# **Operation Manual**

### 4Bank, Double & Single





### **Systems**

### 4Bank

### **Double**

### **Single**





















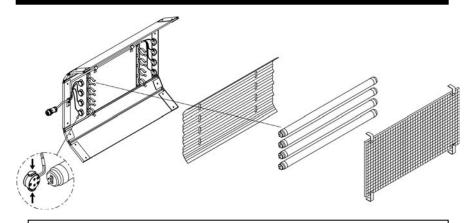




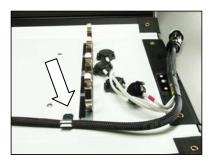
### **Each System consists of:**

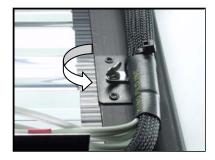
- 1 Fixture
- 1 Mounting Plate
- 1 Extension Cable
- 1 Electronic Ballast

### **Fixture Assembly**



The 4Bank, Double and Single fixtures are comprised of a removable Louver, Reflector, and Lamp Harness. The Louver and Reflector are held in place with Velcro fasteners. The Lamp Harness is secured by means of a ¼ turn fastener and two clips.





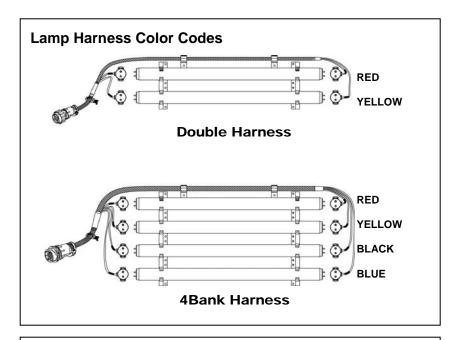
#### To Release the Lamp Harness

Remove the harness from 2 clips located under the reflector. Rotate the ¼ turn fastener clockwise to release harness.



The lamps can operate independent of the fixture allowing them to be built into sets or custom soft boxes or hand held as a single tube for an eye-light.

**WARNING**: Always use safety coated lamps to avoid injury if lamp breaks.



The Harness wiring is color-coded. The same color-code must match at each end of the lamp for proper operation.

### **Inserting Lamps**





#### **Locking Lamp Connector:**

Depress both tabs on lamp connector and apply to lamp pins. Match the Harness color-codes at each end of the lamp. Push lamps into the fixture's Lamp Holder Clips.

## **Gelling the Fixture**



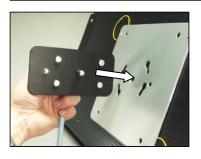


Restricting the airflow around the lamps can cause the lamp to operate hotter. This increased heat will raise the lamp's color temperature and green spike. Therefore, it is recommended to clip gels to the Doors of the Fixture.

Do Not clip gels to louver.

Do Not block the fixture ends in a manner that restricts airflow.

### **Mounting the Fixture**



Align the center pin of the mounting plate to the center hole on the mating plate.



Rotate plate clockwise until the four shoulder rivets drop into the receptacle. A locking pin will snap into place when the plate is properly seated.





To remove the plate, pull up on the locking pin and rotate the plate counter clockwise.

The standard mount comes with a 3/8" Lollipop that clamps into a grip head. The ball and socket mount allows the fixture to be oriented in a broad range of angles.

The **yellow wire loops** provide attachment points for a safety chain.





Optional Lollipops w/ Baby Receivers allow mounting to a 5/8" pin or a baby stand.

### **Other Fixture Mounting Options**



The grommet holes along the edge of the fixture are designed to allow the fixture to be screwed onto set walls.



### **Extension Cable**



To insert the cable, align the key ways on the extension cable with the circular receptacle on the ballast. Rotate the locking ring until it clicks into the lock position. Lamps can operate as far as 75 feet from the ballast. (3 x 25ft extensions)



A **Splitter** can be used at the Ballast or on the end of an Extension Cable to split a 4 bank run into either 4 Singles or 2 Doubles. This allows for greater rigging flexibility.



A **Combiner** can connect a number of smaller ballasts to a larger fixture. For example, 4 single Ballasts or two Double ballasts can be combined to a 4Bank Extension or Fixture.

### **Ballast Operation**

#### WARNING!

- 1) ALWAYS TURN OFF THE BALLAST BEFORE connecting or disconnecting Lamps, Harnesses or Extension Cables.
- Use only with Sine wave inverters. Do not operate on SCR dimmers.
- If powering the ballasts through a Dimmer Pack set the Dimmer to Non-Dim Mode.

#### **Ballast Operation Continued....**

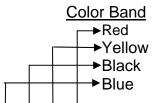
The 120 VAC Ballast requires 110 to 130 Volts AC 50/60 Hertz on an earth grounded circuit; the 230 VAC Ballast requires 220 to 240 Volts AC on an earth grounded circuit. The electronic Ballast operates at a high frequency of 25KHz. It is dead—quiet, instant—on and lightweight.

The Ballast operates remote from the fixture. Connect the Extension cable to the Ballast and the Lamp Harness. After the lamps are properly installed the Ballast can be turned on.

#### **Cold Temperature Operation**

The Select Ballast series is designed to operate at temperatures from 14F to 122F (–10C to +50C). In cold temperatures, the Ballast may not strike the lamp (s) instantly. Switch the Ballast to OFF, wait seven seconds and try again. If the Ballast does not strike after two or three attempts, turn off the Ballast, check that the Extension and Harness connections are secure and re-strike. Once operating for a few minutes, the Lamps should re-strike instantly.

Each switch controls one lamp. The color bands on the Lamp Harness correspond to the switches as illustrated.





#### **Lamp Select Feature**

The Select Ballasts have a **4FT / 2FT** switch. Set the Selector Switch to **4FT** for 4ft lamps and **2FT** for 2ft or 15" lamps. When operating 4ft lamps in high ambient temperature or where the units are rigged into place with restricted airflow, the **2FT** setting can be used to lower the color temperature and remove any green spike. The light drops about a half an f-stop in exposure when dropping from **4FT** to **2FT**.

#### Lamp Select feature continued...

It is not recommended to operate 2ft lamps in the **4FT** setting. At the **4FT** setting, the color temperature of the 2ft lamps will rise dramatically and experience a high green spike.

### System Components



CFX-4804 4ft 4Bank Fixture CFX-2404 2ft 4Bank Fixture CFX-4802 4ft Double Fixture CFX-2402 2ft Double Fixture CFX-4801 4ft Single Fixture CFX-2401 2ft Single Fixture



MTP-K41 "Twist-On" Mount w/ 3/8" Pin



X16-25 4Bank Ext. Cable, 25ft X16-12 4Bank Ext. Cable, 12ft X09-25 Double Ext. Cable, 25ft X09-12 Double Ext. Cable, 12ft X04-25 Single Ext. Cable, 25ft X04-12 Single Ext. Cable, 12ft



BAL-410-S120 Select/Ve 4Bank 120VAC BAL-410-F230 Select/ef 4Bank 230VAC

BAL-210-S120 Select/Ve Double 120VAC BAL-210-F230 Select/ef Double 230VAC

BAL-105-S120 Select/Ve Single 120VAC BAL-100-F230 Select/ef Single 230VAC

### **Accessories and Parts**



MTP-B41 "Twist-On" Mount w/ Baby Receiver
MTP-B41S "Twist-On" Mount w/ Baby Receiver
Short
MTP-B41T "Twist-On" Mount w/ Baby
Receiver Straight



MTP-L Lollipop 3/8" Pin
MTP-LB Lollipop w/ Baby Receiver
MTP-LBS Lollipop w/ Baby Receiver Short
MTP-LBT Lollipop w/ Baby Receiver Straight



MTP-BAL Select Ballast Mount



X16-A4 4Bank to Single Splitter
X16-A9 4Bank to Double Splitter
X09-A4 Double to Single Splitter
X04-A16 Single to 4Bank Combiner
X04-A9 Single to Double Combiner
X09-A16 Double to 4Bank Combiner



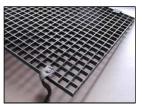
DFS-4804 4ft 4Bank Flozier, Full DFS-4804-H 4ft 4Bank Flozier, Half DFS-4802 4ft Double Flozier, Full DFS-4802-H 4ft Double Flozier, Half DFS-D4 2ft 4Bank Flozier, Full DFS-D4-H 2ft 4Bank Flozier, Half DFS-D2 2ft Double Flozier, Full DFS-D2-H 2ft Double Flozier, Half



FIX-4804 4ft 4Bank Fixture Shell FIX-4802 4ft Double Fixture Shell FIX-4801 4ft Single Fixture Shell FIX-2404 2ft 4Bank Fixture Shell FIX-2402 2ft Double Fixture Shell FIX-2401 2ft Single Fixture Shell



HAR-4804 4ft 4Bank Harness HAR-4802 4ft Double Harness HAR-4801 4ft Single Harness HAR-2404 2ft 4Bank Harness HAR-2402 2ft Double Harness HAR-2401 2ft Single Harness



LVR-4804-B 4ft 4Bank Louver, Black LVR-4801-B 4ft Single Louver, Black LVR-2404-B 2ft 4Bank Louver, Black LVR-2402-B 2ft Double Louver, Black LVR-2401-B 2ft Single Louver, Black



REF-4804 4ft 4Bank Reflector REF-4802 4ft Double Reflector REF-4801 4ft Single Reflector REF-2404 2ft 4Bank Reflector REF-2402 2ft Double Reflector REF-2401 2ft Single Reflector

### **Expendables**



EXP-LHC-T12 Lamp Holder Clips T12, 24pk



EXP-M&T Adhesive Mounts and Releasable Ties, 25pk

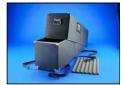


#### PRT-HLC Kino Locking Lamp Connector, 1 pk

See web site: www.kinoflo.com for more repair parts

## Cases









KAS-C46

KAS-54L

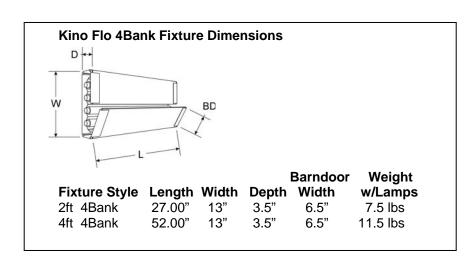
KAS-KFC

**BAG-201** 

Part	Description	Dimensions	Weight	Holds
Number BAG-201	2ft 4Bank Soft Case	27.5" x 7" x 14" 70cm x 18cm x 35.5cm	<b>(Empty)</b> 3lb / 1.4Kg	2ft 4Bank System (1)
BAG-401	4ft 4Bank Soft Case	53.5" x 7" x 14" 136cm x 18cm x 35.5cm	5lb / 2.3Kg	4ft 4Bank System (1)
INS-L4	4-Lamp Foam Pad	24" x 9" x 1" 61cm x 23cm x 2.5cm	N/A	Fits KAS-48, 72, 96
INS-L6	6-Lamp Foam Pad	24" x 13" x 1" 61cm x 33cm x 2.5cm	N/A	Fits KAS-54S, 54L, 96L
KAS-21	2ft System Ship Case	30" x 10" x 15" 76cm x 25.5cm x 38cm	21lb / 9.5Kg	2ft 4Bank System (1)
KAS- 41	4ft System Ship Case	57" x 9.5" x 15" 145cm x 24cm x 38cm	37lb/ 16.7Kg	4ft 4Bank System (1)
KAS-48	4ft Lamp Ship Case	52.5" x 10.5" x 11" 133.5cm x 26.5cm x 28cm	15.5lb / 7Kg า	4ft Lamps (20)
KAS-54L	4ft Fixture Ship Case, Large	57" x 15" x 17" 145cm x 38cm x 43cm	22lb / 10Kg	4ft 4Bank Fixture (5)
KAS-54S	4ft Fixture Ship Case, Small	57" x 15" x 11.5" 145cm x 38cm x 29cm	17lb / 7.7Kg	4ft 4Bank Fixture (3)

Part Number	Description	Dimensions	Weight (Empty)	Holds
KAS-C26	6-Lamp Carry Case, (2ft)	26.5" x 6" x 4" 67.5cm x 15cm x 10cm	1lb / .5Kg	2ft Lamps (6)
KAS-C46	6-Lamp Carry Case, (4ft)	50.5" x 6" x 4" 128.5cm x 15cm x 10cm	2lb / .9Kg	4ft Lamps (6)
KAS-GAF	Gaffer Kit Ship Case	55" x 12" x 19.5" 39.5cm x 30.5cm x 49.5cm	34lb / 15.3Kg	4ft 4Bank System (2)
KAS-INT	Interview Kit Ship Case	35" x 11" x 21" 89cm x 28cm x 53.5cm	27lb / 12.2Kg	2ft 4Bank System (2)
KAS-KFC	Ballast & Cables Crate w/ Lid	21.5" x 15" x 12" 54.5cm x 38cm x 30.5cm	6lb / 2.7Kg	Ballasts, Cables, Mounting Plates

## **Fixture Specifications**



#### **Kino Flo Double Fixture Dimensions**



				Darmaco.	•
Fixture Style	Length	Width	Depth	Width	w/Lamps
2ft Double	27.00"	7.5"	3.5"	6.0"	4.7 lbs
4ft Double	52.00"	7.5"	3.5"	6.0"	7.7 lbs

**Barndoor** 

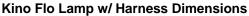
Weight

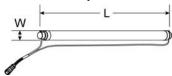
#### **Kino Flo Single Fixture Dimensions**



				Barndoor	weignt
Fixture Style	Length	Width	Depth	Width	w/Lamps
2ft Single	27.00"	4.5"	3.5"	3.5"	2.7 lbs
4ft Single	52.00"	4.5"	3.5"	3.5"	4.3 lbs

## Lamp w/Harness Specifications





Lamp Type	Length	Width
2ft Med. Bi-Pin	24.5"	1.5"
3ft Med. Bi-Pin	36.5"	1.5"
4ft Med. Bi-Pin	48.5"	1.5"

### **Ballast Specifications**



#### BAL-410-S120

Select/Ve 4Bank Ballast, 120VAC

Input Voltage: 120 VAC 50/60Hz

Output Frequency: 25 kHz

Amperage: F75/4.3A, F40/3.1A, F30/2.3A

Lamp switching: 4-1/off Output Switching: 4ft / 2ft

Ballast size: 13 x 9.5 x 2.5"

(33 x 24 x 6.5cm)

Weight: 5lb / 2.3kg

#### BAL-410-F230

Select/ef 4Bank Ballast, 230VAC

Input Voltage: 230VAC 50/60Hz

Output Frequency: 25 kHz

Amperage: F75/2.4A, F40/1.6A, F30/1.3A

Lamp switching: 4-1/off Output Switching: 4ft / 2ft

Ballast size: 13.5 x 9.5 x 2.5"

(34.5 x 24 x 6.5cm)

Weight: 6.1lb / 2.7kg



#### BAL-210-S120

Select/Ve Double Ballast, 120VAC

Input Voltage: 120VAC 50/60Hz

Output Frequency: 25 kHz

Amperage: F75/2.4A, F40/1.6A, F30/1.3A

Lamp switching: 2/1/off
Output Switching: 4ft / 2ft
Ballast size: 9.5 x 9 x 2.5"

(24 x 23 x 6.5cm)

Weight: 3.4lb / 1.5kg

#### BAL-210-F230

Select/ef Double Ballast, 230VAC

Input Voltage: 230VAC 50/60Hz

Output Frequency: 25 kHz

Amperage: F75/1.4A, F40/.9A, F30/.7A

Lamp switching: 2/1/off Output Switching: 4ft / 2ft

Ballast size: 9.5 x 9.5 x 2.5"

(24 x 24 x 6.5cm)

Weight: 4.1lb / 1.8kg



#### BAL-105-S120

Select/Ve Single Ballast, 120VAC

Input Voltage: 120VAC 50/60Hz

Output Frequency: 25 kHz

Amperage: F75/1.3A, F40/.9A, F30/.7A

Lamp switching: 1/off Output Switching: 4ft / 2ft

Ballast size: 11 x 2.5 x 2.7"

(28 x 6.5 x 6.5cm)

Weight: 2lb / 0.9kg

#### BAL-100-F230

Select/ef Single Ballast, 230VAC

Input Voltage: 230VAC 50/60Hz

Output Frequency: 25 kHz

Amperage: F75/.8A, F40/.6A, F30/.5A

Lamp switching: 1/off

Output Switching: 4ft / 2ft

Ballast size: 10.5 x 4 x 2.5"

(26.5 x 10 x 6.5cm)

Weight: 2.8lb / 1.3kg

#### **Environmental: Disposal of Old Electrical & Electronic Equipment.**



This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. This product is made of recyclable materials and should be disposed of in accordance with local and state regulations.

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