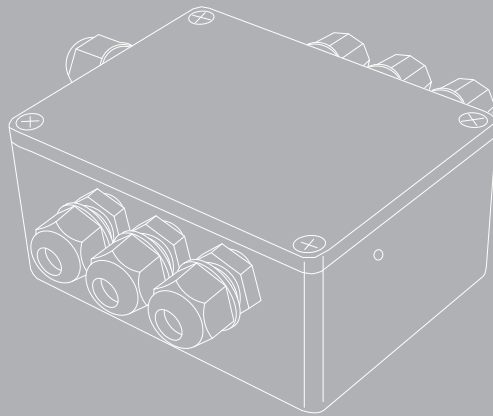


Version 1.20
October 30, 2017

User Manual

PixelGate Arma

PXA-O-2E4SPI, PXA-O-2E8SPI



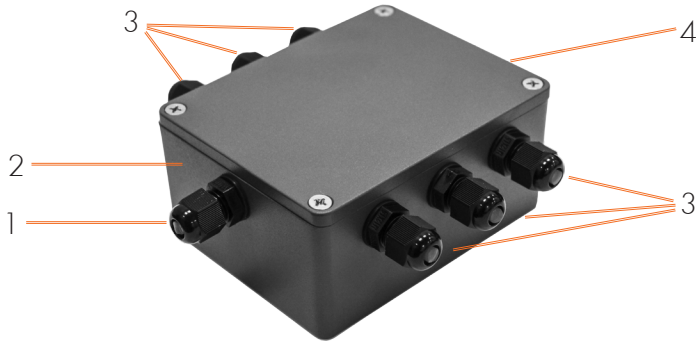
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Visual appearance



Pic.1 Main interfaces and indicators

1	Ethernet input/output	3	Control outputs
2	Device case	4	Power input

Specifications

Control interface	ArtNet, sACN
Supported LEDs	WS2812, WS2811
LED outputs	up to 8, TTL 3/5V L
Ethernet ports	2 10/100 Base-TX
Ethernet connectors	2 LSA-PLUS® connectors
Setup	Web interface
Power supply	5/12/24/48 VDC
Operating Temperature	-40...+70°C
IP Rating	IP65 for outdoor use
Dimensions, mm	115(D) x 55(H) x 65(W)

Safe operation



WARNING!

The device uses hazardous voltage AC 230 V

In installation, operation, preventive maintenance and repairs of the device, the requirements of the safety rules must be followed.

To ensure safe and reliable operation of the devices, please observe the following requirements:

- Use the device only for its intended purpose;
- Do not use devices that shows signs of malfunctioning;
- Avoid strong physical impacts on the device;
- Protect devices and cables from contact with corrosive liquids.

Whenever a fault is detected in the device, please contact the manufacturer.

General information

«PixelGate Arma» is a pixel strip controller for pixel mapped projects at indoor and outdoor installations when you need to convert ArtNet (DMX over Ethernet) or sACN data to 1 or 2 wire interface. IP65 case makes the device resistant to water, dust, fog, and smoke.

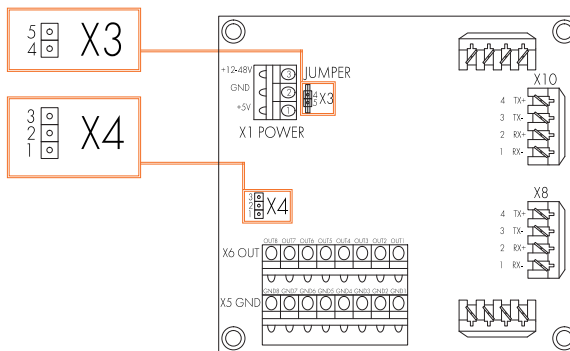
Key features:

- Die-cast, waterproof metal case
- No buttons
- Time-tested in severe weather conditions
- Integrated splitter
- 2 Ethernet ports for chaining the devices

Installation

Before mounting and power up, it is necessary to verify protective earthing and cable connections.

1. Ensure the device has no damage due to transportation.
2. Remove device's lid after unscrewing the four screws.
3. When using 12-48V power source, set the jumper at X3 connector. When using 5V power source, jumper is not installed.
4. When using 5V output signal: set the jumper at 1 and 2 pins of X4 connector. When using 3.3V output signal: set the jumper at 2 and 3 pins of X4 connector.



Pic.2 Jumpers location



ATTENTION!
Incorrect jumper connection may cause device malfunction.

5. Connect Ethernet input and output to X10 and X8 sockets respectively.
6. Connect LED stripes control and ground signals to X6 and X5 terminal blocks respectively.
7. Connect Power supply to X1 terminal block.
8. Set lid back and tighten all screws.

Web-settings

«PixelGate Arma» devices allow you to configure most of its settings via Web interface by HTTP protocol (TCP-port 80). To access to Web interface, the device must be switched on and connected to LAN. To access the interface, open any browser and type the IP address of the device in the address bar. The computer must be set up to connect to subnet 2.x.x.x.

Device settings

To access the settings page enter the IP address of the device to the browser. Main settings page of «PixelGate Arma» device will be displayed.

The screenshot shows the 'PixelGate Control Panel' web interface. At the top, there are three tabs: 'Device Settings' (selected), 'Network Settings', and 'Firmware Update'. Below the tabs, the 'Device Settings' section contains several fields: 'Device Name' (PixelGate), 'Device Description' (PixelGate, 8-output), 'Output protocol' (WS2812), 'Color order' (R-G-B), and 'Network protocol' (ArtNet). Below this is the 'Channels settings' section, which is a table with three columns: 'Channel', 'Subnet * 16 + Universe', and 'Start Address'. The table lists 8 channels, each with two rows of input fields. A 'Save' button is located at the bottom of the form.

PixelGate Control Panel		
Device Settings Network Settings Firmware Update		
Device Settings		
Device Name	<input type="text" value="PixelGate"/>	
Device Description	<input type="text" value="PixelGate, 8-output"/>	
Output protocol	<input type="text" value="WS2812"/>	
Color order	<input type="text" value="R-G-B"/>	
Network protocol	<input type="text" value="ArtNet"/>	
Channels settings		
Channel	Subnet * 16 + Universe	Start Address
Channel 1	<input type="text" value="0"/>	<input type="text" value="1"/>
	<input type="text" value="0"/>	<input type="text" value="1"/>
Channel 2	<input type="text" value="1"/>	<input type="text" value="1"/>
	<input type="text" value="1"/>	<input type="text" value="1"/>
Channel 3	<input type="text" value="2"/>	<input type="text" value="1"/>
	<input type="text" value="2"/>	<input type="text" value="1"/>
Channel 4	<input type="text" value="3"/>	<input type="text" value="1"/>
	<input type="text" value="3"/>	<input type="text" value="1"/>
Channel 5	<input type="text" value="4"/>	<input type="text" value="1"/>
	<input type="text" value="4"/>	<input type="text" value="1"/>
Channel 6	<input type="text" value="5"/>	<input type="text" value="1"/>
	<input type="text" value="5"/>	<input type="text" value="1"/>
Channel 7	<input type="text" value="6"/>	<input type="text" value="1"/>
	<input type="text" value="6"/>	<input type="text" value="1"/>
Channel 8	<input type="text" value="7"/>	<input type="text" value="1"/>
	<input type="text" value="7"/>	<input type="text" value="1"/>

Pic.3 Device Settings

- Device settings:

Device name	Editable device name (up to 18 characters)
Device description	Editable device description (up to 64 characters)
Output protocol	Output protocol signal (WS2812 or WS2811)
Color order	Sequence of colors in LED stripe
Network protocol	Type of Network protocol (ArtNET or sACN)

- Channels settings:

Channel	Number of channel (1-8)
Subnet* 16+ Universe	Subnet and Universe number(for ArtNET) or Universe number (for sACN)
Start Address	Starting DMX address for first and second universe in the channel

For each output channel you can specify two universe for output. If the LED stripe requires to control more than 512 DMX channels, device puts the data of second universe after channel 512 of first universe, providing maximum number of 1024 DMX channels.

To save the changes in device settings, click «Save settings».

Network settings

To edit network settings, press link "Network Settings".

PixelGate Control Panel	
Device Settings Network Settings Firmware Update	
Item	Setting
Static IP Address	2.0.0.138
Subnet Mask	255.0.0.0
Default Gateway	2.0.0.1
Primary DNS Server	0.0.0.0
Secondary DNS Server	0.0.0.0

Pic.4 Network Settings

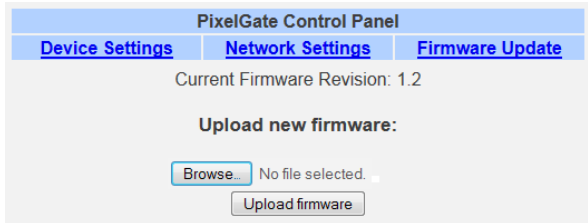
- Static IP Address- view/edit network address of the device;
- Subnet Mask- view/edit IP subnetwork mask;
- Default Gateway- view/edit gateway IP address;

- Primary DNS Settings- primary DNS address;
- Secondary DNS Settings- secondary DNS address.

To save the changes in network settings, click «Save settings».

Firmware update

To edit firmware, press link "Firmware Update".



Pic.5 Firmware Update

- Browse– browse for new firmware's file.

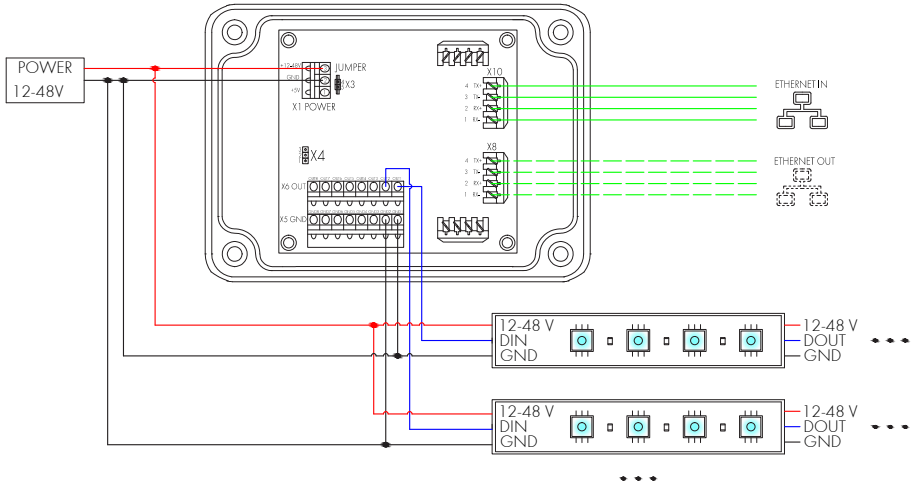
To start updating press button "Upload firmware".



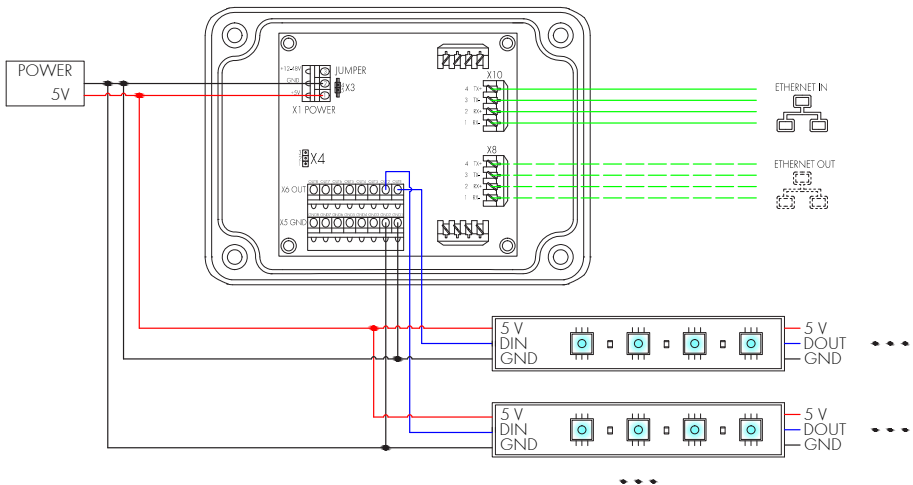
Please note! Selecting and uploading any other third-party file may cause device malfunction.

Connection scheme

Power supply 12V



Power supply 5V



Technical maintenance

Maintenance the device, search and troubleshooting should be performed by service personnel. The device should be free from dirt, dents, connecting cables and wires must be intact and securely fastened.

Please send all your warranty-related questions to
support@sundrax.com

All Sundrax products are covered by a 36 months warranty.



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