LDDE
LIGHTING IDEAS

Lighting
Design
Development
Electronics

LDDE Vertriebsgesellschaft m. b. H.
Simmeringer Hauptstraße 357
1110 Vienna, Austria
P: +43 1 76718110
E: office@ldde.com W: www.ldde.com

NANOPIX SLIM FR1536

USER MANUAL

TABLE OF CONTENTS

SAFETY INSTRUCTIONS

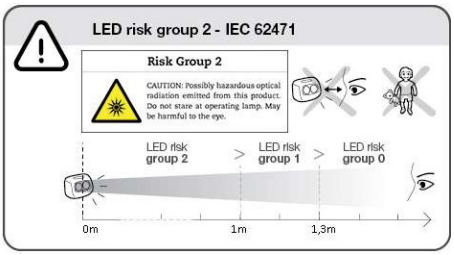
- Please read these safety instructions carefully before using the NANOPIX SLIM FR1536.
- Check the appropriateness of the planned use of the appliance.
- The NANOPIX SLIM FR1536 is not suitable for outdoor use (IP20).
- Never attempt to repair or dismantle the NANOPIX SLIM FR1536 yourself: opening or removing the inner covers can lead to electric shocks or other injuries.

- Always contact an authorised LDDE sales partner in the event of problems.
- Never reach into the appliance while it is in operation.
- Always unplug the appliance before moving or cleaning it.
- When installing the lighting systems in decorations, ensure that a sufficient distance and clearance of around 30 cm is maintained for adequate cooling and ventilation!

- Do not expose the NANOPIX SLIM FR1536 to strong vibrations and shocks.
- Protect the device from moisture and wetness. Ensure that no wet or damp parts come into contact with the device.
- Make sure that the appliance is not covered to ensure adequate ventilation.

- Never insert objects into openings in the housing, as they may come into contact with live parts and cause short circuits. There is a risk of electric shock or fire.
- If it can be assumed that safe operation is no longer possible, the appliance must be taken out of service. out of operation. This applies if:
  - the device shows visible damage.
  - appliance parts are loose or loosened.
  - connecting cables show visible damage.

- LDDE products are manufactured and supplied in accordance with Directive 2002/96/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE). To help protect the environment, dispose of your old appliance at your local recycling centre. Your dealer can provide you with further information on correct disposal.



WARRANTY AND LIABILITY

The warranty for the NANOPIX SLIM FR1536 is 24 months. The warranty covers the free rectification of defects that are demonstrably attributable to manufacturing defects.
Such defects shall be rectified exclusively by the manufacturer.

The warranty shall cease to apply in the event of

- Modifications and attempted repairs to the device by unauthorised persons.
- Damage due to interference by third parties.
- Damage due to non-compliance with the operating instructions.
- Connection to incorrect voltage.
- Incorrect operation or damage due to negligent or improper handling.

In particular, LDDE excludes all liability for damage to the device as well as consequential damage caused by
unsuitability, improper as

OPERATION

SETTINGS WITH LDDE REMOTE CONTROL

With a remote control, it is possible to make various changes to the basic settings and the DMX mode during operation.

Changes to the settings and/or DMX addresses affect
ALL LDDE devices that are connected to the DMX line!

Changing the settings

1. Please note that no DMX transmitting devices, such as a lighting console, are connected to this DMX line.
2. Connect the DMX cable between the NANOPIX SLIM FR1536 and the LDDE Remote Control.
3. Send the desired setting or DMX address.
4. After transmission, the LEDs of the NANOPIX SLIM FR1536 light up in the following colours.

Red	DMX / command invalid
Green	DMX in order
Blue	Programming successful

SETTINGS WITH BCD SWITCH

The settings of the NANOPIX SLIM FR1536 can be changed using the BCD switch on the back of the device. The device must be disconnected from the power supply for this.

To make changes, please proceed as follows.

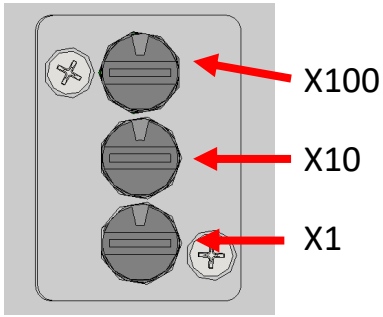
1. Disconnect the NANOPIX SLIM FR1536 from the power supply
2. Set the desired mode on the BCD switch.
3. Reconnect the NANOPIX SLIM FR1536 to the power supply.
4. The status LED and LEDs of the NANOPIX SLIM FR1536 light up blue for approx. 2 seconds.
5. Set the desired DMX address again.

If an invalid command is given via the remote control, the device lights up red.

SETTINGS

DMX ADRESS

The DMX address is set via three BCD switches. The device is set to start address 1 at the factory. Select a DMX address in your control unit and set the BCD switches to the desired address.



Example:

DMX Kanal: 125

X100 = 1
X10 = 2
X1 = 5

CHANNELMODE

You can choose between 9 DMX modes, each designed for different applications.

8-bit Modi

	Description	DMX channels	Remote command
Channelmode 1:	All LEDs together (special version)	1	901
Channelmode 2:	All LEDs together + strobe (special version)	2	902
Channelmode 8:	Colours	8	908
Channelmode 9:	Master + Colours	9	909
Channelmode 10:	Master + colours + strobe	10	910

16-bit Modi

	Description	DMX channels	Remote command
Channelmode 2:	16bit All LEDs together (special version)	2	903
Channelmode 3:	16bit All LEDs together + strobe (8bit) (special version)	3	904
Channelmode 16:	Colours 16bit	16	916
Channelmode 17:	Colours 16bit + strobe (8bit)	4	917

CHANNELMODE

CHANNELMODE 8-BIT

The following table shows the different modes available with 8-bit control and the DMX channels required for the corresponding mode.

DMX Chart

Channelmode 1	
	DMX
All LED´s	1

Channelmode 2	
	DMX
All LED´s	1
Strobe	2

Channelmode 8	
	DMX
Deep Red	1
Red	2
Amber	3
Lime	4
Green	5
Cyan	6
Blue	7
Royal Blue	8

Channelmode 9	
	DMX
Intensity	1
Deep Red	2
Red	3
Amber	4
Lime	5
Green	6
Cyan	7
Blue	8
Royal Blue	9
CCT (optional)	10

Channelmode 10	
	DMX
Intensity	1
Deep Red	2
Red	3
Amber	4
Lime	5
Green	6
Cyan	7
Blue	8
Royal Blue	9
Strobe	10

CHANNELMODE 16-BIT

The following table shows the different modes available with 16-bit control and the DMX channels required for the corresponding mode

DMX Chart

Channelmode 2	
	DMX
All LED´s	1
All LED´s Fine	2

Channelmode 3	
	DMX
All LED´s	1
All LED´s Fine	2
Strobe	3

Channelmode 16	
	DMX
Deep Red	1
Deep Red Fine	2
Red	3
Red Fine	4
Amber	5
Amber Fine	6
Lime	7
Lime Fine	8
Green	9
Green Fine	10
Cyan	11
Cyan Fine	12
Blue	13
Blue Fine	14
Royal Blue	15
Royal Blue Fine	16

Channelmode 17	
	DMX
Deep Red	1
Deep Red Fine	2
Red	3
Red Fine	4
Amber	5
Amber Fine	6
Lime	7
Lime Fine	8
Green	9
Green Fine	10
Cyan	11
Cyan Fine	12
Blue	13
Blue Fine	14
Royal Blue	15
Royal Blue Fine	16
Strobe	17

SETTINGS

PWM FREQUENCY

	Description	Remote command
1500Hz	PWM- frequency 1500 Hz	880
3000Hz	PWM- frequency 3000 Hz	881

STROBOSCOPE CHANNEL

DMX	Description
0-25	No strobe
26-228	Stroboscope 1Hz-25Hz
229-255	No Stroboskop

FADE TO ZERO

	Description	Remote command
OFF	With new DMX value (below DMX value 15) jumps directly to 0.	801
ON	With new DMX value (below DMX value 15) is dimmed to 0.	802

DIMMING CURVE

	Description	Remote command
Smooth	Smooth characteristic curve	923
Normal	Square characteristic curve	922
Linear	No characteristic curve	921

Status LED

The brightness of the status LED can be changed here.

	Description	Remote Befehl
0%	Status LED deactivated	850
5%	Status LED 10%	851
30%	Status LED 30%	852
100%	Status LED 100%	853

STANDALONE MODE

If no DMX is present for 1/3/5/10sec, the light is illuminated with the set brightness of the standalone mode

Description	Remote command
Switch off standalone mode	930
Switch on standalone mode	931
Apply brightness + colour	935
Standalone mode Delay 1s	936
Standalone mode Delay 3s	937
Standalone mode Delay 5s	938
Standalone mode Delay 10s	939

To set the colours for standalone mode, please proceed as follows:

1. Send with the remote control "930".
2. Set the desired brightness and colour for standalone mode.
3. Send "935".
4. Send "931"

Info:
Standalone mode and the safety light must be switched off,
to save a new colour and brightness.

SAFETY LIGHT

If all DMX values are set to 0, the Safety Light lights up with the set brightness.

Description	Remote command
Safety Light Off	860
Safety Light On	861
Safety Light accept current brightness	865

To set the colours for the Safety Light, please proceed as follows:

1. Send with the remote control "860".
2. Set the desired brightness and colour.
3. Send "865".
4. Send "861"

DMX RDM

Without having to go to the device, you can use RDM to localise it, determine its properties and status, assign it and set its operating status.

	Description	Remote command
ON	Switch on RDM	**820**
OFF	Switch off RDM	821

DMX INDIKATOR

	Description	Remote command
ON	If no DMX is present, the NPFR flashes red	**891**
OFF	DMX indicator deactivated	890

SOFTWARE VERSION

	Description	Remote command
ON	Software version is indicated by flashing	555

First, the front digit flashes correspondingly often at slow speed (2x for V2.x)
then the rear digit flashes correspondingly often at fast speed (4x for Vx.4).

RESET TO FACTORY DEFAULT

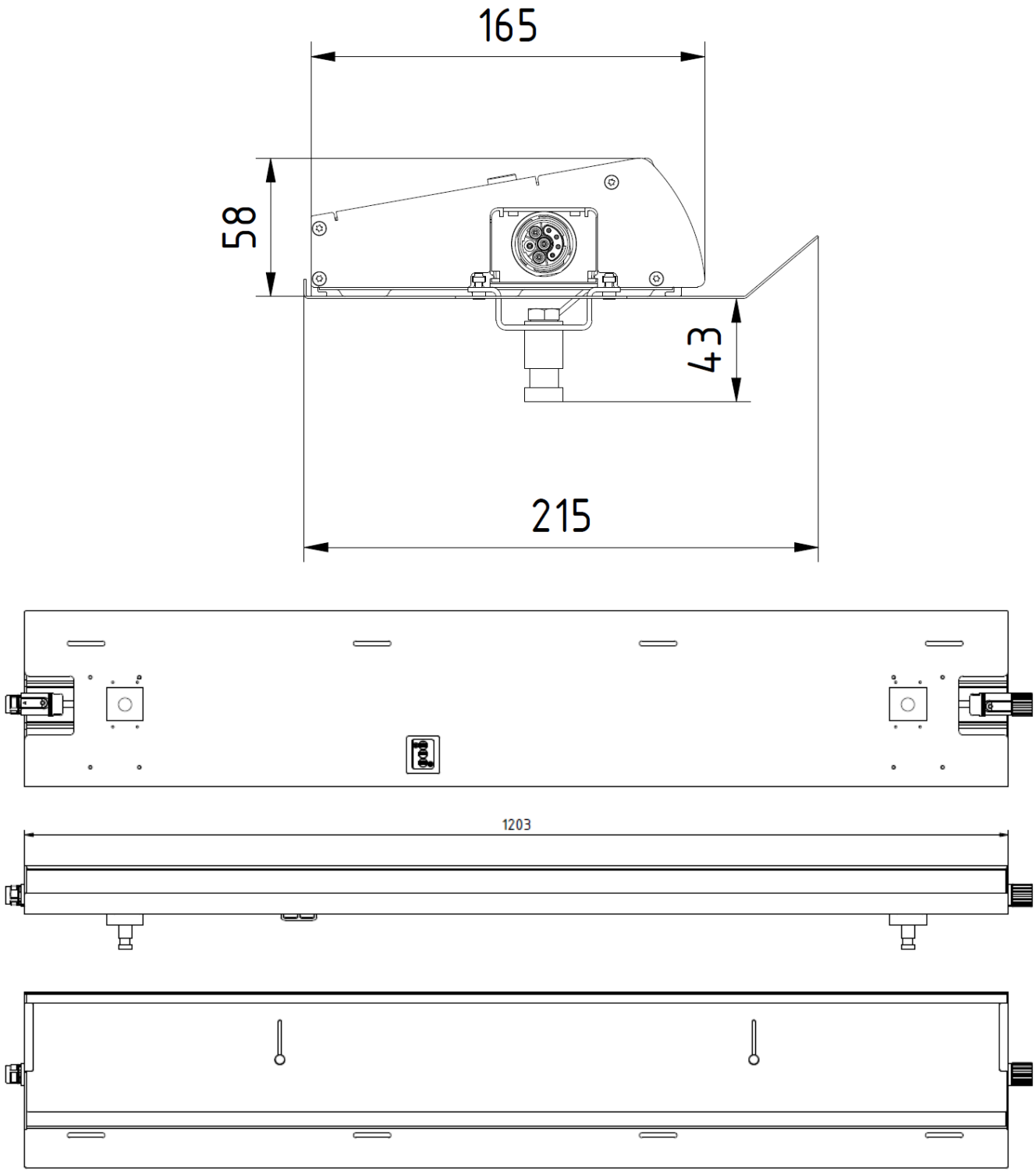
	Description	Remote command
Reset	Device is set to factory settings	666

Werkseinstellungen	
DMX start address	1
Channelmode	Ch10
Dimm curve	Normal
Safety Light	OFF
PWM frequency	3000 Hz
DMX Indikator	OFF
Standalone Mode	OFF
Standalone start time	5s
Fade to Zero	ON
Status Led	30%

TEMPERATURE CONTROL

From 60°C, the status LED starts to flash blue and the maximum brightness is reduced at the same time.

DIMENSIONS



TECHNICAL DATA

Dimensions / Weight

Lengh	1203 mm
Width	164 mm
Height	57 mm
Weight (without accessories)	5,6 kg

Control system

Protocol	DMX512/1990 RDM
Series Connection	max. 10 FR1636

Regulation

Control range	Continuous dimmer 0 - 100%
Resolution	8/16-bit
Frequency	1500Hz / 3000Hz
DMX-Channel	8/9/10/16/17
Configuration	BCD Schalter / Remote Control

Photometric information

Light source	LED-board - 768LEDs 0,5W 8 colours Royal Blue 450nm +/-3nm ca. 950 lm | Blue 470 +/-5nm, 1400 lm Cyan 508 +/-5nm, 2700 lm | Green 532 +/-3 nm 4400 lm Lime 567+/- 5nm 7400 lm | Amber 588 +/- 5 nm 4700 lm Red 625 +/- 5nm 1600 lm | deep red 655nm +/-5 ca. 1000 lm
Average service life	approx 30.000 Stunden

Connections

Input / output	Neutrik PowerCon XLR 5-pol

Electrical data

Input voltage range	100-240VAC | 50/60Hz
Maximum power consumption	130VA

Construction

Housing	Continuous cast aluminium profile
Colour	black
Minimum clearance in front of the LED	100mm
Minimum clearance for sufficient cooling	300mm
Cooling	passiv
Protection class	IP20

Safety standards

Certifications	CE, EN61000-3-2, EN 61000 3-3, EN 55015, EN 60529

Operating temperatures

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