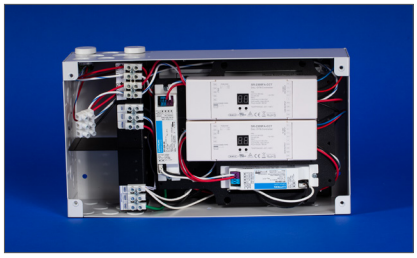
QTM-eLED+DALI-DT8-AWN

24V DC Power Supply - 100W-200W



- LED power supply for DALI 2 applications
- Utilizes a 100W constant voltage LED Driver from Thomas Research
- Includes DALI-2 certified QTL DALI-2 DT8 control gear
- Incorporates factory-installed Lutron Athena Wireless Nodes, which streamlines installation time and allows for simple programming using the Athena iOS or Android app
- The power supplies and decoders are all prewired together along with terminal blocks for power and control wires
- Housing can be recess or surface mounted
- See QTM-eLED+DALI-DT8 for power supply without Athena Nodes

1 PRODUCT	2 WATTAGE	3 CONTROL	4 OUTPUT WIRING 1	5 OUTPUT WIRING 2	6 PRIMARY VOLTAGE	7 SECONDARY VOLTAGE	8 COLOR
QTM-eLED					UNV	24VDC	

Sample Part Number: **QTM-eLED-200W-DALI-DT8-AWN-2-3-3-UNV-24VDC-WH**

1 PRODUCT

QTM-eLED

DALI-DT8-AWN-1,2 is the quantity of nodes mounted in the QTM enclosure. Multiple Athena nodes allow for multiple control zones in one QTM enclosure.

2 WATTAGE

100W

200W

3 CONTROL

DALI-DT8-AWN-1

DALI-DT8-AWN-1
DALI-DT8-AWN-2

4 OUTPUT WIRING 1

3 3-Wire Light Engines

3 3-Wire Light Engines

3-Wire Light Engines: DW-HE

For customization or pre-programming contact a local sales rep.
DALI commissioning to be performed by a third party at time of installation.

5 OUTPUT WIRING 2

N/A

3 3-Wire Light Engines

3-Wire Light Engines: DW-HE

For customization or pre-programming contact a local sales rep.
DALI commissioning to be performed by a third party at time of installation.

6 PRIMARY VOLTAGE

UNV

7 SECONDARY VOLTAGE

24VDC

8 COLOR

WH White (Standard)
BK Black Powder Coat Finish

COMPATIBLE LEDS

STATIC WHITE

SW24/1.5-4.0 SW-DR24/1.5-4.0 SHLD-SW24/1.5-4.0 SW-SCOB24/1.5-4.0	
SW24/5.0, SW-HE, SW-HE+ SW-DR24/5.0, SW-HE-DR SHLD-SW24/5.0, SHLD-SW-HE SW-SCOB24/5.0	
SW-SD24/1.0-4.0	
SW-SD24/6.0	
SW-IA	
SW-XT	

OTHER

DW-HE Tunable Applications	✓
DW-HE Warm Dim Applications	✓
WD	
SC	
RGB	
RGBW, RGBW-HE	

SHEETS

Q-SHEETS SW	
Q-SHEETS DW Tunable Applications	✓
Q-SHEETS DW Warm Dim Applications	✓
Q-SHEETS RGB	
Q-SHEETS RGBW	

MICRO 5

MICRO 5 SW	
MICRO 5 DW Tunable Applications	✓
MICRO 5 DW Warm Dim Applications	✓
MICRO 5 RGB	

PRODUCT INFORMATION

- Limited output voltage and current, plus isolation for safe operation
- Controllable with Lutron Athena System for DALI 2 DT8 functionality
- DALI dimming down to 0.1%
- Fully potted driver(s) for moisture resistance
- Suitable for dry and damp locations
- Suitable for surface or recessed mounting use
- Primary voltage - universal (120-277V)
- Wide operating temperature range: -4˚F to 122˚F
- Fits up to (2):100W 24 VDC driver(s) and DALI decoder module(s)
- Driver has Class A sound rating
- 5-year warranty
- Class 2 output
- CSA #239924
- Low Voltage Lighting Systems
  - CSA class 3425-15 and class 3425-95
  - CSA standard C22.2 No. 250.0-08 - Luminaires
  - ANSI/ UL standard 2108 - Low voltage lighting systems
  - CSA standard C22.2 No 250.13-14 - Light emitting diode (LED equipment for lighting applications
  - ANSI/ UL standard 8750 - Light emitting diode (LED) equipment for use in lighting products

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QTM-eLED+DALI-DT8-AWN

24V DC Power Supply - 100W-200W

VOLTAGE DROP CHART

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved

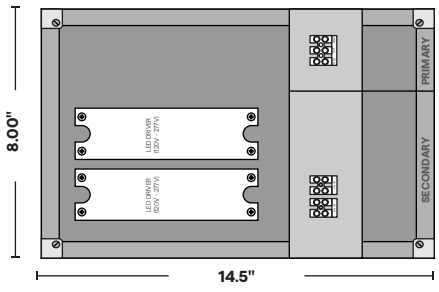
VOLTAGE DROP

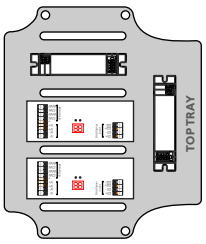
Distance from PS for 1% Voltage Drop										
VDC	Load (W)	10 AWG	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG	26 AWG
24	15	192	121	76	48	30	19	12	7	5
24	30	96	60	38	24	15	9	6	4	2
24	45	64	40	25	16	10	6	4	2	2
24	60	48	30	19	12	8	5	3	2	1
24	80	36	23	14	9	6	4	2	1	1
24	96	30	19	12	7	5	3	2	1	1

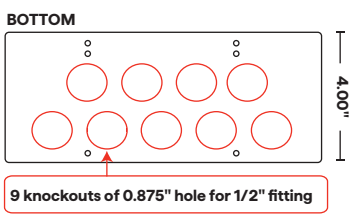
Distance from PS for 3% Voltage Drop										
VDC	Load (W)	10 AWG	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG	26 AWG
24	15	577	362	228	143	90	57	36	22	14
24	30	288	181	114	72	45	28	18	11	7
24	45	192	121	76	48	30	19	12	7	5
24	60	144	91	57	36	23	14	9	6	4
24	80	108	68	43	27	17	11	7	4	3
24	96	90	57	36	22	14	9	6	4	2

Distance from PS for 5% Voltage Drop										
VDC	Load (W)	10 AWG	12 AWG	14 AWG	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG	26 AWG
24	15	961	604	380	239	150	95	59	37	24
24	30	480	302	190	120	75	47	30	19	12
24	45	320	201	127	80	50	32	20	12	8
24	60	240	151	95	60	38	24	15	9	6
24	80	180	113	71	45	28	18	11	7	4
24	96	150	94	59	37	23	15	9	6	4

1 PRODUCT - DIMENSIONS







NOTE: 16 additional side knockouts

2 TECHNICAL INFORMATION

Wattage	Max Load (Watts)	Secondary Voltage	Max Prim Amps @ 120V	Max Prim Amps @ 277V
100W	1x100W	24VDC	0.95A	0.40A
200W	2x100W	24VDC	1.90A	0.80A

3 CONTROL

DALI-DT8-AWN-1: 1 Lutron Athena Node. 1 zone of control for 100-200W. The entire output is controlled as a single zone.
DALI-DT8-AWN-2: 2 Lutron Athena Nodes. 2 zones of control for 200W. Each of the two outputs are controlled as independent zones.
DALI-DT8-AWN is 2-wire only.

Total Wattage	DALI-DT8-AWN-1	DALI-DT8-AWN-2	
	Node 1	Node 2	Node 2
100W	100W	-	-
200W	200W	100W	100W

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Specification subject to change. **Rev-08-24-26**

QTM-eLED+DALI-DT8-AWN

24V DC Power Supply - 100W-200W

HOUSING

- 18 gauge welded steel enclosure: 14.5"W x 8.00"H x 4.00"D
- Door: 15.5"W x 9.00"H
- Knockouts: 25
- Built-in support bracket incorporated to secure housing for surface mounting

LUTRON ATHENA NODE

- Compatibility with Lutron Athena System
- Enables wireless DALI 2 Device Type 8 control for 3-wire LED applications
- Each node controlled as a single zone, use multiple nodes to create multiple zones
- Each Athena wireless node must be installed within 25' of two or more Athena wireless nodes for robust Athena control system connection
- Must be used as part of a Lutron Athena control System

HOUSING

- Rated for surface mount or recessed use
- Fully rated to operate low voltage load at listed wattage (No derating required)
- Voltage regulation to 2% or less of rated output voltage
- The ability to be dimmed using DALI 2 DT-6 dimming
- Universal input range of 120-277 Vrms
- Low Voltage Lighting Systems
  - CSA Class 3425-15 and Class 3425-95
  - Short circuit protection (SCP)
  - Over voltage protection (OVP)
  - Over current protection (OCP)
  - Live tested by the manufacturer to ensure proper operation
  - Manufacturer offers a minimum of 5-year warranty
- Terminal blocks are made of tin plated copper with a voltage rating of 300V and a current rating of 40A

SPECIFICATIONS PER 100W CIRCUIT

Input	24VDC		
Input Voltage (Vrms)	120	230	277
Input Current, max (Arms)	0.98	0.51	0.43
Inrush Current, max* (Apk)	-	20	-
Input Frequency (Hz)	50/60		
Input Power (W)	117		

Output	TW
Output Voltage, nom (V)	24
Output Current (Amax) per channel	4
Output Power (Wmax) per decoder	100

Environmental	Min	Nom	Max
THD (%)	-	-	20
PF (%)	0.90	-	-
Case Temp (°F)	-	-	90

*-200us event

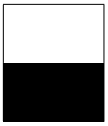
PROTECTIONS

- Short Circuit Protection (SCP)
- Over Voltage Protection (OVP)
- Over Current Protection (OCP)
- Class 2 Output

COMPLIANCE

- EMI Spec
  - FCC 47 Part 15
  - EN61000-3-2
- CSA Certified
  - UL-2108
  - UL-8750
  - CSA C22.2 No 250.0-08
  - CSA C22.2 No 250.13-14

8 COLOR



White (Standard)

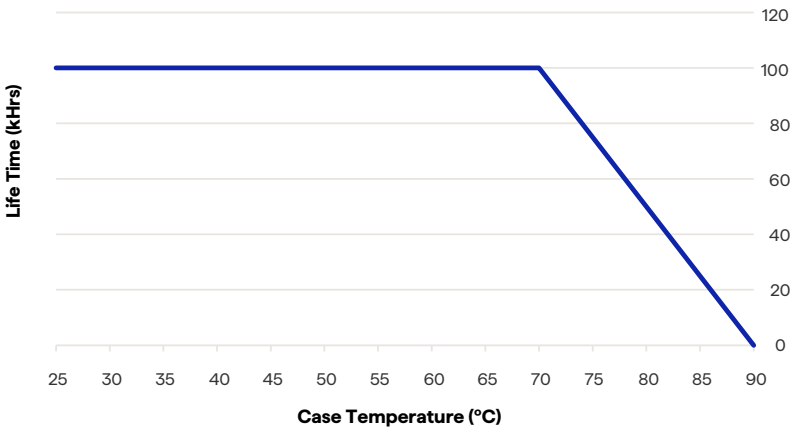
Black Powder Coat Finish

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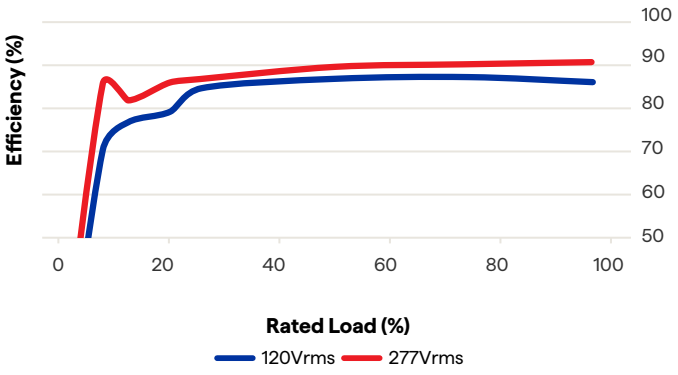
QTM-eLED+DALI-DT8-AWN

24V DC Power Supply - 100W-200W

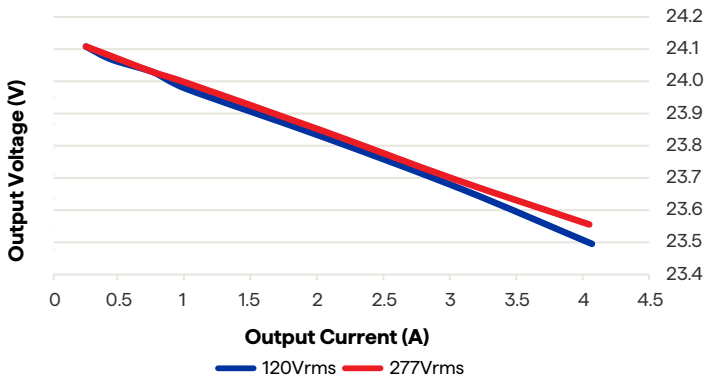
Life Time vs. Case Temperature



Efficiency, 24VDC



Vout vs. Iout, 24VDC



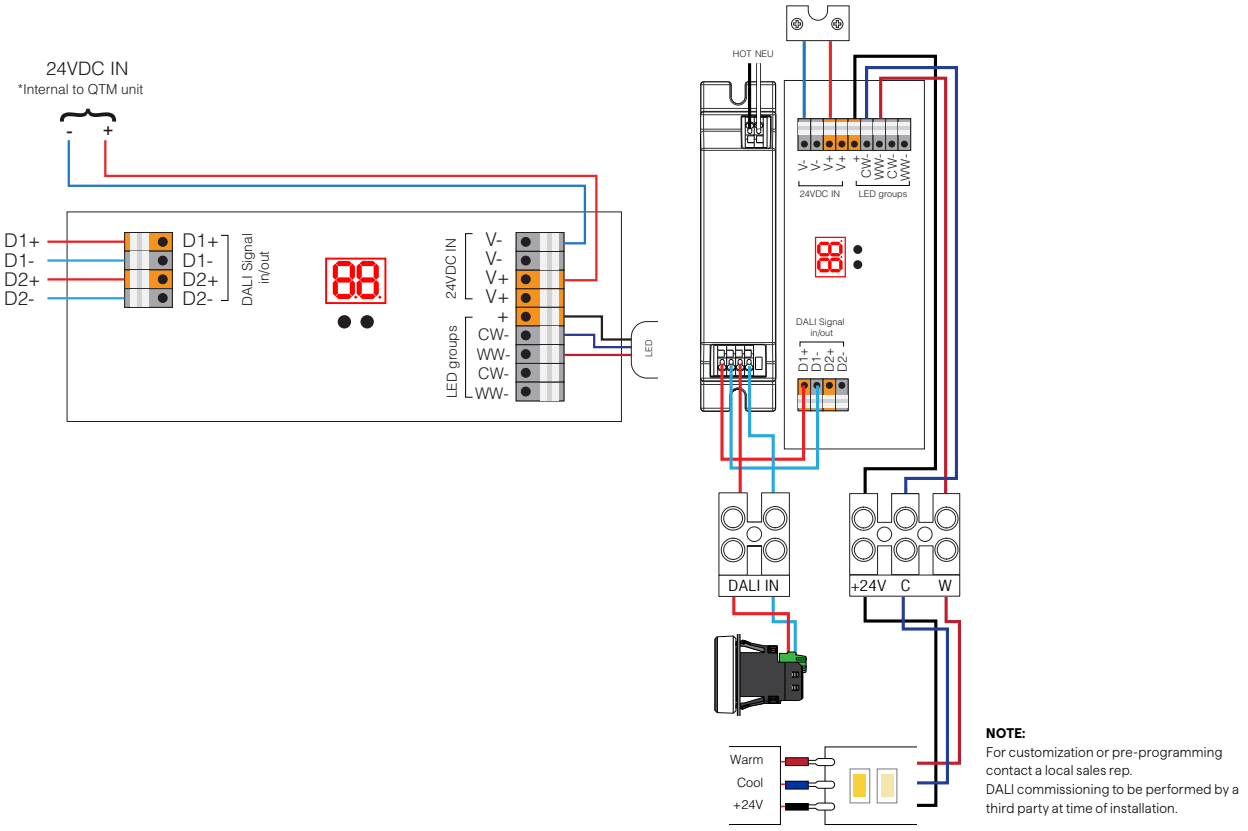
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QTM-eLED+DALI-DT8-AWN

24V DC Power Supply - 100W-200W

WIRING DIAGRAM

3-Wire



NOTE:
For customization or pre-programming contact a local sales rep.
DALI commissioning to be performed by a third party at time of installation.

DALI SIGNAL IN/OUT

- Use these connectors when the driver is used in a DALI network. For DALI in, connect the network cable's DALI+, to the D1+, and D1- connectors respectively. For DALI out, connect the network cable's DALI - to the D2+, and D2- connectors respectively.
- Lutron Athena control system required. By others.

LED GROUPS

- Indicates the location of the connectors for your LED groups. For 3-wire applications, CW- is wired to the cool input on the terminal block. WW- is wired to the warm input on the terminal block.

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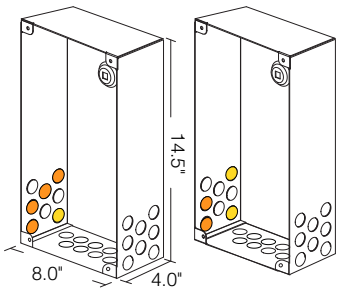
QTM-eLED+DALI-DT8-AWN

24V DC Power Supply - 100W-200W

NODE AND CONDUIT ENTRY LOCATIONS

RECESSED MOUNT

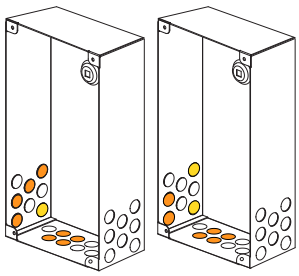
AWN-1 **AWN-2**

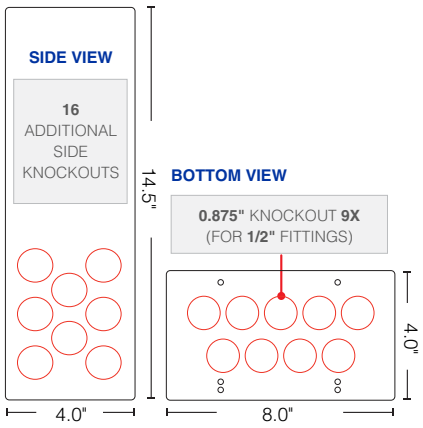


ISO VIEW

SURFACE MOUNT

AWN-1 **AWN-2**





Conduit Entry Locations

Athena nodes must be installed on the secondary side of power supply center and require 1.0” of clearance in order to optimally function. Metal conduit must be 1.0” away from any node. Refer to the diagram above for recommendations for conduit entry into secondary compartment.

Lutron Athena Node

Mounted in the secondary wiring compartment only

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QUICK START GUIDE

CONFIGURATION INSTRUCTION - DALI-2-DT8-TW

These are general guidelines for configuring QTL DALI-2 DT8 TW drivers for the required CCT range. Consult your DALI programmer/commissioning device manufacturer's guide for the specific steps.

1. When connecting the DA+/DA from your device to the QTL drivers, ensure that no other controllers are connected to the DA+ and DA- lines at the same time. See the next page for the wiring diagram.

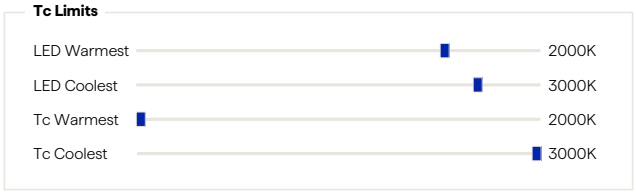
2. QTL DALI-2 drivers do not have integrated bus power supply. Therefore, DALI bus power must be provided by the programming device.

3. When addressing for custom CCT range configuration, multiple drivers may be connected simultaneously to a single controller/programming device.

4. The CCT range can be set in the "Tc Limits" section of the software interface accompanying the DALI-2 application controller.

5. In the "Tc Limits" section, LED Warmest and Tc Warmest should be set to the lowest CCT of the LED strip. LED Coolest and Tc Coolest should be set to the highest CCT of the LED CCT range.

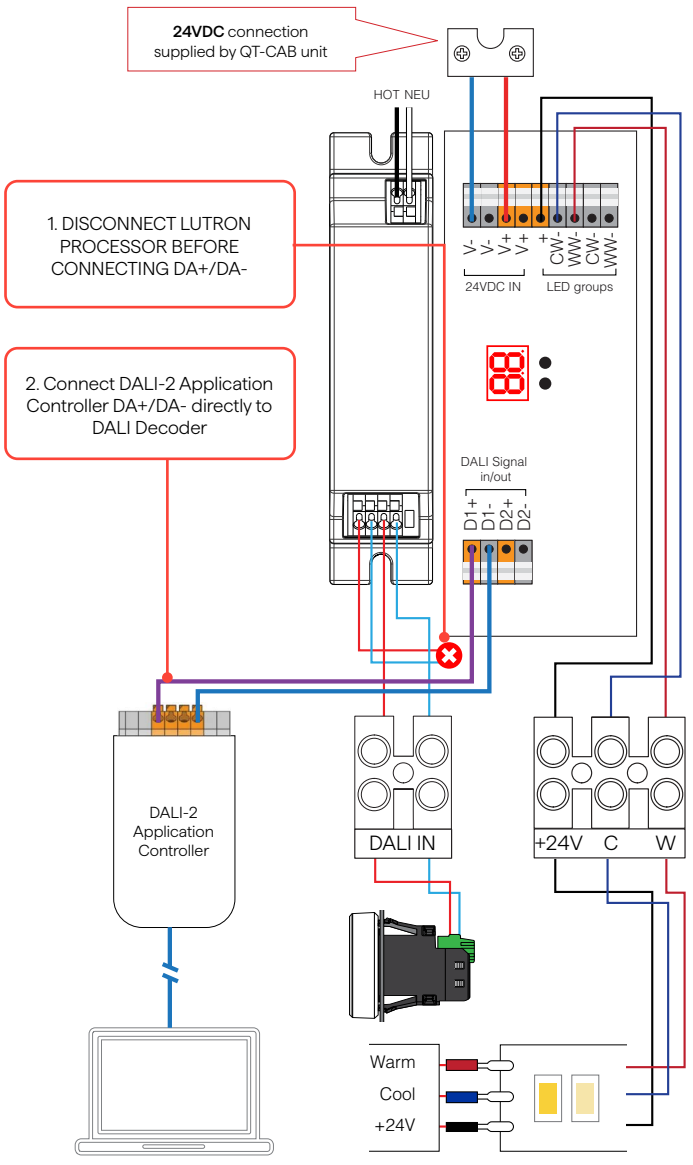
6. For example, if the LED CCT range is 2000K to 3000K (20/30), the LED Warmest and Tc Warmest should be set to 2000K. LED Coolest and Tc Coolest should be set to 3000K.



7. If the exact value cannot be selected, select the next value closest to the required limits. For warm, select the next lower value. For cool, select the next higher value.

8. Save the configured values to the driver by clicking on "write"/"save" or equivalent option in your software interface.

WIRING DIAGRAM



For use with QTL DALI-2 LED drivers only

FOR POWER SUPPLIES WITH LUTRON ATHENA NODES, DISCONNECT LUTRON DC-OEM-DBI FROM THE DALI LINE BEFORE CONNECTING THE DALI-2 PROGRAMMER. RECONNECT AFTER ALL DEVICES ARE CONFIGURED.

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QTM-eLED+DALI-DT8-AWN

Installation Instructions

- **Must be installed by licensed electrician.**

WARNING

Risk of Fire / Electric Shock



Transformer should be installed by a Licensed electrician in accordance with the N.E.C. and all local codes in force.

RoHS COMPLIANT

C SP US

LOW VOLTAGE LIGHTING SYSTEM
CLASS: **3425-15**
3425-95

- Wear rubber shoes and work on a sturdy wooden or fiberglass ladder.
- This power supply must be installed according to the National Electric
- Code and local codes and ordinances.
- This power supply is to be installed and serviced only by an licensed electricians.
- This power supply is to be installed so that it is not likely to be contacted by people.
- To avoid a hazard to children, account for all parts and destroy all packaging materials.
- Do not install in wet locations.

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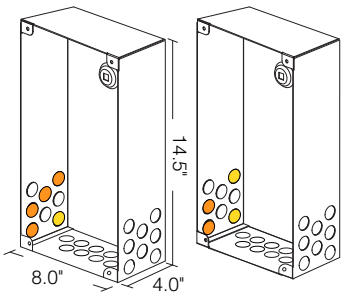
QTM-eLED+DALI-DT8-AWN

Installation Instructions

Node And Conduit Entry Locations

RECESSED MOUNT

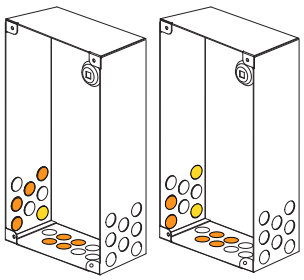
AWN-1 AWN-2

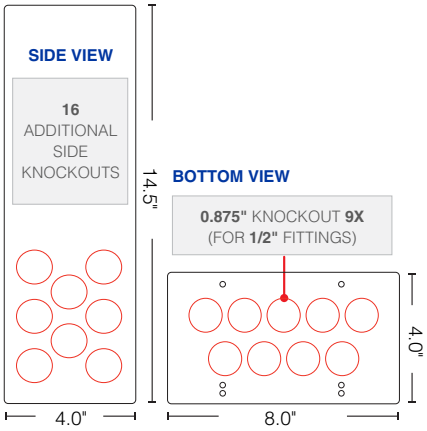


ISO VIEW

SURFACE MOUNT

AWN-1 AWN-2





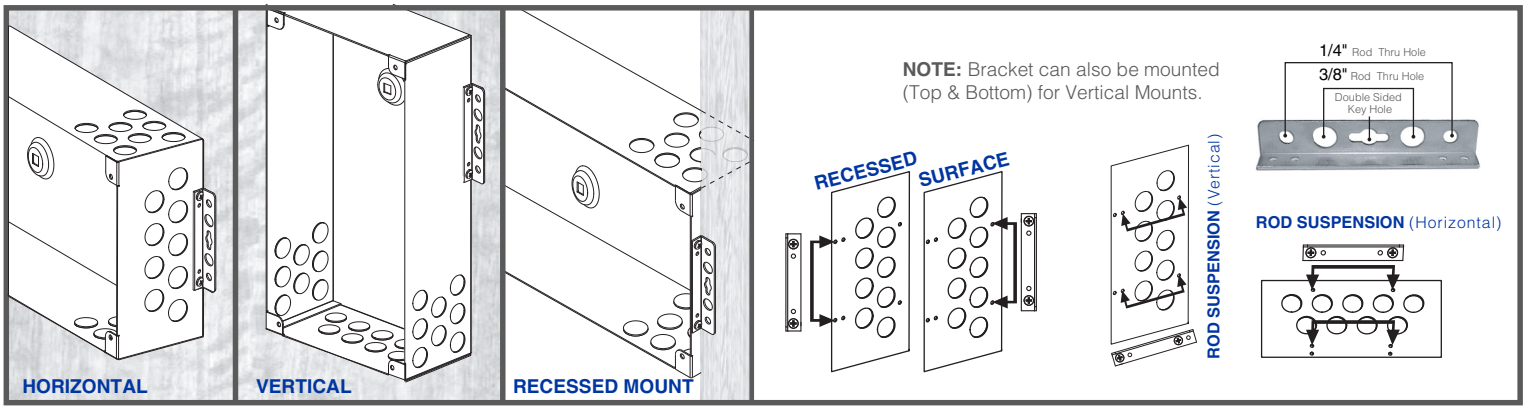
Conduit Entry Locations

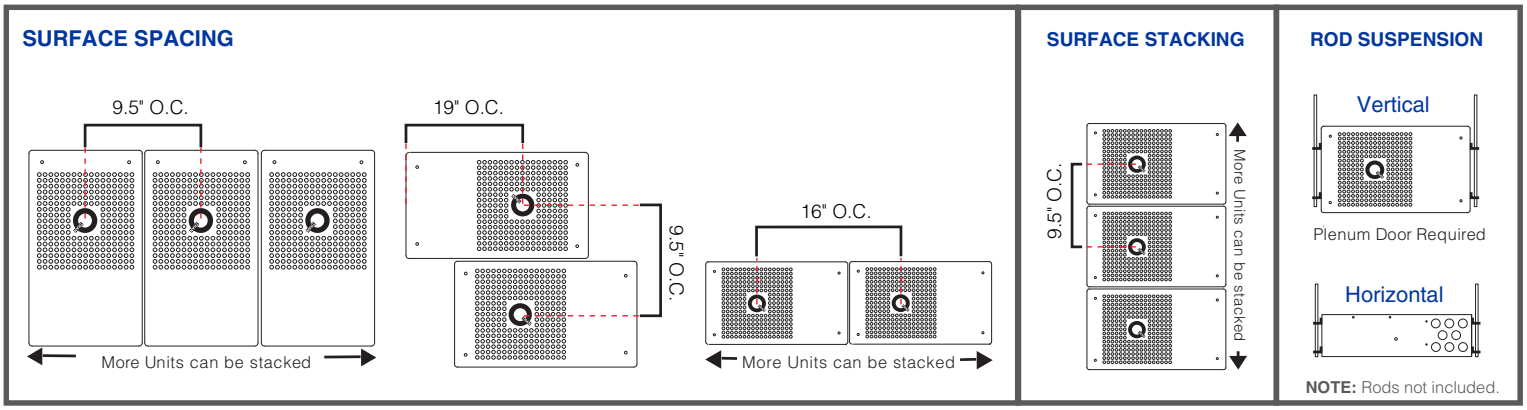
Athena nodes must be installed on the secondary side of power supply center and require 1.0" of clearance in order to optimally function. Metal conduit must be 1.0" away from any node. Refer to the diagram above for recommendations for conduit entry into secondary compartment.

Lutron Athena Node

Mounted in the secondary wiring compartment only

Mounting Options





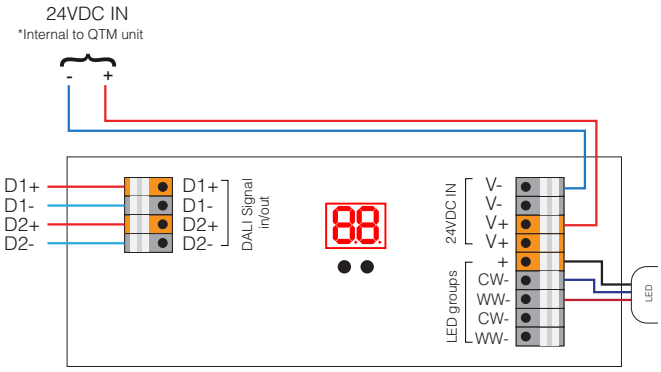
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Specification subject to change. Rev-04-01-24

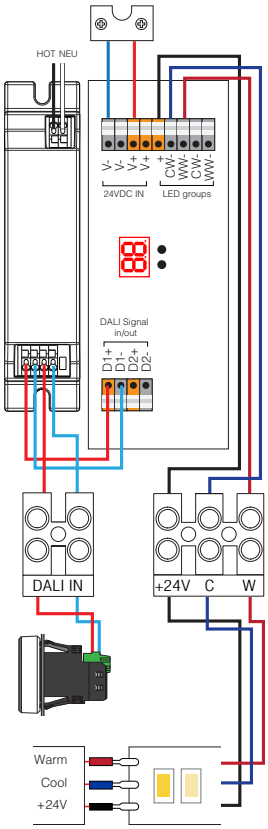
QTM-eLED+DALI-DT8-AWN

Installation Instructions

Connecting and Configuring the DALI-DT8 Decoder

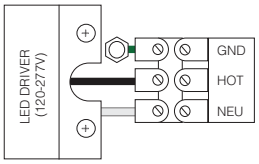


3-Wire

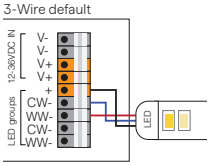


NOTE:
For customization or pre-programming contact a local sales rep.
DALI commissioning to be performed by a third party at time of installation.

Primary Wiring



Secondary Wiring



WARNING: Risk of electrical shock. May result in serious injury or death. Disconnect power before servicing or installing.

CAUTION: The device may only be connected and installed by a qualified electrician. All applicable regulations, legislation and building codes must be observed. Incorrect installation of the device can cause irreparable damage to the device and the connected LEDs.

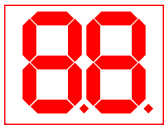
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QTM-eLED+DALI-DT8-AWN

Installation Instructions

Manual Configuration

Digital display



1 2

0-6 0-9

Manual set button

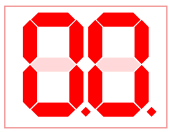
1. Set address manually:



1 2

Press and hold either button
(5 sec)

Set Address



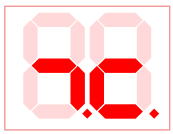
1 2

(tens) (ones)

Use the buttons to set address

00~63

2. Set Output Type:



1 2

Press and hold both button
(5 sec)

Use the second button to
set the output type



TW

Other Features

1. Locking the configuration:

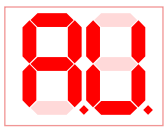


1 2

Press and hold either button
(5 sec)

Confirm

2. Reset to factory defaults:



1 2

Press and hold either button
(5 sec)

Set Address



1 2

Use the buttons to set address

Reset

DT8 Dimming Feature:

NOTE: DT8 color type of the dimmer with Lutron Athena Node can be TW only.

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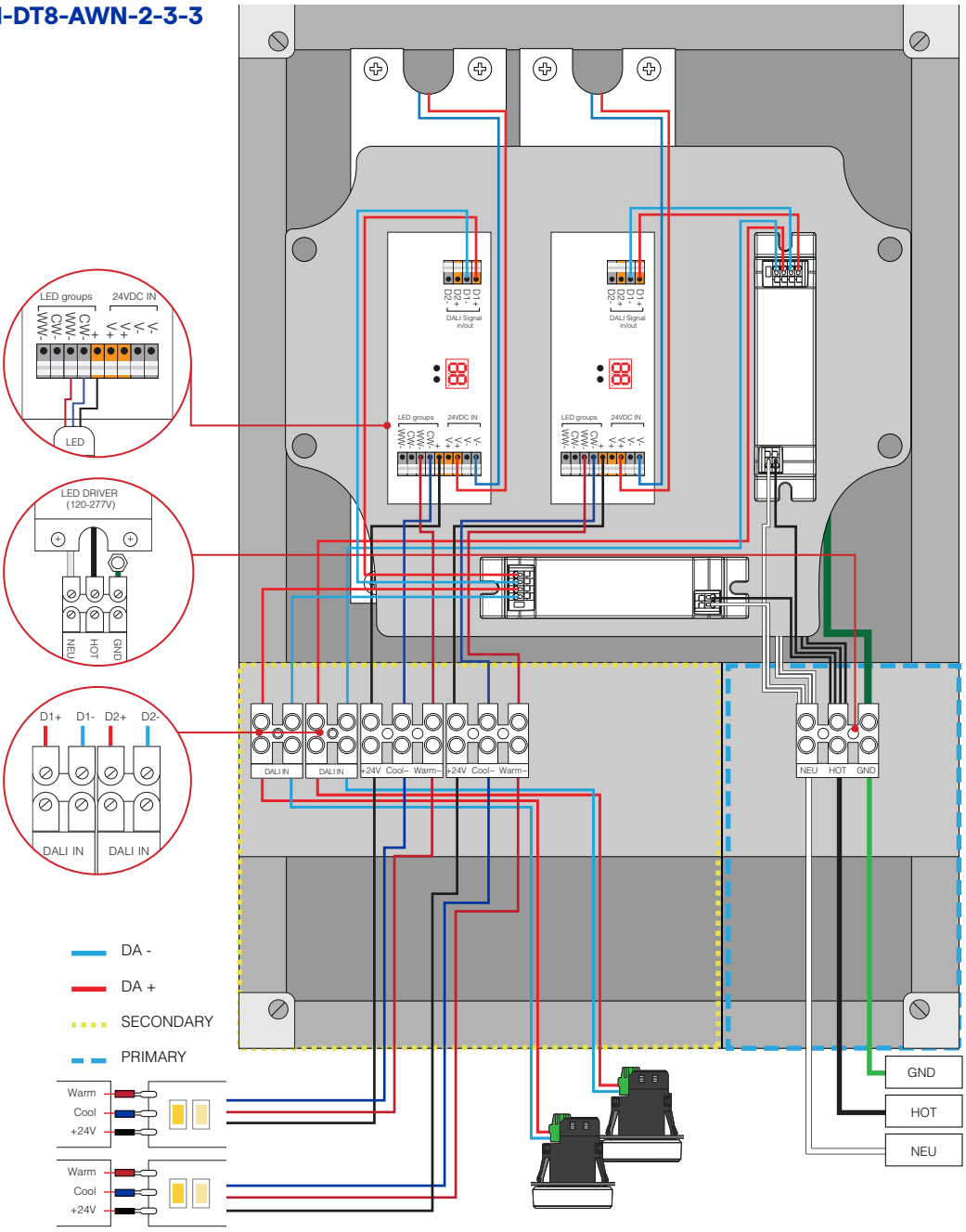
QTM-eLED+DALI-DT8-AWN

Installation Instructions

DALI with Lutron Athena Node

QTM-eLED-200W+DALI-DT8-AWN-2-3-3

: for interior



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QTM-eLED+DALI-DT8-AWN

Installation Instructions

CSA Requirements

- Suitable for indoor use
- This power supply must be installed according to the National Electric Code and local codes and ordinances and in accordance with applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.
- Wear rubber shoes and work on a sturdy wooden or fiberglass ladder.
- This power supply is to be installed in a location where it is not likely to be contacted by non-electricians.
- To avoid a hazard to children, account for all parts and destroy all packaging materials.

QTM-eLED

INPUT VOLTAGE ◯ 120V - 277V

OUTPUT VOLTAGE ◯ 12V ◯ 24V

CONTROL TYPE

◯ 0-10V-AWN
◯ WD-AWN
◯ TW-AWN
◯ DALI-DT6-AWN
◯ DALI-DT8-AWN

	Model	Input Voltage (V)	Input Current (A)	Frequency	Nominal Output Voltage (VDC)	Nominal Output Wattage (W)
◯	QTM-eLED-60	120/277	0.60/0.29	50/60	12	60
◯	QTM-eLED-120	120/277	1.20/0.58	50/60	12	120
◯	QTM-eLED-180	120/277	1.80/0.87	50/60	12	180
◯	QTM-eLED-100	120/277	0.95/0.40	50/60	24	100
◯	QTM-eLED-200	120/277	1.90/0.80	50/60	24	200
◯	QTM-eLED-300	120/277	2.85/1.20	50/60	24	300

- Type IC recessed, inherently protected
  TYPE IC ENCASTRE, PROTECTION INHÉRENTE
- For supply connections use wire rated for at least 60°C
  LES FILS D'ALIMENTATION 60°C MIN.
- Not for use with dimmers
  NE PAS UTILISER AVEC DES GRADATEURS
- Suitable for damp locations
  CONVIENT AUX EMPLACEMENTS HUMIDES
- Wall mount only
  MONTAGE MURAL UNIQUEMENT
- 50/60 Cycle
  CYCLE 50/60
- Class 2
  CLASSE 2

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS.

QTL
MILFORD, CT U.S.A.
(203) 367-8777
www.QTLlighting

LOW VOLTAGE LIGHTING SYSTEM
CLASS: 3425 - 15
3425 - 95

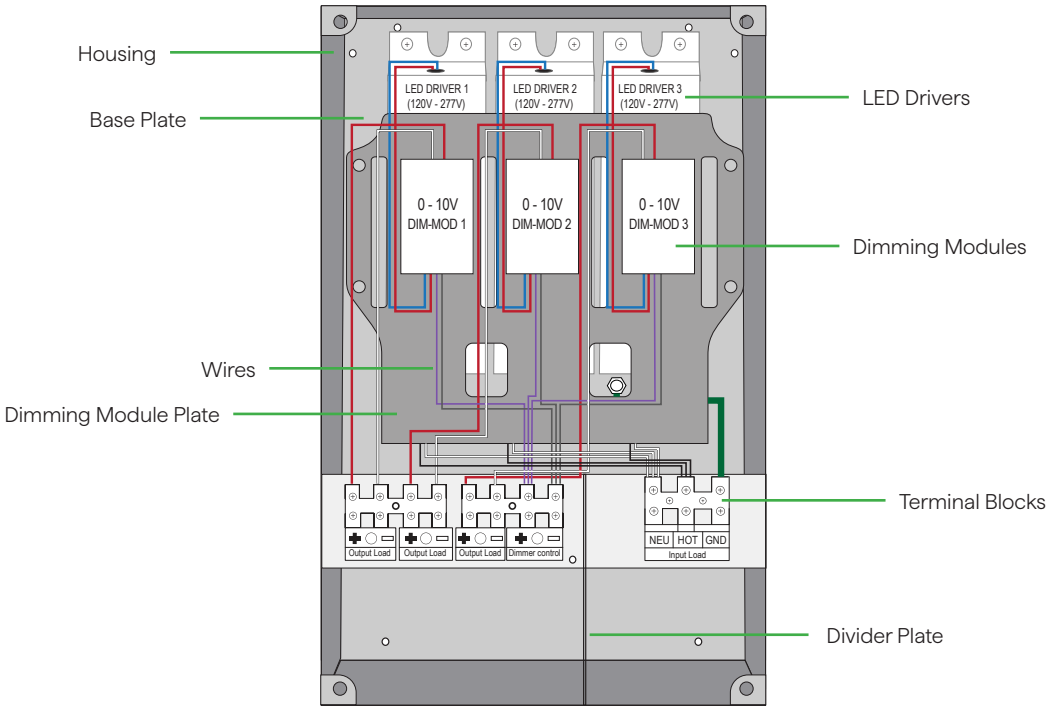
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MATERIAL RECYCLING

QTM/QOM-eLED

You may be done with your products, but chances are they still have more to give. Follow these instructions to break down and sort recyclable components. Check with local recycling collection to ensure they accept the materials listed below.

Additionally, Q-Tran offers a Takeback Program. Contact factory for information.



QTM-eLED shown

7

Terminal Blocks

E

LED Drivers
Dimming Modules
Wires

40

Housing
Base Plate
Dimming Module Plate
Divider Plate

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