User Manual

March 2016

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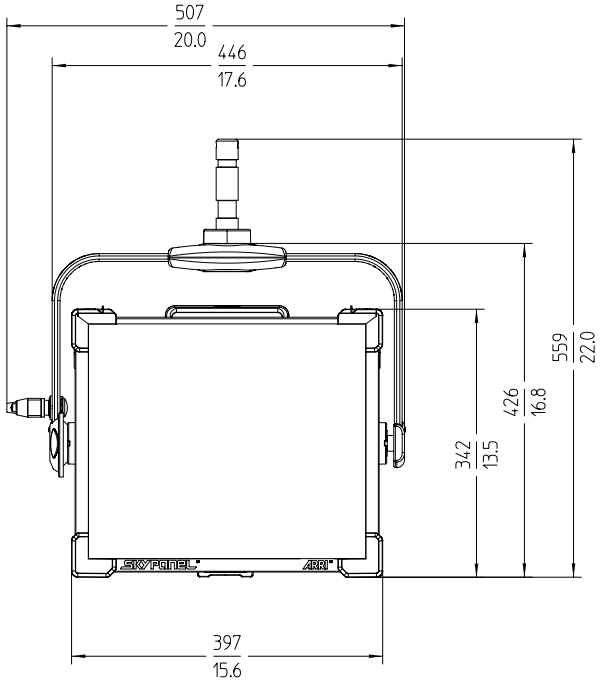
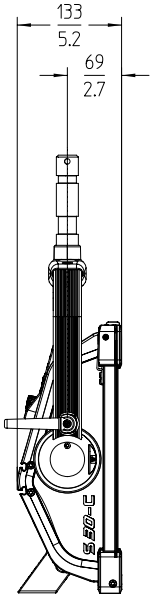
Rev. L02766

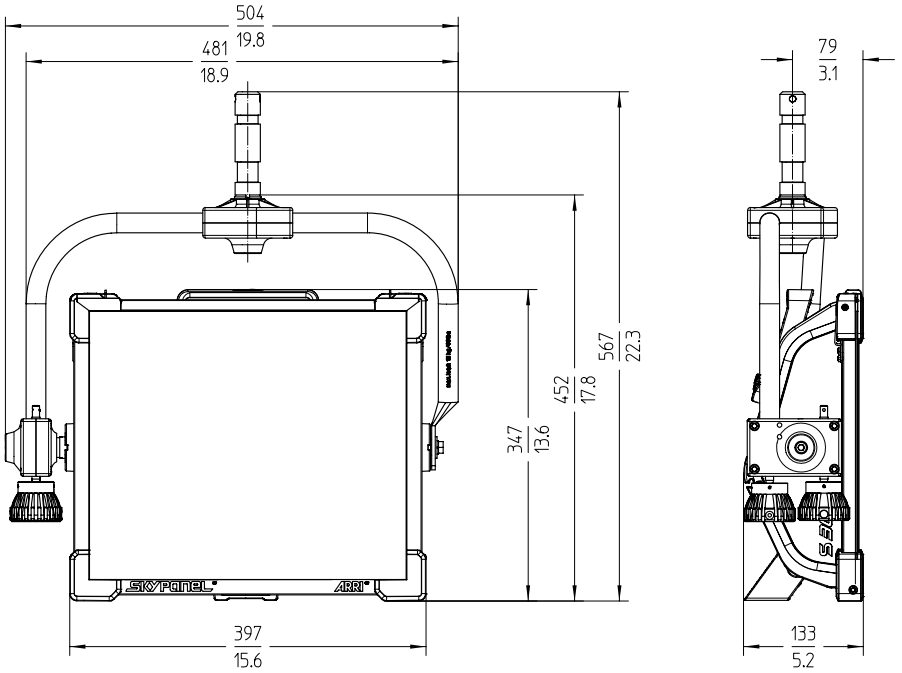
Dimensions

SkyPanel S30 (manual version)

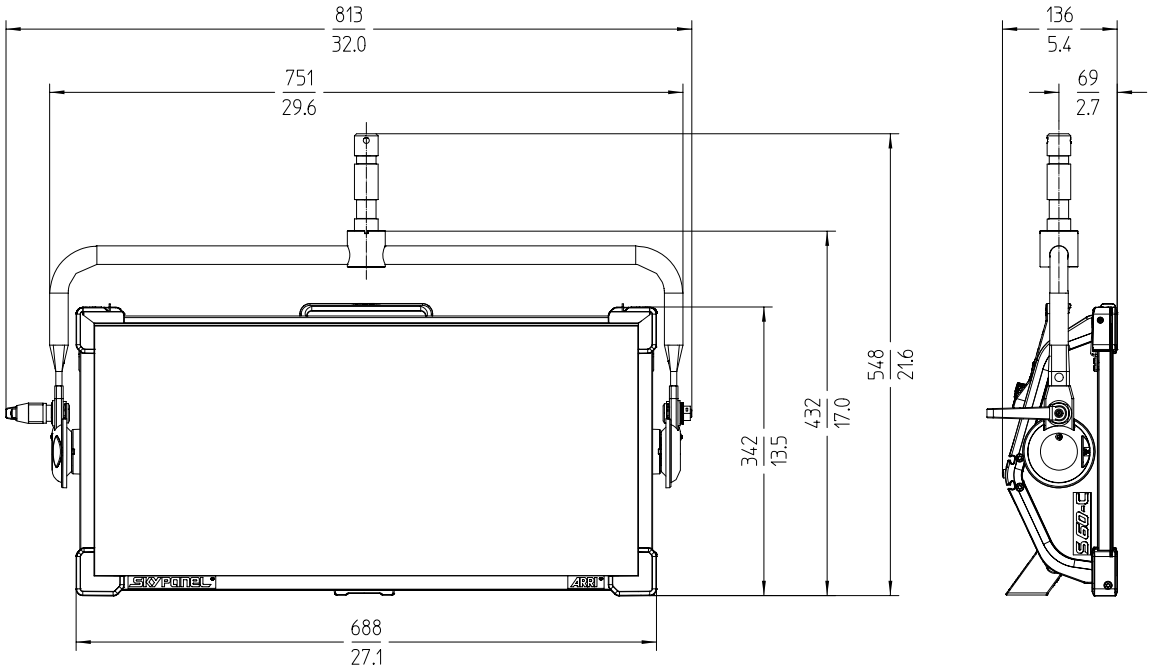




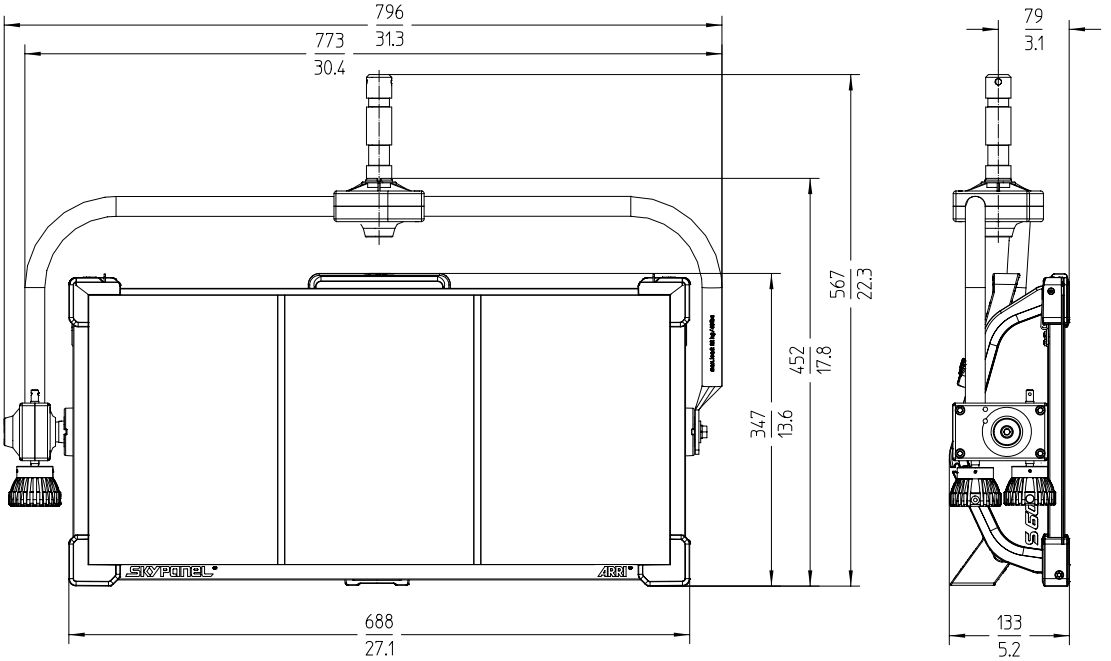
SkyPanel S30 (P.O. Version)



SkyPanel S60 (manual version)



SkyPanel S60 (P.O. Version)



Content

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® 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® SkyPanel® 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 49.

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 product of 0.5 m (1.65 ft.).

WARNING: Intense light. Never look direct into the light source.

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 light source. Do not place the product on heat sources. Intense heat cause 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.

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.

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.

Legal disclaimer

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 fulfils European, national and international requirements.

Replacing the Light Source

The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

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 49). 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 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 24.

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, making color filters dispensable.

Cool Light Beam

Like all LED light sources 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.

DMX-Control

All functions of the SkyPanel are controllable through DMX. The SkyPanel is also fully RDM compatible 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)
- 8 mm allen key (p.o. version)
- 4 mm allen key

Please refer to chapter “Specification” on page 49 for more information about optional accessories.

Overview

Manual Version

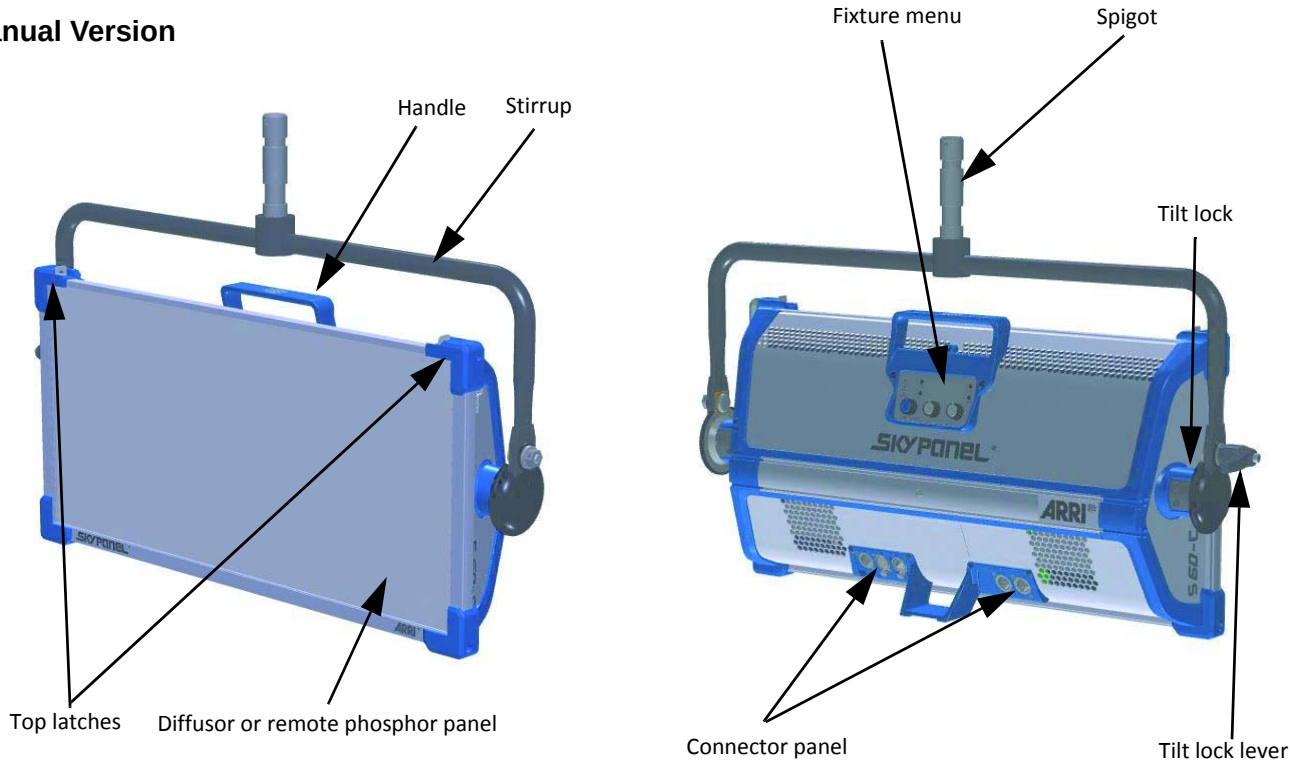


Figure 1: Front and back view, manual version (the figure shows the S60)

P.O. Version

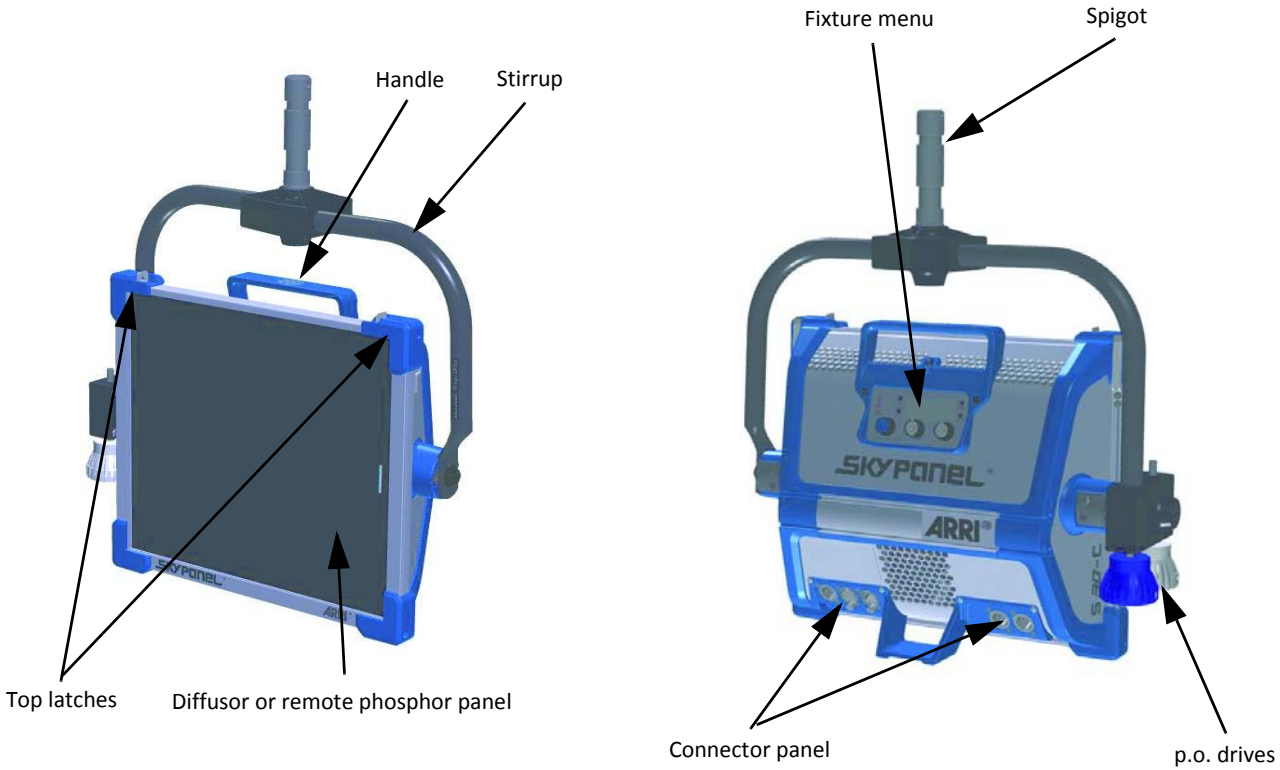


Figure 2: Front and back view, p.o. version (the figure shows the S30)

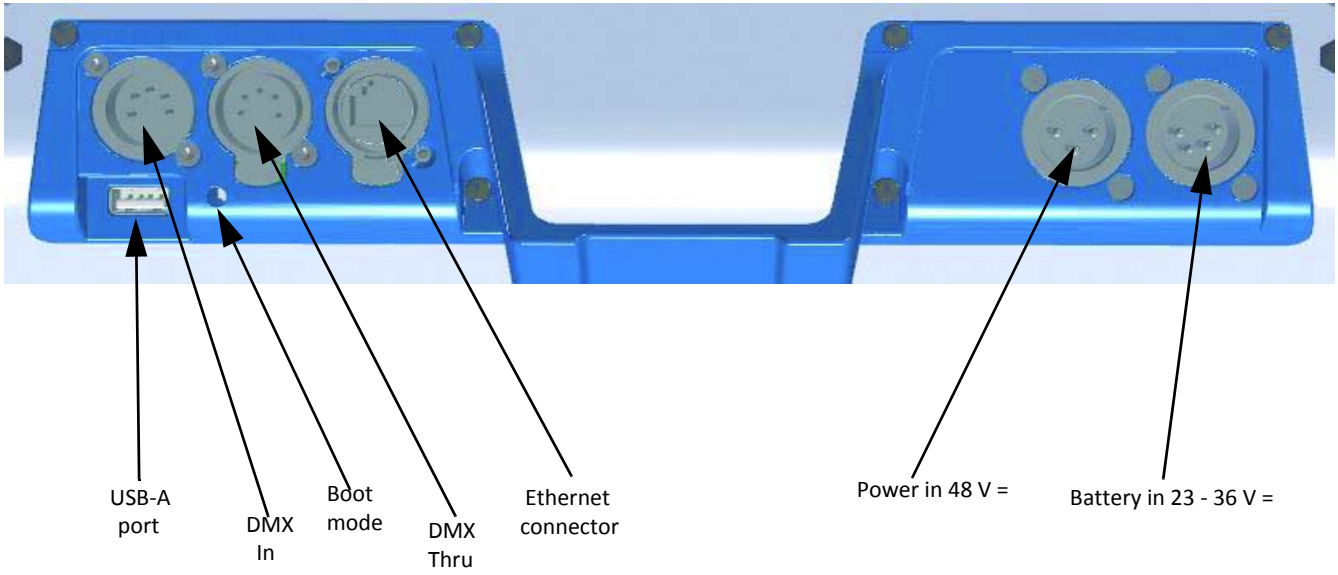


Figure 3: Connector panel

Power Supply Unit S60

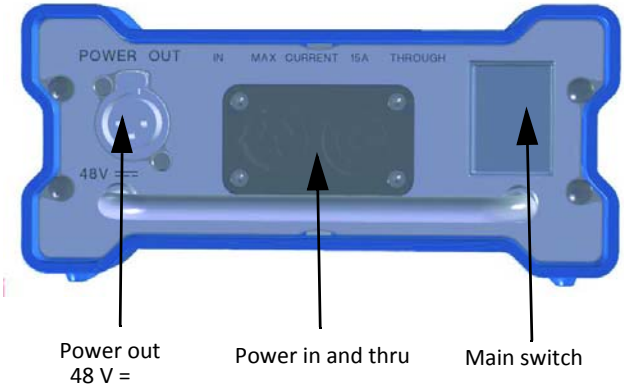


Figure 4: Power supply unit S60

Power Supply Unit S30

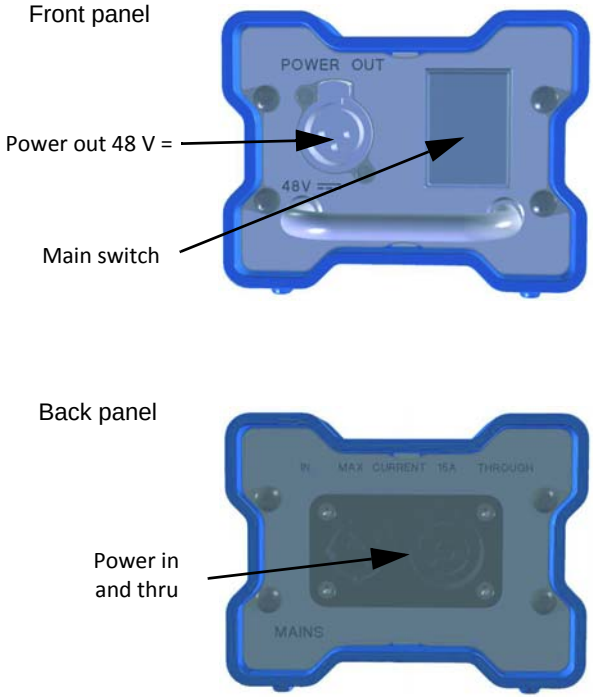


Figure 5: Power supply unit S30

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. 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! 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 5).
- Mount the stirrup with two allen screws on each side of the product (4 mm allen key, recommended torque: 5 ft-lb).

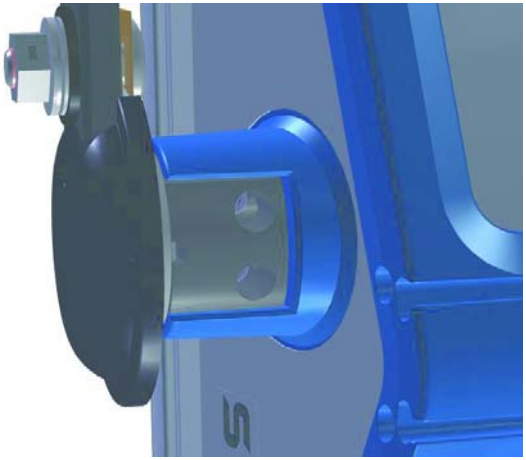


Figure 5: To mount the stirrup

To Mount the Safety Loop Brackets

The holders for the stirrup are used a holder for 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 5).
- 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 6).
- Mount the safety loop brackets with two allen screws on each side of the product (4 mm allen key, torque: 5 ft-lb).

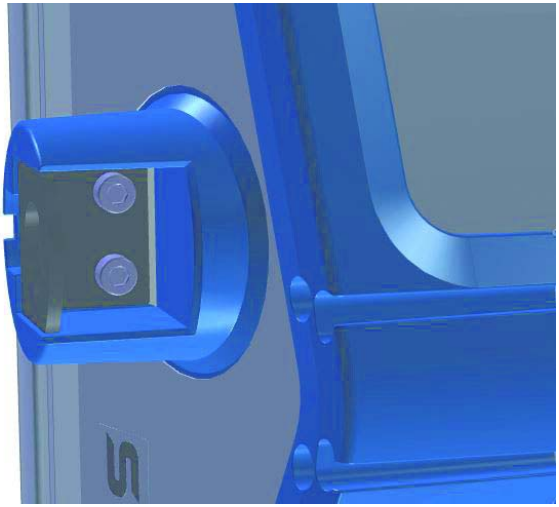


Figure 6: To mount the safety loop brackets

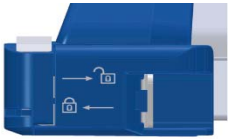
To Install the SkyPanel

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 7: 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 7).
- 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 7).

To Mount a Barndoor

A barndoor is mounted using the outer guiding rails (see Figure 8).

- Close the cover strip. Lock both top latches by sliding both levers completely outwards (see Figure 7).
- Insert the barndoor completely into the outer guiding rails until both safety catches snap in.

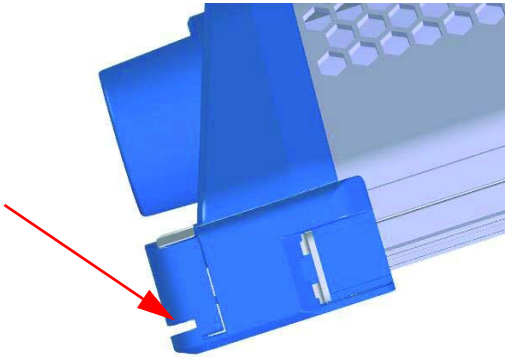


Figure 8: To mount a barndoor

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 Data Link” on page 33.

USB-interface

The SkyPanel has an USB-A connector to upload firmware 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.

LAN-interface

The SkyPanel has an RJ45 LAN port for uploading firmware and setting parameters. The LAN port can be used for service purpose like download error reports 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!

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. 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 27
DMX	yes	no	page 32
RDM	no	yes	page 38
ALSM	no	yes	page 38

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 110 - 240 V ~, 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® PowerCON® True1 NAC3FX-W cable connector. Cable requirements are listed in section “Specification” on page 49.

ARRI offers power cables with PowerCON® cable connectors and different plugs or bare ends (see “Specification” on page 49).

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 49).

To Insert and Remove the PowerCON® 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 18). 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. Connect a maximum of
- four (4) SkyPanel power supply units at 120 V voltage, and
- eight (8) SkyPanel power supply units at 230 V voltage

with one power outlet which is fitted with a 16 A fuse.

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
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 18). 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 possible operating time of the battery pack exactly. The possible operating time is dependent from age, state of charge, type of the battery pack and use of the SkyPanel.

The Fixture Menu of the SkyPanel

Overview of the Fixture Menu

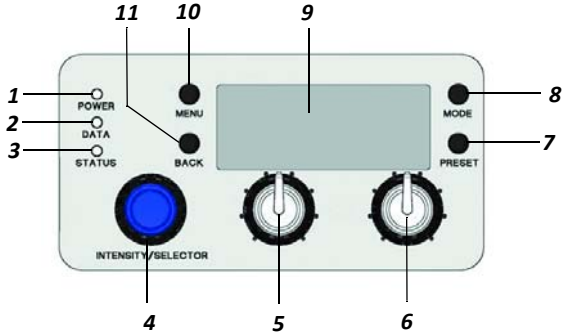


Figure 9: Fixture menu

Feature of the Fixture Menu

POWER-LED (1):

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

DATA-LED (2):

Color	Indication
Blue	The fixture receives a valid control signal.
Red	No communication between fixture menu and main processor.
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)

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. Press I/S (4) to store the preset. Close the dialog with BACK or MENU.

MODE (8)

MODE swaps between CCT and HSI mode (only SkyPanel-C).

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.

Please find a detailed overview in chapter “Fixture Menu” on page 35.

To Set the Operation Mode (only SkyPanel-C)

Press the MODE button (8) to switch from CCT to HSI mode and vice versa.

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.

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 green / magenta 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 Brightness in Both Operating Modes

Set the brightness in both operating modes continuously with the encoder I/S (4). The current setting is displayed left in the display (9)as a bar. 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 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 mode

- 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.
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 35 for a detailed explanation of the options.

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 35 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.

DMX Control

DMX Mode

The SkyPanel offers, depending on the model, up to 15 DMX modes. Use the 8 bit modes (mode 1 and 2) with basic DMX controllers like dimmer consoles.

ARRI recommends the use of the 16 bit modes in combination with DMX 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 DMX channels for most parameters and provide higher resolution compared to the 8 bit modes in combination with DMX 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.

White 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.

White (only SkyPanel-C)

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

White & 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 DMX 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.

Please find a detailed description of all modes in chapter “DMX protocol” on page 39.

Note: Depending on the selected DMX mode the channels required for each SkyPanel should be allocated in the DMX controller to provide independent control of all SkyPanels connected to the controller. Please allocate the maximum number of channels, which is 18 in DMX modes 6 and 11.

DMX Data Link

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 ofd 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 1.0

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

Level 1	Level 2	Level 3	Description (Default setting = bold)
DMX Settings	DMX Address	1 .. 512	DMX Start address
	DMX Protocol	P1 .. P15	DMX Protocol (see page 39)
	DMX Loss Behavior	Hold Last Command	Fixture holds the last received DMX values
		Black Out	**Fixture douses the dimmer**
		Hold 2 Min Fade Out	Hold the last received DMX values for 2 min. then douses
Fan Mode	Low Fan Speed		Low fan speed, silent operation
	Vari Fan Speed		**Temperature regulated fan speed**
	High Fan Speed		High fan speed, best cooling
Lighting Effects	**Off**		**No stand-alone effect**
	Party Effect		Stand-alone effect (see page 31)
Display Setup	Display Illumination	**Always On**	**Display illumination always on**
		Off After 10 Sec.	Display illumination douses 10 sec. after last menu action
	Display Brightness	0 .. **10**	Brightness of the display illumination
	Display Contrast	01 .. **03** .. 10	Contrast of the display content
	Display Rotation	**Normal**	**No rotation of the display content**
		Upside-Down	Display content 180° rotated

Level 1	Level 2	Level 3	Description (Default setting = bold)
Display Setup (continued)	Error Mode Display	**Normal**	**Shows error codes, switches status LED and display illumination to red.**
		Hidden	Displays error codes. Status LEDs and display illumination off.
Fixture Settings	Fixture Status	System Ready	No error
		<Error Message>	Error message (see page 37)
	Light Engine Temp.	xx.x °C xx.x °F	Recent light engine temperature
	Hour Counter	xxh - Light Engine xxh - System	Displays the working hours of the light engines and of the system.
	Battery Voltage	xx.xV	Recent voltage of an external battery
	IP Address	xxx.xxx.xxx.xxx	The fixtures IP address
	MAC Address	XX:XX:XX:XX:XX:XX	The fixtures MAC address
	Network Name	Sxx-xxxxxxx-xxx	The fixtures network name (ident and serial number)
	Fixture Serial No.	L1.xxxxxxx-xxx	The fixtures serial number
	DMX Version	x.x	Version of the DMX protocol
	Firmware Version	x.xx.xx.xxxx	Fixture firmware version
	Display Version	x.xx.xx.xxxx	Display firmware version
	USB Mode	*Normal*	*USB port powered*
		Service	USB port not powered. **Do not change this setting unless being asked by ARRI service. Danger of damage!**
Factory Reset	**No**		**Abort action**
	Yes		Load factory settings

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	Diffusor 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.

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 free of charge.

DMX protocol

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

The DMX protocol V4.x uses 4 DMX channels more in each DMX mode.

SkyPanel-RP

From Firmware-Version 1.0

Overview

8 bit, 1 channel per function	16 bit, 2 channels per function	Coarse/fine, 1-2 channels per function
DMX mode 1	DMX mode 2	DMX mode 3

Mode 1: 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer** closed → open
2			**Reserved (only V4.x)**
3			**Reserved (only V4.x)**
4			**Reserved (only V4.x)**
5			**Reserved (only V4.x)**

Mode 2: 16 bit Resolution per Function

Channel		Value	Percent	Function
1	HI	0-65.535	0-100	**Dimmer** closed → open
2	LO			
3				**Reserved (only V4.x)**
4				**Reserved (only V4.x)**
5				**Reserved (only V4.x)**
6				**Reserved (only V4.x)**

Modus 3: Coarse / Fine per Function

Channel	Value	Prozent	Funktion
1	0-255	0-100	**Dimmer coarse** closed → open
2	0-255	0-100	**Dimmer fine**
3			**Reserved (only V4.x)**
4			**Reserved (only V4.x)**
5			**Reserved (only V4.x)**
6			**Reserved (only V4.x)**

SkyPanel-C

From Firmware-Version 1.0

Overview

8 bit, 1 channel per function	16 bit, 2 channels per function	Coarse/fine, 1-2 channels per function
DMX mode 1 White & RGBW	DMX mode 6 White & RGBW	DMX mode 11 White & RGBW
DMX mode 2 White	DMX mode 7 White	DMX mode 12 White
DMX mode 3 White & HSI	DMX mode 8 White & HSI	DMX mode 13 White & HSI
DMX mode 4 RGBW	DMX mode 9 RGBW	DMX mode 14 RGBW
DMX mode 5 HSI	DMX mode 10 HSI	DMX mode 15 HSI

GGN saturation

The value describes the shift from the neutral point to full minus green or full plus green in percent.
(Reference: Rosco Cinegel #3304 and #3308)

Mode 1: White & RGBW, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer** closed → 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			**Reserved (only V4.x)**
10			**Reserved (only V4.x)**
11			**Reserved (only V4.x)**
12			**Reserved (only V4.x)**

Mode 2: White, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer** closed → 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			**Reserved (only V4.x)**
5			**Reserved (only V4.x)**
6			**Reserved (only V4.x)**
7			**Reserved (only V4.x)**

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

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer** closed → 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	**Hue** 0° → 360°
6	0-255	0-100	**Saturation** 0 → full saturated
7			**Reserved (only V4.x)**
8			**Reserved (only V4.x)**
9			**Reserved (only V4.x)**
10			**Reserved (only V4.x)**

Mode 4: RGBW, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer** closed → 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			**Reserved (only V4.x)**
7			**Reserved (only V4.x)**
8			**Reserved (only V4.x)**
9			**Reserved (only V4.x)**

Mode 5: HSI, 8 bit Resolution per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer** closed → open
2	0-255	0-100	**Hue** 0° → 360°
3	0-255	0-100	**Saturation** 0 → full saturated
4			**Reserved (only V4.x)**
5			**Reserved (only V4.x)**
6			**Reserved (only V4.x)**
7			**Reserved (only V4.x)**

Mode 6: White & RGBW, 16 bit Resolution per Function

Channel		Value	Percent	Function
1	HI	0-65.535	0-100	**Dimmer** closed → open
2	LO			
3	HI	0-5.000 5.001-10.000 10.001-29.999 30.000-40.000 40.001-59.999 60.000-65.535	0-7 8-15 16-46 46-61 61-92 92-100	**GN saturation** neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
4	LO			
5	HI	0-65.535	0-100	**Xfade to color** white → RGBW color
6	LO			
7	HI	0-65.535	0-100	**Intensity red** 0% → 100%
8	LO			
9	HI	0-65.535	0-100	**Intensity green** 0% → 100%
10	LO			
11	HI	0-65.535	0-100	**Intensity blue** 0% → 100%
12	LO			
13	HI	0-65.535	0-100	**Intensity white** 0% → 100%
14	LO			
15				**Reserved (only V4.x)**
16				**Reserved (only V4.x)**
17				**Reserved (only V4.x)**
18				**Reserved (only V4.x)**

Mode 7: White, 16 bit Resolution per Function

Channel		Value	Percent	Function
1	HI	0-65.535	0-100	**Dimmer** closed → open
2	LO			
3	HI	0-65.535	0-100	**Color temperature CCT** 2.800 K → 10.000 K
4	LO			
5	HI	0-5.000 5.001-10.000 10.001-29.999 30.000-40.000 40.001-59.999 60.000-65.535	0-7 8-15 16-46 46-61 61-92 92-100	**GN saturation** neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
6	LO			
7				**Reserved (only V4.x)**
8				**Reserved (only V4.x)**
9				**Reserved (only V4.x)**
10				**Reserved (only V4.x)**

Mode 8: White & HSI, 16 bit Resolution per Function

Channel		Value	Percent	Function
1	HI	0-65.535	0-100	**Dimmer** closed → open
2	LO			
3	HI	0-65.535	0-100	**Color temperature CCT** 2.800 K → 10.000 K
4	LO			
5	HI	0-5.000 5.001-10.000 10.001-29.999 30.000-40.000 40.001-59.999 60.000-65.535	0-7 8-15 16-46 46-61 61-92 92-100	**GN saturation** neutral / no effect full minus green -99% → -1% neutral / no effect 1% → 99% full plus green
6	LO			
7	HI	0-65.535	0-100	**Xfade to color** white → RGBW color
8	LO			
9	HI	0-65.535	0-100	**Hue** 0° → 360°
10	LO			
11	HI	0-65.535	0-100	**Saturation** 0 → full saturated
12	LO			
13				**Reserved (only V4.x)**
14				**Reserved (only V4.x)**
15				**Reserved (only V4.x)**
16				**Reserved (only V4.x)**

Mode 9: RGBW, 16 bit Resolution per Function

Channel		Value	Percent	Function
1	HI	0-65.535	0-100	**Dimmer** closed → open
2	LO			
3	HI	0-65.535	0-100	**Intensity red** 0% → 100%
4	LO			
5	HI	0-65.535	0-100	**Intensity green** 0% → 100%
6	LO			
7	HI	0-65.535	0-100	**Intensity blue** 0% → 100%
8	LO			
9	HI	0-65.535	0-100	**Intensity white** 0% → 100%
10	LO			
11				**Reserved (only V4.x)**
12				**Reserved (only V4.x)**
13				**Reserved (only V4.x)**
14				**Reserved (only V4.x)**

Mode 10: HSI, 16 bit Resolution per Function

Channel		Value	Percent	Function
1	HI	0-65.535	0-100	**Dimmer** closed → open
2	LO			
3	HI	0-65.535	0-100	**Hue** 0° → 360°
4	LO			
5	HI	0-65.535	0-100	**Saturation** 0 → full saturated
6	LO			
7				**Reserved (only V4.x)**
8				**Reserved (only V4.x)**
9				**Reserved (only V4.x)**
10				**Reserved (only V4.x)**

Mode 11: White & RGBW, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer coarse** closed → open
2	0-255	0-100	**Dimmer 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**
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	**Intensity red coarse** 0% → 100%
8	0-255	0-100	**Red fine**
9	0-255	0-100	**Intensity green coarse** 0% → 100%
10	0-255	0-100	**Green fine**
11	0-255	0-100	**Intensity blue coarse** 0% → 100%
12	0-255	0-100	**Blue fine**
13	0-255	0-100	**Intensity white coarse** 0% → 100%
14	0-255	0-100	**White fine**
15			**Reserved (only V4.x)**
16			**Reserved (only V4.x)**
17			**Reserved (only V4.x)**
18			**Reserved (only V4.x)**

Mode 12: White, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer coarse** closed → open
2	0-255	0-100	**Dimmer 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**
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			**Reserved (only V4.x)**
7			**Reserved (only V4.x)**
8			**Reserved (only V4.x)**
9			**Reserved (only V4.x)**

Mode 13: White & HSI, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer coarse** closed → open
2	0-255	0-100	**Dimmer fine**
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			**Reserved (only V4.x)**
12			**Reserved (only V4.x)**
13			**Reserved (only V4.x)**
14			**Reserved (only V4.x)**

Mode 14: RGBW, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer coarse** closed → open
2	0-255	0-100	**Dimmer 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			**Reserved (only V4.x)**
12			**Reserved (only V4.x)**
13			**Reserved (only V4.x)**
14			**Reserved (only V4.x)**

Mode 15: HSI, Coarse / Fine per Function

Channel	Value	Percent	Function
1	0-255	0-100	**Dimmer coarse** closed → open
2	0-255	0-100	**Dimmer fine**
3	0-255	0-100	**Hue coarse** 0 → 360°
4	0-255	0-100	**Hue fine**
5	0-255	0-100	**Saturation coarse** 0 → full saturated
6	0-255	0-100	**Saturation fine**
7			**Reserved (only V4.x)**
8			**Reserved (only V4.x)**
9			**Reserved (only V4.x)**
10			**Reserved (only V4.x)**

Overview of typical CCT values as DMX values

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

To calculate CCT values in DMX % and vice versa

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

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

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

CCT max and min values:

SkyPanel-C

CCT_{min} = 2.800 K

CCT_{max} = 10.000 K

Specification

Physical, SkyPanel S30, manual version

Depth . . . . . 133 mm (5.2 in.)
Wide . . . . . 507 mm (19.9 in.)
Height . . . . . 347 mm (13.6 in., w/o stirrup)
Weight (w/o accessories) . . . . . 8 kg (17.6 lbs)

Physical, SkyPanel S30, p.o. version

Depth . . . . . 133 mm (5.2 in.)
Wide . . . . . 504 mm (19.8 in.)
Height . . . . . 347 mm (13.6 in., w/o stirrup)
Weight (w/o accessories) . . . . . .9 kg (20 lbs)

Physical, SkyPanel S60, manual version

Depth . . . . . 133 mm (5.2 in.)
Wide . . . . . 813 mm (32.0 in.)
Height . . . . . 347 mm (13.6 in., w/o stirrup)
Weight (w/o accessories) . . . . . 12 kg (26.5 lbs)

Physical, SkyPanel S60, p.o. version

Depth . . . . . 133 mm (5.2 in.)
Wide . . . . . 796 mm (31.3 in.)
Height . . . . . 347 mm (13.6 in., w/o stirrup)
Weight (w/o accessories) . . . . . 13 kg (28.7 lbs)

Physical, external power supply unit S30

Depth . . . . . .383 mm (15 in.)
Wide . . . . . 90 mm (3.5 in.)
Height . . . . . 116 mm (4.6 in.)
Weight . . . . . .2,2 kg (4.8 lbs)

Physical, external power supply unit S60

Depth . . . . . .380 mm (15 in.)
Wide . . . . . 190 mm (7.5 in.)
Height . . . . . 90 mm (3.5 in.)
Weight . . . . . .3,7 kg (8.2 lbs)

Light source

Type . . . . . .ARRI LED Light Engine
Typ. LED lifetime L70 . . . . . 50.000 h
White light. . . . . 2.800 K - 10.000 K (SkyPanel-C)
White light. . . . . .Color temperature defined
. . . . . .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)
. . . . . .645 x 300 mm (25.4 x 11.8 in)
Half peak angle (adjustable via diffuser plates) . . . . . 15° - 50°

Dynamic functions

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

Control and Programming

DMX channels . . . . . 7-18 channels, depending on type and mode
Setting and addressing . . . . . Fixture menu, ALSM
DMX compliance . . . . . ESTA DMX512A
RDM compliance . . . . . ESTA DMX512A
Firmware update . . . . . USB interface, network, ALSM

Construction

Color . . . . . Blue / silver or black
Housing . . . . . Composite and aluminum
Protection rating . . . . . IP 20

Installation

Mounting . . . . . 28 mm spigot or 16 mm / 28 mm combo pin
Orientation . . . . . +/- 90°
Minimum clearance around fixture . . . . . 0.5 m
Minimum view distance to light aperture . . . . . 1.0 m

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
USB interface . . . . . USB-A

Electrical

SkyPanel
Power input . . . . . 48 V =
Max. cable length between PSU and luminaire . . . . . 49 ft.
External power supply unit
Power input . . . . . 110 - 240 V ~, 50 / 60 Hz (nom.)
Power output . . . . . 48 V =
Power supply . . . . . Auto-sensing switching-mode power supply

Typical power

230 V, 50 Hz . . . . . 210 W nom. (SkyPanel S30)
. . . . . 420 W nom. (SkyPanel S60)
cos φ . . . . . > 0,9
Measurements made at nominal voltage with all LEDs at full intensity.
Allow for a deviation 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_a) . . . . . -20° C (-4° F)
Maximum ambient temperature (t_a) . . . . . 45° C (113° F)
Cooling . . . . . Silent, temperature-controlled fan cooling

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.

Order Information

ARRI SkyPanel S30

All S30 versions include
- S30 Power supply unit (PSU)
- Rail mount adapter for SkyPanel PSU
- Standard diffusion panel (only C-Version)

Manual versions include additional
- Aluminum yoke with 16 mm / 28 mm combo pin
- DC header cable 48 V= (XLR 3-pin), l = 3 m (10 ft)
- PowerCON TRUE1 mains cable, l = 3 m (10ft) with mains connector

P.O. versions include additional
- Steel yoke with 28 mm junior pin
- DC header cable 48 V= (XLR 3-pin), l = 1 m (3.3 ft)
- PowerCON TRUE1 mains cable, l = 3 m (10ft) with bare ends
- Pole operation for pan and tilt

ARRI SkyPanel S30-C

Color Controllable - Tuneable White (2,800 K - 10,000 K), Green-Magenta Adjustment and Full RGBW Color Gamut

S30-C, MAN, blue/silver, Edison L0.0007711
S30-C, MAN, blue/silver, Schuko L0.0007712
S30-C, MAN, blue/silver, Chinese L0.0007713
S30-C, P.O., blue/silver, bare end L0.0007714
S30-C, P.O., black, bare end L0.0007716

Accessories

Standard Diffusion S30. . . . . L2.0007325
Heavy Diffusion S30 . . . . . L2.0007326
Lite Diffusion S30 . . . . . L2.0007327
Intensifier S30. . . . . L2.0007328

ARRI SkyPanel S30-RP

White Light - Interchangeable Remote Phosphor Panels

S30-RP, MAN, blue/silver, 3.200 K, Edison L0.0007717
S30-RP, MAN, blue/silver, 3.200 K, Schuko L0.0007718
S30-RP, MAN, blue/silver,3.200 K, Chinese L0.0007720
S30-RP, P.O., blue/silver,3.200 K, bare ends L0.0007721
S30-RP, P.O., black,3.200 K, bare ends L0.0007722
S30-RP, MAN, blue/silver,5.600 K, Edison L0.0007723
S30-RP, MAN, blue/silver,5.600 K, Schuko L0.0007724
S30-RP, MAN, blue/silver,5.600 K, Chinese L0.0007725
S30-RP, P.O., blue/silver,5.600 K, bare ends L0.0007726
S30-RP, P.O., black,5.600 K, bare ends L0.0007727

Accessories

Remote Phosphor Panel S30, 2.700 K. L2.0007520
Remote Phosphor Panel S30, 3.200 K. L2.0007521
Remote Phosphor Panel S30, 4.300 K. L2.0007522
Remote Phosphor Panel S30, 5.600 K. L2.0007523
Remote Phosphor Panel S30, 6.500 K. L2.0007524
Remote Phosphor Panel S30, 10.000 K. L2.0007789
Remote Phosphor Panel S30, Chroma Green L2.0007525

Accessories for SkyPanel S30-C and S30-RP

4-leaf barndoor S30 . . . . . L2.0008187
4-chamber eggcrate S30 . . . . . L2.0008048
Honeycomb 60° S30. . . . . L2.0008064
Honeycomb 30° S30. . . . . L2.0008065
Chimera Lightbank with frame S30 . . . . . L2.0008196
DoP Choice SnapGrid 40° S30 . . . . . L2.0008142
DoP Choice SnapBag S30 . . . . . L2.0008141
DoP Choice SnapGrid for SnapBag S30 . . . . . L2.0008140
Snoot S30. . . . . L2.0008019
Extra Diffusion slot S30 . . . . . L2.0008189
Power supply unit S30 blue/silver. L2.0007735
Power supply unit S30 black L2.0007886
Double vertical yoke S30 . . . . . L2.0008184
Safety cable 4 mm, l = 1 m, with Carabiner L2.76990.0

ARRI SkyPanel S60

All S60 versions include
- S60 Power supply unit (PSU)
- Rail mount adapter for SkyPanel PSU
- Standard diffusion panel (only C-Version)

Manual versions include additional
- Aluminum yoke with 28 mm junior pin
- DC header cable 48 V= (XLR 3-pin), l = 3 m (10 ft)
- PowerCON TRUE1 mains cable, l = 3 m (10ft) with connector

P.O. versions include additional
- Steel yoke with 28 mm junior pin and p.o. drives
- DC header cable 48 V= (XLR 3-pin), l = 1 m (3.3 ft)
- PowerCON TRUE1 mains cable, l = 3 m (10ft) with bare ends

ARRI SkyPanel S60-C
Color Controllable - Tuneable White (2,800 K - 10,000 K), Green-Magenta Adjustment and Full RGBW Color Gamut

S60-C, MAN, blue/silver, Edison L0.0007063
S60-C, MAN, blue/silver, Schuko L0.0007064
S60-C, MAN, blue/silver, Chinese L0.0007065
S60-C, P.O., blue/silver, bare end L0.0007066
S60-C, P.O., black, bare end L0.0007067

Accessories

Standard Diffusion S60. . . . . L2.0003345
Heavy Diffusion S60 . . . . . L2.0003903
Lite Diffusion S60 . . . . . L2.0003904
Intensifier S60. . . . . L2.0007818

ARRI SkyPanel S60-RP
White Light - Interchangeable Remote Phosphor Panels

S60-RP, MAN, blue/silver, 3.200 K, Edison L0.0007068
S60-RP, MAN, blue/silver, 3.200 K, Schuko L0.0007069
S60-RP, MAN, blue/silver,3.200 K, Chinese L0.0007070
S60-RP, P.O., blue/silver,3.200 K, bare ends L0.0007071
S60-RP, P.O., black,3.200 K, bare ends L0.0007072
S60-RP, MAN, blue/silver,5.600 K, Edison L0.0007073
S60-RP, MAN, blue/silver,5.600 K, Schuko L0.0007074
S60-RP, MAN, blue/silver,5.600 K, Chinese L0.0007075
S60-RP, P.O., blue/silver,5.600 K, bare ends L0.0007076
S60-RP, P.O., black,5.600 K, bare ends L0.0007077

Accessories

Remote Phosphor Panel S60, 2.700 K. L2.0003347
Remote Phosphor Panel S60, 3.200 K. L2.0003348
Remote Phosphor Panel S60, 4.300 K. L2.0003349
Remote Phosphor Panel S60, 5.600 K. L2.0003350
Remote Phosphor Panel S60, 6.500 K. L2.0003346
Remote Phosphor Panel S60, 10.000 K. L2.0007778
Remote Phosphor Panel S60, Chroma Green L2.0003351

Accessories for SkyPanel S60-C and S60-RP

4-leaf barndoor S60 . . . . . L2.0007530
8-chamber eggcrate S60 . . . . . L2.0007977
Honeycomb 60° S60. . . . . L2.0008058
Honeycomb 30° S60. . . . . L2.0008059
Chimera Lightbank with frame S60 . . . . . L2.0008197
Chimera Lightbank shallow with frame S60 . . . . . L2.0008195
DoP Choice SnapGrid 40° S60 . . . . . L2.0008144
DoP Choice SnapBag S60 . . . . . L2.0008143
DoP Choice SnapGrid 40° for SnapBag S60 . . . . . L2.0008145
Snoot S60. . . . . L2.0007999
Extra diffusion slot S60. . . . . L2.0008188
Power supply unit S60 blue/silver. L2.0007573
Power supply unit S60 black L2.0007878
Double vertical yoke S60 . . . . . L2.0008098
Space Light silk mounting adapter S60 . . . . . L2.0008185
Safety cable 5 mm, l = 1 m, with Carabiner L2.80864.0

Accessories for all models (S30-C, S30-RP, S60-C, S60-RP)

Mains cable, powerCON TRUE1, l = 3 m, Schuko. . . . L2.0007516
Mains cable, powerCON TRUE1, l = 3 m, Edison L2.0007515
Mains cable, powerCON TRUE1, l = 3 m, China L2.0007514
Mains cable, powerCON TRUE1, l = 3 m, bare ends. . L2.0005974
DC cable 48 V=, XLR 3-pol., l = 0,5 m L2.0007492
DC cable 48 V=, XLR 3-pol., l = 1 m L2.0007491
DC cable 48 V=, XLR 3-pol., l = 3 m L2.0007493
DC cable 48 V=, XLR 3-pol., l = 10 m L2.0007494
DC cable 48 V=, XLR 3-pol., l = 15 m L2.0007860
Battery DC cable, XLR 4-pin, l = 0,5 m L2.0008499
Battery DC cable, XLR 4-pin, l = 3 m L2.0008500
Battery adapter plate for Anton/Bauer L2.0008071
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

RISK GROUP 2 - moderate risk

CAUTION! Possibly hazardous optical radiation emitted from this product.

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

In case of technical problems, please visit us at www.arri.com, to find the next ARRI service center.

www.arri.com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