DMX-Splitter 4 RDM

User Manual











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

Contents

Description	3
Data Sheet	4
Contents	4
Model Overview	5
Connection	6
LED display	7
RDM filter	7
RDM	8
Dimensions	10
Accessories	
CE-Conformity	12
Disposal	12
Risk-Notes	13



Description

The **DMX-Splitter 4 RDM** is a compact DMX and RDM distributor that makes a DMX input signal available again at four galvanically isolated outputs.

4 galvanically isolated outputs

The DMX-Splitter 4 RDM is a compact DMX and RDM distributor that makes a DMX input signal available again at four galvanically isolated outputs.

DMX and RDM

In contrast to pure DMX splitters, the RDM information is passed in both directions in addition to the DMX signal.

RDM filter

When the RDM filter is switched on, all RDM information are filtered out and no longer passed on to the outputs. This can prevent malfunction / flickering of non-RDM-capable devices.

Settings possible via RDM

The DMX-Splitter 4 RDM is recognized as an independent RDM device and settings can be made via RDM.

Extremely light construction

Extremely light DC/DC converters are used for galvanic isolation.

Power supply via one power supply unit

The power supply occurs via one power supply unit. The voltage range is between 8V up to 24V.

3 RGB-LEDs

Three RGB LEDs clearly indicate the current operating status.

Switchable LED displays

The LED displays on the DMX-Splitter 4 RDM can be switched off via RDM command (DISPLAY_LEVEL) or time-controlled. This is particularly helpful on stages to avoid disturbing "points of light".

Top hat rail mounting available

Suitable for the DMX-Splitter 4 RDM the DIN rail housing 700 is available as accessory.



Data Sheet

Power supply: 8-24V DC

Power consumption: 200mA@12V / 130mA@24V (no load)

Protocol: DMX512

RDM

Input: 1x DMX512 / RDM

Output: 4x DMX512 / RDM

galvanically isolated

RDM filter: Can be switched on / off

Connections: Screw terminals

Dimensions: 64,2mm x 82mm

Contents

- 1x DMX-Splitter 4 RDM
- 1x Quick guide german and english



Model Overview

The different models of the **DMX-Splitter** series provide a different range of functions and are available in different versions.

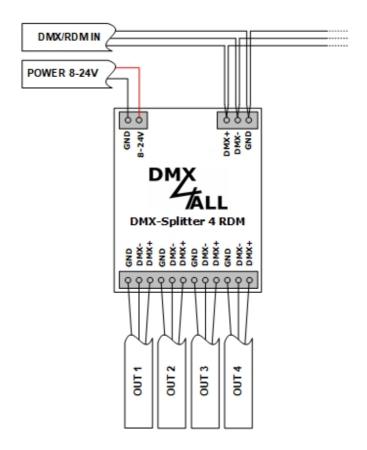
Model	DMX-Splitter 4	DMX-Splitter 4 RDM	DMX-Splitter 4 RDM+	DMX-Splitter 6	DMX-Splitter 6+	
Version	Board	Board	Mounted Device	Board	Mounted Device	
Protocol	DMX512	DMX512 / RDM	DMX512 / RDM	DMX512	DMX512	
Power supply	8-24V DC	8-24V DC	8-24V DC	8-24V DC	8-24V DC	
Outputs	4	4	4	6	6	
Touch control	×	×	✓	×	*	
RDM	×	✓	✓	×	*	
RDM-Filter	×	✓	✓	×	*	
RGB Status LED	×	✓	√	✓	✓	
RGB DMX LED	×	✓	✓	×	*	
RGB RDM LED	×	√	✓	×	*	
Disconnectable LED Display	×	√	√	×	×	
Top hat rail mounting	×	×	√	×	✓	

Not available in this version

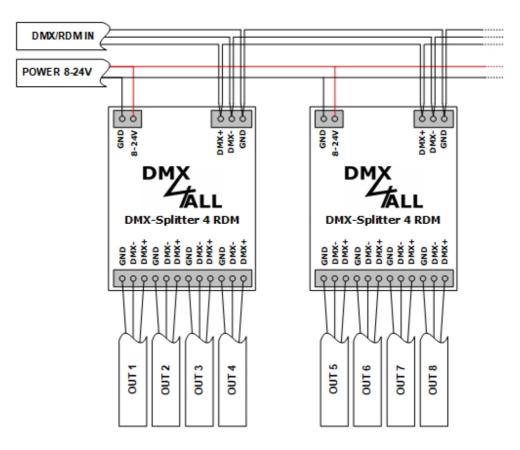
[✓] Available in this version



Connection



If more than 4 outputs are needed, several DMX-Splitter 4 RDM can be combined as follows:





LED display

The DMX-Splitter 4 RDM has three RGB display LEDs.

STATUS LED

OFF Power supply not connected /

The display is in MUTE

GREEN Device ready for use

RED → GREEN → BLUE Device shows RDM Identify

DMX LED

OFF The display is in MUTE

RED DMX signal is not received

GREEN DMX signal is received

RED → GREEN → BLUE Device shows RDM Identify

RDM LED

OFF RDM data does not exist /

The display is in MUTE

RED RDM-Filter ist eingeschaltet

BLUE RDM data is available

RED → GREEN → BLUE Device shows RDM Identify

RDM filter

When the RDM filter is switched on, all RDM information are filtered out and no longer passed on to the outputs. This can prevent malfunction / flickering of non-RDM-capable devices.

The RDM filter can only be activated for all outputs.

The RDM filter is switched on and off by briefly pressing the RDM FILTER ENABLE / DISABLE button.

If the RDM filter is switched on, the RDM LED lights up red continuously. If the RDM filter is switched off, the RDM LED only briefly lights up blue if RDM data is present.



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 occur 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
DISPLAY_LEVEL		✓	✓	E1.20



Parameter ID	Discovery Command	SET Command	GET Command	ANSI/ PID
SERIAL_NUMBER ¹⁾			✓	PID: 0xD400
DISPLAY_AUTO_OFF1)		✓	✓	PID: 0xD401

¹⁾ Manufacturer depending RDM control commands (MSC - Manufacturer Specific Type)

Manufacturer depending RDM control commands:

SERIAL NUMBER

PID: 0xD400

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

GET Send: PDL=0

Receive: PDL=21 (21 Byte ASCII-Text)

DISPLAY AUTO OFF

PID: 0xD401

Sets the time after which the display is switched off (DISPLAY_LEVEL = 0).

Valid values are: 0 - NO AUTO OFF

600 - 1 minute 1200 - 2 minutes 1800 - 3 minutes 2400 - 4 minutes 3000 - 5 minutes 3600 - 6 minutes 4200 - 7 minutes 4800 - 8 minutes 5400 - 9 minutes

GET Send: PDL=0

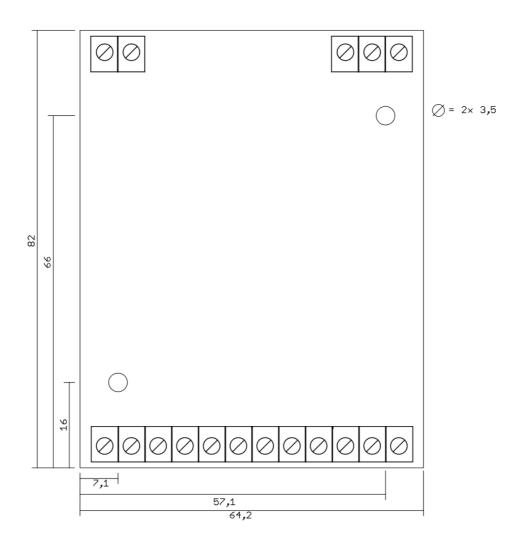
Receive: PDL=2 (1 Word)

SET Send: PDL=2 (1 Word)

Receive: PDL=0



Dimensions





Accessories

Top hat rail mounting 700



Power supply 12V





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.

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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