

# COLORado™ 1 VW

## Snapshot

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

## USER MANUAL



Chauvet, 3000 N 29<sup>th</sup> Ct, Hollywood, FL 33020 U.S.A.  
(800) 762-1084 – (954) 929-1115  
FAX (954) 929-5560  
[www.chauvetlighting.com](http://www.chauvetlighting.com)

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# 1. BEFORE YOU BEGIN

## What is included

- 1 x COLORado™ 1 VW
- 1 x Power cable with plug
- 1 x IP66 power extension cable
- 1 x IP66 signal extension cable
- 1 x DMX input cable
- 1 x DMX output cable
- 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

This fixture has an auto-switching power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate between 100V and 240V AC 50-60 Hz. 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.

## 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! (If applicable)
- 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.
- Do not daisy chain power to more than **20** units @ 120V and **50** units @ 230V.

### **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.***

## LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. It is estimated that a viable lifespan of 40,000 to 50,000 hours will be achieved under normal operational conditions. If improving on this lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

# 2. INTRODUCTION

## Features

- 2, 3 or 6-channel DMX-512 LED wash light (with ID addressing)
- Operating modes
  - 2-channel: cool white, warm white control
  - 3-channel: cool white, warm white, Dimmer
  - 2 channel: master dimmer, color temp macros
  - 6 channel: master dimmer, cool white, warm white, color temp macros, strobe, ID addressing
- Color temp mixing with or without DMX controller
- Recall custom programs via master/slave or DMX

## Additional Features

- High-power, 1W (350mA) LEDs
- Ingress Protection: IP66
- Additional power output: max 20 units @ 120V (see manual for details)
- LED display with password protection
- Gel frame holder (4mm max thickness)
- Transfer custom programs between fixtures
- Double-bracket yoke doubles as floor stand

## OPTIONS

- Optical systems: 15° (C-LENS1536), 30° (installed)
- 16.4ft (5m) power extension cable (IP5POWER)
- 16.4ft (5m) signal extension cable (IP5SIG)

## DMX Channel Summary

The COLORado1™ VW has a total of 4 DMX channel configurations, referred to as “Personalities” in this manual and in the fixture onboard control board. The 6 personalities are [CW, CW+D, STUDIO 1, STUDIO 2]. Each of the different personalities can be accessed from the control panel. Please see section on “Control Panel Functions” on a description on how to accomplish this.

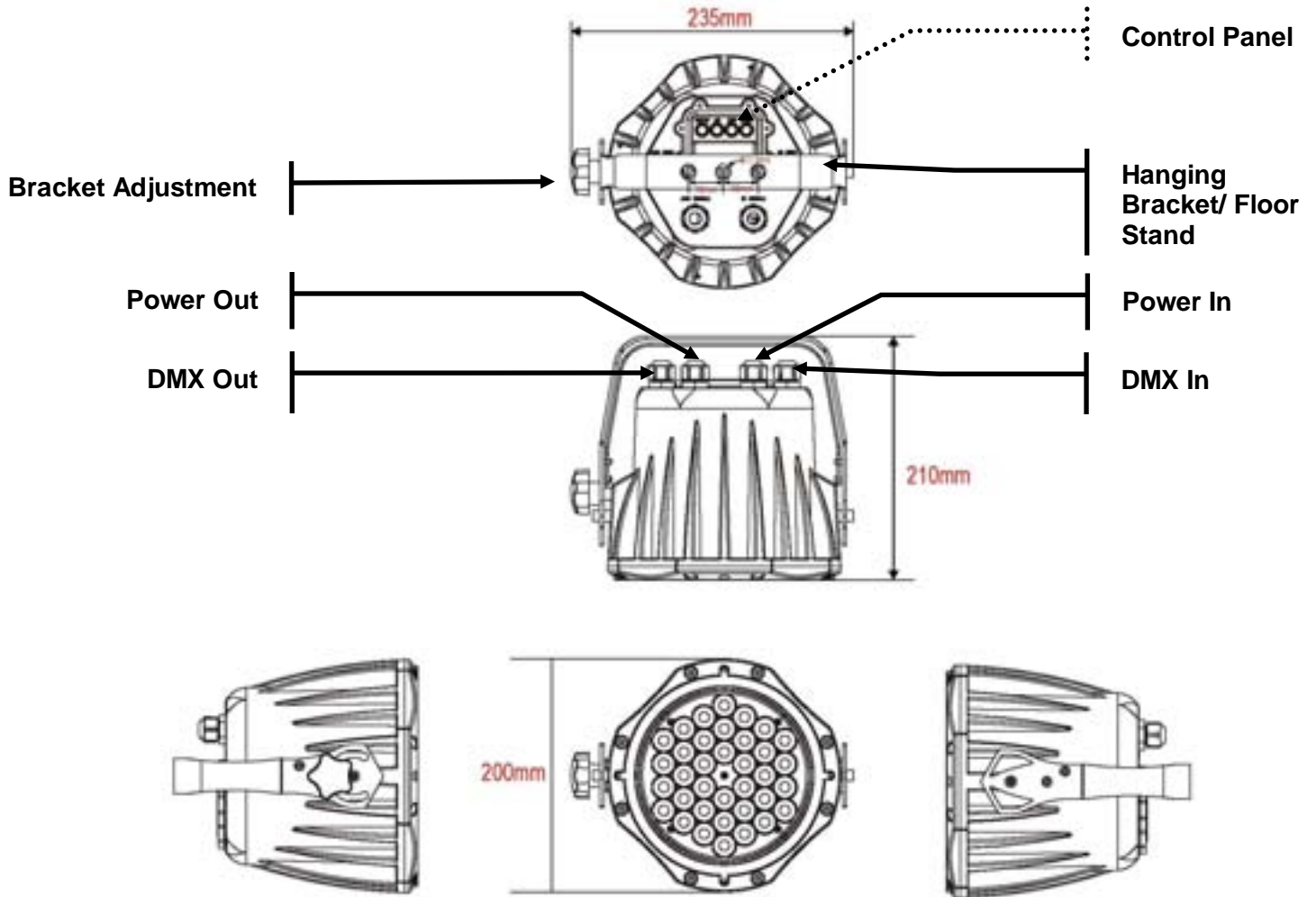
[CW]	CHANNEL	DESCRIPTION
	1	Cool White
	2	Warm White

[CW+D]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Cool White
	3	Warm White

[STUDIO 1]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	White CT Macro

[STUDIO 2]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Cool White
	3	Warm White
	4	White CT Macro
	5	Strobe
	6	ID Address

# Product Overview



# 3. SETUP

## AC Power

This fixture has an auto-switching switch-mode power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This fixture will accommodate between 100V and 240V AC 50-60 Hz. 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.

This fixture is designed for power linking from one COLORado1™ VW to another COLORado1™ VW fixture. Each fixture ships with IP-66 proprietary power input cables. Each fixture ships with a power adapter to Male Edison connector.

**Warning!**

**All fixtures must be connected to circuits with a suitable Earth Ground.**

Depending on the application, the lighting fixture may require a different connector Please refer to the below wire color code if installing a new connector.

Wire	Connection
Brown	AC Live
Blue	AC Neutral
Green/Yellow	AC Ground

Connection	Pin
AC Live	1
AC Neutral	2
Ground(Earth)	3



## Mounting

## Orientation

This fixture may be mounted in any safe position.

## Rigging

The fixture includes a mounting yoke to which a rigging clamp can be attached. You must supply your own clamp and make sure the clamp is capable of supporting the weight of this fixture. It is recommended to use at least 2 mounting points per fixture. You can order “C” and “O”-clamps from any CHAUVET dealer or distributor (CLP-15, CLP-06 recommended).

*Note: There are 2 types of applications for this fixture: floor stand for up lighting, and overhead use for down lighting. If you are using this fixture for up lighting, then you must use at least 1 safety cable/chain for each fixture in addition to the mounting brackets.*

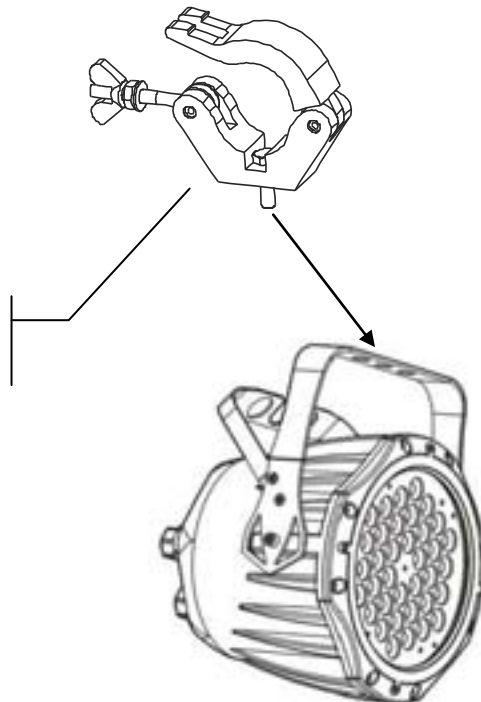
If hanging the fixture for over head use, then please follow the below steps.

1. Block access below the work area and use suitable and stable platform when installing or servicing fixture.
2. Safety cables must always be used, secured through the heat sink ventilation passageway. The safety cable must be capable of holding 10 times the weight of the fixture.
3. Verify the structure can hold 10 times the weight of all to-be installed fixtures.

**Caution!**

*After prolonged periods of operation, the fixture chassis may reach high temperatures. This fixture must be mounted in a ventilated location, as it is convection cooled.*

**Hanging Clamp**  
*Note: sold separately*

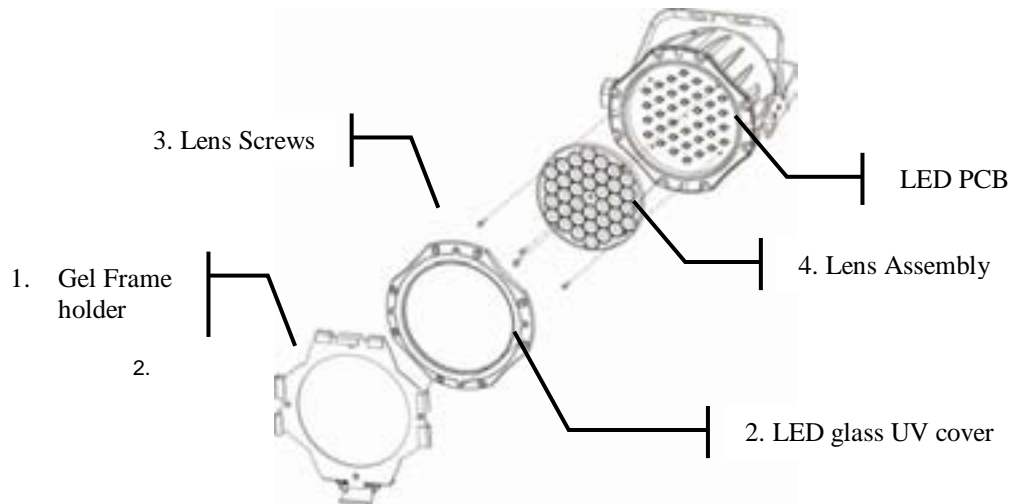


**Safety Cable**

*Note: the cable must be secured through the heat sink ventilation passageway.*

## Lens Assembly Installation/Replacement

The COLORado™ 1 VW comes with 30° lens assembly pre-installed from the factory. However, there is another optional lens kit (**CLENS1536**), which is the 15 degree assembly. This is available as an accessory, and will alter the beam angle. Please follow the below instructions for proper replacement/installation.



1. Remove the gel frame holder, using a Phillips#2 screwdriver.
2. Remove the front, glass UV cover (black) by removing the 8 Phillips #2 screws that hold it in place.
3. After removing the glass cover, remove the screws that hold the lens assembly in place. There are 5 Phillips #2 screws that secure this assembly in position.

**Note: use care when performing this procedure, as this gives you direct access to the LEDs, which are very fragile.**

4. You now should have full access to the lens assembly. This must be removed and the old lenses must be replaced with the new lenses. The same assembly is to be reinstalled with the new lenses in place and the process is complete.

### **Warning!**

1. **When replacing the lens assembly, please make sure that the power is disconnected from the fixture beforehand.**
2. **You must also be VERY CAREFUL when opening this fixture. Improper handling on the behalf of the user may void the IP-66 rating of this fixture.**

## 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.

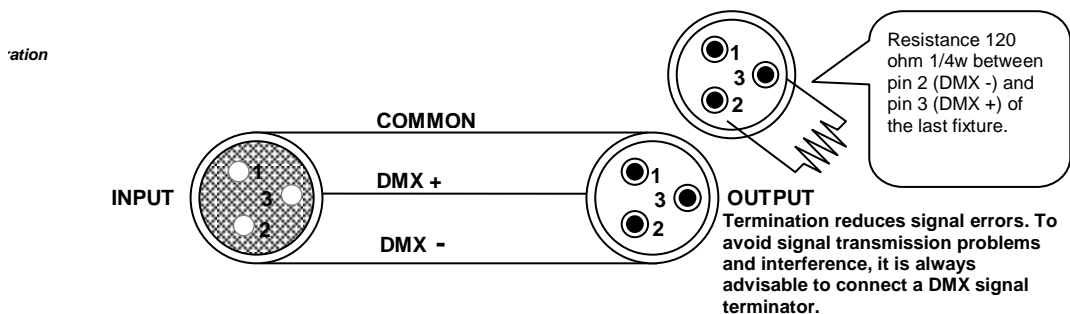
### DMX DATA CABLE

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

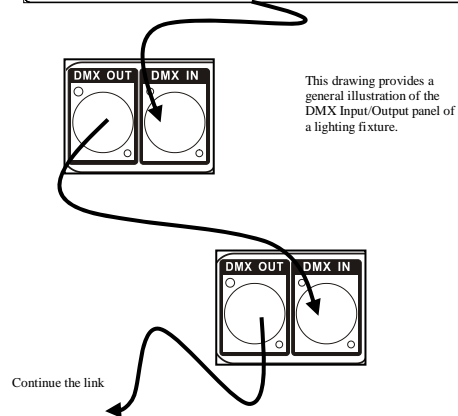
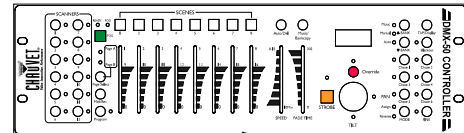
### Setting up a DMX Serial Data Link

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

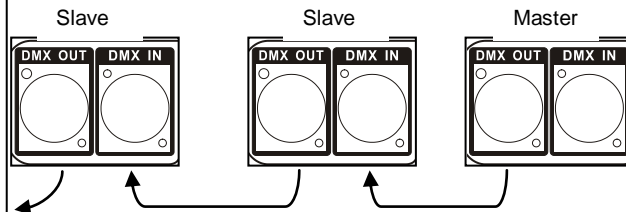


This drawing provides a general illustration of the DMX Input/Output panel of a lighting fixture.

### 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. 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.



# 4. OPERATING INSTRUCTIONS

## Control Options

The COLORado™ 1 VW is addressable in the DMX range of 001 to 512. In its simplest control form, this allows for the control of up to 85 fixtures in the 6-channel “Studio 2” personality; however, a secondary “ID” address system exists for use in a limited DMX universe and architectural environments. The “ID” address system allows the user to assign up to 66 fixtures within the same DMX address; in effect, multiplying the control of COLORado’s™ within a single universe to 3,696 fixtures. The COLORado’s™ “ID” address system is accessed using DMX channel 6 [Studio 2]. Consideration must be placed when programming live performances or cues that need to trigger on demand or on a time line. So, to remain within one second execution time, program no greater than 10 fixtures on ID addressing per DMX channel.

## COLORado™ Control Quick Setup

For detailed instructions on display panel operations and functions please advance to the section titled; “Display Panel Functions”. These steps assume that you have read and are familiar with setting up a DMX serial data link.

### DMX-512 control without “ID” address

The COLORado1™ VW operates on 6 channels of DMX (“Studio 2” personality). Address each fixture in increments of 9 channels. (I.e. 1,10,19,28, etc...) To save time you can use the same DMX address for each fixture. All fixtures will then respond simultaneously to control. You may also group your fixtures and address those groups alike for faster programming and control.

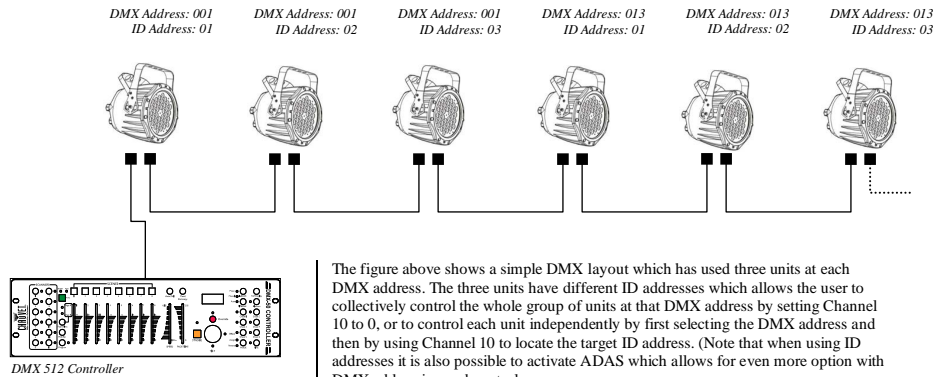
1. Access the control panel function by pressing the **(MENU)** button until the **{RUN MODE}** is displayed.
2. Press **(SET)** and use the **(UP/DOWN)** buttons to select **{DMX}** function.
3. Then, Press **(MENU)** button until **{DMX512 ADDRESS}** is displayed.
4. Press the **(SET)** button.
6. Use the **(UP/DOWN)** buttons to increase or decrease channels between 001 and 512.
7. Press the **(SET)** button to confirm action. Then press **(MENU)** to exit.

Deactivate ID addressing in each fixture by setting panel function **{ID ON/OFF}** to OFF.  
**{MENU} ↻ {SETTINGS} ↻ {ID ON/OFF} ↻ [OFF]**

Notes: If ID addressing is not deactivated in the fixture’s control panel function, unintended results may occur if values are present in channel 9. Make sure values on channel 9 are set to “0”.

## DMX-512 addressing with ID address

1. Follow instructions 1 ~ 4 for DMX512 addressing.
2. Activate ID addressing in each fixture by setting panel function {**ID ON/OFF**} to ON.  
{**MENU**} ⇨ {**Settings**} ⇨ {**ID ON/OFF**} ⇨ [**ON**]
3. For every DMX512 address the user can set 66 separate ID addresses.
4. Set ID addresses in each fixture by setting panel function {**ID address**} to incremental values.  
(I.e. 1,2,3,4,5,6,etc...)  
{**MENU**} ⇨ {**Settings**} ⇨ {**ID address**} ⇨ [**01 ~ 66**]
5. ID addresses are accessible using Channel 9 [Stage 1].



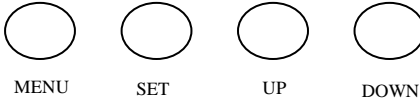
The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting Channel 10 to 0, or to control each unit independently by first selecting the DMX address and then by using Channel 10 to locate the target ID address. (Note that when using ID addresses it is also possible to activate ADAS which allows for even more option with DMX addressing and control.

## Setting the DMX address

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 occupies or uses 7 channels of DMX and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, 105 and 106. Choose start addresses so that the channels used do not overlap and note the start address selected for future reference. The COLORado™ 1 VW uses up to 6 channels of DMX. If this is your first time using DMX, we recommend reading the DMX Primer in the Appendix Section.





## Control Panel Functions

All fixture functions and settings are accessible via the built-in control panel interface.



BUTTON	FUNCTION
<b>MENU</b>	Exits from the current menu or function
<b>SET</b>	Enables the currently displayed menu or sets the currently selected value in to the selected function
<b>UP</b>	Navigates upwards through the menu list and increases the numeric value when in a function
<b>DOWN</b>	Navigates downwards through the menu list and decreases the numeric value when in a function

## Menu Map

MAIN FUNCTION	SUB-FUNCTION	SELECTION	INSTRUCTION
1. STR:	COOL	000 ~ 255*	User can combine Cool white and warm white to generate a custom color Select strobing frequency between 0 and 20Hz
	WARM	000 ~ 255*	
	STRb	000 ~ 255*	
	diMM	000 ~ 255*	
2. dMX		001 ~ 512	Sets the DMX starting address
4. RUN		dMX~SLAV	Sets the operating mode for the fixture: to receive signal from a DMX controller (DMX) or to receive signal from the DMX out of another COLORado1™ VW (Slave)
5. PERS		CW	2-channel cool/warm white mixing
		CWd	3-channel mixing with master dimmer
		STU1	2-channel preset white with dimmer
		STU2	6-channel full mode
6. ID		1-66	Assigns the ID address to a fixture
7. SET	ID	On~Off	Enables or disables ID ADAS
	UPLd	<i>*Password required</i>	Performs an upload of the custom programs to another fixture. Displays "End!" when successful
	RESET Parameter	<i>*Password required</i>	Performs a factory reset
8. PASS		On~Off	Enables or Disables password lockout
9. CAL:	White (1~8)	Cool White	Sets Custom White Balance by adjusting the maximum fader value (0~255)
		Warm White	



## DMX512 Channel Values

The COLORado™ 1 VW has 4 DMX512 channel configurations [**CW**, **CW+D**, **STUDIO1**, **STUDIO2**].

### CW

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	<b>Cool White</b> 0 ⇔ 100%
2	000 ⇔ 255	<b>Warm White</b> 0 ⇔ 100%

### CW+D

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	<b>Dimmer</b> 0 ⇔ 100%
2	000 ⇔ 255	<b>Cool White</b> 0 ⇔ 100%
3	000 ⇔ 255	<b>Warm White</b> 0 ⇔ 100%

### STUDIO 1

CHANNEL	VALUE	FUNCTION
1	000 ⇔ 255	<b>Dimmer</b> 0 ⇔ 100%
2	000 ⇔ 010 011 ⇔ 040 041 ⇔ 070 071 ⇔ 100 101 ⇔ 130 131 ⇔ 160 161 ⇔ 190 191 ⇔ 220 221 ⇔ 255	<b>White CT Macro</b> No Function White 1: 2800K White 2: 3000K White 3: 3200K White 4: 3400K White 5: 4200K White 6: 4900K White 7: 5600K White 8: 5900K

### STUDIO 2

CHANNEL	VALUE	FUNCTION
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<b>1</b>	000 ⇔ 255	<b>Dimmer</b> 0 ⇔ 100%
<b>2</b>	000 ⇔ 255	<b>Cool White</b> 0 ⇔ 100%
<b>3</b>	000 ⇔ 255	<b>Warm White</b> 0 ⇔ 100%
<b>4</b>	000 ⇔ 010 011 ⇔ 040 041 ⇔ 070 071 ⇔ 100 101 ⇔ 130 131 ⇔ 160 161 ⇔ 190 191 ⇔ 220 221 ⇔ 255	<b>White CT Macro</b> No Function White 1: 2800K White 2: 3000K White 3: 3200K White 4: 3400K White 5: 4200K White 6: 4900K White 7: 5600K White 8: 5900K
<b>5</b>	000 ⇔ 004 005 ⇔ 255	<b>Strobe</b> No Function 0 ⇔ 20Hz

**CHANNEL 6 (ID ADDRESS SELECTION)**

	000 ⇔ 009	All IDs	212	ID 23	235	ID 46
	010 ⇔ 019	ID 1	213	ID 24	236	ID 47
	020 ⇔ 029	ID 2	214	ID 25	237	ID 48
	030 ⇔ 039	ID 3	215	ID 26	238	ID 49
	040 ⇔ 049	ID 4	216	ID 27	239	ID 50
	050 ⇔ 059	ID 5	217	ID 28	240	ID 51
	060 ⇔ 069	ID 6	218	ID 29	241	ID 52
	070 ⇔ 079	ID 7	219	ID 30	242	ID 53
	080 ⇔ 089	ID 8	220	ID 31	243	ID 54
	090 ⇔ 099	ID 9	221	ID 32	244	ID 55
	100 ⇔ 109	ID 10	222	ID 33	245	ID 56
	110 ⇔ 119	ID 11	223	ID 34	246	ID 57
	120 ⇔ 129	ID 12	224	ID 35	247	ID 58
	130 ⇔ 139	ID 13	225	ID 36	248	ID 59
	140 ⇔ 149	ID 14	226	ID 37	249	ID 60
	150 ⇔ 159	ID 15	227	ID 38	250	ID 61
	160 ⇔ 169	ID 16	228	ID 39	251	ID 62
	170 ⇔ 179	ID 17	229	ID 40	252	ID 63
	180 ⇔ 189	ID 18	230	ID 41	253	ID 64
	190 ⇔ 199	ID 19	231	ID 42	254	ID 65
	200 ⇔ 209	ID 20	232	ID 43	255	ID 66
	210	ID 21	233	ID 44		
	211	ID 22	234	ID 45		

## **Important Notes about Studio 2 DMX Operation**

### **MASTER DIMMER**

- Channels 1 controls the intensity of the currently projected color
- When the slider is at the highest position (255), then the intensity of the output is at the maximum.

### **COOL WHITE, WARM WHITE, AND WHITE CT MACRO SELECTION**

- Channels 2, 3 control the intensity ratio of each of the Cool & Warm White LEDs.
- Channels 2 and 3 can be combined together to create multiple white CT color combinations.

### **STROBE**

- Channel 4 controls the strobe of Channels 2 through 4..
- Channel 4 has priority over Channels 2, through 4.
- Speed of the strobe is adjustable from 0 to 20 Hz.

### **WHITE CT MACROS**

- Channel 5 selects the required White CT Macro.
- Channel 5 has priority over Channels 2, through 4.
- Channel 1 is used to control the intensity of the current White CT Macro.

### **ID ADDRESS SELECTION**

- Use channel 6 to select ID addressed fixtures.
- Each independent DMX address can have up to 66 ID addressed fixtures.
- ID address "0" allows control of all fixtures simultaneously.

# 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 soft brush to remove dust collected on external 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 external optical lenses 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.

## 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 RMA # 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 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

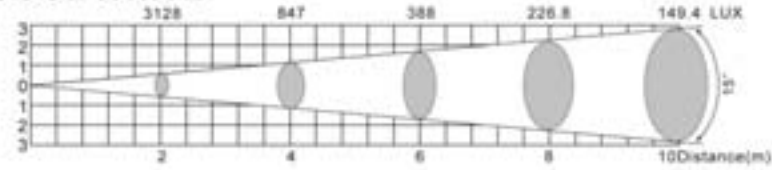
## Claims

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.

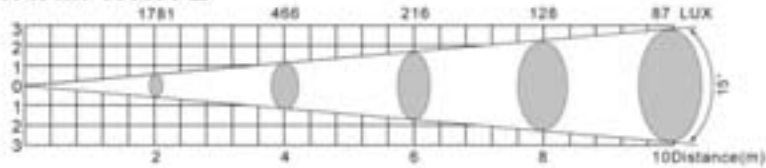
Photometrics

# 15 Degree lenses

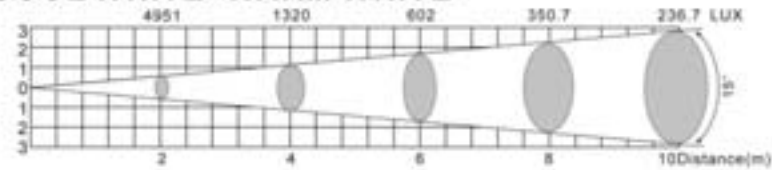
## COOL WHITE



## WARM WHITE

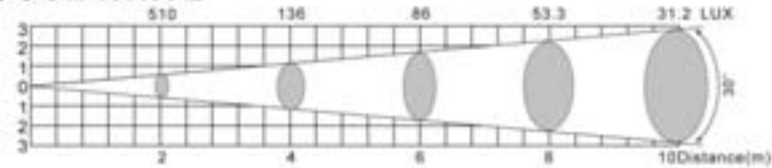


## COOL WHITE+WARM WHITE

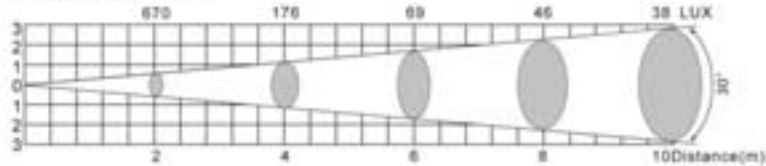


# 30 Degree lenses

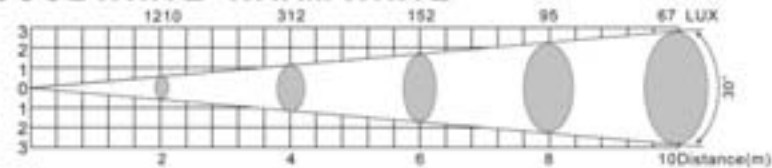
## COOL WHITE



## WARM WHITE



## COOL WHITE+WARM WHITE



## COLORado™ 1 VW Service Maintenance Guide

Symptom(s)	Possible Solution(s)
1 or more LED's are not illuminating	Clean the fixture regularly to avoid any such failure. This fixture is convection cooled, which means that if the surface is kept clean and free of debris, then proper cooling will be allowed to occur
	An LED may have failed, resulting in an open circuit. In this event, all of the red, green, or blue in a single module will no longer illuminate. This does not mean that all of the LEDs have failed, but the circuit is wired in series.
	An LED may have failed, resulting in a short circuit. In this event, only the single LED which has failed will no longer function. This does not mean that all of the LEDs have failed, but the circuit is wired in series.
	<i>-Note: In the event of LED failure, a replacement LED PCB assembly may be purchased directly from Chauvet Part#: P222-CVWLED</i>
1 or more LED's are producing very low output	Check that the lens assembly is installed properly. If the lens assembly is not aligned properly over the LEDs, then they will not project fully <i>-See section on Lens Assembly Installation</i>
	<i>-Note: In the event of LED failure, a replacement LED PCB assembly may be purchased directly from Chauvet Part#: P222-CVWLED</i>
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
	Check cable connections The COLORado™ 1 VW IP-66 cables must be firmly connected and locked in place for operation
	<i>-Note: In the event of autoswitching transformer failure, the unit can be sent in for repair; however, a replacement part can be ordered directly from Chauvet Part#: P140-CPELTR</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 Master PCB failure, a replacement PCB can be ordered directly from Chauvet Part#: P170-CVWMAS</i>
Loss of signal	Use only DMX cables
	Install terminator
	Note: Keep DMX cables separated from power cables or black lights
Stand alone operation	This fixture has built-in, automatic programs that may be triggered from the onboard Control Panel
The display is only showing: ####	The password lockout has been enabled. You may enter the user-set password, or you may use the factory default password: "[UP]-[DOWN]-[UP]-[DOWN]"

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

## Contact Us

### World Wide

#### *General Information*

CHAUVET  
3000 North 29<sup>th</sup> Court  
Hollywood, FL 33020  
voice: 954.929.1115  
fax: 954.929.5560  
toll free: 800.762.1084

#### *Technical Support*

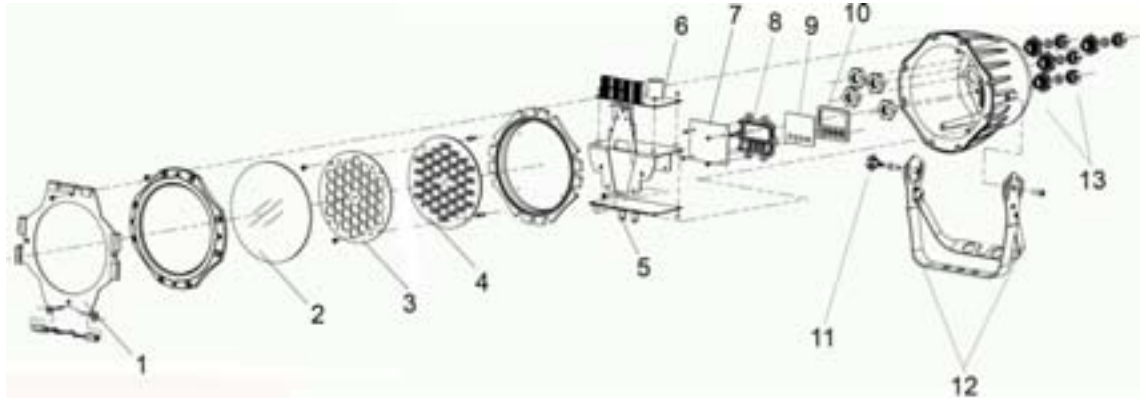
CHAUVET  
3000 North 29<sup>th</sup> Court  
Hollywood, FL 33020  
voice: 954.929.1115 (**Press 4**)  
fax: 954.929.5560 (**Attention: Service**)

#### **World Wide Web**

[www.chauvetlighting.com](http://www.chauvetlighting.com)

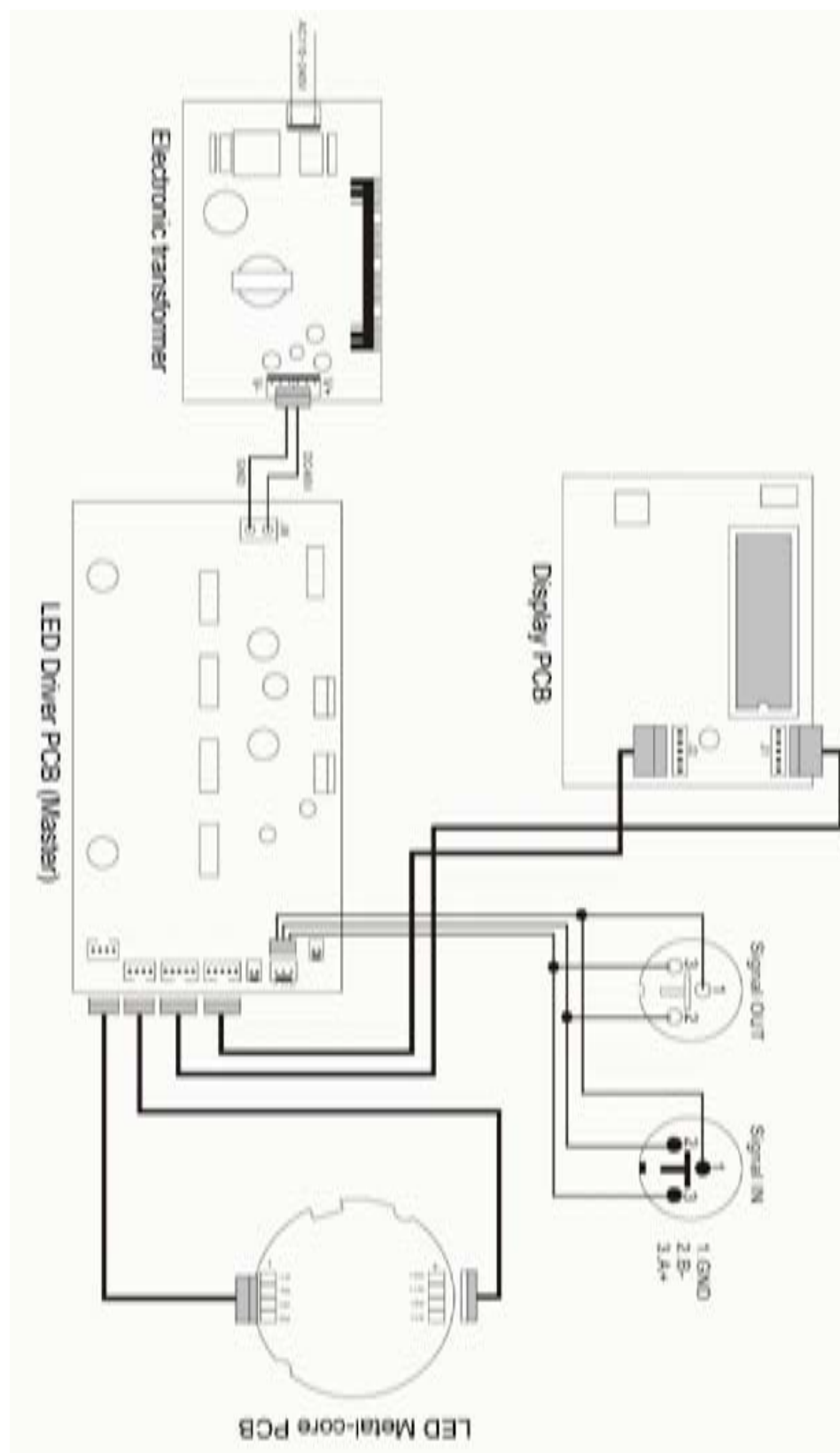


## Blow-out Diagram.



	Description	Part Number
1	Gel holder	P111-C1GELF
2	Glass cover	P111-C1CVRM
3	LED Lens assembly	CL18X10/15/30
4	LED Metal-core PCB assembly	P222-CVWLED
5	LED Driver PCB (Master)	P170-CVWMAS
6	Electronic Transformer	P140-CPELTR
7	Display PCB	P170-CWDISP
8	Display mounting apparatus	P150-CWMTAP
9	Display Clear plastic cover	P150-CWCPC
10	Display watertight seal	P150-CWDWSEL
11	Bracket adjustment metal knob	P111-C1SKNOB
12	Bracket Assembly	P111-C1BSET
13	Cable strain relief/watertight seal-DMX	P111-WRTSLD
13	Cable strain relief/watertight seal-power	P111-WRTSLP
14	Display/Master IC chip	P170-CVWDPIC(not shown)

# COLORado™ 1 VW Wiring Diagram



# Technical Specifications

## WEIGHT & DIMENSIONS

Length ..... 15.7 in (399 mm)  
Width ..... 13.4 in (340 mm)  
Height ..... 11.4 in (289 mm)  
Weight ..... 9.5 lbs (4.3 kg)

## POWER

Autoswitching ..... 100V-240VAC 60/50Hz  
Fuse (internal) ..... 2A 250V  
Power Consumption ..... 51W (0.5A) max @ 120V  
Power Consumption ..... 50.7W (0.4A) max @ 230V  
Inrush Power ..... (0.4A) @ 120V  
Inrush Power ..... (0.165A) @ 230V  
Power Factor ..... 0.72 @ 120V  
Power Factor ..... 0.53 @ 230V  
Power Output ..... 20 units max @ 120V, 40 units max @ 230V

## LIGHT SOURCE

LED ..... 36 x 350mA (18 Warm White, 18 Cool White) 50,000 hrs  
Refresh rate ..... 400Hz

## PHOTO OPTIC

Luminance @ 2m (with optional 15 degree lenses) ..... 3,010 lux  
Luminance @ 2m (with included 30 degree lenses) ..... 1,210 lux  
Beam Angle @2m (with optional 15 degree lenses) ..... 15°  
Field Angle @ 2m (with optional 15 degree lenses) ..... 30.1°  
Beam Angle @ 2m (with included 30 degree lenses) ..... 30°  
Field Angle @ 2m (with included 30 degree lenses) ..... 47°

## 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 ..... 2,3,6

## ORDERING INFORMATION

COLORado™ 1 VW ..... COLORADO1VW

## WARRANTY INFORMATION

Warranty ..... 2-year limited warranty