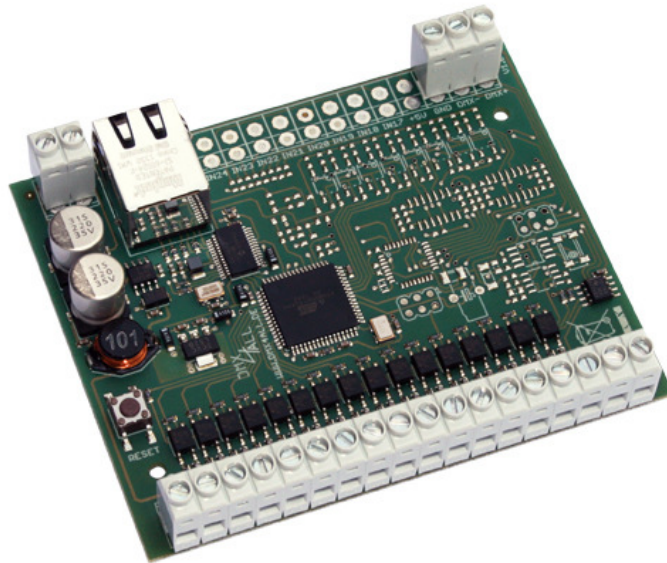


ArtNet-DMX Mux16

User Manual



**ART
NET**
ETHERNET

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DMX®
4
ALL

Description

The **ArtNet-DMX Mux16** has 16 digital inputs which will be outputted via ArtNet and DMX.

For each input the function (Mode) as well as the channels to control are adjustable.

A user-friendly configuration via a web browser allows a fast and uncomplicated setting for all parameters.

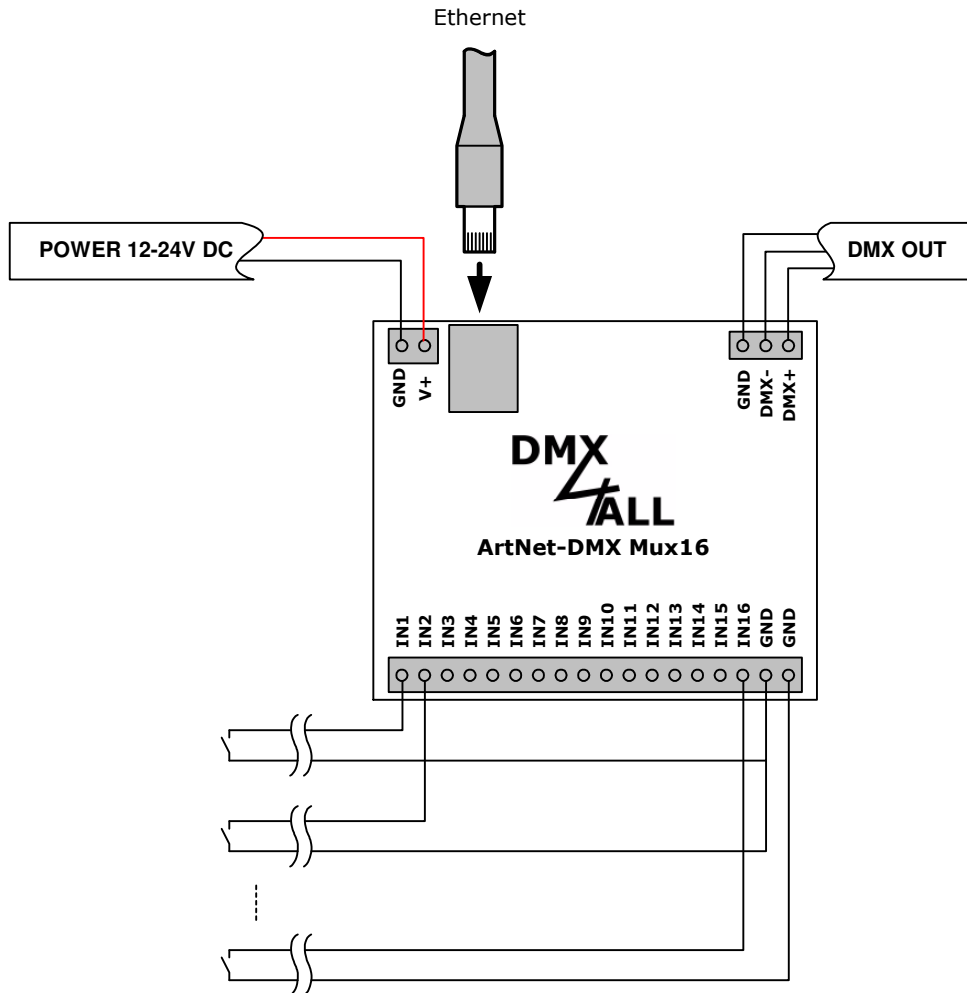
Data sheet

Power supply:	7-24V DC / 0,5A
Ethernet:	1x RJ45
DMX-OUT:	1x 512 DMX-channels
Inputs:	16x Long Distance Digital input
Modes:	Switch Button ON Button OFF Button ON/OFF Dimmer UP Dimmer DOWN Dimmer UP/DOWN Button ON + Dimmer UP Button OFF + Dimmer DOWN Button ON/OFF + Dimmer UP/DOWN
Dimensions (LxBxH):	99 x 82 x 20mm

Delivery

1x	ArtNet-DMX Mux16
1x	RJ45 network cable 1:1
1x	User Manual (german)

Connection



LED-Display

LED green

The green LED flashes, if there is no Ethernet connection available and lights permanent, if an Ethernet connection is available.

LED yellow

The yellow LED lights up as soon as data are received.

Configuration

The **ArtNet-DMX Mux16** configuration occurs via a web-interface which can be called up via any web browser.

The assigned **IP-Address** within the delivery status is **2.0.0.5** which will be used for the web-interface as well as for the ArtNet.



The PCs network settings must be the **IP-Address 2.0.0.1** and the **subnet mask** must be **255.0.0.0**.

Please take further details from the ArtNet-specifications.



Please call up within your web-browser the address task the IP 2.0.0.5 to get the following configuration side:

The screenshot shows the web interface for the ArtNet-DMX Mux16. The top header is green with the DMX4ALL logo and the title 'ArtNet-DMX Mux16 Version 1.00'. Below the header, there is a navigation bar with 'Global', 'Input 1-8', 'Input 9-16', and 'Update' buttons. The main content area is divided into two columns. The left column contains a text box with instructions: 'The DMX4ALL ArtNet-DMX Mux16 is a multiplexer with 16 digital inputs. The device send the input values to DMX and ArtNet. You can give the ArtNet node an own IP address, shortname and longname to differ the node in the network. Please use in ArtNet network the IP address 2.x.x.x or 10.x.x.x. The DMX output allows you to control DMX devices direct with the ArtNet-DMX Mux16. The destination settings are used to define the ArtNet destination device. Please set Net always to 0 if you don't use ArtNet3!'. Below this is a copyright notice: '© Copyright 2014 DMX4ALL GmbH All rights reserved.' The right column is titled 'GLOBAL SETUP' and contains two sections: 'Device settings' and 'Destination settings'. The 'Device settings' section includes fields for IP (2.0.0.5), Netmask (255.0.0.0), Short Name (ArtNet-DMX Mux16), and Long Name (DMX4ALL ArtNet-DMX Mux16). The 'Destination settings' section includes fields for Dest. IP (2.0.0.1), a checked 'Broadcast' checkbox, and dropdown menus for Net (0 (0)), SubNet (0 (0)), and Port/Universe (0 (0)). There is also a checked 'Send only on change' checkbox. At the bottom of the right column is a 'Factory Defaults' section with a field containing '0000' and the text 'Enter 7319 to set to factory defaults.' A red 'Save' button is located at the bottom right of the configuration area. The footer of the page features the 'ARTNET ETHERNET' logo and the text 'Art-Net™ Designed by and Copyright Artistic Licence Holdings Ltd.'

GLOBAL SETUP

Device settings



Each device needs an own **IP-Address** that the assignment occurs clearly within the network. Please use in accordance to the ArtNet-specification the IP-Address 2.x.x.x or 10.x.x.x with the **net-mask** 255.0.0.0 .

Any other IP-Address can be used too, like e.g. 192.168.1.10 .
In this case the net mask must be adjusted to 255.255.255.0 !

For a better distinction you can name the ArtNet-DMX Mux16 anyway.
The **short-name** is limited to 18 signs and the **long-name** to 64 signs.

Destination settings

The Destination settings specify the values for the ArtNet-output.

Under **Dest. IP** the IP-Address will be entered to which the data should be sent via ArtNet (Unicast).

Broadcast activates the ArtNet-data output to all ArtNet-devices. The Dest. IP will not be considered in this case.

Net / SubNet / Port/Universe are the according ArtNet parameters.

Send only on change suppressed the regular repeated output of the values via ArtNet.

Factory defaults

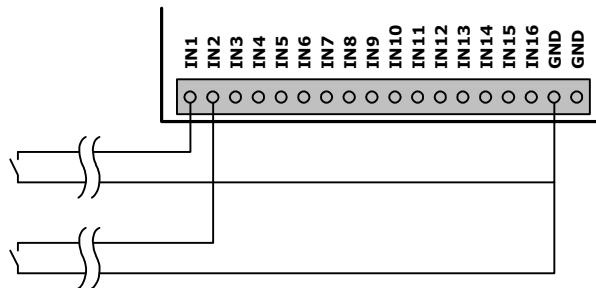
The **Factory Settings** will be restored with entering the number 7319.

SAVE stores the configuration respectively restored the Factory Settings.

Digital inputs

The digital inputs are realized as LONG DISTANCE inputs which allows to use longer supply pipes to the switching element.

The input wiring occurs with a switch or a button connect to GND as shown in the following outline:



The inputs are configured via the web interface. Therefore the both configuration sides **Input 1-8** and **Input 9-16** are available.

Per *Input* the *Mode* and *Channels* which should be controlled can be entered here.

You can choose between the following modes:

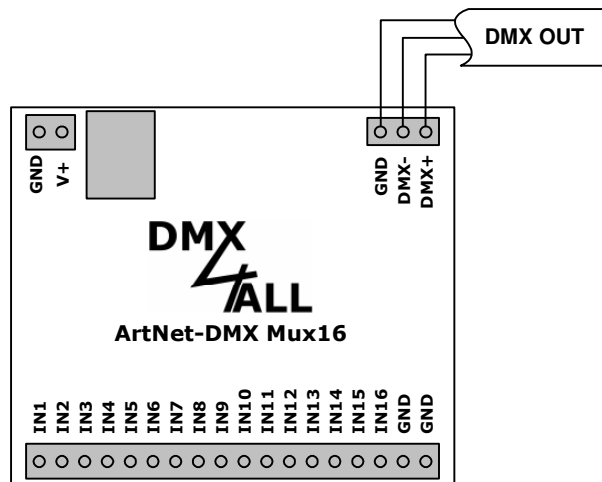
- **Switch**
Active: Channels 100%
Inactive: Channels 0%
- **Button ON**
Channels will be turned on - 100%
- **Button OFF**
Channels will be turned off - 0%
- **Button ON/OFF**
Channels will be switched between on and off 0% / 100%
- **Dimmer UP**
Channels will be dimmed upwards - 0% → 100%
- **Dimmer DOWN**
Channels will be dimmed downwards - 100% → 0%
- **Dimmer UP/DOWN**
Channels will be dimmed upwards/downwards,
change of direction after each loose
- **Button ON + Dimmer UP**
Short active: Channels will be turned on
Long active: Channels will be dimmed upwards
- **Button OFF + Dimmer DOWN**
Short active: Channels will be turned off
Long active: Channels will be dimmed downwards
- **Button ON/OFF + Dimmer UP/DOWN**
Short active: Channels will be turned on/ -off
Long active: Channels will be dimmed upwards/ -downwards,
change of direction after each loose

The channel entry occurs as decimal value from 1 up to 512. If several channels should be controlled via one input, the single values must be entered separately with a comma.

For example an single channel with „1“ or several channels with „1,4,7“.

DMX-Output

The **ArtNet-DMX Mux 16** has a DMX-output which can be used to connect DMX-able devices directly.



At the DMX-output a DMX-signal with 512 DMX-channels will be outputted. The values of the DMX-channels will be determined via the digital inputs and the configuration.

The configuration must occur via the web interface.

Factory Reset

The **ArtNet-DMX Mux 16** can be set into the delivery status via the button.

Please proceed as follows:

- Turn off the device
- Push button and hold
- Turn on the device
- The yellow LED flashes
- Release button
- Push button again and hold
- The green and yellow LED flashes now for ca. 10 seconds alternately
- Release button meanwhile
- Now the Reset is in progress and the LEDs flashes 3x simultaneously as confirmation

Alternatively you can restore the delivery status via the web browser:

- Open Global Settings into web-browser
- Enter the code „7319“ within the input field under Factory Defaults
- Click *Save*
- Then wait minimum 10 seconds

Execute an Update

The **ArtNet-DMX Mux16** has an **Update-function** which allows transferring prospective Firmware-versions.

Please proceed as follows:

- Turn off the device
- Push button and hold
- Turn on the device
- The yellow LED flashes
- Loose button
- Generate a net-work connection to the PC
- Start the Update-Software **DMX4ALL LAN-Updater**
- Select the ArtNet-DMX Mux16 from the list
- Click *Firmware-Update*
- Select Firmware-file (.bin) and confirm
- Please wait until the Update has finished



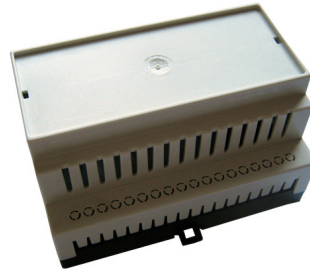
If an error occurs during the Update, you can start from the beginning any time.

Alternatively you can activate the Firmware-Update via the web-browser:

- Open the Update into the web-browser
- Enter the displayed code „1379“ into the input field and click *Send*.
- Start the Update-Software **DMX4ALL LAN-Updater**
- Select the ArtNet-DMX Mux16 from the list
- Click *Firmware-Update*
- Select Firmware-file (.bin) and confirm
- Please wait until the Update has
- Click in the web-browser to *Back to Mainpage*

Equipment

Top-hat rail housing 1050



Power supply 12V / 20W



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. Conformance to the best available technology the following risks should not be 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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