

Dimming Guide

PD6 LED Series

Halo Commercial

Information in this dimming guide related to the PD6 LED product families listed below. The PD6 LED series provides flicker-free dimming to at least 10% with many phase control and 0-10V dimming controls.

PD6 LED - New Construction/Remodel

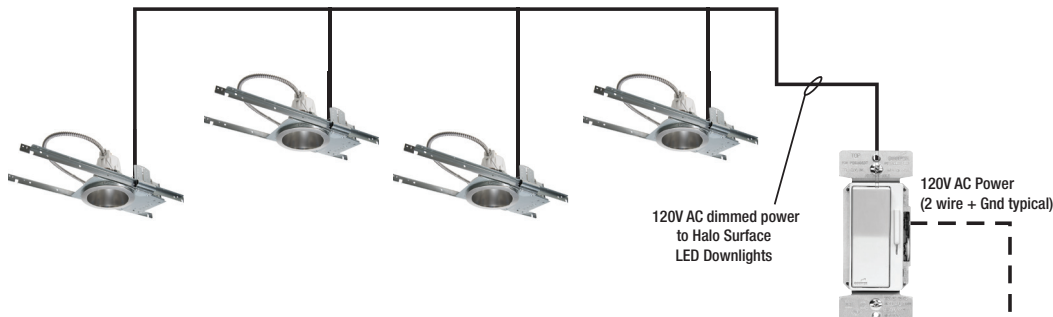
PD610ED010	PD620ED010
PD6CP10ED010	PD6CP20ED010
PD615ED010	PD630ED010
PD6CP15ED010	PD6CP30ED010

PD6 LED - Retrofit

PD6RX10ED010	PD6RX20ED010	PD56R
PD6RXCP10ED010	PD6RXCP20ED010	PD56RCP
PD6RX15ED010	PD6RX30ED010	PD6R
PD6RXCP15ED010	PD6RXCP30ED010	PD6RCP

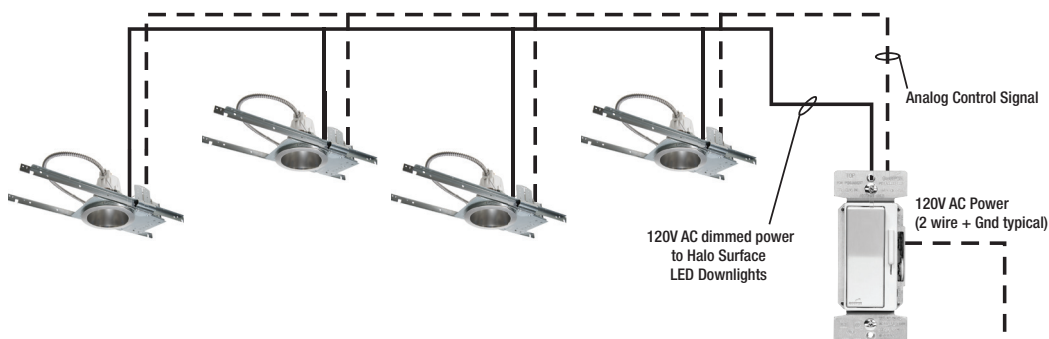
Phase Control 120V Dimming

PD6 luminaires installed with a 120V dimmer.



0-10V Control Dimming

PD6 luminaires installed with a 0-10V dimmer.



Eaton's AL Series dimmers offer versatile options to set the mood and reduce energy consumption.

Visit www.cooperwiringdevices.com/ALSeries for more information.



Dimmer Features	Smart dimmer AAL06/WBSD-SMT	Decorator dimmer DAL06P/WBSD-DEC	Slide dimmer SAL06P/WBSD-SLD	Toggle dimmer TAL06P/WBSD-TOG
Rapid Start feature*	Selectable ON or OFF	Fully adjustable	Fixed ON	Fully adjustable
Adjustable high-end trim	•	•	•	•
Adjustable low-end trim	•	•	•	•
Wiring configurations	Single-pole or multi-location	Single-pole or 3-way	Single-pole or 3-way	Single-pole or 3-way
Color change kits	•	•	•	•

PD6 LED 1000 Series Phase Control 120V Dimming

Dimmer Make	Dimmer Series	Dimmer Model #	Dimmer Rating	Minimum Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 120V	Peak Repetitive Current (A)	Max Dimming percentage (%)	Min Dimming percentage (%)	Start Time
Lutron	Diva	DVCL-153P	INC/HAL/CFL/LED	1	11	8	100%	2%	> 1 Sec ^{1, 2}
Lutron	Maestro	MACL-153-M	INC/HAL/CFL/LED	1	11	8	100%	1%	> 1 Sec ^{1, 2}
EATON	Aspire	9530AW	INC	1	36	11	100%	0%	> 1 Sec ^{1, 2}
EATON	Decorator	DE06P	ELV	1	23	--	100%	1%	> 1 Sec
EATON	Toggle	TAL06P	INC/HAL/MLV/ELV/CFL/LED	1	23	9	100%	3%	> 1 Sec ¹
EATON	Toggle	WBSD-TOG	INC/HAL/MLV/ELV/CFL/LED	1	23	9	100%	3%	> 1 Sec ¹
EATON	Slide	SAL06P	INC/HAL/FLR/MLV/ELV/CFL/LED	1	23	9	100%	3%	> 1 Sec
EATON	Slide	WBSD-SLD	INC/HAL/FLR/MLV/ELV/CFL/LED	1	23	9	100%	3%	> 1 Sec
EATON	Slide	SLC03P	INC/HAL/CFL/LED	1	23	9	100%	2%	> 1 Sec ^{1, 2}
EATON	Smart	AAL06	INC/HAL/FLR/MLV/ELV/CFL/LED	1	23	9	100%	3%	> 1 Sec ¹
EATON	Smart	WBSD-SMT	INC/HAL/FLR/MLV/ELV/CFL/LED	1	23	9	100%	3%	> 1 Sec ¹
Leviton	SureSlide	6674	INC/LED/CFL	1	11	7.5	100%	1%	> 1 Sec ^{1, 2, 5}
Leviton	Illumatech	IPL06	INC/LED/CFL	1	11	7	99%	1%	> 1 Sec ^{1, 2, 5}
Leviton	Illumatech	IPE04	ELV	1	18	--	100%	1%	> 1 Sec ^{1, 2, 3}
Leviton	Vizia	VZE04	ELV	1	24	--	100%	6%	> 1 Sec ¹
Leviton	Acenti	ATX10	FLR	1	61	--	100%	2%	> 1 Sec ^{1, 2, 4}
Lutron	Maestro	MAELV600	ELV	1	36	--	100%	4%	> 1 Sec ^{1, 2}

1. Audible noise present

2. LE start time

3. No smooth dimming

4. Shimmer at lowest dim setting

5. Shimmer at highest dim setting

Dimmer Rating - Load Type

INC = Incandescent

HAL = Halogen

MLV = Magnetic Low Voltage

ELV = Electric Low Voltage

CFL = Compact Fluorescent

FLR = Fluorescent

PD6 LED 1500 Series Phase Control 120V Dimming

Dimmer Make	Dimmer Series	Dimmer Model #	Dimmer Rating	Minimum Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 120V	Peak Repetitive Current (A)	Max Dimming percentage (%)	Min Dimming percentage (%)	Start Time
Leviton	Decora	6673	INC/LED/CFL	1	26	8	99%	1%	≥ 1 Sec ¹
Leviton	SureSlide	6674	INC/LED/CFL	1	8	8.5	99%	7%	≥ 1 Sec ²
Leviton	SureSlide	6631-2	INC	1	26	9	98%	2%	2-10 Sec
Leviton	Illuminatech	IPL06	INC/LED/CFL	1	26	8	100%	7%	≥ 1 Sec ²
Leviton	Illuminatech	IPI06	INC	1	26	9	99%	2%	≥ 1 Sec ²
Leviton	Vizia	VP106	INC	1	26	9	99%	1%	2-10 Sec
Leviton	Decora	6161	INC	1	22	9	99%	5%	≥ 1 Sec
Leviton	SureSlide	6633-P	INC	1	26	8	99%	0%	No light at or after 10 Sec
Lutron	Toggler	TG-600P	INC	1	26	10	98%	7%	2-10 Sec
Lutron	Nova T	NTFTU-6A	Triac	1	32	3.5	99%	19%	≥ 1 Sec
Lutron	Diva	DV600P	INC/HAL	1	26	7	98%	1%	No light at or after 10 Sec
Lutron	Toggler	TGCL-153P	INC/HAL/CFL/LED	1	6	11	98%	5%	≥ 1 Sec
Lutron	Lumea	LG600P	INC	1	26	7.5	98%	2%	No light at or after 10 Sec ^{2,3}
Lutron	Skylark	S600P	INC/HAL	1	26	8	98%	2%	No light at or after 10 Sec ²
Lutron	Skylark Contour	CT103P	INC/HAL/MLV	1	44	11	98%	6%	≥ 1 Sec ²
Lutron	Skylark	SCL-153P-WH	INC/HAL/CFL/LED	1	8	11	99%	5%	≥ 1 Sec
Lutron	Diva	DV603P	INC/HAL	1	26	8	98%	3%	2-10 Sec ²
Lutron	Diva	DVCL-153P	INC/HAL/CFL/LED	1	8	11	99%	5%	2-10 Sec
Lutron	Maestro	MACL-153-M	INC/HAL/CFL/LED	1	8	11	98%	5%	≥ 1 Sec
EATON	Smart	AAL06	INC/HAL/FLR/MLV/ELV/CFL/LED	1	26	10	99%	5%	≥ 1 Sec ²
EATON	Smart	WBSD-SMT	INC/HAL/FLR/MLV/ELV/CFL/LED	1	26	10	99%	5%	≥ 1 Sec ²
EATON	Decorator	DE06P	ELV	1	26	--	97%	3%	2-10 Sec
EATON	React	RI061	INC/HAL	1	26	15	100%	23%	≥ 1 Sec
EATON	Toggle	TAL06P	INC/HAL/FLR/MLV/ELV/CFL/LED	1	16	12	100%	1%	≥ 1 Sec
EATON	Toggle	WBSD-TOG	INC/HAL/FLR/MLV/ELV/CFL/LED	1	16	12	100%	1%	≥ 1 Sec
EATON	Decorator	DAL06P	INC/HAL/FLR/MLV/ELV/CFL/LED	1	16	12	100%	1%	≥ 1 Sec
EATON	Decorator	WBSD-DEC	INC/HAL/FLR/MLV/ELV/CFL/LED	1	16	12	100%	1%	≥ 1 Sec
EATON	Slide	SAL06P	INC/HAL/FLR/MLV/ELV/CFL/LED	1	16	11	100%	1%	≥ 1 Sec ⁴
EATON	Slide	WBSD-SLD	INC/HAL/FLR/MLV/ELV/CFL/LED	1	16	11	100%	1%	≥ 1 Sec ⁴
EATON	Slide	SLC03P	INC/HAL/CFL/LED	1	16	10	99%	5%	≥ 1 Sec
EATON	Decorator	DLC03P	INC/HAL/CFL/LED	1	16	10	99%	5%	≥ 1 Sec
EATON	iLumin	SC277-06-UN	Control Panel	1	32	0	100%	2%	≥ 1 Sec
Leviton	Plug In Lamp Dimmer	TBI04	INC	1	13	16	100%	0%	No light at or after 10 Sec
Leviton	Vizia	VPE06	ELV	1	26	--	100%	3%	2-10 Sec
Leviton	Illuminatech	IPE04	ELV	1	13	--	100%	1%	2-10 Sec
Leviton	Vizia	VZE04	ELV	1	17	--	100%	4%	≥ 1 Sec
Lutron	Maestro	MAELV600	ELV	1	26	--	98%	4%	≥ 1 Sec
Lutron	Faetra	FAELV500	ELV	1	22	--	99%	4%	≥ 1 Sec
Lutron	Diva	DVELV303P	ELV	1	13	--	94%	1%	2-10 Sec
Lutron	Skylark	SELV300P	ELV	1	13	--	95%	1%	2-10 Sec

1. Mild flashes at startup

2. Slight shimmer

3. Slight flicker

4. Flashes with every switch turning on

Dimmer Rating - Load Type

INC = Incandescent

HAL = Halogen

MLV = Magnetic Low Voltage

ELV = Electric Low Voltage

CFL = Compact Fluorescent

FLR = Fluorescent

PD6 LED 2000 Series Phase Control 120V Dimming

Dimmer Make	Dimmer Series	Dimmer Model #	Dimmer Rating	Minimum Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 120V	Peak Repetitive Current (A)	Max Dimming percentage (%)	Min Dimming percentage (%)	Start Time
Leviton	Decora	6673	CFL/INC	1	10	8	99%	2%	> 1 Sec ¹
Leviton	SureSlide	6631-2	INC	1	20	8	100%	0%	> 1 Sec ²
Leviton	Illumatech	RP106	INC	1	20	8	100%	5%	> 1 Sec ³
Leviton	Illumatech	IPI06	INC	1	20	8	100%	0%	> 1 Sec ^{1, 2}
Leviton	Vizia	VP106	INC	1	20	8	100%	2%	> 1 Sec ^{1, 2}
Leviton	Decora	6161	INC	1	16	8	100%	5%	> 1 Sec ¹
Leviton	SureSlide	6633-P	INC	1	20	8	100%	1%	> 1 Sec ^{1, 2}
Lutron	Toggler	TG-600P	INC	1	20	8.5	100%	6%	> 1 Sec ^{1, 2}
Lutron	Diva	DV600P	INC	1	20	7	99%	1%	> 1 Sec ^{1, 2}
Lutron	Maestro	MAW600	INC/HAL	1	25	7.5	100%	0%	> 1 Sec ¹
Lutron	Toggler	TGCL-153P	INC/HAL/CFL/LED	1	6	11	99%	2%	> 1 Sec ^{1, 2}
Lutron	Lumea	LG600P	INC/HAL	1	20	7	100%	1%	> 1 Sec ^{1, 2}
Lutron	Skylark	S600P	INC/HAL	1	20	7	100%	1%	> 1 Sec ^{1, 2}
Lutron	Skylark Contour	CT103P	INC/HAL/MLV	1	33	12	100%	5%	> 1 Sec ^{1, 2}
Lutron	Diva	DV603P	INC/HAL	1	20	7	99%	3%	> 1 Sec ^{1, 2}
Lutron	Diva	DVCL-153P	INC/HAL/CFL/LED	1	6	11	100%	2%	> 1 Sec ^{1, 2}
Lutron	Maestro	MACL-153-M	INC/HAL/CFL/LED	1	6	10	98%	2%	> 1 Sec ^{1, 2}
EATON	Aspire	9530AW	INC	1	20	14	100%	1%	> 1 Sec ^{1, 2}
EATON	React	RI061	INC/HAL	1	20	7	97%	4%	> 1 Sec ^{1, 2}
EATON	Toggle	TAL06P	INC/HAL/MLV/ELV/CFL/LED	1	12	11	100%	3%	> 1 Sec
EATON	Toggle	WBSD-TOG	INC/HAL/MLV/ELV/CFL/LED	1	12	11	100%	3%	> 1 Sec
EATON	Decorator	DAL06P	INC/HAL/FLR/MLV/ELV/CFL/LED	1	12	8	100%	2%	> 1 Sec
EATON	Decorator	WBSD-DEC	INC/HAL/FLR/MLV/ELV/CFL/LED	1	12	8	100%	2%	> 1 Sec
EATON	Slide	SAL06P	INC/HAL/FLR/MLV/ELV/CFL/LED	1	12	12	100%	2%	> 1 Sec
EATON	Slide	WBSD-SLD	INC/HAL/FLR/MLV/ELV/CFL/LED	1	12	12	100%	2%	> 1 Sec
EATON	Slide	SLC03P	INC/HAL/CFL/LED	1	12	9	100%	2%	> 1 Sec ^{1, 2}
EATON	Decorator	DLC03P	INC/HAL/CFL/LED	1	12	12	100%	2%	> 1 Sec ^{1, 2}
EATON	Toggle	TI061	INC/HAL	1	20	15	95%	3%	> 1 Sec
EATON	Smart	AAL06	INC/HAL/FLR/MLV/ELV/CFL/LED	1	12	18	100%	1%	> 1 Sec ^{1, 2}
EATON	Smart	WBSD-SMT	INC/HAL/FLR/MLV/ELV/CFL/LED	1	12	18	100%	1%	> 1 Sec ^{1, 2}
Leviton	SureSlide	6674	INC/LED/CFL	1	6	8	100%	2%	> 1 Sec ^{1, 2}
Leviton	Illumatech	IPL06	INC/LED/CFL	1	6	8	99%	2%	> 1 Sec ^{1, 2}
Leviton	Vizia	VPE06	ELV	1	20	--	100%	3%	> 1 Sec ^{1, 2}
Leviton	Illumatech	IPE04	ELV	1	10	--	100%	1%	> 1 Sec ^{1, 2, 4}
Leviton	Vizia	VZE04	ELV	1	13	--	100%	6%	> 1 Sec ¹
Leviton	Acenti	ATX10	FLR	1	33	--	100%	15%	> 1 Sec ¹
Lutron	Maestro	MAELV600	ELV	1	20	--	99%	5%	> 1 Sec ^{1, 2}
Lutron	Faendra	FAELV500	ELV	1	20	--	99%	4%	> 1 Sec ^{1, 2}
Lutron	Diva	DVELV303P	ELV	1	10	--	95%	2%	> 1 Sec ^{1, 2}
Lutron	Skylark	SELV300P	ELV	1	10	--	96%	2%	> 1 Sec ^{1, 2}
Lightolier	Sunrise	ZP260QEW	ELV	1	8	--	96%	2%	> 1 Sec ^{1, 2}

1. Audible noise present

2. LE start time

3. LED turns off at 9100FC which is at 1/4 of mechanical minimum dimming.

4. No smooth dimming

Dimmer Rating - Load Type

INC = Incandescent

HAL = Halogen

MLV = Magnetic Low Voltage

ELV = Electric Low Voltage

CFL = Compact Fluorescent

FLR = Fluorescent

PD6 LED 1000 Series 0-10V Dimming²

Dimmer Make	Dimmer Series	Dimmer Model #	Minimum Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)
EATON	Slide	SF10P	1	73	102	100%	5%
EATON	Slide	WBSD-010SLD	1	73	102	100%	5%
EATON	Decorator	DF10P	1	73	102	100%	5%
EATON	Decorator	WBSD-010DEC	1	73	102	100%	5%
Leviton	Illuminatech	IP710-DL	1	73	73	100%	5%
Lutron ¹	NTFTV	NOVA T	1	59	136	100%	6%
Lutron ¹	DIVA	DVTV	1	59	136	100%	5%

1. Please refer to Lutron power pack for additional information.

2. Pop up present when turned on at low dim level.

PD6 LED 1500 Series 0-10V Dimming²

Dimmer Make	Dimmer Series	Dimmer Model #	Minimum Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)
EATON	Slide	SF10P	1	53	73	99.94%	12%
EATON	Slide	WBSD-010SLD	1	53	73	99.94%	12%
EATON	Decorator	DF10P	1	53	73	99.94%	12%
EATON	Decorator	WBSD-010DEC	1	53	73	99.94%	12%
Leviton	Illuminatech	IP710-DL	1	53	53	99.28%	12%
Lutron ¹	NTFTV	NOVA T	1	43	98	99.94%	12%
Lutron ¹	DIVA	DVTV	1	43	98	99.76%	11%

1. Please refer to Lutron power pack for additional information.

2. Pop up present when turned on at low dim level.

PD6 LED 2000 Series 0-10V Dimming²

Dimmer Make	Dimmer Series	Dimmer Model #	Minimum Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)
EATON	Slide	SF10P	1	40	55	99.58%	7%
EATON	Slide	WBSD-010SLD	1	40	55	99.58%	7%
EATON	Decorator	DF10P	1	40	55	99.76%	7%
EATON	Decorator	WBSD-010DEC	1	40	55	99.76%	7%
Leviton	Illuminatech	IP710-DL	1	40	40	99.88%	7%
Lutron ¹	NTFTV	NOVA T	1	32	74	99.70%	7%
Lutron ¹	DIVA	DVTV	1	32	74	99.76%	7%

1. Please refer to Lutron power pack for additional information.

2. Pop up present when turned on at low dim level.

PD6 LED 3000 Series 0-10V Dimming²

Dimmer Make	Dimmer Series	Dimmer Model #	Minimum Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)
EATON	Slide	SF10P	1	20	27	98.46%	1%
EATON	Slide	WBSD-010SLD	1	20	27	98.46%	1%
EATON	Decorator	DF10P	1	20	27	98.51%	1%
EATON	Decorator	WBSD-010DEC	1	20	27	98.51%	1%
Leviton	Illuminatech	IP710-DL	1	20	19	98.51%	4%
Lutron ¹	NTFTV	NOVA T	1	16	36	98.51%	4%
Lutron ¹	DIVA	DVTV	1	16	36	98.51%	4%

1. Please refer to Lutron power pack for additional information.

2. Pop up present when turned on at low dim level.

Transformer Load - H347 (75VA)

1. H347 Transformer at full loading consumes a maximum of 15W of power.
2. When a dimmer or switch is on the secondary (120V) side of the transformer, power is consumed by the transformer when the dimmer or switch is in "OFF" mode at 2.5W and in "ON" mode at 15W maximum under full loading.
3. When a switch is on the primary (347V) side ahead of the transformer, power is consumed only in "ON" mode to a maximum of 15W under full loading.

Transformer Load - H347200 (200VA)

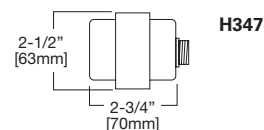
1. H347200 Transformer at full loading on 120V side consumes a maximum of 28W of power, at full loading on 277V side consumes a maximum of 12W of power.
2. When a dimmer or switch is on the secondary (120V) side of the transformer, power is consumed by the transformer when the dimmer or switch is in "OFF" mode at 9.2W and in "ON" mode at 28W maximum under full loading.
When a dimmer or switch is on the secondary (277V) side of the transformer, power is consumed by the transformer when the dimmer or switch is in "OFF" mode at 10.3W and in "ON" mode at 12W maximum under full loading.
3. When a switch is on the primary (347V) side ahead of the transformer, power is consumed only in "ON" mode to a maximum of 28W under full loading on 120V side.
When a switch is on the primary (347V) side ahead of the transformer, power is consumed only in "ON" mode to a maximum of 12W under full loading on 277V side.

Maximum Units PD612 & PD618 on Step Down Transformer

Transformer	VA Rating	PD610	PD615	PD620	PD630
		Max # of Fixtures	Max # of Fixtures	Max # of Fixtures	Max # of Fixtures
H347	75	4	3	2	1
H347200	200	12	8	6	4



H347
347V Step Down Transformer,
75VA



H347200
347V Step Down Transformer,
200VA

