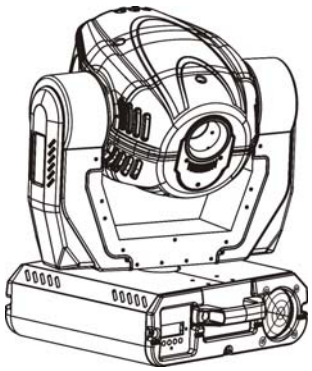
Q-Spot 300™

Snapshot

Ok on Dimmer	⊘
Outdoor OK	⊘
Sound Activated	✓
DMX512	✓
Master/Slave	✓
Multitap Transformer	✓
Replaceable Fuse	✓
User Serviceable	⊘
Duty Cycle	⊘

USER MANUAL



CHAUVET
Value • Innovation • Performance

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(800) 762-1084 – (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

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1. BEFORE YOU BEGIN

What is included

- 1 x Q-Spot 300™
- 5 Additional Free Gobos
- Power Cord
- Warranty Card
- 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.

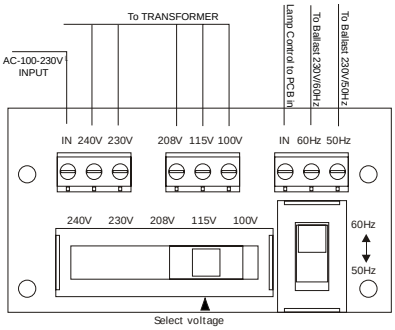

Figure 1 - AC Voltage Switch (inside of base)

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.***

Contact Us

World Wide

General Information

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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

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 95°F (35°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.
- Don't 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

- 12 to 15-channel DMX-512 moving yoke
- Pan: 530° / tilt: 280°
- Variable strobe/shutter
- Color wheel
  - 7 colors + white
  - Rainbow color spin at variable speeds
- Static gobo wheel
  - 4 interchangeable, slot-n-lock gobos + open
  - 2 metal, 2 glass installed
  - 2 CT filters (3200ºK & 5000ºK)
  - Gobo Bounce™
- Indexed rotating gobo wheel
  - 5 interchangeable, indexing rotating + open
  - 2 metal, 3 glass installed
  - Additional free gobos:
  - Rotating gobo wheel spin at variable speeds
  - Gobo Bounce™
- Frost filter for color washing
- 3-facet, high-speed rotating prism in both directions at variable speeds
- Variable motorized focus
- Variable motorized dimmer (0 – 100%)
- Remote fixture reset, lamp on/off & vector speed channel
- Built-in effect macros via DMX (gobo, gobo rotation, color, strobe)

Additional Features

- User-selectable pan/tilt ranges
- Automatic pan & tilt correction
- Built-in automated programs via master/slave
- Built-in sound-active programs via master/slave
- User-selectable basic or advanced operating modes
- LCD display with lock-out feature
- Micro-stepping motors
- Display auto on/off
- Thermal switch
- Fan cooled

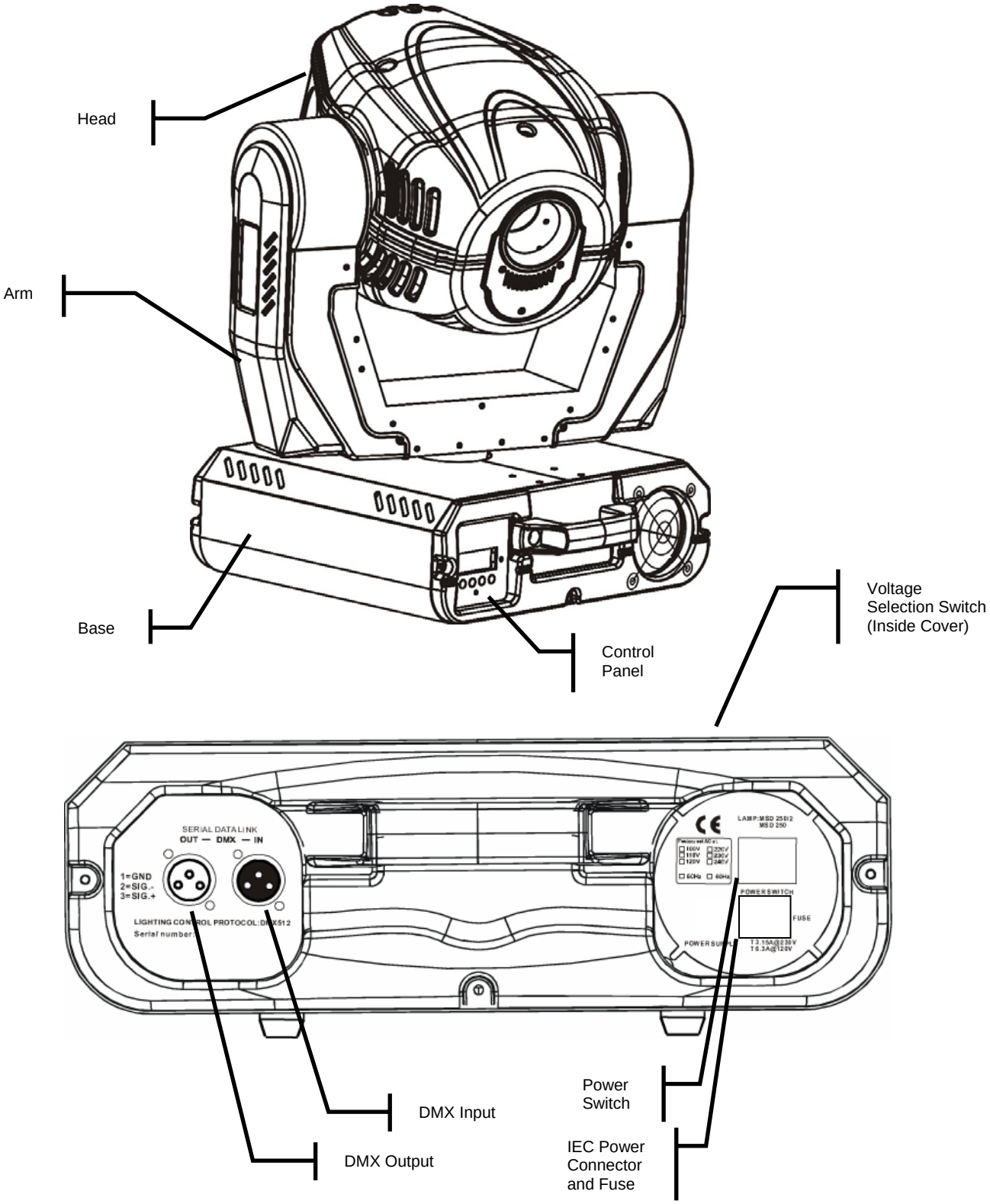
DMX Channel Summary

CHANNEL	FUNCTION (ADVANCED MODE)		FUNCTION (BASIC MODE)		FUNCTION (V.2006 MODE)
1	Pan		Pan		Pan
2	Tilt		Tilt		Tilt
3	Pan fine		Vector speed		Pan fine
4	Tilt fine		Lamp on/off and reset		Tilt fine
5	Vector speed		Color		Vector speed
6	Lamp on/off and reset		Prism and frost		Lamp on/off and reset
7	Color		Static gobo wheel		Color
8	Prism and frost		Rotating gobo wheel		Prism
9	Static gobo wheel		Gobo rotation		Rotating gobo wheel
10	Rotating gobo wheel		Focus		Gobo rotation
11	Gobo rotate		Shutter		Focus
12	Focus		Dimmer		Shutter
13	Shutter				Dimmer
14	Dimmer				
15	Macro				

Note: V.2006 mode has the same channel configuration as the Q-Spot 250, allowing them to be used interchangeably in DMX mode.

Note: the Q-Spot 300 is NOT compatible with the Q-Spot 250 when operating in Master/Slave mode, EVEN IF V.2006 mode is selected.

Product Overview



3. SETUP

Lamp

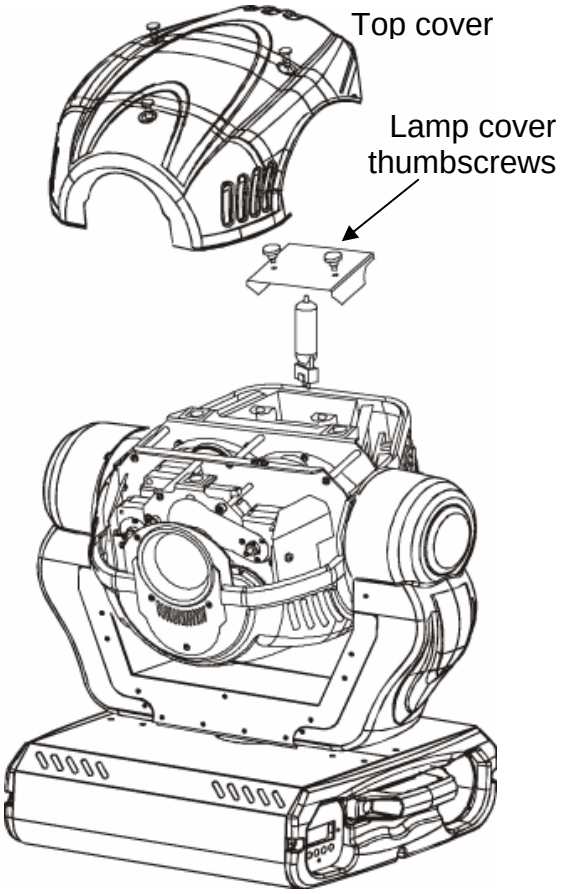
You will need to install a lamp prior to the initial operation of the fixture. An MSD 250W lamp is included.

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.

Lamp Installation

1) Remove all 3 screws located on the top cover of the fixture.
2) Remove the 2 thumbscrews to remove lamp cover as illustrated.
3) If replacing the lamp, remove old lamp first.
4) Holding the new lamp by its base, align the pins on the lamp with the holes in the socket and insert the lamp squarely until the lamp socket secures the lamp tightly.
5) Clean the glass/envelope of the bulb with an alcohol wipe or equivalent.
6) Replace lamp cover, align the screw holes and fasten the thumbscrews back onto the lamp cover.
7) Replace top cover and fasten with screws.
8) Turn the fixture on and adjust the lamp alignment screws until the brightest most even area of the beam is in the center of your spot. It may be necessary for you to use a controller in order to command the fixture to display a white beam on a flat surface with no gobos or colors.



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.

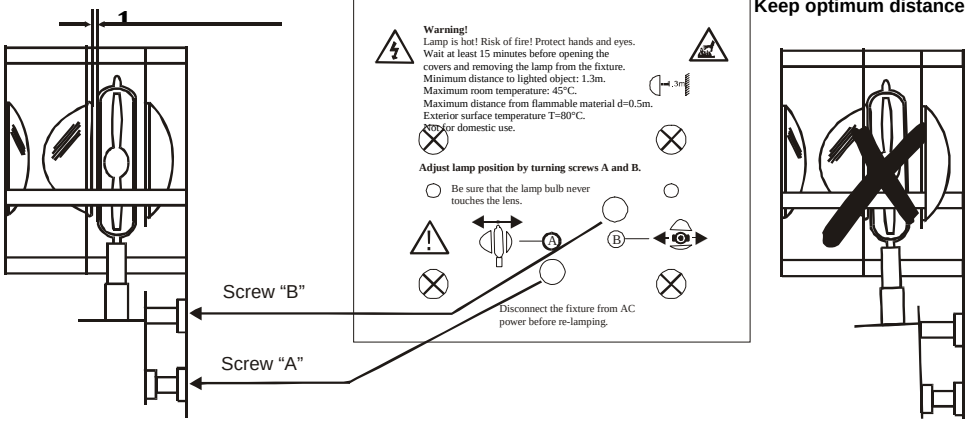
Failure to do so could result in premature aging of the lamp and failure to the electronics that drive it.

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 Alignment How-To

Often, after a new installation of a lamp, you will 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 two lamp alignment screws provided at the rear of the projector head. Turning these screws allow you to optimize the projection quality of the spot as well as the overall intensity of the beam.

Optimum distance 1 to 1.5mm



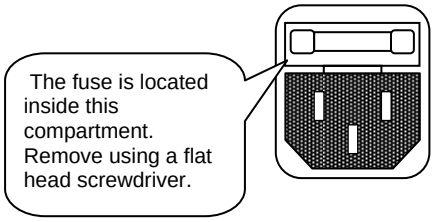
Incorrect!
Keep optimum distance

1. Project a white spot against any flat surface. Preferably the surface should be white or pastel in color.
2. Adjust screw A to achieve optimum lamp distance from reflector of 1 to 1.5mm as illustrated above. If the hotspot is too defined, turn screw A to distribute light evenly.
3. You can center the hot spot by turning screw B.
4. It may be necessary to jump back and forth between step 2 and step 3.
5. As you move in and out of optimum lamp alignment, 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.

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

Fuse Replacement

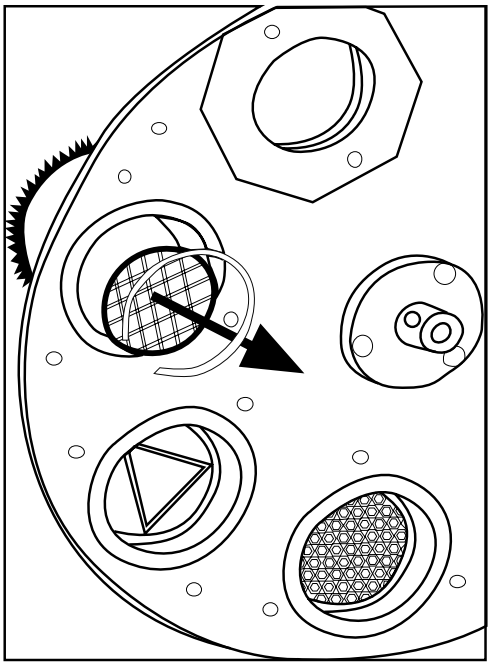
With a flat head screwdriver wedge the fuse holder out of its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.



Replacing Gobos (rotating)

1) Remove the three screws on the top cover of the fixture (the same cover used to gain access to the lamp).
2) Remove the glue from the gobo using tweezers.
3) Remove the retaining spring from the gobo (figure A).
4) Remove the existing gobo, and replace with a new gobo.
5) Replace the retaining spring.
6) If desired, add three small dabs of high-temperature silicone glue to the retaining spring.
7) Repeat steps 4-6 as many times as necessary to replace all desired gobos.
8) Replace the top cover and retighten the four screws removed in step 1.

Figure A

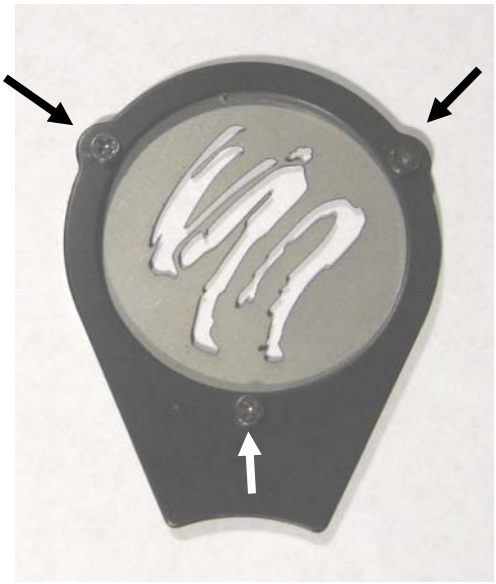


Replacing Gobos (static)

1) Remove the three screws on the top cover of the fixture (the same cover used to gain access to the lamp).
2) Gently pry back the top of the gobo with your fingernail, or a flathead screwdriver, as shown in Figure B.
3) Pull the gobo away from the center of the gobo wheel.
4) Remove the 3 screws shown in Figure C.
5) Remove the existing gobo, and replace with a new gobo.
6) Replace the three screws removed in step 4.
7) Insert the gobo frame into the retaining clip towards the center of the gobo wheel until the gobo frame is flush with the gobo wheel.
8) Repeat steps 2-7 as many times as necessary to replace all desired gobos.
9) Replace the top cover and retighten the three screws removed in step 1.

Figure B

Figure C



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.

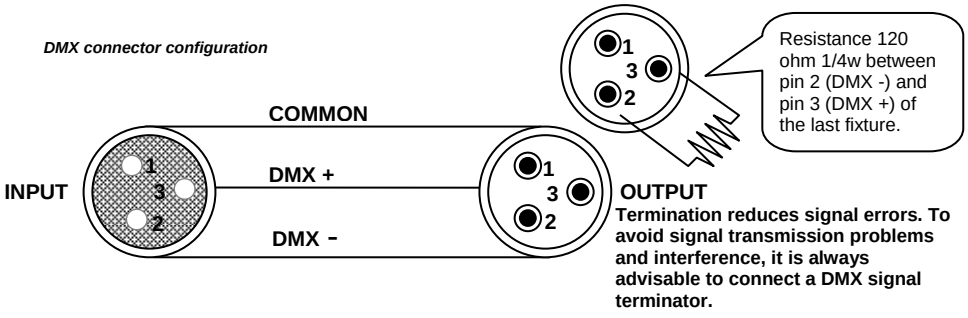
DMX DATA CABLE

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

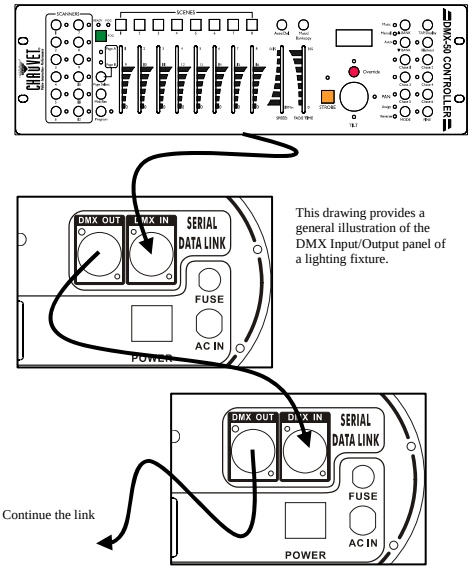
Setting up a DMX Serial Data Link

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

Universal DMX Controller

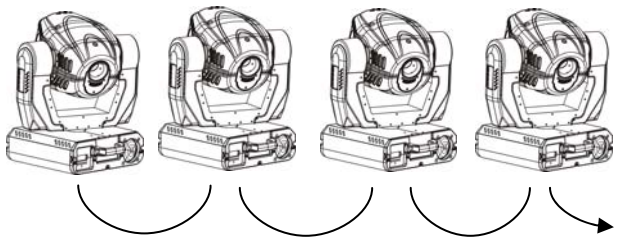


This drawing provides a general illustration of the DMX Input/Output panel of a lighting fixture.

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. Secondarily, 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.



Mounting

ORIENTATION

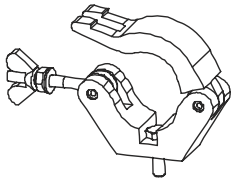
This fixture may be mounted in any position provided there is adequate room for ventilation.

RIGGING

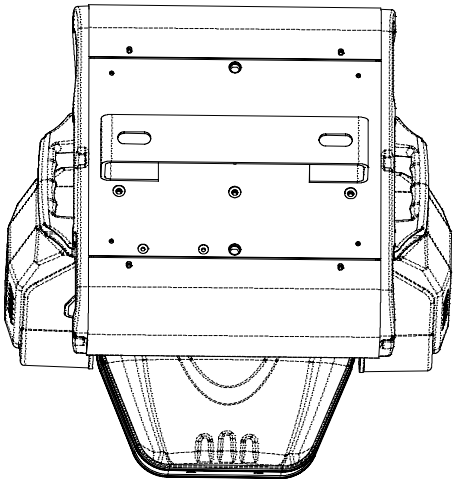
It is important never to obstruct the fan or vents pathway. Mount the fixture using, a suitable “C” or “O” type clamp. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

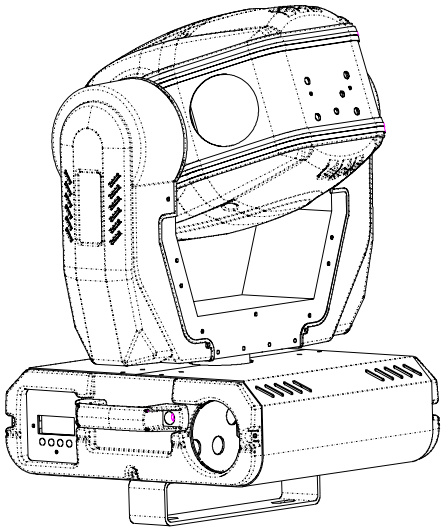
- When selecting installation location, take into consideration lamp replacement access and routine maintenance.
- Safety cables must always be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

Hanging Clamp



Note!
Clamp is sold separately.



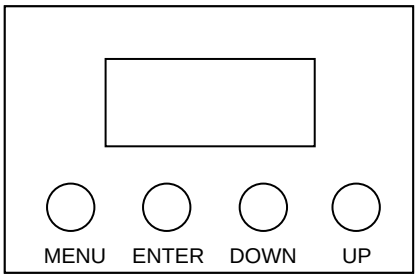


4. OPERATING INSTRUCTIONS

Navigating the Control Panel

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

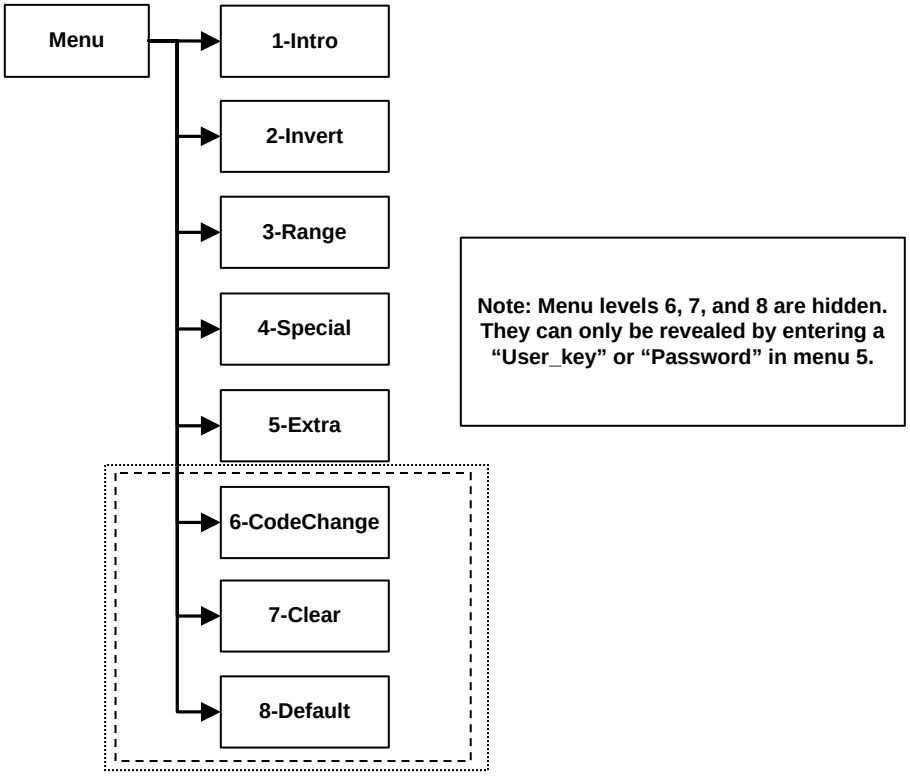
Button	Function
<MENU>	Used to access the menu or to return to a previous menu option
<ENTER>	Used to select and store the current menu or option within a menu
<DOWN>	Scrolls through menu options in descending order
<UP>	Scrolls through menu options in ascending order

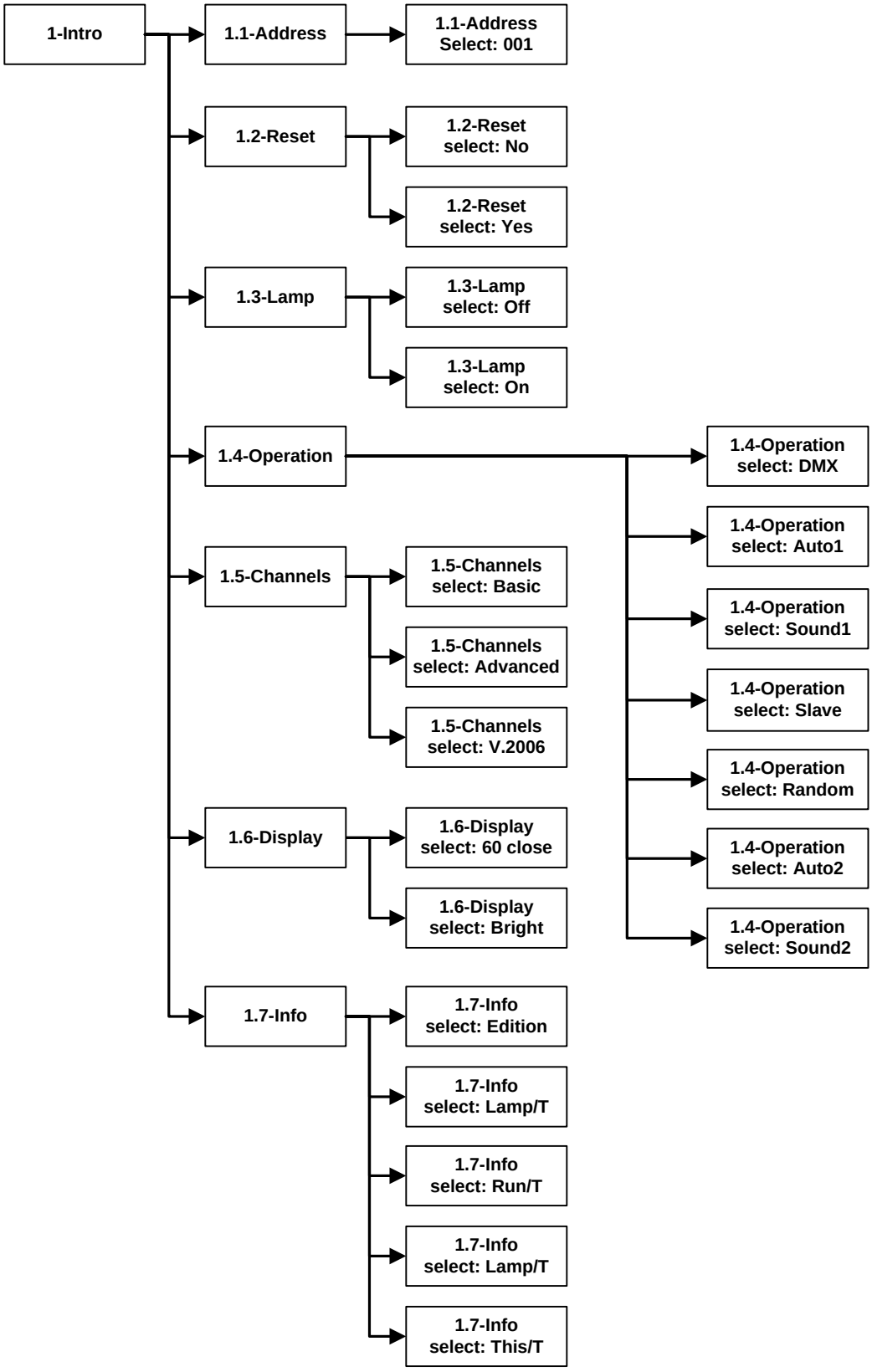


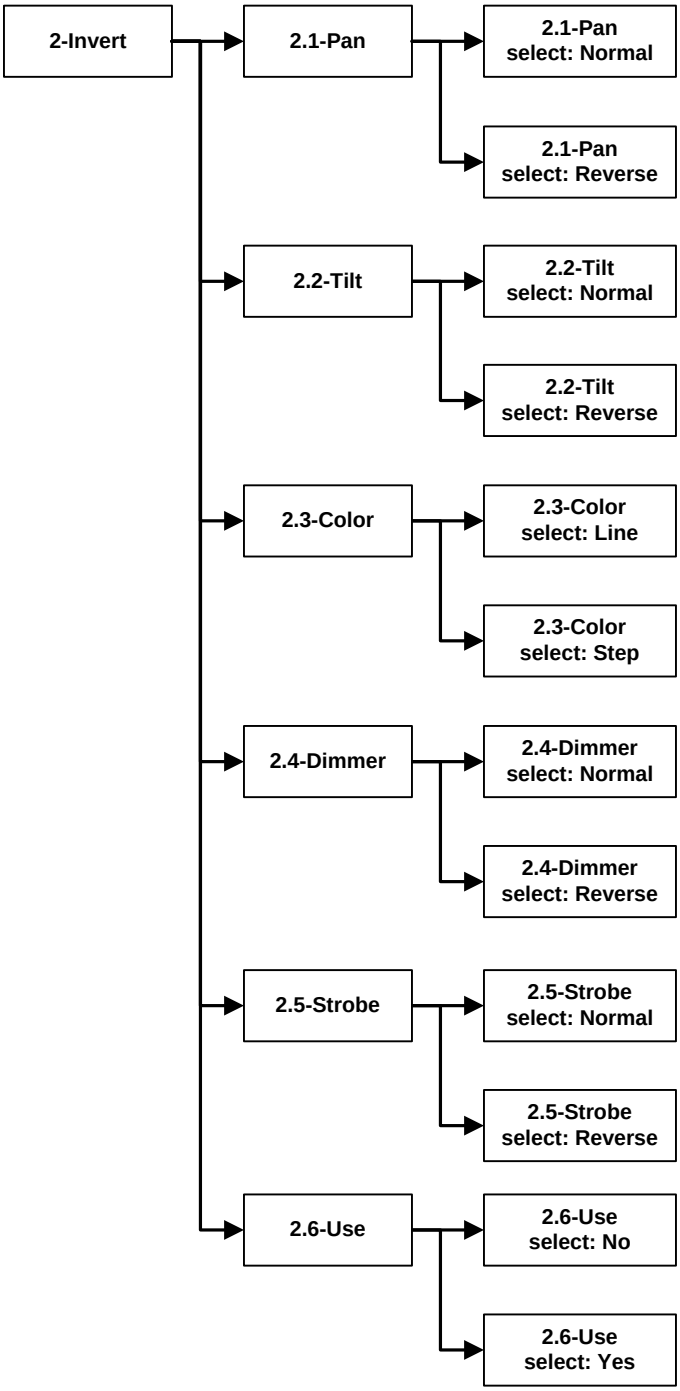
The Control Panel Display shows the menu items you select from the menu map on the following pages. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<ENTER>**.

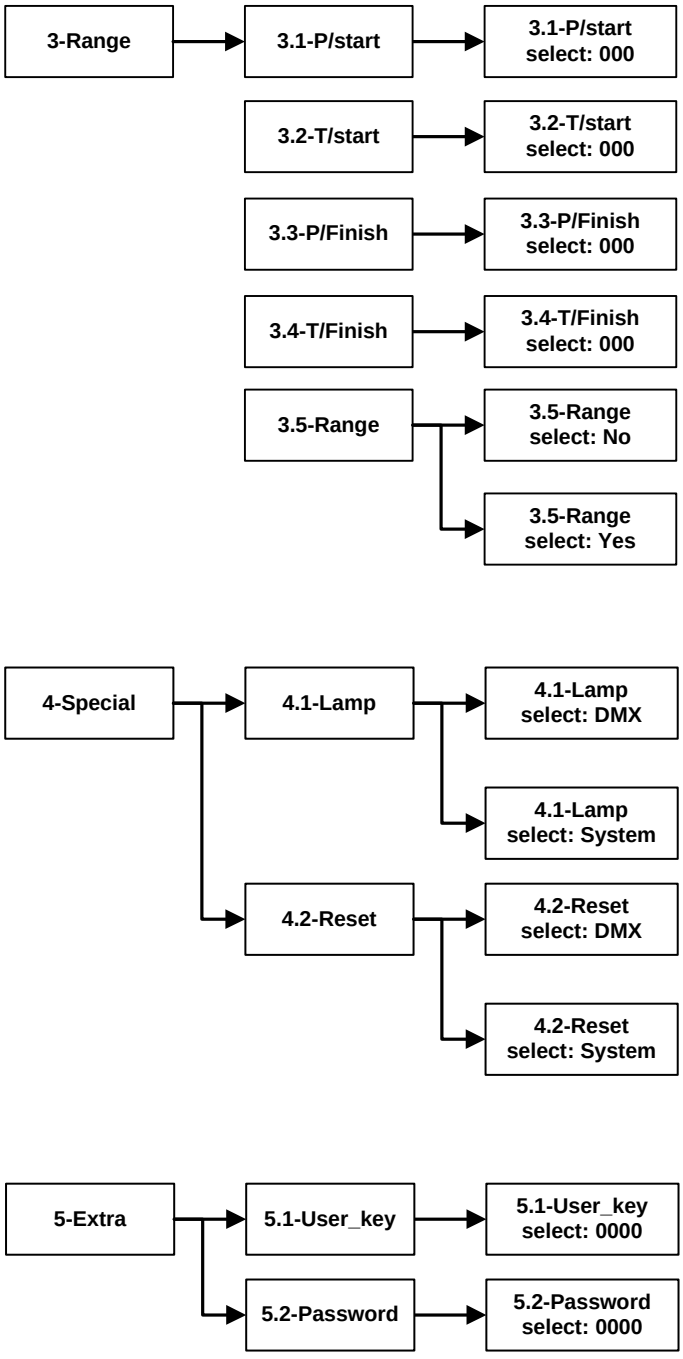
Press the **<MENU>** button repeatedly until the root menu options (shown on the menu map below) appear on the display. Use the **<UP>** and **<DOWN>** buttons to navigate the menu map and menu options. Press the **<ENTER>** button to access the menu function currently displayed or to enable a menu option. To return to the previous option or menu without changing the value, press the **<MENU>** button.

Menu Map

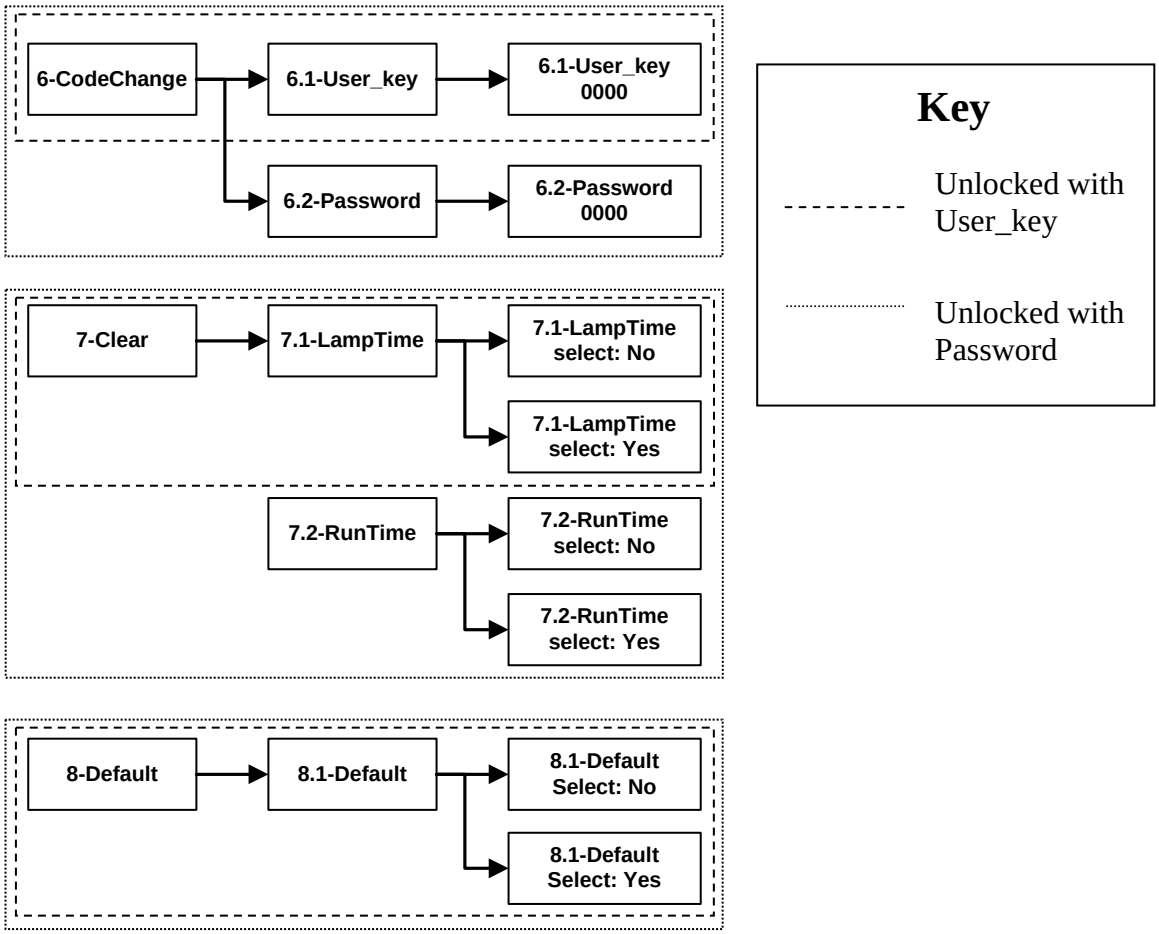



1-Intro
1.1-Address
1.1-Address Select: 001
1.2-Reset
1.2-Reset select: No
1.2-Reset select: Yes
1.3-Lamp
1.3-Lamp select: Off
1.3-Lamp select: On
1.4-Operation
1.4-Operation select: DMX
1.4-Operation select: Auto1
1.4-Operation select: Sound1
1.4-Operation select: Slave
1.4-Operation select: Random
1.4-Operation select: Auto2
1.4-Operation select: Sound2
1.5-Channels
1.5-Channels select: Basic
1.5-Channels select: Advanced
1.5-Channels select: V.2006
1.6-Display
1.6-Display select: 60 close
1.6-Display select: Bright
1.7-Info
1.7-Info select: Edition
1.7-Info select: Lamp/T
1.7-Info select: Run/T
1.7-Info select: Lamp/T
1.7-Info select: This/T


2-Invert
2.1-Pan
2.1-Pan select: Normal
2.1-Pan select: Reverse
2.2-Tilt
2.2-Tilt select: Normal
2.2-Tilt select: Reverse
2.3-Color
2.3-Color select: Line
2.3-Color select: Step
2.4-Dimmer
2.4-Dimmer select: Normal
2.4-Dimmer select: Reverse
2.5-Strobe
2.5-Strobe select: Normal
2.5-Strobe select: Reverse
2.6-Use
2.6-Use select: No
2.6-Use select: Yes



Note: The default “User_key” is 3333. The “Password” is for Chauvet use only.



Menu Functions

MENU OPTION	DESCRIPTION
Intro (1)	Contains the address, reset, lamp, operation, channels, display, and info submenus.
Invert (2)	Sets which functions of the fixture are inverted. Choices are: pan, tilt, shutter, and dimmer. Also sets color wheel to linear or step (snap to colors).
Range (3)	Restricts the pan and tilt range to user-defined values. These restrictions apply to all operating modes of the fixture.
Special (4)	Sets whether reset and lamp control can be accessed via DMX or only on the fixture console.
Extra (5)	Sets an optional user key and password (explained below).
Address (1.1)	Sets the DMX address of the fixture.
Reset (1.2)	Resets the fixture.
Lamp (1.3)	Turns the lamp on or off.
Operation (1.4)	Sets the operating mode (DMX, Auto 1, Sound 1, Slave, Random, Auto 2, or Sound 2). Auto 1 and 2 run preset programs to a preset time interval. Sound 1 and 2 run preset programs to the beat of music. Slave is for Master/Slave operation; set the master fixture to Auto or

	Sound (1 or 2). Random alternates between Auto 1 and Auto 2.
Channels (1.5)	Sets the channel configuration of the fixture to Advanced (15 channels), Basic (12 channels), or V.2006 (13 channels). V.2006 mode has the same channel configuration as the Q-Spot 250, allowing them to be used interchangeably. **Note: the Q-Spot 300 is NOT compatible with the Q-Spot 250 when operating in Master/Slave mode, EVEN IF V.2006 mode is selected.**
Display (1.6)	Sets whether the display backlight turns off after 60 seconds (60 close) or stays on permanently (bright).
Info (1.7)	Contains information about the fixture, the run time of the lamp, and the run time of the fixture.
Use (2.6)	Enable or disable the ability to change certain configuration settings (specifically the settings in the 2.X section).
P/Start (3.1)	The starting point for the pan field of movement. 000 is the default.
T/Start (3.2)	The starting point for the tilt field of movement. 000 is the default.
P/Finish (3.3)	The ending point for the pan field of movement. 255 is the default.
T/Finish (3.4)	The ending point for the tilt field of movement. 255 is the default.
Range (3.5)	Enables or disables range limitation.
Lamp (4.1)	Enables or disables lamp control via DMX. “DMX” allows DMX lamp control, “System” restricts lamp control to the fixture console only.
Reset (4.2)	Enables or disables reset control via DMX. “DMX” allows DMX reset control, “System” restricts reset control to the fixture console only.
User_key (5.1)	Enter the four-digit number used to reveal basic hidden menus 6.1, 7.1, and 8.1. **The factory default is 3333.**
Password (5.2)	Enter the four-digit number used to reveal all hidden menus. The password is for Chauvet use only.
User_key (6.1)	Enter a four-digit number to set the “User_key” for the fixture. This number must be entered to reveal basic hidden menus.
Password (6.2)	Enter a four-digit number to set the “Password” for the fixture. This number must be entered to reveal all hidden menus.
LampTime (7.1)	Clear the lamp time for the fixture. This should be done every time the lamp is replaced to accurately monitor lamp usage.
RunTime (7.2)	Clear the run time for the fixture.
Default (8.1)	Reset all settings to the factory default.

User Configurations

TO SET THE PAN TO INVERTING OR NON-INVERTING:

1) Press the **<MENU>** button to access the display.
2) Scroll through until “2-Invert” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “2.1-Pan” is displayed, and select it.
4) Scroll through until the desired setting is displayed (“Normal” or “Reverse”) and select it.
5) Press **<ENTER>** again to save this setting.

TO SET THE TILT TO INVERTING OR NON-INVERTING:

1) Press the **<MENU>** button to access the display.
2) Scroll through until “2-Invert” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “2.2-Tilt” is displayed, and select it.
4) Scroll through until the desired setting is displayed (“Normal” or “Reverse”) and select it.
5) Press **<ENTER>** again to save this setting.

Service Functions

TO RESET THE FIXTURE:

1) Press the **<MENU>** button to access the display.
2) Scroll through until “1-Info” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “1.2-Reset” is displayed, and select it.
4) Scroll through until “Yes” is displayed and select it.
5) The fixture will now reset.

TO TURN THE LAMP ON OR OFF:

1) Press the **<MENU>** button to access the display.
2) Scroll through until “1-Info” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “1.3-Lamp” is displayed, and select it.
4) Scroll through until the desired setting is displayed (“On” or “Off) and select it.
5) The lamp will now turn on if you selected “On”, or turn off if you selected “Off”.

   Note: if the lamp is still hot, it may not turn back on immediately. The fixture will wait until the lamp is cool before turning it on, even if you select “On” in the control panel.

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) Press the **<MENU>** button to access the display.
2) Scroll through until “1-Info” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “1.4-Operation” is displayed, and select it.
4) Scroll through until the desired setting is displayed (Auto1, Sound1, Auto2, or Sound2) and select it.
5) The unit will react to the low frequencies of music via the internal microphone in Sound Active mode, or the unit will auto change in Auto Mode.

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

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

1) On the Master, press the **<MENU>** button to access the display.
2) Scroll through until “1-Info” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “1.4-Operation” is displayed, and select it.
4) Scroll through until the desired setting is displayed (Auto1, Sound1, Auto2, or Sound2) and select it.
5) The unit will react to the low frequencies of music via the internal microphone in Sound Active mode, or the unit will auto change in Auto Mode.
6) On the Slave fixtures, press the **<MENU>** button until 1-Info is displayed and select it by pressing **<ENTER>**.
7) Scroll through until “1.4-Operation” is displayed, and select it.
8) Scroll through until “Slave” is displayed and select it.
9) The unit will do exactly what the Master does.

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 26.

1) Press the **<MENU>** button to access the display.
2) Scroll through until “1-Info” is displayed and select it by pressing **<ENTER>**.
3) Scroll through until “1.4-Operation” is displayed, and select it.
4) Scroll through until “DMX” is displayed and select it.
5) Press menu until the root menu is displayed, and scroll through until “1-Info” is displayed.
6) Scroll through until “1.1-Address” is displayed, and select it.
7) Use the down and up buttons to set the desired address. Note that **<DOWN>** will scroll through which digit is changeable and **<UP>** will scroll through the different numbers.
8) Press **<ENTER>** twice to store the address.
9) The unit can now be controlled by any universal DMX controller.

DMX Channel Values (Advanced mode)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Pan**
2	000 ⇔ 255	**Tilt**
3	000 ⇔ 255	**Pan fine**
4	000 ⇔ 255	**Tilt fine**
5	000 ⇔ 255	**Vector Speed:** (Normal > Slow)
6		**Lamp on/off & Reset**
	000 ⇔ 127	No Function
	128 ⇔ 139	Lamp on after 3 seconds when lamp is off
		Fixture reset when lamp is on
	140 ⇔ 229	No Function
	230 ⇔ 239	Lamp off after 3 seconds
	240 ⇔ 255	No Function
7		**Color Wheel**
	000 ⇔ 015	White (Open)
	016 ⇔ 031	Cyan
	032 ⇔ 047	Green
	048 ⇔ 063	Yellow
	064 ⇔ 079	Magenta
	080 ⇔ 095	Pink
	096 ⇔ 111	Orange
	112 ⇔ 127	UV
	128 ⇔ 137	Stop rainbow effect
	138 ⇔ 255	Rainbow effect: Fast > Slow (clockwise)
8		**Prism/Frost**
	000 ⇔ 004	Open
	005 ⇔ 127	Counter-clockwise rotation: Slow > Fast
	128 ⇔ 132	No rotation
	133 ⇔ 249	Clockwise rotation: Slow > Fast
	250 ⇔ 255	Frost
9		**Gobo Wheel 2**
	000 ⇔ 036	Open
	037 ⇔ 057	Gobo 1
	058 ⇔ 073	Gobo 1 bounce (slow > fast)
	074 ⇔ 094	Gobo 2
	095 ⇔ 110	Gobo 2 bounce (slow > fast)
	111 ⇔ 131	Gobo 3
	132 ⇔ 147	Gobo 3 bounce (slow > fast)
	148 ⇔ 161	Gobo 4
	162 ⇔ 184	Gobo 4 bounce (slow > fast)
	185 ⇔ 205	Color temperature cool
	206 ⇔ 221	Color temperature cool bounce (slow > fast)
	222 ⇔ 242	Color temperature warm
	243 ⇔ 255	Color temperature warm bounce (slow > fast)
10		**Gobo Wheel 1**
	000 ⇔ 031	Open
	033 ⇔ 047	Gobo 1
	048 ⇔ 063	Gobo 1 bounce (slow > fast)
	064 ⇔ 079	Gobo 2
	080 ⇔ 095	Gobo 2 bounce (slow > fast)
	096 ⇔ 111	Gobo 3
	112 ⇔ 127	Gobo 3 bounce (slow > fast)
	128 ⇔ 143	Gobo 4
	144 ⇔ 159	Gobo 4 bounce (slow > fast)
	160 ⇔ 175	Gobo 5
	176 ⇔ 191	Gobo 5 bounce (slow > fast)
	192 ⇔ 223	Open
	224 ⇔ 229	Stop scroll
	230 ⇔ 255	Scroll (slow > fast)
11		**Gobo rotate**
	000 ⇔ 060	Index

	061 ⇔ 158	Clockwise rotation (slow > fast)
	159 ⇔ 255	Counter-clockwise rotation (slow > fast)
12	000 ⇔ 255	**Focus**
13		**Shutter/Strobe**
	000 ⇔ 031	Closed
	032 ⇔ 063	Open
	064 ⇔ 095	Strobe: slow > fast (max 10fps)
	096 ⇔ 127	Open
	128 ⇔ 159	Pulse Strobe: slow > fast
	160 ⇔ 191	Open
	192 ⇔ 223	Random Strobe: slow > fast
	224 ⇔ 255	Open
14		**Dimmer**
	000 ⇔ 255	Closed > Open
15		**Macro:**
	000 ⇔ 009	Open
	010 ⇔ 019	Macro 1
	020 ⇔ 029	Macro 2
	030 ⇔ 039	Macro 3
	040 ⇔ 059	Macro 4
	060 ⇔ 069	Macro 5
	070 ⇔ 089	Macro 6
	090 ⇔ 099	Macro 7
	100 ⇔ 109	Macro 8
	110 ⇔ 119	Macro 9
	120 ⇔ 129	Macro 10
	130 ⇔ 139	Macro 11
	140 ⇔ 149	Macro 12
	150 ⇔ 159	Macro 13
	160 ⇔ 169	Macro 14
	170 ⇔ 179	Macro 15
	180 ⇔ 189	Macro 16
	190 ⇔ 199	Macro 17
	200 ⇔ 209	Macro 18
	210 ⇔ 219	Macro 19
	220 ⇔ 229	Macro 20
	230 ⇔ 239	Macro 21
	240 ⇔ 249	Macro 22
	250 ⇔ 255	Macro 23

DMX Channel Values (Basic mode)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Pan**
2	000 ⇔ 255	**Tilt**
3	000 ⇔ 255	**Vector Speed:** (Normal > Slow)
4		**Lamp on/off & Reset**
	000 ⇔ 127	No Function
	128 ⇔ 139	Lamp on after 3 seconds when lamp is off
		Fixture reset when lamp is on
	140 ⇔ 229	No Function
	230 ⇔ 239	Lamp off after 3 seconds
	240 ⇔ 255	No Function
5		**Color Wheel**
	000 ⇔ 015	White (Open)
	016 ⇔ 031	Cyan
	032 ⇔ 047	Green
	048 ⇔ 063	Yellow
	064 ⇔ 079	Magenta
	080 ⇔ 095	Pink

	096 ⇔ 111	Orange
	112 ⇔ 127	UV
	128 ⇔ 137	Stop rainbow effect
	138 ⇔ 255	Rainbow effect: Fast > Slow (clockwise)
6		**Prism/Frost**
	000 ⇔ 004	Open
	005 ⇔ 127	Counter-clockwise rotation: Slow > Fast
	128 ⇔ 132	No rotation
	133 ⇔ 249	Clockwise rotation: Slow > Fast
	250 ⇔ 255	Frost
7		**Gobo Wheel 2**
	000 ⇔ 036	Open
	037 ⇔ 057	Gobo 1
	058 ⇔ 073	Gobo 1 bounce (slow > fast)
	074 ⇔ 094	Gobo 2
	095 ⇔ 110	Gobo 2 bounce (slow > fast)
	111 ⇔ 131	Gobo 3
	132 ⇔ 147	Gobo 3 bounce (slow > fast)
	148 ⇔ 161	Gobo 4
	162 ⇔ 184	Gobo 4 bounce (slow > fast)
	185 ⇔ 205	Color temperature cool
	206 ⇔ 221	Color temperature cool bounce (slow > fast)
	222 ⇔ 242	Color temperature warm
	243 ⇔ 255	Color temperature warm bounce (slow > fast)
8		**Gobo Wheel 1**
	000 ⇔ 031	Open
	033 ⇔ 047	Gobo 1
	048 ⇔ 063	Gobo 1 bounce (slow > fast)
	064 ⇔ 079	Gobo 2
	080 ⇔ 095	Gobo 2 bounce (slow > fast)
	096 ⇔ 111	Gobo 3
	112 ⇔ 127	Gobo 3 bounce (slow > fast)
	128 ⇔ 143	Gobo 4
	144 ⇔ 159	Gobo 4 bounce (slow > fast)
	160 ⇔ 175	Gobo 5
	176 ⇔ 191	Gobo 5 bounce (slow > fast)
	192 ⇔ 223	Open
	224 ⇔ 229	Stop scroll
	230 ⇔ 255	Scroll (slow > fast)
9		**Gobo rotate**
	000 ⇔ 060	Index
	061 ⇔ 158	Clockwise rotation (slow > fast)
	159 ⇔ 255	Counter-clockwise rotation (slow > fast)
10	000 ⇔ 255	**Focus**
11		**Shutter/Strobe**
	000 ⇔ 031	Closed
	032 ⇔ 063	Open
	064 ⇔ 095	Strobe: slow > fast (max 10fps)
	096 ⇔ 127	Open
	128 ⇔ 159	Pulse Strobe: slow > fast
	160 ⇔ 191	Open
	192 ⇔ 223	Random Strobe: slow > fast
	224 ⇔ 255	Open
12		**Dimmer**
	000 ⇔ 255	Closed > Open

DMX Channel Values (V.2006 mode)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Pan**
2	000 ⇔ 255	**Tilt**
3	000 ⇔ 255	**Pan fine**
4	000 ⇔ 255	**Tilt fine**
5	000 ⇔ 255	**Vector Speed:** (Normal > Slow)
6		**Lamp on/off & Reset**
	000 ⇔ 127	No Function
	128 ⇔ 139	Lamp on after 3 seconds when lamp is off
		Fixture reset when lamp is on
	140 ⇔ 229	No Function
	230 ⇔ 239	Lamp off after 3 seconds
	240 ⇔ 255	No Function
7		**Color Wheel**
	000 ⇔ 015	White (Open)
	016 ⇔ 031	Cyan
	032 ⇔ 047	Green
	048 ⇔ 063	Yellow
	064 ⇔ 079	Magenta
	080 ⇔ 095	Pink
	096 ⇔ 111	Orange
	112 ⇔ 127	UV
	128 ⇔ 137	Stop rainbow effect
	138 ⇔ 255	Rainbow effect: Fast > Slow (clockwise)
8		**Prism/Frost**
	000 ⇔ 004	Open
	005 ⇔ 127	Counter-clockwise rotation: Slow > Fast
	128 ⇔ 132	No rotation
	133 ⇔ 249	Clockwise rotation: Slow > Fast
	250 ⇔ 255	Frost
9		**Gobo Wheel 1**
	000 ⇔ 031	Open (White)
	032 ⇔ 063	Gobo 1
	064 ⇔ 095	Gobo 2
	096 ⇔ 127	Gobo 3
	128 ⇔ 159	Gobo 4
	160 ⇔ 223	Gobo 5
	224 ⇔ 255	Gobo Spin: Slow > Fast
10		**Gobo rotate**
	000 ⇔ 040	Gobo Incremental rotation
	041 ⇔ 060	Constant rotation
	061 ⇔ 158	Clockwise rotation: Slow > Fast
	159 ⇔ 255	Counter-clockwise rotation: Slow > Fast
11	000 ⇔ 255	**Focus**
12		**Shutter/Strobe**
	000 ⇔ 031	Closed
	032 ⇔ 063	Open
	064 ⇔ 095	Strobe: slow > fast (max 10fps)
	096 ⇔ 127	Open
	128 ⇔ 159	Pulse Strobe: slow > fast
	160 ⇔ 191	Open
	192 ⇔ 223	Random Strobe: slow > fast
	224 ⇔ 255	Open
13		**Dimmer**
	000 ⇔ 255	Closed > Open

Note: V.2006 is a backward-compatibility mode that allows the Q-Spot 300 to function identically to the Q-Spot 250 in DMX, but it will not work in Master/Slave mode with the Q-Spot 250.

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp Check 220/110v switch for proper setting	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		✓	✓
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No laser output	Bounce mirror motor may have shifted during shipping, readjust	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				✓
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	All Chauvet lighting fixtures featuring stand-alone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode	✓			

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

Technical Support

Address: Service Dept.
3000 N 29th Ct, Hollywood, FL 33020 (U.S.A.)
Support (Email): tech@chauvetlighting.com
Telephone: (954) 929-1115 - (Press 4)
Fax: (954) 929-5560 - (Attention: Service)
Website: http://www.chauvetlighting.com

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')

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.

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 (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # 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 an RA #, 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 RA #
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.

Technical Specifications

WEIGHT & DIMENSIONS

Length	15.3 in (389 mm)
Width	17.8 in (452 mm)
Height	20.5 in (521 mm)
Weight	62 lbs (28 kg)

POWER

Operating Voltage (internally selectable)	100V, 115V, 208V, 230V - 50/60 Hz
Power Consumption	370W (3.07A at 120V) Max
Inrush Power	75W (2.11A at 120V)
Power-factor	0.97

LIGHT SOURCE

Lamp	MSD 250W 8000°K 2000hrs

PHOTO OPTIC

Illuminance at 1m	4,010 fc (43,148 lux)
Beam Angle	20°
Pan	530°
Tilt	280°

GOBOS (ROTATING)

Outside diameter	37 mm
Image diameter (maximum)	28.5 mm
Maximum Thickness	4 mm

GOBOS (STATIC)

Outside diameter	37 mm
Image diameter (maximum)	28 mm
Max Thickness	0.3 mm

THERMAL

Maximum ambient temperature	104°F (40°C)

FUSE

110V Operation	6.3A 125V fast blow or 6.3A 250V fast blow
230V Operation	3.15A 250V fast blow

CONTROL & PROGRAMMING

Data input	locking 3-pin XLR male socket
Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols	DMX-512 USITT
DMX Channels	15 or 13 or 12

ORDERING INFORMATION

Q-Spot 300	QSPOT300

WARRANTY INFORMATION

Warranty	2-year limited warranty