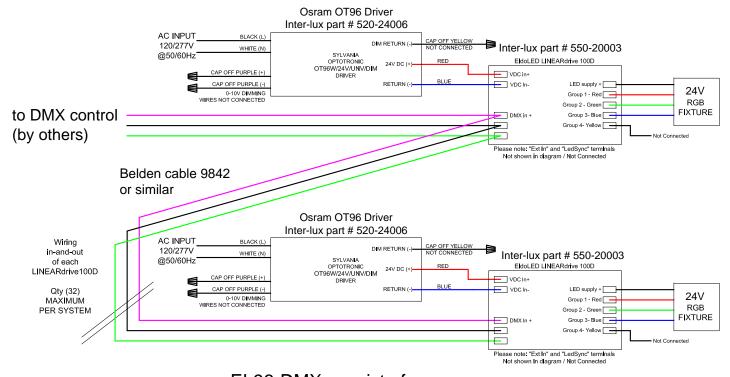
# EL96-DMX



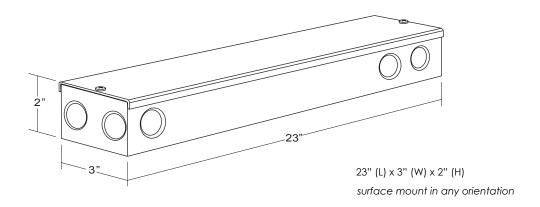
EL96-DMX consist of: 520-24006 + 550-20003 supplied in a 23" dry location enclosure.

DMX control not included (by others)



# 730-20293/94-300 - Standard 23" Dry location enclosure interolux





# **SPECIFICATIONS**

#### Construction

Formed aluminum construction.

All models feature several conveniently located trade size knock-outs (K.O.'s.)

# **Remote Distance**

Consult factory for recommended maximum remote mounting distance.

Standard finish is milled aluminum to provide heat dissipation.

### Components:

730-20293-300 - 23" Enclosure bottom 730-20294-300 - 23" Enclosure top

# Inter-Lux Sylvania Optotronic® Constant Voltage Electronic 24V DC LED Power Supplies

# **Ordering Information**

	Qty.	Inter-lux Part # (driver only)	Osram/Sylvania Part #	Nominal Input Voltage (V)	Nominal Input Current (A)	Power Factor	Output Power Range (W)	Dimming Mode	Dimming Control	Dimming Range	Location Rating	Osram/Sylvania Item Number
$\overline{}$		520-24006	OT96W/24V/UNV/DIM	120 277	0.97 0.39	0.9	1-96	PWM	0-10V DC	10 –100%	Damp	51520
		520-24008	OT96W/24V/UNV/JBX	120 277	0.91 0.39	0.99	0.8-96	n/a	n/a	n/a	Wet <sup>2</sup>	51626
		520-24012	OT240W/3X24V/120-240V/JBX	120	2.39	0.99	0.8-240	n/a	n/a	n/a	Wet <sup>2</sup>	51627

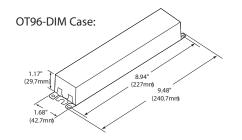
#### Notes:

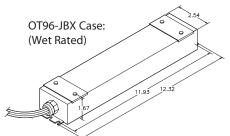
- 1. All power supplies can be remote mounted up to 32 feet. Although it is possible to exceed the remote mounting distance, the installer and/or end user must take precautions to prevent and/or test the effects of EMI (electromagnetic interference).
- 2. Use wiring rated and marked PLTC, CL3R, and "sun resistant"

# Minimum and Maximum Ratings

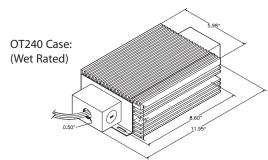
Parameter	Power Supply	Values
Ambient Temperature Range	OT96	-20°C through +40°C
	OT96JBX and OT240	-30°C through +70°C

# Case dimensions





Input: wires with a UL Listed, 1/2" metallic fitting Output: wires with a UL Listed, 1/2" plastic fitting

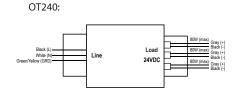


# Wiring Diagrams



		DIMMING		
Black (L)			24V DC (+)	RED
White (N)	VOLTAGE 120-277 V AC		211 50 (1)	
-	50/60Hz	Pout (max): 96 W Vout: 24VDC lout: 0.04-4ADC	_	BLUE 🌣
Purple (+)	Input		Return (-)	n.c.
Gray (-)	0-10 V DC		DIM Return (-)	YELLOW

#### ОТ96ЈВХ: Gray (+) 24V DC Output Black (L \$ Black (-



Specifications and Certifications





# **Maximum wiring distance\***

_						
	Load per driver					
	≤48W	≤72W	≤96W			
#18AWG	37'	25'	18'			
ម្លាំ #16AWG		39'	29'			
<sup>®</sup> #14AWG	95'	63'	47'			
¥12AWG	151'	101'	75'			
#10AWG	241'	160'	120'			

\* Voltage drop guide for 24VDC. Actual Voltage drop to be calculated by installer.



# Datasheet LINEARdrive 100D, 180D, 720D

**DC Series** 



# 4/6/24A Full-Colour Dimmable LED Driver

LINEARdrive DC is a constant voltage LED driver with multiple LED outputs that are controlled over four channels. It is targeted at larger networked and smaller standalone installations that require dimmable, low-power full-colour static or dynamic LED lighting. LINEARdrive DC is DALI, DMX/RDM and LedSync compatible.

# **Applications**

· Entertainment lighting

- · Signage / advertising lighting
- Full-colour architectural lighting
- · Cove lighting

- · Decorative lighting
- · Dynamic colour panel lighting

# Features & benefits

#### Input

Voltage: 12 - 28 VDC for LINEARdrive 100D/180D/720D1
 12 - 48 VDC for LINEARdrive 720D2

· Current, max:

LINEARdrive 100D: 4A at 24V, 6A at 12V

LINEARdrive 180D: 6A, irrespective of PSU voltage LINEARdrive 720D: 24A, irrespective of PSU voltage



# Output

- Voltage: 5V, 12V, 24V or 48V (5V and 48V: LINEARdrive 720D2 only)
- · Max load per output:

	RGBW @ 12V	RGB @ 12V	RGBW @ 24V	RGB @ 24V	RGBW @ 48V	RGB @ 48V
LINEARdrive 100D	1.5A	2A	1A	1.3A	n.a.	n.a.
LINEARdrive 180D	1.5A	2A	1.5A	2A	n.a.	n.a.
LINEARdrive 720D1	6A	6A	6A	6A	n.a.	n.a.
LINEARdrive 720D2	6A	6A	6A	6A	6A	6A

# General

- DALI (LINEARdrive 720D only), USITT DMX512A / RDM (ANSI E1.20) and LedSync compatible
- · HydraDrive: 15-bit resolution
- · Dimming control: smooth dimming from 100% to 0.1%, gamma-corrected curve
- Intuitive 3-button user interface for on-the-fly configuration
- Interface for external control device: 10kΩ potentiometer, 0-10V source or momentary switch
- · ShowMaster: 9 default shows, up to 20 user-defined shows, uploadable via TOOLbox and PC software

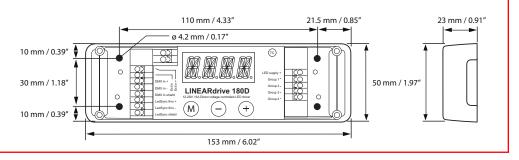
# **Product offering**

Description	Product	Order no.
LINEARdrive DC, 100W, DMX/0-10V, 4 control channels, constant voltage, 4x LED outputs	→ LINEAR 100D	LIN100D2
LINEARdrive DC, 180W, DMX/0-10V, 4 control channels, constant voltage, 4x LED outputs	LINEAR 180D	LIN180D2
LINEARdrive DC, 720W, 48V, DMX/DALI/0-10V, 4 control channels, constant voltage, 4x LED outputs	LINEAR 720D	LIN720D2

# Dimensions, weight, packaging

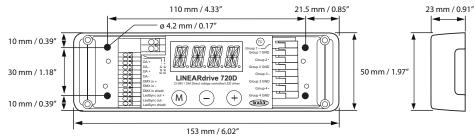
# LINEARdrive 100D/180D

- Weight: 120 g, 4.2 oz
- · Packaging: 12 pcs/carton



### **LINEARdrive 720D**

- · Weight: 144 g, 5.0 oz
- · Packaging: 12 pcs/carton



# **Connections**

#### Connectors LINEARdrive 100D/180D

- VDC: + and -
- · DMX in: +, and shield
- · LedSync thru: +, and shield
- Ext in: + and -
- · LED outputs: 4 outputs with common +

# Wiring

- Cross section: 0.5 1.5 mm<sup>2</sup>, AWG 20 16
- Strip length: 9 mm / 0.35 in.

#### **Connectors LINEARdrive 720D**

- VDC: + and -
- DMX in: +, and shield
- · LedSvnc out: +. and shield
- DALI: + and (x2)
- Ext in: + and -
- LED outputs: + and (x4)

# Other information

# Certifications

- CF
- · IEC 61347, EN 55015, IEC 61003, EN 61547
- UL: UL Recognized Component (file no. E333135) LINEARdrive 100D is Class 2 output.









# **Environmental ratings**

- Ta range: -20°C...50°C / -4°F...122°F
- Tc max: 65°C / 149°F
- · For use in dry locations

# **Control compatibility**

- DALI control gear (LINEARdrive 720D)
- · DMX512A and RDM explore & address (ANSI E1.20) control gear
- · Standard 0-10V switch controls

# Europe, Rest of World

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### **North America**

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F: +1 408 451 9335

Sales support EU & Rest of World: sales@eldoled.com Sales support US/Canada: nasales@eldoled.com

# Other documentation and support

Visit www.eldoled.com/support for further documentation such as quick start guide, wiring diagram, tech sheet and 3D IGES files.

# Warranty

eldoLED represents and warrants that for a period of 3 (three) years, as of the date of invoice, Products materially meet the specifications and specifically agreed upon quality, both as stated in the applicable datasheet and/or written design-in specifications, or as stated in writing otherwise by eldoLED, provided that these specifications are explicitly designated by eldoLED as "warranted specifications".

For the complete warranty text, visit www.eldoled.com/terms.



# Wiring diagram LINEARdrive DC 100

(LIN100D1)





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

### 12V - 28V DC IN

To connect the driver/controller to a 12-28V DC power supply unit (PSU), connect the PSU's positive voltage supply wire to the VDC+ connector and the PSU's negative voltage supply wire to the VDC- connector.

# **EXT in (optional)**

You have the possibility to connect an external control device (0-10V control device,  $10k\Omega$  potentiometer or show selection switch) to the driver/controller's Ext in+ and Ext in- connector. Configure the driver/controller for use with an external control device over the 3-button user interface.

# DMX in/LedSync thru (optional)

Use these connectors when the driver/controller is used in a DMX network.

For DMX in, connect the network cable's DMX+, DMX- and DMX shielding wire (the orange/white, orange and brown wire in a CAT5 cable) to the DMX in+, DMX in- and DMX in shield connector respectively.

For LedSync thru, connect the network cable's data+, dataand shielding wire to the LedSync thru+, LedSync thru- and LedSync shield connector respectively.

# **LED** groups

Indicates the location of the connectors to which you can connect your LED groups. R(ed) represents channel 1, G(reen) represents channel 2, B(lue) represents channel 3 and W(hite) represents channel 4. The default group color allocation can be changed over the 3-button user interface.

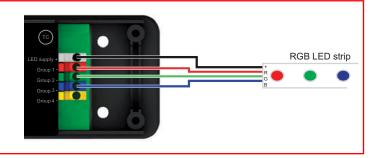
# Connecting an RGB LED strip

Maximum current per output at 12V: 2A Maximum current per output at 24V: 1.3A

Configuration of the LED groups:

Press M and + simultaneously, in the LED menu choose

RGB and save this setting by pressing M.

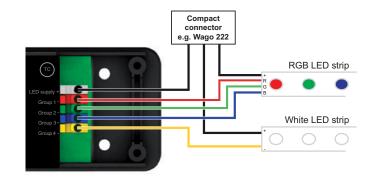


# Connecting an RGB strip and a white LED strip

Maximum current per output at 12V: 1.5A Maximum current per output at 24V: 1A

Configuration of the LED groups:

Press M and + simultaneously, in the LED menu choose RGBW and save this setting by pressing M.



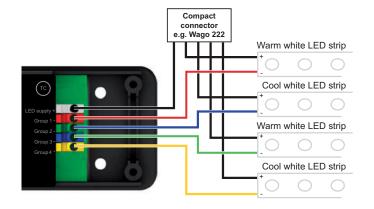
# Connecting warm white and cool white LED strips

Maximum current per output at 12V: 1.5A Maximum current per output at 24V: 1A

Configuration of the LED groups:

Press M and + simultaneously, in the LED menu choose

4-4L and save this setting by pressing M.

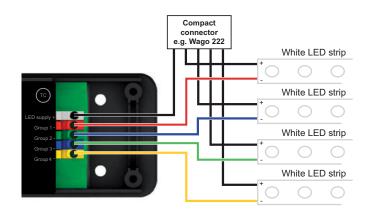


# Connecting four white or self-colored LED strips

Maximum current per output at 12V: 1.5A Maximum current per output at 24V: 1A

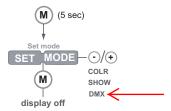
Configuration of the LED groups:

Press M and + simultaneously, in the LED menu choose 1-4L and save this setting by pressing M.

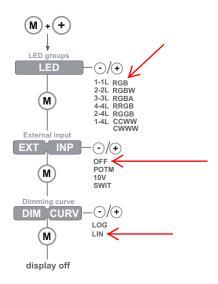


# **Manual configuration**

# 1. Select mode of operation:



# 2. Set LED groups:



#### 3. Standalone Standalone Networked operation operation or operation or - Colour\*-- Show -- DMX -M M ⊙/⊕ ⊙/⊕ DMX ADDR 0...1535 00...20 (M) (M) (M) $\odot/\odot$ SPD ⊙/⊕ NETW RES 0...255 (M) (M) (M)⊙/⊕ ⊙/⊕ 0...255 0...255 (M) M

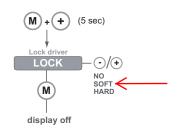
display off

\* The colour menu depends on the LED group settings you have selected in step 2.

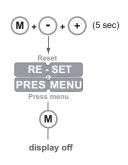
display off

# Other features Visual test run (M)B 1 sec W 1 sec RGBW 1 sec R 1 sec G 1 sec B 1 sec W 1 sec RGBW 1 sec display off

# Locking the configuration:



# Reset to factory defaults



(M)

M

display off

⊙/⊕

⊙/⊕

⊙/⊕

OFF <

VID COLR

WHIT

GLOW

8 BT 16 BT

1...512