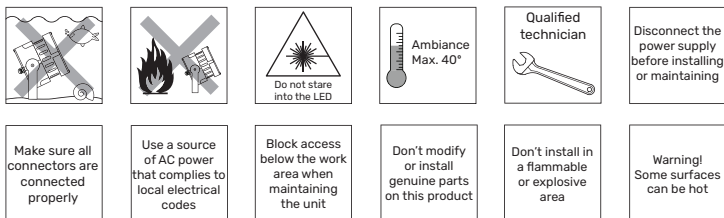


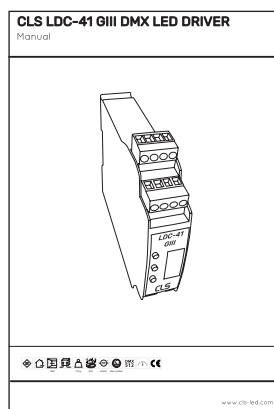
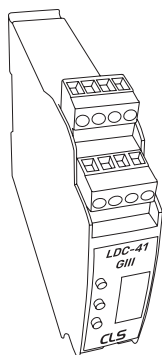
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# SAFETY INFORMATION



## CONTENT



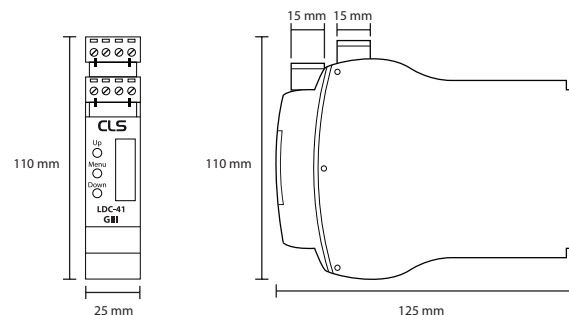
### Optional accessories

911465	CLS LD serie GII/GIII adapter cable XLR3 male to RJ45
911468	CLS LD serie GII/GIII adapter cable RJ45 to XLR3 female
911367	CLS LDC Connection Block to SmartConnect system
911368	CLS LD serie adapter cable RJ45 to XLR3 female
113110	CLS LDC-41 connection cable to Luxo 3 RGB
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
707018	CLS BT75.48 LED power supply 48VDC 75VA 85-264VAC
707019	CLS BT120.48 LED power supply 48VDC 120VA 85-264VAC
707020	CLS BT240.48 LED power supply 48VDC 240VA 85-264VAC

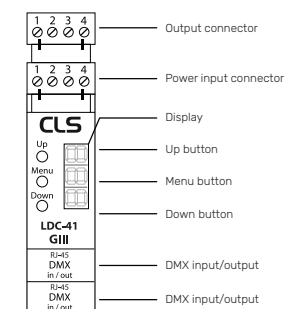
# INTRODUCTION

The CLS LDC-41 is a DMX controllable LED dimmer, which has 4 current controlled DC outputs. The current can be adjusted in steps of 50mA from 350 to 1000mA per channel. Each channel can drive 1 to 15 LEDs in series. Equipped with 4 channels the LDC-41 is suitable for controlling the newest generation of LED fixtures, RGBW or RGBA. This makes it possible to connect 2 to 12 RGB or even RGB(A/W) fixtures on one driver. Unique is the DIN-rail mounting possibility of the new and small housing. The LDC-41 is equipped with a user friendly menu structure, which offers some smart solutions for installers to test & set up an installation.

## MEASUREMENTS



## LAY-OUT DESCRIPTION



### Specifications

Power Supply:	48VDC
Idle Power:	Max. 0,5 Watt
Power consumption:	Max. 185 Watt
LEDs in serie:	1-15 per channel
Output:	4 channels
Output voltage:	2-45VDC
Output current:	350-1000 mA
DMX protocol:	DMX512/1990
Data in/out:	RJ45
Housing:	Plastic
IP rating:	IP40
Measurements:	110 x 25 x 125 mm (h x w x d)
Mounting:	DIN-rail
Weight:	210 gr
Working temperature:	-10 °C to +60 °C

# INSTALLATION

This section describes in general terms how to install the LDC-41. How to setup the menu, data link and how to connect it to a fixture.

## Mounting

The LDC-41 has a unique feature, it is designed to be installed on a DIN-rail. Now it is possible to install the LDC-41 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



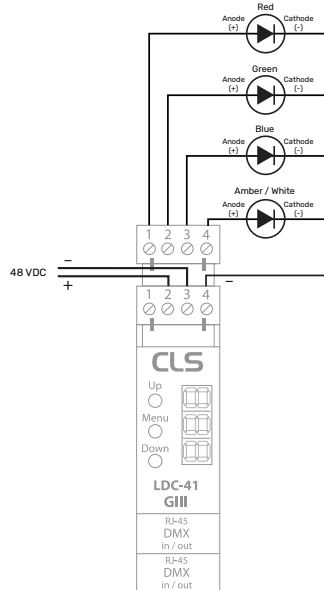
Locate the "INPUT" connection block at the top of the LDC-41, check information sticker on the side of the LDC-41. Connect the positive (+) output of the power supply to positive (+) power input of the LDC-41. Connect the negative (-) output of the power supply to the negative (-) power input of the LDC-41.

## Connect LED fixture

Locate the "OUTPUT" connection block at the top of the LDC-41, check information sticker on the side of the LDC-41. Connect the fixture's RED positive (+ or anode) to Channel 1 (R) of the LDC-41. Repeat this step for the Green, Blue and/or White/Amber colour.

If all colours have separate negative (- or cathode) wires then tie them together and connect to negative (-) power input of the LDC-41. If all colours have a combined negative (- or cathode) wire, connect to negative (-) power input of the LDC-41.

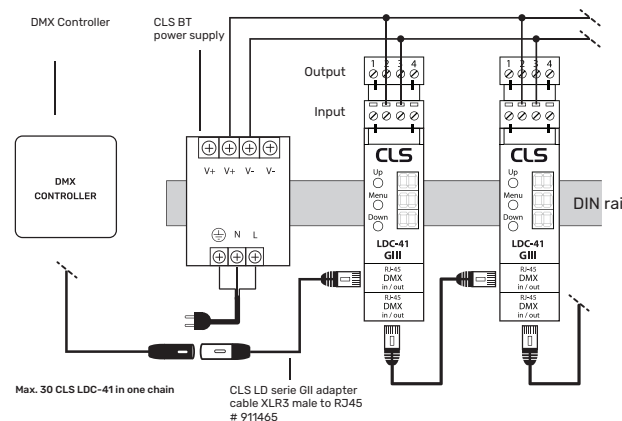
The LDC-41 can also control single colour LED fixture's. You can use the 4 output to create different zone's that can be controlled separately or simultaneously.



## Connect to DMX

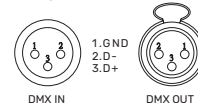
The LDC-41 has two connections for DMX. Both DMX connections are input/output.

When using the LDC-41 with a DMX controller, other than the CLS Zense you can find the connection method on the side of the LDC-41. When no UTP cable is used it is advised to use the LD-serie gender changer cable (art. 911465).

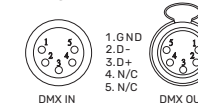


## PINNING DMX OUTPUT

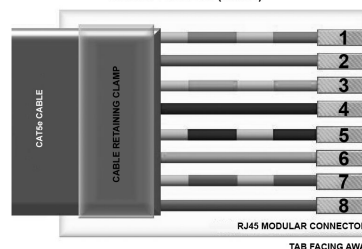
### XLR3



### XLR5



### WIRING PATTERN (T568B)

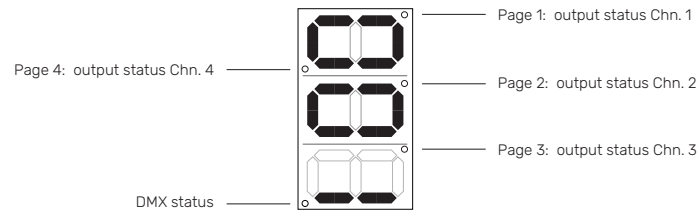


PIN	COLOUR	FUNCTION
1	Orange/white	DMX data +
2	Orange	DMX data -
3	Green/White	Not connected
4	Blue	Not connected
5	Blue/White	Not connected
6	Green	Not connected
7	Brown/White	DMX Common
8	Brown	DMX Common

# STATUS DISPLAY

The LDC-41 has a display which is used to interface with the user. When the LDC-41 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

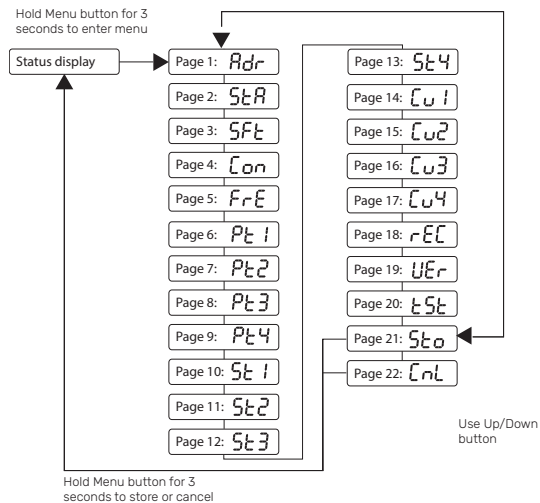
The LDC-41 must be configured to fit the application it is used for. To make configuration easy the LDC-41 has a user friendly menu interface.

### Menu description

When the LDC-41 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 LDC-41 will enter menu interface on page 1.

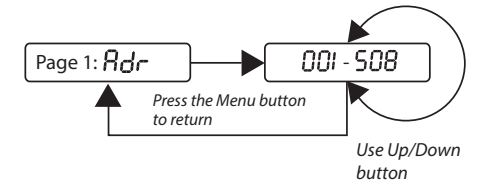
The menu interface holds different pages. Use the up and down button to scroll through the pages. To select the page press the menu button.

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 LDC-41. 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.

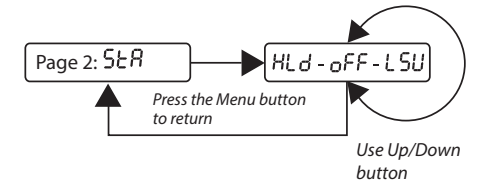


### Default DMX address: 1

### Page 2: Static behavior

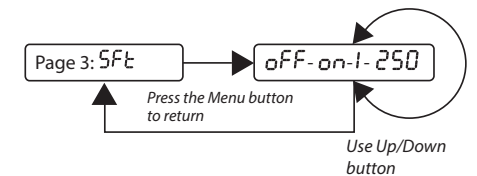
Static behavior when no DMX is connected.

"HLd" = Hold last data  
 "oFF" = Output off  
 "LSv" = Load static values



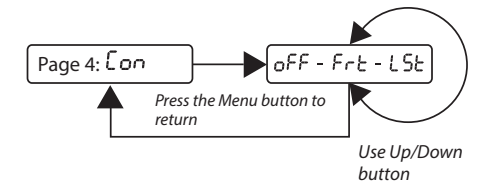
### Page 3: Soft dim option

"oFF" = softdim off  
 "dYn" = softdim on  
 "1-250" = static soft



### 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: Frequency control configuration

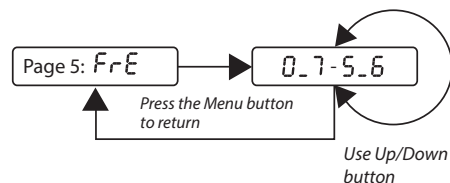
Frequency control let you set the PWM frequency.

0\_7 = 0,7 kHz

1\_4 = 1,4 kHz

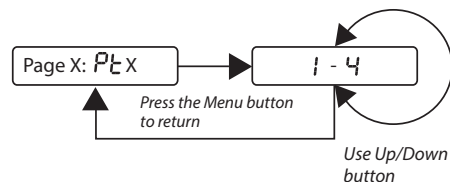
2\_8 = 2,8 kHz

5\_6 = 5,6 kHz



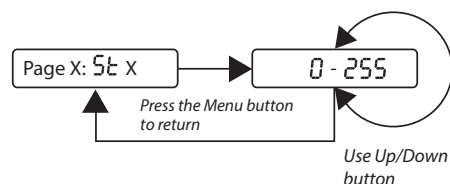
### Page 6-9: Patch

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.



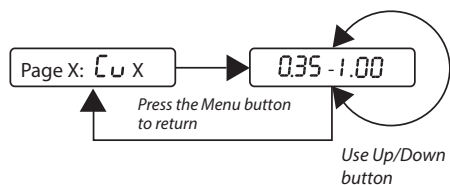
### Page 10-13: Static Value

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 14-17: Current Setting configuration

To adjust the current of an output channel enter the corresponding page and change the value. The current can be adjusted from 350 – 1000mA in steps of 50mA. To return to the main menu press the menu button.

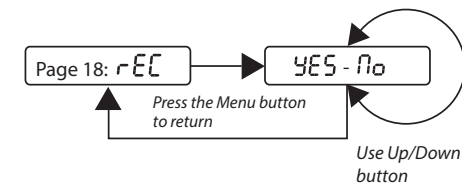


Default Current configuration: 700mA for each channel

### Page 18: Record Static value

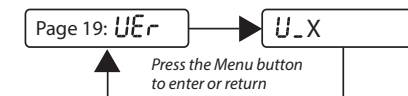
"YES" = Will copy the DMX values

"No" = Return without recording



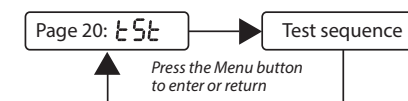
### Page 19: Firmware version

Current firmware version on the LDC-41.



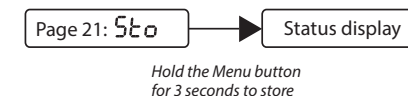
### Page 20: Test loop

Entering this page will result in a test loop on the outputs of the LDC-41. 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.



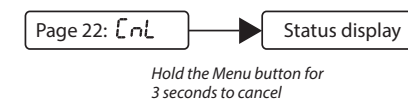
### Page 21: Store configuration

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 22: 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



**Magneo 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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