

# AuxBox

Activation hub for integrating remote dry-contact closure triggering devices



# **AuxBox**

# Activation hub for integrating remote dry-contact closure triggering devices

AuxBox instantly activates up to eight iPlayer 3 or Light System Manager light shows using any remote triggering device with a dry-contact closure. Popular triggering devices that work with AuxBox include motion sensors, time clocks, architectural controllers (such as Lutron Graffik Eye systems), wind speed monitors, pressure sensors, and other third-party controllers or sensor systems. With AuxBox, you can trigger light shows by touch, motion, event, and environmental factors such as temperature to add new dimensions of creativity and flexibility to your lighting installations.

- Support for remote triggering devices —
   Each AuxBox can trigger up to eight iPlayer
   3 light shows using remote, dry-contact
   closure triggering devices.
- Simple installation AuxBox connects to the iPlayer 3 controller with a serial cable, to external dry-contact triggering devices with two-wire cables, and to power with a 24 VDC power supply.
- Multiple AuxBoxes in a single iPlayer 3 installation — In special circumstances, you can install and configure up to eight AuxBoxes in a single iPlayer 3 system, four per iPlayer 3 serial port, for a total of 64 remote triggering devices per installation.



#### **Highly flexible**

AuxBox can receive triggers from up to eight external dry contact switches and immediately activate your choice of light shows from the iPlayer 3 or Light System Manager controller.

Imagine the possibilities of light shows that respond to time, touch, temperature, motion, or sound. AuxBox responds to whatever a device can sense.

# Shows, Triggers, and AuxBox Terminal **Pairs**

Familiarity with iPlayer 3 show concepts and terminology will help you understand how to configure AuxBox to automatically play iPlayer 3 light shows. Refer to the iPlayer 3 and ColorPlay 3 User Guides for more information.

#### **Shows**

iPlayer 3 stores both preconfigured shows and custom shows created with and downloaded from ColorPlay 3, the light show authoring software for iPlayer 3. Shows define effects and the light fixtures or groups of fixtures which display those effects.

## **Triggers**

You associate iPlayer 3 light shows with AuxBox by assigning shows to triggers, downloading the triggers to iPlayer 3, and assigning the triggers to AuxBox terminal pairs. Triggers are numbered 1 - 256 and specify both which show file to play and how a show behaves after one playback cycle (e.g. repeat).

## **Typical iPlayer 3 Installation** iPlayer 3 can control two separate

Low Voltage

**Fixtures** 

Low Voltage

**Fixtures** 

DMX-based light universes. You can install up to four AuxBoxes in each light universe.

## **AuxBox Terminal Pairs**

Line Voltage

Fixtures

Line Voltage

Fixtures

Each AuxBox can automatically trigger up to eight consecutively numbered shows. The Show Range switch on the AuxBox chassis determines which

> set of eight shows the terminal pairs, from left to right, will trigger. The Show Range switch offers 16 positions, 0 - 9 and A - F, for 128 unique triggers. For instance, switch position 0 (zero) sets AuxBox to trigger shows 1 - 8, switch position 1 sets AuxBox to trigger shows 9 – 16, and so on up to switch position F, which triggers shows 121 - 128. To access shows 129 – 256, see the note about base trigger numbers on page 8.

3rd Party Control Devices Keypad ColorPlay 3 PC or Mad USB 2.0 iPlayer 3 DMX 1 DMX 2 Low Voltage Low Voltage Line Voltage Line Voltage to Lights to Lights Fixtures Data Enable Data Enabler Power Data Supply ower Data Supply Data Enabler Data Enabler  $\Theta$  $\Theta$ Low Voltage Low Voltage Line Voltage Line Voltage Fixtures Fixtures Power Data Supply Power Data Data Enables Data Enabler Supply Power Data Power Data Data Enabler Data Enabler Supply

Standard installation allows for two AuxBoxes, one connected to each serial port on iPlayer 3. With advanced instructions, however, you can connect up to four AuxBoxes to each iPlayer 3 serial port, for a total of up to eight AuxBoxes in a single installation. If you're using multiple AuxBoxes in your installation, you can set the Show Range switches so that each AuxBox will trigger a unique set of eight consecutive iPlayer 3 light shows.

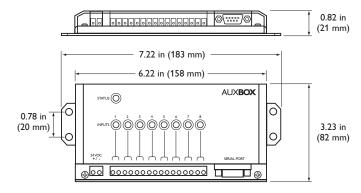
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# Specifications

Due to continuous improvements and innovations, specifications may change without notice.

Item	Specification	Details					
Electrical /	Control	Serial via iPlayer 3					
Control	Power	24 VDC via 100 – 240 VAC power source (included)					
	Dimensions (Height x Width x Depth)	3.2 x 7.22 x .82 in (82 x 183 x 21 mm)					
	Weight	8.1 oz (239.5 g)					
	Housing	Two-piece aluminum indoor enclosure, black matte finish					
Physical	Temperature Ranges	-4° – 122° F (-20° – 50° C) Operating -4° – 122° F (-20° – 50° C) Startup -40° – 176° F (-40° – 80° C) Storage					
	Humidity	0 – 95%, non-condensing					
	Connector	Data interface: 9-pin RS-232 serial port Switch inputs: Screw terminals Power: Screw terminal or serial port					
	Environment	Dry Location					

#### **Dimensions**



#### Included in the box

#### AuxBox

20 ft (6.1 m) serial cable

24 VDC power supply via 100 – 240 VAC power source

and 6 ft (1.8 m) leader cable

# AuxBox and Accessories

The AuxBox is part of a complete system that includes:

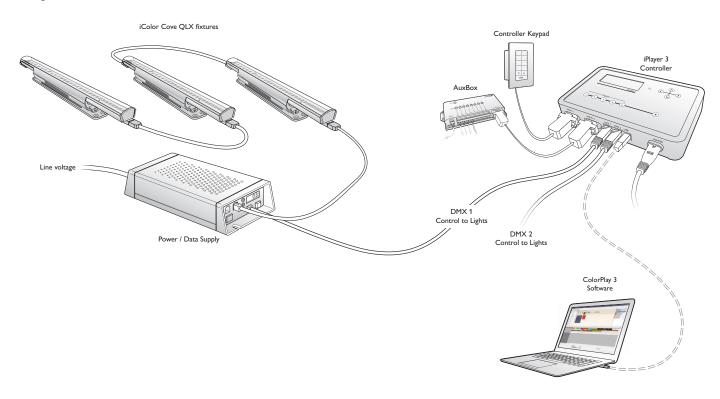
- iPlayer 3 and ColorPlay 3 software for assigning shows to each external trigger.
- The provided 20 ft (6.1 m) serial cable, or a user-customized serial cable of no longer than 50 ft (15.2 m).
- The provided 24 VDC power supply and cable.
- One or more external triggering devices and cables of no longer than 1000 ft (304.8 m).

Item	Item Number	Item 12NC
AuxBox	103-000021-01	910503702433

Use Item Number when ordering in North America.

#### iPlayer 3 Controller installation with AuxBox

In this scenario, AuxBox triggers iPlayer 3 shows designed for iColor Cove QLX fixtures.



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## Installation

AuxBox is installed in lighting installations controlled by iPlayer 3. AuxBox communicates with iPlayer 3 over a serial cable, and it receives power from a 24 VDC power source.

AuxBox triggers up to eight iPlayer 3 light shows using a range of popular dry-contact triggering devices, including motion sensors, time clocks, architectural controllers (such as Lutron Graffik Eye systems), wind speed monitors, pressure sensors, and other third-party controllers or sensor systems. You connect the external triggering devices to AuxBox with simple two-wire cables.

Standard installation allows for two AuxBoxes, one connected to each serial port on the iPlayer 3 controller.

# Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate AuxBox in such a manner as to comply with all applicable codes, state and local laws, ordinances, and regulations. Consult with the appropriate electrical inspector to ensure compliance.

# Prepare for the Installation

AuxBox can accept up to eight external devices to trigger light shows stored on iPlayer 3. Make sure that additional components, such the 24 VDC power supply and mounting screws, are also available.

### Consider these guidelines when planning the installation:

- · AuxBox is designed for indoor use only.
- Create a layout plan that starts with the locations of the power / data supply or Data Enabler and the iPlayer 3 controller, and that includes all leader cables, fixtures, and triggering devices. Determine a convenient location, accessible to the required serial cable of no longer than 50 ft (15.2 m) and the remote triggering device cables of up to 1000 ft (304.8 m).
- AuxBox requires iPlayer 3 to control the light fixtures and assign a light show to each external triggering device. Ensure that iPlayer 3 is programmed with the set of shows that the external devices will trigger, and that one of the two iPlayer serial ports is available.
- Ensure that all required power / data supplies and light fixtures are connected properly.

# Assemble Additional Items

The following additional items are required to mount and connect AuxBox:

- A standard 9-pin serial cable is required to connect AuxBox to an available serial port on the iPlayer 3 controller. You can use the included 20 ft (6.1 m) serial cable, or a custom cable up to the maximum length of 50 ft (15.2 m).
- You must use a 24 VDC via 100 240 VAC power supply (supplied or similar) to power AuxBox.
- One two-wire cable to connect each external triggering device to

E You can install up to eight AuxBoxes in a single iPlayer 3 system, four per iPlayer 3 serial port, and configure each of them to trigger a unique set of eight iPlayer 3 light shows. For more information, visit www.colorkinetics.com/support/appnotes/, or consult Application Engineering services at support@colorkinetics.com.

## Serial cable pinouts (DB9M)

No connection
 RxD (connects to iPlayer 3 TxD pin)
 TxD (connects to iPlayer 3 RxD pin)
 +5 VDC input
 Ground
 9 No connection

## Included in the box

AuxBox

20 ft (6.1 m) serial cable

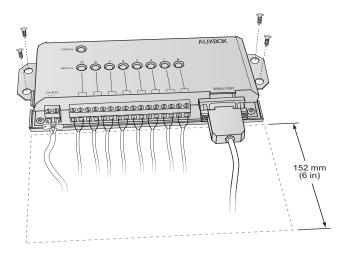
24 VDC power supply via 100 – 240 VAC power

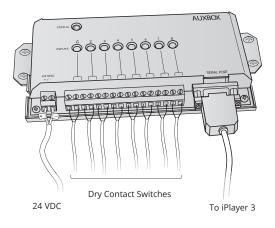
source

and 6 ft (1.8 m) leader cable



AuxBox is also required.



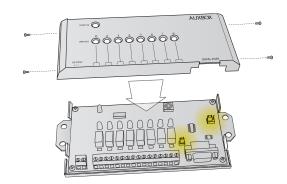


# Inspect the Fixtures and Accessories

Carefully inspect the box containing AuxBox and the contents for any damage that may have occurred in transit.

## Mount AuxBox

- 1. You can mount AuxBox either horizontally or vertically. When choosing a location, ensure at least 6 in (152 mm) of clearance to allow space for connections. Ensure that the serial cable can reach the iPlayer 3 controller.
- 2. Secure AuxBox to the mounting surface with four suitable screws (not included).



#### Switch Position

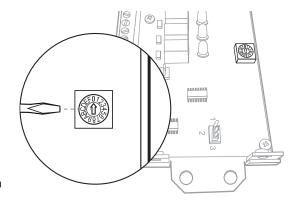
0	1	2	3	4	5	6	7	8	9	А	В	С	D	Е	F
1	9	17	25	33	41	49 -	57 -	65	73	81 -	89	97 -	105 -	113 -	121 -
- 8	- 16	- 24	- 32	- 40	- 48	56	64	- 72	- 80	88	- 96	104	112	120	128

Show Range

# Make Cable Connections

Make sure power is OFF.

- Attach the female connector on the serial cable to the serial port on AuxBox.
- 2. Attach the male connector on the serial cable to an available serial port on iPlayer 3.
- 3. Connect the 24 VDC power supply cable to the 24 VDC terminals on AuxBox.
- 4. Connect each remote dry-contact triggering device's two-wire cable to a terminal pair on AuxBox.



# Installing Multiple AuxBoxes (Optional)

You can install up to eight AuxBoxes in a single iPlayer 3 system, four per iPlayer 3 serial port, by setting jumper configurations on each AuxBox chassis. You can also set the Show Range switch position to configure each AuxBox to trigger any set of eight consecutive iPlayer 3 light shows. Switch position 0 (zero) sets AuxBox to trigger shows 1 – 8, switch position 1 triggers shows 9 – 16, and so on up to switch position F, which triggers shows 121 – 128.

- 1. Remove the four screws from the AuxBox cover, and lift off the cover.
- 2. Place one jumper over both pins on the two-pin jumper block labeled J6.
- 3. Place the other jumper over pins 1 and 2 on the three-pin jumper block labeled J7.
- 4. Set AuxBox to trigger the eight iPlayer light shows you want by rotating the Show Range switch to the desired position.
- 5. Replace the AuxBox cover and secure it with the four screws.

#### **A Note About Base Trigger Numbers**

chassis of either AuxBox.

Setting the base trigger number for an iPlayer 3 serial port (using the iPlayer 3 setup menu) changes the show range of any AuxBox connected to that serial port. For example, if you assign a base trigger of 8 to serial port 1, Show Range switch position 0 will trigger shows 9-16 instead of shows 1-8 (1+8=9, 2+8=10, ... 8+8=16). You can use the base trigger number option to ensure that the show ranges of two AuxBoxes, each connected to a different iPlayer 3 serial port, do not overlap, without having to set the Show Range switch position on the

# Set Show Triggers with iPlayer 3

Make sure the power is ON, and the 24 VDC power source is plugged in.

- 1. Using ColorPlay 3 software, download your saved light shows to the iPlayer 3 controller.
- Assign triggers to your light shows, and copy the triggers to the iPlayer 3 controller. Remember that AuxBox can trigger up to eight consecutive shows,
  - and that the show range depends on the position of the Range switch on the Aux.