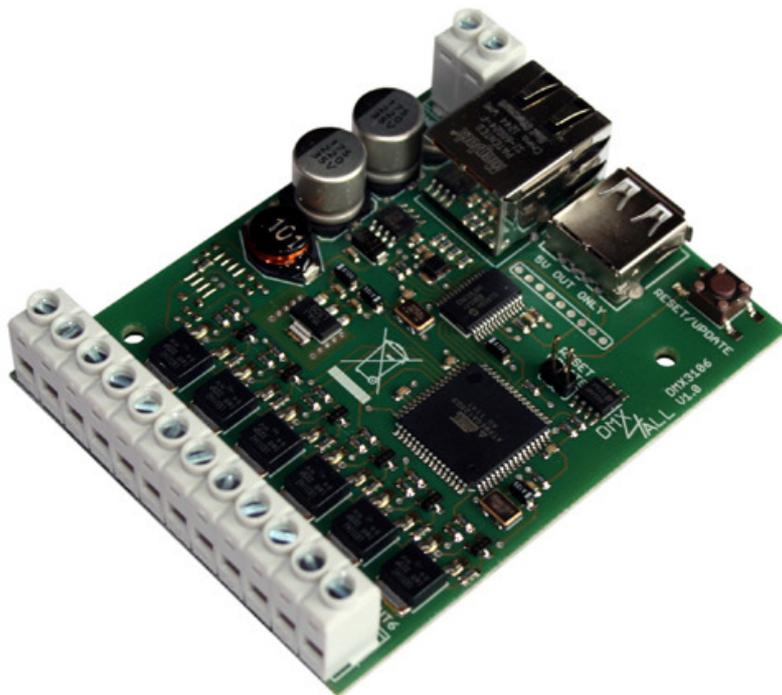


ArtNet-LED-Dimmer 6 ArtNet-LED-Dimmer 6R

User Manual



**ART
NET**
ETHERNET

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DMX®
4
ALL

Description

The **ArtNet-LED Dimmer 6 / 6R** is a compact LED dimmer controlling 6 separate LED outputs. These can be used for RGB / RGB+W or for single stripes. The LEDs connections are made with screw connectors. With a RJ45 connection the access to the Ethernet (ArtNet-Network) takes place.

Additional the **ArtNet-LED Dimmer 6 / 6R** has an USB-connection which allows to connect external devices e.g. a WLAN-bridge, a power supply with 5V/500mA.

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

A user-defined color-change allows an open defined color move through the web browser.

Fitting for the **ArtNet-LED-Dimmer 6R** the App "AND Remote" is free available in the App Store.

Technical Data

Power Supply:

12-24V =

Ethernet:

RJ45

LED-Connection:

6x max. 10A on each output / common anode (+)

Together 60A with all connected GND

6 PWM signals with 256 steps

PWM frequency: 250 Hz / 500 Hz / 1000 Hz / 2000 Hz

USB-Connection:

5V/500mA for the power supply of external devices (WiFi-Bridge)

Dimensions (LxBxH):

64,2 x 82 x 20 mm

Scope of delivery

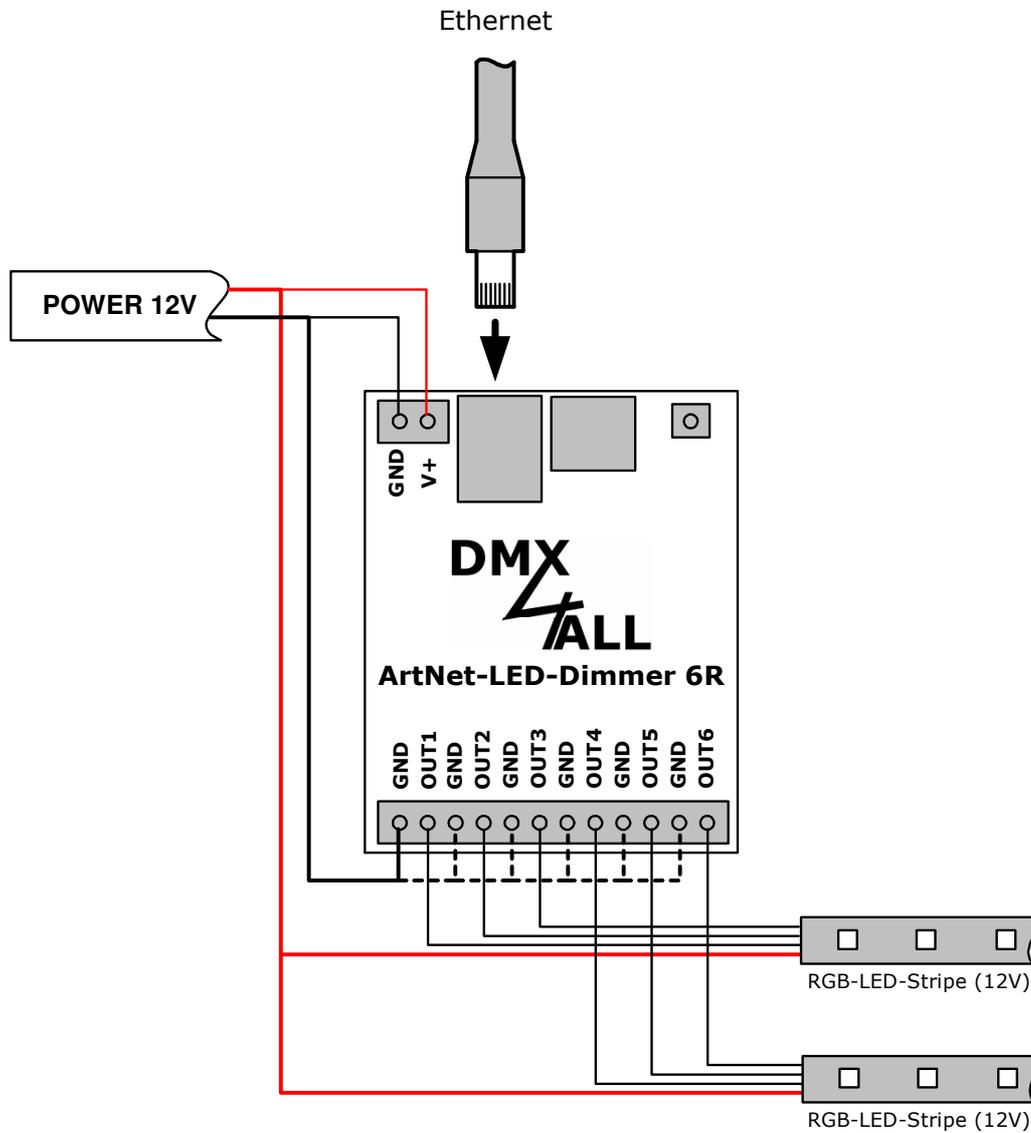
- 1x ArtNet-LED-Dimmer 6 / 6R
- 1x 1m RJ45 Network cable 1:1
- 1x User manual (brief instruction)

only ArtNet-LED-Dimmer 6R:

free iPhone[®] / iPad[®] App "AND Remote" available in the App Store

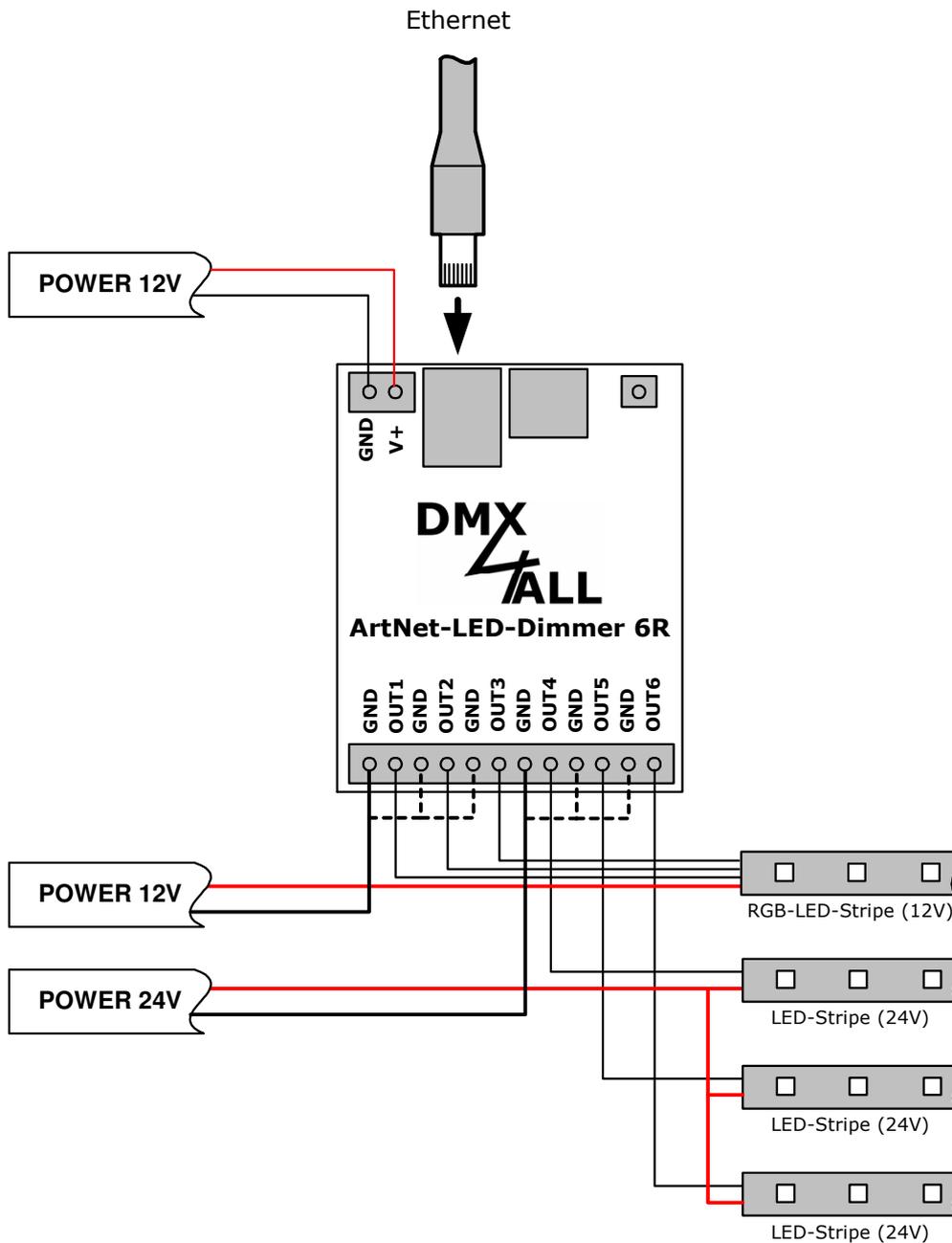
Examples for Connections

Example with 2 separate controllable RGB-LED-Stripes and a central power supply:



----- Connections according to the needed power for the LED-Stripes directly wired from power supply !

Example with a RGB-LED-Stripe (12V) and 3 single color LED-Stripes (24V) with separated power supply:



----- Connections according to the needed power for the LED-Stripes directly wired from power supply !

LED-Display

LED green

The green LED lights up if no Ethernet connection is available and lights up permanent if an Ethernet connection exists.

LED yellow

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

Configuration

The Configuration of the **ArtNet-LED Dimmer 4 / 4R** occurs with a web-interface which can be called with any web browser.

The assigned **IP-address 2.0.0.10** into the delivery conditions will be used for the web-interface as well as for the ArtNet.



The network settings of the PC must be configured to the **IP-address 2.0.0.1** and the **subnet mask to 255.0.0.0**.

Please consult the ArtNet-specifications for further details.



Please call the IP 2.0.0.10 in the address bar of the web browser for getting the following configuration page:

DMX 4ALL ArtNet-LED-Dimmer 6
Version 1.01

The ArtNet-LED Dimmer 6 is a LED dimmer controlled by ArtNet with 6 LED outputs.
The device provides one ArtNet Node with 512 channels and a DMX startaddress. Some stand alone colour moves are available without a ArtNet connection.
You can give the 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 setup allows you to set the ArtNet parameters for SubNet,Net and Port(Universe). Please set Net always to 0 if you don't use ArtNet3!
A DMX-Startaddress sets the first channel inside the universe of 512 channels which is used for the OUT1. The following channels are used for the next outputs OUT2-OUT6.
The Stand-Alone-Function drives the LED outputs without a network connection. The selected program is started on power up the device and is stopped when receiving data from the ArtNet.

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ART-NEUR ETHERNET Art-Net™ Designed by and Copyright Artistic Licence Holdings Ltd.

MAIN SETUP

ArtNet Node
IP Address: 2.0.0.10
Netmask: 255.0.0.0
Short Name: ArtNet-LED-Dimmer
Long Name: DMX4ALL ArtNet-LED-Dimmer 6

ArtNet Settings
SubNet: 0 (0)
Net: 0 (00) Only ArtNet3
Port/Universe: 0 (0)

DMX Startaddress
Address: 1

Output Frequency
250 Hz

POWER ON defaults
OUT 1-3: Off (RGB)
OUT 4: Off
OUT 5: Off
OUT 6: Off
 Enable ArtNet-Master for StandAlone

Master Dimmer
 Enable Master Dimmer
Default: 255 0-255

User Color
 Use User Color instead of POWER ON defaults
User Color Setup

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



Each Node needs an own **IP-address**, so the assignment in the network occurs clearly. According to the ArtNet-specifications please use the IP-addresses 2.x.x.x or 10.x.x.x .

Other IP addresses are possible too, e.g. 192.168.1.10. In this case the Netmask must be changed to 255.255.255.0 !

For an easier identification you can assign each node with any names.

The **Short-name** is limited to 18 signs and the **Long-name** to 64 signs.
The **Subnetmask** is left to 255.0.0.0 according to the ArtNet-specifications.

In the ArtNet settings the justification for the **Subnet**, **Net** and **Port** (Universe) is possible.

The **DMX-Starting address** specifies the channel in the DMX-Universe at which the LED-outputs are responded. Thereby the DMX-starting address corresponds to the output 1 and the following addresses correspond to the outputs 2-4.

The PWM-Output frequency from the LED-driver is adjustable under **Output Frequency**. You can select between the values 250Hz / 500 Hz / 1000Hz and 2000Hz.

Additional **POWER ON defaults** allows operating without connecting an ArtNet device. Turing on the device will set the RGB-program and the output 4 until 6 can be turned on optionally. If data come from an ArtNet-controlling device the program will automatically finished and the outputs get the settings coming from ArtNet.

Enable ArtNet-Master for StandAlone enables the output of the Default Program (Stand-Alone-Program) over ArtNet. The output values are transmitted over the ArtNet by using the Net/SubNet/Universe. The Startaddress give the first channel where the output values are insert.

The **Master Dimmer** can be activated to use a single ArtNet channel to dimm all outputs. This is also available for the Stand-Alone-Program when all output channels are hold to zero.

An user-defined color-gradient can be used under **User Color**. The **User Color Setup** is described on the following pages.

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

SAVE restored the configuration respectively restored the Factory settings.



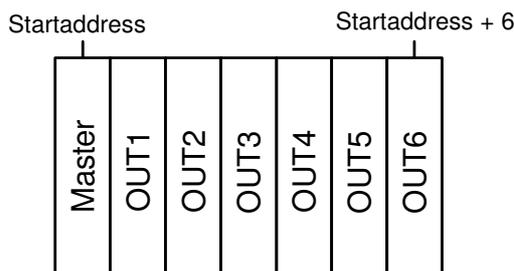
Using other IP-addresses

The ArtNet-LED-Dimmer 6 / 6R works with any IP-addresses.
You can use also the standard IP-addresses 192.168.1.x for your network.
In this case, please set up the Netmask to 255.255.255.0 .

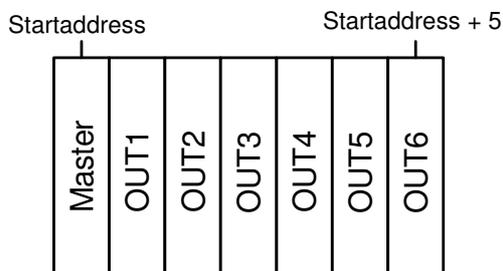
Master Dimmer

The **ArtNet-LED-Dimmer 6 / 6R** support a Master-Dimmer to dimm all outputs with one single ArtNet channel. This Master-Dimmer must be activated in the Webconfiguration.

The ArtNet channel given by the Startaddress is used for the Master-Dimmer channel. The following channels are used for the outputs:



Is no Master-Dimmer activated the channel given by the Startaddress is used for the first output. The following channels are used for the other outputs:



The Master-Dimmer can be used also in combination with the Stand-Alone-Program / User-defined color change.

The Defalult value give the level of the Master-Dimmer after a power on of the device.



It is also possible to change the Master-Dimmer by ArtNet during the Stand-Alone-Programm is playing. In this case the output values mus be hold to 0 ! When receiving an output value higher then 0 the Stand-Alone-Program stop and the output values are used form the ArtNet data.

User-defined color change

The **ArtNet-LED-Dimmer 6 / 6R** has a user-defined color change (User Color) which allows an open defined color reproduction up to 16 steps.

For every step a fade time (Fade time) and a wait time (Wait time) is adjustable.

For editing the user-defined color change click *User Color Setup* in the main menu of the web-interface:

The ArtNet-LED-Dimmer 6R provide a user color change.

Up to 16 steps can be programmed for this user color change. Each step provide a FADE time, a WAIT time and for each output a channel value.

To ADD a step with the parameters inside the edit boxes press the ADD button. To CLEAR all steps inside the tabel press the CLEAR button.

All inputs are made without storing them !
To SAVE the user color change table press the SAVE button and wait until the operation is done.

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ART NET
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ArtNet-LED-Dimmer 6R
Version 1.00

USER COLOR SETUP

User color change

	FADE	WAIT	CH1	CH2	CH3	CH4	CH5	CH6
Step1:								
Step2:								
Step3:								
Step4:								
Step5:								
Step6:								
Step7:								
Step8:								
Step9:								
Step10:								
Step11:								
Step12:								
Step13:								
Step14:								
Step15:								
Step16:								

Clear

New color step

Fade Time: *0,1s

Wait Time: *0,1s

Channel1: 0-255

Channel2: 0-255

Channel3: 0-255

Channel4: 0-255

Channel5: 0-255

Channel6: 0-255

Use actual channel values

Add

Main Setup

Save

Below *User color change* a scale with the 16 current steps are displayed (step 1 up to 16). There are no values in the scale for unaccounted steps.

Erasing the user-defined color changes

Select *Clear* and the whole scale will be erased.

Creating Steps

With *New color Step* you can enter the values for a new step.

The *Fade Time* is in 0,1s units between 0 and 65000. A value of 10 corresponds to 1 second and a value of 600 corresponds to 1 minute.

The *Wait Time* is just the same in 0,1s units between 0 and 65000. A value of 10 corresponds to 1 second and a value of 600 corresponds to 1 minute.

In the fields *Channel 1* up to *Channel 6* the brightness value 0-255 for the outputs 1 up to 6 will be entered. A value to 255 corresponds to 100%.

Click *Add* and the step after the last used step will be attached and adopted into the scale.

By activating the selection box *Use actual channel values* the current brightness values which are set up will be adopted, not the input fields brightness values.

Thus it is possible to set up any color via App and to adopt this one as a step in the user-defined color change. The *Fade Time* and *Wait Time* must be specified furthermore.



The scale have to be stored with *Save*. If *Save* will be not executed the settings will be not adopted permanent and after turning off the ArtNet-LED-Dimmer 6 /6R all settings will be lost..

Saving the user-defined color change

Select *Save* for storing the scale in the ArtNet-LED-Dimmer 6 / 6R. After turning on the device the color change will be replayed as long as a set up via Ethernet for example via App takes place.

Running with App

Control your LED-installation comfortable with your iPod touch[®], iPhone[®], iPad[®] or iPad mini[®].

ArtNet-LED-Dimmer 4R with AND Remote

The **ArtNet-LED-Dimmer 4R** can be controlled with the App "AND Remote" which is free available in the App Store.

(Link: <https://itunes.apple.com/de/app/and-remote/id626793329?mt=8&uo=4>)



The ArtNet-LED-Dimmer 6 can not be used with the free App "AND Remote". Alternatively, you can use e.g. the App "LED Remote" for the ArtNet-LED-Dimmer 6.

ArtNet-LED-Dimmer 6 / 6R mit LED Remote

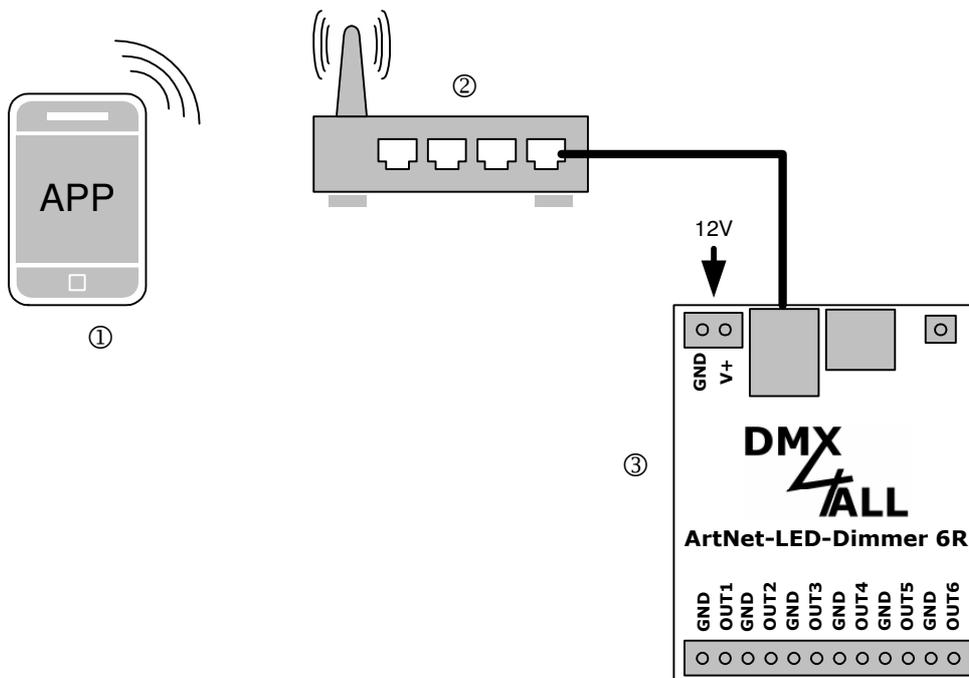
Suitable for the **ArtNet-LED-Dimmer 6 / 6R** you find the App "LED Remote" from Armin Arzani in the App Store. It is separately available and free-required in the App-Store. The app offers an expanded range of functions and is able to manage several devices.

(Link: <https://itunes.apple.com/de/app/led-remote/id519401444?mt=8&uo=4>)

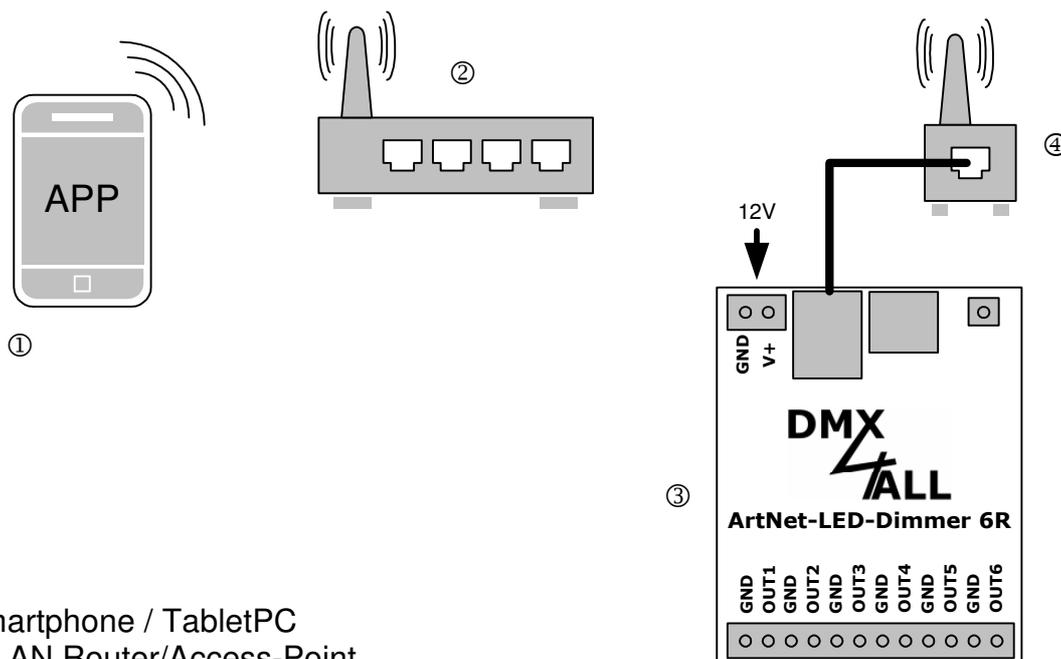
Operating in WLAN

The **ArtNet-LED-Dimmer 6 / 6R** can be operated through WLAN Router/Access-Point or with a WLAN-bridge.

Operating with WLAN Router/Access-Point



Operating with WLAN- Bridge



- ① Smartphone / TabletPC
- ② WLAN Router/Access-Point
- ③ ArtNet-LED-Dimmer 6
- ④ WLAN-Bridge e.g. WNCE2001

Factory Reset without Web-Interface

The **ArtNet-LED Dimmer 6 / 6R** can be reset into the delivery conditions with the Reset-button within the device.

Please proceed als follows:

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

Executing Update

The **ArtNet-LED Dimmer 6 / 6R** (as from Version2) has an Update-function which allows transferring prospective Firmware versions.

Please proceed als follows:

- Turn off the device
- Push button and hold
- Turn on the device
- Yellow LED lights up
- Release button
- Generate Network-connection to PC
- Start Update-Software **DMX4ALL LAN-Updater**
- Select ArtNet-LED-Dimmer 6 from list
- Click *Firmware-Update*
- Select Firmware-Data (.bin) and certify
- Please wait until Update has finished

Equipment

RGB-LED-Stripe 5m



LED-Stripe white



Power supply 12V / 5A



WLAN-Bridge WNCE2001



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.

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





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