

Spectra MasterD

from software version: V2.1

Released: 12-2017 - V1.1 - Rev B



Safety Guidelines



» Please read these safety guidelines carefully before you take the Spectra MasterD into service.

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

» The Spectra MasterD is not suitable for outdoor use (IP20).



» Do not attempt to repair or dismantle the Spectra MasterD 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.

» Ensure that when the luminaire systems are installed in decorations, a sufficient clearance of around 30cm is required for adequate cooling and ventilation.

» Protect the fixture from shocks and impacts.

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



» 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 loose
- 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.

You can choose between 6 DMX modes each designed for different applications and preferences:

CH1 - ONE CHANNEL MODE (1 CHANNEL):

Both channels (WW & CW) are controlled jointly - No intensity and strobe channel available.

CH2 - TWO CHANNEL MODE (2 CHANNELS):

Both channels (WW & CW) are separately controlled - No intensity and strobe channel available.

CH3 - NORMAL MODE (3 CHANNELS):

Both channels (WW & CW) can be controlled separately. Additional intensity channel for dimming, without strobe channel.

CH4 - FULL MODE (4 CHANNELS)

Same as Ch3 - Normal Mode, but with strobe channel.

CH5 - HIGH RESOLUTION FULL MODE (5 CHANNELS)

Both channels (WW & CW) with 16-bit resolution and 8-bit strobe.

CH6 - HIGH RESOLUTION MODE (4 CHANNELS)

Same as Ch5 - but without strobe function.

Operation mode

The table below shows the different available modes and the DMX channels required for the corresponding mode.

| Channel | 8-bit interpolated | Ch1 (901) | Ch2 (902) | Ch3 (903) | Ch4 (904) |
|---------|--------------------|-----------|-----------|-----------|-----------|
| 1 | Intensity | xxx | xxx | 1 | 1 |
| 2 | WW | 1 | 1 | 2 | 2 |
| 3 | CW | 1 | 2 | 3 | 3 |
| 4 | Strobe | xxx | xxx | xxx | 4 |
| | | | | | |
| Channel | 16-bit | Ch5 (905) | Ch6 (906) | | |
| 1 | WW | 1 | 1 | | |
| 2 | WW fine | 2 | 2 | | |
| 3 | CW | 3 | 3 | | |
| 4 | CW fine | 4 | 4 | | |
| 5 | Strobe | 5 | xxx | | |



In brackets, the BCD & Remote command is used to set the desired mode.

For example. To switch to the Ch3 -Normal Mode, use 903 on the BCD switch.

Changing Operating Mode



Changes with BCD switch possible **only before** commissioning!
Changes with LDDE RemoteControl possible **only during operation!**

The respective mode can be changed by means of BCD switch or LDDE RemoteControl.

Changes to the setting or DMX addresses affect **all LDDE devices** which are addressed via the same DMX cable!

Settings with BCD switch

The settings of the Spectra MasterD can be made using the BCD switch on the back of the device, therefore the Spectra MasterD must be disconnected from the power supply.

To make changes, please proceed as follows.

1. Disconnect Spectra MasterD from the power supply!
2. Set the desired mode to the BCD switch.
3. Connect Spectra MasterD back to power supply.
4. The fixture lights up briefly and indicates that a change has occurred.
5. Now set the desired DMX start address again.

Settings with LDDE RemoteControl

To change the settings of the Spectra MasterD, you need a LDDE RemoteControl. This allows various changes to the basic settings and the DMX mode during operation.

To change the settings on the Spectra MasterD with the LDDE RemoteControl, please follow the steps below.

1. Disconnect the DMX connection to the Spectra MasterD.
2. Please note that no devices that could perform DMX value changes, such as a light console, are connected to this DMX line.
3. Connect the Power/DMX cable between Spectra MasterD and the LDDE RemoteControl.
4. Send the desired setting or DMX address to the Spectra MasterD.
5. The fixture lights up briefly and indicates that a change has occurred.
6. Now set the desired DMX start address again.

Overview Settings

| Command | Function |
|--|---|
| 555 - Display current SW-version | Current Software version is indicated |
| 666 - Factory default | The device is reset to factory settings |
| 700 to 799 - Intensity 0-100% (all channels) | Set desired Intensity 0-100% for all channels |
| 801 - DMX hold off | After 5 seconds without a DMX signal, all channels are set to 0 |
| 802 - DMX hold on | The last DMX value is held until the power is turned off |
| 812 - „Fade to Zero“ on | Fade to Zero on |
| 813 - „Fade to Zero“ off | Fade to Zero off |
| 850 - Status LED 0% | The brightness of the status LED is set to 0%. |
| 851 - Status LED 5% | The brightness of the status LED is set to 5%. |
| 852 - Status LED 30% | The brightness of the status LED is set to 30%. |
| 853 - Status LED 100% | The brightness of the status LED is set to 100%. |
| 921 - Linear | No characteristic is used |
| 922 - Normal | Normal dimming curve is used |
| 923 - Smooth | Smooth dimming curve is used |
| 970 - Modulation „PWM“ | Dimming via PWM with 8kHz |
| 971 - Modulation „NonPWM“ | Dimming via NonPWM |

The commands 700 to 799 can only be changed using BCD switch!

The Spectra MasterD is delivered with factory settings in 3Ch - Normal mode, which can be changed via the BCD switch on the back of the device or with a LDDE RemoteControl.

| Factory Default | |
|--------------------------|-------------------|
| DMX address | 1 |
| Channelmode | Ch3 - Normal Mode |
| Dimming parameter | Normal |
| Modulation | PWM 8kHz |
| DMX hold | on |
| Fade to Zero | enabled |
| Status LED | 30% brightness |

Display current software version

555 - Display current Software The current SW version is indicated by the flashing of the LEDs. The LEDs flash accordingly at slow speed for the front areas of the software (shown in red) and at a fast speed for the rear places (shown in blue), for example. **V2.1**

Settings & Modes

Intensity (eg. for fixed installations where no DMX is available)

700 to 799 - Intensity 0-100%

The intensity can be set between 0 and 100%.

This is suitable for testing the devices or for fixed installations where no changes have to be made via DMX.

DMX Hold

801 - disabled

If the DMX hold is deactivated, all outputs are set to zero after 5 seconds without a DMX value.

802 - enabled

When the DMX hold is activated, the DMX values are held until the switch is turned off.

Fade to Zero

812 - enabled

For a new DMX value (below DMX value 15) is dimmed to 0.

813 - disabled

For a new DMX value (below DMX value 15) --> Snap to 0.

Status LED

850 - Status LED 0%

The brightness of the Status LED is set to 0%

851 - Status LED 5%

The brightness of the Status LED is set to 5%

852 - Status LED 30%

The brightness of the Status LED is set to 30%

853 - Status LED 100%

The brightness of the Status LED is set to 100%

Dimming parameter

911 - Linear

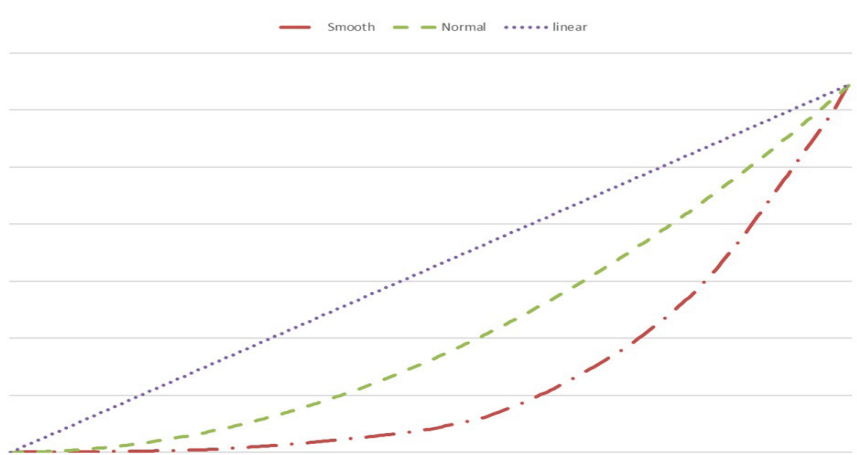
„Linear“ no characteristic is used.

912 - Normal

„Normal“ characteristic is used.

913 - Smooth

„Smooth“ characteristic is used.



Modulation

970 - Modulation „PWM“

Dimming per PWM frequency with 8kHz for scenic operation.

971 - Modulation „NonPWM“

Dimming without PWM frequency.

Factory default

666 - Reset

The device is reset to factory settings.

Technical Specifications (Spectra MasterD 1000 / 1200 / 1500)

Dimensions / Weight

Length 1004 / 1204 / 1504mm | 39,52 / 47,40 / 59,21 Inches
Width 35 mm / 1,37 Inches
Height 62 mm / 2,44 Inches
Weight (without accessories)..... 1,90 / 2,10 / 2,35kg | 4,18 / 4,62 / 5,18 lbs

Control

Protocol DMX512/1990

Dimming

Dimming Continuous dimmer 0 - 100%
Modulation PWM 8kHz / NonPWM
DMX-Channels 1 / 2 / 4 / 5 DMX-Channels
Address settings BCD switch or LDDE RemoteControl

Light Source

LED Engine SMD LEDs 2700°K - 6000°K
Light output ≈ 5333 / 6700 / 8400 lm
Average life span approx. 20.000 hours

Connections

Input / Output Power/Data Multicore cable

Electrical specifications

Input voltage range..... 200-240VAC | 50/60Hz
Max. Power consumption 55W / 65W / 85W

Construction

Housing Aluminium continuous casting profile
Color black (other RAL colors on request)
Minimum clearance of the LED 100mm / 3,93 Inches
Minimum clearance for sufficient cooling 300mm / 11,81 Inches
Cooling convection cooling
Protection class IP20

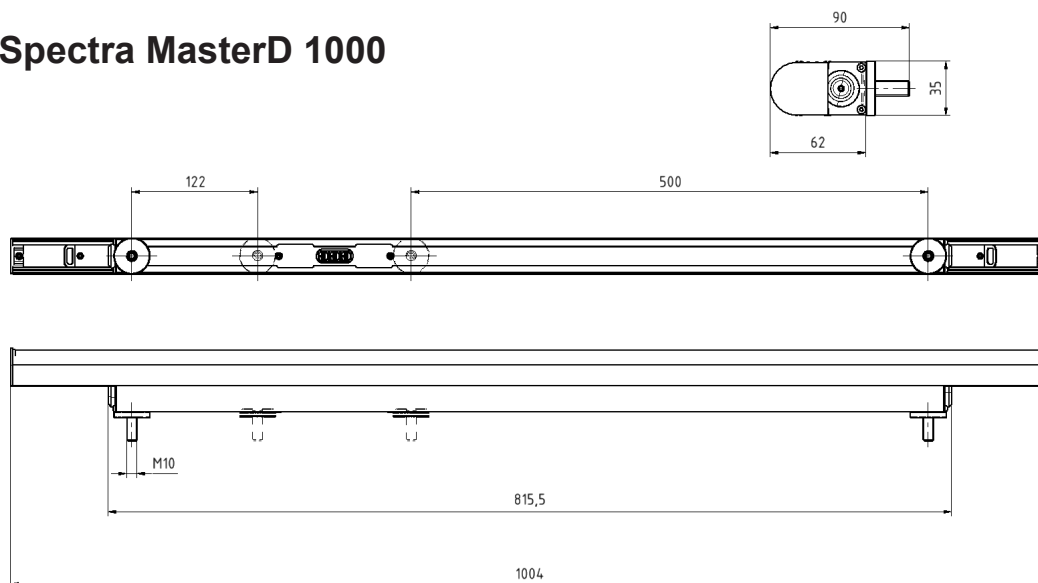
Safety standards

Certifications EN 55015, EN 60598-1, EN 61000-3-2, EN 61000-3-3, EN 61547

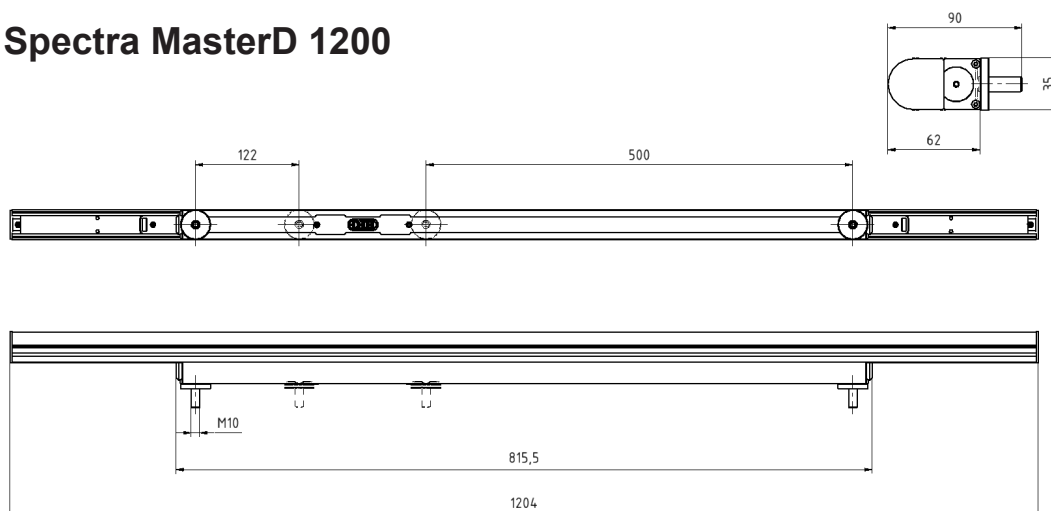
Temperatures

Maximum ambient temperature..... ta: +40° / +104°F

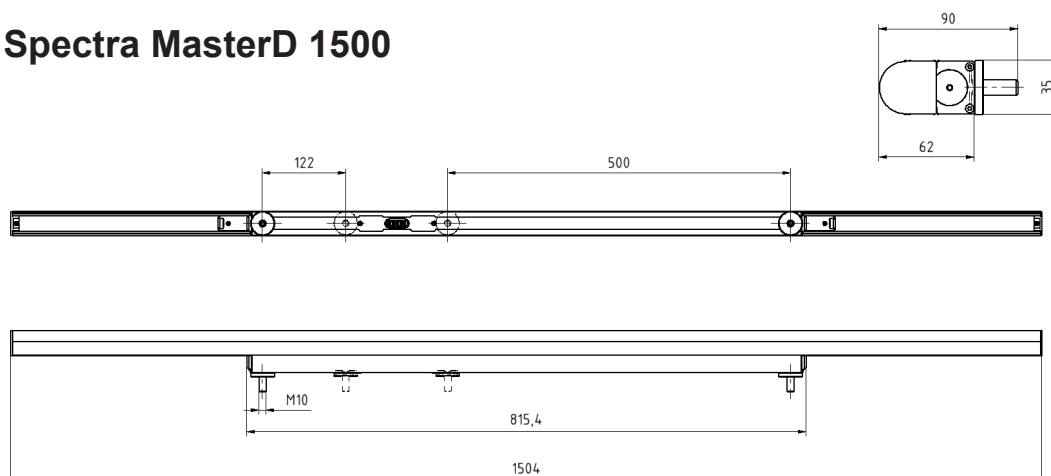
Spectra MasterD 1000



Spectra MasterD 1200



Spectra MasterD 1500





EG-Konformitätserklärung EC Declaration of Conformity



Der Hersteller:
The manufacturer:

LDDE Vertriebsgesellschaft m.b.H
Simmeringer Hauptstraße 357
AT-1110 Wien
Austria

erklären hiermit, dass das nachfolgend angeführte Produkt den einschlägigen grundlegenden Schutzanforderungen, die in den Richtlinien des Rates zur Angleichung der Rechtsvorschriften der Mitgliedsstaaten über die EMV,- und Niederspannungsrichtlinie festgelegt sind, entspricht.

declare that the product listed below complies with the relevant basic protection requirements set out in the Council Directives on the approximation of the laws of the Member States relating to the EMC, EMC and Low Voltage Directives.

EMV-Richtlinie 2004/108/EG
EMC-Directive 2004/108/EC

Produkttyp / Baureihe:
Product type / Model series:

Spectra MasterD 1000 / 1200 / 1500 / 2000

EG Richtlinien, angewandte harmonisierte Normen:
EC Directives, applied harmonized standards:

EN 55015, EN 60598-1 EN 61000-3-2, EN 61000-3-3, EN 61547

Diese Erklärung wird verantwortlich für den Hersteller bzw. Inverkehrbringer.
This declaration becomes responsible for the manufacturer or distributor.

LDDE Vertriebsgesellschaft m.b.H, Simmeringer Hauptstraße 357, A-1110 WIEN, Austria

abgegeben durch

Kurt Reiter

Geschäftsführer / CEO

Wien am 27.11.2017

LDDE Vertriebsgesellschaft m.b.H. | Simmeringer Hauptstraße 357 | A 1110 Vienna | Austria
T: +43 1 7671811-0 | F: +43 1 7671811-99 | E: office@ldde.com | U: www.ldde.com
Raiffeisenbank Region Schwechat | IBAN: AT62 3282 3000 0100 5107 | BIC: RLNWATWW823
UID: ATU 36771409 | GF: Kurt Reiter | Gerichtsstand: Wien | FB-Nr.: FN 38949d

Seite 1/1