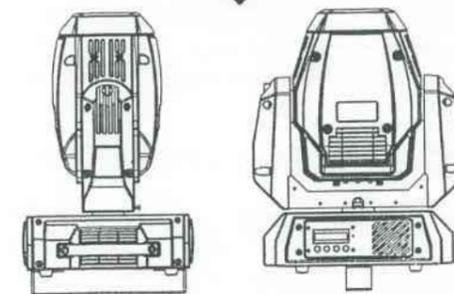


Intimidator™ Spot 250

Snapshot

OK on Dimmer	⊘
Outdoor OK	⊘
Sound Activated	✓
DMX512	✓
Master/Slave	✓
115V/230V Switch	✓
Replaceable Fuse	✓
User Serviceable	⊘
Duty Cycle	⊘

USER MANUAL



CHAUVET

Style - Innovation - Performance
3000 N 29th Ct, Hollywood, FL 33020 U.S.A.
(800) 762-1084 - (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

Technical Specifications

WEIGHT & DIMENSIONS	
Length.....	16.3 in (414 mm)
Width.....	13.3 in (337 mm)
Height.....	20.4 in (517 mm)
Weight.....	58.6 lbs (26.6 kg)
POWER	
Switch-selectable power settings.....	115VAC 60Hz or 230VAC 50Hz
Fuse (fast-blow).....	F7A 250V
Power Consumption.....	444W (3.7A) max @ 120V
Power Consumption.....	667W (2.9A) max @ 230V
Inrush Power.....	(4.2A) @ 120V
Inrush Power.....	(3.4A) @ 230V
Power Factor.....	0.90 @ 120V
Power Factor.....	0.71 @ 230V
LIGHT SOURCE	
Discharge lamp (included).....	MSD250 250W 8000 ^h 2,000hrs
LAMPS	
GE™ CSD 250/2.....	2,000 hr, 9000K, 250W
Osram™ HSD 250/78.....	3,000 hr, 7800K, 250W
Philips™ MSD 250/2.....	3,000 hr, 8500K, 250W
PHOTO OPTIC	
Luminance @ 1m.....	18,000 lux
Beam Angle.....	22°
RANGE	
Pan.....	540°
Tilt.....	270°
ROTATING GOBOS	
Outside diameter.....	26.7 mm
Image diameter (maximum).....	24.5 mm
Max thickness.....	2.5 mm
THERMAL	
Maximum ambient temperature.....	104°F (40°C)
CONTROL & PROGRAMMING	
Data input.....	locking 3&5-pin XLR male socket
Data output.....	locking 3&5-pin XLR female socket
Data pin configuration (3-pin).....	pin 1 shield, pin 2 (-), pin 3 (+)
Data pin configuration (5-pin).....	pin 1 shield, pin 2 (-), pin 3 (+), pin 4 & 5 not used
Protocols.....	DMX-512 USITT
DMX Channels.....	10, 14
STANDARD ORDERING INFORMATION	
Intimidator™ Spot 250.....	INTIMIDATORSPOT250
Easy controller.....	CA-9
WARRANTY INFORMATION	
Warranty.....	2-year limited warranty

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1. BEFORE YOU BEGIN

What is included

- > 1 x Intimidator™ Spot 250
- > 1 x Mounting bracket kit w/screws
- > 1 x Power Cord
- > 1 x Warranty Card
- > 1 x User Manual

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

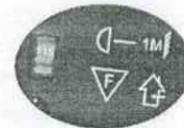
AC Power

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

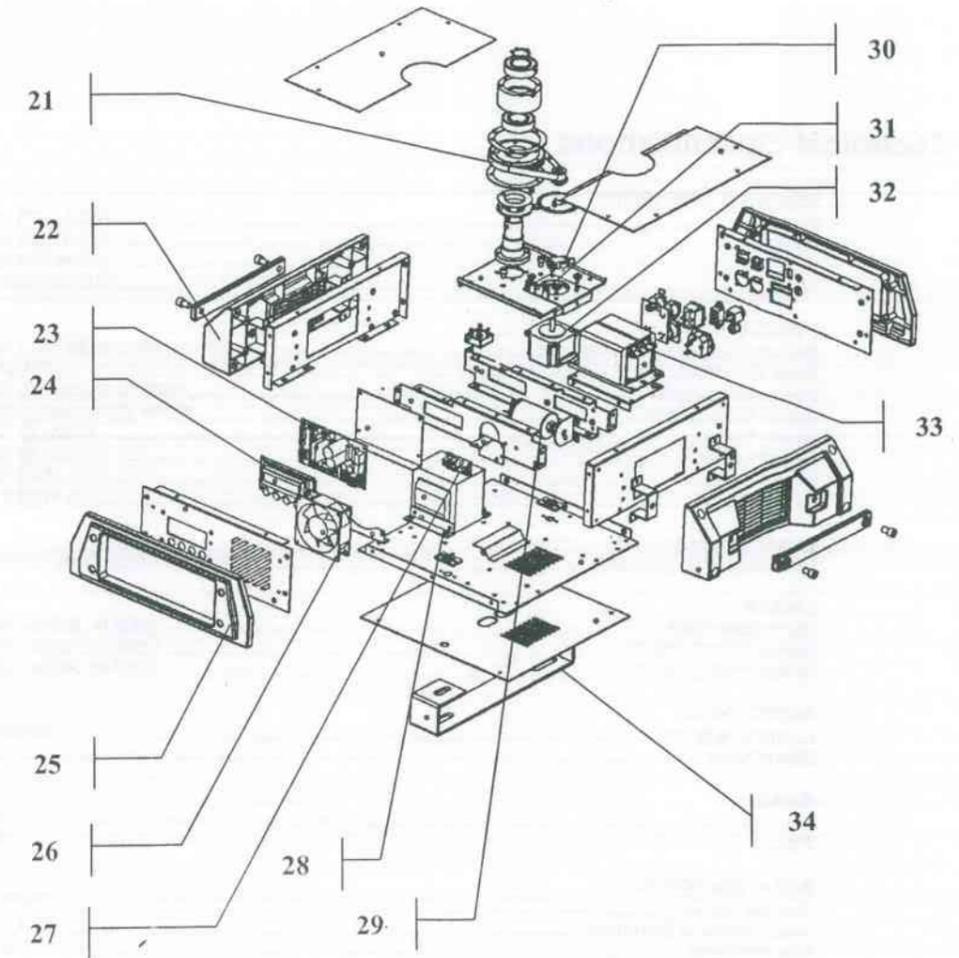
Warning!

Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Earth Ground.

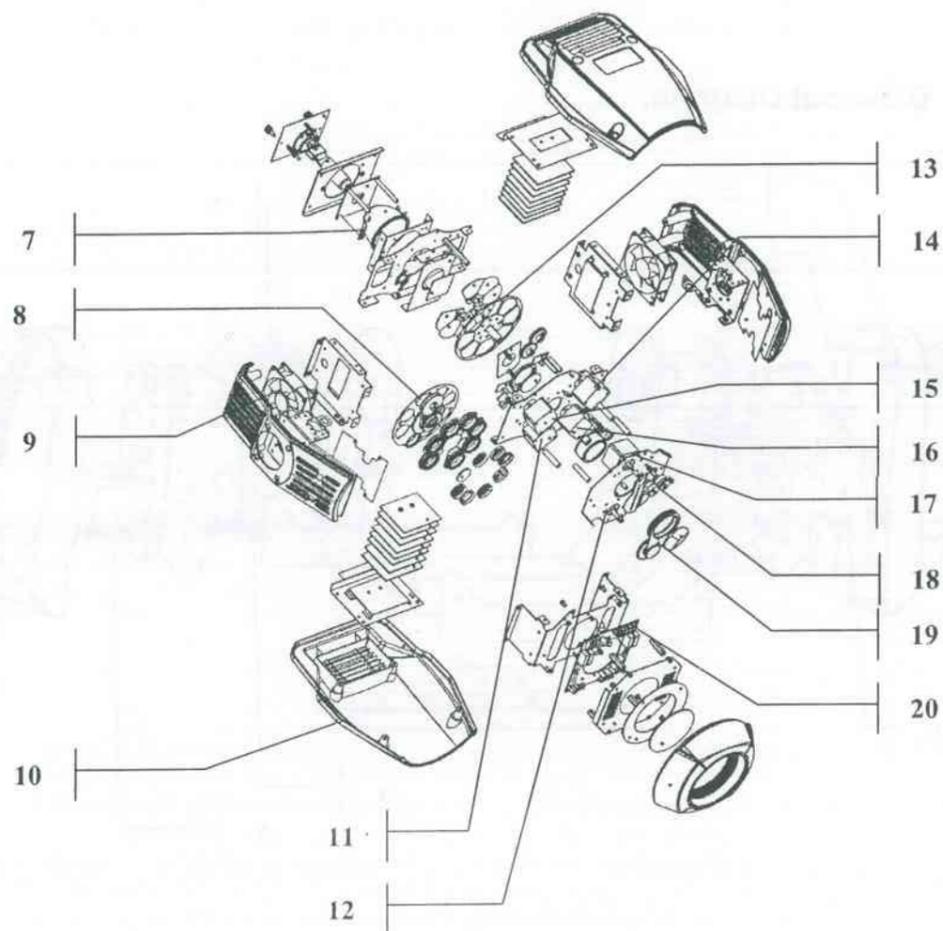
Figure 1 - AC Voltage Switch



Not all fixtures have a voltage select switch. Please be sure to connect to the proper voltage.



	Description	Part Number
21	Pan rubber belt	P110-IS250PRB
22	Side, plastic cover	P100-IS250SPC
23	Master X/Y PCB	P170-IS250MAS
24	Display PCB	P170-IS250DLY
25	Front, plastic cover	P100-IS250FPC
26	Cooling fan 80mm	P130-IS25090M
27	Lamp control PCB	P170-IS250LCP
28	Magnetic transformer	P140-IS250TRAN
29	Main capacitor	P170-IS250CAP
30	Pan stopper sensor	P170-IS250PSS
31	Pan optical sensor	P170-IS250POS
32	Pan stepper motor	P110-IS250PSM
33	Magnetic ballast	P140-IS250MB
34	Mounting bracket	P111-IS250BRKT



	Description	Part Number
7	Lamp reflector	P115-IS250LREF
8	Gobo wheel: assembled	P115-15250GWA
9	Cooling fan: 80mm (1 of 2)	P130-IS25090M
10	Top head cover (1 of 2)	P100-IS250THC
11	Gobo rotation stepper motor	P110-IS250GBSM
12	Prism stepper motor	P110-IS250CWA
13	Color wheel: assembled	P150-IS250CWA
14	Focus stepper motor	P110-IS250FSM
15	Gobo stepper motor	P110-IS250GSM
16	Color stepper motor	P110-IS250CSM
17	Shutter/dimmer stepper motor	P110-IS250SDSM
18	Shutter/dimmer assembly	P100-IS250SDA
19	Prism assembly	P115-IS250PA
20	Motor Driver PCB	P110-IS250MDP

Safety Instructions



Please read these instructions carefully, which includes important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.
- Maximum ambient temperature (Ta) is 104°F (40°C). Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

Caution!

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET at: 954-929-1115.

2. INTRODUCTION

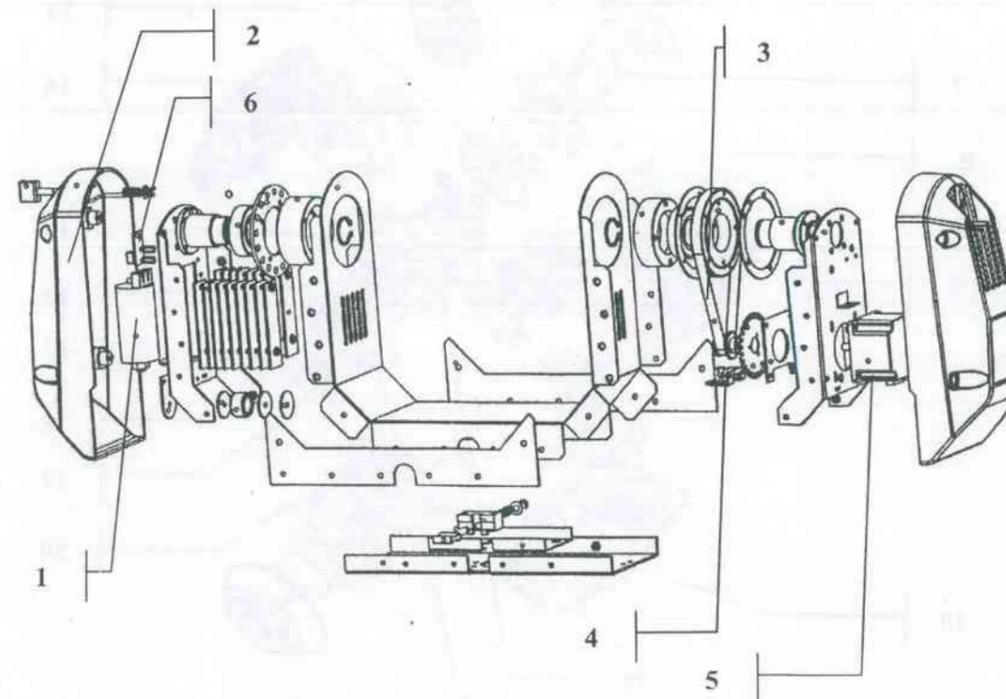
Features

- 10 or 14-channel DMX-512 moving yoke
- Pan: 540° / tilt: 270°
- Color wheel
 - 7 interchangeable, slot-n-lock colors + white
 - Split colors
 - Rainbow color spin at variable speeds
- Indexed rotating gobo wheel with Gobo Bounce™
 - 7 interchangeable, slot-n-lock gobos + open
 - 5 metal, 2 glass installed
 - Rotating gobo wheel spin at variable speeds
- 3-facet, high-speed rotating prism at variable speeds
- Variable motorized shutter (for strobing)
- Variable motorized focus
- Variable motorized dimmer (0 – 100%)
- Remote fixture reset, lamp on/off & vector speed channel
- Individual reset of pan/tilt, color, gobo, shutter, prism, focus
- Move-in-black for pan/tilt, color, gobo
- Built-in effect macros via DMX (gobo, gobo rotation, color, strobe, prism)
- Built-in automated programs via master/slave or DMX
- Built-in sound-active programs via master/slave or DMX

Additional Features

- Pan/tilt lock during transportation
- User-selectable pan/tilt ranges
 - Pan: 540°, 360°, 180°
 - Tilt: 270°, 180°, 90°
- Automatic pan & tilt correction
- User-selectable basic or advanced operating modes

Blow-out Diagram.



Description	Part Number
1 Lamp Igniter	P100-IS250IG
2 Arm plastic cover	P100-IS250APC
3 Tilt rubber belt	P100-IS250TRB
4 Tilt Optical sensor	P100-IS250TOS
5 Tilt stepper motor	P110-IS250TSM
6 Tilt stopper sensor	P100-IS250TSS

Parts Not Shown

Description	Part Number
Gobo wheel sensor	P100-IS250GWS
Gobo rotation sensor	P100-IS250GRS
Color wheel sensor	P100-IS250CWS

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RMA #). Products returned without a RMA # will be refused. Call CHAUVET and request RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given a RMA #, please include the following information on a piece of paper inside the box:

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) The RMA #
- 5) A brief description of the symptoms

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

DMX Channel Summary

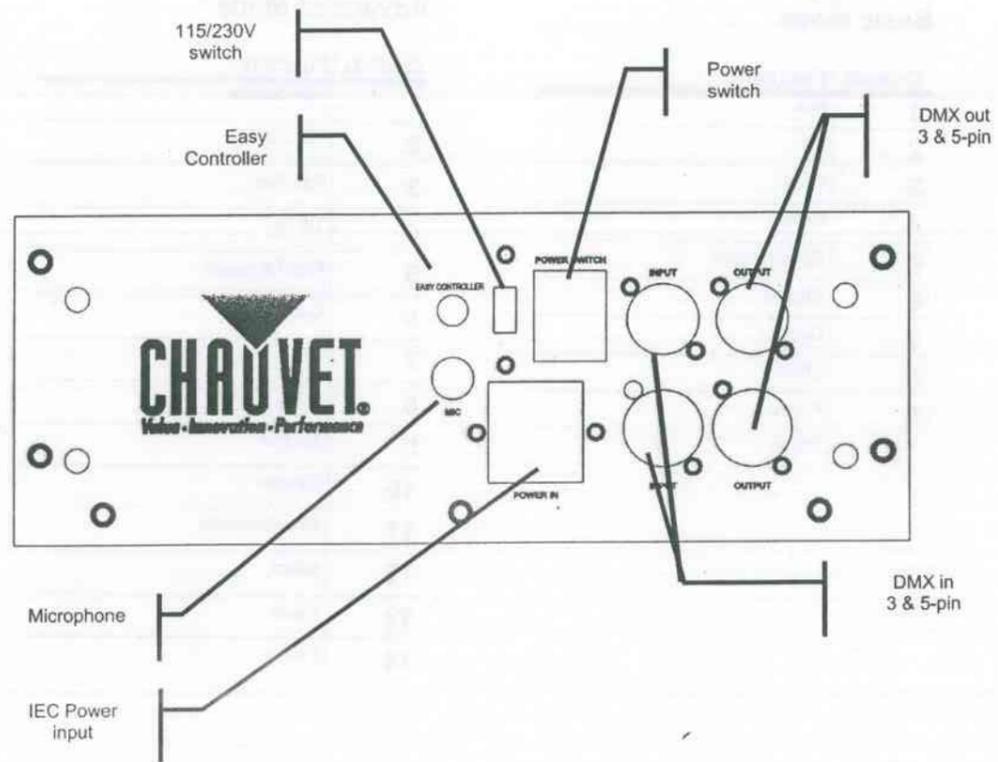
Basic Mode

CHANNEL	FUNCTION
1	Pan
2	Tilt
3	Color
4	Gobo
5	Gobo rotation
6	Shutter
7	Dimmer
8	Effect
9	Prism
10	Focus

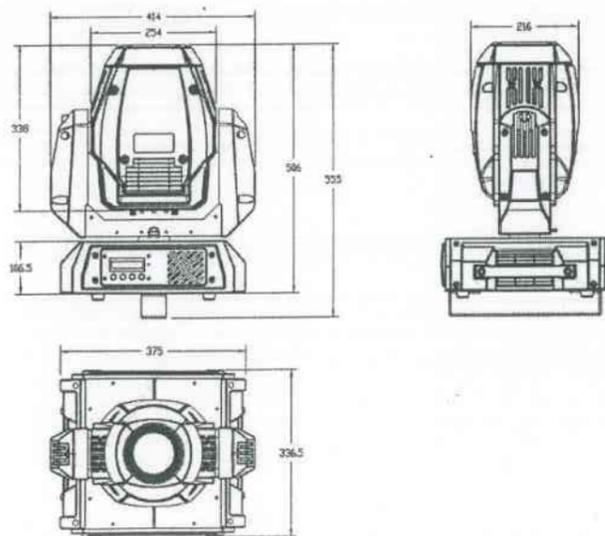
Advanced Mode

CHANNEL	FUNCTION
1	Pan coarse
2	Tilt coarse
3	Pan fine
4	Tilt fine
5	Pan/Tilt speed
6	Color
7	Gobo
8	Gobo rotation
9	Shutter
10	Dimmer
11	Mode/function
12	Effect
13	Prism
14	Focus

Product Overview



Product Dimensions



Contact Us

World Wide

General Information
 CHAUVET
 3000 North 29th Court
 Hollywood, FL 33020
 voice: 954.929.1115
 fax: 954.929.5560
 toll free: 800.762.1084

Technical Support
 CHAUVET
 3000 North 29th Court
 Hollywood, FL 33020
 voice: 954.929.1115 (Press 4)
 fax: 954.929.5560 (Attention: Service)

World Wide Web www.chauvetlighting.com

Website: <http://www.chauvetlighting.com>

General Maintenance

To maintain optimum performance and minimize wear fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

Unplug fixture from power. Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components. Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue. Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens. Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. - Always dry the parts carefully. - Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

Intimidator Spot 250 Service Maintenance Guide

Symptom(s)	Possible Solution(s)
Lamp is not illuminating	Clean the fixture regularly to avoid any such failure. This fixture is forced convection cooled, which means that if the fans are kept clean and free of debris, then proper cooling will be allowed to occur
	Check the options in the display for Lamp function [on~off]. Also check the DMX signal. It is possible to remotely turn off the lamp with a DMX controller.
	Check to see if the lamp needs to be replaced. This is a wear item, and will need to be checked and replaced on a regular basis of operation.
Breaker/Fuse keeps blowing	Check total load placed on the electrical circuit
	Check for a short in the electrical wiring: internal and/or external
Device has no power	Check device's fuse (internal)
	Check for power on Mains
	<i>-Note: In the event of magnetic transformer failure, the unit can be sent in for repair; however, a replacement part can be ordered directly from Chauvet Part#: P140-IS250TRAN</i>
Fixture is not responding to DMX	Check Control Panel settings for correct addressing
	Check DMX cables
	Check polarity switch settings on the controller
	Check cable connections
	Call service technician
	<i>-Note: In the event of Display/Master PCB failure, a replacement PCB can be ordered directly from Chauvet Part#: P170-IS250MAS</i>
Loss of signal	Use only DMX cables
	Install terminator
	Note: Keep DMX cables separated from power cables or black lights
Pan/tilt movement, color, gobo reset problem	1 or more sensors may need to be adjusted or replaced. This may be either the optical sensor or the magnetic stopper sensor.
	<i>Note In the event of a sensor failure, a replacement sensor may be ordered directly from Chauvet: Part#: Magnetic Pan: P170-IS250PSS Optical Pan: P170-IS250POS Magnetic Tilt: P110-IS250TSS Optical Tilt: P100-IS250TOS Gobo: P100-IS250GWS Gobo rotation: P100-IS250GRS Color: P100-IS250CWS</i>
The display backlight will not turn off and stays lit	There is an option in the control board that determines if the display turns off after 30 seconds of inactivity, or if the display stays lit indefinitely. <i>-See section "5-Display" in the onboard display "close".</i>

If you still have a problem after trying the above solutions, please contact CHAUVET Technical Support at the location on the following page.

3. SETUP

Lamp

You will need to install a lamp prior to the initial operation of the fixture. A 250W MSD discharge lamp is included.

Warning!

When replacing the lamp, please wait 15 minutes after powering down to allow the unit to cool down! Always disconnect from main power prior to lamp replacement.

Do not touch the envelope (glass area) of the bulb with bare hands. If this happens, clean the lamp with alcohol and wipe it with a lint free cloth before installation.

Maximizing the life of your lamp

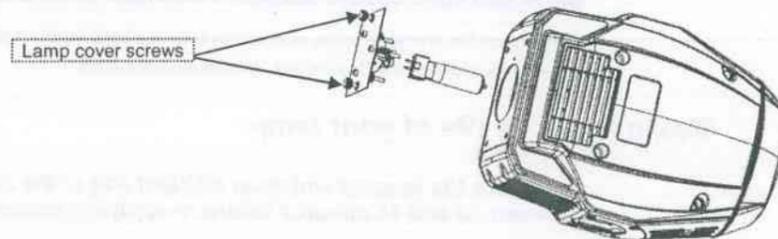
To ensure the longest and most efficient use of the lamp always wait between 10 and 15 minutes before re-applying power after a shutdown.

Failure to do so could result in premature aging of the lamp and failure to the electronics that drive it.

Never turn off the power to the unit while the lamp is striking. Always wait 15 minutes after powering on the fixture before powering down. Turning off the lamp during striking may permanently damage the lamp.

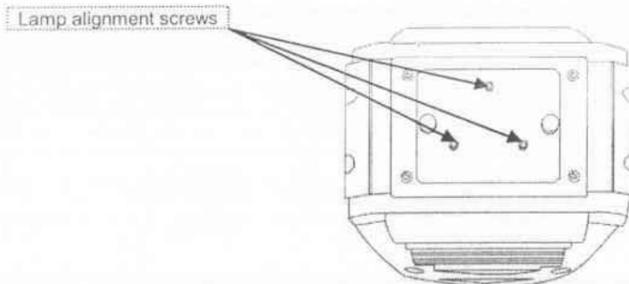
Lamp Installation

- 1) Turn off power to fixture.
- 2) Loosen the 2 lamp covers knobs by turning counter-clockwise.
- 3) If there is a current lamp you are replacing, remove it now.
- 4) While using care not to allow the envelope of the lamp to contact your bare skin install the new lamp.
- 5) Replace lamp cover and tighten knobs.



Lamp Alignment How-To

After the installation of a lamp, you may find that there is an uneven field of light or what is referred to as a hot spot. This is due to the most intense point of the lamp source not being positioned optimally within the reflector.



There are three lamp alignment screws provided at the base of the fixture. Turning these screws allow you to optimize the projection quality of the spot as well as the overall intensity of the beam.

1. Project a white spot against any flat surface. Preferably the surface should be white or pastel in color.
2. Turning the lamp alignment screws, try to position the hot spot in the center of the beam as best as possible. This could require many attempts on your part. It is advisable to even out the screws prior to lamp alignment as described in the illustration.
3. Once the hot spot is in the center of the spot, do your best to turn all screws equally as to affect movement up or down within the reflector.
4. As you move in and out of optimum lamp focus, you will see the hot spot either get wider or narrower. The goal is to either totally diminish the hot spot by having it widen and spread across the entire spot or moving the hot spot so that it covers as much of the beam spot area as possible.

5. APPENDIX

DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

SETTING THE STARTING ADDRESS

This DMX mode enables the use of a universal DMX controller device. Each fixture requires a "start address" from 1 to 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that uses 6 DMX channels and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, and 105. Choose start addresses so that the channels used do not overlap, and note the start address selected for future reference.

If this is your first time addressing a fixture using the DMX-512 control protocol, we suggest jumping to the Appendix Section and reading the heading "DMX Primer". It contains very useful information that will help you understand its use.

	080 ⇄ 089	Reset all
	090 ⇄ 111	No function
	112 ⇄ 119	Lamp off
	120 ⇄ 127	Lamp on
	128 ⇄ 129	No function
	130 ⇄ 192	Auto program
	193 ⇄ 255	Sound program
9	000 ⇄ 015	Prism White
	016 ⇄ 239	Rotation (fast ⇄ slow)
	240 ⇄ 255	Stop, static prism effect
10	0 ⇄ 255	Focus Near ⇄ Far



Disconnect the power cord before replacing a fuse and always replace with the same type fuse.



Fuse Replacement

With a flat head screwdriver wedge the fuse holder out of its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.

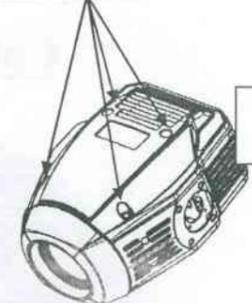
The fuse is located inside this compartment. Remove using a flat head screwdriver.



Replacing Gobos

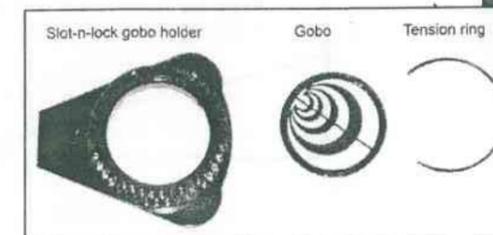
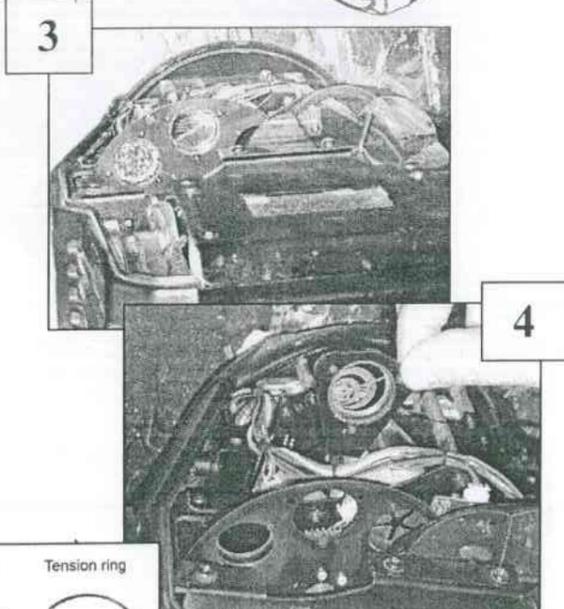
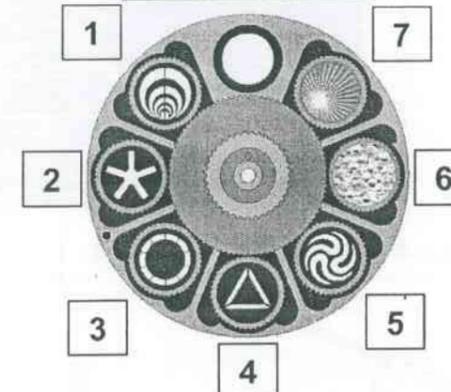
- 1) Be sure the fixture is not powered or connected to mains.
- 2) Remove the top cover by removing the 4 screws with a Phillips #2 screwdriver.
- 3) With your hand, move the gobo wheel to the desired gobo to change.
- 4) Remove the slot-n-lock gobo by pressing it up and away of the gobo wheel and sliding it out of the fixture.
- 5) You may now replace the gobo easily by removing the tension ring. This may be done with a small tool.
- 6) Replace the slot-n-lock gobo assembly.
- 7) Replace top cover and 4 cover screws.

Top cover screws



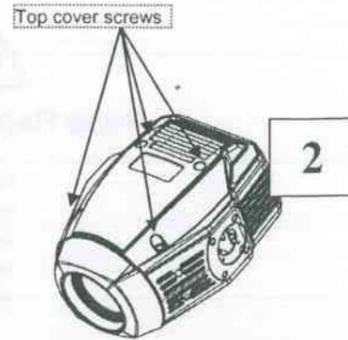
2

Gobo Wheel

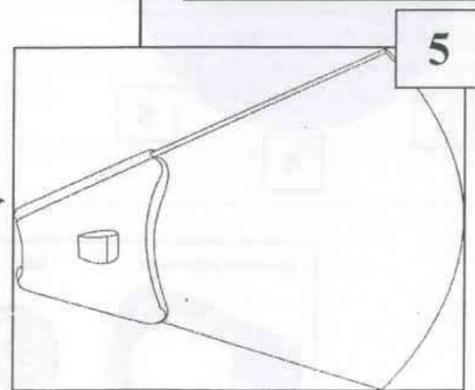
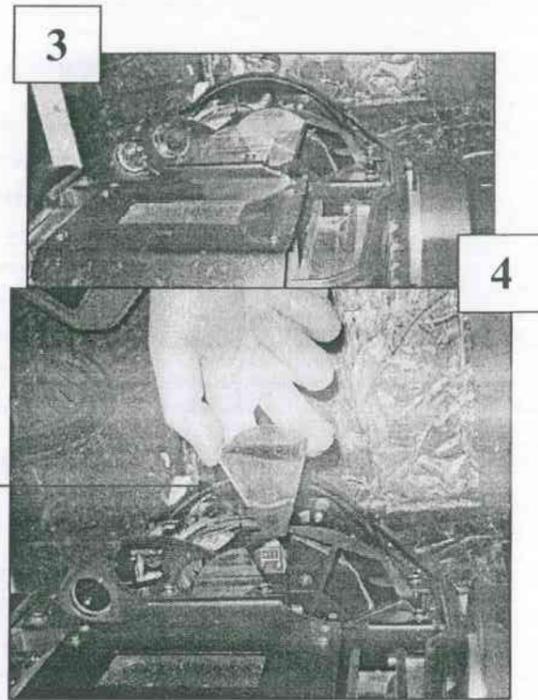
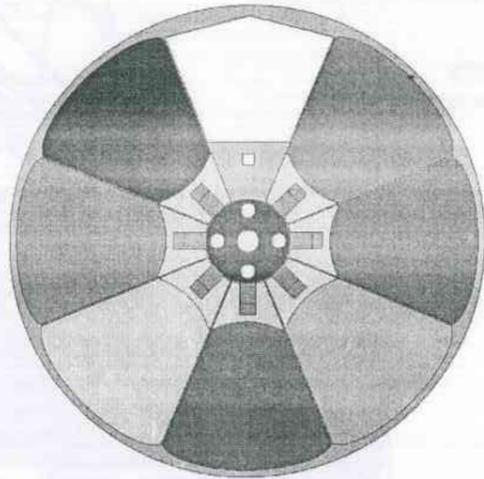


Replacing Color Dichroics

- 1) Be sure the fixture is not powered or connected to mains.
- 2) Remove the top cover by removing the 4 screws with a Phillips #2 screwdriver.
- 3) With your hand, move the color wheel to the desired color dichroic to change.
- 4) Remove the slot-n-lock color by pressing it up and away from the color wheel and sliding in the direction out of the fixture.
- 5) Replace the slot-n-lock color with the new color.
- 6) Replace top cover and 4 cover screws.



Color Wheel



Basic Mode: (8-bit pan/tilt, 10-channel)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	Pan 0° ⇔ 540°
	000 ⇔ 255	Tilt 0° ⇔ 270°
3	000 ⇔ 007	Color Wheel White (open)
	008 ⇔ 015	Light Blue
	016 ⇔ 023	Red
	024 ⇔ 031	Peachblow
	032 ⇔ 039	Green
	040 ⇔ 047	Yellow
	048 ⇔ 055	Pink
	056 ⇔ 063	UV
	064 ⇔ 066	White
	067 ⇔ 078	White + Light Blue
	079 ⇔ 092	Light Blue + Red
	093 ⇔ 107	Red + Peachblow
	108 ⇔ 120	Peachblow + Green
	121 ⇔ 136	Green + Yellow
137 ⇔ 152	Yellow + Pink	
153 ⇔ 170	Pink + UV	
171 ⇔ 212	Rotating clockwise (slow ⇔ fast)	
213 ⇔ 255	Rotating counter-clockwise (slow ⇔ fast)	
4	000 ⇔ 009	Gobo Wheel Open
	010 ⇔ 019	Gobo 1
	020 ⇔ 029	Gobo 2
	030 ⇔ 039	Gobo 3
	040 ⇔ 049	Gobo 4
	050 ⇔ 059	Gobo 5
	060 ⇔ 069	Gobo 6 (glass)
	070 ⇔ 079	Gobo 7 (glass)
	080 ⇔ 099	Gobo 1 gobo shake, fast to slow
	100 ⇔ 119	Gobo 2 gobo shake, fast to slow
	120 ⇔ 139	Gobo 3 gobo shake, fast to slow
	140 ⇔ 159	Gobo 4 gobo shake, fast to slow
	160 ⇔ 179	Gobo 5 gobo shake, fast to slow
	180 ⇔ 199	Gobo 6 (glass) gobo shake, (fast ⇔ slow)
200 ⇔ 219	Gobo 7 (glass) gobo shake, (fast ⇔ slow)	
220 ⇔ 255	Gobo scroll: Bidirectional rotation	
5	000 ⇔ 010	Gobo Rotation Stop
	011 ⇔ 127	Fixed gobo indexing
	128 ⇔ 191	Rotate Counter-clockwise (slow ⇔ fast)
	192 ⇔ 255	Rotate Clockwise (slow ⇔ fast)
6	000 ⇔ 255	Shutter Stop
	000 ⇔ 255	Strobe (slow ⇔ fast)
	000 ⇔ 255	Open
	000 ⇔ 255	Pulse
	000 ⇔ 255	Open
	000 ⇔ 255	Random
	000 ⇔ 255	Open
7	000 ⇔ 255	Dimmer Closed ⇔ Open
	000 ⇔ 009	Function No function
8	010 ⇔ 014	Pan/tilt move-in-black
	015 ⇔ 019	Pan/tilt move-in-black (disable)
	020 ⇔ 024	Color wheel move-in-black
	025 ⇔ 029	Color wheel move-in-black (disabled)
	030 ⇔ 034	Gobo wheel move-in-black
	035 ⇔ 039	Gobo wheel move-in-black (disabled)
	040 ⇔ 044	All movement move-in-black
	045 ⇔ 049	All movement move-in-black (disabled)
	050 ⇔ 054	Reset pan/tilt
	055 ⇔ 059	Reset color wheel
	060 ⇔ 064	Reset gobo wheel
	065 ⇔ 069	Reset shutter
	070 ⇔ 074	Reset focus
	075 ⇔ 079	Reset prism

	015 ⇄ 019	Pan/tilt move-in-black (disable)
	020 ⇄ 024	Color wheel move-in-black
	025 ⇄ 029	Color wheel move-in-black (disabled)
	030 ⇄ 034	Gobo wheel move-in-black
	035 ⇄ 039	Gobo wheel move-in-black (disabled)
	040 ⇄ 044	All movement move-in-black
	045 ⇄ 049	All movement move-in-black (disabled)
	050 ⇄ 054	Reset pan/tilt
	055 ⇄ 059	Reset color wheel
	060 ⇄ 064	Reset gobo wheel
	065 ⇄ 069	Reset shutter
	070 ⇄ 074	Reset focus
	075 ⇄ 079	Reset prism
	080 ⇄ 089	Reset all
	090 ⇄ 111	No function
	112 ⇄ 119	Lamp off
	120 ⇄ 127	Lamp on
	128 ⇄ 129	No function
	130 ⇄ 192	Auto program
	193 ⇄ 255	Sound program
		Effect
	000 ⇄ 009	No function
	010 ⇄ 019	Effect 1
	020 ⇄ 029	Effect 2
	030 ⇄ 039	Effect 3
	040 ⇄ 049	Effect 4
	050 ⇄ 059	Effect 5
	060 ⇄ 069	Effect 6
	070 ⇄ 079	Effect 7
	080 ⇄ 089	Effect 8
	090 ⇄ 099	Effect 9
	100 ⇄ 109	Effect 10
	110 ⇄ 119	Effect 11
12	120 ⇄ 129	Effect 12
	130 ⇄ 139	Effect 13
	140 ⇄ 149	Effect 14
	150 ⇄ 159	Effect 15
	160 ⇄ 169	Effect 16
	170 ⇄ 179	Effect 17
	180 ⇄ 189	Effect 18
	190 ⇄ 199	Effect 19
	200 ⇄ 209	Effect 20
	210 ⇄ 219	Effect 21
	220 ⇄ 229	Effect 22
	230 ⇄ 239	Effect 23
	240 ⇄ 249	Effect 24
	250 ⇄ 255	Effect 25
		Prism
13	000 ⇄ 015	Open
	016 ⇄ 239	Rotation (slow ⇄ fast)
	240 ⇄ 255	Stop, static prism effect
		Focus
14	0 ⇄ 255	Near ⇄ Far

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 32 devices should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended serial data link distance: 500 meters (1640 ft.)

Maximum recommended number of fixtures on a serial data link: 32 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase CHAUVET-certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

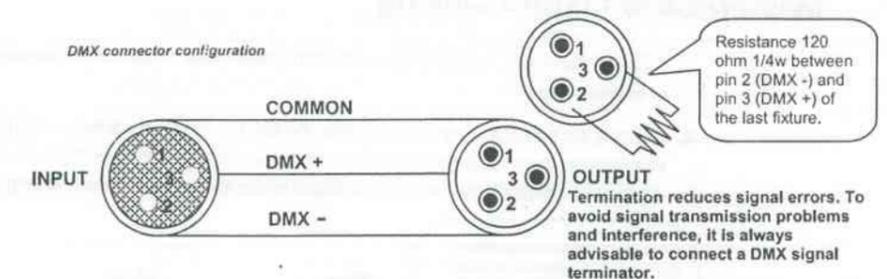
DMX Data Cable

Use a Belden® 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable will have the following characteristics:

2-conductor twisted pair plus a shield
 Maximum capacitance between conductors – 30 pF/ft.
 Maximum capacitance between conductor and shield – 55 pF/ft.
 Maximum resistance of 20 ohms / 1000 ft.
 Nominal impedance 100 – 140 ohms

Cable Connectors

Cabling must have a male XLR connector on one end and a female XLR connector on the other end.



CAUTION Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin to 5-Pin Conversion Chart

Note! If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. CHAUVET Model No: DMX5M, or DMX5F. The chart below details a proper cable conversion:

3 PIN TO 5 PIN CONVERSION CHART

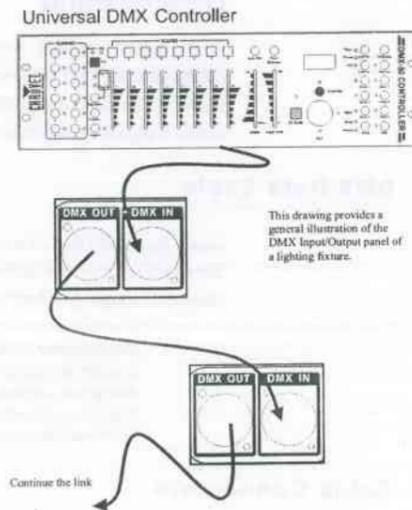
Conductor	3 Pin Female (output)	5 Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data (-) signal	Pin 2	Pin 2
Data (+) signal	Pin 3	Pin 3
Do not use		Do not use
Do not use		Do not use

Setting up a DMX Serial Data Link

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the controller.
2. Connect the end of the cable coming from the controller which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector.
3. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

CHAUVET Certified DMX Data Cables

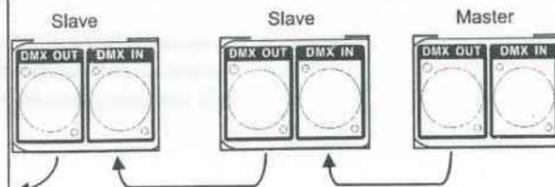
Order Code	Description
DMX1.5	DMX Cable 1.5m/4.9ft
DMX4.5	DMX Cable 4.5m/14.8ft
DMX10	DMX Cable 10m/32.8ft



Master/Slave Fixture Linking

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondly, the fixtures that follow may also require a slave setting. Please consult the "Operating Instructions" section in this manual for complete instructions for this type of setup and configuration.



DMX Channel Values

Advance Mode: (16-bit pan/tilt, 14-channel)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	Pan 0° ⇔ 540°
2	000 ⇔ 255	Tilt 0° ⇔ 270°
3	000 ⇔ 255	Pan fine 0° ⇔ 3°
4	000 ⇔ 255	Tilt fine 0° ⇔ 3°
5	000 ⇔ 255	Pan/tilt speed Fast ⇔ Slow
6	000 ⇔ 007	Color Wheel White (open)
	008 ⇔ 015	Light Blue
	016 ⇔ 023	Red
	024 ⇔ 031	Peachblow
	032 ⇔ 039	Green
	040 ⇔ 047	Yellow
	048 ⇔ 055	Pink
	056 ⇔ 063	UV
	064 ⇔ 066	White
	067 ⇔ 078	White + Light Blue
	079 ⇔ 092	Light Blue + Red
	093 ⇔ 107	Red + Peachblow
	108 ⇔ 120	Peachblow + Green
	121 ⇔ 136	Green + Yellow
137 ⇔ 152	Yellow + Pink	
153 ⇔ 170	Pink + UV	
171 ⇔ 212	Rotating clockwise with increasing speed	
213 ⇔ 255	Rotating counter-clockwise with increasing speed	
7	000 ⇔ 009	Gobo Wheel Open
	010 ⇔ 019	Gobo 1
	020 ⇔ 029	Gobo 2
	030 ⇔ 039	Gobo 3
	040 ⇔ 049	Gobo 4
	050 ⇔ 059	Gobo 5
	060 ⇔ 069	Gobo 6 (glass)
	070 ⇔ 079	Gobo 7 (glass)
	080 ⇔ 099	Gobo 1 gobo shake, fast to slow
	100 ⇔ 119	Gobo 2 gobo shake, fast to slow
	120 ⇔ 139	Gobo 3 gobo shake, fast to slow
	140 ⇔ 159	Gobo 4 gobo shake, fast to slow
	160 ⇔ 179	Gobo 5 gobo shake, fast to slow
	180 ⇔ 199	Gobo 6 (glass) gobo shake, (fast ⇔ slow)
200 ⇔ 219	Gobo 7 (glass) gobo shake, (fast ⇔ slow)	
220 ⇔ 255	Gobo scroll: Bidirectional rotation	
8	000 ⇔ 010	Gobo Rotation Stop
	011 ⇔ 127	Fixed gobo indexing
	128 ⇔ 191	Rotate Counter-clockwise (slow ⇔ fast)
	192 ⇔ 255	Rotate Clockwise (slow ⇔ fast)
9	000 ⇔ 007	Shutter Shutter closed
	008 ⇔ 022	Open
	023 ⇔ 085	Strobe (slow ⇔ fast)
	086 ⇔ 100	Open
	101 ⇔ 165	Pulse (slow ⇔ fast)
	166 ⇔ 180	Open
	181 ⇔ 246	Random (slow ⇔ fast)
	247 ⇔ 255	Open
10	000 ⇔ 255	Dimmer Closed ⇔ Open
11	000 ⇔ 009	Function No function
	010 ⇔ 014	Pan/tilt move-in-black

Operation

Stand-Alone Mode (Sound-Active, Auto Mode):

This mode allows a single unit to run to the beat of the music, or the unit will auto change in Auto Mode.

- 1) Set the fixture to the desired standalone mode by selecting it in the onboard menu.
- 2) Press **<MENU/ESC>** until you reach the "2- Run" option. Press **<ENTER>**.
- 3) Select the desired standalone program using the **<UP>** and/or **<DOWN>** buttons. Press **<ENTER>**.

Master/Slave Mode (Master Sound, Master Auto):

This mode will allow you to link up to 32 units together without a controller.

- 1) Use standard DMX cables to daisy chain your units together via the DMX connector on the rear of the units. For longer cable runs we suggest a terminator at the last fixture. For more information about terminators, see page 12.
- 2) Choose a unit to function as the Master. Adjust the options in the display of the master unit to one of the 3 Master Standalone modes: Auto, Sound, & Econtr. The unit must be the first unit in line. Then simply daisy chain the units together using DMX cable.
- 3) Set the "Run" to "Slave" on the slave units, and they will react the same as the Master.

DMX Mode

This mode allows the unit to be controlled by any universal DMX controller. If you are unfamiliar with DMX, please read the DMX Primer on Page 30.

- 1) Press **<MENU/ESC>** until you reach the "1-DMX Address".
- 2) Press **<ENTER>**.
- 3) Adjust your starting DMX address by using the **<UP>** and/or **<DOWN>** buttons..
- 4) Press **<MENU/ESC>** until you reach the "2- Run".
- 5) Press **<ENTER>**.
- 6) Using the **<UP>** and/or **<DOWN>** buttons, "Select: Slave".
- 7) Press **<ENTER>** button.

Mounting

Orientation

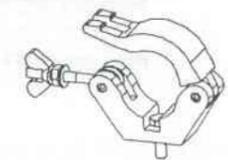
This fixture may be mounted in a vertical-hanging or in a floor-mounting-vertical position, provided there is adequate room for ventilation.

Rigging

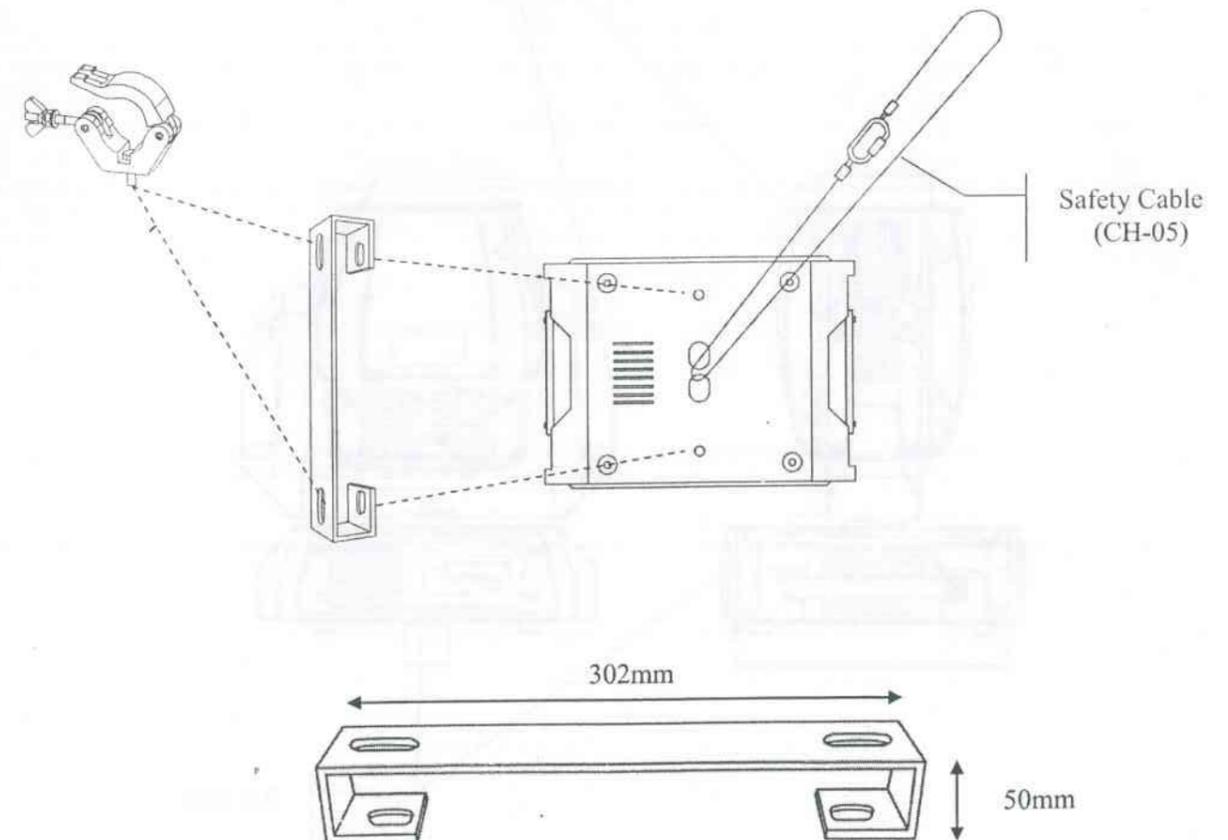
It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp (CLP-15, CLP-06). Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration lamp replacement access and routine maintenance.
- Safety cables must always be used (CH-05).
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

Hanging Clamp



Note!
Clamp is sold separately.



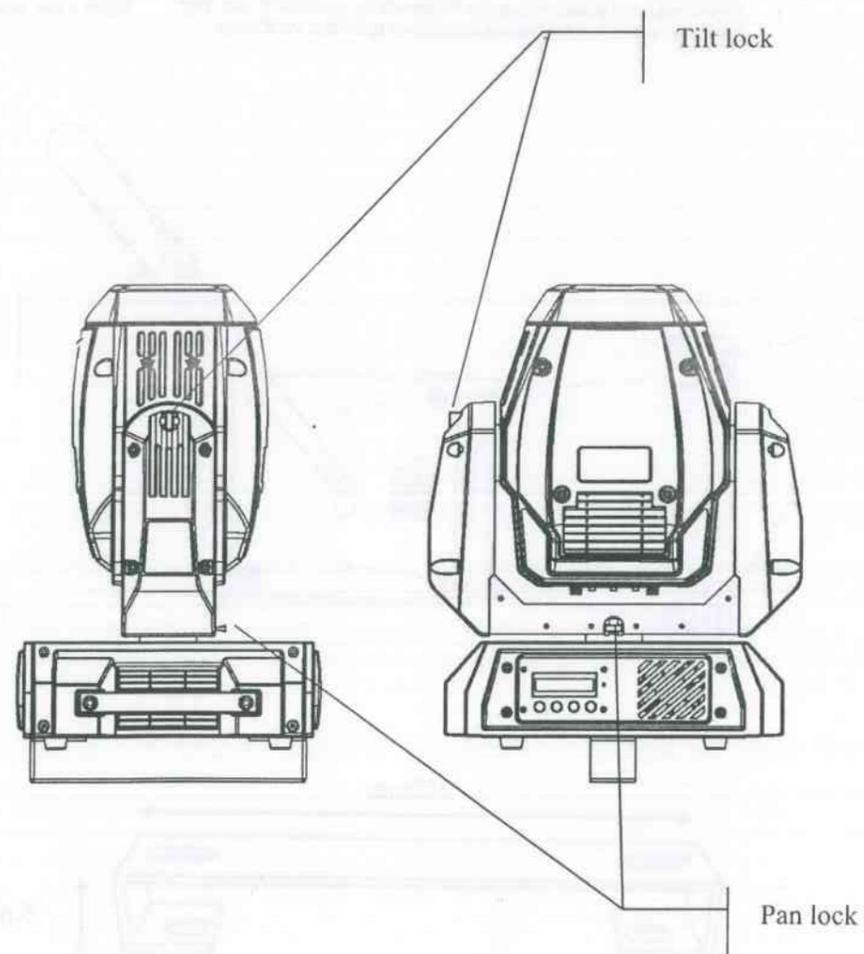
Pan/tilt Lock

This fixture has locking Pan/Tilt function. This is a feature designed to be used during transportation. Follow the below instructions for operating this properly. These steps are for the Pan Lock.

1. Locate the Pan Lock on the base of the yoke.
2. Using your hand (not a tool) rotate this either clockwise or counter-clockwise 90° degrees. It will sink into the lock position.
3. To release the lock, you must pull out the lock and then rotate it 90° degrees.

Note: you may lock the pan/tilt of the fixture in several positions along the axis.

Note: you **MUST** disengage the pan/tilt lock before applying power to the fixture!



Additional Functions

To use the fixture with the ca-9 easy controller.

- 1) Under the "Run" option in the menu, select "Econtr".
- 2) Press the <ENTER> button.
- 3) Now, plug in the CA-9 into the EASY CONTROLLER connection on the back panel of the fixture.

resetting the fixture:

- 1) Under the "10-Reset system", Press <ENTER>.
- 2) "Select: Ok".

To restore all settings to their factory defaults:



Warning: This will erase all user settings and revert the fixture back to the original factory defaults!

- 1) Under the "11-Load Set", Press <ENTER>.
- 2) "Select: Ok".
- 3) Press the <ENTER> button

User Configurations

To set the pan to inverting or non-inverting:

- 1) Press the **<MENU/ESC>**.
- 2) Select the desired option by using the **<UP>** and/or **<DOWN>** button to navigate through the display until you reach "3-Pan".
- 2) Press the **<ENTER>** button.

Note: you may select "Normal" using the <UP and/or <DOWN buttons and press the <ENTER> button for non-inverting; or, you may select "Reverse" for inverting.

To set the tilt to inverting or non-inverting:

- 1) Press the **<MENU/ESC>**.
- 2) Select the desired option by using the **<UP>** and/or **<DOWN>** button to navigate through the display until you reach "4-Tilt".
- 2) Press the **<ENTER>** button.

Note: you may select "Normal" using the <UP> and/or <DOWN> buttons and press the <ENTER> button for non-inverting; or, you may select "Reverse" for inverting.

To activate/deactivate move-in-black function(s):

This fixture has a built-in function that will offer greater ease in programming. This is called the move-in-black function. This is the option of stating that the fixture will blackout (close shutter) between 2 different steps of operation via DMX. You may enable and disable this function remotely via the control channel in DMX operation. See the below instructions for this operation for the pan/tilt movement.

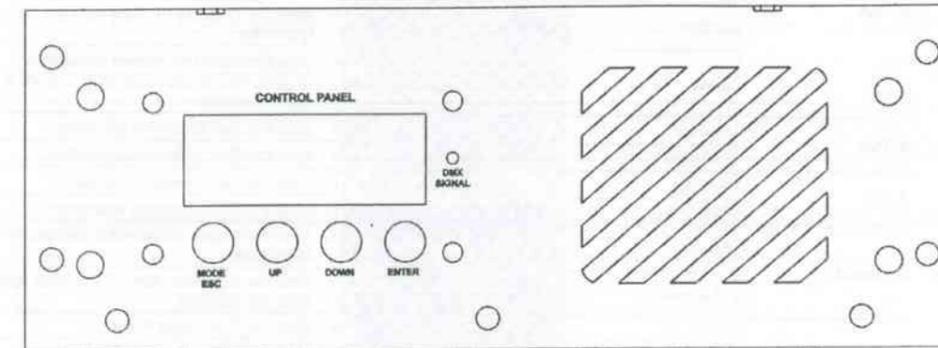
- 1) Using a DMX controller, bring channel 14 (in advanced mode) to a value of [010⇌014].
- 2) Hold this value for 3 seconds.
- 3) After 3 seconds, you may bring the channel back down to a value of [000].
- 4) The fixture now has saved this setting in the onboard memory and will retain it. If you wish to disable this function, then you may bring channel 14 to a value of [015⇌019].

You may follow the above steps for the pan/tilt, color, gobo, and combined movement by locating the corresponding DMX values in the DMX values section of this user manual.

4. OPERATING INSTRUCTIONS

Navigating the Control Panel

Access control panel functions using the four panel buttons located directly underneath the LCD Display.



Button	Function
<MODE/ESC>	Used to access the menu or to return to a previous menu option
<UP>	Scrolls through menu options in ascending order
<DOWN>	Scrolls through menu options in descending order
<ENTER>	Used to select and store the current menu or option within a menu

The Control Panel LCD Display shows the menu items you select from the menu map on page #. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<ENTER>**.

Press the **<MENU/ESC>** button repeatedly until **MENU** appears on the top line of the display. This is the top of the menu map. What appears on the bottom line of the display is one of the four choices in the menu map. Use the **<UP>** and **<DOWN>** buttons to navigate the menu map and menu options. Press the **<ENTER>** button to access the menu function currently displayed or to enable a menu option. To return to the previous option or menu without changing the value, press the **<MODE/ESC>** button.

Menu Map

MAIN FUNCTION	SUB-FUNCTION	SELECTION	INSTRUCTION
1. DMX Address	Address	000 ~ 255	• Sets the DMX starting address
	Fast		• Sets the fixture to fast Auto mode
	Slow		• Sets the fixture to slow Auto mode
2. Run	Sound		• Sets the fixture to audio triggering Auto mode
	Econtr		• Sets the fixture to operate with the Easy Controller
	Slave		• Sets the fixture to receive signal from another fixture (master/slave) or from a DMX controller
3. Pan	Normal		• Sets the Pan to normal operation
	Reverse		• Sets the Pan to inverted operation
4. Tilt	Normal		• Sets the Tilt to normal operation
	Reverse		• Sets the Tilt to inverted operation
5. Display	Bright		• Sets the display backlight to remain on indefinitely
	30-Close		• Sets the display to turn off the back light after 30 seconds
6. Pan Angle	540		• Sets the Pan range to full
	360		• Limits the Pan range to 360° degrees
	180		• Limits the Pan range to 180° degrees
7. Tilt Angle	270		• Sets the Tilt range to full
	180		• Limits the Tilt range to 180° degrees
	90		• Limits the Tilt range to 90° degrees
8. Channel	ADVANCED		• 14-channel 16-bit pan/tilt operation
	Basic		• 10-channel 8-bit pan/tilt operation
9. Lamp Control	ON		• Turns the lamp on
	OFF		• Turns off the lamp
10. Reset System	No		• No function
	Ok		• Resets the fixture
11. Load Set	No		• No function
	Ok		• Reset all settings to factory defaults

Menu Map (continued)

Service Menu Map

