LDDE
LIGHTING IDEAS

SpectraT5 MasterLED

User Manual - V 2.1

Rev. 1/2016 V2.1 - Specifications subject to change without notice.

Lighting
Design
Developement
Electronics

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SpectraT5 MasterLED

Thank you for choosing this LDDE SpectraT5 MasterLED fixture.

LDDE`s new SpectraT5MasterLED unit integrate the new high efficiency LED technology for a genuine zero dimming and an incredible reaction speed. Lighting is controlled directly via DMX512. This opens up completely new areas of application in broadcast, TV, stage and event technology, architectural lighting and lighting design.
The resolution determines how many individual steps can be included in the control range from 0 to 100%. The higher the resolution, the smoother the dimming is perceived as.
The brightness values received in 8-bit resolution are interpolated to 16-bit, so that 65.536 values are now available for optimum dimming.
The reaction time to control the LED tube is 20ms and guarantees best possible performance for professional theatre, event and architecture applications.

Features

- High power LED tube in various CCT or colours
- changeable LED tubes
- up to 4000 Lumen
- high colour rendering quality up to CRI>90
- Strobe frequency up to 25Hz
- Power/Data multicore connectors
- Seamless connection
- Selective dimming from 0-100%
- Flicker free HDTV - 8kHz PWM

Scope of Delivery

The following items are included in the delivery of the SpectraT5 MasterLED:

- 1 x SpectraT5 MasterLED
- User Manual

Safety Guidlines

Warning!

This product is designed exclusively for professional use and not for home use. Of this product are harmful to life and limb due to fire and heat, electric shock and crash. Read this manual before you connect or install the device!
Follow the safety instructions listed below and observe all of this manual or on the device given warnings. Make sure that with the assembly of Leuchtenysteme in decorations, a sufficient distance and clearance of around 30 cm for sufficient cooling and ventilation is maintained!

» Please read these safety guidelines carefully before you take the SpectraT5 MasterLED into service.

» Check the suitability of the product for the intended use.

» The SpectraT5 MasterLED fixture is not suitable for outdoor use (IP20).

» Never expose your eyes to direct beam of the LED light source.

» Do not use optical devices or other means of focussing the LED beam apart from products supplied for this purpose by LDDE Vertriebs GmbH.

» Do not attempt to repair or dismantle the SpectraT5 MasterLED fixture: Opening and removing the internal covers can result in electrocution or other serious injuries.

» In case of product failure, please contact LDDE or an authorised LDDE-dealership.

» Do not touch the fixture while it is in use.

» Disconnect the fixture from the power supply before re-positioning and cleaning.

» Protect the SpectraT5 MasterLED fixture from shocks and impacts.

» Protect the SpectraT5 MasterLED from moisture and water and avoid contact with moist or wet appliances.

» Relative air humidity during operation should be between 20% and 85%.

» Ensure that the fixture is not covered and adequate ventilation is in place.

» Do not insert objects into openings of the housing that are connected to live parts as this can lead to short circuiting. Danger of electric shock and risk of fire.

» The fixture is to be removed from service if:

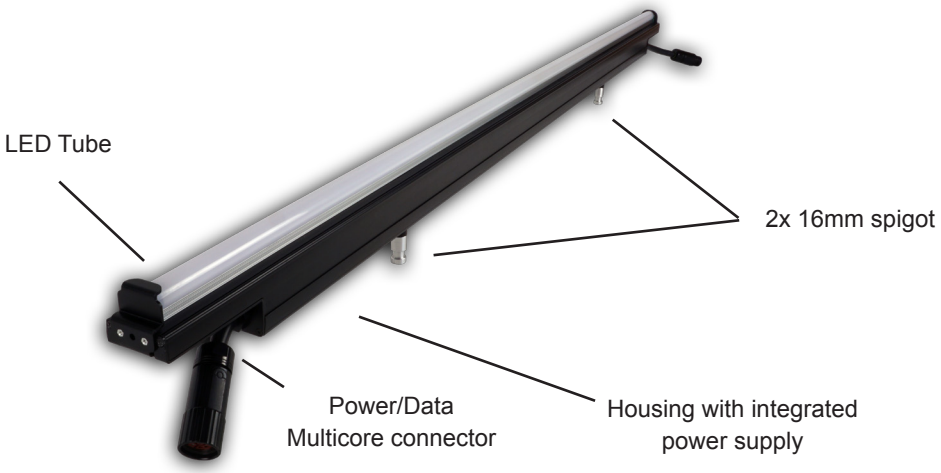
- there is visible damage.
- parts have become lose.
- there is visible damage to cable connections.

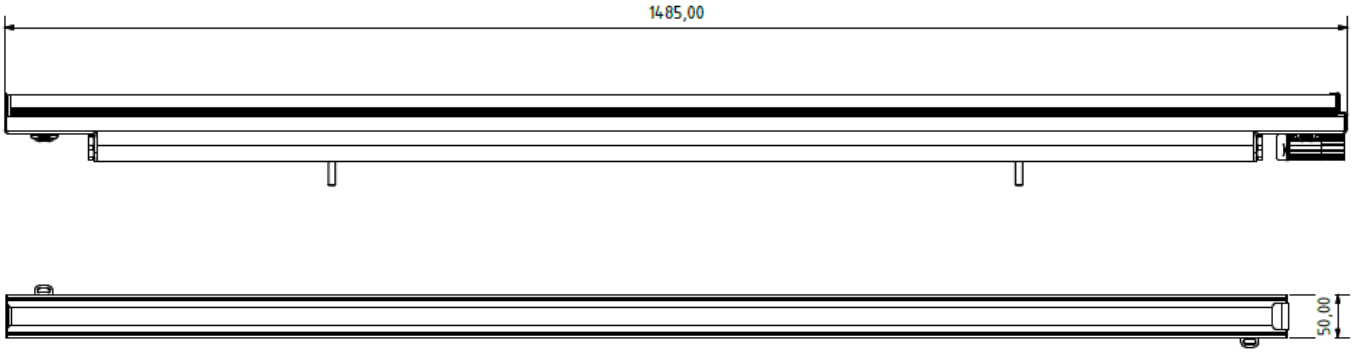
» LDDE products are manufactured and delivered in concordance with EU directive 2002/96/EU of the European Parliament and the Council on Waste Electrical and Electronic Equipment WEEE). Help protect the environment and dispose of used products at your local recycling station. Your dealership can offer further advice on correct disposal

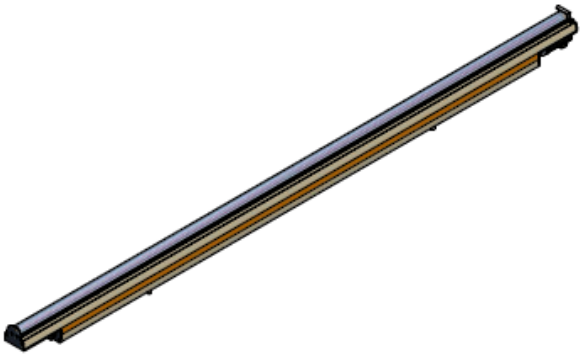
Table of Contents

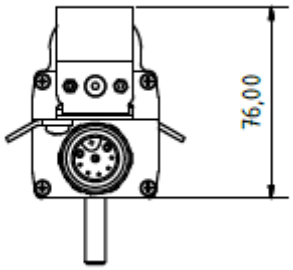
System Overview

Overview







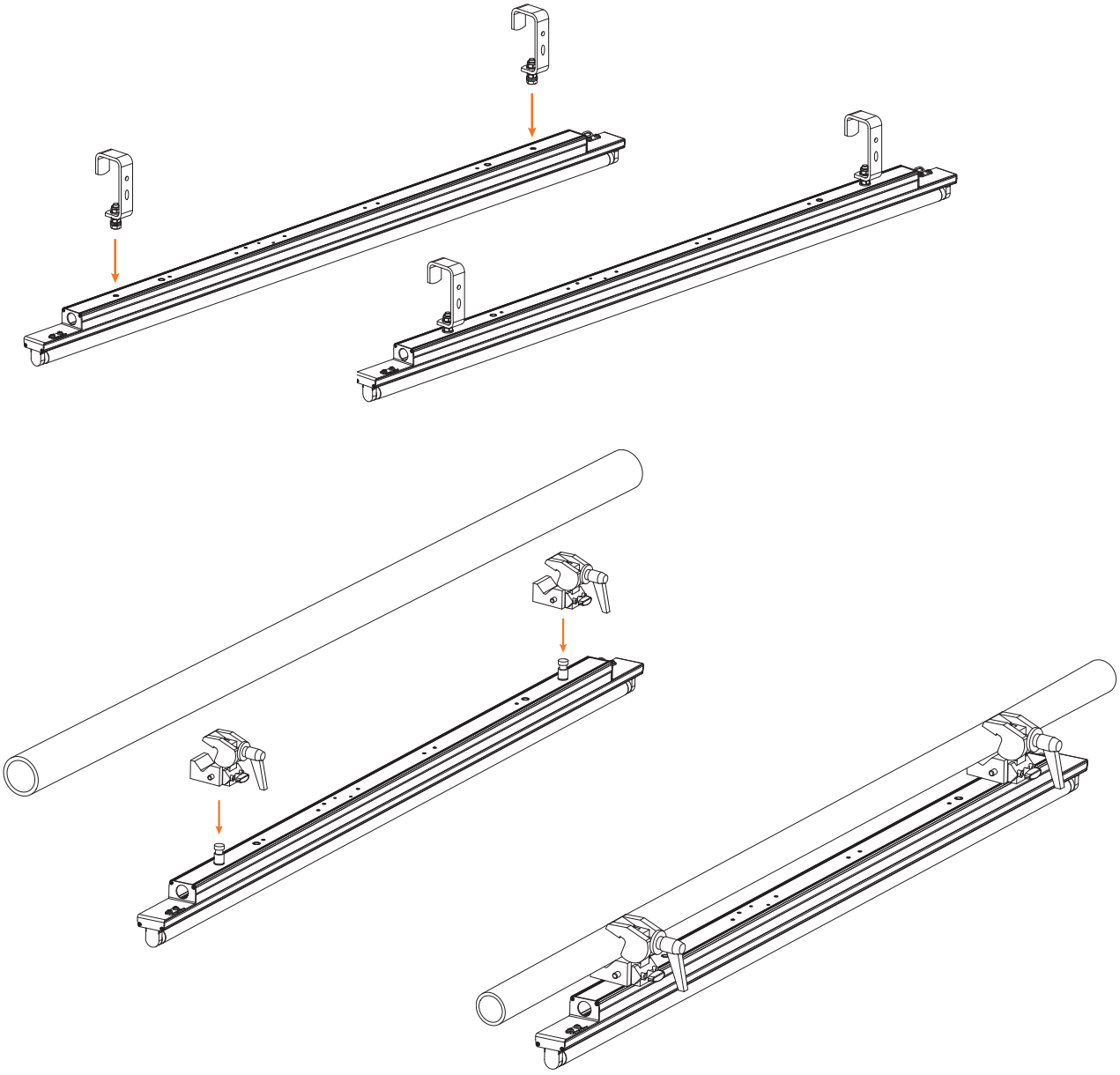


Mounting

Pipe and Truss mounting

To assemble the SpectraT5 MasterLED on trusses and pipes please use suitable accessories such as, C-hooks, Manfrotto 035 Super-Clamp or similar.

1. Attach a mounting clip on 16mm DIN-pin (eg.. Manfrotto 035 Super Clamp).
2. Mount the unit by means of the clamp to a suitable pipe or truss piece.
3. Make sure that you protect the devices mounted with a safety rope from accidentally falling down.



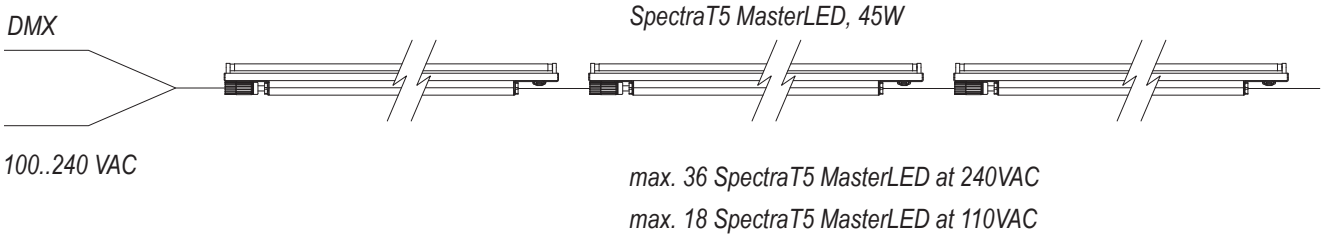
Wiring

The SpectraT5 MasterLED fixtures are supplied with data and power by an 8pin Multicore-Connector. This connector system is compatible with the following products:

- NanoPix1620/3240 and NanoPix1440/2880HP
- SpectraConnecT5 and SpectraConnecT5 LED
- SpectraLED72 and SpectraLED144

This offers the possibility to use cables that you may already have in stock. Different fixtures can be connected using the same cabling system.

Please note that a maximum 36 SpectraT5 MasterLED at 240VAC or 18 SpectraT5 MasterLED at 110VAC can be serially connected using one power supply cable.



Initial Start-up

Attach a stage lighting hook or a mounting clamp to the mounting point and suspend the SpectraT5 MasterLED batten from a pipe or truss. Tighten the hook or clamp only when you have determined the fixture's final position.

Connect the output multicore cable of one batten to the input connection on another batten. Once this connection has been made, you can position the battens in the required locations.
Tighten the hook or clamp securely and attach a safety cable, using the eyelet on the batten, to the pipe or truss.

Connect the power supply cable to the first batten. This comes with an earth contact plug and a 5 pin XLR connector. Plug the power connector into a live circuit and the XLR connector into a DMX output socket.

Once the SpectraT5 MasterLED is supplied with power, the Status LED will be illuminated.

Ensure that the fixture are never connected to a dimmable power circuit!!!

SpectraT5MasterLED – V 2.1
BCD & remote commands

DMX Start address
Valid from 1 – 512
Configuration via BCD rotary switch or LDDE Remote Control

Note: **All settings can be set via Remote Control during operation.**
All settings can be set via BCD rotary switch before power-up!

Channelmode

Mode	Description	DMX Channels
901	Intensity	1
902	Intensity + Strobe	2
903	Intensity 16-bit	2
904	Intensity 16-bit + Strobe 8-bit	3

Fade to Zero

Mode	Description
801 = OFF	With new DMX value 0 (DMX value below 15) is dimmed to 0.
802 = ON	With new DMX value 0 (DMX value below 15) is bound directly to 0 → Snap to Zero

Status LED

Mode	Description
850 = Status LED “OFF”	Status LED turns off
851 = Status LED 5%	Status LED glows @ 5% Intensity
852 = Status LED 30%	Status LED glows @ 30% Intensity
853 = Status LED 100%	Status LED glows @ 100% Intensity

Dimming curves

Mode	Description
911 = “Linear”	“Linear” there is no characteristic used
912 = “Square”	“Square” dimmer curve is used
913 = “Smooth”	“Smooth” dimmer curve is used

Factory Default

DMX address	1
Channelmode	2
Dimming curve	Square
Fade to zero	On
Status LED	30% Intensity

Reset to Factory Default

666 – Reset to Factory Default

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Technical Specifications

Dimensions / Weight

Lenght	1485 mm
Width	76 mm
Height	50 mm
Weight	2,45kg

Control / Wiring

Protocol	DMX512 USITT Protocol
Input	Feed-In cable power (bare ends) / data (XLR 5-pin)
Connection	8-pin Power/Data multicore connection cables
Daisy chaining	max. 36 units at 240VAC / max. 18 units at 110VAC

Programming

Dimmer	even control from 0-100%
Resolution	8 or 16-bit
DMX channels	1-3
Address setting	BCD rotary switch / LDDE Remote Control

Light source

Light source	High power LED tube
Life	20.000 hrs

Power supply / Rating

Input voltage	100..240 VAC, 50/60Hz
Max power consumption	max. 45W Full load

Construction

Housing	aluminium strand casting profile
Color	black (other RAL colors on request)
Cooling	Convection cooling for silent operation
Protection class	IP20

Conformity

EN 61000-6-2, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3

Temperatures

Max. Ambient temperature	ta: +40ºC

Konformitätserklärung nach Richtlinie 2004/108/EG und 2006/95/EG

Hersteller: LDDE Vertriebs GmbH
Dreherstraße 64
1110 Wien, Österreich

erklärt hiermit, dass das nachfolgend angeführte Gerät

Produkt: LDDE SpectraT5MasterLED

den einschlägigen grundlegenden Schutzanforderungen, die in den Richtlinien des Rates zur Angleichung der Rechtsvorschriften der Mitgliedsstaaten über die EMV,- und Niederspannungsrichtlinie festgelegt sind den folgenden Normen entspricht:

Normen: EN 61000-6-2, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3

Kurt Reiter
(Geschäftsführer)

Wien, am 25.November 2015
(Datum)

LDDE Vertriebs GmbH, Dreherstrasse 64, A-1110 Vienna, T: +43.1.7671811-0, E: office@ldde.com, W: www.ldde.com

Maintenance and Service

Should you encounter problems, please contact LDDE or one of our authorised LDDE-dealerships.

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Warranty and Liability

We offer a 24 month warranty on this SpectraT5 MasterLED fixture. This includes free repair of faults that are verifiably due to manufacturing defects. Such repairs are solely performed by the manufacturer.

Warranty expires due to:

- Alterations and repairs by unauthorised individuals
- Damage caused by third parties
- Damage resulting from non-compliance with the manual`s instruction
- Connection to power supply with incorrect voltage
- Operating errors or damage caused by improper use or negligence.

LDDE declines any liability for damages to the fixtures as well as consequential damages which result from negligence, improper use and setup, wrong setting into operation and use, ignoring of valid safety regulations and unsuitable use.

Cables

Feed-In cable 1m, 8-pin Multicore for Power/Data Input	20050310840
DMX Connection cable, 0,5m, Power + DMX 8pin. Multicore-connector (IP67)	20050310842
DMX Connection cable, 1m, Power + DMX 8pin. Multicore-connector (IP67)	20050310843
DMX Connection cable, 2m, Power + DMX 8pin. Multicore-connector (IP67)	20050310844
DMX Connection cable, 3m, Power + DMX 8pin. Multicore-connector (IP67)	20050310845
DMX Connection cable, 4m, Power + DMX 8pin. Multicore-connector (IP67)	20050310845
DMX Connection cable, 5m, Power + DMX 8pin. Multicore-connector (IP67)	20050310846
DMX Connection cable, 7m, Power + DMX 8pin. Multicore-connector (IP67)	20050310847
DMX Connection cable, 10m, Power + DMX 8pin. Multicore-connector (IP67)	20050310848
DMX Connection cable, 15m, Power + DMX 8pin. Multicore-connector (IP67)	20050310849
DMX Connection cable, 20m, Power + DMX 8pin. Multicore-connector (IP67)	20050310905
DMX Connection cable, 25m, Power + DMX 8pin. Multicore-connector (IP67)	20050310906
DMX Connection cable, 30m, Power + DMX 8pin. Multicore-connector (IP67)	20050310907
Output cable 1m, 8-pin Multicore for Power/Data Output	20050310870
Terminator 120 Ohm for DMX Signal (8-pin Multicore)	20050310841

LED Tubes

Standard LED Tube T5, white 2700K (CRI>80)	20050311838
Standard LED Tube T5, white 4000K (CRI>80)	20050311836
Standard LED Tube T5, white 5000K (CRI>80)	20050311838
Standard LED Tube T5, white 6000K (CRI>80)	20050311837
High CRI LED Tube T5, white 2700K (CRI>90)	20050311824
High CRI LED Tube T5, white 4000K (CRI>90)	20050311825
High CRI LED Tube T5, white 6000K (CRI>90)	20050311826

RGB TUBES

Standard LED Tube T5, red	20050311828
Standard LED Tube T5, green	20050311830
Standard LED Tube T5, blue	20050311829

Order Information

SpectraT5 MasterLED, without LED Tube	20050311812