



# iMOPS-150

## INSTALLATION GUIDE

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MODEL# PWR-iMOPS-150-02

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MAN-0021 Rev 00

## INSTALLING iMOPS-150

Color Kinetics® iMOPS-150 is specially designed to supply power and data to iColor™ Cove lighting fixtures.

This fixture should be installed by a qualified electrician in accordance with NEC and relevant local codes for power supplies with Class 2 outputs.

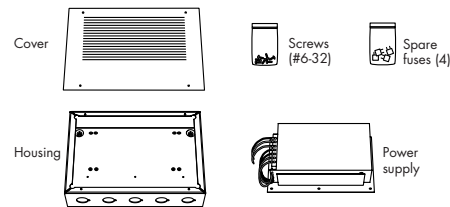
**WARNING:** iMOPS-150 is rated for installation in environments where the temperature does not exceed 104°F (40°C). To ensure product performance, a volume of 8 cubic feet of air is required around the unit. Do not obstruct the vent holes on the unit's cover.

This power supply is not suited for outdoor locations and must be shielded from water spray.

### Unpacking

- Lift the power supply out of the housing, and remove the packing material from the cover and power supply. (See Fig. 1.)

Fig. 1



### Mounting the iMOPS Housing

- Select the location to mount the housing, keeping in mind that the maximum cable run from iMOPS-150 to any iColor Cove fixture is 50 feet.
- Punch out the appropriate number of pre-formed 3/4" conduit holes. At least 3 holes are recommended to separate the following: incoming power (line voltage), incoming data, and outgoing data and power (DC voltage).
- Mount the housing to the wall using four #6 dry wall screws. Mounting holes are located at the bottom of the housing, one at each corner.

## Connecting iColor Cove Fixtures to the Power Supply

There are two main output terminals on the power supply, labeled OUT 1 and OUT 2. Each output can support up to ten 12" fixtures or sixteen 6" fixtures. (See Table 1.)

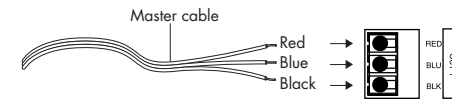
Table 1

iColor Cove	6"	12"
OUT 1	16	10
OUT 2	16	10
Total	32	20

**WARNING:** Make sure the power supply is off before connecting or disconnecting fixtures. Otherwise, damage to the fixture may result.

- Connect the iColor Cove master cable to the green output terminals. (See Fig. 2.)

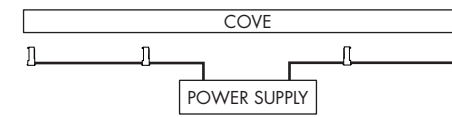
Fig. 2



Recommended wiring schemes are shown in Fig. 3a and 3b.

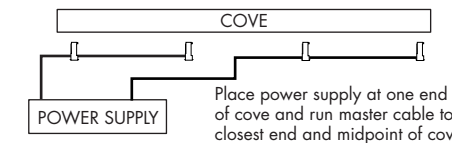
**IMPORTANT:** In any wiring configuration, master cable runs must not exceed fifty feet per output terminal.

Fig. 3a



Place power supply halfway along cove and run master cables of equal lengths to each end of cove.

Fig. 3b

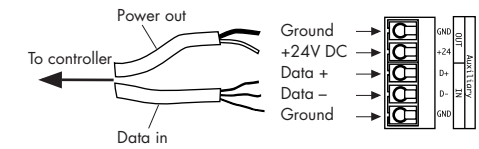


Place power supply at one end of cove and run master cable to closest end and midpoint of cove.

## Connecting Data to the Power Supply

- Connect the controller to the output terminal labeled AUXILIARY. (See Fig. 4.) This terminal supplies power to the controller and also receives data, which it sends to each iColor Cove fixture.

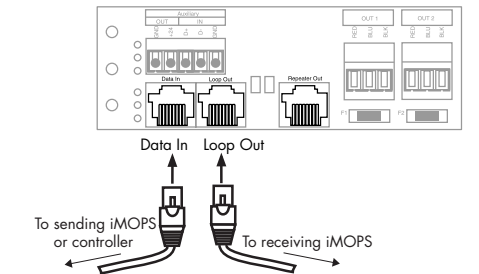
Fig. 4.



**WARNING:** The AUXILIARY terminal is designed for use only with Color Kinetics controllers, such as Synchronizer, Multi Synchronizer, and iPlayer™. Do not use the AUXILIARY terminal to power lights.

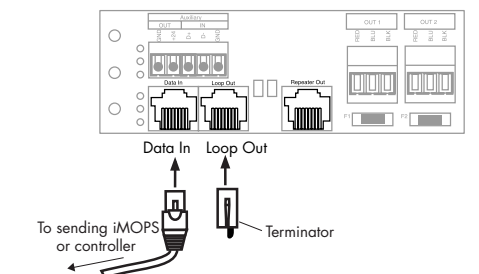
- Alternatively, you can connect the controller to the DATA IN RJ45 port. In this case, the controller must be powered by another source.
- To send data to another iMOPS-150 or other Color Kinetics product with direct DMX input, connect an RJ45 cable between the LOOP OUT port of the sending unit and the DATA IN port of the receiving unit. (See Fig. 5.)

Fig. 5



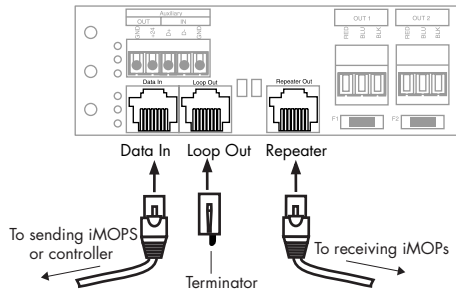
- Make sure a terminator is installed in the LOOP OUT port of the last unit in the chain. (See Fig. 6.) Single units should also be terminated. (Data terminators are available from Color Kinetics.)

Fig. 6



- The REPEATER port boosts the data signal for longer chains. Use the REPEATER port instead of LOOP OUT on every 32nd iMOPS unit in a chain, or when the cable run between two power supplies is more than 400 feet. Make sure a terminator is installed in the LOOP OUT port if the REPEATER port is used. (See Fig. 7.)

**Fig. 7**

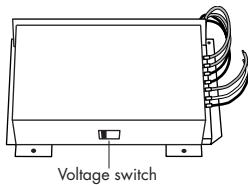


## Connecting Power to the Power Supply

**NOTE:** It is the end user's responsibility to use the proper conductors to permanently mount the incoming facility power, and to provide means for disconnecting the system.

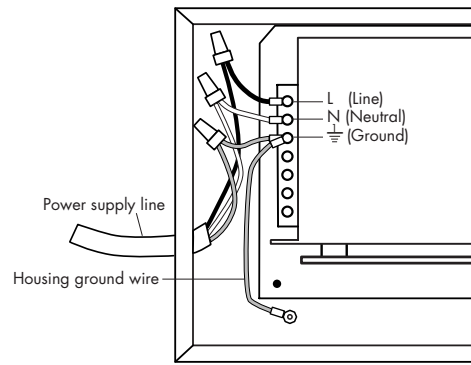
- Set the voltage switch to 115 or 230V AC, depending on your source voltage. (See Fig. 8.) The unit is set to 230V AC as a factory default.

**Fig. 8**



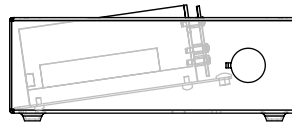
- Pass the power supply line through one of the 3/4" holes in the metal housing. Attach the appropriate conduit connector. Connect power lines to the wires labeled N (neutral), L (line), and  $\perp$  (ground). (See Fig. 9.)

**Fig. 9**



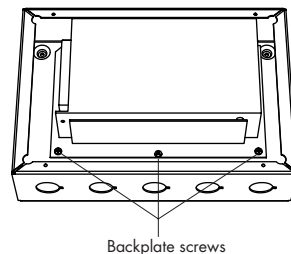
- Connect the housing ground wire to the threaded post in the housing. (See Fig. 9.)
- Ensure that the unit is mounted inside the housing by lining up the two tabs on the power supply backplate with the two slits on the inside of the housing. The unit may need to be inserted at a slight angle as shown in Fig. 10 to slide the tabs in easily.

**Fig. 10**



Once the tabs are in place, attach the backplate to the housing using three of the #6-32 screws. (See Fig. 11). A power screwdriver is recommended for this step.

**Fig. 11**



- Place the cover on the housing, making sure that the vent holes are located above the power supply for proper ventilation, and secure the cover using the remaining four #6-32 screws. A power screwdriver is recommended for this step.

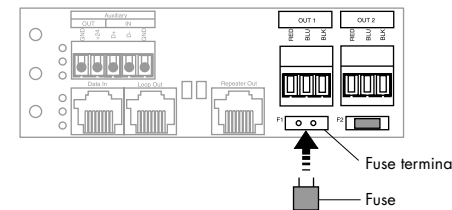
## Replacing Fuses

**WARNING:** Make sure the power supply is off before connecting or disconnecting fuses.

Each of the main output terminals is equipped with a fuse. (See Fig. 12.) If an output terminal is not functioning, replace the fuse as follows:

- Remove the fuse from the malfunctioning terminal. (The fuse terminals are marked F1 for Output 1, and F2 for Output 2.)
- Insert the replacement fuse in the fuse terminal. (See Fig. 12.) Use only fuses with the same type and rating as the original. Additional replacement fuses are available from Color Kinetics.

**Fig. 12**



## iMOPS-150 Specifications

**Power Output** 6 A @ 24 V DC (150 W)

**Power Input** 115/230 V AC (user-selectable)

**Packaging** Includes (2) 50' master cables and NEMA-style enclosure for installation with power supply

**Dimensions** 10.5" X 7.5" X 2.7"

**Connectors** Screw terminal or RJ45 data input and output connectors; screw terminal power output connectors

**Listings** UL listed, CE certified

**Data Interface** DMX512 (RS485) compatible

## ONE YEAR LIMITED HARDWARE WARRANTY

Color Kinetics Incorporated warrants its products, if properly used and installed, will be free from defects in materials and workmanship and will substantially conform to Color Kinetics' publicly available specifications for a period of one (1) year after the date the product was purchased by the end user.

If the product fails during the warranty period, purchaser's remedy under this limited warranty shall be at Color Kinetics sole election:

- Repair the product by means of hardware and/or software or
- Replace the product with another product or
- If Color Kinetics is unable to repair or replace the particular product, refund the then current value of the product.

This limited warranty does not cover damages due to external causes, including, but not limited to, accident, problems with electrical power, usage not in accordance with product instructions, misuse, neglect, modification, repair, improper installation, or improper testing. Color Kinetics is not responsible for indirect, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including, but not limited to, lost profits, downtime, goodwill, damage to or replacement of equipment and property.

To obtain warranty service, you may contact your distributor in accordance with its instructions, or you may contact Color Kinetics. To request warranty service you should call Color Kinetics during the warranty period. Proof of purchase or registration is required. When calling within warranty, please provide:

- 1) Your name, shipping address, and telephone number
- 2) A description of the model and serial number
- 3) An explanation of the problem

A Return Authorization (RA) number & ship-to address will be provided to send the product back.

The warranty and remedies set forth above are exclusive and in lieu of all others, whether oral or written, express or implied. Color Kinetics specifically disclaims any and all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. No Color Kinetics distributor, dealer, agent or employee is authorized to make any modification, extension, or addition to this warranty. This warranty gives you specific legal rights, and you may also have other rights that vary from jurisdiction to jurisdiction.

## MANUFACTURING STANDARDS

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