



**User Manual** 

October 2016

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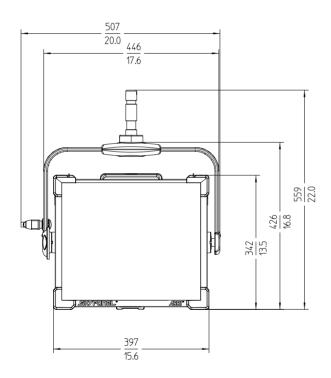
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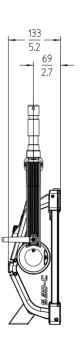
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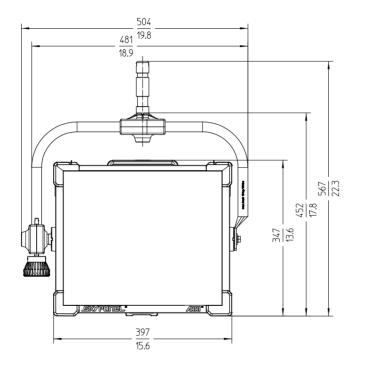
# **Dimensions**

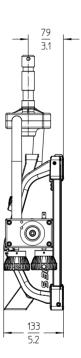
# SkyPanel S30 (manual version)



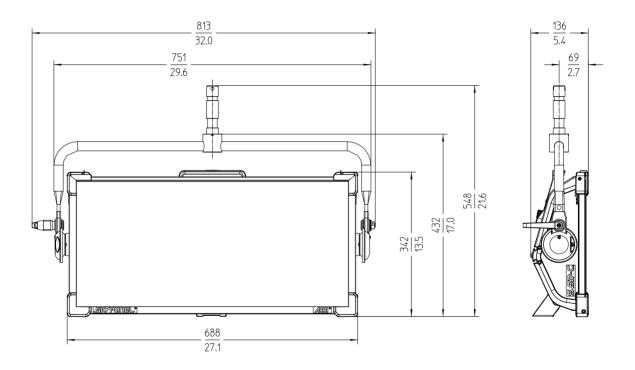


# SkyPanel S30 (P.O. version)

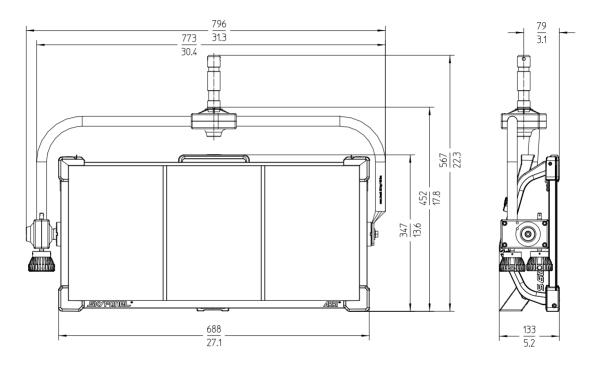




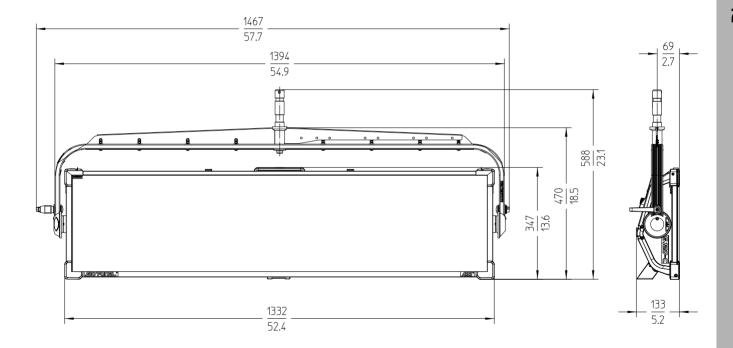
# SkyPanel S60 (manual version)



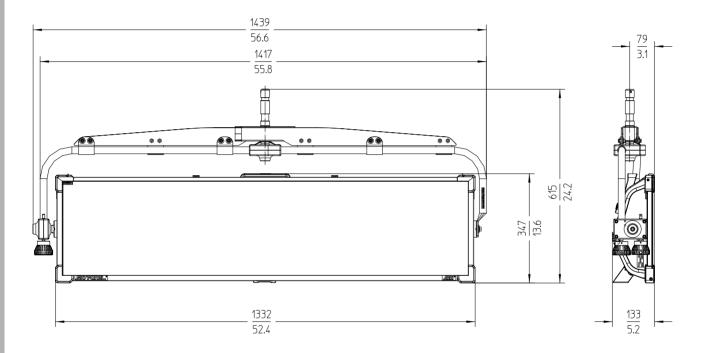
# SkyPanel S60 (P.O. version)



# **SkyPanel S120-C (manual version)**



# SkyPanel S120-C (P.O. version)



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# **Safety Information**



Always follow these instructions and instructions printed on the product or given in the documentation shipped with the product to protect against injury to yourself and damage to the product or other objects.

## **Explanation of Warning Signs and Indications**



Possible risk of injury or damage to equipment.



Risk of fire or electric shock. Possible risk of injury or death or damage to equipment.



Caution! Hot surface. Possible high surface temperature. Risk of injury through burns.



Caution! High intensity light emission. Risk of irreversible eye injury. Wear protection glasses.



Do not stare at the operating light source.

Note: Indicates further information.

#### **General Notes**

- This document contains important instructions and notes to handle the product safe.
- Always follow all safety information for your own protection.
- Please contact a trained ARRI<sup>®</sup> service technician to do any service and maintenance not described in this manual.
- Please follow the user manual of accessories and third party accessories such as battery packs and battery chargers.
   They contain important safety and security information.
- Retain this user manual and all user and installation manuals shipped with the system for further reference and possible new owners of this product.
- ARRI<sup>®</sup> SkyPanel<sup>®</sup> products are intended for professional use and may only be operated by qualified persons. They are not for household use.
- Help protecting the environment by disposing the package material at your local recycling center.
- All components comply to the guidelines listed below:

Low voltage directive 2014/35/EU EMC directive 2014/30/EU RoHS directive 2011/65/EU

## **General Safety Information**



Read and understand all safety information and operation instructions before you operate or install the product or the system.



Use only genuine spare parts or accessories that have been recommended or approved by ARRI. Other accessories or spare parts may cause hazards, damage the product or invalidate the warranty.



Check all cables and devices for visible damage before you work with the system. Defective electric or electronic devices must not be used. Take special care of the following components:

Component	Possible damage
Housing, diffuser	Cracks, cuts, deformation
Cables	Cuts, deformation, burns
Connectors	Cracks, deformation, burns
Cable connectors	Damaged
Threads	Damaged



If the product or accessory is visibly damaged, the product or accessory must no longer be used. Replace or repair the respective part. In case of repairs, please contact an authorized ARRI service center.



Never attempt to repair any part of the product on your own. Maintenance and repair work is only to be carried out by an authorized ARRI service center.



Do not operate the product if the ambient temperature exceeds 45° C. Observe all information given in chapter "Specification" on page 72.



Do not expose the product to rain or moisture. Do not use the product for 2 h when it was exposed to big temperature differences as condensed moisture may damage the product electrically when switched on.



Do not bypass any safety feature of the product.



Do not open the product. There are no user serviceable parts inside. The housing is sealed with an adhesive seal that will break immediately when trying to open the housing. Doing so will invalidate the warranty.



In addition to regular visible checks ARRI recommends that all electric components are checked for electrical safety by a professional every 12 month. Keep the protocol of the check.

## **Specific Safety Information**



Not to observe the safety information or general rules of reason may cause injury or death to yourself and others or damage to equipment.



Intensive use can cause the surface to become warm. Let the product cool down complete before you handle it.



Never cover air vents during operation. Keep a minimum clearance around the air vents of 0.5 m (1.65 ft.).



WARNING: Intense light. Do not stare at the operating light source. Keep a minimum distance to an illuminated surface, object or person of 1.0 m (3.3 ft).



The product must not be used without a diffuser installed. Products with defective safety switches (SkyPanel RP) must not be used.



Never point a light beam from another luminaire into the diffuser. Do not place the product on or nearby heat sources. Intense heat cause damage to the product or automatic power off during operation.



The stirrup shipped with the product must be mounted hanging or standing vertically. Lateral load can cause deformation or breaking of the spigot and the stirrup.



Devices and accessories must be secured against fall when mounted above floor level. Always observe common and local safety regulations.



Never use the cables for transportation. Never hang the product on its cables. Do not hang a battery pack on its connection cable to the product.



Always check that the local AC power matches the voltage and frequency range printed on the type label of the product before use. Never use the product when the AC power does not match.



Use only a genuine ARRI PSU and connection cable designed for the SkyPanel. The use of a third-party PSU and connection cable voids the warranty.



When using a battery pack, always check that the voltage matches the voltage range printed on the type label of the product before connecting the battery pack to the product.



Never connect the product to a dimmer-system or a dimmer-channel in non-dim mode. To do so will damage the electronics. Damages caused by connecting the product to a not suitable power source are not covered by the warranty.



CAUTION: High voltage! Danger of life! Always disconnect the product complete from mains voltage before you connect or disconnect a cable.



Always keep cables away from the product during operation. Do not tilt the power cable directly after the connector. Water could immerse and cause short circuits and damage the connector.



Disconnect all cables prior to transport.

Please observe the information given in the "Safety leaflet ARRI lampheads" (L5.40731.E). The leaflet is available for download on our web site www.arri.com.

## Replacing the Light Source

The light source contained in this luminaire is not replaceable. If the light source has reached the end of its operational life, the entire lamp must be replaced.

If the light source fails before it reached the end of its specified operational life, please contact the manufacturer or his service agent or a similar qualified person.

## **Firmware Downgrade**

Note: Please observe, that it is not possible to downgrade the firmware to a version lower 1.0.0 after updating to version 1.0.0 or higher.

## **Maintenance Information**

- Do not clean the surface of the product with solvents or strong detergents.
- Clean the product with a soft cloth wetted with a mild detergent. Do not rub the surface: lift stuck particles off with a soft repeated press.
- Clean soiled electric contacts with cotton swabs wetted with isopropyle alcohol.
- Keep electric contacts clean and replace corroded parts.

#### Intended use

This product is intended to illuminate persons and objects in a dry environment.

Always follow the safety information.

Any usage other than described above is not permitted and can damage the product and lead to associated risks such as short-circuit, fire, electric shock, etc. You are not allowed to modify the product.

This product fulfills European, national and international requirements.

## Introduction

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

The SkyPanel combines the advantages of the LED technology with the characteristic of a conventional softlight. The SkyPanel integrates seamless 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 saturation (see "Specification" on page 72). The light spectrum is optimized for excellent color rendition and fulfills perfect the demands of modern, digital cameras. All models of the SkyPanel can be controlled using the common DMX512-A protocol, the Art-Net protocol or the fixture menu.

The SkyPanel is powered by AC power or a battery pack. Please find more detailed information in section "To Power the SkyPanel" on page 26.

#### **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. The fully tuneable white light of the C version 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 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 and other accessories for shaping the light like a barndoor are inserted in the locking guiding rails at the front of the fixture.

## Stirrup

The stirrup provides high strength with minimum weight. The external power supply unit can be mounted on the stirrup. An optional, pole operated yoke allows full operation of pan and tilt from the floor and is therefore a popular choice for many studios.

#### Tilt-Lock

The high strength tilt-lock provides extreme secure locking. It eliminates movement and slippage and ensures that the SkyPanel will stay where you put it.

#### Control

All functions of the SkyPanel are controllable through DMX or Art-Net. The SkyPanel is also fully RDM compatible (both via DMX and Art-Net with suitable controllers) and is equipped with a 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 (dependent on model).

## Unpacking

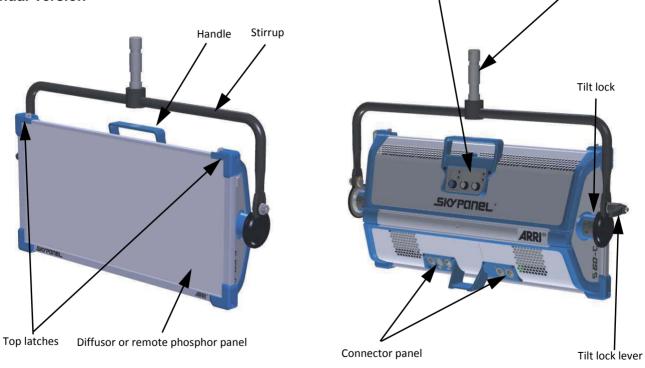
The SkyPanel is supplied with:

- External power supply unit (PSU)
- Power cable with a powerCON TRUE1 connector and a power plug or bare ends
- Connector cable between power supply unit and SkyPanel
- Stirrup
- 28 mm spigot
- Short instruction
- 10 mm allen key (manual version S30 and S60)
- 8 mm allen key (p.o. version S30, S60 and S120, manual version S120)
- 4 mm allen key

Please refer to chapter "Specification" on page 72 for more information about optional accessories.

## **Overview**

## **Manual Version**



Fixture menu

Spigot

Figure 1: Front and back view, manual version (the figure shows the S60)

## P.O. Version

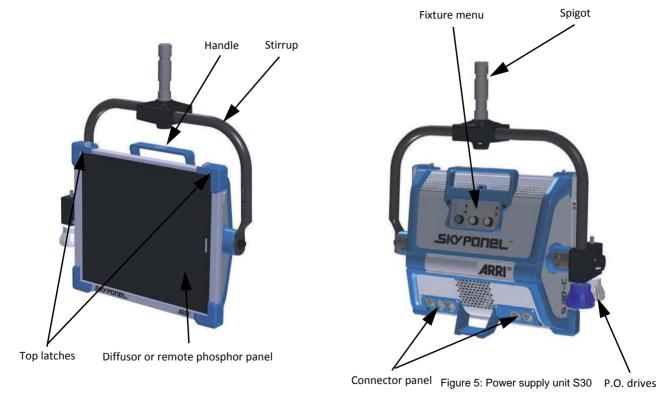


Figure 2: Front and back view, P.O. version (the figure shows the S30)

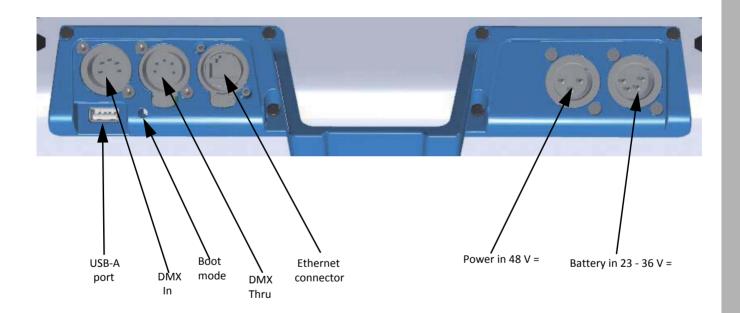
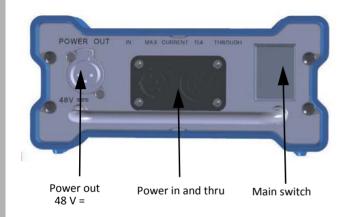


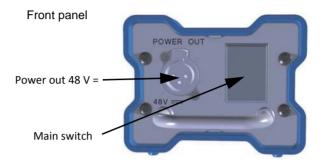
Figure 3: Connector panel

## Power Supply Unit S60 / S120



#### Figure 4: Power supply unit S60 / S120

## **Power Supply Unit S30**



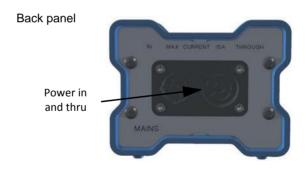


Figure 5: Power supply unit S30

# **Physical Installation**



WARNING! Attach an approved safety-cable to secure the product and accessories against clamp or bracket failure when the product is mounted above floor. The safety-cable needs to be approved at least 10 times the weight of the product including all accessories mounted at the product. The safety cable must comply with EN 60598-2-17 Section 17.6.6 and be approved by an official body such as TÜV. Lead the safety-cable through the stirrup and keep it as short as possible. The handle and the floor stand must not be used as an anchor for the safety-cable.



WARNING! Due to its width the SkyPanel S120 can oscillate and damage objects or insure persons when falling into the safety-cable.



WARNING! The rigging structure needs to be approved for at least 10 times the weight of all devices, equipment and cables installed on it.



WARNING! The stirrup must be mounted hanging or standing vertically. Lateral load can cause deformation or breaking of the spigot and the stirrup.



CAUTION! Block access below the work area and work from a stable platform whenever installing, servicing or moving the product or accessories.



IMPORTANT! Do not illuminate the display and the diffuser plate by high power light beams from a short distance. The display and the light engine are damaged by high brightness and heat radiation within very short time.

## To Mount the Stirrup And the Spigot

You need:

- a 10 mm allen key (manual version)
- a 8 mm allen key (p.o. version)
- a 4 mm allen key
- a torque wrench with 10 mm or 8 mm and 4 mm allen socket

#### To Mount the Spigot (manual version)

Place the spigot on the 13 mm hole in the middle of the stirrup. Insert the allen screw with washer and spring washer and tighten it with a torque wrench to 37 ft-lb. torque.

## To Mount the Spigot (p.o. version)

Insert the allen screw with washer and spring washer in the spigot. Place the spigot on the upper side of the gear in the middle of the spigot. Tighten the allen screw with a torque wrench to 22 ft-lb. torque.

#### To Mount the Stirrup

- Place the SkyPanel with the lighting aperture facing downwards on an even and clean surface.
- Remove two allen screws (4 mm allen key) on each side of the product.
- Insert both connector elements on both sides of the stirrup into the holder on each side of the SkyPanel (see Figure 6).
- Mount the stirrup with two allen screws on each side of the product (4 mm allen key, recommended torque: 5 ft-lb.).

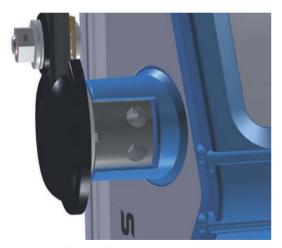


Figure 6: To mount the stirrup

#### To Mount the Safety Loop Brackets

The stirrup holders can be used to attach the safety loop brackets in conjunction the Center mount yoke (L2.0008078) and Fixed center mount yoke (L2.0008080). The brackets are intended to be used as an anchor point for a safety cable.

#### To Dismantle the Stirrup:

- Place the SkyPanel with the lighting aperture facing downwards on an even and clean surface.
- Loosen and remove two allen screws on each side of the product (4 mm allen key, see Figure 6).
- Remove the stirrup.

To Mount the Safety Loop Brackets:

- Place the SkyPanel with the lighting aperture facing downwards on an even and clean surface.
- Place one safety loop bracket in the holder on each side of the SkyPanels (see Figure 7).
- Mount the safety loop brackets with two allen screws on each side of the product (4 mm allen key, torque: 5 ft-lb.).



Figure 7: To mount the safety loop brackets

## To Install the SkyPanel

Always observe all safety information given above when mounting the SkyPanel and accessories. Keep care that:

- Both guiding rails are locked.
- Tripods are set up in a stable position. Tripods need to be approved for the load they need to carry.

Always observe the additional load of cables and accessories!



Top latch unlocked



Top latch locked

Figure 8: Locking top latches

## **Basic Features**

#### Pan and Tilt

Loose the mounting screw of the tripod or the appropriate fixing screw of the mounting clamp to pan the SkyPanel. Tighten the screw to avoid unintended movement. Loose the tilt-lock to tilt the SkyPanel to the desired angle. Tighten the tilt-lock-lever to avoid unintended movement.

## Use of Accessories for Beam Shaping

You can mount accessories using the guiding rails on the front side of the SkyPanel:

- Un-lock both top latches by sliding both levers completely inwards and open the cover strip (see Figure 8).
- Insert the accessory from the top completely into the guiding rails.
- Close the cover strip.
- Lock both top latches by sliding both levers completely outwards (see Figure 8).

#### To Mount a Barndoor

A barndoor is mounted using the outer guiding rails (see Figure 9).

To mount a barndoor on the S30 and S60:

- Close the cover strip. Lock both top latches by sliding both levers completely outwards (see Figure 8).
- Insert the barndoor completely into the outer guiding rails until

both safety catches snap in.

To mount a barndoor on the S120:

- Un-lock both top latches by sliding both levers completely inwards and open the cover strip (see Figure 8).
- Insert the barndoor completely into the outer and inner guiding rails.
- Close the cover strip. Lock both top latches by sliding both levers completely outwards (see Figure 8).

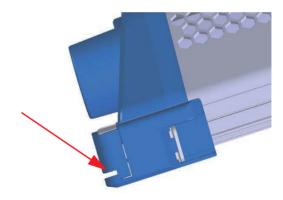


Figure 9: To mount a barndoor

#### DMX / RDM-interface

The SkyPanel has a DMX / RDM-interface. It has locking 5-pin XLR connectors for DMX / RDM data input and throughput. Please find more detailed information how to establish a DMX / RDM data-link in chapter "DMX" on page 41.

#### USB-interface

Note: 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 SkyPanel has an USB-A connector to upload firmware, upload and download fixture settings and preset lists or download error and service logs using an USB memory stick. The memory stick must be formatted with the FAT32 file system. The firmware upload file must be stored in the root directory of the memory stick.

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

#### Ethernet-interface

The SkyPanel has an RJ45 Ethernet port for the control via Art-Net, uploading firmware and setting parameters. The Ethernet port can be used for service purpose like downloading error reports from the product and set certain data. To do so you need a software tool, the ARRI Lighting Service Manager ALSM and an RJ45 network cable to connect your PC with the SkyPanel. Download the ALSM free of charge from the ARRI web site

www.arri.com/lightingsoftware.

Please find more detailed information to work with the ALSM in the user manual of the software. The manual is included in the download package.

## To Power and use the SkyPanel



WARNING! Intense light! Danger of eye injury! Do not stare at the operating light source.

After switching on the SkyPanel initializes for a few seconds and is ready for operation. The SkyPanel will operate with the settings made on the fixture menu or received by DMX or Art-Net. Please observe the following section how to use the SkyPanel.

## **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 29
DMX	yes	no	page 41
RDM	no	yes	page 47
Art-Net	Yes	no	page 40
ALSM	no	yes	page 52

# To Power the SkyPanel



WARNING! Use only an ARRI power supply unit and an ARRI connector cable. The use of other power supply units and connector cables might cause malfunction and damage of the product.



WARNING! For protection from electric shock, always connect the external power supply unit electrically to ground (earth) when connected to AC power. The AC mains power supply must be fitted with a fuse or circuit breaker and ground-fault (earth-fault) protection.



IMPORTANT! Use an eye protection! Ensure that persons do not look at the light emission aperture without eye protection when the product is connected to AC power or a battery pack. The product can light up suddenly. The high intensity light beam of the product can cause eye irritation or injury when not respecting the safety distance.



IMPORTANT! Always connect the product direct to AC power. Do not connect it to a dimmer-system. Doing so will damage the product.

## **AC Power**

The SkyPanel is powered by an external power supply unit (PSU). The PSU is an auto-sensing switch-mode power supply that automatically adapts to AC power at 100 - 240 V  $\sim$ , 50 / 60 Hz (nom.).

Make sure that no person stares at the light output aperture and the product is isolated from DMX before you connect it to a power supply unit or a battery pack.

You can hard-wire the SkyPanel to a building electrical installation. You can install a power plug that is suitable for the local power outlets on the power cable. Power outlets or external power switches that supply the SkyPanel with power must be located near the external power supply unit and easily accessible so that the PSU can easily be disconnected from power.

The external power supply unit of the SkyPanel requires a power input cable with a Neutrik<sup>®</sup> PowerCON<sup>®</sup> True1 NAC3FX-W cable connector. Cable requirements are listed in section "Specification" on page 72.

ARRI offers power cables with PowerCON<sup>®</sup> cable connectors and different plugs or bare ends (see "Specification" on page 72).

The connector cable between the external power supply and the SkyPanel is available in different length as an accessory. Use only ARRI connector cables (see "Specification" on page 72).

#### To Insert and Remove the PowerCON<sup>®</sup> Cable Connector

- Line up the raised key of the connector and the keyway of the input socket. Insert the cable connector without force in the power input socket.
- Turn the cable connector a full quarter-turn clockwise to lock the cable connector.
- To unlock the cable connector, push the connector lock backwards and turn the cable connector counter-clockwise. Pull the cable connector out of the power input socket.

# To Insert and Remove the XLR Connector of the Connector Cable

To insert the cable connectors:

- Disconnect the external power supply unit from AC power.
- Line up the keyway of the female cable connector and the raised key of the 48 V DC power in socket of the product (see Figure 3 on page 19). Insert the cable connector without force in the power in socket until it locks.
- Line up the raised key of the male cable connector and the keyway of the power out socket of the power supply unit. Insert the cable connector without force in the power out socket until it locks.

To remove the cable connectors:

 Press the connector lock and pull the cable connector out of the socket.

#### **Power Through**

- The external power supply is equipped with a Neutrik® PowerCON® True1 power output socket to supply other external power supplies for the SkyPanel from one power outlet. The voltage and frequency of the power through is identical to the voltage and frequency of the power input.
- Please find more information in the user manual of the power supply unit.

## To Use a Battery Pack

The SkyPanel can be powered independently from AC power with a battery pack. The battery pack must meet the following requirements:

Output voltage	23 - 36 V =
Battery operating temperature	68°F - 95°F (-20°C - +45°C)
Minimum capacity	10 Ah
Power outlet connector	4-pin XLR connector

The product has a 4-pin XLR male connector for battery power and DMX data input. The pin-out is:

Pin	Assignment
1	0 V
2	n.c.
3	n.c.
4	+ 23 V - 36 V=



IMPORTANT! Check that the pin-out of the battery pack matches the pin-out of the product. Wrong assigned pin-outs damage the SkyPanel and / or the battery pack.

Always follow the safety information for the battery pack. Use only battery packs that meet all requirements listed above. The use of battery packs that do not fulfill the requirements damage the product and / or the battery pack.

Note: The SkyPanel switches off when the battery voltage drops below 22 V=. The product will be damaged, when the battery voltage exceeds 45 V=.

#### To Insert and Remove the 4-pin XLR Cable Connector

To insert the 4-pin XLR cable connector:

- The main switch of the battery pack must be turned off, if possible.
- Align the raised key of the cable connector with the keyway of the input socket (see Figure 3 on page 19). Insert the cable connector without force in the input socket.
- The cable connector must lock. Repair or replace cable connectors that do not lock.

To remove the 4-pin XLR cable connector:

- Switch of the battery pack, if possible.
- Press down the locking pin of the cable connector and remove the cable connector.

#### Tips for the use of Battery Packs

It is not possible to calculate the operating time of the battery pack exactly. The operating time is dependent from age, state of charge, type of the battery pack and use of the SkyPanel.

## **Fixture Menu**

## Overview

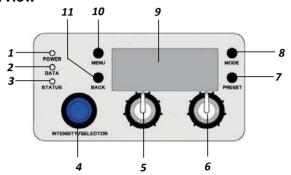


Figure 10: Fixture menu

## **Features of the Fixture Menu**

## POWER-LED (1):

Color	Indication
Green	Fixture switched on. No error.
Blue	Fixture powered by battery pack
Red	Battery pack low voltage
No color	Fixture switched off.

## DATA-LED (2):

Color	Indication
Blue	The fixture receives a valid DMX signal.
Purple	Master mode active
White	Receiving valid Art-Net signal, Gateway active
Green	Receiving valid Art-Net 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 no loaded.
*Display lights up red when STATUS-LED is lit red	

#### 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, only SkyPanel-C)

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, only SkyPanel-C)

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, only SkyPanel-C)

## To call up a preset

A short press of the PRESET knob brings up the list of all available presets. Turn I/S (4) to select a preset. Press I/S (4) to activate the preset.

#### To store a preset

Use the fixture menu to adjust the settings. Press 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 and GEL mode (only Sky-Panel-C). Press the MODE long to open "Light Mode".

#### 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.

#### **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.

#### 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 "Fixture Menu" on page 42.

#### To Set the Operation Mode (only SkyPanel-C)

Press the MODE button (8) to switch from CCT to HSI to GEL 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.

# To set the Color Temperature and Green / Magenta Saturation in CCT Mode (only SkyPanel-C)

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

#### To set the Color in HSI Mode (only SkyPanel-C)

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 Color Temperature and the Color in GEL Mode (only SkyPanel-C)

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 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 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 and Art-Net.

- 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.

- 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:

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Light Control" is selected. Press I/S to open the menu.
- Turn I/S, until "Dimming Curve" is selected. Press I/S to open the menu.
- Select the dimming curve by turning I/S. Press I/S to confirm the setting.
- The menu "Light Control" closes automatically. Press the MENU button to force closing the menu.

#### To set a special control mode

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

 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 afterglow of warm light. This mode is perfect for mixing the SkyPanel with tungsten sources or for producing a familiar effect.

To set a special dimmer mode:

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Light Control" is selected. Press I/S to open the menu.
- Turn I/S, until "Special Modes" is selected. Press I/S to open the menu.
- Select the special mode by turning I/S. Press I/S to confirm the setting.
- The menu "Light Control" closes automatically. Press the MENU button to force closing 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.

Warning! 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 and display an error message (error 25).

To set the master fixture:

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Light Control" is displayed. Press I/S to open the menu.
- Turn I/S, until "Master/Slave Mode" is displayed. Press I/S to open the menu.
- 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.
- 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 is de-activated on all fixtures in the data link.
- Changing the mode on the master fixture (CCT, HSI, GEL) 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.
- The party mode is not available.

#### To set the DMX address

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "DMX Settings" is displayed. Press I/S to open the menu.
- Turn I/S, until "DMX Address" is displayed. Press I/S to open the menu.
- Select the DMX address by turning I/S. Press I/S to confirm the setting.
- The menu "DMX Address" closes automatically. Press the MENU button to force closing the menu.

#### To set the DMX Protocol

• Press the MENU button (10) to open the fixture menu.

- Turn I/S, until "DMX Settings" is displayed. Press I/S to open the menu.
- Turn I/S, until "DMX Protocol" is displayed. Press I/S to open the menu.
- Select the DMX mode by turning I/S. Press I/S to confirm the setting.
- The menu "DMX Protocol" closes automatically. Press the MENU button to force closing the menu.

## To set the DMX-Signal-Loss Behavior

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "DMX Settings" is displayed. Press I/S to open the menu.
- Turn I/S, until "DMX Loss Behavior" is displayed. Press I/S to open the menu.
- Select the setting by turning I/S. Press I/S to confirm the setting.
- The menu "DMX Loss Behavior" closes automatically. Press the MENU button to force closing the menu.

Option	Description
Hold Last Command	The last received DMX values are used until the fixture is switched off or valid DMX data is received again.
Blackout	The fixtures douses to 0% intensity immediately.

Option	Description
Hold for 2 min. then fade out	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 fan Mode

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Fan Mode" is displayed. Press I/S to open the menu.
- Select the Fan mode by turning I/S. Press I/S to confirm the setting.
- The menu "Fan Mode" closes automatically. Press the MENU button to force closing the menu.

Fan mode	Description
Low Fan Speed	Fan operates constantly at low speed (silent).
Vari Fan Speed	The temperature of the light engine controls the fan speed. The fan starts running at app. 70% brightness.
High Fan Speed	Use this mode for ambient temperatures up to 45° C / 113° F. The fan runs at maximum speed.

## Stand-Alone Lighting Effects (only SkyPanel-C)

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Lighting Effects" is displayed. Press I/S twice to open the menu.
- "Party Effects" activates a stand-alone demo sequence, "Off" de-activates the demo sequence.

The demo sequence calls up the color spectrum or changes the color temperature from warm to cold and vice versa in an endless loop. Set the intensity with I/S. Set the speed with the central rotary knob from 0-100% (60 s - 1 s). The right rotary knob sets the saturation and changes between color and color temperature sequence. With the right rotary knob at "0" the color temperature loop is active. Turn the right rotary knob clockwise to increase the saturation to 100%.

## To set the Display Behavior

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Display Setup" is displayed. Press I/S to open the menu.
- 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.
- 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.
- 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.

- 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.
- 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, "Fixture Menu" on page 42 for a detailed explanation of the options.

#### To set the "Battery Low Voltage Warning" Voltage

You can select a voltage that will cause a warning to display on the screen if the battery connected to the fixture goes below the set voltage. The display and the "Power" LED indicator light will turn red and the message "Low Battery" is displayed in the top left corner of the display.

To set a warning voltage:

- Turn I/S, until "Fixture Settings" is displayed. Press I/S to open the menu.
- Turn I/S, until "Low Battery Warning" is displayed. Press I/S to open the menu. Select the desired warning voltage in 0.1 V increments by turning I/S. Press I/S to confirm the setting.
- Press "Menu" to close the menu.

#### To save and load a Preset List

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

To save a preset list:

- Connect an USB memory stick to the USB-A connector of the SkyPanel.
- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "USB Functions" is selected. Press I/S to open the menu.
- Turn I/S, until "Save Light Presets" is selected. Press I/S to open the menu.
- Select "Yes" and press I/S to confirm the setting. Select "No" to abort saving the preset list.
- 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

cproduct 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:

- Connect an USB memory stick with one or more preset lists to the USB-A connector of the SkyPanel.
- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "USB Functions" is selected. Press I/S to open the menu.
- Turn I/S, until "Load Light Presets" is selected. Press I/S to open the list of the preset lists available in the root directory of the USB memory stick.
- Turn I/S, to select a preset list.
- 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 uploaded to another SkyPanel. The file contains all fixture settings except the DMX address and IP settings.

To save the fixture settings:

- Connect an USB memory stick to the USB-A connector of the SkyPanel.
- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "USB Functions" is selected. Press I/S to open the menu.
- Turn I/S, until "Save Fix. Settings" is selected. Press I/S to open the menu.

- Select "Yes" and press I/S to confirm the setting. Select "No" to abort saving the fixture settings.
- 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

cproduct 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 to the SkyPanel:

- Connect an USB memory stick with one or more fixture settings files to the USB-A connector of the SkyPanel.
- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "USB Functions" is selected. Press I/S to open the menu.
- 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.
- Turn I/S, to select a fixture settings file.
- 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:

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

#### To read out Fixture Information

- Press the MENU button (10) to open the fixture menu.
- Turn I/S, until "Fixture Settings" is displayed. Press I/S to open the menu.
- Turn and press I/S to display readouts.

Please refer to section, "Fixture Menu" on page 42 for a detailed explanation of the options.

### To Perform a Factory Reset

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

## **Fixture Control**

The SkyPanel offers, depending on the model, up to 19 control modes. Use the 8 bit modes (mode 1 and 2) 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 (only SkyPanel-C)

This mode provides control of intensity, color temperature, +/-green and individual channels for controlling the red, green, blue and white color.

#### CCT (only SkyPanel-C)

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.

#### CCT & HSI (only SkyPanel-C)

Provides control of intensity, color temperature, +/- green, hue and saturation (HSI = hue, saturation, intensity). In HSI mode

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 (only SkyPanel-C)

Simple mode for controlling the overall intensity and the red, green, blue and white intensity when only a limited number of channels is available.

#### HSI (only SkyPanel-C)

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

#### GEL (only SkyPanel-C)

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 (only SkyPanel-C)

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. The white point has a color temperature of 3.200K. One channel determines the transition type when fading from one color to another color.

Please find a detailed description of all modes in chapter "Protocol" on page 53.

Note: 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**

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

Art-Net supports all modes of the SkyPanel.

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.

#### 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 subnet. (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. Please follow the information given in chapter "DMX" on page 41 when using the DMX data.

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 "Fixture Menu" on page 42.

## **DMX**

To control the SkyPanel via DMX you need a DMX data link. The SkyPanel has 5-pin locking XLR sockets for DMX / RDM data input and output. The default pin-out of both sockets is:

Pin 1 = Shield

Pin 2 = DMX Data - (cold)

Pin 3 = DMX Data + (hot)

Pin 4 = DMX Data - (cold)

Pin 5 = DMX Data + (hot)

Pins 4 and 5 are not used by the SkyPanel but are bridged between input and output sockets. These pins can therefore be used as a pass-through connection for an additional data signal if required.

Do not overload the data link. You must not connect more than 32 SkyPanels per data link. Depending on the channel requirements the address space of one data link (512 channels) may not be enough to control all products of the installation. You may set more than one SkyPanel to identical DMX addresses to obtain identical behavior. For independent control every SkyPanel needs to be assigned an individual address range.

If you need to control more SkyPanels individual, you need to set up additional DMX data links.

## Tips for a Reliable Data Transmission

- Use shielded twisted-pair cable designed for RS-485 devices or CAT 6 network cables. Standard microphone cable cannot transmit control data reliably over long runs. 24 AWG cable is suitable for runs up to 300 meters (1000 ft.). Heavier gauge cable and/or an amplifier is recommended for longer runs.
- To split the data link, use a DMX splitter. Use an RDM compatible splitter when you use the RDM functionality.
- Install a DMX termination plug on the last product of every DMX data link. Terminate the DMX data link on both ends, when you use the RDM functionality. Ask your system specialist for details.

#### To Connect the Data Link

- Connect the DMX data output from the controller to the data input (male XLR) of the first product on the data link.
- Run the data link from the data output (female XLR) to the data input of the next product.
- Terminate the data link by connecting a 120 Ohm, 0.25 Watt resistor between the data 1 hot (+) and cold (-) conductors (and between data 2 hot and cold if used) at the data output of the last product on the link.

# **Fixture Menu**

From firmware version 2.5

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

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

Level 1	Level 2	Level 3	Level 4	Explanation (default setting = bold)		
	DMX Address	<b>1</b> - 512	•	Start address		
	DMX Protocol	<b>P1</b> - P19		Protocol (see page 53)		
		Hold Last Command		Fixture holds the last received control values		
	DMX Loss Behavior	Black Out		Fixture douses the dimmer		
DMX Settings		Hold 2 Min Fade Out		Hold the last received values for 2 min. then douse		
		Version 4.2				
	DMX Protocol Version	Version 4.1		Version of the DMX protocol		
		Version 4.0				
		Version 3.4				
	Low Fan Speed			Low fan speed, silent operation		
Fan Mode	Vari Fan Speed			Temperature regulated fan speed		
	High Fan Speed			High fan speed, best cooling		
		CCT Mode		White light, color temperature and green / magenta correction adjustable		
Light Mode	Mode Selection	HSI Mode		Colored light, hue and saturation adjustable		
		Gel Mode		GEL mode, gel library available, color temperature 3.200 K or 5.600 K		

Level 1	Level 2	Level 3 Level 4		Explanation (default setting = bold)		
		Exponential		Exponential dimming curve		
		Linear		Linear dimming curve		
	Dimming Curve	Logarithmic		Logarithmic dimming curve		
		"S" Curve		Combination of exponential and logarithmic dimming curve		
Light Control	Special Modes	Low End Mode	Off	Flicker free light		
			On	Optimized dimming behavior at low intensity levels		
		Tungatan Mada	Off	Color temperature optimized when dimming		
		Tungsten Mode	On	Emulates the behavior of a tungsten light		
	Master/ Slave Mode Off		•	Master/Slave Mode OFF		
	On			Master/Slave Mode active		
Lighting Effects	Off	•		No stand-alone effect		
Lighting Effects	Party Effect			Stand-alone effect (see page 35)		

Level 1	Level 2	Level 3	Level 4	Explanation (default setting = bold)		
		Always On		Display illumination always on		
	Display Illumination	Off After 10 Sec.		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 Setup	Display Rotation	Normal		No rotation of the display content		
	Display Rotation	Upside-Down		Display content 180° rotated		
	Display Error Mode	Normal		Show error codes, switch status LED and display illumination to red.		
	Display Effor Mode	Hidden		Show error codes. Status LEDs and display illumination off.		
	Light Presets	Save Light Presets	No	Store preset list to an USB memory stick (see page 36)		
		Save Light Flesets	Yes	- Store preset list to all OSB memory stick (see page 30)		
		Load Light Presets	[List]	Load preset list from an USB memory stick. Select preset list with Intensity / Selector (see page 36)		
USB Functions		Save Fix. Settings	No	Store fixture settings to an USB memory stick (see		
USB Functions	Fixture Settings	Save Fix. Settings	Yes	page 36)		
		Load Fix. Settings [List]		Load fixture settings from an USB memory stick. Select fixture settings with Intensity / Selector (see page 36)		
	Save Error Log	No		Store error and service log to an USB memory stick		
	Jave Liloi Log	Yes		(see page 37)		

Level 1	Level 2	Level 3	Level 4	Explanation (default setting = bold)		
	Art-Net Net	<b>0</b> - 127		Select Art-Net net (see page 40)		
	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		
	Art-Net Merge Mode	LTP		Select Merge-Mode "LTP" (Last Take Precedence)		
Art-Net Settings	Art-Net Merge Mode	HTP		Select Merge-Mode "HTP" (High Take Precedence)		
Ait-Net Settings	Art-Net State	Disabled		Art-Net disabled		
	Art-Net State	Enabled		Art-Net enabled		
	Art-Net Gateway	Off		Gateway disabled		
	On On			Gateway enabled (see page 40)		
	IP Mode>			Shortcut to menu "Fixture Settings"		
	Fixture Status	System Ready		No error		
	Tixture Status	<error message=""></error>		Error message (see page 51)		
	Light Engine Temp.	xx.x °C xx.x °F		Recent light engine temperature		
Fixture Info	Hour Counter	xxh - Light Engine 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		
	MAC Address	u:v:w:x:y:z		The fixtures MAC address		
	Network Name	Sxx-xxxxxxxxxxx		The fixtures network name (ident and serial number)		
	Fixture Serial No.	L1.xxxxxxx-xxx		The fixtures serial number		
	Firmware Version	x.xx.xx.xxx		The fixtures firmware version		

Level 1	Level 2	Level 3	Level 4	Explanation (default setting = bold)		
	Low Battery Warning	23.0 - <b>24.1</b> - 36.0 V		Low Battery Warning Voltage (see page 35)		
		DHCP		Use DHCP mode		
	IP Mode	Art-Net 2.B.C.D		Use Art-Net net 2.B.C.D		
	ir Wode	Art-Net 10.B.C.D		Use Art-Net net 10.B.C.D		
		Manual		Jumps to "IP Address" (see page 40)		
Fixture Settings	IP Address	AAA.BBB.CCC.DDD		The fixtures IP address (assigned via DHCP, if active)  If manual mode is active:  AAA = 10, 172 or 192  BBB = 0 - 255, 16 - 31 or 168  CCC = 0 - 255  DDD = 0 - 255  If changed, the IP mode is automatically set to "Manual"		
	Display Version	x.xx.xx.xxx		The displays firmware version		
		Normal		USB port powered		
	USB Mode Service		USB port not powered. Do not change this setting unless being asked by ARRI service. Risk of damage!			
Factory Reset	No	1		Abort action		
raciory Reset	Yes	Yes		Load factory settings		

# **RDM** commands

From firmware version 2.0

Command	Description	GET	SET
Discover Unique Branch	Searches RDM device	Х	Х
Discover Mute	Mutes the RDM device, no response messages	Х	Х
Discover Unmute	Activates device for response messages	Х	Х
Supported Parameters	Shows a list of all supported RDM commands	Х	
Parameter Description	Shows a list of commands that are not standard rdm commands, mostly commands from manufacturer. Describes the data type and shows if Set or Get or both are supported for the listed commands.	х	
Device Info	Lists RDM protocol version, device model ID, product category, software version ID (from Main), DMX footprint, DMX personality, sub-device count and sender count.	Х	
Software Version Label	Shows the software version string from main, e.g. Main 1.66.1 Yes 16 2012 19:10:26	Х	
DMX Start Address	DMX address	Х	Х
Identify Service	Identify Flag -> physically fl ash the light, SkyPanel-C flashes Blue and all other White	Х	Х

# **Required RDM command extensions**

Command	Description	GET	SET
Status Message	Display of actual warning / error message of the fixture.	Х	
Status ID Description	Detailed description of each warning / status report.	Х	
Device Label	This parameter allows you to 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	Х	x
Product Detail ID List	This parameter is utilized to retrieve technical details of a fixture. S shows LED with PWM control	Х	
Device Model Description	A text description of up to 32 characters for the model type of the fixture. SkyPanel-C, SkyPanel RP	Х	
Manufacturer Label	Display the company name ARRI Lighting	Х	
Boot Software Version ID	PrBo SW Version e.g. "2.03.00"	Х	
Boot Software Version Label	Shows text from PrBo Bootloader, e.g. PrBo 2.03.00 Jan 16 2012 19:10:26	Х	
DMX Personality	DMX mode	Х	Х
DMX Personality Description	Displays a text description of a DMX mode with up to 32 characters, shown exactly as in the description in the ALSM	Х	
Slot Info	Shows a description for each DMX channel in use in the requested DMX mode	Х	
Slot Description	Shows a text description with max. 32 characters for each DMX channel from the requested DMX mode	Х	
Default Slot Value	Shows the default DMX channel value from the requested DMX mode	Х	
Sensor Definition	Shows the definition from a specific sensor and a text description	Х	
Sensor Value	Shows the actual sensor value	Х	
Device Hours	Shows the actual device hours of the fixture	Х	

Command	Description	GET	SET
Lamp Hours	Shows the actual lamp hours of the fixture	Х	
Factory Defaults	This command deletes all user parameters and sets the fixture to factory default	Х	Х
Device Power Cycles	Shows the power cycle value, counts every cold start (switch or power-up)	Х	
Reset Device	Fixture makes a software reset (warm start) and carries out a reboot	Х	X
Power State	Power state of the fixture, supported power states: POWER_STATE_STANDBY (0x02), POWER_STATE_NORMAL (0xFF), POWER_STATE_FULL_OFF (0x00) POWER_STATE_SHUTDOWN (0x01)	x	х
Perform Selftest	Supported test modes and demo modes	Х	Х
Self Test Description	Shows a description for each test / demo mode	Х	

# **Manufacturer commands**

Command	Description	GET	SET
RDM Fan Mode PID: 0x8001	Changes the FAN mode of the fixture - this message supports Set and Get commands - the first data byte is used to show / change the fan mode USER_FAN_MODE_LOW = 1 USER_FAN_MODE_VARI = 2 USER_FAN_MODE_HIGH = 3	x	x
RDM Status LED PID: 0x8002	Switch on /off indication LEDs and LCD back light - this message supports Set and Get commands - the first data byte is used to switch indication LEDs on and off LEDs and LCD back light on = 0 LEDs and LCD back light off = 1	x	x

Command	Description	GET	SET
Supported values from -1 to +1			
RDM DMX Signal Lost Mode PIS: 0x8005	If the DMX signal gets lost or the DMX device is unplugged the LED fixture holds the last valid signal, or it holds the last valid signal for two minutes and then douses or switches off immediately.  Supported values:  0 -> hold  1 -> hold 2 minutes  3 -> switch off	x	Х

# **Error Codes**

Code	Error	Remedy
E.003	Controller over temperature. STATUS LED lit up red.	Let the SkyPanel cool down. The STATUS indicator changes to green when the SkyPanel has cooled down. Turn the dimmer knob to "0" or send an intensity value "0" via DMX to activate the light engine again.
E.004	Light engine over temperature	See E.003
E.005	Missing LED supply.	The LED power supply is faulty. Please contact the ARRI service.
E.006	Calibration data of light engine faulty or EEPROM error.	WARNING: Loss of calibration data. This error can only be fixed by re-calibrating the light engine. Please contact the ARRI service.
E.007	Invalid PWM value calculation	Notice: The SkyPanel can be used on. This message is more a notification than an error.
E.008	Invalid values during calculation	See E.007
E.009	Invalid values during calculation	See E.007
E.010	Fan error. The fan speed deviates or the fan doesn't run at all.	Set the fan to LOW or High Speed and see if it starts rotating, in order to determine if there is an electrical malfunction. All mechanical tests or repairs may only be carried out by a trained service technician.
E.011	Fixture menu module not be detected.	If the fixture menu is working, error E.011 can be ignored. However, if the fixture menu remains dark (no LED lights up) we recommend to contact the ARRI service. They can then carry out detailed analyses.
E.012	Temperature sensor(s) are defective or deviation within NTC values too high.	One or more temperature sensors are defective or the deviation within the individual NTCs or BNTCs exceeds the variation tolerance of 12° C / 54° F. Check the error log (LSeries Manager) to see which temperature sensors are affected. Contact the ARRI service.
E.013	Calibration data faulty.	WARNING: Loss of calibration data. Fixture needs to be re-calibrated.
E.014	Watchdog error	Notice: The SkyPanel can be used on. This message is more a notification than an error.
E.015	LED channel faulty	Notice: The SkyPanel can be used on. This message is more a notification than an error.

Code	Error	Remedy
E.0016	Boost over temperature	Let the SkyPanel cool down. The STATUS indicator changes to green when the SkyPanel has cooled down. Turn the dimmer knob to "0" or send an intensity value "0" via DMX to activate the light engine again.
E.017	Battery voltage too low	Battery voltage below 20.5 V. Change the battery pack or switch to AC power.
E.018	PWM driver not found	Switch the SkyPanel off and on again. If the problem persists, please contact the ARRI service.
E.019	Diffuser removed	The diffusor was removed. The protection circuit is active (only RP-version).
E.020	Update with errors	This will be seen if the update process has detected an error during the update. Please look at the error log for more information to see which model or component had a problem with the update.
E.021	Flash init error. No filesystem mounted.	This will happen if the flash disc has a problem with its file system.
E.022	Missing Boost	The Boost board can not be identified during startup. Switch the SkyPanel off and on again. If the problem persists, please contact the ARRI service.
E.023	12V Missing	The 12V power is missing during startup. Please contact the ARRI service.
E.024	5V Missing	The 5V power is missing during startup. Please contact the ARRI service.
E.025	DMX collision	A master fixture detected a valid DMX signal on the data link. It de-activates the master mode.

# **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, which can be downloaded with the ARRI Lighting Service Manager software-bundle from the ARRI web site www.arri.com/lightingsoftware free of charge.

# **Protocol**

Protocol V4.2 is set as default. Use the ALSM to change to Protocol V4.1 or V3.4. ARRI recommends to reserve 4 channels more for each fixture when using Protocol V3.4. This way you do not need to change the patch when you want to use additional features which will become available with Protocol V4.2.

The Protocol V4.2 uses 4 Channels more.

# SkyPanel-RP

#### From Firmware-Version 2.5

8 bit, 1 channel per function	16 bit, 2 chan- nels per function	Coarse/fine, 1-2 chan- nels per function
Mode 1	Mode 2	Mode 3

#### Mode 1: 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity 0 % → 100% (open)
2 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
3-5			Reserved (only V4.x)

#### Mode 2: 16 bit Resolution per Function

Chan	nel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
				Fan Control
	3	0-9	0-4	No function
Reve	rts to	10-60	5-23	Low
fixtur	e set-	61-120	24-47	Variable
ting v	vhen	121-180	48-70	High
signa	l lost.	181-250	71-98	Fan max. speed
		251-255	99-100	Fan off
4	-6			Reserved (only V4.x)

### Modus 3: Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity coarse 0 % → 100% (open)
2	0-255	0-100	Master Intensity fine
3 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
4-6			Reserved (only V4.x)

# SkyPanel-C

#### From Firmware-Version 2.5 - Overview

8 bit, 1 channel per function	16 bit, 2 chan- nels per function	Coarse/fine, 1-2 chan- nels per function
Mode 1	Mode 6	Mode 11
CCT & RGBW	CCT & RGBW	CCT & RGBW
Mode 2	Mode 7	Mode 12
CCT	CCT	CCT
Mode 3	Mode 8	Mode 13
CCT & HSI	CCT & HSI	CCT & HSI
Mode 4	Mode 9	Mode 14
RGBW	RGBW	RGBW
Mode 5	Mode 10	Mode 15
HSI	HSI	HSI
Mode 16 GEL V2	Mode 17 GEL V2	
Mode 18 xy coordinates	Mode 19 xy coordinates	

### GN saturation - 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

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

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity 0 % → 100% (open)
2	0-255	0-100	Color temperature CCT 2.800 K → 10.000 K
3	0-10 11-20 21-119 120-145 146-244 245-255	0-4 5-8 8-46 47-57 57-96 96-100	GN saturation neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
4	0-255	0-100	Xfade to color White → RGBW color
5	0-255	0-100	Intensity red 0% → 100%
6	0-255	0-100	Intensity green 0% → 100%
7	0-255	0-100	Intensity blue 0% → 100%
8	0-255	0-100	Intensity white 0% → 100%
9 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
10-12			Reserved (only V4.x)

Mode 2: CCT, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity 0 % → 100% (open)
2	0-255	0-100	<b>Color temperature CCT</b> 2.800 K → 10.000 K
3	0-10 11-20 21-119 120-145 146-244 245-255	0-4 5-8 8-46 47-57 57-96 96-100	GN saturation neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
4 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
5-7			Reserved (only V4.x)

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

			l <b>-</b>
Channel	Value	Percent	Function
1			Master Intensity
	0-255	0-100	0 % → 100% (open)
2			Color temperature CCT
_	0-255	0-100	2.800 K → 10.000 K
			GN saturation
	0-10	0-4	neutral / no effect
	11-20	5-8	full minus green
3	21-119	8-46	-99% → -1%
	120-145	47-57	neutral / no effect
	146-244	57-96	1% → 99%
	245-255	96-100	full plus green
4			Xfade to color
7	0-255	0-100	white → RGBW color
5			Hue
	0-255	0-100	0° → 360°
6			Saturation
	0-255	0-100	0 → full saturated
			Fan Control
7	0-9	0-4	No function
Reverts to	10-60	5-23	Low
fixture set-	61-120	24-47	Variable
ting when	121-180	48-70	High
signal lost.	181-250	71-98	Fan max. speed
	251-255	99-100	Fan off
8-10			Reserved (only V4.x)

Mode 4: RGBW, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity 0 % → 100% (open)
2	0-255	0-100	Intensity red 0% → 100%
3	0-255	0-100	Intensity green 0% → 100%
4	0-255	0-100	Intensity blue 0% → 100%
5	0-255	0-100	Intensity white 0% → 100%
6 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
7-9			Reserved (only V4.x)

Mode 5: HSI, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity 0 % → 100% (open)
2	0-255	0-100	Hue 0° → 360°
3	0-255	0-100	Saturation 0 → full saturated
4 Reverts to fixture setting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
5-7			Reserved (only V4.x)

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

Chan	nel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
3	HI			Color Temperature CCT
4	LO	0 - 65.535	0 - 100	2.800 K → 10.000 K

Chan	nel	Value	Percent	Function
5	н	0-5.000 5.001-10.000	0-7 8-15	GN saturation neutral / no effect full minus green
6	LO	10.001-29.999 30.000-40.000 40.001-59.999 60.000-65.535	16-46 46-61 61-92 92-100	-99% → -1% neutral / no effect 1% → 99% full plus green
7	Н			Xfade to color
8	LO	0-65.535	0-100	white → RGBW color
9	HI			Intensity red
10	LO	0-65.535	0-100	0% → 100%
11	HI			Intensity green
12	LO	0-65.535	0-100	0% → 100%
13	HI			Intensity blue
14	LO	0-65.535	0-100	0% → 100%
15	HI			Intensity white
16	LO	0-65.535	0-100	0% → 100%
Reve fixtur ting	7 erts to e set- when al lost	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
18	-20			Reserved (only V4.x)

Mode 7: CCT, 16 bit Resolution per Function

Chan	nel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
3	HI			Color temperature CCT
4	LO	0-65.535	0-100	2.800 K → 10.000 K
5	н	0-5.000 5.001-10.000	0-7 8-15	GN saturation neutral / no effect full minus green
6	LO	10.001-29.999 30.000-40.000 40.001-59.999 60.000-65.535	16-46 46-61 61-92 92-100	$-99\% \rightarrow -1\%$ neutral / no effect $1\% \rightarrow 99\%$ full plus green
Reve fixtur ting	7 erts to e set- when al lost	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
8-	10			Reserved (only V4.x)

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

Char	nel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
3	HI			Color temperature CCT
4	LO	0-65.535	0-100	2.800 K → 10.000 K
5	ні	0-5.000 5.001-10.000	0-7 8-15	GN saturation neutral / no effect full minus green
6	LO	10.001-29.999 30.000-40.000 40.001-59.999 60.000-65.535	16-46 46-61 61-92 92-100	$-99\% \rightarrow -1\%$ neutral / no effect $1\% \rightarrow 99\%$ full plus green
7	HI			Xfade to color
8	LO	0-65.535	0-100	white → RGBW color
9	HI			Hue
10	LO	0-65.535	0-100	0° → 360°
11 12	HI LO	0-65.535	0-100	Saturation 0 → full saturated
Reve fixtur ting	3 erts to e set- when al lost	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
14	-16			Reserved (only V4.x)

Mode 9: RGBW, 16 bit Resolution per Function

Char	nel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
3	Н			Intensity red
4	LO	0-65.535	0-100	0% → 100%
5	HI			Intensity green
6	LO	0-65.535	0-100	0% → 100%
7	HI			Intensity blue
8	LO	0-65.535	0-100	0% → 100%
9	HI			Intensity white
10	LO	0-65.535	0-100	0% → 100%
				Fan Control
1	1	0-9	0-4	No function
Reverts to		10-60	5-23	Low
fixture set-		61-120	24-47	Variable
ting when		121-180	48-70	High
signa	al lost	181-250	71-98	Fan max. speed
		251-255	99-100	Fan off
12	-14			Reserved (only V4.x)

Mode 10: HSI, 16 bit Resolution per Function

Chan	nel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
3	HI			Hue
4	LO	0-65.535	0-100	0° → 360°
5	HI			Saturation
6	LO	0-65.535	0-100	0 → full saturated
Reve fixtur ting	rts to e set- when al lost	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
8-	10			Reserved (only V4.x)

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

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity coarse 0 % → 100% (open)
2	0-255	0-100	Master Intensity fine
3	0-255	0-100	Color temperature CCT coarse 2.800 K → 10.000 K
4	0-255	0-100	Color temperature CCT fine

Channel	Value	Percent	Function
			GN saturation
	0-10	0-4	neutral / no effect
	11-20	5-8	full minus green
5	21-119	8-46	-99% → -1%
	120-145	47-57	neutral / no effect
	146-244	57-96	1% → 99%
	245-255	96-100	full plus green
6			Xfade to color
	0-255	0-100	white → RGBW color
7			Intensity red coarse
,	0-255	0-100	0% → 100%
8	0-255	0-100	Red fine
9			Intensity green coarse
9	0-255	0-100	0% → 100%
10	0-255	0-100	Green fine
11			Intensity blue coarse
''	0-255	0-100	0% → 100%
12	0-255	0-100	Blue fine
13			Intensity white coarse
13	0-255	0-100	0% → 100%
14	0-255	0-100	White fine
			Fan Control
15	0-9	0-4	No function
Reverts to	10-60	5-23	Low
fixture set-	61-120	24-47	Variable
ting when	121-180	48-70	High
signal lost.	181-250	71-98	Fan max. speed
	251-255	99-100	Fan off
16-18			Reserved (only V4.x)

Mode 12: CCT, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity coarse 0 % → 100% (open)
2	0-255	0-100	Master Intensity fine
3	0-255	0-100	<b>CCT coarse</b> 2.800 K → 10.000 K
4	0-255	0-100	CCT fine
5	0-10 11-20 21-119 120-145 146-244 245-255	0-4 5-8 8-46 47-57 57-96 96-100	GN saturation neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
6 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
7-9			Reserved (only V4.x)

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

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity coarse 0 % → 100% (open)
2	0-255	0-100	Master Intensity fine

Channel	Value	Percent	Function
3	0-255	0-100	Color temperature CCT coarse 2.800 K → 10.000 K
4	0-255	0-100	Color temperature fine
5	0-10 11-20 21-119 120-145 146-244 245-255	0-4 5-8 8-46 47-57 57-96 96-100	GN saturation neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
6	0-255	0-100	Xfade to color white → RGBW color
7	0-255	0-100	Hue coarse 0 → 360°
8	0-255	0-100	Hue fine
9	0-255	0-100	Saturation coarse 0 → full saturated
10	0-255	0-100	Saturation fine
11 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
12-14			Reserved (only V4.x)

Mode 14: RGBW, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity coarse 0 % → 100% (open)
2	0-255	0-100	Master Intensity fine
3	0-255	0-100	Intensity red coarse 0% → 100%
4	0-255	0-100	Red fine
5	0-255	0-100	Intensity green coarse 0% → 100%
6	0-255	0-100	Green fine
7	0-255	0-100	Intensity blue coarse 0% → 100%
8	0-255	0-100	Blue fine
9	0-255	0-100	Intensity white coarse 0% → 100%
10	0-255	0-100	White fine
11 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
12-14			Reserved (only V4.x)

Mode 15: HSI, Coarse / Fine per Function

Channel	Value	Percent	Function
1			Master Intensity coarse
'	0-255	0-100	0 % → 100% (open)
2	0-255	0-100	Master Intensity fine
3			Hue coarse
3	0-255	0-100	0 → 360°
4	0-255	0-100	Hue fine
5			Saturation coarse
5	0-255	0-100	0 → full saturated
6	0-255	0-100	Saturation fine
			Fan Control
7	0-9	0-4	No function
Reverts to	10-60	5-23	Low
fixture set-	61-120	24-47	Variable
ting when	121-180	48-70	High
signal lost.	181-250	71-98	Fan max. speed
	251-255	99-100	Fan off
8-10			Reserved (only V4.x)

#### Overview of typical CCT values as DMX values

CCT- value	DMX	(-value (8	B bit)	DM)	K-value (16	6 bit)
Sky- panel			С			С
3.200 K			14			3.670
5.600 K			99			25.493
6.000 K			113			29.098
6.500 K			131			33.685

#### To calculate CCT values in DMX % and vice versa

Use the following formulas to transform CCT values in DMX % values and vice versa:

$$CCT_{\text{Target}} = \frac{(CCT_{\text{max}} - CCT_{\text{min}}) \times Channel_{\text{in percent}}}{100} + CCT_{\text{min}}$$

$$Channel_{\text{in percent}} = \frac{CCT_{\text{recent}} - CCT_{\text{min}}}{CCT_{\text{max}} - CCT_{\text{min}}} \times 100$$

#### CCT values SkyPanel-C

$$CCT_{min} = 2.800 \text{ K}$$
  
 $CCT_{max} = 10.000 \text{ K}$ 

#### Mode 16: GEL, 8 bit per function, Base channels

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

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

Channel	Value	Percent	Function
12	0-255	0-100	Gel 2 See tables below
13	0 - 51 52 - 102 103 - 153 154 - 204 205 - 255	0 - 20 21 - 40 41 - 60 61 - 79 80 - 100	Gel Transition Type Direct Through White Point Through Black Point Over White Point Under White point
14 Reverts to fixture setting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
15-17			Reserved (only V4.x)

Mode 17: GEL, 16 bit per function, Base channels

Char	nnel	Value	Percent	Function
1 2	HI LO	0-65.535	0-100	Master Intensity 0 % → 100% (open)
3		0-128 129-255	0-50 51-100	Gel 1,CCT Selection 3.200 K 5.600 K
4		0-128 129-170 171 - 255	0-50 51-67 68 - 100	Gel 1, Color Matching Best Color Color quality optimized Brightest Color brightness opt. No Color Gel
5		0-128 129-255	0-50 51-100	Gel 1, Brand Category on ch. 5 Gel on ch. 6 Rosco LEE Filters
6		0-50 51-101 102-152 153-203 204- 255	0-20 21-39 40-60 61-80 81-100	Gel 1, category Manufacturer on ch. 4 Category 1: Rosco: Color Correction LEE: Color Correction Category 2: Rosco: CalColor LEE: Color Filters Category 3: Rosco: Storaro Selection LEE: 600 Series Category 4: Rosco: Cinelux LEE: Cosmetic Filters Category 5: LEE: 700 Series

Char	nnel	Value	Percent	Function	
7		0-255	0-100	Gel 1 See tables below	
8	HI	0 - 65.535	0 - 100	Xfade to Gel	
9	LO	0 - 05.555	0 - 100	Gel 1 → Gel 2	
10		0-128 129-255	0-50 51-100	Gel 2,CCT Selection 3.200 K 5.600 K	
		0-128	0-50	Gel 2, Color Matching Best Color Color quality optimized	
11		129-170	51-67	Brightest Color brightness opt.	
		171 - 255	68 - 100	No Color Gel	
12		0-128 129-255	0-50 51-100	Gel 2, Brand Category on ch. 11 Gel on ch. 12 Rosco LEE Filters	
13		0-50 51-101 102-152 153-203	0-20 21-39 40-60 61-80	Gel 1, category Manufacturer on ch. 10 Category 1: Rosco: Color Correction LEE: Color Correction Category 2: Rosco: CalColor LEE: Color Filters Category 3: Rosco: Storaro Selection LEE: 600 Series Category 4: Rosco: Cinelux LEE: Cosmetic Filters	
		204- 255	81-100	Category 5: LEE: 700 Series	

Char	nel	Value	Percent	Function
14		0-255	0-100	Gel 2 See tables below
15		0 - 51 52 - 102 103 - 153 154 - 204 205 - 255	0 - 20 21 - 40 41 - 60 61 - 79 80 - 100	Gel Transition Type Direct Through White Point Through Black Point Over White Point Under White point
Reve fixtur ting v	6 erts to e set- vhen al lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
17	-19			Reserved (only V4.x)

# Mode 16 / 17: GEL, gel selection

Category 1, Rosco, Color correction

Chan.	Value	Gel name	Number
6	0 - 1 2 - 3 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 19 20 - 21	Full CTB 3/4 CTB 1/2 CTB 1/3 CTB 1/3 CTB 1/4 CTB 1/8 CTB Double CTB Full CTO 3/4 CTO 1/2 CTO 1/4 CTO	3202 3203 3204 3206 3208 3216 3220 3407 3411 3408 3409

### Category 1, Rosco, Color correction, continued

Chan.	Value	Gel name	Number
6	22 - 23 24 - 25 26 - 27 28 - 29 30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 40 - 41 42 - 43 44 - 45 46 - 47 48 - 49 50 - 51 52 - 53 54 - 55 56 - 57 58 - 59 60 - 61 62 - 63 64 - 65 66 - 255	1/8 CTO Double CTO Full CTS 1/2 CTS 1/2 CTS 1/8 CTS Full Plusgreen 1/2 Plusgreen 1/8 Plusgreen 1/8 Plusgreen 1/8 Minusgreen 3/4 Minusgreen 1/2 Minusgreen 1/4 Minusgreen 1/4 Minusgreen 1/8 Minusgreen 1/8 Minusgreen 1/8 Mo	3410 3420 3441 3442 3443 3444 3304 3315 3316 3317 3308 3309 3313 3314 3318 3310 3150 3150 3152 3107 3134 3106 3102

# Category 2, Rosco, CalColor

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

Category 3, Rosco, Storaro Selection

Chan.	Value	Gel name	Number
	0 - 1	VS Red	2001
	2 - 3 4 - 5	VS Orange VS Yellow	2202 2003
	6 - 7	VS Green	2004
	8 - 9	VS Cyan	2005
6	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

Chan.	Value	Gel name	Number
6	0 - 1 2 - 3 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 19 20 - 21 22 - 23 24 - 25 26 - 27 28 - 29	Bastard Amber Pale Bastard Amber No Color Straw Pale Gold Daffodil Straw Light Amber Gallo Gold Light Flame Flame Mayan Sun Golden Amber Soft Golden Amber Orange Henna Sky	2 302 6 8 310 12 16 316 17 18 318 21 321 23 325

Category 4, Rosco Cinelux, continued

Chan.	Value	Gel name	Number
6	30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 40 - 41 42 - 43 44 - 45 46 - 47 48 - 49 50 - 51 52 - 53 54 - 55 56 - 57 58 - 59 60 - 61 62 - 63 64 - 65 66 - 67 68 - 69 70 - 71 72 - 73 74 - 75 76 - 77 778 - 79 80 - 81 82 - 83 84 - 85 86 - 87 88 - 89	Light Red No Color Pink Blush Pink Flesh Pink Pale Rose Pink Salmon Deep Salmon Middle Rose Light Rose Purple Surprise Pink No Color Blue Clearwater Booster Blue Tipton Blue Blue Bell Daylight Blue Tharon Delft Blue Cerulean Blue Bermuda Blue Green Blue Alice Blue Primary Blue Baldassari Blue Medium Blue Pale Yellow Green Light Green Moss Green Primary Green Turquoise Blue Green Chocolate	26 33 333 34 41 42 44 47 51 60 360 62 362 364 65 365 375 376 77 378 80 381 83 87 88 89 91 92 93

Category 1, LEE Color Correction

Chan.	Value	Gel name	Number
Cilaii.	value	Gername	Number
	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
6	32 - 33	1/4 CTS	443
	34 - 35	1/8 CTS	444
	36 - 37	Full CTO + .3 ND	207
	38 - 39 40 - 41	Full CTO + .6 ND	208
	40 - 41	L.C.T. Yellow (Y1) White Flame Green	212 213
	42 - 43	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

# Category 1, LEE Color Correction, continued

Chan.	Value	Gel name	Number
6	68 - 69 70 - 71 72 - 73 74 - 75 76 - 77 78 - 255	1/8 Plus Green LEE Minus Green 1/2 Minus Green 1/4 Minus Green 1/8 Minus Green Reserved	278 247 248 249 279

### Category 2, LEE Color Filters

Chan.	Value	Gel name	Number
6	0 - 1 2 - 3 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 19 20 - 21 22 - 23 24 - 25 26 - 27 28 - 29 30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 40 - 41 42 - 43 44 - 45	Rose Pink Lavender Tint Medium Bastard Amber Pale Yellow Dark Salmon Pale Amber Gold Medium Yellow Straw Tint Surprise Peach Fire Medium Amber Gold Amber Dark Amber Scarlet Sunset Red Bright Red Light Pink Medium Pink Dark Magenta Rose Purple Light Lavender Paler Lavender	002 003 004 007 008 009 010 013 017 019 020 021 022 024 025 026 035 036 046 048

# Category 2, LEE Color Filters, continued

Chan.	Value	Gel name	Number
6	46 - 47 48 - 49 50 - 51 52 - 53 54 - 55 56 - 57 58 - 59 60 - 61 62 - 63 64 - 65 66 - 67 68 - 69 70 - 71 72 - 73 74 - 75 76 - 77 78 - 79 80 - 81 82 - 83 84 - 85 86 - 87 88 - 89 90 - 91 92 - 93 94 - 95 96 - 97 98 - 99 100 - 101 102 - 103 104 - 105 106 - 107 108 - 109 110 - 111 112 - 113 114 - 115	Mist Blue Pale Blue Sky Blue Evening Blue Just Blue Deeper Blue Lime Green Moss Green Dark Yellow Green Spring Yellow Yellow Light Amber Straw Deep Amber Primary Red Light Rose English Rose English Rose Light Salmon Middle Rose Dark Pink Magenta Peacock Blue Steel Blue Light Blue Deep Blue LEE Green Fern Green Dark Green Smokey Pink Bright Pink Marine Blue Golden Amber Deep Golden Amber Pale Lavender Special Lavender	061 063 068 075 079 085 088 089 090 100 101 102 103 104 106 107 108 109 110 111 111 113 115 117 118 120 121 122 124 127 128 131 134 135 136 137

Category 2, LEE Color Filters, continued

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

# Category 3,LEE 600 Series

Chan.	Value	Gel name	Number
6	0 - 1 2 - 3 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 255	Arctic White Silver Platinum Moonlight White Full CT 85 Industry Sodium HI Sodium Urban Sodium LO Sodium Reserved	600 601 602 603 604 650 651 652 653

# Category 4,LEE Cosmetic Filters

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

# Category 5,LEE 700 Series

Chan.	Value	Gel name	Number
6	0 - 1 2 - 3 4 - 5 6 - 7 8 - 9 10 - 11 12 - 13 14 - 15 16 - 17 18 - 19 20 - 21 22 - 23 24 - 25 26 - 27 28 - 29 30 - 31 32 - 33 34 - 35 36 - 37 38 - 39 40 - 41 42 - 43 44 - 45 46 - 47 48 - 49 50 - 51 52 - 53	Perfect Lavender Provence Special Pale Lavender Cold Lavender Lily King Fals Lavender Cool Lavender Electric Lilac Spir Special Blue Cold Blue Bedford Blue Elysian Blue Cabana Blue Mikkel Blue Colour Wash Blue Berry Blue Virgin Blue Ocean Blue Old Steel Blue Steel Green Liberty Green Dirty Ice Damp Squib JAS Green am Brown Dirty White Brown	700 701 702 703 704 706 708 709 710 711 712 714 715 716 719 721 723 724 725 728 730 731 733 738 742 744 746

# Category 5,LEE 700 Series, continued

Chan.	Value	Gel name	Number
6	54 - 55 56 - 57 58 - 59 60 - 61 62 - 63 64 - 65 66 - 67 68 - 69 70 - 71 72 - 73 74 - 75 76 - 77 78 - 79 80 - 81 82 - 255	Easy White Seedy Pink Wheat Sun Colour Straw LEE Yellow Cardbox Amber Nectarine Millenium Gold Bastard Pink Terry Red Blood Red Moroccan Pink Pretty n'Pink Magical Magenta Reserved	747 748 763 764 765 773 776 778 779 781 789 790 794 795

Mode 18: xy Coordinates, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	Master Intensity 0 % → 100% (open)
2	0-255	0-100	X1 Coordinate 0.0 → 0.8
3	0-255	0-100	<b>Y1 Coordinate</b> 0.0 → 0.8
4	0-255	0-100	<b>Xfade</b> X1, Y1 → X2, Y2
5	0-255	0-100	X2 Coordinate 0.0 → 0.8
6	0-255	0-100	<b>Y2 Coordinate</b> 0.0 → 0.8
7	0 - 51 52 - 102 103 - 153 154 - 204 205 - 255	0 - 20 21 - 40 41 - 60 61 - 79 80 - 100	Gel Transition Type Direct Through White Point Through Black Point Over White Point Under White point
8 Reverts to fixture set- ting when signal lost.	0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
9-11			Reserved (only V4.x)

Mode 19: xy Coordinates, 16 bit Resolution per Function

Cha	nnel	Value	Percent	Function
1	HI			Master Intensity
2	LO	0-65.535	0-100	0 % → 100% (open)
3	HI			X1 Coordinate
4	LO	0-65.535	0-100	0.0 → 0.8
5	HI			Y1 Coordinate
6	LO	0-65.535	0-100	0.0 → 0.8
7	HI			Xfade
8	LO	0-65.535	0-100	X1, Y1 → X2, Y2
9	HI			X2 Coordinate
10	LO	0-65.535	0-100	0.0 → 0.8
11	HI			Y2 Coordinate
12	LO	0-65.535	0-100	0.0 → 0.8
13		0 - 51 52 - 102 103 - 153 154 - 204 205 - 255	0 - 20 21 - 40 41 - 60 61 - 79 80 - 100	Gel Transition Type Direct Through White Point Through Black Point Over White Point Under White point
14 Reverts to fixture set- ting when signal lost.		0-9 10-60 61-120 121-180 181-250 251-255	0-4 5-23 24-47 48-70 71-98 99-100	Fan Control No function Low Variable High Fan max. speed Fan off
15	- 17			Reserved (only V4.x)

# **Specification**

# Physical, SkyPanel S30

Depth	
Wide	507 mm (19.9 in.)
Height	. 347 mm (13.6 in., w/o stirrup)
Weight (w/o accessories)	8 kg (17.6 lbs), 9 kg (20 lbs)

# Physical, SkyPanel S60

Depth
Wide
Height
Weight (w/o accessories) 12 kg (26.5 lbs), 13 kg (28.7 lbs)

# Physical, SkyPanel S120

Depth	133 mm (5.2 in.)
Wide	1467 mm (57.8 in.), man.
	1439 mm (56.7 in.), P.O.
Height	347 mm (13.6 in., w/o stirrup)
Weight (w/o accessories, with PSU).	16 kg (35.3 lbs), man.
	20 kg (44.1 lbs), P.O.

## Physical, external power supply unit

Depth			383	mm (1	5 in.)
Wide 9	0 mm (3.5 in., S	330), 190 mm (	7.5 in.,	S60/S	3120)
Height 1	16 mm (4.6 in.,	S30), 90 mm (	3.5 in.,	S60/S	S120)
Weight	2,2 kg (4.8 lbs,	S30), 3,7 kg (8	3.2 lbs,	S60/S	3120)

### Light source

Type
Typ. LED lifetime L70
White light 2.800 K - 10.000 K (SkyPanel-C)
White light
by remote phosphor panels (SkyPanel-RP
Colored light RGBW color mixing (SkyPanel-C)
Color rendition index typ. CRI >94
Green / Magenta saturation +/- 1 (full green to full magenta)
(SkyPanel-C)

# Optical path

Type	. soft light with diffuser plate (SkyPanel-C)
	remote phospor panel (SkyPanel-RP)
Light aperture	355 x 300 mm (14 x 11.8 in, S30)
	645 x 300 mm (25.4 x 11.8 in, S60)
	1290 x 300 mm (50.8 x 11.8 in, S120)

## **Dynamic functions**

Dimmer	. electronic, 0 - 100%
Color mixing	RGBW color mixing
(Hue and saturati	ion, only SkyPanel-C)

## **Control and Programming**

Channels 5-20 channels, depending on type and mode
Setting and addressing Fixture menu, ALSM
DMX compliance ESTA DMX512A
RDM compliance ESTA DMX512A
Art-Net
Firmware update

#### Construction

Color	Blue / silver or black
Housing	Composite and aluminum
Protection rating	
Protection class	
Protection class	

#### Installation

Mounting	28 mm spigot or 16 mm / 28 mm combo pin
<u> </u>	Orientation +/- 90°
0.5 m 80°C	Min. clearance around fixture
1.0 m 0.5 m	0.5 m (19.7 in)
Max. 90° down	Min. view distance to light aperture
0.5 m	1.0 m (39.4 in)

#### **Connectors**

DC power input	Neutrik® locking 3-pin XLR
Battery pack connector	Neutrik® locking 4-pin XLR
DMX / RDM in / thru	Neutrik® locking 5-pin XLR
Art-Net connector	RJ45 Ethernet connector
USB interface	USB-A

#### **Electrical**

SkyPanel
----------

Power input
Max. cable length between PSU and luminaire 15 m (49 ft.)
External power supply unit
Power input
Power output

Power supply . . . . . . Auto-sensing switching-mode power supply

### **Typical power**

230 V, 50 Hz.	200 W (SkyPanel S30)
	400 W (SkyPanel S60)
	400 W (SkyPanel S120)
cos φ	>0,9
Measurement	s made at nominal voltage with all LEDs at full intensity.
Allow for a de-	viation of +/- 10%

#### **Noise emission**

Ambient temperature = 35° C (95° F)	. < 20dB(A)
Ambient temperature = 45° C (113° F)	. < 30dB(A)

#### **Thermal**

Minimum ambient temperature (t <sub>a</sub> )	20° C (-4° F)
Maximum ambient temperature (t <sub>a</sub> )	. 45° C (113° F)
When using 15 m (49 ft.) header cable	. 40° C (104° F)
Cooling Silent, temperature-control	lled fan cooling

## **Approvals**



#### **RISK GROUP 2 - Moderate Risk**

CAUTION! Possibly hazardous optical radiation emitted from this product. Do not stare in an operating lamp.

#### **Order Information**

All versions include

Power supply unit (PSU)

Rail mount adapter for SkyPanel PSU (not with Center Mount) Standard diffusion panel (only C-Version)

Manual and Center Mount versions include additional

Yoke with 16 mm / 28 mm combo pin (manual version)

DC header cable 48 V= (XLR 3-pin), I = 3 m (10 ft)

PowerCON TRUE1 mains cable, I = 3 m (10ft) with mains connector

Center mount yoke (Center Mount version)

P.O. versions include additional

Steel yoke with 28 mm junior pin

DC header cable 48 V= (XLR 3-pin), I = 1 m (3.3 ft)

PowerCON TRUE1 mains cable, I = 3 m (10ft) with bare ends Pole operation for pan and tilt

#### ARRI SkyPanel S30-C

S30-C, MAN, blue/silver, Edison - Set	. L0.0007711
S30-C, MAN, blue/silver, Schuko - Set	. L0.0007712
S30-C, MAN, blue/silver, China - Set	. L0.0007713
S30-C, MAN, blue/silver, PSE Japan - Set	. L0.0012394
S30-C, P.O., blue/silver, bare ends - Set	. L0.0007714
S30-C, P.O., black, bare ends - set	. L0.0007716
ARRI SkyPanel S30-RP	

# S30-RP, MAN, blue/silver, 3.200 K, Edison - Set. . . . . L0.0007717

S30-RP, MAN, blue/silver, 3.200 K, Schuko- Set L0.0007718
S30-RP, MAN, blue/silver,3.200 K, China - Set L0.0007720
S30-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set . L0.0012395
S30-RP, P.O., blue/silver,3.200 K, bare ends - Set L0.0007721
S30-RP, P.O., black,3.200 K, bare ends - Set L0.0007722

S30-RP, MAN, blue/silver,5.600 K, Edison - Set L0.0007723		
S30-RP, MAN, blue/silver,5.600 K, Schuko- Set L0.0007724		
S30-RP, MAN, blue/silver,5.600 K, China - Set L0.0007725		
S30-RP, MAN, blue/silver, 5.600 K, PSE Japan - Set . L0.0012396		
S30-RP, P.O., blue/silver,5.600 K, bare ends - Set L0.0007726		
S30-RP, P.O., black,5.600 K, bare ends - Set L0.0007727		
ARRI SkyPanel S60-C		
S60-C, MAN, blue/silver, Edison - Set L0.0007063		
S60-C, MAN, blue/silver, Schuko - Set L0.0007064		
S60-C, MAN, blue/silver, China- Set L0.0007065		
S60-C, MAN, blue/silver, PSE Japan - Set L0.0012397		
S60-C, P.O., blue/silver, bare ends - Set L0.0007066		
S60-C, P.O., black, bare ends - Set L0.0007067		
ARRI SkyPanel S60-RP		
ARRI SkyPanel S60-RP		
ARRI SkyPanel S60-RP S60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068		
•		
S60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068		
S60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 S60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069		
S60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 S60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 S60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399 \$60-RP, P.O., blue/silver, 3.200 K, bare ends - Set L0.0007071		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399 \$60-RP, P.O., blue/silver, 3.200 K, bare ends - Set L0.0007071 \$60-RP, P.O., black, 3.200 K, bare ends - Set L0.0007072		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399 \$60-RP, P.O., blue/silver, 3.200 K, bare ends - Set L0.0007071 \$60-RP, P.O., black, 3.200 K, bare ends - Set L0.0007072 \$60-RP, MAN, blue/silver, 5.600 K, Edison - Set L0.0007073		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399 \$60-RP, P.O., blue/silver, 3.200 K, bare ends - Set L0.0007071 \$60-RP, P.O., black, 3.200 K, bare ends - Set L0.0007072 \$60-RP, MAN, blue/silver, 5.600 K, Edison - Set L0.0007073 \$60-RP, MAN, blue/silver, 5.600 K, Schuko - Set L0.0007074		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399 \$60-RP, P.O., blue/silver, 3.200 K, bare ends - Set L0.0007071 \$60-RP, P.O., black, 3.200 K, bare ends - Set L0.0007072 \$60-RP, MAN, blue/silver, 5.600 K, Edison - Set L0.0007073 \$60-RP, MAN, blue/silver, 5.600 K, Schuko - Set L0.0007074 \$60-RP, MAN, blue/silver, 5.600 K, China - Set L0.0007075		
\$60-RP, MAN, blue/silver, 3.200 K, Edison - Set L0.0007068 \$60-RP, MAN, blue/silver, 3.200 K, Schuko - Set L0.0007069 \$60-RP, MAN, blue/silver, 3.200 K, China - Set L0.0007070 \$60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set L0.0012399 \$60-RP, P.O., blue/silver, 3.200 K, bare ends - Set L0.0007071 \$60-RP, P.O., black, 3.200 K, bare ends - Set L0.0007072 \$60-RP, MAN, blue/silver, 5.600 K, Edison - Set L0.0007073 \$60-RP, MAN, blue/silver, 5.600 K, Schuko - Set L0.0007074 \$60-RP, MAN, blue/silver, 5.600 K, China - Set L0.0007075 \$60-RP, MAN, blue/silver, 5.600 K, PSE Japan - Set L0.0012400		

#### ARRI SkyPanel S120-C

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S120-C, MAN, blue/silver, Edison - Set L0.001299	56
S120-C, MAN, blue/silver, Schuko - Set L0.001299	54
S120-C, MAN, blue/silver, China- Set L0.001299	57
S120-C, MAN, blue/silver, PSE, Japan - Set L0.001299	55
S120-C, Center Mount, blue/silver, Edison - Set L0.001299	50
S120-C, Center Mount, blue/silver, Schuko - Set L0.001294	48
S120-C, Center Mount, blue/silver, China - Set L0.001299	51
S120-C, Center Mount, blue/silver, PSE, Japan - Set . L0.001294	49
S120-C, P.O., blue/silver, bare ends - Set L0.001299	53
S120-C, P.O., black, bare ends - Set L0.001299	52
S120-C, blue/silver, w/o cables and stirrup L1.000969	52
S120-C, black, w/o cables and stirrup L1.000969	
Accessories for all models (S30-C, S30-RP, S60-C, S60-RP)	
PSU S30, blue/silver	35
PSU S30, black	86
PSU S60 / S120, blue/silver	91
PSU S60 / S120, black	92
Mains cable, powerCON TRUE1, I = 3 m, SchukoL2.00075	16
Mains cable, powerCON TRUE1, I = 3 m, Edison L2.00075	15
Mains cable, powerCON TRUE1, I = 3 m, China L2.00075	14
Mains cable, powerCON TRUE1, I = 3 m, bare ends L2.00059	74
DC cable 48 V=, XLR 3-pol., I = 0,5 m L2.000749	92
DC cable 48 V=, XLR 3-pol., I = 1 m	91
DC cable 48 V=, XLR 3-pol., I = 3 m	93
DC cable 48 V=, XLR 3-pol., I = 10 mL2.000749	94
DC cable 48 V=, XLR 3-pol., I = 15 m	60
Battery DC cable, XLR 4-pin, I = 0,5 m	99
Battery DC cable, XLR 4-pin, I = 3 m L2.000850	00
Battery adapter plate for Anton/Bauer L2.00080	71

V-Mount Battery adapter plate	L2.0008070
Center mount yoke	L2.0008078
Fixed center mount yoke	L2.0008080
Rail mount adapter for SkyPanel PSU	L2.0008082
Super clamp adapter for SkyPanel PSU	L2.0006921
Accessories	

Please find a detailed overview of all accessories available in the "SkyPanel Accessories Guide" on the ARRI web site.

Specification subject to change without notice. For the latest product specification including photometric data, see www.arri.com

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

