

AL-WS-BATH

LOW VOLTAGE WALL SWITCH



Decorator Style Bath Switch/Driver for LEDs and Fan

The AL-WS-BATH residential light switch directly drives up to 30 W of LED lights plus a 12 W fan using low voltage DC instead of 120 V AC. This decorator-style switch in a standard residential outline fits into any home and meets NEC article 411 class 2 for low voltage lighting.

The AL-WS-BATH has a standard rocker switch with a brightness slider. Typically, one to five 660 mA (6 W) LEDs are connected for 30 W total. The fan can either be on the same switch as the light or have its own switch using any standard single pole switch for the fan control.

Key Specifications

Electrical/Operational	
Input voltage range	44 V to 52 V DC
Minimum output voltage	9 V
Maximum output voltage	Input minus 4 V
Standby power consumption	50 mW
Conversion efficiency	Over 95%
Protection	Reverse protection and static protection
Operating temperature	0°C to 50°C
Standard Connections	
Power source and load	Spring-loaded connectors (2 pair) for AWG 16-20
LED constant current output	Spring-loaded connectors; connect one to five LEDs with 660 mA each
Hot swap	Yes
Fan voltage control output	12 V, 1 A, constant voltage

Features

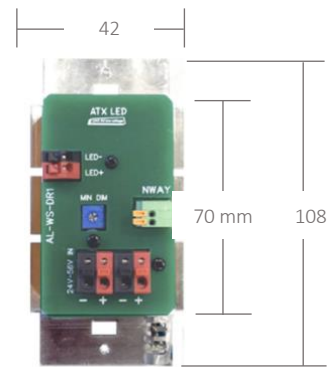
- Elegant decorator-style appearance
- Control lighting and fan from same switch
- Integrated slider controls 0-100% smooth dimming
- Low voltage operation
- Easy installation using AWG 16 or 18
- Can be easily upgraded without changing wiring

Certifications

- NEC article 411
- UL Listed - E500649
- Meets FCC RF standards for minimal interference

Dimensions

External size (metal)	108 mm x 42 mm W x 34 mm D
External size (switch)	70 mm x 42 mm W x 34 mm D



Sample Recommended LED Loads

Watts	Type	Model	Size	LED	Max Count	Total Power	Note
6	Flat ceiling	P023R6	4"	660 mA	5	30	5 in series
6	Recessed	DL-120	4"	660 mA	5	30	5 in series
6	Gimbal spot	MS31008	3"	660 mA	5	30	5 in series
6	E26 bulb	ATX-A60	N/A	660 mA	5	30	5 in series
6	E12 bulb	ATX-C35	N/A	660 mA	5	30	5 in series
6	E26 bulb	E26-48V6W	N/A	120 mA	6	36	6 in parallel

Model Quick Reference

Ordering SKU	LED Channels	Dimming Driver	0-10 V Control	Fan	Vacancy/Occupancy	3-Way ¹	Smart ²	WiFi
AL-WS-BATH	1	X		X		X		
AL-WS-DR1	1	X						
AL-WS-DR1-PIRC	1	X			X	X		
AL-WS-DR2C	2	X		X		X		
AL-WS-DR1-PIR	1	X			X		X	
AL-WS-010V	1	X	X			X	X	
AL-WS-DR2	2	X		X		X	X	
AL-WS-DR2W	2	X		X		X		X

Notes:

1 - Compatible with AL-WS-M Momentary Switch for 3-way

2 - IEC 62386 compatible

Part Numbering

AL	-	WS	-	BATH
ATX LED		Description		Variety

