MiNSpot™

Snapshot

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

USER MANUAL

Chauvet, 3000 N 29th Ct, Hollywood, FL 33020 U.S.A.
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FAX (954) 929-5560
www.chauvetlighting.com

TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What is included

- 1 x MinSpot™
- 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

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

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

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toll free: 800.762.1084

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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, it 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 fuse and be sure to replace with same fuse size and type.
- 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.
- 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

CONTROL FEATURES

- 5 or 13-channel DMX-512 LED moving yoke
- Pan: 540° / tilt: 270°
- RGB color mixing
- Gobo wheel
  - 9 gobos + open
  - Gobo wheel spin effect
- Variable electronic strobe
- Variable electronic dimmer (0 – 100%)
- Vector speed channel for pan/tilt, RGB color mixing and color macros
- Built-in movement macros via master/slave or DMX

ADDITIONAL FEATURES

- User-selectable basic or advanced operating modes
- User-selectable pan/tilt ranges
  - Pan: 540°, 360°, 180°
  - Tilt: 270°, 180°, 90°
- Compact and lightweight
- LED display menu with invert
- Reset to factory settings option
- Display auto on/off
- Pan/tilt invert option
- Fan cooled

OPTIONAL CONTROLLERS

- Easy Controller (CA-9)

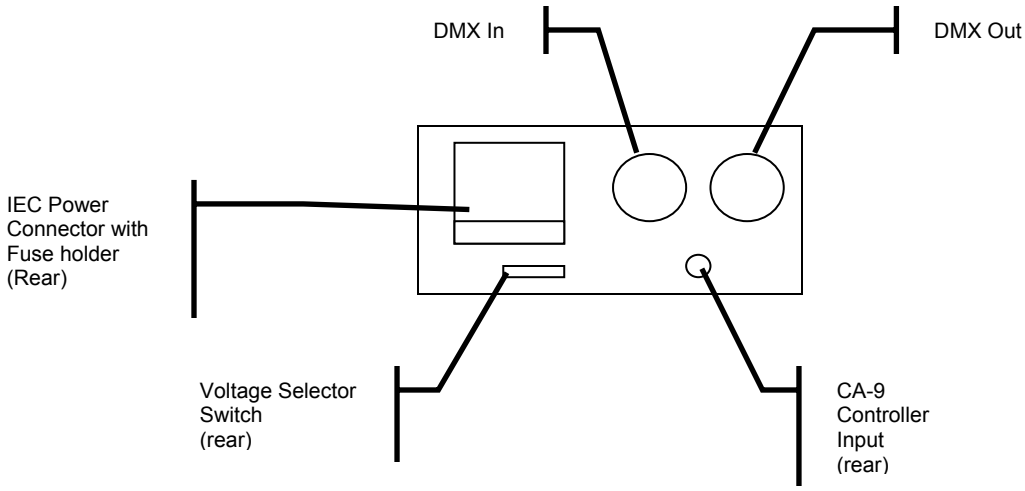
DMX Channel Summary - 13 Channel Mode

CHANNEL	FUNCTION
1	Pan
2	Pan Fine
3	Tilt
4	Tilt Fine
5	Vector Speed (Pan/Tilt)
6	Dimmer/Strobe
7	Red
8	Green
9	Blue
10	Color Macros
11	Vector Speed (Color)
12	Movement Macros
13	Gobo

DMX Channel Summary - 5 Channel Mode

CHANNEL	FUNCTION
1	Pan
2	Tilt
3	Shutter
4	Color Macro
5	Gobo

Product Overview

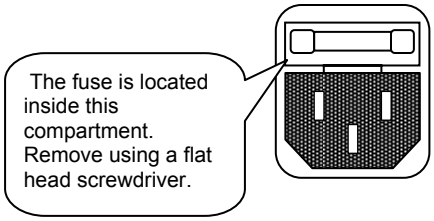


3. SETUP

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.



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.

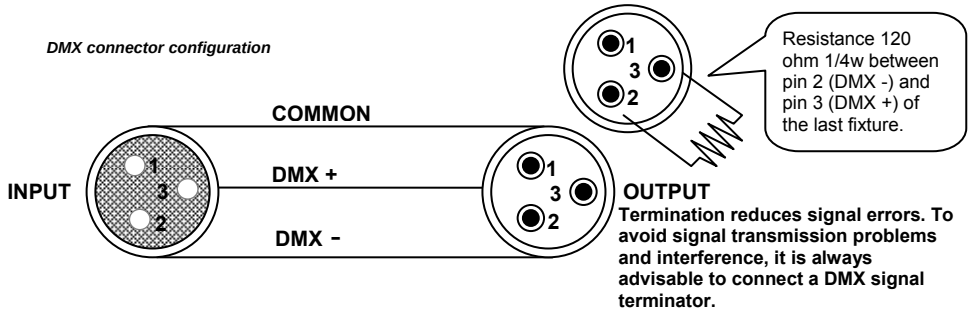
DMX DATA CABLE

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

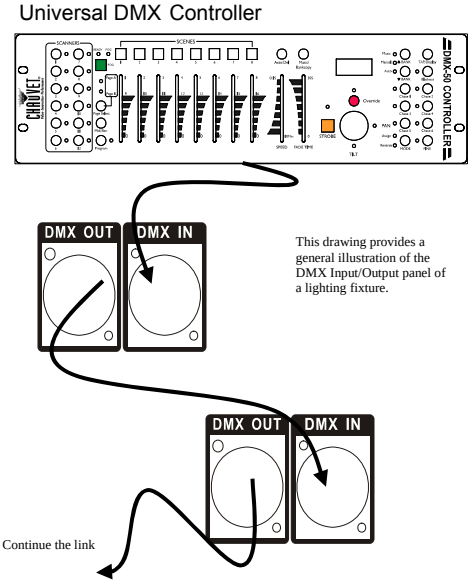
Setting up a DMX Serial Data Link

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

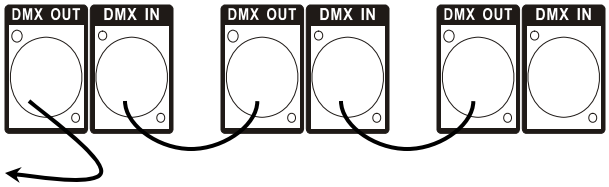
Universal DMX Controller



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

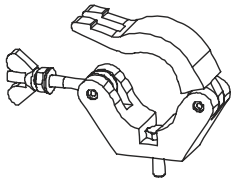
This fixture may be mounted in any position provided there is adequate room for ventilation.

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



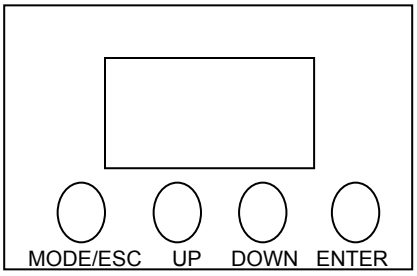
Note!
Clamp is sold separately.

4. OPERATING INSTRUCTIONS

Navigating the Control Panel

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

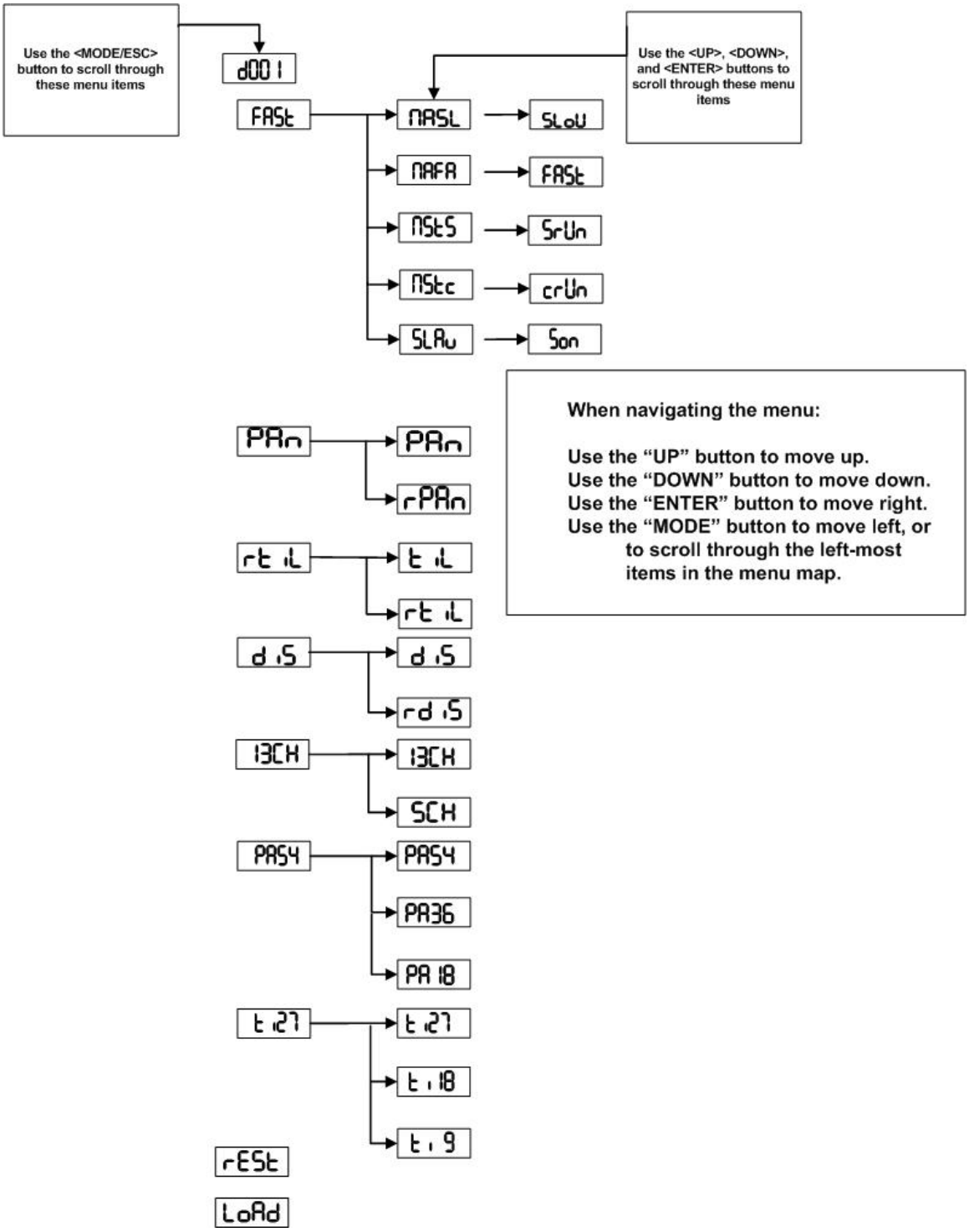
Button	Function
<MODE/ESC>	Used to access the menu or to return to a previous menu option
<UP>	Scrolls through menu options in ascending order
<DOWN>	Scrolls through menu options in descending order
<ENTER>	Used to select and store the current menu or option within a menu



The Control Panel LED Display shows the menu items you select from the menu map on page #11. 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 **<MODE/ESC>** button repeatedly until you reach the desired menu function. Use the **<UP>** and **<DOWN>** buttons to navigate the menu options. Press the **<ENTER>** button to select 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


Use the <MODE/ESC> button to scroll through these menu items
Use the <UP>, <DOWN>, and <ENTER> buttons to scroll through these menu items
d001
FASt
nASL
SLoU
nAFA
FASt
nSt5
SrUn
nStc
crUn
SLAu
Son
PAn
PAn
rPAn
rt iL
t iL
rt iL
d i5
d i5
rd i5
13CH
13CH
5CH
PA54
PA54
PA36
PA 18
t i27
t i27
t i18
t i9
rESt
LoAd
When navigating the menu:
Use the "UP" button to move up.
Use the "DOWN" button to move down.
Use the "ENTER" button to move right.
Use the "MODE" button to move left, or to scroll through the left-most items in the menu map.

User Configurations

TO SET THE PAN TO INVERTING OR NON-INVERTING:

1) Press the Mode button until it shows PAn or rPAn
2) Use the Up/Down buttons to set to the desired inversion, press enter to confirm.

TO SET THE TILT TO INVERTING OR NON-INVERTING:

1) Press the Mode button until it shows tiL or rtiL
2) Use the Up/Down buttons to set to the desired inversion, press enter to confirm.

TO SET THE LED READOUT TO INVERTING OR NON-INVERTING:

1) Press the Mode button until it shows diS or rdiS
2) Use the Up/Down buttons to set to the desired inversion, press enter to confirm.

TO SET THE DMX CHANNEL CONFIGURATION:

1) Press the Mode button until it shows 13CH or 5CH
2) Use the Up/Down buttons to set to the desired inversion, press enter to confirm.

TO SET THE MAXIMUM PAN ANGLE:

1) Press the Mode button until it shows PA54 or PA36 or PA 18
2) Use the Up/Down buttons to set to the desired inversion, press enter to confirm.

TO SET THE MAXIMUM TILT ANGLE:

1) Press the Mode button until it shows t.27 or t.18 or t.9
2) Use the Up/Down buttons to set to the desired inversion, press enter to confirm.

Service Functions

TO RESET THE FIXTURE:

1) Press the Mode button until the display shows rESt
2) Press enter to confirm your selection.

TO RESTORE ALL SETTINGS TO THEIR FACTORY DEFAULTS:

1) Press the mode button until the display reads LoAd
2) Press enter to confirm your selection.

Operation

Stand-Alone Mode (Auto Mode):

This mode allows a single unit to run to a factory installed program in one of two speeds.

1) To set the fixture in auto mode **Fast**, select nAFA Once confirmed the display reads FASt
2) To set the fixture in auto mode **Slow**, select nASL Once confirmed the display reads SLoU

Master/Slave Mode (Master Sound):

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. Proper performance it may be necessary to use a terminator at the last fixture. For more information about terminators, see page 8.
2) Choose a unit to function as the Master. Select NAFA/NASL or NStS (see below for readout) depending upon which master mode you require. The master unit must be the first unit in line. Finally, chain the units together using DMX cable.

   Master Auto nAFA or nASL

   Master Sound nStS becomes SrUn when confirmed

3) Select slave function by using the Up/Down keys to reach SLAv in the Master/Auto menu on the slave units, and they will react in the same as the Master.

   Slave SLAu becomes Son when confirmed

DMX Mode

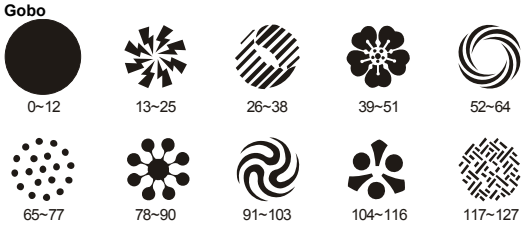
This mode allows the unit to be controlled by any universal DMX controller. If you are unfamiliar with DMX, please read the DMX Primer on page #19.

1) The default mode for the fixture is DMX, which appears as d001 on the LED Readout.

DMX Channel Values (13 Channel)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Pan**
2	000 ⇔ 255	**Pan Fine**
3	000 ⇔ 255	**Tilt**
4	000 ⇔ 255	**Tilt Fine**
5	000 ⇔ 255	**Vector Speed:** (Normal → Slow)
6		**Dimmer/Strobe**
	000 ⇔ 007	Closed
	008 ⇔ 134	100-0%
	135 ⇔ 239	Strobe (slow → fast)
	240 ⇔ 255	Open
7		**Red**
	000 ⇔ 255	0-100%
8		**Green**
	000 ⇔ 255	0-100%
9		**Blue**
	000 ⇔ 255	0-100%
10		**Color Macros**
	000 ⇔ 007	No Function
	008 ⇔ 018	Magenta
	019 ⇔ 031	Purple
	032 ⇔ 043	Orange
	044 ⇔ 055	Pink
	056 ⇔ 067	Yellow
	068 ⇔ 079	Pale Green
	080 ⇔ 091	Light Blue
	092 ⇔ 103	Teal
	104 ⇔ 115	Sky Blue
	116 ⇔ 127	Blue
	128 ⇔ 139	Olive
	140 ⇔ 151	Turquoise
	152 ⇔ 163	Orange
	164 ⇔ 175	Yellow
	176 ⇔ 187	Magenta
	188 ⇔ 199	White
	200 ⇔ 212	Color-Change Macro 1
	213 ⇔ 225	Color-Change Macro 2
	226 ⇔ 239	Color-Change Macro 3
	240 ⇔ 255	Color-Change Macro 4
11	000 ⇔ 255	**Vector Speed (Color)**
12		**Movement Macros**
	000 ⇔ 007	No Function
	008 ⇔ 022	Auto Program 1
	023 ⇔ 037	Auto Program 2
	038 ⇔ 052	Auto Program 3
	053 ⇔ 067	Auto Program 4
	068 ⇔ 082	Auto Program 5
	083 ⇔ 097	Auto Program 6
	098 ⇔ 112	Auto Program 7
	113 ⇔ 127	Auto Program 8
	128 ⇔ 142	Sound Active1
	143 ⇔ 157	Sound Active 2
	158 ⇔ 172	Sound Active 3
	173 ⇔ 187	Sound Active 4
	188 ⇔ 202	Sound Active 5
	203 ⇔ 217	Sound Active 6
	218 ⇔ 232	Sound Active 7
	233 ⇔ 255	Sound Active 8
13		**Gobo**
		 0~12 13~25 26~38 39~51 52~64
		 65~77 78~90 91~103 104~116 117~127
	128-255	**Scrolling Gobo Effect slow → fast**

DMX Channel Values (5 Channel)

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	**Pan**
2	000 ⇔ 255	**Tilt**
3		**Dimmer/Strobe**
	000 ⇔ 007	Closed
	008 ⇔ 134	100-0%
	135 ⇔ 239	Strobe (slow → Fast)
	240 ⇔ 255	Open
4		**Color Macros**
	000 ⇔ 007	No Function
	008 ⇔ 018	Magenta
	019 ⇔ 031	Purple
	032 ⇔ 043	Orange
	044 ⇔ 055	Pink
	056 ⇔ 067	Yellow
	068 ⇔ 079	Pale Green
	080 ⇔ 091	Light Blue
	092 ⇔ 103	Teal
	104 ⇔ 115	Sky Blue
	116 ⇔ 127	Blue
	128 ⇔ 139	Olive
	140 ⇔ 151	Turquoise
	152 ⇔ 163	Orange
	164 ⇔ 175	Yellow
	176 ⇔ 187	Magenta
	188 ⇔ 199	White
	200 ⇔ 212	Color-Change Macro 1
	213 ⇔ 225	Color-Change Macro 2
	226 ⇔ 239	Color-Change Macro 3
	240 ⇔ 255	Color-Change Macro 4
5		**Gobo** 
	128-255	**Scrolling Gobo Effect slow → fast**

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.

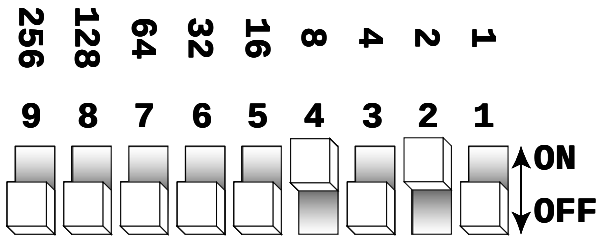
Set the start address using the group of DIP switches located usually on bottom of the fixture. Each dip switch has an associated value. Adding the value of each switch in the ON position will provide the start address. Figuring out which switches to toggle ON given a specific start address can be accomplished by determining which switch values will add up to the address value, and turning these switches on. Do so by doing the following:

1) Determine the largest value switch that is less than the start address. Turn this switch on.
2) Subtract the value of the switch you just turned on from the starting address number.
3) Determine the largest value switch that is less than the remainder from the previous subtraction. Turn this switch on.
4) Subtract the value of the switch you just turned on from the remainder of the previous subtraction.
5) Repeat steps three and four until you have a remainder of zero.

EXAMPLE STARTING ADDRESS

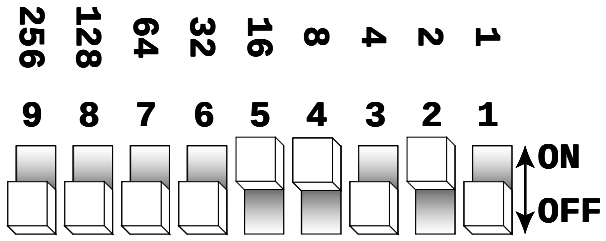
Address 10

Switch # 4 = 8
Switch # 2 = 2
Total = 10



Address 24

Switch # 5 = 16
Switch # 4 = 8
Total = 24



Resolving address using simple math.

Address 233

233 – (128) = 105, Turn ON Dip # 8
105 – (64) = 41, Turn ON Dip # 7
41 – (32) = 9, Turn ON Dip # 6
9 – (8) = 1, Turn ON Dip # 4
1 – (1) = 0, Turn ON Dip # 1

DIPSWITCH	(DMX VALUE)
1	1
2	2
3	4
4	8
5	16
6	32
7	64
8	128
9	256

DMX QUICK REFERENCE CHART

DMX Address Quick Reference Chart

Dip Switch Position

DMX DIP SWITCH SET																					
0=OFF	#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1				
1=ON	#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1				
	#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1				
X=OFF or ON	#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1				
#1	#2	#3	#4	#5																	
0	0	0	0	0		32	64	96	128	160	192	224	256	288	320	352	384	416	448	480	
1	0	0	0	0	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481	
0	1	0	0	0	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482	
1	1	0	0	0	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483	
0	0	1	0	0	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484	
1	0	1	0	0	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485	
0	1	1	0	0	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486	
1	1	1	0	0	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487	
0	0	0	1	0	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488	
1	0	0	1	0	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489	
0	1	0	1	0	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490	
1	1	0	1	0	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491	
0	0	1	1	0	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492	
1	0	1	1	0	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493	
0	1	1	1	0	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494	
1	1	1	1	0	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495	
0	0	0	0	1	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496	
1	0	0	0	1	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497	
0	1	0	0	1	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498	
1	1	0	0	1	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499	
0	0	1	0	1	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500	
1	0	1	0	1	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501	
0	1	1	0	1	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502	
1	1	1	0	1	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503	
0	0	0	1	1	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504	
1	0	0	1	1	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505	
0	1	0	1	1	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506	
1	1	0	1	1	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507	
0	0	1	1	1	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508	
1	0	1	1	1	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509	
0	1	1	1	1	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510	
1	1	1	1	1	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

Dip Switch Position DMX Address

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

6. 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	6.8 in (173 mm)
Width	6.8 in (173 mm)
Height	9.8 in (249 mm)
Weight	8.3 lbs (3.8 kg)

POWER

Switch-selectable power settings	120V 60Hz AC or 230V 50Hz
Fuse	2A 250V
Power Consumption	68.1W (0.60A) Max at 120V
Inrush Power	83.6W (1.41A) inrush at 120V
Power Factor	0.92

LIGHT SOURCE

LED	1, 14W RGB 50,000hrs

PHOTO OPTIC

Beam Angle	13°
Illuminance at 1M	100 fc (1,076 lux)

RANGE

Pan	540°
Tilt	270°

THERMAL

Maximum ambient temperature	104°F (40°C)

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	5 or 13

ORDERING INFORMATION

MiNSpot	MiNspot
Optional Controller	CA-9

WARRANTY INFORMATION

Warranty	2-year limited warranty