

QR code for user manual



**USER MANUAL** 

## **Table of contents**

1.	Safety instructions	3
	Fixture exterior view	
3.	Installation	5
	3.1 Mounting the fixture	
	3.2 Connection to driver	
	3.3 ArcDot II wiring	8
	3.4 Example of Control panel in RDM manager	
4.	Software update	12
5.	Technical specifications	13
6.	Cleaning and maintenance	16
	6.1 Disposing of the product	16
7.	ChangeLog	16

## FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE POWERING OR INSTALLING YOUR ArcDot II! Save it for future reference.

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warnings written in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Unauthorized modification will void warranty.

## 1. Safety instructions

LED light emission. Risk of eye injury. Do not look into the beam from a short distance without suitable protective eyewear. Do not look at LEDs with magnifiers or similar optical instruments that may concentrate the light output.

This device falls under protection class III.

The device was designed for outdoor use. This device must not be used for underwater installation.

When choosing the installation spot, please make sure that the device is not exposed to extreme heat or dust.

Do not install the device near an open flame.

Avoid using the device in locations subject to possible impacts.

The device body never must be covered with cloth or other materials when the device is under operation.

Only operate the device after having checked that the housing is firmly closed and all screws are tightly fastened.

The device becomes hot during operation. Allow the fixture to cool approximately 20 minutes prior to servicing or maintenance.

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

Refer servicing to qualified service personnel.

Please use the original packaging if the device is to be transported.

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the warranty becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock etc.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the unit switched off until it has reached room temperature.

The device (covers and cables) must not be exposed to a high frequency electromagnetic field higher than 3V/m.

Immunity of the equipment is designed according to the standard EN 55035 Electromagnetic compatibility of multimedia equipment - Immunity requirements.

Emission of the equipment complies with the standard EN55032 Electromagnetic compatibility of multimedia equipment – Emission Requirements according to class A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

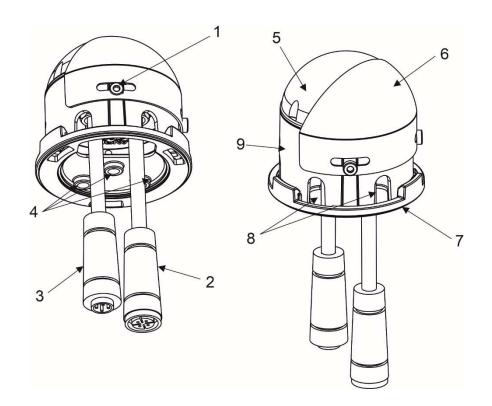
Warning for fixtures with Harsh Environment Finish (HEF):

Handle with care!

Avoid any damage to the painted surface.

Damaging the paint may result in corrosion and loss of warranty.

#### 2. Fixture exterior view

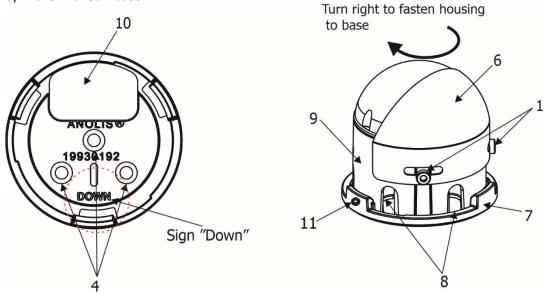


- 1. Shield fastening screw (2x)
- 2. Output cable
- 3. Input cable
- 4. Mounting holes
- 5. Polycarbonate dome
- 6. Shield
- 7. Base
- 8. Cable slots
- 9. Housing

## 3. Installation

## 3.1 Mounting the fixture

Three holes (4) of diameter of 5.5mm in the ArcDot II base (7) serve for mounting the base on a non-flammable flat surface. The input/output cables can be led through the slots (8) in the housing (9) of the ArcDot II or through the aperture (10) in the ArcDot II base.



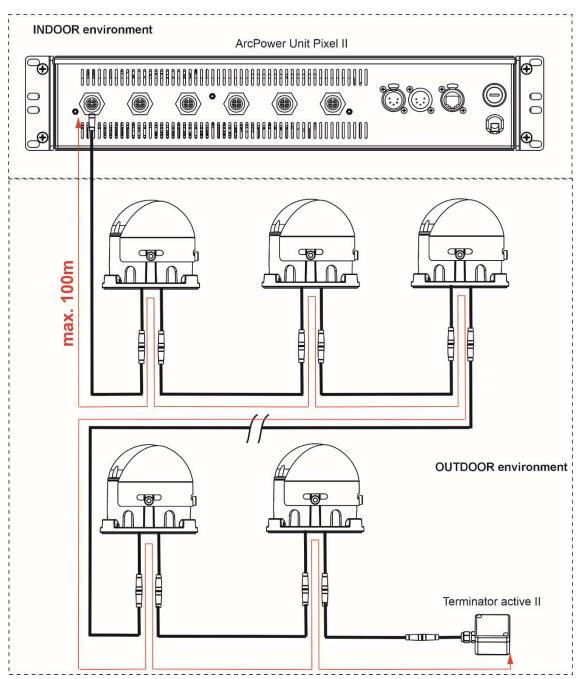
- 1. Fasten the ArcDot's II base (7) on the mounting surface. Keep its orientation as shown on the picture above (sign DOWN has to lead down).
- 2. Put the housing on the base, turn it to right and secure with screw M5 (11).
- 3. The shield (6) can be turned by 90°- unscrew both screws (1), turn the shield by 90° and screw screws (1) back.
- 4. Connect ArcDots II each other and to the ArcPower Unit Pixel II. See the the ArcPower Unit Pixel II user manual for detail description.

## 3.2 Connection to driver

The unit must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

The ArcDot II should be connected to the ArcPower Unit Pixel II.

Always disconnect the ArcPower Unit Pixel II from AC power before connecting/disconnecting ArcDots II.



Up to 25 ArcDots II@100m can be connected to the one LED output of the ArcPower Unit Pixel II.

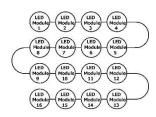
Max. cable length between the ArcPower Unit Pixel II and the terminator active II must not exceed 100m on one LED output of the ArcPower Unit Pixel II.

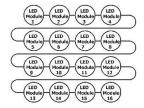
Cable connectors are dust and water protected according to IP 67 by mating with related cable connectors. They cannot stay disconnected outdoor. All unused cable connectors have to be sealed by waterproof caps.

NOTE: Data line of ArcDots II has to be terminated at the last fixture. Connect the terminator active II on the output of the last ArcDot II on each LED output of the ArcPower Unit Pixel II.

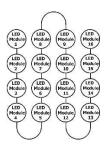
Use the following ways for connecting ArcDots II example for matrix of 4x4).

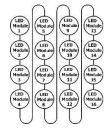
## Horizontal sorting



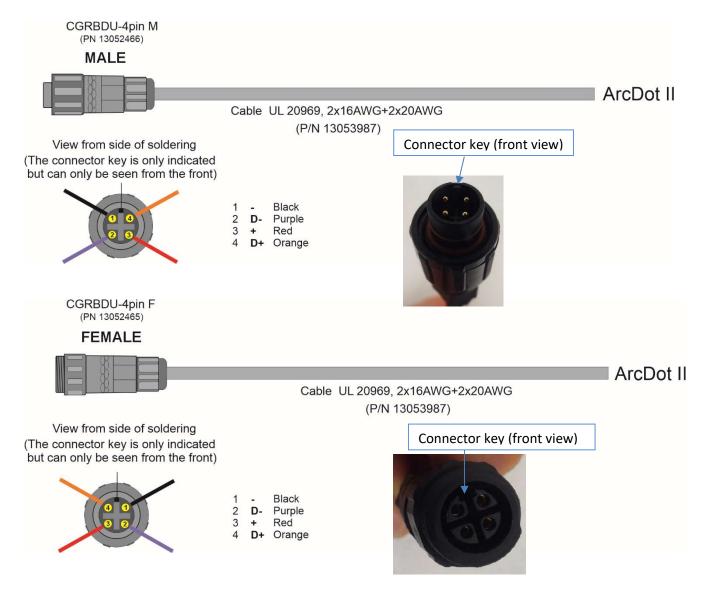


## Vertical sorting

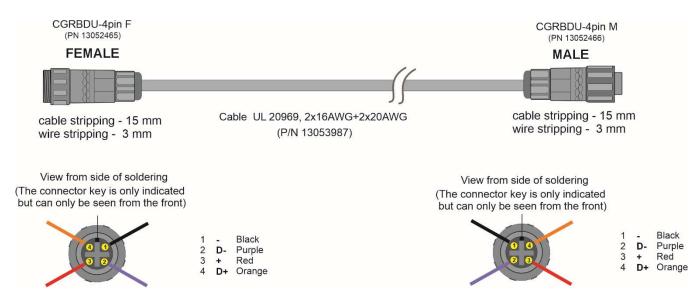




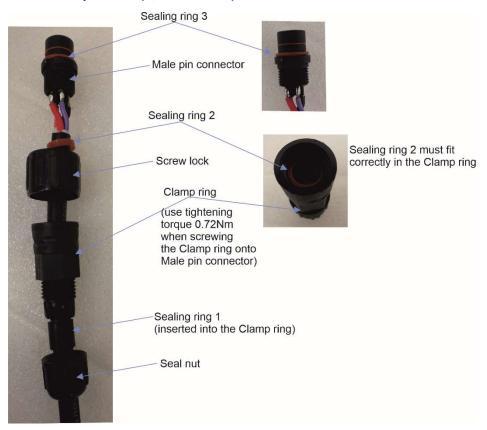
## 3.3 ArcDot II wiring



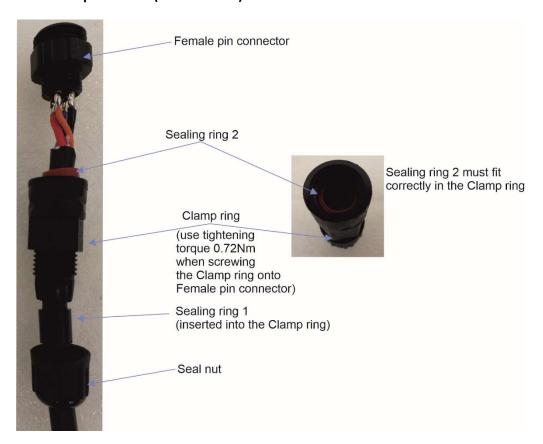
#### **Connection cable**



## Connector CGRBDU-4pin Male (P/N 13052466)



#### Connector CGRBDU- 4pin Female (PN 13052465)

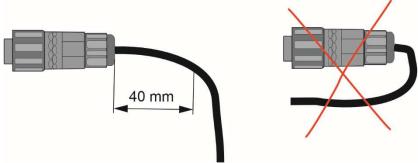


#### **IMPORTANT**



The edge of the thread must not be damaged by solder or soldering tip, otherwise there is a risk that the sealing ring 2 will not be properly placed on the edge and the entire connector will not seal.

Do not bend the cable near to the connector, minimum distance for bending is 40mm.



## 3.4 Example of Control panel in RDM manager

The software RDM manager is available on the ROBE website (<a href="https://www.robe.cz/support">https://www.robe.cz/support</a>), product RUNIT WTX.



Green arrow saves changes made in the Control panel to the ArcDot II.

## 4. Software update

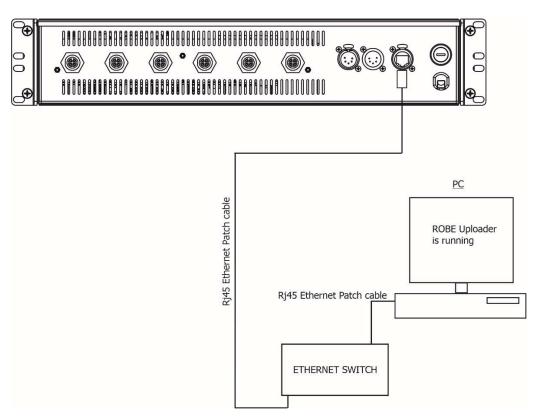
Software update of the ArcDots II can be done via an Ethernet connection between a computer running a ROBE Uploader software and ArcPower Unit Pixel II or using the Robe Universal Interface (Robe Universal Interface WTX), DMX connection and the ROBE Uploader software.

The ROBE Uploader is a software for automatized software update of Robe and Anolis fixtures.

The ROBE Uploader switches ArcPower Unit Pixel II to the update mode automatically.

Please see https://www.robe.cz/robe-uploader/ for more information about the ROBE Uploader.

## Examples of Ethernet connection:



## ROBE Uploader screen





## 5. Technical specifications

#### **Power supply**

• Input voltage: 48V

• Power consumption: 5.5 W/48V

#### **Electric protection class**

• |||

#### **Optical**

• Light source: 1 x 15 W multichip LEDs

• Colour variants: RGBW (W - 6500 K), RGBA, PW (W - 3000 K)

• Beam Angle: non-optic

• Projected Lumen Maintenance: L90B10 >90.000 hrs, Ta = 25°C / 77°F

#### **Control driver**

• ArcPower Unit Pixel II

#### Mounting method

• Mounting back plate

#### Housing

- Cast aluminium body
- Polycarbonate dome

#### **Cooling system**

• Convection

#### **Total heat dissipation**

•77 BTU/h (calculated)

#### **Protection factor**

• CE: IP 67

• US: Suitable for wet location

#### **Impact rating**

• IK07

#### Operating ambient temperature range

• -20°C /+50°C (-4°F /+122°F)

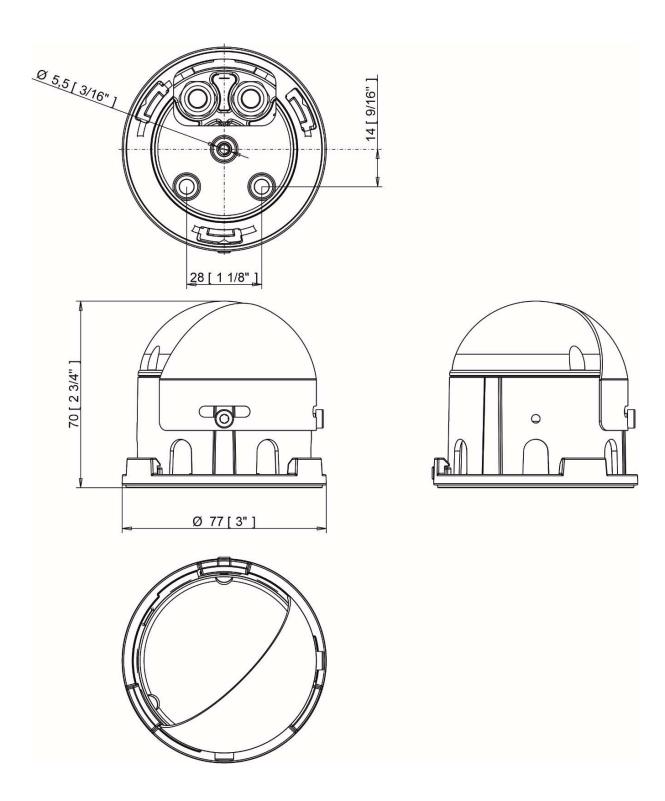
#### Connection

- Cable UL 20969 (2 x AWG16 + 2 x AWG20) + IP67 connector Chogori CGRBDU-4pin M/F
- Cable length: approx. 0.25m IN and 0.18m OUT or custom length

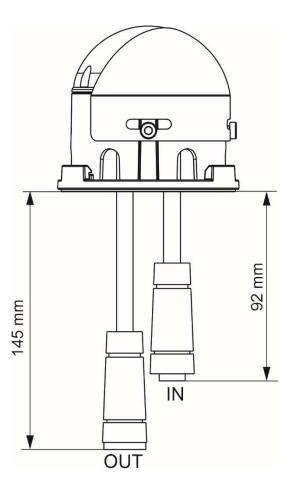
## Weight

•0.2 kg (0.44 lbs

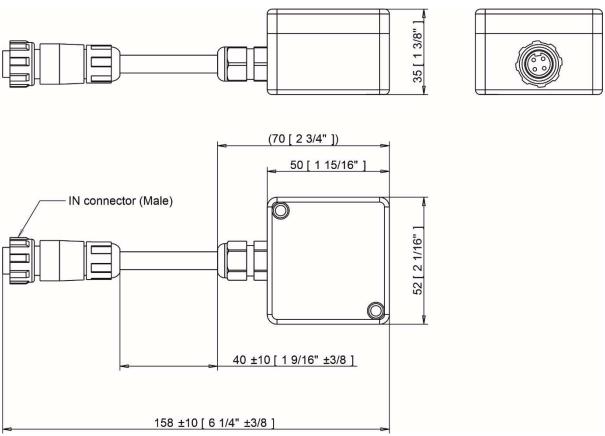
## **Dimensions (**All dimensions in mm [inch])



## Cable IN/OUT length



## Terminator Active for ArcDot II



#### **Included items**

- 1 x ArcDot II
- 1 x User manual

#### **Optional accessories**

Cable Connection ArcDot II 1m

Cable Connection ArcDot II 5m

Cable Connection ArcDot II 10m

Cable (4-core, bare-ends UL 20969, 2x16AWG+2x20AWG (P/N 13053987)

Connector CGR 4-pin, Male (PN 13052466)

Connector CGR 4-pin, Female (PN 13052465)

Terminator Active for ArcDot II (P/N 10069790)

Connector waterproof cap-male (P/N 13051950)

Connector waterproof cap-female (P/N 13052451)

## 6. Cleaning and maintenance

## DANGER! Disconnect from the mains before starting any maintenance or cleaning work

Rinse off loose dirt with low pressure water spray. Wash the housing with a soft brush or sponge and a mild, non-abrasive washing detergent. Rinse it.

Maintenance and service operations are only to be carried out by a qualified person.

Should you need any spare parts, please use ROBE OEM parts.

#### 6.1 Disposing of the product

To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.

## 7. ChangeLog

This section summarizes changes in the user manual.

Version of manual	Date of issue	Description of changes

Specifications are subject to change without notice.

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