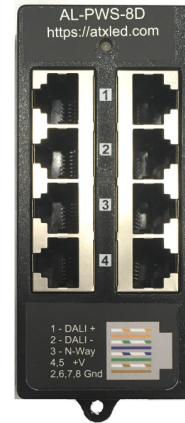




AL-PWS-8D (v2)

DALI Bus power supply with 8 RJ45 connectors

8 power outputs with current limiting



Product Description - AL-PWS-8D – PoE injector with DALI bus power

This DALI bus power supply and PoE injector provides power for any DALI system using convenient RJ45 connectors. It also can provide up to 30 watts of power on each RJ45 port for DC lighting systems using Cat-5e cable. Use with any DALI driver or switches. Optimized for the AL-PWS-DR1 wall switch where LEDs with 6 watts each can be powered over Ethernet cable. The AL-PWS-8D connects to a 48v power supply and supplies current limited power to 8 outputs. It also powers the AL-DALI-Pi directly.

Specifications for AL-PWS-8D

Power input	24 to 56 volts DC up to 5 amps
RJ45 Output Connectors	8 connectors (same pinout on each) RJ45 standard connector with 8 pins
LED status	Red+Green means PoE and external DALI power active Green means PoE and internal DALI active Red means either DALI or PoE power is missing
Output Power	Limited to 650 mA per RJ45 connector port - 36 watts at 56 volts 31 watts at 48 volts 16 watts at 24 volts
DALI power supply	Enabled by default , internal jumper to disable. 65 mA current limit at 12 volts 16 mA at zero volts, 16 volt open circuit
Input power	2.1mm x 5.5mm DC connector with up to 5 amps
Pinout	Passive PoE pinout 4,5 plus and 7,8 minus
Protection	Reverse, short and static protection
Operating Temperature	0°C ~ 50°C



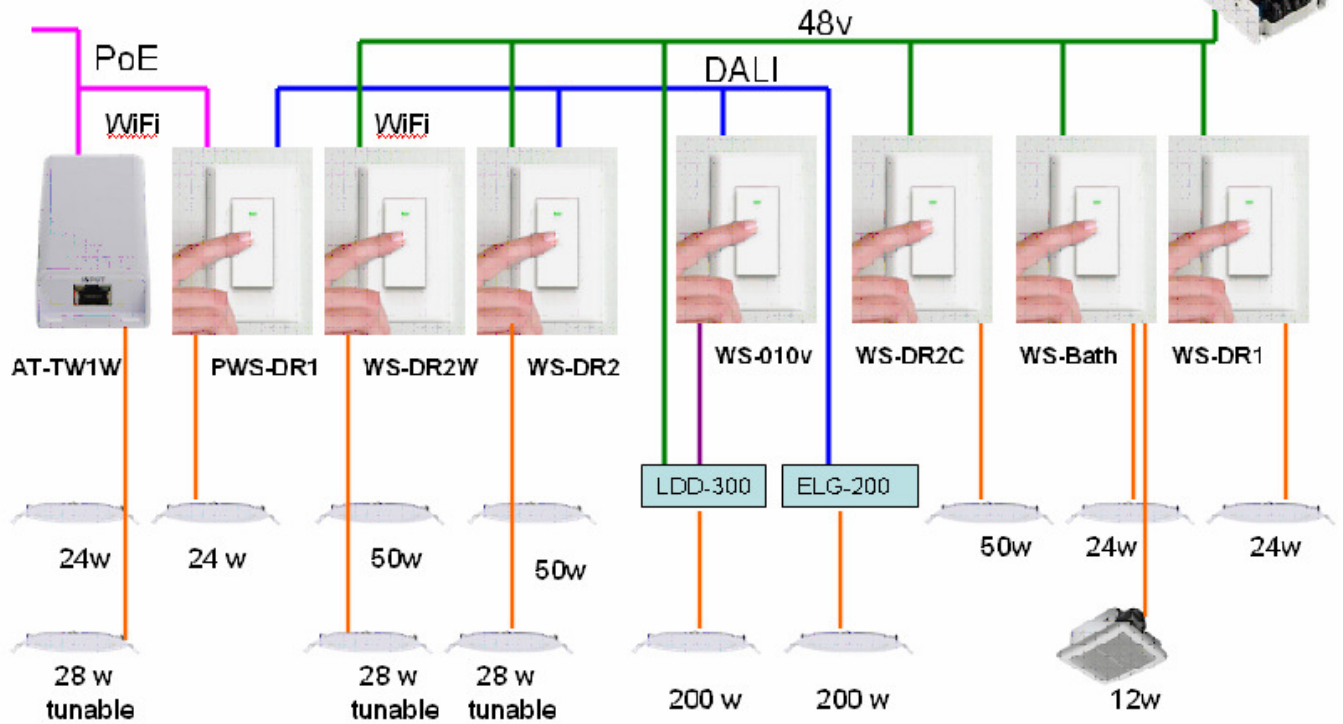
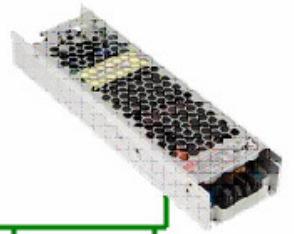
RJ45 connector pinout

	Pin	Function
	1	DALI +
	2	DALI – (gnd)
	3	NC**
	4	+ Voltage
	5	+ Voltage
	6	DALI – (gnd)
	7	Ground
8	Ground	

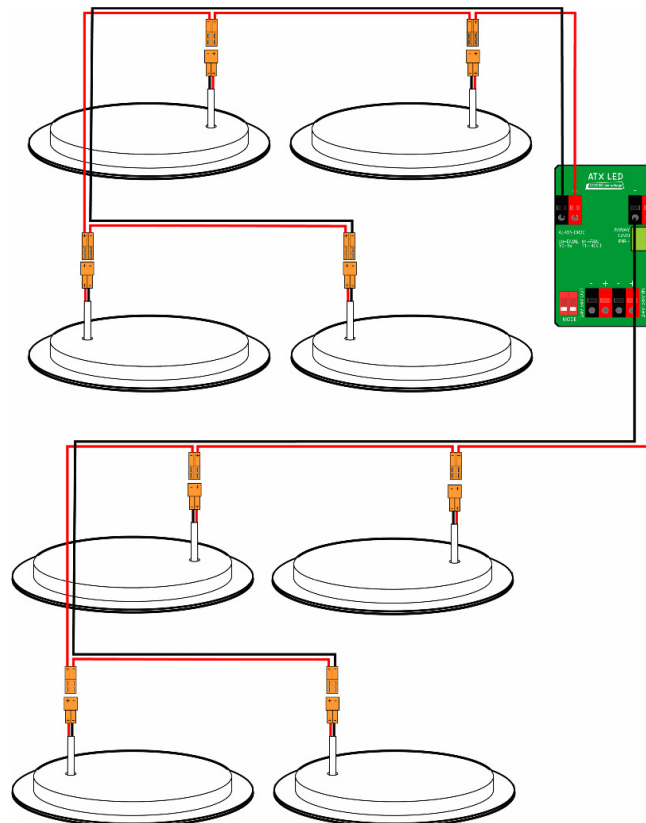
** pin 3 is the N-Way input to a AL-PWS series switch. Internal jumper allows cross connection between adjacent RJ45 connectors (left to right) Note: Version 1 AL-PWS-DR1 are not compatible with this injector – use V1 AL-PWS-8D

ATX LED

100% DC low voltage



Wiring the AL-WS-DR2 for up to 8 LEDs





AL-DALI-Pi with ZWD

DALI master
System Hub

Hue emulation,
home automation,
white and tunable white



Product Description - AL-DALI-Pi with ZWD

This hub manages a DALI lighting system. It can operate offline or can connect a DALI bus with the Cloud. It assigns useful names to the physical addresses of each driver, and allows all DALI features of the drivers to be configured by any user. If cloud enabled, it allows access to Alexa, Google and Siri for home automation. The main user friendly features of this device are:

- Assign persistent friendly names to each DALI switch or DALI driver
- Synchronize names and status with Alexa / Google Home
- Build Scenes and groups
- Turn on/off any device, set brightness, fade rate, minimum/maximum levels
- Record device On/Off status
- Create schedules and macros
- Create and manage scenes
- Connect with DMX devices
- Control tunable white with DT8
- Set special modes like Fan timers, 3-Way switching
- Detect power outages and manage as needed

Local Management

This device connects by Ethernet or WiFi to your network. Then, you can connect to it to access the management pages. Examples are shown below: Use any web browser.

Hue Emulation

After assigning names to wall switch or fixture, the device will appear to the Hue App as a Hue Bridge with the names of the lights that you created.

Schedules and timers and macros

Use the built in scheduling or use Cloud apps for advanced controls. Run Python scripts as you like.

Sample Web Pages

ATX-LED Control Panel

- Devices
- Groups
- Schedule
- Virtual Groups
- Hue
- Admin
- Provisioning

All lights

- NW Closet
- Office Hall
- Master Bedroom
- South Bed
- Main hall
- Pantry
- Office Bath
- Utility
- Dine
- Nook
- South Bed Read
- outside entrance
- Powder

ATX-LED Control Panel

- Devices
- Groups
- Schedule
- Virtual Groups
- Hue
- Admin
- Provisioning

Hue Emulator

All lights

- NW Closet
- Office Hall
- Master Bedroom
- South Bed
- Main hall
- Pantry
- Office Bath
- Utility
- Dine
- Nook

ATX-LED Control Panel

- Devices
- Groups
- Schedule
- Virtual Groups
- Hue
- Admin
- Provisioning

Group 0

outside entrance, Outdoor, upstairs deck, Master Bath Rope, Hall Rope

ATX-LED Control Panel

- Devices
- Groups
- Schedule
- Virtual Groups
- Hue
- Admin
- Provisioning

Schedule
Export
Choose File
No file chosen
Import

New Entry

- Sunset
- Midnight
- Pre Sunset
- Sunrise

Edit name: Delete Entry

When?

Offset: minutes

Actions: +

Set to

ATX-LED Control Panel (1608 ADU)

- Devices
- Groups
- Schedule
- Virtual Groups
- Hue
- Admin
- Provisioning

Status

ZPDS version: 0125-37b9865
 Channels: 1
 HW version: 02
 FW version: 08
 Primary power: False
 Secondary power: False
 DALI power status:

mode: 80 mA (locked)
 voltage: 15.942V
 current (at 0v): 0.046A
 current (at 6v, peak): 0.174A
 current (at 6v, final): 0.174A

Hat power status:
 voltage A: 47.8V
 voltage B: 48.0V
 Local IP Address: 192.168.1.119
 MAC Address: b827ebc65a6c

Site Name

1608 ADU Save

Provisioning

Rescan Addresses
Assign Addresses
Assign Addresses (quick)

This address assignment is faster, by skipping devices that already have short address the same short address, so won't always be correct.

Manual address reassignment
 WARNING: only use this if you know what you're doing!

DALI Channel Old Address New Address Re-assign Address

Tools

Update Server

ATX-LED Control Panel (1608 ADU)

- Devices
- Groups
- Schedule
- Virtual Groups
- Hue
- Admin
- DALI Log

DALI Log

Clear Scroll To Bottom

20191210 19:45:34	send	h3FC5	0	A31	Read memory (dtr=12, dtr1=0)
20191210 19:45:34	send	h3FC5	0	A31	Read memory (dtr=13, dtr1=0)
20191210 19:45:34	send	h3FC5	0	A31	Read memory (dtr=14, dtr1=0)
20191210 19:45:34	send	h3FC5	0	A31	Read memory (dtr=15, dtr1=0)
20191210 19:45:34	send	h3FA5	0	A31	Get fade rates
20191210 19:45:34	send	h3F90	0	A31	Get dev status
20191210 19:45:34	send	h3F93	0	A31	Get dev on
20191210 19:45:34	send	h3F97	0	A31	Get dali version
20191210 19:45:34	send	h3F99	0	A31	Get dev type
20191210 19:45:34	send	h3F9A	0	A31	Get phy min level
20191210 19:45:34	send	h3FA0	0	A31	Get level
20191210 19:45:34	send	h3FA1	0	A31	Get max level
20191210 19:45:34	send	h3FA2	0	A31	Get min level
20191210 19:45:34	send	h3FA3	0	A31	Get power on level
20191210 19:45:34	send	h3FA4	0	A31	Get fail level
20191210 19:45:34	send	h3FC0	0	A31	Get group 0 7
20191210 19:45:34	send	h3FC1	0	A31	Get group 8 15
20191210 19:45:35	send	h3FC2	0	A31	Get addr hi
20191210 19:45:35	send	h3FC3	0	A31	Get addr mi
20191210 19:45:35	send	h3FC4	0	A31	Get addr lo
20191210 19:45:40	recv	v	0		
20191210 19:45:40	recv	q	0		
20191210 19:45:40	recv	p	0		
20191210 19:46:16	recv	v	0		
20191210 19:46:16	recv	q	0		
20191210 19:46:17	recv	p	0		