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# POWER SIGNAL AMPLIFIER for LED lighting

LED-AMP-1P

WARRANTY. The F&F products are covered by a warranty of the 24 months from the date of purchase. Effective only with proof of purchase. Contact your dealer or directly with us.



with proof of purchase. Contact your dealer or directly with us. More information how to make a compliant can be found on the website: www.fif.com.pl/reklamacje



Do not dispose of this device in the trash along with other wastel According to the Law on Waste, electro coming from households free of charge and can give any amount to up to that end point of collection, as well as to store the cocasion of the purchase of new equipment (in accordance with the principle of old-for-new, regardless of brand). Electro thrown in the trash or abandoned in nature one as thrown to the environment and human health.

# Purpose

The LED-AMP-1P controller is a signal amplifier for LED 12/24 V DC lighting. The principle of operation is the reproduction of the PWM control signal connected to the input of the system at the output of the amplifier. The energy to power the next lighting segment is drawn from the power supply connected to the amplifier. Galvanic isolation between the input and output of the amplifier allows for unlimited expansion of the lighting chain, without the risk of problems with power supply from different phases or long ground loops.

# Functioning

LED-AMP-1P records the PWM signal that powers the previous lighting segment and plays it on the output with the full power of the connected power supply. The level of the input signal is indicated by a yellow LED on the controller casing.

The amplifier is equipped with thermal protection that prevents exceeding the temperature within the enclosure if the connected load is too high. In this case, the lighting will be disconnected until the temperature of the device drops to a safe level. Exceeding the temperature is additionally indicated by a red LED located on the casing of the controller.

## Assembly

- 1. Turn off the power supply.
- 2. Mount the device in the installation box.
- 3. Connect the amplifier according to the diagram below.
- a) the Control terminals should be connected in parallel to previous LED lamps.
- b) The power supply should be connected to terminals "+" i "-" of the amplifier.
- c) Connect the controlled lighting between "+" of the power supply and the LED terminal.

#### Warning!

If the lamps have ",+" and ",-" inputs highlighted, they must be connected exactly as in the diagram: ",+" of the lamp to ",+" of the power supply, ",-" of the lamp to LED lead of the amplifier.

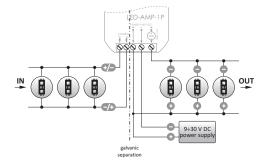
4. Turn on the power supply.



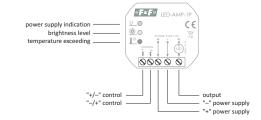
The amplifier is not designed to be powered by AC voltage.

Use a power supply with current efficiency adapted to the connected light sources

# Connection diagram



## **Description of leads**



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# Technical data

power supply

input voltage 6÷30 V DC current 5 mA

control signal PWM output

9÷30 V DC

< 0.05 W

 voltage
 as the power supply voltage

 current [max]
 16 A

 actuator
 transistor

separation between the output and the input type galva

type galvanic level 2.5 kV

power consumption lout= 0 A

lout= 16 A <1.2 W

working temperature (without condensation) -15÷50°C temperature protection 65°C

indication power supply, brightness level,

exceeding the temperature

terminal 2.5 mm² screw terminals tightening torque 0.4 Nm

mounting for Ø60 flush-mounted box dimensions 48×43×20 mm

protection level IP20

### CE declaration

D200429

F&F Filipowski sp. j. declares that the device is in conformity with the essential requirements of Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC. The CE Declaration of Conformity, along with the references to the standards in relation to which conformity is declared, can be found at <a href="https://www.fit.com.pl">www.fit.com.pl</a> on the product page.

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