50 Units	
<b>DP124</b> 120-277V	<b>1.0</b> Energy Saver	<b>1707</b>	<b>J50</b> 50 Units	

**Notes** 1) Black cover only



The DE Series photocontrol utilizes premium components, a silicon light sensor and an infrared blocking filter to provide human eye spectral response and consistent turn-on night after night, over the life of the control.

Frequently Ordered Numbers

- DE124 1.5 TJ J50
- DE124 1.5 TJBK J50
- DE124 1.5 TJBR J50

Intended Use

- HID

Mechanical Characteristics

- Dimensions: ø3.16", Ht.: 2.23"
- Cover Thickness: 0.05"
- Standard Color: ANSI Std. Colors

Electrical Characteristics

- Operating voltage: 105 to 530 VAC, 50/60Hz
- Load rating: 1000 watts, 1800 VA ballast
- Surge rating: 320 Joules/9.5kA
- Average power consumption: 0.5 watts @ 120V

Operating Characteristics

- Sensor type: Filtered Silicon
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C ambient
- Failure Mode: Fail On

Regulatory Listings

- ANSI C136.10-1996
- ROHS compliant

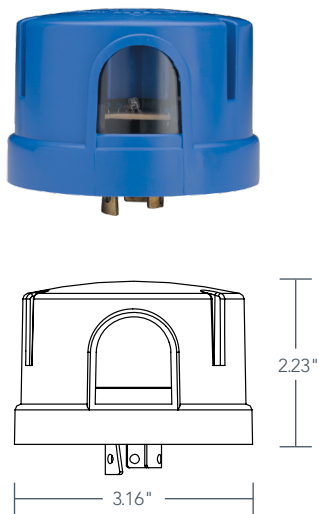
Warranty

- 6 years

ANSI Color Codes	
120V	Gray
240V	Maroon
Multi-Volt (120-277V)	Dark Blue
347V	Green
480V	Yellow

Ordering Information

Series Code & Voltage	Turn-On Level (fc)	Time Delay/Surge Protection	Cover Color	Package Quantity
DE124 120-277V (105-305)	1.0 Energy Saver	TJ 2-5 Second Turn-Off Delay 320J/9500 Amp MOV	blank ANSI Std Color	J12 12 Units
DE347 347V (300-400)	2.6 IES Recommended		BK Black	J50 50 Units
DE480 480V (420-530)	8.0 Metro-High Ambient		BR Brown	
	35 FAA		See Color Chart	



The DUX Series photocontrol is ideal for general non-LED lighting applications. The DUX is UL recognized.

Frequently Ordered Numbers

DUX124 12A J50

Intended Use

- HID

Mechanical Characteristics

- Dimensions: ø3.16", Ht.: 2.23"
- Cover Thickness: 0.05"
- Standard Color: ANSI Std. Colors

Electrical Characteristics

- Operating voltage: 105 to 305 VAC, 420-530VAC, 60Hz
- Load rating: 1000 watts, 1800 VA ballast
- Surge rating: 160 Joules/6.5kA
- Average power consumption: 0.5watts @ 120V

Operating Characteristics

- Sensor type: Silicon
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C ambient
- Failure Mode: Fail On

Regulatory Listings

- ANSI C136.10-1996
- ROHS compliant
- UL Listed

Warranty

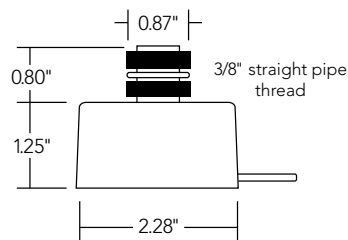
- 6 years

ANSI Color Codes	
Multi-Volt (120-277V)	Dark Blue
480V	Yellow

Ordering Information

Series Code & Voltage	Energy Saver	Sensor	Cover Color	Package Quantity
DUX124 120-277V (105-305)	1 1.0-2.0 fc Turn-off	2 Silicon Sensor, Time Delay (2-5 seconds)	A ANSI Standard Color	J12 12 Units
DUX480 480V			P Upward facing	J50 50 Units





The DBE Series photocontrol is a button-style control designed to be installed with lighting that does not use a NEMA receptacle.

Frequently Ordered Numbers

- DBE124 1.5 T J12
- DBE124 1.5 TUL J12

Intended Use

- HID, LED Lite
- Wired in

Mechanical Characteristics

- Dimensions: See below
- Cover Thickness: NA
- Standard Color: Black
- 12", 200°C, 16 Ga. Stranded leads

Electrical Characteristics

- Operating voltage: 105 to 400 VAC
- Load rating: 1000VA ballast
- Surge rating: 190 Joules/4.5kA
- Average power consumption: 0.5watts @ 120V
- Suitable for 1 LED driver @ 120V

Operating Characteristics

- Sensor type: Filtered Silicon
- Turn on / off ratio: 1:1.5
- Operating temp: -40°C to +70°C ambient
- Failure Mode: Fail On

Regulatory Listings

- ANSI C136.24
- ROHS compliant
- UL Listed
- CSA Listed

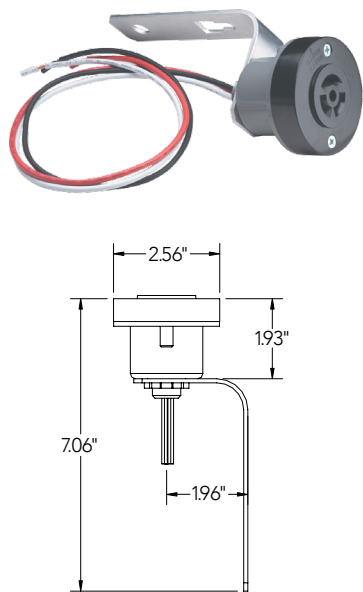
Warranty

- 6 years

ANSI Color Codes	
Multi-Volt (120-277V)	Black
347V	Black

Ordering Information

Series Code & Voltage	Turn-On Level (fc)	Time Delay	Certification	Package Quantity
DBE124 120 - 277V (105-305)	1.5 ANSI Standard	T 5-10 Second Turn-off Delay	U CSA Listed 1	U 1 Unit
DBE347 347V (300-400)			UL UL Listed 2	J12 12 Units J25 25 Units



The DUR series retrofit receptacle kit is remotely mounted to provide a NEMA receptacle for use with a photocontrol. Available in 3-, 5- and 7-pin options.

Frequently Ordered Numbers

- DUR103 J6
- DUR103 J50
- DUR105 M50
- DUR107 M50

Intended Use

- HID, LED
- The DUR Series retrofit receptacle kit adapts a light fixture for use with a NEMA locking type photocontrol.

Mechanical Characteristics

- Dimensions: See below

Electrical Characteristics

- Electrical rating: 15 amp, 480 VAC Max., 50/60 Hz
- Leads are rated 105°C

DUR103-3 PIN RECEPTACLE

- Red = Load, Black = Line, White = Common
- 14 gauge, stranded 14"

DUR105 - 5 PIN RECEPTACLE

- Red = Load, Black = Line, White = Common
- 14 gauge stranded 12"
- Purple & Gray = Dimming per ANSI C136.41
- 18 gauge, stranded 12"

DUR107 - 7 PIN RECEPTACLE

- Red=Load, Black=Line, White=Common
- 14 gauge, stranded 12"
- Purple & Gray=Dimming, Brown & Orange=low voltage per ANSI C136.41
- 18 gauge, stranded 12"

Regulatory Listings

- ANSI C136.24
- ROHS compliant
- UL Recognized Component

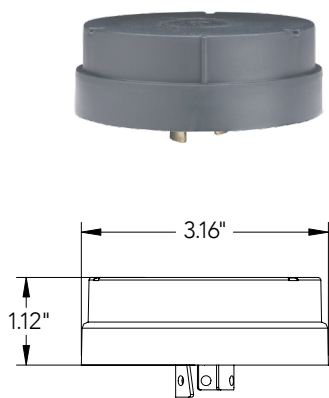
Warranty

- 6 years

Ordering Information

Series Code & Voltage	Package Quantity
DUR103 120 - 480V 3 pin	U 1 Unit
DUR105 120 - 480V 5 pin	J6 12 Units
DUR107 120 - 480V 7 pin	J50 50 Units
	M50 Master Pack of 50 <sup>1</sup>

Notes 1) Non-standard multiples of 50 may be ordered for DUR 105 & 107 only.



The CAP Series Shorting and Open caps are used with luminaires where lights are to be on continuously (shorting cap) or left off (open cap).

Frequently Ordered Numbers

- DSHORT SBK J12
- DSHORT SBK J50
- DSHORT VBK J12
- DSHORT VBK J50
- DOPEN SRD J50

Intended Use

- Any fixture with NEMA locking receptacle can be used with 3, 5 or 7 pin receptacles

Mechanical Characteristics

- Neoprene base gasket has a continuous use temperature of 105°C
- Brass Legs
- Polypropylene Cover

Electrical Characteristics

- Operating voltage: 105 to 530VAC, 50/60Hz
- Surge rating: 265 Joules/6.0kA (VBK only)

Operating Characteristics

- 40°C to +70°C ambient

Regulatory Listings

- Exceeds ANSI C136.10

Ordering Information

Series Code	Surge Protection	Package Quantity
DSHORT	SBK Shorting Cap, Black cover	U 1 Unit
DOPEN	VBK Shorting Cap, 265J MOV, Black cover	J6 6 Units
	SRD Open Cap, Red cover	J12 12 Units
		J50 50 Units

	DCC	DLL	DSS	DE	DP	DUX	DBE
Light Sensor	Silicon	Silicon	Silicon	Silicon	Silicon	Silicon	Silicon
Wireless control	X						
Wired-In control							X
Long Life control	X	X					
LED control	X	X	X				1 LED driver @120V
Sensor filter		Optional IR Filter	LED filtered	IR Filtered			
Certified	CULus	CULus				UL Recognized	UL Listed, CSA optional
347/480V Offered	X	X		X	X	480V only	
Turn On (fc)	1.5	1.5	1.0 1.5 2.6 8.0	1.0 1.5 2.6 8.0 35	1.0 1.5 2.6 8.0 35	1.0-2.0	1.5
Surge Protection	1280J/10kA -Std models 2120J/40kA -UL models	1280J/10kA -Std models 2120J/40kA -UL models	640J/9.5kA	320J/9.5kA	320J/9.5kA	160J/6.5kA	190J/4.5kA
Design Life	15 year	20+ year	10 year	8 year	8 year	8 year	8 year
Warranty	10 year	10 year	6 year	6 year	6 year*	6 year	6 year
Failure Mode	Fail On	Fail On/Off	Fail On/Off	Fail On	Fail On	Fail On	Fail On

\* 1704 and 1707 models have 8yr warranty

Frequently Ordered Numbers are products that are generally in stock. Ordering other catalog number configurations may impact pricing and lead time



**Why should I use a long-life LED photocontrol with my LED fixtures?**

With a 20+ year design life, long-life LED photocontrols are designed to last as long as your LED lighting system. The components were carefully selected to provide superior surge protection as well as protect against the high inrush current associated with LED fixtures.

**What is the difference between fail on and fail off controls?**

Fail OFF Controls: The relay is normally open so a control will fail in the off position to prevent day burning fixture.

Fail ON Control: The relay is normally closed to fail in the on position. The light will day burn upon control failure for safety purposes. This is our standard offering unless otherwise specified.

**Can I get the UL certified controls in colors other than the standard ANSI colors?**

No, you must use standard ANSI colors when specifying UL.

**Do I need one remote for every DCC photocontrol that I order?**

No. Remotes are coded by customer. One remote can control all of your DCC photocontrols.

**How do I get a part number for the remote used with the DCC photocontrol?**

A unique custom part number is required to order the DCR remote. To obtain your custom part number please submit your request to [DTLTechSupport@acuitybrands.com](mailto:DTLTechSupport@acuitybrands.com).

**Can a multivolt control be used as a substitute for a 120V photocontrol?**

Yes, the multi-volt control has a voltage range from 105 to 305V. The voltage range on a 120V photocontrol is 105-130V.

**Acuity Controls**

[www.acuitycontrols.com](http://www.acuitycontrols.com)

