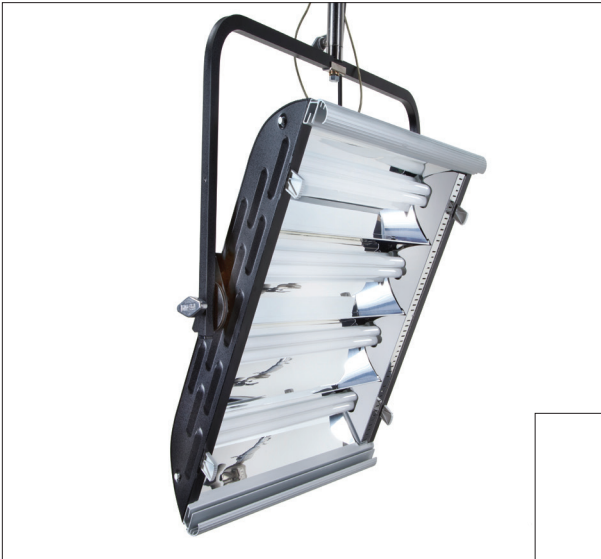

Operation Manual

ParaBeam® 410 & 210 DMX



ParaBeam 410 Yoke Mount



ParaBeam 410 Pole-Op



KINO FLO®
Lighting Systems

ParaBeam Fixture Styles and Features

ParaBeam Yoke Mount



PAR-410Y-120

ParaBeam 410 DMX Yoke Mount, 120VAC

PAR-410Y-230

ParaBeam 410 DMX Yoke Mount, 230VAC



PAR-210Y-120

ParaBeam 210 DMX Yoke Mount, 120VAC

PAR-210Y-230

ParaBeam 210 DMX Yoke Mount, 230VAC

ParaBeam Pole-Op



PAR-410P-120

ParaBeam 410 DMX Pole-Op, 120VAC

PAR-410P-230

ParaBeam 410 DMX Pole-Op, 230VAC



PAR-210P-120

ParaBeam 210 DMX Pole-Op, 120VAC

PAR-210P-230

ParaBeam 210 DMX Pole-Op, 230VAC

ParaBeam Center Mount



PAR-410-120

ParaBeam 410 DMX Center Mount, 120VAC

PAR-410-230

ParaBeam 410 DMX Center Mount, 230VAC



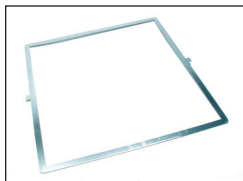
PAR-210-120

ParaBeam 210 DMX Center Mount, 120VAC

PAR-210-230

ParaBeam 210 DMX Center Mount, 230VAC

Included w/ all ParaBeam Models



GFR-P4

ParaBeam 410 Gel Frame (Included)

GFR-P2

ParaBeam 210 Gel Frame (Included)



LVR-P490-P

ParaBeam 410 Louver/HP, 90° (Included)

LVR-P290-P

ParaBeam 210 Louver/HP, 90° (Included)

True Match® Lamps



55C-K32 55W Kino KF32 Compact

55C-K55 55W Kino KF55 Compact

ParaBeam Yoke Mount



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

The **ParaBeam 410 Yoke Mount** can hang from a grid by a junior pipe hanger using a Junior Pin Assembly for Yoke (**MTP-I80**), sold separately.

The **ParaBeam 210 Yoke Mount** can also hang from a grid by a junior pipe hanger using a Junior Pin Assembly for Yoke (**MTP-I80**) or a baby pipe hanger using a Baby Receiver Assembly for Yoke (**MTP-I40**), also sold separately.



MTP-I80



MTP-I40

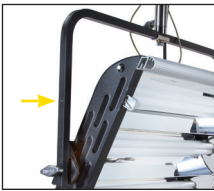
Note: Because of weight capacity, the **MTP-I40** can only be used on the ParaBeam 210 Yoke Fixture.

Warning: Use only M5 X 10mm screws (supplied) to assemble yoke. Note that threads on the fixture are self-locking and may seem tight. Replacement screw: Part No. 2020127

Recommended torque setting:

USA: 18 lb-in

Metric: 2 Nm

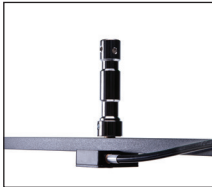


The Yoke Mount is also designed with two holes to allow the yoke bracket to be placed in one of two positions. The additional option is useful when hanging the units in a studio with a low ceiling.

ParaBeam Pole-Op

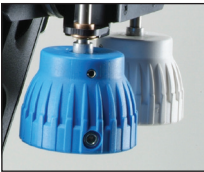


The **ParaBeam 410** and **210 Pole-Op** fixtures include a yoke with an attached junior pin. They can be hung from a grid with a Junior pipe hanger.



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 Center Mount



The **ParaBeam 410 Center Mount** includes a lollipop w/ Junior Pin (**MTP-LM**) and can hang from a grid by a Junior pipe hanger or mount onto a Junior stand.

Note: Loop the safety chain through the handle on the ParaBeam 410.



The **ParaBeam 210 Center Mount** includes a lollipop w/ Baby Receiver (**MTP-LB**) and can hang from a grid by a baby pipe hanger or mount onto a baby stand.



A 180 degree turn is all that is required to loosen the mount for orientation.



To adjust the tension on the lock lever, pull handle away from mount. This disengages the handle from the screw mechanism and allows the lever to be reoriented. You can also use a screwdriver to adjust the tension. Pull back on handle and adjust screw.

Beam Angle Orientation



Vertical beam angle



Horizontal beam angle

Correct Lamp Orientation



VERTICAL MODE:

Follow the principle of **lamp base up and lamp tip down**. This orientation keeps the mercury away from the cathodes and provides best color temperature stability and best color rendering.

DO NOT operate fixtures with lamp base in the down position. Color can diverge up to 400K and will get very green.

HORIZONTAL MODE:

Even in the horizontal position, a slight rotation favoring the lamp tips (lamp base higher than the lamp tip) will allow for better color temperature stability.

Note:

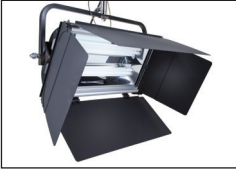
When looking at the back of the fixture, the Kino Flo logo should read:



If the Logo is upside down, the fixture does not have the correct orientation.

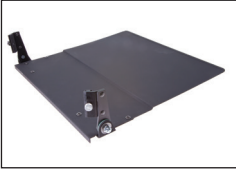
Mounting Barndoors

Side Doors



First apply **Side Doors** by inserting the hinge bracket into the extruded edge. Lock the bracket by turning the silver thumbscrew.

Top & Bottom Doors



Position the Top and Bottom Doors to allow for sufficient movement.

Hinge Tension Adjustment



Top & Bottom Door

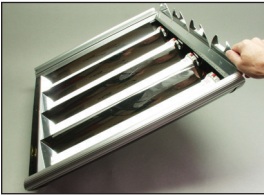


Side Door

Hinge tension on Top & Bottom Doors is adjusted by tightening the nut.

Use a screwdriver to adjust the Side Doors.

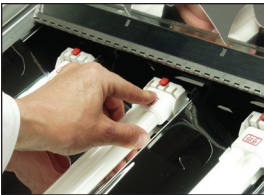
Inserting Lamps



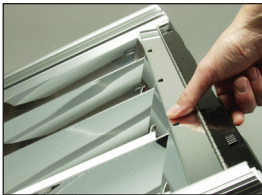
Open hinged reflector door.



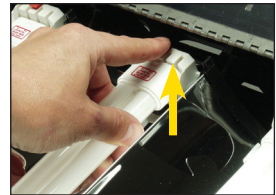
Insert lamp end first.



Snap lamp pins into lamp holder.



Close reflector door.



To release lamps, press Red button and lift lamp out.

Inserting Gel Frame and Louver



Honeycomb louver fits into front channel.



Push tab down and forward to lock into open position.



All 4 retaining tabs must be extended to lock accessories in place.



Insert gel frame into channel closest to lamps.

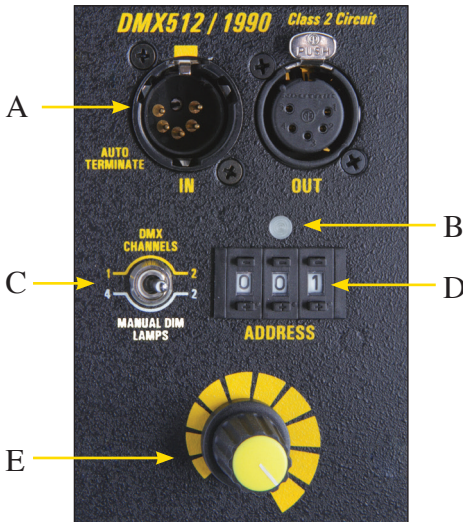
Fixture Operation

Warning! To Ensure Proper Operation

ALWAYS TURN **OFF** THE FIXTURE BEFORE connecting or disconnecting lamps. After the lamps are properly installed, the fixture can be turned on. Avoid operating in temperatures above 125°F (51°C) or below 60°F (15°C).

In temperatures below 60°F or 15°C, the fixture may take longer to strike. If lamps do not strike within 5 seconds, switch the fixture to OFF and try again. Check that the lamps are properly seated and the dimmer is up full, then restrike. If temperatures are too low, try to warm up the fixture to at least 60°F. Lamps will turn on at preset dimmer settings as long as the temperature is above 60°F or 15°C.

ParaBeam 410 DMX Control Panel



- A) **DMX-IN & DMX-OUT:** DMX-In Receives DMX signals from dimmer board. DMX-Out relays DMX signal through other fixtures or instruments. (Note: Each ParaBeam 410 & 210 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.)
- B) **DMX Indicator Light:** Lights if valid DMX signal is present.
- C) **DMX Channels/Manual DIM Lamps:** Sets the ParaBeam 410 to use 1 or 2 DMX Channels. (Note: ParaBeam 210 uses 1 DMX Channel.)
- D) **DMX Address:** Sets DMX address of Fixture.
- E) **Dimmer Knob:** Manual dimming control

Manual Operation



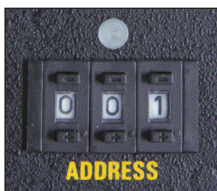
The onboard dimmer knob can manually dim lamps.



The **MANUAL DIM LAMPS** switch selects **4** lamp or **2** lamp operation. Select the **2** lamp setting to turn off the outer lamps.

Note: All manual controls are disabled as soon as the DMX cable is 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.



The **DMX CHANNELS** feature allows user to select **2** or **4** lamp operation for DMX dimming control.

The **ParaBeam 410** operates on one or two DMX addresses.

On **DMX Channel 1**, one DMX address controls/dims all four lamps on one dimmer channel.

On **DMX Channel 2**, two DMX addresses are used:

The 1st address controls the **inner two** lamps.

The 2nd address controls the **outer two** lamps.

Tip: **DMX Channel 2** allows for a greater degree of control.

The board operator can turn two lamps off (1 f-stop drop in exposure) without shifting the color temperature.



The **ParaBeam 210** operates on one DMX address to control/dim 2 lamps on one dimmer channel.



Auto Terminate Feature

The ParaBeam 410 and 210 series have 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. ParaBeams 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

Cable must comply with EIA-485 (RS485).

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 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 loses its DMX signal, it will hold its last DMX command.

For this reason, it is important to turn the 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.

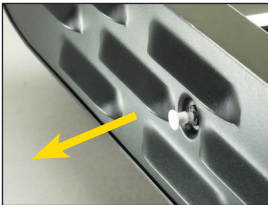
Troubleshooting

LAMPS FAIL TO LIGHT:

- With the power switch in the ON position, the red light should be on. If it is not, voltage is not present. Check your power feed. Check the fuse on the fixture and replace if necessary (5 x 20mm, T3.15AH/250V, Time Delay Type).
- Replace lamp or lamps.
- Check ballast contact. Make sure ballast is properly seated; lock tab must be locked in place. (See checking ballast notes.)
- The onboard manual dimmer should be full up, turned completely clockwise.
- After having checked that lamps and ballasts are correctly seated, turn off power to the fixture for 60 seconds and restart.
- Replace ballast card with one that is known to work.
- With DMX cable connected, if yellow light is off, there is no DMX signal. Establish a valid DMX signal.
- With DMX cable plugged in and yellow indicator on:

1. Address must be between 001 and 512. Addresses above 512 are invalid.
2. The dimmer setting on lighting board must be in the full up mode.

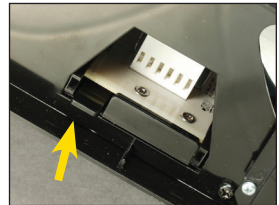
CHECKING BALLAST:



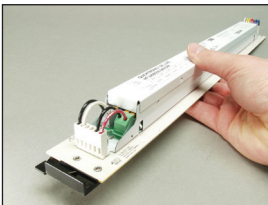
Pull out 3 white push-pins.



Remove end cover with white push-pins.



Push up lock tab and pull out ballast card.

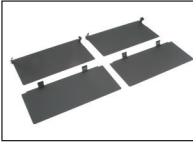


The ballast is mounted to a circuit board with end contacts to allow for rapid ballast replacement without the use of additional tools.

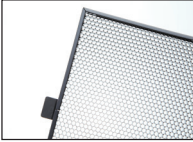
Lock tab must be locked for proper ballast contact.

Note: On ParaBeam 210 Yoke and ParaBeam 210 Pole-Op, the Yoke will need to be removed to access ballasts.

Accessories and Parts



BRD-P4 ParaBeam 410 Barndoors (Set of 4)
BRD-P2 ParaBeam 210 Barndoors (Set of 4)



LVR-P460-P ParaBeam 410 Louver/HP, 60°
LVR-P260-P ParaBeam 210 Louver/HP, 60°



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



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



MTP-LB Kino 41 Lollipop w/ Baby Receiver (16mm)



MTP-LM Kino 81 Lollipop w/ Junior Pin (28mm)



7010004 ParaBeam 410 Yoke Assembly
7010005 ParaBeam 210 Yoke Assembly



7010006 ParaBeam 410 Pole-Op Assembly
7010007 ParaBeam 210 Pole-Op Assembly

Fixture Specifications



**ParaBeam 410
Yoke Mount**

Model: PAR-410Y
ParaBeam 410 DMX Yoke Mount

Input Voltage: 120VAC or 230VAC 50/60Hz
Output Frequency: 30kHz
Amperage: 2.0A at 120VAC
1.1A at 230VAC
Lamp Switching: 4/2
Dimming Range: 100%~5%
Weight w/ lamps: 23 lbs /10.5kg
Dimensions: 29.5 x 26.5 x 6"
(75 x 67 x 15cm)
Lamp type: 55W CFL w/ 2G11 base



**ParaBeam 410
Pole-Op**

Model: PAR-410P
ParaBeam 410 DMX Pole-Op

Input Voltage: 120VAC or 230VAC 50/60Hz
Output Frequency: 30kHz
Amperage: 2.0A at 120VAC
1.1A at 230VAC
Lamp Switching: 4/2
Dimming Range: 100%~5%
Weight w/ lamps: 25.5 lbs /12kg
Dimensions: 29.5 x 26.5 x 6"
(75 x 67 x 15cm)
Lamp type: 55W CFL w/ 2G11 base



**ParaBeam 410
Center Mount**

Model: PAR-410
ParaBeam 410 DMX Center Mount

Input Voltage: 120VAC or 230VAC 50/60Hz
Output Frequency: 30kHz
Amperage: 2.0A at 120VAC
1.1A at 230VAC
Lamp Switching: 4/2
Dimming Range: 100%~5%
Weight w/ lamps: 22.5 lbs /10kg
Dimensions: 24.5 x 25 x 7.5"
(62 x 63.5 x 19cm)
Lamp type: 55W CFL w/ 2G11 base



**ParaBeam 210
Yoke Mount**

Model: PAR-210Y
ParaBeam 210 DMX Yoke Mount

Input Voltage: 120VAC or 230VAC 50/60Hz
Output Frequency: 30kHz
Amperage: 1.1A at 120VAC
0.6A at 230VAC
Lamp Switching: 2/off
Dimming Range: 100%~5%
Weight w/ lamps: 16 lbs /7.5kg
Dimensions: 29.5 x 16 x 6"
(75 x 41 x 15cm)
Lamp type: 55W CFL w/ 2G11 base



**ParaBeam 210
Pole-Op**

Model: PAR-210P
ParaBeam 210 DMX Pole-Op

Input Voltage: 120VAC or 230VAC 50/60Hz
Output Frequency: 30kHz
Amperage: 1.1A at 120VAC
0.6A at 230VAC
Lamp Switching: 2/off
Dimming Range: 100%~5%
Weight w/ lamps: 18 lbs /8kg
Dimensions: 29.5 x 16 x 6"
(75 x 41 x 15cm)
Lamp type: 55W CFL w/ 2G11 base



**ParaBeam 210
Center Mount**

Model: PAR-210
ParaBeam 210 DMX Center Mount

Input Voltage: 120VAC or 230VAC 50/60Hz
Output Frequency: 30kHz
Amperage: 1.1A at 120VAC
0.6A at 230VAC
Lamp Switching: 2/off
Dimming Range: 100%~5%
Weight w/ lamps: 14.5 lbs /7kg
Dimensions: 24.5 x 13.5 x 7.5"
(62 x 34.5 x 19cm)
Lamp type: 55W CFL w/ 2G11 base

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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