

# AVILED® eco

# Installation and user manual



Please read and understand the contents of this manual carefully. Failure to read the manual can result in serious damage, injury or death. Keep this manual. Make sure that all operators of the AVILED<sup>®</sup> eco have read and understand the contents of this manual.



Always work safe and comply with procedures, regulation and local standards.

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This language version of the manual is verified by the manufacturer (Original manual).

Agrilight b.v. reserves the right to change specifications and/or spare parts without prior notice.

The content of this manual may also be changed without prior notice.

For information about settings, maintenance and repairs not provided for in this manual, please contact the technical department of your dealer.

Agrilight b.v. accepts no liability for damage and/or problems arising from the use of spare parts not supplied by Agrilight b.v..

This manual has been compiled with all possible care. Agrilight b.v. assumes no responsibility for any errors in this manual and/or the consequences of an erroneous interpretation of the instructions.

All rights reserved. No part of this publication may be reproduced, stored in computerised databases, or made public, in any form or by any means, either electronic, mechanical, through photocopying, recording or otherwise, without the prior written consent of Agrilight b.v.. This also applies to the associated drawings and diagrams.

### **Preface**

Thank you for purchasing the AVILED<sup>®</sup> eco. This manual is intended for the end user and installer. The manual contains all the information you need to install and use your AVILED<sup>®</sup> eco. Furthermore, the manual contains instructions for preventing possible accidents and serious harm while the product is running. Read this information carefully!

### Storing the manual

The Installation and user manual is a part of your product. Store the manual in the immediate vicinity of the product. Always present a copy of the manual to operators as they work with the AVILED® eco.

### Limitations of the document

The English language version is the original version. This language version of the manual is verified by the manufacturer (Original manual). All other language versions are translations of the original English language version.

Agrilight b.v. reserves the right to modify the construction and/or configuration of its products at any time without any obligation to modify products which have been previously supplied. The data provided in this manual is based on the most recent information. This data may be subject to change at a later date, without prior notification.

The information in this document concentrates solely on use of the product as intended by the manufacturer. In the event that the products, parts of the products or procedures are applied in any way other than that described in this manual, then confirmation must be obtained as to the correctness and suitability of that use. No rights may be derived from this manual or from the documentation supplied together with the product. The supplier is bound by no agreement other than the order confirmation.

This manual contains useful and important information on the correct operation of the product. We have taken all possible steps to make this manual as correct and as complete as possible. Should you discover any errors or omissions, please bring this to the attention of Agrilight b.v., so that we can make amendments. This will enable us to improve our documentation.

# Symbols used

The following marking conventions are used in this manual to draw attention to specific topics or actions:



Warns of a situation that could result in death or serious physical injury and/or may cause material damage if one does not obey the safety instructions.



Warns of a situation that could result in minor or moderate physical injury and/or may cause material damage if one does not follow the safety instructions.

i	Provides additional information that is helpful to do a task or to avoid problems.
CE	This is the CE logo, which indicates that the product meets the legal requirements for the European Union.
CA	This is the UKCA logo, which indicates that the product meets the legal requirements for the United Kingdom.
X	The symbol on the material, the accessories or packaging indicates that this product may not be treated as domestic waste.
	Photo biological safety Risk group 1, no risk.

## **Warranty**

All electrical and mechanical components of the fixture – if used under normal operating conditions in combination with the recommended surge protection type 2 – are covered by a five-year warranty from the original purchase date.

Refer to the General terms and conditions of sale and delivery for further information.

# Liability

Agrilight b.v. is not liable for any damages caused by failure to comply with the installation instructions in accordance with the legislation in your country, or any provisions assigned to function as substitutes thereof and the above assembly instructions.

Agrilight b.v. additional *General terms and conditions of sale and delivery* are exclusively applicable to all deliveries. You can also find these *General terms and conditions of sale and delivery* on our website: www.agrilight.com.

# **Version history**

During the lifetime of the AVILED® eco, engineering improvements may result in the need to revise this manual. It is then at the discretion of Agrilight b.v., if a revision/new version of this manual is required.

The following table describes the main changes for each document version of this manual.

Version	Date	Changes
1.0	8 June 2018	Initial version
1.1	May 2022	Address updated, UKCA logo and DoC added

The information in this document concentrates solely on the installation and use of the AVILED<sup>®</sup> eco as intended by Agrilight b.v.. In the event that the products, parts or procedures are applied in any way other than that described in this manual, then confirmation from Agrilight b.v. must be obtained as to the correctness and suitability of that use.

### Supplements to the manual

Please visit www.agrilight.com for the latest version of the manual.

### Manufacturer details

If you need any assistance, or still have questions after reading this manual, we would encourage you to contact your dealer.

We appreciate all advice, feedback and suggestions from our customers. Please contact:

Agrilight b.v. Vlotlaan 412 2681 TV Monster The Netherlands +31 (0)174 287 287 info@agrilight.com www.agrilight.com

### **Trademarks**

All trademarks stated in this manual are registered trademarks of Agrilight b.v..

### **Terms**

Fixture AVILED® eco

Installer Person qualified to install the AVILED® eco

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#### 1 Introduction

The AVILED® eco is intended as a lighting fixture for lighting livestock and agricultural buildings and halls.

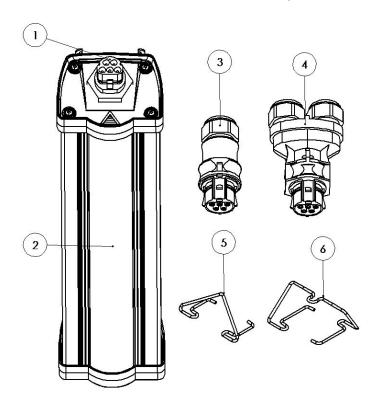
Any use other than the approved intended use described above is considered unintended use. Agrilight b.v. cannot be held responsible for possible (consequential) damage caused by improper, incorrect or inadvisable use.

The AVILED® eco is referred to as the "fixture" in this manual. This manual includes all versions of the fixture.

# 2 Description

# 2.1 Main components

The AVILED $^{\circledR}$  eco consists of the following components:



- 1. Wieland connector Male
- 2. Lens
- **3.** Wieland connector Female (not included, order separately)
- **4.** Wieland T connector Female (not included, order separately)
- 5. Mounting clip chain
- 6. Mounting clip ceiling

# 2.2 Technical specifications

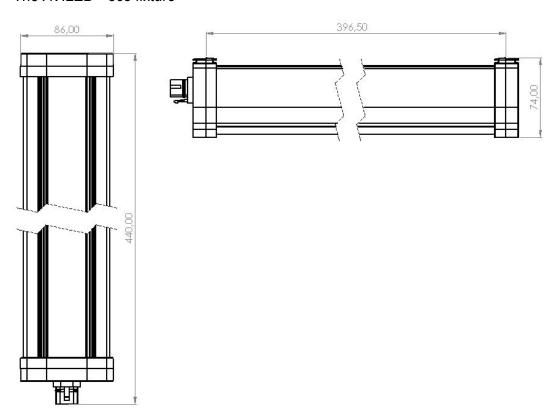
Characteristics		
Mains voltage	220-240V (see identification sticker on product)	
Frequency	50 / 60Hz	
Current	0.06A	
Inrush current	5.0A (45µsec at 50% Ipeak)	
Power	14W (+/- 5%) (system)	
Power factor	0.95	
Efficiency	160 Lm/W (system)	
Color temperature	4000K (+/- 5%)	
Color rendering index (CRI)	80	
Energy class	С	
Dimming function	Yes (1% - 100%) Flicker Free	

AGRILIGHT B.V. Description 8

Characteristics		
Dimming signal	DALI	
Photo biological safety	Risk group: RG1	
IP class	IP65 / IK08	
Ambient temperature	Ta -20°C ~ +45°C	
Unit dimensions (L x B/W x H)	440 x 86 x 74 mm	
Packing dimensions (L x B/W x H)	580 x 370 x 90 mm (4 pcs)	
Unit weight	1.1 kg	
Weight including packaging	4.7 kg (4 pcs)	
Maximum cable diameter	10 - 14 mm (Wieland connector)	
Expected lifetime (burning hours LED)	100,000 (L90/B50)	
Warranty (year)	5	

### **Dimensions** 2.3

# The AVILED® eco fixture



#### **Safety** 3



- The product may only be installed by a qualified person.
- Product installation must satisfy the current applicable standards.
- Switch off the power supply before commencing installation or maintenance work.
- Do not open or disassemble the product. Opening the product can prove hazardous and will void the warranty.
- If connected, the product or its components are powered by a 230V power supply.
- Never look directly into the light source after connection to protect your eyesight.
- Wait at least 30 minutes after switching off the fixture before you replace any components, e.g. the led driver. The parts can be hot.
- Make sure that the power cord/box and the lamp cord are connected properly.
- Never suspend a fixture by its power cord or power cable.
- Do not plug or unplug a lamp cord/cable while the fixture is switched on.
- The fixture lens must not be removed as it may damage the sealing. Removing the fixture lens will terminate the product warranty.
- Do not plug this system into a supply voltage other than indicated on the fixture label.



The end user is responsible for the proper installation and product use. An incorrect installation may result in product damage or shortcomings. The warranty will become void, if the product and/or electronic components are damaged due to an incorrect installation.

#### 4 Installation

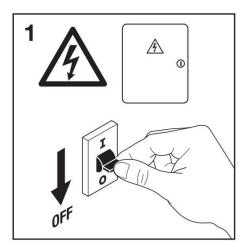


- The product may only be installed by a qualified person.
- Switch off the power supply before commencing installation.
- The end user is responsible for a correct and safe installation.
- Ensure that the wiring satisfies the requirements as described in the specifications.
- For the electrical connection, you are referred to the Wiring diagram in the manual. In addition, you must comply with the local legal connecting conditions.

#### 4.1 Installing the fixture

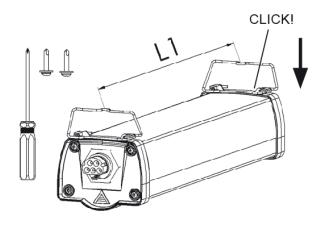
Gather the equipment for mounting the fixture and consult the lighting plan before you start the installation.

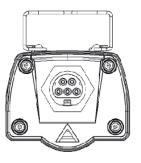
1. Switch off the power supply.



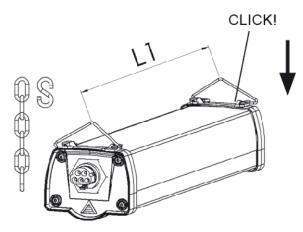
Choose and install the correct mounting brackets for each situation. Other mounting hardware 2. is not included.

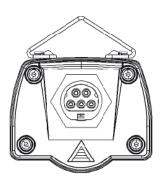
Mounting directly to ceiling L1 = 390 mm



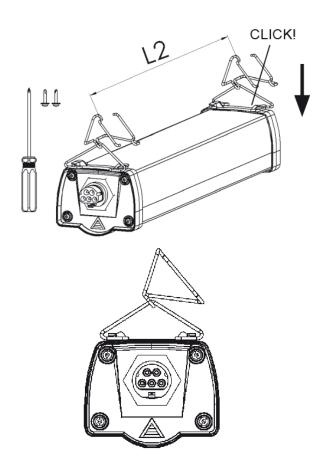


Mounting with cables/chains L1 = 390 mm

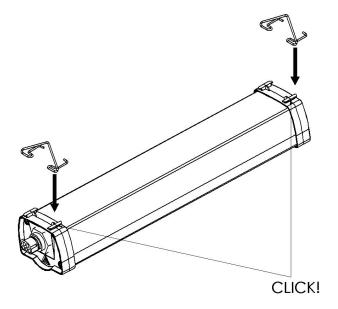




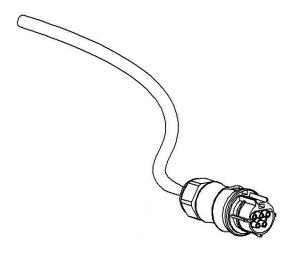
Combine brackets mounting to sloped ceiling L2 = 405 mm



Click the bracket on the fixture.



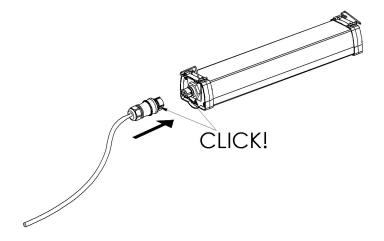
Connect the cable to the connector.



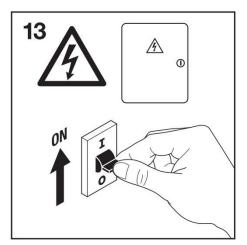
Cable	Connector
Phase	L
Neutral	N
Earth	PE
Dali +	D1
Dali -	D2

Table 1: Wiring diagram

5. Connect the fixture.



Switch on the power supply. 6.



### **Operation** 5



- The AVILED® eco has been developed for the agricultural sector.
- The ambient temperature should not exceed a temperature of 113°F/45°C and a relative humidity of 70%.
- Maximum concentration NH3 (ammonia) 20ppm.

#### **Operating the fixture** 5.1

- In order for the fixture to function properly, the minimum light level must be at least 1%. In addition, the power supply 230V must be connected.
- The light level (1-100%) can be adjusted using a Dali controller.
- To protect led driver and led, use the surge protection type 2 on the mains.
- Dali controller and surge protection can be ordered by Agrilight.

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#### 6 **Maintenance**



- Switch off the power supply before commencing maintenance work.
- Do not open or disassemble the product. Opening the product can prove hazardous and will void the warranty.

#### 6.1 **Cleaning**

Check the product at regular intervals for build-up of dust and dirt. Clean the product, if necessary. Contamination can lead to overheating and reduced performance.

Clean the fixture with a dry or slightly damp cloth.



- Never clean the product with corrosive cleaning agents, abrasives or other aggressive liquids.
- Protect connectors against the ingress of water.

#### **Questions and Answers** 6.2



Do not replace any parts yourself (not even LEDs or LED modules) as it will void the product warranty.

Questions	Answers
The fixtures do not switch on.	Check the power supply voltage.
	Check for damaged cables, and, if any, have them replaced by a qualified engineer.
One of the fixtures does not switch on.	Check if the connector is properly connected (see Installing the fixture).
All fixtures operate in dimmed mode.	Check the Dali control signal.
One fixture operates in a dimmed mode.	Check if the D1 and D2 are properly connected.
If all above does not help, replace the fixture and contact your dealer.	

#### Storing or discarding the product 7

### **Storing**

In the event that the product is to be stored, it must be kept in a dry, clean environment with an ambient temperature of  $0^{\circ}$ C ~ +40°C.

### **Discarding**



Dispose the equipment through a recycling centre that handles electronics and electrical appliances within the EU and in other European countries which use separate collection systems for used electronics and electrical appliances. By disposing of the equipment in the proper way, you will be helping to prevent potential risks to the environment and public health, which might otherwise be caused by improper handling of the discarded equipment. Recycling of materials contributes to the conservation of natural resources. Therefore, do not discard your old electrical and electronic equipment via the domestic waste.

# **8 EC Declaration of Conformity**



We,

Manufacturer:

Agrilight b.v. Vlotlaan 412 2681 TV Monster The Netherlands

Hereby declare on one's own responsibility that the following device(s):

- AVILED<sup>®</sup> eco 2700K
- AVILED<sup>®</sup> eco 4000K

Comply with all relevant provisions of this Directive and those of the following Directive(s) and, where appropriate, that they are in agreement with the following harmonized standard (s) or parts thereof:

- LVD 2014/35/EU
- EN60598-1:2015
- EN60598-2-1:1989
- EN62471-5:2015
- EMC 2014/30/EU
- EN55015:2013 and A1:2015
- EN61000-3-2:2014
- EN61000-3-3:2013
- EN61547:2009

CE mark affixed on the product: 2018

### Authorized Representative:

Place: Monster

Date: June 8th, 2018

Name: H. Hondebrink

Position: General Manager

### **UKCA Declaration of Conformity** 9



### **UKCA Declaration of Conformity**



The undersigned, representing the following supplier, and technical documentation for the product(s) are available from:

Agrilight b.v. Vlotlaan 412 2681 TV Monster The Netherlands

Products / Modeltype

AVILED® eco 2700K AVILED® eco 4000K



Hereby certifies that this product is conform with the British standards.

- 2016 (SI 2016/1101) The Electrical Equipment Safety Regulations
- 2016 (SI 2016/1091) The Electromagnetic Compatibility Regulations

The product has been tested according to

- BS 60598-1:2015
- BS 60598-2-1:1989
- BS 55015:2013 en A1:2015
- BS 61000-3-2:2014
- BS 61000-3-3:2013
- BS 62778:2014
- BS 62471:2009

- Luminaires General requirements and tests
- Fixed General purpose Luminaires
- Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
- Limits for harmonic current emissions
- Electromagnetic compatibility (EMC) Limits. Limitation of voltage changes, voltage fluctuations and flicker in public lowvoltage supply systems, for equipment with rated currect < 16A per phase and not subject to conditional connection.
- The assessment of blue light hazard to light sources and Luminaires
- Photobiological safety of lamps and lamp systems

Signature & date

Place of issue Date of issue - Monster

Name

- 6/5/2022 - H. Hondebrink

Function

- Managing Director





BETTER LIGHT, BETTER LIFE

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