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DM-2512 DMX
Merge

BOTEX DM-2512 DMX Merge User Manual

BOTEX DM-2512 DMX Merge

Product Information

Specifications

- Product Name: DMX Merge DM-2512 DMX Manager
- Date: 09.12.2024
- ID: 172666 (V5)
- Features: DMX manager with the following features:
    - Merge multiple DMX signals
    - Distribute one DMX signal to multiple DMX chains
    - Extend a DMX chain
    - 19 rack-mountable

Product Usage Instructions

Safety Instructions

Intended use: This device is intended for merging multiple DMX signals, distributing one DMX signal to multiple DMX chains, and extending a DMX chain. Use the device only as described in the user manual.

Safety: Risk of injury and choking hazard for children. Danger to life due to electric current. Do not remove any covers as there are high voltages inside. Only use the device with all safety equipment intact.

Installation and Starting Up

1. Unpack and carefully check for any transportation damage before use.
2. Retain the equipment packaging for future use.
3. Use original packaging or suitable packaging material for transportation or storage to protect the product against vibration, dust, and moisture.

FAQ

- **Q: Can this device be used without mounting it in a rack?**
    - A: Yes, the DMX Merge DM-2512 DMX Manager can be used without rack-mounting, but ensure it is placed securely on a stable surface.
- **Q: Is it possible to connect multiple DMX chains to this device simultaneously?**
    - A: Yes, the device is designed to handle multiple DMX chains simultaneously for efficient signal management.

General information

This document contains important instructions for the safe operation of the product. Read and follow the safety instructions and all other instructions. Keep the document for future reference.
Make sure that it is available to all those using the product. If you sell the product to another user, be sure that they also receive this document.
Our products and documentation are subject to a process of continuous development. They are therefore subject to change. Please refer to the latest version of the documentation, which is ready for download under **www.thomann.de**.

Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this document

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – high-voltage.
	Warning – danger zone.

Safety instructions

Intended use

This device is intended for merging multiple DMX signals, for distributing one DMX signal to multiple DMX chains and for the extension of a DMX chain. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use. This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this \device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Risk of injury and choking hazard for children! Children can suffocate on packaging material and small parts. Children can injure themselves when handling the device. Never allowchildren to play with the packaging material and the device. Always store packaging material out of the reach of babies and small children. Always dispose of packaging material properly when it is not in use. Never allow children to use the device without supervision. Keep small parts away from children and make sure that the device does not shed any small parts (such knobs) that children could play with.

DANGER!
Danger to life due to electric current!

Within the device there are areas where high voltages may be present. Never remove any covers. There are no

user-serviceable parts inside. Do not use the device when covers, safety equipment or optical components are missing or damaged

NOTICE!
Damage to the external power supply due to high voltages!

The device is powered by an external power supply. The external power supply can be damaged if it is operated with the incorrect voltage or if high voltage peaks occur. In the worst case, excess voltages can also cause a risk of injury and fires. Make sure that the voltage specification on the external power supply matches the local power grid before plugging in the power supply. Only operate the external power supply from professionally installed mains sockets that are protected by a residual current circuit breaker (FI). Ensure that the power cord plug is easily accessible at all times if it is the only device to safely disconnect the device from the mains supply. As a precaution, disconnect the power supply from the power grid when storms are approaching or it the device will not be used for a longer period.

NOTICE!
Damage to the device due to use of unsuitable external power supplies!

If the device is operated with an unsuitable external power supply, the device can be damaged by overvoltage or incorrect polarity. If things go badly, using an unsuitable power supply can also cause a risk of injury and fire. Only use the external power supply designated for the device or an equivalent external power supply with identical parameters. If in doubt, compare the voltage specifications on the external power supply and the polarity (+/-) with the specifications in this manual and printed on the device. Voltage and polarity must always match.

NOTICE!
Risk of fire due to covered vents and neighbouring heat sources!

If the vents of the device are covered or the device is operated in the immediate vicinity of other heat sources, the device can overheat and burst into flames. Never cover the device or the vents. Do not install the device in the immediate vicinity of other heat sources. Never operate the device in the immediate vicinity of naked flames

NOTICE!
Damage to the device if operated in unsuitable ambient conditions!

The device can be damaged if it is operated in unsuitable ambient conditions. Only operate the device indoors within the ambient conditions specified in the "Technical specifications" chapter of this user manual. Avoid operating it in environments with direct sunlight, heavy dirt and strong vibrations. Avoid operating it in environments with strong temperature fluctuations. If temperature fluctuations cannot be avoided (for example after transport in low outside temperatures), do not switch on the device immediately. Never subject the device to liquids or moisture. Never move the device to another location while it is in operation. In environments with increased dirt levels (for example due to dust, smoke, nicotine or mist): Have the device cleaned by qualified specialists at regular intervals to prevent damage due to overheating and other malfunctions.

NOTICE!
Possible staining due to plasticiser in rubber feet!

The plasticiser contained in the rubber feet of this product may react with the coating of the floor and cause permanent dark stains after some time. If necessary, use a suitable mat or felt slide to prevent direct contact between the product's rubber feet and the floor.

Features

DMX manager with the following features:

- Four operating modes: HTP, Backup, Merge and LTP
- 2 × 3-pin DMX input on the front panel, 2 × 3-pin DMX input on the rear panel (not usable in parallel)
- 1 × 3-pin DMX output on the front panel, 1 × 3-pin DMX output on the rear panel (not usable in parallel)
- 19″ rack-mountable

Installation and starting up

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.
Create all connections while the device is off. Use the shortest possible high-quality cables for all connections. Take care when running the cables to prevent tripping hazards.

Rack mounting

The unit has been designed for rack mounting in a standard 19-inch rack; it occupies one rack unit.

Connecting the power supply

Connect the included power adapter to the device, then to the mains. Switch on the device on with the main switch to start operation.
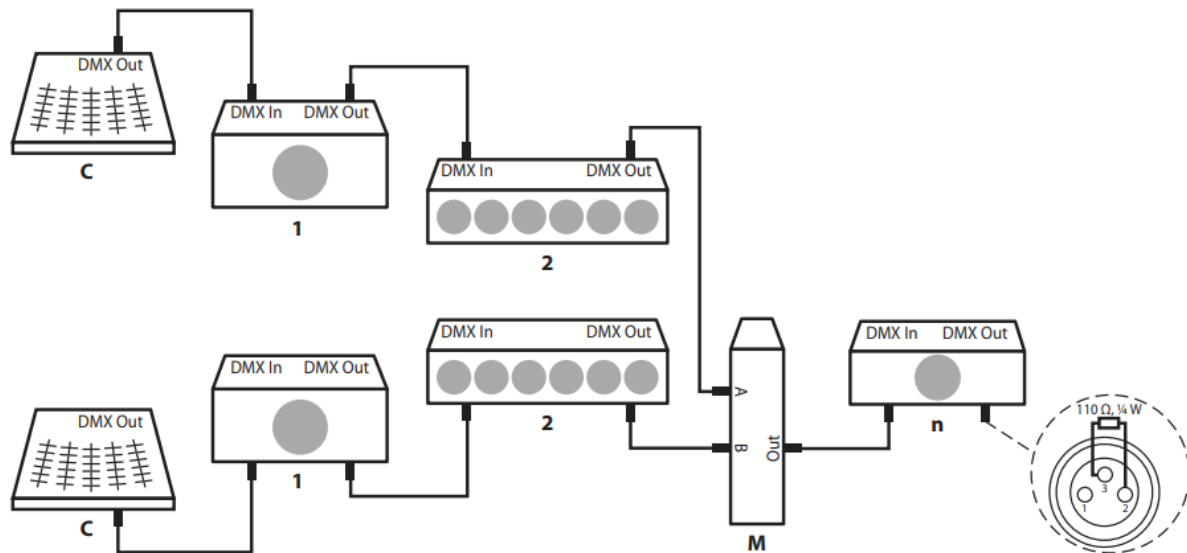
DMX connections

NOTICE!

- Data transfer errors due to improper wiring!
- If the DMX connections are wired incorrectly, this can cause errors during the data transfer.
- Do not connect the DMX input and output to audio devices, e.g. mixers or amplifiers. Use special DMX cables for the wiring instead of normal microphone cables.

Connections in 'DMX' mode

Connect the output of the first DMX device to the input of the second one and so on, to form a series connection. Connect the output of this DMX chain to input A on the front or back of the DMX Manager. Connect the output of a second DMX chain to input B on the front or back of the DMX Manager. Connect the output on the front or rear of the DMX Manager to the DMX input of a DMX controller or other DMX device. Make sure that the output of the last DMX device in the chain is terminated by a resistor (110 Ω, ¼ W). Note that the ports on the front and back can not be used in parallel.
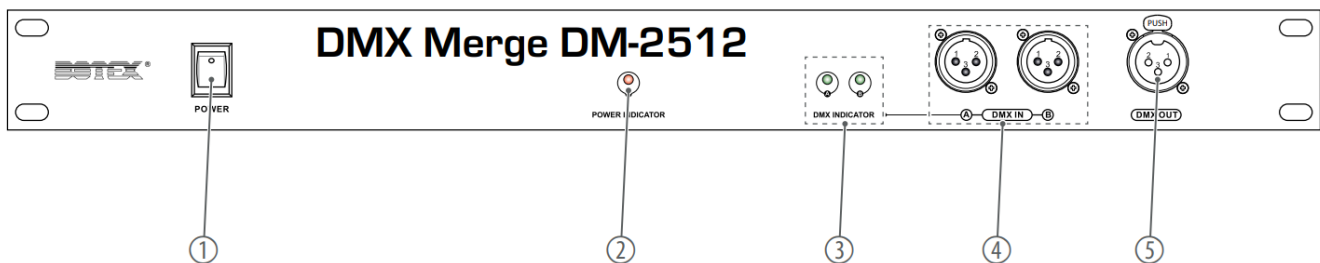
DMX indicator

- When the device and the DMX controller are operational, the DMX indicator in the display shows that a DMX signal is being received on the input.
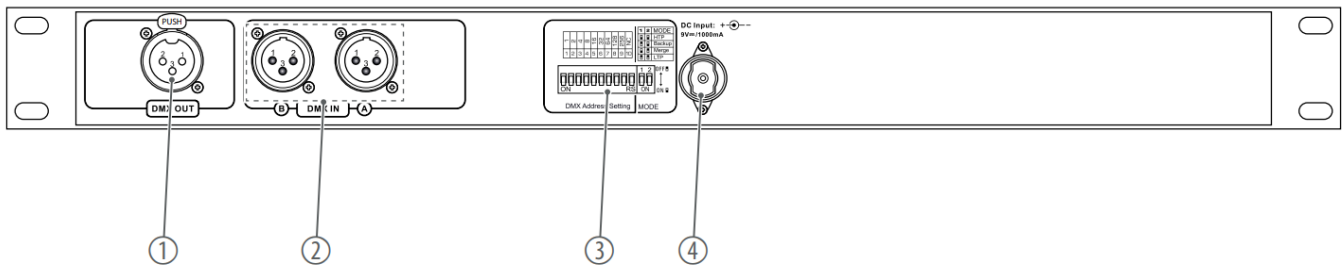
Connections and controls

Front panel

1. [POWER] | Main switch. Turns the device on and off.
2. [POWER INDICATOR] | Indicator LED for operating status. Lights up as soon as the device is turned on.
3. [DMX INDICATOR] [A], [B] | 2 × Indicator LED for DMX input. The indicator LED of the respective channel lights up green as soon as a signal is present.
4. [DMX IN] | 2 × DMX input, designed as XLR socket
5. [DMX OUT] | 1 × DMX output, designed as XLR socket

Rear panel

1. [DMX OUT] | 1 × DMX output, designed as XLR socket
2. [DMX IN] | 2 × DMX input, designed as XLR socket
3. DIP switches for setting the operating modes and DMX addresses
4. Connection for the power supply adapter

Operating

Setting the operating modes

The device offers four different operating modes for combining several DMX signals: HTP, Backup, Merge and LTP.

Operating mode HTP (High Take Precedence Modus)

In HTP mode, the highest DMX value has priority.

Set DIP switches 1 and 2 to [ON].

- HTP mode is activated. If two DMX signals are present at the inputs of the device, then the signal with the higher value overwrites the other signal.

BACKUP mode

In BACKUP mode, the signal of the other input is accepted if no DMX signal is present at one input.

Set DIP switch 1 to [OFF] and DIP switch 2 to [ON].

- BACKUP mode is activated. If a DMX signal is present at input A, it is output at the device output. If no DMX signal is present at input A, then the signal from input B is output at the device output.

MERGE mode

In MERGE mode, DMX signals A and B are combined to form a new signal.

1. Set DIP switch 1 to [ON] and DIP switch 2 to [OFF].
   - MERGE mode is activated.
2. Use DIP switches 1 … 9 to set the DMX start address for the new merged signal.

Example: You want to merge the first 6 channels of DMX signal A and all subsequent channels of DMX signal B.

1. Set DIP switches 1, 2 and 3 to [OFF].
2. Set DIP switches 4 … 10 to [ON].
   The first 6 channels of the DMX output signal are occupied by the 6 channels of DMX signal A. Channels 7 … 512 of the DMX output signal are occupied by the channels of DMX signal B.

LTP mode (Latest Takes Precedence)

In LTP mode, the most recent DMX value has priority.

Set DIP switches 1 and 2 to [OFF].

- LTP mode is activated. If two DMX signals are present at the inputs of the device, then the two most recently changed values are applied.

Setting the DMX address

DMX address table

DMX B Start channel number	DIP switch ON
1	1
2	2
3	1, 2
4	3
5	1, 3
6	2, 3
7	1, 2, 3
8	4
9	1, 4
10	2, 4
11	1, 2, 4
12	3, 4
13	1, 3, 4

DMX B Start channel number	DIP switch ON
14	2, 3, 4
15	1, 2, 3, 4
16	5
…	…
511	1, 2, 3, 4, 5, 6, 7, 8, 9

Technical specifications

Operating modes	HTP, Backup, Merge, LTP	
Control	DIP switches	
Input connections	DMX signal input, front of the device	2 × XLR panel socket, 3-pin
	DMX signal input, back of the device	2 × XLR panel socket, 3-pin
	Power supply	Hollow plug socket for the power adapter
Output connections	DMX signal output, front of the device	1 × XLR panel socket, 3-pin
	DMX signal output, back of the device	1 × XLR panel socket, 3-pin
Power supply	External power adapter, 100 - 240 V ∼ 50/60 Hz	
Operating voltage	9 V…12 V ⎓ / 1000 mA, centre positive	
Installation properties	19″, 1 RU	
Dimensions (W × H × D)	482 mm × 44 mm × 162 mm	
Weight	2.0 kg	
Ambient conditions	Temperature range	0 ℃…40 ℃
	Relative humidity	20%…80% (non-condensing)

Further information

Type	Merger
Type of distribution	2in1
RDM compatible	No
WDMX capable	No

Plug and connection assignments

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment so that a perfect light experience is guaranteed. Please take our tips, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into a socket, the result of an incorrect connection may be a destroyed DMX controller, a short

circuit or 'just' a not working light show!

DMX connections

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for the pin assignment of a suitable XLR plug.

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX–, 'cold signal')
3	Signal (DMX+, 'hot signal')

Protecting the environment

Disposal of the packing material

- Environmentally friendly materials have been chosen for the packaging. These materials can be sent for normal recycling. Ensure that plastic bags, packaging, etc. are disposed of in the proper manner. Do not dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the instructions and markings on the packaging.

- Observe the disposal note regarding documentation in France

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) as amended.

Do not dispose of your old device with your normal household waste; instead, deliver it for controlled disposal by an approved waste disposal firm or through your local waste facility. If in doubt, consult your local waste management facility. You can also return the device to a retailer if they offer to take the device back for free or if they are legally obliged to do so. When disposing of the device, comply with the rules and regulations that apply in your country. You can also return your old device to Thomann GmbH at no charge. Check the current conditions on **www.thomann.de**. Proper disposal protects the environment as well as the health of your fellow human beings. This is because the proper handling of old devices negates the potential negative effects of hazardous substances, and because it conserves resources by recycling them. Also note that waste avoidance is a valuable contribution to environmental protection. Repairing a device or passing it on to another user is an ecologically valuable alternative to disposal. For example, use the classified ads of Thomann GmbH. If your old device contains personal data, delete those data before disposing of it.

Documents / Resources

BOTEX DMX Merge DM-2512 User Manual DMX Manager	**BOTEX DM-2512 DMX Merge** [pdf] User Manual DM-2512 DMX Merge, DM-2512, DMX Merge, Merge

References

- **Buy musical instruments online from the market leader – Thomann United States**
- **Buy musical instruments online from the market leader – Thomann United States**
- **User Manual**