

RL-DM Night Light Downlight

Dimming Guide and Step-down Transformer Application Note

HALO

The RL-DM Night Light LED Series provides continuous dimming with reverse or forward phase cut dimmers.

RL4DM Night Light

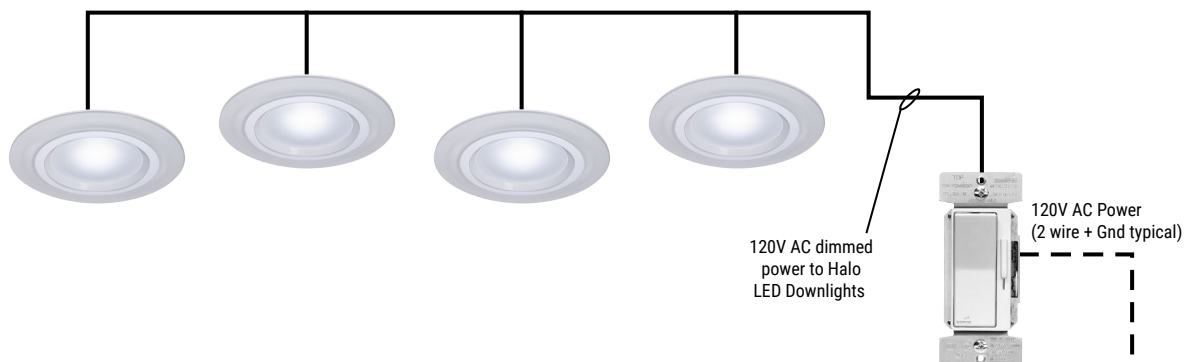
RL4069NLWHDMR

RL6DM Night Light

RL6069NLWHDMR



Phase Control Dimming



RL4-DM Night Light

Reference

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	6672	1	56	4%	98%	<1s
Leviton	SureSlide	6674	1	14	7%	98%	<1s
Leviton	SureSlide	DSL06-ILZ	1	56	7%	98%	<1s
Leviton	Illumatech	IPL06-ILZ	1	14	6%	97%	<1s
Leviton	Decora	TSL06-1LW	1	47	5%	100%	<1s
Leviton	SureSlide	RDL06-10Z	1	56	4%	100%	<1s
Lutron	Toggler	TG-600P	1	56	0%	96%	>1s ¹
Eaton	RF Smart	RF9540-N	1	28	4%	100%	<1s
Lutron	Toggler	TGCL-153P	1	14	2%	96%	<1s
Lutron	Lumea	LG600P	1	56	0%	97%	>1s ¹
EWD	Universal	TUL06P-C2	1	28	3%	98%	<1s
EWD	Universal	SUL06P	1	28	2%	98%	<1s
Lutron	Skylark	SCL-153P-WH	1	14	2%	95%	<1s
Lutron	Diva	DV603P	1	56	0%	96%	>1s ¹
Lutron	Diva	DVCL-153P	1	14	2%	95%	<1s
Lutron	Maestro	MACL-153-M	1	14	6%	89%	<1s
Leviton	Vizia	VPE06	1	56	6%	100%	<1s
Leviton	Legrand	H703PTU	1	28	4%	100%	<1s
Leviton	Vizia	VZE04	1	37	7%	100%	<1s
Leviton	Acenti	ATX10	1	94	5%	100%	<1s
Lutron	Maestro	MAELV600	1	56	8%	99%	<1s
Lutron	Faedra	FAELV500	1	47	0%	99%	>1s ¹
Lutron	Diva	DVELV303P	1	28	4%	99%	<1s
Lutron	Skylark	SELV300P	1	28	4%	99%	<1s
EWD	Smart	AAL06	1	28	8%	98%	<1s
Lightolier	Sunrise	ZP260QEW	1	24	4%	97%	<1s
Eaton	Aspire	9530AW	1	56	0%	99%	>1s ¹
Eaton	Skye	SF8AP	1	90	14%	99%	<1s
Eaton	Devine	DE06P	1	56	1%	88%	<1s
Eaton	React	RI061	1	56	0%	100%	>1s ¹
Eaton	Devine	TAL06P	1	28	2%	98%	<1s
Eaton	Toggle	DAL06P	1	28	3%	98%	<1s
Eaton	Skye	SAL06P	1	28	3%	98%	<1s
Eaton	Skye	SLC03P	1	28	2%	98%	<1s
Eaton	Devine	DLC03P	1	28	1%	98%	<1s
Eaton	Toggle	TI061	1	56	0%	82%	>1s ¹
Lutron(PANEL)	LCP128 (TRIAC)	LP-RPM-4U-120	1	180	0%	99%	>1s ¹
Lutron(PANEL)	LCP128 (ELV)	LP-RPM-4A-120	1	112	0%	98%	>1s ¹
Ecospec(PANEL)	LDCM	LDCM-PL-120-277-010V-GR	1	42	0%	100%	>1s ¹
Lutron	Ariadni	AY-600P	1	56	0%	97%	>1s ¹
Lutron	Contour	CT-103P	1	94	0%	98%	>1s ¹
Lutron	Contour	CT-600P	1	56	0%	98%	>1s ¹
Lutron	Rotary	D-600P	1	56	0%	96%	>1s ¹
Lutron	Diva	DV-600P	1	56	0%	97%	>1s ¹
Lutron	Glyder	GL-600P	1	56	0%	97%	>1s ¹
Lutron	Lumia	LG-600PH	1	56	0%	97%	>1s ¹
Lutron	Maestro	MA-600	1	56	9%	99%	<1s
Lutron	Nova	N-600	1	56	0%	98%	>1s ¹
Lutron	Skylark	S-600P	1	56	0%	96%	>1s ¹
Lutron	Centurion	C-600P	1	56	0%	97%	>1s ¹
Lutron	Ariadni	AYLV-600P	1	42	0%	96%	>1s ¹
Lutron	Glyder	GLV-600	1	42	0%	97%	>1s ¹
Lutron	Diva	DVLV-600P	1	42	0%	95%	>1s ¹
Lutron	Lumina	LG-103P	1	94	0%	96%	>1s ¹
Lutron	Skylark	SLV-600P	1	42	0%	96%	>1s ¹
EWD	Universal	DUL06P-C7	1	28	3%	95%	<1s
Lutron	Nova	NTLV-600	1	28	4%	97%	<1s
Lutron	Nova	NT-600	1	42	0%	97%	>1s ¹

1. Dim to off.

RL6-DM Night Light

Reference

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	6672	1	41	3%	97%	<1s
Leviton	SureSlide	6674	1	10	6%	97%	<1s
Leviton	SureSlide	DSL06-ILZ	1	41	5%	98%	<1s
Leviton	Illumatech	IPL06-ILZ	1	10	5%	97%	<1s
Leviton	Decora	TSL06-1LW	1	34	5%	99%	<1s
Leviton	SureSlide	RDL06-10Z	1	41	3%	100%	<1s
Lutron	Toggler	TG-600P	1	41	0%	93%	>1s ¹
Lutron	Nova T	NTFTU-6A	1	41	18%	100%	<1s
Eaton	RF Smart	RF9540-N	1	20	4%	99%	<1s
Lutron	Maestro	MAW600	1	41	7%	99%	<1s
Lutron	Toggler	TGCL-153P	1	10	2%	96%	<1s
Lutron	Lumea	LG600P	1	41	0%	97%	>1s ¹
EWD	Universal	TUL06P-C2	1	20	2%	96%	<1s
EWD	Universal	SUL06P	1	20	2%	96%	<1s
Lutron	Skylark	SCL-153P-WH	1	10	2%	95%	<1s
Lutron	Diva	DV603P	1	41	0%	97%	>1s ¹
Lutron	Diva	DVCL-153P	1	10	2%	95%	<1s
Lutron	Maestro	MACL-153-M	1	10	6%	88%	<1s
Leviton	Vizia	VPE06	1	41	4%	100%	<1s
Leviton	Legrand	H703PTU	1	20	4%	100%	<1s
Leviton	Vizia	VZE04	1	27	6%	100%	<1s
Leviton	Acenti	ATX10	1	69	5%	99%	<1s
Lutron	Maestro	MAELV600	1	41	6%	99%	<1s
Lutron	Diva	DVELV303P	1	20	3%	98%	<1s
Lutron	Skylark	SELV300P	1	20	3%	98%	<1s
EWD	Smart	AAL06	1	20	6%	98%	<1s
Lightolier	Sunrise	ZP260QEW	1	18	4%	97%	<1s
Eaton	Aspire	9530AW	1	41	0%	100%	>1s ¹
Eaton	Skye	SF8AP	1	66	16%	100%	<1s
Eaton	Devine	DE06P	1	41	1%	88%	>1s
Eaton	React	RI061	1	41	0%	100%	>1s ¹
Eaton	Devine	TAL06P	1	20	2%	100%	<1s
Eaton	Toggle	DAL06P	1	20	2%	100%	<1s
Eaton	Skye	SAL06P	1	20	2%	99%	<1s
Eaton	Skye	SLC03P	1	20	2%	98%	<1s
Eaton	Devine	DLC03P	1	20	1%	99%	<1s
Eaton	Toggle	TI061	1	41	0%	81%	>1s ¹
Lutron(PANEL)	LCP128 (TRIAC)	LP-RPM-4U-120	1	133	0%	100%	>1s ¹
Lutron(PANEL)	LCP128 (ELV)	LP-RPM-4A-120	1	83	0%	99%	>1s ¹
Ecospec(PANEL)	LDCM	LDCM-PL-120-277-010V-GR	1	31	0%	100%	>1s ¹
Lutron	Ariadni	AY-600P	1	41	0%	97%	>1s ¹
Lutron	Contour	CT-103P	1	69	0%	97%	>1s ¹
Lutron	Contour	CT-600P	1	41	0%	96%	>1s ¹
Lutron	Rotary	D-600P	1	41	0%	94%	>1s ¹
Lutron	Diva	DV-600P	1	41	0%	96%	>1s ¹
Lutron	Glyder	GL-600P	1	41	0%	96%	>1s ¹
Lutron	Lumia	LG-600PH	1	41	0%	96%	>1s ¹
Lutron	Maestro	MA-600	1	41	7%	95%	<1s
Lutron	Nova	N-600	1	41	0%	96%	>1s ¹
Lutron	Skylark	S-600P	1	41	0%	95%	>1s ¹
Lutron	Centurion	C-600P	1	41	0%	99%	>1s ¹
Lutron	Ariadni	AYLV-600P	1	31	0%	98%	>1s ¹
Lutron	Glyder	GLV-600	1	31	0%	99%	>1s ¹
Lutron	Diva	DVLV-600P	1	31	0%	95%	>1s ¹
Lutron	Lumina	LG-103P	1	69	0%	96%	>1s ¹
Lutron	Skylark	SLV-600P	1	31	0%	96%	>1s ¹
EWD	Universal	DUL06P-C7	1	20	2%	94%	<1s
Lutron	Nova	NTLV-600	1	20	3%	97%	<1s
Lutron	Nova	NT-600	1	31	1%	98%	<1s

1. Dim to off.

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 EATON dimmers which provide adjustment capability of the "rapid start": Devine (DAL06P), Accell (AAL06P), and Trace (TAL06P). Refer to product specifications online at www.eaton.com for more details.

Dimming Guide Disclaimer:

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