

# SkyPanel® S360-C

USER MANUAL

L5.0016339



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# Introduction

Thank you for selecting the SkyPanel LED soft light from ARRI. The SkyPanel is a compact, ultra-bright and high-quality LED soft light. It is much more efficient than a soft light with a conventional light source.

The SkyPanel combines the advantages of the LED technology with the characteristic of a conventional soft light. The SkyPanel integrates seamlessly into established working practice. Lighting designers as well as Studios don't need to change its workflow. The optical system produces a soft, homogeneous light field.

The different models of the SkyPanel emit white light with a fixed color temperature or colored light with adjustable color temperature and adjustable green-magenta point. The light spectrum is optimized for excellent color rendition and fulfills perfectly the demands of modern, digital cameras. All models of the SkyPanel can be controlled using the common DMX512-A protocol, Art-Net, sACN or the fixture menu.

Please observe the SkyPanel Installation and Safety Manual. The manual is available for free download on the ARRI web site [www.arri.com](http://www.arri.com).

## Features

### Light Field

The SkyPanel offers the same functionality as a conventional softlight.

### Even Light Field

The SkyPanel softlight produces a homogeneous, single-shadow light field, delivering natural results.

### Vibrant Colors, Full Spectrum Lighting

True-to-life color rendition is an outstanding feature of the SkyPanel S360-C. The fully tunable white light of the SkyPanel can be adjusted for different skin tones, camera sensors and mixed light environments. Full gamut color mixing enables the rendition of all color shades. The extensive gel library (from firmware version 2.0) offers a wide range of familiar colors at the user's fingertips.

### Cool Light Beam

The SkyPanel S360-C does not emit any infrared or UV radiation and thus does not forward heat, making actors feel comfortable in the light beam.

## Properties

### Guiding Rails

Diffuser plates or an intensifier is placed on the front of the fixture and held by four locking pins. Both the diffuser and intensifier are equipped with guiding rails at the front to carry other accessories for shaping the light like a honey comb.

### Yoke

The carbon fiber yoke provides high strength with minimum weight. The short metal yoke is the perfect solution when the SkyPanel is mounted in a grid facing downwards.

### Tilt-Lock

The high strength tilt-locks on each side of the stirrup provide secure locking. It eliminates movement and slippage and ensures that the SkyPanel will stay where you put it.

## Control

All functions of the SkyPanel S360-C are controllable through DMX, CRMX, Art-Net or sACN. The SkyPanel is also fully RDM compatible (via DMX, CRMX and Art-Net with suitable controllers) and is equipped with an RDM feedback channel for reporting all set parameters including system status.

## Fixture Menu

For location applications the SkyPanel is equipped with a fixture menu for manual adjustment of intensity, color temperature and plus/minus green as well as hue and saturation.

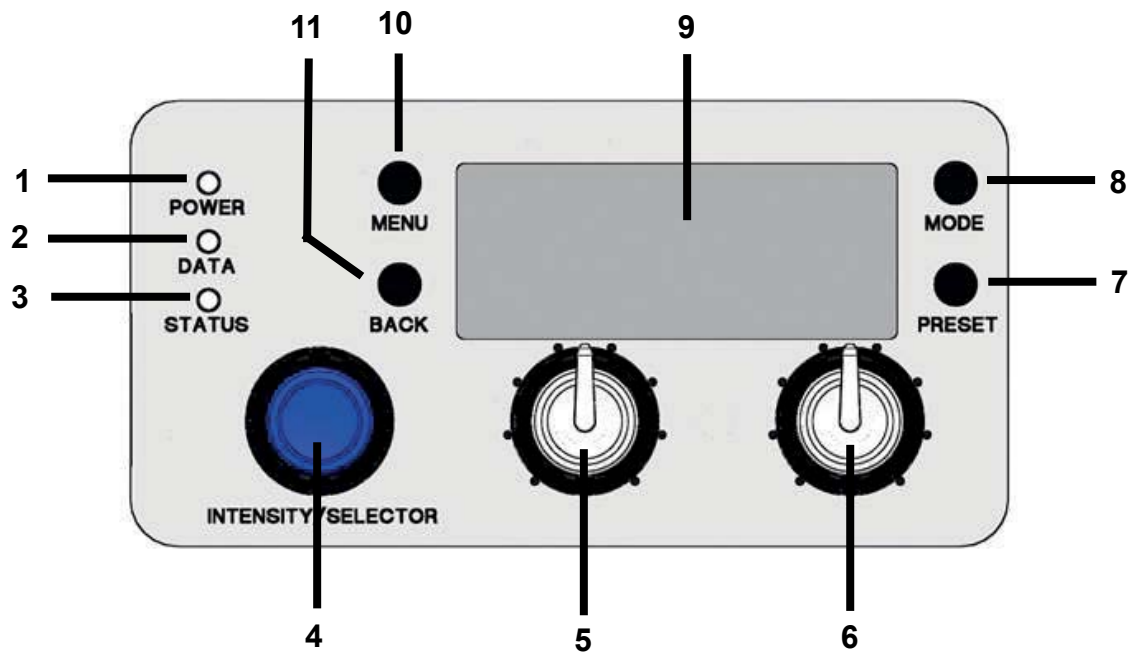
## Control Options

You can set up or control the SkyPanel with the options listed in the table below

| Option           | Control | Configuration | Information |
|------------------|---------|---------------|-------------|
| Fixture menu     | Yes     | Yes           | page 7      |
| DMX              | Yes     | No            | page 30     |
| CRMX (WDMX)      | Yes     | No            | page 13     |
| RDM              | No      | Yes           | page 28     |
| Art-Net and sACN | Yes     | No            | page 21     |
| ALSM             | No      | Yes           | page 21     |
| Web server       | No      | Yes           | page 22     |

# Fixture Menu

## Overview



## Features of the Fixture Menu

### POWER-LED (1):

| Color    | Indication                     |
|----------|--------------------------------|
| Green    | Fixture switched on. No error. |
| No color | Fixture switched off.          |

### DATA-LED (2):

| Color        | Indication                                                  |
|--------------|-------------------------------------------------------------|
| Blue         | The fixture receives a valid DMX signal.                    |
| Blue / green | The fixture receives a valid CRMX (WDMX) signal.            |
| Purple       | Master mode active                                          |
| White        | Receiving valid Art-Net signal, Gateway active              |
| Green        | Receiving valid Art-Net signal, Gateway not active          |
| Orange       | Receiving valid sACN signal, Gateway active                 |
| Cyan         | Receiving valid sACN signal, Gateway not active             |
| Red          | No communication between fixture menu and controller board. |
| No light     | The fixture receives no valid control signal.               |

**STATUS-LED (3):**

| Color                                                    | Indication                                                                 |
|----------------------------------------------------------|----------------------------------------------------------------------------|
| Green                                                    | No error. Normal temperature.                                              |
| Red flashing (0,5s rhythm)*                              | Warning fixture over temperature (only with fan modes LOW and High Speed). |
| Red*                                                     | Fixture over temperature.                                                  |
| Change from red to green*                                | Fixture normal temperature.                                                |
| Red flashing (0,25s Rhythm)*                             | Calibration data not loaded.                                               |
| <i>*Display lights up red when STATUS-LED is lit red</i> |                                                                            |

**INTENSITY/SELECTOR (I/S, 4)**

The INTENSITY/SELECTOR encoder I/S has two functions:

- Fixture menu closed: Setting the intensity.
- Fixture menu open: Use I/S to scroll through the menu, open sub menus and set parameters. Pressing the knob opens sub menus and confirms settings.

**Central Rotary Knob (5)**

Use the rotary knob to set the color temperature (CCT) or the color hue (HUE). The current function of the rotary knob is shown in the display (9) above the knob.

**Right Rotary Knob (6)**

Use the rotary knob to set the green / magenta saturation or the color saturation (SAT). The current function of the rotary knob is shown in the display (9) above the knob.

**PRESET (7)*****To call up a preset***

A short press of the PRESET button brings up the list of all available presets. Turn I/S (4) to select one of 10 factory presets and 10 user definable presets. Press I/S (4) to activate the preset.

***To store a preset***

Use the fixture menu to adjust the settings. Hold PRESET, until the preset save dialog opens. Turn I/S (4) to select a preset memory slot. Press I/S (4) to store the preset. Close the dialog with BACK.

**MODE (8)**

MODE swaps between CCT, HSI, GEL, Source Matching and RGBW mode of the SkyPanel.

**DISPLAY (9)**

The display shows the current settings and other information during normal operation. Press the MENU button (4) to open or close the fixture menu. Use I/S (4) and the BACK button (11) to navigate through the fixture menu.

**MENU (10)**

The MENU button opens the fixture menu. Press MENU when the fixture menu is open to close the menu and abort an action (Escape). Use I/S (4) to scroll through the menu, open sub menus and set parameters. Press MENU long to display the menus which are used most.



## BACK (11)

The BACK button closes a sub menu and aborts an action (Escape). Compared to the MENU button (10) the BACK button only closes the sub menu, but not the fixture menu.

Press BACK long to display the last used menus.

### To lock the fixture menu

- Press I/S in the home screen for 5 seconds to lock all buttons and knobs. Use the feature to prevent an accidental change of settings.
- The word „LOCKED“ appears on the display when locked.
- Press I/S in the home screen for 5 seconds again to unlock all buttons and knobs.
- Please find a overview in chapter “Overview of the Fixture Menu” on page 23.

## To Set the Operation Mode

Press the MODE button (8) to switch from CCT to HSI to GEL to Source to RGBW and back to CCT mode.

In CCT mode the SkyPanel generates white light with optimized color rendition. In HSI mode the SkyPanel generates colored light. If saturation is set very low, the SkyPanel generates white light, but not with optimized color rendition. The GEL mode offers an extensive color gel library. In Source mode the SkyPanel generates the light of traditional light sources. Use the RGBW mode to generate a RGBW color using the control panel.

### To set the Lighting Parameters in CCT Mode

Set the color temperature continuously with the central rotary knob (5). Set the Green-Magenta point continuously with the right rotary knob (6). The current setting is displayed above the rotary knobs.

### To set the Color in HSI Mode

Set the hue continuously with the central rotary knob (5). Set the saturation continuously with the right rotary knob (6). The current setting is displayed above the rotary knobs.

### To Set the Lighting Parameters in GEL Mode

Use the central rotary knob (5) to set the color temperature 3.200 K or 5.600 K. The right rotary knob (6) offers two options: „Best color“ displays the gel with optimized color quality, „Brightest“ displays the gel with optimized brightness.

- Press I/S (4) to open the gel library. Choose the gel manufacturer (Rosco or LEE) with the central rotary knob (5). Use the right rotary knob (6) to activate a gel category as shown in the table below.

| Rosco             | LEE              |
|-------------------|------------------|
| Color Correction  | Color Correction |
| CalColor          | Color Filters    |
| Storaro Selection | 600 Series       |
| Cinelux           | Cosmetic         |
|                   | 700 Series       |

- Turn I/S (4) to call up a gel from the gel set. Press I/S to select a gel or press BACK (11) to close the gel set and set the intensity with I/S (4). Press I/S (4) again, to re-open the gel set.

### To set the Light Source in Source Mode

Use the fixture menu to activate the source mode. Press I/S to call up a list of the light sources available. Use the right rotary knob (6) to select the category (please see page 56 for a detailed list). Turn I/S to select a light source. The SkyPanel calls up the selected light source in real time. Press I/S to choose the selected light source.

## To set the Color in RGBW Mode)

Use the MODE button to activate the RGBW color mode. The central rotary knob (5) has no function in RGBW mode. Use the right rotary knob (6) to select the functionality of the encoder I/S (4). Dependent on the selection of the right rotary knob, I/S is used to set the overall intensity of the red, green, blue and white color. Please note the setting „Direct Control“ or „RGBW Color Space (see page 11). You can store the RGBW color as a preset.

## To Set the Brightness in all Operating Modes

Set the brightness in both operating modes continuously with the encoder I/S (4). The setting is dynamic: Turning the encoder fast changes the intensity in coarse steps, turning it slow changes the intensity in fine steps.

## To Set the Dimming Curve

The SkyPanel supports four dimming curves. The dimming curves are global: They affect both the intensity control via the fixture menu or DMX, WDMX, Art-Net and sACN.

- **Linear:** The intensity changes proportional to the encoder I/S (4) or the channel value.
- **Exponential:** The resolution is high at lower intensity levels and low at higher intensity levels. Use this dimming curve when you need a high resolution at low intensity levels. This is the default setting.
- **Logarithmic:** The resolution is low at lower intensity levels and high at higher intensity levels. Use this dimming curve when you need a high resolution at high intensity levels.
- **„S“ curve:** The resolution is both high at lower and higher intensity levels and low at intensity levels in between. Use this dimming curve, when you need a high resolution at low and high intensity levels.

## To set the dimming curve

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Light Control“ is selected. Press I/S to open the menu.
3. Turn I/S, until „Dimming Curve“ is selected. Press I/S to open the menu.
4. Select the dimming curve by turning I/S. Press I/S to confirm the setting.

### NOTICE

The dynamic of an effect using the intensity is very low, when you choose a basic intensity value in a flat area of the dimming curve. Choose a different effect or select another dimming curve to create a more dynamic effect.

## To Set a Special Control Mode

The SkyPanel supports three special control modes. The special control modes are global: They affect both the intensity control via the fixture menu or DMX, WDMX, and Art-Net or sACN.

### Low End Mode

The Low End Mode optimizes the dimmer quality at low intensity levels and enables SkyPanel to generate accurate CCTs with high color rendition and smooth dimming at very low light levels. The Low End Mode can cause flickering when used with cameras shooting at high frame rates.

### Tungsten Mode

The tungsten Mode can mimic the dimming curve and strike on-and-off effect of a traditional tungsten lamp. The CCT warms as the light is dimmed and when the intensity drops to zero quickly there is a short after-glow of warm light. This mode is perfect for mixing the SkyPanel with tungsten sources or for producing a familiar effect.

### High Speed Mode

The High Speed mode generates flicker-free light for High Speed shootings. High Speed Mode has been tested up to 25.000 fps and down to 2° shutter angle with no flicker or roll bars. The intensity is fixed in High Speed mode. The only settings are 0% (black out) or 100% (full intensity). In High Speed mode the settings for low end mode, tungsten mode, effects and PWM frequencies are ignored.

**NOTICE**

Effects are de-activated in High Speed mode. When you try to call up an effect in High Speed mode, the warning „*Not Possible: High Speed Active*“ is displayed. When you try to activate the High Speed mode with an effect active, the warning „*Not Possible: Effect Active*“ is displayed. De-activate the effect or the High Speed mode to change the control mode.

**To set a special control mode:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Light Control“ is selected. Press I/S to open the menu.
3. Turn I/S, until „Special Modes“ is selected. Press I/S to open the menu.
4. Select the special mode by turning I/S. Press I/S to confirm the setting.
5. Press MENU to close the menu.

**Master/Slave Mode**

In Master/Slave mode the slave fixtures mimic the master fixture without delay. The master fixture generates a DMX signal on the 5-pin DMX Thru connector.

Connect a maximum of 32 SkyPanels and L-series fixtures to a DMX data link. Choose one SkyPanel to be the master fixture.

**NOTICE**

There must not be more than one SkyPanel in the data link set to master.

Setting more than one fixture to master or connecting a DMX controller to the data link causes one or all master fixtures to de-activate the master mode

**To set the Master Fixture:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Light Control“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „Master/Slave Mode“ is displayed. Press I/S to open the menu.
4. Set all fixtures in the data link to „Off“ to de-activate master mode. Select „On“ on one fixture in the data link to set the fixture as master fixture.
5. Press MENU to close the menu.

All fixtures in the data link will mimic the master fixture automatically and independent from their settings.

Please note when using the master/slave mode:

- Art-Net and sACN are de-activated on all fixtures in the data link.
- Changing the mode on the master fixture (CCT, HSI, GEL, Source Matching, RGBW) changes the mode on all slave fixtures accordingly.
- The settings DMX protocol version, DMX address, tungsten mode, low end mode, fans and signal loss behavior are changed accordingly to the settings of the master fixture.
- Connect only C version fixtures of one type in a data link.
- L-series fixtures do not support the GEL mode.
- Presets are not available.

**Calibrated RGBW Color Space**

When using RGBW mode, the SkyPanel by default does not generate colors in a calibrated color space. The color is generated with optimized brightness within the specified tolerances. You can activate the calibrated color space Kodak Pro Photo Color Gamut / ESTA standard E1.54 to force the SkyPanel to generate a calibrated color. The white point is 3.200 K. The calibrated color space is a global setting and is active in both on-board controls and DMX.

### **To Activate and De-activate the Calibrated RGBW Color Space:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Light Control“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „RGBW Color Space“ is displayed. Press I/S to open the menu.
4. Select „Direct Control“ to generate colors with optimized intensity. Select „Calibrated Color“ to generate a calibrated color.
5. Press MENU to close the menu.

## **Frequency Selection**

You can change the frequency in the fixture menu. Change the frequency, when you recognize flicker when in the camera picture or by your eyes. The default frequency is the highest frequency. You can change the frequency in 10 steps. Frequency 1 is the highest frequency, while frequency 10 is the lowest frequency setting.

### **To set the frequency:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Light Control“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „Frequency Selection“ is displayed. Press I/S to open the menu.
4. Select a frequency. Press I/S to confirm the setting. The frequency is set immediately.
5. Press MENU to close the menu.

## **DMX Address**

When you control the SkyPanel using DMX in a DMX data network, you must assign a DMX address to the fixture.

### **To assign a DMX address:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „DMX Settings“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „DMX Address“ is displayed. Press I/S to open the menu.
4. Select a DMX address. Press I/S to confirm the setting.
5. Press MENU to close the menu.

## **DMX Protocol**

The SkyPanel offer different DMX protocols. Please find a detailed overview of all DMX protocols on page 30.

### **To Set a DMX Protocol:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „DMX Settings“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „DMX Protocol“ is displayed. Press I/S to open the menu.
4. Select a DMX protocol. Press I/S to confirm the setting.
5. Press MENU to close the menu.

## **DMX-Signal-Loss Behavior**

You can set the behavior of the fixture when the control signal is lost. The table below shows the available options:

| Option                      | Description                                                                                                                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hold Last Command</b>    | The last received DMX values are used until the fixture is switched off or valid DMX data is received again.                                                                                 |
| <b>Black Out</b>            | The fixtures douses to 0% intensity immediately.                                                                                                                                             |
| <b>Hold 2 Min. Fade Out</b> | The last received DMX values are used for 2 minutes. After 2 minutes the fixture douses to 0% intensity. When valid DMX data is received after less than 2 minutes, these data will be used. |

### **To set the DMX-Signal-Loss Behavior:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „DMX Settings“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „DMX Loss Behavior“ is displayed. Press I/S to open the menu.
4. Select the setting by turning I/S. Press I/S to confirm the setting.
5. Press MENU to close the menu.

## **Wireless DMX**

The SkyPanel S360-C is equipped with a wireless DMX receiver supporting the LumenRadio CRMX protocol.

If there is no DMX traffic received via a wired interface (DMX-512A, ArtNet or sACN) and wireless DMX is activated via the fixture menu, the SkyPanel S360-C can linked to a wireless DMX transmitter via an RDM discovery command. Once linked successfully, the SkyPanel S360-C processes wireless DMX data and respond to RDM requests only via the wireless link.

The DATA LED on the fixture menu panel fades from blue to green followed by a 2 second fade from green to blue as soon as CRMX (WDMX) is active AND CRMX data is received and processed by the SkyPanel S360-C.

If the WDMX Data State is set to OFF, no wireless DMX and no wireless RDM traffic will be processed. However, „Unlinking“ and Linking is still possible in State OFF.

To Unlink a SkyPanel S360-C from a Wireless DMX transmitter:

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S until „DMX Settings“ is displayed. Press I/S to open the menu.
3. Turn I/S until „WDMX Settings“ is displayed. Press I/S to open the menu.
4. Turn I/S until „WDMX Connection Unlink“ is displayed. Press I/S to open the menu.
5. Select the setting „Yes“ by pressing the I/S.
6. The fixture is now unlinked from the transmitter. Press MENU to close the menu.

As soon as DMX or RDM traffic is detected via the other interfaces, any wireless DMX or RDM data will be ignored and the SkyPanel S360-C processes the wired DMX/RDM traffic.

## **To set the Fan Mode**

You can set the fan mode to adapt the cooling and noise level to the environment. The table below shows the available options:

| Fan Mode          | Max. power    | Description                                        |
|-------------------|---------------|----------------------------------------------------|
| <b>Normal</b>     | <b>1500 W</b> | The fans operate temperature regulated.            |
| <b>Quiet Mode</b> | <b>1200 W</b> | The fans operate constantly at low speed (silent). |
| <b>Variable</b>   | <b>1200 W</b> | The fans operate temperature regulated.            |
| <b>High Temp</b>  | <b>1200 W</b> | The fans run at maximum speed.                     |

### **To set the fan Mode**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Fan Mode“ is displayed. Press I/S to open the menu.
3. Select the Fan mode by turning I/S. Press I/S to confirm the setting.
4. Press MENU to close the menu.

## Lighting Effects

The SkyPanel offers an effect library with a wide variety of lighting effects used on set or in a TV studio. The SkyPanel replaces many special effect devices with its unique effect library.

You can call up all effects using the fixture menu or via DMX, Art-Net or sACN. Every effect offers specific parameters. A lighting effect can be stored in a preset slot for quick access at a later point.

### **To select and activate an effect:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Lighting Effects“ is displayed. Press I/S to open the menu.
3. Select the desired effect by turning I/S.
4. Press I/S to start the effect.
5. Set the parameters, as described below.

### **To stop an effect:**

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Lighting Effects“ is displayed. Press I/S to open the menu.
3. Select the option „Off“. Press I/S to confirm.

### **Start / Stop function of the effect**

If an effect is running, press I/S to stop the effect execution. Press I/S again to restart the effect from the beginning. While stopped, the SkyPanel performs a black out and a P:<Effect> shows the status in the display. The start / stop function is only available in the effects control screen.

The SkyPanel provides the following effects in DMX modes 22 (8 bit) and 23 (16 bit). Intensity is a parameter for all effects:

### **Party**

The Party effect calls up the color spectrum or changes the color temperature from warm to cold and vice versa in an endless loop.

Parameters:

- Saturation
- Speed

If you do not need the effect for shooting, you will need it for the party when the movie is done!

### **Candle**

Low flickering of a warm light, slower than fire and less energetic. The light gently fades in CCT and brightness with periods of static behavior in between. It consists of „flutters“ and static periods.

Parameters:

- CCT range
- Speed

### **Clouds Passing**

Slow variations in intensity and CCT that can be offset. The effect is most useful when using many Sky-Panels that are offset to prevent a simultaneous effect on different fixtures.

Parameters:

- Offset
- Passing speed
- Sync

### **Club Lights**

Random colors that pulse, flash and fade.

Parameters:

- Color variety
- Speed
- Sync

### **Color Chase**

Creates a color chasing effect over the surface of the SkyPanel using multiple LED light engines.

Parameters:

- Saturation
- Speed

- Offset
- Sync

### **Cop Car**

Creates an on-board blue and red flashing effect to mimic a police car, an ambulance or a fire brigade. Do not use the effect in public areas without permission.

Parameters

- Color combination
- Flash pattern

### **Fire**

Creates a flickering fire effect.

Parameters:

- CCT range
- Flicker speed

### **Fireworks**

Bright flashes of color and have a quick start and fade to zero intensity.

Parameters:

- Color combination
- Speed

### **Light Strobe**

Generates a white or colored strobe effect with adjustable speed from 25 flashes / sec to 1 flash / sec.

## **DANGER**

### **DANGER! Risk of injury or death through epileptic seizure.**

Do not use the effect near stairways, in corridors or near public exits.

Provide advance notice that strobe lighting is in use. Display advisory notices on the set, at the point of ticket sales, on tickets if possible, in the program, and at the entrance(s) to the venue or studio.

Avoid extended periods of continuous flashing, particularly at frequencies of 10 to 20 flashes per second. At flash rates below 5 flashes per second, it is estimated that only 5% of flicker-sensitive persons will be at risk of seizure

Make sure that personnel at the venue are trained in the care of a person who is having an epileptic seizure and able to provide care if necessary.

If strobes are in use and a person has a seizure, switch the strobes off immediately.

Mount strobes as high above head height as practicable.

Parameters:

- CCT
- Green-Magenta point
- Cross fade
- Saturation
- Flash speed

### **Lightning**

Creates an on-board flashing lightning effect. Intensity, speed and frequency of flashing can be controlled.

Parameters:

- CCT
- Green-Magenta point
- Speed
- Frequency
- Sync

### Paparazzi

Effect that mimics a flash bulb or modern camera flash.

Parameters:

- CCT
- Flash type
- Frequency

### Pulsing

A pulsing or throbbing effect where the color and speed can be set.

Parameters:

- CCT
- Green-Magenta point
- Cross fade
- Color
- Saturation
- Frequency
- Span

### Television

Creates an on-board TV effect. Cool CCT that changes intensity every few seconds.

Parameters:

- CCT range
- Speed

## To Activate and set Effect Parameters with the Fixture Menu

The rotary knobs adjust the effect parameters when an effect is active. For all effects applies:

- The selected effect is displayed in the left top corner of the display.
- Intensity / Selector adjusts the intensity.
- Press I/S to stop the effect (black out).
- Press I/S again to restart the effect.
- Press MODE long (> 1 sec) to activate the parameters described below (column „Mode“, not available for all effects).
- Press MODE again to close the effect control and regain normal control.

The table below shows the parameters you can adjust with the rotary knobs for each effect:

| Effect                | Mode | Rotary Knob | Parameter         |
|-----------------------|------|-------------|-------------------|
| <b>Candle</b>         |      | Central     | CCT range         |
|                       |      | Right       | Speed             |
| <b>Clouds Passing</b> |      | Central     | Offset            |
|                       |      | Right       | Speed             |
| <b>Club Lights</b>    |      | Central     | Color range       |
|                       |      | Right       | Speed             |
| <b>Color Chase</b>    |      | Central     | Offset            |
|                       | X    | Central     | Saturation        |
|                       |      | Right       | Speed             |
| <b>Cop Car</b>        |      | Central     | Color combination |
|                       |      | Right       | Flash pattern     |
| <b>Fire</b>           |      | Central     | CCT range         |
|                       |      | Right       | Speed             |
| <b>Fireworks</b>      |      | Central     | Color combination |
|                       |      | Right       | Speed             |



| Effect              | Mode | Rotary Knob | Parameter            |
|---------------------|------|-------------|----------------------|
| <b>Light Strobe</b> | X    | Central     | Speed                |
|                     |      | Central     | Normal functionality |
|                     |      | Right       | Normal functionality |
| <b>Lightning</b>    | X    | Central     | Frequency            |
|                     |      | Central     | CCT range            |
|                     |      | Right       | Speed                |
| <b>Paparazzi</b>    | X    | Right       | Green-Magenta point  |
|                     |      | Central     | Frequency            |
|                     |      | Central     | CCT range            |
| <b>Pulsing</b>      | X    | Right       | Flash bulb           |
|                     |      | Right       | Green-Magenta point  |
|                     |      | Central     | Normal functionality |
| <b>Television</b>   | X    | Central     | Span                 |
|                     |      | Right       | Normal functionality |
|                     |      | Right       | Frequency            |
| <b>Television</b>   |      | Central     | CCT range            |
|                     |      | Right       | Speed                |

When changing a parameter of an active effect through the fixture menu or via DMX, the internal effect generator recalculates the effect in real time. The effect can stutter, step or be unsmooth for a short period. Do not change parameters of an active effect if the effect needs to run smooth.

## To Set the Display Behavior

You can set the intensity of the background illumination, the contrast, the behavior of the background illumination and the orientation of the display content.

### To set the display behavior:

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Display Setup“ is displayed. Press I/S to open the menu.
3. Turn I/S, until „Display Illumination“ is displayed. Press I/S to open the menu. Select the desired setting by turning I/S. Press I/S to confirm the setting.
4. Turn I/S, until „Display Brightness“ is displayed. Press I/S to open the menu. Select the desired brightness by turning I/S. Press I/S to confirm the setting.
5. Turn I/S, until „Display Contrast“ is displayed. Press I/S to open the menu. Select the desired contrast by turning I/S. Press I/S to confirm the setting.
6. Turn I/S, until „Display Rotation“ is displayed. Press I/S to open the menu. Select the desired setting by turning I/S. Press I/S to confirm the setting.
7. Turn I/S, until „Error Mode Display“ is displayed. Press I/S to open the menu. Select the desired setting by turning I/S. Press I/S to confirm the setting.

Please refer to section “Overview of the Fixture Menu” on page 23 for a detailed explanation of the options.

## Preset Lists

The fixtures preset list can be saved to an USB memory stick and be uploaded to another SkyPanel.

### NOTICE

Disconnect all DMX cables from the product before using an USB memory stick. The data transfer between the product and the USB memory stick might be disturbed due to interferences.

The USB-A port can power small USB devices. The maximum current is 500 mA @ 5V. Do not overload the USB-A port.

#### **To Save a preset List:**

1. Connect an USB memory stick to the USB-A connector of the SkyPanel.
2. Press the MENU button (10) to open the fixture menu.
3. Turn I/S, until „USB Functions“ is selected. Press I/S to open the menu.
4. Turn I/S, until „Save Presets“ is selected. Press I/S to open the menu.
5. Select „Yes“ and press I/S to confirm the setting. Select „No“ to abort saving the preset list.
6. The preset list will be saved on the USB memory stick.

Up to 30 preset lists can be stored in the root directory of the USB memory stick. The file name is **<product serial number>-Presetxx.json**. The SkyPanel is looking for „Presetxx.json“ to identify a preset list on an USB memory stick. Be sure to keep the string when renaming a preset list. Otherwise the file will not be found by the SkyPanel.

#### **To Load a Preset List:**

1. Connect an USB memory stick with one or more preset lists to the USB-A connector of the SkyPanel.
2. Press the MENU button (10) to open the fixture menu.
3. Turn I/S, until „USB Functions“ is selected. Press I/S to open the menu.
4. Turn I/S, until „Load Presets“ is selected. Press I/S to open the list of the preset lists available in the root directory of the USB memory stick.
5. Turn I/S, to select a preset list.
6. Press I/S to load the selected preset list. The internal preset list of the SkyPanel will be overwritten by the selected preset list.

## To Save and Load Fixture Settings

The fixtures settings can be saved to an USB memory stick and be uploaded to another SkyPanel. The file contains all fixture settings except the DMX address and IP settings.

#### **To Save the Fixture Settings:**

1. Connect an USB memory stick to the USB-A connector of the SkyPanel.
2. Press the MENU button (10) to open the fixture menu.
3. Turn I/S, until „USB Functions“ is selected. Press I/S to open the menu.
4. Turn I/S, until „Save Fix. Settings“ is selected. Press I/S to open the menu.
5. Select „Yes“ and press I/S to confirm the setting. Select „No“ to abort saving the fixture settings.
6. The fixture settings will be saved on the USB memory stick.

Up to 30 fixture settings files can be stored in the root directory of the USB memory stick. The file name is **<product serial number>-Clonexx.json**. The SkyPanel is looking for „Clonexx.json“ to identify a fixture settings file on an USB memory stick. Be sure to keep the string when renaming a fixture settings file. Otherwise the file will not be found by the SkyPanel.

#### **To Load Fixture Settings:**

1. Connect an USB memory stick with one or more fixture settings files to the USB-A connector of the SkyPanel.
2. Press the MENU button (10) to open the fixture menu.
3. Turn I/S, until „USB Functions“ is selected. Press I/S to open the menu.
4. Turn I/S, until „Load Fix. Settings“ is selected. Press I/S to open the list of the fixture settings files available in the root directory of the USB memory stick.
5. Turn I/S, to select a fixture settings file.
6. Press I/S to load the selected fixture settings. The SkyPanel restarts with the new fixture settings after successful upload.

## To Save the Error and Service Log

For diagnosis purpose you might be asked to send the error and service log to the ARRI service. The log files can be downloaded to an USB memory stick.

The file name contains the date, time and serial number of the fixture.

### **To save the log files:**

1. Connect an USB memory stick to the USB-A connector of the SkyPanel.
2. Press the MENU button (10) to open the fixture menu.
3. Turn I/S, until „USB Functions“ is selected. Press I/S to open the menu.
4. Turn I/S, until „Save Error Log“ is selected. Press I/S to open the menu.
5. Select „Yes“ and press I/S to confirm saving the log files. Select „No“ to abort saving the log files.
6. The log files will be saved on the USB memory stick.

## To Read out Fixture Information

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Enabled Functions“ is displayed. Press I/S to open the menu.
3. Turn I/S to display readouts.
4. Press I/S to change settings, if applicable.

## To Perform a Factory Reset

1. Press the MENU button (10) to open the fixture menu.
2. Turn I/S, until „Factory Reset“ is displayed. Press I/S to open the menu.
3. Turn I/S to choose the option „Yes“ and perform a factory reset. Press BACK (11) to abort.
4. The SkyPanel reboots with its factory settings.

# Fixture Control

The SkyPanel offers, depending on the model, up to 23 control modes. Use the 8 bit modes with basic controllers like dimmer consoles.

ARRI recommends the use of the 16 bit modes in combination with controllers supporting 16 bit resolution to obtain best results. The high resolution provides smooth dimming and precise color adjustments.

The coarse / fine modes utilize two channels for most parameters and provide higher resolution compared to the 8 bit modes in combination with controllers that do not support true 16 bit resolution. One channel sets the coarse value between 0 and 255 of the function. Each step is divided in 256 increments using the fine channel. This way it is possible to control the light very precise without using a true 16 bit resolution.

## CCT and RGBW

This mode provides control of intensity, color temperature, green-magenta point and individual channels for controlling the red, green, blue and white color (only SkyPanel-C).

### CCT

Simple white-only mode. It is used when the number of available channels of the controller is very limited. It provides control of intensity, color temperature and green-magenta point.

### CCT & HSI

Provides control of intensity, color temperature, green-magenta point, hue and saturation (HSI = hue, saturation, intensity). In HSI mode (only SkyPanel-C) the color and intensity is very even over the fixtures as it is controlled using color algorithms which take the tolerances of the light engines into account during calculation.

### RGBW

Simple mode for controlling the overall intensity and the red, green, blue and white intensity when only a limited number of channels is available. Please find more information about the RGB color space on page 11.

### HSI

Simple mode for controlling hue, saturation and intensity when only a limited number of DMX channels is available.

### GEL

The GEL mode offers an extensive color filter list. The color temperature has two settings, 3.200 K and 5.600 K. The intensity can be controlled as usual.

## xy Coordinates

The xy mode determines the color displayed by its xy coordinates in the CIE 1931 diagram. Set the x and y coordinate with 8 bit or 16 bit resolution. One channel determines the transition type when fading from one color to another color.

## Source Matching

Select from a list of light sources to match that color and spectrum. Source Matching saves a lot of time when you need a specific illumination. Select from 50 different light sources the one which fits best to your demands.

## Light Effects

The SkyPanel contains a light effect engine with 13 different light effects. Activating a light effect is very easy. Just activate a light effect via the fixture menu, DMX, Art-Net or sACN and set the parameters to get exactly the effect you need.

Please find a detailed description of all modes in chapter "Protocol" on page 30.

### NOTICE

Depending on the selected mode the channels required for each SkyPanel should be allocated in the controller to provide independent control of all SkyPanels connected to the controller.

# Art-Net and sACN

From firmware version 2.0 the SkyPanel supports Art-Net. Art-Net is a network protocol to control devices.

Here is a brief explanation of some basic terms being used by Art-Net. For more detailed information, please visit the web site of the Art-Net developers: [www.artisticlicence.com](http://www.artisticlicence.com).

Please find more information about sACN in the standard ANSI E1.31.

## Art-Net IP Address

When setting the IP address manually, please take care the address is in the range 2.0.0.1 to 2.255.255.255 (Network switch off) or 10.0.0.1 to 10.255.255.255 (Network switch on). Any other range is not according to the Art-Net standard and problems might occur.

## Art-Net Net

A group of 16 consecutive Sub-Nets or 256 consecutive Universes is referred to as a net. There are 128 Nets in total.

## Sub-Net

A group of 16 consecutive universes is referred to as a sub-net. (Not to be confused with the subnet mask).

## Universe

A single DMX512 frame of 512 channels is referred to as a Universe.

## Art-Net Merge Mode

The Art-Net protocol allows multiple nodes or controllers to transmit ArtDmx data to the same universe. Merging is limited to two sources, any additional sources will be ignored by the Node.

## Art-Net Gateway

With enabled Art-Net gateway the SkyPanel makes all 512 channels of the used universe available at its DMX connectors.

The menu „Art-Net Settings“ contains all parameters to set up a SkyPanel in an Art-Net network. Please find a detailed description in the chapter "Features of the Fixture Menu" on page 7.

## ARRI Lighting Service Manager

Please find information about the features and the functionality of the ARRI Lighting Service Manager in the user manual for the ARRI Lighting Service Manager. You can download it with the ARRI Lighting Service Manager software-bundle from the ARRI web site [www.arri.com/lightingsoftware](http://www.arri.com/lightingsoftware) free of charge.

## Web Server

The SkyPanel provides a web page accessible via http, when connected to a network. Type in the IP address of the SkyPanel in your web browser to open the web page and change the settings listed below. The Web Server can also be found by using a Bonjour service to discover the fixture and open the Web Server page without needing to know the IP address.

### NOTICE

Always use the latest version of your web browser. Earlier versions might not be compatible to the web page of the SkyPanel.

The table shows the settings you can change:

| Option              |
|---------------------|
| DMX Settings        |
| RGBW Color Space    |
| Fan Mode            |
| Dimming Curve       |
| Special Modes       |
| Light Effects       |
| Display Settings    |
| Network Settings    |
| Low Battery Warning |
| USB Mode            |
| Factory Reset       |

#### **To Save Settings**

You can save the settings visible on the web page to a file. Click „Download Settings“ to start the download to your computer.

#### **To Load Settings**

You can upload a settings file to the SkyPanel. Click „Upload Settings“ to start the upload of a settings file. A file selector menu will open to select the settings file.

#### **To Save or Load Presets via the Web Server**

You can save and load a preset list via the web server. Click „Download Presets“ to save a preset list on your computer. Click „Upload Presets“ to upload a preset list saved on your computer to the SkyPanel.

#### **To Activate a Password Protection**

You can activate a password protection for changing settings via the web server page. The password can be set, modified and deactivated using the web server page.

If password protection has been activated via ALSM or the web server page, the SkyPanel only allows changing settings via the web server if a valid password has been entered at the beginning of each http session.

Per default there is no password check. A factory reset deactivates a previously activated password.

The default user name is „webuser“.

# Overview of the Fixture Menu

From Firmware-Version 3.0

Open and close the fixture menu the MENU button. BACK closes a sub menu and aborts an action.

Turn INTENSITY / SELECTOR to scroll. Press INTENSITY / SELECTOR to select an item

| Level 1       | Level 2              | Level 3             | Level 4                           | Explanation (default setting = bold)                                       |
|---------------|----------------------|---------------------|-----------------------------------|----------------------------------------------------------------------------|
| DMX Set-tings | DMX Address          | 001 - 512           |                                   | Start address                                                              |
|               | DMX Protocol         | P1 - P23            |                                   | Protocol (see page 30)                                                     |
|               | DMX Loss Behav-ior   | Hold Last Command   |                                   | Fixture holds the last received control values                             |
|               |                      | Black Out           |                                   | Fixture douses the dimmer                                                  |
|               |                      | Hold 2 Min Fade Out |                                   | Hold the last received values for 2 min. then douse                        |
|               | DMX Protocol Version | Version 3.4         |                                   | Version of the DMX protocol                                                |
|               |                      | Version 4.0         |                                   |                                                                            |
|               |                      | Version 4.1         |                                   |                                                                            |
|               |                      | Version 4.2         |                                   |                                                                            |
|               |                      | Version 4.3         |                                   |                                                                            |
|               | RDM State            | On                  |                                   | RDM communication active                                                   |
|               |                      | Off                 |                                   | RDM communication not active                                               |
| WDMX Settings | WDMX State           | On                  | WDMX activated                    |                                                                            |
|               |                      | Off                 | WDMX deactivated                  |                                                                            |
|               | Connection           | Unlink              | Link (NO) or Unlink (YES) fixture |                                                                            |
| Fan Mode      | Normal               |                     |                                   | Fans temperature regulated, P(max.) 1.500 W                                |
|               | Quiet Mode           |                     |                                   | Fan speed low, P(max.) 1.200 W                                             |
|               | Variable             |                     |                                   | Fans temperature regulated, P(max.) 1.200 W                                |
|               | High Temp            |                     |                                   | Fan speed high, P(max.) 1.200 W                                            |
| Light Mode    | CCT                  |                     |                                   | White light, color temperature and green / magenta correction adjustable   |
|               | HSI                  |                     |                                   | Colored light, hue and saturation adjustable                               |
|               | Gel                  |                     |                                   | GEL mode, gel library available, color tempera-<br>ture 3.200 K or 5.600 K |
|               | Source Matching      |                     |                                   | The SkyPanel emulates a specific light source.                             |
|               | RGBW                 |                     |                                   | Color mixing in RGBW mode.                                                 |
| Light Control | Dimming Curve        | Exponential         |                                   | Exponential dimming curve                                                  |
|               |                      | Linear              |                                   | Linear dimming curve                                                       |
|               |                      | Logarithmic         |                                   | Logarithmic dimming curve                                                  |
|               |                      | „S“ Curve           |                                   | Combination of exponential and logarithmic dimming curve                   |
|               | Special Modes        | Low End Mode        | Off                               | Flicker free light                                                         |
|               |                      |                     | On                                | Optimized dimming behavior at low intensity levels                         |
|               |                      | Tungsten Mode       | Off                               | Color temperature optimized when dimming                                   |
|               |                      |                     | On                                | Emulates the behavior of a tungsten light                                  |
|               |                      | High Speed Mode     | Off                               | Highspeed mode OFF                                                         |
|               |                      |                     | On                                | Highspeed mode ON                                                          |
|               | Master/ Slave Mode   | Off                 |                                   | Master/Slave Mode OFF                                                      |
|               |                      | On                  |                                   | Master/Slave Mode active                                                   |
|               | RGBW Color Space     | Direct Control      |                                   | The color is mixed in RGBW mode direct (opti-<br>mized brightness).        |
|               |                      | Calibrated Color    |                                   | The RGBW color is calibrated (optimized hue)                               |

| Level 1                  | Level 2              | Level 3             | Level 4          | Explanation (default setting = bold)                                                                            |
|--------------------------|----------------------|---------------------|------------------|-----------------------------------------------------------------------------------------------------------------|
| Light Control<br>(cont.) | Frequency Selection  | <b>Default</b>      |                  | Default frequency (highest frequency)                                                                           |
|                          |                      | Frequency 1         |                  | Adjusted frequency                                                                                              |
|                          |                      | Frequency 2         |                  |                                                                                                                 |
|                          |                      | Frequency 3         |                  |                                                                                                                 |
|                          |                      | Frequency 4         |                  |                                                                                                                 |
|                          |                      | Frequency 5         |                  |                                                                                                                 |
|                          |                      | Frequency 6         |                  |                                                                                                                 |
|                          |                      | Frequency 7         |                  |                                                                                                                 |
|                          |                      | Frequency 8         |                  |                                                                                                                 |
|                          |                      | Frequency 9         |                  |                                                                                                                 |
|                          |                      | Frequency 10        |                  |                                                                                                                 |
| Lighting Effects         | <b>Off</b>           |                     |                  | No stand alone effect                                                                                           |
|                          | Party Effect         |                     |                  | Party mode                                                                                                      |
|                          | Candle               |                     |                  | Candle                                                                                                          |
|                          | Clouds Passing       |                     |                  | Clouds passing                                                                                                  |
|                          | Club Lights          |                     |                  | Club light                                                                                                      |
|                          | Color Chase          |                     |                  | Color chase                                                                                                     |
|                          | Cop Car              |                     |                  | Cop car                                                                                                         |
|                          | Fire                 |                     |                  | Fire                                                                                                            |
|                          | Fireworks            |                     |                  | Fireworks                                                                                                       |
|                          | Light Strobe         |                     |                  | Light strobe                                                                                                    |
|                          | Lightning            |                     |                  | Lightning                                                                                                       |
|                          | Paparazzi            |                     |                  | Paparazzi                                                                                                       |
|                          | Pulsing              |                     |                  | Pulsing                                                                                                         |
|                          | Television           |                     |                  | Television                                                                                                      |
| Display Setup            | Display Illumination | <b>Always On</b>    |                  | Display illumination always on                                                                                  |
|                          |                      | Off After 10 Sec.   |                  | Display illumination douses 10 sec. after last menu action                                                      |
|                          | Display Brightness   | 0 - <b>10</b>       |                  | Brightness of the display illumination                                                                          |
|                          | Display Contrast     | 01 - <b>03</b> - 10 |                  | Contrast of the display content                                                                                 |
|                          | Display Rotation     | <b>Normal</b>       |                  | No rotation of the display content                                                                              |
|                          |                      | Upside-Down         |                  | Display content 180° rotated                                                                                    |
|                          | Display Error Mode   | <b>Normal</b>       |                  | Show error codes, switch status LED and display illumination to red.                                            |
|                          |                      | Hidden              |                  | Show error codes. Status LEDs and display illumination off.                                                     |
| USB Functions            | Light Presets        | Save Light Pre-sets | No               | Store preset list to an USB memory stick (see page 18)                                                          |
|                          |                      |                     | Yes              |                                                                                                                 |
|                          |                      | Load Light Pre-sets | [List]           | Load preset list from an USB memory stick. Select preset list with Intensity / Selector (see page 18)           |
|                          |                      |                     | Fixture Settings | Save Fix. Settings                                                                                              |
|                          | Yes                  |                     |                  |                                                                                                                 |
|                          | Load Fix. Settings   | [List]              |                  | Load fixture settings from an USB memory stick. Select fixture settings with Intensity / Selector (see page 18) |
|                          | Save Error Log       |                     |                  | Store error and service log to an USB memory stick (see page 19)                                                |



| Level 1          | Level 2            | Level 3            | Level 4 | Explanation (default setting = bold)                                                                                                                                                                                                       |
|------------------|--------------------|--------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Art-Net & sACN   | Art-Net/sACN State | <b>Automatic</b>   |         | Accepts both protocols.                                                                                                                                                                                                                    |
|                  |                    | Art-Net Only       |         | Accepts Art-Net only                                                                                                                                                                                                                       |
|                  |                    | sACN Only          |         | Accepts sACN only                                                                                                                                                                                                                          |
|                  |                    | Off                |         | Accepts no network protocol                                                                                                                                                                                                                |
|                  | Art-Net Net        | <b>0</b> - 127     |         | Select Art-Net net                                                                                                                                                                                                                         |
|                  | Art-Net Subnet     | <b>0</b> - 15      |         | Select Art-Net subnet in Art-Net net                                                                                                                                                                                                       |
|                  | Art-Net Universe   | <b>0</b> - 15      |         | Select Art-Net universe in Art-Net subnet                                                                                                                                                                                                  |
|                  | Merge Mode         | <b>LTP</b>         |         | Select Merge-Mode „LTP“ (Last Take Precedence)                                                                                                                                                                                             |
|                  |                    | HTP                |         | Select Merge-Mode „HTP“ (High Take Precedence)                                                                                                                                                                                             |
|                  | Gateway            | <b>On</b>          |         | Gateway disabled                                                                                                                                                                                                                           |
|                  |                    | Off                |         | Gateway enabled                                                                                                                                                                                                                            |
|                  | sACN Universe      | <b>1</b> ... 65000 |         | sACN universe                                                                                                                                                                                                                              |
|                  | IP Mode -->        |                    |         |                                                                                                                                                                                                                                            |
| Network Settings | Connection Status  | Connection OK      |         | Connection established                                                                                                                                                                                                                     |
|                  |                    | No Connection      |         | No connection                                                                                                                                                                                                                              |
|                  | IP Address         | AAA.BBB.CCC.DDD    |         | The fixtures IP address (assigned via DHCP, if active)<br>If manual mode is active:<br>AAA = 10, 172 or 192<br>BBB = 0 - 255, 16 - 31 or 168<br>CCC = 0 - 255<br>DDD = 0 - 255<br>If changed, the IP mode is automatically set to „Manual“ |
|                  | IP Mode            | DHCP               |         | Use DHCP mode                                                                                                                                                                                                                              |
|                  |                    | Art-Net 2.B.C.D    |         | Use Art-Net net 2.B.C.D                                                                                                                                                                                                                    |
|                  |                    | Art-Net 10.B.C.D   |         | Use Art-Net net 10.B.C.D                                                                                                                                                                                                                   |
|                  |                    | Manual             |         | Jumps to „IP Address“                                                                                                                                                                                                                      |
|                  | Subnet Mask        | 255.255.255.0      |         | Cannot be changed via the fixture menu.                                                                                                                                                                                                    |
|                  | Gateway            | x.x.x.x            |         | Cannot be changed via the fixture menu.                                                                                                                                                                                                    |
|                  | DNS1               | x.x.x.x            |         | Cannot be changed via the fixture menu.                                                                                                                                                                                                    |
|                  | DNS2               | x.x.x.x            |         | Cannot be changed via the fixture menu.                                                                                                                                                                                                    |
|                  | MAC Address        | XX:XX:XX:XX:XX:XX  |         | MAC address                                                                                                                                                                                                                                |
|                  | Network Name       | Sxx-xxxxxx-xxxx    |         | Serial number                                                                                                                                                                                                                              |
| Enabled Menu     | Fan Mode           |                    |         | Shows the settings of each option. Press I/S to change the setting of the selected option.                                                                                                                                                 |
|                  | Dim. Curve         |                    |         |                                                                                                                                                                                                                                            |
|                  | Low End            |                    |         |                                                                                                                                                                                                                                            |
|                  | Tungsten           |                    |         |                                                                                                                                                                                                                                            |
|                  | High Speed         |                    |         |                                                                                                                                                                                                                                            |
|                  | Frequency          |                    |         |                                                                                                                                                                                                                                            |
|                  | Master/Slave       |                    |         |                                                                                                                                                                                                                                            |
|                  | Effect             |                    |         |                                                                                                                                                                                                                                            |
|                  | Art-Net/sACN       |                    |         |                                                                                                                                                                                                                                            |
|                  | RDM                |                    |         |                                                                                                                                                                                                                                            |
|                  | Gateway            |                    |         |                                                                                                                                                                                                                                            |
|                  | RGBW C-Space       |                    |         |                                                                                                                                                                                                                                            |
|                  | USB Mode           |                    |         |                                                                                                                                                                                                                                            |

| Level 1          | Level 2            | Level 3                              | Level 4 | Explanation (default setting = bold)                                                                        |
|------------------|--------------------|--------------------------------------|---------|-------------------------------------------------------------------------------------------------------------|
| Fixture Info     | Fixture Status     | System Ready                         |         | No error                                                                                                    |
|                  |                    | <error message>                      |         | Error message (see „Safety and Installation manual“)                                                        |
|                  | Light Engine Temp. | xx.x °C<br>xx.x °F                   |         | Recent light engine temperature                                                                             |
|                  | Hour Counter       | xxh - Light Engine<br>yyh - System   |         | Working hours of the light engines and of the system since production of the fixture                        |
|                  | Battery Status     | x.y V                                |         | Recent voltage of an external battery                                                                       |
|                  | Fixture Serial No. | L1.xxxxxxx-xxx                       |         | The fixtures serial number                                                                                  |
|                  | Firmware Versions  | FW: x.xx.xx.xxxx<br>CP: x.xx.xx.xxxx |         | Main firmware version and display firmware version                                                          |
| Fixture Settings | USB Mode           | Normal                               |         | USB port powered                                                                                            |
|                  |                    | Service                              |         | USB port not powered. <b>Do not change this setting unless being asked by ARRI service. Risk of damage!</b> |
| Factory Reset    | No                 |                                      |         | Abort action                                                                                                |
|                  | Yes                |                                      |         | Load factory settings                                                                                       |

# RDM Commands

From Firmware 3.2.

| Command                | Description                                                                                                                                                        | GET | SET |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| Discover Unique Branch | Searches RDM device                                                                                                                                                | X   | X   |
| Discover Mute          | Mutes the RDM device, no response messages                                                                                                                         | X   | X   |
| Discover Unmute        | Activates device for response messages                                                                                                                             | X   | X   |
| Supported Parameters   | Shows a list of all supported RDM commands                                                                                                                         | X   |     |
| Parameter Description  | Shows a list of commands that are not standard RDM commands, mostly commands from manufacturer.                                                                    | X   |     |
| Device Info            | Get:<br>RDM protocol version<br>Model ID<br>Product category<br>Main software version ID<br>DMX foot print,<br>DMX personality<br>Sub device count<br>Sender count | X   |     |
| Software Version Label | Shows the software version string from main, e.g. Main 1.66.1 Yes 16 2012 19:10:26                                                                                 | X   |     |
| DMX Start Address      | DMX address                                                                                                                                                        | X   | X   |
| Identify Service       | Identify Flag -> physically flash the light, Sky-Panel-C flashes Blue and all other White                                                                          | X   | X   |

## RDM Command Extensions

| Command                     | Description                                                                                                                                          | GET | SET |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| Status Message              | Display of actual warning / error message of the fixture.                                                                                            | X   |     |
| Status ID Description       | Detailed description of each warning / status report.                                                                                                | X   |     |
| Device Label                | Generate an informative label for each fixture. It can be utilized to identify the rack number of a dimmer or to determine the position of a fixture | X   | X   |
| Product Detail ID List      | This parameter is utilized to retrieve technical details of a fixture.                                                                               | X   |     |
| Device Model Description    | A text description for the model type of the fixture.                                                                                                | X   |     |
| Manufacturer Label          | Shows „ARRI Lighting“ an                                                                                                                             | X   |     |
| Boot Software Version ID    | PrBo Version 2.03.00                                                                                                                                 | X   |     |
| Boot Software Version Label | Shows text from PrBo Bootloader                                                                                                                      | X   |     |
| DMX Personality             | DMX mode                                                                                                                                             | X   | X   |
| DMX Personality Description | Displays a text description of a DMX mode                                                                                                            | X   |     |
| Slot Info                   | Shows a description for each DMX channel in use                                                                                                      | X   |     |
| Slot Description            | Shows a text description for each DMX channel                                                                                                        | X   |     |
| Default Slot Value          | Shows the default DMX channel value                                                                                                                  | X   |     |
| Sensor Definition           | Shows the definition of a specific sensor                                                                                                            | X   |     |
| Sensor Value                | Shows the actual sensor value                                                                                                                        | X   |     |
| Device Hours                | Shows the actual device hours of the fixture                                                                                                         | X   |     |
| Lamp Hours                  | Shows the actual lamp hours of the fixture                                                                                                           | X   |     |
| Factory Defaults            | This command deletes all user parameters and sets the fixture to factory default                                                                     | X   | X   |
| Reset Device                | Performs a reboot.                                                                                                                                   | X   | X   |

## RDM Command Extensions (continued)

| Command                                                                                                                                                                                                                                                             | Description                                     | GET | SET |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----|-----|
| Display Invert                                                                                                                                                                                                                                                      | Rotates the display content 180° (only MKII)    | X   | X   |
| Display Level                                                                                                                                                                                                                                                       | Set the display contrast (only MKII)            | X   | X   |
| Real Time Clock                                                                                                                                                                                                                                                     | Get / set time and date (only L10 and SkyPanel) | X   | X   |
| Queued Message                                                                                                                                                                                                                                                      | Get / set message                               | X   | X   |
| Curve                                                                                                                                                                                                                                                               | Get / set dimming curve (only SkyPanel)         | X   |     |
| Curve Description                                                                                                                                                                                                                                                   | Get / set curve description                     | X   |     |
| List Interfaces<br>Interface Label<br>Interface Hardware Address<br>Type1<br>IPV4 Current Address<br>IPV4 DHCP Mode<br>IPV4 Static Address<br>Interface Release DHCP<br>IPV4 Default Route<br>DNS IPV4 Name Server<br>DNS Hostname<br>Interface Apply Configuration | only SkyPanel                                   | X   | X   |

## Manufacturer Commands

| Command                            | Description                                                                                                                        | GET | SET |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| RDM Fan Mode<br>0x8001             | Get / set fan mode<br>Fan Low = 1<br>Fan HI45 = 2<br>Fan Vari = 3                                                                  | X   | X   |
| RDM Status LED<br>0x8002           | Get / set status LED and display illumination<br>on = 0<br>off = 1                                                                 | X   | X   |
| RDM DMX Signal Lost Mode<br>0x8005 | Get / set DMX signal lost behavior<br>Hold = 1<br>Hold 2 min / fade out = 2<br>Blackout = 3                                        | X   | X   |
| RDM DMX Protocol version<br>0x8004 | Get / set DMX protocol version<br>V3.4 = 1<br>V4.0 = 2<br>V4.1 = 3<br>V4.2 = 4<br>V4.3 = 5                                         | X   | X   |
| RDM Display contrast<br>0x8005     | Get / set display contrast (only MKII)<br>less = 0<br>high = 10                                                                    | X   | X   |
| RDM Dim Curve<br>0x8006            | Get / set dimming curve<br>Dim Curve Exponential = 1<br>Dim Curve Linear = 2<br>Dim Curve Logarithmic = 3<br>Dim Curve S-Curve = 4 | X   | X   |
| RDM Tungsten Mode<br>0x8007        | Get / set Tungsten mode<br>off = 0<br>on = 1                                                                                       | X   | X   |
| RDM Low End Mode<br>0x8008         | Get / set low end dimming mode<br>off = 0<br>on = 1                                                                                | X   | X   |
| RDM IP DHCP<br>0x8009              | Get / set DHCP<br>off = 0<br>on = 1                                                                                                | X   | X   |

## Manufacturer Commands (continued)

| Command                          | Description                                                                                                                                                                                                                                          | GET | SET |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| RDM IP Address<br>0x800A         | Get / set IP address                                                                                                                                                                                                                                 | X   | X   |
| RDM IP Subnet<br>0x800B          | Get / set subnet mask                                                                                                                                                                                                                                | X   | X   |
| RDM IP Gateway<br>0x800C         | Get / set Gateway address                                                                                                                                                                                                                            | X   | X   |
| RDM IP DNS1<br>0x800D            | Get / set DNS1 address                                                                                                                                                                                                                               | X   | X   |
| RDM IP DNS2<br>0x800E            | not used                                                                                                                                                                                                                                             |     |     |
| RDM Error Mode Display<br>0x800F | Get / set error mode display (only MKII)<br>normal = 0<br>hidden = 1                                                                                                                                                                                 | X   | X   |
| RDM RGBW PLASA Mode<br>0x810     | Get / set calibrated color space (PLASA mode)<br>off = 0<br>on = 1                                                                                                                                                                                   | X   | X   |
| RDM Frequency<br>0x8011          | Get / set PWM frequency<br>Frequency setting off = 0<br>Frequency 1 = 1<br>Frequency 2 = 2<br>Frequency 3 = 3<br>Frequency 4 = 4<br>Frequency 5 = 5<br>Frequency 6 = 6<br>Frequency 7 = 7<br>Frequency 8 = 8<br>Frequency 9 = 9<br>Frequency 10 = 10 | X   | X   |
| RDM High Speed Mode<br>0x8012    | Get / set high speed mode<br>off = 0<br>on = 1                                                                                                                                                                                                       | X   | X   |
| RDM Service RDM<br>0x8013        | Get / set RDM service<br>off = 0<br>on = 1                                                                                                                                                                                                           | X   | X   |

# Protocol

Protocol V4.3 is set as default. Use the ALSM to change to the protocol version. ARRI recommends to reserve additional channels which are required in V4.3 for each fixture when using a protocol version below V4.3. This way you do not need to change the patch when you want to use additional features which became available with protocol V4.3.

From Firmware-Version 3.0

| 8 bit, 1 channel per function  | 16 bit, 2 channels per function | Coarse/fine, 1-2 channels per function |
|--------------------------------|---------------------------------|----------------------------------------|
| Mode 1<br>CCT & RGBW           | Mode 6<br>CCT & RGBW            | Mode 11<br>CCT & RGBW                  |
| Mode 2<br>CCT                  | Mode 7<br>CCT                   | Mode 12<br>CCT                         |
| Mode 3<br>CCT & HSI            | Mode 8<br>CCT & HSI             | Mode 13<br>CCT & HSI                   |
| Mode 4<br>RGBW                 | Mode 9<br>RGBW                  | Mode 14<br>RGBW                        |
| Mode 5<br>HSI                  | Mode 10<br>HSI                  | Mode 15<br>HSI                         |
| Mode 16<br>GEL V2              | Mode 17<br>GEL V2               |                                        |
| Mode 18<br>x,y Koordinaten     | Mode 19<br>x,y Koordinaten      |                                        |
| DMX Mode 20<br>Source Matching | DMX Mode 21<br>Source Matching  |                                        |
| DMX Mode 22<br>Effects         | DMX Mode 23<br>Effects          |                                        |

## Green-Magenta Point - Average Equivalents

| Setting     | Rosco# | Setting     | Rosco# |
|-------------|--------|-------------|--------|
| Full -Green | 3308   | Full +Green | 3304   |
| 1/2 -Green  | 3313   | 1/2 +Green  | 3315   |
| 1/4 -Green  | 3314   | 1/4 +Green  | 3316   |
| 1/8 -Green  | 3318   | 1/8 +Green  | 3317   |

## Preset Channel - DMX Value Allocation

| Channel                  | Value     | Percent  | Function                                 |
|--------------------------|-----------|----------|------------------------------------------|
| Depending on<br>DMX mode | 0 – 11    | 0 – 4    | <b>Preset</b><br>No effect               |
|                          | 12 – 23   | 5 – 9    | <b>User Defined Presets</b><br>Preset 01 |
|                          | 24 – 35   | 10 – 14  | Preset 02                                |
|                          | 36 – 47   | 15 – 18  | Preset 03                                |
|                          | 48 – 59   | 19 – 23  | Preset 04                                |
|                          | 60 – 71   | 24 – 28  | Preset 05                                |
|                          | 72 – 83   | 29 – 33  | Preset 06                                |
|                          | 84 – 95   | 34 – 37  | Preset 07                                |
|                          | 96 – 107  | 38 – 42  | Preset 08                                |
|                          | 108 – 119 | 43 – 47  | Preset 09                                |
|                          | 120 – 131 | 48 – 51  | Preset 10                                |
|                          |           |          | <b>Factory Presets</b>                   |
|                          | 132 – 143 | 52 – 56  | Preset 01 (2.900 K, 0 +/- GN)            |
|                          | 144 – 155 | 57 – 61  | Preset 02 (3.200 K, 0 +/- GN)            |
|                          | 156 – 167 | 62 – 65  | Preset 03 (5.600 K, 0 +/- GN)            |
|                          | 168 – 179 | 66 – 70  | Preset 04 (6.500 K, 0 +/- GN)            |
|                          | 180 – 191 | 71 – 75  | Preset 05 (120° Hue, 100% Sat)           |
|                          | 192 – 203 | 76 – 80  | Preset 06 (240° Hue, 100% Sat)           |
|                          | 204 – 215 | 81 – 84  | Preset 07 (Rosco 3408, 5.600 K)          |
|                          | 216 – 227 | 85 – 89  | Preset 08 (Lee 187, 3.200 K Base)        |
|                          | 228 – 239 | 90 – 94  | Preset 09 (Rosco 3152, 3.200 K)          |
|                          | 240 – 255 | 95 – 100 | Preset 10 (Lee 162, 3.200 K Base)        |

## Mode 1: CCT & RGBW, 8 bit Resolution per Function

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                        | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT</b><br>2.800 K → 10.000 K                                                                                                   |
| 3                                                        | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 4                                                        | 0-255                                                              | 0-100                                                     | <b>Cross Fade to Color</b><br>White → RGBW color                                                                                                     |
| 5                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity red</b><br>0% → 100%                                                                                                                    |
| 6                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity green</b><br>0% → 100%                                                                                                                  |
| 7                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity blue</b><br>0% → 100%                                                                                                                   |
| 8                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity white</b><br>0% → 100%                                                                                                                  |
| 9<br><i>Reverts to fixture setting when signal lost.</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 10                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 11-12                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 2: CCT, 8 bit Resolution per Function

| Channel                                                 | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                       | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT</b><br>2.800 K → 10.000 K                                                                                                   |
| 3                                                       | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 4<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 5                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 6-7                                                     |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 3: CCT & HSI, 8 bit Resolution per Function

| Channel                                                 | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                       | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT</b><br>2.800 K → 10.000 K                                                                                                   |
| 3                                                       | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 4                                                       | 0-255                                                              | 0-100                                                     | <b>Cross Fade to Color</b><br>White → Color                                                                                                          |
| 5                                                       | 0-255                                                              | 0-100                                                     | <b>Hue</b><br>0° → 360°                                                                                                                              |
| 6                                                       | 0-255                                                              | 0-100                                                     | <b>Saturation</b><br>0 → full saturated                                                                                                              |
| 7<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 8                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 9-10                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |



### Mode 4: RGBW, 8 bit Resolution per Function

| Channel                                                 | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                       | 0-255                                                              | 0-100                                                     | <b>Intensity red</b><br>0% → 100%                                                                                                                    |
| 3                                                       | 0-255                                                              | 0-100                                                     | <b>Intensity green</b><br>0% → 100%                                                                                                                  |
| 4                                                       | 0-255                                                              | 0-100                                                     | <b>Intensity blue</b><br>0% → 100%                                                                                                                   |
| 5                                                       | 0-255                                                              | 0-100                                                     | <b>Intensity white</b><br>0% → 100%                                                                                                                  |
| 6<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 7                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 8-9                                                     |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

### Mode 5: HSI, 8 bit Resolution per Function

| Channel                                                 | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                       | 0-255                                                              | 0-100                                                     | <b>Hue</b><br>0° → 360°                                                                                                                              |
| 3                                                       | 0-255                                                              | 0-100                                                     | <b>Saturation</b><br>0 → full saturated                                                                                                              |
| 4<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 5                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 6-7                                                     |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 6: CCT &amp; RGBW, 16 bit Resolution per Function

| Channel |    | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------|----|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI      | LO |                                                                    |                                                           |                                                                                                                                                      |
| 1       | 2  | 0-65.535                                                           | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3       | 4  | 0-65.535                                                           | 0-100                                                     | <b>Color temperature CCT</b><br>2.800 K → 10.000 K                                                                                                   |
| 5       | 6  | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 7       | 8  | 0-65.535                                                           | 0-100                                                     | <b>Xfade to color</b><br>White → RGBW color                                                                                                          |
| 9       | 10 | 0-65.535                                                           | 0-100                                                     | <b>Intensity red</b><br>0% → 100%                                                                                                                    |
| 11      | 12 | 0-65.535                                                           | 0-100                                                     | <b>Intensity green</b><br>0% → 100%                                                                                                                  |
| 13      | 14 | 0-65.535                                                           | 0-100                                                     | <b>Intensity blue</b><br>0% → 100%                                                                                                                   |
| 15      | 16 | 0-65.535                                                           | 0-100                                                     | <b>Intensity white</b><br>0% → 100%                                                                                                                  |
| 17      |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 18      |    | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 19-20   |    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 7: CCT, 16 bit Resolution per Function

| Channel                                                 |    | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|----|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI                                                      | LO |                                                                    |                                                           |                                                                                                                                                      |
| 1                                                       | 2  | 0-65.535                                                           | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3                                                       | 4  | 0-65.535                                                           | 0-100                                                     | <b>Color temperature CCT</b><br>2.800 K → 10.000 K                                                                                                   |
| 5                                                       | 6  | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 7<br><i>Reverts to fixture setting when signal lost</i> |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 8                                                       |    | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 9-10                                                    |    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 8: CCT & HSI, 16 bit Resolution per Function

| Channel                                                  |    | Value                                                                                       | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|----|---------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI                                                       | LO |                                                                                             |                                                           |                                                                                                                                                      |
| 1                                                        | 2  | 0-65.535                                                                                    | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3                                                        | 4  | 0-65.535                                                                                    | 0-100                                                     | <b>Color temperature CCT</b><br>2.800 K → 10.000 K                                                                                                   |
| 5                                                        | 6  | 0-5.000<br>5.001-10.000<br>10.001-29.999<br>30.000-40.000<br>40.001-59.999<br>60.000-65.535 | 0-7<br>8-15<br>16-46<br>46-61<br>61-92<br>92-100          | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 7                                                        | 8  | 0-65.535                                                                                    | 0-100                                                     | <b>Xfade to color</b><br>White → Color                                                                                                               |
| 9                                                        | 10 | 0-65.535                                                                                    | 0-100                                                     | <b>Hue</b><br>0° → 360°                                                                                                                              |
| 11                                                       | 12 | 0-65.535                                                                                    | 0-100                                                     | <b>Saturation</b><br>0 → full saturated                                                                                                              |
| 13<br><i>Reverts to fixture setting when signal lost</i> |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255                          | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 14                                                       |    | 0-255                                                                                       | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 15-16                                                    |    |                                                                                             |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 9: RGBW, 16 bit Resolution per Function

| Channel                                                  |    | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|----|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI                                                       | LO |                                                                    |                                                           |                                                                                                                                                      |
| 1                                                        | 2  | 0-65.535                                                           | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3                                                        | 4  | 0-65.535                                                           | 0-100                                                     | <b>Intensity red</b><br>0% → 100%                                                                                                                    |
| 5                                                        | 6  | 0-65.535                                                           | 0-100                                                     | <b>Intensity green</b><br>0% → 100%                                                                                                                  |
| 7                                                        | 8  | 0-65.535                                                           | 0-100                                                     | <b>Intensity blue</b><br>0% → 100%                                                                                                                   |
| 9                                                        | 10 | 0-65.535                                                           | 0-100                                                     | <b>Intensity white</b><br>0% → 100%                                                                                                                  |
| 11<br><i>Reverts to fixture setting when signal lost</i> |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 12                                                       |    | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 13-14                                                    |    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 10: HSI, 16 bit Resolution per Function

| Channel                                                 |    | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|----|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI                                                      | LO |                                                                    |                                                           |                                                                                                                                                      |
| 1                                                       | 2  | 0-65.535                                                           | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3                                                       | 4  | 0-65.535                                                           | 0-100                                                     | <b>Hue</b><br>0° → 360°                                                                                                                              |
| 5                                                       | 6  | 0-65.535                                                           | 0-100                                                     | <b>Saturation</b><br>0 → full saturated                                                                                                              |
| 7<br><i>Reverts to fixture setting when signal lost</i> |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 8                                                       |    | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 9-10                                                    |    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 11: CCT &amp; RGBW, Coarse / Fine per Function

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity coarse</b><br>0 % → 100% (open)                                                                                                  |
| 2                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity fine</b>                                                                                                                         |
| 3                                                        | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT coarse</b><br>2.800 K → 10.000 K                                                                                            |
| 4                                                        | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT fine</b>                                                                                                                    |
| 5                                                        | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 6                                                        | 0-255                                                              | 0-100                                                     | <b>Xfade to color</b><br>White → RGBW color                                                                                                          |
| 7                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity red coarse</b><br>0% → 100%                                                                                                             |
| 8                                                        | 0-255                                                              | 0-100                                                     | <b>Red fine</b>                                                                                                                                      |
| 9                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity green coarse</b><br>0% → 100%                                                                                                           |
| 10                                                       | 0-255                                                              | 0-100                                                     | <b>Green fine</b>                                                                                                                                    |
| 11                                                       | 0-255                                                              | 0-100                                                     | <b>Intensity blue coarse</b><br>0% → 100%                                                                                                            |
| 12                                                       | 0-255                                                              | 0-100                                                     | <b>Blue fine</b>                                                                                                                                     |
| 13                                                       | 0-255                                                              | 0-100                                                     | <b>Intensity white coarse</b><br>0% → 100%                                                                                                           |
| 14                                                       | 0-255                                                              | 0-100                                                     | <b>White fine</b>                                                                                                                                    |
| 15<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 16                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 17-18                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 12: CCT, Coarse / Fine per Function

| Channel                                                 | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity coarse</b><br>0 % → 100% (open)                                                                                                  |
| 2                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity fine</b>                                                                                                                         |
| 3                                                       | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT coarse</b><br>2.800 K → 10.000 K                                                                                            |
| 4                                                       | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT fine</b>                                                                                                                    |
| 5                                                       | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 6<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 7                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 8-9                                                     |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 13: CCT &amp; HSI, Coarse / Fine per Function

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity coarse</b><br>0 % → 100% (open)                                                                                                  |
| 2                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity fine</b>                                                                                                                         |
| 3                                                        | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT coarse</b><br>2.800 K → 10.000 K                                                                                            |
| 4                                                        | 0-255                                                              | 0-100                                                     | <b>Color temperature CCT fine</b>                                                                                                                    |
| 5                                                        | 0-10<br>11-20<br>21-119<br>120-145<br>146-244<br>245-255           | 0-4<br>5-8<br>8-46<br>47-57<br>57-96<br>96-100            | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green            |
| 6                                                        | 0-255                                                              | 0-100                                                     | <b>Xfade to color</b><br>White → Color                                                                                                               |
| 7                                                        | 0-255                                                              | 0-100                                                     | <b>Hue coarse</b><br>0° → 360°                                                                                                                       |
| 8                                                        | 0-255                                                              | 0-100                                                     | <b>Hue fine</b>                                                                                                                                      |
| 9                                                        | 0-255                                                              | 0-100                                                     | <b>Saturation coarse</b><br>0 → full saturated                                                                                                       |
| 10                                                       | 0-255                                                              | 0-100                                                     | <b>Saturation fine</b>                                                                                                                               |
| 11<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 12                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 13-14                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 14: RGBW, Coarse / Fine per Function

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity coarse</b><br>0 % → 100% (open)                                                                                                  |
| 2                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity fine</b>                                                                                                                         |
| 3                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity red coarse</b><br>0% → 100%                                                                                                             |
| 4                                                        | 0-255                                                              | 0-100                                                     | <b>Red fine</b>                                                                                                                                      |
| 5                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity green coarse</b><br>0% → 100%                                                                                                           |
| 6                                                        | 0-255                                                              | 0-100                                                     | <b>Green fine</b>                                                                                                                                    |
| 7                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity blue coarse</b><br>0% → 100%                                                                                                            |
| 8                                                        | 0-255                                                              | 0-100                                                     | <b>Blue fine</b>                                                                                                                                     |
| 9                                                        | 0-255                                                              | 0-100                                                     | <b>Intensity white coarse</b><br>0% → 100%                                                                                                           |
| 10                                                       | 0-255                                                              | 0-100                                                     | <b>White fine</b>                                                                                                                                    |
| 11<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 12                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 13-14                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 15: HSI, Coarse / Fine per Function

| Channel                                                 | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|---------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity coarse</b><br>0 % → 100% (open)                                                                                                  |
| 2                                                       | 0-255                                                              | 0-100                                                     | <b>Master Intensity fine</b>                                                                                                                         |
| 3                                                       | 0-255                                                              | 0-100                                                     | <b>Hue coarse</b><br>0° → 360°                                                                                                                       |
| 4                                                       | 0-255                                                              | 0-100                                                     | <b>Hue fine</b>                                                                                                                                      |
| 5                                                       | 0-255                                                              | 0-100                                                     | <b>Saturation coarse</b><br>0 → full saturated                                                                                                       |
| 6                                                       | 0-255                                                              | 0-100                                                     | <b>Saturation fine</b>                                                                                                                               |
| 7<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 8                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 9-10                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |



## Mode 16: GEL V2, 8 bit Resolution per Function, Basis

| Channel | Value                                           | Percent                                   | Function                                                                                                                                                                                                                                                                                                                                                                       |
|---------|-------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | 0-255                                           | 0-100                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                                                                                                                                                                                                                                                   |
| 2       | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 1,CCT Selection</b><br>3.200 K<br>5.600 K                                                                                                                                                                                                                                                                                                                               |
| 3       | 0-128<br>129-170<br>171-255                     | 0-50<br>51-67<br>68-100                   | <b>Gel 1, Color Matching</b><br>Best Color<br><i>Color quality optimized</i><br>Brightest<br><i>Color brightness opt.</i><br>No Color Gel                                                                                                                                                                                                                                      |
| 4       | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 1, Brand</b><br><i>Category on ch. 5</i><br><i>Gel on ch. 6</i><br>Rosco<br>LEE Filters                                                                                                                                                                                                                                                                                 |
| 5       | 0-50<br>51-101<br>102-152<br>153-203<br>204-255 | 0-20<br>21-39<br>40-60<br>61-80<br>81-255 | <b>Gel 1, category</b><br><i>Manufacturer on ch. 4</i><br><b>Category 1:</b><br>Rosco: Color Correction<br>LEE: Color Correction<br><b>Category 2:</b><br>Rosco: CalColor<br>LEE: Color Filters<br><b>Category 3:</b><br>Rosco: Storaro Selection<br>LEE: 600 Series<br><b>Category 4:</b><br>Rosco: Cinelux<br>LEE: Cosmetic Filters<br><b>Category 5:</b><br>LEE: 700 Series |
| 6       | 0-255                                           | 0-100                                     | <b>Gel 1</b><br>See tables below                                                                                                                                                                                                                                                                                                                                               |
| 7       | 0-255                                           | 0-100                                     | <b>Xfade to Gel</b><br>Gel 1 → Gel 2                                                                                                                                                                                                                                                                                                                                           |
| 8       | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 2,CCT Selection</b><br>3.200 K<br>5.600 K                                                                                                                                                                                                                                                                                                                               |
| 9       | 0-128<br>129-170<br>171-255                     | 0-50<br>51-67<br>68-100                   | <b>Gel 2, Color Matching</b><br>Best Color<br><i>Color quality optimized</i><br>Brightest<br><i>Color brightness opt.</i><br>No Color Gel                                                                                                                                                                                                                                      |
| 10      | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 2, Brand</b><br><i>Category on ch. 11</i><br><i>Gel on ch. 12</i><br>Rosco<br>LEE Filters                                                                                                                                                                                                                                                                               |

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11                                                       | 0-50<br>51-101<br>102-152<br>153-203<br>204-255                    | 0-20<br>21-39<br>40-60<br>61-80<br>81-255                 | <b>Gel 1, category</b><br><i>Manufacturer on ch. 10</i><br><b>Category 1:</b><br>Rosco: Color Correction<br>LEE: Color Correction<br><b>Category 2:</b><br>Rosco: CalColor<br>LEE: Color Filters<br><b>Category 3:</b><br>Rosco: Storaro Selection<br>LEE: 600 Series<br><b>Category 4:</b><br>Rosco: Cinelux<br>LEE: Cosmetic Filters<br><b>Category 5:</b><br>LEE: 700 Series |
| 12                                                       | 0-255                                                              | 0-100                                                     | <b>Gel 2</b><br>See tables below                                                                                                                                                                                                                                                                                                                                                |
| 13                                                       | 0 – 51<br>52 – 102<br>103 – 153<br>154 – 204<br>205 - 255          | 0 – 20<br>21 – 40<br>41 – 60<br>61 – 79<br>80 - 100       | <b>Gel Transition Type</b><br>Direct<br>Through White Point<br>Through Black Point<br>Over White Point<br>Under White point                                                                                                                                                                                                                                                     |
| 14<br><i>Reverts to fixture setting when signal lost</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off                                                                                                                                                                                                                            |
| 15                                                       | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                                                                                                                                                                                                                                                    |
| 16-17                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                                                                                                                                                                                                                                                     |

## Mode 17: GEL V2, 16 bit Resolution per function, Basic

| Channel |    | Value                                           | Percent                                   | Function                                                                                                                                                                                                                                                                                                                                                                       |
|---------|----|-------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI      | LO |                                                 |                                           |                                                                                                                                                                                                                                                                                                                                                                                |
| 1       | 2  | 0-65.535                                        | 0-100                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                                                                                                                                                                                                                                                   |
| 3       |    | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 1,CCT Selection</b><br>3.200 K<br>5.600 K                                                                                                                                                                                                                                                                                                                               |
| 4       |    | 0-128<br>129-170<br>171-255                     | 0-50<br>51-67<br>68-100                   | <b>Gel 1, Color Matching</b><br>Best Color<br><i>Color quality optimized</i><br>Brightest<br><i>Color brightness opt.</i><br>No Color Gel                                                                                                                                                                                                                                      |
| 5       |    | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 1, Brand</b><br><i>Category on ch. 5</i><br><i>Gel on ch. 6</i><br>Rosco<br>LEE Filters                                                                                                                                                                                                                                                                                 |
| 6       |    | 0-50<br>51-101<br>102-152<br>153-203<br>204-255 | 0-20<br>21-39<br>40-60<br>61-80<br>81-255 | <b>Gel 1, category</b><br><i>Manufacturer on ch. 4</i><br><b>Category 1:</b><br>Rosco: Color Correction<br>LEE: Color Correction<br><b>Category 2:</b><br>Rosco: CalColor<br>LEE: Color Filters<br><b>Category 3:</b><br>Rosco: Storaro Selection<br>LEE: 600 Series<br><b>Category 4:</b><br>Rosco: Cinelux<br>LEE: Cosmetic Filters<br><b>Category 5:</b><br>LEE: 700 Series |
| 7       |    | 0-255                                           | 0-100                                     | <b>Gel 1</b><br>See tables below                                                                                                                                                                                                                                                                                                                                               |
| 8       | 9  | 0 - 65.535                                      | 0 - 100                                   | <b>Xfade to Gel</b><br>Gel 1 → Gel 2                                                                                                                                                                                                                                                                                                                                           |
| 10      |    | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 2,CCT Selection</b><br>3.200 K<br>5.600 K                                                                                                                                                                                                                                                                                                                               |
| 11      |    | 0-128<br>129-170<br>171-255                     | 0-50<br>51-67<br>68-100                   | <b>Gel 2, Color Matching</b><br>Best Color<br><i>Color quality optimized</i><br>Brightest<br><i>Color brightness opt.</i><br>No Color Gel                                                                                                                                                                                                                                      |
| 12      |    | 0-128<br>129-255                                | 0-50<br>51-100                            | <b>Gel 2, Brand</b><br><i>Category on ch. 13</i><br><i>Gel on ch. 14</i><br>Rosco<br>LEE Filters                                                                                                                                                                                                                                                                               |

| Channel                                                   | Value                                                              | Percent                                                   | Function                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13                                                        | 0-50<br>51-101<br>102-152<br>153-203<br>204-255                    | 0-20<br>21-39<br>40-60<br>61-80<br>81-255                 | <b>Gel 1, category</b><br><i>Manufacturer on ch. 12</i><br><b>Category 1:</b><br>Rosco: Color Correction<br>LEE: Color Correction<br><b>Category 2:</b><br>Rosco: CalColor<br>LEE: Color Filters<br><b>Category 3:</b><br>Rosco: Storaro Selection<br>LEE: 600 Series<br><b>Category 4:</b><br>Rosco: Cinelux<br>LEE: Cosmetic Filters<br><b>Category 5:</b><br>LEE: 700 Series |
| 14                                                        | 0-255                                                              | 0-100                                                     | <b>Gel 2</b><br>See tables below                                                                                                                                                                                                                                                                                                                                                |
| 15                                                        | 0 – 51<br>52 – 102<br>103 – 153<br>154 – 204<br>205 - 255          | 0 – 20<br>21 – 40<br>41 – 60<br>61 – 79<br>80 - 100       | <b>Gel Transition Type</b><br>Direct<br>Through White Point<br>Through Black Point<br>Over White Point<br>Under White point                                                                                                                                                                                                                                                     |
| 16<br><i>Reverts to fixture setting when signal lost.</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off                                                                                                                                                                                                                            |
| 17                                                        | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                                                                                                                                                                                                                                                    |
| 18-19                                                     |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                                                                                                                                                                                                                                                     |

**Mode 16 / 17: GEL, Gel Selection**  
**Category 1, Rosco, Color correction**

| Channel                                                                               | Value    | Gel Name         | Number |
|---------------------------------------------------------------------------------------|----------|------------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | Full CTB         | 3202   |
|                                                                                       | 2 - 3    | 3/4 CTB          | 3203   |
|                                                                                       | 4 - 5    | 1/2 CTB          | 3204   |
|                                                                                       | 6 - 7    | 1/3 CTB          | 3206   |
|                                                                                       | 8 - 9    | 1/4 CTB          | 3208   |
|                                                                                       | 10 - 11  | 1/8 CTB          | 3216   |
|                                                                                       | 12 - 13  | Double CTB       | 3220   |
|                                                                                       | 14 - 15  | Full CTO         | 3407   |
|                                                                                       | 16 - 17  | 3/4 CTO          | 3411   |
|                                                                                       | 18 - 19  | 1/2 CTO          | 3408   |
|                                                                                       | 20 - 21  | 1/4 CTO          | 3409   |
|                                                                                       | 22 - 23  | 1/8 CTO          | 3410   |
|                                                                                       | 24 - 25  | Double CTO       | 3420   |
|                                                                                       | 26 - 27  | Full CTS         | 3441   |
|                                                                                       | 28 - 29  | 1/2 CTS          | 3442   |
|                                                                                       | 30 - 31  | 1/4 CTS          | 3443   |
|                                                                                       | 32 - 33  | 1/8 CTS          | 3444   |
|                                                                                       | 34 - 35  | Full Plusgreen   | 3304   |
|                                                                                       | 36 - 37  | 1/2 Plusgreen    | 3315   |
|                                                                                       | 38 - 39  | 1/4 Plusgreen    | 3316   |
|                                                                                       | 40 - 41  | 1/8 Plusgreen    | 3317   |
|                                                                                       | 42 - 43  | Full Minusgreen  | 3308   |
|                                                                                       | 44 - 45  | 3/4 Minusgreen   | 3309   |
|                                                                                       | 46 - 47  | 1/2 Minusgreen   | 3313   |
|                                                                                       | 48 - 49  | 1/4 Minusgreen   | 3314   |
|                                                                                       | 50 - 51  | 1/8 Minusgreen   | 3318   |
|                                                                                       | 52 - 53  | Fluorofilter     | 3310   |
|                                                                                       | 54 - 55  | Industrial Vapor | 3150   |
|                                                                                       | 56 - 57  | Urban Vapor      | 3152   |
|                                                                                       | 58 - 59  | Tough Y-1        | 3107   |
|                                                                                       | 60 - 61  | Tough MT 54      | 3134   |
|                                                                                       | 62 - 63  | Tough MTY        | 3106   |
|                                                                                       | 64 - 65  | Tough MT2        | 3102   |
|                                                                                       | 66 - 255 | Reserved         |        |

## Category 2, Rosco, CalColor

| Channel                                                                               | Value    | Gel Name    | Number |
|---------------------------------------------------------------------------------------|----------|-------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | 15 Blue     | 4215   |
|                                                                                       | 2 - 3    | 30 Blue     | 4230   |
|                                                                                       | 4 - 5    | 60 Blue     | 4260   |
|                                                                                       | 6 - 7    | 90 Blue     | 4290   |
|                                                                                       | 8 - 9    | 7 Cyan      | 4307   |
|                                                                                       | 10 - 11  | 15 Cyan     | 4315   |
|                                                                                       | 12 - 13  | 30 Cyan     | 4330   |
|                                                                                       | 14 - 15  | 60 Cyan     | 4360   |
|                                                                                       | 16 - 17  | 90 Cyan     | 4390   |
|                                                                                       | 18 - 19  | 15 Green    | 4415   |
|                                                                                       | 20 - 21  | 30 Green    | 4430   |
|                                                                                       | 22 - 23  | 60 Green    | 4460   |
|                                                                                       | 24 - 25  | 90 Green    | 4490   |
|                                                                                       | 26 - 27  | 15 Yellow   | 4515   |
|                                                                                       | 28 - 29  | 30 Yellow   | 4530   |
|                                                                                       | 30 - 31  | 60 Yellow   | 4560   |
|                                                                                       | 32 - 33  | 90 Yellow   | 4590   |
|                                                                                       | 34 - 35  | 15 Red      | 4615   |
|                                                                                       | 36 - 37  | 30 Red      | 4630   |
|                                                                                       | 38 - 39  | 60 Red      | 4660   |
|                                                                                       | 40 - 41  | 90 Red      | 4690   |
|                                                                                       | 42 - 43  | 15 Magenta  | 4715   |
|                                                                                       | 44 - 45  | 30 Magenta  | 4730   |
|                                                                                       | 46 - 47  | 60 Magenta  | 4760   |
|                                                                                       | 48 - 49  | 90 Magenta  | 4790   |
|                                                                                       | 50 - 51  | 15 Pink     | 4815   |
|                                                                                       | 52 - 53  | 30 Pink     | 4830   |
|                                                                                       | 54 - 55  | 60 Pink     | 4860   |
|                                                                                       | 56 - 57  | 90 Pink     | 4890   |
|                                                                                       | 58 - 59  | 15 Lavender | 4915   |
|                                                                                       | 60 - 61  | 30 Lavender | 4930   |
|                                                                                       | 62 - 63  | 60 Lavender | 4960   |
|                                                                                       | 64 - 65  | 90 Lavender | 4990   |
|                                                                                       | 66 - 255 | Reserved    |        |

## Category 3, Rosco, Storaro Selection

| Channel                                                                               | Value    | Gel Name   | Number |
|---------------------------------------------------------------------------------------|----------|------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | VS Red     | 2001   |
|                                                                                       | 2 - 3    | VS Orange  | 2202   |
|                                                                                       | 4 - 5    | VS Yellow  | 2003   |
|                                                                                       | 6 - 7    | VS Green   | 2004   |
|                                                                                       | 8 - 9    | VS Cyan    | 2005   |
|                                                                                       | 10 - 11  | VS Azure   | 2006   |
|                                                                                       | 12 - 13  | VS Blue    | 2007   |
|                                                                                       | 14 - 15  | VS Indigo  | 2008   |
|                                                                                       | 16 - 17  | VS Violet  | 2009   |
|                                                                                       | 18 - 19  | VS Magenta | 2010   |
|                                                                                       | 20 - 255 | Reserved   |        |

# Category 4, Rosco Cinelux

| Channel                                                                               | Value    | Gel Name           | Number |
|---------------------------------------------------------------------------------------|----------|--------------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | Bastard Amber      | 2      |
|                                                                                       | 2 - 3    | Pale Bastard Amber | 302    |
|                                                                                       | 4 - 5    | No Color Straw     | 6      |
|                                                                                       | 6 - 7    | Pale Gold          | 8      |
|                                                                                       | 8 - 9    | Daffodil           | 310    |
|                                                                                       | 10 - 11  | Straw              | 12     |
|                                                                                       | 12 - 13  | Light Amber        | 16     |
|                                                                                       | 14 - 15  | Gallo Gold         | 316    |
|                                                                                       | 16 - 17  | Light Flame        | 17     |
|                                                                                       | 18 - 19  | Flame              | 18     |
|                                                                                       | 20 - 21  | Mayan Sun          | 318    |
|                                                                                       | 22 - 23  | Golden Amber       | 21     |
|                                                                                       | 24 - 25  | Soft Golden Amber  | 321    |
|                                                                                       | 26 - 27  | Orange             | 23     |
|                                                                                       | 28 - 29  | Henna Sky          | 325    |
|                                                                                       | 30 - 31  | Light Red          | 26     |
|                                                                                       | 32 - 33  | No Color Pink      | 33     |
|                                                                                       | 34 - 35  | Blush Pink         | 333    |
|                                                                                       | 36 - 37  | Flesh Pink         | 34     |
|                                                                                       | 38 - 39  | Pale Rose Pink     | 37     |
|                                                                                       | 40 - 41  | Salmon             | 41     |
|                                                                                       | 42 - 43  | Deep Salmon        | 42     |
|                                                                                       | 44 - 45  | Middle Rose        | 44     |
|                                                                                       | 46 - 47  | Light Rose Purple  | 47     |
|                                                                                       | 48 - 49  | Surprise Pink      | 51     |
|                                                                                       | 50 - 51  | No Color Blue      | 60     |
|                                                                                       | 52 - 53  | Clearwater         | 360    |
|                                                                                       | 54 - 55  | Booster Blue       | 62     |
|                                                                                       | 56 - 57  | Tipton Blue        | 362    |
|                                                                                       | 58 - 59  | Blue Bell          | 364    |
|                                                                                       | 60 - 61  | Daylight Blue      | 65     |
|                                                                                       | 62 - 63  | Tharon Delft Blue  | 365    |
|                                                                                       | 64 - 65  | Cerulean Blue      | 375    |
|                                                                                       | 66 - 67  | Bermuda Blue       | 376    |
|                                                                                       | 68 - 69  | Green Blue         | 77     |
|                                                                                       | 70 - 71  | Alice Blue         | 378    |
|                                                                                       | 72 - 73  | Primary Blue       | 80     |
|                                                                                       | 74 - 75  | Baldassari Blue    | 381    |
|                                                                                       | 76 - 77  | Medium Blue        | 83     |
|                                                                                       | 78 - 79  | Pale Yellow Green  | 87     |
|                                                                                       | 80 - 81  | Light Green        | 88     |
|                                                                                       | 82 - 83  | Moss Green         | 89     |
|                                                                                       | 84 - 85  | Primary Green      | 91     |
|                                                                                       | 86 - 87  | Turquoise          | 92     |
|                                                                                       | 88 - 89  | Blue Green         | 93     |
|                                                                                       | 90 - 91  | Chocolate          | 99     |
|                                                                                       | 92 - 255 | Reserved           |        |

## Category 1, LEE Color Correction

| Channel                                                                               | Value    | Gel Name                       | Number |
|---------------------------------------------------------------------------------------|----------|--------------------------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | Double CTB                     | 200    |
|                                                                                       | 2 - 3    | Full CTB                       | 201    |
|                                                                                       | 4 - 5    | 3/4 CTB                        | 281    |
|                                                                                       | 6 - 7    | 1/2 CTB                        | 202    |
|                                                                                       | 8 - 9    | 1/4 CTB                        | 203    |
|                                                                                       | 10 - 11  | 1/8 CTB                        | 218    |
|                                                                                       | 12 - 13  | Double CTO                     | 287    |
|                                                                                       | 14 - 15  | Full CTO                       | 204    |
|                                                                                       | 16 - 17  | 3/4 CTO                        | 285    |
|                                                                                       | 18 - 19  | 1/2 CTO                        | 205    |
|                                                                                       | 20 - 21  | 1/4 CTO                        | 206    |
|                                                                                       | 22 - 23  | 1/8 CTO                        | 223    |
|                                                                                       | 24 - 25  | 1 1/2 CTB                      | 283    |
|                                                                                       | 26 - 27  | 1 1/2 CTO                      | 286    |
|                                                                                       | 28 - 29  | Full CTS                       | 441    |
|                                                                                       | 30 - 31  | 1/2 CTS                        | 442    |
|                                                                                       | 32 - 33  | 1/4 CTS                        | 443    |
|                                                                                       | 34 - 35  | 1/8 CTS                        | 444    |
|                                                                                       | 36 - 37  | Full CTO + .3 ND               | 207    |
|                                                                                       | 38 - 39  | Full CTO + .6 ND               | 208    |
|                                                                                       | 40 - 41  | L.C.T. Yellow (Y1)             | 212    |
|                                                                                       | 42 - 43  | White Flame Green              | 213    |
|                                                                                       | 44 - 45  | LEE Fluorescent Green          | 219    |
|                                                                                       | 46 - 47  | Super Correction L.C.T. Yellow | 230    |
|                                                                                       | 48 - 49  | Super Correction W.F. Green    | 232    |
|                                                                                       | 50 - 51  | H.M.I. (to Tungsten)           | 236    |
|                                                                                       | 52 - 53  | C.I.D. (to Tungsten)           | 237    |
|                                                                                       | 54 - 55  | C.S.I. (to Tungsten)           | 238    |
|                                                                                       | 56 - 57  | LEE Fluorescent 5700 Kelvin    | 241    |
|                                                                                       | 58 - 59  | LEE Fluorescent 4300 Kelvin    | 242    |
|                                                                                       | 60 - 61  | LEE Fluorescent 3600 Kelvin    | 243    |
|                                                                                       | 62 - 63  | LEE Plus Green                 | 244    |
|                                                                                       | 64 - 65  | 1/2 Plus Green                 | 245    |
|                                                                                       | 66 - 67  | 1/4 Plus Green                 | 246    |
|                                                                                       | 68 - 69  | 1/8 Plus Green                 | 278    |
|                                                                                       | 70 - 71  | LEE Minus Green                | 247    |
|                                                                                       | 72 - 73  | 1/2 Minus Green                | 248    |
|                                                                                       | 74 - 75  | 1/4 Minus Green                | 249    |
|                                                                                       | 76 - 77  | 1/8 Minus Green                | 279    |
|                                                                                       | 78 - 255 | Reserved                       |        |



## Category 2, LEE Color Filters

| Channel                                                                               | Value     | Gel Name             | Number |
|---------------------------------------------------------------------------------------|-----------|----------------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1     | Rose Pink            | 002    |
|                                                                                       | 2 - 3     | Lavender Tint        | 003    |
|                                                                                       | 4 - 5     | Medium Bastard Amber | 004    |
|                                                                                       | 6 - 7     | Pale Yellow          | 007    |
|                                                                                       | 8 - 9     | Dark Salmon          | 008    |
|                                                                                       | 10 - 11   | Pale Amber Gold      | 009    |
|                                                                                       | 12 - 13   | Medium Yellow        | 010    |
|                                                                                       | 14 - 15   | Straw Tint           | 013    |
|                                                                                       | 16 - 17   | Surprise Peach       | 017    |
|                                                                                       | 18 - 19   | Fire                 | 019    |
|                                                                                       | 20 - 21   | Medium Amber         | 020    |
|                                                                                       | 22 - 23   | Gold Amber           | 021    |
|                                                                                       | 24 - 25   | Dark Amber           | 022    |
|                                                                                       | 26 - 27   | Scarlet              | 024    |
|                                                                                       | 28 - 29   | Sunset Red           | 025    |
|                                                                                       | 30 - 31   | Bright Red           | 026    |
|                                                                                       | 32 - 33   | Light Pink           | 035    |
|                                                                                       | 34 - 35   | Medium Pink          | 036    |
|                                                                                       | 36 - 37   | Dark Magenta         | 046    |
|                                                                                       | 38 - 39   | Rose Purple          | 048    |
|                                                                                       | 40 - 41   | Light Lavender       | 052    |
|                                                                                       | 42 - 43   | Paler Lavender       | 053    |
|                                                                                       | 44 - 45   | Lavender             | 058    |
|                                                                                       | 46 - 47   | Mist Blue            | 061    |
|                                                                                       | 48 - 49   | Pale Blue            | 063    |
|                                                                                       | 50 - 51   | Sky Blue             | 068    |
|                                                                                       | 52 - 53   | Evening Blue         | 075    |
|                                                                                       | 54 - 55   | Just Blue            | 079    |
|                                                                                       | 56 - 57   | Deeper Blue          | 085    |
|                                                                                       | 58 - 59   | Lime Green           | 088    |
|                                                                                       | 60 - 61   | Moss Green           | 089    |
|                                                                                       | 62 - 63   | Dark Yellow Green    | 090    |
|                                                                                       | 64 - 65   | Spring Yellow        | 100    |
|                                                                                       | 66 - 67   | Yellow               | 101    |
|                                                                                       | 68 - 69   | Light Amber          | 102    |
|                                                                                       | 70 - 71   | Straw                | 103    |
|                                                                                       | 72 - 73   | Deep Amber           | 104    |
|                                                                                       | 74 - 75   | Primary Red          | 106    |
|                                                                                       | 76 - 77   | Light Rose           | 107    |
|                                                                                       | 78 - 79   | English Rose         | 108    |
|                                                                                       | 80 - 81   | Light Salmon         | 109    |
|                                                                                       | 82 - 83   | Middle Rose          | 110    |
|                                                                                       | 84 - 85   | Dark Pink            | 111    |
|                                                                                       | 86 - 87   | Magenta              | 113    |
|                                                                                       | 88 - 89   | Peacock Blue         | 115    |
|                                                                                       | 90 - 91   | Steel Blue           | 117    |
|                                                                                       | 92 - 93   | Light Blue           | 118    |
|                                                                                       | 94 - 95   | Deep Blue            | 120    |
|                                                                                       | 96 - 97   | LEE Green            | 121    |
|                                                                                       | 98 - 99   | Fern Green           | 122    |
|                                                                                       | 100 - 101 | Dark Green           | 124    |
|                                                                                       | 102 - 103 | Smokey Pink          | 127    |
|                                                                                       | 104 - 105 | Bright Pink          | 128    |
|                                                                                       | 106 - 107 | Marine Blue          | 131    |
|                                                                                       | 108 - 109 | Golden Amber         | 134    |
|                                                                                       | 110 - 111 | Deep Golden Amber    | 135    |
|                                                                                       | 112 - 113 | Pale Lavender        | 136    |
|                                                                                       | 114 - 115 | Special Lavender     | 137    |

## Category 2, LEE Color Filters, continued

| Channel                                                                               | Value     | Gel Name        | Number |
|---------------------------------------------------------------------------------------|-----------|-----------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 116 - 117 | Pale Green      | 138    |
|                                                                                       | 118 - 119 | Summer Blue     | 140    |
|                                                                                       | 120 - 121 | Pale Violet     | 142    |
|                                                                                       | 122 - 123 | Pale Navy Blue  | 143    |
|                                                                                       | 124 - 125 | No Color Blue   | 144    |
|                                                                                       | 126 - 127 | Apricot         | 147    |
|                                                                                       | 128 - 129 | Bright Rose     | 148    |
|                                                                                       | 130 - 131 | Gold Tint       | 151    |
|                                                                                       | 132 - 133 | Pale Gold       | 152    |
|                                                                                       | 134 - 135 | Pale Salmon     | 153    |
|                                                                                       | 136 - 137 | Pale Rose       | 154    |
|                                                                                       | 138 - 139 | Chocolate       | 156    |
|                                                                                       | 140 - 141 | Pink            | 157    |
|                                                                                       | 142 - 143 | No Color Straw  | 159    |
|                                                                                       | 144 - 145 | Slate Blue      | 161    |
|                                                                                       | 146 - 147 | Bastard Amber   | 162    |
|                                                                                       | 148 - 149 | Flame Red       | 164    |
|                                                                                       | 150 - 151 | Daylight Blue   | 165    |
|                                                                                       | 152 - 153 | Lilac Tint      | 169    |
|                                                                                       | 154 - 155 | Deep Lavender   | 170    |
|                                                                                       | 156 - 157 | Dark Steel Blue | 174    |
|                                                                                       | 158 - 159 | Loving Amber    | 176    |
|                                                                                       | 160 - 161 | Dark Lavender   | 180    |
|                                                                                       | 162 - 163 | Light Red       | 182    |
|                                                                                       | 164 - 165 | Flesh Pink      | 192    |
|                                                                                       | 166 - 167 | Surprise Pink   | 194    |
|                                                                                       | 168 - 169 | Zenith Blue     | 195    |
|                                                                                       | 170 - 171 | True Blue       | 196    |
|                                                                                       | 172 - 173 | Alice Blue      | 197    |
|                                                                                       | 174 - 175 | Palace Blue     | 198    |
|                                                                                       | 176 - 177 | Regal Blue      | 199    |
|                                                                                       | 178 - 255 | Reserved        |        |

## Category 3, LEE 600 Series

| Channel                                                                               | Value    | Gel Name        | Number |
|---------------------------------------------------------------------------------------|----------|-----------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | Arctic White    | 600    |
|                                                                                       | 2 - 3    | Silver          | 601    |
|                                                                                       | 4 - 5    | Platinum        | 602    |
|                                                                                       | 6 - 7    | Moonlight White | 603    |
|                                                                                       | 8 - 9    | Full CT 85      | 604    |
|                                                                                       | 10 - 11  | Industry Sodium | 650    |
|                                                                                       | 12 - 13  | HI Sodium       | 651    |
|                                                                                       | 14 - 15  | Urban Sodium    | 652    |
|                                                                                       | 16 - 17  | LO Sodium       | 653    |
|                                                                                       | 18 - 255 | Reserved        |        |

## Category 4, LEE Cosmetic Filters

| Channel                                                                               | Value    | Gel Name              | Number |
|---------------------------------------------------------------------------------------|----------|-----------------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | Cosmetic Peach        | 184    |
|                                                                                       | 2 - 3    | Cosmetic Silver Rose  | 186    |
|                                                                                       | 4 - 5    | Cosmetic Rouge        | 187    |
|                                                                                       | 6 - 7    | Cosmetic Highlight    | 188    |
|                                                                                       | 8 - 9    | Cosmetic Silver Moss  | 189    |
|                                                                                       | 10 - 11  | Cosmetic Aqua Blue    | 191    |
|                                                                                       | 12 - 13  | Lily Frost            | 705    |
|                                                                                       | 14 - 15  | Shanklin Frost        | 717    |
|                                                                                       | 16 - 17  | Half Shanklin Frost   | 718    |
|                                                                                       | 18 - 19  | Durham Daylight Frost | 720    |
|                                                                                       | 20 - 21  | Hampshire Rose        | 749    |
|                                                                                       | 22 - 23  | Durham Frost          | 750    |
|                                                                                       | 24 - 25  | Soft Amber Key 1      | 774    |
|                                                                                       | 26 - 27  | Soft Amber Key 2      | 775    |
|                                                                                       | 28 - 29  | Moroccan Frost        | 791    |
|                                                                                       | 30 - 31  | Blue Diffusion        | 217    |
|                                                                                       | 32 - 33  | Blue Frost            | 221    |
|                                                                                       | 34 - 35  | Daylight Blue frost   | 224    |
|                                                                                       | 36 - 255 | Reserved              |        |

## Category 5, LEE 700 Series

| Channel                                                                               | Value    | Gel Name              | Number |
|---------------------------------------------------------------------------------------|----------|-----------------------|--------|
| <b>8 bit:</b><br>Gel 1: 6<br>Gel 2: 12<br><br><b>16 bit:</b><br>Gel 1: 6<br>Gel 2: 14 | 0 - 1    | Perfect Lavender      |        |
|                                                                                       | 2 - 3    | Provence              | 700    |
|                                                                                       | 4 - 5    | Special Pale Lavender | 701    |
|                                                                                       | 6 - 7    | Cold Lavender         | 702    |
|                                                                                       | 8 - 9    | Lily                  | 703    |
|                                                                                       | 10 - 11  | King Fals Lavender    | 704    |
|                                                                                       | 12 - 13  | Cool Lavender         | 706    |
|                                                                                       | 14 - 15  | Electric Lilac        | 708    |
|                                                                                       | 16 - 17  | Spir Special Blue     | 709    |
|                                                                                       | 18 - 19  | Cold Blue             | 710    |
|                                                                                       | 20 - 21  | Bedford Blue          | 711    |
|                                                                                       | 22 - 23  | Elysian Blue          | 712    |
|                                                                                       | 24 - 25  | Cabana Blue           | 714    |
|                                                                                       | 26 - 27  | Mikkel Blue           | 715    |
|                                                                                       | 28 - 29  | Colour Wash Blue      | 716    |
|                                                                                       | 30 - 31  | Berry Blue            | 719    |
|                                                                                       | 32 - 33  | Virgin Blue           | 721    |
|                                                                                       | 34 - 35  | Ocean Blue            | 723    |
|                                                                                       | 36 - 37  | Old Steel Blue        | 724    |
|                                                                                       | 38 - 39  | Steel Green           | 725    |
|                                                                                       | 40 - 41  | Liberty Green         | 728    |
|                                                                                       | 42 - 43  | Dirty Ice             | 730    |
|                                                                                       | 44 - 45  | Damp Squib            | 731    |
|                                                                                       | 46 - 47  | JAS Green             | 733    |
|                                                                                       | 48 - 49  | am Brown              | 738    |
|                                                                                       | 50 - 51  | Dirty White           | 742    |
|                                                                                       | 52 - 53  | Brown                 | 744    |
|                                                                                       | 54 - 55  | Easy White            | 746    |
|                                                                                       | 56 - 57  | Seedy Pink            | 747    |
|                                                                                       | 58 - 59  | Wheat                 | 748    |
|                                                                                       | 60 - 61  | Sun Colour Straw      | 763    |
|                                                                                       | 62 - 63  | LEE Yellow            | 764    |
|                                                                                       | 64 - 65  | Cardbox Amber         | 765    |
|                                                                                       | 66 - 67  | Nectarine             | 773    |
|                                                                                       | 68 - 69  | Millenium Gold        | 776    |
|                                                                                       | 70 - 71  | Bastard Pink          | 778    |
|                                                                                       | 72 - 73  | Terry Red             | 779    |
|                                                                                       | 74 - 75  | Blood Red             | 781    |
|                                                                                       | 76 - 77  | Moroccan Pink         | 789    |
|                                                                                       | 78 - 79  | Pretty n'Pink         | 790    |
|                                                                                       | 80 - 81  | Magical Magenta       | 794    |
|                                                                                       | 82 - 255 | Reserved              | 795    |

## Mode 18: X,Y Coordinates, 8 bit Resolution per Function

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                        | 0-255                                                              | 0-100                                                     | <b>X1 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 3                                                        | 0-255                                                              | 0-100                                                     | <b>Y1 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 4                                                        | 0-255                                                              | 0-100                                                     | <b>Xfade</b><br>X1, Y1 → X2, Y2                                                                                                                      |
| 5                                                        | 0-255                                                              | 0-100                                                     | <b>X2 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 6                                                        | 0-255                                                              | 0-100                                                     | <b>Y2 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 7                                                        | 0 – 51<br>52 – 102<br>103 – 153<br>154 – 204<br>205 - 255          | 0 – 20<br>21 – 40<br>41 – 60<br>61 – 79<br>80 - 100       | <b>Gel Transition Type</b><br>Direct<br>Through White Point<br>Through Black Point<br>Over White Point<br>Under White point                          |
| 8<br><i>Reverts to fixture setting when signal lost.</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 9                                                        | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 10-11                                                    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 19: X,Y Coordinates, 16 bit Resolution per Function

| Channel                                                   |    | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|-----------------------------------------------------------|----|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI                                                        | LO |                                                                    |                                                           |                                                                                                                                                      |
| 1                                                         | 2  | 0-65.535                                                           | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3                                                         | 4  | 0-65.535                                                           | 0-100                                                     | <b>X1 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 5                                                         | 6  | 0-65.535                                                           | 0-100                                                     | <b>Y1 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 7                                                         | 8  | 0-65.535                                                           | 0-100                                                     | <b>Xfade</b><br>X1, Y1 → X2, Y2                                                                                                                      |
| 9                                                         | 10 | 0-65.535                                                           | 0-100                                                     | <b>X2 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 11                                                        | 12 | 0-65.535                                                           | 0-100                                                     | <b>Y2 Coordinate</b><br>0.0 → 0.8                                                                                                                    |
| 13                                                        |    | 0 – 51<br>52 – 102<br>103 – 153<br>154 – 204<br>205 - 255          | 0 – 20<br>21 – 40<br>41 – 60<br>61 – 79<br>80 - 100       | <b>Gel Transition Type</b><br>Direct<br>Through White Point<br>Through Black Point<br>Over White Point<br>Under White point                          |
| 14<br><i>Reverts to fixture setting when signal lost.</i> |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 15                                                        |    | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 16 - 17                                                   |    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 20: Source Matching, 8 bit Resolution per Function

| Channel                                                  | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                        | 0-255                                                              | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 2                                                        | 0-50<br>51-101<br>102-152<br>153-203<br>204-255                    | 0-20<br>21-39<br>40-59<br>60-79<br>80-100                 | <b>Category 1</b><br>Incandescent<br>Fluorescent<br>Discharge<br>Other<br>Reserved for future use                                                    |
| 3                                                        | 0-255                                                              | 0-100                                                     | <b>Source 1</b><br>Please see table below                                                                                                            |
| 4                                                        | 0-255                                                              | 0-100                                                     | <b>Cross Fade</b><br>Cat 1, Source 1 → Cat 2, Source 2                                                                                               |
| 5                                                        | 0-50<br>51-101<br>102-152<br>153-203<br>204-255                    | 0-20<br>21-39<br>40-59<br>60-79<br>80-100                 | <b>Category 2</b><br>Incandescent<br>Fluorescent<br>Discharge<br>Other<br>Reserved for future use                                                    |
| 6                                                        | 0-255                                                              | 0-100                                                     | <b>Source 2</b><br>Please see table below                                                                                                            |
| 7<br><i>Reverts to fixture setting when signal lost.</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 8                                                        | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 9-11                                                     |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Mode 21: Source Matching, 16 bit Resolution per Function

| Channel                                                  |    | Value                                                              | Percent                                                   | Function                                                                                                                                             |
|----------------------------------------------------------|----|--------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| HI                                                       | LO |                                                                    |                                                           |                                                                                                                                                      |
| 1                                                        | 2  | 0-65.535                                                           | 0-100                                                     | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                         |
| 3                                                        |    | 0-50<br>51-101<br>102-152<br>153-203<br>204-255                    | 0-20<br>21-39<br>40-59<br>60-79<br>80-100                 | <b>Category 1</b><br>Incandescent<br>Fluorescent<br>Discharge<br>Other<br>Reserved for future use                                                    |
| 4                                                        |    | 0-255                                                              | 0-100                                                     | <b>Source 1</b><br>Please see table below                                                                                                            |
| 5                                                        | 6  | 0-65.535                                                           | 0-100                                                     | <b>Cross Fade</b><br>Cat 1, Source 1 → Cat 2, Source 2                                                                                               |
| 7                                                        |    | 0-50<br>51-101<br>102-152<br>153-203<br>204-255                    | 0-20<br>21-39<br>40-59<br>60-79<br>80-100                 | <b>Category 2</b><br>Incandescent<br>Fluorescent<br>Discharge<br>Other<br>Reserved for future use                                                    |
| 8                                                        |    | 0-255                                                              | 0-100                                                     | <b>Source 2</b><br>Please see table below                                                                                                            |
| 9<br><i>Reverts to fixture setting when signal lost.</i> |    | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255 | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100 | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off |
| 10                                                       |    | 0-255                                                              | 0-100                                                     | <b>Preset</b><br>See page 31                                                                                                                         |
| 11 - 12                                                  |    |                                                                    |                                                           | <b>Reserved (only V4.x)</b>                                                                                                                          |

## Source Matching, Light Sources

| Category            | Value  | Function                |
|---------------------|--------|-------------------------|
| <b>Incandescent</b> | 0-2    | Tungsten Bulb           |
|                     | 3-5    | Incandescent            |
|                     | 6-8    | Halogen                 |
|                     | 9-11   | Antique Bulb            |
|                     | 12-14  | Warm Antique Bulb       |
|                     | 15-17  | Christmas Lights        |
|                     | 18-20  | Night Light             |
|                     | 21-23  | Infrared Heat Lamp      |
|                     | 24-26  | Grow light              |
|                     | 27-255 | Reserved for future use |
| <b>Flourescent</b>  | 0-2    | CFL Soft White          |
|                     | 3-5    | CFL Bright White        |
|                     | 6-8    | CFL Cool White          |
|                     | 9-11   | CFL Daylight            |
|                     | 12-14  | Cool White 1            |
|                     | 15-17  | Cool White 2            |
|                     | 18-20  | Cool White 3            |
|                     | 21-23  | Warm White              |
|                     | 24-26  | CFL Blacklight          |
|                     | 27-255 | Reserved for future use |
| <b>Discharge</b>    | 0-2    | HMI                     |
|                     | 3-5    | High Pressure Sodium    |
|                     | 6-8    | Low Pressure Sodium     |
|                     | 9-11   | Mercury Vapor           |
|                     | 12-14  | Metal Halide            |
|                     | 15-17  | Ceramic                 |
|                     | 18-20  | Carbon Arc              |
|                     | 21-23  | Xenon                   |
|                     | 24-255 | Reserved for future use |
| <b>Other</b>        | 0-2    | Candle                  |
|                     | 3-5    | Gas Fire                |
|                     | 6-8    | Sun Direct              |
|                     | 9-11   | Sun Overcast            |
|                     | 12-14  | Sun Blue Hour           |
|                     | 15-17  | Mobile Phone            |
|                     | 18-20  | Computer Monitor        |
|                     | 21-23  | Electroluminescence     |
|                     | 24-26  | Blow Torch              |
|                     | 27-29  | Road Flare              |
|                     | 30-32  | Amber Caution           |
|                     | 33-35  | Green Traffic Light     |
|                     | 36-38  | Yellow Traffic Light    |
|                     | 39-41  | Red Traffic Light       |
|                     | 42-44  | Blue Glow Stick         |
|                     | 45-47  | Green Glow Stick        |
|                     | 48-50  | Red Glow Stick          |
|                     | 51-53  | Yellow Glow Stick       |
|                     | 54-56  | Pink Glow Stick         |
|                     | 57-59  | Violet Glow Stick       |
|                     | 60-255 | Reserved for future use |



## Mode 22: Effects, 8 bit Resolution per Function

| Channel                                                   | Value                                                                                                                                         | Percent                                                                                                                         | Function                                                                                                                                                                                                                                     |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Master Intensity</b><br>0 % → 100% (open)                                                                                                                                                                                                 |
| 2                                                         | 0-10<br>11-20<br>21-30<br>31-40<br>41-50<br>51-60<br>61-70<br>71-80<br>81-90<br>91-100<br>101-110<br>111-120<br>121-130<br>131-140<br>141-255 | 0-4<br>5-8<br>9-12<br>13-15<br>16-20<br>21-23<br>24-27<br>28-31<br>32-35<br>36-39<br>40-43<br>44-47<br>48-51<br>52-55<br>53-100 | <b>Effect Selection</b><br>No Effect<br>Party Effect<br>Candle<br>Clouds Passing<br>Club Lights<br>Color Chase<br>Cop Car<br>Fire<br>Fireworks<br>Light Strobe<br>Lightning<br>Paparazzi<br>Pulsing<br>Television<br>Reserved for future use |
| 3                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 1</b><br>See table below                                                                                                                                                                                                 |
| 4                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 2</b><br>See table below                                                                                                                                                                                                 |
| 5                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 3</b><br>See table below                                                                                                                                                                                                 |
| 6                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 4</b><br>See table below                                                                                                                                                                                                 |
| 7                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 5</b><br>See table below                                                                                                                                                                                                 |
| 8                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 6</b><br>See table below                                                                                                                                                                                                 |
| 9                                                         | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Effect Parameter 7</b><br>See table below                                                                                                                                                                                                 |
| 10<br><i>Reverts to fixture setting when signal lost.</i> | 0-9<br>10-57<br>58-105<br>106-153<br>154-201<br>202-249<br>250-255                                                                            | 0-3<br>4-22<br>23-41<br>42-60<br>61-78<br>79-97<br>98-100                                                                       | <b>Fan Control</b><br>Use fixture setting<br>Quiet Mode<br>Variable Mode<br>High Temp Mode<br>Normal Mode (only S360-C)<br>Fan max. speed<br>Fan off                                                                                         |
| 11                                                        | 0-255                                                                                                                                         | 0-100                                                                                                                           | <b>Preset</b><br>See page 31                                                                                                                                                                                                                 |
| 12-13                                                     |                                                                                                                                               |                                                                                                                                 | <b>Reserved (only V4.x)</b>                                                                                                                                                                                                                  |

## Mode 23: Effects, 16 bit Resolution per Function

| Channel                                                  |    | Value   | Percent | Function                                     |
|----------------------------------------------------------|----|---------|---------|----------------------------------------------|
| HI                                                       | LO |         |         |                                              |
| 1                                                        | 2  | 0-65535 | 0-100   | <b>Master Intensity</b><br>0 % → 100% (open) |
| 3                                                        |    | 0-10    | 0-4     | <b>Effect Selection</b>                      |
|                                                          |    | 11-20   | 5-8     | No Effect                                    |
|                                                          |    | 21-30   | 9-12    | Party Effect                                 |
|                                                          |    | 31-40   | 13-15   | Candle                                       |
|                                                          |    | 41-50   | 16-20   | Clouds Passing                               |
|                                                          |    | 51-60   | 21-23   | Club Lights                                  |
|                                                          |    | 61-70   | 24-27   | Color Chase                                  |
|                                                          |    | 71-80   | 28-31   | Cop Car                                      |
|                                                          |    | 81-90   | 32-35   | Fire                                         |
|                                                          |    | 91-100  | 36-39   | Fireworks                                    |
|                                                          |    | 101-110 | 40-43   | Light Strobe                                 |
|                                                          |    | 111-120 | 44-47   | Lightning                                    |
|                                                          |    | 121-130 | 48-51   | Paparazzi                                    |
|                                                          |    | 131-140 | 52-55   | Pulsing                                      |
|                                                          |    | 141-255 | 53-100  | Television<br>Reserved for future use        |
| 4                                                        | 5  | 0-255   | 0-100   | <b>Effect Parameter 1</b><br>See table below |
| 6                                                        | 7  | 0-255   | 0-100   | <b>Effect Parameter 2</b><br>See table below |
| 8                                                        | 9  | 0-255   | 0-100   | <b>Effect Parameter 3</b><br>See table below |
| 10                                                       | 11 | 0-255   | 0-100   | <b>Effect Parameter 4</b><br>See table below |
| 12                                                       | 13 | 0-255   | 0-100   | <b>Effect Parameter 5</b><br>See table below |
| 14                                                       | 15 | 0-255   | 0-100   | <b>Effect Parameter 6</b><br>See table below |
| 16                                                       | 17 | 0-255   | 0-100   | <b>Effect Parameter 7</b><br>See table below |
| 18<br><i>Reverts to fixture setting when signal lost</i> |    | 0-9     | 0-3     | <b>Fan Control</b>                           |
|                                                          |    | 10-57   | 4-22    | Use fixture setting                          |
|                                                          |    | 58-105  | 23-41   | Quiet Mode                                   |
|                                                          |    | 106-153 | 42-60   | Variable Mode                                |
|                                                          |    | 154-201 | 61-78   | High Temp Mode                               |
|                                                          |    | 202-249 | 79-97   | Normal Mode (only S360-C)                    |
|                                                          |    | 250-255 | 98-100  | Fan max. speed<br>Fan off                    |
| 19                                                       |    | 0-255   | 0-100   | <b>Preset</b><br>See page 31                 |
| 20-21                                                    |    |         |         | <b>Reserved (only V4.x)</b>                  |

## Party Effect

| Parameter | Value 8 bit | Value 16 bit   | Percent    | Function                                                        |
|-----------|-------------|----------------|------------|-----------------------------------------------------------------|
| 1         | 0<br>1-255  | 0<br>1 – 65535 | 0<br>1-100 | <b>Saturation</b><br>CCT 2.800 → 10.000 K<br>0 → 1.0 Saturation |
| 2         | 0-255       | 0 – 65535      | 0-100      | <b>Speed</b><br>Loop 60 s → 1 s                                 |

## Candle

| Parameter | Value 8 bit               | Value 16 bit                                | Percent                 | Function                                                                                                                            |
|-----------|---------------------------|---------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-84<br>85-170<br>171-255 | 0 – 21844<br>21845 - 43690<br>43691 - 65535 | 0-33<br>34-66<br>67-100 | <b>CCT Range</b><br><i>Not continuous, set range for random generation</i><br>1.400 → 1.700 K<br>1.700 → 2.000 K<br>2.000 → 2.300 K |
| 2         | 0-255                     | 0 – 65535                                   | 0-100                   | <b>Speed</b><br>0 → 120 changes / min                                                                                               |

## Clouds Passing

| Parameter | Value 8 bit      | Value 16 bit               | Percent        | Function                                                                                                      |
|-----------|------------------|----------------------------|----------------|---------------------------------------------------------------------------------------------------------------|
| 1         | 0-255            | 0 – 65535                  | 0-100          | <b>Offset</b><br>Offset Number 0 – 50<br><i>Every 5 DMX values is a new offset</i>                            |
| 2         | 0-127<br>128-255 | 0 - 32767<br>32768 - 65535 | 0-50<br>51-100 | <b>Speed</b><br>2 x Slower → Default Speed<br>Default Speed → 2 x Faster                                      |
| 3         |                  |                            |                | <b>Sync</b><br><i>If bumped to 255 (100%), the loop will start at zero (or depending on the offset value)</i> |

## Club Lights

| Parameter | Value 8 bit                                                                                  | Value 16 bit                                                                                                                   | Percent                                                                              | Function                                                                                                                  |
|-----------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1         | 0 – 31<br>32 – 63<br>64 – 95<br>96 – 127<br>128 – 159<br>160 – 191<br>192 – 223<br>224 – 255 | 0 – 8191<br>8192 – 16383<br>16384 – 24575<br>24576 – 32767<br>32768 – 40959<br>40960 – 49151<br>49152 – 57343<br>57344 – 65535 | 0 – 12<br>13 – 25<br>26 – 37<br>38 – 49<br>50 – 62<br>63 – 75<br>76 – 87<br>88 – 100 | <b>Color Variety</b><br>3 Colors<br>6 Colors<br>9 Colors<br>12 Colors<br>15 Colors<br>18 Colors<br>21 Colors<br>24 Colors |
| 2         | 0-255                                                                                        | 0 – 65535                                                                                                                      | 0-100                                                                                | <b>Speed</b><br>0 → 120 changes / min                                                                                     |

## Color Chase

| Parameter | Value 8 bit | Value 16 bit   | Percent    | Function                                                                                                      |
|-----------|-------------|----------------|------------|---------------------------------------------------------------------------------------------------------------|
| 1         | 0-255       | 0 – 65535      | 0-100      | <b>Offset</b><br>Offset Number 0 – 50<br><i>Every 5 DMX values is a new offset</i>                            |
| 2         | 0-255       | 0 – 65535      | 0-100      | <b>Speed</b><br>Loop 60 s → 1 s                                                                               |
| 3         | 0<br>1-255  | 0<br>1 – 65535 | 0<br>1-100 | <b>Saturation</b><br>CCT 2.800 → 10.000 K<br>0 → 1.0 Saturation                                               |
| 4         |             |                |            | <b>Sync</b><br><i>If bumped to 255 (100%), the loop will start at zero (or depending on the offset value)</i> |

## Cop Car

| Parameter | Value 8 bit                                                                                  | Value 16 bit                                                                                                                   | Percent                                                                              | Function                                                                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-63<br>64-127<br>128-191<br>192-255                                                         | 0 – 16383<br>16384 – 32767<br>32768 – 49151<br>49152 - 65535                                                                   | 0-25<br>26-50<br>51-75<br>76-100                                                     | <b>Color Combinations</b><br>Just Blue<br>Blue and Red<br>Blue and White<br>Blue, Red and White                                                                         |
| 2         | 0 – 31<br>32 – 63<br>64 – 95<br>96 – 127<br>128 – 159<br>160 – 192<br>192 – 223<br>224 – 255 | 0 – 8191<br>8192 – 16383<br>16384 – 24575<br>24576 – 32767<br>32768 – 40959<br>40960 – 49151<br>49152 – 57343<br>57344 - 65535 | 0 – 12<br>13 – 25<br>26 – 37<br>38 – 50<br>51 – 62<br>63 – 75<br>76 – 87<br>88 – 100 | <b>Flash Pattern</b><br>Single Flash<br>Double Flash<br>Quint All Flash<br>Quint Flash<br>Quad Flash<br>Cycle All<br>Reserved for future use<br>Reserved for future use |

## Fire

| Parameter | Value 8 bit               | Value 16 bit                                | Percent                 | Function                                                                                                                            |
|-----------|---------------------------|---------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-84<br>85-170<br>171-255 | 0 – 21844<br>21845 – 43690<br>43691 - 65535 | 0-33<br>34-66<br>67-100 | <b>CCT Range</b><br><i>Not continuous, set range for random generation</i><br>1.800 → 2.200 K<br>2.200 → 2.600 K<br>2.600 → 3.000 K |
| 2         | 0-255                     | 0 – 65535                                   | 0-100                   | <b>Speed</b><br>0 → 180 changes / min                                                                                               |

## Fireworks

| Parameter | Value 8 bit                          | Value 16 bit                                                 | Percent                          | Function                                                                                    |
|-----------|--------------------------------------|--------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------|
| 1         | 0-63<br>64-127<br>128-191<br>192-255 | 0 – 16383<br>16384 – 32767<br>32768 – 49151<br>49152 - 65535 | 0-25<br>26-50<br>51-75<br>76-100 | <b>Color Combinations</b><br>Colors<br>White<br>Colors and White<br>Reserved for future use |
| 2         | 0-255                                | 0 – 65535                                                    | 0-100                            | <b>Speed</b><br>10 → 0,5 s between fire-works                                               |

## Strobe Light

| Parameter | Value 8 bit                                                          | Value 16 bit                                                                               | Percent                                                    | Function                                                                                                                                  |
|-----------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Speed</b><br>1 → 25 flashes / second                                                                                                   |
| 2         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Color Temperature</b><br>CCT 2.800 → 10.000 K                                                                                          |
| 3         | 0 - 10<br>11 - 20<br>21 - 119<br>120 - 145<br>146 - 244<br>245 - 255 | 0 – 2621<br>2622 – 5243<br>5244 – 30146<br>30147 – 37355<br>37356 – 62914<br>62915 - 65535 | 0 - 4<br>5 - 8<br>8 - 46<br>47 - 57<br>57 - 96<br>97 - 100 | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green |
| 4         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Cross Fade</b>                                                                                                                         |
| 5         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Hue</b><br>0 → 360°                                                                                                                    |
| 6         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Saturation</b><br>0 → 1.0 Saturation                                                                                                   |

## Lightning

| Parameter | Value 8 bit                                                          | Value 16 bit                                                                               | Percent                                                    | Function                                                                                                                                  |
|-----------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-254<br>255                                                         | 0 – 65534<br>65535                                                                         | 0-99<br>100                                                | <b>Frequency</b><br>2 → 14 lightning strikes set<br>Random                                                                                |
| 2         | 0-254<br>255                                                         | 0 – 65534<br>65535                                                                         | 0-99<br>100                                                | <b>Speed</b><br>0 → 10 flashes / second<br>Random                                                                                         |
| 3         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Color Temperature</b><br>CCT 2.800 → 10.000 K                                                                                          |
| 4         | 0 - 10<br>11 - 20<br>21 - 119<br>120 - 145<br>146 - 244<br>245 - 255 | 0 – 2621<br>2622 – 5243<br>5244 – 30146<br>30147 – 37355<br>37356 – 62914<br>62915 - 65535 | 0 - 4<br>5 - 8<br>8 - 46<br>47 - 57<br>57 - 96<br>97 - 100 | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green |
| 5         |                                                                      |                                                                                            |                                                            | <b>Sync</b><br><i>If bumped to 255 (100%), the<br/>loop will start at zero (or<br/>depending on the offset<br/>value)</i>                 |

## Paparazzi

| Parameter | Value 8 bit                                                          | Value 16 bit                                                                               | Percent                                                    | Function                                                                                                                                  |
|-----------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Frequency</b><br>6 → 120 Flashes / min                                                                                                 |
| 2         | 0-128<br>129-255                                                     | 0 - 32767<br>32768 - 65535                                                                 | 0-50<br>51-100                                             | <b>Flash Type</b><br>Flash Bulb<br>Modern Flash                                                                                           |
| 3         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Color Temperature</b><br>CCT 2.800 → 10.000 K                                                                                          |
| 4         | 0 - 10<br>11 - 20<br>21 - 119<br>120 - 145<br>146 - 244<br>245 - 255 | 0 – 2621<br>2622 – 5243<br>5244 – 30146<br>30147 – 37355<br>37356 – 62914<br>62915 - 65535 | 0 - 4<br>5 - 8<br>8 - 46<br>47 - 57<br>57 - 96<br>97 - 100 | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green |

## Pulsing

| Parameter | Value 8 bit                                                          | Value 16 bit                                                                               | Percent                                                    | Function                                                                                                                                  |
|-----------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Frequency</b><br>5 → 90 Pulses / minute                                                                                                |
| 2         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Pulse Duration</b><br>4 → 0.25 seconds                                                                                                 |
| 3         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Color Temperature</b><br>CCT 2.800 → 10.000 K                                                                                          |
| 4         | 0 - 10<br>11 - 20<br>21 - 119<br>120 - 145<br>146 - 244<br>245 - 255 | 0 – 2621<br>2622 – 5243<br>5244 – 30146<br>30147 – 37355<br>37356 – 62914<br>62915 - 65535 | 0 - 4<br>5 - 8<br>8 - 46<br>47 - 57<br>57 - 96<br>97 - 100 | <b>Green-Magenta Point</b><br>neutral / no effect<br>full minus green<br>-99% → -1%<br>neutral / no effect<br>1% → 99%<br>full plus green |
| 5         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Cross Fade</b>                                                                                                                         |
| 6         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Hue</b><br>0 → 360°                                                                                                                    |
| 7         | 0-255                                                                | 0 – 65535                                                                                  | 0-100                                                      | <b>Saturation</b><br>0 → 1.0 Saturation                                                                                                   |

## Television

| Parameter | Value 8 bit               | Value 16 bit                                | Percent                 | Function                                                                                                                             |
|-----------|---------------------------|---------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 1         | 0-84<br>85-170<br>171-255 | 0 – 21844<br>21845 – 43690<br>43690 - 65535 | 0-32<br>33-66<br>67-100 | <b>CCT Range</b><br><i>Not continuous, set range for random generation</i><br>2.800 → 4.700 K<br>4.700 → 6.500 K<br>6.500 → 10.000 K |
| 2         | 0-255                     | 0 - 65535                                   | 0-100                   | <b>Speed</b><br>4 → 24 changes / min                                                                                                 |

## Overview of Typical CCT Values as DMX Values

| CCT value | DMX value (8 bit) |  |     | DMX value (16 bit) |  |        |
|-----------|-------------------|--|-----|--------------------|--|--------|
| Sky-Panel |                   |  | C   |                    |  | C      |
| 3.200 K   |                   |  | 14  |                    |  | 3.670  |
| 5.600 K   |                   |  | 99  |                    |  | 25.493 |
| 6.000 K   |                   |  | 113 |                    |  | 29.098 |
| 6.500 K   |                   |  | 131 |                    |  | 33.685 |

### Equations for calculation

To calculate the CCT value

8 bit

$$DMX_{Value} = \frac{CCT_{Value} - 2800}{28.235}$$

$$CCT_{Value} = (DMX_{Value} \times 28.235) + 2800$$

16 bit

$$DMX_{Value} = \frac{CCT_{Value} - 2800}{0.109865}$$

$$CCT_{Value} = (DMX_{Value} \times 0.109865) + 2800$$

To calculate the x,y coordinate

8 bit

$$DMX_{x-Value} = \frac{x_{Coordinate} \times 255}{0.8}$$

$$DMX_{y-Value} = \frac{y_{Coordinate} \times 255}{0.8}$$

16 bit

$$DMX_{x-Value} = \frac{x_{Coordinate} \times 65535}{0.8}$$

$$DMX_{y-Value} = \frac{y_{Coordinate} \times 65535}{0.8}$$

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