

Smart AL series dimmers

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

Description

Single-Pole & Multi-Location 300W Dimmable LED, Dimmable Compact Fluorescent (CFL) 600W/VA Incandescent (INC)/Halogen (HAL), Dimmable Fluorescent (FLR), Magnetic Low-Voltage (MLV), Electronic Low-Voltage (ELV)

Design features

- Electro-mechanical push pad for ON/OFF operation with separate DIM/BRIGHT bar
- Preset feature allows user to return to previous light setting when turning lights ON
- Master/Accessory units for multi-location control
- Amber LED at bottom of LED display indicates ON/OFF load status
- Seven step green LED display on push pad indicates selected light level – and reduces brightness when OFF (nightlight feature)
- Pressing and holding push pad for 2 seconds when dimmer is OFF brings light to full brightness without affecting preset levels
- Offers a 10 second delayed-OFF feature by pressing and holding push pad for 2 seconds when dimmer is ON
- Digital circuitry provides aesthetically pleasing soft-ON/fade-OFF that extends lamp life
- Neutral is required for installation of device
- Programmable rapid start feature ensures lamp start-up even at low dim levels
- Adjustable low-level trim setting for optimal lamp compatibility
- Air-gap switch disconnects power from load, forcing an OFF condition
- Adjustable high-level trim setting for additional energy savings
- Color change kits are available to allow for quick changes and less inventory
- Tri-color packaging which provides one unit box with three color faceplates



AAL06



ARD

Table 1. Smart AL Dimmers, Wire Leads

Catalog No.	Description	Compatible Lamp Types	Rating		Color Suffix
			Watt	V/AC	
□ AAL06-__	Smart Dimmer Master, AL Series, Single-Pole/Multi-Location with Presets and LEDs. Neutral Required.	Dimmable LED/CFL	300	120	C1, C2, C4, C5
		INC, HAL, FLR, MLV, ELV	600	120	C1, C2, C4, C5
□ ARD-__	Accessory Dimmer, Multi-Location, with Preset and LEDs. Must be used with AAL06	—	—	120	A, B, BK, GY, C2, V, LA, V, W
□ AMC-__-BP	Master Dimmer Color Change Faceplate	—	—	—	A, B, BK, GY, LA, V, W
□ ARC-__-BP	Accessory Dimmer Color Change Faceplate	—	—	—	A, B, BK, GY, LA, V, W



Powering Business Worldwide

Compliances, specifications and availability are subject to change without notice.

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Applications

The Smart AL series dimmer provides smooth, full-range digital dimming for incandescent, halogen, electronic low-voltage, magnetic low-voltage, dimmable LED/CFL, and fluorescent lighting. In addition, an accessory dimmer is included in the product series for multi-location control for up to 5 locations. This line offers a combined single-pole/multi-location unit for nearly all lamp loads. All Smart AL dimmers are compatible with any decorator, designer-style wallplates.

Table 2. Specifications

Catalog No.	AAL06, ARD, AMC-BP, ARC-BP Series
Device Type	Smart AL Dimmers
Wiring Type	6" pre-stripped wire leads, #14 AWG
Testing & Code Compliance	<ul style="list-style-type: none"> cULus Listed to UL1472, file no. E47967 NOM Certified
Environmental Specifications	Flammability: Meets UL 94 requirements; V2 rated Temperature Rating: 0°C to 40°C (32°F to 104°F)
Electrical Specifications	Rating: 120V/AC 60 Hz Light Intensity Control: Full-range, continuously variable dimming Dimming Performance: Smooth and continuous Square Law Dimming curve Solid State Dimming Radio Frequency Interference: Designed to reduce interference with radio, audio and video equipment Lamp Ratings: 300W Dimmable LED/CFL 600W Incandescent, Halogen, Dimmable Fluorescent, Electronic Low-Voltage, Magnetic Low-Voltage
Mechanical Specifications	Wiring Types: Single-Pole & Multi-Location LED Indicators: Load status indicator, light level & locator Air-gap Switch: Meets UL1472 for inclusion of visible, accessible air-gap off switch Voltage Ratings: Permanently marked on device

Table 3. Materials

Catalog No.	AAL06, ARD, AMC-BP, ARC-BP Series
Top Housing	Polycarbonate
Bottom Housing	Polycarbonate
Strap	Aluminum
Form Factor	Decorator
Finish	Gloss

Table 4. De-Rating Chart - 600W Models

Lamp Type	1-Gang	2-Gang	3-Gang +
LED/CFL	300W max.	300W max.	300W max.
INC, HAL, ELV	600W max.	600W max.	600W max.
MLV	600VA max.	600VA max.	600VA max.
FLR	See Ballast Performance Data pages		

Table 5. Color Ordering Information

For ordering devices, include Cat. No. followed by the color code: A (Almond), B (Brown), BK (Black), GY (Gray) LA (Light Almond), V (Ivory), W (White)

A	B	BK	GY	LA	V	W
Almond	Brown	Black	Gray	Lt. Almond	Ivory	White

Color Kit Color Combinations and Ordering Suffixes (for select models):

A	W	V	LA	W	V	BK	W	V	BK	W	GY
C1 Color Kit A (Almond), W (White), V (Ivory)			C2 Color Kit LA (Light Almond), W (White), V (Ivory)			C4 Color Kit BK (Black), W (White), V (Ivory)			C5 Color Kit BK (Black), W (White), GY (Gray)		

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Product Dimensions

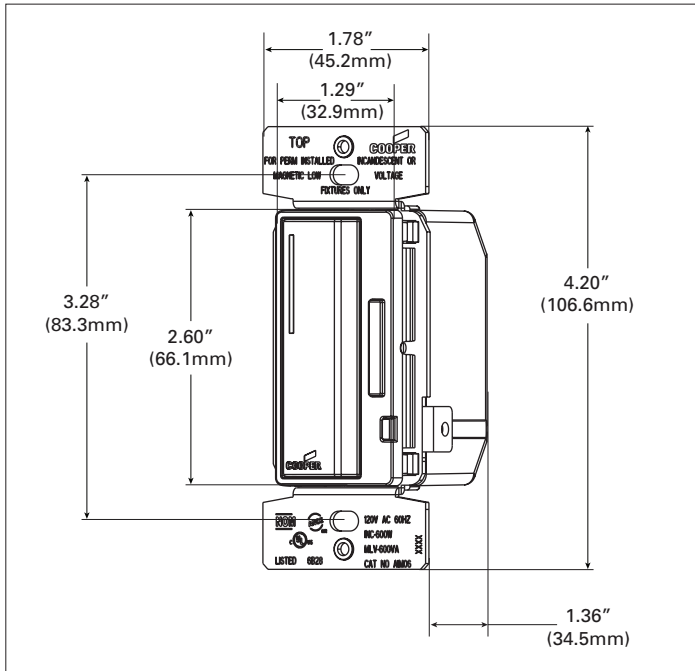


Figure 1. AAL06 Line Art with Dimensions

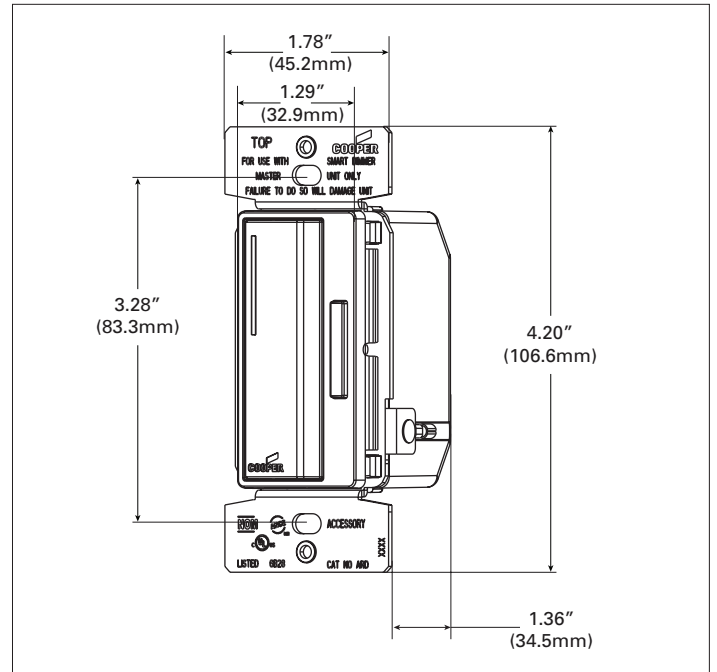
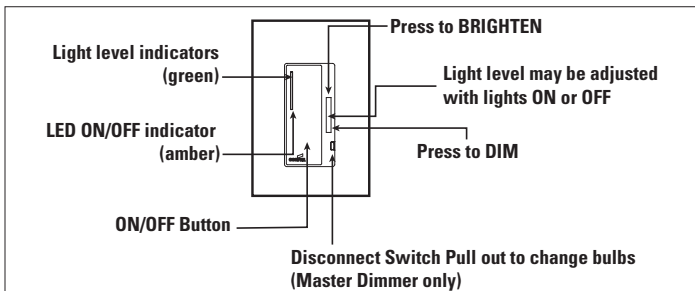


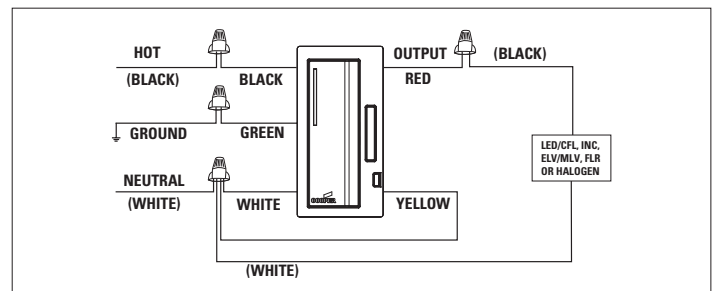
Figure 2. ARD Line Art with Dimensions

Wiring Diagrams

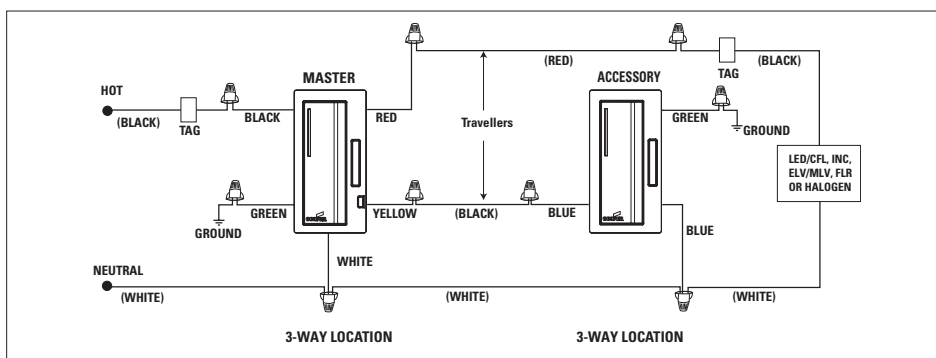
Switch Functions



Single Location Wiring Diagram



Two Location Installation Wiring Diagram



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Table 7. Listed Dimmable LED Bulb List

Make	Catalog Number	Make	Catalog Number
Cooper Lighting	H455ICAT120D	Satco	S873X (PAR20)
	H455RICAT120D		S874X, S877X (PAR30)
	ML706827		S875X (PAR 38)
	ML706830	Solaris	LR30/10/30/750
	ML706835		LR30/25/30/750
	ML706840		LR30LN/10/30/850
	ML709827ICAT120D		LR30LN/25/30/850
	ML709830ICAT120D		LR38/10/30/1000
	ML709835ICAT120D		LR38/25/30/1000
	ML709840ICAT120D	Sylvania	LED15PAR30LN/DIM/830/FL40
	RL706830E26WBS		LED15PAR30LN/DIM/830/NFL25
	RL706830WBS		LED15PAR30LN/DIM/827/NFL25
	Cree		BA19-08027OMF-12DE26-1U100
BA21-16050OMF-12DE26-1U110			LED18PAR38/DIM/830/NFL25
BBR30-06527FLF			LED18PAR38/DIM/830/FL40
LR6			LED18PAR38/DIM/827/NFL25
LR6-DR650			LED18PAR38/DIM/827/FL40
LR6-DR1000			LED18PAR38/DIM/827/FL40
LE6			LED8A/DIM/F/830
CR6		LED8A/DIM/F/827	
LR4E-15		LED8G25/DIM/F/830	
LR4E-30		LED8G25/DIM/827	
Ecosmart (Home Depot)	ECO-575L ECS19WW120	LED8PAR20/DIM/830/NFL25	
	ECS20WWFL120	LED8PAR20/DIM/830/FL36	
	ECS30WWFL120	LEDPAR20/DIM/827/NFL25	
	ECS38WWFL120	LEDPAR20/DIM/827/FL36	
	ECS25WW120	Triangle	55961
Feit	BPAG1100DM/5K/LED		
	BPCEBR30/DM/LED		
	BPCEG25/LED/3		
	BPCEPAR38/930/LED		
G7 Power	G7BR301527D		
HitLights/Dura	HL-LED_5WWWW_GU10		
Lighting Ever	200055-WW-US		
	600026-WW-US		
Lighting Science	DFN20NWFL120		
	DFN38NWFL120		
	DFN30NWFL120		
	DFN19NW120		
	DFN25NWFL120		
Philips	EnduraLED 7A 2700 A19 Dimm (407956)		
	EnduraLED 11W 2700K PAR30S Dimmable (408096)		
	EnduraLED 11W 3000K PAR30S Dimmable (408104)		
	EnduraLED 11W 4200K PAR30S Dimmable (408112)		
	EnduraLED 11W 2700K PAR30L Dimmable (408120)		
	EnduraLED 11W 3000K PAR30L Dimmable (408138)		
	EnduraLED 11W 4200K PAR30S Dimmable (408146)		
	EnduraLED 11W 4200K PAR30S Dimmable (410134)		
	EnduraLED 11W 2700K PAR30L Dimmable (410142)		
	EnduraLED 16W 2700K 120V PAR38 Dimmable (408153)		
	EnduraLED 16W 3000K 120V PAR38 Dimmable (408161)		
	EnduraLED 16W 4200K 120V PAR38 Dimmable (408179)		
	EnduraLED 6W 3000K R20 Dimm (408203)		
	423400 (9290002192 on bulb)		
	423798 (9290002544 on bulb)		
	424382 (9290002268A on bulb)		
	425264 (9290002296A on bulb)		
	432195 (9290002596 on bulb)		
	433227 (9290002707 on bulb)		
	433235 (9290002709 on bulb)		

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Table 8. Maximum Fluorescent Lamp Wattage



The following table lists the maximum number of Mark 10® or AmbiStar® ballasts that can be connected to a dimmer for single and multi-device installations in a wallbox.

Ballast Cast#	Lamp Type	# of Lamps	Lamp Watts	Max # of Ballasts per Dimmer for Multigang		
				One Gang	Two Gang	Three Gang
REB-2S26	CFQ26W/G24q	1	26	20	18	16
REB-2S26	CFQ26W/G24q	2	26	10	9	8
REB-2S26	CFTR32W/GX24q	1	32	15	14	12
REB-2S26	CFTR42W/GX24q	1	42	11	10	9
REZ-1Q18	CFQ18W/G24q	1	18	26	23	21
REZ-1Q18	CFTR18W/GX24q	1	18	26	23	21
REZ-2Q18	CFQ18W/G24q	2	18	13	11	10
REZ-2Q18	CFTR18W/GX24q	2	18	13	11	10
REZ-2Q26	CFQ26W/G24q	2	26	9	8	8
REZ-2Q26	CFTR26W/GX24q	2	26	9	8	8
REZ-1T42	CFQ26W/G24q	1	26	18	16	14
REZ-1T42	CFTR26W/GX24q	1	26	18	16	14
REZ-1T42	CFTR32W/GX24q	1	32	14	13	12
REZ-1T42	CFTR42W/GX24q	1	42	11	10	9
REZ-2T42	CFTR32W/GX24q	2	32	7	6	6
REZ-2T42	CFTR42W/GX24q	2	42	5	5	4
REZ-2T42	CFTR57W/GX24q	1	57	8	7	7
REZ-2T42	CFTR70W/GX24q	1	70	7	6	5
IEZ-2S24	FT24W/2G11	2	24/27	9	8	8
IEZ-2S24	F24T5/HO	2	24	9	8	8
REZ-1TTS40	FT36W/2G11	1	36/39	14	13	12
REZ-1TTS40	FT40W/2G11/RS	1	40	14	13	12
REZ-2TTS40	FT36W/2G12	2	36/40	7	6	6
REZ-2TTS40	FT40W/2G11/RS	2	41	6	6	5
REZ-154	F54T5/HO	1	54	8	8	7
REZ-154	FC12T5/HO	1	55	9	8	7
REZ-154	FT55W/2G11	1	55	9	8	7
REZ-2S54	F54T5/HO	2	54	4	4	3
REZ-2S54	FC12T5/HO	2	55	4	4	4
REZ-2S54	FT55W/2G12	2	55	4	4	4
REZ-132	F17T8, FBO16T8	1	17	23	21	19
REZ-132	F25T8, FBO24T8	1	25	18	16	14
REZ-132	F32T8, FBO31T8	1	32	16	14	13
REZ-2S32	F17T8, FBO16T9	2	17	14	13	12
REZ-2S32	F25T8, FBO24T9	2	25	10	9	8
REZ-2S32	F32T8, FBO31T9	2	32	8	7	6
REZ-3S32	F17T8, FBO16T10	3	17	10	9	8
REZ-3S32	F25T8, FBO24T10	3	25	7	6	5
REZ-3S32	F32T8, FBO31T10	3	32	5	4	4

Lutron Tu-Wire® ballast. The total of all line currents for the ballasts connected to the dimmer should be less than: 4-70A for one gang; 4-30A for two gang and 3-90A for three gang installations.

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Certifications & Compliances

Catalog No.		
AAL06	•	•
ARD	•	•
AMC-BP	•	•
ARC-BP	•	•

KEY:  cULus  NOM

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