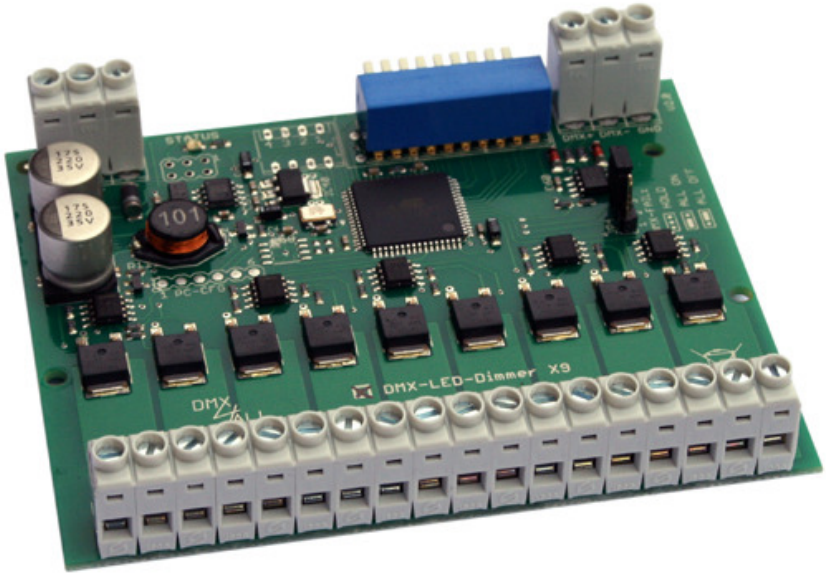
# DMX-LED-DIMMER X9

## 9x PWM each 10A

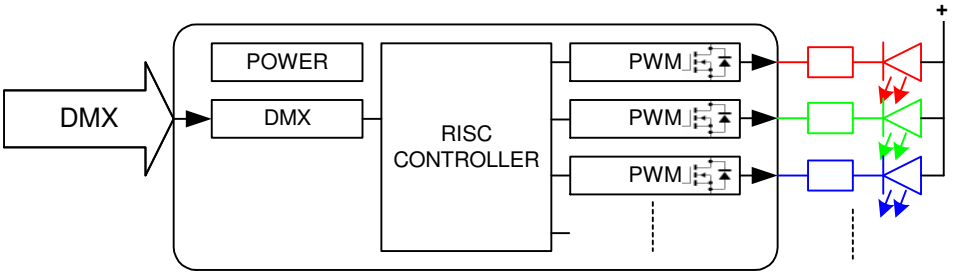
User Manual




DMX 4 ALL ®

# Description

The **DMX-LED-Dimmer X9** is especially specified for controlling the RGB LED-Stripes. It comes with 9 PWM-outputs which are autonomous controllable with DMX. Alternatively internal colour courses can be called without external control.

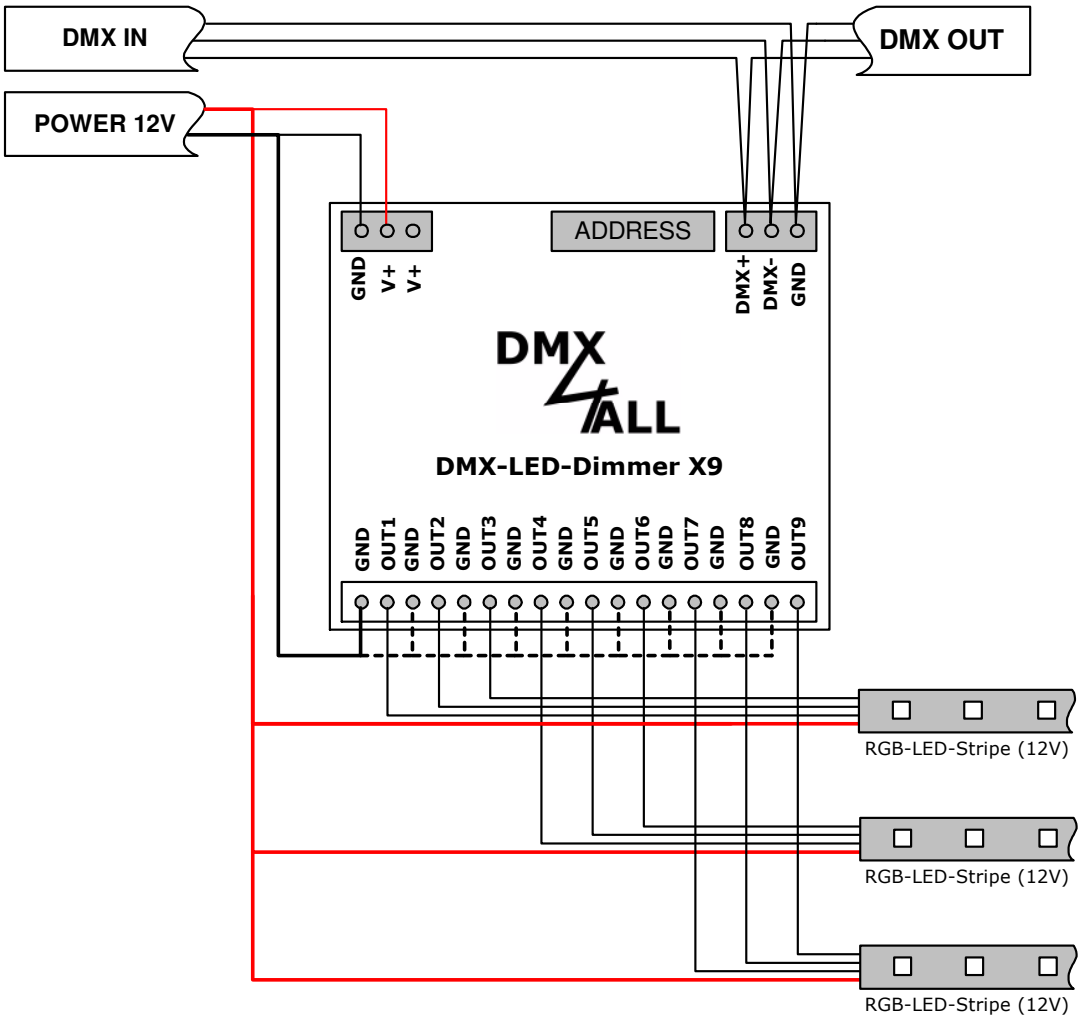



**Energy Saving Design:**
By modern switch-power-supply-technology it will be generated less warmth considerably and therefore the energy consumption is lowered.

# Technical data

| | |
|---|---|
| **Power supply:** | 7-24C DC / 100mA (without connected loads) |
| **LED voltage:** | 7-24V DC (no AC voltage !) |
| **DMX:** | 9 channels |
| **DMX-Fail:** | Hold / Off / On |
| **Output:** | 9 PWM-signals in 256 steps / 244Hz PWM<br>common voltage supply |
| **Output current:** | max. 10A each output,<br>Together 90A with all GND connections (direct from PSU) |
| **Output power:** | 9x 120W (12V) / 9x 240W (24V) |
| **StandAlone-Function:** | 9 internal StandAlone programs |
| **Board Dimensions:** | 99 x 82mm |

# Connection with one power supply

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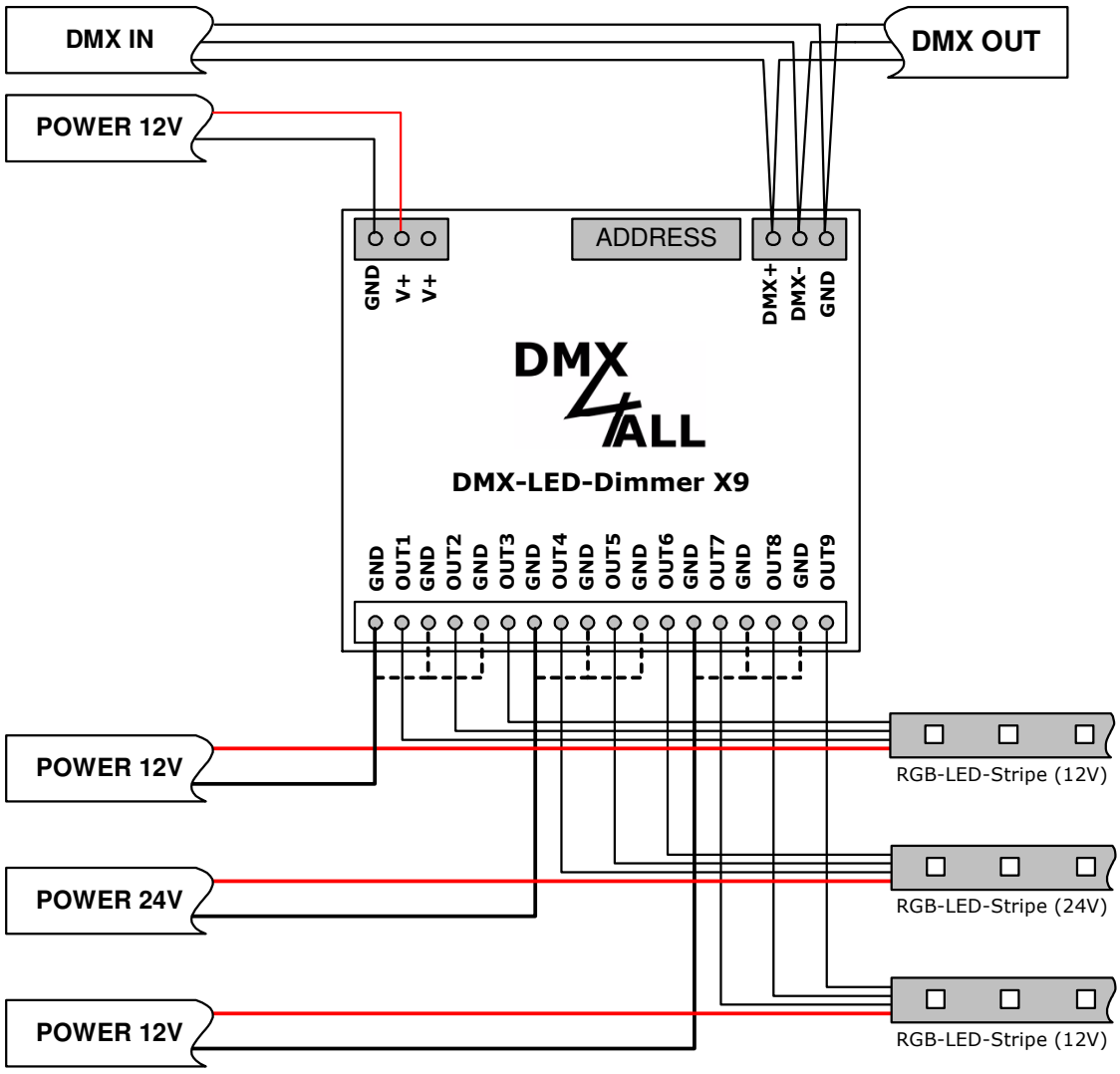
Must be connected direct from the power supply. Depends on the current for the LED-Stripes.

# Connection with several power supplies

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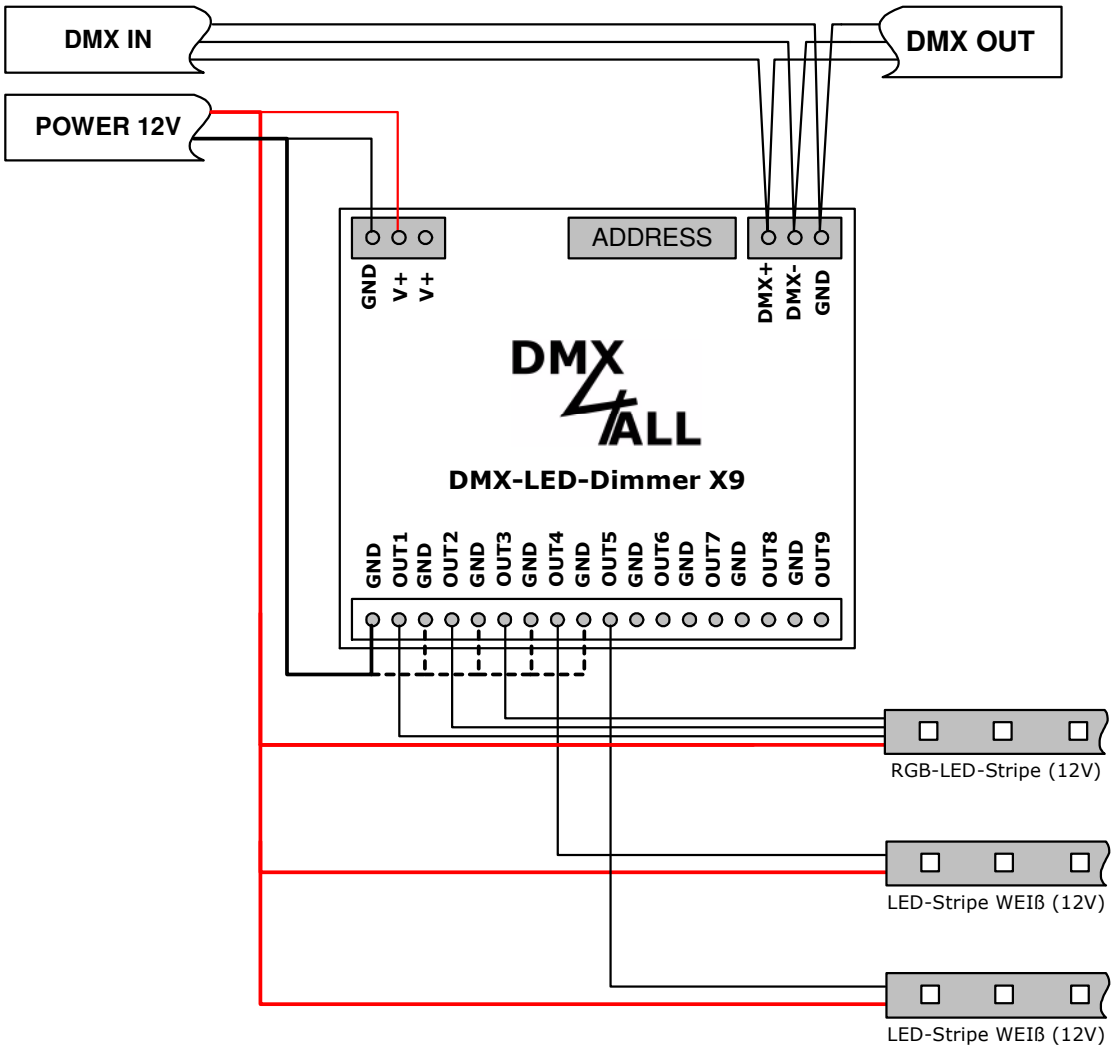
Must be connected direct from the power supply. Depends on the current for the LED-Stripes.

# Connection with single color and multi color stripes

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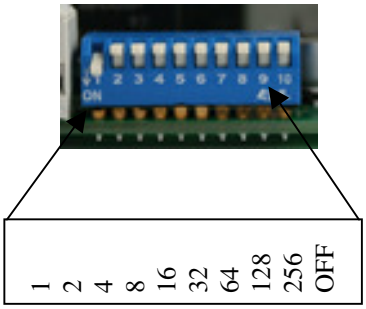
Must be connected direct from the power supply. Depends on the current for the LED-Stripes.

# DMX-Adressing

The DMX-start-address is adjustable about the counters 1until 9.

Thereby switch 1 has the valency $2^0$ (=1), switch 2 the valency $2^1$ (=2) and so on until switch 9 has the valency $2^8$ (=256). The sum of the counters standing on ON corresponds to the start address.

Counter 10 is exclusive for the StandAlone-function and have to show the DMX-mode OFF.




# LED-Display-Codes

The integrated LED is a Multi-functional-display.
In the normal DMX-mode the LED lights up nonstop. In this case the device is working.

Also the LED signalled the operation status. In this case the LED lights up in short pitches and then and then turns into off modus. The Number of flashing signals is equal to the Number of the error status.

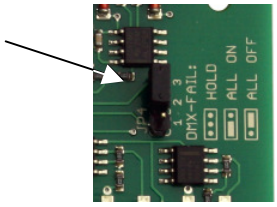
| Error Status | Error | Description |
|---|---|---|
| 1 | No DMX | There is no DMX-Signal coming into the dimmer |
| 2 | Address error | Check if a valid DMX starting address is adjusted at the DIP-switch. |

# DMX-Fail option

from 06/2013 (Version 2)

The DMX-LED-Dimmer X9 can hold the last value, switch on or switch off the LED outputs on DMX fail.

This DMX-Fail option is selectable with the Jumper.




# Cabel length

The DMX-LED-Dimmer X9 should be used with short cable lengths.

Due to the less supply voltage in LED-installations the cable cross section should be large at most to keep a voltage drop low as possible.

The cable cross section should be choose last at most by a rising distance and rising load.

The following cable length should be not exceeded:

| | |
|---|---|
| From power supply to the DMX-LED-Dimmer X9 | ➔ 1m |
| From DMX-LED-Dimmer X9 to the LEDs | ➔ 10m |

# Energy-Save output (CTRL)

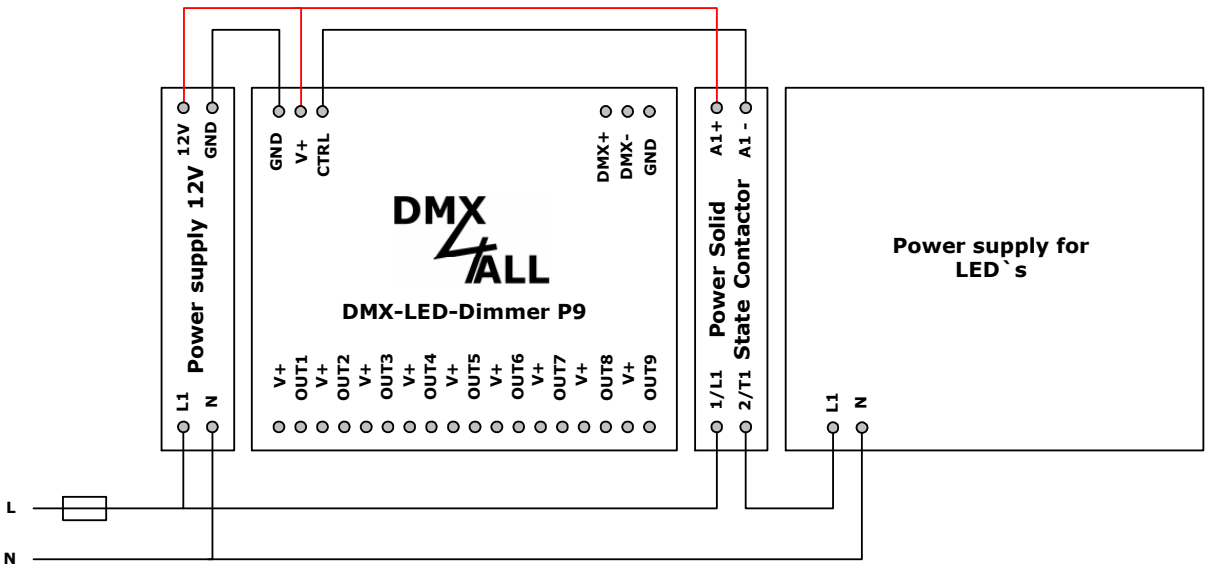
from 06/2014 (Version 2.1)

The **DMX-LED-Dimmer P9** has an Energy-Save controlling output (CTRL) which can turn off the load-power supplies for the LEDs.

If no output will be controlled for a time period of 5 minutes respective all DMX-values for 5 minutes to the value of 0, the controlling output will be shut down.

So the dissipation for the power supply which will not be needed for a longer time can be avoided.

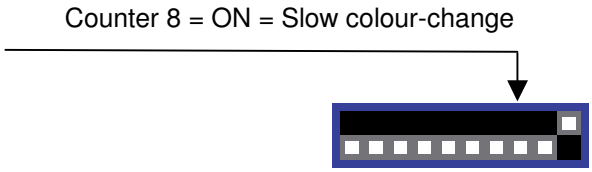
**Installation sample:**



# Select the internal color change

You can select the internal colour change by switching counter 10 on ON.

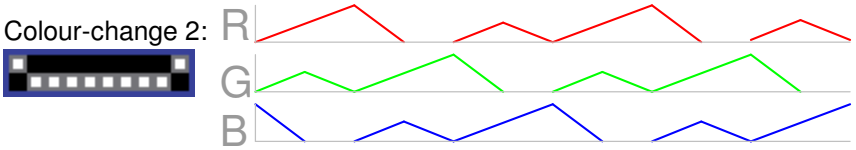
The DMX LED dimmer S makes available a SLOW-mode for slow colour changes. This is activated, by switching counter 8 on ON.



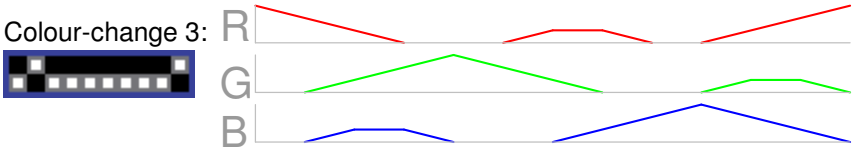

Now you can select the colour change programs about the counters 1, 2 and 3.
The following colour changes are selectable:

Colour-change 1:

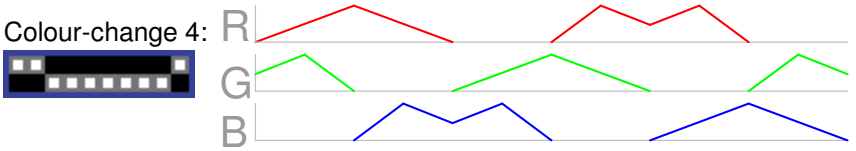

Colour-change 2:



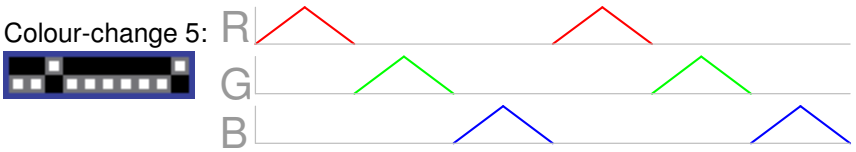

Colour-change 3:



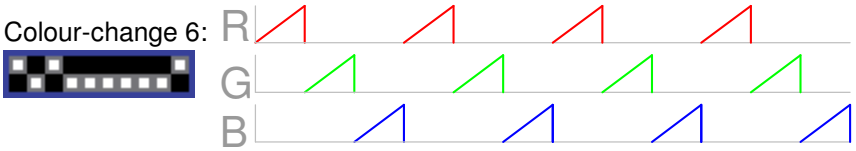

Colour-change 4:



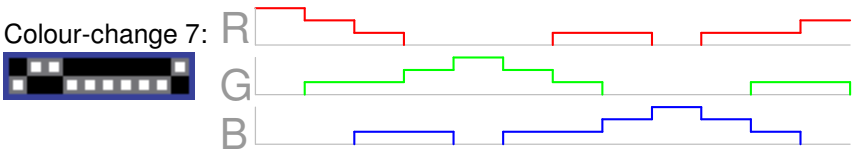

Colour-change 5:



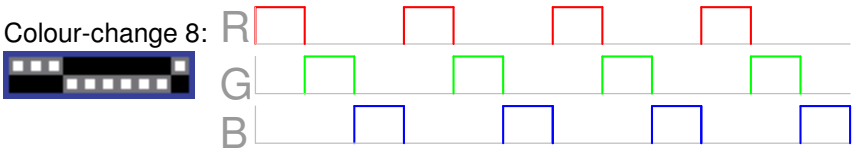

Colour-change 6:




Colour-change 7:




Colour-change 8:



# Equipment

## Housing for DIN-Rail-Mounting

DIN-Rail housing 1050

# CE-conformity

This assembly (board) is controlled by a microprocessor and uses high frequency (8MHz). To get the characteristics of the assembly in relation to the CE-conformity, an installation in a compact metal casing is necessary.

# Risk-Notes

You purchased a technical product. Conformable to the best available technology the following risks should not excluded:

**Failure risk:** The device can drop out partially or completely at any time without warning. To reduce the probability of a failure a redundant system structure is necessary.

**Initiation risk:** For the installation of the board, the board must be connected and adjusted to foreign components according to the device paperwork. This work can only be done by qualified personnel, which read the full device paperwork and understand it.

**Operating risk:** The Change or the operation under special conditions of the installed systems/components could as well as hidden defects cause to breakdown within the running time.

**Misusage risk:** Any nonstandard use could cause incalculable risks and is not allowed.

**Warning:** It is not allowed to use the device in an operation, where the safety of persons depend on this device.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