

# **User Manual**



Model ID: COLORADOPXLCURVE12





# **Edition Notes**

The COLORado PXL Curve 12 User Manual includes a description, safety precautions, installation, programming, operation, and maintenance instructions for the COLORado PXL Curve 12 as of the release date of this edition.

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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**

Go to www.chauvetprofessional.com for the latest version.

Revision	Date	Description
5	04/2024	Added Full PXL personality to DMX chart and menu map



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# 1. Before You Begin

# What Is Included

- COLORado PXL Curve 12
- Seetronic Powerkon IP65 power cord
- 2 Omega bracket with mounting hardware
- Quick Reference Guide

# Claims

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

If the box or the contents (the product and included accessories) appear damaged from shipping, or show signs of mishandling, notify the carrier immediately, not Chauvet. Failure to report damage to the carrier immediately may invalidate a claim. In addition, keep the box and contents for inspection. For other issues, such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with Chauvet within 7 days of delivery.

# **Manual Conventions**

Convention	Meaning
1–512	A range of values
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
Â	Electrical warning. Not following these instructions may cause electrical damage to the product, accessories, or the user.
$\triangle$	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.

Connection of the control signal: DMX line

- The product has XLR sockets for DMX input and output.
- Notice: This control circuit is isolated and belongs to the Class 2 data port.

The control circuit has a cumulative leakage current of less than 3.5 mA.





# Safety Notes

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



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

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

- The luminaire is intended for professional use only.
- The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 40 ft (12.2 m) is not expected.
- If the external flexible cable or cord of this luminaire is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or its service agent.
- The light source contained in this luminaire shall only be replaced by the manufacturer or its service agent or a similar qualified person.
- CAUTION:
  - This product's housing may be hot when operating. Mount this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
  - When transferring the product from extreme temperature environments, (e.g., cold truck to warm humid ballroom) condensation may form on the internal electronics of the product. To avoid causing a failure, allow the product to fully acclimate to the surrounding environment before connecting it to power.
  - Flashing light is known to trigger epileptic seizures. User must comply with local laws regarding notification of strobe use.

#### • ALWAYS:

- Disconnect from power before cleaning the product or replacing the fuse.
- When using an IP65-rated product in an outdoor environment, use IP65- (or higher) rated power and data cable.
- Replace and secure IP-rated protective covers to all power, data, USB, or other ports when not in use.
- · Replace the fuse with the same type and rating.
- Use a safety cable when mounting this product overhead.
- Connect this product to a grounded and protected circuit.

#### DO NOT:

- Open this product. It contains no user-serviceable parts.
- Look at the light source when the product is on.
- Leave any flammable material within 20 cm of this product while operating or connected to power.
- Connect this product to a dimmer or rheostat.
- Operate this product if the housing, lenses, or cables appear damaged.
- Submerge this product (adhere to standards for the published IP rating). Regular outdoor operation is fine.
- Permanently install outdoors in locations with extreme environmental conditions. This includes, but is not limited to:
  - Exposure to a marine/saline environment (within 3 miles of a saltwater body of water).
  - Locations where normal temperatures exceed the temperature ranges in this manual.
  - Locations that are prone to flooding or being buried in snow.
  - Other areas where the product will be subject to extreme radiation or caustic substances.
- ONLY use the handles or the hanging/mounting brackets to carry this product.
- The maximum ambient temperature is 113 °F (45 °C). Do not operate this product at higher temperatures.
- The minimum startup temperature is -4°F (-20°C). Do not start the product at lower temperatures.
- The minimum ambient temperature is -22°F (-30°C). Do not operate the product at lower temperatures.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely
- disconnect the product from power via breaker or by unplugging it.
- In the event of a serious operating problem, stop using immediately.

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



# FCC Statement of Compliance

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

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

# **RF Exposure Warning for North America and Australia**

**Warning!** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and the user. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# **Expected LED Lifespan**

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





# 2. Introduction

# Description

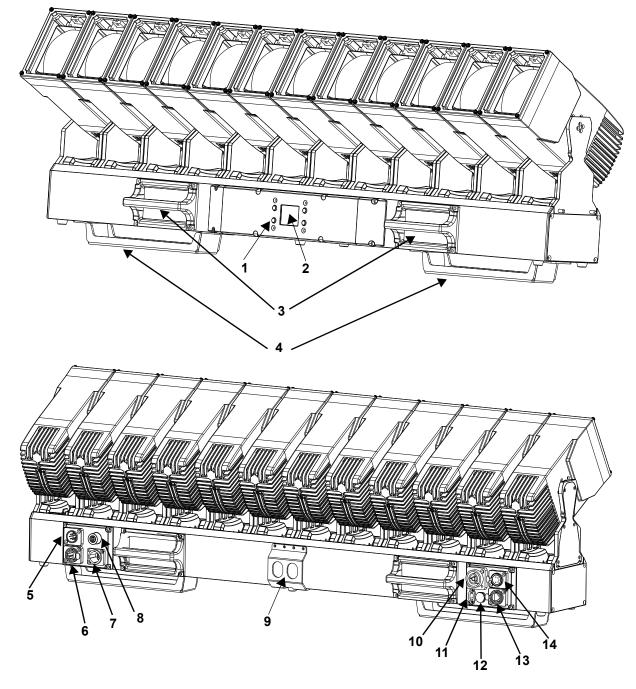
COLORado PXL Curve 12 is a fully pixel-mappable motorized IP65-rated RGBW LED batten with individual control of zoom, tilt and color across twelve independent heads. Basic and advanced operating modes and an extensive library of pre-built effects that includes virtual gobos, movement macros, and foreground/background color control make creating complex and volumetric looks easy. Seamless edge-to-edge mounting maintains pixel pitch between fixtures helping to make runway effects consistent. COLORado PXL Curve 12 speaks DMX, sACN, Art-Net, Kling-Net and RDM.

# Features

- IP65 batten with (12) 45W RGBW LEDs, (12) individually controllable tilting heads with a 5.7° to 36.3° zoom range
- Maintains pixel pitch between fixtures.
- Quiet and quick operation of 200° of tilt of each of (12) heads
- Quiet and quick operation of (12) individual zoom zones
- Fully pixel mappable
- Several built-in effects including virtual gobos and movement macros with foreground and background color control for easy pixel animation effects
- DMX, SACN, Art-Net, and Kling-Net control for full flexibility
- RDM-enabled for remote addressing and troubleshooting
- 5.7° to 36.3° zoom range for variable beam sizes
- TRUE1-compatible power input/output ports
- IP65-rated 5-pin DMX and TCP/IP input/output ports
- IP65-rated USB-C software upload port
- Slotted Omega brackets for easy hanging on truss

# Introduction

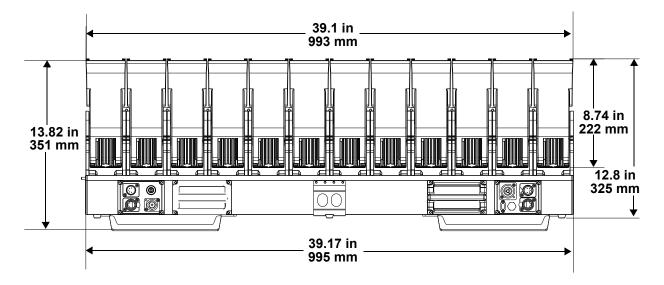
# **Product Overview**

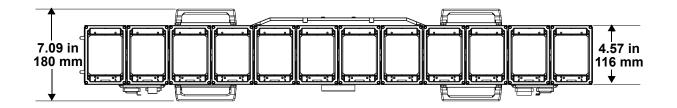


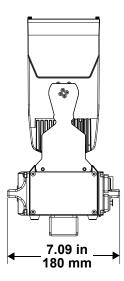
#	Name	#	Name	
1	Menu buttons	8 Fuse holder		
2	Display	9 Safety loop		
3	Handles	es 10 Power out		
4	Omega brackets	11 USB-C port		
5	DMX in	12 Condensation valve		
6	Network in	13	Network out	
7	Power in	14	DMX out	



# **Product Dimensions**







# 3. Setup

# AC Power

Each COLORado PXL Curve 12 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 PXL Curve 12, refer to the label affixed to the product or to the <u>Technical Specifications</u> 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 (a circuit breaker or fuse). Make sure the product has an appropriate electrical ground to avoid the risk of electrocution or fire.
- To eliminate unnecessary wear and improve its lifespan, during periods of non-use completely disconnect the product from power via breaker or by unplugging it.



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

# AC Plug

The COLORado PXL Curve 12 comes with a power input cord terminated with a Seetronic Powerkon IP65 connector on one end and an Edison plug on the other end (U.S. market). If the cable has no plug or it is necessary to change the plug, use the table below to wire a plug.

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

## Power Linking

It is possible to power link COLORado PXL Curve 12 products. See the table below for the current draw at each voltage and frequency:

	100 V, 60 Hz	120 V, 60 Hz	208 V, 60 Hz	230 V, 50 Hz	240 V, 60 Hz
Current Draw	8.13 A	6.70 A	3.80 A	3.44 A	3.30 A

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

# Signal Connections

The COLORado PXL Curve 12 can receive a DMX, Art-Net™, sACN, or Kling-Net signal. The COLORado PXL Curve 12 has 2 Neutrik RJ45 through ports, and 5-pin XLR DMX in and out ports. If using other compatible products with this product, each can be controlled individually with a single controller.

### Control Personalities

The COLORado PXL Curve 12 uses DMX, Art-Net™, sACN, and Kling-Net for its control personalities:

Single Control Mode	Dual Control Mode Movement	Dual Control Mode Pixels	
Basic (20 channels)	Basic (8 channels)	Basic (36 channels)	
Basic2 (53 channels)	Basic2 (41 channels)	Standard (48 channels)	
Standard (101 channels)	Standard (53 channels)	Advanced (96 channels)	
Advanced (155 channels)	Advanced (59 channels)		
Advanced2 (169 channels)		Uses DMX, Art-Net™, sACN, or Kling-Net	
Full PXL (169 channels)	Uses DMX, Art-Net™, or sACN		
Tour (179 channels)	USES DIVIA, AIT-NET , OF SACIN	Tring-Net	
Uses DMX, Art-Net™, or sACN			



In Dual Control mode, the Movement protocol and the Pixels protocol cannot be the same.

Refer to the Operation section to learn how to configure the COLORado PXL Curve 12 to work in these personalities.

The DMX Values section provides detailed information regarding the control personalities.



#### DMX Linking

The COLORado PXL Curve 12 can be linked to a DMX controller using a 5-pin DMX connection or a WDMX connection. For more information about DMX, read the DMX primer at: <u>https://www.chauvetprofessional.com/wp-content/uploads/2016/06/DMX\_Primer.pdf</u>.

#### Art-Net<sup>™</sup> Connection

Art-Net<sup>™</sup> is an Ethernet protocol that uses TCP/IP that transfers a large amount of DMX512 data using a Neutrik RJ45 connection over a large network. An Art-Net<sup>™</sup> protocol document is available from <u>www.chauvetprofessional.com</u>.

Art-Net<sup>™</sup> designed by and copyright Artistic Licence Holdings Ltd.

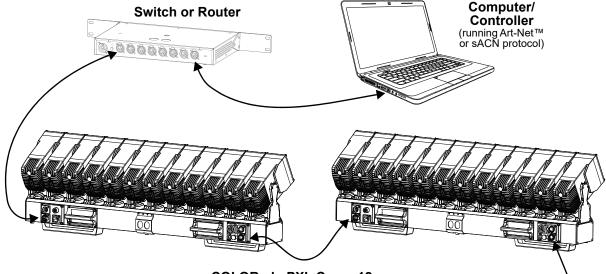
#### sACN Connection

Streaming ACN, also known as ANSI E1.31, is an Ethernet protocol that uses the layering and formatting of Architecture for Control Networks to transport DMX512 data over IP or any other ACN-compatible network.

#### **Remote Device Management**

Remote Device Management (RDM) is a standard for allowing DMX-enabled devices to communicate bidirectionally 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 PXL Curve 12 supports RDM protocol that allows feedback to make changes to menu map options.

#### **Connection Diagram**



**COLORado PXL Curve 12** 

To other Art-Net<sup>™</sup> or sACN devices



# **USB Software Update**

The COLORado PXL Curve 12 allows for software update through USB using the built-in USB port. To enable or disable this function, follow the instructions below:

- 1. Go to the **Setup** main level.
- 2. Select USB Update.

3. Select **NO** (disables updating by USB) or **YES** (enables updating by USB).

To update the software using USB flash drive, do the following:

- 1. Power on the product, and plug the flash drive into the USB port.
- 2. Once the flash drive has been detected, the message "USB UPDATE" will be displayed. Select YES.
- 3. The next screen will show the software versions available for this fixture on the USB drive. For multiple versions of the software for the same fixture, use **<UP>** or **<DOWN>** to select the desired version. Press **<ENTER>**.
- 4. The "USB UPDATE" screen will re-appear. Select YES.



It is possible to update multiple units with the USB if they are daisy chained via DMX.

- 5. The upgrade will start. **DO NOT** turn off the power or disconnect the USB while the USB LED is still blinking during the process. The screen display will read: "**USB Update Wait**". The update can take several minutes to complete.
  - When the USB firmware is done uploading, in some fixtures, the display will change to: **"DO NOT UNPLUG, UPDATING**".
- 6. When the update is completed, the fixture will automatically reboot.
- 7. Go to Fixture Information on the product's menu map and confirm the firmware revision.
  - When the boot-up process is finished, restart the product.



- Place the .chl file in the root directory of the USB drive.
- The product's USB port supports up to 32GB capacity and only works with FAT32 file format.

Turning off the power or removing the USB while the USB LED is still blinking during the update will cause partial or total firmware failure in the targeted fixture(s). If this occurs, the user will need the UPLOAD 08 device to fix this. Please contact Chauvet regarding this device.





# Mounting

Before mounting the product, read and follow the safety recommendations indicated in the <u>Safety Notes</u>. For the 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

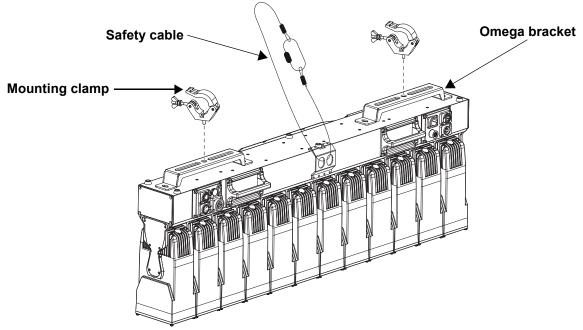
Chauvet recommends using the following general guidelines when mounting this product:

- 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 and attachment points can support the weight before hanging the product (see the <u>Technical Specifications</u> for weight information).
- Always use a safety cable when mounting the product overhead. Mount the product securely to a rigging point, whether an elevated platform or a truss.
- Use a mounting clamp of appropriate weight capacity when rigging the product onto a truss.
- When power linking multiple products, mount the products close enough for power linking cables to reach.

#### Procedure

The COLORado PXL Curve 12 comes with a bracket to which the user can directly attach mounting clamps (sold separately). Mounting clamps are sold separately. Make sure the clamps are capable of supporting the weight of this product. Use at least two mounting point per product. For the Chauvet Professional line of mounting clamps, go to <a href="http://www.trusst.com/products">http://www.trusst.com/products</a>.

#### Mounting Diagram



# 4. Operation Control Panel Operation

Button	Function
<menu></menu>	Exits from the current menu or function
<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
	Nextracted developed through the mean list or decreases the numeric value when in a function

**<DOWN>** Navigates downward through the menu list or decreases the numeric value when in a function

# **Protocol Configuration**

The COLORado PXL Curve 12 can be set to respond to DMX, Art-Net<sup>™</sup>, sACN, Kling-Net, or a combination of these protocols. The protocol configuration must be set for the product to respond correctly to the controller(s).

### **Control Mode**

The COLORado PXL Curve 12 can work with a single controller or with 2 controllers running 2 different control protocols. In Dual Control mode, one protocol controls the Movement, and the other protocol controls the Pixels.

- Single Control mode works with wired DMX, Art-Net<sup>™</sup>, and sACN control signals.
- Dual Control Movement works with wired DMX, Art-Net<sup>™</sup>, and sACN control signals.

• **Dual Control Pixels** works with wired DMX, Art-Net<sup>™</sup>, sACN, and Kling-Net control signals.

To set the control mode and the protocol(s):

- 1. Go to the Address main level.
- 2. Select the desired control mode between Single Control and Dual Control.
- 3. For **Dual Control**, select which mode to configure between **Movement** and **Pixels**.
- 4. Select the desired protocol, from DMX, ArtNet, sACN, or KlingNet (Dual Control Pixels only).



In Dual Control mode, the Movement protocol and the Pixels protocol cannot be the same.

See the <u>Network Settings</u> section for further setup of ethernet protocols (Art-Net<sup>™</sup> or sACN).

### **Control Personalities**

To set the control personality:

- 1. Select the control mode and protocol as described under Control Mode.
- 2. Select the Personality option.
- 3. Select the desired personality from:

Single Control	Dual Control Movement	Dual Control Pixels
Basic (20 channels)	Basic (8 channels)	Basic (36 channels)
Standard (101 channels)	Standard (53 channels)	Standard (48 channels)
Advanced (155 channels)	Advanced (59 channels)	Advanced (96 channels)
Advanced2 (169 channels)	Basic2 (41 channels)	
Full PXL (169 channels)		*Kling-Net will only function with Basic or Standard mode
Tour (179 channels)		Basic or Standard mode
Basic2 (53 channels)		



See the <u>Starting Address</u> section for the highest recommended address for each personality.

• Make sure that the starting addresses on the various products do not overlap due to the new personality setting.



### Starting Address

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

- 1. Select the control mode and protocol as described under <u>Control Mode</u>.
- 2. Select the **Start Address** option.
- 3. Select the starting address (001–512).

Control Mode	Personality	Channels	Highest Address
	Basic	20	493
	Standard	101	412
	Advanced	155	358
Single Control	Advanced2	169	344
	Full PXL	169	344
	Tour	179	334
	Basic2	53	460
	Basic	8	505
Dual Control Movement	Standard	53	460
	Advanced	59	454
	Basic2	41	472
	Basic	36	477
Dual Control Pixels	Standard	48	465
	Advanced	96	417

#### Universe

The Art-Net<sup>™</sup> and sACN control protocols require a universe address in addition to the starting address. To assign a universe to the control mode when using Art-Net<sup>™</sup> or sACN:

- 1. Select the control mode and protocol as described under <u>Control Mode</u>.
- 2. Select the Universe option.
- 3. Select the universe (000-255 for ArtNet, or 001-256 for sACN).



**Menu Map** Refer to the COLORado PXL Curve 12 product page on <u>www.chauvetprofessional.com</u> for the latest software and menu map.

		Pr	ogramming	J Levels		Description
					Basic	
					Standard	
					Advanced	Cata the DMX nemerouslity
			DMY	Personal	Advanced2	-Sets the DMX personality -(see Control Personalities)
			DMX		Tour	(see <u>control Personalities</u> )
					Basic2	-
					Full PXL	
				Start Addr	001-512	Sets the DMX starting address
					Basic	
					Standard	
				Personal	Advanced	Sets the Art-Net™ personality
	Sinale	e Control	ArtNet		Tour	(see <u>Control Personalities</u> )
	- J -			-	Basic2	
				Start Addr	001-512	Sets the Art-Net™ starting address
			-	Universe	000-255	Sets the Art-Net™ universe
					Basic	
					Standard	-
				<b>_</b> .	Advanced	Sets the sACN personality
				Personal	Tour	(see Control Personalities)
			SACN		Basic2	
					Full PXL	-
				Start Addr	001-512	Sets the sACN starting address
				Universe	001-256	Sets the sACN universe
-				Universe	Basic	
					Standard	Sets the DMX personality
			DMX	Personal	Advanced	(see <u>Control Personalities</u> )
~			Dilix		Basic2	
6S			=	Start Addr	001-512	Sets the DMX starting address
a				Otart Addi	Basic	Sets the BMX starting address
Address					Standard	Sets the Art-Net™ personality
		Movement	ArtNet	Personal	Advanced	(see <u>Control Personalities</u> )
					Basic2	
				Start Addr	001-512	Sets the Art-Net™ starting address
				Universe	000-255	Sets the Art-Net <sup>™</sup> universe
				01110100	Basic	
				_	Standard	Sets the sACN personality
				Personal	Advanced	(see <u>Control Personalities</u> )
			sACN		Basic2	
				Start Addr	001-512	Sets the sACN starting address
	Dual			Universe	001-256	Sets the sACN universe
	Control				Basic	
				Personal	Standard	Sets the DMX personality
			DMX	i sissifui	Advanced	(see <u>Control Personalities</u> )
				Start Addr	001-512	Sets the DMX starting address
					Basic	0
				Personal	Standard	Sets the Art-Net™ personality
			ArtNet	i ciconai	Advanced	(see <u>Control Personalities</u> )
				Start Addr	001-512	Sets the Art-Net™ starting address
		Pixels		Universe	000-255	Sets the Art-Net <sup>™</sup> universe
				01110100	Basic	
				Personal	Standard	Sets the sACN personality
			sACN	i ci solial	Advanced	(see <u>Control Personalities</u> )
			SAUN	Start Addr	001–512	Sets the sACN starting address
				Universe	000-255	Sets the sACN starting address
					Basic	Sets the Kling-Net personality
1			KlingNet	Personal	Standard	(see <u>Control Personalities</u> )



Main Level		Programming Levels			Description
		Auto Test			Auto test all functions
Run Mode	Manual Test	LED Macro LED Ma. Speed LED Ma. Fade Background Background Dim. Dimmer Shutter Function Zoom		000–255	Manually control and test all settings through the control panel
	Network Settings	IP   SMK  	Mode IP Byte1–4 SubMask1–4		Manually sets IP address Network sets IP address Product sets IP address Sets IP address in manual mode Sets Subnet Mask in manual mode
	Tilt		NO		Normal tilt
	Reverse		YES		Reversed tilt
	Zoom		NO		Normal zoom
	Reverse		YES		Reversed zoom
Setup	Screen		NO		Normal display
Setup	Reverse		YES		Inverted display
	Reverse	AUTO			Automatic display orientation
			200		200° tilt range
	Tilt Angle		180		180° tilt range
			60		60° tilt range
	BL. O. T		NO		Do not blackout while tilt
	Move		YES		Blackout while tilt
			30S		Display turns off after 30 seconds
	Backlight		1M		Display turns off after 1 minute
	Timer		5M		Display turns off after 5 minutes
			ON		Display stays on
	Loss of		Hold		Holds last signal received
	Data		Close		Blacks out fixture
	Red Shift		NO		Enables/disables red shift
	Neu Sillit		YES	-	
	C Mixing		RGBW		RGBW mode (additive)
	Mode		CMY		CMY mode (subtractive)

# Operation



lain Level		Programn	ning Levels		Description	
	Linear					
	Dimmer		Square			
	Curve		I Śqua		Set the dimmer curve	
	-	SCurve				
	Dimmer		Smooth			
	Speed		Fast		Set the dimmer speed	
		600Hz				
	_		1200Hz		-	
	PWM Option	2000Hz			Sets the Pulse Width Modulation	
		4000Hz			frequency	
	option	6000Hz			nequency	
	-	15000Hz			-	
			1–12		Light activates from left to right	
	Cell Order	1-12				
			12-1		Light activates from right to left	
	Calibrated -	ON			Default light output temperature set to 7500K	
	White		OFF		Deactivates calibrated white setting	
			Custom		Adjust light output temperature using White Balance setting	
			Red		Sets red LED maximum value	
Setup	White	G	Green	000–255	Sets green LED maximum value	
Setup	Balance		Blue	000-255	Sets blue LED maximum value	
		V	Vhite		Sets white LED maximum value	
		Preset A				
	Preset		Preset B		Recorded preset menu options Allows recorded preset menu options to b	
	Select		Preset C			
	<b>–</b>		NO			
	Preset Sync		YES		transferred to other COLORado PXL Curve 12 in the DMX daisy chain	
	USB		NO			
	Update	YES			Enables/disables updating by USB	
		R1–12		000–255	Calibrates red LED	
	Pixel				Calibrates green LED	
	calibration	B	31–12		Calibrates blue LED	
			Tilt	NO		
				YES		
	Reset	7	'oom	NO	Reset individual functions or all functio	
	Function	Zoom		YES	from startup	
			All	NO		
				YES		
	Factory		NO		Reset to factory default settings	
	Settings		YES			
	Firmware	Version	V		Shows firmware version	
	Running	Mode			Shows current running mode	
	Addre	ss		_	Shows current starting address	
	Tempera		Temperature 1–12		Shows current product temperature in °(	
	Fixture	Time			Shows number of hours product has been powered on	
Sys Info	LED Ho				Shows total hours the LED has been	
-		Juis			powered on	
		IP			Shows current IP address	
	ArtNet Info	SubMask			Shows current Subnet Mask	
		MAC			Shows current MAC address	
	Device				Shows product UID	
	Fan	Base			Shows speed of base fans 1–2 in rpm	
	Information Fan1–2 – – –					



# **DMX Values**

# Single Control Mode

Basic (20CH)

Channel	Function	Value	Percent/Setting
1	Tilt 1–12	000 ⇔ 255	0–100%
2	Fine tilt 1–12	000 ⇔ 255	0–100%
3	Tilt speed	000 ⇔ 255	
4	Tilt macro		No function
-			see <u>Tilt Macro</u>
5	стс	000	No function
			From 19000K to 2700K
6	Color macro	000	No function
			see <u>Color Chart</u>
7	Pattern	000	No function
			see <u>Patterns</u>
8	LED built-in		No function
			see <u>LED Macro</u>
			Fast to slow
9	LED built-in speed	128	Stop
			Slow to fast
10	LED built-in delay		Fast to slow
11	Background color	000	No function
			see <u>Color Chart</u>
12	Background color dimmer	000 ⇔ 255	
13	Dimmer	000 ⇔ 255	
14	Strobe	000 ⇔ 019	
			see <u>Strobe Settings</u>
15	Zoom 1–12	000 ⇔ 255	
16	Control		No function
			see <u>Control Settings</u>
17	Red Cyan	000 ⇔ 255	
18	Green Magenta	000 ⇔ 255	
19	Blue Yellow	000 ⇔ 255	
20	White	000 ⇔ 255	0–100%



# Advanced2 (169CH) / Full PXL (169CH)

Full PXL (169CH)	Advanced 2 (169CH)	Function	Value	Percent/Setting
_	1	Control	000 ⇔ 009	
	2	Tilt speed		see <u>Control Settings</u> Fast to slow
-	2	The speed	000 ⇔ 235 000 ⇔ 004	
-	3	Tilt macro		see <u>Tilt Macro</u>
			000	No function
-	4	СТС		From 19000K to 2700K
	E	Color moore	000	No function
	5	Color macro	001 ⇔ 255	
_	6	Pattern (see Patterns)	000	No function
	•			Pattern 1–255
_	7	LED built-in	000 ⇔ 015	
	-			see <u>LED Macro</u>
	0	LED built in anord	000 ⇔ 127 128	Fast to slow
-	8	LED built-in speed		Stop Slow to fast
	9	LED built-in delay		Fast to slow
			000 🗘 200	No function
-	10	Background color		see <u>Color Chart</u>
-	11	Background color dimmer	000 ⇔ 255	
-	12	Background color fine dimmer	000 ⇔ 255	
	13	Strobe		
-	15	Strobe		see <u>Strobe Settings</u>
1	14	Tilt 1	000 ⇔ 255	
2	15	Fine tilt 1	000 ⇔ 255	
3	16	Zoom 1	000 ⇔ 255	
4	17	Dimmer 1	000 ⇔ 255	
5	18	Fine dimmer 1	000 ⇔ 255 000 ⇔ 019	
6	-	Strobe 1		see <u>Strobe Settings</u>
7	19	Red 1 Cyan 1		RGBW Mode: 0–100% / CMY Mode: 100–0%
8	20	Fine red 1 Fine cyan 1		RGBW Mode: 0–100% / CMY Mode: 100–0%
9	21	Green 1 Magenta 1		RGBW Mode: 0–100% / CMY Mode: 100–0%
10	22	Fine green 1 Fine magenta 1		RGBW Mode: 0–100% / CMY Mode: 100–0%
11	23	Blue 1 Yellow 1		RGBW Mode: 0–100% / CMY Mode: 100–0%
12	24	Fine blue 1 Fine yellow 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
13	25	White 1		RGBW Mode: 0–100% / CMY Mode: 100–0%
14	26	Fine white 1		RGBW Mode: 0-100% / CMY Mode: 100-0%
15	27	Tilt 2	000 ⇔ 255	
16	28	Fine tilt 2	000 ⇔ 255	
17	29	Zoom 2	000 ⇔ 255	
18	30	Dimmer 2	000 ⇔ 255	
19	31	Fine dimmer 2	000 ⇔ 255 000 ⇔ 019	
20	-	Strobe 2	020 ⇔ 255	see <u>Strobe Settings</u>
21	32	Red 2 Cyan 2		RGBW Mode: 0–100% / CMY Mode: 100–0%
22	33	Fine red 2 Fine cyan 2		RGBW Mode: 0–100% / CMY Mode: 100–0%
23	34	Green 2 Magenta 2		RGBW Mode: 0–100% / CMY Mode: 100–0%
24	35	Fine green 2 Fine magenta 2 Blue 2 Yellow 2		RGBW Mode: 0–100% / CMY Mode: 100–0%
25	36	Blue 2 Yellow 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%





Full	Advanced				
PXL	2	Function		Value	Percent/Setting
(169CH)	(169CH)				
26	37	Fine blue 2	Fine yellow 2		RGBW Mode: 0–100% / CMY Mode: 100–0%
27	38	White 2			RGBW Mode: 0–100% / CMY Mode: 100–0%
28	39	Fine white 2		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
29	40	Tilt 3		000 ⇔ 255	
30	41	Fine tilt 3		000 ⇔ 255	
31	42	Zoom 3		000 ⇔ 255	
32	43	Dimmer 3		000 ⇔ 255	
33	44	Fine dimmer	3	000 ⇔ 255	
34	_	Strobe 3		000 ⇔ 019	
					see <u>Strobe Settings</u>
35	45	Red 3	Cyan 3		RGBW Mode: 0–100% / CMY Mode: 100–0%
36	46	Fine red 3	Fine cyan 3		RGBW Mode: 0–100% / CMY Mode: 100–0%
37	47	Green 3	Magenta 3		RGBW Mode: 0–100% / CMY Mode: 100–0%
38	48		Fine magenta 3		RGBW Mode: 0-100% / CMY Mode: 100-0%
39	49	Blue 3	Yellow 3		RGBW Mode: 0-100% / CMY Mode: 100-0%
40	50	Fine blue 3	Fine yellow 3		RGBW Mode: 0-100% / CMY Mode: 100-0%
41	51	White 3			RGBW Mode: 0–100% / CMY Mode: 100–0%
42	52	Fine white 3			RGBW Mode: 0-100% / CMY Mode: 100-0%
43	53	Tilt 4		000 ⇔ 255	
44	54	Fine tilt 4		000 ⇔ 255	
45	55	Zoom 4		000 ⇔ 255	
46	56	Dimmer 4		000 ⇔ 255	
47	57	Fine dimmer	4	000 ⇔ 255	
48	_	Strobe 4		000 ⇔ 019	
			-		see <u>Strobe Settings</u>
49	58	Red 4	Cyan 4		RGBW Mode: 0-100% / CMY Mode: 100-0%
50	59	Fine red 4	Fine cyan 4		RGBW Mode: 0-100% / CMY Mode: 100-0%
51	60	Green 4	Magenta 4		RGBW Mode: 0–100% / CMY Mode: 100–0%
52	61		Fine magenta 4		RGBW Mode: 0-100% / CMY Mode: 100-0%
53	62	Blue 4	Yellow 4		RGBW Mode: 0–100% / CMY Mode: 100–0%
54	63	Fine blue 4	Fine yellow 4		RGBW Mode: 0–100% / CMY Mode: 100–0%
55	64	White 4			RGBW Mode: 0–100% / CMY Mode: 100–0%
56	65	Fine white 4			RGBW Mode: 0–100% / CMY Mode: 100–0%
57	66	Tilt 5		000 ⇔ 255	
58	67	Fine tilt 5		000 ⇔ 255	
59	68	Zoom 5		000 ⇔ 255	
60	69 70	Dimmer 5	F	000 ⇔ 255 000 ⇔ 255	
61	70	Fine dimmer	5	000 ⇔ 255 000 ⇔ 019	
62	-	Strobe 5			see <u>Strobe Settings</u>
63	71	Red 5	Cyan 5		RGBW Mode: 0–100% / CMY Mode: 100–0%
64	71	Fine red 5	Fine cyan 5		RGBW Mode: 0–100% / CMY Mode: 100–0%
65	72	Green 5	Magenta 5		RGBW Mode: 0-100% / CMY Mode: 100-0%
66	73		Fine magenta 5		RGBW Mode: 0-100% / CMY Mode: 100-0%
67	74	Blue 5	Yellow 5		RGBW Mode: 0-100% / CMY Mode: 100-0%
68	76	Fine blue 5	Fine yellow 5		RGBW Mode: 0-100% / CMY Mode: 100-0%
69	78	White 5	i ne yenow o		RGBW Mode: 0–100% / CMY Mode: 100–0%
70	78	Fine white 5			RGBW Mode: 0-100% / CMY Mode: 100-0%
70	79	Tilt 6		000 ⇔ 255 000 ⇔ 255	
72	80	Fine tilt 6		000 ⇔ 255 000 ⇔ 255	
73	81	Zoom 6		000 ⇔ 255 000 ⇔ 255	
74	82	Dimmer 6		000 ⇔ 255 000 ⇔ 255	
1-1	02			000 ↔ 200	



Full PXL	Advanced 2	Function		Value	Percent/Setting
(169CH)		Function		value	reiceni/setting
75	83	Fine dimmer	6	000 ⇔ 255	
76		Strobe 6		000 ⇔ 019	
10		Strobe o			see <u>Strobe Settings</u>
77	84	Red 6	Cyan 6		RGBW Mode: 0–100% / CMY Mode: 100–0%
78	85	Fine red 6	Fine cyan 6		RGBW Mode: 0–100% / CMY Mode: 100–0%
79	86	Green 6	Magenta 6		RGBW Mode: 0–100% / CMY Mode: 100–0%
80	87		Fine magenta 6		RGBW Mode: 0–100% / CMY Mode: 100–0%
81	88	Blue 6	Yellow 6		RGBW Mode: 0–100% / CMY Mode: 100–0%
82	89		Fine yellow 6		RGBW Mode: 0–100% / CMY Mode: 100–0%
83	90	White 6			RGBW Mode: 0-100% / CMY Mode: 100-0%
84	91	Fine white 6			RGBW Mode: 0–100% / CMY Mode: 100–0%
85	92	Tilt 7		000 ⇔ 255	
86	93	Fine tilt 7		000 ⇔ 255	
87	94	Zoom 7		000 ⇔ 255	
88	95	Dimmer 7		000 ⇔ 255	
89	96	Fine dimmer	7	000 ⇔ 255	
90	_	Strobe 7		000 ⇔ 019	
					see <u>Strobe Settings</u>
91	97	Red 7	Cyan 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
92	98		Fine cyan 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
93	99	Green 7	Magenta 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
94	100		Fine magenta 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
95	101	Blue 7	Yellow 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
96	102		Fine yellow 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
97	103	White 7			RGBW Mode: 0–100% / CMY Mode: 100–0%
98	104	Fine white 7			RGBW Mode: 0–100% / CMY Mode: 100–0%
99	105	Tilt 8			0-100%
100	106	Fine tilt 8		000 ⇔ 255	
101	107	Zoom 8		000 ⇔ 255	
102	108	Dimmer 8	0	000 ⇔ 255 000 ⇔ 255	
103	109	Fine dimmer	8	000 ⇔ 255 000 ⇔ 019	
104	_	Strobe 8			
105	110	Red 8	Cyan 8		see <u>Strobe Settings</u> RGBW Mode: 0–100% / CMY Mode: 100–0%
105	111	Fine red 8			RGBW Mode: 0–100% / CMY Mode: 100–0%
100	112	Green 8	Fine cyan 8 Magenta 8		RGBW Mode: 0–100% / CMY Mode: 100–0%
107	112		Fine magenta 8		RGBW Mode: 0–100% / CMY Mode: 100–0%
108	113	Blue 8	Yellow 8		RGBW Mode: 0–100% / CMY Mode: 100–0%
110	114	Fine blue 8	Fine yellow 8		RGBW Mode: 0–100% / CMY Mode: 100–0%
111	116	White 8			RGBW Mode: 0-100% / CMY Mode: 100-0%
112	117	Fine white 8			RGBW Mode: 0–100% / CMY Mode: 100–0%
113	118	Tilt 9		000 ⇔ 255	
114	119	Fine tilt 9		000 ⇔ 255	
115	120	Zoom 9		000 ⇔ 255	
116	121	Dimmer 9		000 ⇔ 255	
117	122	Fine dimmer	9	000 ⇔ 255	
			-	000 ⇔ 019	
118	-	Strobe 9			see <u>Strobe Settings</u>
119	123	Red 9	Cyan 9		RGBW Mode: 0–100% / CMY Mode: 100–0%
120	124	Fine red 9	Fine cyan 9		RGBW Mode: 0–100% / CMY Mode: 100–0%
121	125	Green 9	Magenta 9		RGBW Mode: 0–100% / CMY Mode: 100–0%
122	126		Fine magenta 9		RGBW Mode: 0–100% / CMY Mode: 100–0%
	*			200	





Full	Advanced				
PXL	2	Function		Value	Percent/Setting
(169CH)	(169CH)				J J
123	127	Blue 9	Yellow 9	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
124	128	Fine blue 9	Fine yellow 9		RGBW Mode: 0–100% / CMY Mode: 100–0%
125	129	White 9			RGBW Mode: 0–100% / CMY Mode: 100–0%
126	130	Fine white 9			RGBW Mode: 0–100% / CMY Mode: 100–0%
127	131	Tilt 10			0–100%
128	132	Fine tilt 10			0–100%
129	133	Zoom 10			0–100%
130	134	Dimmer 10			0–100%
131	135	Fine dimmer	10	000 ⇔ 255	
132	_	Strobe 10		000 ⇔ 019	
400	400	Ded 40	0		see <u>Strobe Settings</u>
133	136	Red 10	Cyan 10		RGBW Mode: 0–100% / CMY Mode: 100–0%
134	137		Fine cyan 10		RGBW Mode: 0–100% / CMY Mode: 100–0%
135	138	Green 10	Magenta 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
136	139	Fine green 10	Fine magenta 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
137	140	Blue 10	Yellow 10		RGBW Mode: 0-100% / CMY Mode: 100-0%
138	141		Fine yellow 10		RGBW Mode: 0–100% / CMY Mode: 100–0%
139	142	White 10			RGBW Mode: 0–100% / CMY Mode: 100–0%
140	143	Fine white 10			RGBW Mode: 0–100% / CMY Mode: 100–0%
141	144	Tilt 11		000 ⇔ 255	
142	145	Fine tilt 11		000 ⇔ 255	
143	146	Zoom 11		000 ⇔ 255	
144	147	Dimmer 11		000 ⇔ 255	
145	148	Fine dimmer	11	000 ⇔ 255	
146	-	Strobe 11		000 ⇔ 019 020 ⇔ 255	oπ see <u>Strobe Settings</u>
147	149	Red 11	Cyan 11	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
148	150	Fine red 11	Fine cyan 11	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
149	151	Green 11	Magenta 11	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
150	152		Fine magenta 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
151	153	Blue 11	Yellow 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
152	154		Fine yellow 11		RGBW Mode: 0-100% / CMY Mode: 100-0%
153	155	White 11			RGBW Mode: 0–100% / CMY Mode: 100–0%
154	156	Fine white 11			RGBW Mode: 0–100% / CMY Mode: 100–0%
155	157	Tilt 12		000 ⇔ 255	
156	158	Fine tilt 12		000 ⇔ 255	
157	159	Zoom 12		000 ⇔ 255	
<u>158</u> 159	160 161	Dimmer 12 Fine dimmer	10	000 ⇔ 255 000 ⇔ 255	
159	101	Fille ulliller	12	000 ⇔ 233 000 ⇔ 019	
160	-	Strobe 12			see <u>Strobe Settings</u>
161	162	Red 12	Cyan 12	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
162	163	Fine red 12	Fine cyan 12		RGBW Mode: 0–100% / CMY Mode: 100–0%
163	164	Green 12	Magenta 12		RGBW Mode: 0-100% / CMY Mode: 100-0%
164	165		Fine magenta 12		RGBW Mode: 0-100% / CMY Mode: 100-0%
165	166	Blue 12	Yellow 12		RGBW Mode: 0-100% / CMY Mode: 100-0%
166	167		Fine yellow 12		RGBW Mode: 0–100% / CMY Mode: 100–0%
167	168	White 12			RGBW Mode: 0–100% / CMY Mode: 100–0%
168	169	Fine white 12			RGBW Mode: 0–100% / CMY Mode: 100–0%
169	_	Control			No function
				010 ⇔ 255	see <u>Control Settings</u>



# Basic2 (53CH) / Standard (101CH) / Advanced (155CH) / Tour (179CH)

53 CH	101 CH	155 CH	179 CH	Function	Value	Percent/Setting
1	1	1	1	Tilt 1	000 🗇 255	0–100%
2	2	2	2	Fine tilt 1	000 ⇔ 255	0–100%
3	3	3	3	Tilt 2	000 ⇔ 255	0–100%
4	4	4	4	Fine tilt 2	000 ⇔ 255	0–100%
5	5	5	5	Tilt 3	000 ⇔ 255	0–100%
6	6	6	6	Fine tilt 3	000 ⇔ 255	0–100%
7	7	7	7	Tilt 4	000 ⇔ 255	0–100%
8	8	8	8	Fine tilt 4	000 ⇔ 255	0–100%
9	9	9	9	Tilt 5	000 ⇔ 255	
10	10	10	10	Fine tilt 5	000 ⇔ 255	
11	11	11	11	Tilt 6	000 ⇔ 255	
12	12	12	12	Fine tilt 6	000 ⇔ 255	
13	13	13	13	Tilt 7	000 ⇔ 255	
14	14	14	14	Fine tilt 7	000 ⇔ 255	
15	15	15	15	Tilt 8	000 ⇔ 255	
16	16	16	16		000 ⇔ 255	
17	17	17	17	Tilt 9	000 ⇔ 255	
18	18	18	18	Fine tilt 9	000 ⇔ 255	
19	19	19	19	Tilt 10	000 ⇔ 255	
20	20	20	20	Fine tilt 10	000 ⇔ 255	0-100%
21	21	21	21	Tilt 11	000 ⇔ 255	
22	22	22	22	Fine tilt 11	000 ⇔ 255	
23	23	23	23	Tilt 12	000 ⇔ 255	
24	24 25	24 25	24 25	Fine tilt 12	000 ⇔ 255	0–100% Fast to slow
25	25	25	25	Tilt speed	000 ⇔ 255 000 ⇔ 004	
26	26	26	26	Tilt macro	000 ⇔ 004 005 ⇔ 255	see <u>Tilt Macro</u>
					003 \(\.approx 233)	No function
27	27	27	27	СТС	000 001 ⇔ 255	From 19000K to 2700K
					001 000	No function
28	28	28	28	Color macro	001 ⇔ 255	see <u>Color Chart</u>
					000	No function
29	29	29	29	Pattern (see <u>Patterns</u> )		Pattern 1–255
						No function
30	30	30	30	LED built-in	016 ⇔ 255	see <u>LED Macro</u>
					000 ⇔ 127	Fast to slow
31	31	31	31	LED built-in speed	128	Stop
				-	129 ⇔ 255	Slow to fast
32	32	32	32	LED built-in delay	000 ⇔ 255	Fast to slow
22	22	22	22	Paakaround calar	000	No function
33	33	33	33	Background color	001 ⇔ 255	see <u>Color Chart</u>
34	34	34	34	Background color dimmer	000 ⇔ 255	0–100%
-	-	35	35	Background color fine dimmer	000 ⇔ 255	0–100%
35	35	36	36	Dimmer	000 ⇔ 255	0–100%
-	-	37	37	Fine dimmer	000 ⇔ 255	0–100%
36	36	38	38	Strobe	000 ⇔ 019	Off
30	30	30	30		020 ⇔ 255	see <u>Strobe Settings</u>
37	37	39	39	Zoom 1	000 ⇔ 255	0–100%
38	38	40	40	Zoom 2	000 ⇔ 255	0–100%



53 CH	101 CH	155 CH	179 CH	Function	Value	Percent/Setting
39	39	41	41	Zoom 3	000 ⇔ 255	0–100%
40	40	42	42	Zoom 4	000 ⇔ 255	0–100%
41	41	43	43	Zoom 5	000 ⇔ 255	0–100%
42	42	44	44	Zoom 6	000 ⇔ 255	0–100%
43	43	45	45	Zoom 7	000 ⇔ 255	0–100%
44	44	46	46	Zoom 8	000 ⇔ 255	0–100%
45	45	47	47	Zoom 9		
46	46	48	48	Zoom 10	000 ⇔ 255	0–100%
47	47	49	49	Zoom 11	000 ⇔ 255	0–100%
48	48	50	50	Zoom 12	000 ⇔ 255	0–100%
49	49	51	51	Control	000 🗇 009	No function
43	43	51	5	control	010 ⇔ 255	see <u>Control Settings</u>
50	50	52	52	Red Cyan	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	Ι	53	53	Fine red Fine cyan		RGBW Mode: 0–100% / CMY Mode: 100–0%
51	51	54	54	Green Magenta	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	55	55	Fine green Fine magenta	000 ⇔ 255	
52	52	56	56	Blue Yellow		RGBW Mode: 0-100% / CMY Mode: 100-0%
-	-	57	57	Fine blue Fine yellow		RGBW Mode: 0-100% / CMY Mode: 100-0%
53	53	58	58	White	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
-	-	59	59	Fine white		RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	-	60	Dimmer 1	000 ⇔ 255	
-	-	-	61	Fine dimmer 1	000 ⇔ 255	
-	54	60	62	Red 1 Cyan 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	61	63	Fine red 1 Fine cyan 1	000 ⇔ 255	
-	55	62	64	Green 1 Magenta 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	63	65	Fine green 1 Fine magenta		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	56	64	66	Blue 1 Yellow 1	000 ⇔ 255	
-	-	65	67	Fine blue 1 Fine yellow 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	57	66	68	White 1	000 ⇔ 255	
-	-	67	69	Fine white 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	-	70	Dimmer 2		
-	-	-	71	Fine dimmer 2	000 ⇔ 255	
-	58	68	72	Red 2Cyan 2Fine red 2Fine cyan 2		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	69 70				RGBW Mode: 0–100% / CMY Mode: 100–0%
-	59	70	74	Green 2 Magenta 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	- 60	71 72	75 76	Fine green 2 Fine magenta Blue 2 Yellow 2	<b>2</b> 000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0% RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	73	70	Fine blue 2 Fine yellow 2	000 ⇔ 255 000 ⇔ 255	
-	- 61	73	78	White 2	000 ⇔ 255 000 ⇔ 255	
_	-	74	79	Fine white 2	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	_	-	80	Dimmer 3	000 ⇔ 255 000 ⇔ 255	0-100%
_		_	81	Fine dimmer 3	000 ⇔ 255	0-100%
_	62	76	82	Red 3 Cyan 3	000 ⇔ 255	
_	-	77	83	Fine red 3 Fine cyan 3	000 ⇔ 255	
_	63	78	84	Green 3 Magenta 3	000 ⇔ 255	
_	-	79	85	Fine green 3 Fine magenta		RGBW Mode: 0–100% / CMY Mode: 100–0%
_	64	80	86	Blue 3 Yellow 3	000 \le 255	
_	-	81	87	Fine blue 3 Fine yellow 3	000 ⇔ 255	
_	65	82	88	White 3		RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	83	89	Fine white 3		RGBW Mode: 0–100% / CMY Mode: 100–0%
					200 0 200	

# Operation



53 CH	101 CH	155 CH	179 CH	Function		Value	Percent/Setting
_	-	-		Dimmer 4		000 ⇔ 255	0–100%
_	_	-	91	Fine dimmer	r 4	000 ⇔ 255 000 ⇔ 255	0-100%
_	66	84	92	Red 4	Cyan 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	85	93	Fine red 4	Fine cyan 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	67	86	94	Green 4	Magenta 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	87	-		Fine magenta 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	68	88		Blue 4	Yellow 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	89			Fine yellow 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	69	90	98	White 4		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	_	91	99	Fine white 4		000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
-	_	-	100	Dimmer 5		000 ⇔ 255	0–100%
-	-	-		Fine dimme	r 5	000 ⇔ 255	0–100%
-	70	92		Red 5	Cyan 5	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	93		Fine red 5	Fine cyan 5	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	71	94		Green 5	Magenta 5	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	_	95			Fine magenta 5	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	72	96		Blue 5	Yellow 5	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
_	-	97			Fine yellow 5	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
-	73	98		White 5	,	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	99	109	Fine white 5		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	-		Dimmer 6		000 ⇔ 255	0–100%
-	-	-	111	Fine dimme	r 6	000 ⇔ 255	0–100%
-	74	100	112	Red 6	Cyan 6	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	101	113	Fine red 6	Fine cyan 6	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	75	102	114	Green 6	Magenta 6	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	103	115	Fine green 6	Fine magenta 6	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	76	104	116	Blue 6	Yellow 6	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	105	117	Fine blue 6	Fine yellow 6	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	77	106	118	White 6		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	107		Fine white 6		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	Ι	I	120	Dimmer 7		000 ⇔ 255	0–100%
-	Ι	Ι		Fine dimme	r 7	000 ⇔ 255	0–100%
-	78	108		Red 7	Cyan 7		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	109	123	Fine red 7	Fine cyan 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	79	110		Green 7	Magenta 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	111		-	Fine magenta 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	80	112		Blue 7	Yellow 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	113			Fine yellow 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	81	114		White 7		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	115		Fine white 7		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	-		Dimmer 8		000 ⇔ 255	0–100%
-	-	-		Fine dimmer		000 ⇔ 255	0-100%
-	82			Red 8	Cyan 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-			Fine red 8	Fine cyan 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	83	118		Green 8	Magenta 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	119		-	Fine magenta 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	84	120		Blue 8	Yellow 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	121			Fine yellow 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	85			White 8		000 ⇔ 255	
-	-	123	139	Fine white 8		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%



53 CH	101 CH	155 CH	179 CH	Function		Value	Percent/Setting
-	-	-	140	Dimmer 9		000 ⇔ 255	0–100%
-	-	-	141	Fine dimme	r 9	000 ⇔ 255	0–100%
-	86	124	142	Red 9	Cyan 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	125	143	Fine red 9	Fine cyan 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	87	126	144	Green 9	Magenta 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	127	145	Fine green 9	Fine magenta 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	88	128	146	Blue 9	Yellow 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-				Fine yellow 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	89			White 9		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	131		Fine white 9		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	-		Dimmer 10		000 ⇔ 255	0–100%
-	-	-		Fine dimme		000 ⇔ 255	0–100%
-	90	132		Red 10	Cyan 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-				Fine cyan 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	91	134	154	Green 10	Magenta 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	135	155	Fine green 10	Fine magenta 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	92			Blue 10	Yellow 10		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-				Fine yellow 10	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
-	93	138		White 10		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	139		Fine white 1	0	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	-		Dimmer 11		000 ⇔ 255	0–100%
_	-	-		Fine dimme		000 ⇔ 255	0–100%
-	94			Red 11	Cyan 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-				Fine cyan 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	95	142	164	Green 11	Magenta 11	000 🗇 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	143	165	Fine green 11	Fine magenta 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	96			Blue 11	Yellow 11	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-				Fine yellow 11	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	97			White 11	_	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	147		Fine white 1	1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	-		Dimmer 12			0–100%
-	-	-		Fine dimmer			0-100%
_	98			Red 12	Cyan 12		RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-			Fine red 12	Fine cyan 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	99	150	1/4	Green 12	Magenta 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-		175	Fine green 12	Fine magenta 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	100			Blue 12	Yellow 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-				Fine yellow 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	101			White 12		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	155	179	Fine white 1	2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%



# Dual Control Mode - Movement Basic (8CH)

Channel	Function	Value	Percent/Setting
1	Tilt 1–12	000 ⇔ 255	0–100%
2	Fine tilt 1–12	000 ⇔ 255	0–100%
3	Tilt speed	000 ⇔ 255	0–100%
4	Tilt macro	000 ⇔ 004	No function
4		005 ⇔ 255	see <u>Tilt Macro</u>
5	Dimmer	000 ⇔ 255	0–100%
6	Strobe	000 ⇔ 019	Off
0		020 ⇔ 255	see <u>Strobe Settings</u>
7	Zoom 1–12	000 ⇔ 255	0–100%
8	Control	000 ⇔ 009	No function
0	Control	010 ⇔ 255	see <u>Control Settings</u>

# Basic2 (41CH) / Standard (53CH) / Advanced (59CH)

41 CH	53 CH	59 CH	Function	Value	Percent/Setting
1	1	1	Tilt 1	000 ⇔ 255	0–100%
2	2	2	Fine tilt 1	000 ⇔ 255	0–100%
3	3	3	Tilt 2	000 ⇔ 255	0–100%
4	4	4	Fine tilt 2	000 ⇔ 255	0–100%
5	5	5	Tilt 3	000 ⇔ 255	0–100%
6	6	6	Fine tilt 3	000 ⇔ 255	0–100%
7	7	7	Tilt 4	000 ⇔ 255	0–100%
8	8	8	Fine tilt 4	000 ⇔ 255	
9	9	9	Tilt 5	000 ⇔ 255	
10	10	10	Fine tilt 5	000 ⇔ 255	
11	11	11	Tilt 6	000 ⇔ 255	
12	12	12	Fine tilt 6	000 ⇔ 255	
13	13	13	Tilt 7	000 ⇔ 255	
14	14	14	Fine tilt 7	000 ⇔ 255	
15	15	15	Tilt 8	000 ⇔ 255	
16	16		Fine tilt 8	000 ⇔ 255	
17	17	17	Tilt 9	000 ⇔ 255	
18	18	18	Fine tilt 9	000 ⇔ 255	
19	19	19	Tilt 10	000 ⇔ 255	
20	20	20	Fine tilt 10	000 ⇔ 255	
21	21	21	Tilt 11	000 ⇔ 255	
22	22	22	Fine tilt 11	000 ⇔ 255	
23	23	23	Tilt 12	000 ⇔ 255	0–100%
24	24	24	Fine tilt 12	000 ⇔ 255	0–100%
25	25	25	Tilt speed	000 ⇔ 255	Fast to slow
26	26	26	Tilt macro	000 ⇔ 004	No function
				005 ⇔ 255	see <u>Tilt Macro</u>
_	27	27	стс	000	No function
				001 ⇔ 255	From 19000K to 2700K
_	28	28	Color macro	000	No function
		-0		001 ⇔ 255	see <u>Color Chart</u>
_	29	29	Pattern (see <u>Patterns</u> )	000	No function
_	23	23		001 ⇔ 002	Pattern 1–255



41 CH	53 CH	59 CH	Function		Value	Percent/Setting		
	30	20	LED built-in		000 ⇔ 015	No function		
-	30	30			016 ⇔ 255	see <u>LED Macro</u>		
					000 ⇔ 127	Fast to slow		
-	31	31	LED built-in speed		128	Stop		
					129 ⇔ 255	Slow to fast		
-	32	32	LED built-in d	lelay	000 ⇔ 255			
_	33	33	Background	color	000	No function		
	55	5	U		001 ⇔ 255			
-	34	34	Background of		000 ⇔ 255	0–100%		
-	-	35	Background of fine dimmer	color	000 ⇔ 255			
27	35	36	Dimmer		000 ⇔ 255			
-	Ι	37	Fine dimmer		000 ⇔ 255			
28	36	38	Strobe		000 ⇔ 019			
		50	Slibbe		020 ⇔ 255			
29	37	39	Zoom 1		000 ⇔ 255			
30	38	40	Zoom 2		000 ⇔ 255			
31	39				000 ⇔ 255			
32	40		Zoom 4		000 ⇔ 255			
33	41	-	Zoom 5		000 ⇔ 255			
34	42				000 ⇔ 255			
35	43		Zoom 7		000 ⇔ 255			
36	44		Zoom 8		000 ⇔ 255			
37	45	47	Zoom 9		000 ⇔ 255			
38	46	48	Zoom 10		000 ⇔ 255			
39	47	49			000 ⇔ 255			
40	48	50	Zoom 12		000 ⇔ 255			
41	49	51	Control		000 ⇔ 009			
	_				010 ⇔ 255			
_	50	52	Red	Cyan	000 ⇔ 255			
_	-	53	Fine red	Fine cyan	000 ⇔ 255			
_	51	54	Green	Magenta	000 ⇔ 255			
-	-	55	Fine green	Fine magenta	000 ⇔ 255			
-	52	56		Yellow		RGBW Mode: 0–100% / CMY Mode: 100–0%		
-	-	57	Fine blue	Fine yellow		RGBW Mode: 0–100% / CMY Mode: 100–0%		
-	53	58	White			RGBW Mode: 0-100% / CMY Mode: 100-0%		
-	-	59	Fine white		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%		



# Dual Control Mode - Pixels Basic (36CH) / Standard (48CH) / Advanced (96CH)

36 CH	48 CH	96 CH	Function		Value	Percent/Setting
1	1	1	Red 1	Cyan 1	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
-	-	2	Fine red 1	Fine cyan 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
2	2	3	Green 1	Magenta 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	4	Fine green 1	Fine magenta 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
3	3	5	Blue 1	Yellow 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	6	Fine blue 1	Fine yellow 1	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	4	7	White 1		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	8	Fine white 1		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
4	5	9	Red 2	Cyan 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	10	Fine red 2	Fine cyan 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
5	6	11	Green 2	Magenta 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-		Fine green 2	Fine magenta 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
6	7	13	Blue 2	Yellow 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	14	Fine blue 2	Fine yellow 2	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	8	15	White 2		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	16	Fine white 2		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
7	9	17	Red 3	Cyan 3	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	18	Fine red 3	Fine cyan 3	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
8	10	19	Green 3	Magenta 3	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	20	Fine green 3	Fine magenta 3	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
9	11	21	Blue 3	Yellow 3	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	22	Fine blue 3	Fine yellow 3	000 ⇔ 255	
-	12	23	White 3		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	24	Fine white 3	-	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
10	13	25	Red 4	Cyan 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	26	Fine red 4	Fine cyan 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
11	14	27	Green 4	Magenta 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	28	Fine green 4	Fine magenta 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
12	15	29	Blue 4	Yellow 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	30	Fine blue 4	Fine yellow 4	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
13	16	31	White 4		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	32	Fine white 4	0	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	17	33	Red 5	Cyan 5	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	34	Fine red 5	Fine cyan 5		RGBW Mode: 0–100% / CMY Mode: 100–0%
14	18	35	Green 5	Magenta 5		RGBW Mode: 0–100% / CMY Mode: 100–0%
15	- 19		Fine green 5	Fine magenta 5 Yellow 5	000 ⇔ 255	
	19	37 38	Blue 5 Fine blue 5	Fine yellow 5	000 ⇔ 255 000 ⇔ 255	
- 16	- 20	39	White 5	Fille yellow 5	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
	20	40	Fine white 5		000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	_ 21	40	Red 6	Cyan 6	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
	21	42	Fine red 6	Fine cyan 6	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
- 17	- 22	42	Green 6	Magenta 6	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
	-	43	Fine green 6	Fine magenta 6	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
18	23	44	Blue 6	Yellow 6	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	23		Fine blue 6	Fine yellow 6	000 ⇔ 255 000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
19	- 24	40	White 6	THE YENOW O	000 ⇔ 255 000 ⇔ 255	
	<u>∠</u> → _	47	Fine white 6			RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	-10	I IIIC WIIILC O		000 w 200	



36 CH	48 CH	96 CH	Function		Value	Percent/Setting
-	25	49	Red 7	Cyan 7	000 ⇔ 255	RGBW Mode: 0-100% / CMY Mode: 100-0%
-	-	50	Fine red 7	Fine cyan 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
20	26	51	Green 7	Magenta 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	52	Fine green 7	Fine magenta 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
21	27	53	Blue 7	Yellow 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	54	Fine blue 7	Fine yellow 7	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
22	28	55	White 7	-	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	56	Fine white 7		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
23	29	57	Red 8	Cyan 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	58	Fine red 8	Fine cyan 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	30	59	Green 8	Magenta 8	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	60	Fine green 8	Fine magenta 8	000 ⇔ 255	0–100%
24	31	61	Blue 8	Yellow 8	000 ⇔ 255	0–100%
-	-	62	Fine blue 8	Fine yellow 8	000 ⇔ 255	0–100%
25	32	63	White 8	-	000 ⇔ 255	0–100%
-	-	64	Fine white 8		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
26	33	65	Red 9	Cyan 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	66	Fine red 9	Fine cyan 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	34	67	Green 9	Magenta 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	68	Fine green 9	Fine magenta 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
27	35	69	Blue 9	Yellow 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	70	Fine blue 9	Fine yellow 9	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
28	36	71	White 9		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	72	Fine white 9		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
29	37	73	Red 10	Cyan 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	74	Fine red 10	Fine cyan 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	38	75	Green 10	Magenta 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	76	Fine green 10	Fine magenta 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
30	39	77	Blue 10	Yellow 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	78	Fine blue 10	Fine yellow 10	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	40	79	White 10		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	80	Fine white 10		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
31	41	81	Red 11	Cyan 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	82	Fine red 11	Fine cyan 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
32	42	83	Green 11	Magenta 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	84	•	Fine magenta 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
33	43		Blue 11	Yellow 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	86	Fine blue 11	Fine yellow 11		RGBW Mode: 0–100% / CMY Mode: 100–0%
-	44	87	White 11		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	88	Fine white 11	-	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
34	45	89	Red 12	Cyan 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	90	Fine red 12	Fine cyan 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
35	46	91	Green 12	Magenta 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
-	-	92	Fine green 12	Fine magenta 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
36	47	93	Blue 12	Yellow 12	000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%
_	-	94	Fine blue 12	Fine yellow 12	000 ⇔ 255	
-	48	95	White 12		000 ⇔ 255	
-	-	96	Fine white 12		000 ⇔ 255	RGBW Mode: 0–100% / CMY Mode: 100–0%

# Operation



# **Tilt Macro**

Value	Percent/Setting	Value	Percent/Setting				
000 🗇 004	No function	130 ⇔ 134	Tilt macro 26				
005 ⇔ 009	Tilt macro 1	135 ⇔ 139	Tilt macro 27				
010 ⇔ 014	Tilt macro 2	140 ⇔ 144	Tilt macro 28				
015 ⇔ 019	Tilt macro 3	145 ⇔ 149	Tilt macro 29				
020 ⇔ 024	Tilt macro 4	150 ⇔ 154	Tilt macro 30				
025 ⇔ 029	Tilt macro 5	155 ⇔ 159	Tilt macro 31				
030 ⇔ 034	Tilt macro 6	160 ⇔ 164	Tilt macro 32				
035 ⇔ 039	Tilt macro 7	165 ⇔ 169	Tilt macro 33				
040 ⇔ 044	Tilt macro 8	170 ⇔ 174	Tilt macro 34				
045 ⇔ 049	Tilt macro 9	175 ⇔ 179	Tilt macro 35				
050 ⇔ 054	Tilt macro 10	180 ⇔ 184	Tilt macro 36				
055 ⇔ 059	Tilt macro 11	185 ⇔ 189	Tilt macro 37				
060 ⇔ 064	Tilt macro 12	190 ⇔ 194	Tilt macro 38				
065 ⇔ 069	Tilt macro 13	195 ⇔ 199	Tilt macro 39				
070 ⇔ 074	Tilt macro 14	200 ⇔ 204	Tilt macro 40				
075 ⇔ 079	Tilt macro 15	205 ⇔ 209	Tilt macro 41				
<b>080 ⇔ 084</b>	Tilt macro 16	210 ⇔ 214	Tilt macro 42				
<b>085 ⇔ 089</b>	Tilt macro 17	215 ⇔ 219	Tilt macro 43				
090 ⇔ 094	Tilt macro 18	220 ⇔ 224	Tilt macro 44				
095 ⇔ 099	Tilt macro 19	225 ⇔ 229	Tilt macro 45				
100 ⇔ 104	Tilt macro 20	230 ⇔ 234	Tilt macro 46				
105 ⇔ 109	Tilt macro 21	235 ⇔ 239	Tilt macro 47				
110 ⇔ 114	Tilt macro 22	240 ⇔ 244	Tilt macro 48				
115 🗇 119	Tilt macro 23	245 ⇔ 249	Tilt macro 49				
120 ⇔ 124	Tilt macro 24	250 ⇔ 254	Tilt macro 50				
125 ⇔ 129	Tilt macro 25	255	Tilt macro 51				

# **Color Chart**

Value	Percent/Setting				
000	No function				
001 ⇔ 002	White 2700K	R = 156	G = 118	B = 0	W = 63
003 ⇔ 004	White 3200K	R = 156	G = 141	B = 5	W = 89
005 ⇔ 006	White 4200K	R = 156	G = 141	B = 14	W = 255
007 ⇔ 008	White 5600K	R = 156	G = 207	B = 54	W = 255
<b>009 ⇔ 010</b>	White 8000K	R = 130	G = 255	B = 96	W = 255
011	Blue	R = 0	G = 0	B = 255	W = 0
012 ⇔ 048	+ Green	R = 0	G = 0–255	B = 255	W = 0
049	Cyan	R = 0	G = 255	B = 255	W = 0
050 ⇔ 086	- Blue	R = 0	G = 255	B = 255–0	W = 0
087	Green	R = 0	G = 255	B = 0	W = 0
088 ⇔ 124	+ Red	R = 0–255	G = 255	B = 0	W = 0
125	Yellow	R = 255	G = 255	B = 0	W = 0
126 ⇔ 162	- Green	R = 255	G = 255–0	B = 0	W = 0
163	Red	R = 255	G = 0	B = 0	W = 0
164 ⇔ 200	+ Blue	R = 255	G = 0	B = 0–255	W = 0
201	Magenta	R = 255	G = 0	B = 255	W = 0
202 ⇔ 238	- Red	R = 255–0	G = 0	B = 255	W = 0
239	Blue	R = 0	G = 0	B = 255	W = 0
240 ⇔ 247	Color fade, fast to	o slow			
248 ⇔ 255	Color snap, fast t	o slow			



## **Strobe Settings**

Value	Percent/Setting	Value	Percent/Setting
000 ⇔ 019	Off	145 ⇔ 149	On
020 ⇔ 024	On	150 ⇔ 164	Random strobe 0–100%, fast to slow
025 ⇔ 064	Strobe, fast to slow	165 ⇔ 169	On
065 ⇔ 069	On	170 ⇔ 184	Pulse strobe, fast to slow
070 ⇔ 084	Strobe 100–0%, fast to slow	185 ⇔ 189	On
085 ⇔ 089	On	190 ⇔ 204	Random pulse strobe, fast to slow
090 ⇔ 104	Strobe 0–100%, fast to slow	205 ⇔ 209	On
105 ⇔ 109	On	210 ⇔ 224	Strobe 0–100–0%, fast to slow
110 ⇔ 124	Random strobe, fast to slow	225 ⇔ 229	On
125 ⇔ 129	On	230 ⇔ 244	Random pulse strobe, fast to slow
130 ⇔ 144	Random strobe 100–0%, fast to slow	245 ⇔ 255	On

# **Control Settings**

Value	Percent/Setting	Value	Percent/Setting
000 🗇 009	No function	105 🗇 109	Reserved for future use
010 ⇔ 014	Blackout on tilt	110 ⇔ 114	Red Shift on
015 ⇔ 019	Reserved for future use	115 🗇 119	Red Shift off
020 ⇔ 024	RGBW (additive) color-mixing mode	<b>120 ⇔ 134</b>	Reserved for future use
025 ⇔ 029	CMY (subtractive) color-mixing mode	135 🗇 139	Dimmer fast
<b>030 ⇔ 034</b>	Combine heads	140 ⇔ 144	Dimmer smooth
035 ⇔ 039	Disable combine heads	<b>145 ⇔ 149</b>	Linear
040 ⇔ 044	Color presets HTP on	150 ⇔ 154	Square
045 ⇔ 049	Color presets HTP off	155 ⇔ 159	I Squa
050 ⇔ 054	Reserved for future use	160 ⇔ 164	S-Curve
055 ⇔ 059	Tilt reset	165 ⇔ 169	White Mode
060 ⇔ 064	Zoom reset	170 ⇔ 174	Full Mode
065 ⇔ 069	Quiet zoom reset	175 🗇 179	PWM 600HZ
070 ⇔ 074	All reset	<b>180 ⇔ 184</b>	PWM 1200HZ
075 ⇔ 079	Cell order 1–12	<b>185 ⇔ 189</b>	PWM 2000 HZ
<b>080 ⇔ 084</b>	Cell order 12–1	<b>190 ⇔ 194</b>	PWM 4000 HZ
085 ⇔ 089	Reserved for future use	<b>195 ⇔ 19</b> 9	PWM 6000 HZ
090 ⇔ 094	Tilt reverse	200 🗇 204	PWM 15000 HZ
095 ⇔ 099	Reserved for future use	205 ⇔ 255	Reserved for future use
100 ⇔ 104	Disable tilt reverse		



**Preset Color HTP** When preset color HTP is on, manual color controls may be used at the same time as preset color controls.

When preset color HTP is off, preset color controls will override all manual color controls.

# Operation



# LED Macro

Value	Percent/Setting	Value	Percent/Setting	Value	Percent/Setting
000 ⇔ 015	No function	096 ⇔ 097	LED built-in 41	176 ⇔ 177	LED built-in 81
016 ⇔ 017	LED built-in 1	098 ⇔ 099	LED built-in 42	178 ⇔ 179	LED built-in 82
018 ⇔ 019	LED built-in 2	100 ⇔ 101	LED built-in 43	<b>180 ⇔ 181</b>	LED built-in 83
020 ⇔ 021	LED built-in 3	102 ⇔ 103	LED built-in 44	182 🗇 183	LED built-in 84
022 ⇔ 02 <b>3</b>	LED built-in 4	104 ⇔ 105	LED built-in 45	<b>184 ⇔ 185</b>	LED built-in 85
024 ⇔ 025	LED built-in 5	106 ⇔ 107	LED built-in 46	186 ⇔ 187	LED built-in 86
026 ⇔ 027	LED built-in 6	108 ⇔ 109	LED built-in 47	<b>188 ⇔ 189</b>	LED built-in 97
028 ⇔ 029	LED built-in 7	110 ⇔ 111	LED built-in 48	190 ⇔ 191	LED built-in 88
030 ⇔ 031	LED built-in 8	112 ⇔ 113	LED built-in 49	192 ⇔ 193	LED built-in 89
032 ⇔ 033	LED built-in 9	114 ⇔ 115	LED built-in 50	194 ⇔ 195	LED built-in 90
034 ⇔ 035	LED built-in 10	116 ⇔ 117	LED built-in 51	196 ⇔ 197	LED built-in 91
036 ⇔ 037	LED built-in 11	118 ⇔ 119	LED built-in 52	198 ⇔ 199	LED built-in 92
<b>038 ⇔ 039</b>	LED built-in 12	120 ⇔ 121	LED built-in 53	200 ⇔ 201	LED built-in 93
040 ⇔ 041	LED built-in 13	122 ⇔ 123	LED built-in 54	202 ⇔ 203	LED built-in 94
042 ⇔ 043	LED built-in 14	124 ⇔ 125	LED built-in 55	204 ⇔ 205	LED built-in 95
044 ⇔ 045	LED built-in 15	126 ⇔ 127	LED built-in 56	206 ⇔ 207	LED built-in 96
046 ⇔ 047	LED built-in 16	128 ⇔ 129	LED built-in 57	208 ⇔ 209	LED built-in 97
048 ⇔ 049	LED built-in 17	130 ⇔ 131	LED built-in 58	210 ⇔ 211	LED built-in 98
050 ⇔ 051	LED built-in 18	132 ⇔ 133	LED built-in 59	212 ⇔ 213	LED built-in 99
052 ⇔ 053	LED built-in 19	134 ⇔ 135	LED built-in 60	214 ⇔ 215	LED built-in 100
054 ⇔ 055	LED built-in 20	136 ⇔ 137	LED built-in 61	216 ⇔ 217	LED built-in 101
056 ⇔ 057	LED built-in 21	138 ⇔ 139	LED built-in 62	218 ⇔ 219	LED built-in 102
058 ⇔ 059	LED built-in 22	140 ⇔ 141	LED built-in 63	220 ⇔ 221	LED built-in 103
060 ⇔ 061	LED built-in 23	142 ⇔ 143	LED built-in 64	222 ⇔ 223	LED built-in 104
062 ⇔ 063	LED built-in 24	144 ⇔ 145	LED built-in 65	224 ⇔ 225	LED built-in 105
064 ⇔ 065	LED built-in 25	146 ⇔ 147	LED built-in 66	226 ⇔ 227	LED built-in 106
066 ⇔ 067 068 ⇔ 069	LED built-in 26	148 ⇔ 149	LED built-in 67	228 ⇔ 229 230 ⇔ 231	LED built-in 107
068 ↔ 069 070 ⇔ 071	LED built-in 27 LED built-in 28	150 ⇔ 151 152 ⇔ 153	LED built-in 68 LED built-in 69	230 ↔ 231 232 ⇔ 233	LED built-in 108 LED built-in 109
070 ↔ 071 072 ⇔ 073	LED built-in 28	152 ↔ 155 154 ⇔ 155	LED built-in 09	232 ↔ 233 234 ⇔ 235	LED built-in 109
072 ⇔ 075 074 ⇔ 075	LED built-in 29	154 ⇔ 155	LED built-in 70	236 ⇔ 237	LED built-in 111
076 ⇔ 077	LED built-in 31	158 ⇔ 159	LED built-in 72	238 ⇔ 239	LED built-in 112
078 ⇔ 079	LED built-in 32	160 ⇔ 161	LED built-in 73	240 ⇔ 241	LED built-in 113
080 ⇔ 081	LED built-in 33	162 ⇔ 163	LED built-in 74	242 ⇔ 243	LED built-in 114
082 ⇔ 083	LED built-in 34	164 ⇔ 165	LED built-in 75	244 ⇔ 245	LED built-in 115
084 ⇔ 085	LED built-in 35	166 ⇔ 167	LED built-in 76	246 ⇔ 247	LED built-in 116
086 ⇔ 087	LED built-in 36	168 ⇔ 169	LED built-in 77	248 ⇔ 249	LED built-in 117
088 ⇔ 089	LED built-in 37	170 ⇔ 171	LED built-in 78	250 ⇔ 251	LED built-in 118
<b>090 ⇔ 091</b>	LED built-in 38	172 ⇔ 173	LED built-in 79	252 ⇔ 253	LED built-in 119
092 ⇔ 093	LED built-in 39	174 ⇔ 175	LED built-in 80	254 ⇔ 255	LED built-in 120
094 ⇔ 095	LED built-in 40				



# Patterns

	_						
1	00000000000	65	•••••00••••0	129	••••000•••0•	193	•00000•••••0
2	$\bigcirc$	66	0000	130	••••000••••0	194	0000000
3	$\bullet \bigcirc \bullet \bullet$	67	00	131	•••••000•0••	195	•000000••••
4	••0••••••	68	00 • • • 0 • • • • • •	132	•••••000••0•	196	●●000000●●●
5	•••0	69	00 • • • 0 • • • • •	133	•••••000•••0	197	●●●○○○○○●●
6	••••0	70	00 • • • • • 0 • • • •	134	••••••000•0•	198	●●●●○○○○○●●
7	•••••	71	00 • • • • • • 0 • • •	135	••••••000••0	199	•••••0000000
8	•••••	72	000000000000000000000000000000000000000	136	00000	200	0000000
9	••••••	73	0000000000	137	•00000	201	000000000000000000000000000000000000000
10	•••••••	74	0000	138	••00000	202	000000000000000000000000000000000000000
11	••••••••	75	•0000	139	•••00000•••	203	0000
12	••••••••••	76	••0000	140	••••00000•••	204	000000000000000000000000000000000000000
13	•••••••••••	77	•••0000	141	•••••00000••	205	000000000000000000000000000000000000000
14	•••••	78	••••0000••••	142	••••••	206	00000000
15	00 • • • • • • • • • •	79	•••••0000•••	143	•••••••00000	207	••••00000000
16	•00••••••	80	••••••0000	144	00000	208	00000000
17	••00•••••••	81	●●●●●●●0000●	145	000000000000000000000000000000000000000	209	•0000000•••
18	•••00••••••	82	••••••••0000	146	0000000000	210	••0000000••
19		83	0000	147	00000000000000	211	●●●○○○○○○○●
20		84	00000000	148	000000000000000000000000000000000000000	212	●●●●○○○○○○○○
21		85	00000000000	149	0000	213	00000000
22		86	000000000000000000000000000000000000000	150	000000000000000000000000000000000000000	214	000000000000000000000000000000000000000
23	••••••••00	87	•00••••00•••	151	0000	215	000000000000000000000000000000000000000
24	••••••••••00	88	••00••••00••	152	0000	216	000000000000000000000000000000000000000
25	••••••••••	89	•••00••••00•	153	000000000000000000000000000000000000000	217	000000000000000000000000000000000000000
26		90		154		218	
20	0				•0000•0•••••		000000
	0.00	91	0	155	•0000••0•••	219	0000000
28	•0•0•••••	92	•00•••••00•	156	•0000•••0•••	220	00000000
29	••0•0•••••	93	•••00••00•••	157	•0000••••0••	221	●00000●000●●
30	•••0•0•••••	94	•••00••00•••	158	•0000•••••0•	222	●●0000●●000●
31	••••0•0•••••	95	0	159	•0000•••••0	223	●●●○○○●●●○○○
32	•••••0•0••••	96	•0•••00•••0•	160	••00000••••	224	000000000000000000000000000000000000000
33	••••••	97	••0••00••0••	161	••0000•0•••	225	000000000000000000000000000000000000000
34	•••••••	98	•••0•00•0•••	162	••0000••0•••	226	000000000000000000000000000000000000000
35	••••••••	99	••00•00••••	163	••0000•••0	227	00000.000000
36	•••••••••0•0	100	•••00•00••••	164	••0000	228	00000.
37	$\bigcirc$	101	••••00•00•••	165	••0000••••0	229	000000.00000000000000000000000000000000
38	$\bullet \bigcirc \bullet \bigcirc \bigcirc$	102	000000000000000000000000000000000000000	166	000000	230	000000000000000000000000000000000000000
39	•0•••0••••	103	000	167	•000000	231	000000000000000000000000000000000000000
40	••0•••0••••	104	000000000000000000000000000000000000000	168	••000000	232	000000000
41	•••0•••0	105	000000000000000000000000000000000000000	169	●●●○○○○○●●●	233	●000000000●
42	••••0	106	000000000000000000000000000000000000000	170	●●●●○○○○○●●	234	●●0000000000
43	•••••0	107	000000000000000000000000000000000000000	171	●●●●●000000●	235	000000000000000000000000000000000000000
44	••••••0	108	000000000000000000000000000000000000000	172	••••••000000	236	000000000000000000000000000000000000000
45	••••••	109	•000•0•••••	173	000000	237	000000000000000000000000000000000000000
46	000	110	•000••0••••	174	000000000000000000000000000000000000000	238	000000000000000000000000000000000000000
47	•000•••••••	111	•000•••0•••	175	000000000	239	000000000000
48	••000	112	•000••••0	176	000000000000	240	000000.00000
49	•••000	113	•000•••••0••	177	00000	241	000000000000000000000000000000000000000
50	••••000	114	•000••••••0	178	0000000000	242	000000000000000000000000000000000000000
51	•••••000	115	•000••••••0	179	●●○○●●○○●●○○	243	000000000000000000000000000000000000000
52	••••••000	116	••000•0••••	180	●000●●●000●●	244	•000000000
53	•••••••000	117	••000••0•••	181	●●○○○●●●○○○●	245	●00000●00000
54	••••••••000•	118	••000•••0•••	182	00000000000	246	000000000000
55	•••••••••000	119	••000••••0	183	•0•0•0•0•0•0	247	000000000000
56	000000	120	••000•••••0•	184	00000000	248	000000000000
57	000000000	121	••000•••••0	185	00000	249	000000000000
58	0	122	•••000•0•••	186	00000	250	000000000000
59	•0•••00••••	123	•••000••0•••	187	00000	251	•00000•00000
60	••0••00••••	124	•••000•••0••	188	00000	252	000000000000
61	•••0•00•••••	125	•••000••••0•	189	•00000•0••••	253	000000000000
62	•••••00•0	126	•••000••••0	190	•00000••0•••	254	000000000000000000000000000000000000000
63	•••••00	127	••••000•0••	191	•00000	255	000000000000000000000000000000000000000
64	•••••00	128	••••000	192	•00000	256	000000000000000000000000000000000000000
		220		192		200	



# Configuration

### Test Mode

#### Auto Test

To perform an auto test of the COLORado PXL Curve 12, follow the instructions below:

- 1. Go to the Run Mode main level.
- 2. Select Auto Test.

#### Manual Test

To test the functions of the COLORado PXL Curve 12 manually, do the following:

- 1. Go to the Run Mode main level.
- 2. Select Manual Test.
- 3. Select the function (Tilt, P/T Speed, Red, Green, Blue, White, CTC, Color, Pattern, LED Macro, LED Ma. Speed, LED Ma. Fade, Background, Background Dim., Dimmer, Shutter, Function, and Zoom) to test.
- 4. Change the value of the tested function, **000–255**.

### Setup

#### Network Settings

To adjust the IP Mode, IP Byte, and SubMask settings, follow the instructions below:

- 1. Go to the **Setup** main level.
- 2. Select Network Settings.

#### IP mode

The IP address of the COLORado PXL Curve 12 can be set manually, by the network, or to a preset static address specific to each product. To set the IP Mode, do the following:

- 1. Navigate to Network Settings.
- 2. Select IP Mode.
- 3. Select among:
  - Manual set the IP address with the control panel
  - DHCP the network sets the IP address
  - Static a preset address specific to each product

#### IP byte

In Manual IP Mode, the IP address must be assigned using the product menu. To set the IP address in Manual IP Mode, follow the instructions below:

- 1. Navigate to Network Settings.
- 2. Select IP.
- 3. Select from **IP Byte 1** to **4**.
- 4. Change the value of each IP Byte, 000-255.

#### Subnet mask

In Manual IP Mode, the Subnet Mask must be assigned using the product menu. To set the Subnet Mask in Manual IP mode, do the following:

- 1. Navigate to **Network Settings**.
- 2. Select SMK.
- 3. Select from SubMask 1 to 4.
- 4. Change the value of each SubMask, 000–255.

#### **Tilt Orientation**

To set whether the tilt orientation is normal or inverted, follow the instructions below:

- 1. Go to the **Setup** main level.
- 2. Select Tilt Reverse.
- 3. Select NO (normal tilt) or YES (reversed tilt).

#### Zoom Orientation

To set whether the zoom goes from wide to narrow or from narrow to wide, do the following:

- 1. Go to the **Setup** main level.
- 2. Select Zoom Reverse.
- 3. Select NO (wide to narrow) or YES (narrow to wide).





#### **Display Orientation**

To set which way the display faces, follow the instructions below:

- 1. Go to the **Setup** main level.
- 2. Select Screen Reverse.
- 3. Select **NO** (display is normal), **YES** (display is inverted), or **AUTO** (the display automatically detects which way the product is facing and orients itself accordingly).

#### **Tilt Angle Range**

To set the range of motion the tilt is permitted, do the following:

- 1. Go to the Setup main level.
- 2. Select Tilt Angle.
- 3. Select **200** (200° tilt), **180** (180° tilt), or **60** (60° tilt).

#### Blackout on Tilt Movement

To set whether the product will black out during tilt movement, follow the instructions below:

- 1. Go to the Setup main level.
- 2. Select BL. O. T Move.
- 3. Select NO (do not black out) or YES (black out during movement).

#### **Backlight Timer**

To set the amount of time after inactivity before the display backlight turns off, do the following:

- 1. Go to the **Setup** main level.
- 2. Select Backlight Timer.
- 3. Select **30S** (after 30 seconds of inactivity), **1M** (after 1 minute of inactivity), **5M** (after 5 minutes of inactivity), or **ON** (does not turn off).

#### Loss of Data

In case of any loss of input signal, the COLORado PXL Curve 12 will respond in one of two ways: The product will either hold the last signal received, or black out all LED output.

To set how the product responds, follow the instructions below:

- 1. Go to the Setup main level.
- 2. Select Loss of Data.
- 3. Select Hold (hold last signal received) or Close (black out all LED output).

#### **Color-Mixing Mode**

The COLORado PXL Curve 12 has a mode that emulates CMY (cyan, magenta, and yellow) color mixing. In this mode, the dimming is reversed (000 = 100%, 255 = 0%), and the red, green, and blue channels control cyan, magenta, and yellow, respectively.

To set the color-mixing mode, do the following:

- 1. Go to the **Setup** main level.
- 2. Select C Mixing Mode.
- 3. Select RGBW (additive mode: 0-100%) or CMY (subtractive mode: 100-0%).

#### Dimmer Curve

To set the dimmer curve, follow the instructions below:

- 1. Go to the Setup main level.
- 2. Select Dimmer Curve.
- 3. Select **Linear** (increase in light intensity is linear), **Square** (light intensity control is finer at low levels and coarser at high levels), **I Squa** (light intensity control is coarser at low levels and finer at high levels), or **SCurve** (light intensity is finer at low and high levels, and coarser at medium levels).

#### **Dimmer Speed**

To set the dimmer speed, do the following:

- 1. Go to the Setup main level.
- 2. Select Dimmer Speed.
- 3. Select Smooth or Fast.



#### **LED Frequency**

This option changes the Pulse Width Modulation (PWM) frequency of the LEDs on the COLORado PXL Curve 12.

- 1. Go to the **Setup** main level.
- 2. Go to the **PWM Option** main level.
- 3. Select PWM frequency (600Hz, 1200Hz, 2000Hz, 4000Hz, 6000Hz, or 25Khz).

#### Cell Order

To set how the light is activated, follow the instructions below:

- 1. Go to the Setup main level.
- 2. Select Cell Order.
- 3. Choose 1-12 (light activates from left to right) or 12-1 (light activates from right to left).

#### **Calibrated White**

When activated, calibrated white sets the light output temperature to 7500K. To set the calibrated white setting, do the following:

- 1. Go to the **Setup** main level.
- 2. Select Calibrated White.
- 3. Select **ON** (activates calibrated white), **OFF** (deactivates calibrated white), or **Custom** (adjust light output temperature using the White Balance setting).

#### White Balance

To set the maximum values of a given LED color to create a white light output, follow the instructions below:

- 1. Go to the **Setup** main level.
- 2. Select White Balance.
- 3. Select the color value to be changed (Red, Green, Blue, or White).
- 4. Set the color value, **000–255**.

#### **Preset Functions**

The COLORado PXL Curve 12 has three presets. Every time a settings is changed in the fixture, the current preset is updated to include that change. To load a preset, do the following:

- 1. Go to the **Setup** main level.
- 2. Select Preset Select.
- 3. Select the preset to load (Preset A, Preset B, or Preset C).
- 4. The selected preset will load, and all changes made to the settings will save to that preset.

Presets can be uploaded to other COLORado PXL Curve 12 using a DMX connection. To do so:

- 1. Connect the DMX Out of the product that has the desired presets to the DMX In of the product to be updated.
- 2. Power on both products.
- 3. On the product with the desired presets, go to the Setup main level.
- 4. Select Preset Sync.
- 5. Select NO (do not upload settings) or YES (upload settings).

#### **Reset Functions**

To reset the tilt, zoom, or all functions as if from startup, follow the instructions below:

- 1. Go to the **Setup** main level.
- 2. Select Reset Function.
- 3. Select the function to be reset (Tilt, Zoom, or All).
- 4. Select **NO** (do not reset) or **YES** (reset).

#### **Factory Reset**

To restore the COLORado PXL Curve 12 to factory default settings, do the following:

- 1. Go to the Setup main level.
- 2. Select Factory Settings.
- 3. Select NO (do not reset) or YES (reset to factory default settings).



### System Information

All the information about the current status of the COLORado PXL Curve 12 is available through the product's **Information** menu. To view this information, follow the instructions below:

- 1. Go to the **Information** main level.
- 2. Choose the desired information from the following:
  - Firmware Version displays the current firmware version
  - Running Mode displays the current running mode
  - Address displays the current starting address
  - Temperature displays the current product temperature in °C
  - Fixture Time displays the number of hours the fixture has been powered on
  - LED Hours displays the total hours the LED has been powered on
  - ArtNet Info displays the current IP address, Subnet Mask, and MAC address
  - Device UID displays the product UID
  - Fan Information displays the speed of head fans, defrost fans, and base fans

### **Offset Mode**

The offset mode provides fine adjustments for the home position of all the moving parts in the optical path and the tilt movements. This ensures that the moving parts do not show any border or reduce the light output when in their home position.

- 1. Starting from the Main Level screen, press and hold <**MENU**> until the passcode screen appears.
- 2. Enter the passcode 2323.
- 3. This direct the user to the Zero Adjust menu screen.

#### Tilt

To adjust the starting point of the tilt motor, do the following:

- 1. Select **TILT**.
- 2. Increase or decrease the starting value, from 000 to 255.

#### Zoom

To adjust the starting point of the zoom motor, follow the instructions below:

- 1. Select **ZOOM1** or **ZOOM2**.
- 2. Increase or decrease the starting value, from 000 to 255.

#### **MAC Address**

To adjust the fourth, fifth, and sixth digit of the MAC address, do the following:

- 1. Select MAC4, MAC5, or MAC6.
- 2. Increase or decrease the starting value, from **000** to **255**.



# Web Server

The COLORado PXL Curve 12 Web Server can be accessed by any computer on the same network as the product. It allows network access to system information and settings (e.g., control setup, manual testing of all functions, firmware updates, and the ability to change the Web Server password).

- 1. Connect the product to power, and set the Control Protocol to Art-Net and the <u>IP mode</u> to Static.
- 2. Connect the product to a Windows<sup>®</sup> computer with a network cable.
- 3. On the computer, set the IP address of the new network to have the same first 3 digits as the IP address of the product (see IP byte).
- 4. Enter the IP address of the product into the URL bar of a Web browser on the computer.
- 5. Enter both the User Name and Password as **admin** to log in.

#### Information

The Information page on the Web Server displays the current settings and the system information of the COLORado PXL Curve 12.

#### Setup

The Setup page on the Web Server provides options for control, similar to the **Setup** menu on the product. Click **Save Settings** to send the new configuration to the product.

#### Manual Test

The Manual Test page on the Web Server allows all output functions of the product to be controlled through the browser. To set all functions back to default, click **Reset**.

#### Firmware Update

The Upgrade page on the Web Server allows the product to be updated with the latest firmware. Go to <u>https://www.chauvetprofessional.com/products/colorado-pxl-curve-12</u> to download firmware updates.

#### Security

The Security page on the Web Server gives the option to change the password to the connected product's Web server. Enter the old password (**admin**, by default) and the new password twice, then click **Save Settings** to change the password.





# 5. Maintenance

# **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.

#### Avoid spinning the cooling fans using compressed air to prevent damage.

# **Torque Measurements**

To maintain the IP rating when reassembling the product, use the given torque measurements for each of the following screws and bolts:

Fixture Parts	Torque Rating (Kgf.cm)	Torque Rating (Igb.in)
Feet	9.2	7.9
Omega bracket holders	12.2	10.6
Bottom allen key (not feet)	9.2	7.9
Screws for safety cable point	15.3	13.3
Screws around power and data points	3.6	3.1
Connector plate allen key screws	16.3	14.1
Fuse	7.1	6.2
Front display bump-out allen screws	15.3	13.3
Allen screws around display	9.2	7.9
Allen screws holding yokes to base	15.3	13.3
Allen screws for alignment pin holder	12.2	10.6
Allen screws around lens covers	12.2	10.6

# Vacuum Test Measurements

Use the IP Tester from Chauvet Professional to ensure the product has been reassembled correctly by following the information below:

Parameters	Values
Method	Positive
Test pressure	2.18 kPa
Test duration	60 seconds
PASS state leak pressure	<0.02 kPa



# 6. Technical Specifications

Dimensions and We	ight						
Length	W	idth	Height		Weight		
39.49 in (1,003 mm)	6.65 in	(169 mm)	12.76 in (324 m	m) 76	76 lb (34.5 kg)		
<b>Note</b> : Dimensions in inches rounded to the nearest decimal digit. <b>Power</b>							
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	800 W	790 W	772 W	768 W	767 W		
Operating current	8.13 A	6.70 A	3.80 A	3.44 A	3.30 A		
Power-linking current (products)	F 12 A, 250 V	F 12 A, 250 V	F 12 A, 250 V (3 products)	F 12 A, 250 V (3 products)	F 12 A, 250 V (3 products)		
Power I/O		U.S./World	U.S./Worldwide UK/Europe		irope		
Power input connector Power output connector Power cord plug Light Source		Seetronic Powerkon IP65 Seetronic Powerkon IP65 Edison (U.S.)		Seetronic Powerkon IP65 Seetronic Powerkon IP65 Local plug			
•	olor	Quantity	Power	Current	Lifespan		
	olor RGBW	12	45 W	2.96 A	50,000 hours		
Photometrics		12		2.007	00,000 Houre		
Parameter			Flood	50% Zoom			
Beam angle		Spot 5.7°	26.8°		8.8°		
Field angle		9.0°	33.9°	-	).2°		
Cutoff angle		9.9°	36.3°	21.6°			
Illuminance @ 5	m	38,727 lux	1,120 lux				
Thermal							
Maximum External Te	mperature	Cooling Sy	stem				
113 °F (45 °C		Fan-assisted convection					
DMX							
I/O Connector		Channel Range					
Seetronic et	5-pin IP-rated XLR, Seetronic etherCON IP65 Single Mode: 20, 53, 101, 155, 169, or 179 channels Dual Mode Movement: 8, 41, 53, or 59 channels Dual Mode Pixels: 36, 48, or 96 channels			r 59 channels			
Ordering							
Product Name		Item Name			JPC Number		
COLORado PXL Curve 12 COLORADOPXLCURVE12 08012099 781462224479							





# **Contact Us**

General Information	Technical Support		
Chauvet World Headquarters			
Address: 3360 Davie Rd., Suite 509	Voice: (844) 393-7575		
Davie, FL 33314	Fax: (954) 756-8015		
Voice: (954) 577-4455	Email: <u>chauvetcs@chauvetlighting.com</u>		
Fax: (954) 929-5560			
Toll Free: (800) 762-1084	Website: www.chauvetprofessional.com		
Chauvet U.K.			
Address: Pod 1 EVO Park	Email: <u>UKtech@chauvetlighting.eu</u>		
Little Oak Drive, Sherwood Park			
Nottinghamshire, NG15 0EB	Website: www.chauvetprofessional.eu		
UK			
Voice: +44 (0) 1773 511115			
Fax: +44 (0) 1773 511110			
Chauvet Benelux			
Address: Stokstraat 18	Email: <u>BNLtech@chauvetlighting.eu</u>		
9770 Kruishoutem			
Belgium	Website: www.chauvetprofessional.eu		
Voice: +32 9 388 93 97			
Chauvet France			
Address: 3, Rue Ampère 91380 Chilly-Mazarin	Email: FRtech@chauvetlighting.fr		
France	Website: www.chauvetprofessional.eu		
Voice: +33 1 78 85 33 59			
Chauvet Germany			
Address: Bruno-Bürgel-Str. 11	Email: <u>DEtech@chauvetlighting.de</u>		
28759 Bremen			
Germany	Website: www.chauvetprofessional.eu		
Voice: +49 421 62 60 20			
Chauvet Mexico			
Address: Av. de las Partidas 34 - 3B	Email: <u>servicio@chauvet.com.mx</u>		
(Entrance by Calle 2)			
Zona Industrial Lerma	Website: www.chauvetprofessional.mx		
Lerma, Edo. de México, CP 52000			
Voice: +52 (728) 690-2010			

# Warranty & Returns

For warranty terms and conditions and return information, please visit our website. For customers in the United States and Mexico: <u>www.chauvetlighting.com/warranty-registration</u>. For customers in the United Kingdom, Republic of Ireland, Belgium, the Netherlands, Luxembourg, France, and Germany: <u>www.chauvetlighting.eu/warranty-registration</u>.