



#### Support

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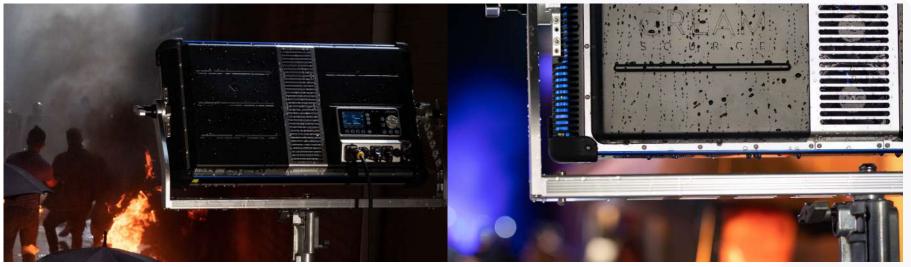


#### **1.1 Overview**

The Vortex8 is a versatile 2x1 RGBW system with a CCT range from 2200K to 15000K that can be used as a hard punch light to bounce or push through diffusion, or as a creamy soft light with the Creamsource Dome or DoPchoice Snapbag. Effects and colour gels are built into the latest CreamOS architecture in addition to a range of new features wrapped into an intuitive user interface. Unpredictable weather and messy effects machines are no longer a worry for the lighting department where the Vortex is in place. The Vortex8 is IP65 water resistant and sealed for the ultimate security and efficiency. Rain, snow and dust wont hold the Vortex8 back.

Connectivity to the Vortex8 is well up to date with LumenRadio TimoTwo built in, Ethernet, Bluetooth, 5pin DMX, Wifi, USB type A and Creamsource Accessory port. Interaction between Vortex8 and various third party instruments and protocols are endless opening various wired and wireless control options. We are geeks for high quality and precision engineering, and loads of our geekiness has spilled into the Vortex Series. Built with elegance and durability in mind the aluminium machining and technopolymer infusion has allowed us to achieve our goals. Containment and simplicity is also achieved in this design, with the PSU as well as the antennas integrated into the head.

We stand by our users offering 5 years Warranty when you register your product. Go to **www.creamsource.com** for more information.



Vortex8 in action



### **1.2 Part Numbers**

The table below lists part numbers for the Creamsource Vortex system.

Part Number	Description
K-CSV-8-ESS	Vortex8 Essentials Kit: Includes Fixture, Yoke, Power Cable, Flat Diffuser.
CSV-8	Vortex8 650W Colour Fixture, Head Only







#### **1.3 Warnings**

- **IMPORTANT** Power Vortex8 with the supplied PowerCon Cable only. (When using Vortex8 with water you must only use the supplied cable as not all PowerCon cables are water resistant.
- Use etherCON TOP connector only for preventing water from damaging ethernet ports
- *Vortex8 is rated IP65. Vortex8 must NOT be submerged in water.*
- Heavy -Vortex8 weighs 13.7kg/30lbs. Lift with care.
- Not intended for permanent outdoor use. Temporary outdoor use only.
- ! Do not open or disassemble the fixture under any circumstances, doing so voids warranty and may cause harm to you if powered.
- Do not stare directly at the light beam.
- Ensure that the Vortex8 is clear of any obstructions in any direction with a minimum distance of 45cm/18".
- This product is intended for professional use and may only be operated by qualified persons.
- Do not cover the ventilation slots on the side and rear of the Vortex8. Airflow is required for cooling and operation.
- Inspect the power cable for damage prior to operation.

Check for visible damage to the fixture, cables or connectors and do not operate the device if damaged. Please contact your a nearest authorised repair centre for the fixture to be repaired.

- Always ensure that the fixture is earthed electrically.
- The fixture may become hot during operation. Maximum Surface Temperature Tc = 70°C.



### **1.4 Compliance Notes**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

#### Certifications: CE, FCC, RCM



Please make sure discarded electrical waste is properly recycled to reduce environmental impact. Please use a separate collection facility or contact the supplier from which this fixture was purchased.





# 2. Getting started

#### 2.1 What's in the Box

Yoke

2

3

4

Vortex8 ships with the following items included in the box.





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### 3. Water and Temperature



#### 3.1 Water

The IP65 rating of the Vortex8 fixture means it can survive low pressure water jets in all directions, but **not full submersion**. It also means that it has a high resistance to dust and dirt. Precautions are advised.

<u>^!</u>

The supplied PowerCon cable must be used when the Vortex8 is exposed to water. Not all PowerCon cables are water resistant and can be an electrical hazard.





#### 3.2 Temperature

The Vortex8 is a high powered lighting fixture and will get quite hot during operation, especially on the aluminium chassis due to heat dissipation. Care must be taken when handling the Vortex8.

- The maximum surface temperature of the lamp head will be 60° C/140°F, when operated in an ambient temperature of 25° C/77° F
- Maximum ambient temperature for normal operation is 40°C/104°F.





#### 4.1 Yoke Assembly

The Vortex8 ships with a quick release yoke system that is assembled using a T30 Torx tool provided.

The standard yoke allows for mounting to a combo stand with a standard baby pin receiver.





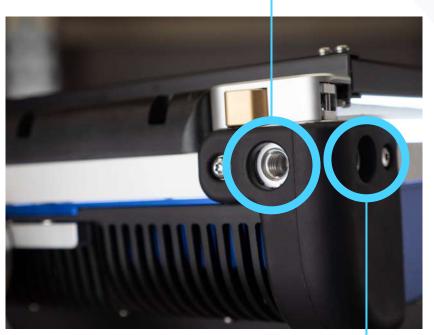
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### 4.2 Rigging

The Vortex8 has a unique dual 3/8th threaded corner system to support complex rigging setups and Vortex8 arrays .



Ensure that mounting point is safe and secure and is rated to take the full unit weight





RIGGING POINT



# 

**RIGGING POINT** 

**RIGGING POINT** 

### 4.3 Filter Rails

There are various accessories that are available for V8 that can slide into the front two accessory rails. Eg a standard diffuser and a honeycomb grid. Accessories slide into the rail system and lock securely with unique lock and latch system.



The filter rail slot has a unique locking mechanism that locks the initial filter in while allowing second filter to be inserted without unlocking.



Latch in unlock position.



Push top latch down to engage the lock.



Push gold button to release to unlock.





#### 4.4 Installing a Dome

Installing the Dome the Vortex8 widens the native 20° beam angle. This modifier softens the source and reduces shadowing.

Install the Dome into the safety filter rail as per steps above in the "Rails Filter" section.



Slide the dome into the first filter rail.



Push top latch down to engage the lock on each side.





#### 4.5 Installing a Honeycomb

The honeycomb reduces the beam angle and stops ambient spill of light. This works great in with the standard diffuser in the second slot.





Slide the honeycomb into the first filter rail.

Push top latch down to engage the lock on each side.





### 4.6 Installing a Diffuser

The standard diffuser softens the native hard light and widens the beam angle. This modifier works well inconjunction with the dome and the honecomb.





Slide the diffuser into the first filter rail.

Push top latch down to engage the lock on each side.







### **5.1 Controlling the Vortex8**

There are four different ways of controlling the fixture, which are detailed below.





### 5.3 Introducing CreamOS

CreamOS is the all new operating system based on architecture that is robust and expandable. CreamOS continues to evolve with easy access and a user fiendly interface.

CreamOS is driven by the following screens:



CCT Mode



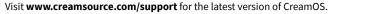
Effects Mode



Home screen



Options screen





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#### **5.4 CreamOS Home Screen**

Control parameters and access the functions from the home screen.





### 5.5 CreamOS Colour Mode

Easily switch colour modes from this screen.



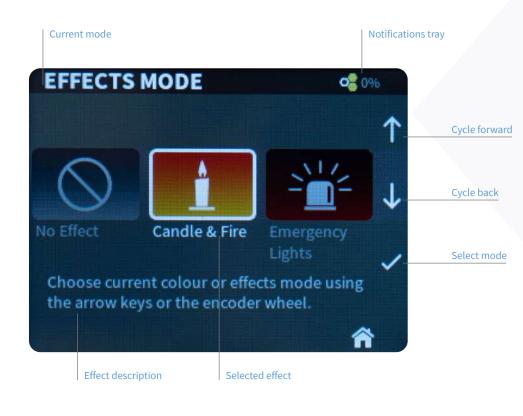
For more information about the Colour Mode menu, go to 5.7 Menu Functions



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### **5.6 CreamOS Effects Mode**

Enter the Effects menu and select one of the following presets. Each preset has multiple parameters that can be changed to customise the effects.









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Effects Off

Candle & Fire

Emergency







Colur Cycle

Flash Frame



Pulse









Timed Flash



Calibrate

Random





Vortex8 User Manual



### **5.7 Menu Functions**

#### The table below outlines all the menu items and a brief description of their function, for firmware **V1.4.7** and above.

COLOUR MODE	Normal - CCT	Switch to CCT mode to produce white light with CCT and GRN/MAG control	
	Colour - HSV	Switch to HSV mode to produce colours with Hue and Saturation control	
EFFECTS MODE	→ NO EFFECT	➡ Turn off effects	
	Strobe	Switch to strobe mode	
	Random	Switch to Random Flashing mode	
	Colour Cycle	Switch to Colour Cycle mode	
	Calibrate Sync	Switch to Calibrate Sync Mode	
PRESET	→ 2700K	Set colour temperature to 2700K, GRN/MAG to 0	
	3200K	Set colour temperature to 3200K, GRN/MAG to 0	
	4500K	➡ Set colour temperature to 4500K, GRN/MAG to 0	
	5600K	Set colour temperature to 5600K, GRN/MAG to 0	
	6500K	Set colour temperature to 6500K, GRN/MAG to 0	
DMX Address	<b>→</b>	Use UP/DOWN arrow keys to set DMX address from 1 to 494 (<512 to allow for all channels to be patched)	
DMX Scenario	→	Use UP/DOWN arrow keys to set DMX Scenario from 1 to 10 (see DMX implementation tables for complete description of different scenarios)	
Boost Brightness	<b>→</b>	Boost Brightness allows for increased light output when unit is running at low temperatures. When Boost Brightness is NOT enabled, the output level of the light is restricted to that of the normal 'HOT' running temperature of the light, even if the light is running cooler than normal. This prevents 'output droop' as a unit heats up	
FAN MODE	→ Auto	➡ Fans speed is variable depending on temperature	
	Quiet	➡ Fans will constantly run at lowest speed	
	Medium	➡ Fans will constantly run a medium speed	
	High	➡ Fans will constantly run at high speed	
	Pause	Fans will stop running, until maximum temperature is reached - then will run in Quiet mode	
Advanced	→ LumenRadio Unlink	Select this to unlink Lumen Radio from transmitter	
	LumenRadio Enabled	➡ Lumen Radio Receiver can be enabled or disabled	
	High Speed	Enable High Speed Mode – this increases the PWM frequency of the unit to allow fast frame rate shooting (u to 2,000fps). The drawback of using High Speed mode is that the dimming and colour changing of the unit becomes less fluid and smooth. When disabled, frame rates of up to 500fps are achievable.	
	DMX Terminated	Enable to terminate DMX line with 120R resistor internally. The last fixture in the DMX chain should have thi option selected	
	Display Always On	➡ If this is not enabled, then the OLED display will switch off after a period of no key-presses, to lengthen it's lifespan and prevent screen burn-in	
	Information	Displays information screen with serial number, temperatures, unit run-hours and other vital statistics	
	Restore Defaults	Restores user defaults including DMX address, Scenario and other settings	



### 5.7 Menu Functions Cont.

COLOUR MODE	ССТ	White light with variable colour temperature and green/magenta control	
	HSI	➡ Vivid colours with Hue and Saturation control	
	RGBW	➡ Direct control of Red, Green, Blue and White channels	
	XY	➡ Calibrated colour control using X,Y coordinates	
<b>→</b>	GEL	Select from over 300 industry standard lighting gels	
	CCT-HSI	Crossfade betweeen CCT and HSI modes	
	CCT-RGBW	→ Crossfade between CCT and RGBW modes	
	CCT-XY	➡ Crossfade between CCT and XY modes	
	CCT-GEL	➡ Crossfade between CCT and GEL modes	
EFFECTS MODE	No Effect	➡ All effects disabled	
	Candle & Fire	Realistic candle are firelight effect with control over preset, intensity, speed and colour	
	Emergency Lights	Emergency lights such as police and ambulance with control over preset, colour, flashes, speed and pause time	
	Television	➡ Changes CCT and green/magenta to simulate light cast by TV screen, with control over speed, dynamic range and CCT	
	➡ Party	Dynamic colour changing party lights with control over pallete, speed, transition type and transition speed	
	Pulse	➡ Pulse of light fading in and out with control of frequency and pulse speed	
	Paparazzi	Random camera flash-bulb effect with control of speed, decay speed and CCT	
	Colour Cycle	➡ Cycle through the spectrum of saturated colours with control over speed	
	Strobe	➡ Strobe effect with control over frequency, brightness & duty cycle	
	Random	➡ Create a random pattern of flashes with control over frequency, length & variation	
	Dual Level	Set two different light levels and instantly switch between then using Flash button, DMX or external trigger signal	
PRESET	→ Select from a range of CCT and 0	Select from a range of CCT and Colour presets for recall of commonly used colours	
FIXTURE SETUP	FAN MODE	Auto - Variable speed fan control based on temperature of fixture	
<b>→</b>		➡ Quiet - Fans run at constant low speed	
	<b>→</b>	Medium - Fans run at constant medium speed	
		High - Fans run at constant high speed	
		➡ Pause - Fans are stopped temporarily until until fixture heats up (should not be used for long periods of time)	



### 5.7 Menu Functions Cont.

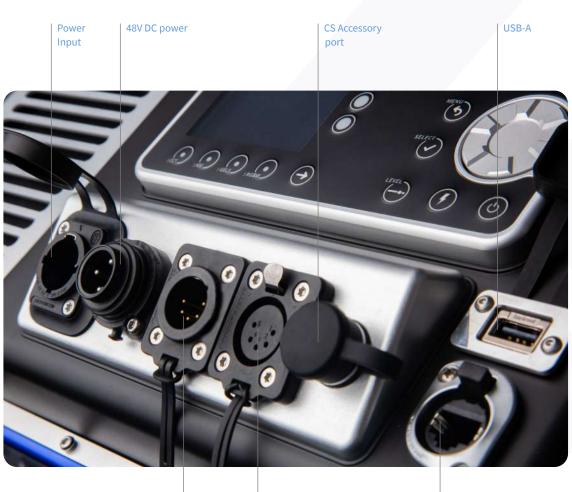
FIXTURE SETUP	DIMMING CURVE	➡ Linear - Linear dimming curve
	<b>→</b>	➡ Exponential - Smoothest dimming at low levels
		➡ Logarithmic - Smoothest dimming at high levels
		S Curve - Smoothest dimming at low and high levels
	→ Calibrated RGBW	Activate calibrated colour space for RGBW modes. This uses the Kodak Pro Photo Colour Gamut / Plasa standard E1.54. The white point is set to 3200K
	➡ High Speed	Enables High Speed mode for shooting at high frame rates. Disable for best colour accuracy and dimming performace
DMX SETUP	→ DMX Address	Set DMX Address from 1 to 508
	→ DMX Mode	Choose active DMX Mode
<b>→</b>	DMX Smoothing	→ Off - No smoothing is applied to DMX data, fastest response time
	→	Smooth - Interpolation over two DMX frames for smooth dimming, reduced response time
		Super Smooth - Interpolation over five DMX frames for super smooth dimming, slow response time
LINK	→ LumenRadio Unlink	Unlink LumenRadio from all transmitters (shortcut - hold LINK button for two seconds)
	→ LumenRadio Enabled	Enable or disable LumenRadio receiver
	→ DMX SETUP	Shortcut to DMX SETUP Menu
	→ Master Mode	→ When enabled this unit will act as a master and transmit colour data over DMX port to other Creamsource fixtures
ADVANCED	EXTERNAL TRIGGERING	Trigger Disabled - No external triggering over Accessory Port
<b>→</b>	→	Trigger Effects - External trigger signal used to trigger effects (same as Flash button on keypad)
		Virtual Shutter - External trigger signal used to shutter light ON/OFF (fastest response time)
	→ Information	Show system information such as Serial Number, IP Address, Hardware type
	Restore Defaults	Restore all fixture settings to the factory defaults



# 6. Connectivity

### 6.1 Best Of Class Connectivity

Vortex8 is equiped with a wide range of connectivity options both wireless and wired.



DMX In

DMX Thru

etherCON TOP connector





# 6. Connectivity



#### **6.2 Wired DMX Control**

Standard 5 pin XLR connectors are located on the back of the unit. The connectors are Neutrik TOP series, and will be only be water resistant when mated with other Neutrik TOP connectors.

When valid DMX signal is present, the yellow EXT indicator on the keypad will light up and the DMX homescreen is displayed, which shows active DMX parameters and quick keys to change DMX Address, Mode and Smoothing options. Local control of the fixture is overridden when DMX control is active.

DMX Address and Mode can be selected from the DMX SETUP Menu. Please see the DMX Implementation Tables for more information about the channel mapping options.

#### **6.3 Wireless DMX Control**

Every Vortex unit has built in Wireless DMX control using the Lumen Radio system.

When a valid wireless DMX signal is present, the blue Wireless indicator on the keypad will light up. The current signal level will also be displayed on the top status area of the OLED screen

If wired DMX is connected at the same time as the Wireless DMX is receiving data, then the wired connection will take control.

The DMX Address and Mode should be set in the same manner as for wired DMX.

To unlink the Lumen Radio module, press the LINK button and select "Unlink Lumen Radio" (or hold down the LINK button for 2 seconds).

Please see Lumen Radio documentation for more information about the wireless DMX system.

#### **6.4 Wired Remote Dimmer**

The wired remote dimmer plugs into the 7 pin Accessory connector on the back of the unit. This will allow basic control of the fixture.



# 6. Connectivity

### 6.5 Firmware Updates Via USB

Download the latest CreamOS update from www.creamsource.com/support.

1. Copy the file to a USB drive.

Note: Only one **\*.sfb** update file should be copied onto the drive at a time.

2. Insert USB drive into USB connector on Vortex.

**3.** Power up Vortex8 and it will automatically update to the version copied on the USB drive.

Note: Installing will take 1-2 minutes.

**4.** Safely remove USB drive once the update is complete.



Recommended USB drives include EMTEC, Kingston and Toshiba. Drives will need to be formatted as FAT32. If the Vortex8 fails to read the USB drive, please try one from a different manufacturer.







# 7. Maintenance

### 7.1 Vortex8 Fuse

The Vortex8 has an internal fuse and is not user serviceable. Please contact your nearest authorised repair centre for it to be replaced.

Require help finding your nearest authorised repair centre? Feel free to get in touch.

https://creamsource.com/support



Internal fuse is only for 48V DC, not AC input.



### 8. Power



#### **8.1 Running from Batteries**

The Vortex8 can be run directly from a 48V regulated DC battery source with no additional hardware required. The fixture is also able to hot-swap between AC and DC power sources and is capable of running at 100% brightness while being powered by a battery. The battery must have sufficient capacity to continuously power the fixture with a current draw of 13.5A.



The green battery icon will display in the status bar when the unit is being powered via a battery source.



The table below shows power requirements when running at maximum brightness. Battery Amp-Hour ratings should be chosen accordingly.

Part Number	Wattage	Current Draw @ 48V
CSV-8 Vortex8	650W	13.5A



### 8. Power



### 8.2 Pinout for DC Power connector on Vortex8

Choose a 4 core cable of >15AWG (1.5mm2) and wire all 4 pins

Part Number	Connector	Manufacturer	Part Number	
CSV-8 Vortex8	Ecomate 4 Pin Female	Amphenol	C016 20D003 110 10	
Pin		Wire To		
E		- Ve		
1		- Ve		
2		+Ve		
3		+Ve		



### 9.1 Specs for the Accessory Port Pinout

Connector Type: Weipu Socket 7Pin Mating Plug: Weipu Plug 7Pin SF1210/P7II

Pin	Description
1	TRIGGER Input +Ve (5-24V Input, referenced to GND)
2	DMX Data (-Ve)
3	DMX Data (+Ve)
4	
5	
6	GND, Ground Reference
7	+12V Output, 200mA maximum





### 9.2 Specs for the Vortex8



Material	Aluminium/Technopolymer	
Light Source	RGBW LED	
Colour Range	CCT: 2200 - 15000K, PLUS/MINUS GREEN, HUE/SATURATION, XY, GELS, DIRECT RGBW, EFFECTS	
CRI	Typical 95	
тісі	Typical 95	
Beam Angle, SPOT Lens	20° (Half Peak Angle)	
Tilt Angle	360°	
Photometrics	3200K: 68,200 lx / 6,340 fc @ 1m / 3.3ft 26,200 lx / 2,430 fc @ 2m / 6.6ft 12,700 lx / 1,180 fc @ 3m / 9.8ft 7,400 lx / 690 fc @ 4m / 13.1ft 4,800 lx / 450 fc @ 5m / 19.4 ft 3,400 lx / 320 fc @ 6m / 19.7 ft 5600K: 73,500 lx / 6,830 fc @ 1m / 3.3ft 28,600 lx / 2,660 fc @ 2m / 6.6ft 13,900 lx / 1,290 fc @ 3m / 9.8ft 8,000 lx / 740 fc @ 4m / 13.1ft 5,200 lx / 480 fc @ 5m / 19.4 ft 3,700 lx / 340 fc @ 6m / 19.7 ft	
Mounting	8x 3/8" Threaded Insert Rigging Points	
Yoke	Removable quick release yoke	
Filter Rails	2 Filter Rails for Secondary Lenses, Diffusers, Accessories	
User interface	High Precision Digital Magnetic Encoder, Backlit Keypad, Colour LCD Display	
Dimming	0-100% with High Resolution, Super- Smooth Low End Mode	

High Speed Capability	Over 5000fps Flicker Free in High Speed Mode
Synchronization	Sync Input for Triggering and Syncing to Camera Shutter
Max Ambient Temperature	40°C
Cooling	Low noise variable speed fans
Estimated LED Lifespan	50,000hrs (L70)
Input (AC)	100-240V AC, 50/60Hz, Max 8A. Neutrik PowerConTrue connector
Input (DC)	48V DC, Max 13A, Can run at 100% brightness on DC input
Protection Class	IP65
Weight	13.7kg / 30lb (Excluding Yoke) 1.98kg / 4.4lb (Yoke weight)
Dimensions	690 x 380 x 121mm / 27.2" x 15" x 4.8" (Excluding Yoke) 831 x 551 x 164mm / 32.7" x 21.7" x 6.4" (Including Yoke)
Warranty	3 Years on Fixtures, 12 Months on Accessories (5 Years registered)
Certifications	CE, RCM, FCC. Pending: ETC
Control	On-Board Interface, DMX via standard 5- pin XLR connectors, Wired Remote Control Accessory, Integrated Lumen radio Timo Two with Bluetooth, Ethernet, USB Type A
Includes	Vortex8 650W Colour, Yoke, Power cable, Flat diffuser
Product Code	K-CSV-8-ESS



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### 9.3 Warranty

We stand by our quality, to learn more about Warranty Terms and Conditions, please visit:

https://creamsource.com/5-year-warranty

### 9.4 Support

#### Have any questions? Feel free to get in touch

https://creamsource.com/support

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### 9.4 Document History

1.0	14 Jan 2020	Initial Release



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