

FEATURES

- 4 constant voltage channels configurable as:
 - 4 independent LED channels.
 - 1 RGBW channel.
 - RGB + W channels.
- 6 inputs configurable as:
 - Binary inputs.
 - Motion detector with luminosity sensor.
- Master Light Control.
- External 12-30VDC power supply required.
- Total data saving on KNX bus failure.
- Manual control through buttons and status indicator LED.
- Integrated KNX BCU.
- Dimensions 67 x 90 x 79mm (4.5 DIN units).
- DIN rail unit assembly (EN 50022), through pressure.
- Conformity with the CE directives (CE-mark on the right side).

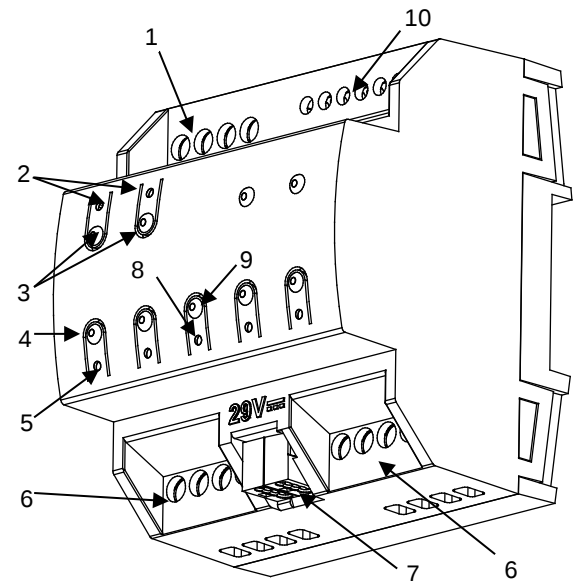


Figure 1. Lumento DX4

1. External power supply	2. Colour shift status LED*	3. Colour shift control buttons*	4. Channel control button	5. Channel status LED
6. Output channels	7. KNX connector	8. Programming/Test LED	9. Programming/Test button	10. Inputs

Programming/test button: short button press to set programming mode. If this button is held while plugging the device into the KNX bus, it enters in safe mode. If this button is held more than 3 seconds, the device enters into manual mode (test mode)

Programming/Test LED: programming mode indicator (red). When the device enters into safe mode, it blinks (red) every half second. The manual mode is indicated by the green color. During the start-up (after reset or knx bus failure) and if the device is not in safe mode, it emits a red flash. A blue blink represents an error (see figure 2)

GENERAL SPECIFICATIONS

CONCEPT			DESCRIPTION		
Type of device			Electric operation control device		
KNX supply	Voltage (typical)		29VDC SELV		
	Voltage range		21...31VDC		
	Maximum consumption	Voltage	mA		mW
		29VDC (typical)	6.5		188.5
		24VDC ⁽¹⁾	10		240
Connection type		Typical TP1 bus connector; 0.80mm² section			
External power supply			12 to 30 VDC (voltage in concordance with voltage LEDs to be controlled)		
Operation temperature			0°C to +45°C		
Storage temperature			-20°C to +70°C		
Operation humidity			5 to 95% RH (no condensation)		
Storage humidity			5 to 95% RH (no condensation)		
Complementary characteristics			Class B		
Protection class			III		
Operation type			Continuous operation		
Device action type			Type 1		
Electrical stress period			Long		
Degree of protection			IP20, clean environment		
Installation			Independent device to be mounted inside electrical panels with DIN rail (EN 50022)		
Minimum clearances			Not required		
Response on bus KNX bus failure			Data saving according to parameterization		
Response on KNX bus restart			Data recovery according to parameterization		
Operation indicator			Programming LED indicates programming mode (red), test mode (green) and error (blue blinking). Colour shift LEDs show the current colour*. The LED of each channel indicates its status (fixed = active channel; flashing = error). For more information about error notification, see Fig. 2.		
Weight			184g		
PCB CTI index			175V		
Housing material			PC FR V0 halogen free		

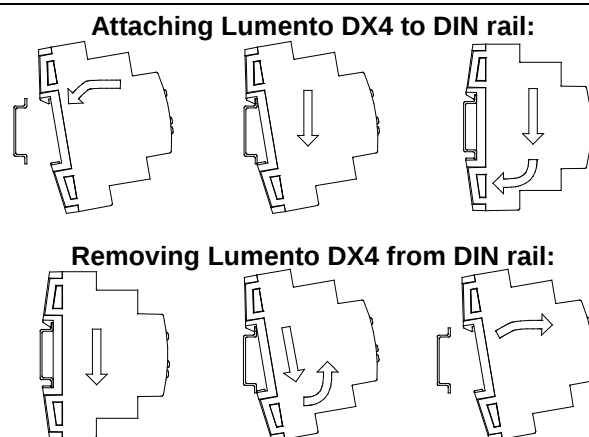
⁽¹⁾ Maximum consumption in the worst case scenario (KNX Fan-In model)

* Only available when RGB / RGBW is parameterized

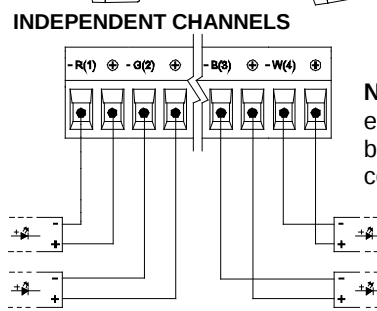
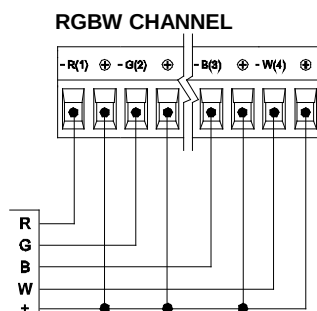
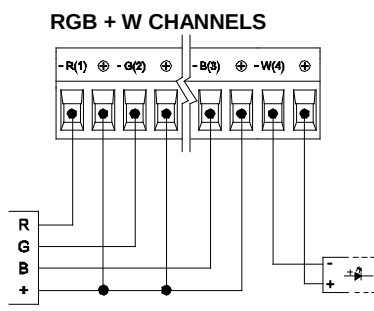
OUTPUTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Maximum current per channel	6A @ 25°C ambient temperature
Number of channels	4
Connection type	Screw terminal block
Cable section	0.5mm ² to 4.0mm ² (26-10 AWG)
Load type	LED strip (monochrome, RGB or RGBW) with common anode (+)
Short circuit protection	Yes
Overload protection	Yes
Overheating protection	Yes

EXTERNAL POWER SUPPLY SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Voltage range	12 to 30VDC (voltage in concordance with voltage LED strips to be connected)
Current range	Depending upon the load to be controlled up to a maximum of 24A
Connection method	Screw terminal block
Cable cross-section	0.5mm ² to 4mm ² (26-10 AWG)

INPUTS SPECIFICATIONS AND CONNECTIONS	
CONCEPT	DESCRIPTION
Number of inputs per common	6
Operation voltage	+3.3VDC in the common
Operation current	1.0mA @ 3.3VDC (each input)
Maximum impedance	Aprox. 3.3kΩ
Switching type	Dry voltage contacts
Connection method	Screw terminal block
Maximum cable length	30m
Cable cross-section	0.5mm ² to 2.5mm ² (26-12 AWG)
Response time	10ms



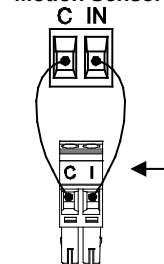
CONNECTION SCHEMATICS



NOTE: The ⊕ pole of each channel in use must be mandatorily connected.

Any combination of the next **accessories** is allowed in the inputs:

Motion Sensor

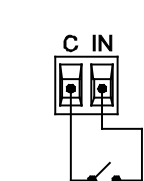


Up to two motion sensors can be plugged into the same device input (parallel wiring)

Motion sensor screw terminal.

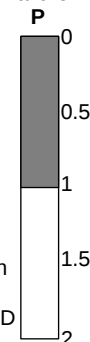
Motion sensor references:
ZN1IO-DETEC-P⁽¹⁾
ZN1IO-DETEC-X

Switch/Sensor/ Push button

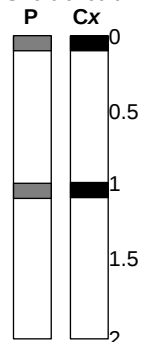


(1) The micro switch number 2 in the ZN1IO-DETEC-P sensor **must be in Type B position** to work properly.

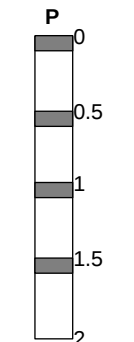
Power supply failure



Overload Short-circuit



Overheating



Description:
LED off
Blue LED On
GreenLED On
P: Prog. LED
Cx: Channel x LED

Figure 2. Error notification LED codes



SAFETY INSTRUCTIONS

- Installation should only be performed by qualified professionals according to the laws and regulations applicable in each country.
- Do not connect the mains voltage nor any other external voltage to any point of the KNX bus; it would represent a risk for the entire KNX system. The facility must have enough insulation between the mains (or auxiliary) voltage and the KNX bus or the wires of other accessories, in case of being installed.
- Once the device is installed (in the panel or box), it must not be accessible from outside.
- Keep the device away from water and do not cover it with clothes, paper or any other material while in use.
- The WEEE logo means that this device contains electronic parts and it must be properly disposed of by following the instructions at <http://zennio.com/weee-regulation>.