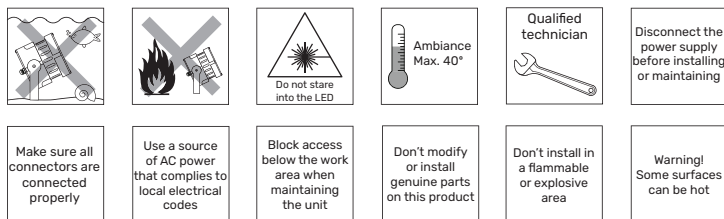


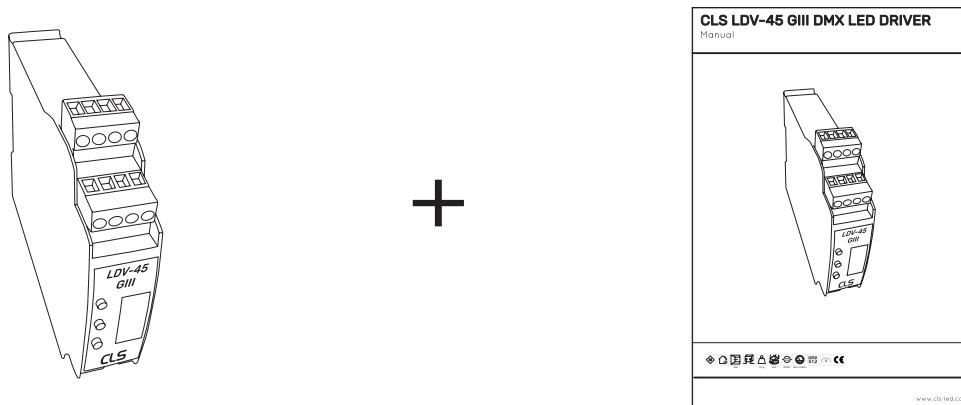
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# SAFETY INFORMATION



## CONTENT



### Optional accessories

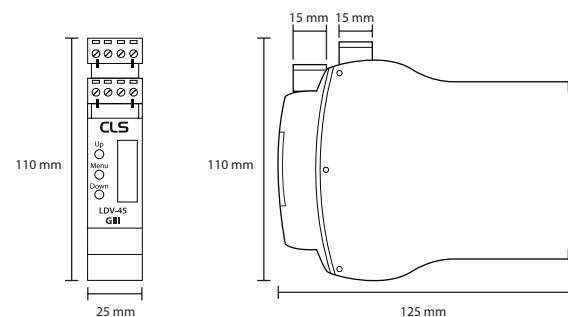
911465	CLS LD serie GII adapter cable XLR3 male to RJ45
911468	CLS LD serie GII adapter cable RJ45 to XLR3 female
911368	CLS LD serie adapter cable RJ45 to XLR3 female
706995	CLS BT20.24 LED power supply 24VDC 2-VA 85-264VAC
707011	CLS BT45.24 LED power supply 24VDC 45VA 85-264VAC
707012	CLS BT75.24 LED power supply 24VDC 75VA 85-264VAC
707013	CLS BT120.24 LED power supply 24VDC 120VA 85-264VAC
707014	CLS BT240.24 LED power supply 24VDC 240VA 85-264VAC

# INTRODUCTION

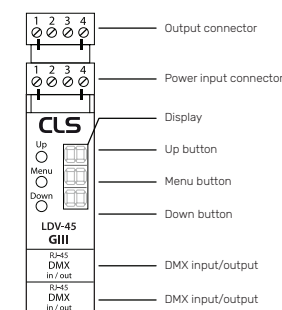
The CLS LDV-45 is a DMX controllable LED dimmer, which has a maximum of 4 regulated voltage DC outputs. Up to a maximum of 5A per channel at 12-24 Volts, with a total maximum current of 10A. Equipped with a maximum of 4 channels the LDV-45 is suitable for controlling the latest generation of LED fixtures, RGBW or RGBA.

Unique is the DIN-rail mounting possibility of the new and small housing. The LDV-45 is equipped with installer friendly menu structure, which offers some smart solutions for installers to test and setup an installation.

## MEASUREMENTS



## LAY-OUT DESCRIPTION



## Specifications

Power Supply:	12-24VDC
Idle Power:	Max. 0,5 Watt
Power consumption:	Max. 240 Watt
Output:	4 channels
DMX protocol:	DMX512/1990
Data in/out:	RJ45
Housing:	Plastic
IP rating:	IP40
Measurements:	110 x 25 x 125 mm (hwxwd)
Mounting:	DIN-rail
Weight:	140 gr
Working temperature:	-10 °C to +60 °C

# INSTALLATION

This section describes in general terms how to install the LDV-45. How to setup the menu, data link and how to connect it to a fixture.

## Mounting

The LDV-45 has a unique feature, it is designed to be installed on a DIN-rail. Now it is possible to install the LDV-45 directly next to the power supplies which are also suitable for DIN-rail mounting. This helps to keep your installation work modular and fault proof.

## CONNECT POWER SUPPLY

**WARNING**

**ATTENTION!**  
Make sure that **NONE** of the products you are working on, are powered!

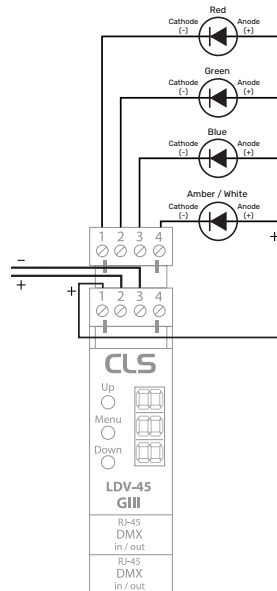
Locate the "INPUT" connection block at the top of the LDV-45, check information sticker on the side of the LDV-45. Connect the positive (+) output of the power supply to positive (+) power input of the LDV-45. Connect the negative (-) output of the power supply to the negative (-) power input of the LDV-45.

## Connect LED fixture

Locate the "OUTPUT" connection block at the top of the LDV-45, check information sticker on the side of the LDV-45. Connect the fixture's RED positive to Channel 1 (R) of the LDV-45. Repeat this step for the Green, Blue and / or White / Amber colour.

If all colours have separate positive (+ or anode) wires then tie them together and connect to (+) power input of the LDV-45. If all colours have a combined (+ or anode) wire, connect to (+) power input of the LDV-45.

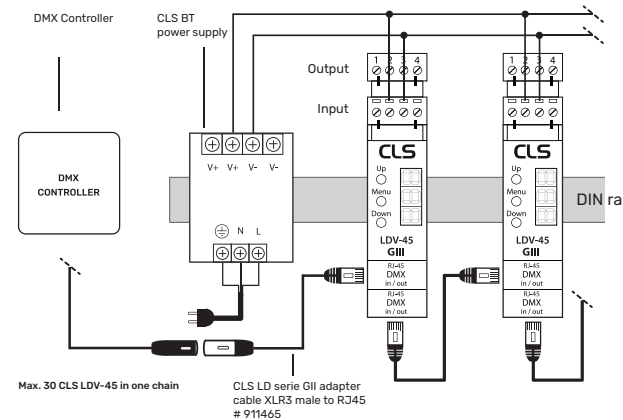
The LDV-45 can also control single colour LED fixture's. You can use the 4 output to create different zone's that can be controlled separately or simultaneously.



## Connect to DMX

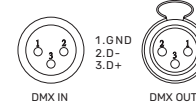
The LDV-45 has two connections for DMX. Both DMX connections are input/output.

When using the LDV-45 with a DMX controller, other than the CLS Zense you can find the connection method on the side of the LDV-45. When no UTP cable is used it is advised to use the LD-serie gender changer cable (art. 911465).

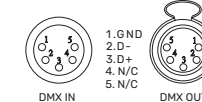


## PINNING DMX OUTPUT

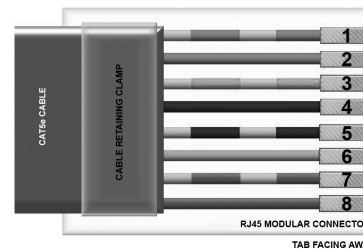
### XLR3



### XLR5



### WIRING PATTERN (T568B)

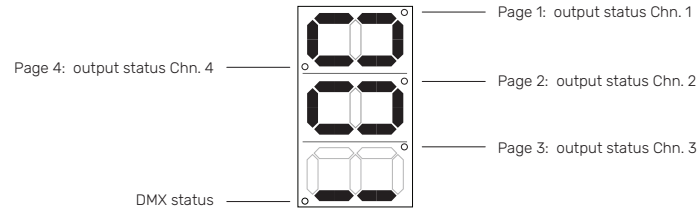


PIN	COLOUR	FUNCTION
1	Orange/white	DMX data +
2	Orange	DMX data -
3	Green/White	Not connected
4	Blue	Not connected
5	Blue/White	Not connected
6	Green	Not connected
7	Brown/White	DMX Common
8	Brown	DMX Common

# STATUS DISPLAY

The LDV-45 has a display which is used to interface with the user. When the LDV-45 is powered the DMX address is showed. When DMX is active the DMX status dot is on. When no DMX the dot is flashing

By pressing the menu button you can scroll through the different status pages. The status pages dots will indicate which page is displayed. The status pages will show the output value of the outputs 1-4 from 0 (min) to 255 (max).

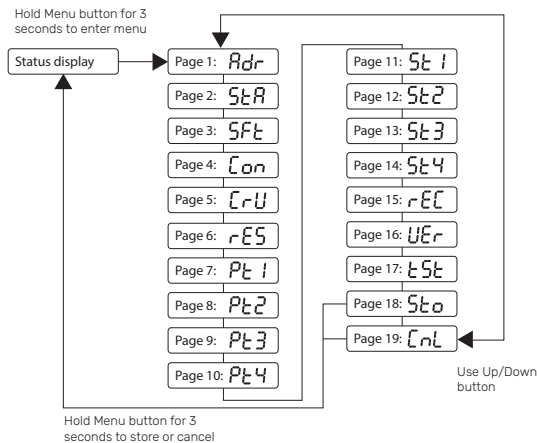


## CONFIGURATION

The LDV-45 must be configured to fit the application it is used for. To make configuration easy the LDV-45 has a user friendly menu interface.

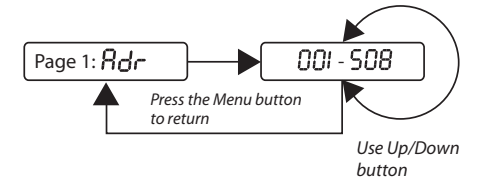
### Menu description

When the LDV-45 is powered the status display is shown with the DMX address. To enter the menu press and hold the menu button for 3 seconds. The LDV-45 will enter menu interface on page 1. The menu interface holds different pages. Use the up and down button to scroll through the pages. To select the page press the menu button. In each page the settings can be adjusted. To leave a page press the menu button again.



### Page 1: DMX addressing

In this page you can adjust the DMX address of the LDV-45. Use the up and down button to adjust the value. Hold down the up or down button to scroll fast. When DMX address is selected press the menu button to return to the main menu.



### Default DMX address: 1

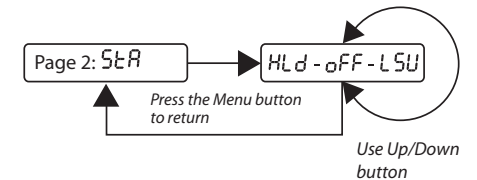
### Page 2: Static behavior

Static behavior when no DMX is connected.

"HLd" = Hold last data

"oFF" = Output off

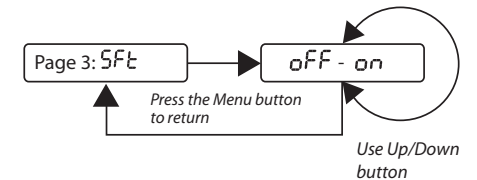
"LSV" = Load static values



### Page 3: Soft dim option

"oFF" = softdim off

"on" = softdim on



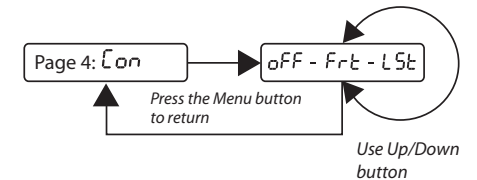
### Page 4: Master control configuration

Master used for dim channel;

"oFF" = Master function off

"Frt" = Master is first channel

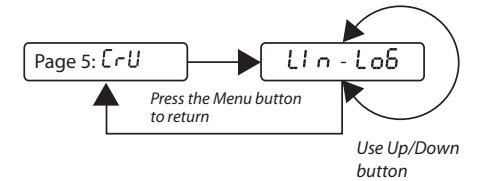
"LSt" = Master is last channel



### Page 5: Dim curve used

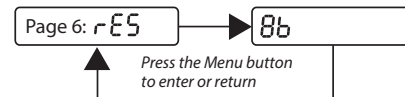
"Lin" = linear

"LoG" = logarithmic



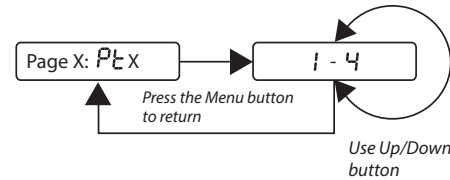
#### Page 6: Resolution

Control resolution 8 Bit.  
1 DMX channel per output.



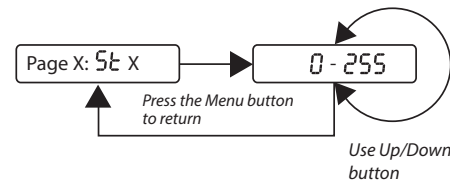
#### Page 7-10: Patch

To adjust the Patch Value of an output channel enter the corresponding page and change the value. The Patch value can be adjusted from 0 – 4. To return to the main menu press the menu button.



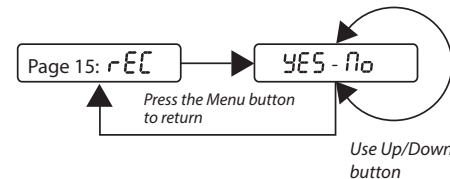
#### Page 11-14: Static Value

To adjust the Static Value of an output channel enter the corresponding page and change the value. The Static value can be adjusted from 0 – 255. To return to the main menu press the menu button.



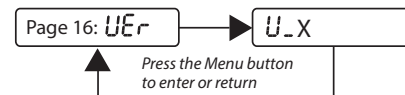
#### Page 15: Record Static value

"YES" = Will copy the DMX values  
"No" = Return without recording



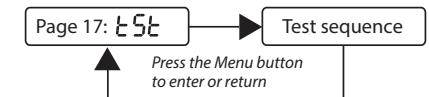
#### Page 16: Firmware version

Current firmware version on the LDV-45.



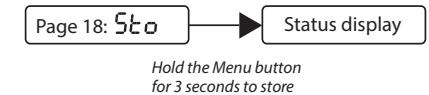
#### Page 17: Test loop

Entering this page will result in a test loop on the outputs of the LDV-45. This enables the user to test the connections without the need of an DMX controller. To end the test sequence and return to the main menu press the menu button.



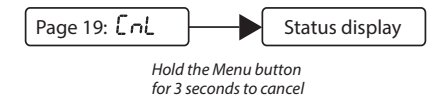
#### Page 18: Store configuration

After all changes are made the setting need to be stored before they become active. To store the settings go to the store page and press and hold the menu button for 3 seconds. The settings are stored and you will return to the status display.



#### Page 19: Cancel configuration

When you have made changes but you don't want to store them you can cancel the settings. Go to the cancel page and press and hold the menu button for 3 seconds. The settings are not stored and you will return to the status display.



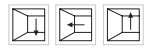
# LIST OF SYMBOLS



**Protection class**  
One, two or three



**Application area**  
Indoor or outdoor



**Application area**  
Floor, wall or ceiling



**Swivel**  
Fixture is horizontally rotatable, indicated in degrees



**Swivel**  
Fixture is vertically rotatable, indicated in degrees



**Multiple connection**  
Daisychain connectivity



**Installation depth**  
In centimeters



**Installation size**  
In centimeters



**Cable length**  
Maximum cable attached to the fixture in centimeters



**Driver**  
Inclusive or exclusive Internal or external



**Weight**  
In grams/kilograms



**Pressure**  
Maximum pressure on the fixture in kg/cm²



**Lifespan**  
Of the light source in hours



**Lenses**  
Available lenses, indicated in degrees



**Performance Zoom**  
Adjustable beam angle



**LEDs**  
Kind of LED used in the fixture



**Plug & play**  
Easy connection using the SmartConnect system



**IP value**  
Ingress Protection classifies the degrees of protection provided against the intrusion of the product



**Colour changing**  
RGB, RGB-W, RGB-A, AWB or Tunable White



**Retail & Food LED modules**  
Clothing, furniture, kitchens, jewellery, shoes, bread, meat, fish and vegetables & fruit.



**Colour**  
Available colours:  
Amber, blue, red or green



**White colour temperature**  
In different Kelvin values:  
Cold white, neutral white, warm white or extra warm white



**Curve**  
Minimal bending curve in centimeters



**Cutting length**  
Indicated by the cutting marks



**LED pitch**  
Pitch between the LEDs in millimeters



**Power supply**  
In VDC, VAC or milliAmpere



**Power consumption**  
In VA or Watt



**Dimmable**  
1-10 Volt, Phase, individual, DMX dimmable or DALI



**PWM dimming**  
Traditional PWM dimming, DMX analog or DMX Hybrid dim



**Bluetooth controlled**  
By Casambi



**Magne dimming**  
Accurate dimming from 100 - 1% by using a magnet



**Dynamic Control**  
Dynamic Power Control or Dynamic Temperature Control



**DMX input**  
Fixture works on DMX512 protocol or Wireless DMX



**Combined product**  
Compose your own fixture



**Warranty**  
3 or 5 years warranty on the product



**Conformité Européenne**  
CE marking for free marketability of industrial goods within the EU



**Energy label**



**Lightsource**  
Equipped with a CLS, Citizen or a Xicato LED module

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