creamsource | outsight

MICRO +C

USER MANUAL

For firmware v1.0 and above

Contents

Chapter 1:

Welcome

Thank you for buying a Creamsource Micro+C from Outsight. We design and engineer our products to the highest standards to be used under the challenging circumstances that come with motion picture and television production. This unit will give you years of reliable service.

This manual will explain the multiple functions of the Creamsource Micro+C and its capabilities as a stand alone unit as well as working in sync with other units, cameras and accessories. We are always eager to find out about new and unusual applications for our products as well as suggestions for future features.

Please let us know about your experiences on social media or email: ideas@creamsource.com

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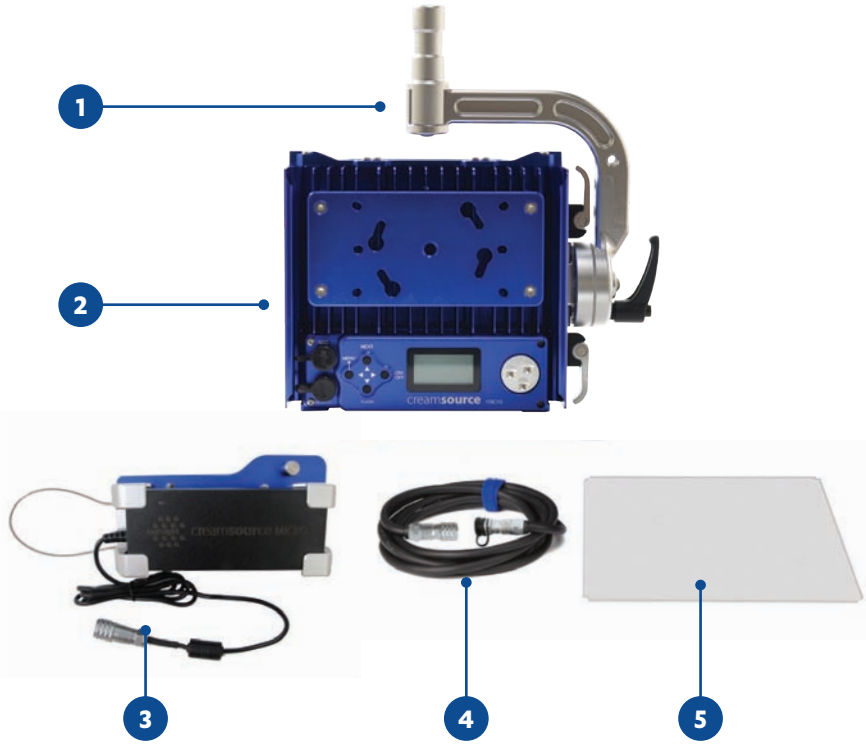
Chapter 2: Getting Started

2.1 What's included:

If you have purchased your Creamsource Micro+C as an Essential Kit, you will receive the following:



1. Creamsource Micro Rigging Yoke
2. Creamsource Micro Luminaire fixture
3. Creamsource Micro Power Supply with Mounting Bracket
4. Creamsource Micro Power Cable
5. Creamsource Micro 60° Lens

2.2 Powering Up and Powering Down:

Before you power up make sure you read all the safety warnings (page 33), it won't take much time.

- Use only the power supply that comes with the Creamsource Micro+C. Its input is auto-ranging from 100-240V AC, 50/60Hz for use world-wide.
- Attach power supply to main power source. With the power supply turned OFF, connect the power cable to the light head. This procedure will extend the life of the connectors.
- The Creamsource Micro+C remembers its last brightness setting, if the light was turned on or off and the last MODE it was used in.
- Up to 10m (32ft) of extension cable can be run between the power supply and the head.

The power should be switched off before unplugging the cable. There are no other special procedures for powering down - it can be done at any time without harm to the unit.

If the external flexible cable of this luminaire is damaged, it must be replaced by an original cable from the manufacturer or service agent.

The standard Power Supply IS NOT water resistant, please make sure to keep in a dry location to avoid electric shock

2.3 Batteries

The Creamsource Micro+C can be run on DC battery power directly with no additional hardware required. Any voltage source between 10V and 32V which is capable of 80 watts draw can be used. The LED array will turn off if the voltage falls below 10V, so it is advisable to use 14.4V or higher for best performance.

Chapter 3: Water, Weather and Temperature

The IP65 rating of the Creamsource Micro+C Head 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. Still precautions are advised.

Note that the standard accessories are not water resistant - for example battery mount, remote, power supply etc.

Temperature

As the Creamsource Micro+C is a high-power device, it will get hot during normal operation, and care must be taken when touching the unit.

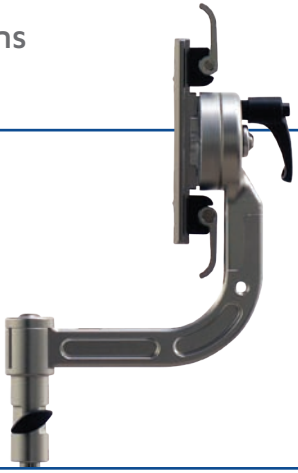
- The maximum surface temperature of the lamp head will be 60º C/140ºF, when operated in an ambient temperature of 25º C/77º F
- Maximum ambient temperature for normal operation is 40ºC/104ºF.

Chapter 4: Rigging and Safety

Recommended rigging position for the Creamsource Micro+C is with the cooling fins in a vertical orientation. This allows for the best natural cooling of the unit.
It can be mounted in other positions BUT care must be taken not to smother the cooling fins on the back of the unit. Keep a 10cm/4in. clearance around the unit to maintain air flow.
If rigging the unit above people, from vehicles, moving platforms, or hanging from any rigging, be sure to secure the unit through the safety-cable holes located at each end of the unit using approved and correctly rated safety cables, chains or carabiners.

Use appropriate safety cable for 4kg load. If the unit is to be mounted suspended, it is necessary to replace the standard spigot with a 28mm DIN or Euro spigot - please contact Outsight for more details

Rigging Options



4.1 Quick Release Yoke:

A combo Junior/Baby spigot - compatible with a large range of stands and other rigging equipment. The yoke is quickly fitted without tools. Simply flip the levers on each side of the yoke to the UP position, and slide the yoke onto the unit. Then press the lockers "levers" down to lock.

4.2 Multi Yoke:

The Multi Yoke (Part number CSU-YOKE-1X4) is designed to complement the Creamsource Micro as an accessory that allows the deployment of two, three or four units in a linear array. It features a quick release tool-less setup, and folds down for easy transport.

4.3 Universal Mount Plate:

The universal mount plate on the back of the Micro can be used to mount the Power Supply and Battery mount. It can also be used for rigging - it is compatible with mounting accessories from Kino Flo, such as the MTP-BF41S ("lollipop") mount. To release, lift the spring pin and turn plate counter-clockwise.

4.4 3/8" Tapped (threaded) Hole:

Another mounting option is the 3/8" hole tapped (threaded) directly in the base and top of the unit.

4.5 Optional Spigot:

Suitable for floor stand mounting only. (Supplied with 'Basic Kit').

Other setup accessories

4.6 Gels and Lenses:

The Micro+C has a native spot beam angle of 20°. Highly efficient 20°, 60° & 100° holographic Lenses are available to widen the native beam angle. Empty gel frames are also available if you want to fit your own diffusion or filters.

4.7 Light Shaping tools:

Optional extras- Barn Doors, Lightbanks and Grids

4.8 Dome Diffusers:

The Creamsource Micro Dome diffuser system creates an instant softlight from the Creamsource Micro. The qualities of the light can be manipulated by adding additional lenses or barn doors for control. Manufactured from durable optical grade polycarbonate and designed for years of rough service these domes come in two grades, Medium (CSU-DOME-M) and Heavy (CSU-DOME-H).

Chapter 5: Controls

5.1 Control Wheel and Buttons

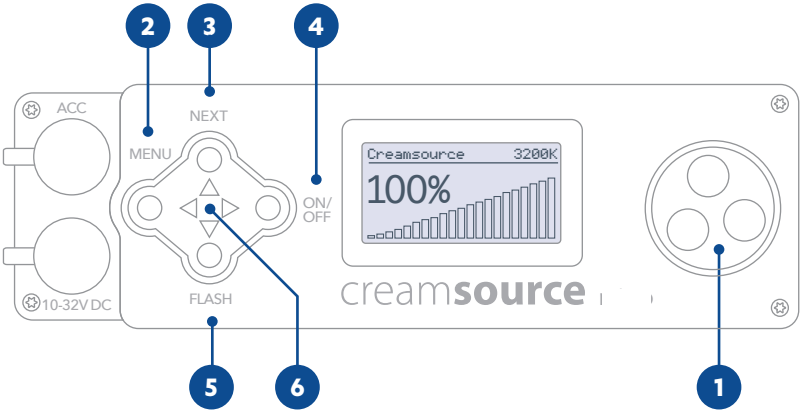
1) The control wheel adjusts the intensity or colour temperature of the light output. It is speed sensitive, so it can be turned slowly for fine adjustments, or quickly for rapid changes. It is also used to change other settings such as strobe frequency or dual flash level when using these modes and to scroll up and down through the menu system.

Under normal operation the buttons have dedicated functions:

2) **MENU** - press to display menu
3) **NEXT** - press to select next setting to adjust (then use wheel to change)
4) **ON/OFF** - press to turn light on and off
5) **FLASH** - flashes light on or off when held down

When in the menu, the buttons have the following functions:

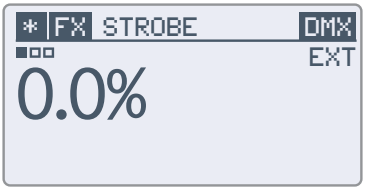
1) Use the control wheel to scroll through the menu items, or change setting values
6) ◀ Back - press to go back a menu level. Hold to return to main screen
   ▲ Up - press to scroll up, or increase setting value. Hold to scroll quickly
   ▶ Select - press to accept current menu item or setting
   ▼ Down - press to scroll down, or decrease setting value. Hold to scroll quickly



5.2 LCD Display and Menu

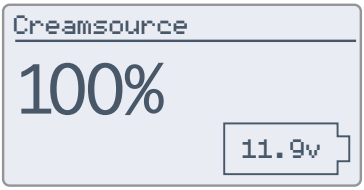
General Info Display

This is the normal display mode of the Creamsource. The current intensity level is displayed, along with additional information in the status area at the top of the screen:



- The navigation dots give a visual guide as to which setting is currently active. Press ▲ **NEXT** to advance to the next setting (e.g. Level, CCT, GRN/MAG)
- The text FX appears when any effects mode is enabled.
- The symbol * appears if a colour bump setting is currently active (see section 6.7)
- The text DMX appears when a DMX signal is detected
- A lock icon indicates when the rotary wheel is locked, or the unit is receiving commands from another source (for example the Remote or another Creamsource)
- Frame rate is displayed upper right when an external sync signal is present.
- 'EXT' is displayed in upper right when External Triggering mode is enabled.

5.3 Low Battery Warning



If the input voltages falls within 10% of the user-definable Shutdown Voltage, a flashing battery icon will displayed.

If the voltage continues to fall below this Shutdown Voltage, then the LED array will switch off - however, the display will still be operational.

The Shutdown Voltage can be adjusted under **MENU->ADVANCED->SHUTDOWN VOLTAGE-.** The default setting is 10V. This function has several uses, for example to reserve part of a battery capacity, or to ensure batteries are not run to completely flat thus promoting healthier batteries.

Chapter 6: Change Settings with Menus

Use the ◀ **MENU** button to enter or exit the menu system on the display and change the settings on your Creamsource Micro Colour. The display screen shows the current menu level or setting to be changed. Capitalised options will access a further menu. Use either the Control Wheel or the ▲ and ▼ buttons to scroll up and down and use the ▶ button to select a setting to change.

The table on the following pages outlines all the menu items & provides a brief description of their function.

SETTING		SUB MENU		DESCRIPTION
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
	▶	Colour – RGBW	▶	Switch to RGBW mode to control Red, Green, Blue & White independently
	▶	Colour XY	▶	Switch to XY to dial in a colour using the XY coordinates from the CIE 1931 XY coordinate plane
	▶	Light Gels	▶	Switch to Light Gels to choose from over 300 LEE & Roscoe Gels
	▶	Crossfade CCT-HSV	▶	Switch to Crossfade CCT-HSV to crossfade between your Normal CCT settings and your HSV settings
	▶	Crossfade CCT-RGBW	▶	Switch to Crossfade CCT-RGBW to crossfade between your Normal CCT settings and your RGBW settings
	▶	Crossfade CCT-XY	▶	Switch to Crossfade CCT-XY to crossfade between your Normal CCT settings and your XY settings
	▶	Crossfade CCT-GEL	▶	Switch to Crossfade CCT-GEL to crossfade between your Normal CCT settings and your selected Gel
	▶	<<<BUMP COLOUR>>>	▶	This allows you to fine-tune the current colour along the red/cyan, green/magenta or blue/yellow axis or through increased / decreased saturation. **SHORTCUT: Hold ◀ from anywhere to access 'Bump Colour'.**
	▶	<<<REMOVE BUMP>>>	▶	Click to remove. **SHORTCUT: Hold ◀ from the 'Bump colour' menu to remove any bump.**

EFFECTS MODE	▶	No Effect	▶	Default. Select this to turn off an active effect
	▶	Dual Level	▶	Allows two light levels to be set and toggled between using the Flash button. Once Dual Levels are set you can adjust colour via Colour Modes or Presets
	▶	Strobe	▶	Enables the Strobe effect with control over frequency, brightness & duty cycle. With the Strobe effect on you can adjust colour via Colour Modes or Presets. After any colour change you need to reselect strobe to restore control over frequency & duty cycle.
	▶	Random	▶	Create a random pattern of flashes with control over frequency, length & variation. Once your random pattern is set you can adjust colour via Colour Modes or Presets. After any colour change you need to reselect Random to restore control over frequency, length & variation
	▶	Timed Flash	▶	Create flashes of a defined duration with control over output and duration of flash. Once your Timed Flash is set you can adjust colour via Colour Modes or Presets. After any colour change you need to reselect Timed Flash to restore control over output and duration of flash
	▶	Flash Frames	▶	Create flashes tightly synchronised to the camera shutter when used with a sync source such as the Creamsource Flashbandit. Control over the number of frames to flash on & off is enabled. Calibrate Sync mode must be run first
	▶	Colour Cycle	▶	Select to run through the entire spectrum with control over the speed of the cycle.
	▶	Calibrate Sync	▶	Calibrate the fixture with a sync source such as the Creamsource Flashbandit
USER PRESET		USER PRESET 1-20		Use the 20 available presets to store up to 20 colour settings including crossfades. To store a new preset, select the preset number you want to use and hold ▶ to store.
		HOLD ▶ TO CLEAR ALL		All pre-sets can be cleared in one go by holding ▶ when on this menu item

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
	▶	10000K	▶	Set colour temperature to 10000K, GRN/MAG to 0
	▶	RED	▶	Set Hue to Red & Mode to Colour HSV. Use ▲ and the control wheel to adjust Hue & Saturation
	▶	GREEN	▶	Set Hue to Green & Mode to Colour HSV. Use ▲ and the control wheel to adjust Hue & Saturation
	▶	BLUE	▶	Set Hue to Blue & Mode to Colour HSV. Use ▲ and the control wheel to adjust Hue & Saturation
	▶	CYAN	▶	Set Hue to Cyan & Mode to Colour HSV. Use ▲ and the control wheel to adjust Hue & Saturation
	▶	MAGENTA	▶	Set Hue to Magenta & Mode to Colour HSV. Use ▲ and the control wheel to adjust Hue & Saturation
	▶	YELLOW	▶	Set Hue to Yellow & Mode to Colour HSV. Use ▲ and the control wheel to adjust Hue & Saturation
FIXTURE SETUP	▶	DIMMING CURVE	▶	Choose from Linear, Exponential, Logarithmic or S curve Dimming curves with ▲ and ▼ buttons. Select with ▶
	▶	Calibrated RGBW	▶	Select this to 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 the dedicated High Speed mode for shooting at high frame rates
DMX SETUP	▶	DMX Address	▶	Use ▲ and ▼ to set DMX address from 1 to 460 (<512 to allow for all channels to be patched)
	▶	DMX Scenario	▶	Use ▲ and ▼ to set DMX Scenario from 1 to 20 (see DMX implementation tables for complete description of different scenarios)
	▶	DMX Terminated	▶	Use this to designate the unit as the end of the DMX chain
ADVANCED	▶	TRIGGERING	▶	Use an external pulse to trigger any effect
	▶	Shutdown Voltage	▶	Allows a minimum voltage level to be set that will shut down the fixture when the (battery) voltage drops to that level. Use ▲ and ▼ to set level.
	▶	Slave All Units	▶	When two or more fixtures are connected with a DMX cable, they will automatically slave together. If Slave All Units is selected, all units will be slaved as one. If this is not selected, then only units with the same DMX address will be slaved.
	▶	LCD Contrast	▶	Adjust the contrast on the LCD display using ▲ and ▼
	▶	Restore Defaults	▶	Reset the fixture to the factory defaults. Please note that this will lose any User Presets.
	▶	Information	▶	Shows the information screen for this fixture

6.1 Colour Mode – Normal CCT

The default Colour Mode is 'Normal CCT'. In this mode you can control Colour Temperature & Green / Magenta Bias. As with all settings, you can also control brightness, add effects & store as a User Preset.

6.1.1 Normal CCT: Change Colour Temperature

To change the colour temperature, press the ▲ **NEXT** button uuntil the CCT heading is displayed. Then use the control wheel to run smoothly through the available colour temperature range (2200K - 15000K). The display shows approximate colour temperature in Kelvin..

6.1.2 Normal CCT: Adjust Green / Magenta Bias

To adjust the Green / Magenta bias, press the ▲ **NEXT** button until the GRN/MAG heading is displayed. Then use the control wheel to smoothly adjust the colour balance by adding more Green or Magenta as desired.

6.2. Colour Mode – Colour HSV

In the Colour HSV mode you can control the Hue through the entire 360 ° Colour Spectrum and use Saturation to control the intensity of that colour. As with all settings, you can also control brightness, add effects & store as a User Preset.

6.2.1 Colour HSV: Change Hue

To change the Hue, press the ▲ **NEXT** button until the HUE degrees heading is displayed. Then use the control wheel to smoothly change the Hue from 0° to 360° on the Colour Spectrum.

6.2.2 Colour HSV: Adjust Saturation

To adjust the Saturation, press the ▲ **NEXT** button until the SATURATION heading is displayed. Then use the control wheel to smoothly de-saturate the Hue back to 3200K at 0°.

6.3. Colour Mode – Colour RGBW

In the Colour RGBW mode you can independently control the Red, Green, Blue & White LEDs. As with all settings, you can also control brightness, add effects & store as a User Preset.

6.3.1 Colour RGBW: Change Red, Green, Blue & White

To change the intensity of the Red, Green, Blue & White LEDs press the **▲ NEXT** button to toggle through the 4 colours and use the control wheel to smoothly change the intensity of each from 0 to 100%.

6.4. Colour Mode – Colour XY

In the Colour XY mode you can dial in any colour by entering the coordinates from the CIE 1931 XY coordinate plane. As with all settings, you can also control brightness, add effects & store as a User Preset.

6.4.1 Colour XY: Set X and Y coordinates

To add coordinates press the **▲ NEXT** button to toggle through the X and Y coordinate entry screens and use the control wheel to enter the desired coordinates.

6.5. Colour Mode – Lighting Gels

The 'Lighting Gels' colour mode gives you access to over 300 LEE & Rosco Gel colours through 9 Gel libraries. As with all settings, you can also control brightness, add effects & store as a User Preset.

6.5.1 Lighting Gels: Gel Library

Use the **▲ NEXT** button and control wheel to select a Gel library from the of the 9 available options:

- LEE Color Filters — 89 Gels available
- LEE Cosmetic — 18 Gels available
- LEE 600 Series — 9 Gels available
- LEE 700 Series — 41 Gels available
- LEE Color Correction — 39 Gels available
- ROSCO Cinelux — 46 Gels available
- ROSCO CalColor — 33 Gels available

- ROSCO Storaro Selection 10 Gels available
- ROSCO Color Correction 33 Gels available

6.5.2 Lighting Gels: Selecting a Gel

Press the ▲ **NEXT** button to enter the library and use the control wheel to view the Gels available.

6.5.3 Lighting Gels: Choose a Source Colour Temp

Press the ▲ **NEXT** button and use the control wheel to choose between a 3200K or 5600K source colour temperature for the selected Gel.

6.6. Colour Mode – Crossfades

In the 4 Crossfade modes you can combine the Normal CCT mode control with any of the other Colour modes and crossfade between the two selections.
As with all settings, you can also control brightness, add effects & store as a User Preset.

6.5.1 Crossfade CCT-HSV

Use the ▲ **NEXT** button to toggle through the Normal CCT settings and the HSV settings to define you're 2 colours. Use the ▲ **NEXT** button to toggle to the CROSSFADE heading and use the control wheel to smoothly fade between the 2 colours. At 0 CROSSFADE, your Normal CCT colour selection is output and at 100 CROSSFADE your HSV colour selection is output.

6.5.2 Crossfade CCT-RGBW

Use the ▲ **NEXT** button to toggle through the Normal CCT settings and the RGBW settings to define you're 2 colours. Use the ▲ **NEXT** button to toggle to the CROSSFADE heading and use the control wheel to smoothly fade between the 2 colours. At 0 CROSSFADE, your Normal CCT colour selection is output and at 100 CROSSFADE your RGBW colour selection is output.

6.5.3 Crossfade CCT-XY

Use the ▲ **NEXT** button to toggle through the Normal CCT settings and the XY settings to define you're 2 colours. Use the ▲ **NEXT** button to toggle to the CROSSFADE heading and use the control wheel to smoothly fade between the 2 colours. At 0 CROSSFADE, your Normal CCT colour selection is output and at 100 CROSSFADE your Gel colour selection is output.

6.5.4 Crossfade CCT-GEL

Use the ▲ **NEXT** button to toggle through the Normal CCT settings and the Gel settings to define you're 2 colours. Use the ▲ **NEXT** button to toggle to the CROSSFADE heading and use the control wheel to smoothly fade between the 2 colours. At 0 CROSSFADE, your Normal CCT colour selection is output and at 100 CROSSFADE your Gel colour selection is output.

6.7. Colour Mode – BUMP COLOUR

'Bump Colour' allows you to modify any colour (be that a White, Hue/Sat or Gel) by adjusting the colour along any of the axis: Red/ Cyan, Green/ Magenta or Blue/ Yellow. The saturation can also be increased or decreased. Colour bumps are saved and restored during power down but will be removed if the colour mode is changed or if a new Gel is selected. As with all settings, you can also control brightness, add effects & store as a User Preset..

6.7.1 BUMP COLOUR: Accessing Colour Bump

The 'Bump Colour' menu can also be accessed at any time by holding down the ◀ **MENU** button for two seconds. When the bump is enabled, ✻ is shown on the top left of the screen. To exit the colour bump screen, tap the ◀ **MENU** button once.

6.7.2 BUMP COLOUR: Adjust Saturation

To adjust the Saturation, press the ▲ **NEXT** button until the SATURATION heading is displayed. Then use the control wheel to smoothly increase or decrease saturation of the Hue. To reset the bump to 0, hold the ON/OFF button (whilst in the 'Bump Colour' screen).

6.7.3 BUMP COLOUR: Adjust Colour along axis

To adjust the Red/ Cyan, Green/ Magenta or Blue/ Yellow axis press the ▲**NEXT** button to toggle through until the axis you want to adjust is displayed. Then use the control wheel to smoothly adjust the colour mix along that axis. To reset the bump to 0, hold the ON/OFF button (whilst in the 'Bump Colour' screen).

6.8. Colour Mode – REMOVE BUMP

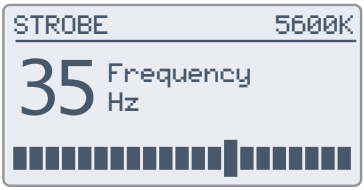
Select this menu item to remove the Colour Bump. Alternatively, the Colour Bump can be removed by holding down the ◀ **MENU** button for two seconds from within the colour bump menu.

Chapter 7: Effects Modes

Different lighting modes and effects such as Strobe and Timed Flash are available under **MENU->EFFECTS MODES.**

Use the NEXT button to switch between settings for adjustment, then the wheel to change that setting. Each time NEXT is pressed, the next setting is selected

The ON/OFF and FLASH buttons can also be used as normal to switch the effect on/off or to create 'bursts'.



In modes such as Strobe and Random, the display changes to show the selected setting when the **NEXT** button is pressed.

When the light output is turned off, the display goes negative (white text on black background).

7.1 NORMAL

All effects are disabled. Normal is for using the light as a normal solid light source. Intensity and Colour may be adjusted.

The ON/OFF button can be used to turn the light on or off, and the FLASH button can be used to create flashes.

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Light output level

See section 6.0 for infromation on different available colour settings.

7.2 DUAL LEVEL

Dual level allows two light levels to be set. This is useful if you need a modeling light level, but then want to flash brighter for a lightning or strobe effect.
Use the ON/OFF button to turn on or off the modeling light, and FLASH button to flash up to the Flash Level setting.

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Modeling light output level
FLASH LEVEL	1-50Hz	Light output when FLASH button pressed

7.3 STROBE AND FLASHES

The ON/OFF button can be used to turn the effect on or off, and the FLASH button can be used to create 'bursts' of strobe

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Strobe brightness level
FREQUENCY	1-50Hz	Frequency of strobe effect
DUTY CYCLE	1-99%	Duty cycle of strobe effect - the ratio between light OFF and ON times

7.4 RANDOM FLASHES

Creates a random pattern of flashes that can be adjusted to look similar to lightning, welding or other flashing effects.
The ON/OFF button can be used to turn the effect on or off, and the FLASH button can be used to create 'bursts' of random flashing.

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Maximum flash brightness
FREQUENCY	1-50Hz	Frequency of random effect
LENGTH	2-200mS	Maximum length of any flash
VARIATION	0-100%	Amount the brightness is allowed to vary from the BRIGHTNESS setting. 0 = No Variation (flashes will all be same brightness). 100 = Flashes can be any brightness

7.5 TIMED FLASH

Used to create flashes of a defined duration, similar to a Studio Strobe light. A modelling level can also be set.
The flash can be triggered by pressing the FLASH button, or if 'External Triggering' is enabled it can be triggered from an external source such as a camera hot shoe.

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Modeling light output level
FLASH LEVEL	0-100%	Light output when FLASH triggered
FLASH TEMP	1/5th - 1/5000th sec	Duration the light is flashed ON for

7.6 FLASH FRAMES

Use this mode to create flashes tightly synchronised to the camera shutter. Must be used in conjunction with a sync source such as Creamsource FlashBandit.
The duration of the flash ON and OFF is specified in Frames - e.g. Flash 1 frame ON, followed by 3 frames OFF, repeat.

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Maximum flash brightness
FRAMES OFF	1-255	No. of frames to flash OFF (i.e Skip)
FRAMES ON	1-255	No. of frames to flash ON

Note: Calibrate Sync mode should be run first to make sure fixture is aligned with the camera shutter to prevent 'torn frames' on cameras with rolling shutter. See next chapter.

7.7 COLOUR CYCLE

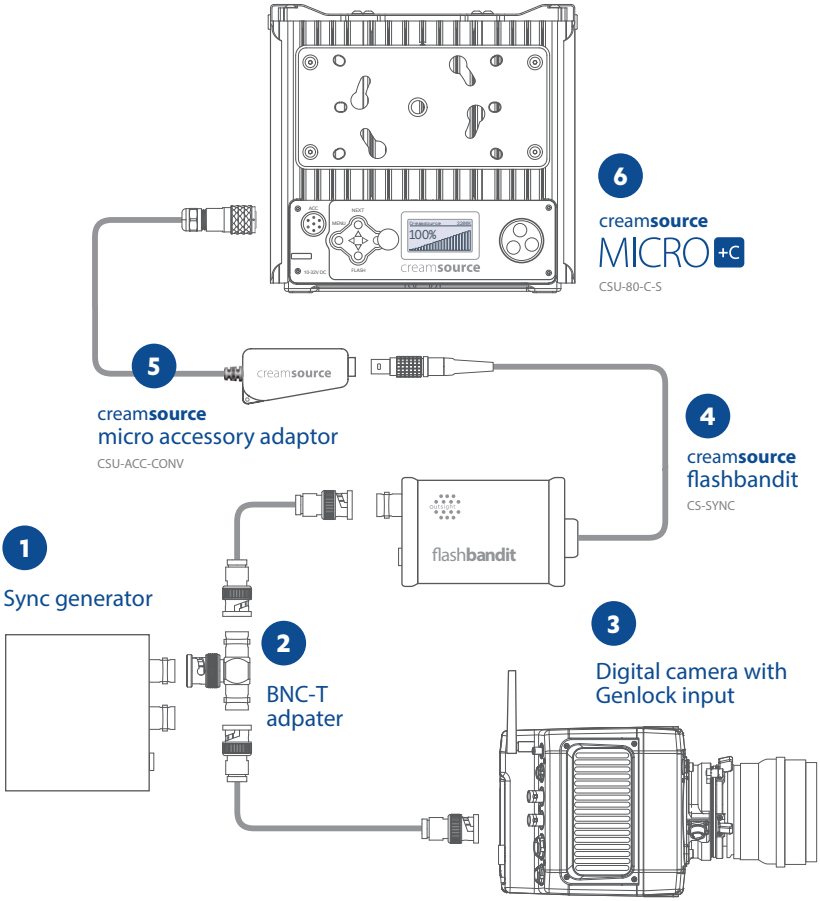
This mode cycles through all available hue's, at maximum saturation. The speed may be adjusted.

SETTING	RANGE	DESCRIPTION
BRIGHTNESS	0-100%	Light output level
SPEED	0-100	Speed of effect

Chapter 8: Syncing

8.1 Syncing to Camera using Flashbandit

The Creamsource can be triggered from an external source, such as a sync generator box (e.g. Ambient ACL202CT Lockit box), to ensure that it is synchronised with the camera shutter. This can be used to solve the frame tearing / flash banding problem most digital CMOS (and in fact some CCD/ lm) cameras can have with any flashing or strobing light source.



Setup

1. Set correct frame rate and format on Lockit box [1] (see instruction manual for device). This should match the frame rate and format you intend to shoot at
2. Plug a BNC T adapter [2] into the VIDEO/WORD output of the Lockit box
3. Connect camera GENLOCK input [3] to Lockit box [2] with coaxial cable. Follow camera instructions to enable external genlock input, and make sure camera is receiving genlock signal (if shooting on RED camera, see instructions on next page)
4. Plug Flashbandit adapter [4] into the Creamsource Accesory adaptor [5]
5. Plug the Creamsource Accesory adaptor [5] into Accessories input on Creamsource Micro+C [5]
6. Connect Flashbandit to Lockit Box using coaxial cable – blue light on Flashbandit should flash indicating valid signal
7. Check correct frame rate is shown on Creamsource display
8. Calibrate with Flashbandit (see 8.2 for details)

Synchronising to frame rates greater than 60fps to can difficult. For best results shoot at under this speed.

8.2 Calibrate with Flashbandit

This is a special mode used for calibrating the light to an external sync source, such as the FlashBandit sync box. It is used to make sure the camera shutter and Creamsource are synchronised, to prevent the flash-banding effects when shooting on a CMOS sensor camera. Access this mode by going to **MENU->EFFECTS->Calibrate Sync.** See next page for full details.

SETTING	RANGE	DESCRIPTION
PHASE	0-350 Deg	Phase offset of camera pulse
BRIGHTNESS	0-100%	Maximum flash brightness
COLOUR TEMP	2700k - 6500k	Approximate colour temperature

1. Setup as per page 26
2. Point camera directly at Creamsource light
3. Select **MENU->MODES->Calibrate Sync** on Creamsource. It will start to flash at the locked framerate
4. Use wheel to adjust phase on Creamsource. As you change the phase, a dark band should appear to move up and down on the camera monitor. Adjust until the dark band fills the monitor completely. Shooting with wide shutter angles and at higher speeds reduces the size of the dark band, making calibration more difficult.
5. The Creamsource is now calibrated. It can now be set to desired mode (Normal, Strobe etc) E.g. Select **MENU->MODES->Normal**

Shooting

Once the Creamsource has been calibrated, any of the modes may be used without the possibility of causing torn frames. The remote dimmer unit or DMX control can also be used safely. If the framerate, shutter angle or the phase of the camera shutter is adjusted, then you will need to re-calibrate.
You can use FlashBandit with more than one Creamsource unit only if you are NOT also using DMX or Remote. This is because the DMX or Remote overrides the communication channel between the Creamsources.

How to run multiple Creamsource WITH DMX/Remote:

1. You will need a FlashBandit unit for each Creamsource, and each unit will have to be calibrated (the same Phase angle will apply to all units).
2. Each Creamsource will then need to be set to the desired Mode (Strobe, Flash Frames etc)

How to run multiple Creamsources with Flashbandit and no DMX input

1. Link Creamsource together using DMX cable from DMX IN to DMX THRU connectors on back of unit
2. Plug the FlashBandit into the first unit (the Master)
3. Calibrate the Master unit as normal
4. Set up the desired effect on the Master
5. Set the second/third/fourth units (the Slaves) to 'Normal' mode - they will follow whatever the Master does

As there is communications required between the Master and Slave units, there will be a delay of around 500uS in synchronisation of the slaves. This may or may not be noticeable depending on the frame rate and shutter angle of the camera. Testing is highly recommended!

Note if you plug in DMX or Remote, then this will override the Master, and the Slaves will no longer be in sync. Note also the 'Timed Flash' effect will not sychronise between units, however all other effects will.

8.3 Slave Multiple Creamsource Units

Multiple Creamsource fixtures can be connected together to operate in unison, without an external DMX controller. Use DMX cable to connect the units together, and all units become automatically synchronised.

A DMX breakout cable is required to split out the DMX ports from the Accessories socket (Part Number CSU-DMX-Y).

A change on one unit (brightness, colour temperature etc.) will be reflected on all other units. This allows for a bank of Creamsource lights to be operated as if they were one large source.

To sync special effects modes such as Strobe and Random, the mode should be set up on one Creamsource unit only, with the other units set to Normal mode. This Creamsource fixture becomes the Master, and drives the others in sync with it. Any changes to settings, or using the ON/OFF and FLASH buttons should be done from this unit.

Make sure all units are running the latest firmware to ensure seamless option between Micro's, Mini's, Doppio's and Sky's

Chapter 9: DMX Control

Due to the water resistant nature of the Creamsource Micro+C, it does not have full size XLR DMX connectors. Instead, DMX is accessible by using a breakout cable plugged into the Accessory socket, which brings the signals out to 5 pin XLR connectors. Part number for the breakout cable is: **CSU-DMX-Y**

When a valid DMX signal is present, the manual controls for the unit are disabled. These are restored one second after loss of DMX signal.

The DMX address can be changed under **MENU->DMX SETUP.** **Please refer to our separate DMX table guide for detailed information.**

Termination

As with all DMX installations, the last unit in the chain should be terminated. This can be done through the menu system, by selecting **MENU->DMX SETUP ->DMX Terminated.**

External Effects Triggering

You can use an external pulse to trigger any effect including Timed Flash and Dual Level Flash. This essentially gives you a way to remotely access the FLASH button, and performs the same function as pressing and releasing this button. External triggering can be enabled by selecting: **MENU->ADVANCED->Triggering->External Trigger.** When enabled, the text EXT appears in the upper right of the LCD display.

- The Rising pulse edge triggers the effect, and is the same as pressing the FLASH button in.
- The Falling pulse edge is the same as releasing the FLASH button.

An input voltage from 5V – 24V can be used for trigger. The input impedance is 180kΩ

Chapter 10: Accessory Port Pinout and Specifications

Pinout for Creamsource Micro+C

Choose a 2 core cable of >17AWG (1.0mm^2) and wire both pins

Pin	Wire To
1	- Ve
2	+ Ve

Connector type to plug into Creamsource Lamp Head

Creamsource	Connector	Manufacturer	Part Number
Micro	Weipu 2 Pin Female	Weipu	SF1210/S2II

Connector type to plug into Creamsource Power Supply

Power Supply	Connector	Manufacturer	Part Number
CSU-PSU-90	Weipu 2 Pin Male	Weipu	SF1211/P2II

Accessories Port Pinout

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

Pin	Description
1	TRIGGER Input +Ve (5-24V Input, referenced to GND)
2	DMX Data (-Ve)
3	DMX Data (+Ve)
4	RS232 RX
5	RS232 TX
6	GND, Ground Reference
7	+12V Output, 200mA maximum

Specifications for Creamsource Micro+C (CSU-80)

Specifications for complete system	
Complete system includes Lamp Head, Power Supply and Power Cables	
Model Number	K-CSU-C-xxx (where xxx indicates kit type)
Input	100-240V AC, 50-60Hz, 1.3A MAX
Environmental	Max Ta:40°C
Certifications	EN55015
	EN61547
	EN61000-3-2
	EN61003-3
	EN60598.2.17
	DIN EN62471:03 - Risk Group 1
	FCC Part 15, Class A
	AS/NZS 61347.1 & AS/NZS 61347.2.13
	RoHS

Specifications for Power Supply	
Model Number	CSU-PSU-90
Input	100-240V AC, 50-60Hz, 1.3A
Output	24.0V DC, 3.75A MAX
Environmental	Max Ta:40°C
Protection Class	IP20
Weight	0.45kg / 1lbs

Specifications for Lamp Head	
Model Number	CSU-80-C-S
Input	10-32V DC, Max Ta: 40°C
Environmental	Max Ta:40°C
Weight	3.4kg / 7.5lbs (excluding yoke)
Protection Class	IP65
Dimensions	223mm x 207mm x 108mm /8.7" x 8.1" x 4.3" (excl. yoke)
Cooling	Passive (No fans)

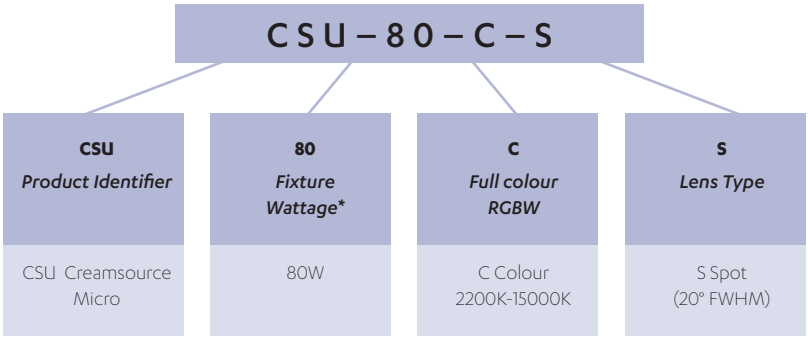
The front protection screen must be changed if it has become visibly damaged to such an extent that its effectiveness is impaired, for example by cracks or deep scratches.

DMX Implementation Tables

The Creamsource offers a number of different DMX implementations, in both 8 and 16 bit resolutions. **Please refer to our separate DMX table guide for detailed information.**

Part Numbers – what they mean

The compliance plate located on the bottom of the creamsource identifies the specific model, including colour temperature and lens type. See example part number below for explanation of how to interpret part numbers:



When supplied as a complete kit, including power supply and cables, the part number will have a K as a prefix. Check www.outsight.com.au for up to date list of kitting options and part numbers.

** We have changed this number from the LED count (single and bi-colour units) to Wattage (colour units).*

Other products and accessories

Creamsource Sky with optional Snapbag Sofbox

Creamsource Doppio Gaffer Kit

Creamsource Mini Gaffer Kit

Safety Information

High power LED light is emitted from this product. Do not stare directly into the beam, permanent eye damage could result

Case can get hot during normal operation. Please take care when handling unit. Maximum Surface Temperature Tc = 70°C

Power Supply has dangerous voltages inside. Do not open or expose to moisture

Falling hazard - make sure unit is properly secured and safety chain attached

Servicing is only to be done by an authorised agent. Sealing can be compromised by incorrect assembly

The standard Power Supply IS NOT water resistant, please make sure to keep in a dry location to avoid electric shock

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.

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.

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