Operation Manual

DMX Image
80, 40, 20

KINO FLO

LIGHTING SYSTEMS

DMX Image System

DMX Image 80
- 8 x 4ft lamps
- DMX and Manual on/off switching control
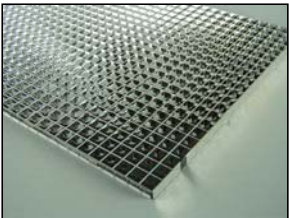- Switches one lamp at a time

DMX Image 40
- 4 x 4ft lamps
- DMX and Manual on/off switching control
- Switches one lamp at a time
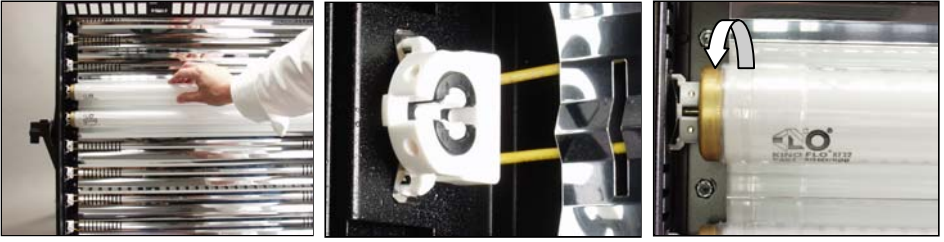

DMX Image 20
- 4 x 2ft lamps
- DMX and Manual on/off switching control
- Switches two lamps at a time

Each System Includes:

1 DMX Image Fixture
1 Silver Louver
1 Gel Frame

Inserting Lamps

Insert lamps into both lamp holders. Twist ¼ 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.
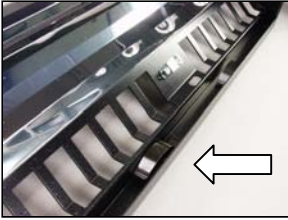
Applying Gel to Frame

(A)

(B)

A) The Gel Frame comes with Gel Clips. Cut the gel to size and use the Clips to fasten the gel to the 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 Options

Junior Pin Assembly

The Image 80 requires a Junior Pin assembly or any other clamping device that uses a ½ inch bolt.

The Image 80 uses the longer bolt. The Image 40 or 20 require the shorter bolt.
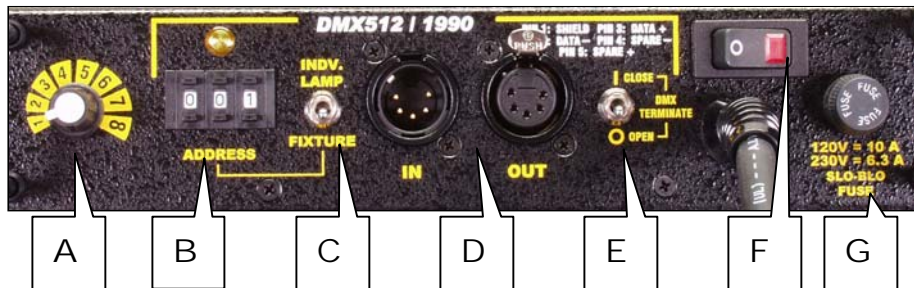

Baby Receiver Assembly

The Baby Receiver is for use only on the Image 40 and Image 20.

Do Not use the Baby Receiver on the Image 80. This receptacle is not strong enough to safely hold the greater weight of the Image 80.

Image Fixture DMX Control Panel

The Image 80 Fixture is used for example purposes throughout these instructions.

A) Manual Selector Dial: Turns lamps on and off manually without connecting DMX Cable to Fixture.

B) DMX Address: Sets DMX Address of Fixture.

C) Individual Lamp / Fixture Switch: Converts between INDIVIDUAL LAMP and FIXTURE methods of DMX control.

D) DMX-In & DMX-Out: DMX-IN receives DMX signals from Dimmer Board, DMX-OUT relays DMX signal through to other Fixtures or Instruments.

E) DMX TERMINATE Switch: Terminates DMX signal at the end of Fixture series.

F) Power Switch: Has a built-in indicator light, which can detect if AC power is present in power cord. "O" = OFF position

G) Fuse: Provides circuit protection. *Note: If Fuse is "blown" or "open" replace with same type of fuse rating as marked.*

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.)

Power Requirements

Provide 120 Volt AC primary power.
Do not dim the fixture through a dimming circuit.
If powering the fixtures through a dimmer board, set the dimmer profile to non-dim.

Load Considerations:

Kino Flo ballasts are not power factor corrected. They will draw <u>double</u> the current on the neutral from what is being drawn on the two hot legs. On large installations it may be necessary to double your neutral run so as not to exceed your cable capacity.
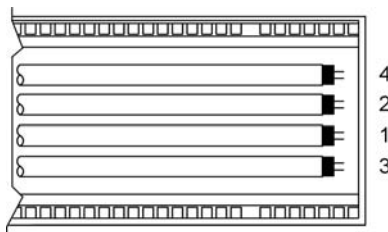
Manual Operation

IMAGE 80, 40 and 20 DMX Fixtures may be operated manually with the Manual Lamp Selector Dial. The Dial enables you to turn lamps on and off with an "inside-out" pattern (i.e., if all lamps are on, the outside tubes will turn off first).
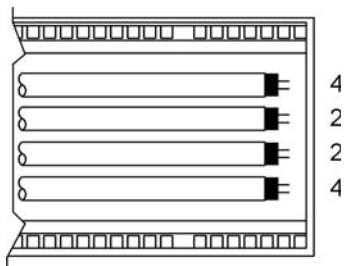
DMX Image 80 Switching
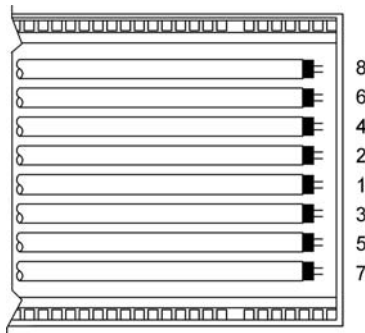
DMX Image 40 Switching

DMX Image 20 Switching

Note: Manual lamp switching is disabled as soon as DMX cables are applied.

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 yellow light above the address block will illuminate if a DMX signal is present.

After the DMX address is entered, the Image 80 Fixture automatically assigns the next 7 addresses to lamps 2 - 8. For the sake of simplification it is advisable to select address sequences such as 1, 10, 20, 30, 40 and so on.

Note: Manual lamp switching is disabled as soon as the 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.

The **DMX Terminate Switch** must be set to open **(O)** on Fixtures within the DMX chain.

Set to closed (**I**) when the Fixture is the last DMX control device in the chain.

Note: When the last Fixture's DMX Term is set to "I," it will absorb all energy in the DMX line, ensuring DMX signals are transmitted correctly. If a signal is not terminated, it is called a "Reflected Wave," and may create transmission errors by causing valid DMX signals to be canceled.

Any theatrical lighting board with DMX 512 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.

DMX Cables

The Fixture uses 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*. Cable must comply with EIA-485 (RS485).

NOTE: If a Fixture or Ballast loses its DMX signal it will hold it's last DMX command. For this reason it is important to turn a Fixture or Ballast 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 or Ballasts require a DMX "Off" or " Black-out" command in order to turn off.

Fixture Lamp Mode
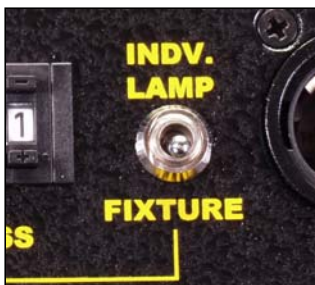
Setting the unit to "Fixture Mode" allows the user to re-create the "Inside-Out" pattern of the manual switch.

One of the best applications for the "Fixture Mode" is when lighting Blue and Green Screens or large Cycloramas.

For example: One row of fixtures can be set to Fixture mode 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.
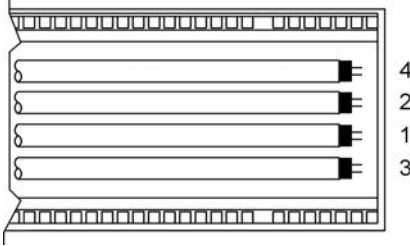
Dimmer level - Lamp response

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 channel levels, depending on the dimmer board.

Image 80 Lamp Sequence
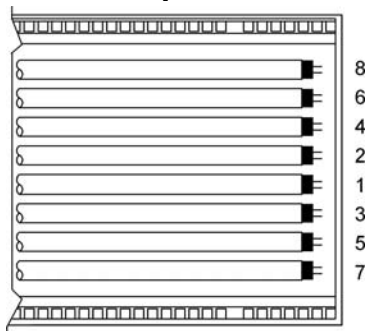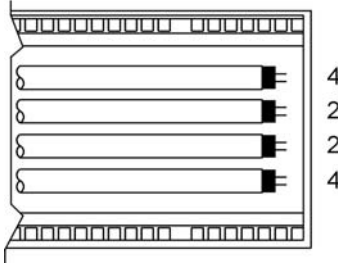
DMX Lamp Sequence	
Lamp #	**Dimmer Level**
Lamp 1	6
Lamp 1~2	19
Lamp 1~3	32
Lamp 1~4	45
Lamp 1~5	57
Lamp 1~6	69
Lamp 1~7	82
Lamp 1~8	95

Image 40 Lamp Sequence

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

Image 20 Lamp Sequence

DMX Lamp Sequence	
Lamp #	**Dimmer Level**
Lamps 2	25
Lamps 4	75

Individual Lamp Mode

Setting the unit to "Individual Lamp" mode allows each lamp within the fixture to have it's own address. Although this option will use up a lot of addresses, it may be preferable for certain situations. The "Individual Lamp" mode is useful in achieving light effects like flickering, chasing or creating light patterns.

After the DMX address is entered, the DMX Image 80 automatically assigns the next 7 addresses to lamps 2 -8. For the sake of simplification it is advisable to select address sequences such as 1, 10, 20, 30, 40 and so on.

For example, if the DMX IMAGE 80 base address is set at 001, the configuration below will provide eight lamps individually addressable through DMX512.
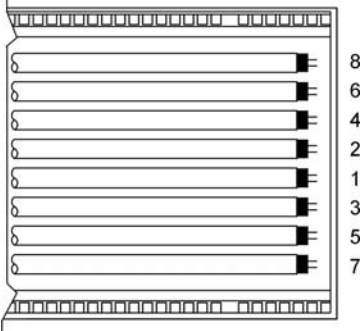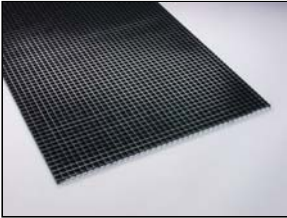
Image 80 Address Sequence DMX Address = 001	
Lamp #	DMX Address
Lamp 1	1
Lamp 2	2
Lamp 3	3
Lamp 4	4
Lamp 5	5
Lamp 6	6
Lamp 7	7
Lamp 8	8

Accessories

LVR-I80-B   Image 80 Black Louver

MTP-I80   Junior Pin for Image 80
           Image 40 and 20

MTP-I40   Baby Receiver for
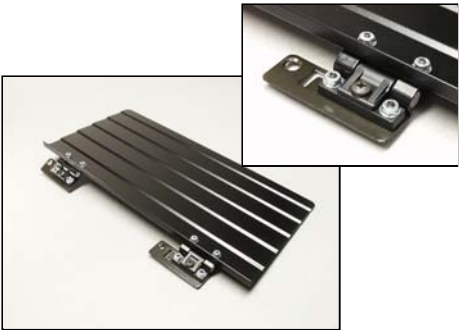   Image 40 and 20

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XLR-515   DMX Cable 5 Pin, 15ft
XLR-525   DMX Cable 5 Pin, 25ft

BRD-I80   Image 80 Barndoors Set of 4
BRD-I40   Image 40 Barndoors Set of 4
BRD-I20   Image 20 Barndoors Set of 4

Mounting Barndoors

Side Door
X2

Top and Bottom Door

1. For the **Side Doors**, 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.

1. For the **Top and Bottom Doors**, 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.

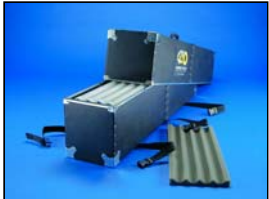Adjust the hinge tension with a Philips head screwdriver.

Cases

Kas-I80-1

Kas-I80-2

KAS-48

Part Number	Description	Dimensions	Weight (Empty)	Holds
KAS-I80-2	Image 85 Ship Case (2)	56.5" x 16" x 35" 143.5cm x 40.5cm x 89cm	103lb / 46.4Kg	Image 85 (2)
KAS-I80-1	Image 85 Ship Case (1)	56.5" x 8" x 35" 143.5cm x 20.5cm x 89cm	29lb / 13.1Kg	Image 85 (1)
KAS-I40-1	Image 45 Ship Case (1)	56.5" x 9" x 23.5" 143.5cm x 23cm x 59.5cm	27lb / 12.2Kg	Image 45 (1)
KAS-I20-1	Image 20 Ship Case (1)	31" x 10" x 23" 78.5cm x 25.5cm x 58.5cm	20lb / 9Kg	Image 20 (1)
KAS-48	4ft Lamp Ship Case	52.5" x 10.5" x 11" 133cm x 26.5cm x 28cm	15.5lb / 7Kg	4ft Lamps (20)

Fixture Specifications

Model: DMX Image 80

Power requirements: 120VAC or 230VAC
Amperage: 8.6 amps at 120VAC, 4.3 amps at 230VAC
Weight w/ lamps: 38lb / 17.4Kg
Dimensions: 54" x 28" x 6.5"
137cm x 71cm x 16.5cm
Lamp Switching: 8-1 / Off
Lamp type: F40T12

Model: DMX Image 40

Power requirements: 120VAC or 230VAC
Amperage: 4.5 amps at 120VAC, 2.3 amps at 230VAC
Weight w/ lamps: 25lb / 11.3Kg
Dimensions: 54.5" x 17" x 6.5"
138.5cm x 43cm x 16.5cm
Lamp Switching: 4-1 / Off
Lamp type: F40T12

Model: DMX Image 20

Power requirements: 120VAC or 230VAC
Amperage: 2.5 amps at 120VAC, 1.3 amps at 230VAC
Weight w/ lamps: 15lb / 6.8Kg
Dimensions: 30.5" x 16.5" x 6.5"
77.5cm x 42cm x 16.5cm
Lamp Switching: 4-2 / Off
Lamp type: F20T12

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.

Rev 10-04-2005
Part No. 3100003