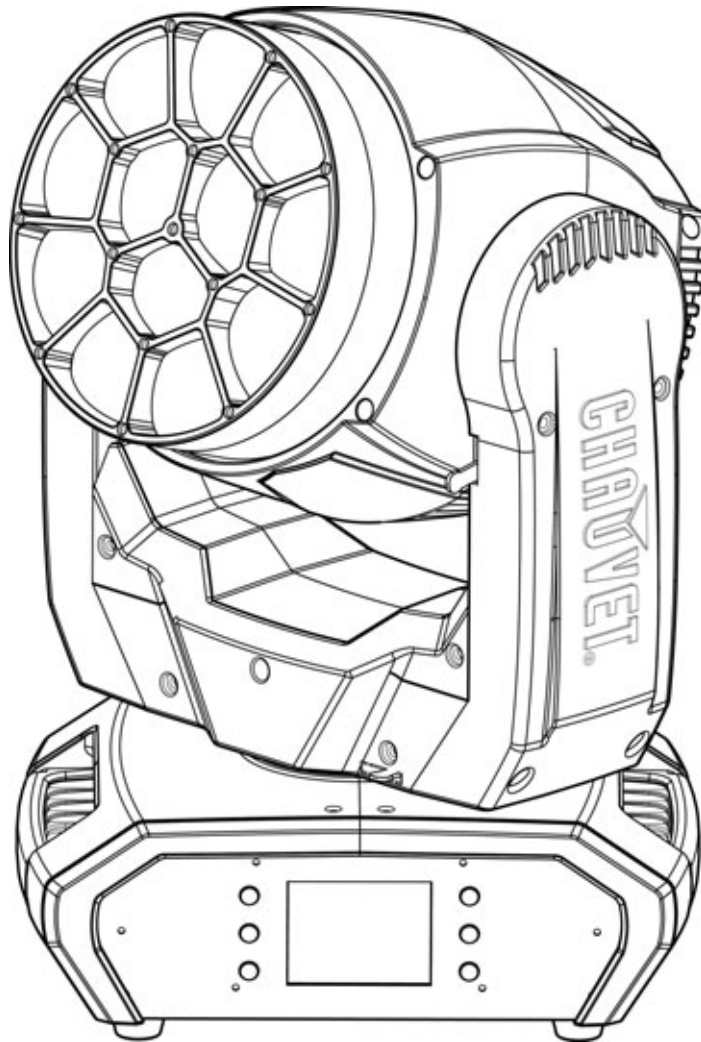


MAVERICK

MK2 WASH

User Manual




CHAUVET
PROFESSIONAL

EDITION NOTES

The Maverick MK2 Wash User Manual includes a description, safety precautions, installation, programming, operation and maintenance instructions for the Maverick MK2 Wash 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

This Maverick MK2 Wash User Manual is the 9th edition of this document. Go to www.chauvetprofessional.com for the latest version.

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1. BEFORE YOU BEGIN

What Is Included

- Maverick MK2 Wash
- Seetronic Powerkon Power Cord
- 2 Omega Brackets with Mounting Hardware
- 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.



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 this product from its power source before servicing.
- Always connect this product to a grounded circuit to avoid the risk of electrocution.
- Do not touch this product's housing during operation because it may be very hot.

Mounting and Rigging

- This product is not intended for permanent installation.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. (IP20)
- 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.
- 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 this product while it is operating.
- When hanging this product, always secure to a fastening device using a safety cable.
- Never carry the product by the power cord or any moving part.

Power and Wiring

- Make sure the power cord is not crimped or damaged.
- Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- 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 this product to a dimmer pack or rheostat.
- Make sure to replace the fuse with another of the same type and rating.
- 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

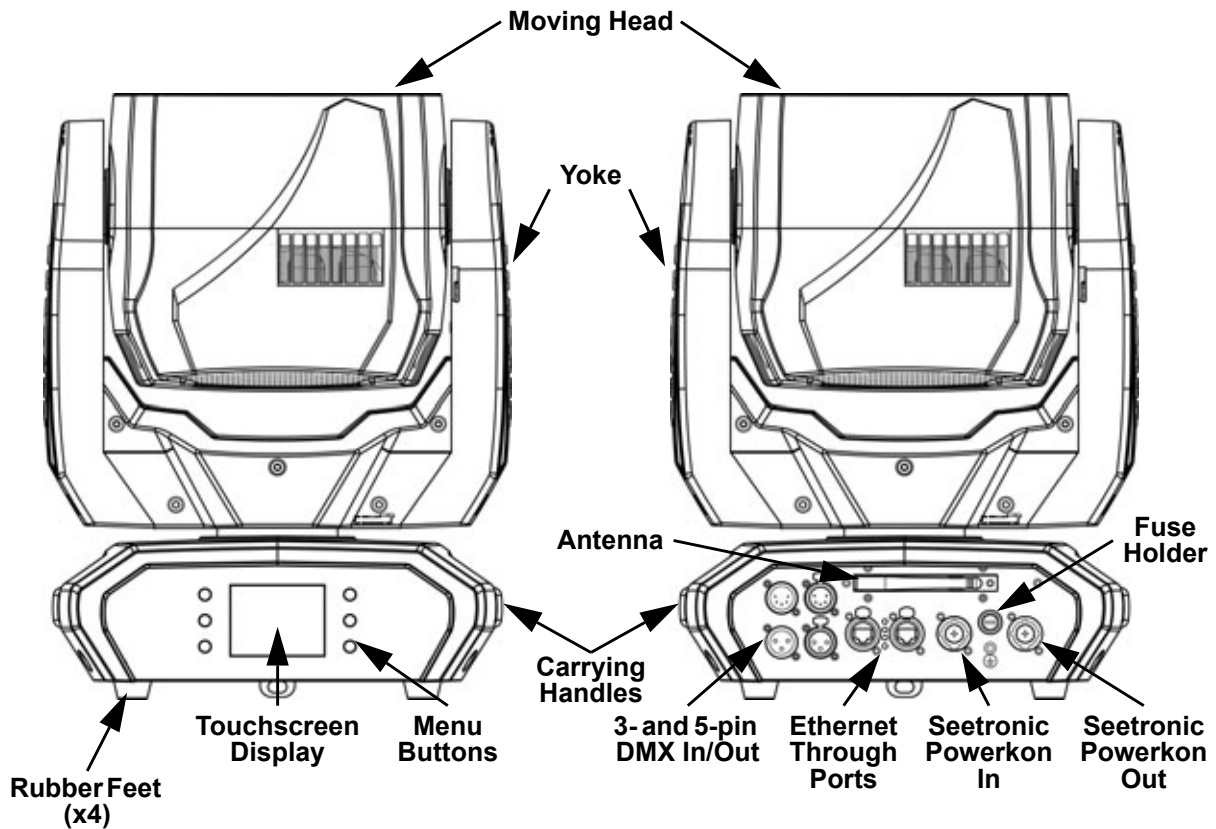
Description

The Maverick MK2 Wash is a fully featured moving head product equipped with 12 quad-color RGBW 40-watt LEDs. The Maverick MK2 Wash is a powerful wash product that features smooth pan and tilt operation, a 7° to 49° zoom range, and a unique lens system that gives you an even, professionally combined color wash. The Maverick MK2 Wash runs on Art-Net™, sACN, Kling-Net, DMX, and WDMX protocols, and can be controlled with lighting consoles or media servers, providing the ultimate in flexible control integration options. Convert TCP/IP protocols in to DMX output for shorter cable runs.

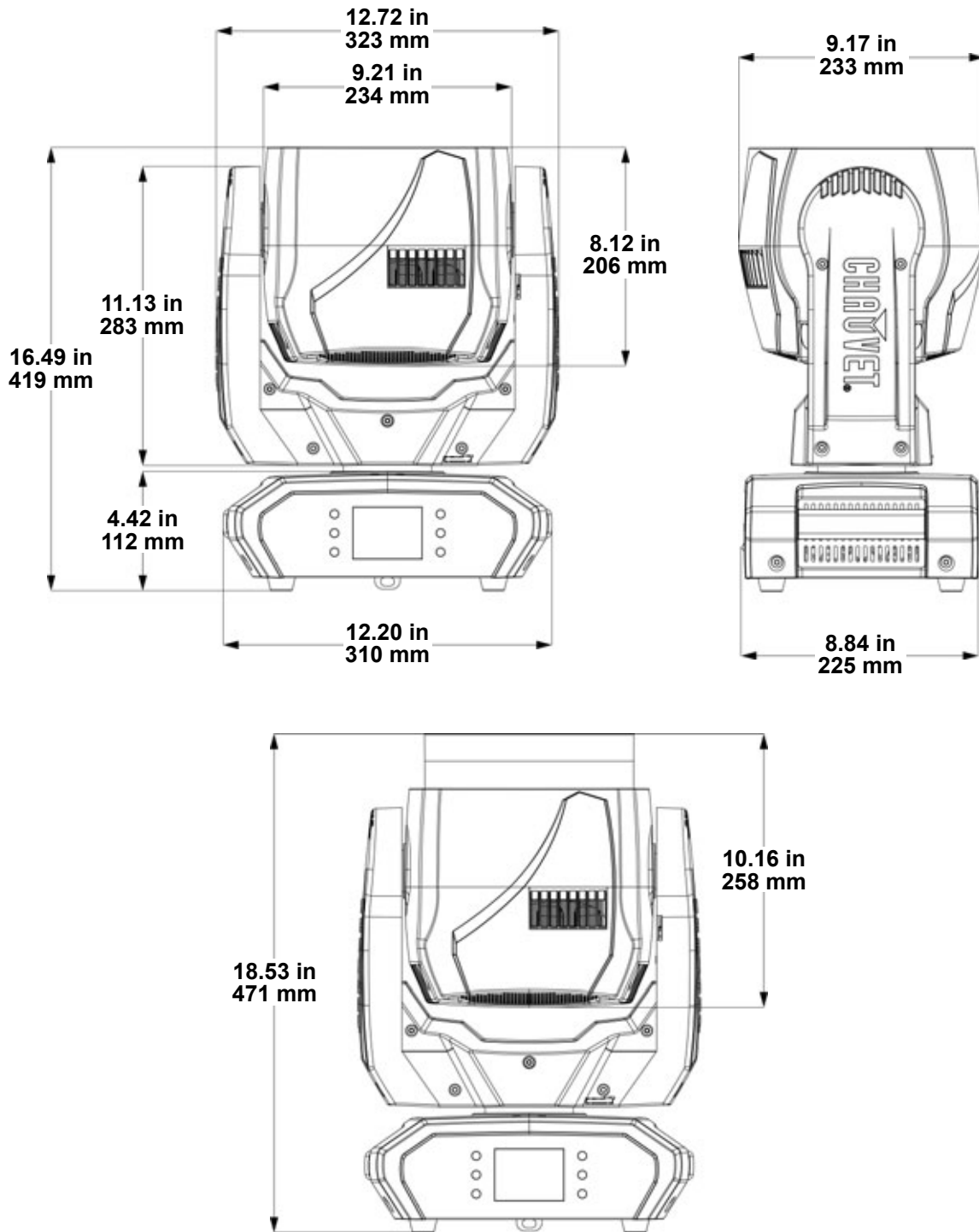
Features

- Fully featured RGBW LED yoke wash fixture with pixel mapping and zoom
- 16-bit Dimming of master dimmer as well as individual colors for smooth control of fades
- Built in colors for quick design possibilities
- Built in virtual gobo wheel with background colors for impressive atmospheric effects
- Fast movement of pan, tilt, and zoom
- Quiet operation for a wide range of installation situations
- DMX, WDMX, S ACN, Art-Net, and Kling-Net control for full flexibility
- Converts TCP/IP to DMX for shorter data cable runs
- 7° - 49° Zoom angle for variable beam sizes
- True 1 compatible power input
- Battery backup display with auto rotate depending on fixture orientation

Product Overview



Product Dimensions



3. SETUP

AC Power

Each Maverick MK2 Wash 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 Maverick MK2 Wash, 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 Maverick MK2 Wash comes with a power input cord terminated with a Seetronic Powerkon 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

Fuse Replacement

1. Disconnect this product from the power outlet.
2. Using a flat-head screwdriver, unscrew the fuse holder cap from the housing.
3. Remove the blown fuse and replace with another fuse of the same type and rating (F 10 A, 250 V).
4. Screw the fuse holder cap back in place and reconnect power.

Power Linking

The Maverick MK2 Wash supports power linking. You can power link up to 2 products at 120 V, up to 4 at 208 V, or up to 5 at 230 V.

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

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 Maverick MK2 Wash supports RDM protocol that allows feedback to make changes to menu map options.

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

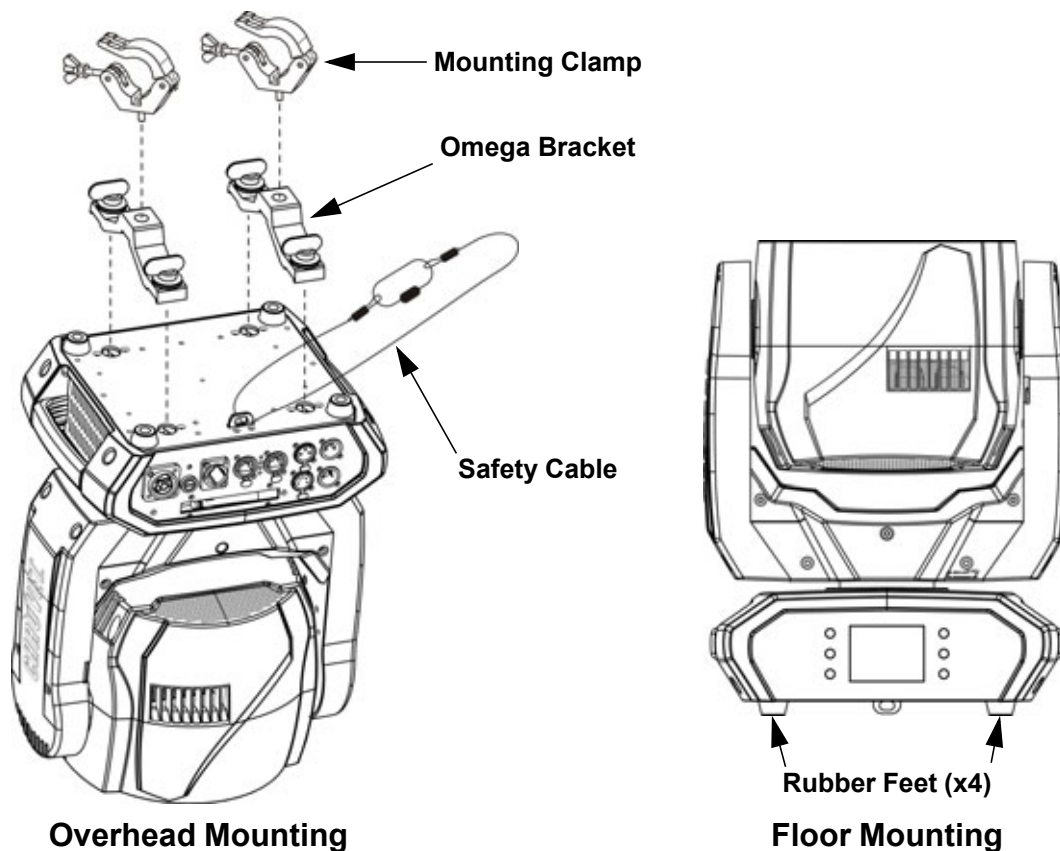
Always mount this product in a safe position and make sure there is adequate room for ventilation, configuration, and maintenance. The Maverick MK2 Wash can be suspended upright or upside down using the 2 Omega brackets included, or it can be placed on its rubber feet on a flat level surface.

Rigging

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

- When selecting an installation location, consider easy access to this product for operation, programming adjustments, and routine maintenance.
- The product is not intended for permanent installation.
- Make sure to mount this product away from any flammable material.
- Never mount in places where rain, high humidity, extreme temperature changes, or restricted ventilation may affect the product.
- If hanging this product, make sure that the mounting location can support the product's weight. See the [Technical Specifications](#) for the weight-bearing requirements of this product.
- When hanging this product, always secure to a fastening device using a safety cable. For our CHAUVET Professional line of safety cables, go to <http://trusst.com/products/>.
- When mounting the product on the floor, make sure that the product and cables are away from people and vehicles.
- Place the Maverick MK2 Wash so that it can move freely without hitting anything or anybody.
- Leave enough slack on the cables to prevent tension and pull on the plugs.

Mounting Diagram



Signal Connections

The Maverick MK2 Wash can receive DMX, Art-Net™, sACN, or Kling-Net signal. The Maverick MK2 Wash has 2 Neutrik® etherCON® through ports, and 3- and 5-pin DMX in and out ports. For more information about DMX, read the DMX primer at: https://www.chauvetprofessional.com/wp-content/uploads/2016/06/DMX_Primer.pdf.

Art-Net™ Connection

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

Art-Net™ designed by and copyright Artistic Licence Holdings Ltd.

sACN Connection

Also known as ANSI E1.31, streaming ACN 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. ACN is maintained by the Professional Lighting and Sound Association (PLASA).

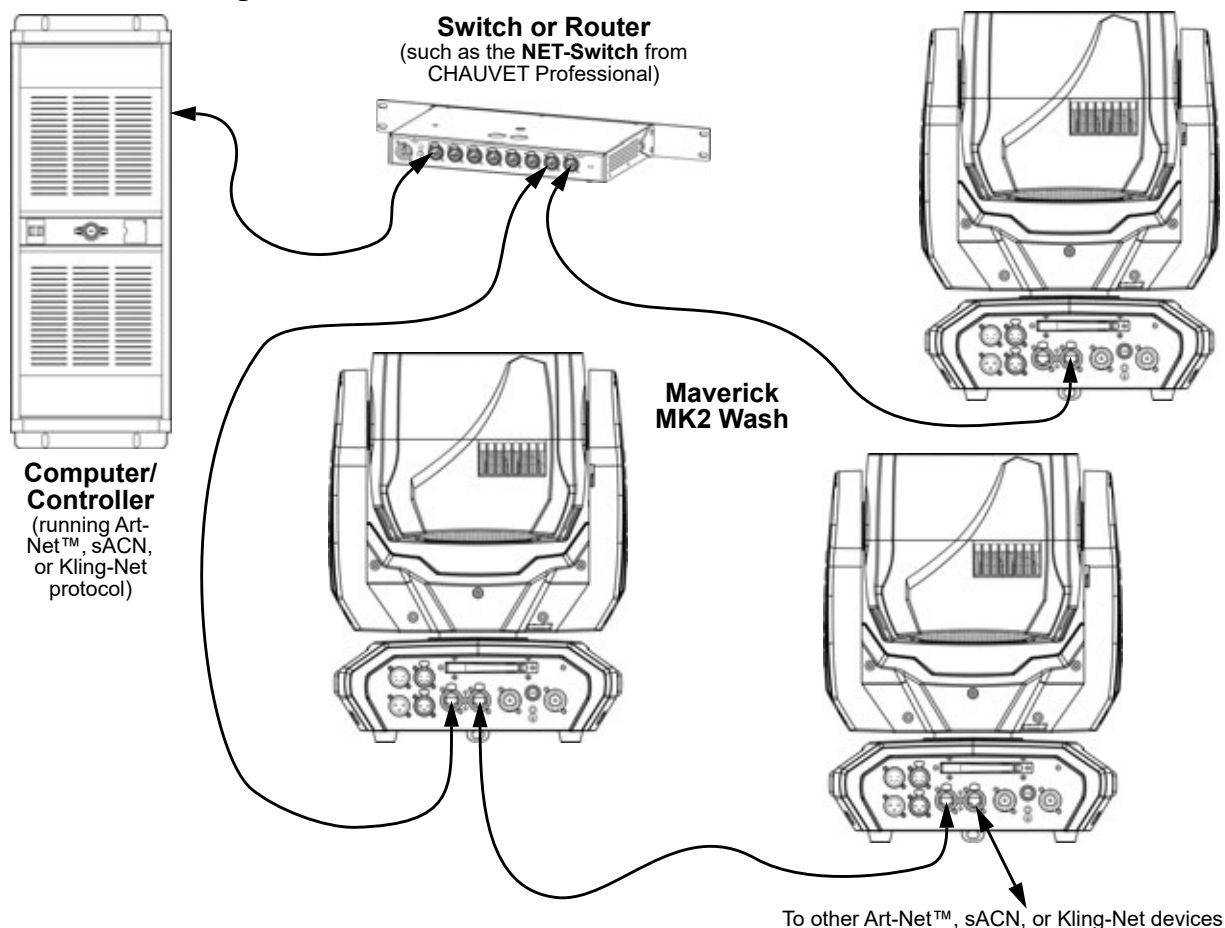
Kling-Net Connection

Kling-Net is a network protocol that allows auto configuration of display devices using a Neutrik® etherCON® RJ45 Ethernet connection. Refer to the ArKaos software manual for detailed instructions on programming this product.



ArKaos Kling-Net does not support the pan and tilt functions, and must be paired with another protocol for full functionality with the Maverick MK2 Wash.

Connection Diagram









The three LED indicators in between the ethernet through ports indicate a connection to a network and activity on that network. They do not indicate whether or not the Maverick MK2 Wash is receiving a signal from a controller.

4. OPERATION

Touchscreen Control Panel

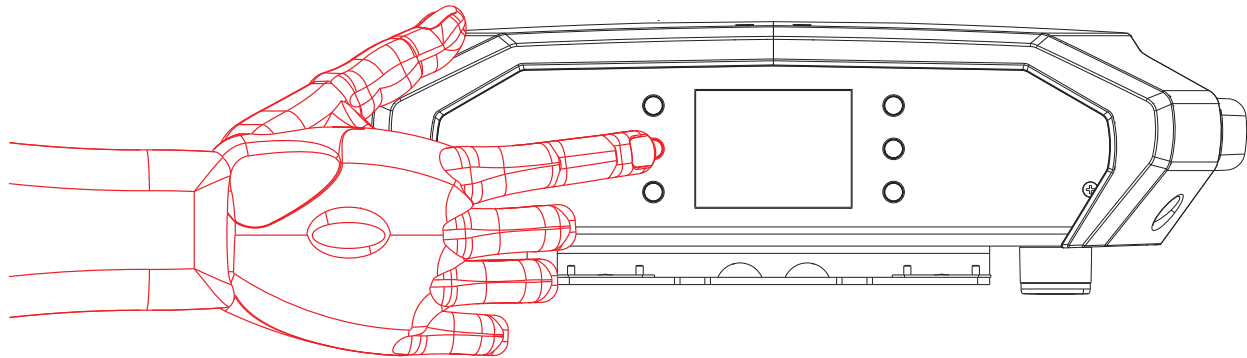
The Maverick MK2 Wash has a touchscreen display as well as 6 control buttons. Navigate the menu structure by pressing the buttons, touching the images of the buttons on the sides of the display, or touching the desired menu option on the display directly. The touchscreen can be locked and calibrated through the Setup options in the menu. (See [Touchscreen Calibration](#) and [Touchscreen Lock](#).)

Control Panel Description

Button	Function
	Navigates upwards through the menu list or increases the numeric value when in a function
	Exits from the current menu or function
	Navigates downwards through the menu list or decreases the numeric value when in a function
	Navigates leftwards through the menu list
	Enables the currently displayed menu or sets the currently selected value into the selected function
	Navigates rightwards through the menu list

Battery Powered Display

Press and hold until menu screen appears (approx 15 sec.).



Menu Map

Programming Levels				Description
Control Settings				Main Level
Control Settings	Single Control	DMX	Personality	Basic
				Standard
				Advanced
				Tour
		Start Address	1-512	Sets the DMX starting address
		ArtNet	Personality	Basic
				Standard
				Advanced
	Tour			
	Start Address	1-512	Sets the Art-Net™ starting address	
	Universe	0-254	Sets the Art-Net™ universe	
	sACN	Personality	Basic	
			Standard	
			Advanced	
			Tour	
	Start Address	1-512	Sets the sACN starting address	
	Universe	0-255	Sets the sACN universe	
	WDMX	Personality	Basic	
			Standard	
			Advanced	
Tour				
Start Address	1-512	Sets the WDMX starting address		

Programming Levels					Description
Control Settings					Main Level
Control Settings	Dual Control	Movement	DMX	Personality	Basic Sets the DMX personality (see Control Personalities)
					Standard
					Advanced
				Start Address	1–512 Sets the DMX starting address
			ArtNet	Personality	Basic Sets the Art-Net™ personality (see Control Personalities)
					Standard
				Advanced	
			Start Address	1–512 Sets the Art-Net™ starting address	
			Universe	0–254 Sets the Art-Net™ universe	
		sACN	Personality	Basic Sets the sACN personality (see Control Personalities)	
				Standard	
				Advanced	
			Start Address	1–512 Sets the sACN starting address	
			Universe	0–255 Sets the sACN universe	
	Pixels		DMX	Personality	Basic Sets the DMX personality (see Control Personalities)
				Standard	
				Advanced	
			Start Address	1–512 Sets the DMX starting address	
		ArtNet	Personality	Basic Sets the Art-Net™ personality (see Control Personalities)	
				Standard	
				Advanced	
			Start Address	1–512 Sets the Art-Net™ starting address	
			Universe	0–254 Sets the Art-Net™ universe	
		sACN	Personality	Basic Sets the sACN personality (see Control Personalities)	
			Standard		
			Advanced		
	Start Address		1–512 Sets the sACN starting address		
	Universe		0–255 Sets the sACN universe		
KlingNet	Personality		Basic Sets the Kling-Net personality (see Control Personalities)		
		Standard			



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

Programming Levels			Description	
Test Mode			Test Mode Main Level	
Test Mode	Auto Test		Auto test all functions	
	Manual Test	Pan	000-255	Manually control and test all settings through the control panel
		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				
Zoom				
Setup			Setup Main Level	
Setup	Network Settings	IP Mode	Manual	Manually set IP address
			DHCP	Network sets IP address
			Static	Product sets IP address
		IP	---'----'----'- --	Sets IP address in Manual mode
		SubMask	---'----'----'- --	Sets Subnet Mask in Manual mode
	Pan Reverse	NO		Normal pan
		YES		Reversed pan
	Tilt Reverse	NO		Normal tilt
		YES		Reversed tilt
	Zoom Reverse	NO		Normal Zoom
YES			Reversed Zoom	
Screen Reverse	NO		Normal display	
	YES		Inverted display	
	AUTO		Automatic display orientation	
Pan Angle	540		540° pan range	
	360		360° pan range	
	180		180° pan range	
Tilt Angle	540		540° tilt range	
	270		270° tilt range	
	180		180° tilt range	
BL. O. P/T Move	NO		Do not black out while pan/tilt	
	YES		Blackout while pan/tilt	
Calibration	NO		Keep current settings	
	YES		Calibrate touchscreen	
Touchscreen Lock	NO		Display responds to touch	
	YES		Display does not respond to touch	
Lock Screen	NO		Lock the buttons and touch screen	
	YES		Passcode: 0920	
Swap XY	NO		Do not swap pan and tilt	
	YES		Pan controls tilt, tilt controls pan	

Programming Levels		Description	
Setup (cont.)		Setup Main Level (cont.)	
XY Mode	Slow	Slow pan and tilt	
	Fast	Fast pan and tilt	
WDMX Reset	NO	Do not reset WDMX	
	YES	Reset WDMX	
Backlight Timer	30S	Display turns off after 30 seconds	
	1M	Display turns off after 1 minute	
	5M	Display turns off after 5 minutes	
	ON	Display stays on	
Loss of Data	Hold	Holds last signal received	
	Close	Blacks out fixture	
Fans	Auto	Fan speed according to product temperature	
	Full	Fan speed set on high	
	ECO	Quiet mode	
C Mixing Mode	RGBW	RGBW mode	
	CMY	CMY mode (R=C, G=M, B=Y)	
Dimmer Curve	Linear	Set the dimmer curve	
	Square		
	I Squa		
	SCurve		
Dimmer Speed	Smooth	Set the dimmer speed	
	Fast		
Color Balance	Red	100–255	
	Green		
	Blue		
	White		
Preset Select	PRESET A	Recorded preset menu options	
	PRESET B		
	PRESET C		
Preset Sync	NO	Allows recorded preset menu options to be transferred to other Maverick MK1 Spots in the DMX daisy chain	
	YES		
Reset Function	Pan	NO	Reset individual functions or all functions from start-up
		YES	
	Tilt	NO	
		YES	
All	NO		
	YES		
Factory Settings	NO	Reset to factory default settings	
	YES		

Programming Levels			Description	
Sys Info			Sys Info Main Level	
Fixture Information	Ver	V_	Shows firmware version	
	Running Mode	---	Shows current running mode	
	Address	---	Shows current starting address	
	Temperature	---	Shows current product temperature in °C	
	Fixture Hours	-----	Shows number of hours product has been powered on	
	IP	-----	Shows current IP address	
	SubMask	-----	Shows current Subnet Mask	
Fan Information	MAC	-----	Shows current MAC address	
	Head Fan1 Speed	----	Shows speed of head fans in rpm	
Head Fan2 Speed	----			
Error Information	No Error!*		Shows any errors, or No Error!	
Sys Info	Channel Information	Frequency	---	Shows all current values from input signals, 000–255
		Pan		
		Pan Fine		
		Tilt		
		Tilt Fine		
		CTC		
		Color		
		Pattern		
		LED Macro		
		LED Ma. Speed		
		LED Ma. Fine		
		Background		
		Background Dim.		
		Bg. Dim. Fine		
		Dimmer		
		Dimmer Fine		
		Shutter		
		Zoom		
		Function		
		Red (all, 1–12)		
		Red Fine (all, 1–12)		
		Green (all, 1–12)		
		Green fine (all, 1–12)		
		Blue (all, 1–12)		
		Blue Fine (all, 1–12)		
		White (all, 1–12)		
		White Fine (all, 1–12)		

Protocol Configuration

The Maverick MK2 Wash can be set to respond to DMX, WDMX, Art-Net™, sACN, Kling-Net, or a combination of those protocols. The protocol configuration must be set for the product to respond correctly to the controller(s).

Control Personalities

The following control personalities are available on the Maverick MK2 Wash:

Single Control	Dual Control Movement	Dual Control Pixels
Basic (20-channel)	Basic (8-channel)	Basic (36-channel)
Standard (68-channel)	Standard (20-channel)	Standard (48-channel)
Advanced (122-channel)	Advanced (26-channel)	Advanced (96-channel)
Tour (146-channel) Uses DMX, Art-Net™, sACN, or WDMX	Uses DMX, Art-Net™, or sACN	Uses DMX, Art-Net™, sACN, or Kling-Net

Single Control

In Single Control mode, the Maverick MK2 Wash is controlled by a single protocol input. Choose from DMX, Art-Net™, sACN, or WDMX. In this mode, the four personalities available are **Basic** (20 channels), **Standard** (68 channels), **Advanced** (122 channels), and **Tour** (146 channels).

Single Control Protocol

To select the Single Control protocol, follow the instructions below:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Control Settings**, or touch the display where it says **Control Settings**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select **Single Control**, or touch the display where it says **Single Control**.
5. If using the buttons instead of the touchscreen, press **<ENTER>**.
6. Use **<UP>** or **<DOWN>** to select from **DMX**, **ArtNet**, **sACN**, or **WDMX**, or touch the display where it says the desired protocol option.
7. If using the buttons instead of the touchscreen, press **<ENTER>**.

Single Control Personality

To select the Single Control personality, set the [Protocol](#), then do the following:

1. Use **<UP>** or **<DOWN>** to select **Personality**, or touch the display where it says **Personality**.
1. If using the buttons instead of the touchscreen, press **<ENTER>**.
1. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from **Basic** (20-channel), **Standard** (68-channel), **Advanced** (122-channel), or **Tour** (146), or touch the display where it says the desired personality.
1. If using the buttons instead of the touchscreen, press **<ENTER>**.



For WDMX control, ensure the antenna is raised and there are no obstructions between the controller and the product. See [WDMX Reset](#) for troubleshooting information.

Single Control Start Address

To set the starting address of the Single Control mode, set the [Protocol](#), then follow the instructions below:

1. Use **<UP>** or **<DOWN>** to select **Start Address**, or touch the display where it says **Start Address**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Enter the starting address (**1–512**) with one of the following methods:
 - Type the address number using the number pad that shows on the touchscreen display.
 - or
 - Using the buttons (or the button icons on the sides of the display),
 - a. Use **<LEFT>** or **<RIGHT>** to select the digit to be altered.
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the number value of that digit.
 - c. Repeat until the address is set as desired.
4. Press **<ENTER>**.

Single Control Universe

To set the Universe address of the Single Control mode when using Art-Net™ or sACN, set the [Protocol](#) to **ArtNet** or **sACN**, then do the following:

1. Use **<UP>** or **<DOWN>** to select **Universe**, or touch the display where it says **Universe**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Enter the universe address (**0–254** for Art-Net™, **0–255** for sACN,) with one of the following methods:
 - Type the address number using the number pad that shows on the touchscreen display.
 - or
 - Using the buttons (or the button icons on the sides of the display),
 - a. Use **<LEFT>** or **<RIGHT>** to select the digit to be altered.
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the number value of that digit.
 - c. Repeat until the address is set as desired.
4. Press **<ENTER>**.

Dual Control

In Dual Control mode, the Maverick MK2 Wash is controlled by two protocol inputs. One controls the movement of the yoke and zoom, as well as the dimmers and shutter, while the other controls the individual LED output.

Dual Control Movement

The Movement protocol controls the movement of the yoke and zoom, as well as the dimmers and shutter. Choose from DMX, Art-Net™, or sACN. In this mode, the three personalities available are **Basic** (8 channels), **Standard** (20 channels), and **Advanced** (26 channels).

Dual Control Movement Protocol

To select the Dual Control Movement protocol, follow the instructions below:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Control Settings**, or touch the display where it says **Control Settings**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select **Dual Control**, or touch the display where it says **Dual Control**.
5. If using the buttons instead of the touchscreen, press **<ENTER>**.
6. Use **<UP>** or **<DOWN>** to select **Movement**, or touch the display where it says **Movement**.
7. If using the buttons instead of the touchscreen, press **<ENTER>**.
8. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from **DMX**, **ArtNet**, or **sACN**, or touch the display where it says the desired protocol option.
9. If using the buttons instead of the touchscreen, press **<ENTER>**.

Dual Control Movement Personality

To select the Dual Control Movement personality, set the [Protocol](#), then do the following:

1. Use **<UP>** or **<DOWN>** to select **Personality**, or touch the display where it says **Personality**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from **Basic** (8-channel), **Standard** (20-channel), or **Advanced** (26-channel), or touch the display where it says the desired personality.
4. If using the buttons instead of the touchscreen, press **<ENTER>**.

Dual Control Movement Start Address

To set the starting address of the Dual Control Movement mode, set the [Protocol](#), then follow the instructions below:

1. Use **<UP>** or **<DOWN>** to select **Start Address**, or touch the display where it says **Start Address**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Enter the starting address (**1–512**) with one of the following methods:
 - Type the address number using the number pad that shows on the touchscreen display.
 - or
 - Using the buttons (or the button icons on the sides of the display),
 - a. Use **<LEFT>** or **<RIGHT>** to select the digit to be altered.
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the number value of that digit.
 - c. Repeat until the address is set as desired.
4. Press **<ENTER>**.

Dual Control Movement Universe

To set the Universe address of the Dual Control Movement mode when using Art-Net™ or sACN, set the [Protocol](#) to **ArtNet** or **sACN**, then do the following:

1. Use **<UP>** or **<DOWN>** to select **Universe**, or touch the display where it says **Universe**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Enter the universe address (**0–254** for Art-Net™, **0–255** for sACN,) with one of the following methods:
 - Type the address number using the number pad that shows on the touchscreen display.
 - or
 - Using the buttons (or the button icons on the sides of the display),
 - a. Use **<LEFT>** or **<RIGHT>** to select the digit to be altered.
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the number value of that digit.
 - c. Repeat until the address is set as desired.
4. Press **<ENTER>**.

Dual Control Pixels

The Pixels protocol controls the individual output of the LEDs. Choose from DMX, Art-Net™, sACN, or Kling-Net. In this mode, the three personalities available are **Basic** (36 channels), **Standard** (48 channels), and **Advanced** (96 channels).

Dual Control Pixels Protocol

To select the Dual Control Pixels protocol, follow the instructions below:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Control Settings**, or touch the display where it says **Control Settings**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select **Dual Control**, or touch the display where it says **Dual Control**.
5. If using the buttons instead of the touchscreen, press **<ENTER>**.
6. Use **<UP>** or **<DOWN>** to select **Pixels**, or touch the display where it says **Pixels**.
7. If using the buttons instead of the touchscreen, press **<ENTER>**.
8. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from **DMX**, **ArtNet**, **sACN**, or **KlingNet**, or touch the display where it says the desired protocol option.
9. If using the buttons instead of the touchscreen, press **<ENTER>**.

Dual Control Pixels Personality

To select the Dual Control Pixels personality, set the [Protocol](#), then do the following:

1. Use **<UP>** or **<DOWN>** to select **Personality**, or touch the display where it says **Personality**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from **Basic** (36-channel), **Standard** (48-channel), or **Advanced** (96-channel), or touch the display where it says the desired personality.
4. If using the buttons instead of the touchscreen, press **<ENTER>**.



ArKaos Kling-Net can only be assigned the Basic and Standard Pixels personalities.

Dual Control Pixels Start Address

To set the starting address of the Dual Control Pixels mode, set the [Protocol](#), then follow the instructions below:

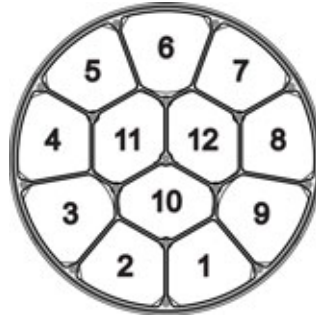
1. Use **<UP>** or **<DOWN>** to select **Start Address**, or touch the display where it says **Start Address**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Enter the starting address (**1–512**) with one of the following methods:
 - Type the address number using the number pad that shows on the touchscreen display.
 - or
 - Using the buttons (or the button icons on the sides of the display),
 - a. Use **<LEFT>** or **<RIGHT>** to select the digit to be altered.
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the number value of that digit.
 - c. Repeat until the address is set as desired.
4. Press **<ENTER>**.

Dual Control Pixels Universe

To set the Universe address of the Dual Control Pixels mode when using Art-Net™ or sACN, set the [Protocol](#) to **ArtNet** or **sACN**, then do the following:

1. Use **<UP>** or **<DOWN>** to select **Universe**, or touch the display where it says **Universe**.
2. If using the buttons instead of the touchscreen, press **<ENTER>**.
3. Enter the universe address (**0–254** for Art-Net™, **0–255** for sACN,) with one of the following methods:
 - Type the address number using the number pad that shows on the touchscreen display.
 - or
 - Using the buttons (or the button icons on the sides of the display),
 - a. Use **<LEFT>** or **<RIGHT>** to select the digit to be altered.
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the number value of that digit.
 - c. Repeat until the address is set as desired.
4. Press **<ENTER>**.

Zones for Pixel Control



Single Control Values

Single Control: Tour Mode (146-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇔ 255	0–100%
2	Pan Fine	000 ⇔ 255	0–100%
3	Tilt	000 ⇔ 255	0–100%
4	Tilt Fine	000 ⇔ 255	0–100%
5	CTC	000	No function
		001 ⇔ 255	Color temperature, 2800–10000 K
6	Color Macro	000	No function
		001 ⇔ 255	Color macros
7	Gobo	000	No function
		001 ⇔ 255	Gobos (indexed)
8	LED Macro / Auto Program	000 ⇔ 015	No function
		016 ⇔ 135	LED macros
		136 ⇔ 255	Auto programs
9	LED Macro / Auto Program Speed	000 ⇔ 127	Auto speed, fast to slow
		128	Hold
		129 ⇔ 255	Auto speed, slow to fast
10	LED Built-in Delay	000 ⇔ 255	Fast to slow
		000	No function
11	Background Color	001 ⇔ 002	2700K R=156 G=118 B=0 W=63
		003 ⇔ 004	3200K R=156 G=141 B=5 W=89
		005 ⇔ 006	4200K R=156 G=141 B=14 W=255
		007 ⇔ 008	5600K R=156 G=207 B=54 W=255
		009 ⇔ 010	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 slow
		248 ⇔ 255	Color snap, fast to slow

Channel	Function	Value	Percent/Setting
12	Background Dimmer	000 ⇔ 255	0–100%
13	Background Fine Dimmer	000 ⇔ 255	0–100%
14	Main Dimmer	000 ⇔ 255	0–100%
15	Main Fine Dimmer	000 ⇔ 255	0–100%
16	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
		190 ⇔ 204	Random pulse strobe, fast to slow
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
17	Zoom	000 ⇔ 255	Wide to narrow
18	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
		130 ⇔ 134	Auto fan mode
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		

Channel	Function	Value	Percent/Setting
19	Main Red	000 ⇔ 255	0–100%
20	Main Fine Red	000 ⇔ 255	0–100%
21	Main Green	000 ⇔ 255	0–100%
22	Main Fine Green	000 ⇔ 255	0–100%
23	Main Blue	000 ⇔ 255	0–100%
24	Main Fine Blue	000 ⇔ 255	0–100%
25	Main White	000 ⇔ 255	0–100%
26	Main Fine White	000 ⇔ 255	0–100%
27	Dimmer 1	000 ⇔ 255	0–100%
28	Fine Dimmer 1	000 ⇔ 255	0–100%
29	Red 1	000 ⇔ 255	0–100%
30	Fine Red 1	000 ⇔ 255	0–100%
31	Green 1	000 ⇔ 255	0–100%
32	Fine Green 1	000 ⇔ 255	0–100%
33	Blue 1	000 ⇔ 255	0–100%
34	Fine Blue 1	000 ⇔ 255	0–100%
35	White 1	000 ⇔ 255	0–100%
36	Fine White 1	000 ⇔ 255	0–100%
37	Dimmer 2	000 ⇔ 255	0–100%
38	Fine Dimmer 2	000 ⇔ 255	0–100%
39	Red 2	000 ⇔ 255	0–100%
40	Fine Red 2	000 ⇔ 255	0–100%
41	Green 2	000 ⇔ 255	0–100%
42	Fine Green 2	000 ⇔ 255	0–100%
43	Blue 2	000 ⇔ 255	0–100%
44	Fine Blue 2	000 ⇔ 255	0–100%
45	White 2	000 ⇔ 255	0–100%
46	Fine White 2	000 ⇔ 255	0–100%
47	Dimmer 3	000 ⇔ 255	0–100%
48	Fine Dimmer 3	000 ⇔ 255	0–100%
49	Red 3	000 ⇔ 255	0–100%
50	Fine Red 3	000 ⇔ 255	0–100%
51	Green 3	000 ⇔ 255	0–100%
52	Fine Green 3	000 ⇔ 255	0–100%
53	Blue 3	000 ⇔ 255	0–100%
54	Fine Blue 3	000 ⇔ 255	0–100%
55	White 3	000 ⇔ 255	0–100%
56	Fine White 3	000 ⇔ 255	0–100%
57	Dimmer 4	000 ⇔ 255	0–100%
58	Fine Dimmer 4	000 ⇔ 255	0–100%
59	Red 4	000 ⇔ 255	0–100%
60	Fine Red 4	000 ⇔ 255	0–100%
61	Green 4	000 ⇔ 255	0–100%
62	Fine Green 4	000 ⇔ 255	0–100%
63	Blue 4	000 ⇔ 255	0–100%
64	Fine Blue 4	000 ⇔ 255	0–100%
65	White 4	000 ⇔ 255	0–100%
66	Fine White 4	000 ⇔ 255	0–100%

Operation

Channel	Function	Value	Percent/Setting
67	Dimmer 5	000 ⇔ 255	0–100%
68	Fine Dimmer 5	000 ⇔ 255	0–100%
69	Red 5	000 ⇔ 255	0–100%
70	Fine Red 5	000 ⇔ 255	0–100%
71	Green 5	000 ⇔ 255	0–100%
72	Fine Green 5	000 ⇔ 255	0–100%
73	Blue 5	000 ⇔ 255	0–100%
74	Fine Blue 5	000 ⇔ 255	0–100%
75	White 5	000 ⇔ 255	0–100%
76	Fine White 5	000 ⇔ 255	0–100%
77	Dimmer 6	000 ⇔ 255	0–100%
78	Fine Dimmer 6	000 ⇔ 255	0–100%
79	Red 6	000 ⇔ 255	0–100%
80	Fine Red 6	000 ⇔ 255	0–100%
81	Green 6	000 ⇔ 255	0–100%
82	Fine Green 6	000 ⇔ 255	0–100%
83	Blue 6	000 ⇔ 255	0–100%
84	Fine Blue 6	000 ⇔ 255	0–100%
85	White 6	000 ⇔ 255	0–100%
86	Fine White 6	000 ⇔ 255	0–100%
87	Dimmer 7	000 ⇔ 255	0–100%
88	Fine Dimmer 7	000 ⇔ 255	0–100%
89	Red 7	000 ⇔ 255	0–100%
90	Fine Red 7	000 ⇔ 255	0–100%
91	Green 7	000 ⇔ 255	0–100%
92	Fine Green 7	000 ⇔ 255	0–100%
93	Blue 7	000 ⇔ 255	0–100%
94	Fine Blue 7	000 ⇔ 255	0–100%
95	White 7	000 ⇔ 255	0–100%
96	Fine White 7	000 ⇔ 255	0–100%
97	Dimmer 8	000 ⇔ 255	0–100%
98	Fine Dimmer 8	000 ⇔ 255	0–100%
99	Red 8	000 ⇔ 255	0–100%
100	Fine Red 8	000 ⇔ 255	0–100%
101	Green 8	000 ⇔ 255	0–100%
102	Fine Green 8	000 ⇔ 255	0–100%
103	Blue 8	000 ⇔ 255	0–100%
104	Fine Blue 8	000 ⇔ 255	0–100%
105	White 8	000 ⇔ 255	0–100%
106	Fine White 8	000 ⇔ 255	0–100%
107	Dimmer 9	000 ⇔ 255	0–100%
108	Fine Dimmer 9	000 ⇔ 255	0–100%
109	Red 9	000 ⇔ 255	0–100%
110	Fine Red 9	000 ⇔ 255	0–100%
111	Green 9	000 ⇔ 255	0–100%
112	Fine Green 9	000 ⇔ 255	0–100%
113	Blue 9	000 ⇔ 255	0–100%
114	Fine Blue 9	000 ⇔ 255	0–100%
115	White 9	000 ⇔ 255	0–100%
116	Fine White 9	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
117	Dimmer 10	000 ⇔ 255	0–100%
118	Fine Dimmer 10	000 ⇔ 255	0–100%
119	Red 10	000 ⇔ 255	0–100%
120	Fine Red 10	000 ⇔ 255	0–100%
121	Green 10	000 ⇔ 255	0–100%
122	Fine Green 10	000 ⇔ 255	0–100%
123	Blue 10	000 ⇔ 255	0–100%
124	Fine Blue 10	000 ⇔ 255	0–100%
125	White 10	000 ⇔ 255	0–100%
126	Fine White 10	000 ⇔ 255	0–100%
127	Dimmer 11	000 ⇔ 255	0–100%
128	Fine Dimmer 11	000 ⇔ 255	0–100%
129	Red 11	000 ⇔ 255	0–100%
130	Fine Red 11	000 ⇔ 255	0–100%
131	Green 11	000 ⇔ 255	0–100%
132	Fine Green 11	000 ⇔ 255	0–100%
133	Blue 11	000 ⇔ 255	0–100%
134	Fine Blue 11	000 ⇔ 255	0–100%
135	White 11	000 ⇔ 255	0–100%
136	Fine White 11	000 ⇔ 255	0–100%
137	Dimmer 12	000 ⇔ 255	0–100%
138	Fine Dimmer 12	000 ⇔ 255	0–100%
139	Red 12	000 ⇔ 255	0–100%
140	Fine Red 12	000 ⇔ 255	0–100%
141	Green 12	000 ⇔ 255	0–100%
142	Fine Green 12	000 ⇔ 255	0–100%
143	Blue 12	000 ⇔ 255	0–100%
144	Fine Blue 12	000 ⇔ 255	0–100%
145	White 12	000 ⇔ 255	0–100%
146	Fine White 12	000 ⇔ 255	0–100%

Operation

Single Control: Advanced Mode (122-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇔ 255	0–100%
2	Pan Fine	000 ⇔ 255	0–100%
3	Tilt	000 ⇔ 255	0–100%
4	Tilt Fine	000 ⇔ 255	0–100%
5	CTC	000	No function
		001 ⇔ 255	Color temperature, 2800–10000 K
6	Color Macro	000	No function
		001 ⇔ 255	Color macros
7	Gobo	000	No function
		001 ⇔ 255	Gobos (indexed)
8	LED Macro / Auto Program	000 ⇔ 015	No function
		016 ⇔ 135	LED macros
		136 ⇔ 255	Auto programs
9	LED Macro / Auto Program Speed	000 ⇔ 127	Auto speed, fast to slow
		128	Hold
		129 ⇔ 255	Auto speed, slow to fast
10	LED Built-in Delay	000 ⇔ 255	Fast to slow
11	Background Color	000	No function
		001 ⇔ 002	2700K R=156 G=118 B=0 W=63
		003 ⇔ 004	3200K R=156 G=141 B=5 W=89
		005 ⇔ 006	4200K R=156 G=141 B=14 W=255
		007 ⇔ 008	5600K R=156 G=207 B=54 W=255
		009 ⇔ 010	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 slow
248 ⇔ 255	Color snap, fast to slow		
12	Background Dimmer	000 ⇔ 255	0–100%
13	Background Fine Dimmer	000 ⇔ 255	0–100%
14	Main Dimmer	000 ⇔ 255	0–100%
15	Main Fine Dimmer	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
16	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
		190 ⇔ 204	Random pulse strobe, fast to slow
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
17	Zoom	000 ⇔ 255	Wide to narrow
18	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
		130 ⇔ 134	Auto fan mode
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		
19	Main Red	000 ⇔ 255	0–100%
20	Main Fine Red	000 ⇔ 255	0–100%
21	Main Green	000 ⇔ 255	0–100%
22	Main Fine Green	000 ⇔ 255	0–100%
23	Main Blue	000 ⇔ 255	0–100%
24	Main Fine Blue	000 ⇔ 255	0–100%
25	Main White	000 ⇔ 255	0–100%
26	Main Fine White	000 ⇔ 255	0–100%

Operation

Channel	Function	Value	Percent/Setting
27	Red 1	000 ⇔ 255	0–100%
28	Fine Red 1	000 ⇔ 255	0–100%
29	Green 1	000 ⇔ 255	0–100%
30	Fine Green 1	000 ⇔ 255	0–100%
31	Blue 1	000 ⇔ 255	0–100%
32	Fine Blue 1	000 ⇔ 255	0–100%
33	White 1	000 ⇔ 255	0–100%
34	Fine White 1	000 ⇔ 255	0–100%
35	Red 2	000 ⇔ 255	0–100%
36	Fine Red 2	000 ⇔ 255	0–100%
37	Green 2	000 ⇔ 255	0–100%
38	Fine Green 2	000 ⇔ 255	0–100%
39	Blue 2	000 ⇔ 255	0–100%
40	Fine Blue 2	000 ⇔ 255	0–100%
41	White 2	000 ⇔ 255	0–100%
42	Fine White 2	000 ⇔ 255	0–100%
43	Red 3	000 ⇔ 255	0–100%
44	Fine Red 3	000 ⇔ 255	0–100%
45	Green 3	000 ⇔ 255	0–100%
46	Fine Green 3	000 ⇔ 255	0–100%
47	Blue 3	000 ⇔ 255	0–100%
48	Fine Blue 3	000 ⇔ 255	0–100%
49	White 3	000 ⇔ 255	0–100%
50	Fine White 3	000 ⇔ 255	0–100%
51	Red 4	000 ⇔ 255	0–100%
52	Fine Red 4	000 ⇔ 255	0–100%
53	Green 4	000 ⇔ 255	0–100%
54	Fine Green 4	000 ⇔ 255	0–100%
55	Blue 4	000 ⇔ 255	0–100%
56	Fine Blue 4	000 ⇔ 255	0–100%
57	White 4	000 ⇔ 255	0–100%
58	Fine White 4	000 ⇔ 255	0–100%
59	Red 5	000 ⇔ 255	0–100%
60	Fine Red 5	000 ⇔ 255	0–100%
61	Green 5	000 ⇔ 255	0–100%
62	Fine Green 5	000 ⇔ 255	0–100%
63	Blue 5	000 ⇔ 255	0–100%
64	Fine Blue 5	000 ⇔ 255	0–100%
65	White 5	000 ⇔ 255	0–100%
66	Fine White 5	000 ⇔ 255	0–100%
67	Red 6	000 ⇔ 255	0–100%
68	Fine Red 6	000 ⇔ 255	0–100%
69	Green 6	000 ⇔ 255	0–100%
70	Fine Green 6	000 ⇔ 255	0–100%
71	Blue 6	000 ⇔ 255	0–100%
72	Fine Blue 6	000 ⇔ 255	0–100%
73	White 6	000 ⇔ 255	0–100%
74	Fine White 6	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
75	Red 7	000 ⇄ 255	0–100%
76	Fine Red 7	000 ⇄ 255	0–100%
77	Green 7	000 ⇄ 255	0–100%
78	Fine Green 7	000 ⇄ 255	0–100%
79	Blue 7	000 ⇄ 255	0–100%
80	Fine Blue 7	000 ⇄ 255	0–100%
81	White 7	000 ⇄ 255	0–100%
82	Fine White 7	000 ⇄ 255	0–100%
83	Red 8	000 ⇄ 255	0–100%
84	Fine Red 8	000 ⇄ 255	0–100%
85	Green 8	000 ⇄ 255	0–100%
86	Fine Green 8	000 ⇄ 255	0–100%
87	Blue 8	000 ⇄ 255	0–100%
88	Fine Blue 8	000 ⇄ 255	0–100%
89	White 8	000 ⇄ 255	0–100%
90	Fine White 8	000 ⇄ 255	0–100%
91	Red 9	000 ⇄ 255	0–100%
92	Fine Red 9	000 ⇄ 255	0–100%
93	Green 9	000 ⇄ 255	0–100%
94	Fine Green 9	000 ⇄ 255	0–100%
95	Blue 9	000 ⇄ 255	0–100%
96	Fine Blue 9	000 ⇄ 255	0–100%
97	White 9	000 ⇄ 255	0–100%
98	Fine White 9	000 ⇄ 255	0–100%
99	Red 10	000 ⇄ 255	0–100%
100	Fine Red 10	000 ⇄ 255	0–100%
101	Green 10	000 ⇄ 255	0–100%
102	Fine Green 10	000 ⇄ 255	0–100%
103	Blue 10	000 ⇄ 255	0–100%
104	Fine Blue 10	000 ⇄ 255	0–100%
105	White 10	000 ⇄ 255	0–100%
106	Fine White 10	000 ⇄ 255	0–100%
107	Red 11	000 ⇄ 255	0–100%
108	Fine Red 11	000 ⇄ 255	0–100%
109	Green 11	000 ⇄ 255	0–100%
110	Fine Green 11	000 ⇄ 255	0–100%
111	Blue 11	000 ⇄ 255	0–100%
112	Fine Blue 11	000 ⇄ 255	0–100%
113	White 11	000 ⇄ 255	0–100%
114	Fine White 11	000 ⇄ 255	0–100%
115	Red 12	000 ⇄ 255	0–100%
116	Fine Red 12	000 ⇄ 255	0–100%
117	Green 12	000 ⇄ 255	0–100%
118	Fine Green 12	000 ⇄ 255	0–100%
119	Blue 12	000 ⇄ 255	0–100%
120	Fine Blue 12	000 ⇄ 255	0–100%
121	White 12	000 ⇄ 255	0–100%
122	Fine White 12	000 ⇄ 255	0–100%

Operation

Single Control: Standard Mode (68-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇔ 255	0–100%
2	Pan Fine	000 ⇔ 255	0–100%
3	Tilt	000 ⇔ 255	0–100%
4	Tilt Fine	000 ⇔ 255	0–100%
5	CTC	000	No function
		001 ⇔ 255	Color temperature, 2800–10000 K
6	Color Macro	000	No function
		001 ⇔ 255	Color macros
7	Gobo	000	No function
		001 ⇔ 255	Gobos (indexed)
8	LED Macro / Auto Program	000 ⇔ 015	No function
		016 ⇔ 135	LED macros
		136 ⇔ 255	Auto programs
9	LED Macro / Auto Program Speed	000 ⇔ 127	Auto speed, fast to slow
		128	Hold
		129 ⇔ 255	Auto speed, slow to fast
10	LED Built-in Delay	000 ⇔ 255	Fast to slow
11	Background Color	000	No function
		001 ⇔ 002	2700K R=156 G=118 B=0 W=63
		003 ⇔ 004	3200K R=156 G=141 B=5 W=89
		005 ⇔ 006	4200K R=156 G=141 B=14 W=255
		007 ⇔ 008	5600K R=156 G=207 B=54 W=255
		009 ⇔ 010	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 slow
248 ⇔ 255	Color snap, fast to slow		
12	Background Dimmer	000 ⇔ 255	0–100%
13	Main Dimmer	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
14	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
190 ⇔ 204	Random pulse strobe, fast to slow		
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
15	Zoom	000 ⇔ 255	Wide to narrow
16	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
130 ⇔ 134	Auto fan mode		
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		
17	Main Red	000 ⇔ 255	0–100%
18	Main Green	000 ⇔ 255	0–100%
19	Main Blue	000 ⇔ 255	0–100%
20	Main White	000 ⇔ 255	0–100%
21	Red 1	000 ⇔ 255	0–100%
22	Green 1	000 ⇔ 255	0–100%
23	Blue 1	000 ⇔ 255	0–100%
24	White 1	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
25	Red 2	000 ⇔ 255	0–100%
26	Green 2	000 ⇔ 255	0–100%
27	Blue 2	000 ⇔ 255	0–100%
28	White 2	000 ⇔ 255	0–100%
29	Red 3	000 ⇔ 255	0–100%
30	Green 3	000 ⇔ 255	0–100%
31	Blue 3	000 ⇔ 255	0–100%
32	White 3	000 ⇔ 255	0–100%
33	Red 4	000 ⇔ 255	0–100%
34	Green 4	000 ⇔ 255	0–100%
35	Blue 4	000 ⇔ 255	0–100%
36	White 4	000 ⇔ 255	0–100%
37	Red 5	000 ⇔ 255	0–100%
38	Green 5	000 ⇔ 255	0–100%
39	Blue 5	000 ⇔ 255	0–100%
40	White 5	000 ⇔ 255	0–100%
41	Red 6	000 ⇔ 255	0–100%
42	Green 6	000 ⇔ 255	0–100%
43	Blue 6	000 ⇔ 255	0–100%
44	White 6	000 ⇔ 255	0–100%
45	Red 7	000 ⇔ 255	0–100%
46	Green 7	000 ⇔ 255	0–100%
47	Blue 7	000 ⇔ 255	0–100%
48	White 7	000 ⇔ 255	0–100%
49	Red 8	000 ⇔ 255	0–100%
50	Green 8	000 ⇔ 255	0–100%
51	Blue 8	000 ⇔ 255	0–100%
52	White 8	000 ⇔ 255	0–100%
53	Red 9	000 ⇔ 255	0–100%
54	Green 9	000 ⇔ 255	0–100%
55	Blue 9	000 ⇔ 255	0–100%
56	White 9	000 ⇔ 255	0–100%
57	Red 10	000 ⇔ 255	0–100%
58	Green 10	000 ⇔ 255	0–100%
59	Blue 10	000 ⇔ 255	0–100%
60	White 10	000 ⇔ 255	0–100%
61	Red 11	000 ⇔ 255	0–100%
62	Green 11	000 ⇔ 255	0–100%
63	Blue 11	000 ⇔ 255	0–100%
64	White 11	000 ⇔ 255	0–100%
65	Red 12	000 ⇔ 255	0–100%
66	Green 12	000 ⇔ 255	0–100%
67	Blue 12	000 ⇔ 255	0–100%
68	White 12	000 ⇔ 255	0–100%

Single Control: Basic Mode (20-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇔ 255	0–100%
2	Pan Fine	000 ⇔ 255	0–100%
3	Tilt	000 ⇔ 255	0–100%
4	Tilt Fine	000 ⇔ 255	0–100%
5	CTC	000	No function
		001 ⇔ 255	Color temperature, 2800–10000 K
6	Color Macro	000	No function
		001 ⇔ 255	Color macros
7	Gobo	000	No function
		001 ⇔ 255	Gobos (indexed)
8	LED Macro / Auto Program	000 ⇔ 015	No function
		016 ⇔ 135	LED macros
		136 ⇔ 255	Auto programs
9	LED Macro / Auto Program Speed	000 ⇔ 127	Auto speed, fast to slow
		128	Hold
		129 ⇔ 255	Auto speed, slow to fast
10	LED Built-in Delay	000 ⇔ 255	Fast to slow
11	Background Color	000	No function
		001 ⇔ 002	2700K R=156 G=118 B=0 W=63
		003 ⇔ 004	3200K R=156 G=141 B=5 W=89
		005 ⇔ 006	4200K R=156 G=141 B=14 W=255
		007 ⇔ 008	5600K R=156 G=207 B=54 W=255
		009 ⇔ 010	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 slow
248 ⇔ 255	Color snap, fast to slow		
12	Background Dimmer	000 ⇔ 255	0–100%
13	Main Dimmer	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
14	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
		190 ⇔ 204	Random pulse strobe, fast to slow
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
15	Zoom	000 ⇔ 255	Wide to narrow
16	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
		130 ⇔ 134	Auto fan mode
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		
17	Main Red	000 ⇔ 255	0–100%
18	Main Green	000 ⇔ 255	0–100%
19	Main Blue	000 ⇔ 255	0–100%
20	Main White	000 ⇔ 255	0–100%

Dual Control Values

Dual Control Movement

Dual Control: Advanced Movement Mode (26-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇄ 255	0–100%
2	Pan Fine	000 ⇄ 255	0–100%
3	Tilt	000 ⇄ 255	0–100%
4	Tilt Fine	000 ⇄ 255	0–100%
5	CTC	000	No function
		001 ⇄ 255	Color temperature, 2800–10000 K
6	Color Macro	000	No function
		001 ⇄ 255	Color macros
7	Gobo	000	No function
		001 ⇄ 255	Gobos (indexed)
8	LED Macro / Auto Program	000 ⇄ 015	No function
		016 ⇄ 135	LED macros
		136 ⇄ 255	Auto programs
9	LED Macro / Auto Program Speed	000 ⇄ 127	Auto speed, fast to slow
		128	Hold
		129 ⇄ 255	Auto speed, slow to fast
10	LED Built-in Delay	000 ⇄ 255	Fast to slow
11	Background Color	000	No function
		001 ⇄ 002	2700K R=156 G=118 B=0 W=63
		003 ⇄ 004	3200K R=156 G=141 B=5 W=89
		005 ⇄ 006	4200K R=156 G=141 B=14 W=255
		007 ⇄ 008	5600K R=156 G=207 B=54 W=255
		009 ⇄ 010	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 slow		
248 ⇄ 255	Color snap, fast to slow		
12	Background Dimmer	000 ⇄ 255	0–100%
13	Background Fine Dimmer	000 ⇄ 255	0–100%
14	Main Dimmer	000 ⇄ 255	0–100%
15	Main Fine Dimmer	000 ⇄ 255	0–100%

Channel	Function	Value	Percent/Setting
16	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
190 ⇔ 204	Random pulse strobe, fast to slow		
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
17	Zoom	000 ⇔ 255	Wide to narrow
18	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
130 ⇔ 134	Auto fan mode		
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		
19	Main Red	000 ⇔ 255	0–100%
20	Main Fine Red	000 ⇔ 255	0–100%
21	Main Green	000 ⇔ 255	0–100%
22	Main Fine Green	000 ⇔ 255	0–100%
23	Main Blue	000 ⇔ 255	0–100%
24	Main Fine Blue	000 ⇔ 255	0–100%
25	Main White	000 ⇔ 255	0–100%
26	Main Fine White	000 ⇔ 255	0–100%

Dual Control: Standard Movement Mode (20-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇔ 255	0–100%
2	Pan Fine	000 ⇔ 255	0–100%
3	Tilt	000 ⇔ 255	0–100%
4	Tilt Fine	000 ⇔ 255	0–100%
5	CTC	000	No function
		001 ⇔ 255	Color temperature, 2800–10000 K
6	Color Macro	000	No function
		001 ⇔ 255	Color macros
7	Gobo	000	No function
		001 ⇔ 255	Gobos (indexed)
8	LED Macro / Auto Program	000 ⇔ 015	No function
		016 ⇔ 135	LED macros
		136 ⇔ 255	Auto programs
9	LED Macro / Auto Program Speed	000 ⇔ 127	Auto speed, fast to slow
		128	Hold
		129 ⇔ 255	Auto speed, slow to fast
10	LED Built-in Delay	000 ⇔ 255	Fast to slow
11	Background Color	000	No function
		001 ⇔ 002	2700K R=156 G=118 B=0 W=63
		003 ⇔ 004	3200K R=156 G=141 B=5 W=89
		005 ⇔ 006	4200K R=156 G=141 B=14 W=255
		007 ⇔ 008	5600K R=156 G=207 B=54 W=255
		009 ⇔ 010	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 slow
248 ⇔ 255	Color snap, fast to slow		
12	Background Dimmer	000 ⇔ 255	0–100%
13	Main Dimmer	000 ⇔ 255	0–100%

Channel	Function	Value	Percent/Setting
14	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
		190 ⇔ 204	Random pulse strobe, fast to slow
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
15	Zoom	000 ⇔ 255	Wide to narrow
16	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
130 ⇔ 134	Auto fan mode		
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		
17	Main Red	000 ⇔ 255	0–100%
18	Main Green	000 ⇔ 255	0–100%
19	Main Blue	000 ⇔ 255	0–100%
20	Main White	000 ⇔ 255	0–100%

Dual Control: Basic Movement Mode (8-channel)

Channel	Function	Value	Percent/Setting
1	Pan	000 ⇔ 255	0–100%
2	Pan Fine	000 ⇔ 255	0–100%
3	Tilt	000 ⇔ 255	0–100%
4	Tilt Fine	000 ⇔ 255	0–100%
5	Main Dimmer	000 ⇔ 255	0–100%
6	Shutter	000 ⇔ 019	Off
		020 ⇔ 024	On
		025 ⇔ 064	Strobe, fast to slow
		065 ⇔ 069	On
		070 ⇔ 084	Strobe 100–0%, fast to slow
		085 ⇔ 089	On
		090 ⇔ 104	Strobe 0–100%, fast to slow
		105 ⇔ 109	On
		110 ⇔ 124	Random strobe, fast to slow
		125 ⇔ 129	On
		130 ⇔ 144	Random strobe 100–0%, fast to slow
		145 ⇔ 149	On
		150 ⇔ 164	Random strobe 0–100%, fast to slow
		165 ⇔ 169	On
		170 ⇔ 184	Pulse strobe, fast to slow
		185 ⇔ 189	On
190 ⇔ 204	Random pulse strobe, fast to slow		
205 ⇔ 209	On		
210 ⇔ 224	Strobe 0–100–0%, fast to slow		
225 ⇔ 229	On		
230 ⇔ 244	Random pulse strobe, fast to slow		
245 ⇔ 255	On		
7	Zoom	000 ⇔ 255	Wide to narrow
8	Control	000 ⇔ 009	No function
		010 ⇔ 014	Blackout on Pan/Tilt
		015 ⇔ 019	Reserved for future use
		020 ⇔ 024	RGBW color mixing mode
		025 ⇔ 029	CMY color mixing mode (R=C, G=M, B=Y)
		030 ⇔ 049	Reserved for future use
		050 ⇔ 054	Pan reset
		055 ⇔ 059	Tilt reset
		060 ⇔ 064	Zoom reset
		065 ⇔ 069	Reserved for future use
		070 ⇔ 074	Reset all
		075 ⇔ 109	Reserved for future use
		110 ⇔ 114	Fast Pan/Tilt speed
		115 ⇔ 119	Slow Pan/tilt speed
		120 ⇔ 124	Slow fan mode
		125 ⇔ 129	Full fan mode
		130 ⇔ 134	Auto fan mode
135 ⇔ 139	Fast dimmer mode		
140 ⇔ 144	Slow dimmer mode		
145 ⇔ 255	Reserved for future use		

Operation

Dual Control Pixels

Dual Control: Advanced Pixels Mode (96-channel)

Channel	Function	Value	Percent/Setting
1	Red 1	000 ⇄ 255	0–100%
2	Fine Red 1	000 ⇄ 255	0–100%
3	Green 1	000 ⇄ 255	0–100%
4	Fine Green 1	000 ⇄ 255	0–100%
5	Blue 1	000 ⇄ 255	0–100%
6	Fine Blue 1	000 ⇄ 255	0–100%
7	White 1	000 ⇄ 255	0–100%
8	Fine White 1	000 ⇄ 255	0–100%
9	Red 2	000 ⇄ 255	0–100%
10	Fine Red 2	000 ⇄ 255	0–100%
11	Green 2	000 ⇄ 255	0–100%
12	Fine Green 2	000 ⇄ 255	0–100%
13	Blue 2	000 ⇄ 255	0–100%
14	Fine Blue 2	000 ⇄ 255	0–100%
15	White 2	000 ⇄ 255	0–100%
16	Fine White 2	000 ⇄ 255	0–100%
17	Red 3	000 ⇄ 255	0–100%
18	Fine Red 3	000 ⇄ 255	0–100%
19	Green 3	000 ⇄ 255	0–100%
20	Fine Green 3	000 ⇄ 255	0–100%
21	Blue 3	000 ⇄ 255	0–100%
22	Fine Blue 3	000 ⇄ 255	0–100%
23	White 3	000 ⇄ 255	0–100%
24	Fine White 3	000 ⇄ 255	0–100%
25	Red 4	000 ⇄ 255	0–100%
26	Fine Red 4	000 ⇄ 255	0–100%
27	Green 4	000 ⇄ 255	0–100%
28	Fine Green 4	000 ⇄ 255	0–100%
29	Blue 4	000 ⇄ 255	0–100%
30	Fine Blue 4	000 ⇄ 255	0–100%
31	White 4	000 ⇄ 255	0–100%
32	Fine White 4	000 ⇄ 255	0–100%
33	Red 5	000 ⇄ 255	0–100%
34	Fine Red 5	000 ⇄ 255	0–100%
35	Green 5	000 ⇄ 255	0–100%
36	Fine Green 5	000 ⇄ 255	0–100%
37	Blue 5	000 ⇄ 255	0–100%
38	Fine Blue 5	000 ⇄ 255	0–100%
39	White 5	000 ⇄ 255	0–100%
40	Fine White 5	000 ⇄ 255	0–100%
41	Red 6	000 ⇄ 255	0–100%
42	Fine Red 6	000 ⇄ 255	0–100%
43	Green 6	000 ⇄ 255	0–100%
44	Fine Green 6	000 ⇄ 255	0–100%
45	Blue 6	000 ⇄ 255	0–100%
46	Fine Blue 6	000 ⇄ 255	0–100%
47	White 6	000 ⇄ 255	0–100%
48	Fine White 6	000 ⇄ 255	0–100%

Channel	Function	Value	Percent/Setting
49	Red 7	000 ⇔ 255	0–100%
50	Fine Red 7	000 ⇔ 255	0–100%
51	Green 7	000 ⇔ 255	0–100%
52	Fine Green 7	000 ⇔ 255	0–100%
53	Blue 7	000 ⇔ 255	0–100%
54	Fine Blue 7	000 ⇔ 255	0–100%
55	White 7	000 ⇔ 255	0–100%
56	Fine White 7	000 ⇔ 255	0–100%
57	Red 8	000 ⇔ 255	0–100%
58	Fine Red 8	000 ⇔ 255	0–100%
59	Green 8	000 ⇔ 255	0–100%
60	Fine Green 8	000 ⇔ 255	0–100%
61	Blue 8	000 ⇔ 255	0–100%
62	Fine Blue 8	000 ⇔ 255	0–100%
63	White 8	000 ⇔ 255	0–100%
64	Fine White 8	000 ⇔ 255	0–100%
65	Red 9	000 ⇔ 255	0–100%
66	Fine Red 9	000 ⇔ 255	0–100%
67	Green 9	000 ⇔ 255	0–100%
68	Fine Green 9	000 ⇔ 255	0–100%
69	Blue 9	000 ⇔ 255	0–100%
70	Fine Blue 9	000 ⇔ 255	0–100%
71	White 9	000 ⇔ 255	0–100%
72	Fine White 9	000 ⇔ 255	0–100%
73	Red 10	000 ⇔ 255	0–100%
74	Fine Red 10	000 ⇔ 255	0–100%
75	Green 10	000 ⇔ 255	0–100%
76	Fine Green 10	000 ⇔ 255	0–100%
77	Blue 10	000 ⇔ 255	0–100%
78	Fine Blue 10	000 ⇔ 255	0–100%
79	White 10	000 ⇔ 255	0–100%
80	Fine White 10	000 ⇔ 255	0–100%
81	Red 11	000 ⇔ 255	0–100%
82	Fine Red 11	000 ⇔ 255	0–100%
83	Green 11	000 ⇔ 255	0–100%
84	Fine Green 11	000 ⇔ 255	0–100%
85	Blue 11	000 ⇔ 255	0–100%
86	Fine Blue 11	000 ⇔ 255	0–100%
87	White 11	000 ⇔ 255	0–100%
88	Fine White 11	000 ⇔ 255	0–100%
89	Red 12	000 ⇔ 255	0–100%
90	Fine Red 12	000 ⇔ 255	0–100%
91	Green 12	000 ⇔ 255	0–100%
92	Fine Green 12	000 ⇔ 255	0–100%
93	Blue 12	000 ⇔ 255	0–100%
94	Fine Blue 12	000 ⇔ 255	0–100%
95	White 12	000 ⇔ 255	0–100%
96	Fine White 12	000 ⇔ 255	0–100%

Operation

Dual Control: Standard Pixels Mode (48-channel)

Channel	Function	Value	Percent/Setting
1	Red 1	000 ⇔ 255	0–100%
2	Green 1	000 ⇔ 255	0–100%
3	Blue 1	000 ⇔ 255	0–100%
4	White 1	000 ⇔ 255	0–100%
5	Red 2	000 ⇔ 255	0–100%
6	Green 2	000 ⇔ 255	0–100%
7	Blue 2	000 ⇔ 255	0–100%
8	White 2	000 ⇔ 255	0–100%
9	Red 3	000 ⇔ 255	0–100%
10	Green 3	000 ⇔ 255	0–100%
11	Blue 3	000 ⇔ 255	0–100%
12	White 3	000 ⇔ 255	0–100%
13	Red 4	000 ⇔ 255	0–100%
14	Green 4	000 ⇔ 255	0–100%
15	Blue 4	000 ⇔ 255	0–100%
16	White 4	000 ⇔ 255	0–100%
17	Red 5	000 ⇔ 255	0–100%
18	Green 5	000 ⇔ 255	0–100%
19	Blue 5	000 ⇔ 255	0–100%
20	White 5	000 ⇔ 255	0–100%
21	Red 6	000 ⇔ 255	0–100%
22	Green 6	000 ⇔ 255	0–100%
23	Blue 6	000 ⇔ 255	0–100%
24	White 6	000 ⇔ 255	0–100%
25	Red 7	000 ⇔ 255	0–100%
26	Green 7	000 ⇔ 255	0–100%
27	Blue 7	000 ⇔ 255	0–100%
28	White 7	000 ⇔ 255	0–100%
29	Red 8	000 ⇔ 255	0–100%
30	Green 8	000 ⇔ 255	0–100%
31	Blue 8	000 ⇔ 255	0–100%
32	White 8	000 ⇔ 255	0–100%
33	Red 9	000 ⇔ 255	0–100%
34	Green 9	000 ⇔ 255	0–100%
35	Blue 9	000 ⇔ 255	0–100%
36	White 9	000 ⇔ 255	0–100%
37	Red 10	000 ⇔ 255	0–100%
38	Green 10	000 ⇔ 255	0–100%
39	Blue 10	000 ⇔ 255	0–100%
40	White 10	000 ⇔ 255	0–100%
41	Red 11	000 ⇔ 255	0–100%
42	Green 11	000 ⇔ 255	0–100%
43	Blue 11	000 ⇔ 255	0–100%
44	White 11	000 ⇔ 255	0–100%
45	Red 12	000 ⇔ 255	0–100%
46	Green 12	000 ⇔ 255	0–100%
47	Blue 12	000 ⇔ 255	0–100%
48	White 12	000 ⇔ 255	0–100%

Dual Control: Basic Pixels Mode (36-channel)

Channel	Function	Value	Percent/Setting
1	Red 1	000 ⇔ 255	0–100%
2	Green 1	000 ⇔ 255	0–100%
3	Blue 1	000 ⇔ 255	0–100%
4	Red 2	000 ⇔ 255	0–100%
5	Green 2	000 ⇔ 255	0–100%
6	Blue 2	000 ⇔ 255	0–100%
7	Red 3	000 ⇔ 255	0–100%
8	Green 3	000 ⇔ 255	0–100%
9	Blue 3	000 ⇔ 255	0–100%
10	Red 4	000 ⇔ 255	0–100%
11	Green 4	000 ⇔ 255	0–100%
12	Blue 4	000 ⇔ 255	0–100%
13	Red 5	000 ⇔ 255	0–100%
14	Green 5	000 ⇔ 255	0–100%
15	Blue 5	000 ⇔ 255	0–100%
16	Red 6	000 ⇔ 255	0–100%
17	Green 6	000 ⇔ 255	0–100%
18	Blue 6	000 ⇔ 255	0–100%
19	Red 7	000 ⇔ 255	0–100%
20	Green 7	000 ⇔ 255	0–100%
21	Blue 7	000 ⇔ 255	0–100%
22	Red 8	000 ⇔ 255	0–100%
23	Green 8	000 ⇔ 255	0–100%
24	Blue 8	000 ⇔ 255	0–100%
25	Red 9	000 ⇔ 255	0–100%
26	Green 9	000 ⇔ 255	0–100%
27	Blue 9	000 ⇔ 255	0–100%
28	Red 10	000 ⇔ 255	0–100%
29	Green 10	000 ⇔ 255	0–100%
30	Blue 10	000 ⇔ 255	0–100%
31	Red 11	000 ⇔ 255	0–100%
32	Green 11	000 ⇔ 255	0–100%
33	Blue 11	000 ⇔ 255	0–100%
34	Red 12	000 ⇔ 255	0–100%
35	Green 12	000 ⇔ 255	0–100%
36	Blue 12	000 ⇔ 255	0–100%

Operating Settings Configuration

Home Screen

The Maverick MK2 Wash has a home screen that shows the current control protocols, personalities, starting addresses, IP addresses, and universes. To see the home screen, press **<MENU>** repeatedly until it shows on the display. From the home screen, touch any of the displayed control settings to immediately jump to that part of the menu, such as the personality, starting address, or universe, or press **<ENTER>** to reach the main menu.

Test Mode

Auto Test

To perform an auto test of the Maverick MK2 Wash functions, follow the instructions below:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Test Mode**, or touch the display where it says **Test Mode**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select **Auto test**, or touch the display where it says **Auto test**.
5. Press **<ENTER>**.

Manual Test

To test the functions of the product manually, do the following:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Test Mode**, or touch the display where it says **Test Mode**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select **Manual Test**, or touch the display where it says **Manual Test**.
5. If using the buttons instead of the touchscreen, press **<ENTER>**.
6. Use **<UP>** or **<DOWN>** to select the function to test, from **Pan, Tilt, P/S Speed, Red, Green, Blue, White, CTC, Color, Pattern, LED Macro, LED Ma. Speed, LED Ma. Fade, Background, Background Dim., Dimmer, Shutter, Function, or Zoom**, or touch the display where it says the desired function.
7. If using the buttons instead of the touchscreen, press **<ENTER>**.
8. Change the value of the tested function with one of the following methods:
 - Type the desired value using the number pad that shows on the touchscreen display.
 - or
 - Use **<UP>**, **<RIGHT>**, **<DOWN>**, or **<LEFT>** to increase or decrease the value.
9. Press **<ENTER>**.

Setup

To reach the **Setup** menu, follow the instructions below:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Setup**, or touch the display where it says **Setup**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.

Network Settings

To reach the Network Settings menu, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Network Settings**, or touch the display where it says **Network Settings**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.

IP Mode

The IP address of the Maverick MK2 Wash can be set manually, by the network, or to a pre-set static address specific to each product. To set the IP Mode, follow the instructions below:

1. Navigate to the [Network Settings](#) menu.
2. Use **<UP>** or **<DOWN>** to select **IP Mode**, or touch the display where it says **IP Mode**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from:
 - **Manual** (set the IP address with the control panel),
 - **DHCP** (the network sets the IP address),
 - or
 - **Static** (a pre-set address specific to each product), or touch the display where it says the desired mode.
5. Press **<ENTER>**.

IP Address

In Manual IP Mode, the IP address must be assigned through the product menu. To set the IP address in Manual IP Mode, do the following:

1. Navigate to the [Network Settings](#) menu.
2. Use **<UP>** or **<DOWN>** to select **IP**, or touch the display where it says **IP**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Set the IP address (from **000.000.000.000** to **255.255.255.255**) with one of the following methods:
 - Through the touchscreen:
 - a. Touch the display where it shows the byte (set of three numbers) to be changed.
 - b. Use the number pad on the display to enter the desired number.
 - c. Repeat until the IP address is set as desired.
 - With the buttons:
 - a. Use **<LEFT>** or **<RIGHT>** to select the byte (set of three numbers) to be changed).
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the value.
 - c. Repeat until the IP address is set as desired.
5. Press **<ENTER>**.

Subnet Mask

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

1. Navigate to the [Network Settings](#) menu.
2. Use **<UP>** or **<DOWN>** to select **SubMask**, or touch the display where it says **SubMask**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Set the Subnet Mask (from **000.000.000.000** to **255.255.255.255**) with one of the following methods:
 - Through the touchscreen:
 - a. Touch the display where it shows the byte (set of three numbers) to be changed.
 - b. Use the number pad on the display to enter the desired number.
 - c. Repeat until the Subnet Mask is set as desired.
 - With the buttons:
 - a. Use **<LEFT>** or **<RIGHT>** to select the byte (set of three numbers) to be changed).
 - b. Use **<UP>** or **<DOWN>** to increase or decrease the value.
 - c. Repeat until the Subnet Mask is set as desired.
5. Press **<ENTER>**.



In DHCP or Static IP Mode, the IP and SubMask menu settings have no effect on the product.

Operation

Pan/Tilt Orientation

To set whether the pan or tilt orientation is normal or inverted:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Pan Reverse** or **Tilt Reverse**, or touch the display where it says the desired setting.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (normal orientation) or **YES** (inverted orientation), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Zoom Orientation

To set whether the zoom goes from wide to narrow or from narrow to wide, follow the instructions below:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Zoom Reverse**, or touch the display where it says **Zoom Reverse**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (wide to narrow) or **YES** (narrow to wide) or touch the display where it says the desired option.
5. Press **<ENTER>**.

Display Orientation

To set which way the display faces, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Screen Reverse**, or touch the display where it says **Screen Reverse**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to 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), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Pan/Tilt Angle Range

To set the range of motion the pan or tilt is permitted:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Pan Angle** or **Tilt Angle**, or touch the display where it says the desired setting.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **540** (540°), **360** or **270** (360° or 270° for pan or tilt respectively) or **180** (180°), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Blackout on Pan/Tilt Movement

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

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **BL. O. P/T Move**, or touch the display where it says **BL. O. P/T Move**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (do not black out) or **YES** (black out during movement), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Touchscreen Calibration

If the touchscreen is not responding correctly, it may need to be calibrated. To do so:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Calibration**, or touch the display where it says **Calibration**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (do not calibrate) or **YES** (calibrate), or touch the display where it says the desired option.
5. Press **<ENTER>**.
6. Follow the instructions, touching the points as they appear on the display.

Touchscreen Lock

To lock or unlock the touchscreen for the control panel, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Touchscreen Lock**, or touch the display where it says **Touchscreen Lock**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (display will respond to touch) or **YES** (display will not respond to touch), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Lock Screen

To completely lock or unlock the control panel, follow the instructions below:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Lock Screen**, or touch the display where it says **Lock Screen**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (control panel will not lock) or **YES** (control panel will require a passcode to access), or touch the display where it says the desired option.
5. Press **<ENTER>**.

To access the control panel when it has been locked:

1. Press **<MENU>**.
2. Enter the passcode **0920** using one of the following methods:
 - Through the touchscreen: use the number pad on the screen to enter **0920**.
 - With the buttons:
 - a. Use **<DOWN>** to select the number to be changed.
 - b. Use **<UP>** to increase the value.
 - c. Repeat until **0920** has been entered.
3. Press **<ENTER>**.

Swap Pan and Tilt

To switch the pan and tilt functions so that what normally controls the pan controls the tilt and what normally controls the tilt controls the pan, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Swap XY**, or touch the display where it says **Swap XY**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (normal pan and tilt) or **YES** (pan controls tilt, tilt controls pan), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Pan/Tilt Speed

To set the maximum speed of the pan and tilt:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **XY Mode**, or touch the display where it says **XY Mode**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Slow** or **Fast**, or touch the display where it says the desired option.
5. Press **<ENTER>**.

WDMX Reset

To reset the WDMX connection from the Maverick MK2 Wash, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **WDMX Reset**, or touch the display where it says **WDMX Reset**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (do not reset connection) or **YES** (reset the connection), or touch the display where it says the desired option.
5. Press **<ENTER>**.



Once a WDMX receiver has been linked to a specific WDMX transmitter, it will remain linked to that specific transmitter until it is linked to a different one.

Operation

Backlight Timer

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

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Backlight Timer**, or touch the display where it says **Backlight Timer**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to 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), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Loss of Data

In case of an input signal being lost in any way, the Maverick MK2 Wash will respond in one of two ways. The product will either hold the last signal received, or black out all LED output.

To set which way the product responds, follow the instructions below:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Loss of Data**, or touch the display where it says **Loss of Data**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Hold** (hold last signal received) or **Close** (black out all LED output), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Fan Speed

To set the speed of the fans, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Fans**, or touch the display where it says **Fans**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Auto** (fan speed set according to product temperature), **Full** (maximum speed), or **ECO** (quiet fans mode), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Color Mixing Mode

The Maverick MK2 Wash 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:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **C Mixing Mode**, or touch the display where it says **C Mixing Mode**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **RGBW** (additive mode: red, green, blue, and white), or **CMY** (subtractive mode: red controls cyan, green controls magenta, blue controls yellow), or touch the display where it says the desired option.
5. Press **<ENTER>**.

Dimmer Curve

To set the dimmer curve, follow the instructions below:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Dimmer Curve**, or touch the display where it says **Dimmer Curve**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Linear**, **Square**, **I Squa**, or **SCurve**, or touch the display where it says the desired option.
5. Press **<ENTER>**.

Dimmer Speed

To set the dimmer speed, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Dimmer Speed**, or touch the display where it says **Dimmer Speed**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Smooth** or **Fast**, or touch the display where it says the desired option.
5. Press **<ENTER>**.

Color Balance

To set the maximum values of a given color in the mix, follow the instructions below:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Color Balance**, or touch the display where it says **Color Balance**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>**, to select the color value to be changed, from **Red**, **Green**, **Blue**, or **White**, or touch the display where it says the desired option.
5. If using the buttons instead of the touchscreen, press **<ENTER>**.
6. Set the color value with one of the following methods:
 - Type the desired value using the number pad that shows on the touchscreen display.
 - or
 - Use **<UP>**, **<RIGHT>**, **<DOWN>**, or **<LEFT>** to increase or decrease the value.
7. Press **<ENTER>**.
8. Repeat steps 4–7 until the color balance is set as desired.

Preset Select

This option saves 3 different preset menu option configurations. To record and set these presets follow the instructions below:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Preset Select**, or touch the display where it says **Preset Select**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select the presets, from **PRESET A**, **PRESET B**, or **PRESET C**, or touch the display where it says the desired option.
5. Press **<ENTER>**.
6. The product will reset. Any changes made to the menu options will be saved to this preset.



- Default is **PRESET A**. If you make changes inside **PRESET A**, those changes are saved to **PRESET A** without having to do anything.
- To create a new preset, highlight and select **PRESET SELECT**. Highlight **PRESET B** or **PRESET C** and press **<ENTER>**. When you make that selection, the product will reset automatically. Go back and make the changes you need to make in the menu. This will automatically save to the preset you are in.

Preset Sync

To sync all menu presets to other Maverick MK2 Washes, follow the instructions below:

1. Connect all Maverick MK2 Washes via DMX cable.
2. Navigate to the [Setup](#) menu.
3. Use **<UP>** or **<DOWN>** to select **Preset Sync**, or touch the display where it says **Preset Sync**.
4. If using the buttons instead of the touchscreen, press **<ENTER>**.
5. Select **YES** or touch the display where it says the desired option.
6. Press **<ENTER>**.



- To sync other Maverick MK2 Washes, you connect those products by a DMX cable.
- The product can be in any control mode except WDMX. ArtNet, DMX, sACN are all acceptable.
- All menu options are transferred, including the DMX address. Only the IP address is not affected in the other products.



Only connect Maverick MK2 Washes

Reset Functions

To reset the pan, tilt, or all functions as if from startup:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Reset Function**, or touch the display where it says **Reset Function**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select the function to reset, from **Pan**, **Tilt**, or **All**, or touch the display where it says the desired option.
5. If using the buttons instead of the touchscreen, press **<ENTER>**.
6. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select from **NO** (do not reset) or **YES** (reset), or touch the display where it says the desired option.
7. Press **<ENTER>**.

Factory Reset

To restore the Maverick MK2 Wash to factory default settings, do the following:

1. Navigate to the [Setup](#) menu.
2. Use **<UP>** or **<DOWN>** to select **Factory Settings**, or touch the display where it says **Factory Settings**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **NO** (do not reset) or **YES** (reset to factory settings), or touch the display where it says the desired option.
5. Press **<ENTER>**.

System Information

All information about the current status of the Maverick MK2 Wash is available through the product's **Sys Info** menu. To view this information, follow the instructions below:

1. Press **<MENU>** repeatedly until the [Home Screen](#) shows on the display. Press **<ENTER>**.
2. Use **<UP>**, **<DOWN>**, **<LEFT>**, or **<RIGHT>** to select **Sys Info**, or touch the display where it says **Sys Info**.
3. If using the buttons instead of the touchscreen, press **<ENTER>**.
4. Use **<UP>** or **<DOWN>** to select from **Fixture Information** (shows firmware version, running mode, starting address, etc.), **Fan Information** (shows speed of the head fans in rpm), **Error Information** (shows any errors or **No Error!**), or **Channel Information** (shows the current value of all signal input channels) or touch the display where it says the desired option.
5. Press **<ENTER>**.
6. Use **<UP>** or **<DOWN>** to scroll through the information.

Offset Mode

The Offset mode provides fine adjustments for the home position of all the moving parts in the optical path as well as the pan and tilt movements. This way, when in their home position, the moving parts do not show any border or reduce the light output.

1. Starting from the Main Level screen, press and hold **<MENU>** until the passcode screen appears.
2. Enter the passcode **2323** using one of the following methods:
 - Through the touchscreen: use the number pad on the screen to enter **2323**.
 - With the buttons:
 - a. Use **<DOWN>** to select the number to be changed.
 - b. Use **<UP>** to increase the value.
 - c. Repeat until **2323** has been entered.
3. Press **<ENTER>**.

This brings you into the Zero Adjust menu screen.

PAN

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

1. Use **<UP>** or **<DOWN>** to select **PAN**.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to increase or decrease the starting value, from **000–255**.
4. Press **<ENTER>**.

TILT

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

1. Use **<UP>** or **<DOWN>** to select **TILT**.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to increase or decrease the starting value, from **000–255**.
4. Press **<ENTER>**.

ZOOM

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

1. Use **<UP>** or **<DOWN>** to select **ZOOM**.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to increase or decrease the starting value, from **000–255**.
4. Press **<ENTER>**.

MAC Address

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

1. Use **<UP>** or **<DOWN>** to select **MAC4**, **MAC5**, or **MAC6**.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to increase or decrease the value, from **000–255**.
4. Press **<ENTER>**.

Operation

Web Server

The Maverick MK2 Wash Web Server can be accessed by any computer on the same network as the product. It allows network access to system information, settings such as 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 [IP Mode](#) to **Static**.
2. Connect the product to a Windows 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 Address](#)).
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 Maverick MK2 Wash.

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 <https://www.chauvetprofessional.com/products/maverick-mk3-wash> 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. 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.



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

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight

Length	Width	Height	Weight
12.72 in (323 mm)	9.17 in (233 mm)	18.54 in (471 mm)	32.8 lb (14.8 kg)

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

Power

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

Parameter	120 V, 60 Hz	208 V, 60 Hz	230 V, 50 Hz
Consumption	651 W	629 W	609 W
Operating Current	5.51 A	3.03 A	2.53 A
Power linking current (products)	13.6 A (2 products)	13.6 A (10 products)	13.6 A (11 products)
Fuse/Breaker	T/F 10 A 250 V	T/F 10 A 250 V	T/F 10 A 250 V

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

Light Source

Type	Color	Quantity	Power	Current	Lifespan
LED	Quad-color RGBW	12	40 W	2.6 A	50,000 hours

Photometrics

Color Temperature	Beam Angle	Field Angle	Zoom Angle	Illuminance @ 5 m (7°)	Illuminance @ 5 m (49°)
2800 to 10000 K	5° to 36°	7° to 49°	7° to 49°	19,000 lux	800 lux

DMX

I/O Connector	Channel Range (Single Control)	Channel Range (Dual Control Movement)	Channel Range (Dual Control Pixels)
3- and 5-pin XLR	20, 69, 122 or 146	8, 20 or 26	36, 48 or 96

Art-Net™/sACN

I/O Connector	Channel Range (Single Control)	Channel Range (Dual Control Movement)	Channel Range (Dual Control Pixels)
Amphenol XLRnet	20, 69, 122 or 146	8, 20 or 26	36, 48 or 96

ArKaos Kling-Net

I/O Connector	Channel Range
Amphenol XLRnet	Determined per ArKaos MediaMaster software

Thermal

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

Ordering

Product Name	Item Name	Item Code	UPC Number
Maverick MK2 Wash	MAVERICKMK2WASH	08011201	781462215491

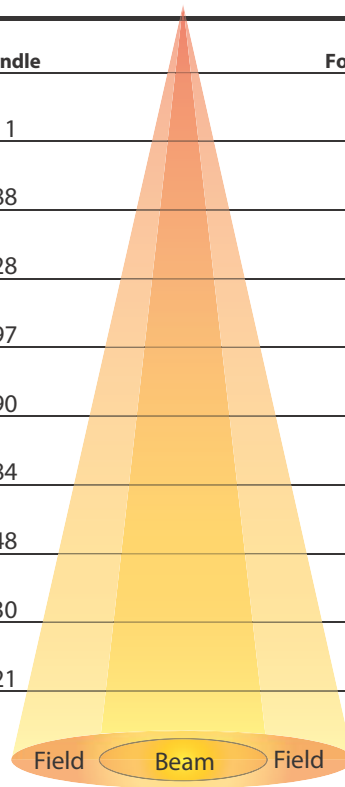


UL 1573
CSA C22.2 No. 166
E113093

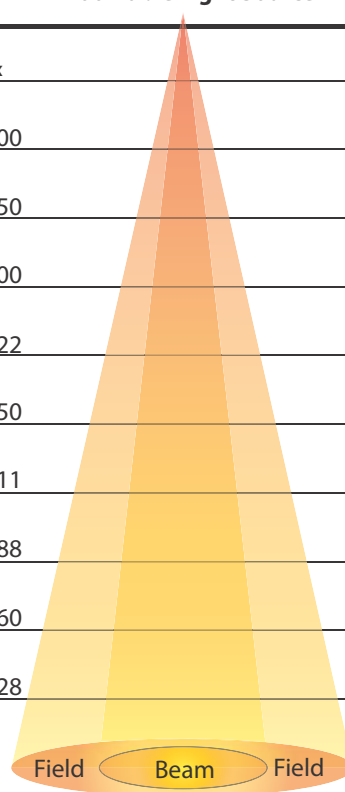


Photometrics Chart

Distance	Narrow		Zoomable Light Source		Wide	
	Beam Diameter	Field Diameter	Footcandle	Footcandle	Beam Diameter	Field Diameter
15 ft	1.31 ft	1.83 ft	2,111	89	9.75 ft	13.67 ft
20 ft	1.75 ft	2.45 ft	1,188	50	13.00 ft	18.23 ft
30 ft	2.62 ft	3.67 ft	528	22	19.50 ft	27.34 ft
40 ft	3.49 ft	4.89 ft	297	13	25.99 ft	36.46 ft
50 ft	4.37 ft	6.12 ft	190	8	32.49 ft	45.57 ft
75 ft	6.55 ft	9.17 ft	84	4	48.74 ft	68.36 ft
100 ft	8.73 ft	12.23 ft	48	2	64.98 ft	91.15 ft
125 ft	10.92 ft	15.29 ft	30	1	81.23 ft	113.93 ft
150 ft	13.10 ft	18.35 ft	21	1	97.48 ft	136.72 ft



Distance	Narrow		Zoomable Light Source		Wide	
	Beam Diameter	Field Diameter	Lux	Lux	Beam Diameter	Field Diameter
1 m	0.09 m	0.12 m	475,000	20,000	0.65 m	0.91 m
2 m	0.17 m	0.24 m	118,750	5,000	1.30 m	1.82 m
5 m	0.44 m	0.61 m	19,000	800	3.25 m	4.56 m
8 m	0.70 m	0.98 m	7,422	313	5.20 m	7.29 m
10 m	0.87 m	1.22 m	4,750	200	6.50 m	9.11 m
15 m	1.31 m	1.83 m	2,111	89	9.75 m	13.67 m
20 m	1.75 m	2.45 m	1,888	50	13.00 m	18.23 m
25 m	2.18 m	3.06 m	760	32	16.25 m	22.79 m
30 m	2.62 m	3.67 m	528	22	19.50 m	27.34 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.

To submit a service request online, go to www.chauvetprofessional.com/service-request.

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

World Headquarters	
General Information	Technical Support
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.chauvetlighting.com
EUROPE	
General Information	Technical Support
Address: Stokstraat 18 9770 Kruishoutem Belgium Voice: +32 9 388 93 97	Email: eutech@chauvetlighting.eu
	Website www.chauvetlighting.eu
General Information	Technical Support
Address: Unit 1C Brookhill Road Industrial Estate Pinxton, Nottingham, UK NG16 6NT Voice: +44 (0) 1773 511115 Fax: +44 (0) 1773 511110	Email: uktech@chauvetlighting.com
	Website www.chauvetlighting.co.uk
MEXICO	
General Information	Technical Support
Address: Av. de las Partidas 34 - 3B Zona Industrial Lerma Lerma, Edo. de México, CP 52000 Voice: +52 (728) 285-5000	Email: servicio@chauvet.com.mx
	Website www.chauvet.com.mx

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