

USER MANUAL

# COLORADO 2-QUAD ZOOM



Model ID: COLORADO2QZOOM

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## **Edition Notes**

The Colorado 2 Quad Zoom User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for the Colorado 2 Quad Zoom as of the release date of this edition.

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## **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.

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## **Document Revision**

This Colorado 2 Quad Zoom User Manual is the 3<sup>rd</sup> edition of this document. Go to [www.chauvetprofessional.com](http://www.chauvetprofessional.com) for the latest version.

# 1. Before You Begin

## What Is Included

- Colorado 2 Quad Zoom
- Seetronic Powerkon IP65 power cord
- Gel frame
- Gel frame holder (9 in/229 mm accessories)
- 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 your 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.

## Manual Conventions

Convention	Meaning
<b>1–512</b>	A range of values
<b>50/60</b>	A set of values of which only one can be chosen
<b>&lt;SET&gt;</b>	A button on the product's control panel
<b>Settings</b>	A product function or a menu option

## Symbols

Symbol	Meaning
	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
	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.**

## 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.**

## Personal Safety

- Avoid direct eye exposure to the light source while the product is on.
- Always disconnect the product from the power source before cleaning.
- Always connect the product to a grounded circuit to avoid the risk of electrocution.
- Do not touch the product's housing when operating because it may be very hot.

## Mounting and Rigging

- Do not submerge this product (IP65). Temporary outdoor operation is fine.
- When using this product in an outdoor environment, use IP65 (or higher) rated power and data cables. Secure unused power and data ports with attached IP65 covers.
- CAUTION: When transferring 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 product to fully acclimate to the surrounding environment before connecting it to power.
- Not for permanent outdoor installation 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 the normal high or low temperatures exceed the temperature ranges in this manual.
  - Locations that are prone to flooding or being buried in snow.
  - Areas where the product will be subjected to extreme radiation or caustic substances.
- Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Make sure there are no flammable materials close to the product when operating.
- When hanging this product, always secure to a fastening device using a safety cable.

## Power and Wiring

- Always make sure you are connecting the product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- Never connect the product to a dimmer pack or rheostat.
- Never disconnect this product by pulling or tugging on the power cable.

## Operation

- Do not operate this product if there is damage on the housing, lenses, or cables. Have the damaged parts replaced by an authorized technician at once.
- Do not cover the ventilation slots when operating to avoid internal overheating.
- The maximum ambient temperature is 113 °F (45 °C). Do not operate the product at higher temperatures.
- In the event of a serious operation problem, stop using this product immediately!



**If your Chauvet product requires service, contact Chauvet Technical Support.**

## Expected LED Lifespan

LEDs gradually decline in brightness over time, primarily because of heat. LEDs that are arranged in clusters experience higher operating temperatures than single LEDs. For this reason, operating clustered LEDs at their fullest intensity significantly reduces the LEDs' lifespan. Under normal conditions, this lifespan is 40,000 to 50,000 hours. If extending this lifespan is vital, lower the operating temperature by improving the ventilation around the product, thus reducing the ambient temperature. In addition, limiting the overall projection intensity may extend the LEDs' lifespan.

## 2. Introduction

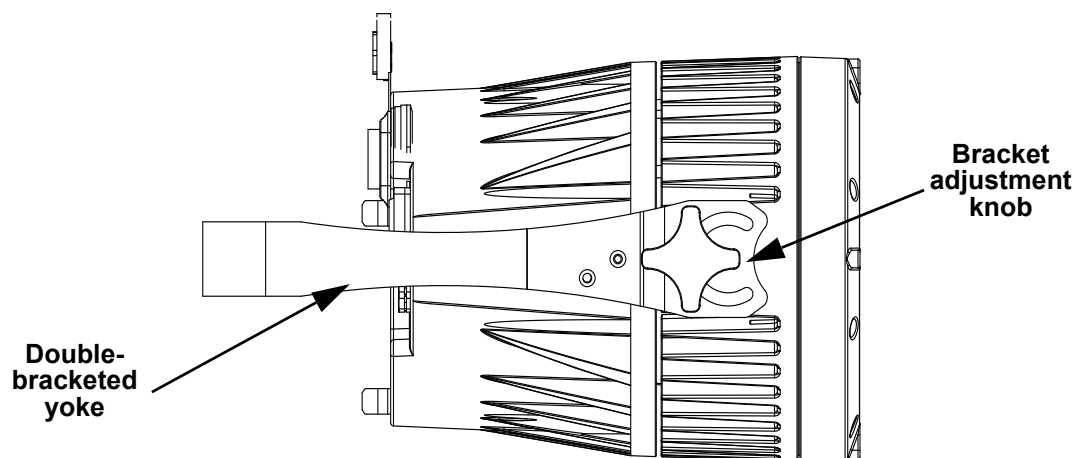
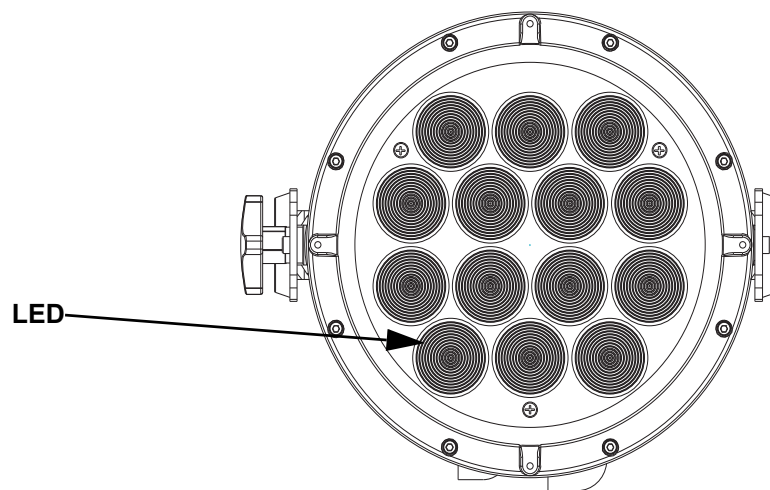
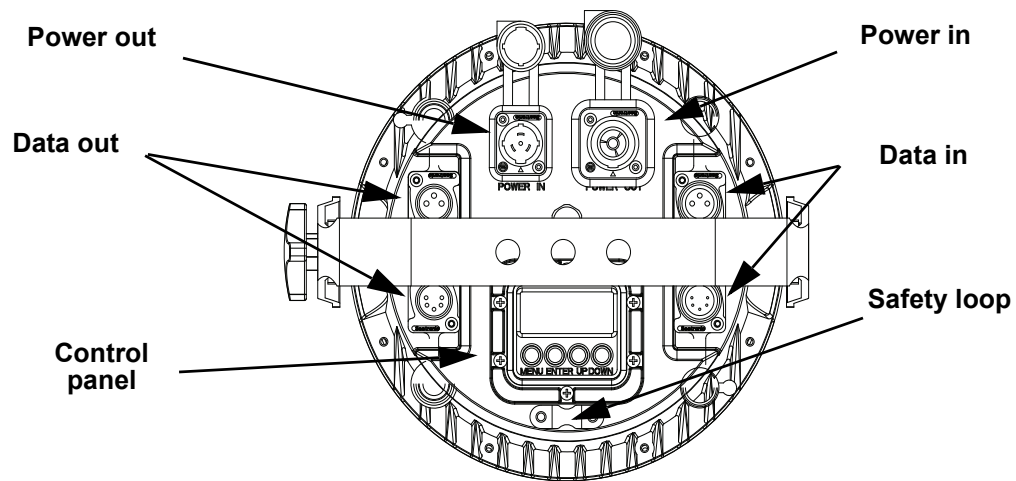
### Description

The Colorado 2 Quad Zoom is a ruggedly built wash light with 14 high-output RGBW LEDs. IP-rated power and data connectors allow for easy connections. Using IP-rated DMX cables allows the fixture to maintain its IP65 rating, but standard 3- or 5-pin XLR DMX cables work perfectly for indoor use. A 14° to 44° zoom gives you beam control in a multitude of application, and selectable dimming curves allow the user to integrate the product into any existing rig.

### Features

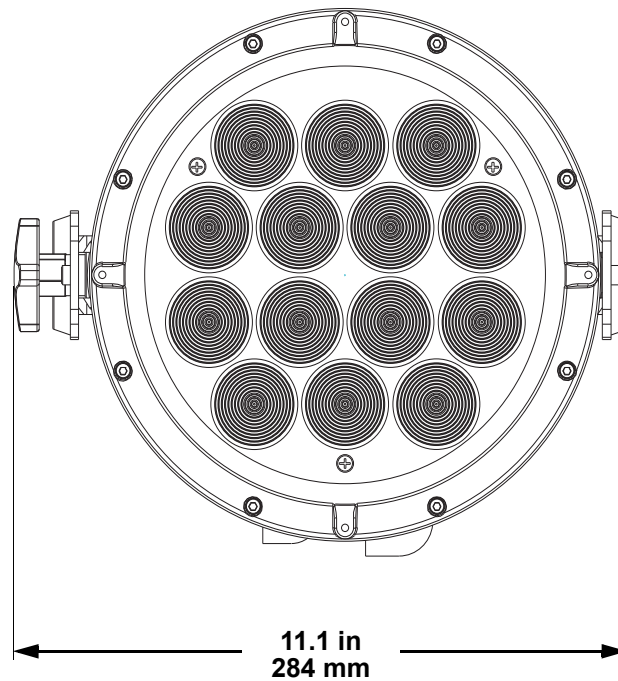
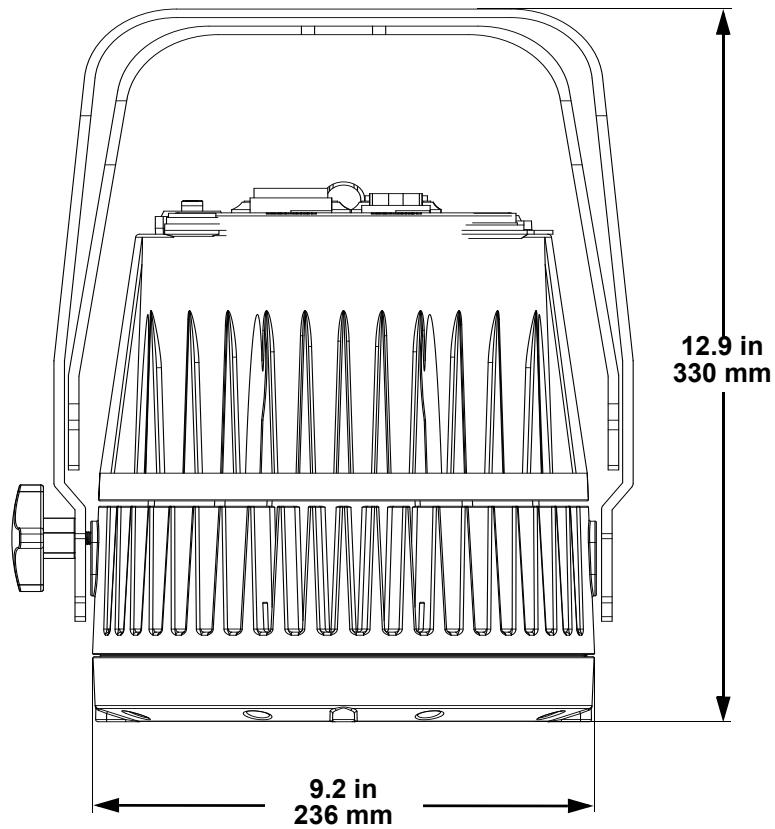
- 3-, 4-, 5-, 6-, 7-, 12-, or 17-channel quad-color LED wash product
- Operating modes:
  - 3-channel: RGB control
  - 3-channel: HSV control
  - 4-channel: RGB, dimmer
  - 4-channel: RGBW
  - 5-channel: RGBW, dimmer
  - 6-channel: RGBW, dimmer, strobe
  - 7-channel: RGBW, dimmer, zoom, zoom reset
  - 12-channel: RGBW, dimmer, strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
  - 17-channel: 16-bit RGBW and dimmer; strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
- Built-in auto and custom programs recalled via DMX and Master/Slave
- RGBW color mixing via DMX or manually
- Zoomable, with a wide zoom range for design versatility
- Tough road-ready construction
- Selectable, smooth dimming curves for programming versatility
- 16-bit dimming of individual colors and master dimmer
- All-environment operation with IP-rated power and DMX connections
- 3- and 5-pin DMX input/output connections
- Double-bracket yoke doubles as floor stand

## Product Overview





## Product Dimensions





## 3. Setup

### AC Power

Each Colorado 2 Quad Zoom has an auto-ranging power supply that works with an input voltage range of 100 to 240 VAC, 50/60 Hz. To determine the power requirements for each Colorado 2 Quad Zoom, refer to the label affixed to the product. You can also refer to the Technical Specifications chart in this manual.

The listed current rating indicates the maximum current draw during normal operation. For more information, download Sizing Circuit Breakers from the Chauvet website: [www.chauvetprofessional.com](http://www.chauvetprofessional.com).



- **Always connect the product to a protected circuit (e.g., 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 2 Quad Zoom comes with a power input cord terminated with a Seetronic Powerkon A connector on one end and an Edison plug on the other end (U.S. market). If the power input cord that came with your product has no plug, or if you need to change the plug, use the table below to wire the new 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

The product supports power linking up to 6 Colorado 2 Quad Zoom products at 100 V, up to 8 products at 120 V, up to 13 products at 208 V, or up to 14 products at 230 V, or up to 15 products at 240 V. This product comes with a power input cord. Power-linking cables are available for purchase at Chauvet.



- **To preserve the IP65 rating and the warranty of this product Seetronic Powerkon cables must be used.**
- **Insert the attached IP65 rated plugs into the corresponding power/data connections when not in use.**

### DMX Linking

You can link the Colorado 2 Quad Zoom to a DMX controller using a 3- or 5-pin DMX connection. If using other DMX-compatible products with this product, you can control each individually with a single DMX controller.

### DMX Personalities

The Colorado 2 Quad Zoom uses a 3- or 5-pin DMX data connection for the 3-, 4-, 5-, 6-, 7-, 12-, and 17-channel DMX personalities.

- Refer to the [Introduction](#) for a brief description of each DMX personality.
- Refer to the [Operation](#) chapter to learn how to configure the Colorado 2 Quad Zoom to work in these personalities.
- The [DMX Values](#) section provides detailed information regarding the DMX personalities.



**If you are not familiar with or need more information about DMX standards, Master/Slave connectivity, or the DMX cables needed to link this product to a DMX controller, download the DMX Primer from the Chauvet website: [www.chauvetprofessional.com](http://www.chauvetprofessional.com).**

## Master/Slave Connectivity

The Master/Slave mode allows a Colorado 2 Quad Zoom (the master) to control one or more Colorado 2 Quad Zoom products (the slaves) without a DMX controller. One Colorado 2 Quad Zoom becomes the master when running an auto or custom program, or by being in a Static mode.

You must configure each slave's control panel to operate in Slave mode. During Master/Slave operation, the slaves will operate in unison with the master.



**DO NOT connect a DMX controller to products operating in Master/Slave mode. The DMX controller signals may interfere with the signals from the master.**



- The [Operation](#) section of this manual provides detailed instructions on how to configure the master and slaves.
- If you are not familiar with or need more information about DMX standards, or the DMX cables needed to link this product to a DMX controller, download the DMX Primer from the Chauvet website: [www.chauvetprofessional.com](http://www.chauvetprofessional.com).



- To preserve the IP65 rating and the warranty of this product, IP65 data cables must be used.
- Insert the attached IP65-rated plugs into the corresponding power/data connections when not in use.

## 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

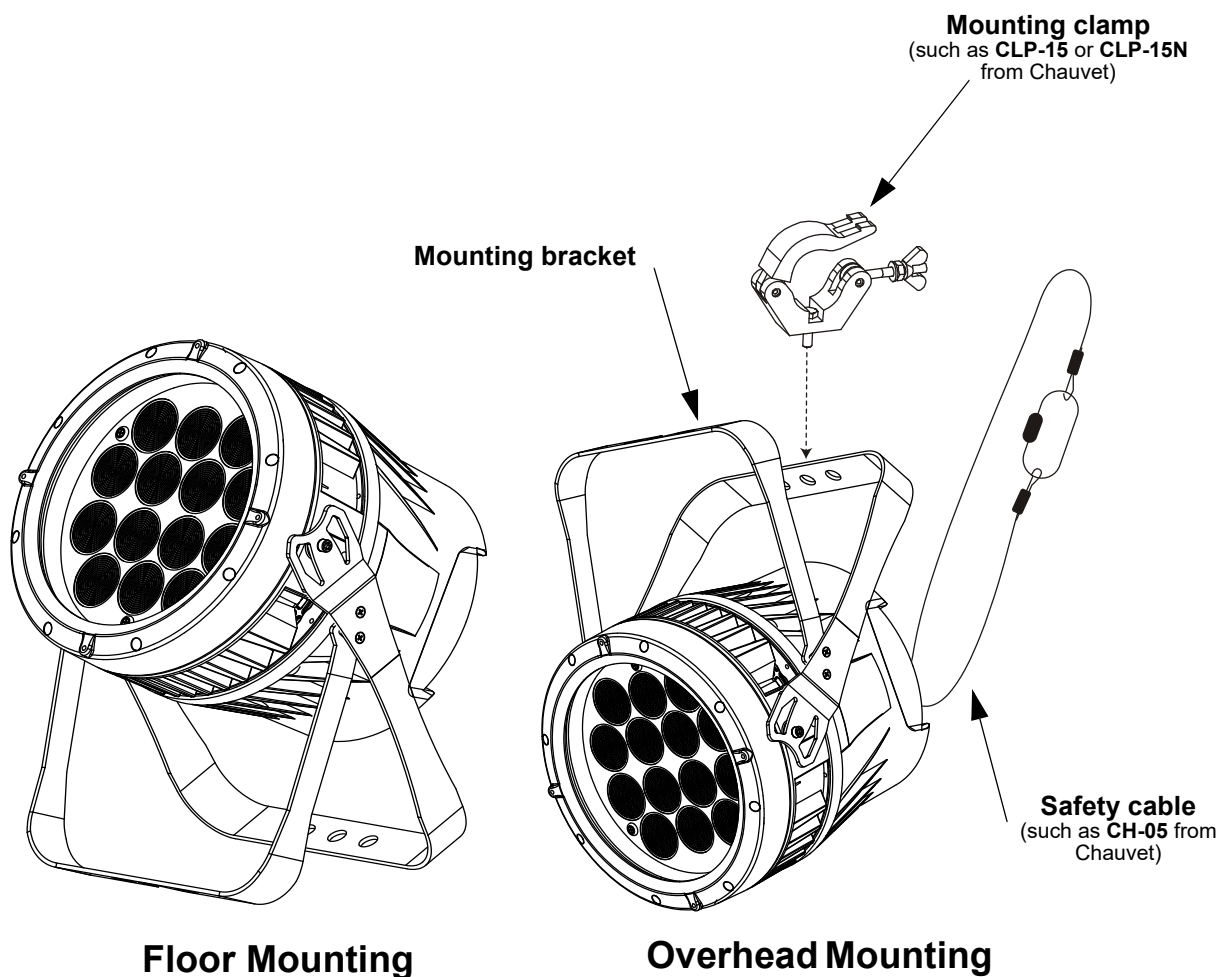
Chauvet recommends using the following general guidelines when mounting this product.

- 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 onto which you are mounting the product can support the product's weight. 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.
- When power linking multiple products, mount the products close enough for power linking cables to reach.
- The bracket adjustment knobs allow for directional adjustment when aiming the product to the desired angle. Only loosen or tighten the bracket knobs manually. Using tools could damage the knobs.

## Procedure

The Colorado 2 Quad Zoom comes with a double-bracketed yoke to which you can either attach mounting clamps for hanging or simply use as a floor stand. You must supply the mounting clamps. Make sure the clamps are capable of supporting the weight of this product. Use at least one mounting point per product. For the CHAUVET Professional line of mounting clamps, go to <http://trusst.com/products/>.

## Mounting Diagram



## 4. Operation

### Control Panel Operation

Button	Function
<MENU>	Exits from the current menu or function
<ENTER>	Enables the currently displayed menu or sets the currently selected value in to the current function
<UP>	Navigates upward through the menu list or increases the numeric value when in a function
<DOWN>	Navigates downward through the menu list or decreases the numeric value when in a function

### Control Options

Set the Colorado 2 Quad Zoom starting address in the 001-512 DMX range. This enables control of up to 15 products in the 17-channel TR16 personality.

### Programming

Refer to the [Menu Map](#) to understand the menu options. The menu map shows the main level and a variable number of programming levels for each option.

- To go to the desired main level, press <MENU> repeatedly until the option shows on the display. Press <ENTER> to select. This will take you to the first programming level for that option.
- To select an option or value within the current programming level, press <UP> or <DOWN> until the option shows on the display. Press <ENTER> to select. In this case, if there is another programming level, you will see that first option, or you will see the selected value.
- Press <MENU> repeatedly to exit to the previous main level.

### Control Panel Lock

This setting enables you to activate or disable the control panel lock, which keeps unauthorized users from changing the product's settings.

1. Go to the **KEY** main level.
2. Select **ON** or **OFF**.



**When the control panel lock is activated, in order to access the products main programming level, the product will prompt for the passcode. Enter the passcode as described below.**

### Passcode

After being prompted to enter the passcode:

Press <UP>, <DOWN>, <UP>, <DOWN>, <ENTER>

## Menu Map

Main Level	Programming Levels				Description
STAT		R.	0-255		Combines red, green, blue, and white to make a custom color (0–100%)
		G.			
		B.			
		W.			
		Z.			
		S.	0-20		Changes the beam angle (zoom)
AUTO	AT. 1-10				Selects automatic programs and auto program speed
	PR 1-10				Selects customizable programs
RUN	DMX				Receives DMX signals from the DMX controller
	SLAVE				Receives DMX signals from the master
DMX	D. 001-512				Sets the DMX starting address
PERS	TR16				17-channel: 16-bit RGBW and dimmer; strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
	STD.Y				17-channel: 16-bit RGBW and dimmer; strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
	TOUR				12-channel: RGBW, dimmer, strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
	AR2.Z				7-channel: RGBW, dimmer, zoom, zoom reset
	AR2.S				6-channel: RGBW, dimmer, strobe
	AR2.D				5-channel: RGBW, dimmer
	ARC.2				4-channel: RGBW
	AR1.D				4-channel: RGB, dimmer
	ARC.1				3-channel: RGB control
	HSV.				3-channel: HSV control
EDIT	PR. 1-10	SC.01-30	R.	0-255	Combines red, green, blue, and white to make a custom color (0-100%)
			G.		
			B.		
			W.		
			Z.		
			S.	0-20	Changes the beam angle (zoom)
			T.	0-255	Selects the strobe frequency (0–20 Hz)
			F.		Defines the step duration (slow to fast)
					Defines the fade duration (slow to fast)

Main Level	Programming Levels						Description
SET	UPLD			**** (Enter Passcode)			Uploads custom programs to other Colorado 2 Quad Zoom
	REST						Resets the fixture to factory defaults
	COLR			OFF			RGB set to 255 = max. output
				RGBW			RGB set to 255 = balanced white
				UC.			Universal color balance
	DIM			OFF			Selects dimming profiles from fast ( <b>DIM1</b> ) to slow ( <b>DIM4</b> ) or <b>OFF</b>
				DIM1			
				DIM2			
				DIM3			
				DIM4			
	CURV			OFF			No dimmer
				CV1			Dimmer curves fast (CV1) to slow (CV3)
				CV2			
				CV3			
	DERR			SAVE			Continues with last command upon loss of DMX control
				BLAC			Blacks out fixture upon loss of DMX
	ZOOM			BASE			Sets default zoom position (full movement)
POS1				Sets position 1 setting for zoom limit			
POS2				Sets position 2 setting for zoom limit			
CAL	**** (Enter Passcode)	CAL	WT	WH 01-11	R.	000–255	Modifies the color macros used in the <b>TOUR</b> , <b>STD.Y</b> , and <b>TR16</b> personalities
					G.		
					B.		
					W.		
			RG BW	RGB.W	R.		Defines the color temperature used when COLOR is set to RGBW
					G.		
					B.		
			ZOOM		POS.1		Sets the min/max position of the zoom function
					POS.2		
KEY	OFF						Sets to key lock (Passcode mode)
	ON						

## Configuration (DMX)

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

### DMX Personalities

This setting allows you to choose a particular DMX personality.

1. Go to the **PERS** main level.
2. Select the desired personality (**TOUR**, **TR16**, **STD.Y**, **ARC.1**, **AR1.D**, **ARC.2**, **AR2.D**, **AR2.S**, **AR2.Z**, or **HSV**).



- See the [DMX Values](#) section for the highest starting address you can select for each personality.
- Make sure that the starting addresses on the various products do not overlap due to the new personality setting.

### DMX Control

In this mode, each product will respond to a unique starting address from the DMX controller. All products with the same starting address will respond in unison.

1. Select a DMX personality as shown in [DMX Personalities](#).
2. Set the running mode:
  - a. Go to the **RUN** main level.
  - b. Select the **DMX** programming level.
3. Set the starting address:
  - a. Go to **DMX** main level.
  - b. Select the starting address (**001–512**)

The highest recommended starting address for each DMX mode is as follows:

DMX Personality	DMX Address	DMX Personality	DMX Address
<b>TOUR</b>	501	<b>AR2.S</b>	507
<b>ARC.1</b>	510	<b>HSV</b>	510
<b>AR1.D</b>	509	<b>TR16</b>	496
<b>ARC.2</b>	509	<b>STD.Y</b>	496
<b>AR2.D</b>	508	<b>AR2.Z</b>	506

### Loss Of Signal Setting

This setting controls how the product will respond when the DMX signal is lost.

1. Go to the **SET** main level.
2. Select **DERR**.
  - a. Select **SAVE** to make the product use the last command used when the signal is lost.
  - b. Select **BLAC** to turn off the all the LEDs when the signal is lost.

### Zoom Limit Settings

These settings allow you to select the zoom range. Basic zoom (**BASE**) is the default setting which allows the zoom to move at full range (**000–255**) and has no adjustable limit. Position 1 (**POS.1**) and Position 2 (**POS.2**) allow you to set limits on how far the zoom moves.

1. Set the zoom range to be used:
  - a. Go to the **SET** main level.
  - b. Select **ZOOM**.
  - c. Select **BASE**, **POS.1**, or **POS.2**.
2. Set the limit for zoom range **POS.1** or **POS.2**:
  - a. Go to the **CAL** main level.
  - b. Enter the master access passcode as described in Passcode.
  - c. When **CAL** shows, press **<UP>**.
  - d. Go to **ZOOM**.
  - e. Select **POS.1** or **POS.2**.
  - f. Select a zoom limit value (**000–255**).



## DMX Values

TR16	Channel	Function	Value	Percent/Setting
	1	Dimmer	000 ⇌ 255	0-100%
	2	Fine Dimmer	000 ⇌ 255	Fine control (16-bit) (Step Duration if Custom 1–10 in CH. 13 is active)
	3	Red	000 ⇌ 255	0-100% (Fade Duration if Custom 1–10 in CH. 13 is active)
	4	Fine Red	000 ⇌ 255	Fine control (16-bit)
	5	Green	000 ⇌ 255	0-100%
	6	Fine Green	000 ⇌ 255	Fine control (16-bit)
	7	Blue	000 ⇌ 255	0-100%
	8	Fine Blue	000 ⇌ 255	Fine control (16-bit)
	9	White	000 ⇌ 255	0-100%
	10	Fine White	000 ⇌ 255	Fine control (16-bit)
	11	Color Macro + White Balance	000 ⇌ 010 011 ⇌ 030 031 ⇌ 050 051 ⇌ 070 071 ⇌ 090 091 ⇌ 110 111 ⇌ 130 131 ⇌ 150 151 ⇌ 170 171 ⇌ 200 201 ⇌ 205 206 ⇌ 210 211 ⇌ 215 216 ⇌ 220 221 ⇌ 225 226 ⇌ 230 231 ⇌ 235 236 ⇌ 240 241 ⇌ 245 246 ⇌ 251 251 ⇌ 255	No function R:100%    G: 0-100%    B: 0 R:100%-0    G: 100%    B: 0 R:0    G: 100%    B: 0-100% R:0    G: 100%-0    B: 100% R:0-100%    G: 0    B: 100% R:100%    G: 0    B: 100%-0 R:100%    G: 0-100%    B: 0-100% R:100%-0    G: 100%-0    B: 100% RGBW: 100% White 1 White 2 White 3 White 4 White 5 White 6 White 7 White 8 White 9 White 10 White 11
	12	Strobe	000 ⇌ 009 010 ⇌ 255	No function 0-20 Hz
	13	Programs	000 ⇌ 040 041 ⇌ 050 051 ⇌ 060 061 ⇌ 070 071 ⇌ 080 081 ⇌ 090 091 ⇌ 100 101 ⇌ 110 111 ⇌ 120 121 ⇌ 130 131 ⇌ 140 141 ⇌ 150 151 ⇌ 160 161 ⇌ 170 171 ⇌ 180 181 ⇌ 190 191 ⇌ 200 201 ⇌ 210 211 ⇌ 220 221 ⇌ 230 231 ⇌ 255	No function Auto 1 Auto 2 Auto 3 Auto 4 Auto 5 Auto 6 Auto 7 Auto 8 Auto 9 Auto 10 Custom 1 Custom 2 Custom 3 Custom 4 Custom 5 Custom 6 Custom 7 Custom 8 Custom 9 Custom 10
	14	Auto Speed	000 ⇌ 255	0-100% (only when using Auto 1–10 in CH. 13)

TR16	Channel	Function	Value	Percent/Setting
	<b>15</b>	<b>Dimmer Speed</b>	000 ⇌ 009	Preset dimmer speed from display menu
			010 ⇌ 029	Linear dimmer
			030 ⇌ 069	Nonlinear dimming curve 1 (fastest)
			070 ⇌ 129	Nonlinear dimming curve 2
			130 ⇌ 189	Nonlinear dimming curve 3
			190 ⇌ 255	Nonlinear dimming curve 4 (slowest)
	<b>16</b>	<b>Zoom</b>	000 ⇌ 255	0-100%
	<b>17</b>	<b>Zoom Control</b>	000 ⇌ 200	No function
			201 ⇌ 220	Zoom reset
			221 ⇌ 255	No function
STD.Y	Channel	Function	Value	Percent/Setting
	<b>1</b>	<b>Dimmer</b>	000 ⇌ 255	0-100%
	<b>2</b>	<b>Fine Dimmer</b>	000 ⇌ 255	Fine control (16-bit) (Step Duration if Custom 1–10 in CH. 13 is active)
	<b>3</b>	<b>Red</b>	000 ⇌ 255	0-100% (Fade Duration if Custom 1–10 in CH. 13 is active)
	<b>4</b>	<b>Fine Red</b>	000 ⇌ 255	Fine control (16-bit)
	<b>5</b>	<b>Green</b>	000 ⇌ 255	0-100%
	<b>6</b>	<b>Fine Green</b>	000 ⇌ 255	Fine control (16-bit)
	<b>7</b>	<b>Blue</b>	000 ⇌ 255	0-100%
	<b>8</b>	<b>Fine Blue</b>	000 ⇌ 255	Fine control (16-bit)
	<b>9</b>	<b>White</b>	000 ⇌ 255	0-100%
	<b>10</b>	<b>Fine White</b>	000 ⇌ 255	Fine control (16-bit)
	<b>11</b>	<b>Color Macro + White Balance</b>	000 ⇌ 010	No function
			011 ⇌ 030	R:100% G: 0-100% B: 0
			031 ⇌ 050	R:100%-0 G: 100% B: 0
			051 ⇌ 070	R:0 G: 100% B: 0-100%
			071 ⇌ 090	R:0 G: 100%-0 B: 100%
			091 ⇌ 110	R:0-100% G: 0 B: 100%
			111 ⇌ 130	R:100% G: 0 B: 100%-0
			131 ⇌ 150	R:100% G: 0-100% B: 0-100%
			151 ⇌ 170	R:100%-0 G: 100%-0 B: 100%
			171 ⇌ 200	RGBW: 100%
			201 ⇌ 205	White 1
			206 ⇌ 210	White 2
			211 ⇌ 215	White 3
			216 ⇌ 220	White 4
			221 ⇌ 225	White 5
			226 ⇌ 230	White 6
			231 ⇌ 235	White 7
			236 ⇌ 240	White 8
			241 ⇌ 245	White 9
			246 ⇌ 251	White 10
			251 ⇌ 255	White 11
	<b>12</b>	<b>Strobe</b>	000 ⇌ 009	No function
			010 ⇌ 255	0-20 Hz

STD.Y	Channel	Function	Value	Percent/Setting
	13	Programs	000 ⇌ 040	No function
			041 ⇌ 050	Auto 1
			051 ⇌ 060	Auto 2
			061 ⇌ 070	Auto 3
			071 ⇌ 080	Auto 4
			081 ⇌ 090	Auto 5
			091 ⇌ 100	Auto 6
			101 ⇌ 110	Auto 7
			111 ⇌ 120	Auto 8
			121 ⇌ 130	Auto 9
			131 ⇌ 140	Auto 10
			141 ⇌ 150	Custom 1
			151 ⇌ 160	Custom 2
			161 ⇌ 170	Custom 3
			171 ⇌ 180	Custom 4
			181 ⇌ 190	Custom 5
			191 ⇌ 200	Custom 6
			201 ⇌ 210	Custom 7
			211 ⇌ 220	Custom 8
			221 ⇌ 230	Custom 9
			231 ⇌ 255	Custom 10
	14	Auto Speed	000 ⇌ 255	0-100% (only when using Auto 1–10 in CH. 13)
	15	Dimmer Speed	000 ⇌ 009	Preset dimmer speed from display menu
			010 ⇌ 029	Linear dimmer
			030 ⇌ 069	Nonlinear dimming curve 1 (fastest)
			070 ⇌ 129	Nonlinear dimming curve 2
			130 ⇌ 189	Nonlinear dimming curve 3
			190 ⇌ 255	Nonlinear dimming curve 4 (slowest)
	16	Zoom	000 ⇌ 255	0-100%
	17	Zoom Control	000 ⇌ 200	No function
			201 ⇌ 220	Zoom reset
			221 ⇌ 255	No function

TOUR	Channel	Function	Value	Percent/Setting
	1	Dimmer	000 ⇌ 255	0-100%
	2	Red	000 ⇌ 255	0-100% (Step Duration if Custom 1–10 in CH. 8 is active)
	3	Green	000 ⇌ 255	0-100% (Fade Duration if Custom 1–10 in CH. 8 is active)
	4	Blue	000 ⇌ 255	0-100%
	5	White	000 ⇌ 255	0-100%
	6	Color Macro + White Balance	000 ⇌ 010	No function
			011 ⇌ 030	R:100%    G: 0-100%    B: 0
			031 ⇌ 050	R:100%-0    G: 100%    B: 0
			051 ⇌ 070	R:0    G: 100%    B: 0-100%
			071 ⇌ 090	R:0    G: 100%-0    B: 100%
			091 ⇌ 110	R:0-100%    G: 0    B: 100%
			111 ⇌ 130	R:100%    G: 0    B: 100%-0
			131 ⇌ 150	R:100%    G: 0-100%    B: 0-100%
			151 ⇌ 170	R:100%-0    G: 100%-0    B: 100%
			171 ⇌ 200	RGBW: 100%

TOUR	Channel	Function	Value	Percent/Setting
	<b>6</b>	<b>Color Macro + White Balance</b>	201 ⇌ 205	White 1
			206 ⇌ 210	White 2
			211 ⇌ 215	White 3
			216 ⇌ 220	White 4
			221 ⇌ 225	White 5
			226 ⇌ 230	White 6
			231 ⇌ 235	White 7
			236 ⇌ 240	White 8
			241 ⇌ 245	White 9
			246 ⇌ 251	White 10
			251 ⇌ 255	White 11
	<b>7</b>	<b>Strobe</b>	000 ⇌ 009 010 ⇌ 255	No function 0-20 Hz
	<b>8</b>	<b>Programs</b>	000 ⇌ 040	No function
			041 ⇌ 050	Auto 1
			051 ⇌ 060	Auto 2
			061 ⇌ 070	Auto 3
			071 ⇌ 080	Auto 4
			081 ⇌ 090	Auto 5
			091 ⇌ 100	Auto 6
			101 ⇌ 110	Auto 7
			111 ⇌ 120	Auto 8
			121 ⇌ 130	Auto 9
			131 ⇌ 140	Auto 10
			141 ⇌ 150	Custom 1
			151 ⇌ 160	Custom 2
			161 ⇌ 170	Custom 3
			171 ⇌ 180	Custom 4
			181 ⇌ 190	Custom 5
			191 ⇌ 200	Custom 6
			201 ⇌ 210	Custom 7
			211 ⇌ 220	Custom 8
			221 ⇌ 230	Custom 9
			231 ⇌ 255	Custom 10
	<b>9</b>	<b>Auto Speed</b>	000 ⇌ 255	0-100% (only when using Auto 1–10 in CH. 8)
	<b>10</b>	<b>Dimmer Speed</b>	000 ⇌ 009	Preset dimmer speed from display menu
			010 ⇌ 029	Linear dimmer
			030 ⇌ 069	Nonlinear dimming curve 1 (fastest)
			070 ⇌ 129	Nonlinear dimming curve 2
			130 ⇌ 189	Nonlinear dimming curve 3
			190 ⇌ 255	Nonlinear dimming curve 4 (slowest)
	<b>11</b>	<b>Zoom</b>	000 ⇌ 255	0-100%
	<b>12</b>	<b>Zoom Control</b>	000 ⇌ 200	No function
			201 ⇌ 220	Zoom reset
			221 ⇌ 255	No function
AR2.Z	Channel	Function	Value	Percent/Setting
	<b>1</b>	<b>Dimmer</b>	000 ⇌ 255	0-100%
	<b>2</b>	<b>Red</b>	000 ⇌ 255	0-100%
	<b>3</b>	<b>Green</b>	000 ⇌ 255	0-100%
	<b>4</b>	<b>Blue</b>	000 ⇌ 255	0-100%
	<b>5</b>	<b>White</b>	000 ⇌ 255	0-100%
	<b>6</b>	<b>Zoom</b>	000 ⇌ 255	0-100%
	<b>7</b>	<b>Zoom Control</b>	000 ⇌ 200	No function
			201 ⇌ 220	Zoom reset
			221 ⇌ 255	No function

AR2.S	Channel	Function	Value	Percent/Setting
	1	Dimmer	000 ⇄ 255	0-100%
	2	Red	000 ⇄ 255	0-100%
	3	Green	000 ⇄ 255	0-100%
	4	Blue	000 ⇄ 255	0-100%
	5	White	000 ⇄ 255	0-100%
	6	Strobe	000 ⇄ 009 010 ⇄ 255	No function 0-20 Hz

AR2.D	Channel	Function	Value	Percent/Setting
	1	Dimmer	000 ⇄ 255	0-100%
	2	Red	000 ⇄ 255	0-100%
	3	Green	000 ⇄ 255	0-100%
	4	Blue	000 ⇄ 255	0-100%
	5	White	000 ⇄ 255	0-100%

ARC.2	Channel	Function	Value	Percent/Setting
	1	Red	000 ⇄ 255	0-100%
	2	Green	000 ⇄ 255	0-100%
	3	Blue	000 ⇄ 255	0-100%
	4	White	000 ⇄ 255	0-100%

AR1.D	Channel	Function	Value	Percent/Setting
	1	Dimmer	000 ⇄ 255	0-100%
	2	Red	000 ⇄ 255	0-100%
	3	Green	000 ⇄ 255	0-100%
	4	Blue	000 ⇄ 255	0-100%

ARC.1	Channel	Function	Value	Percent/Setting
	1	Red	000 ⇄ 255	0-100%
	2	Green	000 ⇄ 255	0-100%
	3	Blue	000 ⇄ 255	0-100%

HSV	Channel	Function	Value	Percent/Setting
	1	Hue	000 ⇄ 255	0-100%
	2	Saturation	000 ⇄ 255	0-100%
	3	Value	000 ⇄ 255	0-100%

## Configuration (Standalone)

Use standalone configuration to operate the product without a DMX controller.

### Auto Programs

Auto programs allow for dynamic RGBW color mixing without a DMX controller.

1. Go to the **AUTO** main level
2. Select the desired auto program (**AT. 01–10**) or custom program (**PR. 01–10**)



**You cannot edit any of the auto programs (AT. 01–10); however, you can edit the custom programs (PR.01–10). See Edit Custom Programs for details.**

### Edit Custom Programs

This setting allows the programming of up to 30 scenes for each of the 10 customizable programs, including colors and effects.

1. Go to the **EDIT** main level.
2. Select the desired custom program (**PR. 01–10**).
3. Select the desired scene (**SC. 01–30**).
4. Select the desired color, effect, or timer (**R, G, B, W, S, Z, T, or F**).
5. Select the color, effect, or timer value (**000–255** for colors, effects, and timers or **00–20** for strobe).
6. Repeat for the other colors, effects, or timers.
7. Return to the scene (**SC. 01–30**) level.
8. Repeat the settings of colors, effects, and timers for the other scenes.

### Master/Slave

The Master/Slave mode allows a group of Colorado 2 Quad Zoom products (the slaves) to simultaneously duplicate the output of another Colorado 2 Quad Zoom (the master) without a DMX controller.

To set each of the slaves:

1. Go to the **RUN** main level.
2. Select **SLAVE**.

To set the master:

1. Set the running mode to DMX as explained in [DMX Control](#).
2. Select an auto or custom program as explained in [Auto Programs](#), or a static mix of colors..



- The master is the one that runs a program whether in Auto, or Static Color 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.

### Color Settings

The COLOR setting determines how the Colorado 2 Quad Zoom generates the white color based on various RGB settings.

1. Go to the **SET** main level.
2. Select **COLR**.
3. Select **OFF**, **RGBW**, or **UC**.



**OFF:** When all the RGB faders are set to **255**, the output is maximum, although the resulting white color may not be balanced.

**RGBW:** When all the RGB faders are set to **255**, the resulting output is defined by the configured white color (see White Calibration).

**UC:** When all the RGB faders are set to **255**, the output matches that of less efficient products (Universal Color).

## Dimmer Profiles

This setting determines how fast the output of the Colorado 2 Quad Zoom changes when you modify the values of the red, green, blue, amber, and dimmer faders. This setting provides four different options to simulate the dimming curve of an incandescent lighting product.

1. Go to the **SET** main level.
2. Select **DIM**.
3. Select a dimmer curve (**OFF**, **DIM1**, **DIM2**, **DIM3**, or **DIM4**).



**OFF:** The output is proportional (linear) to the dimmer and RGBW channel values.

**Dimmer 1-4:** The output follows the dimmer and RGBW channel values based on the corresponding dimmer curve, DIM1 being the fastest.

## Curve Settings

This setting determines how fast the output of the Colorado 2 Quad Zoom changes when you modify the values of the red, green, blue, amber, and dimmer faders. This setting provides three different options to simulate the dimming curve of an incandescent lighting product.

1. Go to the **SET** main level.
2. Select **CURV**.
3. Select a dimmer curve (**OFF**, **CV1**, **CV2**, or **CV3**).



**OFF:** The output is proportional (linear) to the dimmer and RGBW channel values.

**CV1-3:** The output follows the dimmer and RGBW channel values based on the corresponding dimmer curve, **CV1** being the fastest and **CV3** the slowest.



**For optimum control of the 16-bit dimming channels in the TR16 and STD.Y personalities, be sure that both dimming curves in SET > DIM and SET > CURV are set to OFF**



- When the control panel lock is active, the product will prompt you to enter the passcode after 30 seconds of control panel inactivity or after turning on the product. See [Passcode](#).

## Program Upload

This option allows you to copy the custom programs of one Colorado 2 Quad Zoom onto other Colorado 2 Quad Zoom products by using the Master/Slave mode.

1. Configure and connect the products in a Master/Slave arrangement, where the master has the custom programs you want to transfer to the slaves.
2. From the master, go to the **SET** main level.
3. Select **UPLD**
4. When **PASS** shows, press <ENTER>
5. Enter the master access passcode as shown in [Passcode](#).
6. Wait for the upload process to finish (the display will show **END** before continuing or turning the products off).

**The master and slaves will provide the status of the process by lighting up as follows:**



- **Yellow** indicates that the upload process is running.
- **Green** indicates that the upload process completed successfully.
- **Red** indicates that the upload process failed due to an error. Recheck all cable connections and restart the process. If the issue persists, contact Chauvet Technical Support.



**DO NOT upload the data from a Colorado 2 Quad Zoom to a different product. The other product may become inoperative.**



## Reset

This setting allows you to reset the Colorado 2 Quad Zoom to the default values including the custom programs.

1. Go to the **SET** main level.
2. Select **REST**
3. When **PASS** shows, press **<ENTER>**.
4. Enter the master access passcode as described in [Passcode](#).
5. Wait for the reset process to finish.

## Whites Setting

This setting allows you to select and edit the temperature of the white colors used in channel 6 (Macros) when in the **TOUR** and **C1Q** mode, channel 11 when in the **TR16** and **STD.Y** mode, or channel 19 when in the **FULL** mode.

1. Go to the **CAL** main level.
2. Enter the master access passcode as described in [Passcode](#).
3. Go to **CAL**.
4. Go to **WT**.
5. Select a white color (**WH.01-11**).
6. Select a color (**R**, **G**, **B**, or **W**).
7. Select a color value (**000-255**).
8. Repeat for the other colors..

## White Calibration

This setting allows you to select the white color shown by the Colorado 2 Quad Zoom when the color setting is **RGBW** and the DMX controller's red, green, and blue faders are set to 255.

1. Go to the **CAL** main level.
2. Enter the master access passcode as described in [Passcode](#).
3. Go to **RGBW**.
4. Go to **RGB.W**
5. Select a color (**R**, **G**, or **B**).
6. Select a color value (**000-255**).
7. Repeat for the other colors.



- When selecting **CAL > RGBW**, you will only be able to define the values of **R** (red), **G** (green), and **B** (blue).
- The values of **R** (red), **G** (green), and **B** (blue) configured from **CAL > RGBW** will define the color temperature shown when the RGB faders are set to **255** if **SET > COLR > RGBW** is active.

## Static Color

The Static Color mode allows for permanent RGBW color mixing without a DMX controller.

1. Go to the **STAT** main level.
2. Select the desired color or effect (**R**, **G**, **B**, **W**, **S**, or **Z**).
3. Select the color or effect value (**000-255** for colors and effect, or **00-20** for strobe).
4. Repeat for the other colors or effects.

## 5. Technical Information

### Product Maintenance

To maintain optimum performance and minimize wear, clean this product frequently. Usage and environment are contributing factors in determining the cleaning frequency.

Clean this product at least twice a month. Dust build-up reduces light output performance and can cause overheating. This can lead to reduced light source life and increased mechanical wear.

To clean the product:

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 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
12.9 in (330 mm)	11.1 in (284 mm)	9.2 in (236 mm)	18.8 lb (8.6 kg)

**Note:** Dimensions in inches rounded to the nearest decimal digit.

### 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	203 W	201 W	208 W	208 W	208 W
Operating current	2.04 A	1.67 A	1.02 A	0.93 A	0.89 W
Power-linking current (products)	13.6 A (6 products)	13.6 A (8 products)	13.6 A (13 products)	13.6 A (14 products)	13.6 A (15 products)

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

### Light Source

Type	Power	Lifespan
LED	15 W	50,000 hours

Color	Quantity	Current
Quad-color RGBW	14	985 mA

### Photometrics

Parameter	Narrow Zoom	Wide Zoom
Beam angle	7°	29°
Field angle	14°	44°
Illuminance @ 5 m	8,780 lux	921

### Thermal

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

### DMX

I/O Connector	Channel Range
3- and 5-pin XLR	3, 4, 5, 6, 7, 12, or 17 channels

### Ordering

Product Name	Item Code	UPC Number
Colorado 2 Quad Zoom	01031244	781462215927



UL 1573  
CSA C22.2 No. 166  
E113093



RoHS



## Returns

In case you need to get support or return a product:

- If you are located in the U.S., contact Chauvet World Headquarters.
- If you are located in the U.K. or Ireland, contact Chauvet Europe Ltd.
- If you are located in Benelux, contact Chauvet Europe BVBA.
- If you are located in France, contact Chauvet France.
- If you are located in Germany, contact Chauvet Germany.
- If you are located in Mexico, contact Chauvet Mexico.
- If you are located in any other country, DO NOT contact Chauvet. Instead, contact your local distributor. See [www.chauvetprofessional.com](http://www.chauvetprofessional.com) for distributors outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico.



**If you are located outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico, contact your distributor of record and follow their instructions on how to return Chauvet products to them. Visit our website [www.chauvetprofessional.com](http://www.chauvetprofessional.com) for contact details.**

Call the corresponding Chauvet Technical Support office and request a Return Merchandise Authorization (RMA) number before shipping the product. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.

To submit a service request online, go to [www.chauvetprofessional.com/service-request](http://www.chauvetprofessional.com/service-request).

Send the merchandise prepaid, in its original box, and with its original packing and accessories. Chauvet will not issue call tags.

Clearly label the package with the RMA number. Chauvet will refuse any product returned without an RMA number.



**Write the RMA number on a properly affixed label. DO NOT write the RMA number directly on the box.**

Before sending the product, clearly write the following information on a piece of paper and place it inside the box:

- Your name
- Your address
- Your phone number
- RMA number
- A brief description of the problem

Be sure to pack the product properly. Any shipping damage resulting from inadequate packaging will be your responsibility. FedEx packing or double-boxing are recommended.



**Chauvet reserves the right to use its own discretion to repair or replace returned product(s).**

## Contact Us

General Information	Technical Support
<b>Chauvet World Headquarters</b>	
Address: 5200 NW 108th Ave. Sunrise, FL 33351 Voice: (954) 577-4455 Fax: (954) 929-5560 Toll Free: (800) 762-1084	Voice: (844) 393-7575 Fax: (954) 756-8015 Email: <a href="mailto:chauvetcs@chauvetlighting.com">chauvetcs@chauvetlighting.com</a> Website: <a href="http://www.chauvetdj.com">www.chauvetdj.com</a>
<b>Chauvet Europe Ltd</b>	
Address: Unit 1C Brookhill Road Industrial Estate Pinxton, Nottingham, UK NG16 6NT Voice: +44 (0) 1773 511115 Fax: +44 (0) 1773 511110	Email: <a href="mailto:UKtech@chauvetlighting.eu">UKtech@chauvetlighting.eu</a> Website: <a href="http://www.chauvetdj.eu">www.chauvetdj.eu</a>
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<b>Chauvet Germany</b>	
Address: Bruno-Bürgel-Str. 11 28759 Bremen Germany Voice: +49 421 62 60 20	Email: <a href="mailto:DEtech@chauvetlighting.de">DEtech@chauvetlighting.de</a> Website: <a href="http://www.chauvetdj.eu">www.chauvetdj.eu</a>
<b>Chauvet Mexico</b>	
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: <a href="mailto:servicio@chauvet.com.mx">servicio@chauvet.com.mx</a> Website: <a href="http://www.chauvetdj.mx">www.chauvetdj.mx</a>

Outside the U.S., U.K., Ireland, Benelux, France, Germany, or Mexico, contact the dealer of record. Follow the instructions to request support or to return a product. Visit our website for contact details.