Smart AL series dimmers

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





ARD

Description

Single pole & multi-location 600W/VA, 1000W/VA, 120V/AC Rated for all common lighting loads - dimmable LED, dimmable CFL, INC/HAL, ELV, MLV, FLR

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 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
- 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 compatability
- · Faceplate is removable to allow for color change
- Air-gap switch disconnects power from load, forcing an OFF condition
- · Adjustable high-level trim setting for additional energy savings
- Compatible with most common dimmable lighting loads (phase-cut)
- Color change kits are available with packout of 3 different colors for increased flexibility and convenience

Table 1. Smart AL Dimmers, Wire Leads

Cotolon No	Description	Compatible		ting	Calar Cuffin
Catalog No.	Description	Lamp Types	Watt	V/AC	Color Suffix
□ AAL06	Smart dimmer master, AL series, single pole/ multi-location with	Dimmable LED/CFL	300	120	C1, C2, C4, C5
	presets and LEDs. Neutral required.	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, C1, C2, GY, LA, V, W
☐ AMCBP	Master dimmer color change faceplate	_	_		A, B, BK, GY, LA, V, W
☐ ARCBP	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 AL series smart 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 AL smart dimmers are compatible with any decorator, designer-style wallplates.

Table 2. Specifications

Catalog No.	AAL06, ARD, AMC-BP, ARC-BP Series Smart AL Dimmers		
Device Type			
Wiring Type	6" pre-stripped wire leads, #14 AWG		
Testing & Code Compliance	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

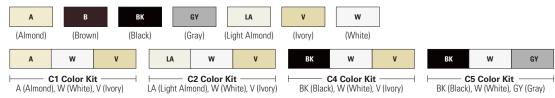
Catalog No.	AAL06, ARD, AMC-BP, ARC-BP Series
Top Housing	Polycarbonate
Bottom Housing	Polycarbonate
Strap	Aluminum
Form Factor	Decorator
Finish	Gloss

Table 4. De-Rating Chart - 600W Models

Lamp Type	1-Gang	2-Gang	3-Gange +
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	S	Gee Ballast Performance	Data pages

Table 5. Color Ordering Information

For ordering devices, include Catalog no. followed by the Color suffix: A (Almond), B (Brown), BK (Black), GY (Gray), LA (Light Almond), V (Ivory), W (White), C1 (Color Change Kit: A, W, V), C2 (Color Change Kit: LA, W, V), C4 (Color Change Kit: BK, W, V), C5 (Color Change Kit: BK, W, V), C5 (Color Change Kit: BK, W, C7)



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

Product Dimensions

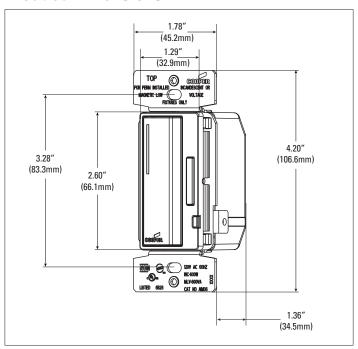


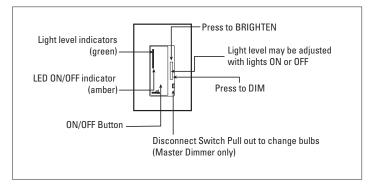
Figure 1. AAL06 Line Art with Dimensions

1.78" (45.2mm) 1.29" (32.9mm) TOP © GOODER MAISER TO DO SO THE DANAGE UNT HALLER TO DO SO THE DANAGE UNT (106.6mm) 1.36" (34.5mm)

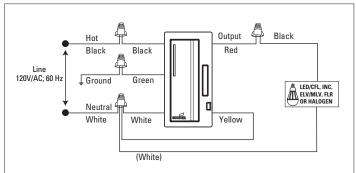
Figure 2. ARD Line Art with Dimensions

Wiring Diagrams

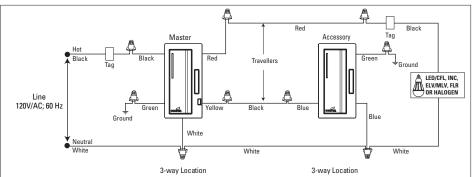
Switch Functions



Single Location Wiring Diagram INC, HAL, LED/CFL, FLR, MLV, ELV



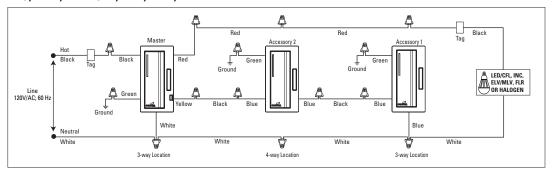
Two Location Installation Wiring Diagram INC, HAL, LED/CFL, FLR, MLV, ELV



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

Wiring Diagrams

Three Location Installation Wiring Diagram INC, HAL, LED/CFL, FLR, MLV, ELV



Certifications & Compliances

Catalog No.	¢(UL) us	<u>HOM</u> 426	
AAL06	•	•	
ARD	•	•	
AMC-BP	•	•	
ARC-BP	•	•	

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Table 6. Listed Dimmable CFL Bulb List

Make	Catalog Number	Make	Catalog Number
Ecosmart	ES5M10123 ES5R214DIM50K ES5CCDF052 ES5R315DIM	Neptune	24514-ADIM 32016-ADIM
		Sylvania	CF5EL/B10/C/DIM/827 CF5EL/A15/DIM/827 CF5EL/DECO/DIM CF24EL/TWIST/827/DIM CF19EL/BR40/827/DIM CF15EL/BR30/DIM/827 CF14EL/TWIST/827/DIM CF14EL/TWIST/827/DIM
Feit			
GE	FLE15/2/DV/R30 FLE15HT3/2/DV/ FLE26/2/DV/R40 FLE26HT3/2/DV/	TCP	40114 40123 2R2014DIM 2R3016DIM 2R4019DIM 10123 8T03CL 8T05CL 8T05CL 8TC05F 8A08WH 8TF05F 2G2514DIM
Globe			
Phillips	EL/ES Dim 20 Alto EL/A R30 DIM 16W EL/A R40 DIM 20W EL/A PAR38 DIM 20W EL/A R40 Dim 20W (150725) EL/mDT DIM 20W EL/Dt dim 32W EL/mdT Dim 15W EL/A R30 DIM 16W (150417)		

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Table 7. Listed Dimmable LED Bulb List

Make	Catalog Number	Make	Catalog Number	
Cooper Lighting	H455ICAT120D H455RICAT120D ML706827 ML706830 ML706835 ML706840 ML709827ICAT120D ML709830ICAT120D ML709835ICAT120D ML709840ICAT120D RL709840ICAT120D RL706830E26WBS RL706830WBS	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 (408161)	
Cree	BA19-080270MF-12DE26-1U100 BA21-160500MF-12DE26-1U110 BBR30-06527FLF LR6 LR6-DR650 LR6-DR1000 LE6 CR6 LR4E-15 LR4E-30		EnduraLED 6W 3000K R20 Dimm (408203) 423400 (9290002192 on bulb) with 2+ lamps 423798 (9290002544 on bulb) 424382 (9290002268A on bulb) 425264 (9290002296A on bulb) 432195 (9290002596 on bulb) 433227 (9290002707 on bulb) 433235 (9290002709 on bulb)	
		Satco	S873X (PAR20) S874X, S877X (PAR30) S875X (PAR 38)	
Ecosmart (Home Depot)	EC0-575L ECS19WW120 ECS20WWFL120 ECS30WWFL120 ECS38WWFL120 ECS25WW120	Solaris	LR30/10/30/750 LR30/25/30/750 LR30LN/10/30/850 LR30LN/25/30/850	
Feit	BPAG1100DM/5K/LED BPCEBR30/DM/LED BPCEG25/LED/3	Sylvania	LR38/10/30/1000 LR38/25/30/1000 LED15PAR30LN/DIM/830/FL40	
BPCEPAR38/930/LED G7 Power G7BR301527D			LED15PAR30LN/DIM/830/NFL25 LED15PAR30LN/DIM/827/NFL25	
	G7BR301527D		LED15PAR30LN/DIM/827/FL40 LED18PAR38/DIM/830/NFL25	
HitLights/Dura	HL-LED_5WWW_GU10 200039 (not compatible with AAL06P) 200055-WW-US 600026-WW-US		LED18PAR38/DIM/830/FL40 LED18PAR38/DIM/827/NFL25 LED18PAR38/DIM/827/FL40 LED8A/DIM/F/830	
Lighting Science	DFN20NWFL120 DFN38NWFL120 DFN30NWFL120 DFN19NW120 DFN25NWFL120		LED8A/DIM/F/827 LED8G25/DIM/F/830 LED8G25/DIM/827 LED8PAR20/DIM/830/NFL25 LED8PAR20/DIM/830/FL36 LEDPAR20/DIM/827/NFL25 LEDPAR20/DIM/827/FL36	
		Triangle	55961	
		Utilitech	0599032 0519042 0113539 0519037	
	Uber Haus	Uber Haus	15735007 15735004 15735005	

Technical Data Effective October 2016

ļ	Project Name:	Prepared By:
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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.

				Max # of Ballasts per Dimmer for Multiganging		
Ballast Cast#	Lamp Type	# of Lamps	Lamp Watts	One Gang	Two Gang	Three Gange
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-2018	CFQ18W/G24q	2	18	13	11	10
REZ-2018	CFTR18W/GX24q	2	18	13	11	10
REZ-2026	CFQ26W/G24q	2	26	9	8	8
REZ-2026	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/H0	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/H0	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/H0	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, FB016T8	1	17	23	21	19
REZ-132	F25T8, FB024T8	1	25	18	16	14
REZ-132	F32T8, FB031T8	1	32	16	14	13
REZ-2S32	F17T8, FB016T9	2	17	14	13	12
REZ-2S32	F25T8, FB024T9	2	25	10	9	8
REZ-2S32	F32T8, FB031T9	2	32	8	7	6
REZ-3S32	F17T8, FB016T10	3	17	10	9	8
REZ-3S32	F25T8, FB024T10	3	25	7	6	5
REZ-3S32	F32T8, FB031T10	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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