



# ELEA

Technical Document and User Guide

English

# ZENOPIX ELEA

## TECHNICAL DOCUMENT AND INTRODUCTION GUIDE

2nd Version June 2025

Thank you for choosing Zenopix® ELEA.

**Please read this booklet and the product user manual before using the product. You can access the user manual on our website.**

**If you experience any technical issues, you can contact our company using the information below to receive technical support.**

ZENOPIX® Elektronik  
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## **Safe Use**

Use the device only in dry environments (indoors). The device has an IP rating of IP20. Do not use the device in humid environments and avoid contact with water or other liquids. If you will not use the device for a long time, turn off its power. Galvanic isolation is always recommended. Do not remove any parts from the unit or connect it to an ungrounded circuit. Do not connect the unit to LEDs that are already powered on. Connect the unit only to LEDs and controllers that are initially powered off. There are no user-serviceable parts inside or outside the interface. Repairs are the responsibility of the manufacturer only. If the interface appears defective, please contact your dealer. After the warranty period expires, if possible, you may contact your supplier or manufacturer for repair services for a fee. This device is intended to be used by professionals. It is not designed to be operated by non-professionals or children.

## **Warranty Information**

Zenopix ELEA is covered by the manufacturer's warranty. For detailed information, please refer to the product warranty certificate or visit our website.

## **Kutu İçeriği**

**1x** Zenopix ELEA

**1x** Power Adapter (Only for XLR version)

**1x** Cat6 Cable

**1x** Technical Document and User Guide

**1x** Warranty Certificate

**NOTE: After opening the package, please check the contents and the condition of the interface. If anything is missing or damaged, contact your supplier. Do not use the device if it appears damaged!**

## **Information on Human and Environmental Health**

If the instructions in the user manual are followed completely, this device poses no risk to human health or the environment. The device should not be disposed of as regular waste. It must be delivered to collection centers (electronic and electrical equipment recycling points). It should be recycled or disposed of in a manner that does not harm nature or human health.

## **Introduction**

This device is an advanced control system based on the Art-Net protocol. It converts Art-Net data packets received over the Ethernet network into DMX512 signals, enabling efficient and precise control of lighting systems.

Thanks to its high-speed ARM processor, it offers stable and secure performance. Supporting an RJ45 network interface, the system provides up to 8 universe outputs, allowing control of up to 1024 DMX channels per universe.

The output options include support for 3-pin and 5-pin XLR connectors along with a terminal block. Additionally, the device features 1 USB-B port, 1 Ethernet input, 1 reset button, and 2 LEDs indicating system status.

With these features, the system offers a powerful and flexible solution for professional lighting applications.

## Technical Specifications

|                            |   |
|----------------------------|---|
| Input Voltage Range        | 12–24VDC (Adapter or Terminal)                      |
| Power Consumption          | <5 W (During Normal Operation)                      |
| Network Protocol           | Art-Net   |
| Number of DMX512 Universes | 8 x 1024 DMX Channel Output                         |
| DMX512 Output Ports        | 3-Pin, 5.08 Terminal / 3-Pin, XLR, female           |
| Ethernet                   | 1x RJ45, 10/100Mbit/s                               |
| USB                        | 1x USB 2.0 Connection Port, Type B                  |
| Status LED                 | 2 Units   |
| Case                       | 6082 Aluminum Enclosure Type / Plastic              |
| Dimensions                 | Enclosure Mounting: 483 x 82.5 x 45 mm              |
|                            | DIN Rail Type: 158x90x58 mm                         |
| Operating Temperature      | Operation: -10°C to 65°C / 20% RH                   |
| Operating Humidity         | 20% ~ 70% Relative Humidity, Non-condensing         |
|                            | Storage: -25°C to 75°C / 70% RH (Relative Humidity) |
| Protection                 | IP-20   |
| Mounting Type              | Wall / Cabinet Mounting – Rail Type                 |

## Status LED Codes

**Red LED:** If the device's Ethernet connection is lost, the LED will remain constantly on.

**Green LED:** The Art-Net Poll signal will blink for a specific duration (2.5 seconds) to indicate that Art-Net data is being received correctly.

There are two additional LEDs located at the Ethernet input. The green LED stays on continuously to indicate a valid connection. The yellow LED indicates data transmission. If the yellow LED blinks faster than usual, it means new data is being transmitted.

## Reset to Default Factory Settings

1. Find a suitable tool to press the reset button located on the front of the device.
2. Press and hold the reset button for 10 seconds.
3. Release the button after all the status LEDs on the front of the device have blinked.



### Warning!

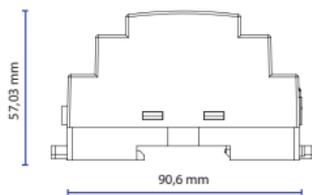
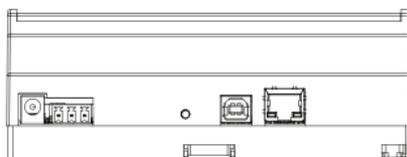
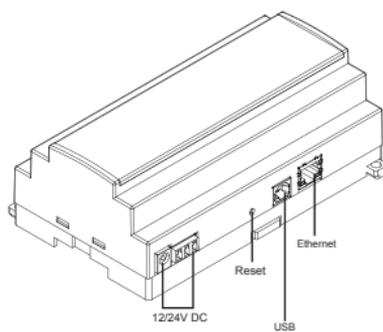
Please do not operate the device without reading the entire user manual.

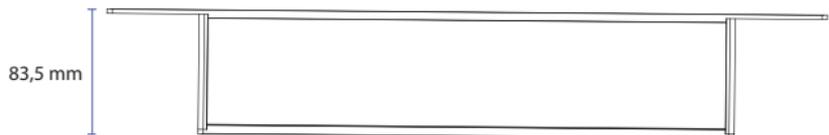
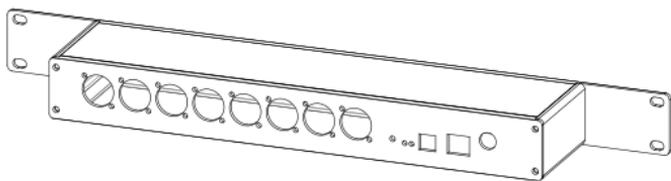
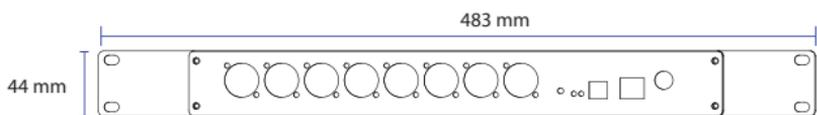
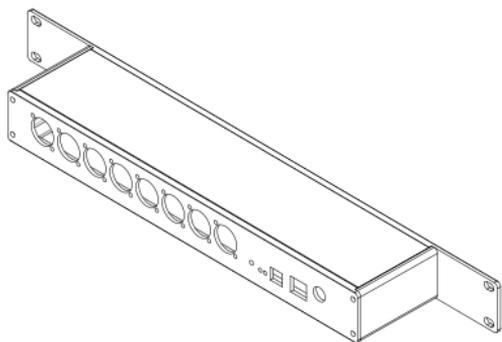


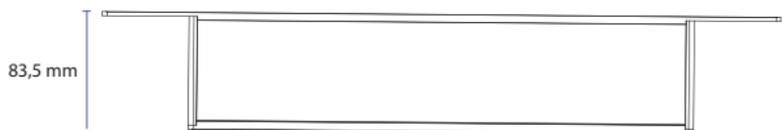
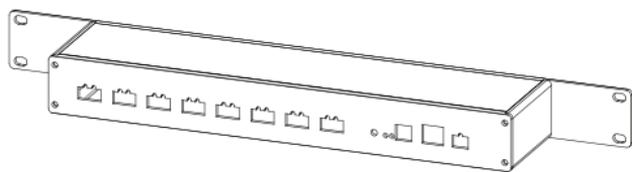
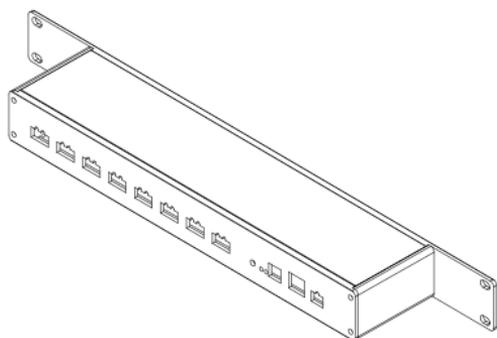
### Warning!

The product operates with 12–24V. Please do not use any other power source.

## Device Technical Drawings









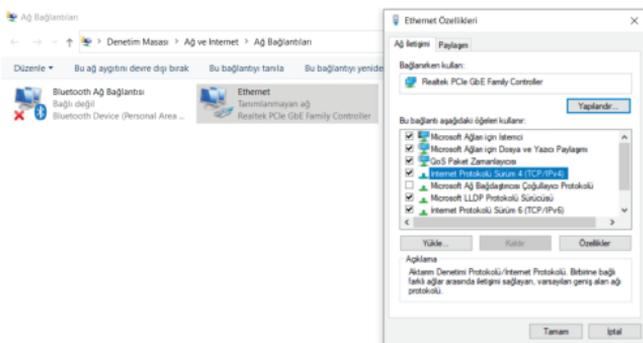


## Configuration via Web Browser

When you connect ZENOPIX ELEA via Ethernet, you can easily configure it using the built-in web configuration interface. To do this, your computer must be on the same network as ELEA. Follow the steps below to configure the device.

- Connect your computer to the same network as ZENOPIX ELEA.
- Assign the correct network settings to the PC.

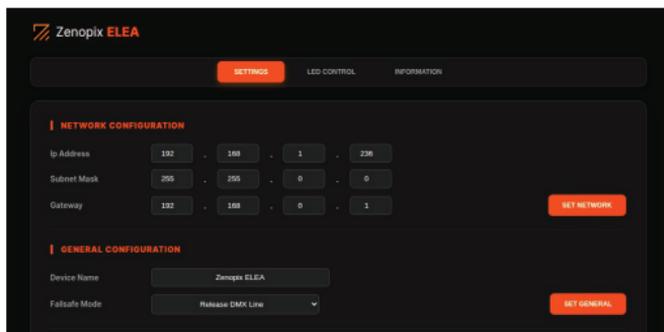
(Recommended settings: IP address 192.168.1.50 / Subnet mask 255.255.255.0)



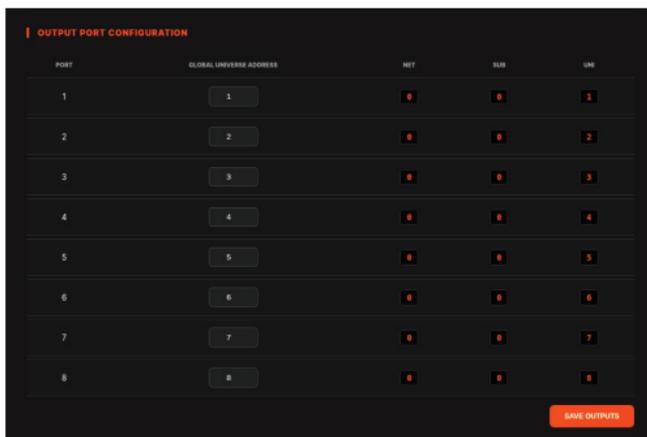
- Open your web browser and enter the IP address of ZENOPIX ELEA.

(Default IP address: 192.168.1.250)

In the opened web interface, you can change the device name and the connected IP address under the Settings section. To do this, you need to press the Set button after modifying the information.



In the Port Address section located below in the Settings menu, you can see which port of the ELEA device corresponds to which universe value, and you can modify these values.



By clicking on the Test tab, you can test the outputs of Zenopix ELEA devices and your LEDs. Once in the Test tab, you can select which port to test from the top section. In the Address Counting section, you can cycle through the LED channels one by one, and in the Select Color Mode section, you can light up test colors based on your LED type.



### Warning!

To receive output from Art-Net data, you must activate Art-Net mode.

Zenopix ELEA

DEVICE IN LED CONTROL MODE - EXTERNAL ART-NET DATA IGNORED

SETTINGS LED CONTROL INFORMATION

LED CONTROL MODE ARTNET MODE

PORT 1 PORT 2 PORT 3 PORT 4  
PORT 5 PORT 6 PORT 7 PORT 8

MANUAL COLOR CHANNEL COUNTER ADDRESSING

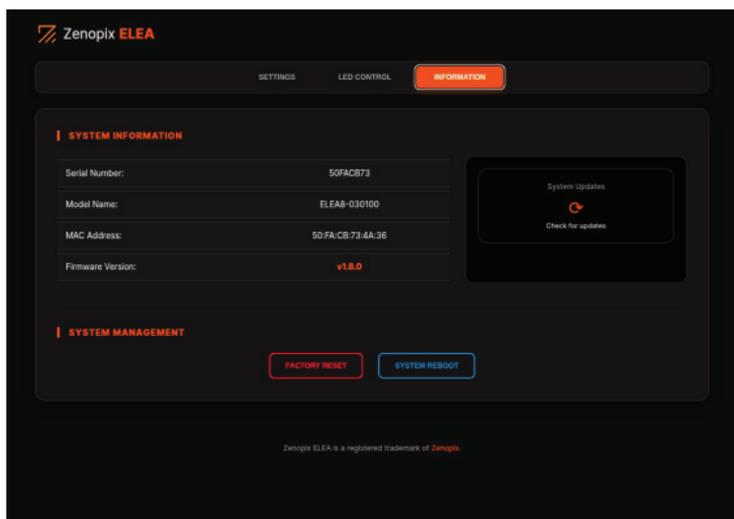
1-CH 2-CH 3-CH 4-CH 5-CH

CH1 Red 44  
CH2 Green 0  
CH3 Blue 128

SAVE COLOR

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In the Information section, you can view the features and version of your ELEA device.



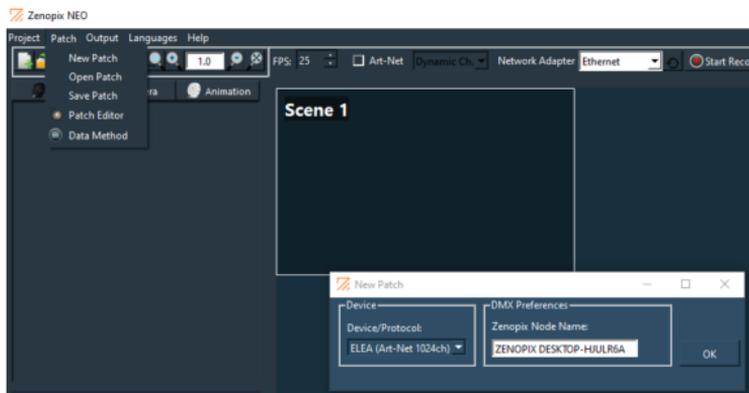
## 2.2 SAMPLE MEDIA PLAYER CONFIGURATION

With Zenopix ELEA, achieving your desired visuals and animations is very easy. Zenopix ELEA works seamlessly with all third-party media player software available on the market. By connecting it to your computer via Ethernet, you can instantly transmit the visuals you generate with programs like ZENOPIX NEO, MADRIX, RESOLU ME ARENA, and JINX directly to the LED output. Additionally, with Zenopix SOLUS (For details: <https://www.zenopix.com/product/zenopix-solus-artnet-master-controller>), you can connect to ELEA in the field without a computer and control your LEDs using pre-recorded animations.

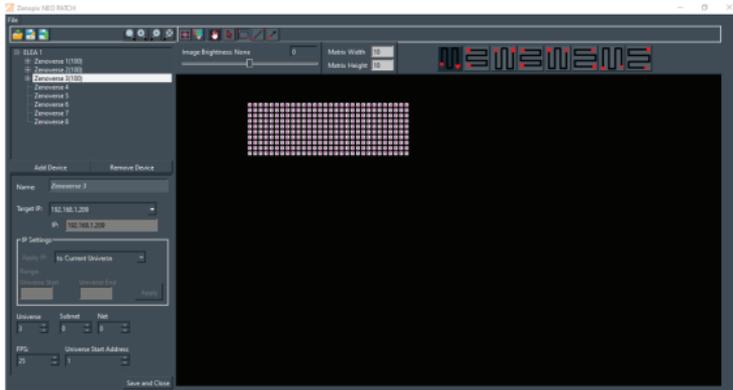
## 2.2.1 Device Connection with Zenopix NEO

- Make the necessary connections to your Zenopix ELEA device and connect it to your computer via Ethernet.
- Configure your computer's IP settings.
- Open the Zenopix NEO application (For detailed usage: <https://www.zenopix.com/zenopix-neo>)

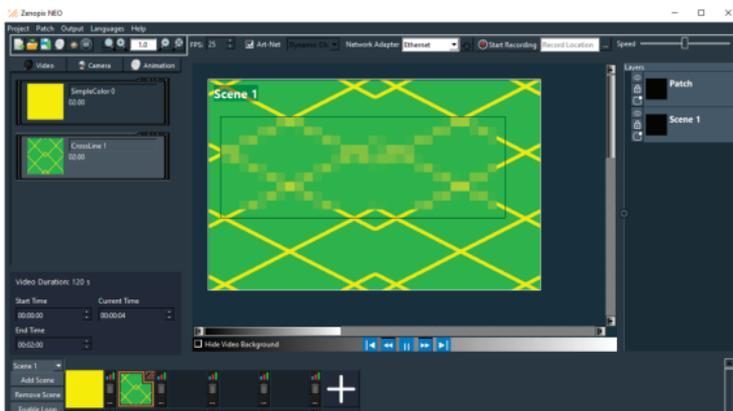
After creating the project file, first select the Ethernet device from the Network Adapter section, then go to Patch/New Patch to create a new patch and select the ELEA device as the hardware.



In the Patch screen that appears, the ELEA device with 8 universes will be added automatically. Enter the IP address of the ELEA device in the Target IP field at the bottom left. If the ELEA device is connected via Ethernet, its IP address will be detected automatically. After setting the number of channels and LED layout, close the screen using the 'Save and Close' button.



After returning to the main screen, create your animation in the 'Video' or 'Animation' section, then drag and drop the animation onto the appropriate layer. After checking the Art-Net box, you can start playing your animation.



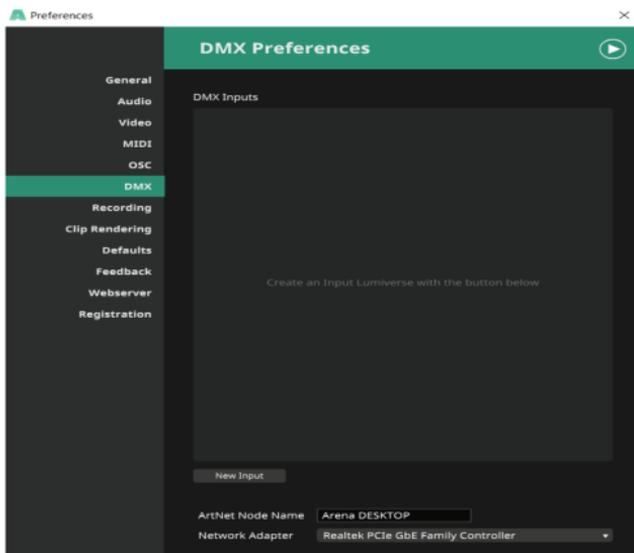


### Warning!

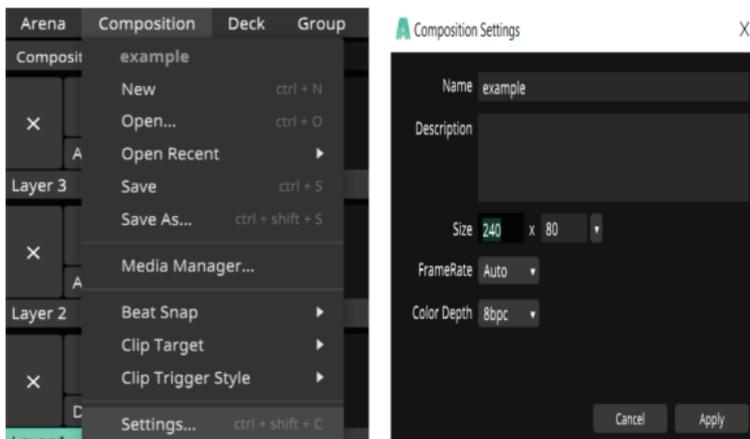
For detailed use of the Zenopix NEO application, please read the NEO user manual on our website.

## 2.2.2 Device Connection with Resolume Arena

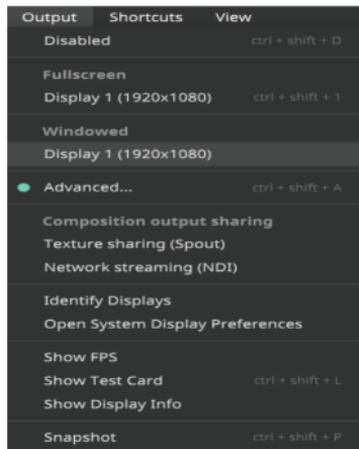
- Make the necessary connections to your Zenopix ELEA device and connect it to your computer via Ethernet.
- Configure your computer's IP settings.
- Open the Resolume Arena application. Click on Arena → Preferences in the top left corner.
- In the opened tab, under the DMX section, select your computer's connection in the Network Adapter dropdown.



- To define our output size, go to the Composition / Settings section on the main screen and adjust the output dimensions.

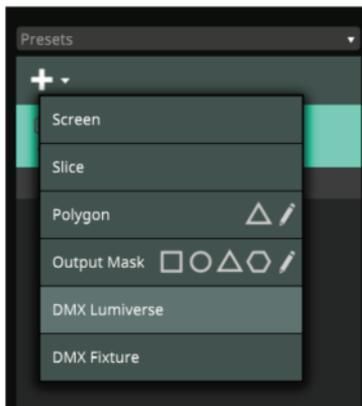


- Then return to the main screen and go to the Output / Advanced section.

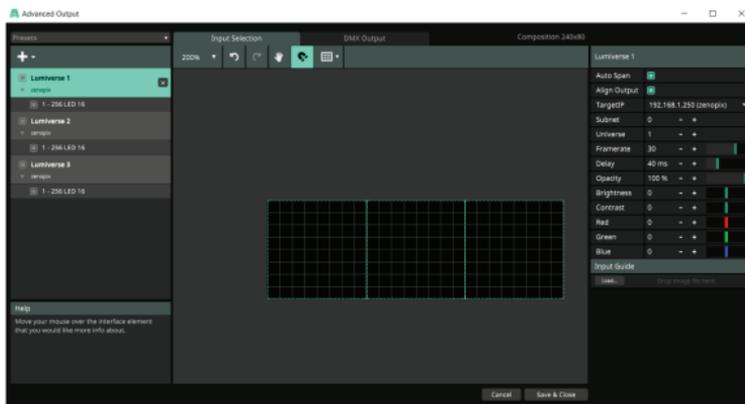


- On the opened screen, click the "+" icon located at the top left and select the DMX Lumiverse option.

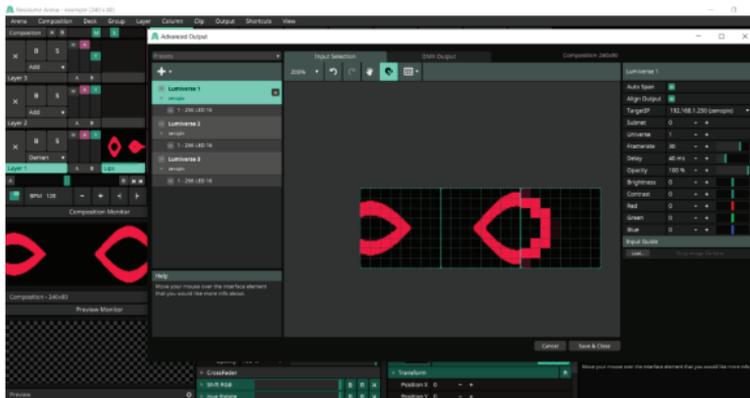
## Advanced Output



- Place the generated windows into the appropriate empty areas of the previously defined Composition area.
- On the right side of the screen, enter the IP address of our Zenopix ELEA device in the Target IP field, then save and exit.



- As the final step, select the desired animation from the main menu, and you will see it on the output.



## Warnings

1. The products must be installed by qualified professionals.
2. Zenopix products are not waterproof (except for special models). Please avoid exposure to sunlight and rain. When installed outdoors, make sure they are mounted inside a waterproof enclosure. Proper heat dissipation will extend the product's service life, so ensure adequate ventilation.
3. Please check whether the operating voltage used is compatible with the product's specified parameters..
4. The wire gauge used must be capable of supporting the connected lighting fixtures and ensure a secure cable connection.
5. Before powering on the products, please ensure all cables are correctly connected to avoid damaging the lighting fixtures due to incorrect wiring. If a malfunction occurs, do not attempt to repair the products yourself. If you have any questions, please contact your supplier.
6. This manual is subject to change without prior notice. Product functions may vary depending on the model. If you have any questions, please do not hesitate to contact us.



Zenopix is an R&D, manufacturing, and technology company specializing in lighting control systems, backed by nearly 20 years of extensive experience in electronics and software.

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