

# Lumis — Manual

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A lot of useful and recent information can be also found on the Internet. See <http://www.kanardia.eu> for more details.

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Some open source code is used in the Nesis software:

- <https://angusj.com/clipper2/>
- <https://flatbuffers.dev/>

- <https://www.oberhumer.com/opensource/lzo/>
- <https://rapidxml.sourceforge.net/>
- <https://www.sqlite.org/index.html>
- <https://www.nayuki.io/page/free-small-fft-in-multiple-languages>
- <https://rapidjson.org/>
- <https://design.ubuntu.com/font>

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## Revision History

The following table shows the revision history of this document.

Rev.	Date	Description
1.0	May 2023	Initial release

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# 1 Introduction

Thank you for choosing our product, the Lumis - dimmer control. We appreciate your trust in our brand and are delighted to provide you with an accessory that allows you to adjust the brightness of your devices. This manual aims to familiarize you with the technical description and operation of the Lumis device.

# 2 Specifications

Description	Value
Weight	35 g
Size	20 × 50 × 27 mm
Operational voltage	8-30 V
Power consumption	0.14 W
Current	12 mA at 12V
Operating temperature	-30 ~ +85 °C
Humidity	30 ~ 90 %, non condensing
Communication	CAN bus, 29 bit header, 500 kbit, Kanardia protocol

Table 1: Basic technical specifications for Lumis.

# 3 Operation

The Lumis - dimmer device is designed to control the brightness of all connected devices simultaneously. The operation of the device is simple and intuitive:

- Step 1: Upon powering on the Lumis (dimmer device), all connected devices will start with 100% brightness.
- Step 2: Locate the brightness control knob on the Lumis device. This knob is used to adjust the brightness levels.
- Step 3: To increase the brightness, turn the knob clockwise.

- Step 4: To decrease the brightness, turn the knob counterclockwise (opposite of clockwise).
- Step 5: The connected devices will respond accordingly and adjust their brightness levels based on the direction of the knob.

\*Speciality is when the Horis device is connected to the CAN BUS because it has the ability to set the initial brightness. If the initial brightness on Horis is different from 100% (let's say 50%), Horis will start with 50% while all other devices will start at 100%. However, upon the first change of brightness, all devices will synchronize and have the same brightness.

## 4 Maintenance

No special maintenance is required.

To avoid damaging the instrument, do not use any chemical cleaners, solvents, or abrasive materials on the device. Only clean the surface using a dry or slightly damp microfiber cloth.

Improper cleaning may result in permanent damage to the screen or housing and void the warranty.

## 5 Limited Conditions

Although a great care was taken during the design, production, storage and handling, it may happen that the Product will be defective in some way. Please read the following sections about the warranty and the limited operation to get more information about the subject.

### 5.1 Two Years Warranty

Kanardia d.o.o. warrants the Product manufactured by it against defects in material and workmanship for a period of twenty-four (24) months from retail purchase.

## Warranty Coverage

Kanardia's warranty obligations are limited to the terms set forth below:

Kanardia d.o.o. warrants the Kanardia-branded hardware product will conform to the published specification when under normal use for a period of twenty-four months (24) from the date of retail purchase by the original end-user purchaser ("Warranty Period"). If a hardware defect arises and a valid claim is received within the Warranty Period, at its option and as the sole and exclusive remedy available to Purchaser, Kanardia will either (1) repair the hardware defect at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product, or, at its option, if (1) or (2) is not possible (as determined by Kanardia in its sole discretion), (3) refund the purchase price of the product. When a refund is given, the product for which the refund is provided must be returned to Kanardia and becomes Kanardia's property.

## Exclusions and Limitations

This Limited Warranty applies only to hardware products manufactured by or for Kanardia that have the "Kanardia" trademark, trade name, or logo affixed to them at the time of manufacture by Kanardia. The Limited Warranty does not apply to any non-Kanardia hardware products or any software, even if packaged or sold with Kanardia hardware. Manufacturers, suppliers, or publishers, other than Kanardia, may provide their own warranties to the Purchaser, but Kanardia and its distributors provide their products *AS IS*, without warranty of any kind.

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This warranty does not apply: (a) to damage caused by use with non-Kanardia products; (b) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (c) to damage caused by operating the product outside the permitted or intended uses described by Kanardia; (d) to damage caused by service (including upgrades and expansions) performed by anyone who is not a representative of Kanardia or an Kanardia Authorized Reseller; (e) to a product or part that has been modified to significantly alter functionality or capability without the written permission of Kanardia; (f) to consumable parts, such as batteries, unless damage has occurred due to a

defect in materials or workmanship; or (g) if any Kanardia serial number has been removed, altered or defaced.

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This product is not TSO approved as a flight instrument. Therefore, the manufacturer will not be held responsible for any damage caused by its use. The Kanardia is not responsible for any possible damage or destruction of any part on the airplane caused by default operation of instrument.