



REPEATER

Technical Document and User Guide

English

ZENOPIX REPEATER

TECHNICAL DOCUMENT AND USER GUIDE

1st Version June 2025

Thank you for choosing Zenopix® REPEATER

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 and receive technical support.

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Safe Use

Use the device only in dry environments (indoor use). 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 the device will not be used for an extended period, turn off the 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. Only connect the unit to LEDs and controllers that are initially powered off. There are no user-serviceable parts inside or outside the interface. Repair services are the responsibility of the manufacturer only. If the interface appears to be faulty, please contact your dealer. After the warranty period expires, if possible, you may contact your supplier or manufacturer for repairs subject to an individual service fee. This device is intended for use by professionals only. It is not designed to be operated by untrained individuals or children.

Warranty Information

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

Package Contents

1x Zenopix Repeater

1x Terminal Bag

1x Technical Documentation and User Guide

1x Warranty Certificate

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

Information Regarding Human and Environmental Health

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

Introduction

Zenopix RDM/DMX isolated power & data repeater is a signal amplifier engineered for RDM and DMX protocols. By boosting the RDM/DMX signal, it ensures reliable transmission over much longer distances with ease.

DMX 1-to-1 Signal Amplifier (Repeater)

Input Voltage Range	12–48 V DC Terminal Block Connector
Power Consumption	< 5 W Under Normal Operating Conditions
DMX-RDM Input / Output	1 × DMX Input / 1 × DMX Output
Connection Method	RS-485 (Up to 32 Devices)
Input / Output Connection Type	3-Pin Screw Terminal For Data Input and Output
Isolation Type	Power and Data Isolation
Case	Plastic Enclosure
Dimensions	88x52x31mm(L×W×H)
Operating Temperature	20°C - 60°C / %20
Operating Humidity	-25°C ~ 75°C, %70
Protection	IP-20

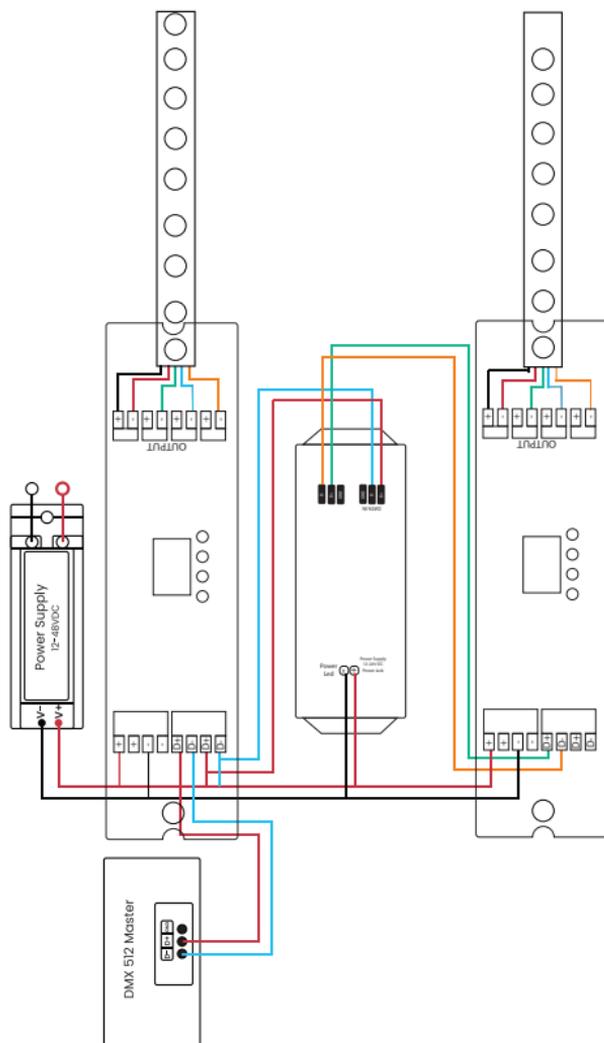
DMX 1-to-2 Signal Amplifier (Repeater)

Input Voltage Range	12–48 V DC Terminal Block Connector
Power Consumption	< 5 W Under Normal Operating Conditions
DMX-RDM Input / Output	1 × DMX Input / 2 × DMX Output
Connection Method	RS-485 (Up to 32 Devices)
Input / Output Connection Type	3-Pin Screw Terminal For Data Input and Output
Isolation Type	Power and Data Isolation
Case	Plastic Enclosure
Dimensions	121.5×43×24mm(L×W×H)
Operating Temperature	20°C - 60°C / %20
Operating Humidity	-25°C ~ 75°C, %70
Protection	IP-20

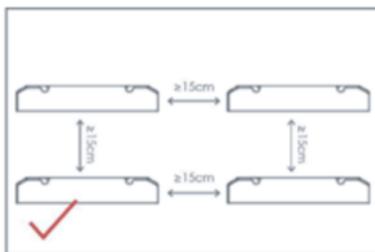
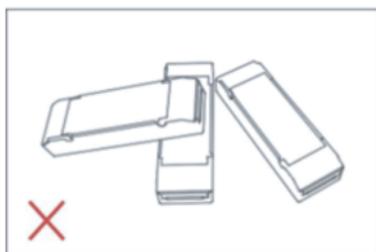
2 × 1–4, 8-output DMX Opto Signal Amplifier (Repeater)

Input Voltage Range	220 V AC or 12–48 V DC Terminal Block Connector
Power Consumption	< 10 W under normal operating conditions
DMX-RDM Input / Output	2 × DMX inputs / 8 DMX outputs (2 × 4)
Connection Method	RS-485 (Up to 32 Devices)
Input / Output Connection Type	3-Pin Screw Terminal For Data Input and Output
Isolation Type	Power and Data Isolation
Case	Plastic Enclosure
Dimensions	158x90x58mm(L×W×H)
Operating Temperature	20°C - 60°C / %20
Operating Humidity	-25°C ~ 75°C, %70
Protection	IP-20

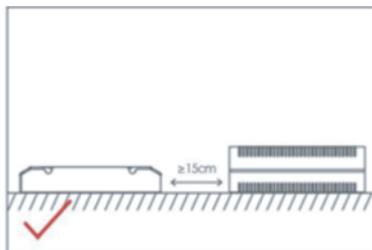
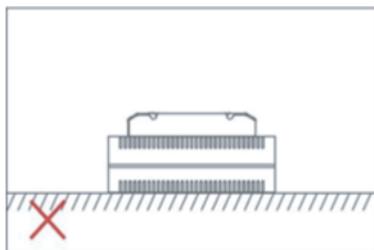
Device and Pin Connections



Installation and Precautions



Please do not stack the products. To avoid affecting their heat dissipation and service life, maintain a distance of more than 15 cm between any two units.



Please do not place the products on top of LED drivers. Maintain a distance of at least 15 cm between the product and the driver to allow proper heat dissipation and prevent shortening the devices' lifespan.

WARNINGS

1. The products must be installed by qualified professionals.
2. Zenopix products are not waterproof (except for special models). Please avoid direct sunlight and rain. When installed outdoors, make sure the product is placed inside a waterproof enclosure. Proper heat dissipation will extend the operating life of the products. Please ensure good ventilation.
3. Please check whether the operating voltage being used meets the product's parameter requirements.
4. The diameter of the wire used must be capable of carrying the load of the connected lighting fixtures and ensure a secure cable connection.
5. Before powering on the products, please make sure all cables are correctly connected to avoid any damage to the lighting fixtures due to incorrect wiring. In case of a malfunction, 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 depend on the actual items delivered. 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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