
Operation Manual

Image 87 & 47 DMX



Image 87 Yoke Mount



Image 47 Pole-Op



KINO FLO®
Lighting Systems

Image 87 & 47 Fixtures

Image Yoke Mount



IMG-87X-120U

Image 87 DMX Yoke Mount, Univ 120U

IMG-87X-230U

Image 87 DMX Yoke Mount, Univ 230U



IMG-47X-120U

Image 47 DMX Yoke Mount, Univ 120U

IMG-47X-230U

Image 47 DMX Yoke Mount, Univ 230U

Image Pole-Op



IMG-87P-120U

Image 87 DMX Pole-Op, Univ 120U

IMG-87P-230U

Image 87 DMX Pole-Op, Univ 230U



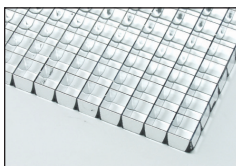
IMG-47P-120U

Image 47 DMX Pole-Op, Univ 120U

IMG-47P-230U

Image 47 DMX Pole-Op, Univ 230U

Included w/ all Image Models

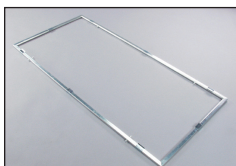


LVR-I80-S

Image 87 Silver Louver (Included)

LVR-I40-S

Image 47 Silver Louver (Included)



GFR-I80

Image 87 Gel Frame (Included)

GFR-I40

Image 47 Gel Frame (Included)

True Match® Lamps



488-K32-S 4ft Kino KF32

488-K55-S 4ft Kino KF55



488-K10-S 4ft Kino 800ma 420 Blue

488-K5-S 4ft Kino 800ma 525 Green

Note: Kino Flo recommends Safety-Coated 420nm Blue for Bluescreen and 525nm Green for Greenscreen.

Image Yoke Mount Kits



Image 87 DMX Kit

KIT-I87-X1/120U

Image 87 DMX Kit, Univ 120U

KIT-I87-X1/230U

Image 87 DMX Kit, Univ 230U

Kit Contents:

1 Image 87 DMX

1 Jr. Pin

1 Ship Case

Dimensions:

57.5 x 8 x 35.5"

(146 x 20.5 x 90cm)

Weight:

62 lb (28kg)



**Image 87 DMX Kit
(2-Unit)**

KIT-I87-X2/120U

Image 87 DMX Kit, Univ 120U (2-Unit)

KIT-I87-X2/230U

Image 87 DMX Kit, Univ 230U (2-Unit)

Kit Contents:

2 Image 87 DMX

2 Jr. Pin

1 Ship Case

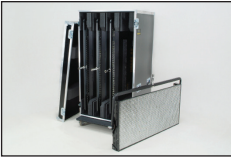
Dimensions:

57.5 x 17 x 40"

(146 x 43 x 102cm)

Weight:

163 lb (74kg)



**Image 87 DMX Kit
(4-Unit)**

KIT-I87-X4/120U

Image 87 DMX Kit, Univ 120U (4-Unit)

KIT-I87-X4/230U

Image 87 DMX Kit, Univ 230U (4-Unit)

Kit Contents:

4 Image 87 DMX
4 Jr. Pin
1 Ship Case

Dimensions:

35.5 x 33.5 x 64"
(90 x 85 x 163cm)

Weight:

365 lb (166kg)



Image 47 DMX Kit

KIT-I47-X1/120U

Image 47 DMX Kit, Univ 120U

KIT-I47-X1/230U

Image 47 DMX Kit, Univ 230U

Kit Contents:

1 Image 47 DMX
1 Jr. Pin
1 Ship Case

Dimensions:

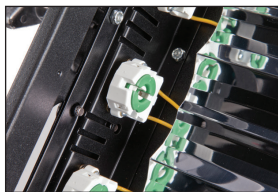
58 x 9.5 x 25.5"
(147 x 24 x 65cm)

Weight:

47 lb (21.5kg)

Inserting Lamps

Image 87 is shown throughout this operation manual for illustration purposes only.



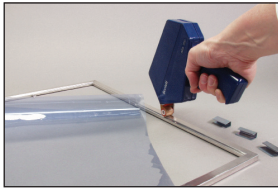
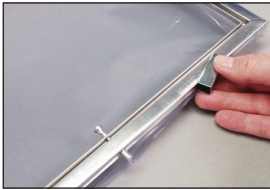
Insert lamps into both lamp holders. Twist $\frac{1}{4}$ turn to make electrical contact.

Inserting Gel Frame



The gel frame is secured to the fixture by 4 spring-loaded pins. Align the pins of the gel frame with the oval receptacle holes on the edge of the fixture. Pull back the pins and release into the receptacles to properly secure the gel frame.

Applying Gel to Frame

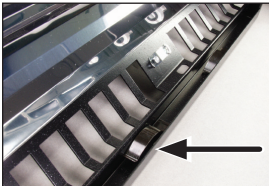


- A) The Gel Frame comes with gel clips. Cut the gel to size and use the clips to fasten the gel to the frame.

Note: It is recommended to attach one clip on all four sides and two clips near all four corners of the Gel Frame.

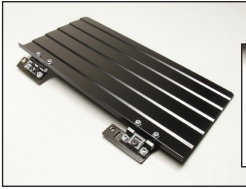
- B) Another method is to apply transfer tape directly to the gel frame. The clips are not necessary when taping the gel.

Inserting Louver

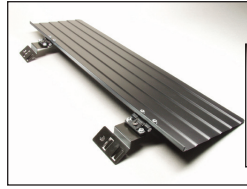
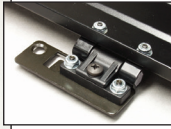


Place the long edge of the Louver into the lower channel containing a set of leaf springs. Press down on the Louver and slip the upper edge of the louver into the upper channel of the fixture. To remove, reverse the procedure.

Mounting Barndoors



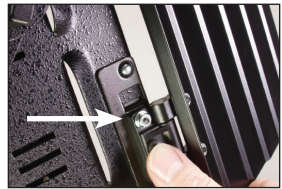
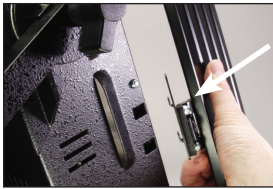
Side Door (x2)



Top/ Bottom Door (x2)

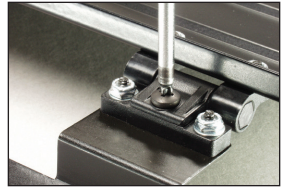
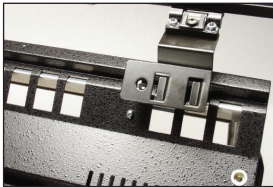


Side Doors



- 1) Align the hinge bracket tabs with the two square receptacles on the side of the fixture.
- 2) Press the tabs of both brackets into the square receptacles.
- 3) Slide the two brackets up until the silver lock pin snaps into place.
- 4) To release the barndoor, press the lock pin down and slide the bracket in reverse.

Top and Bottom Doors



- 1) Align the two hinge bracket tabs with the two square vents closest to the silver lock pins.
- 2) Press the brackets down into the vent and slide them over to engage the lock pins with the hole in the bracket.
- 3) To remove the barndoor, press down on the two lock pins and slide the brackets back.
- 4) Adjust the hinge tension with a Phillips head screwdriver.

Image Yoke Mount



The Yoke has a 1/2" hole to accept industry standard mounting hardware.

The **Image 87 Yoke Mount** can hang from a grid by a junior pipe hanger using a Junior Pin Assembly for Yoke (**MTP-I80**), sold separately.



The **Image 47 Yoke Mount** can also hang from a grid by a junior pipe hanger using a Junior Pin Assembly for Yoke (**MTP-I80**) or hang from a baby pipe hanger using a Baby Receiver Assembly for Yoke (**MTP-I40**), both sold separately.

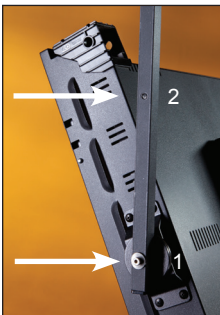
Note: Because of weight capacity, the **MTP-I40** can only be used on the Image 47 Yoke Fixture.



MTP-I80 Junior Pin Assembly for Yoke (28mm)



MTP-I40 Baby Receiver Assembly for Yoke (16mm)



The Yoke Mount is also designed with two holes to allow the yoke bracket to be placed in one of two positions. The additional option is useful when hanging the units in a studio with a low ceiling.

Warning: Use only 10-32 x 3/8" screws (supplied) to assemble yoke. Note that threads on the fixture are self-locking and may seem tight. Replacement screws: Part No. 2020058

Recommended torque setting:

USA: 18 lb-in

Metric: 2 Nm

Image Pole-Op



The **Image 87 and 47 Pole-Op** fixtures include a yoke with an attached junior pin.

They can be hung from a grid with a junior pipe hanger.



Junior pin attached to Pole-Op Yoke

Pole Operation



The **Blue cup** alters the **Pan** (left or right).

The **White cup** alters the **Tilt** (up or down).



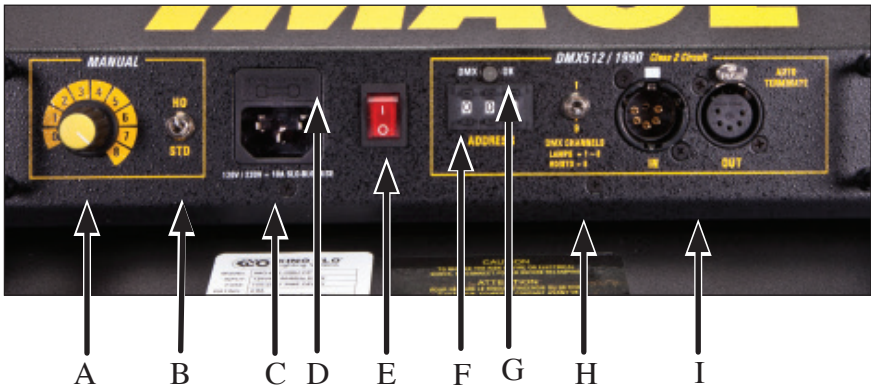
Warning!

Do not pull yoke to adjust tilt. Turn the white knob counter clockwise to angle the yoke 90°.

(ParaBeam shown for illustration purposes only.)



Image 87 DMX Control Panel



- A) **Manual Selector Dial:** Turns lamps on and off manually without connecting DMX cable to fixture.
- B) **HO/Std Selector Switch:** **HO** setting operates lamps at High Output; **Std** setting operates lamps at Standard light output.
Note: **Std** is ½ f-stop lower than **HO**.
- C) **IEC Plug Receptacle**
- D) **Fuse:** Provides circuit protection. Note: If fuse is “blown” or “open”, replace with same type of fuse rating as marked.
- E) **Power Switch:** Turns fixture on and off. Has built-in indicator light to detect if AC power is present in power cord. “O” = OFF position.
- F) **DMX Address:** Sets DMX address of fixture.
- G) **DMX OK:** Lights if DMX signal is present and conforms to DMX512/1990.
- H) **DMX Channels:** Sets the Image to control all lamps on one channel or to control lamps individually. Image 87 uses DMX Channel 1 or DMX Channel 9 (1-8 = Lamps, 9 = **HO/Std**). Image 47 uses DMX Channel 1 or DMX Channel 5 (1-4 = Lamps, 5 = **HO/Std**).
The 9th address (5th address for Image 47) controls the **HO/Std** setting.
- I) **DMX-In & DMX-Out:** DMX-In receives signals from Dimmer Board. DMX-Out relays DMX signals through other fixtures or instruments.
Note: Each Image 87 & 47 DMX fixture has an “AUTO TERMINATE” feature. The last fixture that does not have an XLR cable attached to the DMX “Out” port will automatically terminate.

Power

Provide 100~240VAC. Do not dim fixture through a dimming circuit. If powering the fixtures through a dimming board, set the dimmer profile to non-dim.

Manual Operation



The Image 87 & 47 DMX fixtures may be operated manually with the Manual Lamp Selector Dial. The selector dial enables you to turn lamps on and off with an “inside-out” pattern. Note: If all lamps are on, the outside tubes will turn off first.

HO operates lamps in High Output mode.
Std operates lamps in Standard Output mode.

Image 87 Lamp Switching

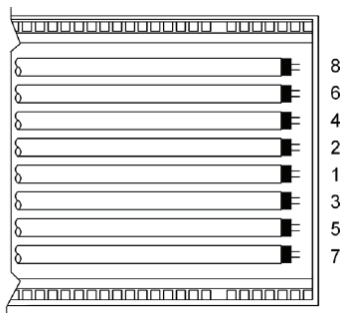
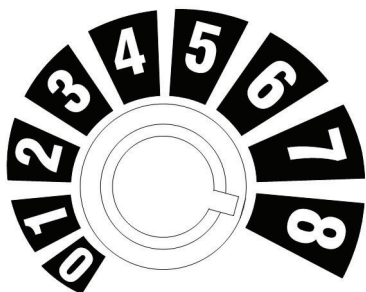
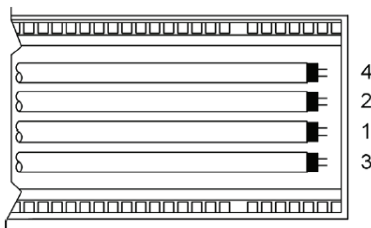
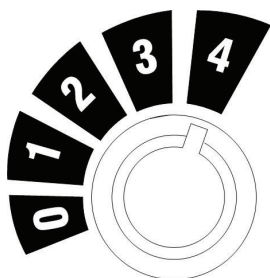


Image 47 Lamp Switching



Note: All manual functions are disabled as soon as DMX cables are applied. For manual control with DMX cables plugged in, set address to “000”. There is a 5 second delay when switching between DMX and Manual control.

DMX Operation



DMX Addressing

Prior to hanging any instruments, set the DMX address of each fixture.

Push the tabs above or below the number window to set the address. (Valid addresses range from 001 to 512.) The light above the address block will illuminate if a DMX signal is present.

Tip: Power is not required to set DMX addresses. Therefore, DMX addresses can be set for each fixture prior to hanging.

Image 87 operates on 9 DMX addresses:

Lamps = 1-8, **HO/Std** = 9

Image 47 operates on 5 DMX addresses:

Lamps = 1-4, **HO/Std** = 5

The 9th address (5th address for Image 47) controls the **HO/Std** setting. Dimmer level from 0%~50% operates all the lamps at HO mode. Dimmer level from 50%~100% operates the lamps in the Std mode and the overall light output of the fixture drops by ½ f-stop.

For the sake of simplification, it is advisable to select address sequences such as 10, 20, 30, 40 and so on.

IMPORTANT!

The dimmer board/light console should have its channel set to LINEAR light output response. (LINEAR response is the default setting on most dimmer boards.)

DMX Channels



Image 87 operates on DMX Channel 1 or 9
Lamps = 1-8, HO/Std = 9

On **DMX Channel 1**, one DMX address controls all 8 lamps on one dimmer channel. Channels 2-7 are not used. A 9th address controls the **HO/Std** setting.

On **DMX Channel 9**, the first 8 addresses control 8 lamps individually. After the first DMX address is entered, the Image 87 automatically assigns 8 addresses to lamp positions 1-8, and address 9 controls the **HO/Std** setting.



Image 47 operates on DMX Channel 1 or 5
Lamps = 1-4, HO/Std = 5

On **DMX Channel 1**, one DMX address controls all 4 lamps on one dimmer channel. Channels 2 & 3 are not used. A 5th address controls the **HO/Std** setting.

On **DMX Channel 5**, the first 4 addresses control 4 lamps individually. After the first DMX address is entered, the Image 47 automatically assigns 4 addresses to lamp positions 1-4, and address 5 controls the **HO/Std** setting.

Note: If the 9th address (or 5th address on Image 47) is not addressed, the fixture will default in the **HO** Setting.

Dimmer level – Lamp sequence

Sliding the fader on the dimmer board from 0% ~100% controls the number of lamps that are on within a fixture. Note: The lamps may respond ± 4 slider channel levels, depending on the dimmer board.

Image 87 Lamp Sequence (DMX Channel 1)

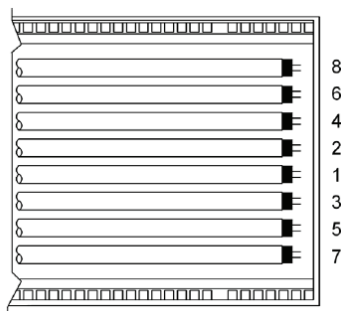


Image 87 DMX Lamp Sequence DMX Channel 1

Lamp #	Dimmer Level
Lamp 1	6
Lamp 1~2	19
Lamp 1~3	32
Lamp 1~4	45
Lamp 1~5	57
Lamp 1~6	69
Lamp 1~7	82
Lamp 1~8	95

Image 47 Lamp Sequence (DMX Channel 1)

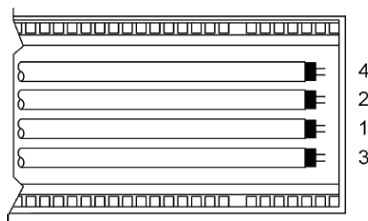


Image 47 DMX Lamp Sequence DMX Channel 1

Lamp #	Dimmer Level
Lamp 1	12
Lamp 1~2	37
Lamp 1~3	64
Lamp 1~4	83

HO/Std Control:

Image 87: Assign a second dimmer channel to the 9th address.

Image 47: Assign a second dimmer channel to the 5th address.

Dimmer level from 0%~50% operates all the lamps at HO mode. Dimmer level from 50%~100% operates the lamps in the Std mode and the overall light output of the fixture drops by $\frac{1}{2}$ f-stop.

One of the best applications for **DMX Channel 1** mode is when lighting Blue and Green Screens or large Cycloramas. For example: One row of Image 87 fixtures can be set to **DMX Channel 1** on a common address. When the fader on the dimmer board is brought up or down, all the fixtures on that address will have the same lamps turned on. Assigning the 9th address (5th address on Image 47) on all the fixtures renders control over the HO/Std settings.

DMX Channel 9 (DMX Channel 5 for Image 47) may be preferable for achieving light effects such as flickering, chasing or creating light patterns.

Image 87 Lamp Sequence (DMX Channel 9)

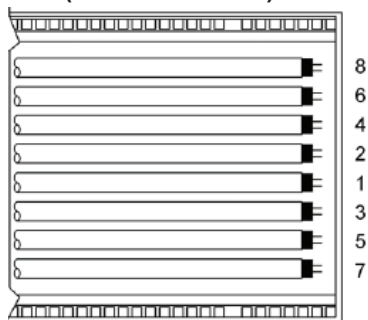


Image 87 DMX Lamp Sequence DMX Channel 9	
Lamp #	DMX Address
Lamp 1	1
Lamp 2	2
Lamp 3	3
Lamp 4	4
Lamp 5	5
Lamp 6	6
Lamp 7	7
Lamp 8	8
HO/Std	9

Image 47 Lamp Sequence (DMX Channel 5)

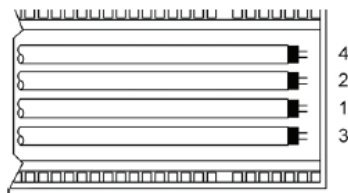


Image 47 DMX Lamp Sequence DMX Channel 5	
Lamp #	DMX Address
Lamp 1	1
Lamp 2	2
Lamp 3	3
Lamp 4	4
HO/Std	5



Auto Terminate

Each Image 87 & 47 DMX fixture has an “**AUTO TERMINATE**” feature. The last fixture that does not have an XLR cable attached to the DMX “Out” port will automatically terminate.

Any theatrical lighting board with DMX512 protocol can be used to individually turn on/off lamps in a fixture.

Image fixtures can be jumpered using the IN and OUT ports. As many as 100 fixtures can be jumpered on one chain as long as the DMX cable run remains under 1000 feet or 40 x 25ft DMX cables.

Note: When operating fixtures at great distances from the dimmer board, it is recommended to use Opto-Isolators to provide DMX signal amplification.

Note: If a fixture loses its DMX signal, it will hold its last DMX command. For this reason, it is important to turn a fixture off using the DMX commands. For example, if you try to turn off the lights by turning off the dimmer board, the lights will remember their last DMX command and stay on. The fixtures require a DMX “Off” or “Black-out” command in order to turn off.



DMX Cables

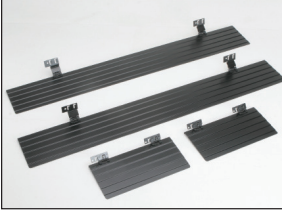
The Image fixtures use five-pin XLR male and female connectors to receive DMX signals from the Dimmer Board and jumper the fixtures in a series. DMX pin-out wiring follows the USITT DMX512 standard:

Pin 1: Shield
Pin 2: Data -
Pin 3: Data +
Pin 4: Spare -
Pin 5: Spare +

Note: Pin four and five in the fixture are connected internally as Pin four to four and Pin five to five. Connecting Pin four and five as the pass-thru allows secondary data to be passed through for other equipment.

Do Not use Microphone Cables and other general purpose two-core cables designed for audio or signaling use. They are not suitable for DMX512. Problems due to incorrect cabling may not be immediately apparent. Microphone Cables may appear to work fine, but systems built with such cables may fail or be prone to random errors. Cables must comply with EIA-485 (RS485).

Accessories



BRD-I80 Image 87 Barndoors (Set of 4)

BRD-I40 Image 47 Barndoors (Set of 4)



MTP-I80 Junior Pin Assembly for Yoke
(28mm)



MTP-I40 Baby Receiver Assembly for Yoke
(16mm)



XLR-525 5-Pin xlr DMX Cable, 25ft

XLR-515 5-Pin xlr DMX Cable, 15ft

XLR-510 5-Pin xlr DMX Cable, 10ft

XLR-505 5-Pin xlr DMX Cable, 5ft

True Match® Lamps



488-K32-S 4ft Kino KF32
488-K55-S 4ft Kino KF55



488-K10-S 4ft Kino 800ma 420 Blue
488-K5-S 4ft Kino 800ma 525 Green

Note: Kino Flo recommends Safety-Coated 420nm Blue for Bluescreen and 525nm Green for Greenscreen.

Cases



KAS-I80-1



KAS-I80-2



KAS-I80-4

Part Number	Description	Dimensions	Weight (Empty)	Holds
KAS-I40-1	Image 47 Ship Case	58 x 9.5 x 25.5" (147 x 24 x 65cm)	27.5 lb (12.5kg)	Image 47
KAS-I80-1	Image 87 Ship Case	57.5 x 8 x 35.5" (146 x 20.5 x 90cm)	27.5 lb (12.5kg)	Image 87
KAS-I80-2	Image 87 Ship Case (2-Unit)	57.5 x 17 x 40" (146 x 43 x 102cm)	97.5 lb (44kg)	Image 87 (2)
KAS-I80-4	Image 87 Ship Case (4-Unit)	90 x 85 x 163" (35.5 x 33.5 x 64cm)	232 lb (105kg)	Image 87 (4)

Fixture Specifications



Image 87 Yoke Mount

Model: IMG-87X

Image 87 DMX Yoke Mount

Input Voltage: 100VAC~240VAC

Output Frequency: 25kHz

Amperage: 4.8A at 120VAC

2.4A at 230VAC

Lamp Switching: 1~8

Output Switching: HO/Std

Weight w/ lamps: 39 lb (18kg)

Dimensions: 54 x 28 x 6.5"

(137 x 71 x 16.5cm)

Lamp Type: F75T12



Image 47 Yoke Mount

Model: IMG-47X

Image 47 DMX Yoke Mount

Input Voltage: 100VAC~240VAC

Output Frequency: 25kHz

Amperage: 2.3A at 120VAC

1.1A at 230VAC

Lamp Switching: 1~4

Output Switching: HO/Std

Weight w/ lamps: 23 lb (10.5kg)

Dimensions: 54 x 17 x 6.5"

(137 x 43 x 16.5cm)

Lamp Type: F75T12



Image 87 Pole-Op

Model: IMG-87P

Image 87 DMX Pole-Op

Input Voltage: 100VAC~240VAC

Output Frequency: 25kHz

Amperage: 4.8A at 120VAC

2.4A at 230VAC

Lamp Switching: 1~8

Output Switching: HO/Std

Weight w/ lamps: 43 lb (19.5kg)

Dimensions: 54.5 x 28 x 6.5"

(138.4 x 71 x 16.5cm)



Image 47 Pole-Op

Model: IMG-47P

Image 47 DMX Pole-Op

Input Voltage: 100VAC~240VAC

Output Frequency: 25kHz

Amperage: 2.3A at 120VAC

1.1A at 230VAC

Lamp Switching: 1~4

Output Switching: HO/Std

Weight w/ lamps: 25 lb (11.5kg)

Dimensions: 54.5 x 17 x 6.5"

(138.4 x 43 x 16.5cm)

Lamp Type: F75T12

For latest Warranty information and Certifications,
see Kino Flo website at www.kinoflo.com.

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 governmental regulations.

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