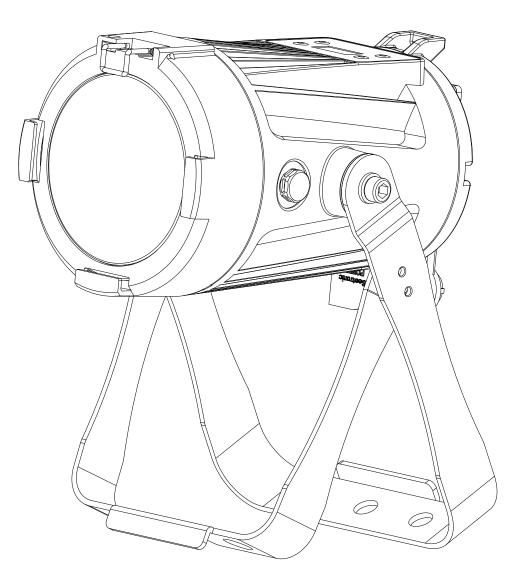


User Manual







EDITION NOTES

The Colorado M Solo User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for the Colorado M Solo as of the release 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.

Disclaimer

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Document Revision

This Colorado M Solo User Manual is the 3rd edition of this document. Go to <u>www.chauvetprofessional.com</u> for the latest version.



TABLE OF CONTENTS

1.	Before You Begin	3
-	What Is Included	3
	Claims	3
	Manual Conventions	3
		3
	Symbols	4
	Safety Notes	4
	Personal Safety Mounting and Rigging	4
	Power and Wiring	4
	Operation	4
	Expected LED Lifespan	4
2		5
2.	Introduction	
	Description	5
	Features	5
	Product Overview	6
	Product Dimensions	7
3.	Setup	8
	AC Power	8
	AC Plug	8
	Power Linking	8
	DMX Linking	8
	DMX Personalities	8
	Remote Device Management (RDM)	9
	Master/Slave Connectivity	9
	Mounting	9
	Orientation	9
	Rigging	ğ
	Procedure	1Ŏ
4.	Operation	11
- •	Control Panel Operation	11
		11
	Control Options	11
	Programming	11
	Control Panel Lock	11
	Passcode	11
	Menu Map	
	Configuration (DMX)	14
	DMX Personalities	14
	DMX Control.	14
	Loss Of Signal Setting	14 15
	TOUR Notes DMX Values	16
	STD.Y	16
	TR16	17
	Tour	19
	HSIC	20
	SSP	21
	Configuration (Standalone)	22
	Auto Programs	22
	Edit Custom Programs	22
	Master/Slave	22
	Color Settings	22



Dimmer Profiles	23
Program Upload	23
Reset	24
Whites Setting	24
White Calibration	
Color Temperature Settings	24
Zoom Mode	24
LED Frequency	24
Software Information	25
RDM	
5. Technical Information	26
Product Maintenance	26
6. Technical Specifications	27
Photometrics Chart	28
7. Returns	29
8. Contact Us	30



1. BEFORE YOU BEGIN

What Is Included

- Colorado M Solo
- Power Cord

- Warranty Card
- 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		
1–512	1–512 A range of values		
50/60	50/60 A set of values of which only one can be chosen		
<set></set>	A button on the product's control panel		
Settings A product function or a menu option			
- · ·	•		

Symbols

Symbol	Meaning
4	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
<u>_</u>	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.
Í	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 or replacing the fuse.
- 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

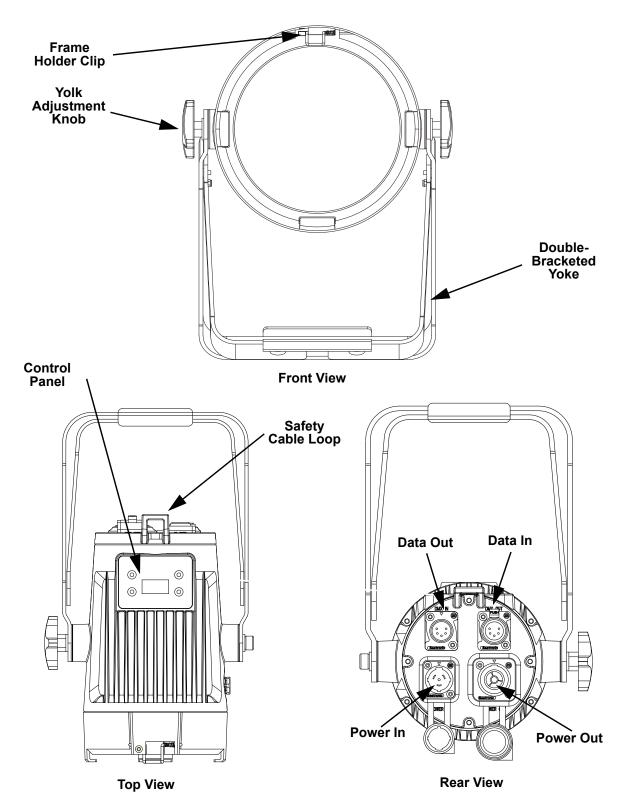
The Colorado M Solo uses one 40 W RGBW LED to project a fully homogenized beam through fast and smooth zooming optics. It uses IP rated power and data connectors as well as full convection cooling for reliable and silent performance in a wide range of applications, from indoor theatrical to outdoor festival productions.

Features

- 9, 12 or 17-channel quad-color LED wash product
- Operating modes:
 - 9-channel: H/S/CCT control, dimmer, strobe, zoom, zoom reset, dimmer speed
 - 9-channel: R/G/B/W, dimmer, strobe, zoom, zoom reset, dimmer speed
 - 12-channel: R/G/B/W, dimmer, strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
 - 17-channel: 16-bit R/G/B/W and dimmer; strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
 - 17-channel: 16-bit R/G/B/W and dimmer; strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset
- Zooming RGBW LED wash for touring, rental and production indoors or out
- Completely homogenized wash with superior color mixing and zoom
- 5° to 24° smooth and fast zoom
- All environment operation with IP rated power and DMX connections
- Color temperature presets, from 3200 K to 10,000 K
- Selectable, smooth dimming curves for programming versatility
- OLED display with password protection

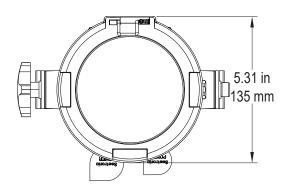


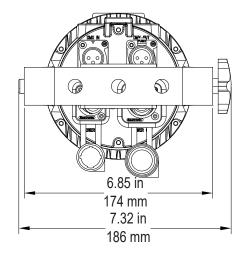
Product Overview

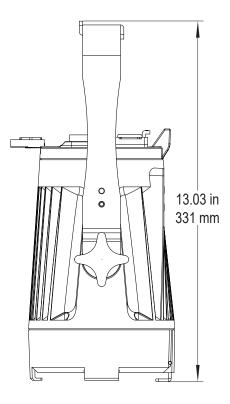




Product Dimensions









3. Setup

AC Power

Each Colorado M Solo 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 M Solo, 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: <u>www.chauvetprofessional.com</u>.

- Always connect the product to a protected circuit (circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.
- <u>/!</u>\
- To eliminate unnecessary wear and improve its lifespan, during periods of nonuse 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 M Solo 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 the 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. You can power link up to 39 products at 120 V; up to 58 at 208 V; or up to 62 at 230 V.

This product comes with a power input cord. Power linking cables are available from Chauvet for purchase.

 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 M Solo to a DMX controller using a 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 M Solo uses a 5-pin DMX data connection for the 9-, 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 M Solo 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: <u>www.chauvetprofessional.com</u>.
- For optimum control of the 16-bit dimming channels in the TR16 and STD.Y
 personalities, be sure that both dimming curves in SETTING > DIMMER are
 set to OFF.



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 M Solo supports RDM protocol that allows feedback to make changes to menu map options.

Master/Slave Connectivity

The Master/Slave mode allows a Colorado M Solo (the master) to control one or more Colorado M Solo products (the slaves) without a DMX controller. One Colorado M Solo 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 <u>Operation</u> 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: <u>www.chauvetprofessional.com</u>.
- 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 <u>http://trusst.com/products/</u>.

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.

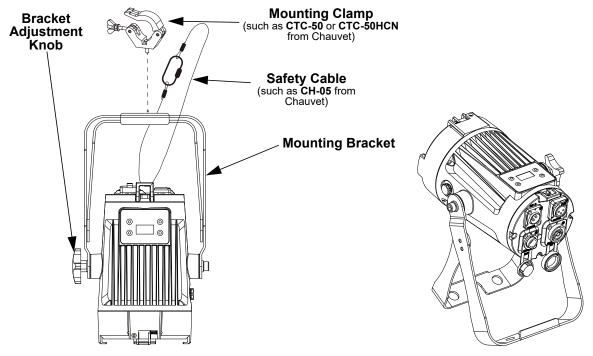
- Before deciding on a location for the product, make sure there is easy access to the product for maintenance and programming purposes.
- Make sure that the structure onto which you are mounting the product can support the product's weight. See the <u>Technical Specifications</u> for weight information.
- 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 M Solo 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://www.trusst.com/products.

Mounting Diagram





4. OPERATION

Control Panel Operation

Button Function				
<menu></menu>	<menu> Exits from the current menu or function</menu>			
<enter></enter>	Enables the currently displayed menu or sets the currently selected value in to the current function			
<up></up>	Navigates upward through the menu list or increases the numeric value when in a function			
<down></down>	Navigates downward through the menu list or decreases the numeric value when in a function			

Control Options

Set the Colorado M Solo starting address in the 001-512 DMX range. This enables control of up to 30 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	-	gramming L	evels		Description
STATIC	RED GREEN BLUE WHITE		0-25	5	Combines red, green, blue, and white to make a custom color (0–100%)
	ZOOM			•	Changes the beam angle (zoom) Selects the strobe
	STROBE				frequency (0–25 Hz)
ADDRESS		001-512			Sets the DMX starting address
AUTO	AUTO 1-1	0	SPEED	0-255	Selects automatic programs and auto program speed
PROGRAM	P	ROGRAM 1-	-10		Selects customizable programs
		DMX			Receives DMX signals from the DMX controller
		SLAVE			Receives DMX signals from the master
	Z	OOM MODE	1		Normal operation
ZOOM MODE	Z	OOM MODE	2		Recommended for use Below 40 °F
	HSIC			9-channel: H/S/CCT control, dimmer, strobe, zoom, zoom reset, dimmer speed	
	SSP				9-channel: R/G/B/W, dimmer, strobe, zoom, zoom reset, dimmer speed
PERSONALITY	TOUR			12-channel: R/G/B/W, dimmer, strobe, color macro, auto/custom, dimmer speed, auto speed, zoom, zoom reset	
	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	
			RED GREEN BLUE WHITE		Combines red, green, blue, and white to make a custom color (0-100%)
EDIT	PROGRAM	SCENE	ZOOM	0-255	Changes the beam angle (zoom)
	1-10	01-30	STROBE		Selects the strobe frequency (0–20 Hz)
			TIME		Defines the step duration (slow to fast)
			FADE		Defines the fade duration (slow to fast)



OPERATION

Main Level		Progr	amming L	Description				
		UPL	.OAD	**** (Enter Passcode)	SEND	Uploads custom programs to other Colorado M Solo s		
		RESET		**** (Enter Passcode)		Resets the fixture to factory defaults		
		DIM	MER	DIM DIM DIM	OFF DIM1 Selects dimmin from fast (DIM1 DIM3 (DIM4) or OFF DIM4			
		DMX E	ERROR	SAV	E	Continues with last command upon loss of DMX control		
OFTINO	****			BLAC	CK	Blacks out fixture upon loss of DMX		
SETTING	(Enter Passcode)	PWM		600HZ 1200HZ 2000HZ		Selects the PWM output frequency		
				2400HZ 6000HZ 18000HZ 25000HZ				
				Warm White Neutral White		Sets the color temperature		
	FL		FULL POWER CCT		nite#1 nite#2	when all color faders are set to 100%		
				NORMAL HIDE SHOW		Manual color temperature		
		XY OFFSET				Shows and hides XY settings in PWM menu option.		
KEY		OFF				1		Sets to key lock (Passcode mode)
CALIB.C	**** (Enter Passcode)	WHITE	WHITE 01-13	X FINE Y FINE	+/- 200	Modifies the color macros used in the TOUR,STD.Y, and TR16 personalities		
	VERS	ION	V		<u> </u>	Shows installed software version		
INFO		U	ID			Shows product UID		
	RDM LAI		BEL	COLORADO M SOLO		Shows product name		



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 **PERSONALITY** main level
- 2. Select the desired personality (TOUR, TR16, STD.Y, HSIC, or SSP).



- See the <u>DMX Values</u> 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 MODE** main level
 - b. Select the **DMX** programming level
- 3. Set the starting address:
 - a. Go to **DMX Address** 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
TOUR	501	TR16	496
STD.Y	496	HSIC	504
SSP	504		

Loss Of Signal Setting

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

- 1. Go to the SETTING main level
- 2. Enter the master access passcode as described in **Passcode**
- 3. Select **DMX ERROR**
 - a. Select SAVE to make the product use the last command used when the signal is lost
 - b. Select **BLACK** to turn off the all the LEDs when the signal is lost



TOUR Notes

These notes clarify the way the **TOUR** DMX personality works.

Master Dimmer

- Channel 1 controls the intensity of the currently projected color.
- When the slider is at the highest position (100%), the intensity of the output is at maximum.

Red, Green, Blue, and White Color Selection

- Channels 2 through 5 control the intensity ratio of each of the red, green, blue, and white LEDs.
- When these channels are at the highest position (100%), the intensity of each color is at maximum.
- You can combine channels 2 through 5 to create over one trillion colors.

Color Macros

- Channel 6 selects the required color macro.
- Channel 6 has priority over channels 2 through 6.
- Channel 1 controls the intensity of the color macro.

Strobe

- Channel 7 controls the strobe frequency (not the intensity) of channels 2 through 6.
- Channel 7 can strobe channels 2 through 5 when not running macros, allowing the individual faders (R, G, B, and W), as well as channel 1 (D), to control the output intensity.
- Channel 7 can strobe channel 6 when running macros, allowing channel 6 to select the macro and channel 1 to control the output intensity

Auto/Custom

- Channel 8 selects the preset auto programs AUTO01–10 or the custom programs PROGRAM1-10.
- When activating the custom auto programs **PROGRAM1-10**, you can control the step time and fade time using channels 2 and 3, respectively.
- Channel 8 has priority over channels 2 through 7.
- Channel 9 controls the speed at which each auto program plays.

Zoom

- Channel 10 controls Zoom adjustment. This provides options to adjust the beam angle from 8 to 55 degrees.
- Channel 11 resets the zoom lens to the home position.

Dimmer Speed

- Channel 12 selects the Dimmer mode and speed. Dimmer mode provides four different options to simulate the dimming curve of an incandescent lighting product.
- When dimmer is set to OFF, the changes in the RGBW and master dimmer faders are linear.
- When dimmer is set to DIM1-DIM4, DIM1 is the fastest dimmer curve and DIM4 is the slowest.



DMX Values STD.Y

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ⇔ 255	0-100%
2	Dimmer Fine		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	Red Fine	000 ⇔ 255	Fine control (16-bit)
5	Green	000 ⇔ 255	0-100%
6	Green Fine	000 ⇔ 255	Fine control (16-bit)
7	Blue	000 ⇔ 255	0-100%
8	Blue Fine	000 ⇔ 255	Fine control (16-bit)
9	White	000 ⇔ 255	0-100%
10	White Fine	000 ⇔ 255	Fine control (16-bit)
11	Color Macro	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	R:100%-0 G: 100% B: 0 R:0 G: 100%-0 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 10 White 11 White 12 White 12
12	Strobe	010 ⇔ 099 100 ⇔ 109 110 ⇔ 179	No function Slow to fast No function Lighting effect, slow to fast No function Random

OPERATION



Channel	Function	Value	Percent/Setting
13	Programs	$\begin{array}{cccccc} 041 \Leftrightarrow & 050\\ 051 \Leftrightarrow & 060\\ 061 \Leftrightarrow & 070\\ 071 \Leftrightarrow & 080\\ 081 \Leftrightarrow & 090\\ 091 \Leftrightarrow & 100\\ 101 \Leftrightarrow & 110\\ 111 \Leftrightarrow & 120\\ 121 \Leftrightarrow & 130\\ 131 \Leftrightarrow & 140\\ 141 \Leftrightarrow & 150\\ 151 \Leftrightarrow & 160\\ 161 \Leftrightarrow & 170\\ 171 \Leftrightarrow & 180\\ 181 \Leftrightarrow & 190\\ 191 \Leftrightarrow & 200\\ 201 \Leftrightarrow & 210\\ 211 \Leftrightarrow & 220\\ 221 \Leftrightarrow & 230\\ \end{array}$	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
14	Auto Speed	000 ⇔ 255	
15	Zoom	000 ⇔ 255	0-100%
16	Zoom Control	201 ⇔ 220	No function Zoom reset No function
17	Dimmer Speed		Preset dimmer speed from display menu Linear dimmer Nonlinear dimming curve 1 (fastest) Nonlinear dimming curve 2 Nonlinear dimming curve 3 Nonlinear dimming curve 4 (slowest)

TR16

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ⇔ 255	
2	Dimmer Fine		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	Red Fine	000 ⇔ 255	Fine control (16-bit)
5	Green	000 ⇔ 255	0-100%
6	Green Fine	000 ⇔ 255	Fine control (16-bit)
7	Blue	000 ⇔ 255	0-100%
8	Blue Fine	000 ⇔ 255	Fine control (16-bit)
9	White	000 ⇔ 255	0-100%
10	White Fine	000 ⇔ 255	Fine control (16-bit)



Channel	Function	Value	Percent/Setting			
11	Color Macro	$\begin{array}{cccccc} 011 & \Leftrightarrow & 030 \\ 031 & \Leftrightarrow & 050 \\ 051 & \Leftrightarrow & 070 \\ 071 & \Leftrightarrow & 090 \\ 091 & \Leftrightarrow & 110 \\ 111 & \Leftrightarrow & 130 \\ 131 & \Leftrightarrow & 150 \\ 151 & \Leftrightarrow & 170 \\ 171 & \Leftrightarrow & 195 \\ 196 & \Leftrightarrow & 200 \\ 201 & \Leftrightarrow & 205 \\ 206 & \Leftrightarrow & 210 \\ 211 & \Leftrightarrow & 215 \\ 216 & \Leftrightarrow & 220 \\ 221 & \Leftrightarrow & 225 \\ 226 & \Leftrightarrow & 230 \\ 231 & \Leftrightarrow & 225 \\ 236 & \Leftrightarrow & 240 \\ 241 & \Leftrightarrow & 245 \\ 246 & \Leftrightarrow & 250 \\ 251 & \Leftrightarrow & 255 \\ \end{array}$	R:100%-0 G: 100% B: 0 R:0 G: 100%-0 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 5 White 7 White 8 White 10 White 11 White 12 White 10			
12	Strobe	010 ⇔ 099 100 ⇔ 109 110 ⇔ 179 180 ⇔ 189 190 ⇔ 255				
13	Programs	$\begin{array}{cccccc} 0.41 \Leftrightarrow & 050 \\ 0.51 \Leftrightarrow & 060 \\ 0.61 \Leftrightarrow & 070 \\ 0.71 \Leftrightarrow & 080 \\ 0.81 \Leftrightarrow & 090 \\ 0.91 \Leftrightarrow & 100 \\ 101 \Leftrightarrow & 110 \\ 101 \Leftrightarrow & 110 \\ 111 \Leftrightarrow & 120 \\ 121 \Leftrightarrow & 130 \\ 131 \Leftrightarrow & 140 \\ 141 \Leftrightarrow & 150 \\ 151 \Leftrightarrow & 160 \\ 161 \Leftrightarrow & 170 \\ 171 \Leftrightarrow & 180 \\ \end{array}$	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			
14	Auto Speed	000 ⇔ 255	0-100%			
15	Zoom		0-100%			
16	Zoom Control	201 ⇔ 220	No function Zoom reset No function			
17	Dimmer Speed	010 ⇔ 029 030 ⇔ 069 070 ⇔ 129 130 ⇔ 189	Preset dimmer speed from display menu Linear dimmer Nonlinear dimming curve 1 (fastest) Nonlinear dimming curve 2 Nonlinear dimming curve 3 Nonlinear dimming curve 4 (slowest)			



Tour

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ⇔ 255	0-100%
2	Red	000 ⇔ 255	0-100% (Fade Duration if Custom 1-10 in CH. 13 is active)
3	Green	000 ⇔ 255	0-100%
4	Blue	000 ⇔ 255	0-100%
5	White	000 ⇔ 255	0-100%
6	Color Macro	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	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: 00%-0 R:100% G: 0-100% B: 0-100% R:100%-0 G: 100%-0 B: 0-100% RGBW: 100% White 1 White 2 White 3 White 4 White 5 White 5 White 7 White 8 White 10 White 10
7	Strobe	010 ⇔ 099 100 ⇔ 109 110 ⇔ 179	No function Slow to fast No function Lighting effect, slow to fast No function Random
8	Programs	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	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
9	Auto Speed		0-100%



Channel	Function	Value	Percent/Setting
11	Zoom Control	201 ⇔ 220	No function Zoom reset No function
12	Dimmer Speed	010 ⇔ 029 030 ⇔ 069 070 ⇔ 129	Preset dimmer speed from display menu Linear dimmer Nonlinear dimming curve 1 (fastest) Nonlinear dimming curve 2 Nonlinear dimming curve 3 Nonlinear dimming curve 4 (slowest)

HSIC

Channel	Function	Value	Percent/Setting		
1	Dimmer	000 ⇔ 255	0-100%		
2	Hue	000 ⇔ 255	0-100%		
3	Hue Fine	000 ⇔ 255	0-100%		
4	Saturation	000 ⇔ 255	0-100%		
5	White Balance		White 2 White 3 White 4 White 5 White 6 White 7 White 8 White 9 White 10 White 11		
6	Strobe	010 ⇔ 099 100 ⇔ 109 110 ⇔ 179	No function Slow to fast No function Lighting effect, slow to fast No function Random		
7	Zoom	000 ⇔ 255	0-100%		
8	Zoom Control	201 ⇔ 220	No function Zoom reset No function		
9	Dimmer Speed	010 ⇔ 029 030 ⇔ 069 070 ⇔ 129 130 ⇔ 189	Preset dimmer speed from display menu Linear dimmer Nonlinear dimming curve 1 (fastest) Nonlinear dimming curve 2 Nonlinear dimming curve 3 Nonlinear dimming curve 4 (slowest)		

SSP

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%



OPERATION

Channel	Function	Value	Percent/Setting	
6	Strobe	010 ⇔ 099 100 ⇔ 109 110 ⇔ 179	No function Slow to fast No function Lighting effect, slow to fast No function Random	
7	Zoom	000 ⇔ 255	0-100%	
8	Zoom Control	201 ⇔ 220	No function Zoom reset No function	
9	Dimmer Speed	010 ⇔ 029 030 ⇔ 069 070 ⇔ 129 130 ⇔ 189	Preset dimmer speed from display menu Linear dimmer Nonlinear dimming curve 1 (fastest) Nonlinear dimming curve 2 Nonlinear dimming curve 3 Nonlinear dimming curve 4 (slowest)	

Configuration (Standalone)

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

Auto Programs

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

- 1. Go to the **Auto Program** main level
- 2. Select the desired auto (AUTO1-10) and (Speed 000-255) or custom program (PROGRAM1-10)



You cannot edit any of the auto programs (AUTO1-10); however, you can edit the custom programs (PROGRAM1-10). 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 auto program (PROGRAM01-10)
- 3. Select the desired scene (**SCENE 01–30**)
- 4. Select the desired color or effect (**RED**, **GREEN**, **BLUE**, **WHITE**, **STROBE**, **TIME**, or **FADE**)
- 5. Select the color or effect value (**000–255**)
- 6. Repeat for the other colors or effects
- 7. Return to the scene (SCENE 01-30) level
- 8. Repeat the settings of colors and effects for the other scenes



Master/Slave

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

To set each of the slaves:

- 1. Go to the **RUN MODE** 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 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.

Dimmer Profiles

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

- 1. Go to the **SETTING** main level
- 2. Enter the master access passcode as described in Passcode
- 3. Select **DIMMER**
- 4. Select a dimmer curve (OFF, DIM1, DIM2, DIM3, or DIM4)



- **OFF:** The output is proportional (linear) to the dimmer and RGBW channel values.
- **DIM1-4:** The output follows the dimmer and RGBW channel values based on the
- corresponding dimmer curve, DIM1 being the fastest and DIM4 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 SETTING > DIMMER 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 M Solo onto other Colorado M Solos 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 **SETTING** main level
- 3. Enter the master access passcode as shown in Passcode
- 4. Select UPLOAD
- 5. Enter the master access passcode as shown in Passcode
- 6. When **SEND** shows, press **<ENTER>** to start the upload.
- 7. 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 M Solo to a different product. The other product may become inoperative.

Reset

This setting allows you to reset the Colorado M Solo to the default values, including the custom programs.

- 1. Go to the **SETTING** main level
- 2. Enter the master access passcode as shown in Passcode
- 3. Select RESET
- 4. Enter the master access passcode as shown 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** mode, channel 11 when in the **TR16** and **STD.Y** mode, or channel 5 when in the **HSIC** mode.

- 1. Go to the **CALIB.C** main level.
- 2. Enter the master access passcode as shown in Passcode
- 3. Select a white color (WHITE > WHITE 01-13)
- 4. Select a white color sides (**X FINE-Y Fine**)
- 5. Select a white color side value (+/- 200)
- 6. Repeat for the other colors

Color Temperature Settings

This setting controls the color temperature with preset white output options when all color faders are set to 100%.

- 1. Go to the **SETTING** main level
- 2. Enter the master access passcode as shown in Passcode
- 3. Select FULL POWER CCT
- 4. Choose a white output color temperature. (WARM WHITE, NEUTRAL WHITE, COOL WHITE#1, COOL WHITE#2, or NORMAL)

Zoom Mode

These settings are to be changed when operating in environmental temperatures lower than 40 °F. The default setting for normal operating temperatures above 40 °F is **ZOOM MODE 1**.

- 1. Go to the **ZOOM MODE** main level
- 2. Select **ZOOM MODE 1** for use in normal operating temperature environments or **ZOOM MODE 2** environmental temperatures lower than 40 °F.

LED Frequency

This option changes the Pulse Width Modulation (PWM) frequency of the LEDs on the Colorado M Solo.

- 1. Go to the **SETTING** main level
- 2. Enter the master access passcode as shown in Passcode
- 3. Select PWM
- 4. Choose an output frequency. (600Hz, 1200Hz, 2000Hz, 2400Hz, 6000Hz, 18000Hz, or 25000Hz)





Software Information

This option shows what version of software the Colorado M Solo is running.

- 1. Go to the **INFO** main level
- 2. Select **VERSION** and the version number will show on the screen

RDM

This option shows the product's UID # and the product name.

- 1. Go to the **RDM** main level
- 2. Select **UID** and the version number will show on the screen
- 3. Select LABEL and the product name will show on the screen



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	
13.03 in (331 mm) 7.3	2 in (186 mm)	5.31 in (135 mm)	7.8 lb (3.6 kg)	
Note: Dimensions in inches round Power	ed to the nearest h	undredth.		
Power Supply Type	Rar	-	Voltage Selection	
Switching (internal)	100 to 240 VA	AC, 50/60 Hz	Auto-ranging	
Parameter	120 V,	60 Hz	230 V, 50 Hz	
Consumption	44	W	49 W	
Operating Current	0.34	-2 A	0.218 A	
Power linking current (products)	13.6 A (39	products)	13.6 A (62 products)	
Power I/O	U.S./C	anada	Worldwide	
Power input connector	Seetronic Po	werkon IP65	Seetronic Powerkon IP65	
Power output connector	Seetronic Po	werkon IP65	Seetronic Powerkon IP65	
Power Cord plug	Edison	(U.S.)	Local Plug	
Light Source				
Туре	Pov	ver	Lifespan	
LED	40	W	50,000 hours	
Color	Quai	ntity	Current	
quad-color RGBW	1		2.55 A	
Photometrics				
Parameter	Narrow	Zoom	Wide Zoom	
Beam Angle	4	0	18°	
Field Angle	5	0	24°	
Illuminance @ 5 m	4280) lux	238 lux	
Thermal				
Maximum External Temperature	Cooling	System		
113 °F (45 °C)	Conve	ection		
DMX				
I/O Connector	Channe	I Range		
5-pin XLR	9, 12	or 17		
Ordering				
Product Name	Item	Code	UPC Number	
Colorado M Solo	0103	1314	781462216627	





Photometrics Chart

metri	03 01	art							
	Nar	row	Zoomable Light Source					Wide	
Distance	Beam Diameter	Field Diameter	FC				FC	Beam Diameter	Field Diameter
15 ft	1.05 ft	1.31 ft	476				26	4.75 ft	6.38 ft
20 ft	1.40 ft	1.75 ft	268				15	6.34 ft	8.50 ft
30 ft	<u>2.10 ft</u>	2.62 ft	119				7	9.50 ft	12.75 ft
40 ft	2.79 ft	3.49 ft	67				4	12.67 ft	17.00 ft
50 ft	<u>3.49 ft</u>	4.37 ft	43				2	15.84 ft	21.26 ft
75 ft	<u>5.24 ft</u>	6.55 ft	19				1	23.76 ft	31.88 ft
<u>100 ft</u>	<u>6.98 ft</u>	8.73 ft	11				1	31.68 ft	42.51 ft
<u>125 ft</u>	<u>8.73 ft</u>	10.92 ft	7				0	39.60 ft	53.14 ft
150 ft	10.48 ft	13.10 ft	5				0	47.52 ft	63.77 ft
				Field Pr		Field			

Field Beam Field

	Nar	row	2	Zoomable Light Source				Wide	
Distance	Beam Diameter	Field Diameter	Lux				Lux	Beam Diameter	Field Diameter
<u>1 m</u>	0.07 m	0.09 m	107,000				5950	0.32 m	<u>0.43 m</u>
<u>2 m</u>	0.14 m	0.17 m	26,750				1488	0.63 m	<u>0.85 m</u>
<u>5 m</u>	0.35 m	0.44 m	4280				238	1.58 m	2.13 m
<u>8 m</u>	0.56 m	0.70 m	1672				93	2.53 m	3.40 m
10 m	0.70 m	0.87 m	1070				60	3.17 m	4.25 m
<u>15 m</u>	1.05 m	1.31 m	476				26	4.75 m	<u>6.38 m</u>
20 m	1.40 m	1.75 m	268				15	6.34 m	<u>8.50 m</u>
25 m	1.75 m	2.18 m	171				10	7.92 m	10.63 m
30 m	2.10 m	2.62 m	119				7	9.50 m	12.75 m
			Fiel	d Be	am	Field			



RETURNS

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

Call Chauvet 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(s) for the return.

Clearly label the package with an 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.

Once you have the RMA number, provide 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
Chauvet World Headquarters	· ·
Address: 5200 NW 108th Ave.	Voice: (844) 393-7575
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Fax: (954) 929-5560	
Toll Free: (800) 762-1084	Website: www.chauvetprofessional.com
Chauvet Europe Ltd	
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Chauvet Mexico	
Address: Av. de las Partidas 34 - 3B (Entrance by Calle 2)	Email: <u>servicio@chauvet.com.mx</u>
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Lerma, Edo. de México, CP 52000	
Voice: +52 (728) 690-2010	

Visit the applicable website above to verify our contact information and instructions to request support. Outside the U.S., United Kingdom, Ireland, Mexico, France, Germany, or Benelux, contact the dealer of record.