PX778

Extension module 8ch

User manual

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Manufacturer reserves the right to make modifications in order to improve device operation.

1   Description

PX778 is a device dedicated to work with PX340 / PX340+ and PX710 / PX710+ controllers, in which it is possible to connect of additional inputs for the controllers.

Extension module 8ch expands the system by 8 digital inputs, this device is connected to the controller using a connector, which is the PX725 Keyboard Hub. The PX725 Keyboard Hub is not required when connected to the PX340+ / PX710+ controller. It is possible to connect 64 devices (max. 32 per one line) and they should be connected in series.

The digital inputs can be of thew sink in type – "joint plus" or the source in type – "joint mass", depending on the configuration of the SS input connection ("-" or "+"). In addition, the device has 8 OC outputs, to which signaling diodes can be connected. Each output has a 10-degree scale of the brightness level with a maximum load of up to 150mA.

Each of the inputs and outputs in PX778 can be configured using the PxDesigner application (available for free download from the manufacturer's website).

The device is enclosed in a housing adapted for mounting on a standard 35mm DIN rail and can be supplied with 12 – 24V DC.
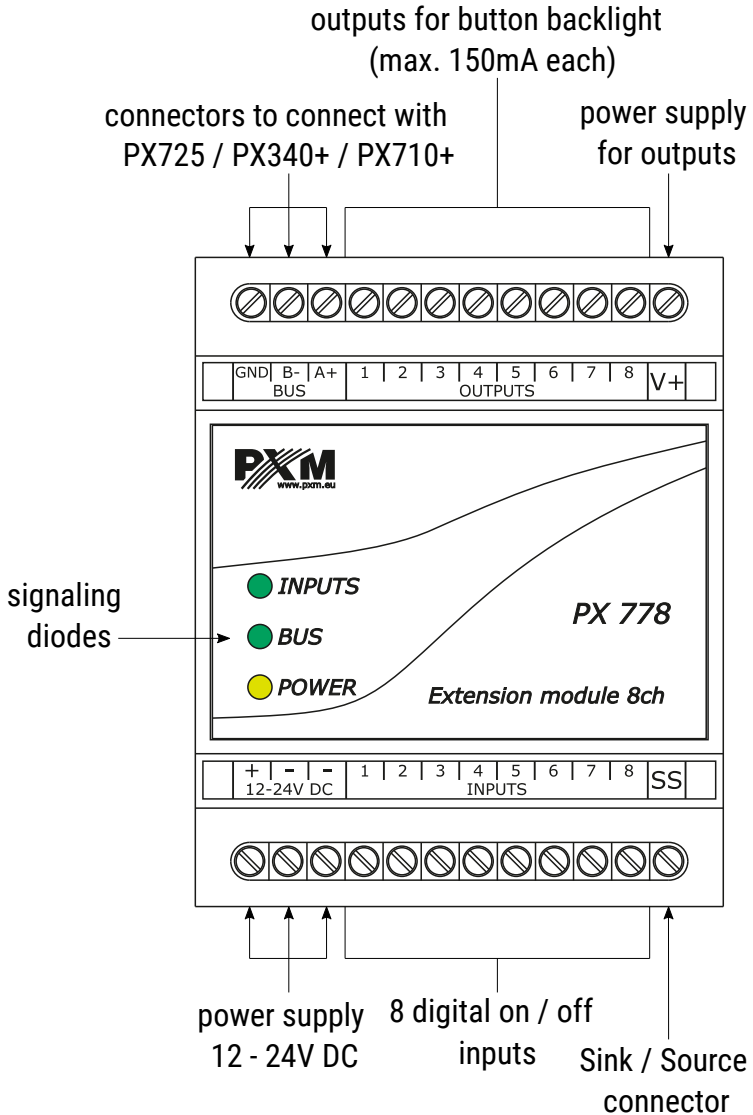
2   Safety conditions

PX778 is a device powered with safe voltage 12 – 24V DC, however, during its installation and use the following rules must be strictly observed:

1. The device can be connected to 12 – 24V DC with current-carrying capacity compatible with technical data.
2. All the conductors should be protected against mechanical and thermal damage.
3. In case of damage to a conductor, it should be replaced with a conductor of the same technical parameters.
4. All repairs, connecting and disconnecting of cables can only be made with cut off power supply.
5. The device should be strictly protected against contact with water and other liquids.
6. All sudden shocks, particularly dropping, should be avoided.
7. The device cannot be turned on in places with humidity exceeding 90%.
8. The device cannot be used in places with temperature lower than +2°C or higher than +40°C.
9. Clean with damp cloth only.

3 Connectors and control elements

outputs for button backlight
(max. 150mA each)

connectors to connect with
PX725 / PX340+ / PX710+

power supply
for outputs

| GND | B- | A+ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | V+ |
| | BUS | | | | | OUTPUTS | | | | | |

PXM
www.pxm.eu

INPUTS

BUS

POWER

PX 778

Extension module 8ch

signaling
diodes

| + | – | – | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | SS |
| | 12-24V DC | | | | | INPUTS | | | | | |

power supply
12 - 24V DC

8 digital on / off
inputs

Sink / Source
connector

4 Device operation

Thanks to the PX778, the system can be extended with eight additional digital inputs that are programmed using a PxDesigner application.

Each connected input generates two events in the controller: from turning on and from turning off. The button can also be defined as "repetitive" – then pressing it longer will generate the event from turning on every defined interval of time.

The system expansion device has an additional eight built-in control outputs (for connecting LEDs) with a maximum load of 150mA each. All outputs can be configured in the PxDesigner application.
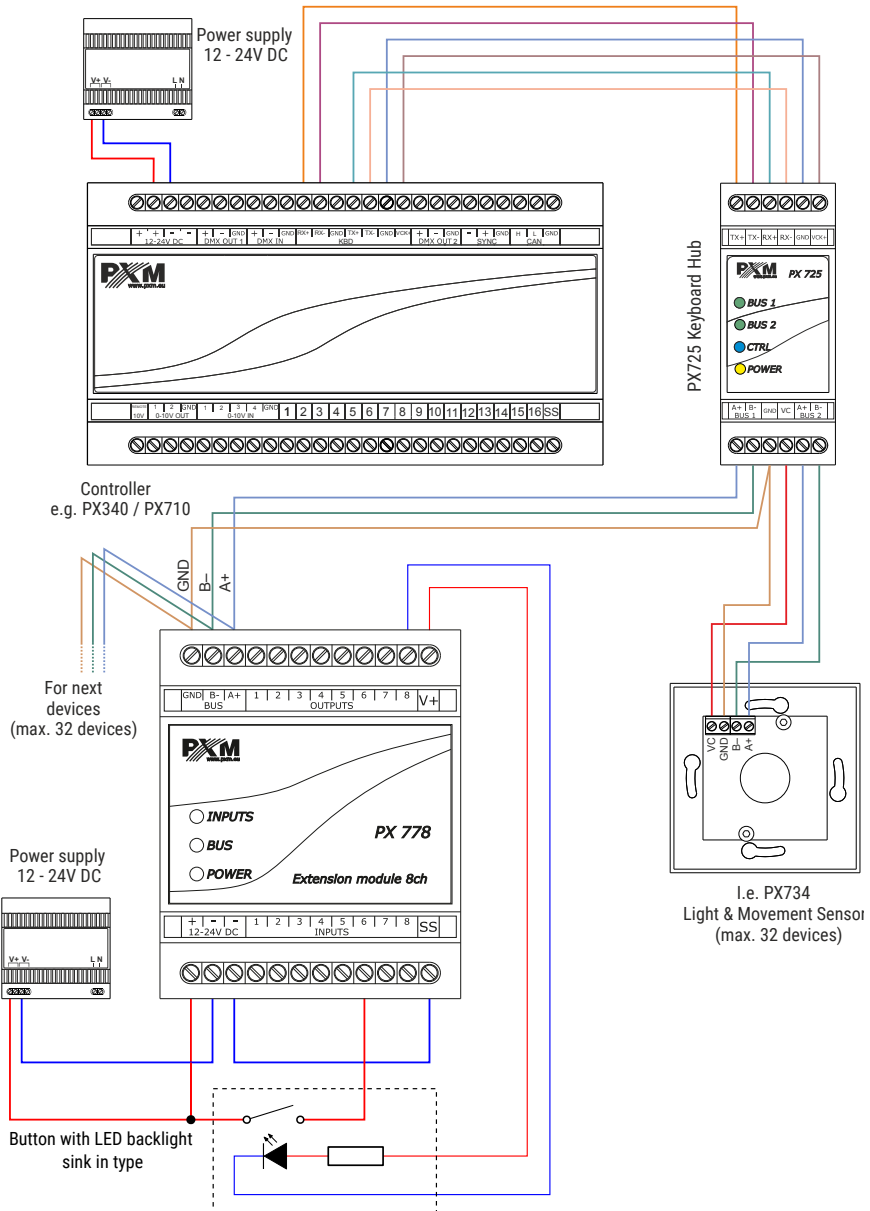
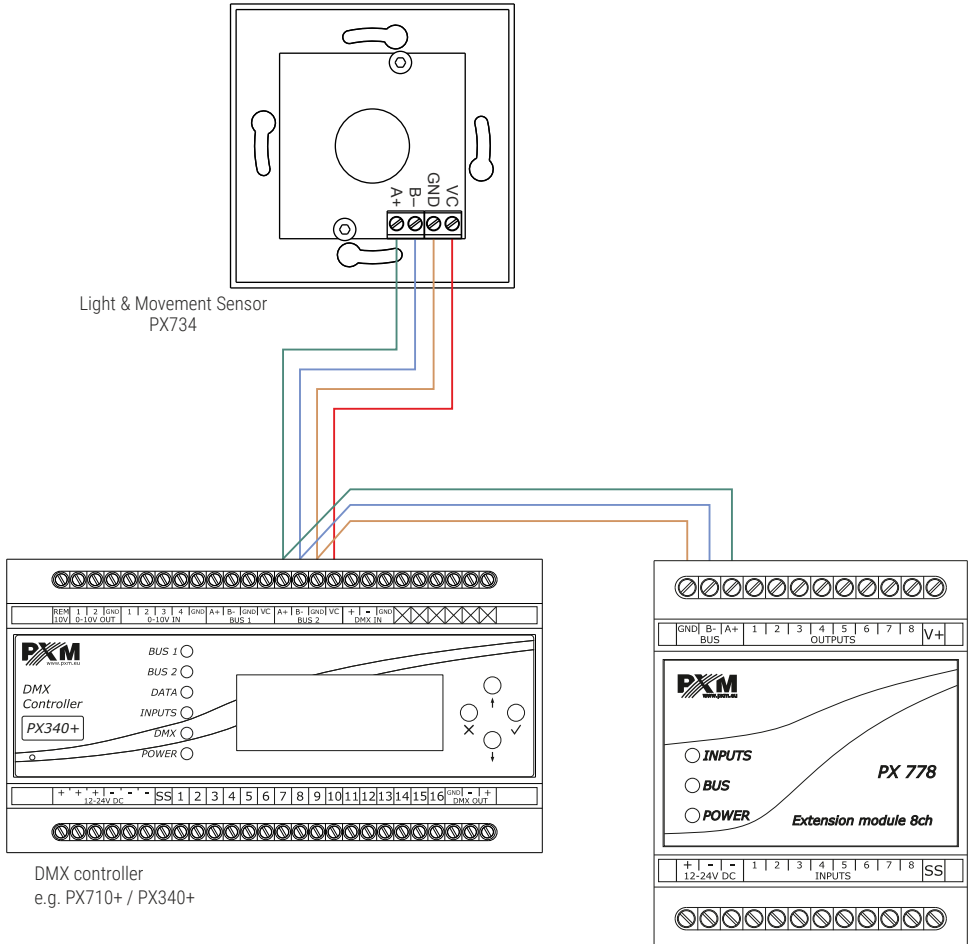# 5 Indication lights

PX778 is equipped with 4 indicators signaling:

Indicator	Action	Function
green ⬤ INPUTS	permanent light	at least one of the inputs is shorted
green ⬤ BUS	flash	PX778 communicates correctly with PX725 / PX340+ / PX710+
yellow ⬤ POWER	permanent light	the device works correctly

6   Connection scheme
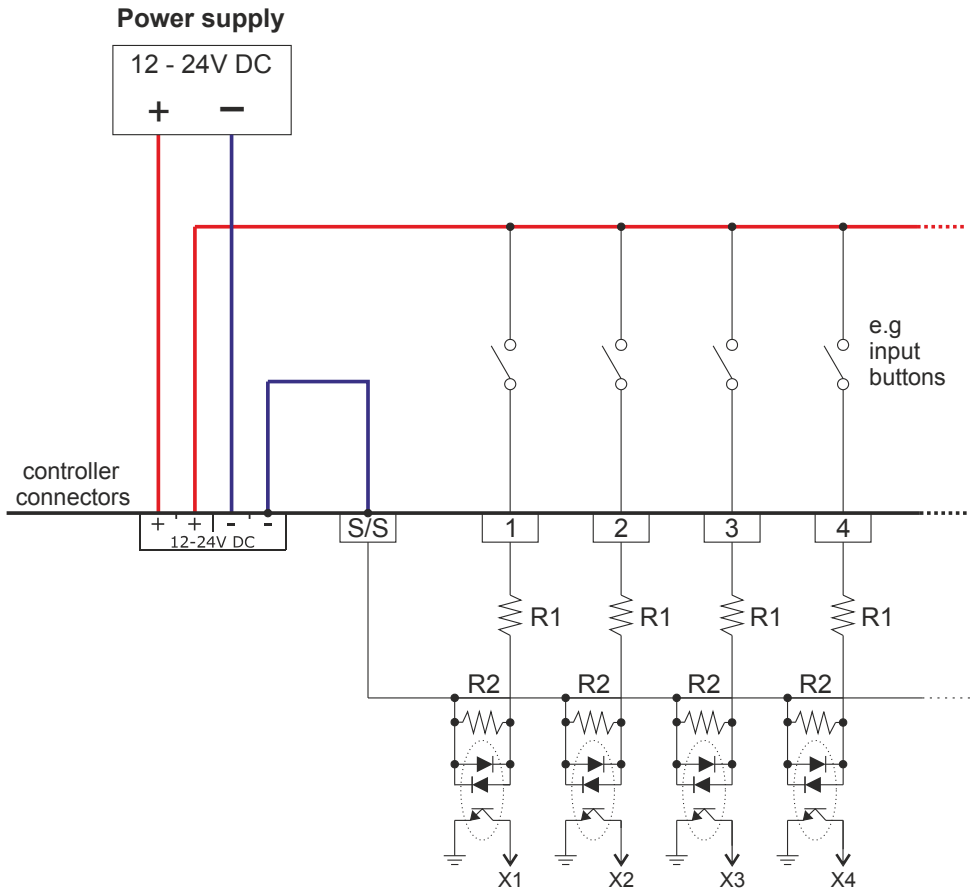
a) PX778 connection to the PX340 / PX710 controller

Power supply
12 - 24V DC

PX725 Keyboard Hub

Controller
e.g. PX340 / PX710

For next
devices
(max. 32 devices)

Power supply
12 - 24V DC

PX 778
Extension module 8ch

○ INPUTS
○ BUS
○ POWER

I.e. PX734
Light & Movement Sensor
(max. 32 devices)

Button with LED backlight
sink in type

b) PX778 connection to the PX340+ / PX710+ controller

Light & Movement Sensor
PX734

DMX controller
e.g. PX710+ / PX340+

c) connection of digital inputs (sink in) – positive logic input – "*joint plus*"

Power supply

12 - 24V DC

+   **−**

e.g input buttons

controller connectors

+   +   -   -
12-24V DC

| S/S | 1 | 2 | 3 | 4 |

R1   R1   R1   R1

R2   R2   R2   R2

X1   X2   X3   X4

d) connection of digital inputs (source in) – negative logic input - "*joint mass*"

Power supply

12 - 24V DC

+   **−**

e.g
input
circui

controller
connectors

+ ' + | - ' −
12-24V DC

S/S

| 1 | 2 | 3 | 4 |

R1   R1   R1   R1

R2   R2   R2   R2

X1   X2   X3   X4
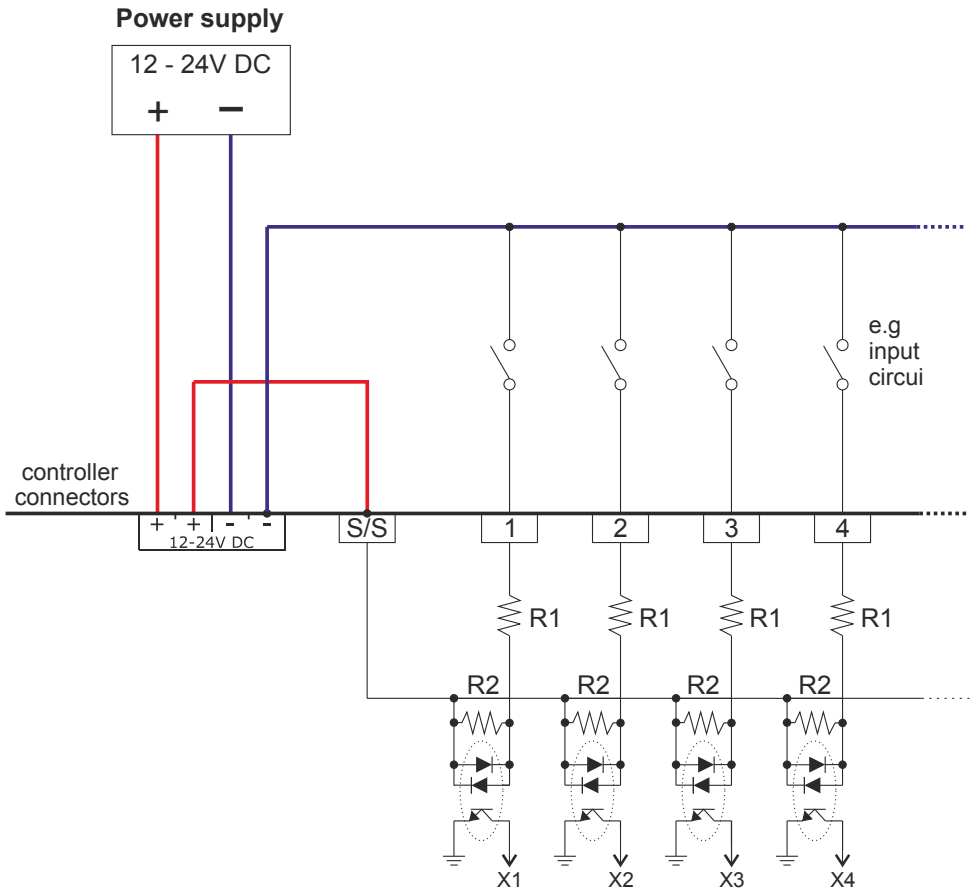
7   Dimensions
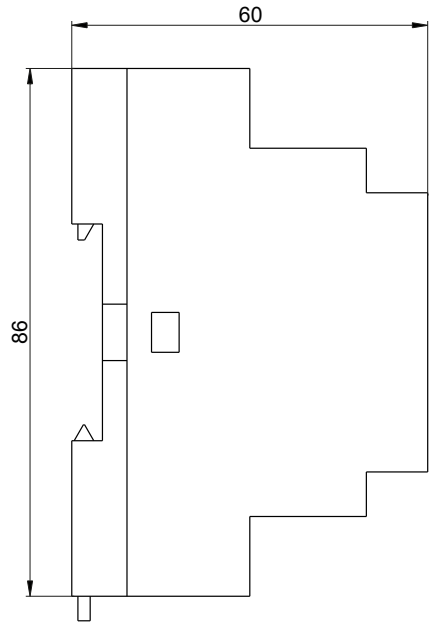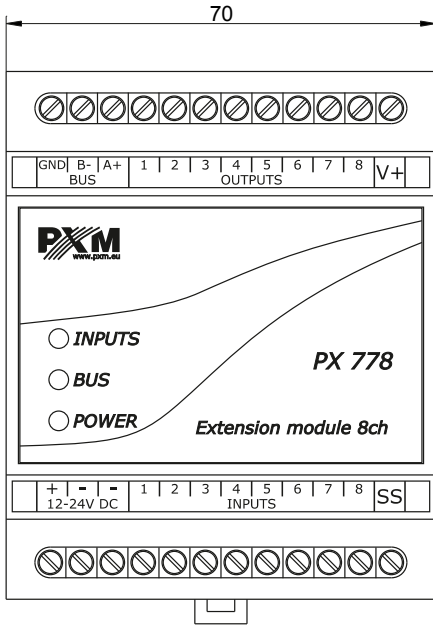
8   Technical data

type	PX778
power supply	12 – 24V DC
cooperation with the controllers	PX340, PX710M
method of programming	with the use of PxDesigner
max. power consumption	2W
output load capacity	max. 150mA / output
weight	0.1kg
dimensions	width: 70mm height: 86mm depth: 60mm

DECLARATION OF CONFORMITY

PXM Marek Żupnik spółka komandytowa
Podłęże 654, 32-003 Podłęże

we declare that our product:

Product name: Extension module 8ch

Product code: PX778

meets the requirements of the following standards, as well as harmonised standards:

PN-EN IEC 63000:2019-01	EN IEC 63000:2018
PN-EN 61000-4-2:2011	EN 61000-4-2:2009
PN-EN IEC 61000-6-1:2019-03	EN IEC 61000-6-1:2019
PN-EN IEC 61000-6-3:2021-08	EN IEC 61000-6-3:2021

and meets the essential requirements of the following directives:

2011/65/UE **DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment
Text with EEA relevance.

2014/30/UE **DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL** of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast)
Text with EEA relevance.

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