



# JUICE BOX 2

## INSTALLATION

### GUIDE

COLOR KINETICS INCORPORATED  
 10 MILK STREET, SUITE 1100  
 BOSTON, MA 02108  
 TEL 888 FULL RGB  
 TEL 617 423 9999  
 FAX 617 423 9998  
 INFO@COLORKINETICS.COM  
 WWW.COLORKINETICS.COM

### GETTING STARTED

Color Kinetics® Juice Box uses our patented Smartjuice™ technology to provide both power and data to iColor™ MR lamps over conventional two-wire circuits.

This guide contains important information on installing your new Juice Box 2. For your protection please read it carefully before you embark on your colorful adventure. There are very few rules, but those that exist are there for your safety.

**WARNING:** Juice Box 2 is rated for installation in environments where the temperature does not exceed 104° F (40° C).

Juice Box 2 is not suited for outdoor locations and must be shielded from water spray.

#### Materials included:

- (1) Juice Box 2
- (1) Installation Guide

**MODEL# ENA-JB 2**  
 FOR USE UNDER U.S. PATENTS 6,016,038 AND 6,150,774  
 OTHER PATENTS PENDING  
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 PUB-000052-00 Rev 00  
 Specifications subject to change without notice.

#### Additional items you'll need:

- (1) 24V DC power supply (Color Kinetics Part # PWR-002, Item # 109-000001-00).
- (4) mounting screws  
(up to 40) iColor MR fixtures

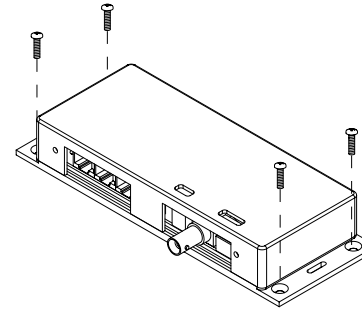
**CAUTION:** Do not use with any product other than iColor MR.

### INSTALLING JUICE BOX 2

This product should be installed by a qualified electrician in accordance with NEC and relevant local codes.

- Select the location to mount the housing, keeping in mind that the maximum distance from the Juice Box 2 to any iColor MR product cannot exceed 50 feet.
- Mount the housing to the surface with the four mounting screws. (See Fig. 1.)

Fig. 1



### CONNECTING POWER TO JUICE BOX 2

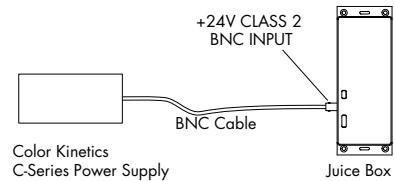
Juice Box 2 is designed to be powered by the C-Series Power Supply available from Color Kinetics (Model# PWR-002).

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

#### Using the C-Series Power Supply

- Connect the BNC cable from the Color Kinetics power supply to the Juice Box 2 terminal labeled +24V BNC input. (See Fig. 2.)

Fig. 2: Power input using C-Series Power Supply



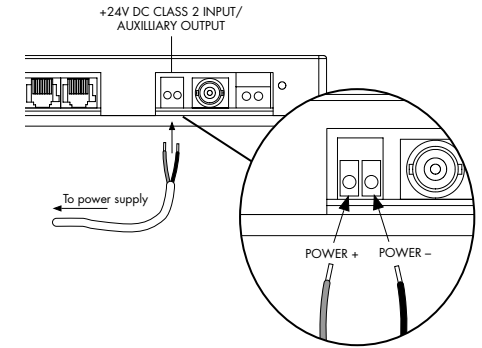
#### Using Other Power Supplies

If you are using a separate power supply without a BNC connector, connect the power supply to the Juice Box 2 screw terminals labeled +24V DC Input/Auxiliary Output.

- Connect the POWER + lead to the left screw terminal and the POWER – lead to the right screw terminal. (See Fig. 3.)

**WARNING:** The power supply must be a Class 2 device or must be equipped with a 4A slow blow fuse. Use of an unlisted device may cause damage to the equipment.

Fig. 3: Power input using other power supply

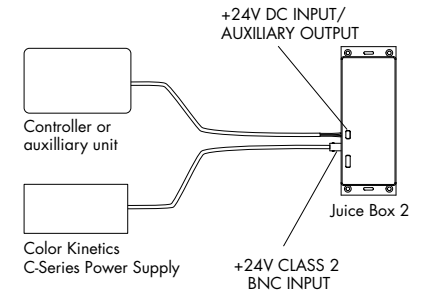


### POWERING AN AUXILIARY UNIT WITH JUICE BOX 2

Juice Box 2 offers 24V DC output that may be used to power a Color Kinetics controller or other auxiliary unit.

- Connect the leads from the auxiliary unit to the screw terminals labeled 24V DC Class 2 Input/Auxiliary Output. (See Fig. 4.)

Fig. 4

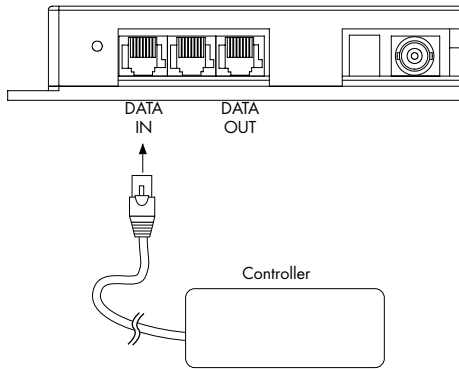


**WARNING:** The Auxiliary Output terminal is designed for use only with Color Kinetics controllers such as Synchronizer, Multi Synchronizer, and iPlayer. Do not use the Auxiliary Output to power Color Kinetics lights.

## CONNECTING DATA TO JUICE BOX 2

- Connect the RJ45 cable from your controller to the RJ45 jack labeled DATA IN. (See Fig. 5.)

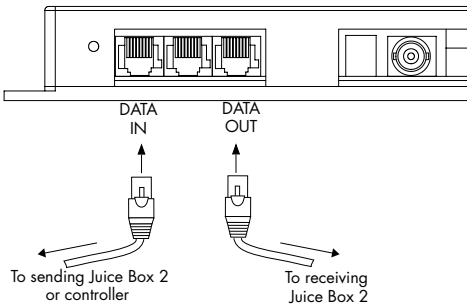
Fig. 5



### To send data to another Juice Box 2

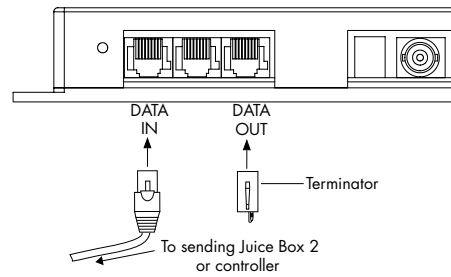
- To send data to another Juice Box 2 unit, connect an RJ45 cable between the DATA OUT port of the sending unit and the DATA IN port of the receiving unit. (See Fig. 6.)

Fig. 6



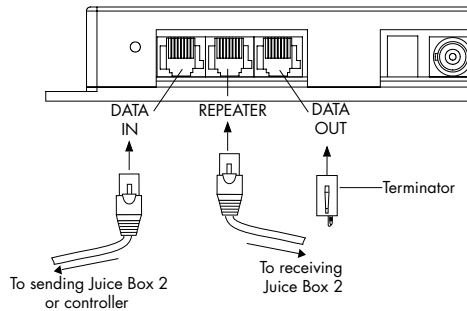
- Make sure a terminator is installed in the LOOP OUT port of the last unit in the chain. (See Fig. 7.) Single units should also be terminated. (Data terminators are available from Color Kinetics.)

Fig. 7



The REPEATER port boosts the data signal for longer chains. Use the REPEATER port instead of the DATA OUT port on every 32nd Juice Box 2 unit in a chain, or when the cable between two power supplies is more than 400 feet. (See Fig. 8.)

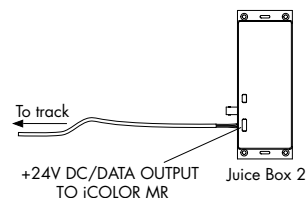
Fig. 8



## CONNECTING JUICE BOX 2 TO TWO-WIRE CIRCUITS

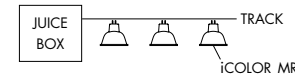
- Connect the leads from the track to the screw terminal labeled +24V DC/Data Output to iColor MR. The polarity of the output wires does not matter. This terminal supplies power and data to the iColor MR. (See Fig. 9.)

Fig. 9

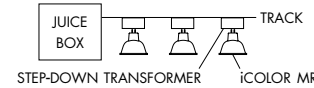


**NOTE:** Juice Box 2 should only be used with low-voltage systems that use a single step down transformer. (See Fig. 10.)

**RIGHT**



**WRONG**



## ELECTRICAL SPECIFICATIONS

<b>Power Input</b>	24V DC
<b>Power Output</b>	2.4A @24V DC (58W)
<b>Power Supply</b>	Color Kinetics power supply
<b>Dimensions</b>	7.52" x 2.76" x 0.98"
<b>Data Interface</b>	DMX 512 (RS485) compatible

### Connectors

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

### NOTES:

- Juice Box 2 performs internal diagnostics upon start up. A 7-second delay before power is distributed to the iColor MR fixtures is to be expected.
- The maximum run length of one track/cable system must not exceed 50 feet.
- The maximum number of iColor MR lights per Juice Box 2 must not exceed 40.
- The maximum number of lights is reduced by one for every 1 watt used for auxiliary power.
- Juice Box 2 should only be used with iColor MR lamps.
- Juice Box 2 should only be used with low-voltage systems that function with a single step down transformer.

## 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.