

BUS Receiver 6ch / RGB+W+CCT2 PWM

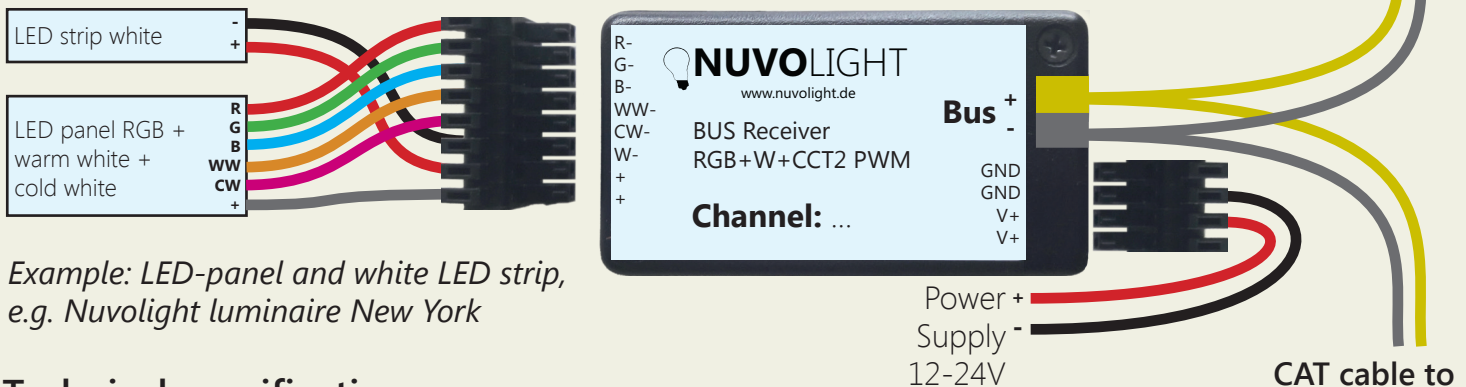
Art.-Nr.: 112001 (6ch variant) and 112003 (RGB+W+CCT2 variant)

The Nuvolight BUS Receiver PWM is a small and powerful LED controller for continuously dimming LED lights and LED strips with PWM-modulated voltage. It reacts to DMX control signals* or can be integrated into the Nuvolight system via WLAN. The BUS Receiver PWM is available in two different versions: as a 6-channel dim version with individually controllable outputs and as an RGB+W+CCT2 version with additional dedicated dimmer channels in DMX addressing.

Installation

As soon as the BUS receiver is supplied with power, the green status LED inside the controller begins to pulse. Fast and regular flashing signals a correctly applied DMX signal. After a few minutes, the controller stops flashing so as not to generate any stray light when placed in the field of view (time interval can be configured).

CAT cable from previous DMX device or from Nuvolight control unit (SMARTgateway)



Example: LED-panel and white LED strip, e.g. Nuvolight luminaire New York

Technical specifications

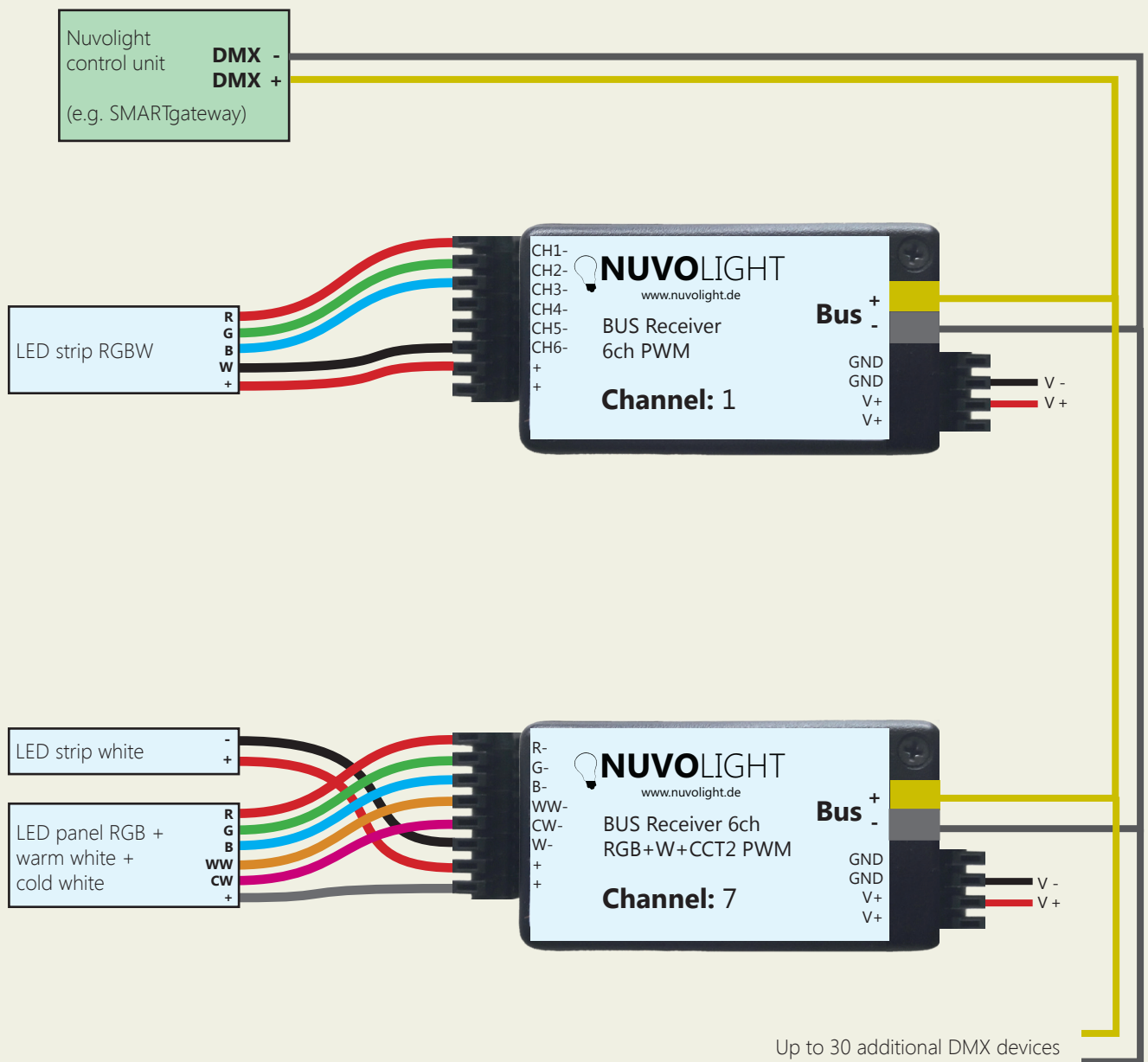
Dimensions in mm (H x W x L)	21 x 42 x 103 (incl. plugs, plus cables)
Power supply	12V to 24V DC
Maximum current	10A@12-24V per clamp/ max. 20A total
Resolution dimming curve per CH	16 Bit (65536 steps)
Number of outputs	6
Color	Black
Protection	IP20
Cable type BUS	CAT7, one pair of cable cores
Cable type power supply	max. 1,5mm ² flex
Cable type LED connection	max. 1,5mm ² flex



* For luminaires that are dimmed with constant current instead of PWM, please use our controller BUS Receiver Constant Current.

Connection example

Up to 32 BUS receivers or other DMX-capable controllers can be connected to a Nuvolight control unit with DMX output. Each BUS receiver can be controlled individually by appropriate addressing. The outputs of each 6ch PWM BUS receiver can also be controlled individually. The outputs of the BUS Receiver RGB+W+CCT2 PWM are partially grouped by DMX to offer simple DMX integration of colored LED panels and strips (see next page).



DMX addressing

The BUS receiver reacts to several consecutive addresses in the DMX protocol.

The first channel is set as the start address. The data received on the start channel and the following address numbers determine the dimming states of the outputs.

The address assignment is as follows:

RGB+W+CCT2 Version

Start address	R -	red
Start address + 1	G -	green
Start address + 2	B -	blue
Start address + 3	W-	white (separately dimmable)
Start address + 4		Dimmer red & green & blue
Start address + 5	WW-	warm white
Start address + 6	CW -	cold white
Start address + 7		Dimmer warm white & cold white

6ch Version

Start address	CH1-
Start address + 1	CH2-
Start address + 2	CH3-
Start address + 3	CH4-
Start address + 4	CH5-
Start address + 5	CH6-

The start address is preset at the factory (see labeling), but can also be changed manually via WIFI using the browser interface. Valid DMX addresses range from 1 to 512.

Change DMX start address

1. Supply the BUS Receiver with power. The BUS Receiver now provides a WIFI network for ten minutes, through which settings can be made.
2. Connect your computer, tablet or mobile phone to the network of the BUS Receiver via WIFI.

Network name: **SMARTxxx_XX:XX:XX:XX:XX:XX**
Password: **nuvolight123**

3. Now type the following address into your browser:
<http://192.168.4.1>



4. Now set the start address via the browser interface. To do this, click on the **CONFIG** tab. and select the sub-item **DMX**. Type the desired start address in the associated text field and then click **Apply Changes**.

The BUS receiver now restarts with the set start address. The WLAN connection is interrupted.



1. Choose „CONFIG“ tab

2. Choose „DMX“ tab

3. Enter desired start address

4. Click on „Apply Changes“

The network connection is now interrupted because the device restarts.

Further configuration options

Menu	Selection option	Function
WIRELESS MODE	Accesspoint	The device offers its own WIFI to connect to it via the browser interface.
	Accesspoint + Station	The device also tries to connect to another existing network so that it can be controlled wirelessly.
WIRELESS ACCESSPOINT	SSID, Password, Channel	Network name and password of the WIFI network the device offers. CAUTION: Incorrect settings can block access to the configuration of the device! It's best not to change anything here.
	Timeout [min]	The time after the device is switched on after which the configuration WLAN is switched off.
WIRELESS CLIENT	SSID, Password	Network name and password of the WLAN to which the BUS receiver is to connect.
	Hostname	The name under which the device logs on to the network
	DHCP	On: The BUS receiver expects that it will be assigned an IP in the network (standard) Off: The BUS Receiver uses the self-assigned IP address, gateway, subnet mask and DNS IP addresses below
DEVICE	Status LED Timeout	The time after which the green status LED inside the device is switched off. A value of 0 means that the status LED never goes out (standard)
	Power Range	The minimum and maximum power that the device delivers at the output. CAUTION: The limitation refers to the average value at the outputs of the channels! For example, if the maximum power is set to 50% and CH1 is set to 100% while all other channels are set to 0%, the full 100% is still output on CH1. The average of all six channels is $100/600 = 16.67\%$ and is therefore less than 50%.
	No-DMX Boot Value	If this option is set, the outputs go back to the boot settings if there is no DMX signal.
DMX	DMX Start Address	The DMX start address
UPDATE	Current Firmware	The current firmware version
	Upload	Firmware update. The new firmware can be uploaded as a file from the computer to the BUS receiver.

Bearbeiter: TH

Kontrolle: FP

Version: 2.0

Stand: 18.03.2020