Dimensions

SkyPanel S30 (manual version)

SkyPanel S30 (p.o. version)
SkyPanel S120-C (manual version)

SkyPanel S120-C (p.o. version)
# Content

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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.

### Risk Levels and Alert Symbols

Safety warnings, safety alert symbols, and signal words in these instructions indicate different risk levels:

<table>
<thead>
<tr>
<th>Alert Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DANGER!</strong></td>
<td>Indicates an imminent hazardous situation which, if not avoided, will result in death or serious injury.</td>
</tr>
<tr>
<td><strong>WARNING!</strong></td>
<td>Indicates a potentially hazardous situation which, if not avoided, may result in death or serious injury.</td>
</tr>
<tr>
<td><strong>CAUTION!</strong></td>
<td>Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</td>
</tr>
<tr>
<td><strong>NOTICE</strong></td>
<td>Explains practices not related to physical injury. No safety alert symbol appears with this signal word.</td>
</tr>
</tbody>
</table>
Vital Precautions

**DANGER!**

**High voltage! Risk of electric shock and fire.**

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

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

Use solely and exclusively as described in the instructions.

Always check that the local AC power matches the voltage and frequency range printed on the type label of the product before use.

Use only a genuine ARRI PSU and connection cable designed for the SkyPanel.

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 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.

Do not open the product. There are no user serviceable parts inside.

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 bypass or remove any safety feature of the product.

**Warnings**

**WARNING!**

**Humidity and Condensation! Risk of electric shock and fire.**

Never 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 bend the power cable directly after the connector. Water could immerse and cause short circuits and damage the connector.

**WARNING!**

**Overheating! Risk of fire.**

Do not operate the product if the ambient temperature exceeds 45° C.

Intensive use can cause the surface to become hot (up to 80° C). Let the product cool down completely 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.).

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.
**General Precautions**

**NOTICE**

ARRI® SkyPanel® products are intended for professional use and may only be operated by qualified persons. They are not for household use.

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.

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.

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.

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

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**

**NOTICE**

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

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

Maintenance Information

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not clean the surface of the product with solvents or strong detergents.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Clean soiled electric contacts with cotton swabs wetted with isopropyle alcohol.</td>
</tr>
<tr>
<td>Keep electric contacts clean and replace corroded parts.</td>
</tr>
</tbody>
</table>

Intended Use

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>
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 seamlessly into established working practice. Lighting designers as well as Studios don’t need to change their workflow. The optical system produces a soft, homogeneous light field.

The different models of the SkyPanel emit white light with a fixed color temperature or colored light with adjustable color temperature and adjustable green/magenta point (see “Specification” on page 26). The light spectrum is optimized for excellent color rendition and fulfills Art-Netthe demands of modern, digital cameras. All models of the SkyPanel can be controlled using the common DMX512-A protocol, RDM, sACN, Art-Net, 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 22.


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 26 for more information about optional accessories.
Overview

Manual Version

Figure 1: Front and back view, manual version (the figure shows the S60)
Figure 2: Front and back view p.o. version (the figure shows the S30)
**Connector Panel**

![Connector Panel Image](image)

- **USB-A port**
- **DMX In**
- **Boot mode**
- **DMX Thru**
- **Ethernet connector**
- **Power in 48 V=**
- **Battery in 23 - 36 V =**

*Figure 3: Connector panel*

**Power Supply Unit S60 / S120**

![Power Supply Unit S60 / S120 Image](image)

- **Main power in**
- **Thru**
- **Power Out 48 V DC**
- **Main switch**

*Figure 4: Power supply unit S60 / S120*

**Power Supply Unit S30**

![Power Supply Unit S30 Image](image)

- **Power Out 48 V DC**
- **Main switch**

*Figure 5: Power supply unit S30*
Physical Installation

**WARNING!**

Risk of falling! Risk of injury.

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 (or the eyelet when using a P.O. version) and keep it as short as possible. The handle and the floor stand must not be used as an anchor for the safety-cable.

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

The rigging structure needs to be approved for the weight of all devices, equipment and cables installed on it.

Due to its width the SkyPanel S120 can oscillate and damage objects or injure persons when falling into the safety-cable. Two safety cables on either side of the fixture are recommended to reduce this occurrence.

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

---

**NOTICE**

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

The fixture is shipped with the stirrup not mounted. Mount the stirrup to the fixture if you want to use 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.).

To Mount the Safety Loop Brackets or SkyPanel Side Handles

The stirrup holders can be used to attach the safety loop brackets or side handles in conjunction with the Center mount yoke (L2.0008078) and Fixed center mount yoke (L2.0008080). The brackets or side handles 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 or Side Handles

• 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 SkyPanel, or
• Slide one side handle over the holder on each side of the SkyPanel (see Figure 7).
• Mount the safety loop brackets or side handles with two allen screws on each side of the product (4 mm allen key, torque: 5 ft-lb.).
**To Install the SkyPanel**

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
</table>
| 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.
  - The use of sand bags are recommended on all tripods to increase stability.

Always observe the additional load of cables and accessories! |
Basic Features

Pan and Tilt (manual version)
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.

Pan and Tilt (p.o. version)
Pan and Tilt the SkyPanel by turning the white and blue wheel by hand or pole.

Use of Accessories for Beam Shaping
You can mount accessories like barn doors, snoots, honey combs or egg crates by 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).

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 24.
USB-Port

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>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. Do not use service features during a show or a shot. The data transfer between the product and the controller might be disturbed due to interferences. The USB-A connector can power small USB devices. The maximum current is 500 mA @ 5V. Do not overload the USB-A connector.</td>
</tr>
</tbody>
</table>

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.

Ethernet-Interface

The SkyPanel has an RJ45 EtherCON port for the control via Art-Net, uploading firmware and setting parameters. The Ethernet port can be used for service purposes 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

<table>
<thead>
<tr>
<th>WARNING!</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intense light! Danger of eye injury. Do not stare at the operating light source.</td>
</tr>
</tbody>
</table>

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, sACN or Art-Net.
To Power the SkyPanel

**DANGER**

High voltage! Risk of electric shock and fire.

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.

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!**

Intense light! Risk of eye injury. 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.

**NOTICE**

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 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 26.

ARRI offers power cables with PowerCON® cable connectors and different plugs or bare ends (see “Specification” on page 26).

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 26).

**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 counterclockwise. 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 16). 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:

<table>
<thead>
<tr>
<th>Specification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Voltage</td>
<td>23 - 36 V =</td>
</tr>
<tr>
<td>Battery operating temperature</td>
<td>68° F - 95° F (-20° C to +45° C)</td>
</tr>
<tr>
<td>Recommended minimum capacity</td>
<td>10 Ah</td>
</tr>
<tr>
<td>Power out connector</td>
<td>4-pin XLR Connector</td>
</tr>
</tbody>
</table>

Table 1: Specification of the battery pack

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

<table>
<thead>
<tr>
<th>Pin</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GND</td>
</tr>
<tr>
<td>2</td>
<td>not connected</td>
</tr>
<tr>
<td>3</td>
<td>not connected</td>
</tr>
<tr>
<td>4</td>
<td>+23 - 36 V =</td>
</tr>
</tbody>
</table>

Table 2: Pin assignment of the battery input

**NOTICE**
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.

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

When a battery pack is discharged and switches off, please disconnect the battery pack before connecting a SkyPanel power supply unit.

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.

**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 16). 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.
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.
## Error Codes

<table>
<thead>
<tr>
<th>Code</th>
<th>Error</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.003</td>
<td>Controller over temperature. STATUS LED lit up red.</td>
<td>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.</td>
</tr>
<tr>
<td>E.004</td>
<td>Light engine over temperature</td>
<td>See E.003</td>
</tr>
<tr>
<td>E.005</td>
<td>Missing LED supply.</td>
<td>The LED power supply is faulty. Please contact the ARRI service.</td>
</tr>
<tr>
<td>E.006</td>
<td>Calibration data of light engine faulty or EEPROM error.</td>
<td>WARNING: Loss of calibration data. This error can only be fixed by re-calibrating the light engine. Please contact the ARRI service.</td>
</tr>
<tr>
<td>E.007</td>
<td>Invalid PWM value calculation</td>
<td>Notice: The SkyPanel can be used on. This message is more a notification than an error.</td>
</tr>
<tr>
<td>E.008</td>
<td>Invalid values during calculation</td>
<td>See E.007</td>
</tr>
<tr>
<td>E.009</td>
<td>Invalid values during calculation</td>
<td>See E.007</td>
</tr>
<tr>
<td>E.010</td>
<td>Fan error. The fan speed deviates or the fan doesn’t run at all.</td>
<td>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.</td>
</tr>
<tr>
<td>E.011</td>
<td>Fixture menu module not be detected</td>
<td>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.</td>
</tr>
<tr>
<td>E.012</td>
<td>Temperature sensor(s) are defective or deviation within NTC values too high.</td>
<td>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.</td>
</tr>
<tr>
<td>E.013</td>
<td>Calibration data faulty.</td>
<td>WARNING: Loss of calibration data. Fixture needs to be re-calibrated.</td>
</tr>
<tr>
<td>E.014</td>
<td>Watchdog error</td>
<td>Notice: The SkyPanel can be used on. This message is more a notification than an error.</td>
</tr>
<tr>
<td>E.015</td>
<td>LED channel faulty</td>
<td>Notice: The SkyPanel can be used on. This message is more a notification than an error.</td>
</tr>
<tr>
<td>E.016</td>
<td>Boost over temperature</td>
<td>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.</td>
</tr>
<tr>
<td>E.017</td>
<td>Battery voltage too low</td>
<td>Battery voltage below 20.5 V. Change the battery pack or switch to AC power.</td>
</tr>
<tr>
<td>E.018</td>
<td>PWM driver not found</td>
<td>Switch the SkyPanel off and on again. If the problem persists, please contact the ARRI service.</td>
</tr>
<tr>
<td>E.019</td>
<td>Diffuser removed</td>
<td>The diffusor was removed. The protection circuit is active (only RP-version).</td>
</tr>
<tr>
<td>E.020</td>
<td>Update with errors</td>
<td>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.</td>
</tr>
<tr>
<td>E.021</td>
<td>Flash init error. No filesystem mounted.</td>
<td>This will happen if the flash disc has a problem with its file system.</td>
</tr>
<tr>
<td>E.022</td>
<td>Missing Boost</td>
<td>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.</td>
</tr>
<tr>
<td>E.023</td>
<td>12V Missing</td>
<td>The 12V power is missing during startup. Please contact the ARRI service.</td>
</tr>
<tr>
<td>E.024</td>
<td>5V Missing</td>
<td>The 5V power is missing during startup. Please contact the ARRI service.</td>
</tr>
</tbody>
</table>

Table 3: Error codes
### Specification

#### Physical, SkyPanel S30
- **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), 9 kg (20 lbs)

#### Physical, SkyPanel S60
- **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), 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 (15 in.)
- **Wide**: 90 mm (3.5 in., S30), 190 mm (7.5 in., S60 / S120)
- **Height**: 116 mm (4.6 in., S30), 90 mm (3.5 in., S60 / S120)
- **Weight**: 2.2 kg (4.8 lbs, S30), 3.7 kg (8.2 lbs, S60 / S120)

#### Light source
- **Type**: ARRI LED Light Engine
- **Typ. LED lifetime L70**: 50,000 h
- **White light**: 2,800 K - 10,000 K (SkyPanel-C)
- **Color temperature defined by remote phosphor panels (SkyPanel-RP)**
- **Colored light**: RGBW color mixing (SkyPanel-C)
- **Color rendition index**: typ. CRI >94
- **Green - Magenta point**: +/- 1 (full green to full magenta, only SkyPanel-C)

#### Optical path
- **Type**: soft light with diffuser plate (SkyPanel-C) or remote phosphor 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 saturation, only SkyPanel-C)
Control and Programming
- Channels: 5-21 channels, depending on type and mode
- Setting and addressing: Fixture menu, ALSM
- DMX compliance: ESTA DMX512A
- RDM compliance: ESTA DMX512A
- Art-Net: Version 4
- sACN: ANSI E1.31
- Firmware update: USB interface, network, ALSM

Construction
- Color: Blue / silver or black
- Housing: Composite and aluminum
- Protection rating: IP 20
- Protection class: III

Installation
- Mounting: 28 mm spigot or 16 mm / 28 mm combo pin
- Orientation: any
- Min. clearance around fixture: 0.5 m (19.7 in)
- Min. view distance to light aperture: 0.5 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
- Ethernet connector: Neutrik® RJ45 EtherCON connector
- USB interface: USB-A

Electrical
- SkyPanel
  - Power input: 48 V
  - Max. cable length between PSU and luminaire: 15 m (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)
- 400 W nom. (SkyPanel S120)

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
SkyPanel S120-C: RISK GROUP 0 - No Risk
No photobiological hazard.

SkyPanel S30-C/RP and S60-C/RP: RISK GROUP 1
No photobiological hazard under normal behavioral limitations.

Approvals

**EU Safety**
- EN / IEC 60598-2-17
- EN / IEC 60598-1
- EN / IEC 62471
- EN / IEC 62493

**EU EMC**
- EN 55015
- EN / IEC 61000-3-2
- EN / IEC 61000-3-3
- EN / IEC 61547
- CISPR 15

**US Safety**
- UL1573

**US EMC**
- FCC CFR 47 Part 2
- FCC CFR 47 Part 15

**Canada Safety**
- CAN/CSA C22.2 No. 166
- CAN/CSA C22.2 No. 9.0
- CAN/CSA C22.2 No. 9.0S1

**Canada EMC**
- ICES-003

**Japan**
- PSE
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), l = 3 m (10 ft)
- PowerCON TRUE1 mains cable, l = 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), 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
- 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 ......................................... L0.0012396
- S30-RP, MAN, blue/silver, 5.600 K, PSE Japan - Set ................................... L0.0007725
- 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
- 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
- S60-RP, MAN, blue/silver, 3.200 K, PSE Japan - Set ................................... L0.0012399
- S60-RP, P.O., blue/silver,3.200 K, bare ends - Set ...................................... L0.0007071
- S60-RP, P.O., black,3.200 K, bare ends - Set .............................................. L0.0007072
- S60-RP, MAN, blue/silver, 5.600 K, Edison - Set ........................................ L0.0007073
- S60-RP, MAN, blue/silver, 5.600 K, Schuko - Set ........................................ L0.0007074
- S60-RP, MAN, blue/silver, 5.600 K, China - Set ......................................... L0.0007075
- S60-RP, MAN, blue/silver, 5.600 K, PSE Japan - Set ................................... L0.0012400
- S60-RP, P.O., blue/silver,5.600 K, bare ends - Set ...................................... L0.0007076
- S60-RP, P.O., black,5.600 K, bare ends - Set ............................................. L0.0007077
ARRI SkyPanel S120-C

- S120-C, MAN, blue/silver, Edison - Set: L0.0012956
- S120-C, MAN, blue/silver, Schuko - Set: L0.0012954
- S120-C, MAN, blue/silver, China - Set: L0.0012957
- S120-C, MAN, blue/silver, PSE, Japan - Set: L0.0012955
- S120-C, Center Mount, blue/silver, Edison - Set: L0.0012950
- S120-C, Center Mount, blue/silver, Schuko - Set: L0.0012948
- S120-C, Center Mount, blue/silver, China - Set: L0.0012951
- S120-C, Center Mount, blue/silver, PSE, Japan - Set: L0.0012949
- S120-C, P.O., blue/silver, bare ends - Set: L0.0012953
- S120-C, P.O., black, bare ends - Set: L0.0012952
- S120-C, blue/silver, w/o cables and stirrup: L1.0009652
- S120-C, black, w/o cables and stirrup: L1.0009653

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

- PSU S30, blue/silver: L2.0007735
- PSU S30, black: L2.0007886
- PSU S60 / S120, blue/silver: L2.0012491
- PSU S60 / S120, black: L2.0012492
- Mains cable, powerCON TRUE1, l = 3 m, Schuko: L2.0007514
- 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: L2.00005974
- DC cable 48 V=, XLR 3-pol., l = 3 m: L2.0007492
- DC cable 48 V=, XLR 3-pol., l = 1 m: L2.0007491
- DC cable 48 V=, XLR 3-pol., l = 10 m: L2.0007494
- 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

**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.