



# Austin Led Consultants

DMX and Led power over ethernet

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## AL-DALI-WS 3-Way Switch/Dimmer with DALI™



### Product Description - AL-DALI-wall switch

Combine this switch with a standard DALI LED driver to build cost effective LED installations using standardized technology. It supports the standard DALI protocol in a low cost switch for the USA market for the first time. A proven rocker switch and brightness slider leverages mass production of 120 VAC switches, for a low voltage application – any casual user requires no training, no App to use this switch.

For 3-way operation – a simple 2 wire link with AWG24 or better allows 2, 3, or an unlimited numbers of switches to control one set of LED's. Any single pole switch found at Home Depot can be used to add a remote switch, or a dual pole switch for 3 or an unlimited number of switch points.

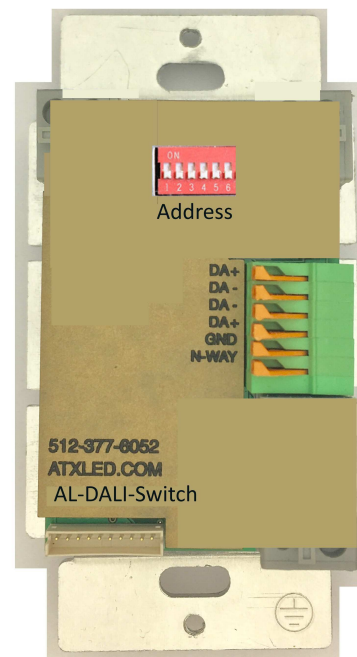
This switch operates just like any standard residential light switch – however no 120 VAC wiring is required. It operates from the low voltage, safe DALI power supply. This Decora style switch in a standard residential style outline fits into any home, looks like any switch yet requires no licensed electrician for installation. No complicated controller is required. But it can grow into a large and complex setup easily.

Stand alone it operates as a simple switch for a DALI compatible LED driver – readily available at with many power options.

To enable Home / Business automation – the AL-DALI-SW includes a serial bidirectional port that allows remote control – use an DALI Alexa hub to enable voice control of lighting. The DALI protocol is supported. Use simple CAT-3 wire up to 1000 ft to implement remote management. DALI lines are duplicated allowing easy installation.

### Specifications

Power source	DALI bus – 2 ma max
Input voltage range	12v to 57 volts 50% duty cycle
Power consumption	30 milliwatts @ 16 volts
Protection	Reverse protection and static protection
Static Electricity	Ground Metal plate to protect from Static Discharge.
Operating Temperature	0°C ~ 50°C
Size	115 x 46 x 50 mm
Dimming	1 to 100 %, log scale, Current control
FCC and interference	All outputs are RF filtered for minimal interference
Microprocessor	STM32L0 Customization is available
Other Options	Please see our DMX and PoE products
DALI interface	Set 6 address bits per DALI address 1--47 direct addressing use address 48-62 for group 0-14 use address 63 for broadcast
3-Way switching	Connect 1 or more standard dual pole switches to the N-Way / Gnd terminals via AWG 18 – 24 wire for 3-way switching



## DALI operation




By default – the AL-DALI-WS operates stand alone – no controller or master is required. Connect the DA+ and DA- to your LED driver – polarity is not important. We offer a low cost current limited power supply. Set the switch to all 6 ON for broadcast mode – this will activate a DALI driver that accepts broadcast commands. You can switch on/off or dim an LED this way.

3-WAY - To use this switch for 3-way wiring – simply connect a AWG24 ( solid CAT-3 is recommended) between the N-WAY pins and a remote 1 pole 110vac type standard wall switch. If 3 or more control switches are needed – use a dual pole switch. No controller is required.

DALI addressing:

The DIP switch can be set as follows

- a) 47 direct short addresses ( switch 1 thru 47 )
- b) 14 group addresses ( switch 48-62 )
- c) Broadcast mode ( switch set to 63 )

		
Structured Wiring DALI power supply with easy wiring	Meanwell 500 watt power supply	Meanwell DC-DC Dali driver expansion option