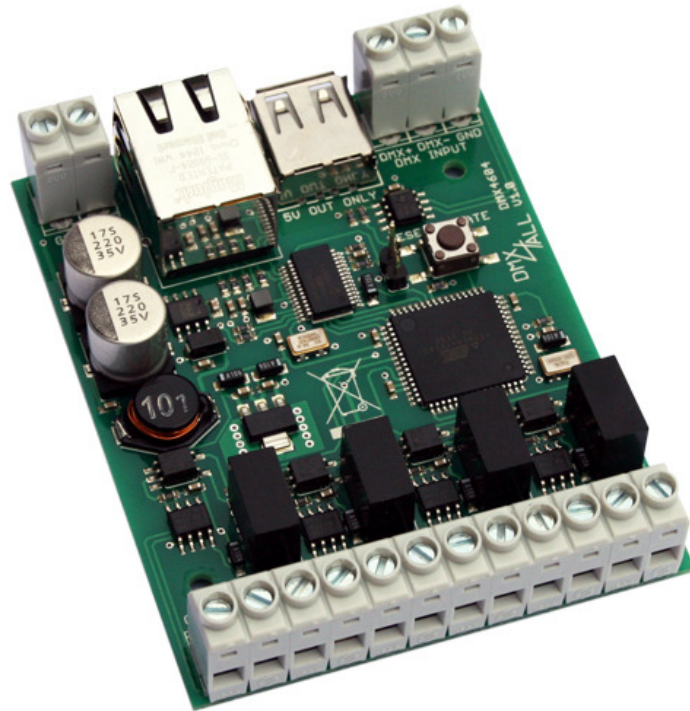


ArtNet DMX-UNIVERSE DR 4.1

User Manual



**ART
NET**
ETHERNET

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DMX®
4
ALL

Description

The **ArtNet-DMX-UNIVERSE DR 4.1** is equipped with 4 DMX outputs and 1 DMX input. Each DMX output is galvanically isolated.

Via a RJ45 connection a linkage to the ArtNet network happens.

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

Additionally the Extension Mode enables an output of 1024 DMX-channels for each DMX output. So, in total up to 4096 channels can be supported. The Extension Mode is optimized for controlling the DMX4ALL MagiarLED products.

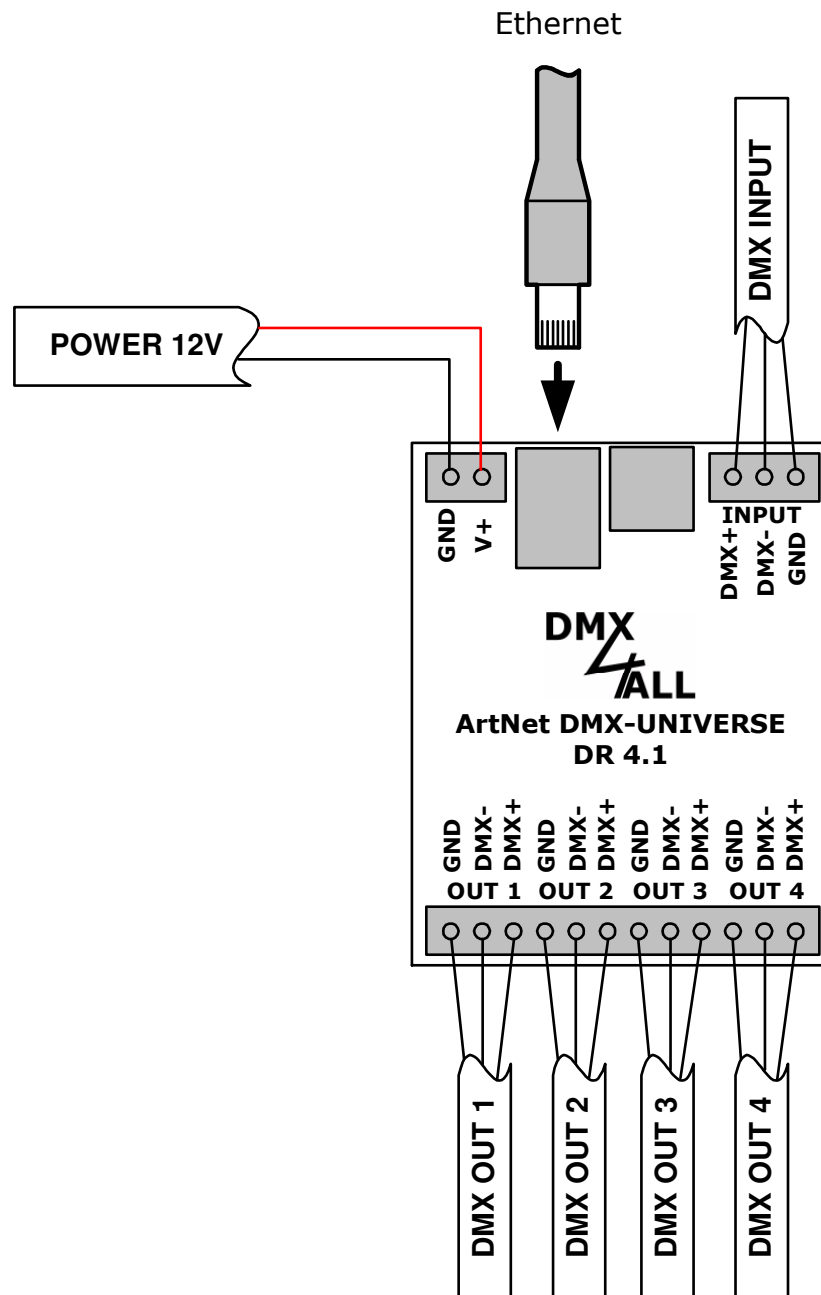
Technical Data

Power Supply:	7-24V DC / 1A
Ethernet:	1x Neutrik RJ45
DMX-IN:	1x 512 DMX-channels
DMX-OUT:	4x 512 DMX-channels or 4x 1024 DMX-channels using the Extension Mode
USB-Connection:	5V/500mA to power supply of external devices (e.g. WLAN-Bridge)
Dimensions (LxBxH):	64,2 x 82 x 20mm

Delivery

1x	ArtNet-DMX UNIVERSE DR 4.1
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 and it shines permanently if an Ethernet connection is available.

LED yellow

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

Configuration

The **ArtNet-DMX-UNIVERSE DR 4.1** configuration takes place via a web-interface which can be activated with any web browser.

The **IP-Adresse 2.0.0.10** is assigned in the default condition which is used both for the web- interface and the ArtNet.



The network setting of the computer has to set up to the **IP-Address 2.0.0.1** and the **Subnetmask 255.0.0.0**.

Please take further details from the ArtNet-specifications.



Call up the IP 2.0.0.10 in the addressing list of the web browser to get the following configuration site:

DMX 4ALL ArtNet-DMX-UNIVERSE DR 4.1
Version 1.00 - MAC ID: 00-60-35-57-72-00

The ArtNet-DMX-UNIVERSE DR 4.1 is an ArtNet interface with 4 DMX outputs and 1 DMX input.
The device provides one ArtNet Node for the input and two ArtNet Node for the outputs.
You can give each Node an own IP address, shortname and longname to differ the Node in the network. Please use in one network the IP address 2.x.x.x or 10.x.x.x
The DMX input allows you to set a refresh rate and a DMX fail option.
Each DMX output is working with 512 channels (1 Universe) in the Standard mode.
In the Extension mode each DMX output is working with 1024 channels (1+1 Universes).
Output configuration in Extension mode:
DMX-OUT 1 use the Node 2 port 1 and 2
DMX-OUT 2 use the Node 2 port 3 and 4
DMX-OUT 3 use the Node 3 port 1 and 2
DMX-OUT 4 use the Node 3 port 3 and 4
The DMX-Routing allows you to setup the combination of the 2 universes for each output.
After the given value from the 1st DMX Universe the 2nd DMX Universe is attached.
Example: 450 in the input box means the channels 1-450 from DMX Universe 1 and the following channels 451-963 are the channels 1-512 from DMX Universe 2.
EXTENSION SETUP
The extension setup allows you to set the ArtNet parameters for SubNet,Net and Port.
Please set Net always to 0 if you don't use ArtNet3!

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ART NET
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MAGIAR
This Interface is optimized for MagiarLED Products.

MAIN SETUP

Node 1 - DMX Input
IP Address: 2.0.0.10
Short Name: ArtNet DR 4.1-1
Long Name: DMX4ALL ArtNet-Universe DR 4.1-1
Mode: Use Broadcast
 Use Unicast
Dest. IP: 2.0.0.1 only for Unicast
DMX-IN Fail: NO DATA
 HOLD last DMX data
 CLEAR all DMX channels to 0%
 SET all DMX channels to 100%
Update Rate: DMX framerate DMX IN - Refresh interval

Node 2 - DMX Output 1-4
IP Address: 2.0.0.11
Short Name: ArtNet DR 4.1-2
Long Name: DMX4ALL ArtNet-Universe DR 4.1-2

Device Subnetmask
Netmask: 255.0.0.0

Factory Defaults
0000 Enter 7319 to set the ArtNet-Interface to factory defaults.

Extension Setup

Save

The **ArtNet-DMX-UNIVERSE DR 4.1** is equipped with 2 ArtNet nodes which must be configured separately.



Each node needs an own **IP-Address** so that the assignment can occur clearly. Use in accordance to the ArtNet-specifications the IP-Address 2.x.x.x or 10.x.x.x

Any other IP-Address can also be used e.g. 192.168.1.10 . In this case the net-mask has to be fit to 255.255.255.0 !

You can assign each node with any name for a better distinction.

The **Short-Name** is limited up to 18 signs and the **Long-Name** up to 64 signs.

The **Subnetmask** is to leave in accordance to the ArtNet specifications 255.0.0.0.

Node 1 - DMX-Input

Use Broadcast: The DMX-data will be sent to all devices in the ArtNet.

Use Unicast: The DMX-data will be sent to a specified device with the *Unicast IP* in the ArtNet.

You can choose several actions for the DMX-input if a blackout of the DMX-signals (**DMX FAIL**) takes place:

NO DATA	- via ArtNet will be any DMX-input received
HOLD last DMX data	- the last data will be maintained
CLEAR all DMX channels to 0%	- all DMX-input channels will be set to 0
SET all DMX channels to 100%	- all DMX-input channels will be set to 255

The **Update-Rate**, for the DMX-input data output, can be set in different times. *On change data* transmitted the DMX-input data only if these are changed, however max. 0,1 seconds.

The option **Use Unicast** allows sending the DMX-input specifically to the ArtNet device with the **Unicast IP** in the network.

Use Broadcast sends the DMX-input to all ArtNet devices.

Node 2 - DMX-Output

The DMX-output has no settings but the IP and the name.

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

SAVE stores the configurations respectively restores the Factory Settings.

Extension Setup

In the **Extension Setup** the ArtNet parameters Net, SubNet and Port can be adjusted for every node.

DMX 4ALL ArtNet-DMX-UNIVERSE DR 4.1
Version 1.00 - MAC ID: 00-60-35-57-72-00

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MAGIAR
This Interface is optimized for MagiarLED Products.

EXTENSION SETUP

Node 1 - DMX Input
SubNet: 0 (0)
Net: 0 Value 0-127
Port 0: 15 (F)

Node 2 - DMX Output 1-4
SubNet: 0 (0)
Net: 0 Value 0-127
Port 1: 0 (0)
Port 2: 1 (1)
Port 3: 2 (2)
Port 4: 3 (3)

Extension Mode
Enable:

Sync Options
Enable Sync:

Firmware Update
Main Setup
Save

Furthermore the Extension Mode and the synchron DMX-output can be activated.

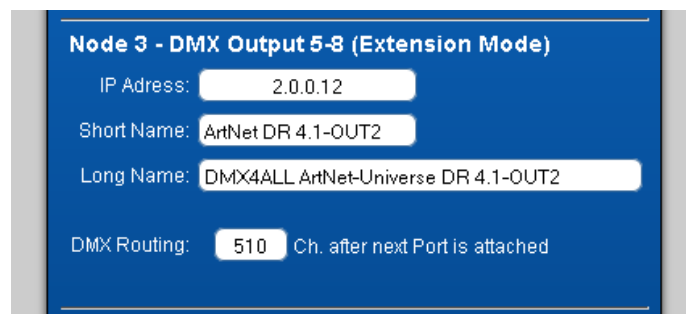
Extension Mode

The **ArtNet-DMX-UNIVERSE DR 4.1** interface is equipped with an Extension Mode. On each DMX-output 1024 channels can be outputted. On each DMX-output 2 ports (per 512 DMX-channels) will be outputted one behind the other. So, up to 4096 DMX-channels are possible.

For activating the Extension Mode, please start in the Extension Settings the Extension Mode and click Save to store this option:



Another ArtNet node will be activated in the Extension Mode which has also 4 ports. This one will be displayed in the web configuration as node 3:



Each node needs an own **IP-Address** so that the assignment can occur clearly. Use in accordance to the ArtNet-specifications the IP-Address 2.x.x.x or 10.x.x.x

Any other IP-Address can also be used e.g. 192.168.1.10 . In this case the net-mask has to be fit to 255.255.255.0 !

The assignment of the ports to the according outputs is as follows:

Node 1 Port 1 + Node1 Port 2 → OUTPUT 1

Node 1 Port 3 + Node 1 Port 4 → OUTPUT 2

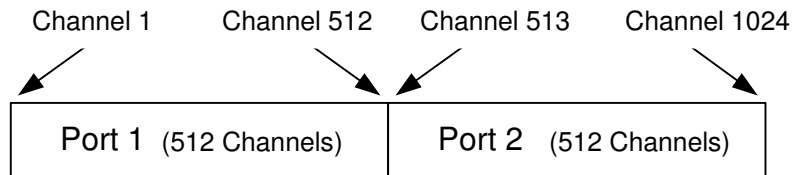
Node 2 Port 1 + Node 2 Port 2 → OUTPUT 3

Node 2 Port 3 + Node 2 Port 4 → OUTPUT 4

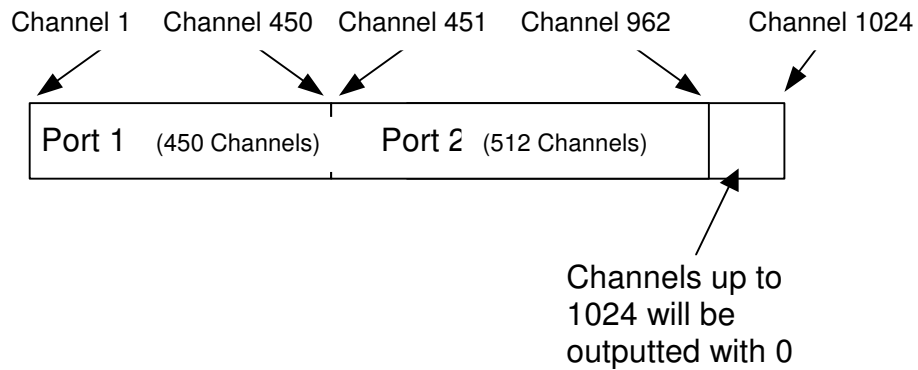
The **DMX Routing** in the configurations shows how to hang together the data of the ports.

The entered value shows, how many DMX-channels should be outputted from the first port. Then the DMX-channels of the second port will be attached.

Example: DMX-Routing = 512



Example: DMX-Routing = 450



Factory Reset without Web-Interface

The **ArtNet-DMX-UNIVERSE DR 4.1** can be reset into the default conditions with the Reset-button.

Please proceed as follows:

- Turn off the device
- Push button and hold
- Turn on the device
- The yellow LED lights up
- Leave button
- Push button again and hold
- The green and yellow LED lights up for ca. 10 seconds alternately
- Leave button meanwhile
- The reset will be executed and the LEDs light up 3x simultaneously for confirmation

Executing Update

The **ArtNet-DMX-UNIVERSE DR 4.1** is equipped with an Update-function which allows transmitting prospective Firmware-versions.

Please proceed as follows:

- Turn off the device
- Push button and hold
- Turn on the device
- The yellow LED lights up
- Leave button
- Generate a network connection to PC
- Start update-software **DMX4ALL LAN-Updater**
- Select the ArtNet-DMX-UNIVERSE DR 4.1 from the list
- Click *Firmware-Update*
- Select Firmware-file (.bin) and confirm
- Please wait until the update has finished

Equipment

Top-hat rail housing 700



Power supply 12V / 20W



WLAN-Bridge WNCE2001



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 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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