

WS2811 pixel string 12 V DC, round 12 mm pixels, 10 cm pixel pitch, IP68

The string carries 50 or 100 individually addressable RGB pixels with WS2811 chip at a pitch of 10 cm. The pixels are potted (IP68), each wire has a 0.75 mm² cross-section. The string runs on 12 V DC and needs a pixel controller and a suitable power supply. The pixels limit their current with series resistors (resistor), the proven standard version.

TECHNICAL DATA

Form factor	Pixel string	Cuttable	Yes, after each pixel
Operating Voltage	12 Volt DC	Pixel Diameter	12 mm
Ambient operating temperature	-15 to +60 °C	Pixel spacing	4 inch (≈ 10 cm)
Controller IC	WS2811	IP rating	IP68
Color depth	24-bit (≈16M colors)	Voltage management	resistor
Wire cross-section	0.75 mm ²		

CONNECTION

- Mind the direction. Data runs in one direction only.
Connect the controller to the input of the string – connected the wrong way round, the pixels stay dark.
- Choose the power supply. Allow up to 36 W (3 A at 12 V) per 50 pixels, that is 60 mA per pixel at full white, plus about 20 % reserve.
- Inject power. With several strings in a row the voltage drops. Inject power additionally, with xConnect® for example using the T-connector 10209.
- Switch on. Make all connections first, then switch on the power supply.

SCOPE OF DELIVERY

- 1 pixel string in the ordered variant (50 or 100 pixels), with plug and socket at the ends
- Power supply and controller are not included.

SAFETY INSTRUCTIONS

- Operate only on a 12 V DC power supply (safety extra-low voltage); choose the power supply with about 20 % reserve.
- Make or break connections only with the power off.
- Do not operate a damaged string.
- Do not kink the cable or run it over sharp edges; avoid pulling on the pixels.
- Operating temperature –15 to +60 °C.
- Not a toy — keep out of the reach of children.
- After shortening, insulate and seal the cut; IP68 no longer applies there.
- JST-SM connectors are not watertight — seal them additionally outdoors.

Manufacturer

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Marking



CE — the EU declaration of conformity is available on request.



Electrical and electronic equipment must not be disposed of with household waste. Take the old device to a collection point. WEEE reg. no. DE 32487762