
CASCADA

LPR16180

**FOUNTAIN
LIGHT**



Operating Instructions

ASTEL
LIGHTING

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PREFACE

The CASCADA series of fountain light with built-in driver is designed to use the latest LED lighting technology.

The CASCADA series is available in stainless steel casings with tempered glass optical window. The lighting is available in warm white, cool white or RGBW color with 16 high-power LEDs.

The most advanced engine with built-in microprocessor enables network connection and simple control of complete groups of multi-color lights through the complete rainbow spectrum by using optional momentary switch or optional DMX512 interfaces with built-in ASTEL protocol.

FEATURES

- Modular Stainless Steel Casing
- Electropolished Finishing
- 16 High-Power LEDs Design
- Warm White, Cool White or Multi-Color RGBW Lighting
- Tempered Glass Optical Window
- High-Efficiency Lens
- Remote Control
- Digital Dimming
- Built-in ASTEL Protocol for DMX512 Control
- Polarity Protection
- Transient Protection
- Thermal Protection
- Low Power Consumption
- Simple Installation

PRECAUTIONS

- The fountain light has to be installed and used in accordance with the instructions of this manual only.
- The power supply has to be disconnected before installation.
- Avoid using this unit near appliances generating strong magnetic fields.
- The optical window has to be cleaned with a mild soap or detergent and lukewarm water by using a soft cloth or sponge. Do not use abrasive or highly alkaline cleaners. Never scrape with razor blades or other sharp instruments.
- Do turn power off immediately and refer servicing to qualified service personnel if the fountain light does not operate normally following the operating instructions.
- The external flexible cable or cord of this luminaire cannot be replaced; if cord is damaged, the luminaire shall be destroyed.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.
- Luminaires shall be supplied by short-circuit proof control gear for LED modules with output complying for Safety Extra Low Voltage (SELV).

INSTALLATION

The fountain light kit consists of the following components:

- Fountain Light CASCADA with connection cable
- Operating Instructions with Declaration of Conformity and Warranty conditions

The assembling and installation have to be realized by qualified personnel.

The CASCADA has to be assembled and fixed as shown in the drawings below:



Note:

- ***Do not cover the fountain light body with any kind of temperature isolating material. The fountain light is protected by a temperature sensor against over-heating. When the temperature of the fountain light exceeds 85°C the fountain light is automatically switched off.***

CONNECTION

The power supply has to be connected through the main switch (not included) with correct polarity and protected by a fuse (not included). The power supply voltage has to be from 10 - 30Vdc.

Note:

- ***The power supply has to be switched off before installation.***

The fountain light has to be connected as described in the table below:

CASCADA wire color	FUNCTION
Red	+ DC Power Supply
Black	GND Power Supply
Orange	+ Control
Brown	GND Control

For basic control of the light the CONTROL wire has to be connected through the momentary switch (not included) to the GND by using a 2-pole signal cable extension. (not included)
For DMX512 control optional LXU01 interface can be connected to the CONTROL and GND wires by using a 2-pole signal cable (not included).

Note:

- ***When two or more lights are connected in the lighting system the control wires can be connected in parallel and all the lights then can be controlled by using only one momentary switch or LXU01 interface.***

Earthing

The fountain light has to be earthed by using a pre-tinned green wire with a yellow stripe a minimum of 8 AWG (8.36 mm²). The wire has to be connected to the rear side of the fountain light by the help of prepared fixing terminal M4 and optional cable lug fixed by set of nut, washer and ribbed-washer, signed by earthing label.

Synchronization

When more than one light is connected to the system the optional Synchronization Unit LSU08 is recommended to synchronize the colors of lighting at the Rainbow Color Spectrum mode of lighting. On the other case the colors of all installed lights would not be the same after few minutes or hours of operation in the Rainbow Color Spectrum mode.

If the multi-color RGBW light is used only with one of the fixed color of lighting the synchronization is not necessary.

CONTROLS

Single-color warm white (WW) or cool white (CW)

Control by momentary switch

Remote control by momentary switch can be used to turn-on and turn-off the light and to control the luminosity.

Turning on / off

Press the momentary switch momentary.

Dimming

When the light is on, press the momentary switch longer until the desired power is achieved.

Turning on minimum

When the light is off, press the momentary switch longer (e.g. one second or more) until the light is turned on at minimum power.

Set default

Press the momentary switch for min. 40 seconds or until the light is turned off.

DMX512 control

The network connection to control the light with the standard DMX512 protocol is enabled by using optional LXU01 or LXU03 interfaces.

Multi-color (RGBW) model:

Control by momentary switch

Remote control by momentary switch has to be used to turn-on and turn-off the light and to control the mode of lighting and luminosity.

When the light is turned-off the color or mode of lighting can be changed sequentially by pressing the momentary switch for 2 seconds:

Custom Color
Full RGBW
Neutral White
White
Red
Green
Blue
White Color Spectrum
Custom White Color
(Rainbow) Color Spectrum

Turning on /off

Press the momentary switch shortly.

Changing the color or mode of lighting

When the light is turned-off press the momentary switch for 2 seconds.

Setting the Custom Color

At the selected Rainbow Color Spectrum mode press the momentary switch shortly to turn the light off. After that press the momentary switch for 5 seconds or until the light is switched to the selected color and then the Custom Color is set and selected.

Dimming

When the light is turned-on press the momentary switch until the desired illumination is achieved. By another pressing of the momentary switch the luminosity will increase to the maximum illumination.

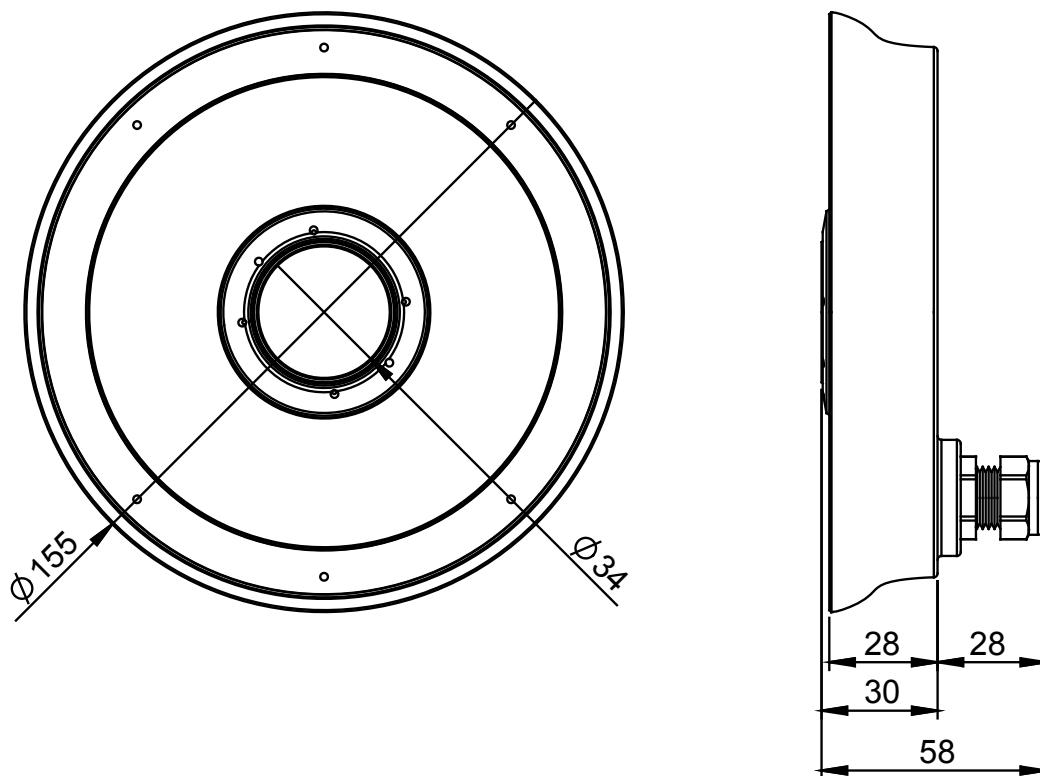
Set default

Press the momentary switch for min. 40 seconds or until the light is turned off.

DMX512 control

The built-in ASTEL protocol enables the network connection to control the lights with the standard DMX512 protocol by using optional LXU01 interface.

APPEARANCE



TECHNICAL SPECIFICATIONS

Power supply	12 – 24 Vdc, max. 1.7 A/12 Vdc or 820 mA/24 Vdc
Lens angle	15°
Optical window	Tempered glass
Luminous flux	max. 3.000 lm
ASTEL protocol default address	1
Operating temperature	-10°C - +50°C
Casing	Stainless steel (316L)
Protection	IP 68
Dimensions	$\varnothing 155 \times 30$ mm
Weight	2.1 kg

Design and specifications subject to change without notice.

WARRANTY

1. The equipment manufactured by ASTEL d.o.o. is warranted to be free from defects in workmanship and materials under normal use and service.
2. This Warranty is in effect for of two years from the date of purchase by the user. Proof of purchase must be included, to establish that it is inside the warranty period.
3. This Warranty is transferrable and covers the product for the specified time period.
4. In case any part of the equipment proves to be defective, other than those parts excluded in paragraph 5 below, the owner should do the following:
 - (a) prepare a detailed written statement of the nature and circumstances of the defect, to the best of the Owner's knowledge, including the date of purchase, the place of purchase, the name and address of the installer, and the Purchaser's name, address and telephone number;
 - (b) the Owner should return the defective part or unit along with the statement referenced in the preceding paragraph to the warrantor, ASTEL d.o.o., or an authorized distributor, postage/shipping prepaid and at the expense of the Purchaser;
 - (c) if upon the Warrantor's or authorized distributor's examination, the defect is determined to result from defective material or workmanship, the equipment will be repaired or replaced at the Warrantor's option without charge, and returned to the Purchaser at the Warrantor's expense;
 - (d) no refund of the purchase price will be granted to the Purchaser, unless the Warrantor is unable to remedy the defect after having a reasonable number of opportunities to do so. Prior to refund of the purchase price, Purchaser must submit a statement in writing from a professional supplier that the installation instructions of the Operating Instructions manual have been complied with and that the defect remains;
 - (e) warranty service shall be performed only by the Warrantor, or an authorized distributor, and any attempt to remedy the defect by anyone else shall render this warranty void.
5. There shall be no warranty for defects or damages caused by faulty installation or hook-up, abuse or misuse of the equipment including exposure to excessive heat, salt or fresh water spray, or water immersion except for equipment specially designed as waterproof.
6. There shall be no responsibility or liability whatsoever on the part of the Warrantor or its employees and representatives for injury to any person or persons, or damage to property, loss of income or profit, or any other consequential or resulting damage or cost which may be claimed to have been incurred through the use or sale of the equipment, including any possible failure or malfunction of the equipment, or part thereof.

DECLARATION OF CONFORMITY

according to IEC Guide 22 and EN 45014

Manufacturer's Name: ASTEL, Podjetje za projektiranje, proizvodnjo in trgovino, d.o.o.

Manufacturer's Address: Dutovlje 138
6221 Dutovlje
Slovenija

declares that the products

Item, Product Name and Model Number: 1. Fountain LED light CASCADA series

conform to the following Product Specifications:

EMC: EN 55015:2006 + A1:2007
EN 61547:1995 + A1:2000 + A2:2009
EN 61547:2009

Safety: EN 60598-2-18:1995/A1:2012
EN 60529:1992+A2:2013

Supplementary Information:

The products herewith comply with the requirements of the following Directives and carry the CE-marking accordingly:

- the Low Voltage Directive 2014/35/EU
- the EMC Directive 2014/30/EU
- the RoHS Directive (EU) 2015/863

ASTEL d.o.o.
Dutovlje 138
6221 Dutovlje
Slovenija

17th April, 2026

ASTEL d.o.o., Dutovlje 138, 6221 Dutovlje, Slovenia
Tel: +386 5 7310771, +386 5 7310772
Fax: +386 5 7310789
E-mail: info@astel-lighting.com
Web: www.astel-lighting.com