

COLORADO *EXPO W*

User Manual



Model ID: COLORADOEXPOW


CHAUVET
PROFESSIONAL

Edition Notes

The COLORado EXPO W User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for the COLORado EXPO W as of the release date of this edition.

Trademarks

Chauvet, Chauvet Professional, the Chauvet logo, and COLORado are registered trademarks or trademarks of Chauvet & Sons, LLC (d/b/a Chauvet and Chauvet Lighting) in the United States and other countries. Other company and product names and logos referred to herein may be trademarks of their respective companies.

Copyright Notice

The works of authorship contained in this manual, including, but not limited to, all design, text and images are owned by Chauvet.

© **Copyright 2023 Chauvet & Sons, LLC. All rights reserved.**

Electronically published by Chauvet in the United States of America.

Manual Use

Chauvet authorizes its customers to download and print this manual for professional information purposes only. Chauvet expressly prohibits the usage, copy, storage, distribution, modification, or printing of this manual or its content for any other purpose without written consent from Chauvet.

Document Printing

For best results, print this document in color, on letter size paper (8.5 x 11 in), double-sided. If using A4 paper (210 x 297 mm), configure the printer to scale the content accordingly.

Intended Audience

Any person installing, operating, and/or maintaining this product should completely read through the guide that shipped with the product, as well as this manual, before installing, operating, or maintaining this product.

Disclaimer

Chauvet believes that the information contained in this manual is accurate in all respects. However, Chauvet assumes no responsibility and specifically disclaims any and all liability to any party for any loss, damage or disruption caused by any errors or omissions in this document, whether such errors or omissions result from negligence, accident or any other cause. Chauvet reserves the right to revise the content of this document without any obligation to notify any person or company of such revision, however, Chauvet has no obligation to make, and does not commit to make, any such revisions. Download the latest version from www.chauvetprofessional.com.

Document Revision

This COLORado EXPO W User Manual is the 1st edition of this document. Go to www.chauvetprofessional.com for the latest version.

TABLE OF CONTENTS

1. Before You Begin	1
What Is Included	1
Claims	1
Text Conventions	1
Symbols	1
FCC Compliance.....	1
Expected LED Lifespan.....	1
Safety Notes.....	2
2. Introduction	3
Description	3
Features.....	3
Product Overview.....	3
Product Dimensions.....	4
3. Setup	5
AC Power.....	5
AC Plug.....	5
Power Linking.....	5
Remote Device Management (RDM).....	5
Mounting	6
Orientation.....	6
Rigging.....	6
Procedure.....	6
4. Operation	7
Control Panel Description	7
Menu Map	7
Configuration (DMX)	8
Control Personalities	8
Starting Address.....	8
Control Channel Assignments and Values.....	8
Configuration (Standalone).....	8
Configuration (Settings)	8
Master/Slave	8
Dimmer Speed	9
DMX Error	9
LED Frequency	9
Fan Mode.....	9
Back Light	9
Dimmer Knob	9
Information	9
Factory Reset.....	9
5. Maintenance.....	10
Product Maintenance	10
6. Technical Specifications	11
Contact Us	12
Warranty & Returns.....	12

1. Before You Begin

What Is Included

- COLORado EXPO W
- Seetronic Powerkon IP65 power cable
- Gel frame
- Quick Reference Guide

Claims

Carefully unpack the product immediately and check the container to make sure all the parts are in the package and are in good condition.




If the box or the contents (the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier immediately, not Chauvet. Failure to report damage to the carrier immediately may invalidate a claim. In addition, keep the box and contents for inspection.

For other issues, such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with Chauvet within 7 days of delivery.

Text Conventions

Convention	Meaning
1–512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified
<ENTER>	A key to be pressed on the product’s control panel

Symbols

Symbol	Meaning
	Critical installation, configuration, or operation information. Not following these instructions may make the product not work, cause damage to the product, or cause harm to the operator.
	Important installation or configuration information. The product may not function correctly if this information is not used.
	Useful information.



Any reference to data or power connections in this manual assumes the use of Seetronic IP rated cables.



The term “DMX” used throughout this manual refers to the USITT DMX512-A digital data transmission protocol.

FCC Compliance

This device complies with Part 15 Part B of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Expected LED Lifespan

Over time, use and heat will gradually reduce LED brightness. Clustered LEDs produce more heat than single LEDs, contributing to shorter lifespans if always used at full intensity. The average LED lifespan is 40,000 to 50,000 hours. To extend LED lifespan, maintain proper ventilation around the product, and limit the overall intensity.

Before You Begin

Safety Notes

Read all the following safety notes before working with this product. These notes contain important information about the installation, usage, and maintenance of this product.



This product contains no user-serviceable parts. Any reference to servicing in this User Manual will only apply to properly trained, certified technicians. Do not open the housing or attempt any repairs.



All applicable local codes and regulations apply to proper installation of this product.

- The luminaire is intended for professional use only.
- The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 3.28 ft (1 m) is not expected.
- If the external flexible cable or cord of this luminaire is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or its service agent.
- The light source contained in this luminaire shall only be replaced by the manufacturer or its service agent or a similar qualified person.
- **CAUTION:**
 - This product's housing may be hot when operating. Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
 - When transferring the product from extreme temperature environments, (e.g., cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow the product to fully acclimate to the surrounding environment before connecting it to power.
 - Flashing light is known to trigger epileptic seizures. User must comply with local laws regarding notification of strobe use.
- **ALWAYS:**
 - Disconnect from power before cleaning the product or replacing the fuse.
 - When using an IP65-rated product in an outdoor environment, use IP65- (or higher) rated power and data cable.
 - Replace and secure IP-rated protective covers to all power, data, USB, or other ports when not in use.
 - Replace the fuse with the same type and rating.
 - Use a safety cable when mounting this product overhead.
 - Connect this product to a grounded and protected circuit.
- **DO NOT:**
 - Open this product. It contains no user-serviceable parts.
 - Look at the light source when the product is on.
 - Leave any flammable material within 50 cm of this product while operating or connected to power.
 - Connect this product to a dimmer or rheostat.
 - Operate this product if the housing, lenses, or cables appear damaged.
 - Submerge this product (adhere to standards for the published IP rating). Regular outdoor operation is fine.
 - Permanently install outdoors in locations with extreme environmental conditions. This includes, but is not limited to:
 - Exposure to a marine/saline environment (within 3 miles of a saltwater body of water).
 - Locations where normal temperatures exceed the temperature ranges in this manual.
 - Locations that are prone to flooding or being buried in snow.
 - Other areas where the product will be subject to extreme radiation or caustic substances.
- **ONLY** use the handles or the hanging/mounting brackets to carry this product.
- The maximum ambient temperature is 113 °F (45 °C). Do not operate this product at higher temperatures.
- The minimum startup temperature is -4°F (-20°C). Do not start the product at lower temperatures.
- The minimum ambient temperature is -22°F (-30°C). Do not operate the product at lower temperatures.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.
- In the event of a serious operating problem, stop using immediately.



If a Chauvet product requires service, contact Chauvet Technical Support.

2. Introduction

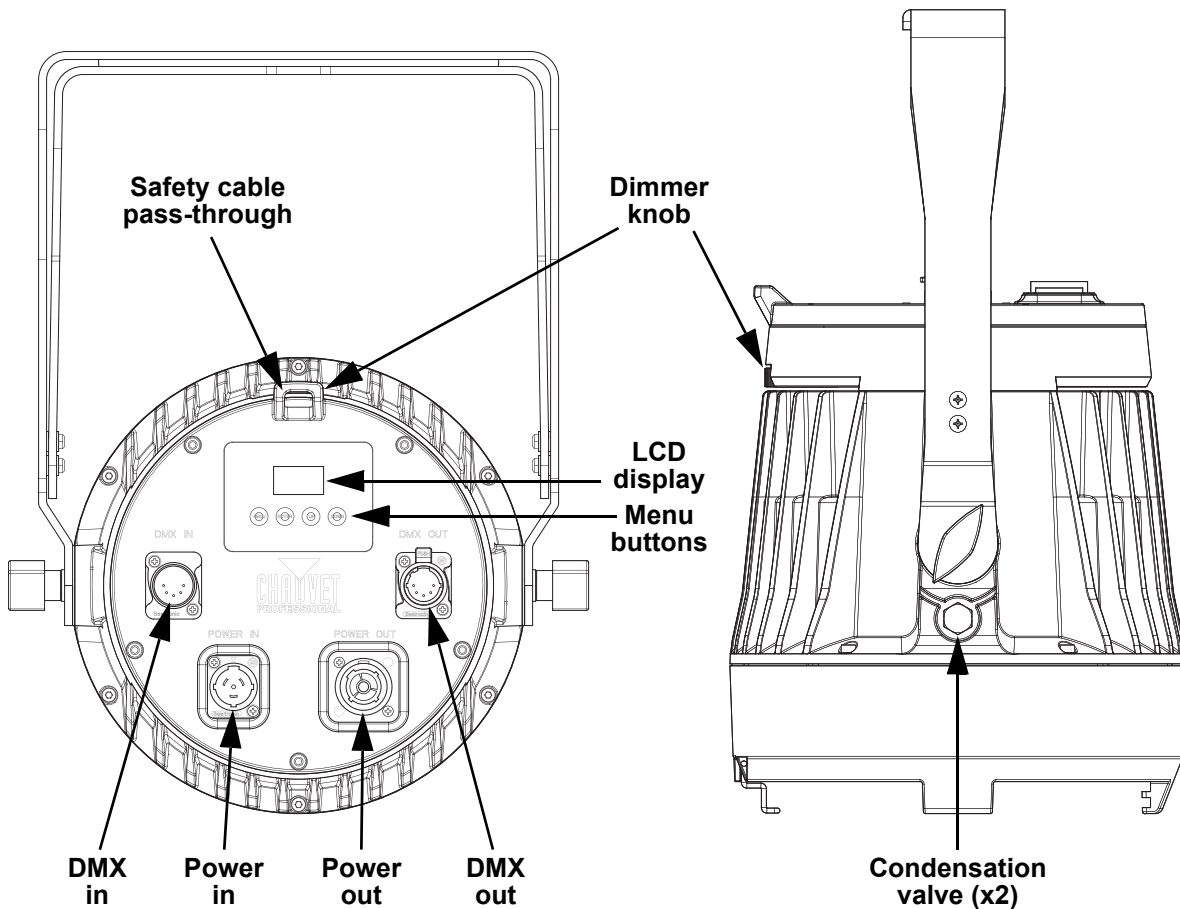
Description

The COLORado EXPO W is a rugged IP65-rated indoor/outdoor wash light that projects over 5,000 lumens of high quality 3200K warm white light with a 12° beam angle. High-resolution 16-bit dimming is smooth, and manually adjusting output is easy with its on-board rotary dimming dial. Phenomenal CRI and TLCI scores, selectable PWM, and included gel accessories make the COLORado EXPO W a versatile instrument, on-site or on camera, in any setting.

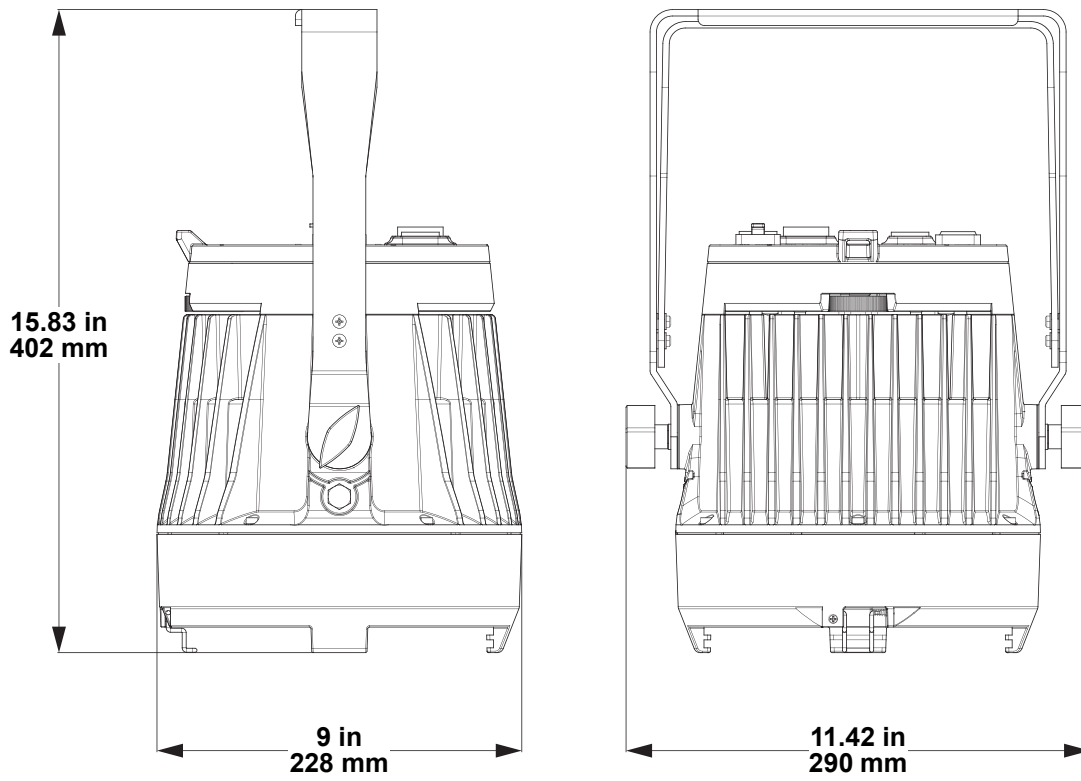
Features

- High-power warm white wash light with easy standalone control
- Warm, 3200K white light
- 16-bit dimming resolution for smooth fades
- Intuitive rotary dial for easy manual dimmer settings
- Selectable, smooth dimming curves for programming versatility
- All environment operation with IP rated power and DMX connections
- 5-pin DMX input/output connections
- LED display with password protection

Product Overview



Product Dimensions



3. Setup

AC Power

The COLORado EXPO W has an auto-ranging power supply and it can work with an input voltage range of 100 to 240 VAC, 50/60 Hz.

To determine the product's power requirements (circuit breaker, power outlet, and wiring), use the current value listed on the label affixed to the product's back panel, or refer to the product's specifications chart. The listed current rating indicates the product's average current draw under normal conditions.



- **Always connect the product to a protected circuit (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.**
- **To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.**



Never connect the product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

AC Plug

The COLORado EXPO W comes with a power input cable terminated with a Seetronic Powerkon A connector on one end and an Edison connector on the other end (U.S. market). Use the table below to wire a plug.

Connection	Wire (U.S.)	Wire (Europe)	Screw Color
AC Live	Black	Brown	Yellow or Brass
AC Neutral	White	Blue	Silver
AC Ground	Green/Yellow	Green/Yellow	Green

Power Linking

It is possible to power link COLORado EXPO W products. See the table below for the current draw at each voltage and frequency:

	100 V, 60 Hz	120 V, 60 Hz	208 V, 60 Hz	230 V, 50 Hz	240 V, 50 Hz
Current Draw	1.495 A	1.234 A	0.723 A	0.657 A	0.633 A

Never exceed 12 A on a single circuit. Power-linking cables can be purchased separately.

Remote Device Management (RDM)

Remote Device Management, or RDM, is a standard for allowing DMX-enabled devices to communicate bi-directionally along existing DMX cabling. Check the DMX controller's User Manual or with the manufacturer as not all DMX controllers have this capability. The COLORado EXPO W supports RDM protocol that allows feedback to make changes to menu map options.

Setup

Mounting

Before mounting the product, read and follow the safety recommendations indicated in the Safety Notes. For our Chauvet Professional line of mounting clamps, go to <http://trusst.com/products/>.

Orientation

Always mount this product in a safe position, making sure there is adequate room for ventilation, configuration, and maintenance.

Rigging

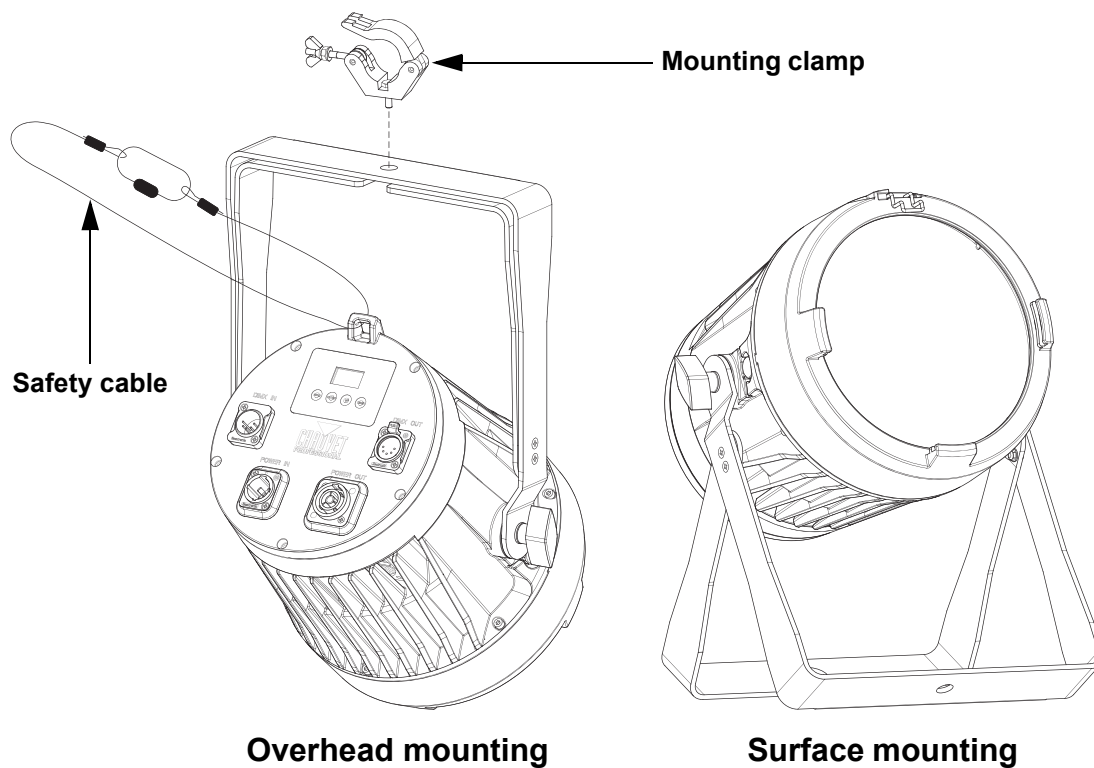
Chauvet recommends using the following general guidelines when mounting this product.

- Before deciding on a location for the product, make sure there is easy access to the product for maintenance and programming purposes.
- Make sure that the structure and attachment points can support the weight before hanging the product. See the [Technical Specifications](#) for weight information.
- When mounting the product overhead, always use a safety cable. Mount the product securely to a rigging point, whether an elevated platform or a truss.
- When rigging the product onto a truss, use a mounting clamp of appropriate weight capacity.

Procedure

The COLORado EXPO W comes with a double-yoke bracket to which the user can directly attach a mounting clamp (sold separately). Make sure the clamp is capable of supporting the weight of this product. For the Chauvet Professional line of mounting clamps, go to <http://www.trusst.com/products>.

Mounting Diagram



4. Operation

Control Panel Description

Button/Knob	Function
<MENU>	Exits from the current menu or function
<ENTER>	Enables the currently displayed menu or sets the selected value into the function
<UP>	Navigates upwards through the menu list or increases the value when in a function
<DOWN>	Navigates downwards through the menu list or decreases the value when in a function
Dimmer knob	Increases or decreases the dimmer value

Menu Map

Refer to the COLORado EXPO W product page on www.chauvetprofessional.com for the latest menu map.

Main Level	Programming Levels		Description	
DMX Address	001–512		Sets the starting address	
DMX Channel	1Ch		1-channel: dimmer	
	2Ch		2-channel: 16-bit dimmer	
	3Ch		3-channel: 16-bit dimmer, strobe	
	4Ch		4-channel: 16-bit dimmer, strobe, dimmer mode	
Static	Dimmer	0–255	Standalone dimmer control	
	Strobe		Standalone strobe control (0–10 no function)	
Master/ Slave	Master		DMX mode (Master)	
	Slave		Slave mode	
Dimmer Mode	Off		Linear dimmer	
	Dimmer1–3		Dimmer speed, fast (1) to slow (3)	
Dmx Error	Save		Continues the last command upon loss of DMX signal	
	Black		Blacks out product upon loss of DMX	
LED Frequency	600Hz		Sets the Pulse Width Modulation frequency	
	1200Hz			
	2000Hz			
	4000Hz			
	6000Hz			
	25kHz			
Fan Mode	Auto		Fan speed set by product temperature	
	On		Fan speed set on high	
Back Light	10S		Display turns off after 10 seconds	
	30S		Display turns off after 30 seconds	
	2Min		Display turns off after 2 minutes	
	Always On		Display stays on	
Knob On/Off	On		Enables dimmer knob	
	Off		Disables dimmer knob	
Information	FIXTURE HOURS	Device: __ H	Shows hours product has been on	
		LED: __ H	Shows hours LEDs have been on	
	VERSION	COLORado EXPO W V_._._		Shows the current firmware version
	UID	-----		Shows the product UID
Reset Factory	No		Reset to factory default settings	
	Yes			

Operation

Configuration (DMX)

Use control configurations to operate the product with a DMX controller.

Control Personalities

To set the control personality:

1. Go to the **DMX Channel** main level.
2. Select the desired personality, from **1Ch**, **2Ch**, **3Ch**, or **4Ch**.



- See the [Starting Address](#) section for the highest selectable starting address for each personality.
- Make sure that the starting addresses on the various products do not overlap due to the new personality setting.

Starting Address

Each product will respond to a unique starting address from the controller. All products with the same starting address will respond in unison. To set the starting address:

1. Go to the **DMX Address** main level.
2. Select the starting address (**001–512**).
 - The highest recommended starting address for **1Ch** is **512**.
 - The highest recommended starting address for **2Ch** is **511**.
 - The highest recommended starting address for **3Ch** is **510**.
 - The highest recommended starting address for **4Ch** is **509**.

Control Channel Assignments and Values

1Ch	2Ch	3Ch	4Ch	Function	Value	Percent/Setting
1	1	1	1	Dimmer	000 ⇔ 255	0–100%
–	2	2	2	Fine dimmer	000 ⇔ 255	0–100%
–	–	3	3	Strobe	000 ⇔ 010	No function
					011 ⇔ 255	Strobe, slow to fast
–	–	–	4	Dimmer mode	000 ⇔ 051	Preset dimmer speed from display menu
					052 ⇔ 101	Linear dimmer
					102 ⇔ 152	Dimmer mode 1 (fastest)
					153 ⇔ 203	Dimmer mode 2
					204 ⇔ 255	Dimmer mode 3 (slowest)

Configuration (Standalone)

To manually control the dimmer and strobe:

1. Go to the **Static** main level.
2. Select from **Dimmer** or **Strobe**.
3. Set the selected value from **000–255**.

Configuration (Settings)

Master/Slave

The Master/Slave mode allows a group of COLORado EXPO W products (the slaves) to simultaneously duplicate the output of another COLORado EXPO W (the master) without a DMX controller.

To set each of the slaves:

1. Go to the **Master/Slave** main level
2. Select **Slave**.

To set the master:

1. Go to the **Master/Slave** main level
2. Select **Master**.
3. Select a standalone setting.



- The master is the one that runs a program whether in Auto or Static mode.
- Do not connect a DMX controller to the products configured for Master/Slave operation. The DMX controller may interfere with signals from the master.
- The master should be the first product in the daisy chain.

Dimmer Speed

This setting determines how fast the output of the COLORado EXPO W changes when the output value is modified. It provides four different options to simulate the dimming curve of an incandescent lighting product. To select a specific dimmer profile, do the following:

1. Go to the **Dimmer Mode** main level.
2. Select a dimmer curve (**Off**, **Dimmer 1**, **Dimmer 2**, or **Dimmer 3**).



Off: The output is proportional (linear) to the dimmer channel value.

Dimmer 1–3: The output follows the dimmer value based on the corresponding dimmer curve, **Dimmer 1** being the fastest.

DMX Error

To select how the product will respond to losing a DMX control signal:

1. Go to the **Dmx Error** main level.
2. Select from **Save** (continues last command) or **Black** (blackout).

LED Frequency

To adjust the frequency of the pulse width modulation:

1. Go to the **LED Frequency** main level.
2. Select the frequency, from **600Hz**, **1200Hz**, **2000Hz**, **4000Hz**, **6000Hz**, or **25kHz**.

Fan Mode

To select the fan mode:

1. Go to the **Fan Mode** main level.
2. Select from **Auto** (fan speed adjusts to the product temperature) or **On** (maximum fan speed).

Back Light

To set how long before an inactive display will turn off:

1. Go to the **Back Light** main level.
2. Select the length of the backlight timer, from **10S** (10 seconds), **30S** (30 seconds), **2Min** (2 minutes), or **Always On**.

Dimmer Knob

To enable or disable the dimmer knob:

1. Go to the **Knob On/Off** main level.
2. Select from **On** (enable) or **Off** (disable).

Information

To view essential product information:

1. Go to the **Information** main level.
2. Select **Fixture Hours**, **Version**, or **UID**.

Factory Reset

To reset the product to factory settings:

1. Go to the **Reset Factory** main level.
2. Select **No** (to cancel) or **Yes** (to reset the product configuration).

5. Maintenance

Product Maintenance

Dust build-up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life and/or mechanical wear. To maintain optimum performance and minimize wear, clean each lighting product at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.

To clean the product, follow the instructions below:

1. Unplug the product from power.
2. Wait until the product is at room temperature.
3. Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface/vents.
4. Clean all transparent surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
5. Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
6. Softly drag any dirt or grime to the outside of the transparent surface.
7. Gently polish the transparent surfaces until they are free of haze and lint.



Always dry the transparent surfaces carefully after cleaning them.

6. Technical Specifications

Dimensions and Weight

Length	Width	Height	Weight
11.42 in (290 mm)	9 in (228 mm)	15.83 in (402 mm)	16.4 lb (7.4 kg)

Note: Dimensions in inches are rounded.

Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100 to 240 VAC, 50/60 Hz	Auto-ranging

Parameter	100 V, 60 Hz	120 V, 60 Hz	208 V, 60 Hz	230 V, 50 Hz	240 V, 50 Hz
Consumption	150 W	149 W	145 W	145 W	145 W
Operating current	1.495 A	1.234 A	0.723 A	0.657 A	0.633 A
Maximum output current	12 A	12 A	12 A	12 A	12 A

Power I/O	U.S./Worldwide	UK/Europe
Power input connector	Seetronic Powerkon IP65	Seetronic Powerkon IP65
Power output connector	Seetronic Powerkon IP65	Seetronic Powerkon IP65
Power cable plug	Edison	Local plug

Light Source

Type	Color	Quantity	Power	Current	Lifespan
LED	Warm white	1	117 W	2.187 mA	50,000 hours

Photometrics

Beam Angle	Field Angle	Illuminance @ 15 m
12.7°	23.4°	2,403 lux

Thermal

Maximum External Temperature	Cooling System
113 °F (45 °C)	Fan-assisted Convection

Control

DMX I/O Connector	Channel Range
5-pin IP rated XLR	1, 2, 3, or 4

Ordering

Product Name	Item Name	Item Code	UPC Number
COLORado EXPO W	COLORADOEXPOW	01031725	781462220730



Contact Us

General Information	Technical Support
Chauvet World Headquarters	
Address: 3360 Davie Rd. Davie, FL 33314 Voice: (954) 577-4455 Fax: (954) 929-5560 Toll Free: (800) 762-1084	Voice: (844) 393-7575 Fax: (954) 756-8015 Email: chauvetcs@chauvetlighting.com Website: www.chauvetprofessional.com
Chauvet U.K.	
Address: Pod 1 EVO Park Little Oak Drive, Sherwood Park Nottinghamshire, NG15 0EB UK Voice: +44 (0) 1773 511115 Fax: +44 (0) 1773 511110	Email: UKtech@chauvetlighting.eu Website: www.chauvetprofessional.eu
Chauvet Benelux	
Address: Stokstraat 18 9770 Kruishoutem Belgium Voice: +32 9 388 93 97	Email: BNLtech@chauvetlighting.eu Website: www.chauvetprofessional.eu
Chauvet France	
Address: 3, Rue Ampère 91380 Chilly-Mazarin France Voice: +33 1 78 85 33 59	Email: FRtech@chauvetlighting.fr Website: www.chauvetprofessional.eu
Chauvet Germany	
Address: Bruno-Bürgel-Str. 11 28759 Bremen Germany Voice: +49 421 62 60 20	Email: DEtech@chauvetlighting.de Website: www.chauvetprofessional.eu
Chauvet Mexico	
Address: Av. de las Partidas 34 - 3B (Entrance by Calle 2) Zona Industrial Lerma Lerma, Edo. de México, CP 52000 Voice: +52 (728) 690-2010	Email: servicio@chauvet.com.mx Website: www.chauvetprofessional.mx

Warranty & Returns

For warranty terms and conditions and return information, please visit our website.

For customers in the United States and Mexico: www.chauvetlighting.com/warranty-registration.

For customers in the United Kingdom, Republic of Ireland, Belgium, the Netherlands, Luxembourg, France, and Germany: www.chauvetlighting.eu/warranty-registration.