

Components on board:

- Two connectors for power supply
- 10/100 Ethernet connector
- SDmicro flash card
- Control button «Set»
- Six two-pin terminator, connects 120 Ohm resistor between lines A and B («T0»-«T5»)
- Art-Net LED activity («Art-Net»)
- File system LED activity («SD»)
- Power LED («Led»)
- Six connectors for DMX output

Electrical:

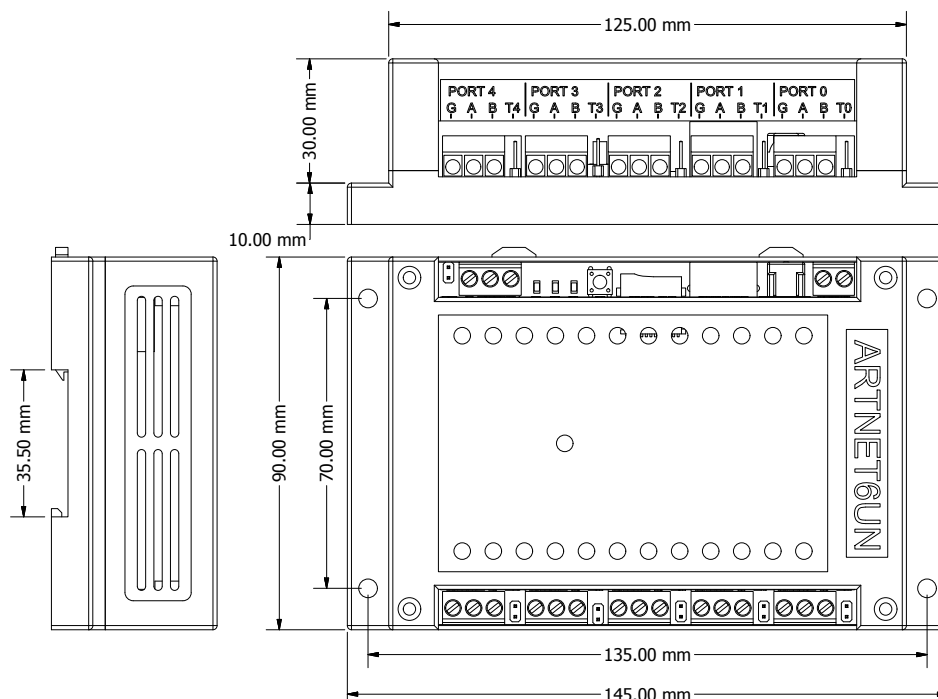
- Supply voltage 7V - 24V
- Supply current of the controller 350 mA
- DMX lines have overload protection
- Operation Range -40°C to 50°C

Features of firmware:

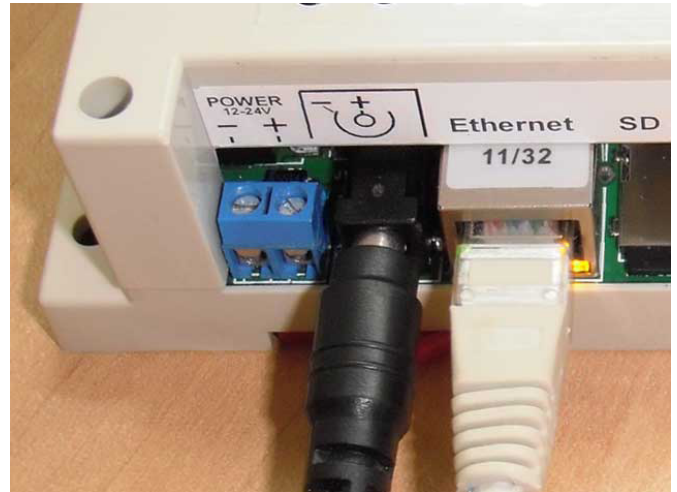
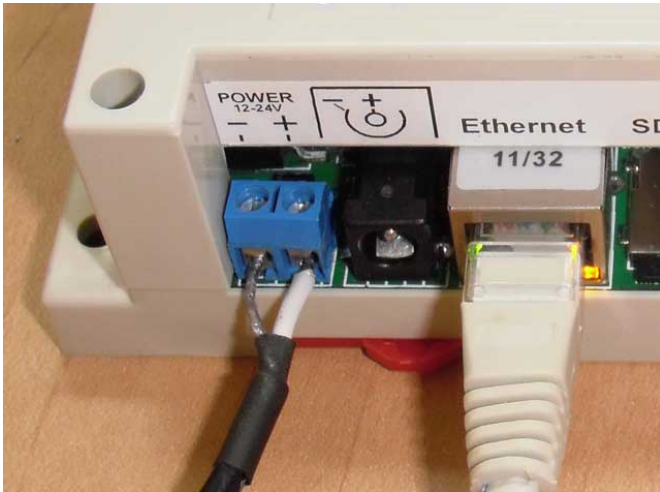
- Ethernet to DMX 512/1990
- Ethernet protocol Art-Net III
- sACN multicast (E1.31)
- Up to six DMX 512 ports output
- Up to six DMX 512 ports input (for Art-Net)
- Web server for configuration net and universes
- 30 fps. for video applications on every universe

Mechanical:

Weight: 170 grams. Installation on DIN rail
35 mm.



1. Connect the power supply and Ethernet



1.1 Power:

Power connection may be with any connectors. DC adapter should have output current 500mA. minimum. The supply voltage must be 7V - 24V. All connected devices must be grounded.

1.2 Configure network:

These is the defaults settings:

IP: 2.0.0.2
 MASK: 255.0.0.0
 MAC: 12:45:78:98:34:76
 Gateway IP: 192.168.0.1

These settings can be changed via the web server, or Art-Net software ([Art-Net test Software](#)).

IP: 2.0.0.2
 MASK: 255.0.0.0

These settings can be changed only via the web server.

MAC: 12:45:78:98:34:76
 Gateway IP: 192.168.0.1

1.3 Setup network default procedure:

- Disable controller's power supply.
- Push button «Set». Hold down the button.
- Enable controller's power supply.
- Wait two seconds.
- Release the button «Set»

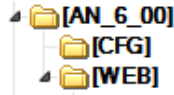
1.4 Example of network settings for the connected PC:

<input type="radio"/>	Obtain an IP address automatically
<input checked="" type="radio"/>	Use the following IP address:
IP address:	2 . 0 . 0 . 100
Subnet mask:	255 . 0 . 0 . 0
Default gateway:	. . .

2. SDmicro card

2.1 Function:

- a. Card necessary to store files of the web server and configuration.
The card format is: FAT16/32.
- b. The directory structure is:



- This structure you can not change. Not permitted to modify the files in WEB directory: «INDEX.HTM», «DEVCTR.HTM», «ARTP0B.HTM». Directory «CFG» file contains «AN_6_20.CFG». This file contains all the settings of the controller.
- c. **All the attributes of the files must be in the off position.**
 - d. **Replace a file «AN_6_20.GFG» on the base, makes the configuration as a default.**

3. Control button «Set»

3.1 This button is used: [Setup network default procedure](#)

3.2 Start firmware upgrade.

- a. Disable controller power supply.
- b. Unpack and copy file «an6_00.img» to miniSD card, in the main directory . Insert the miniSD card to miniSD slot.
- c. Push button «Set». Hold down the button.
- d. Enable controller's power supply.
- e. Wait for downloading of the image.
- f. Delete «an6_00.img» file from the flash.

4. DMX terminator

4.1 All of DMX ports have a two-pin connector for resistor 120-ohm. If the connector is closed then the resistor connects to the lines A and B. Connector should be closed just when the port is connected as an input and the controller is on the end of the line DMX.

5. Art-Net LED activity

- 5.1 Displays the reception of the packets Art-Net and sACN.
- 5.2 Displays the flash memory operations of the processor.

6. File system LED activity

- 6.1 Displays file system requests.
- 6.2 Displays errors of the image loading.

7. Device configuration

7.1 To enter you need to dial in your browser: <http://2.0.0.2> (if address as default). Click on the button «Device control».

7.2 «ShortName» and «LongName» - uses in Art-Net mode.

7.3 «Source IP» - the main address of the controller. All Art-Net packets must be sent to this address.

7.4 «Gateway IP» in the LAN does not use.

7.5 «Subnet Mask»

7.6 «MAC address» - need to select a different address for different controllers.

7.7 «Virtual IP» - look «9. Port 5 and 6 configuration».

7.8 «Input to IP» - if the switch is in the OFF position, input stream will be sent to BROADCAST address, if in On position then the input stream will be sent to the address specified in this field. It affects on the ports are configured as input.

7.9 «Art-Net» and «sACN» - choose a protocol.

7.10 «Save configuration» -saving changes. Changes will be applied after a reset (button «Reboot») or power Off->On.

7.11 If you use ArtNet and you have more then 12 universes, you must configure the software for sending your data as UNICAST (to main IP of controllers).

Electron-design

Home page **Device control** Port 0 Port 1 Port 2 Port 3 Port 4 Port 5

Network name configuration

ShortName:

LongName:

Network configuration

Source IP

Gateway IP

Subnet Mask

MAC Address

Virtual IP Univers 5 and 6

Input to IP On Off

Protocol configuration

Art-Net sACN(E1.31)

(c) Electron-design firmware ArtNet to Dmx6 2.0.00, web server V 2.0

8. Port configuration

8.1 In Art-Net mode, each port can be configured as output or input(look 7.8).

8.2 In sACN mode you can not have input and you should not set NET/Subnet/Universe as 0.

8.3 Each port can operate in its own «net».

8.4 Each port has 256 combinations «Subnet/Universes»

Electron-design

The screenshot shows the 'Port 0' configuration page for Art-Net mode. At the top, there is a navigation bar with buttons for 'Home page', 'Device control', 'Port 0', 'Port 1', 'Port 2', 'Port 3', 'Port 4', and 'Port 5'. Below the navigation bar, the page title is 'Art-Net port mode(requires a reboot)'. The configuration area includes two radio buttons for 'Input' (selected) and 'Output'. Below this, there are two dropdown menus for 'Net' and 'Subnet/Universe', both currently set to '0(00)'. At the bottom of the configuration area, there are two buttons: 'Save configuration' and 'Reboot'.

(c) Electron-design firmware ArtNet to Dmx6 2.0.00, web server V 2.0

Electron-design

The screenshot shows the 'Port 0' configuration page for sACN mode. At the top, there is a navigation bar with buttons for 'Home page', 'Device control', 'Port 0', 'Port 1', 'Port 2', 'Port 3', 'Port 4', and 'Port 5'. Below the navigation bar, the page title is 'sACN(E1.31) port mode(requires a reboot)'. A green message box states 'You can not use Net+Subnet+Universe as 0'. Below this, there are two dropdown menus for 'Net' and 'Subnet/Universe'. The 'Net' dropdown is set to '0(00)' and the 'Subnet/Universe' dropdown is set to '1(01)'. At the bottom of the configuration area, there are two buttons: 'Save configuration' and 'Reboot'.

9. Port 5 and 6 configuration

9.1 Art-Net protocol has a single IP address for 4 ports. Ports 5 and 6 have a virtual IP address. This address is required for the automatic detection of ports 5 and 6.

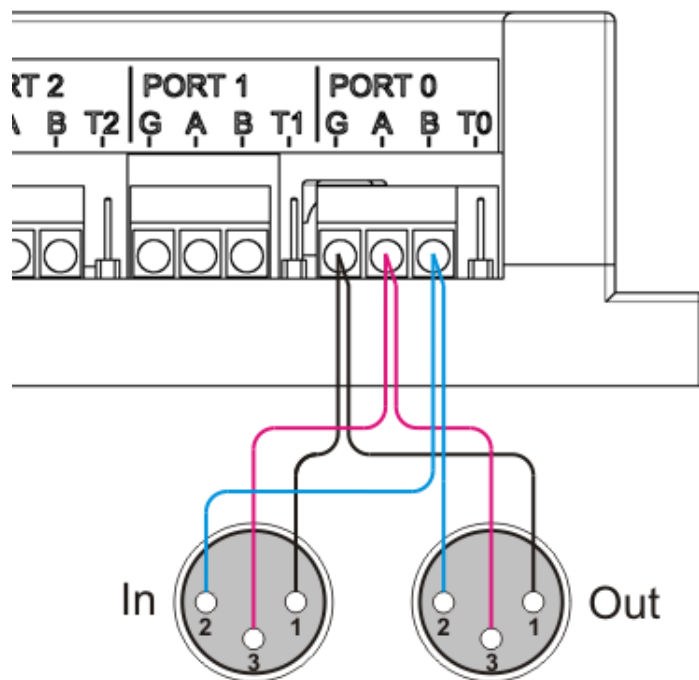
9.2 Ports 5 and 6 always get messages to the IP address of the controller (to the main address). If there are more than one controller in the system, then necessary a UNICAST data transmission. In this case, you must configure the port 5 and 6 manually.

10. Firmware updates.

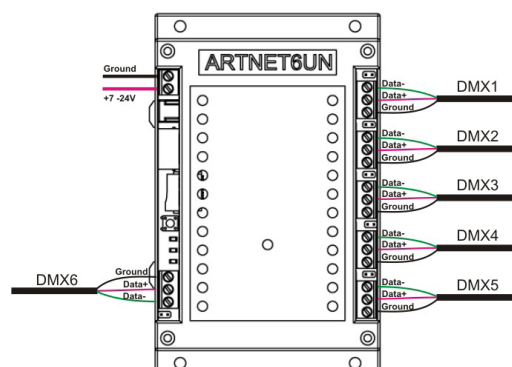
10.1 Procedure: [watch on YouTube](#).

10.2 [Download the latest firmware](#).

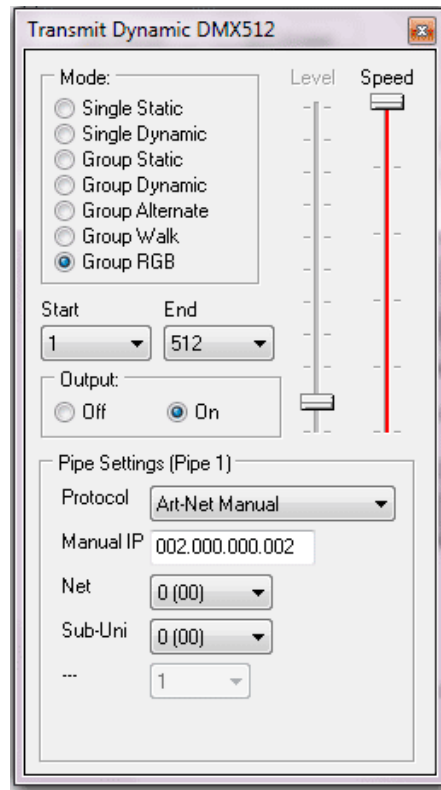
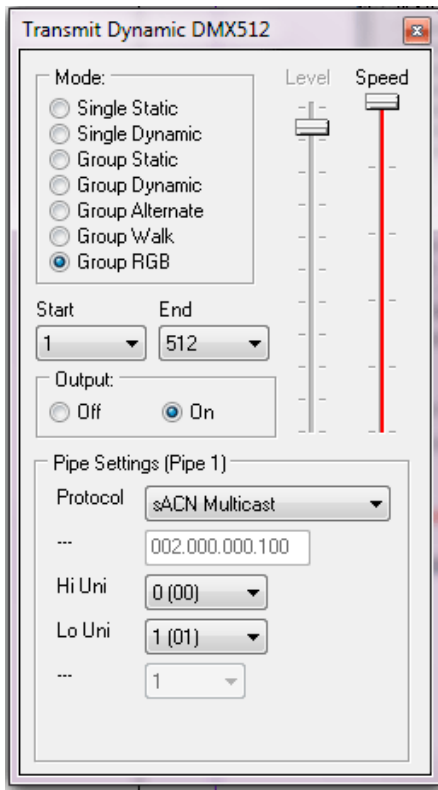
11. XLR3 DMX connector



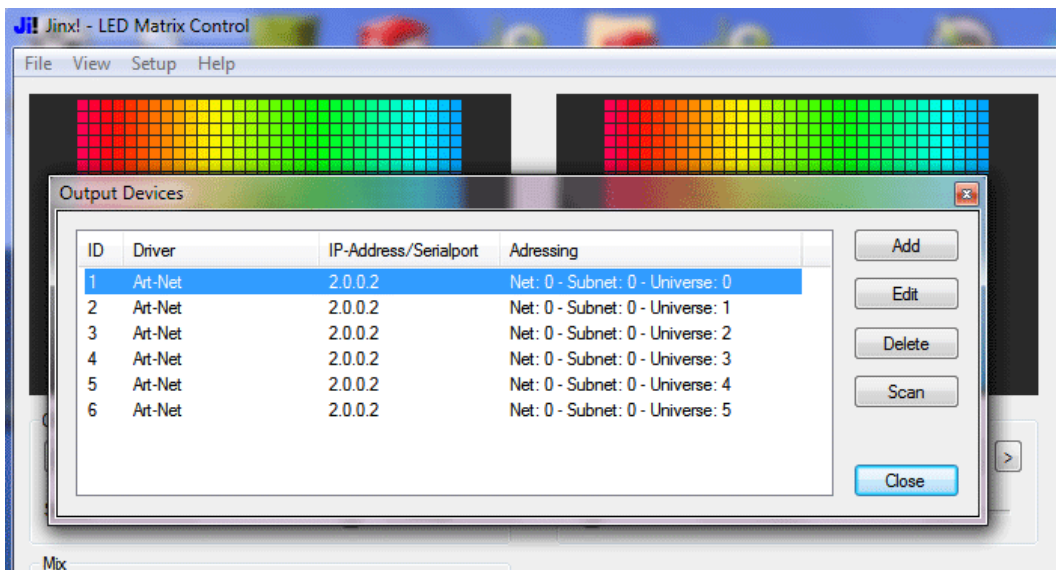
12. DMX and power



12. DMX-Workshop



12. jinx configuration



Links:

[Art-Net protocol.](#)

[Led DMX decoder.](#)

[Led DMX converter DMX to WS2801](#)

[Led DMX converter DMX to UCS1903,WS2811,WS2812\(B\)](#)

[Art-Net DMX to SPI controller](#)

[FreeStyler](#)

[Madrix](#)

[Jinx](#)