



# Shine Midi Ana 02 WW

# Shine Midi Ana 02 CW

User Manual  
- version 0.0.3 -





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Subject to technical modification



Please read this manual carefully before carrying out the installation!!! Although our products are very robust, incorrect wiring may destroy the module!

During the operation of the device the specified technical parameters shall always be met. At the installation the environment shall be fully taken into consideration. The device must not be exposed to moisture and direct sunshine.

A soldering tool may be necessary for the installation and/or mounting of the devices, which requires special care.

During the installation it shall be ensured that the bottom of the device should not contact with a conductive (e.g. metal) surface!

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## 1. Features

- 9 low current high brightness white LED lighting module
- suitable for carriage, platforms or buildings interior lighting.
- the module is usable connected to DC/DCC
- external AC/ DC power supply operation also possible
- user adjustable length in 2 additional steps, max 210 min 190 mm.

Available versions:

Shine Midi Ana 02 Cool White	ordercode tOm 02070304
Shine Midi Ana 02 Warm White	order code tOm 02070305

## 2. Package Content

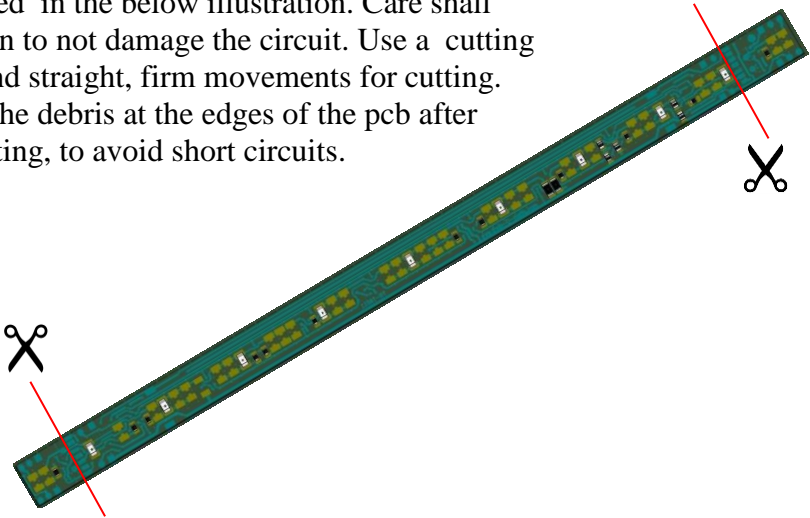
The Shine Midi Ana lighting modules are supplied in transparent plastic bags or blister packs. Check when unpacking the product if the following parts are present: 1 x Shine Midi Ana 02 (Cool White or Warm White), 2x 220uF/25V capacitors.

## 3. Tehnical parameters

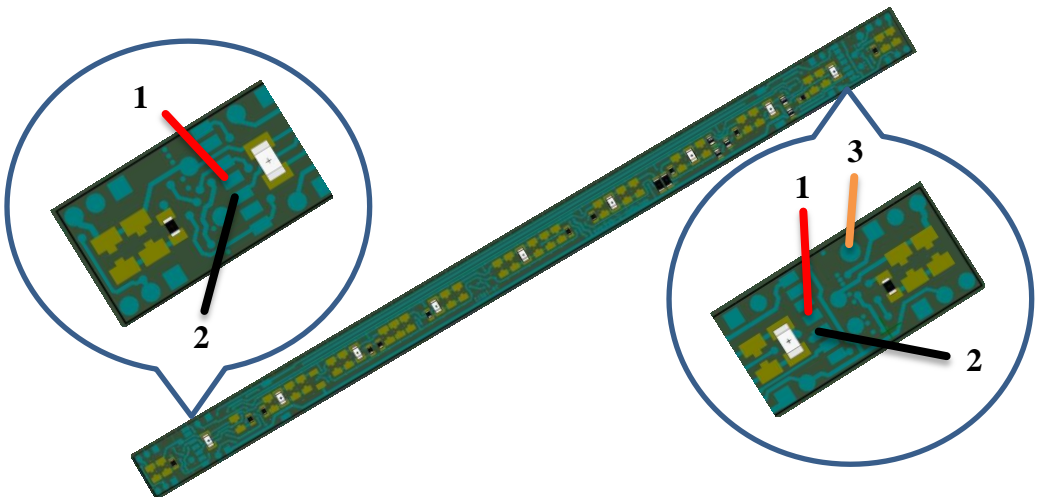
- 9 LEDs
  - Size LxWxH: 210 mm x 11mm x 3mm
  - Maximum current consumption @16Vdc
  - supply voltage :
- |          |
|----------|
| max 40mA |
| 6-24 Vdc |
| 4-16 Vac |

### 4. Cutting to size

The operation can be performed at the points indicated in the below illustration. Care shall be taken to not damage the circuit. Use a cutting plier and straight, firm movements for cutting. Clean the debris at the edges of the pcb after the cutting, to avoid short circuits.




### 5. Installation and connection

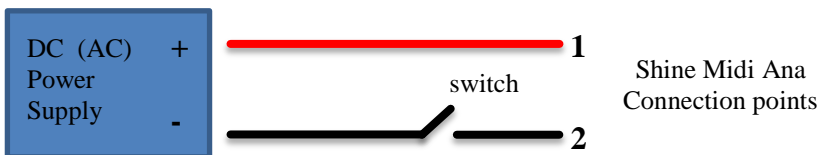



The connections marked with **1** and **2** have to be connected to the DC/DCC track voltage through the use of the current pickups of the carriages. The connections are available at both end of the module.



 Please use the round solder pad marked with **3** at the right end of the module as a reference for identification of the correct connections.

In case of DC operations, the terminals of the Shine Midi Ana 02 module can be wired directly or through a switch to a power supply.



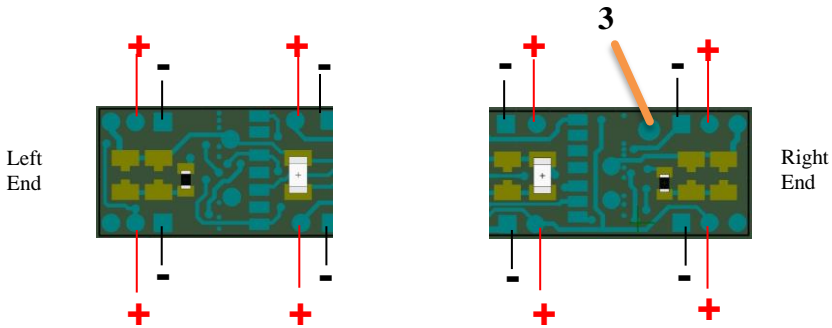
 Since the Shine Midi Ana 02 has an internal bridge rectifier, in both connection modes (DC/DCC or power supply connection) the connections marked with **1** and **2** can be interchanged, the polarity of the applied voltage doesn't matter. The usage of an AC power supply is also possible.

## 6. Connecting the anti-flickering capacitor

On both ends of the module, there are available several connections for the anti-flickering capacitors. Please solder the supplied capacitors in the proper position.

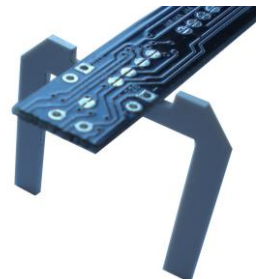


The capacitors are polarized electronic devices. Please respect the polarity as indicated! Soldering the capacitors with wrong polarity can damage the module, or/and the capacitors!



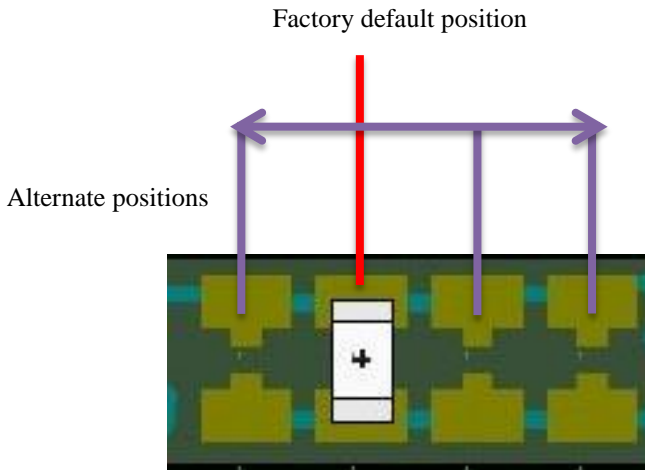
The positive terminal of the capacitor has to be connected to any of the connections marked with **+** while the negative terminal to the connection points marked with **-**

The module can be fixed to the ceiling of the carriage frame by double-sided adhesive tape, or can be held in place with the help of the Shine Pastic Supports (PS Shine, p/n: tOm 05090102).



## 7. Advanced features

The PCB layout of the Shine Midi Ana 02 module allows the repositioning of the LEDs which results in a better fit in the carriages. The LEDs can be shifted left and right in several positions with a  $\sim 3$  mm pitch, as illustrated below.



For the soldering operations a proper soldering station and soldering skills are required. Incorrect soldering can damage or destroy the module. We recommend these operations only for advanced users!



The LEDs are polarized electronic devices, please do not change their polarity during the repositioning!



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