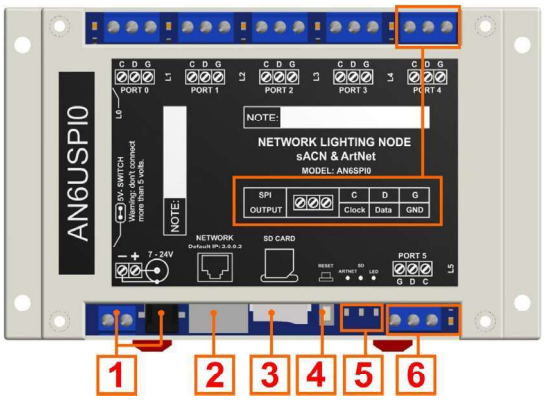
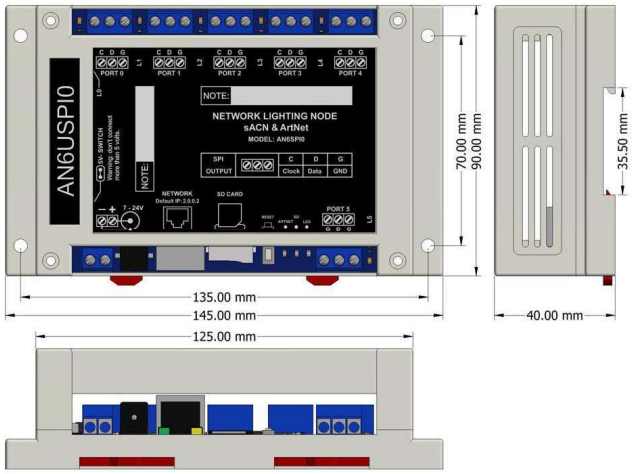
User manual 01.02.24

CONNECTION



Ref.	Function	Description
1	Power connectors	5-24VDC
2	RJ45 Ethernet connector	10BaseT and 100BaseT isolation: 1 kV
3	microSD card slot	Firmware update, starting with an alternative configuration.
4	Push button	Reset - press and release Factory reset - press and wait 10 sec, Firmware update -hold down and cycle power.
5	Leds	«ART-NET» -data received. «SD» - SDcard activity. «PW» - power.
6	Port + led	Output data, ground terminal and indication LED for port activity

DIMENSIONS



Weight: 170 grams. DIN rail 35 mm.

DEVICE

PORTS

The controller has 6 ports for connecting the LEDs strip data signal. DATA (pin D) signal level is TTL. The output is protected from overvoltage. All connected LEDs must have a common ground with the controller(pin G). The LEDs power must be connected to the LEDs separately.

Defaul network for fw - 4.0.00

IP: 2.0.0.2
MASK: 255.0.0.0
Gateway IP: 192.168.1.1
MAC: 42:45:78:98:34:76

microSD

This controller can work without microSD card. In this firmware the card is used to update the firmware, to startup the controller with an alternate configuration (SD loading mode) and to restore a lost flash configuration. The files for the SD loading mode are supplied with the firmware. The card must be formatted as FAT32 before use.

ART-NET

Art-Net address universe numbers in the range 0-32767. There are two universes available per port. (1020 channels)

sACN unicast

Art-Net address universe numbers in the range 1-32767. There are two universes available per port. (1020 channels)

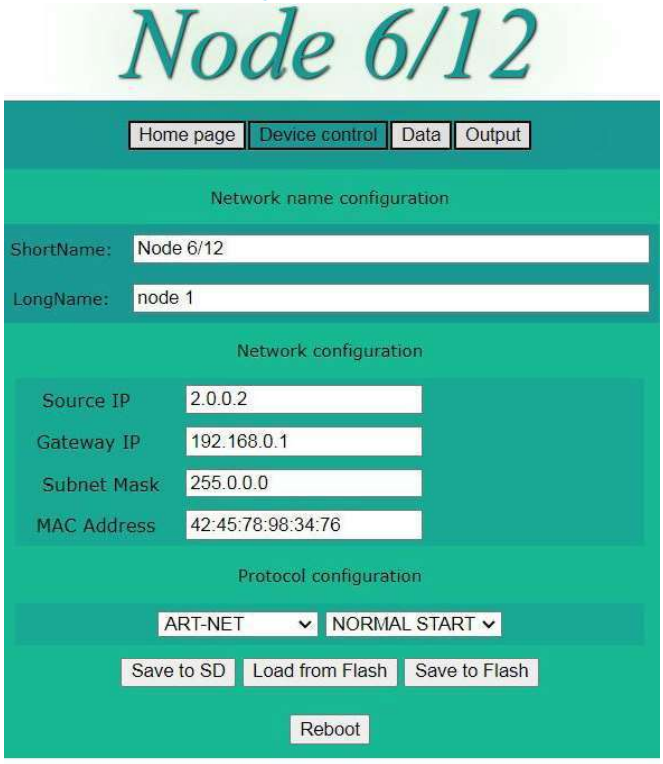
sACN multicast

Art-Net address universe numbers in the range 1-32767. One universe per port is available. (512 channels)

Firmware update

Need to be done:
Power controller OFF. Unpack and copy file «an6spiv2.img» to the main directory of microSD card. Insert the microSD card to controller's microSD slot. Push and hold «RESET» button. Power controller ON. Wait 4 seconds.
The glow of the «ART-NET» led indicates the correct start of the process. If the process is completed correctly, the SD led will light up.

SD card web pages:



To restore a lost controller configuration without resetting it to default, you must load the controller with a SD flash card containing the standard configuration and make a «Load from Flash».

The configuration will be loaded from the controller's flash memory.

To restore access to the controller, you need to change the network settings and save the changed configuration to the controller's flash memory by «Save to Flash».

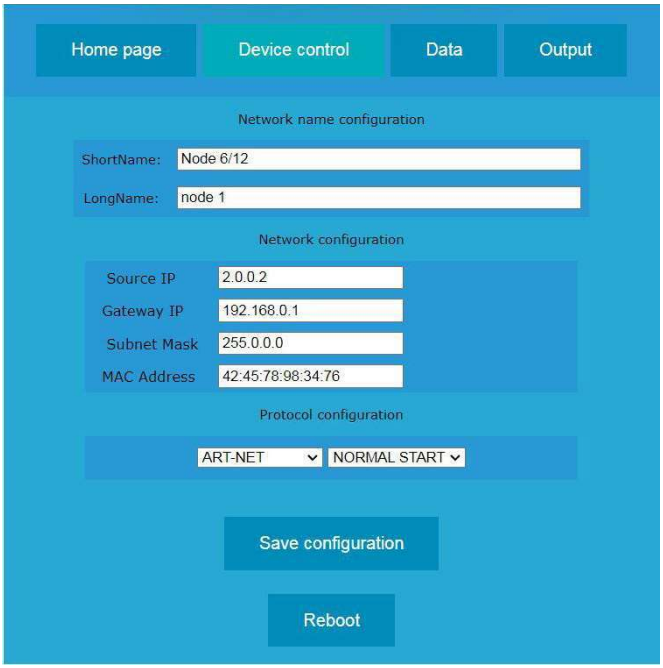
Directory structure on the card:

```
X:.                     //SD DISK
|   AN6SPIV2.IMG        //IMAGE FILE
|
\---AN_6_00             //CONTROLLER FOLDER
    +---CFG
    |       AN_6_20.CFG //CONFIGURATION FILE
    |
    \---WEB             //WEB FOLDER
            ARTP0B.HTM
            DEVCTR.HTM
            INDEX.HTM
            OUTCTR.HTM
```

DESCRIPTION

Device control

This page for general controller settings. The configuration must be saved and the controller must be rebooted for the settings to take effect.



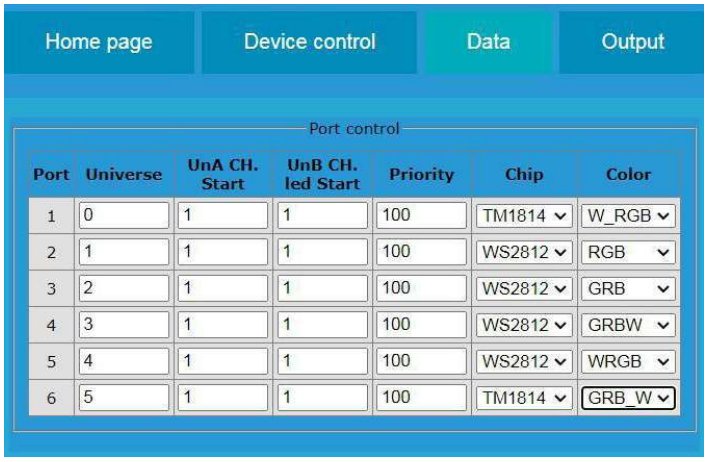
Output control

«Channels» - 3-1020. The number of channels output to pixels. FPS depends on this parameter. The refresh rate can exceed 100Hz when this value is set to 512.

«Current» - Current of LEDs in the strip. Used for tapes that support this mode (TM1814). Check the tape documentation for correct use.

«Set» - Writing parameters to the output chip.

Data

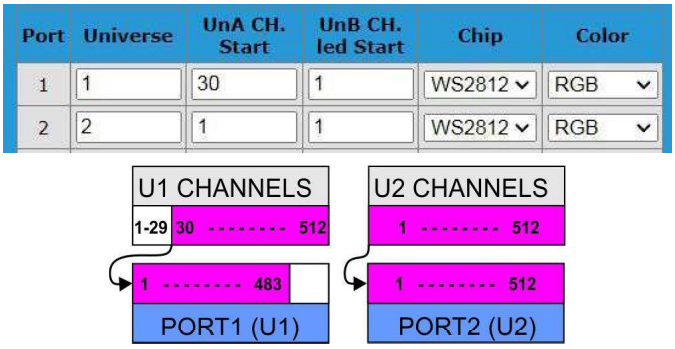


«Universe» - 0-32767. The universe number of this port.

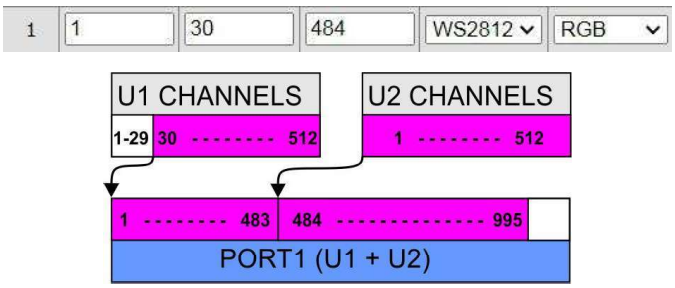
«UnA CH. Start» - Channel number in the first input universe from which the output will begin.

«UnB CH. led Start» - The channel number in the output from which the second universe will begin. If this number is greater than the number in the parameter above, then the controller output two universes with numbers «Un» and «Un+1» into one port.

Example 1, one universe to one Port:



Example 2, two universes into one port:



The data on the port will be changed only after receiving the second universe.

«Priority» - Universe priority in sACN mode.

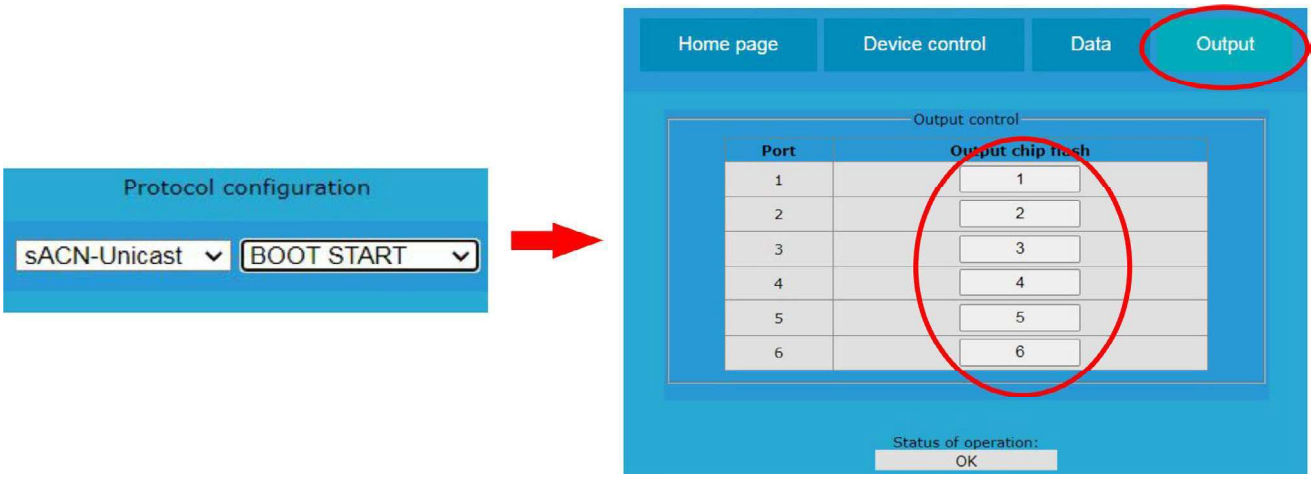
«Chip» - Select the pixel chip type.

«Color» - Select the order of colors in the pixel. Possible options: **RGB**, **GRB**, **BRG**, **RGBW**, **WRGB**, **GRBW**. The settings also include RGBW modes to control the RGBW strip in RGB format: **W_RGB, RGB_W**, **GRB_W**. White color is disabled.

DESCRIPTION

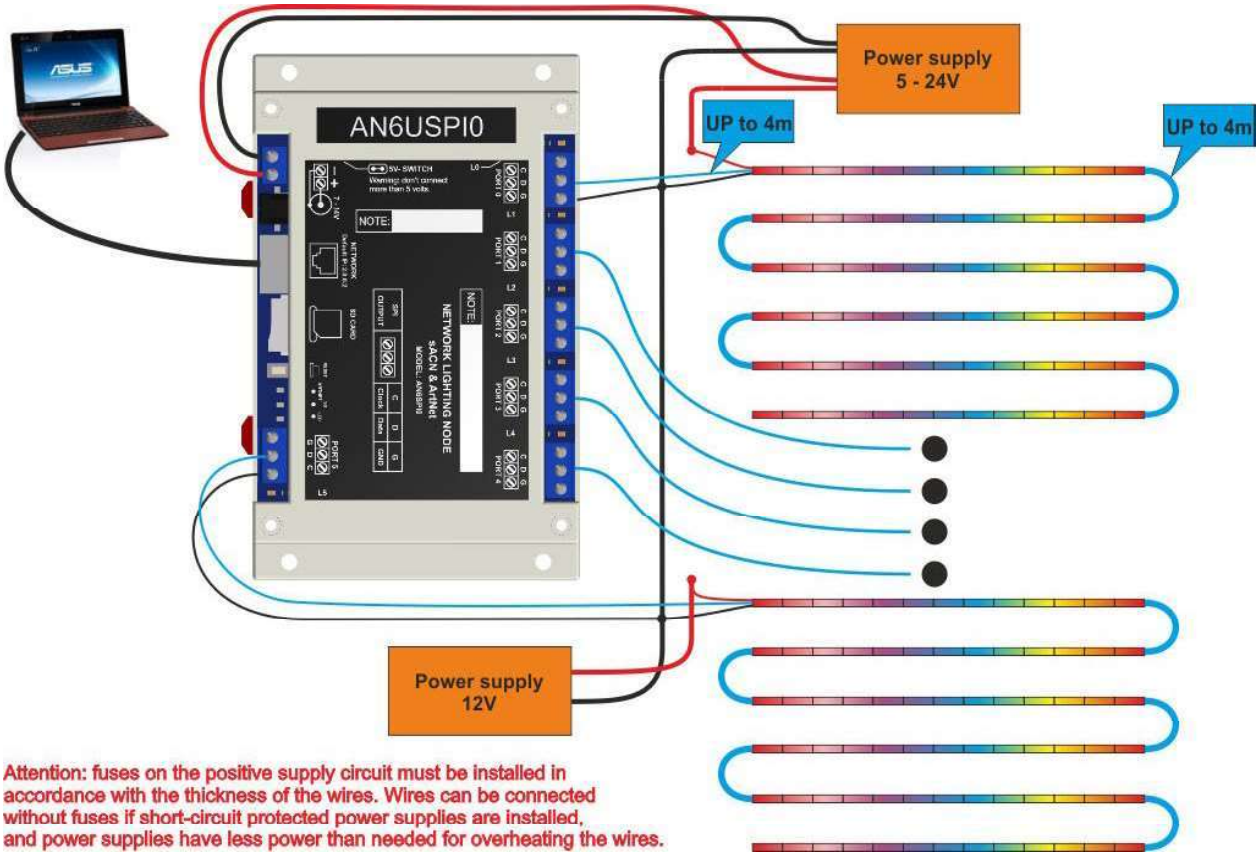
Output port drivers firmware update:

1. Select the «BOOT START» item on the controller «Device control» page and save configuration.
2. Make the controller power cycle. The LEDs of port should light up.
3. Update the firmware of the desired port using 1 - 6 buttons.
4. Disable «BOOT START» mode and reboot the controller.



The firmware of output drivers is built in main firmware.

Connection:



Links:

YouTube examples.
DMX to SPI converter WS2812(B)....
Art-Net to SPI controller.
Art-Net DMX controler.
FreeStyler.
Madrix.
Jinx.
Store.