MiniPixx 3.5 RDM
MiniPixx 4.5 RDM
MiniPixx 4.12 RDM

User manual

DMX RDM ✓

DMX4ALL ®

For your own safety, please read this user manual and warnings carefully before installation.

Soldering work may only be carried out by a certified specialist in order to prevent damage to the product and injury to people.
If acidic or leaded solder, soldering grease or acidic flux etc. has been used for soldering and/or if the board has been improperly soldered, all warranty claims will be voided and no repair will be carried out.

Contents

Description

The **MiniPixx RDM** is the smallest DMX controller for digital LED stripes, which is available in different versions.
The individual pixels of the digital LED strip can be controlled in the simplest way via DMX.

Different versions
The MiniPixx RDM is available in 3 different versions. Depending on the LED stripe, a version 3.5 / 4.5 (5V) or 4.12 (12V) is available.

170 RGB-, 128 RGBW- or 512 single color pixel
By controlling via DMX, 170 pixels (RGB), 128 pixels (RGBW) or 512 pixels (single color) can be controlled individually.

RDM Support
The MiniPixx RDM allows an RDM supported configuration via DMX.

Pixel-Sequencer
With the pixel sequencer different effects can be generated.
Only a few DMX channels are necessary to customize the settings for the effects.

Small Design
Due to the small size of only 12mm x 25mm, the MiniPixx RDM can be mounted directly at the beginning of the LED stripe.

Selectable LED-Chip
The LED chip used in the connected digital LED strip can be selected. This allows the use with various digital LED stripes.

Settable Color Replay
The color sequence for RGB as well as RGBW LED stripes is adjustable for universal use.

SingleColor-Option
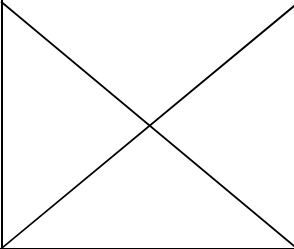Via a DMX universe up to 512 pixels can be controlled in single color. For this, the SingleColor Option must be selected, in which each pixel needs only one channel.

Settable Pixel Group
The MiniPixx RDM supports pixel groups with an adjustable length. Each pixel group behaves like a single pixel that is controlled via 3 DMX channels (for RGB). This way channels can be saved in longer installations.

Data sheet

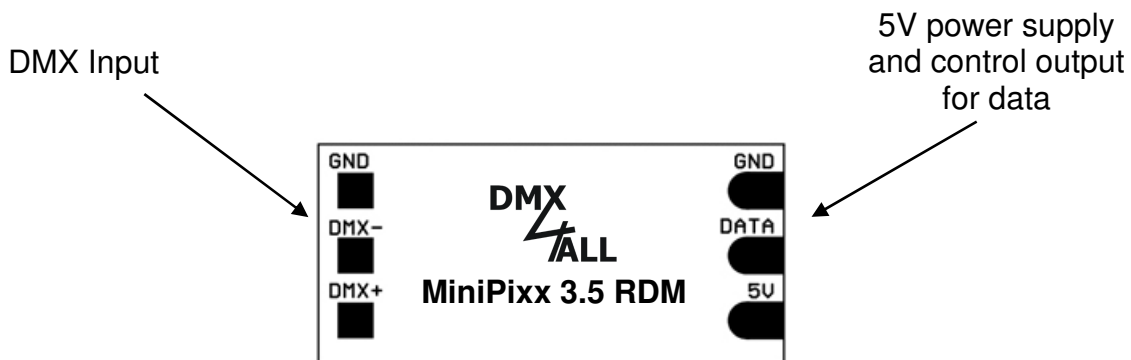|	MiniPixx 3.5 RDM	MiniPixx 4.5 RDM	MiniPixx 4.12 RDM
Power supply:	5V DC / 50mA	5V DC / 50mA	12V DC / 50mA
Protocol:	DMX512 / RDM		
DMX channels:	up to 512 DMX channels		
Output:	Digital control signal		
Output Protocol: (LED type)	APA-104 GS8208 INK1002, INK1003 LPD1886 8Bit, LPD1886 12Bit SK6812, SK6822 TLS3001 8Bit TM1804, TM1812, TM1814, TM1829 UCS1903, UCS1912, UCS2903, UCS2912, UCS9812 WS2811, WS2812(B), WS2813, WS2815, WS2818		APA-101, APA-102 DycoLED PB3, DycoLED PC5 LC8808(B) LPD1101, LPD6803, LPD8806 MagiarLED III flex SK9822 WS2801
Color sequence:	RGB (order setable) SingleColor white SingleColor red SingleColor green SingleColor blue RGBW		
Pixel group:	1 – 127 Pixel		
Max. number Pixel/Pixel groups:	170 Pixel (RGB) 128 Pixel (RGBW) 512 Pixel (SingleColor)		
Dimensions:	12mm x 25mm	12mm x 25mm	12mm x 31mm

⚠️ The power supply of the MiniPixx RDM must match to the power supply of the digital LED stripe!
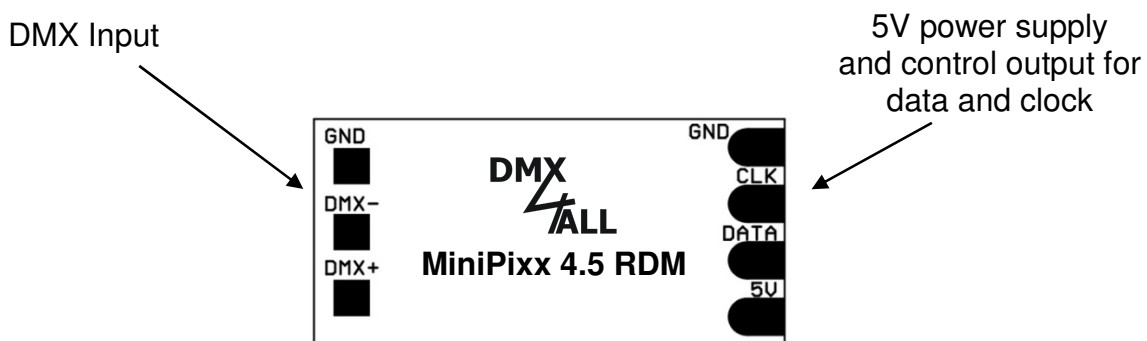
Content

1x   MiniPixx RDM

1x   Quick guide german and english

Connection

MiniPixx 3.5 RDM

DMX Input

5V power supply
and control output
for data

```
GND                    GND
       DMX
       4ALL
DMX-                   DATA
       MiniPixx 3.5 RDM
DMX+                   5V
```

MiniPixx 4.5 RDM

DMX Input

5V power supply
and control output for
data and clock

```
GND                    GND
       DMX             CLK
       4ALL
DMX-                   DATA
       MiniPixx 4.5 RDM
DMX+                   5V
```

MiniPixx 4.12 RDM

DMX Input

12V power supply
and control output for data
and clock

```
GND                    GND
       DMX             CLK
       4ALL
DMX-                   DATA
       MiniPixx 4.12 RDM
DMX+                   12V
```
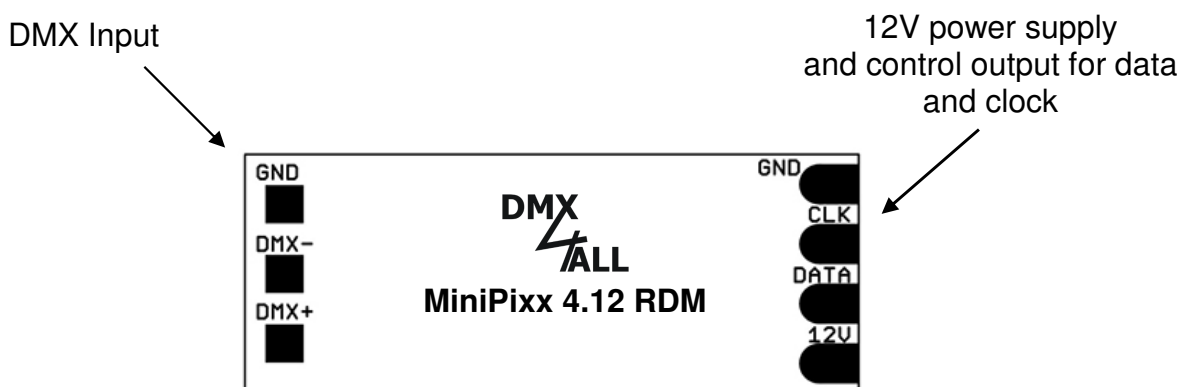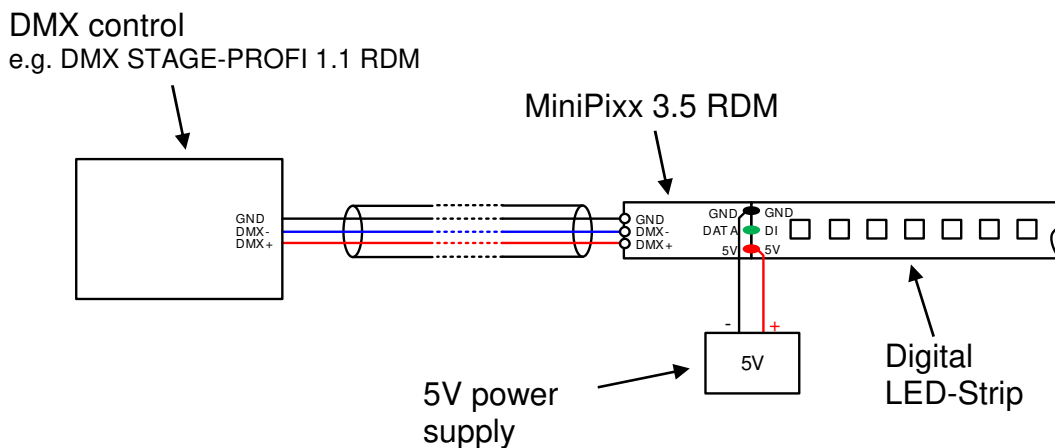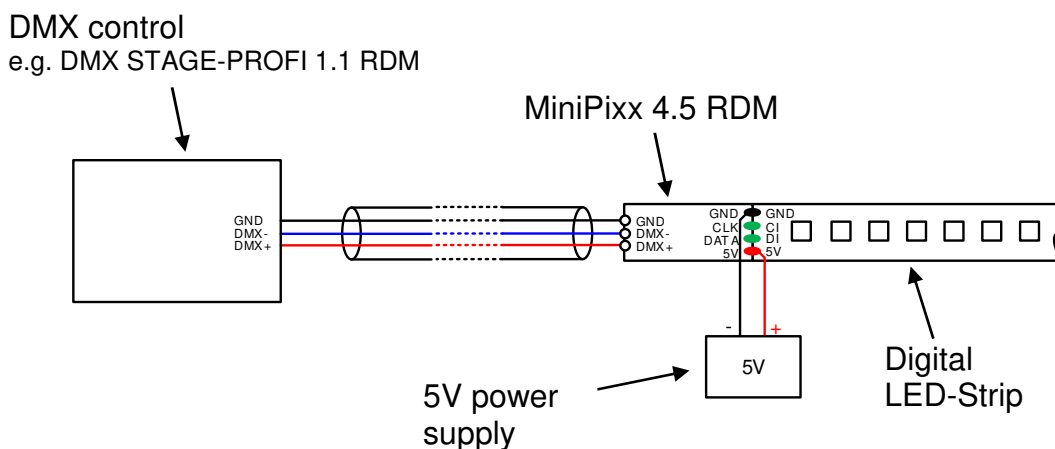
Connection examples

5V-Strip with one control signal (DATA) at MiniPixx 3.5 RDM

APA-104 / SK6812 / INK1002 / INK1003 / LPD1886 / TLS3001 / TM1804 / TM1812 / TM1814 / TM1829 / UCS1903 / UCS1912 / UCS2903 / UCS2912 / UCS9812 / WS2811 / WS2812(B)

DMX control
e.g. DMX STAGE-PROFI 1.1 RDM

MiniPixx 3.5 RDM

GND
DMX-
DMX+

GND
DMX-
DMX+

GND   GND
DATA   DI
5V   5V

5V

- +

5V power
supply

Digital
LED-Strip

5V-Strip with data (DATA) and clock signal (CLK) at MiniPixx 4.5 RDM

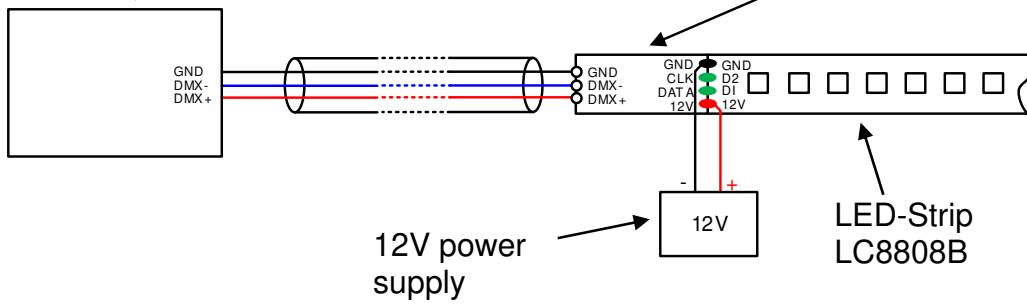APA-101 / APA-102 / DycoLED PB3 / DycoLED PC5 / LPD6803 / LPD6806 / LPD8803 / SK9822 / WS2801

DMX control
e.g. DMX STAGE-PROFI 1.1 RDM

MiniPixx 4.5 RDM

GND
DMX-
DMX+

GND
DMX-
DMX+

GND   GND
CLK   CI
DATA   DI
5V   5V

5V

- +

5V power
supply

Digital
LED-Strip

12V-Strip with one control signal (DATA) at MiniPixx 4.12 RDM

LC8808B

DMX control
e.g. DMX STAGE-PROFI 1.1 RDM

D2 with CLK and DI with DATA
connect with MiniPixx 4.12 RDM

GND
DMX-
DMX+

GND
DMX-
DMX+

GND   GND
CLK   D2
DATA   DI
12V   12V

12V power
supply

12V

LED-Strip
LC8808B

GS8208

DMX control
e.g. DMX STAGE-PROFI 1.1 RDM

D1 leave open and D0 with DATA
connect to MiniPixx 4.12 RDM

GND
DMX-
DMX+

GND
DMX-
DMX+

GND   GND
CLK   D0
DATA   D1
12V   12V

12V power
supply

12V
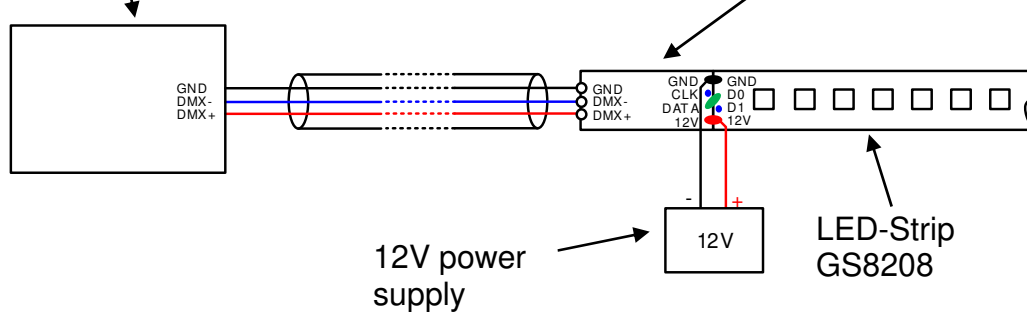
LED-Strip
GS8208

5V-Stripes with one control signal (DATA) and one back up signal

⚠️ For the connection of the LED stripe to the controller, the specifications of the LED strip manufacturer must be noted. The illustrations are based on the LED stripes offered or tested by us.

SK6822

D0 and D1 at Stripe with DATA at MiniPixx 3.5 RDM connected

GND
DMX-
DMX+

GND
DATA
5V

GND
D0
D1
5V

5V

LED-Strip
SK6822

WS2813

BI at Stripe with GND and DI with DATA at MiniPixx 3.5 RDM connected

GND
DMX-
DMX+

GND
DATA
5V

GND
BI
DI
5V

5V
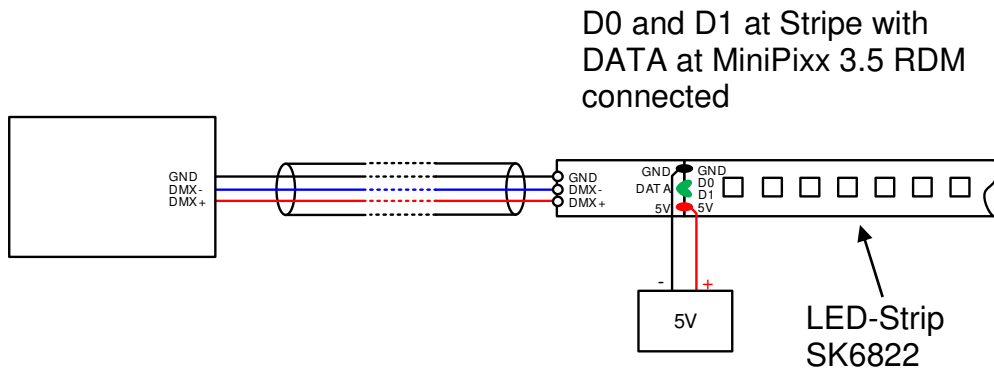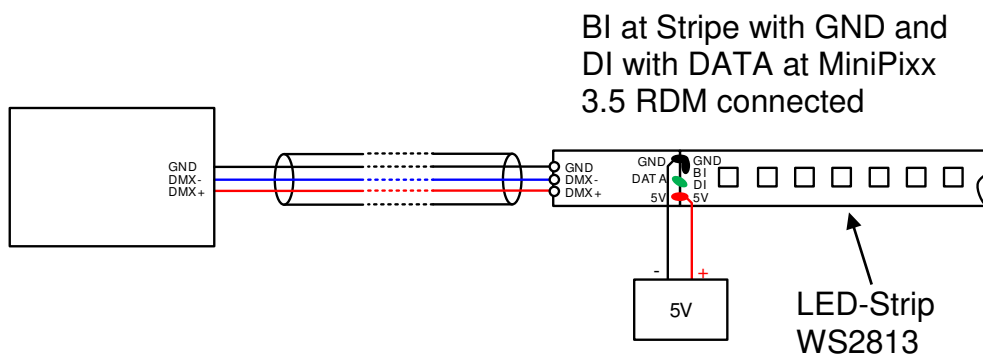
LED-Strip
WS2813

Power supply for digital LED-Stripes

Generally digital LED-Stripes are operated with a power supply of 5V.
Relatively high currents for the complete installation are the result.

A voltage drop occurs on the digital LED-Stripe, so the brightness reduces little by little. This is the reason for different color reproduction in case of using RGB/RGBW-Stripes. Therefore, it is necessary to re-supply the voltage regularly.

The voltage/current supply can be provided by several decentralized power supply units or by one central power supply unit. The cross-sections of the supply lines to the digital LED stripe must be enough dimensioned !

Connecting LED-Stripes with multiple power supplys

If several power supply units are used, they can be installed decentral.
This means that the supply lines can be shorter.
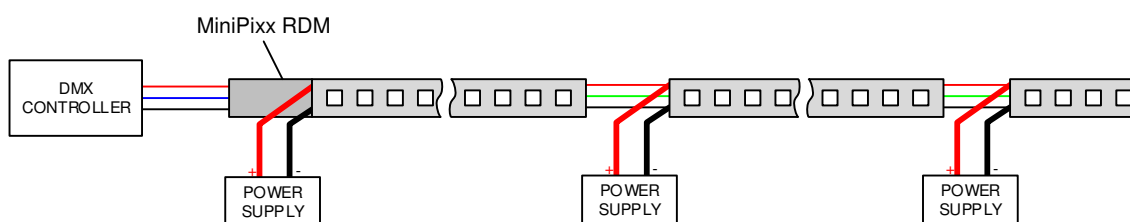
In case of long distances within the installation the PixxRangeExtender 5V or 12V can be used to purify the control signal and to isolate single areas.
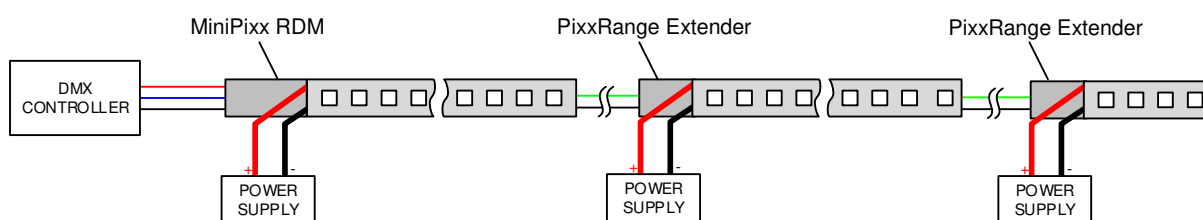
Connecting LED-Stripes with one power supply

The supplies must be calculated adequately in its dimension if only one power supply with the needed high power is provided. To ensure a low voltage drop on the cable route this is necessary.
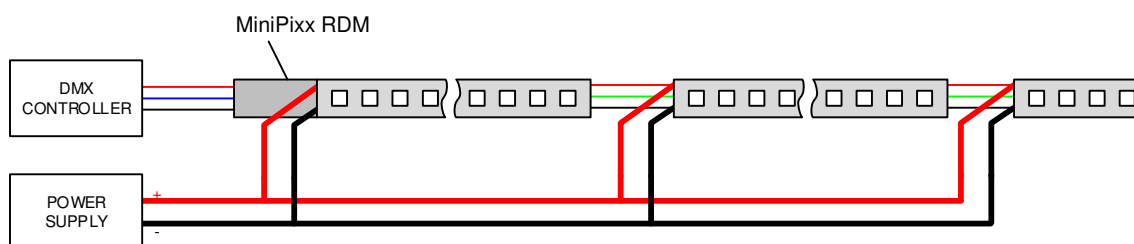
DMX-Addressing

The DMX start address specifies from which DMX channel the **MiniPixx RDM** processes the DMX data.

With the RDM parameter DMX_START_ADDRESS the setting of the DMX start address is settable.

The DMX channel assignment is described in section Pixel control via DMX.

LED-Type

The MiniPixx RDM is able to control different LED types and uses the fitting LED protocol.

Via the RDM parameter PIXEL_TYPE occurs the LED-Types setting.

LED Color

The color or color sequence can be set for the selected LED type.

The LED color is set via the RDM parameter COLOR_SEQUENCE.

RGB

For RGB LED stripes, the color sequence can be set.
The control of each LED pixel can be done via <u>three</u> DMX channels.

RGBW

RGBW LED Stripes are available in different versions. The color sequence RGBW or RGBRGBRGBWW is adjustable.

RGBW → The signal output takes place for each pixel one by one
RGBRGBRGBWWW → The signal output is always done for 3 pixels, first with the RGB values, then the white values

Each LED pixel is controlled via four DMX channels.

Single color

The MiniPixx RDM also controls single color LED stripes, e.g. digital LED stripes with white LEDs, or only one color for digital RGB LED stripes.

In this case, each pixel is controlled with only <u>one</u> DMX channel.

Pixel groups

The **MiniPixx RDM** supports pixel groups with an adjustable length (1-127).

Settings for the pixel group are available as the RDM parameter GROUP_SIZE.

Each pixel group behaves like a single pixel which is controlled via 3 DMX channels for RGB / 4 DMX channels for RGBW.

According to the selected LED protocol different number of pixel at the output (controlled pixel) can be connected:

LED protocol	max. pixel/pixel groups	max. controlled pixel
RGB		
APA-101	170	3071
APA-102	170	1534
APA-104	170	512
DycoLED PB3	170	3071
DycoLED PC5	170	192
GS8208	170	512
INK1002 / INK1003	170	512
LC8808(B)	170	512
LPD1101	170	3071
LPD6803	170	3071
LPD1886 8Bit	170	512
LPD1886 12Bit (8Bit controlled)	170	341
LPD1886 12Bit (12Bit controlled)	170	341
LPD8806	170	2047
MagiarLED III	170	1534
SK6812	170	512
SK6822	170	512
SK9822	170	1534
TLS3001 8Bit	170	558
TM1804	170	512
TM1812	170	512
TM1829	170	512
UCS1903 / UCS1912	170	512
UCS2903 / UCS2912	170	512
UCS9812 (8Bit controlled)	170	292
UCS9812 (16Bit controlled)	170	292
WS2801	170	2048
WS2811 / WS2812 (B) / WS2813	170	512
RGBW		
SK6812	128	384
TM1814	128	382
UCS2912	128	384

The set pixel group is considered for the control via DMX as well as for the output of the demo programs and the Pixel-Sequencer.

Pixel Control

The **MiniPixx RDM** can control each pixel individually via DMX.

For this each RGB-Pixel needs 3 DMX channel, each RGBW pixel needs 4 DMX channels or single color pixel needs 1 DMX channel.
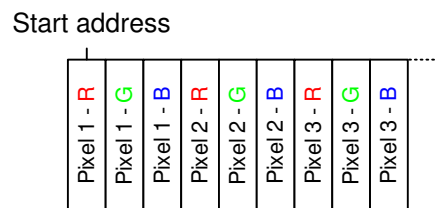Red, green, blue and white optionally each needs one DMX channel.

The assignment of the DMX channels depends on the Personality.

Personality 1: Color-Channels

Starting from the start address the DMX channels are assigned to the pixels:

RGB

Start address

| Pixel 1 - R | Pixel 1 - G | Pixel 1 - B | Pixel 2 - R | Pixel 2 - G | Pixel 2 - B | Pixel 3 - R | Pixel 3 - G | Pixel 3 - B | ...... |

RGBW

Start address

| Pixel 1 - R | Pixel 1 - G | Pixel 1 - B | Pixel 1 - W | Pixel 2 - R | Pixel 2 - G | Pixel 2 - B | Pixel 2 - W | Pixel 3 - R | ...... |

Single color

Start address

| Pixel 1 | Pixel 2 | Pixel 3 | Pixel 4 | Pixel 5 | Pixel 6 | Pixel 7 | Pixel 8 | Pixel 9 | ...... |
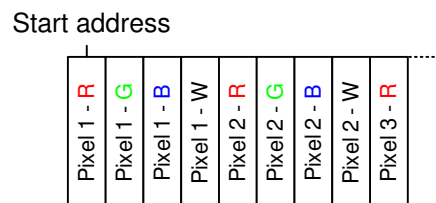
Personality 2: Color-Channels + Demo-Programs

An additional MODE channel allows to form pixel groups (pixel sections) and to call the demo programs via DMX.
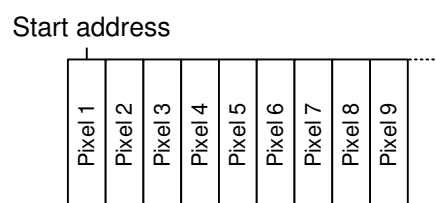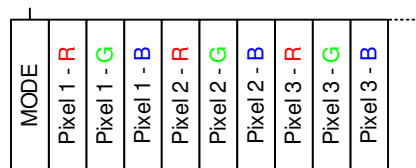
In this Personality the DMX channel 1 specifies the pixel section length with the same color (DMX value 1-127), where the maximum length is 127 pixels.

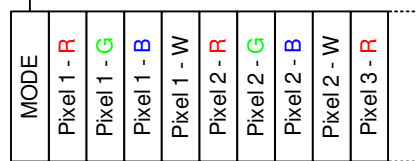The following DMX addresses are reserved for the color setting.
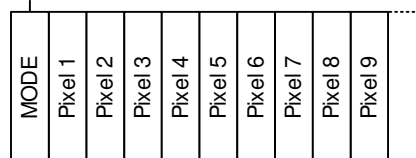
RGB

Start address

| MODE | Pixel 1 - R | Pixel 1 - G | Pixel 1 - B | Pixel 2 - R | Pixel 2 - G | Pixel 2 - B | Pixel 3 - R | Pixel 3 - G | Pixel 3 - B | ...... |

RGBW

Start address

| MODE | Pixel 1 - R | Pixel 1 - G | Pixel 1 - B | Pixel 1 - W | Pixel 2 - R | Pixel 2 - G | Pixel 2 - B | Pixel 2 - W | Pixel 3 - R | ...... |

Single color

Start address

| MODE | Pixel 1 | Pixel 2 | Pixel 3 | Pixel 4 | Pixel 5 | Pixel 6 | Pixel 7 | Pixel 8 | Pixel 9 | ...... |

Channel	Function	Value	(RGB)	(RGBW)	(single color)
1	Mode	0	Pixel section length = All Pixel		
		1-127	DMX value = Pixel section length		
		128-255	See demo programs via DMX		
2	Color	0-255	Pixel 1 red	Pixel 1 red	Pixel 1
3		0-255	Pixel 1 green	Pixel 1 green	Pixel 2
4		0-255	Pixel 1 blue	Pixel 1 blue	Pixel 3
5		0-255	Pixel 2 red	Pixel 1 white	Pixel 4
:::		:::	:::	further color values for the following pixels	

Personality 3: Color-Channels + Pixel-Sequencer

An additional EFFECT channel and REPEAT channel allow forming pixel groups (pixel sections), repeating the output as well as calling the Pixel-Sequencer.
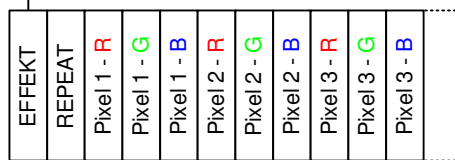
In this mode DMX channel 1 determines the length of the pixel section with the same color (DMX value 1-127), the maximum length is 127 pixels.

DMX channel 2 specifies after how many pixels the output should be repeated.

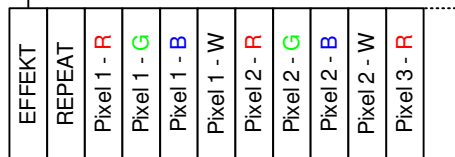The following DMX addresses are reserved for the color setting.
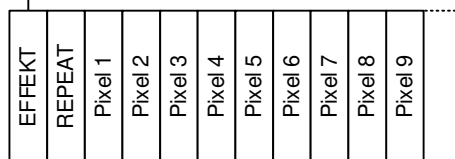
RGB

Start address

EFFEKT	REPEAT	Pixel 1 - R	Pixel 1 - G	Pixel 1 - B	Pixel 2 - R	Pixel 2 - G	Pixel 2 - B	Pixel 3 - R	Pixel 3 - G	Pixel 3 - B

RGBW

Start address

EFFEKT	REPEAT	Pixel 1 - R	Pixel 1 - G	Pixel 1 - B	Pixel 1 - W	Pixel 2 - R	Pixel 2 - G	Pixel 2 - B	Pixel 2 - W	Pixel 3 - R

single color

Start address

EFFEKT	REPEAT	Pixel 1	Pixel 2	Pixel 3	Pixel 4	Pixel 5	Pixel 6	Pixel 7	Pixel 8	Pixel 9

Channel	Function	Value	(RGB)	(RGBW)	(Single color)
1	Effect	0	Pixel section length = All Pixel		
		1-127	DMX value = Pixel section length		
		128-255	see Pixel Sequencer		
2	Repeat	0	No repeat		
		1-255	To repeated length of section		
3	Color	0-255	Pixel 1 red	Pixel 1 red	Pixel 1
4		0-255	Pixel 1 green	Pixel 1 green	Pixel 2
5		0-255	Pixel 1 blue	Pixel 1 blue	Pixel 3
6		0-255	Pixel 2 red	Pixel 1 white	Pixel 4
:::		:::	:::	further color values for the following pixels	

Demo programs

The predefined demo programs in the **MiniPixx RDM** are selected via DMX channel 1 (MODE channel) from DMX value 128.

The replayed color is to set via DMX channel 2.

The speed is to set via DMX channel 3.

Channel	Function	Value	
1	Mode	0-127	See pixel control
		128-135	8 color mix
		136-143	R-G-B
		144-151	RGB color star
		152-159	Single color star
		160-167	Wave 1
		168-175	Wave 2
		176-183	Snake
		184-191	Blowing
		192-199	Running Point 1
		200-207	Running point 2
		208-215	Blink
		216-223	Color change
		224-247	RESERVED
		248-255	Rainbow
2	Color	0-31	White
		32-63	Red
		64-95	Green
		96-127	Blue
		128-159	Yellow
		160-191	Pink
		192-223	Cyan
		224-255	(Off)
3	Speed	0	STOP
		1-255	Slow → Fast

Pixel-Sequencer

The Pixel Sequencer is designed to create various effects.

With only a few DMX channels the settings are made to individualize the effects.

The first DMX channels define effect, speed, brightness, effect length and direction.

This is followed by the number of colors with which the effect is to be reproduced and the color information. Depending on the effect, up to 16 colors are possible.

If a pixel group is set, it will be considered when the effect is outputted.

The following table shows the assignment of DMX values for the Pixel-Sequencer with RGB pixels:

| Channel	Function	DMX value	Description	
1	Effect	0-127	See pixel control	
		128-135	Scroll	Up to 16 colors
		136-143	Knight Rider	2 colors
		144-151	Stars [1]	Up to 16 colors
		152-159	Wave	Up to 16 colors
		160-167	2 Color Wave	2 colors
		168-175	3 Color Move	3 colors
		176-183	Caterpillar	2 colors
		184-191	Shake	2 colors
		192-199	Falling Point	2 colors
		200-207	Running Points	3 colors
		208-215	Blink	2 colors
		216-223	Blow	Up to 16 colors
		224-231	Color Ramp	2 colors
		232-239	Shift Colors	Up to 16 colors
		240-247	Fade Moving Colors	Up to 16 colors
		248-255	Rainbow	no colors
2	Speed	0	STOP	
		1-255	Slow → Fast	
3	Brightness	0-255	0% dark → 100% bright	
4	Effect length	0-255	Depends on effect	
5	Effect direction	0-63	Move left	
		64-127	Move left /right [2]	
		128-191	Move right/left [2]	
		192-255	Move right	
6	Number of colors	0-16	Number of the following RGB-Colors	
7	Color settings	0-255	color 1 - red	
8		0-255	color 1 - green	
9		0-255	color 1 - blue	
10		0-255	color 2 - red	
11		0-255	color 2 - green	
12		0-255	color 2 - blue	
: : :			: : :	

[1] The Stars Effect needs two DMX channels for the effect length, the following DMX channels move by one DMX channel !

[2] Only for the Running Points / Color Ramp effects

Scroll-Effect

The scroll effect pushes the colors through the LED pixels in the selected length one after the other LED pixel.

Example: Length = 3 / Colors = 3 (red / green / blue)
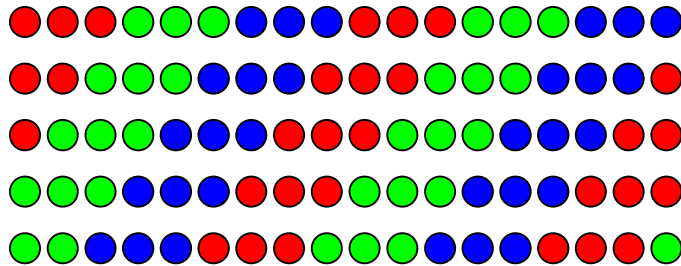
Knight Rider

The Knight Rider effect creates a point of light with a tail that is moved from right to left and back.

⚠ The Knight Rider effect requires two DMX channels for the effect length, which is specified via DMX channels 4 and 5!

Channel	Function			
1	Effect			
2	Speed			
3	Brightness			
4	Effect length 1		➔	Length after the effect is repeated
5	Effect length 2		➔	Length of the tail
6	Direction	0-127		All effects in the same direction
		128-255		Every second effect in the opposite direction of the effect
ab 7	Color settings		➔	First color for background
			➔	Second color for effect

Example: Length1 = 14 / Length 2 = 5 / Colors = 2 (black / red)
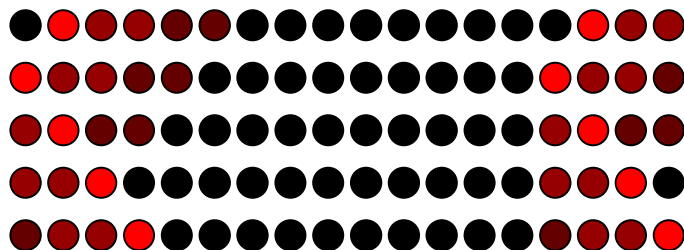
Stars-Effect

The Stars effect creates points that trail a tail.

⚠️ The Stars-Effect needs two DMX channels for the effect length, the following DMX channels move by one DMX channel !

Channel	Function		
1	Effect		
2	Speed		
3	Brightness		
4	Effect length1	➔	Distance between two points
5	Effect length1	➔	Tail length
6	Effect direction		
7	Number of colors		
from 8	Color settings		

Example: Length 1= 9 / Length 2 = 3 / Colors = 3 (red / green / blue)
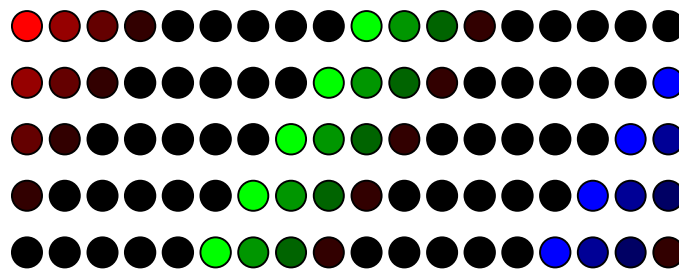
Wave-Effect

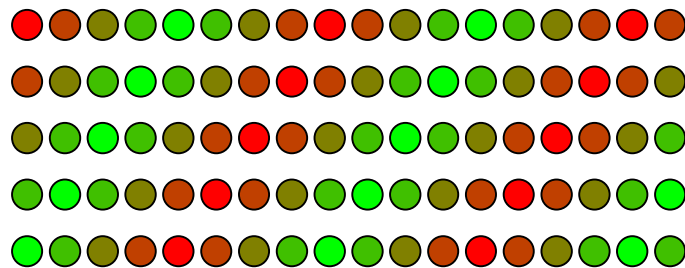The Wave-Effect generates light waves rising up to the maximum and then fall away.

Example: Length = 10 / Colors = 2 (red / white)
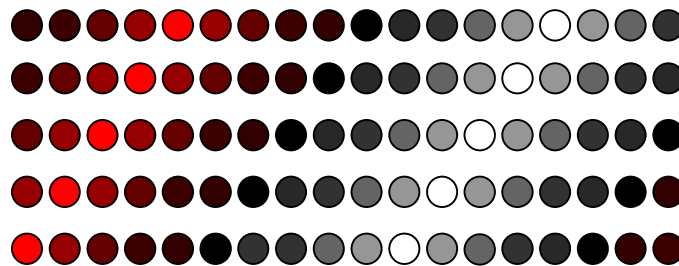
2 Color-Wave-Effect

The 2 Color-Wave-Effect generates color crossings between 2 colors in the defined length.

Example: Length = 5 / Colors = 2 (red / green)

3 Color-Move-Effect

The 3 Color-Move-Effect generates a fix defined combination of three free selectable colors.

The whole effect length is 64 pixels with several sections in which the three colors are outputted alternately.

Caterpillar-Effect

The Caterpillar-Effect builds up one light point up to a defined length and then reduces it again.
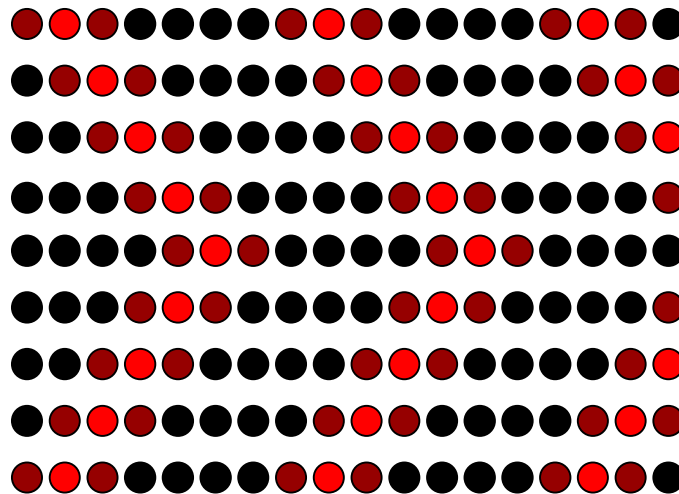
Example: Length = 4 / Colors = 2 (black / red)
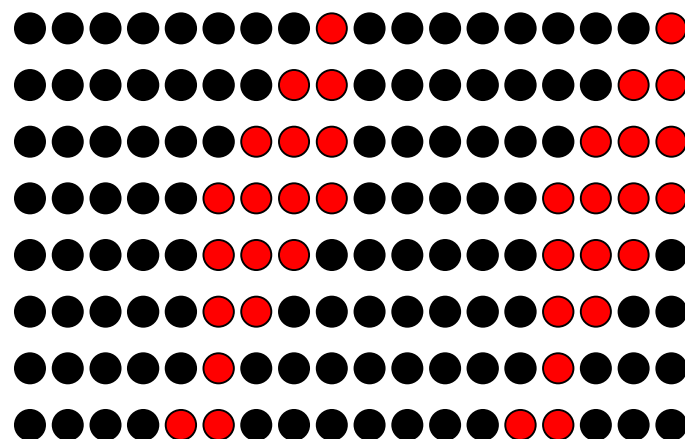
Shake-Effect

The Shake-Effect generates a light point with reducing intensity in the defined length and pushes it to the right and to the left
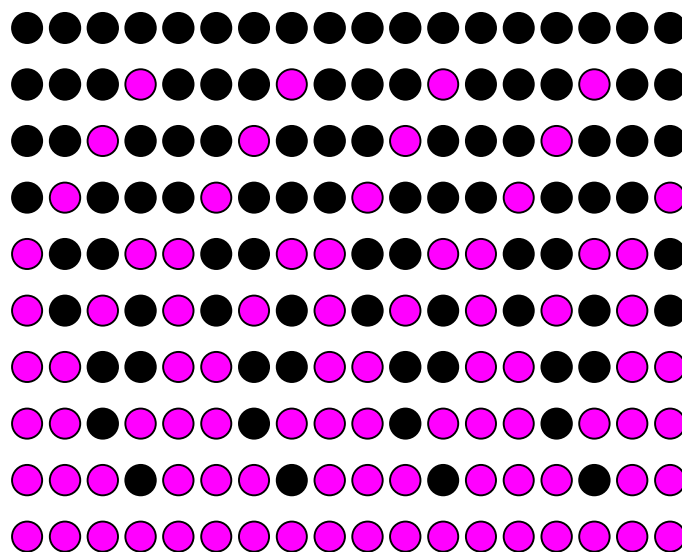
Example: Length = 4 / Colors = 2 (black / red)

Falling Point- Effect

The Falling Point-Effect generates one pixel which is moved fort he defined length and stops at the end.

Example: Length = 4 / Colors = 2 (black / pink)

Running Points-Effect

The Running Points-Effect generates 2 moving points. One of them is moving twice as fast as the other. The background color and the one color for each of the moving points can be set. The playback length is fixed.

The effect direction can be set independently for both points:

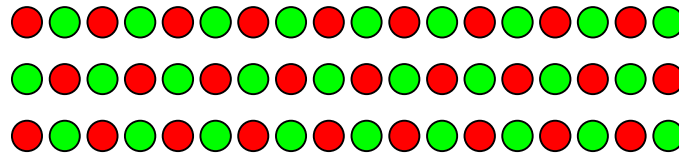| 5	Effect direction	0-63	Point 1 left / Point 2 left
		64-127	Point 1 left / Point 2 right
		128-191	Point 1 right / Point 2 left
		192-255	Point 1 right / Point 2 right

Example: Length = 1 / Colors = 3 (black / green / red)
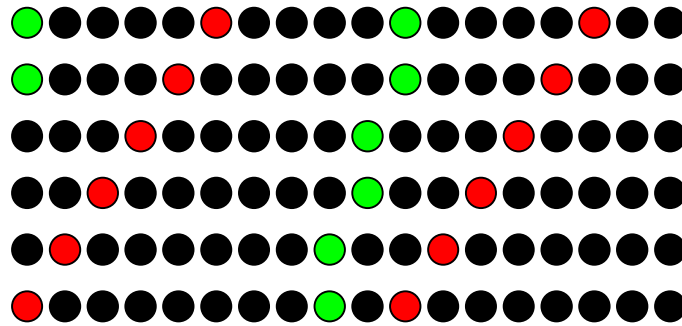
Blink-Effect

The Blink-Effect generates 2 alternating colors with the defined length and switch these back and forth.
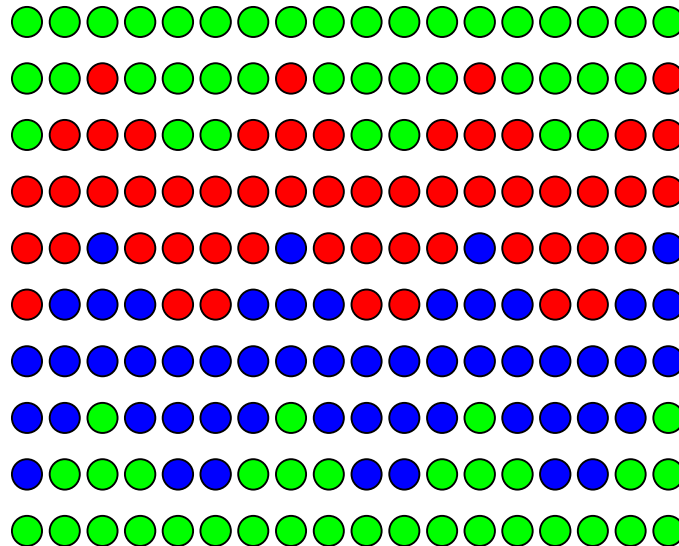
Example: Length = 1 / Colors = 2 (red / green)

Blow- Effect

The Blow-Effect alternates between the colors, as more and more pixels, starting from one point, switch into the new color.

Example: Length = 1 / Colors = 2 (red / green)

Ramp- Effect

The Ramp-Effect generates a color ramp with the defined length between the two selected colors and moves it.

The direction of the effect can be set independently for both color ramps:

5	Effect direction	0-63	Color ramp 1 left / Color ramp 2 left
		64-127	Color ramp 1 left / Color ramp 2 right
		128-191	Color ramp 1 right / Color ramp 2 left
		192-255	Color ramp 1 right / Color ramp 2 right

Example: Length = 8 / Colors = 2 (red / blue)
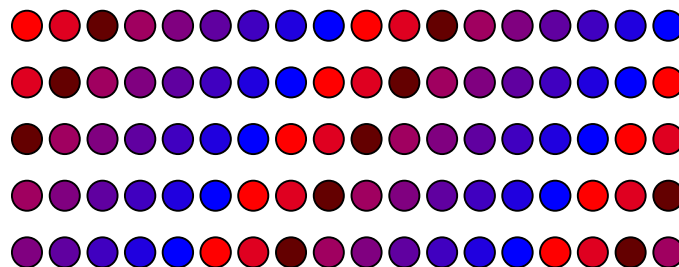
Shift Color- Effect

The Shift Color-Effect pushes the single colors one after the other with the defined lengths in the output.

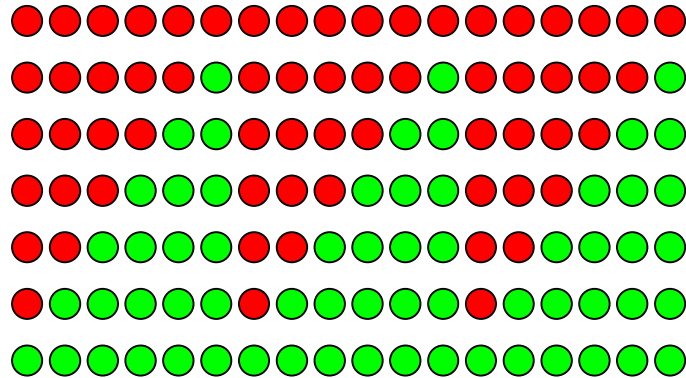Example: Length = 6 / Colors = 2 (red / green)

Fade Moving Colors- Effect

The Fade Moving Colors-Effect generates a color gradient with the defined colors and the specified length greater than 0 and moves this color gradient.

Example: Length = 4 / Colors = 2 (blue / yellow)

The Fade Moving Colors effect with a length equal to 0 controls all LED pixels equally. The colors are faded softly one after the other.

Example: Colors = 3 (red / green / blue)

Rainbow- Effect

The Rainbow-Effect generates a RGB gradient (Rainbow) with the defined length and moves it.

Adjust settings via DMX

The settings of the **MiniPixx RDM** are made via DMX values when the power supply is switched on.

⚠️ To accept and save the settings after switching the power supply the DMX-Values must be set exactly. A difference of the values causes that the values are not accepted!

To set the MiniPixx RDM please follow the following steps:

- Turn off the power supply
- Connect the DMX-Signal with the MiniPixx RDM
- Adjust the DMX-Value according to the following table
- Turn on the power supply of the LED-Stripe
- Wait ca. 10 seconds until the settings are stored
- Turn off the power supply

DMX Channel	DMX Value	Description
1	55	
2	77	
3	10	WS2811 / WS2812(B) / WS2813 /APA-104 / INK1002 / INK1003 / SK6812
	20	TM1804
	30	TM1803 / TM1812
	40	TM1829
	50	LPD1886 - 8Bit
	60	LPD1886 - 12Bit (8Bit controlled)
	70	UCS1903 / UCS1912 / UCS2903 / UCS2912
	80	UCS9812 (8Bit controlled)
	90	UCS9812 (16Bit controlled)
	110	LPD1886 - 12Bit (12Bit controlled)
	150	MagiarLED III flex
	160	LPD1101 / LPD6803 / DycoLED PB3 / APA-101
	170	LPD8803 / LPD8806
	180	WS2801
	190	APA-102 / SK9822
	200	DycoLED PC5
4	10	R-G-B
	20	R-B-G
	30	G-R-B
	40	G-B-R
	50	B-R-G
	60	B-G-R
	70	Single Color WHITE
	80	Single Color RED
	90	Single Color GREEN
	100	Single Color BLUE
	110	RGBW
5	1-127	Length of pixel group
6	22	Personality 1: Color-Channels
	222	Personality 2: Color-Channels + Demo-Programs
	111	Personality 3: Color-Channels + Pixel-Sequencer
7	0-255	DMX-Start L
8	0-255	DMX-Start H DMX-Start address = DMX-Start L + (DMX-Start H x 256) DMX-Start address must be in the range 1-511.

Examples:

LED-Stripe: APA-104
Color order: R-G-B
Length of pixel group: 2
Mode-Channel: OFF
DMX start address: 1

To set DMX values: 55 77 10 10 2 22 1 0

LED-Stripe: SK6812
Color order: R-G-B
Length of pixel group: 1
Mode-Channel: OFF
DMX start address: 100

To set DMX values: 55 77 10 10 2 22 100 0

RDM

RDM is the short form for **R**emote **D**evice **M**anagement.

As soon as the device is within the system, device-dependent settings can be made remotely via RDM command due to the uniquely assigned UID. A direct access to the device is not necessary.

This device supports the following RDM commands:

Parameter ID	Discovery Command	SET Command	GET Command	ANSI/ PID
DISC_UNIQUE_BRANCH	✓			E1.20
DISC_MUTE	✓			E1.20
DISC_UN_MUTE	✓			E1.20
DEVICE_INFO			✓	E1.20
SUPPORTED_PARAMETERS			✓	E1.20
PARAMETER_DESCRIPTION			✓	E1.20
SOFTWARE_VERSION_LABEL			✓	E1.20
DMX_START_ADDRESS		✓	✓	E1.20
DEVICE_LABEL		✓	✓	E1.20
MANUFACTURER_LABEL			✓	E1.20
DEVICE_MODEL_DESCRIPTION			✓	E1.20
IDENTIFY_DEVICE		✓	✓	E1.20
FACTORY_DEFAULTS		✓	✓	E1.20
DMX_PERSONALITY		✓	✓	E1.20
DMX_PERSONALITY_DESCRIPTION			✓	E1.20

Parameter ID	Discovery Command	SET Command	GET Command	ANSI/ PID
SERIAL_NUMBER[1]			✓	PID: 0xD400
DMX_FAIL_MODE[1]		✓	✓	PID: 0xD403
PIXEL_TYPE[1]		✓	✓	PID: 0xD410
GROUP_SIZE[1]		✓	✓	PID: 0xD412
COLOR_SEQUENCE[1]		✓	✓	PID: 0xD413

1) Manufacturer-dependent RDM control commands: (MSC - Manufacturer Specific Type)

Manufacturer-dependent RDM control commands:

SERIAL_NUMBER
PID: 0xD400

Outputs a text description (ASCII text) of the serial number of the device.

GET   Send: PDL=0
       Receive: PDL=33   (33 Byte ASCII-Text)

DMX_FAIL_MODE
PID: 0xD403

Sets behavior in case of DMX fail.

GET   Send: PDL=0
       Receive: PDL=1   (1 Byte Function)

SET   Send: PDL=1   (1 Byte Function)
       Receive: PDL=0

Parameter	Function
0	Hold
1	Off
2	Save current values and use on DMX fail

PIXEL_TYPE
PID: 0xD410

Sets the used LED-Pixel-Type.

GET   Send: PDL=0
             Receive: PDL=1   (1 Byte PIXEL_TYPE_ID)

SET   Send: PDL=1   (1 Byte PIXEL_TYPE_ID)
             Receive: PDL=0

PIXEL_TYPE_ID	Function
0	MagiarLED II
1	MagiarLED III
2	DycoLED PB3
3	TM1804
4	WS2801
5	WS2811
6	LPD8806
7	UCS1903 / UCS1912
8	APA-102
9	TM1812
13	LPD1886 8Bit
14	LPD1886 12Bit (8bit controlled)
15	WS2812
17	TM1829 High Speed
18	UCS9812 (8bit controlled)
19	UCS9812 (16bit controlled)
20	LPD6803
21	INK1002
22	INK1003
23	UCS2903 / UCS2912
25	LPD1886 12Bit (12bit controlled)
26	SK6812
27	APA-104
29	DycoLED PC5
30	TM1829 Low Speed
31	TM1814
32	SK9822
33	APA-101
34	TLS3001 8Bit
37	SK6822
40	GS8208
41	WS2815
42	WS2818
43	LC8808(B)

GROUP_SIZE
PID: 0xD412

Sets the size of the pixel group.

GET Send: PDL=0
Receive: PDL=1 (1 Byte size of pixel group)

SET Send: PDL=1 (1 Byte size of pixel group)
Receive: PDL=0

Parameter	Function
1-127	size of pixel group
254	All

COLOR_SEQUENCE
PID: 0xD413

Sets the color sequence used.

GET Send: PDL=0
Receive: PDL=1 (1 Byte COLOR_SEQUENCE_ID)

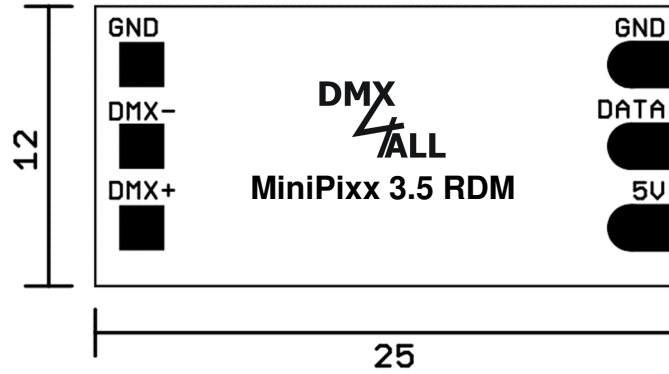SET Send: PDL=1 (1 Byte COLOR_SEQUENCE_ID)
Receive: PDL=0

COLOR_SEQUENCE_ID	Function
0	R-G-B
1	R-B-G
2	G-R-B
3	G-B-R
4	B-R-G
5	B-G-R
6	WHITE Single color
7	RED Single color
8	GREEN Single color
9	BLUE Single color
10	RGBW
11	RGBRGBRGBWWW

Factory Reset

Via the RDM parameter FACTORY_RESET the **MiniPixx RDM** can be reset into the delivery conditions.

Dimension

MiniPixx 3.5 RDM

MiniPixx 4.5 RDM
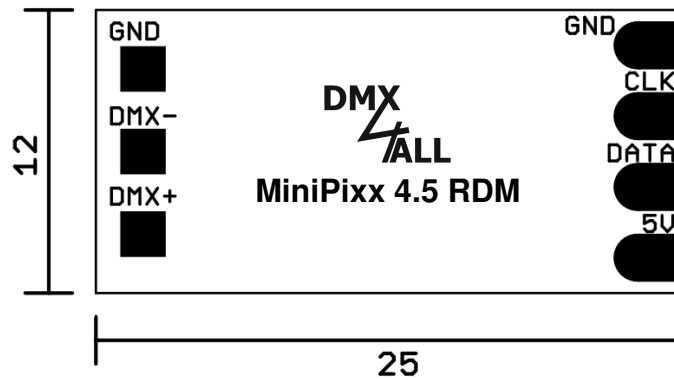
MiniPixx 4.12 RDM
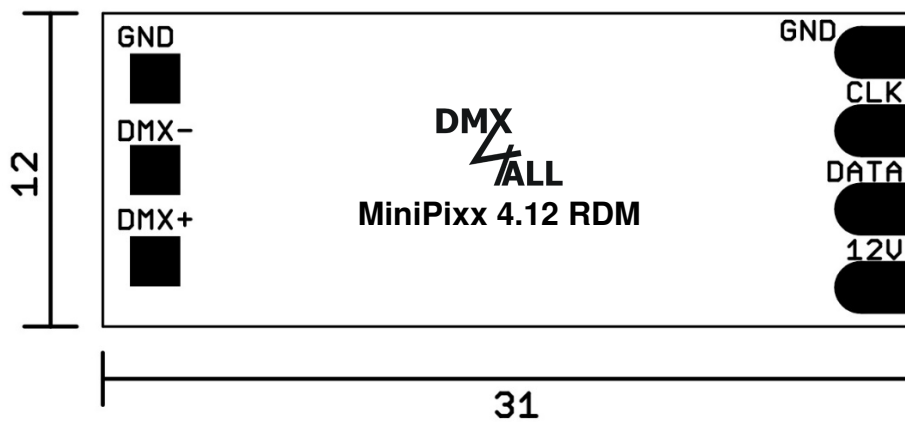
All details in mm

Equipment

Digital LED-Stripes / Pixel Stripes
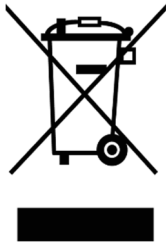Different LED-Stripes

Power supply

CE-Conformity

This assembly (board) is controlled by a microprocessor and uses high frequency. In order to maintain the properties of the module with regard to CE conformity, installation into a closed metal housing in accordance with the EMC directive 2014/30/EU is necessary.

Disposal

Electronical and electronic products must not be disposed in domestic waste. Dispose the product at the end of its service life in accordance with applicable legal regulations. Information on this can be obtained from your local waste disposal company.

Warning

This device is no toy. Keep out of the reach of children. Parents are liable for consequential damages caused by nonobservance for their children.

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.

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

DMX4ALL ®

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