



# Intelligent light control technology



# Symbols explanation



- LED display
- graphical display
- dipswitch
- external PX277 programmer
- mobile application
- PC application
- USB connector
- LAN connector
- Art-Net support
- DMX-RDM support
- Modbus TCP/IP support

# About PXM

The PXM company was established by a team of electronic engineers in 1991 under the name of PROXIMA. The company's goal was to design and produce the stage and disco lighting controllers, make the installations and distribute the products of foreign companies.

Since 1999, the company began to gradually change the profile, giving up the installation and distribution of third party products. Since 2001, we have only been deaingl with designing and manufacturing our own devices. Seeking both new technologies and different applications of manufactured equipment, in 2004 PROXIMA was the first Polish company to develop and introduce to the market the LED control system based on the DMX–512 protocol.

In 2008 the company name was changed to PXM.

At the beginning of 2016 the company moved to a modern headquarters in the Special Economic Zone in Niepołomice.

Today PXM consists of the design department, constantly inventing new devices, its own measurement stands, laboratories and first of all production. We offer dimmers, controllers, signal converters, LED drivers and LED lamps.

Our devices are used in museum lighting, architectural illumination, fountain illumination and plant lighting.

Our products are found in the National Museum in Warsaw, the Malbork Castle Museum, the Zacheta - National Gallery of Art in Warsaw, the Wieliczka Salt Mine and many others.



# DMX Controllers

# **PX345** DMX Controller**PX340** DMX Controller**PX710** DMX Controller



The PXM offer includes three very advanced DMX-512 controllers:

- PX345,
- PX340,
- PX710.

The comparison of controller parameters is shown in the table on the next page.

All the controllers are equipped with an Ethernet connector and are configured via PC software. The devices have a built-in real time clock that can be synchronized with the NTP server and an astronomical clock that allows to program the events depending on the sunrise and sunset for the chosen geographical location.

The controllers support the Modbus protocol to make their integration with other control systems possibile.

PX340 and PX710 are equipped with the DMX input and allows to record the input data stream, and play it back later.

The most advanced controller - PX710 has two output DMX lines. The basic PX710M module may be extended with maximum 7 additional PX710S modules. It allows to create one system that supports up to 16 output DMX lines (8192 channels).

For managing the devices there is provided the advanced PxDesigner application for PCs.. There is also available the mobile app for Android  $^{**}$  OS and iOS $^{**}$ , which allows to control the previously programmed elements on the controller.



#### Ethernet

All the controllers are equipped with the LAN socket that allows to communicate with dedicated applications and to integrate with other systems.



#### PC application

PC application with built-in devices and effects libraries is provided with the device. It allows to configure and manage the controller.



#### Keyboards

The dedicated system of keyboards and ligt sensors may be connected to the PX340 or PX710M controllers besides the built-in digital and analogue inputs (PX725, PX723 i PX734 - details on page 6).



#### Modbus

All the controllers support the Modbus TCP/IP protocol. This allows to integrate them with external systems.

#### Mobile devices

The dedicated mobile application is provided with the conrollers. It allows to manage their operation.

parameter	PX345	PX340	PX710
DMX output channels	128	512	1 024 (+7 168)
DMX input channels	-	512	512
digital inputs	16	16	16
analogue inputs	-	4	4
analogue outputs	-	2	2
touchpanels support	NO	YES	YES
mobile devices support	YES	YES	YES
Modbus TCP/IP support	YES	YES	YES
scenes	1 024 (200 simultaneously)	1 024 (200 simultaneously)	1 024 (200 simultaneously)
masks	200	200	200
programs	512 (40 simultaneously)	512 (40 simultaneously)	512 (40 simultaneously)
program steps	250 000 (1 000/program)	250 000 (1 000/program)	250 000 (1 000/program)
sequences	128	128	128
sequence steps	10 000	10 000	10 000
statuses	256	256	256
data stream (DMX recording)	NO	YES	YES
internal events	1 024	1 024	1 024
timers	1 024	1 024	1 024
clock events	1 024	1 024	1 024
event actions	30 000	30 000	30 000
action limits	30 000	30 000	30 000
zones	16	16	32
users (including ADMIN)	4	8	16





# Additional devices

Additional devices, which allow to create extended and consistent controll systems based on PX340 or PX710 controllers are available in our offer.

# **PX725** Keyboard hub





The external input modules, PX723 and PX734, may be connected to the PX340 or PX710 controllers.

PX725 Keyboard Hub is used to connect these additional input devices with the controller. It has two separate databuses. Up to 32 input devices may be connected in series to each line (the maximum number of input devices is 64 for the whole system).

Configuration of additional modules is done through PxDesigner.

**PX723** Keyboard 8



The touch keyboard that has eight buttons with LED indicator each. It may be connected as an additional input module cooperating with the PX340 or PX710 controllers (through PX725).

The device is supported with the controller as eight digital inputs and eight LED indicators.

The casing of the device allows for easy installation in a standard double electrical box. The front panel of the keyboard is made of tempered glass.

# PX734 Light & movement sensor



The light intensity sensor integrated in one module with the movement sensor. The device may be connected as the additional input module to the PX340 or PX710 controller (through PX725). Up to 64 sensors may be connected in one system.

The device is supplied by the controller as one analogue input and one digital input.

The light sensor may work in three different modes suitable for different brightness ranges:

- to work in dark environment
- to work in medium environment
- to work in bright environment

The casing of the device is designed for easy wall or ceiling installation.

# Preview

## **PX703** Touch Panel

The touchpanel is dedicated to work with the PX340 and PX710 controllers. It will replace the previous PX181 Touchpanel.

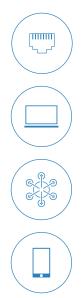
The device has a 7" color touch screen. It allows you to create multiple desktops and place buttons, sliders, and controls on them.

The interface appearance is fully customizable by the user. It is possible to limit acces to the device with a password.

The device is equipped with a LAN connector, which allows an easy connection to the controllers and computer.

The configuration is uploaded to the entire system (the controller + panels) from the PxDesigner application.

# **PX333** Mini DMX Controller







The small driver designed for simple applications. It supplies 64 channels in the DMX-512 standard. In addition, it has 3 OC outputs with the load carrying capacity of 1500mA each, allowing for direct control, e.g. LED strips.

It is equipped with 8 in-built ON/OFF inputs, to which you can assign the appropriate call to action and the LAN connector, which allows you to communicate with your computer or mobile devices.

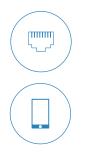
The device management is available on PCs running Windows (XP or later), Linux (Debian and Ubuntu) and OS X and for smartphones with Android and iPhones. The applications have an intuitive interface and allow for a complete configuration and control of the device.

In the configuration, you can create 16 areas, 32 scenes, 8 programs and 16 lists of elements. It is also possible to activate three users' accounts with the various access level to the device.

The controller also supports the Modbus protocol for easier integration with other control systems.

parameters	
DMX output channels	64
control inputs	8
OC outputs	3 (1500mA)
Modbus TCP/IP support	YES
zones	16
scenes	32
programs	8

**PX387** SwitchDimm DMX Controller





The small DMX controller dedicated to work with the PX314 dimmer as a module expandingits functionality, but it may also be used separately.

The device operates 512 DMX output channels, which can be controlled in a switch mode (ON/OFF) or dimmable with the slider. It supports monitoring of realtime output values. Creating configuration and device control is possible via dedicated mobile app for smartphones and tablets with Android  $^{\rm M}$  OS.

The software allows creating up to 16 zones and corelate output channels to them. It is also possible to set their order and the size of the displayed buttons can be defined.

Two accounts can be defined in the controller, which differ in the access level: an administrator and user.

#### parameters

DMX output channels	512
zones	16
scenes	-
programs	-

# Channel 2 (STREF Side Convert 2 (STREF

# DMX equipment

# DMX / Art-Net

## **PX724** GATE 4 DMX RDM





The ethernet network gate converts Art-Net<sup>™</sup> signal to four DMX-512 ports with the support of the RDM protocol.

PX724 has a LCD display and four buttons that allow to navigate easily through the intuitive menu. The device may be configured with the front panel or Art-Net commands. There are LEDs on the casing indicating a working mode of each output port.

The PX724 gate is fully compatybile with the Art-Net<sup>™</sup> version 4 protocol. In the gate there are two signal merging modes: HTP and LTP.

The gate is powered with the mains voltage of 230V AC. The robust metal casing protects against mechanical damage. DMX ports have optical and galvanic insulation and protection against short circuits and surges. It is possible to order 3-pin or 5-pin XLR connectors. The device is equipped with a LAN connector working in the 10/100BaseTX standard.

Additionally, the elements enabling installation in the RACK system or the truss suspension are available in the offer.



**PX357** GATE 4 DMX





The Ethernet network gate that converts Art-Net  $\ensuremath{^{\texttt{M}}}$  signal to four DMX-512 ports.

The device has a solid, metal housing protecting against mechanical damage. DMX ports have optical and galvanic insulation and protection against short circuits and surges.

It is possible to order 3-pin or 5-pin XLR connectors.

The device is equipped with a LAN connector working in the 10/100BaseTX standard. In addition, there are four LED diodes on the housing of the device, indicating the device operating mode. The gate is powered with the mains voltage of 230V AC.

In the gate there are two signal merging modes: HTP and LTP. The device comes with the application that allows for viewing the network settings and setting up the output signal parameters, such as: Brake, MAB, MBF, WAIT and the number of transmitted DMX channels.

Additionally, the elements enabling installation in the RACK system or the truss suspension are available in the offer.



# DMX / Analog

# PX235 0-10V/DMX Interface





The advanced converter that allows to receive data from 8 analogue (0-10V) inputs or the DMX input and convert them to the DMX output signal. It is possible to select DMX channels, to which the processed signals are sent.

The colour display makes it easy to operate the device and monitor its status. In addition, the device has the integrated module to operate the wind sensor. It enables to convert the impulse signal to the DMX output.

The device also has the output of OC type (Open Collector), which allows to signal certain statuses in the form of alarms.

The device has an integrated output of 10V, which can power the analogue sensors such as e.g. potentiometers or photometers.

The device is equipped with the USB connector for communication with a PC and updating firmware.

## **PX227 PX060 PX385** DMX/0-10V Interface



PXM offers 3 devices to convert a DMX signal to the analogue 0-10V signal.

Apart from simple DMX signal decoding, the devices provide the possibility to select the drive characteristics and program the response to the disappearance of the DMX signal.

The devices have a different number of outputs and different types of housing as well as a manner of configuration.



device	output chennels	housing	other
PX060	8	none	888
PX227	8	DIN T-35	888
PX385	1	metal	



# PX292 DMX/4-20mA Interface





 $\mathsf{PX292}$  is used to process the DMX-512 signal to the 4-20mA current drive. The device is produced in the housing for mounting on the DIN T-35 rail.

The converter allows for programming the response to the disappearance of the DMX signal and setting the individual parameters for each of the eight output channels.

# Relays

**PX232** DMX/Relay Interface





The relay driven with the DMX-512 signal. It is used to control effects of stage or architectural illumination with the DMX-512 signal.

The module has integrated hysteresis, which eliminates the phenomenon of vibration of the relay contacts.

The device is produced in the housing adjusted to mounting on the DIN T-35 rail, and is powered directly from the network of 230V AC.

**PX257-RE** DMX/Relay Interface **PX257-OC** DMX/OC Interface



The set of 8 relays for controlling ON/OFF outputs.

It is produced in two versions: OC and RE. The OC version of the device has digital electronic connectors of DC with a maximum voltage of 24V DC and load of switching one circuit of 1.3A. The RE version of the device has mechanical relays.

The manu of the device allows you to program a DMX address individually for all output channels. It is also possible to set thresholds of hysteresis and define behaviour of the device when the DMX signal disappears.

The devices are produced for mounting on the DIN T-35 rail.

# DMX/DALI

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# PX175 DMX/DALI Interface





The DMX signal converter to DALI. It allows to connect, in accordance with the standards, up to 64 DALI devices.

The menu of the converter allows for any addressing of individual lamps or groups of devices. In addition, a number of parameters may be defined for each of the lamps. Through PX175, you can also select the system response to the disappearance of the DMX signal.

The device is produced for mounting on the DIN T-35 rail.

# PX255 DMX/DALI/DMX Interface



The advanced converter of the DMX signal to DALI and DALI to DMX. In accordance with the DALI standard, up to 64 DALI devices (e.g. ballasts) can be connected to PX255. The device can also convert the control signal in the opposite direction: from the DALI controller to the DMX receiving devices. The menu of the converter allows for any addressing of individual lamps or groups of the devices (maximum 16). In addition, you can define a number of individual parameters for each of the lamps.

The device is produced for mounting on the DIN T-35 rail.

# DMX bus

PX094 PX165 PX349 PX716 PX736 DMX SPLITTER





The DMX line splitter allows to create branches in the large-scale systems. By using the splitter, the DMX input signal can be divided into independent lines, which are galvanically and optically separated both from the input and from each other. The splitter also strengthens the signal on each output line which guarantees the correct opeartion of the entire system.

Five different devices of this type are available in the PXM offer. They differ in the number of the inputs and outputs and the type of housing. What is more, PX716 and PX349 support the RDM protocol.

There are additional elements available for PX716 and PX736 that allow mounting in the RACK system.

PX736 has two DMX inputs and ten outputs. An individual switch for each output allows a selection of a source signal.

The devices with XLR connectors may be ordered in a 3-pin or 5-pin version.



device	input/output	housing	other
PX349	1/4	DIN T-35	
PX716	1/4	metal	
PX165	1/6	DIN T-35	
PX094	1/6	19"	
PX736	2/10	19"	

# PX113 PX173 DMX MERGER





The DMX merger allows merging 2 DMX input lines. The start address and the number of channels may be set for each input independently, as well as the way of signal merging. There are several functions available. The device is produced in 2 versions of housing.

device	input/output	housing	other
PX113	2/2	19"	888
PX173	2/2	DIN T-35	888

# **PX097** DMX REPEATER



The device works as an amplifier and a splitter of the DMX signal. It allows to attach further 32 receivers and increase the length of the DMX line. PX097 has two optically separated outputs and therefore it can also serve as a splitter.

The device is produced in two types of housing:

- metal with XLR connectors (with 3 pins or 5 pins)
- hermetic with cable glands (IP65)

# **PX245** SOUND TO LIGHT





The audio signal converter to DMX-512 is designed to synchronize music with the lighting control.

The device is equipped with a colour display, which makes programming and controlling the device intuitive.

PX245 can be driven via DMX signals, through ON/OFF input or operate by itself. The user has access to 16 fully programmable configurations, for which he can freely change the parameters of the audio signal processing.

The PC software for configuration is provided with the device.

The converter is for mounting on the DIN T-35 rail.

PX359 DMX/RS-232 Interface





The converter of DMX-512 driving to the RS232 protocol.

It allows for driving the multimedia devices by converting the DMX-512 input signal to the RS232 protocol. It is often used to control the projectors with the DMX signal.

The device has the LAN connector and a built-in web server that allows easy configuration via web browser.

The device has two RS232 output buses. User may define separate commands set for each bus.

PX359 suppots the RDM protocol. Additionally, the DMX address may be set with hardware dipswitch.

# PX218 RDM CONTROLLER



The transmitter of the DMX-RDM signal allows to monitor the status and change the settings of the devices supporting the RDM protocol that are connected to the DMX system.

PX218 operation management is done using the applications on the Windows platform via a USB port. The application allows to search for RDM devices in the DMX network, view the status and set the parameters of the selected device.

The device is closed in a damage-resistant, metal housing and powered from the computer via a USB port.

**PX300** CT SENSOR

**ACCESSORIES** 

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DMX



CT Sensor is used to measure brightness and colour temperatureof light in the range from 2500K to 6000K. The measured values can be sent using the DMX-512 or RS-485 protocols to other devices.

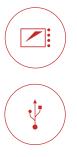
The device allows to adaptively control the lamps equipped with adjustment of colour temperature of the emitted light depending on the ambient light.

The device is closed in the sealed IP65 housing.

device	description
PX313 USB/RS-485 Interface	USB to RS-485converter for upgrading devices without a USB port
PY506 ANEMOMETR	a wind sensor dedicated to work with PX235
PY500 REMOTE CONTROLLER RADIO 4	4-channel radio remote controller
PY502 REMOTE CONTROLLER RADIO 8	8-channel radio remote controller
PY505 ACCESS POINT 4	4xLAN Wi-Fi access point

# Multimedia

# PX249 Audio DMX Player





#### parameters

inputDMXdata storageSD/SDHC cardamplifier20dBsupported formatswav	audio output	balanced unbalanced speaker
amplifier 20dB	input	DMX
	data storage	SD/SDHC card
supported formats wav	amplifier	20dB
	supported formats	wav

The audio player driven with a DMX-512 signal.

The maximum of 85 tracks in the WAV format of any length can be put on the SD/SDHC memory card. The capacity of the memory card is the only limit. The functions carried out by PX249 using the DMX controller allow to play tracks, select a particular track, loop single and many tracks, control a volume smoothly, adjust low and high tones and balance. The player can work with the mode with four or seven DMX channels. The device has the following outputs: balanced, unbalanced, and an integrated power amplifier of 2x10W.

In addition, it is possible to connect an external START button.

The device is equipped with a colour display, which allows you to view the status, and set up the device quickly. The menu of the device allows you to define the behaviour of the player in the absence of the DMX signal.

PX249 is produced in the housing for mounting on the DIN T-35 rails.

# **PX376** HD Multimedia Player





The FULL HD video player, controlled with the DMX-512 signal or through the LAN network with the UDP protocol. It allows to play multimedia files in all popular formats.

The files are stored on an external USB stick.

The device is equipped with the LAN connector that allows easy configuration with a PC application. It is possible to upload the playlist, set the DMX address and define the response to no DMX signal. The user may also control the device from the application, using the UDP protocol.

It is possible to connect and upload the configuration and playlist to multiple devices at the same time, which allows to update the multimedia material effectively and quickly.

The device is closed in a damage-resistant, metal housing with a special cover for connectors.

#### parameters

output	HDMI
input	DMX, LAN
USB ports	4
image quality	Full HD (1920 x 1080p)
supported formats	mkv, avi, mpeg, mp4, ogg, mov, flv, wmv, mpg, mp3, jpg, jpeg, png



# LED drivers

LED driver allows to control LED strips or LED lamps that are not equipped with the DMX receiver, with the DMX signal.

The PXM offer includes a wide range of LED drivers, both current and voltage. The devices differ in the number and load capacity of outputs as well as power supply voltage. There are also two types of housing: plastic for the DIN T-35 rail to be used in the switchboards, and metal to be integrated.

The comparison of all drivers is presented in the tables on the next page.

All drivers equipped with the display have an intuitive menu that allows to set the parameters for the entire device, or the individual parameters of each channel.

It is possible to set a DMX address, operation mode, reaction to signal loss, frequency of an output signal and output power limits.

The three- and four-channel drivers have a special "dynamic white" operation mode that allows to control the set of cold white and warm white lamps in an easy way.

Most of the drivers support the DMX-RDM protocol, which allows to remotely read and set device parameters through the DMX line.

The PX178, PX186 and PX252 drivers are equipped with a color display and a USB connector that allow firmware upgrade. Those models are more advanced and have a real time clock and an astronomical clock.

# **PX713** Serial Driver





PX713 is a special driver designed to control digital LED strips in which there is a possibility to control each pixel independently. The device operates two types of strips: TLC59731 and WS2818B.

The device has two operating modes: the direct one in which it is possible to control each pixel (the driver takes up to 512 DMX channels) or the effect one in which it is possible to start the in-built program with the use of several channels, changing its parameters.

PX713 is closed in a small metal housing. It is programmed with PX277 or the RDM protocol.

## PX265 MX System

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In addition, the offer includes the PX265 MX System driver, which is supplied in the OEM version to allow further building-in to the end user. The driver consists of the modules, which, if properly combined, create the current or voltage driver, or both. The integrated DMX receiver allows you to controll 12 channels.

device	description
PX265-DMX	DMX receiver
PX265-DISR	display with buttons
PX265-DRVU	voltage driver
PX265-DRVI	current driver

**PX396** LED Controller **PX397** Control Panel



0-+ 12845

The three-channel LED driver PX396 with the dedicated touch keyboard PX397 are designed as a standalone set for controlling RGB or dynami white LED strips (it has two separate operation modes).

Five different scenes may be written into the device memory for each control mode (DW - dynamic white and RGB). Scenes may be configured with the attached PC application or using PX397 touch panel (in admin mode).

During normal work PX397 allows to select one of the scenes and change its default brightness.

PX396 is equipped with the SD card that allows to move the stored configuration between the devices easily.

The PX397 keyboard is made of tempered glass.

# current

catalog number	outputs	output load	power supply	housing	other
PX319	1	2A	12-48V	metal	
PX215	3	350mA	12-48V	DIN T-35	
PX745	3	350mA	12-48V	metal	
PX184	3	700mA	12-48V	DIN T-35	
PX746	3	700mA	12-48V	metal	
PX308*	3	350mA	24-48V	metal	
PX241	4	350mA	12-48V	DIN T-35	
PX211	4	700mA	12-48V	DIN T-35	
PX714	4	350mA	12-48V	metal	
PX715	4	700mA	12-48V	metal	
PX252	6	350mA	12-48V	DIN T-35	Ý 🔼
PX186	6	700mA	12-48V	DIN T-35	¥ 🔼
PX268	12	350mA	12V	DIN T-35	נתנייתנ

\* the device will be replaced with PX745

# voltage

catalog number	outputs	output load	power supply	housing	other
PX342	1	10A	12-24V	DIN T-35	
PX254	3	6A	7-24V	metal	
PX282	3	6A	12-24V	DIN T-35	
PX370	4	5A	7-24V	metal	
PX178	6	7,5A	12-24V	DIN T-35	Ý 🔼
PX163	48	700mA	12-24V	metal	







# Architectural lamps

# PxSpot





Small lamps for illumination of interiors and architectural details, equipped with three powerful LEDs.

In order to drive the PX167 and PX203 lamps, use current drivers, 350 or 700mA respectively. They may be made in an RGB or monochromatic version. The cables of the lamps are terminated with the RJ-45 connectors and can be combined with the PX271 splitter.

In order to drive PX350 and PX351 lamps, use voltage drivers. These models may be made only with white LEDs (warm, neutral or cold). They differ with current consumption (350 and 700mA respectively) and brightness.

device	power supply driver type	LED colors	lens angle	housing color
PX167	current 350mA	RGB, monochromatic	10°, 22°, 40°	black, white or silver
PX203	current 700mA	RGB, monochromatic	10°, 22°, 40°	black, white or silver
PX350	voltage 12V	white: warm, neutral or cold	10°, 22°, 40°	black, white or silver
PX351	voltage 12V	white: warm, neutral or cold	10°, 22°, 40°	black, white or silver

# PxGround





In the PXM offer there are two PxGround lamps designed to be mounted in the ground. The lamps are equipped with the special cover against reflection. The special construction of the housing enables to change the angle of inclination of the LED module inside the lamp, which allows you to direct the light independently (within  $\pm 10^\circ$ ) of the mounted housing.

The housing is made of of acid resistant stainless steel (316L).

PX318 is equipped with 12 LEDs in the 4x3 system (3 separate control circuits) - each LED under a separate lens. It is available in the RGB or WNC version. To power the lamp, the voltage driver needs to be used.

PX361 is equipped with 24 LEDs in the 6x4 system (4 separate control circuits) - 4 LEDs (R, G, B, W) under the common lens.

PX316 has a built-in DMX receiver and supports the RDM protocol.

device	power supply/ control	LED count	LED colors	lens angle	
PX318	24V / PWM	12 (4x3)	RGB, WNC	6°, 14°, 28°, 47°	
PX361	24V / DMX512, DMX-RDM	24 (6x4)	RGBW	20°, 35°	

## **PX298** PxDuo 2x3 12V



The architectural with six high-power LED: 3 LED illuminating down and 3 LED illuminating up. The device is supplied with the junction box and the bracket for wall mounting. In order to drive the lamp, use the voltage drive or AC voltage of 12V DC.

LED colors	W, N, C
lens angle	10°, 22°, 40°
power supply/control	voltage 12V

# Underwater lamps

PxAqua PxRing



In the PXM offer there are two types of lamps with the IP68 housings, which are designed for underwater usage: PxAqua and PxRing.

The PxAqua series includes spot lamps with 3 or 6 LEDs. PxRing is 12 LED lamp with central opening for a nozzle.

Lamp models vary with LEDs count and power supply type. All lamps are closed in stainless steel housing.

High-quality LEDs used in the devices provide high brightness at low power consumption.

Voltage lamps (PX291, PX284 i PX373) are available only with white LEDs (warm, neutral or cold). Other lamps may be ordered in monochromatic or RGB version.



PX284 and PX291 lamps are available in the version with the "honeycomb" cover. Aditional anti-reflection covers are available for the PX284 model. The lamps are produced on order with the chosen LEDs colors nad lens angles. All models are compared in the table.

device	LED count	power supply	lans angles	LEDs colors	housing type
PX278	3	current	10°, 25°, 45°	RGB	in-ground
PX291	3	voltage 12V	10°, 22°, 40°	C, N, W	in-ground
PX284	3	voltage 12V	10°, 22°, 40°	C, N, W	with holder
PX229	3	current	10°, 25°, 45°	RGB	with holder/in tube
PX373	6	voltage 12 - 24V	10°, 25°, 50°	C, N, W	with holder
PX712	12	current	10°, 25°, 45°	RGB, RGBW	ring







# Exhibition lighting

PxArt is a complete museum lighting system mounted on the busbars GLOBAL TRAC CONTROL PULSE ®, driven with a DMX-512 signal. The system includes lamps, an audio player, a splitter, a programmer, busbars and all accessories needed for connection and power supply.

# Lamps with variable color temperature

**PX390** PxArt+ 6 **PX391** PxArt+ 12 **PX392** PxArt+ 18



The PXM offer includes 3 LED illuminators with variable colour temperature of emitted light: six-, twelve- and eighteen-LEDs.

Due to application of the latest solid-state light sources LED SSL and the advanced driving electronics, the lamps meet very high demands on the museum and exposition lighting.

The illuminators are characterized by a total absence of ultraviolet radiation and trace amounts of infrared radiation, as shown in the chart on the next page.

The lamps have a very high colour rendering index CRI - min. 90. The colour temperature of the emitted light can be continuously adjustable in the range of 2700-4500K.

The devices are also characterized by high brightness and low energy consumption. The lamps have efficient passive cooling, so that they do not disturb silence in museum premises. Each lamp has two individual addresses which allow for independent adjustment of brightness and colour temperature. Due to the buttons placed on the lamp housing, you can also control it manually in case of the lack of the DMX signal.

The lamps are also available in the version with a constant color temperature, owing to which their brightness is almost twice as high.

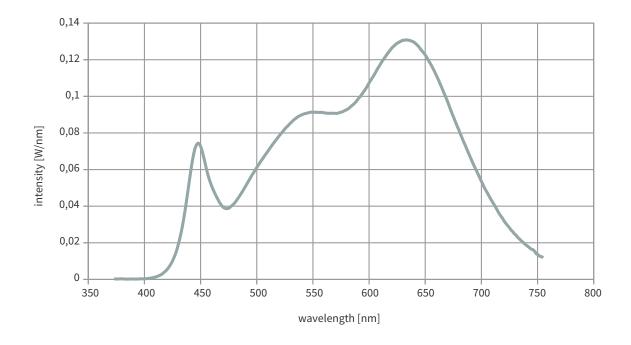
device	LED count	brightness(Im)
PX390	6	600
PX391	12	1200
PX392	18	1800





#### parameter

CCT range (K)	2700-4500
CRI (min.)	90
lens angle	10°, 20°, 30°, 40° eliptical 10°x45° wall washer* 50°x110° *tylko PX391 i PX392
housing color	black, white, gray



# Lamps with a constant color temperature



version	CRI (min.)	CCT (K)	brightness (Im)
PX378, PX393			without optics
-X30	95	3000	1090
-930	90	3000	1850
-950	90	5000	2215
-830	80	3000	2385
-850	80	5000	2420
PX389			
-930	90	3000	540
-850	80	5000	680

The PXM offer also includes 3 monochromatic illuminators available in several colour temperatures. The lamps have adjustable brightness controlled with the DMX protocol.

PX389 PxArt+ 3 is the smallest lamp in the series. It has 3 powerful LEDs under a common lens. The following lens angles are available:  $10^{\circ}$ ,  $22^{\circ}$ ,  $40^{\circ}$ .

The PX393 PxArt+ Mono lamp has a replaceable reflector. The following reflector angles are: 15°, 36°, 51°.

The PX378 PxArt+ Frame lamp has an advanced optical system enabling a very precise framing of the light.





# **PX372** PxArt+ Fluo



The PxArt Fluo lamp allows you to use line fluorescent lamps in the exhibition lighting.

It is the only fluorescent lamp in the PxArt series. The model has an integrated DMX-512 signal receiver, which allows you to smoothly adjust brightness of the installed fluorescent lamp (ranging from 5 to 100%) and switch light on and off.

The device operating parameters can be programmed with an external PX277 configurator.

## PX348 PxArt+ Audio



PxArt Audio is the sound system designed to be mounted on the busbar. The device consists of a speaker, an amplifier and a WAV file player.

PX348 allows you to play audio tracks anywhere in the room equipped with the busbar system without the need for additional installation. The system can be driven with any controller operating in the DMX-512 standard.

The functions carried out by PX348 controlled with DMX protocol allow you to play tracks, select a particular track, looping single and many tracks, smooth volume control. By using PX277 (PxArt Controller Settings), you can set all parameters of the device.

# PX295 PxArt+ Splitter DMX



The DMX splitter allows you to create branches in the large-scale DMX systems. With a large number of receivers, connecting them in series can be difficult; therefore, there is possibility to create branches. If you use a triangle or cross connector to create branches of the busbar, use the PX295 splitter.

By using PX295, you can split a DMX-512 input signal into 3 independent lines. In order to avoid disruptions in the busbar, use the splitter of more than 20 receivers on a single DMX line. Individual output tracks are galvanically isolated both from the input and each other, and properly strengthened to guarantee the correct operation of the entire system.

The splitter is produced in the metal housing equipped with the adapter allowing for quick installation to the busbar.

## **PX277** PxArt+ Settings Controller



The programmer of the devices of the PxArt series. It allows you to change a DMX address, define the response in case of loss of a DMX signal as well as set and view other parameters, depending on the type of the device.

# **GLOBAL TRAC CONTROL® PULSE SYSTEM**

The PXM offer includes the complete system of GLOBAL TRAC CONTROL PULSE busbars with the supply and control lines, connectors and supply elements produced by Nordic Aluminium. Elements may be ordered in 3 colors white, black and grey.

catalog number	description
PY651	SURFACE MOUNTED TRACK 1m
PY652	SURFACE MOUNTED TRACK 2m
PY653	SURFACE MOUNTED TRACK 3m
PY654	SURFACE MOUNTED TRACK 4m
PY661	TRACK FOR SUSPENDED CEILINGS 1m
PY662	TRACK FOR SUSPENDED CEILINGS 2m
PY663	TRACK FOR SUSPENDED CEILINGS 3m
PY664	TRACK FOR SUSPENDED CEILINGS 4m
PY660	END CAP
PY655	LEFT END FEED
PY656	RIGHT END FEED
PY657	STRAIGHT CONNECTOR
PY673	STRAIGHT INNER CONNECTOR
PY659	FLEXIBLE CONNECTOR
PY665	LEFT L-CONNECTOR
PY666	RIGHT L-CONNECTOR
PY668	INNER RIGHT T-CONNECTOR
PY670	INNER LEFT T-CONNECTOR
PY669	OUTER RIGHT T-CONNECTOR
PY667	OUTER LEFT T-CONNECTOR
PY671	X-CONNECTOR
PY645	SUSPENSION SET 1,5M
PY646	CEILING CLAMP





# Industrial lamps

# **PxTech series**

The series of the lamps designed for lighting warehouses, industrial halls, workplaces and communication routes.

 ${\sf Possibility} of intelligent driving reduces power consumption.$ 

The lamps are available in 4 versions with a different kind of LEDs (PowerLED or Midpower) and a type of power supply (24V DC or 230V AC with the builtin receiver DMX or DALI). The lamps with Power LEDs are available with 3 different lens angles or with a reflector.

The devices are available with holders or adapted for suspension. The lamps powered with 230V AC are also available in a triple version for suspension that allows to tilt each module.

Each model is produced in the version with white light at the color temperature 4000K and the color rendering index CRI over 80. The models with Midpower LEDs are also available in the version with the variable color temperature 2700-5700K.

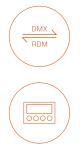
device	LEDs	power supply	control	versions
PX356	Power LED	230V AC	DMX-RDM, DALI	single/triple, reflector/lenses
PX717	Midpower	230V AC	DMX-RDM, DALI	single/triple, 4000K/2700-5700K
PX718	Power LED	24V DC	PWM (requires a LED driver)	reflector/lenses
PX719	Midpower	24V DC	PWM (requires a LED driver)	4000K/2700-5700K

<b>(356</b> Tech 230V	PX356 - version	power consumption	brightness	
	single with a reflector	60 W	5 600 lm	
	single with lenses	60 W	4 600 lm	
	triple with a reflector	185 W	16 800 lm	
	triple with lenses	185 W	14 000 lm	





PX717	
PxTech 230V	Midpower



PX718	
PxTech	24V

PX717 - version	power consumption	brightness
single, 4000K	55 W	6 400 lm
single, 2700-5700K	40 W	4 700 lm
triple, 4000K	160 W	19 000 lm
triple, 2700-5700K	120 W	14 000 lm

PX718 - version	power consumption	brightness
reflector	70 W	6 500 lm
lenses	70 W	5 400 lm

# **PX719** PxTech 24V Midpower

PX719 - version	power consumption	brightness
4000K	55 W	6 400 lm
2700-5700K	40 W	4 700 lm





# Preview

# **PX747** PxTech Square 4



color temperature	4000K
CRI	>82
power consumption	110 W
brightness	11000 lm
control	DMX-RDM

The rectange-shaped lamp for indoor industrial solutions enclosed in the IP65 housing. The lamp is powered with 230V AC and controlled directly with the DMX protocol. It also supports the RDM protocol.

The device is equipped with 48 high-power LEDswith CCT of 4000K and CRI at least 82.

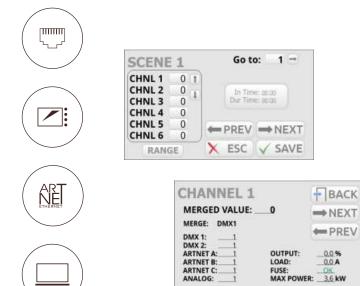
Intelligent controll allows to limit power consumption and create energy-efficient installation that meets the lightning quality requirements.

# Dimmers

24x

3600W

# **PX314** AC+ DIMMER 24 x 3600 W



The professional dimmer of AC class, equipped with a colour touchscreen and a LAN interface. The device allows you to control 24 independent channels with a power of 3.6 kW each. The dimmer allows you to control input signals from 6 different sources simultaneously, including:

- 2DMX-512lines,
- 3 Art-Net<sup>™</sup> address ports,
- 24 analogue inputs (optional on request).

The device has an integrated merger system with a possibility to select one of 13 priorities.

The advanced electronics allows you to address each output channel, select and edit the driving characteristics graphically (5 factory characteristics, 5 user's characteristics).

The dimmer is powered by three phases and has an integrated system fully protecting against the effects of reverse phase connection.

PX314 also enables setting of limits for voltage and output current for each channel individually. The device is equipped with the bulb heating system (10 levels) and control of the attached fuse and the broken circuit/a burnt bulb. The user can define the dimmer response to the lack of the driving signal. In addition to the basic options (ON, OFF, HOLD), 64 scenes and the program are available to be edited.

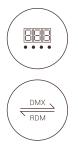
The integrated "PLL," "soft-start," "soft-on" and "even-off" systems assure reliable operation in the most extreme conditions. Direct detection of zero of the network and optical insulation of the DMX input guarantee high resistance to interference.

The colour touch screen and the intuitive menu allow you to configure the parameters and view the output status. The available software for PC allows you to set up and monitor the device over LAN. It is possible to connect and preview multiple dimmers at the same time.





# **PX741** TRAILING EDGE DIMMER





 $\mathsf{PX741}$  is an intelligent transistor dimmer with phase shut-off, and trailing edge control type.

The module controls four channels - 200VA each and has a built-in interference elimination system, fuses and signal controls.

The device has a DMX512 input, 0-10V analog inputs and the possibility to connect external buttons that may be set in one of four different operation modes.

Each of the four output channels can be configured individually. The settings include: input source, input characteristics and range of control signal.

Dimmer is designed to work with loads type R and RC:

- dimmable LED bulbs,
- LEDs connected to a dimmable CC type power supply,
- traditional bulbs,
- 230 V halogen lamps,
- 12V halogen bulbs connected to a dimmable electronic transformer. PX741 supports the RDM protocol.

The device is enclosed in a housing for mounting on the DIN T-35 rails.

# Other dimmers



PXM offers the dimmers of different numbers and load of the circuits, available in several types of the housing.

All dimmers can be powered by three, two or one phase (not applicable to the series of MultiSystem) and have an integrated system, fully protecting against the effects of reverse phase connection.

The devices allow individual and group setting of the parameters of individual channels:

- DMX address,
- characteristic (linear, reverse, logarithmic, exponential, ON/OFF),
- ACL, which is a programmable reduction of the output power.

It is also possible to set the parameters of the device:

• PREHEAT, i.e. heating the bulb fibres, set in the range of 0 - 10%

• the way of the dimmer reaction to DMX signal disappearance (off, 100% on, slow switching off, one of three scenes, chaser).

All dimmers have constant temperature and supply voltage measurement, and the integrated systems: "PLL," "soft-start," "soft-on" and "even-off", direct detection of zero of the network, optical isolation of the DMX input and individual overcurrent protection of each circuit. In addition, LEDs reflect the status of all outputs, and the detector of break in the load circuit allows you to locate the defective bulb or wire immediately.

device	circuits	circuits load	housing	
PX156 MultiSystem Dimmer 2 x1200 W	2	1200 W	DIN T-35	
PX155 MultiSystem Dimmer 4 x 600 W	4	600 W	DIN T-35	
PX170 AC Dimmer 6 x 1200 W	6	1200 W	for grate mounting	
PX091 AC Dimmer 12 x 1200 W	12	1200 W	on-wall mounting	
PX214 AC Dimmer 12 x 2300 W	12	2300 W	on-wall mounting	







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