

# Spectra MasterD

from software version: V2.1

Released: 10-2017 - V1.0 - Rev A



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	
<b>DMX address</b>	1
<b>Channelmode</b>	Ch3 - Normal Mode
<b>Dimming parameter</b>	Normal
<b>Modulation</b>	PWM 8kHz
<b>DMX hold</b>	on
<b>Fade to Zero</b>	enabled
<b>Status LED</b>	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

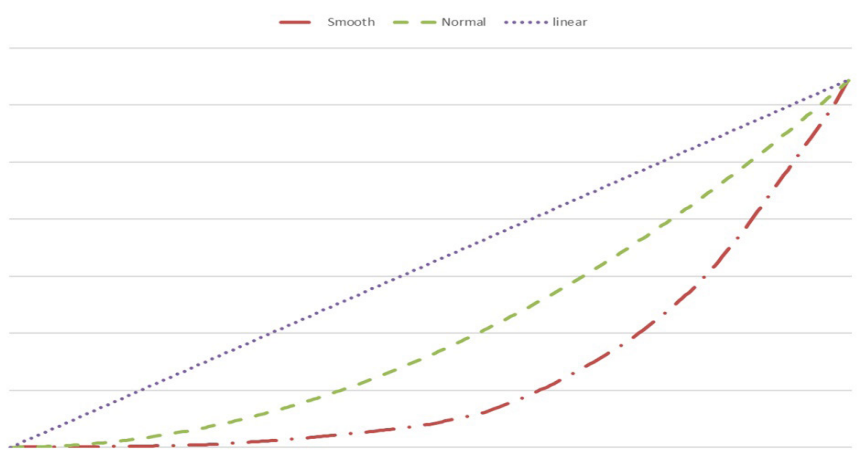
„Linear“ no characteristic is used.

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

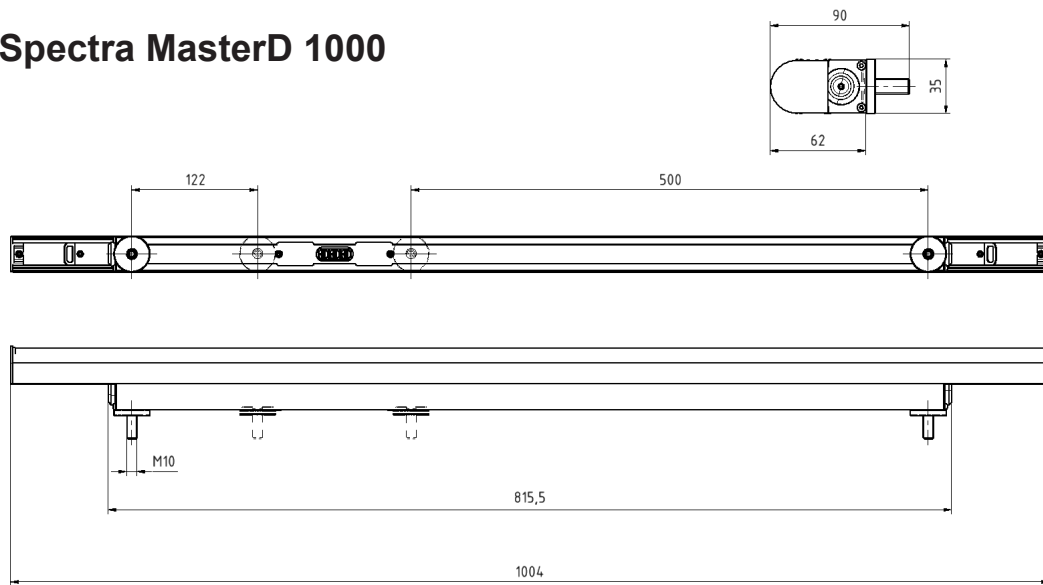
## Safety standards

Certifications ..... CE, EN 55015, EN 60669, EN 60929, EN 61000-3-2, EN 61000-3-3

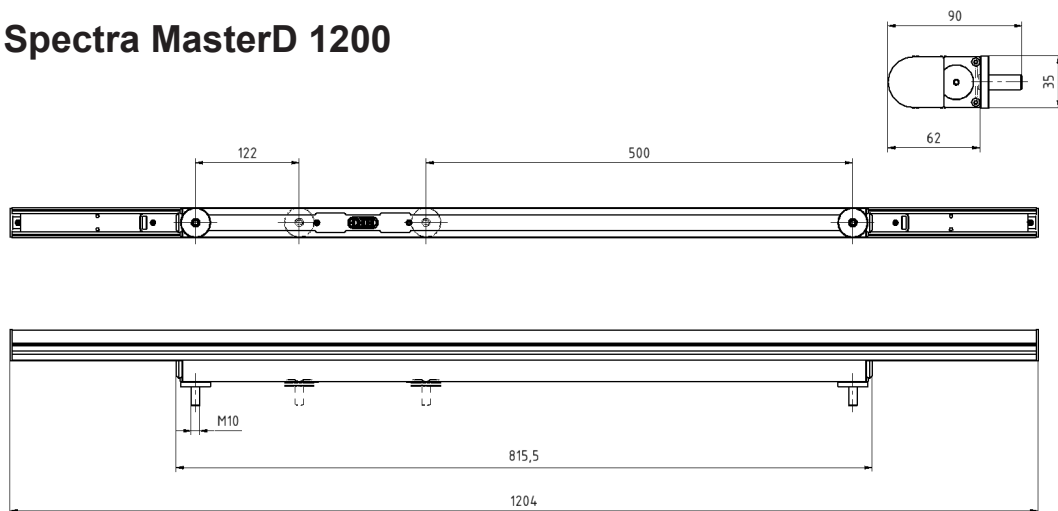
## Temperatures

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

## Spectra MasterD 1000



## Spectra MasterD 1200



## Spectra MasterD 1500

