

July 2019

# DG559MB04A1A01

Technical reference manual

Date: 01. 07. 2019	Version: 201907
--------------------	-----------------

Technology Partner  
**SILVAIR**

**QUALIFIED  
BLUETOOTH®  
MESH**

**DG LIGHT**

All of the contents are protected from copying under the provisions of copyright laws.  
The copyrights belong to DG Light. Any unauthorized copying, alteration, distribution, transmission, performance, display or other use of this material is prohibited.

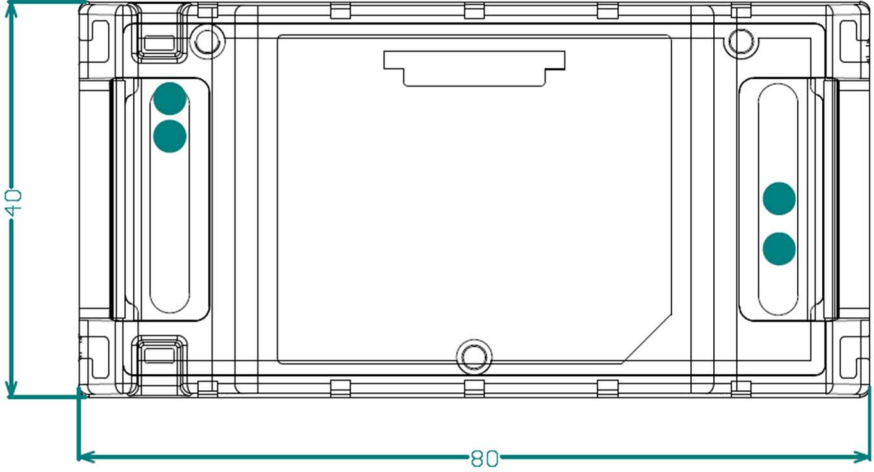
# Table of Contents

Table of Contents .....	2
1. Product description .....	3
2. Technical data.....	4
3. Wiring diagram and description.....	5
4. Installation and precautions.....	6
5. Commissioning by SILVAIR .....	7
6. Contact .....	8

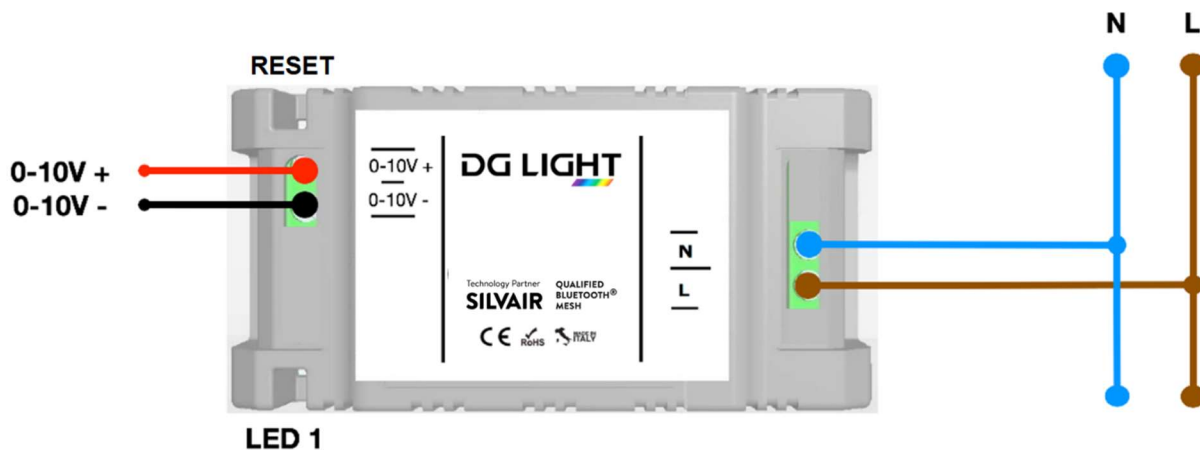
# 1. Product description

DG559MB04A1A01 is a wireless Bluetooth Mesh® control unit for lighting drivers with 0-10V dimming interface resulting in an easy and smart way to provide Bluetooth Mesh® network capabilities to 0-10V dimmable lights.

## 2. Technical data

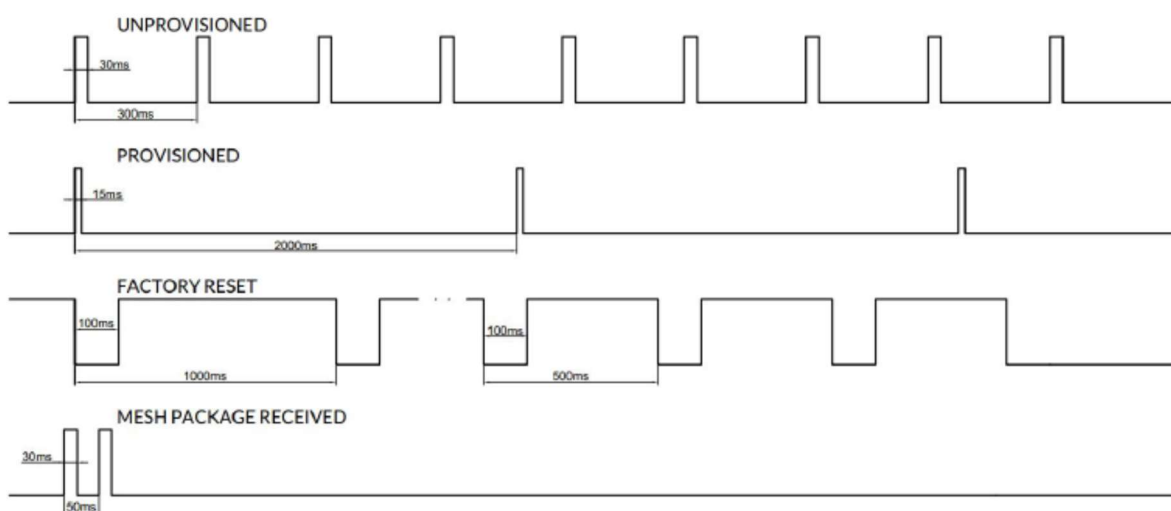
<b>Supply Input</b>	Voltage range: 90÷264 VAC Frequency: 50÷60 Hz No Load power consumption: 580mW@220VAC 50Hz
<b>0-10 V Output</b>	Voltage range: 0-10Vdc Max. load current :20mA
<b>Operating conditions</b>	Ambient temperature, ta: -20...+50°C Max. case temperature, tc: +70 °C Storage temperature: -25...+70 °C Max. relative humidity: 0...80%, non-cond.
<b>Connectors</b>	Wire range, solid & stranded: 0,75-1,5 mm <sup>2</sup> (14-22 AWG)
<b>Mechanical dimensions</b>	 <p>40x80x24,5 mm (40X100X24.5mm with cable ties accessories)</p>
<b>Protection degree</b>	IP20

### 3. Wiring diagram and description



N	Neutral line mains power supply connector
L	Load line mains power supply connector
LED1	Bluetooth mesh status LED (see <b>Note 1</b> )
RESET	To trigger factory reset, please place a magnet near RESET for at least 5 seconds until LED1 will start blinking as unprovisioned according to Note1
0-10V +	Positive 0-10V interface output connector
0-10V -	Negative 0-10V interface output connector

**Note 1:** LED1 provides an indication of the device state as reported below:



## 4. Installation and precautions

- Make sure that the mains voltage is switched off when making any connections.
- Use 0,75- 1,5 mm<sup>2</sup> solid or stranded conductor electrical wires.
- Connect wires as shown in **wiring diagram** paragraph and tighten the connector screw.
- Make sure to connect the input and outputs correctly.
- Mains input connector is marked with letters L and N.
- Connect 0-10V dimmable light to 0-10V DG559MB04A1A01 output connectors paying attentions to the correct polarity.

### *Notes:*

*DG559MAB04A1A01 is a built-in class II device. Use double insulated wires or an external mounting box if the device is not mounted inside another insulated device.*

*Make sure that the ambient temperature does not exceed the specified maximum value.*

## 5. Commissioning by Silvair

DG559 is based on Bluetooth Mesh Silvair commissioning platform

Silvair Commissioning is a set of software tools that allows commissioning agents, contractors, installers and facility managers to configure, control and manage commercial lighting infrastructures based on qualified Bluetooth mesh.

Silvair Commissioning consists of two elements:

- *Silvair web app*, which is used off site to manage lighting installation projects, plan commissioning along with mapping zones on a floor within a building, setting up control scenarios for zones and managing users collaborating on the project.
- *Silvair mobile app*, which is used on site to commission the devices with the commissioning plan set up earlier in Silvair web app. It has the basic features for managing a project so it can also be used to perform any fine-tuning or commissioning small projects.

Please contact SILVAIR at **business@silvair.com** for the Commissioning user manual



Contact:

**info@dglight.eu**  
**www.dglight.eu**  
+39 011.9040938

Our office:

Via Giaveno, 20  
10040 - Cumiana (TO)  
ITALY