



AltaDrive Specification Sheet

Dim-to-Dark • Universal Dimming
96W • 24V Constant Voltage LED Driver

120-277V

24VDC

SELV

CLASS 2

IP66



Key Features

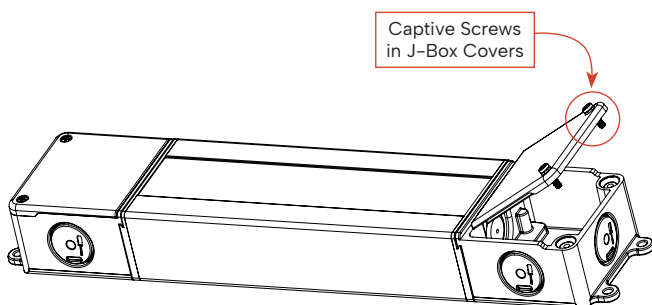
- Dim-to-Dark: Dims to 0.1% minimum
- PWM output for consistent performance with all types of LED tape
- QR Code enables quick access to phase dimming compatibility chart
- 15VDC Aux Output (powers accessories that operate between 12VDC and 24VDC)
- No fumbling for J-box cover screws – captive screws stay in place for easy installation
- Current limiting overload protection

Specification Overview

- Universal dimming: Forward Phase (TRIAC), Reverse Phase (ELV), 0-10V
- Universal input voltage 120 to 277VAC
- Constant Voltage 24VDC output, 96W Output Power
- J-Box option has 7/8" (1/2" Trade) knockouts on sides & bottom
- IP66 rated for dry or wet location
- UL8750, UL2043, Class 2, Class P, CSA C22.2 No. 250.2
- 5-year warranty

ORDERING INFORMATION

Part Number	Description
ATU96L24DC	AltaDrive 96W, 24VDC, 120-277VAC, Universal Dim, 15VDC Aux Out, with J-Box
ATU96L24DC-AWN	AltaDrive 96W, 24VDC, 120-277VAC, Universal Dim, 15VDC Aux Out, with J-Box, Prewired AWN sensor
ATU96R24DC	AltaDrive 96W, 24VDC, 120-277VAC, Universal Dim, 15VDC Aux Out, Flying Leads



Captive Screws
in J-Box Covers

STD	HD	COB
✓	✓	✓

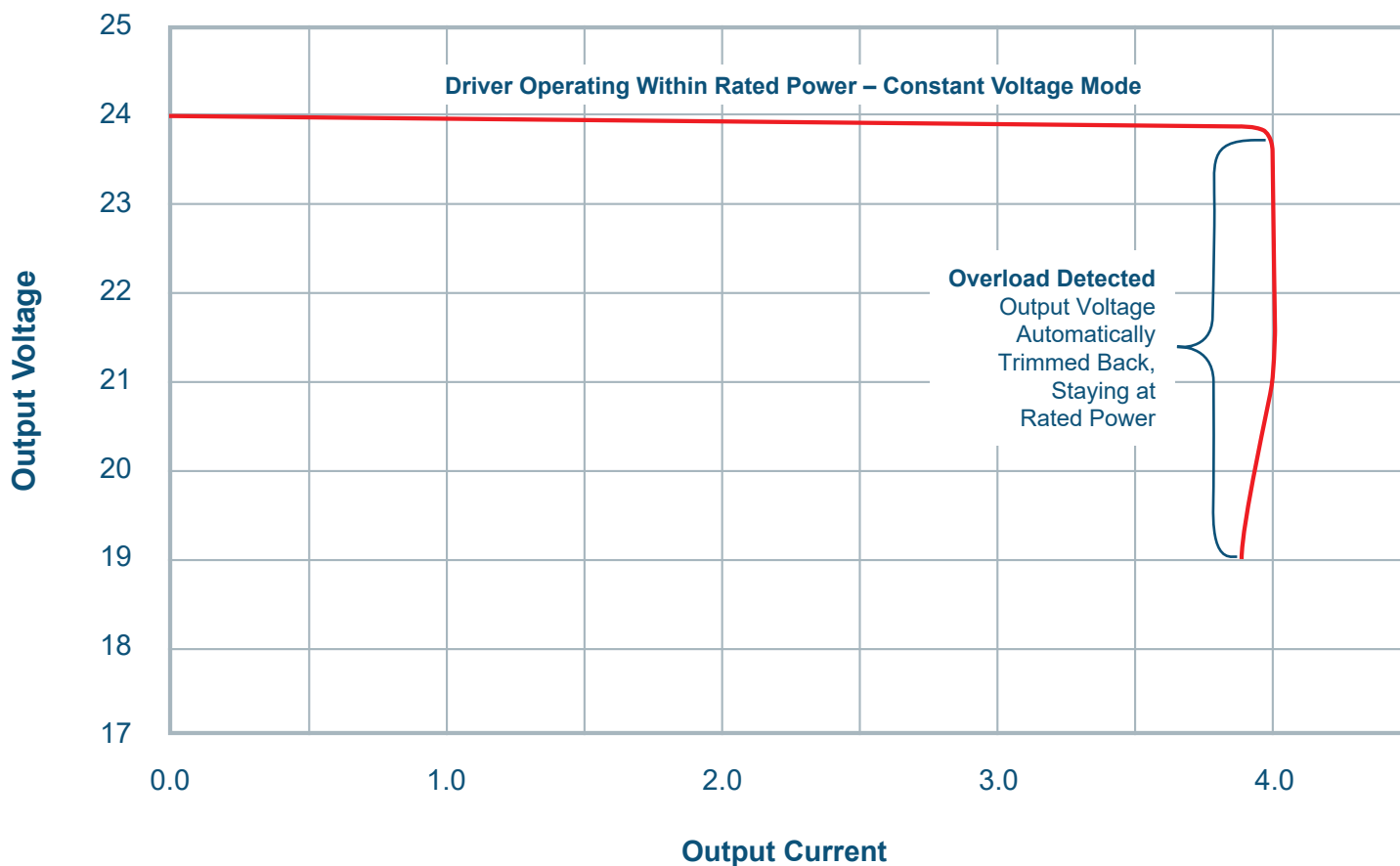
Tape Compatibility Chart

ENCLOSURE DETAILS

Dimensions	Material	Finish	Environmental
With J-Box: 12.1" W x 2.4" H x 1.4" D (307mm x 60mm x 36mm)	Aluminum	Black Anodized	IP66
With Leads: 7.5" W x 2.4" H x 1.4" D (190mm x 60mm x 36mm)			

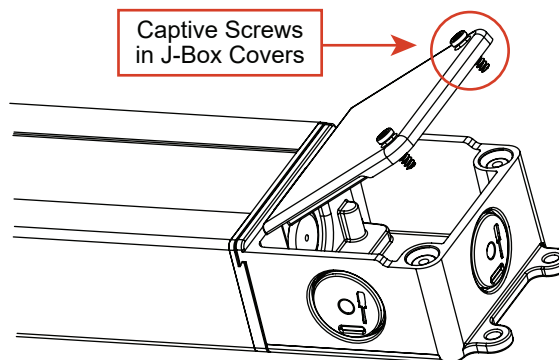
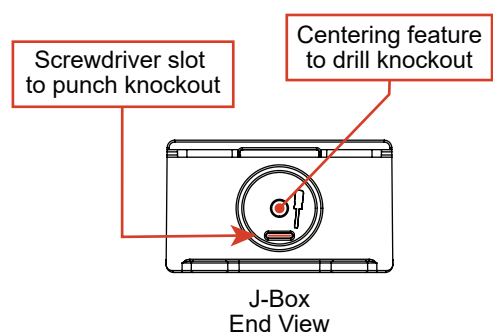
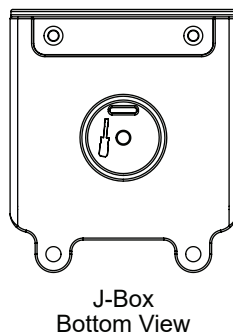
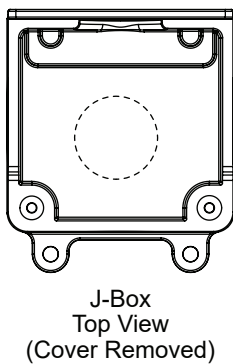
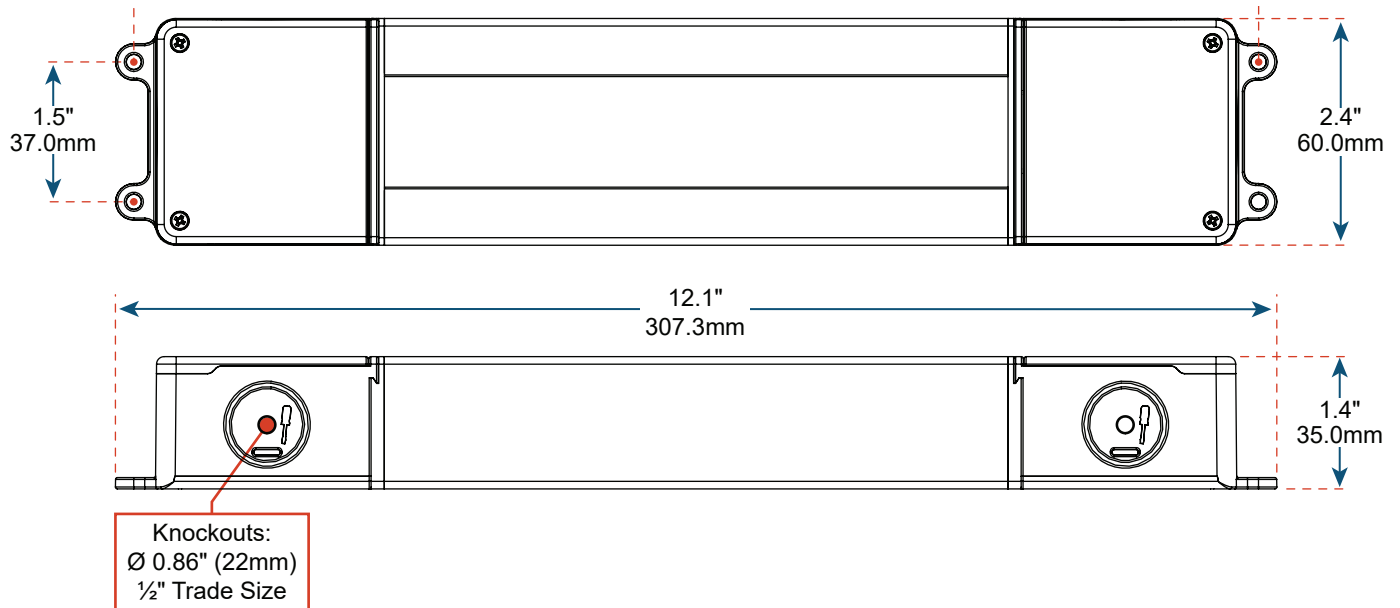
SPECIFICATIONS

Input	
Input Voltage Range	120 to 277VAC $\pm$ 10%
Input Frequency	50 / 60Hz
Input Current	1.05A @ 120V, 0.45A @ 277V
Inrush Current	80A @ 277V
Efficiency	84% @120V, 86% @ 277V
Power Factor	> 0.97
THD	< 20%
Output	
Output Voltage	24VDC
Max Load	96W
Output Current @ Maximum Load	4.1A
Output Dimming Method / Frequency	PWM / 3.9Hz
Flicker	California Title 24 / JA8
Output Ripple (Peak-to-Peak)	$\leq$ 5%
Line Regulation	$\pm$ 5%
Load Regulation	$\pm$ 5%
Turn On Delay Time	< 0.5 sec
Auliliary Output Voltage	15VDC up to 200mA (powers accessories that operate between 12VDC and 24VDC)
Environmental	
Ambient Operating Temperature	-40°C to 40°C / (-40°F to 104°F)
Maximum Case Temp. (Tcase)	90°C (194°F)
Storage Temperature	-40°C to +85°C / (-40°F to 185°F)
Ingress Protection (IP) / Enclosure Rating	IP66
Expected Lifetime	$\geq$ 80,000 hrs @Tc $\leq$ 60°C
Audible Noise	< 24dB Class A
Dimming	
Dimming Style	Phase-Cut (120V) or 0-10V (120V to 277V). Also dimmable with PWM Controller or Potentiometer
Minimum Dimming Level	0.1%, Dim-to-Dark
Minimum Load for Dimming	8W
Dimming Curve	Linear
PWM Controller Dimming Signal Freq. Range	500Hz to 2Khz @ 10V Amplitude
Compliance	0-10V Dimming Compliant with ANSI C137.1
Protection	
Over Voltage Protection	Yes
Over Temperature Protection	Yes / Auto-Recovery
Overload Protection	Yes / Current Limit
Short Circuit Protection	Yes / Auto-Recovery
Approval Markings & Certifications	
Listing	UL8750, CSA C22.2 No 250.2
Certifications	Class 2, FCC

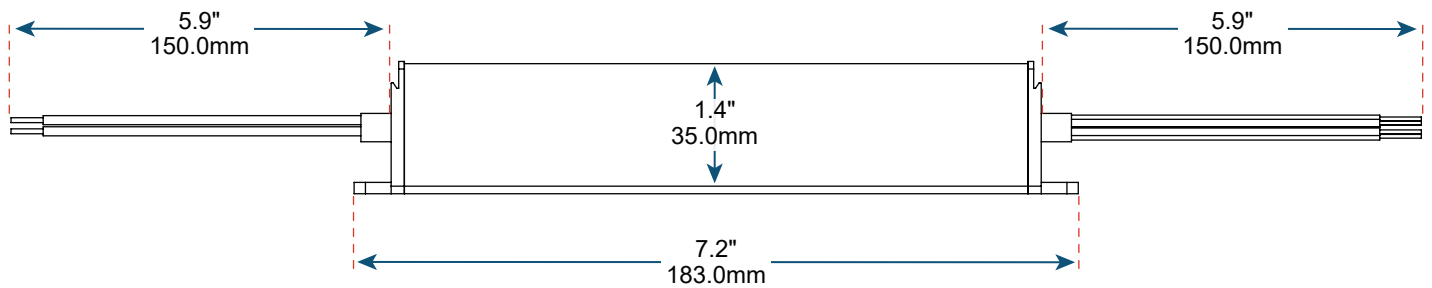
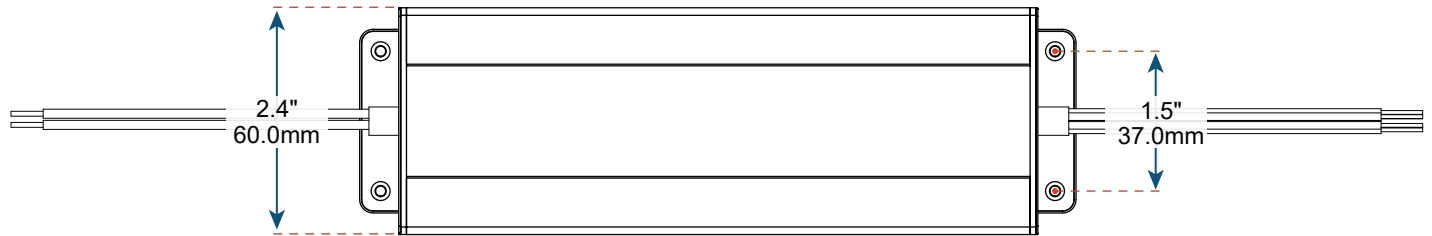
CURRENT LIMITING OVERLOAD PROTECTION


- Using AltaDrive, installers and designers can use LED lighting loads that match its full rated power. No derating is required
- AltaDrive's constant current overload protection avoids the problem of unwanted flashing or shut down due to the LED driver being at or near its maximum rated output
- This protection feature makes slight reductions to the output voltage if the LED load draws too much current. It's the same effect as barely dimming the output to stay at the rated power
- The driver will not shut down upon an overload condition; no blinking lights and no driver resets

MECHANICAL DIAGRAMS WITH INTEGRATED JUNCTION BOX



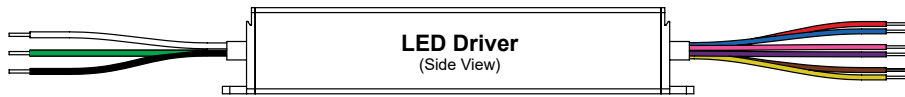
MECHANICAL DIAGRAMS WITH WIRE LEADS



WIRING DIAGRAMS / WIRING CONFIGURATIONS

120-277V Input

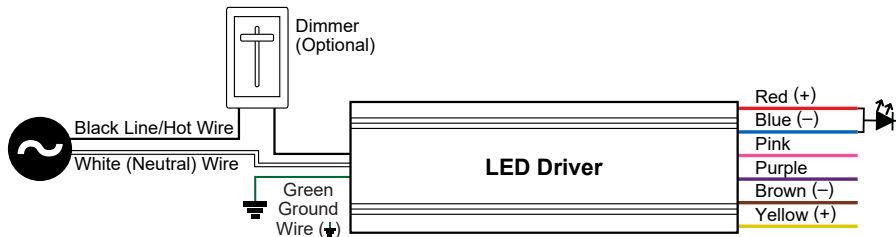
White: Neutral (-)
Green: Ground
Black: Line (+)



Output

Red: 24VDC Out (+)
Blue: 24VDC Out (-)
Pink: 0-10V (-)
Purple: 0-10V (+)
Brown: Aux Out (-)
Yellow: Aux Out (+)

↓ Phase-Cut Dimmable ↓

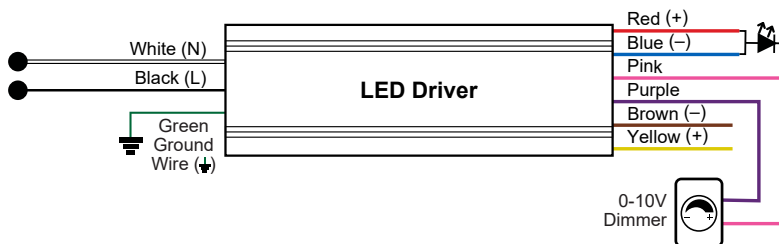


15VDC Aux Output

Powers accessories that operate between 12VDC and 24VDC.

If not used, wires must be capped off to avoid short.

↓ 0-10V Dimmable ↓

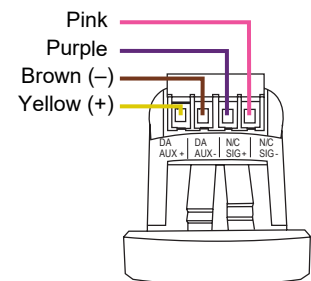
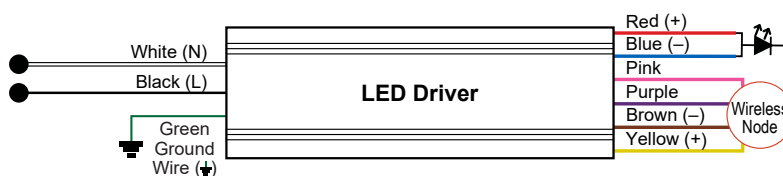


15VDC Aux Output

Powers accessories that operate between 12VDC and 24VDC.

If not used, wires must be capped off to avoid short.

↓ 0-10V Wireless Node ↓



Lutron Athena AWN Shown

Consult Lutron Specification Sheet 3691234 for more details. Wiring is typical for other wireless control nodes.