# **NanoSD Player**

**User Manual** 







# Description

The **NanoSD Player** is a Stand-Alone DMX- or LED Pixel-Player.

A digital LED-Stripe can be connected directly at the output with up to 340 LED-Pixel.

Currently the following Pixel Led will be supported: MagiarLED III flex, MagiarLED II flex, DycoLED, TM1804, TM1812, WS2801, WS2811, LPD8806, UCS1903, APA101 (SuperLED), LPD1886 8Bit, LPD1886 12Bit

Alternatively a DMX-output for controlling DMX-capable devices is possible, too.

Via an integrated IR-sensor the NanoSD-Player can be remote controlled.

The programming occurs only via a Micro-SD-card. So, all settings are available in accordance to the specific project.

The user-friendly configuration via the DMX-Configurator allows fast and uncomplicated settings of all parameters and the creation of the replaying programs.

# Data sheet

Power supply:	5-12V (from LED-Stripe or external power supply) ~ 300mA @ 5V / ~ 120mA @ 12V
Output:	Controlling signal for digital LED-Stripe (max. 340 Pixel) or DMX-signal with 512 channels
Digital LED-Stripes:	MagiarLED III flex, MagiarLED II flex, DycoLED, TM1804, TM1812, WS2801, WS2811, LPD8806, UCS1903, APA101 (SuperLED), LPD1886 8Bit, LPD1886 12Bit
Input:	IR-sensor
Connection:	5 pin screw terminal (removable)
Program memory:	Micro-SD-Card (4GB included)
Operation:	Button and LED-Display at the device
Function:	RGB-Filter / Firmware-Update-Function
Dimensions:	82 x 32 x 27 mm



# Connection



V+	POWER 5-12V DC	
GND	POWER GND	
GND	LED GND	or DMX GND
CLK	LED CLK	or DMX -
DATA	LED DATA	or DMX +

Output assignment for several LED-Stripe types:

LED-Stripe type	CLK	DATA	
MagiarLED III	CLK	DATA	
MagiarLED II	CLK	DATA	
TM1804		DATA	
TM1812		DATA	
WS2801	CLK	DATA	
WS2811		DATA	
LPD8803	CLK	DATA	
Dyco LED	CLK	DATA	
UCS1903		DATA	
APA-101	CLK	DATA	
LPD1886		DATA	
DMX512	DMX-	DMX+	

# Example for connecting Stripes with two controlling signals (CLK+DATA)



## Example for connecting Stripes with one controlling signal (DATA)



#### **Example for connecting DMX-devices**





The NanoSD Player has a button as well as a LED to operate at the device.

By pushing the button the programs will be called in in order.

Furthermore the **NanoSD** Player has an IR-sensor which is placed at the devices front. Via an IR-remote control (accessory) further functions can be executed.

# **Micro-SD-Card**

The **NanoSD Player** needs fort he program memory a Micro-SD-Card. This will be slided-in underneath the IR-Sensor with the contact downwards.

By inserting the Micro-SD-Card slide it in until a clicking sound is heard.

For removing the Micro-SD-Card please push again until a clicking sound is heard. The card will be pressed out ca. 3mm and can be removed.

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Use only Micro-SD-Cards or Micro-SDHC-Cards with class4 or higher.

The Micro-SD-Card must be formatted with the File-System FAT16 or FAT32.

It is recommend not to change the DMX-Configurator names.



### **Configuration / Create programs**

The settings configuration and the program creation occur user-friendly via the Windows-program DMX-Configurator.

The DMX-Configurator 4PIXX is available in the current version as download on <a href="http://www.dmx4all.de/software.html">www.dmx4all.de/software.html</a> .

The procedure for creating programs is available in the User Manual for the DMX-Configurator.

After creating the programs the export can be carried out under menu  $Project \rightarrow Export \rightarrow NanoSD$ :

Device			
Port settings			
Mode:	DMX OUT	•	
LED-Stripe type:	MagiarLED III flex	<b>v</b>	
Color sequence:	R-G-B	7	
Power-On defaults			
Brightness::	Set brightness to 100%	•	
Default		Load se	ettings from file
Export NanoSD Player S	etting		
Export scenes from proje	ct		
	_oop		
Export only Steps in I			
Export only Steps in I Export text memo Create folder			
Export only Steps in I Export text memo Create folder			

The range *NanoSD Settings* contains the NanoSD Player device-settings. This will be explained on the following pages.

*Load settings from File* reads out the devices settings from an existing file which is created before. Please enter here the config.cfg file.

Which elements should be exported will be specified by the export-possibilities to be marked.

Export NanoSD Settings	The devices settings will be exported
Export scenes from project	The scenes included in the project will be exported
Export only Steps in Loop	Only the steps which are included in one loop will be
	exported
Export text memo	A Memo.txt file will be exported
Create folder	Creates the exported files in one folder which is
	generated. This option allows serving the exported
	project files on a medium.

Under *Location* you have to specify the path where the files should be written.



#### NanoSD Player

Select directly the SD-Card and create no folder to use the SD-card directly afterwards in the NanoSD Player!

*Export* starts the export procedure.

#### **Device settings**

The **NanoSD Player** can output directly a controlling signal for digital LED-Stripes or out put a DMX-Signal.

The setting MODE specifies if DMX or a digital LED-Stripe is to be controlled.

If *PixxControl OUT* is selected for controlling digital LED-Stripes, the *LED-Stripe type* as well as the color sequence (**Color sequence**) must be selected too.

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#### **Execute the Firmware-Update**

The **NanoSD Player** has a Firmware-Update-function which allows transferring prospective Firmware-versions. A Firmware-Update occurs via the SD-Card.

Please procedure as follows:

- Copy the Firmware-file (firmware.bin) on a SD-card
- Turn off the NanoSD Player
- Plug in the SD-card into the device
- Push the button and hold
- Turn on the NanoSD Player
- The LED flashes 10x
- Meanwhile release the button
- Wait until the Update has finished
- This will be signalled due to fast LED-flashes
- Turn off NanoSD Player

The Firmware-file (firmware.bin) can be deleted from the SD-card.



# Accessory

MagiarLED III flex Stripe 72 LEDs / 3m



Digital LED Pixel Stripe LPD1886 - 5m



Power supply 12V





# Notes



# **CE-conformity**



This assembly (board) is controlled by a microprocessor and uses high frequency (8MHz). To get the characteristics of the assembly in relation to the CE-conformity, an installation in a compact metal casing is necessary.

# **Risk-Notes**

You purchased a technical product. Conformable to the best available technology the following risks should not excluded:

**Failure risk:** The device can drop out partially or completely at any time without warning. To reduce the probability of a failure a redundant system structure is necessary.

**Initiation risk:** For the installation of the board, the board must be connected and adjusted to foreign components according to the device paperwork. This work can only be done by qualified personnel, which read the full device paperwork and understand it.

**Operating risk:** The Change or the operation under special conditions of the installed systems/components could as well as hidden defects cause to breakdown within the running time.

**Misusage risk:** Any nonstandard use could cause incalculable risks and is not allowed.

**Warning:** It is not allowed to use the device in an operation, where the safety of persons depend on this device.





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