
Operation Manual

4Bank, Double & Single



KINO FLO

L I G H T I N G S Y S T E M S

Systems

4Bank

Double

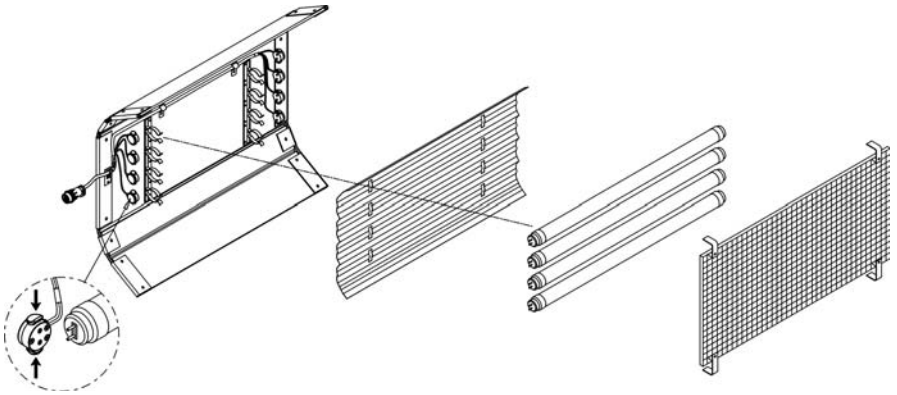
Single



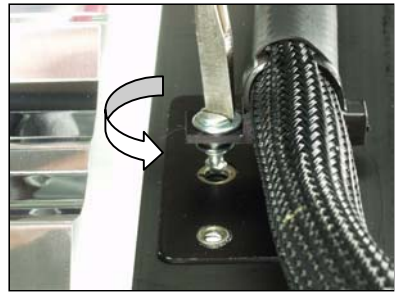
Each System consists of:

- 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 $\frac{1}{4}$ turn fastener and two clips.



To Release the Lamp Harness

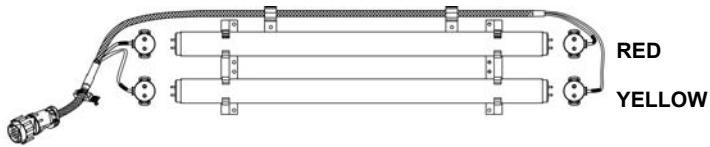
Remove the harness from 2 clips located under the reflector. Insert a flat head screwdriver into the $\frac{1}{4}$ turn fastener and rotate counter clockwise to release.



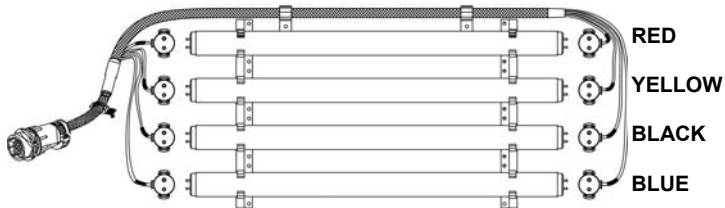
The lamps can operate independent of the fixture allowing them to be built into sets or custom soft boxes or hand held as a single tube for an eye-light.

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

Lamp Harness Color Codes



Double Harness



4Bank Harness

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

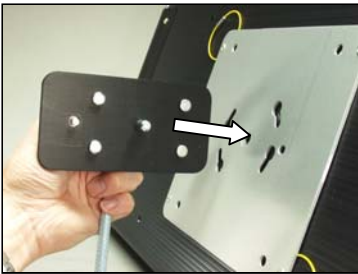


Restricting the airflow around the lamps can cause the lamp to operate hotter. This increased heat will raise the lamp's color temperature and green spike. Therefore it is recommended to clip gels to the Doors of the Fixture.

Do Not clip gels to louver.

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

Mounting the Fixture



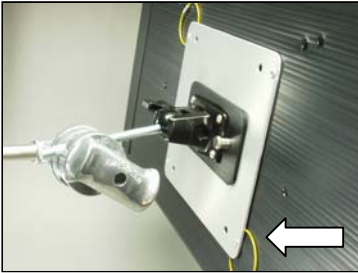
Align the center pin of the mounting plate to the center hole on the mating plate.



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.
- 2) Use only with Sine wave inverters. Do not operate on SCR dimmers.
- 3) If powering the ballasts through a Dimmer Pack set the Dimmer to Non-Dim Mode.

Ballast Operation Continued....

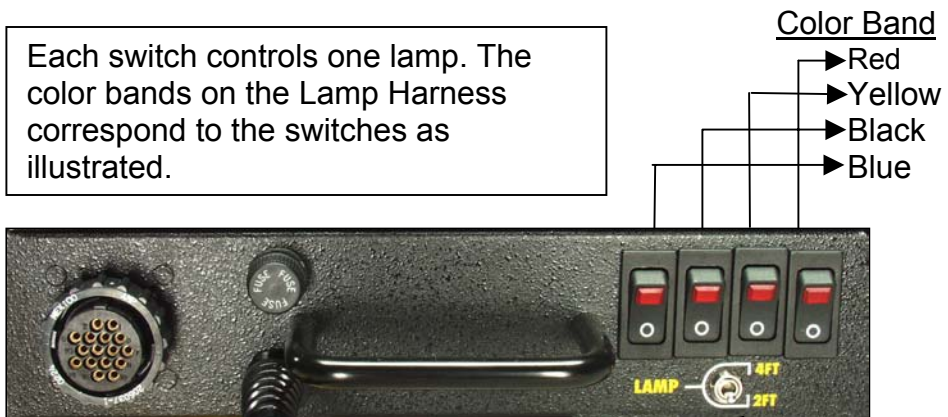
The 120 VAC Ballast requires 110 to 130 Volts AC 50/60 Hertz on an earth grounded circuit; the 230 VAC Ballast requires 220 to 240 Volts AC on an earth grounded circuit. The electronic Ballast operates at a high frequency of 25KHz. It is dead-quiet, instant-on and lightweight.

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-1504 15" 4Bank Fixture
CFX-4802 4ft Double Fixture
CFX-2402 2ft Double Fixture
CFX-1502 15" Double Fixture
CFX-4801 4ft Single Fixture
CFX-2401 2ft Single Fixture
CFX-1501 15" 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-L Lollipop 3/8" Pin
MTP-LB Lollipop w/ Baby Receiver
MTP-LBS Lollipop w/ Baby Receiver short



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



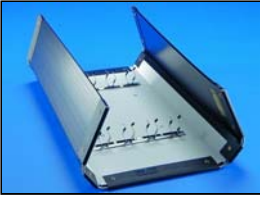
DFS-4804 4ft 4Bank Flozier, Full
DFS-4804-H 4ft 4Bank Flozier, Half
DFS-4802 4ft Double Flozier, Full
DFS-4802-H 4ft Double Flozier, Half
DFS-D4 2ft 4Bank Flozier, Full
DFS-D4-H 2ft 4Bank Flozier, Half
DFS-D2 2ft Double Flozier, Full
DFS-D2-H 2ft Double Flozier, Half



EXP-LHC-T12 Lamp holder clips T12, 24pk



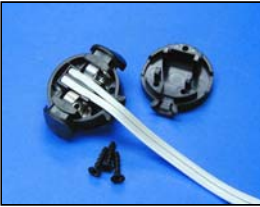
EXP-M&T Adhesive Mounts and Releasable Ties, 25pk



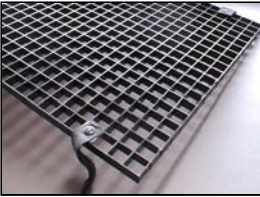
FIX-4804 4ft 4Bank Fixture Shell
FIX-4802 4ft Double Fixture Shell
FIX-4801 4ft Single Fixture Shell
FIX-2404 2ft 4Bank Fixture Shell
FIX-2402 2ft Double Fixture Shell
FIX-2401 2ft Single Fixture Shell
FIX-1504 15" 4Bank Fixture Shell
FIX-1502 15" Double Fixture Shell
FIX-1501 15" Single Fixture Shell



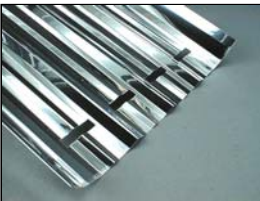
HAR-4804 4ft 4Bank Harness
HAR-4802 4ft Double Harness
HAR-4801 4ft Single Harness
HAR-2404 2ft 4Bank Harness
HAR-2402 2ft Double Harness
HAR-2401 2ft Single Harness
HAR-1504 15" 4Bank Harness
HAR-1502 15" Double Harness
HAR-1501 15" Single Harness



PRT-HLC Kino Locking Lamp Connector, 1 pk



LVR-4804-B 4ft 4Bank Louver, Black
LVR-4802-B 4ft Double 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
LVR-1504-B 15" 4Bank Louver, Black
LVR-1502-B 15" Double Louver, Black
LVR-1501-B 15" 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
REF-1504 15" 4Bank Reflector
REF-1502 15" Double Reflector
REF-1501 15" Single Reflector



- LVR-4804-S 4ft 4Bank Louver, Silver
- LVR-4802-S 4ft Double Louver, Silver
- LVR-4801-S 4ft Single Louver, Silver
- LVR-2404-S 2ft 4Bank Louver, Silver
- LVR-2402-S 2ft Double Louver, Silver
- LVR-2401-S 2ft Single Louver, Silver
- LVR-1504-S 15" 4Bank Louver, Silver
- LVR-1502-S 15" Double Louver, Silver
- LVR-1501-S 15" Single Louver, Silver

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

Cases



KAS-C46



KAS-54L



KAS-KFC

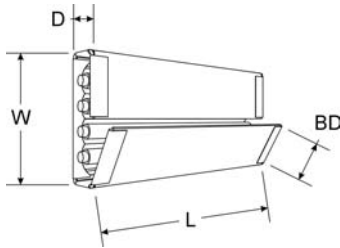


BAG-201

Part Number	Description	Dimensions	Weight (Empty)	Holds
KAS-C46	4ft Lamp Carry Case	50.5" x 5.5" x 3.5" 1283mm x 140mm x 89mm	2lb / .9Kg	4ft T12 Lamps (6)
KAS-48	4ft Lamp Ship Case	52.5" x 10.5" x 11.25" 1333mm x 267mm x 286mm	15lb / 7Kg	4ft T12 Lamps (20)
KAS-54L	4ft Fixture Case, Large	57" x 14.75" x 17" 1448mm x 375mm x 432mm	22lb / 10Kg	4ft 4Bank Fixtures (5)
KAS-54S	4ft Fixture Case, Small	57" x 14.75" x 11.5" 1448m x 375mm x 292mm	17lb / 7.7Kg	4ft 4Bank Fixtures (3)
KAS- 41	4ft System Ship Case	57" x 9.5" x 15" 1448mm x 242mm x 380mm	37lb/ 16.6Kg	4ft 4Bank System (1)
KAS-21	2ft System Ship Case	30" x 9.75" x 15" 762mm x 248mm x 380mm	21lb / 5.4Kg	2ft 4Bank System (1)
KAS-KFC	Crate w/ Lid	21.5" x 15.25" x 12.5" 546mm x 387mm x 318mm	6lb / 2.7Kg	Cables, Ballasts, Mounts
BAG-201	2ft System Soft Case	27.5" x 7" x 15" 698mm x 178mm x 380mm	3.5lb / 1.6Kg	2ft 4Bank System (1)
BAG-401	4ft System Soft Case	53.5" x 7" x 14.5" 1359mm x 178mm x 381mm	5.5lb / 2.5Kg	4ft 4Bank System (1)

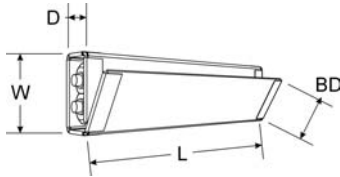
Fixture Specifications

Kino Flo 4Bank Fixture Dimensions



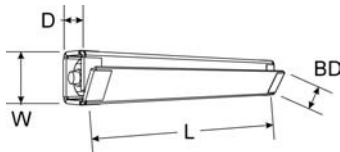
Fixture Style	Length	Width	Depth	Barndoor		Weight w/Lamps
				Width		
15" 4Bank	17.75"	13"	3.5"	6.5"		5 lbs
2ft 4Bank	26.75"	13"	3.5"	6.5"		6.5 lbs
4ft 4Bank	51.50"	13"	3.5"	6.5"		10.5 lbs

Kino Flo Double Fixture Dimensions



Fixture Style	Length	Width	Depth	Barndoor		Weight w/Lamps
				Width		
15" Double	17.75"	7.5"	3.5"	6.5"		3 lbs
2ft Double	26.75"	7.5"	3.5"	6.5"		4 lbs
4ft Double	51.50"	7.5"	3.5"	6.5"		7 lbs

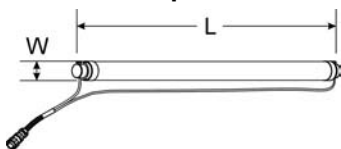
Kino Flo Single Fixture Dimensions



Fixture Style	Length	Width	Depth	Barndoor		Weight w/Lamps
				Width		
15" Single	17.75"	4.5"	3.5"	3.5"		1.5 lbs
2ft Single	26.75"	4.5"	3.5"	3.5"		2 lbs
4ft Single	51.50"	4.5"	3.5"	3.5"		4 lbs

Lamp w/Harness Specifications

Kino Flo Lamp w/ Harness Dimensions



Lamp Type	Length	Width
15" Medium Bi-Pin	15.5"	1.5"
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

Input Voltage: 120 VAC 50/60Hz
 Output Frequency: 25kHz
 Amperage: F40/5A, F20/3.5A, F14/2.5A
 Lamp switching: 4-1/off
 Output Switching: 4ft / 2ft
 Ballast size: 12.75" X 9.3" X 2.5"
 324mm X 225mm X 64mm
 Weight: 5lb / 2.2Kg

BAL-410-F230

Input Voltage: 230 VAC 50/60Hz
 Output Frequency: 25kHz
 Amperage: F40/2.5A, F20/1.7A, F14/1.2A
 Lamp switching: 4-1/off
 Output Switching: 4ft / 2ft
 Ballast size: 13.5" X 9.3" X 2.5"
 343mm X 225mm X 64mm
 Weight: 6lb / 2.7Kg



BAL-210-S120

Input Voltage: 120 VAC 50/60Hz
Output Frequency: 25kHz
Amperage: F40/2.6A F20/1.8A, F14/1.4A
Lamp switching: 2/1/off
Output Switching: 4ft / 2ft
Ballast size: 8.5" X 8.13" X 2.5"
215mm X 210mm X 64mm
Weight: 3.2lb / 1.4Kg

BAL-210-F230

Input Voltage: 230 VAC 50/60Hz
Output Frequency: 25kHz
Amperage: F40/1.3A, F20/.9A, F14/.7A
Lamp switching: 2/1/off
Output Switching: 4ft / 2ft
Ballast size: 10.13" X 9.3" X 2.5"
250mm X 225mm X 64mm
Weight: 4.1lb / 1.8Kg



BAL-105-S120

Input Voltage: 120 VAC 50/60Hz
Output Frequency: 25kHz
Amperage: F40/1.3A F20/.9A, F14/.7A
Lamp switching: 1/off
Output Switching: 4ft / 2ft
Ballast size: 10.75" X 2.25" X 2.5"
270mm X 57mm X 64mm
Weight: 1.8lb / .8Kg

BAL-100-F230

Input Voltage: 230 VAC 50/60Hz
Output Frequency: 25kHz
Amperage: F40/.65A, F20/.5A, F14/.35A
Lamp switching: 1/off
Output Switching: 4ft / 2ft
Ballast size: 10.25" X 3.75" X 2.5"
260mm X 95mm X 64mm
Weight: 2.4lb / 1.1Kg