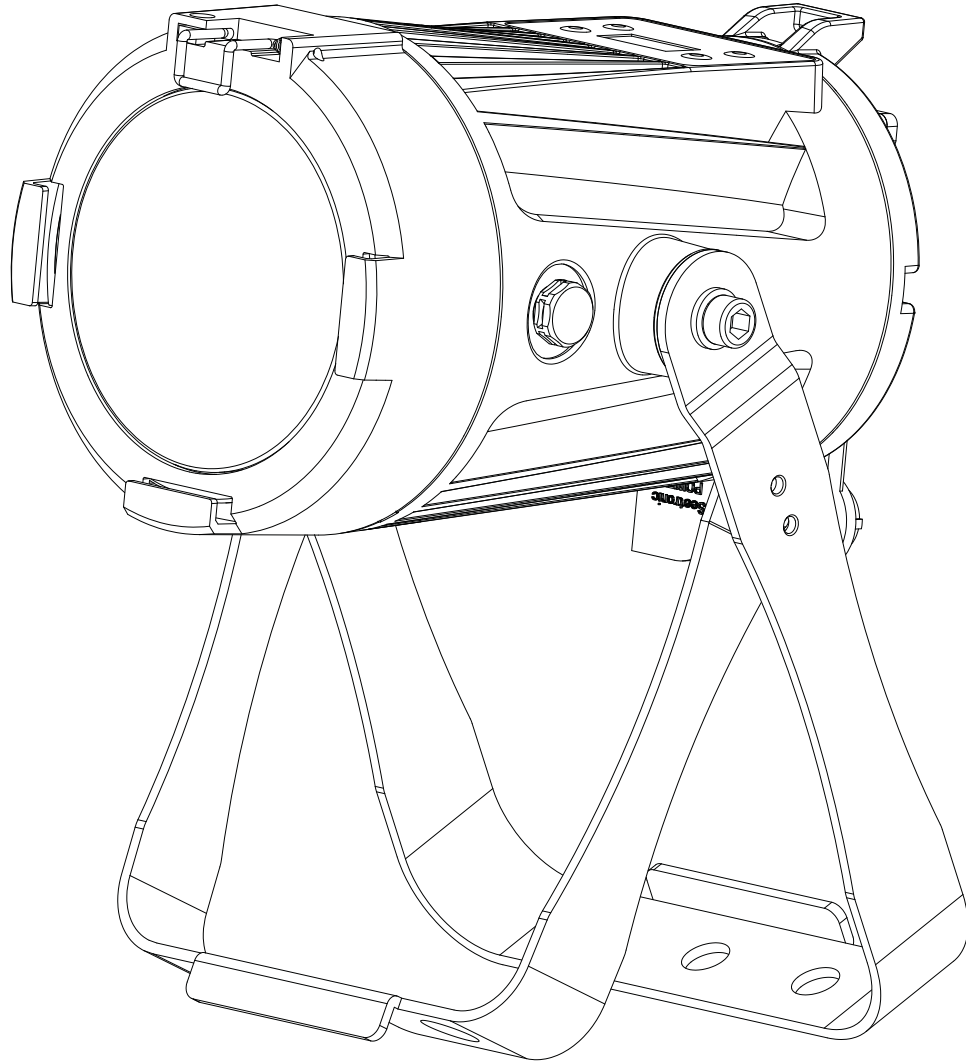


COLORADO M SOLO

User Manual




CHAUVET
PROFESSIONAL

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 www.chauvetprofessional.com for the latest version.

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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	A range of values
50/60	A set of values of which only one can be chosen
<SET>	A button on the product’s control panel
Settings	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 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

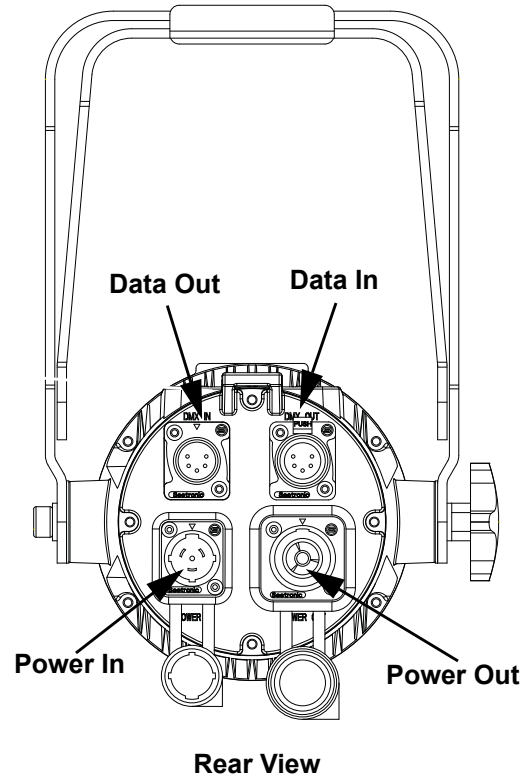
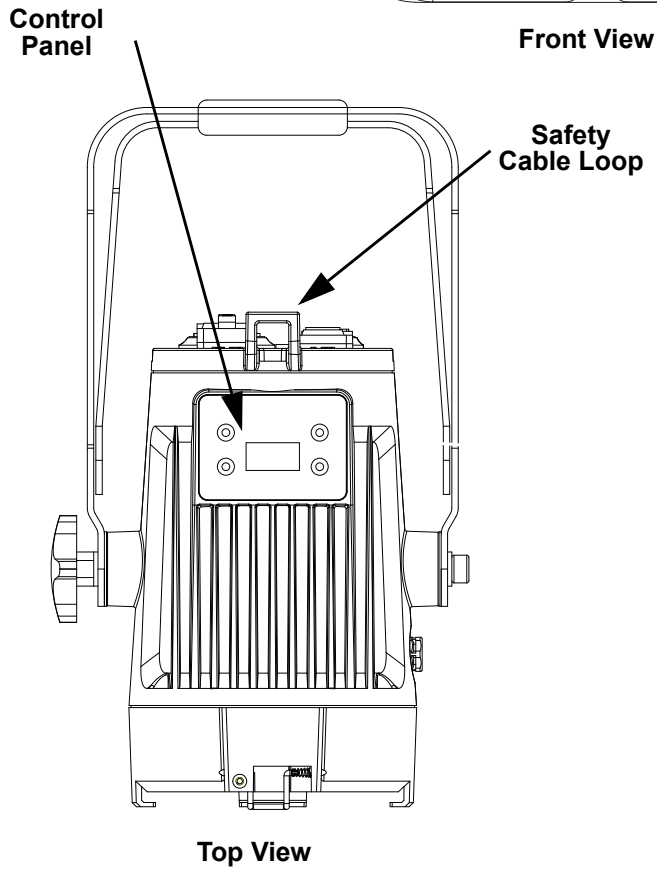
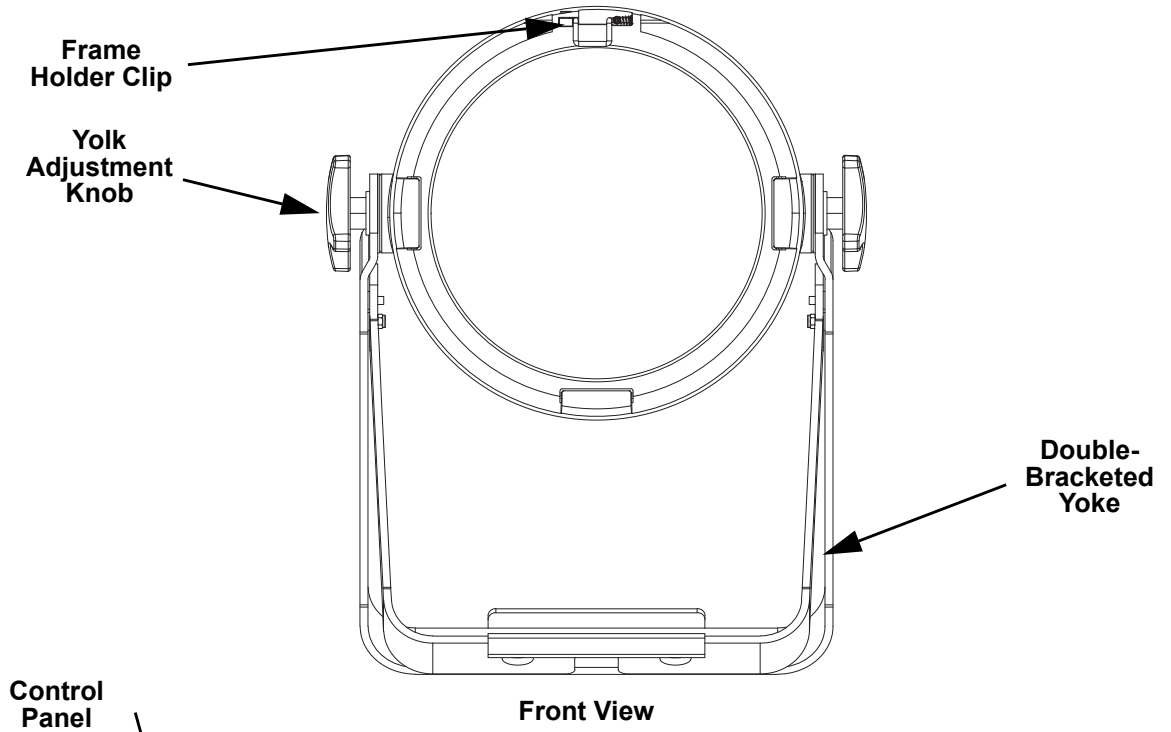
Description

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.

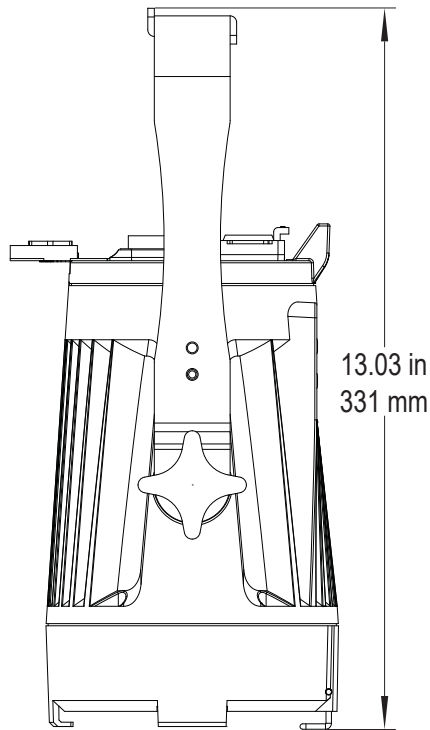
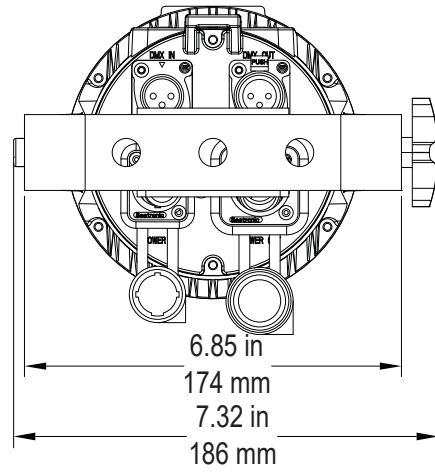
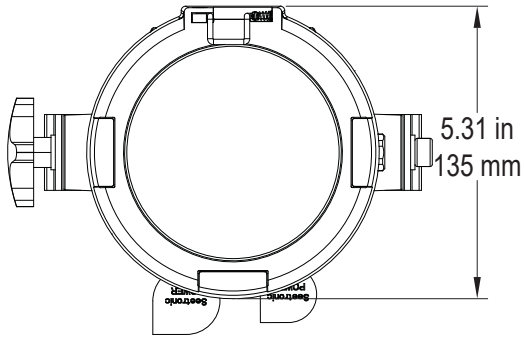
Features

- 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: www.chauvetprofessional.com.



- **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.**
- **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 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 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. 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: www.chauvetprofessional.com.**
- **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 [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.



- 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

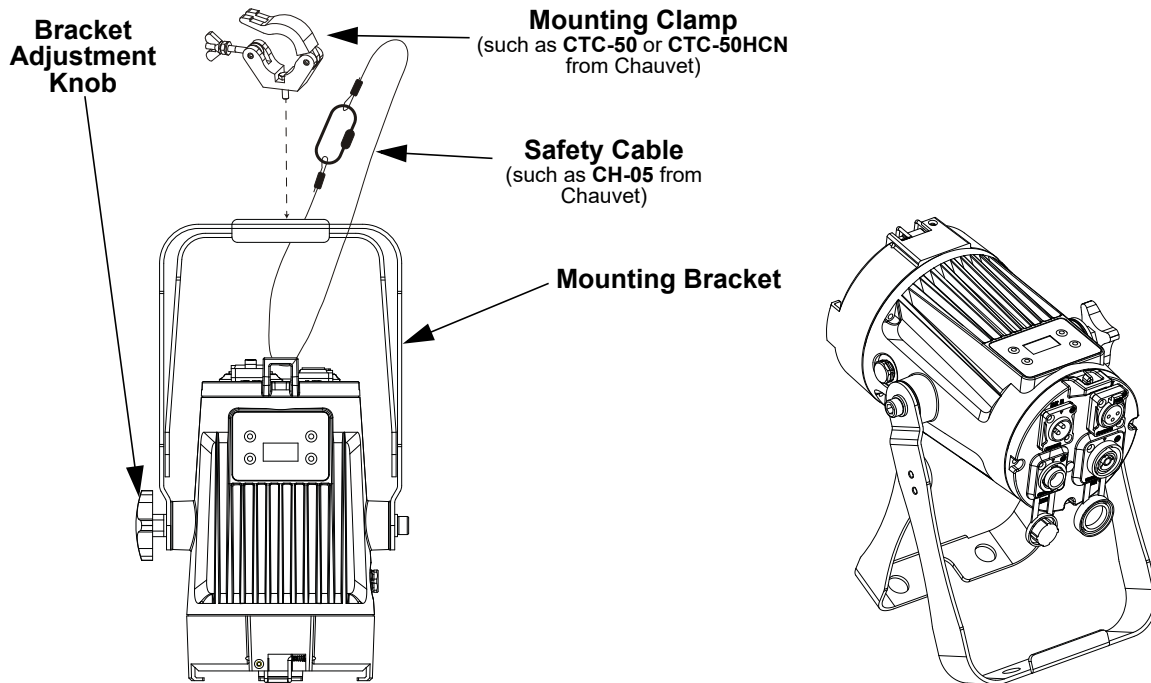
Chauvet recommends using the following general guidelines when mounting this product.

- 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 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>	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 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	Programming Levels			Description		
STATIC	RED	0-255		Combines red, green, blue, and white to make a custom color (0-100%)		
	GREEN					
	BLUE					
	WHITE					
	ZOOM					
	STROBE			Selects the strobe frequency (0-25 Hz)		
ADDRESS	001-512			Sets the DMX starting address		
AUTO PROGRAM	AUTO 1-10	SPEED 0-255		Selects automatic programs and auto program speed		
	PROGRAM 1-10			Selects customizable programs		
RUN MODE	DMX			Receives DMX signals from the DMX controller		
	SLAVE			Receives DMX signals from the master		
ZOOM MODE	ZOOM MODE 1			Normal operation		
	ZOOM MODE 2			Recommended for use Below 40 °F		
PERSONALITY	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		
	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		
EDIT	PROGRAM 1-10	SCENE 01-30	RED	0-255	Combines red, green, blue, and white to make a custom color (0-100%)	
			GREEN			
			BLUE			
			WHITE			
			ZOOM			Changes the beam angle (zoom)
			STROBE			Selects the strobe frequency (0-20 Hz)
			TIME			Defines the step duration (slow to fast)
FADE	Defines the fade duration (slow to fast)					

Main Level	Programming Levels					Description	
SETTING	**** (Enter Passcode)	UPLOAD		**** (Enter Passcode)	SEND	Uploads custom programs to other Colorado M Solo s	
		RESET		**** (Enter Passcode)		Resets the fixture to factory defaults	
		DIMMER		OFF			Selects dimming profiles from fast (DIM1) to slow (DIM4) or OFF
				DIM1			
				DIM2			
				DIM3			
		DMX ERROR		SAVE			Continues with last command upon loss of DMX control
				BLACK			Blacks out fixture upon loss of DMX
		PWM		600HZ			Selects the PWM output frequency
				1200HZ			
				2000HZ			
				2400HZ			
				6000HZ			
				18000HZ			
		FULL POWER CCT		Warm White			Sets the color temperature when all color faders are set to 100%
	Neutral White						
	Cool White#1						
	Cool White#2						
XY OFFSET		NORMAL			Manual color temperature		
		HIDE			Shows and hides XY settings in PWM menu option.		
		SHOW					
KEY		OFF ON				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	
INFO	VERSION		V....			Shows installed software version	
	RDM	UID			Shows product UID	
		LABEL		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 [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 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 5.
- 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	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	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	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 ⇄ 195	RGBW: 100%
		196 ⇄ 200	White 1
		201 ⇄ 205	White 2
		206 ⇄ 210	White 3
		211 ⇄ 215	White 4
		216 ⇄ 220	White 5
		221 ⇄ 225	White 6
		226 ⇄ 230	White 7
231 ⇄ 235	White 8		
236 ⇄ 240	White 9		
241 ⇄ 245	White 10		
246 ⇄ 250	White 11		
251 ⇄ 255	White 12		
12	Strobe	000 ⇄ 009	No function
		010 ⇄ 099	Slow to fast
		100 ⇄ 109	No function
		110 ⇄ 179	Lighting effect, slow to fast
		180 ⇄ 189	No function
		190 ⇄ 255	Random

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%
15	Zoom	000 ⇄ 255	0-100%
16	Zoom Control	000 ⇄ 200	No function
		201 ⇄ 220	Zoom reset
		221 ⇄ 255	No function
17	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)		

TR16

Channel	Function	Value	Percent/Setting
1	Dimmer	000 ⇄ 255	0-100%
2	Dimmer Fine	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	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	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 ⇄ 195	RGBW: 100%
		196 ⇄ 200	White 1
		201 ⇄ 205	White 2
		206 ⇄ 210	White 3
		211 ⇄ 215	White 4
		216 ⇄ 220	White 5
		221 ⇄ 225	White 6
		226 ⇄ 230	White 7
		231 ⇄ 235	White 8
		236 ⇄ 240	White 9
		241 ⇄ 245	White 10
246 ⇄ 250	White 11		
251 ⇄ 255	White 12		
12	Strobe	000 ⇄ 009	No function
		010 ⇄ 099	Slow to fast
		100 ⇄ 109	No function
		110 ⇄ 179	Lighting effect, slow to fast
		180 ⇄ 189	No function
		190 ⇄ 255	Random
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%
15	Zoom	000 ⇄ 255	0-100%
16	Zoom Control	000 ⇄ 200	No function
		201 ⇄ 220	Zoom reset
		221 ⇄ 255	No function
17	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)		

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	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 ⇄ 195	RGBW: 100%
		196 ⇄ 200	White 1
		201 ⇄ 205	White 2
		206 ⇄ 210	White 3
		211 ⇄ 215	White 4
		216 ⇄ 220	White 5
		221 ⇄ 225	White 6
		226 ⇄ 230	White 7
231 ⇄ 235	White 8		
236 ⇄ 240	White 9		
241 ⇄ 245	White 10		
246 ⇄ 250	White 11		
251 ⇄ 255	White 12		
7	Strobe	000 ⇄ 009	No function
		010 ⇄ 099	Slow to fast
		100 ⇄ 109	No function
		110 ⇄ 179	Lighting effect, slow to fast
		180 ⇄ 189	No function
		190 ⇄ 255	Random
8	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		
9	Auto Speed	000 ⇄ 255	0-100%
10	Zoom	000 ⇄ 255	0-100%

Channel	Function	Value	Percent/Setting
11	Zoom Control	000 ⇄ 200	No function
		201 ⇄ 220	Zoom reset
		221 ⇄ 255	No function
12	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)

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	000 ⇄ 010	No function
		011 ⇄ 030	White 1
		031 ⇄ 050	White 2
		051 ⇄ 070	White 3
		071 ⇄ 090	White 4
		091 ⇄ 110	White 5
		111 ⇄ 130	White 6
		131 ⇄ 150	White 7
		151 ⇄ 170	White 8
		171 ⇄ 190	White 9
		191 ⇄ 210	White 10
		211 ⇄ 230	White 11
		231 ⇄ 255	White 12
6	Strobe	000 ⇄ 009	No function
		010 ⇄ 099	Slow to fast
		100 ⇄ 109	No function
		110 ⇄ 179	Lighting effect, slow to fast
		180 ⇄ 189	No function
		190 ⇄ 255	Random
7	Zoom	000 ⇄ 255	0-100%
8	Zoom Control	000 ⇄ 200	No function
		201 ⇄ 220	Zoom reset
		221 ⇄ 255	No function
9	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)

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%

Channel	Function	Value	Percent/Setting
6	Strobe	000 ⇄ 009	No function
		010 ⇄ 099	Slow to fast
		100 ⇄ 109	No function
		110 ⇄ 179	Lighting effect, slow to fast
		180 ⇄ 189	No function
		190 ⇄ 255	Random
7	Zoom	000 ⇄ 255	0-100%
8	Zoom Control	000 ⇄ 200	No function
		201 ⇄ 220	Zoom reset
		221 ⇄ 255	No function
9	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)

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)	7.32 in (186 mm)	5.31 in (135 mm)	7.8 lb (3.6 kg)

Note: Dimensions in inches rounded to the nearest hundredth.

Power

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

Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	44 W	49 W
Operating Current	0.342 A	0.218 A
Power linking current (products)	13.6 A (39 products)	13.6 A (62 products)

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

Light Source

Type	Power	Lifespan
LED	40 W	50,000 hours

Color	Quantity	Current
quad-color RGBW	1	2.55 A

Photometrics

Parameter	Narrow Zoom	Wide Zoom
Beam Angle	4°	18°
Field Angle	5°	24°
Illuminance @ 5 m	4280 lux	238 lux

Thermal

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

DMX

I/O Connector	Channel Range
5-pin XLR	9, 12 or 17

Ordering

Product Name	Item Code	UPC Number
Colorado M Solo	01031314	781462216627



UL 1573
CSA C22.2 No. 166
E113093

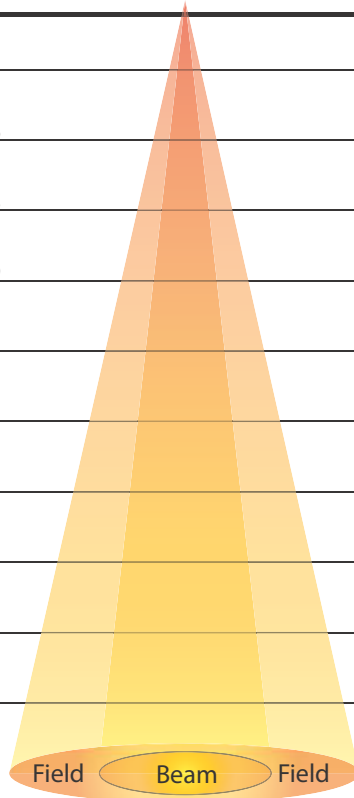


RoHS

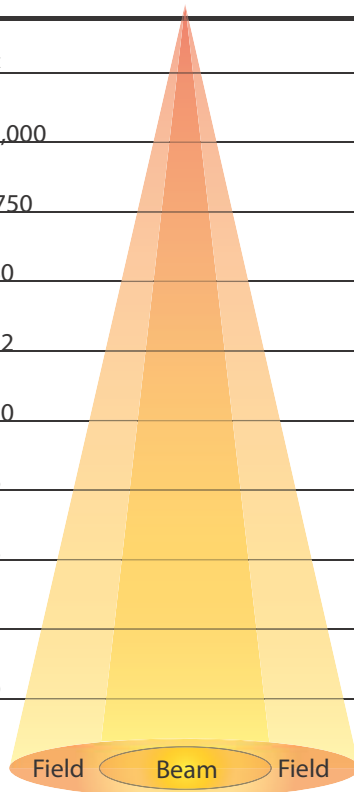


Photometrics Chart

Distance	Narrow		Zoomable Light Source		Wide	
	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	2.10 ft	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	3.49 ft	4.37 ft	43	2	15.84 ft	21.26 ft
75 ft	5.24 ft	6.55 ft	19	1	23.76 ft	31.88 ft
100 ft	6.98 ft	8.73 ft	11	1	31.68 ft	42.51 ft
125 ft	8.73 ft	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



Distance	Narrow		Zoomable Light Source		Wide	
	Beam Diameter	Field Diameter	Lux	Lux	Beam Diameter	Field Diameter
1 m	0.07 m	0.09 m	107,000	5950	0.32 m	0.43 m
2 m	0.14 m	0.17 m	26,750	1488	0.63 m	0.85 m
5 m	0.35 m	0.44 m	4280	238	1.58 m	2.13 m
8 m	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
15 m	1.05 m	1.31 m	476	26	4.75 m	6.38 m
20 m	1.40 m	1.75 m	268	15	6.34 m	8.50 m
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



RETURNS

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. 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: chauvetcs@chauvetlighting.com Website: www.chauvetprofessional.com
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Chauvet Mexico	
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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.