

HL3 Downlight Series

Dimming Guide

HALO™

The HL3 series provides continuous dimming with reverse or forward phase cut dimmers.

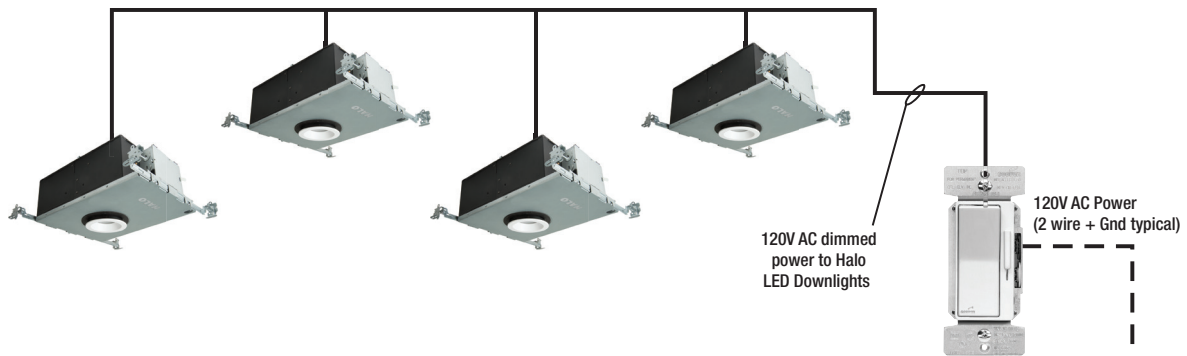
HL36A

HL36A20SP927ED010ICAT	HL36A20NFL927ED010ICAT	HL36A20FL927ED010ICAT	HL36A20WFL927ED010ICAT
HL36A20SP930ED010ICAT	HL36A20NFL930ED010ICAT	HL36A20FL930ED010ICAT	HL36A20WFL930ED010ICAT
HL36A20SP935ED010ICAT	HL36A20NFL935ED010ICAT	HL36A20FL935ED010ICAT	HL36A20WFL935ED010ICAT
HL36A20SP940ED010ICAT	HL36A20NFL940ED010ICAT	HL36A20FL940ED010ICAT	HL36A20WFL940ED010ICAT

HL36SA

HL36SA20SP927ED010ICAT	HL36SA20NFL927ED010ICAT	HL36SA20FL927ED010ICAT	HL36SA20WFL927ED010ICAT
HL36SA20SP930ED010ICAT	HL36SA20NFL930ED010ICAT	HL36SA20FL930ED010ICAT	HL36SA20WFL930ED010ICAT
HL36SA20SP935ED010ICAT	HL36SA20NFL935ED010ICAT	HL36SA20FL935ED010ICAT	HL36SA20WFL935ED010ICAT
HL36SA20SP940ED010ICAT	HL36SA20NFL940ED010ICAT	HL36SA20FL940ED010ICAT	HL36SA20WFL940ED010ICAT

Phase Control Dimming



Compatible Dimmers

Dimmer Make	Dimmer Series	Dimmer Model #	Minimum Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit)	Min Dimming percentage (%)	Max Dimming percentage (%)	Low End Start Time
Lutron	Diva	C-L wall-mount dimmers (T8,T9)	1	7	9%	98%	<1s
Lutron	Skylark	C-L wall-mount dimmers (T8,T9)	1	7	9%	98%	<1s
Lutron	Skylark Contour	C-L wall-mount dimmers (T8,T9)	1	7	9%	98%	<1s
Lutron	Ariadni / Toggler	C-L wall-mount dimmers (T8,T9)	1	7	9%	98%	<1s
Lutron	Lumea	C-L wall-mount dimmers (T8,T9)	1	7	9%	98%	<1s
Lutron	RadioRA 2	RRD-6NA	1	7	13%	99%	<1s
Lutron	Maestro Wireless	MRF2-6ELV	1	7	13%	99%	<1s
Lutron	HomeWorks QS	HQRD-6NA	1	7	13%	99%	<1s
Lutron	Panel Module	HW/LP-RPM-4A-120	1	42	10%	99%	<1s
Lutron	Panel Module	HW/LP-RPM-4U-120	1	12	8%	100%	<1s
Lutron	Grafik QS/Wallbox Power Module	"Grafik Eye QS Main Unit Family/ LQRJ-WPM-6P"	1	12	10%	99%	<1s
Lutron	Panel Module	GP (Harrier) Card	1	12	9%	98%	<1s
Lutron	Grafik Eye 3000/HomeWorks	Grafik Eye 3000 Family/HWI-WPM-6D-120	1	12	10%	99%	<1s
Lutron	Caseta Wireless	PD-6WCL (SD11)	1	7	9%	91%	<1s
Lutron	RadioRA 2	RRD-6CL (R3)	1	7	13%	93%	<1s
Lutron	Maestro Wireless	MRF2-6CL (M6)	1	7	13%	93%	<1s
Lutron	HomeWorks QS	HQRD-6CL (H2)	1	7	13%	93%	<1s
Lutron	HomeWorks QS	HQRA-6CL (H2)	1	7	13%	93%	<1s
Lutron	HomeWorks QS/myRoom	LQSE-4A1-D	1	3	9%	99%	<1s
Lutron	HomeWorks QS/myRoom	MQSE-4A1-D	1	3	9%	99%	<1s
Lutron	HomeWorks QS/myRoom	MQSE-3A1	1	3	9%	99%	<1s
Lutron	HomeWorks QS/myRoom	MQSE-2A1-D	1	3	9%	99%	<1s
Lutron	Grafik T	GT-5NEM	1	12	10%	99%	<1s
Lutron	Grafik T	GTJ-5NEM	1	12	10%	99%	<1s
Lutron	Nova T	NTRP-250	1	12	1%	100%	<1s
Lutron	Skylark Contour Slide to Off	CTCL-150	1	7	9%	98%	<1s
Lutron	Caseta Wireless Phase Selectable	PD-5NE	1	12	10%	91%	<1s
Lutron	Vive	MRF2S-6ELV	1	7	13%	99%	<1s
Lutron	Vive	MRF2S-6CL	1	7	13%	93%	<1s
Lutron	HomeWorks QS	LQSE-4A-120-D	1	8	9%	99%	<1s
Lutron	Lumea Slide-to-Off	LECL-150H	1	7	9%	98%	<1s
Lutron	Caseta Wireless	PD-6WCL (SD12)	1	7	10%	92%	<1s

1. Shimmer at lower dim setting.

For Reference Only

Dimmer Make	Dimmer Series	Dimmer Model #	Minimum Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit)	Min Dimming percentage (%)	Max Dimming percentage (%)	Low End Start Time
Leviton	Decora	6673	1	24	9%	98%	<1s ²
Leviton	SureSlide	6674	1	6	5%	100%	<1s
Leviton	SureSlide	6631-2	1	24	1%	100%	>1s
Leviton	Illumatech	IPL06	1	6	4%	100%	<1s
Leviton	Decora	6161	1	20	1%	100%	<1s
Lutron	Toggler	TG-600P	1	24	1%	100%	>1s
Lutron	Nova T	NTFTU-6A	1	11	16%	99%	<1s
Lutron	Toggler	TGCL-153P	1	6	4%	92%	<1s
Lutron	Lumea	LG600P	1	24	1%	98%	>1s
Lutron	Skylark	SCL-153P-WH	1	6	5%	94%	<1s
Lutron	Diva	DV603P	1	24	1%	98%	>1s
Lutron	Diva	DVCL-153P	1	6	4%	93%	<1s
Lutron	Maestro	MACL-153-M	1	6	4%	87%	<1s
Leviton	Acenti	ATX10	1	40	1%	98%	<1s
Lutron	Maestro	MAELV600	1	24	1%	98%	<1s
Lutron	Faetra	FAELV500	1	20	1%	98%	<1s
Lutron	Diva	DVELV303P	1	12	1%	95%	>1s
Eaton	Smart	AAL06	1	12	1%	98%	<1s ¹
Eaton	React	RI061	1	24	0%	97%	N.A. ¹
Eaton	Toggle	TI061	1	24	1%	83%	<1s
Lutron	LCP128	LP-RPM-4U-120	1	35	0%	100%	N.A. ¹
Lutron	LCP128	LP-RPM-4A-120	1	22	0%	99%	N.A. ¹
Lutron	Rotary	D-600P	1	24	0%	94%	N.A. ¹
Lutron	Nova	N-600	1	24	1%	72%	>1s ²
Lutron	Skylark	S-600P	1	24	1%	98%	>1s ²
Lutron	Centurion	C-600P	1	24	1%	99%	>1s
Lutron	Ariadni	AYLV-600P	1	18	1%	99%	<1s
Lutron	Glyder	GLV-600	1	18	1%	98%	>1s
Lutron	Diva	DVLV-600P	1	18	1%	98%	<1s ²
Lutron	Lumina	LG-103P	1	40	1%	100%	<1s ²
Lutron	Skylark	SLV-600P	1	18	1%	98%	>1s ²
Lutron	Nova	NTLV-600	1	18	1%	98%	<1s
Lutron	Nova	NT-600	1	24	1%	98%	>1s ²
Eaton	Toggle	DAL06P	1	12	5%	98%	<1s ¹
Eaton	Skye	SLC03P	1	12	5%	98%	<1s ¹
Eaton	Devine	DLC03P	1	12	4%	98%	<1s ¹

1. Dim to off.

2. Shimmer at lower dim setting.

0-10V Dimmers

Dimmer Make	Dimmer Series	Dimmer Model #	Types of Dimmer	Minimum Lamps or Luminaires (per circuit)	Maximum Recommended Luminaires (per circuit) at 120V	Maximum Recommended Luminaires (per circuit) at 277V	Max Dimming percentage (%)	Min Dimming percentage (%)	Low End Start Time
Eaton	Slide Dimmer	SF10P	0-10V	1	46	64	100	1	<1S
Eaton	Decorator Dimmer	DF10P	0-10V	1	46	64	100	1	<1S
Leviton	Illumatech	IP710-DL	0-10V	1	46	58	100	1	<1S
Lutron	NTFTV	NOVA T	0-10V	1	63	63	100	1	<1S
Lutron	DIVA	DVTV	0-10V	1	63	63	100	1	<1S
Cooper Lighting Solutions	iLumin	SC277-06	0-10V	1	71	158	100	1	<1S
Cooper Lighting Solutions	Greengate	CK4A	0-10V	1	89	197	100	1	<1S

Dimmer Notes:

- 1) Start time is measured at the lowest dimmer setting.
- 2) Some LED dimmers have a "rapid start" design used to provide a momentary power boost to LED and CFL lamps during start-up. When a LED luminaire is on a dimmer with "rapid start" the boost may cause a momentary flash of the LED lighting. This "flash" is generated by the dimmer, and may be more noticeable when the dimmer is at a low setting. A solution is available with Cooper Lighting Solutions dimmers which provide adjustment capability of the "rapid start": Devine (DAL06P), Accell (AAL06P), and Trace (TAL06P). Refer to product specifications online at www.cooperlighting.com for more details.

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