ARRI Lighting Service Manager
Version 5.0.0
Software Manual

LIGHTING – TECHNICAL INFORMATION
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<th>Version</th>
<th>Author</th>
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| 25.08.2020 | 5.0     | ml     | Release for ALSM 5.0.0  
Added Orbiter related descriptions                                                                                   |
| 11.04.2019 | 4.2     | ml     | Release for ALSM 4.2.0  
Changed text in chapter 6.3 for adding light engine compensation.                                                   |
| 13.11.2018 | 4.1     | ml     | Release for ALSM 4.1.0  
Added VCP driver installation for Windows 10.                                                                       |
| 15.10.2018 | 4.0.1   | ml     | Release for ALSM 4.0.0  
Added note for Mac in chapter 8.                                                                                     |
| 03.05.2018 | 4.0     | ml     | Release for ALSM 4.0.0  
Updated screenshots with additional GUI elements.  
Added some comments.                                                                                               |
| 07.02.2018 | 3.2     | ml     | Release for ALSM 3.2.0  
Fan Settings moved to Settings tab.                                                                                   |
| 24.04.2016 | 3.0     | ml     | Release for ALSM 3.0.0.  
Multi Selection of ARRI SkyPanels  
Change of all settings in the GUI will be applied to all selected ARRI SkyPanels, if applicable  
Batch import of json-settings-file to all selected ARRI SkyPanels (only allowed for same type; -C or –RP)  
UI for changing the webserver password configuration for ARRI SkyPanels with firmware release 3.0  
Update functionality for SkyPanel Remote Controls  
Type of DFU device can be selected during registration (Bootloader update for ARRI SkyPanel or firmware update for SkyPanel Remote Control)  
DMX implementation table V4.3  
IP-Connect-Dialog with new functionality  
Reset error state for selected devices  
Fixed bugs  
Added latest firmware components for ARRI SkyPanel and SkyPanel Remote Control |
| 08.04.2015 | 2.2.0   | kl     | Release for ALSM 2.2.0.  
General bug fixing & stability improvement  
Includes L7/ L5 firmware v2.0.5  
Includes L10 firmware v2.0.0  
Includes SkyPanel Firmware v2.0.0  
Implemented automatic software update  
Implemented export and import of presets and settings for SkyPanel  
On Max OS X the software is delivered as Installer Package                                                               |
<table>
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<tr>
<td>04.12.2015</td>
<td>2.1</td>
<td>kl</td>
<td>Release for ALSM 2.1.0. General bug fixing &amp; stability improvement</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Implemented support for ARRI SkyPanel</td>
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<td></td>
<td></td>
<td></td>
<td>Implemented update of boot loader for L10</td>
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<tr>
<td>30.03.2015</td>
<td>2.0</td>
<td>kl</td>
<td>Release for ALSM 2.0.0. Based on the LS manager manual</td>
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2. Download and Installation

2.1. Supported Operating Systems

<table>
<thead>
<tr>
<th>Windows</th>
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<tbody>
<tr>
<td>This software has been tested on the following operating systems:</td>
</tr>
<tr>
<td>Microsoft Windows XP</td>
</tr>
<tr>
<td>Microsoft Windows Vista</td>
</tr>
<tr>
<td>Microsoft Windows 7</td>
</tr>
<tr>
<td>Microsoft Windows 8</td>
</tr>
<tr>
<td>Microsoft Windows 8.1</td>
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<tr>
<td>Microsoft Windows 10</td>
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</table>

In general **ARRI Lighting Service Manager** should work on all Windows desktop versions up from Windows XP. There is no guarantee that the application will work properly on not tested operating systems.

<table>
<thead>
<tr>
<th>Mac OS</th>
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</thead>
<tbody>
<tr>
<td>Apple Mac OS X 10.9 Mavericks</td>
</tr>
<tr>
<td>Apple Mac OS X 10.10 Yosemite</td>
</tr>
<tr>
<td>Apple Mac OS X 10.11 El Capitan</td>
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<td>Apple Mac OS X 10.12 Sierra</td>
</tr>
<tr>
<td>Apple Mac OS X 10.13 High Sierra</td>
</tr>
<tr>
<td>Apple Mac OS X 10.14 Mojave</td>
</tr>
<tr>
<td>Apple Mac OS X 10.15 Catalina</td>
</tr>
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- Visit our download center at [http://www.arri.com/lightingsoftware](http://www.arri.com/lightingsoftware)
- Download the latest **ARRI Lighting Service Manager** Version matching your operating system.

2.2. Windows Installation

2.2.1. Prepare the USB VCP driver on Windows 10

If the ALSM is installed on Windows 10 for the first time, the USB driver needs to be configured.

The original Windows 10 VCP driver is not able to communicate with the ARRI SkyPanel. For this it is necessary to uninstall the original VCP driver and install a compatible VCP Driver. The ALSM software package includes the recommended driver.

Please do the following steps:
- Connect a SkyPanel via USB to your PC
- Open the Windows “Device Manager”

- Open every "USB Serial Converter" you can find, go to the “Details”-Tab and find out which one contains the following Hardware-ID:

  USB\VID_0483&PID_5740&REV_0200 (Important is VID_0483)
- Right click on this “USB Serial Converter” in the device list
- Choose “Delete Driver Software”
- Confirm “Device Uninstall”
- Now Install ALSM incl. all drivers by running the setup

- After having installed the ALSM, unplug the USB connection of the ARRI SkyPanel, if plugged
- Plug again the USB connection to your ARRI SkyPanel
- ALSM should show the ARRI SkyPanel with an icon in the device list.

→ Now your PC is ready to connect any ARRI SkyPanel in the future!

2.2.2. Standard Installation

The standard installation can be done, if the Windows USB driver is already configured as described in 2.2.1 or if a former Version of the ALSM already has been installed.

If you have downloaded a zip file, extract the file before you proceed.

⚠️ Windows: Do not connect the lamphead via USB to the computer before the ARRI Lighting Service Manager has been installed!
Start the installation by double-clicking on the installer executable.

The installation requires administrator privileges. If your user profile does not provide administrator privileges, Windows asks for an administrator account login. As an alternative, start the installation by right-clicking on the installer file and choose “start as Administrator”.

When the installation is finished, connect a lamphead before you start the ARRI Lighting Service Manager the first time.

This will finalize the USB driver installation on the system. Otherwise errors might occur when the ARRI Lighting Service Manager tries to connect to the lamphead for the first time.

If you have installed the ARRI Lighting Service Manager on a Windows 10 machine for the first time, some more installation is necessary. See chapter 2.2.1.

If you want to connect ARRI SkyPanels via LAN, please ensure that your computer does not bloc LAN traffic over port 23 (Telnet)!

### 2.3. Mac-OS Installation

If you have downloaded a zip file, extract the file before you proceed.
Start the installation by double-clicking on the installer executable.

If you want to connect ARRI SkyPanels via LAN, please ensure that your computer does not bloc LAN traffic over port 23 (Telnet)!
3. Limitations

The **ARRI Lighting Service Manager** supports all features of

- ARRI L7 with firmware version 1.74.1 or higher.
- ARRI L5 with firmware version 2.0.2 or higher.
- ARRI L10 with firmware version 1.0.0 or higher.
- ARRI SkyPanel with firmware version 1.0.0 or higher.
- ARRI Orbiter with firmware version 1.0.0 or higher

Update lampheads with older firmware versions to the latest firmware version. Otherwise not all features of the lamphead are available.

To update a lamphead to the latest firmware version using the **ARRI Lighting Service Manager** requires at least:

- ARRI L7 / L5 with primary or secondary boot loader version 3.0.0 or higher.
- ARRI L10 with boot loader version 0.87.0 or higher.
- ARRI SkyPanel with boot loader version 0.87.0 or higher.
- ARRI Orbiter with firmware version 0.9.9 or higher

With ARRI L10 as well as with ARRI SkyPanel it may be necessary to perform a boot loader update using the **ARRI Lighting Service Manager** before a firmware update is possible.

**Windows**: Automatic detection of connected lampheads via LAN and Bonjour works only on Windows 10 reliable. On all other Windows-Version please add lampheads manually if they do not appear in the treeview. (See Chapter 4.1)
4. Start the ARRI Lighting Service Manager

Windows: Double-click on the desktop short cut or the usual start methods will start the ARRI Lighting Service Manager.

Mac-OS: Double-click the application symbol in the applications directory or the usual start methods will start the ARRI Lighting Service Manager.

The next chapters show how to connect lampheads to your computer.

4.1. Connect a lamphead via LAN connection

The ARRI Lighting Service Manager detects lampheads connected via LAN to the computer automatically, if there is a bonjour-service running and bonjour is enabled in the network-settings of the ARRI Lighting Service Manager.

If bonjour is disabled you can connect a lamphead using the right mouse button -> “Connect to IP Device” in the left side of the program window. A dialog appears where you can enter the IP-address of the desired lamphead.
NOTE: Using the LAN-connection is the preferred way to connect ARRI SkyPanels!

Windows: Automatic detection of connected lampheads via LAN and Bonjour works only on Windows 10 reliable. On all other Windows-Version please add lampheads manually if they do not appear in the treeview.

ALSM might crash if any intense network traffic causing application is already connected to the ARRI SkyPanel like DMX workshop (Artistic License).

4.2. Connect a lamphead via USB connection

The ARRI Lighting Service Manager detects lampheads connected via USB to the computer automatically. Multiple lampheads can be connected simultaneously by utilizing additional USB ports.

Windows 10 users may unplug the lamphead and replug it to ensure using the ARRI-VCP-Driver instead of the Windows-USB-Driver.

Please see the operation manual of your lamphead for how to use the USB-port

Do not connect a ARRI SkyPanel that is in “normal” USB-mode to your computer! Connection is only allowed in “service” USB mode. “Normal”-mode can cause a damage of your computer’s USB-port!

USB connection is not supported for ARRI Orbiters!
5. Work with connected lampheads

Each detected lamphead will be added to the lamphead list on the left side of the program window. Here you can select one or more lampheads to change any settings or to retrieve information about them.

Note:
While the ARRI Lighting Service Manager is communicating with a lamphead it is recommended:

- not to change any settings via the fixture menu of the lamphead
- not to communicate via DMX or RDM with the lamphead at the same time.
- to close any other application or service, working in the foreground as well as in the background, which may interrupt any USB port permanently or periodically.

5.1. Selection of one lamphead

This is simply done by clicking on any icon in the lamphead list.
Detailed information for the selected lamphead is shown in the device view on the right side. Here you can navigate through the different program functions.

5.2. Selection of multiple ARRI SkyPanels and ARRI Orbiters

It is possible to select multiple ARRI SkyPanels or multiple ARRI Orbiters. For this a common device view for the selected ARRI SkyPanels / ARRI Orbiters is shown on the right hand side. Any changes can be applied to all selected ARRI SkyPanels by clicking “Apply Settings”. All not chosen properties are omitted.

Multiselection of ARRI SkyPanels is only allowed for Devices with firmware-version greater than 3.0.0.

Multiselection of ARRI Orbiters only support the firmware update to multiple ARRI Orbiters.

In the context-menu you will find a link to “Sort Devices by Type”. This makes it easier for you to multiselect only ARRI SkyPanels.

If you select multiple ARRI SkyPanels of type “-C” (color) or “-RP” (remote phosphor) you can import settings to all selected ARRI SkyPanels out of a settings-file from your computer. See Chapter 9.2 for more details.
6. Device views for selected lampheads

6.1. General

This view displays information about your lamphead:

- Type
- Serial numbers
- Hardware and firmware versions
- Calibration date
- Optics Accessory (for ARRI Orbiters)
6.2. DMX Settings

- **DMX Implementation Table**
  This displays the version of the DMX implementation table of your lamphead. Clicking on "Details" opens a PDF document with detailed information about the DMX modes available.

- **DMX Address**
  This displays the recent DMX start address ("channel", "slot") of the lamphead. Set the DMX address with the arrows right of the information. For individual control every fixture needs to be assigned to an individual DMX address range. The number of DMX channels required is dependent from the DMX mode. Identical fixtures set to the same mode might share the same DMX address when they should behave identical. Please find a detailed description of the DMX channels in the DMX implementation table.

- **DMX Mode**
  This displays the recent DMX Mode. Set the DMX mode with the arrows right of the information. Please find a detailed description of each mode and the number of channels required in the DMX implementation table.

- **DMX Signal loss behavior**
  This displays the recent DMX Signal loss behavior. Set the behavior with the arrows right of the information.

- **DMX Version**
  This displays the recent DMX-Version.

- **Activate Extended Color Control**
  This activates the Extended Color Control functionality.
• **Activate RDM**  
  This activates the RDM-funcionality on the device (if supported).

• **Activate CRMX**  
  This activates wireless DMX on the device (if supported).

• **Activate DMX Reduce Channels**  
  This activates “reduce channels” on the device (if supported).

• **Activate DMX Valid Filter**  
  This activates the DMX valid filter on the device (if supported).

• **Activate DMX Termination**  
  This activates DMX Termination on the device (if supported).

• **Protocol Selection**  
  This displays the current protocol-selection: Auto select – Art-Net-Only – sACN-Only – Off

• **Art-Net Net / Subnet / Universe**  
  This displays the current Art-Net settings

• **Merge Mode**  
  This displays the current Merge Mode: LTP - HTP

• **Activate Gateway**  
  This displays if the gateway is activated

• **sACN Universe**  
  This displays the current sACN Universe

Click “Set DMX Settings” to apply the settings.

As long as the settings have not been applied they can be reverted by clicking the button “Revert Changes”. The **ARRI Lighting Service Manager** holds changed settings for each lamphead as long as the lamphead is connected to the computer independent whether it is selected or not. There are situations where the **ARRI Lighting Service Manager** may ask to apply or revert changed settings in order to perform other requested functions.
6.3. Settings

- **Fan Mode**
  This displays the recent fan mode. Set the fan mode with the arrows right of the information.

- **Dimming Curve**
  This displays and changes the dimming curve.

- **Special Modes**
  This displays and changes all special modes like Low End Mode, Highspeed Mode, Master/Slave Mode, Calibrated RGBW, Tungsten Mode and Light Engine Compensation. If there are any dependencies, any of these modes might be grayed out.

- **Frequency Selection**
  This displays and changes the Frequency Selection.

- **Low Battery Warning Level**
  This displays and changes the warning level for the case if low battery.

- **Display Settings**
This displays and changes all display settings like Brightness, Contrast, Illumination and Orientation.

Click “Apply Settings” to apply the settings.

6.4. Diagnosis

ARRI LED lampheads have an internal logging for diagnosis. The logs are important for your ARRI Service Partner for a better understanding of fixture issues.

- **Read Service Log**
  Click this button to read out a detailed service-log. The log contains an overview of the system state and further important data.

- **Read Error Log**
  Click this button to read out a history of internal error messages.

- **Clear Log**
  This clears the currently displayed log.

- **Mail Log**
  Click the button “Mail Log” to mail the log using a email application.
Some Mail Clients as MS Outlook have problems with huge logs, so this function is limited to 20000 characters (about 230 lines). In some cases it might be necessary to provide the full Log to the ARRI service. Then please use the “Save Log” function described below!

- **Print Log**
  Click the button “Print Log” to print the log.

- **Save Log**
  Click the button “Save Log” to save the log as a .txt file on the computer.

### 6.5. Firmware Update

See chapter 8 for a detailed description how to update your components.
6.6. IP Settings

6.6.1. IP Basic Settings

At this tab you can change all TCP/IP settings of the selected ARRI SkyPanel depending the topology of your LAN.

- **Activate Bonjour**
  Activate or deactivate, if this fixture should be visible for the Bonjour Service in your network.

- **Set IP Defaults**
  Click this button to apply the default IP settings. The fixture may disconnect for a short time if connected over LAN.

- **Renew DHCP Lease**
  Click this button to renew the DHCP lease. The fixture may disconnect for a short time if connected over LAN.

- **Set IP Settings**
  Click this button to apply all changed settings. The fixture may disconnect for a short time when connected over LAN.

**Note:** Changing the IP settings to a manually configuration may result in a permanently loss of IP connection if the changed parameters do not match the requirements of your local area network. In this case connect the ARRI SkyPanel via USB.
6.6.2. IP Service Settings

With the ARRI SkyPanel models **ARRI Lighting Service Manager** supports changing the IP service settings for the NTP as well as the SYSLOG protocol.
7. Bootloader update

A bootloader update is only necessary if the lamphead has been switched off during a firmware update procedure and does not boot up any more.

7.1. Boot Loader Update with ARRI L10

The ARRI Lighting Service Manager checks for all connected L10 if a boot loader update is necessary before a firmware update is possible. In this case, click “Update Boot Loader” to start the update process.

On Mac OS X, the system FTDI driver must be temporarily unloaded. For this you are asked to type in your password to allow this. All USB connected devices disappear in this case. All disconnected devices automatically reconnect after the bootloader update has bee finished.

The bootloader update takes some seconds. After the boot loader update is finished the message “Update process finished successfully!” is displayed in the update progress text field.

In order to reboot the lamphead with this new boot loader the L10 temporarily disconnects from the ARRI Lighting Service Manager. After the reconnection a firmware update is required.

7.2. Boot Loader Update for ARRI SkyPanel
For updating the boot loader of an ARRI SkyPanel two steps are necessary: unprotect the bootloader and update it.

7.2.1. Unprotect the bootloader

In order to perform a boot loader update with the ARRI Lighting Service Manager it is necessary to set the device to the DFU boot loader mode by pressing the red “Reset Button” next to the USB port for approximately 5 seconds.

Connect the ARRI SkyPanel via USB to the computer.

If you do this on your Windows 10 machine for the first time, the device might not be found. In this case please follow the instructions of the application note “ARRI AN180517 ALSM Win10 Howto EN.pdf” to install the drivers properly.

The ARRI Lighting Service Manager will show a dialog, where you can choose whether your connected device is an ARRI SkyPanel or a SkyPanel Remote Control. Please select “SkyPanel”.

In the tab “Firmware Update” now you can select “Update Boot Loader”.

The ARRI Lighting Service Manager will show a warning message. Click OK to proceed.
Now the device disconnects from ARRI Lighting Service Manager to perform the unprotecting procedure. This means the device disappears from the device list of the ARRI Lighting Service Manager.

Keep the device connected to the computer for approximately 20 seconds until the following message box appears:

To continue click “OK”. Now you are ready to install the bootloader!

7.2.2. Update Bootloader

After the bootloader has been unprotected, again set the device to DFU mode by pressing and holding the “Reset Button” for approximately 5 seconds.

Again, the ARRI Lighting Service Manager will show a dialog, where you choose whether your connected device is an ARRI SkyPanel or a SkyPanel Remote Control. Please select “SkyPanel”.

The ARRI Lighting Service Manager recognizes the boot loader mode and offers another “Boot Loader Update” in the tab “Firmware Update”.

The ARRI Lighting Service Manager will show a warning message. Click OK, if you want to proceed.

Since the device memory is already unprotected in this pass the new boot loader file gets uploaded to the device. Again the device immediately disconnects from ARRI Lighting Service Manager to reboot the new boot loader. When reconnected a firmware update is required.
7.3. Flash SkyPanel Remote Control

7.3.1. Transmit the firmware to a SkyPanel Remote Control

With this procedure you will flash your SkyPanel Remote Control with the latest basic firmware delivered with your ARRI Lighting Service Manager.

To perform a firmware update with the ARRI Lighting Service Manager it is necessary to set the device into DFU mode by pressing the red “Reset Button” next to the USB port for approximately 5 seconds.

If you do this on your Windows 10 machine for the first time, the device might not be found.

In this case please follow the instructions of the application note “ARRI AN180517 ALSM Win10 Howto EN.pdf” to install the drivers properly.

Connect the SkyPanel Remote Control via USB to the computer.

The ARRI Lighting Service Manager will show a dialog, where you choose the device type. As your connected device is a SkyPanel Remote Control. Please select “Remote Control”!

In the tab “Firmware Update” now you can select “Flash Remote Control”.

The ARRI Lighting Service Manager will show a warning message. Click OK to proceed.
Now the device disconnects from **ARRI Lighting Service Manager** to perform the file transmission procedure. This means the device disappears from the device list of the **ARRI Lighting Service Manager**.

![Message Box]

After transmission is completed a message box will appear.

Now you can disconnect the SkyPanel Remote Control from your PC.

As your ARRI SkyPanel might have a newer firmware version please test the SkyPanel Remote Control with your ARRI SkyPanel.

### 7.3.2 Test the updated SkyPanel Remote Control

On your ARRI SkyPanel ensure, that in the menu “**Fixture Settings**” -> “**USB Mode**” “**Normal**” is activated.

Now you can connect the SkyPanel Remote Control to the ARRI SkyPanel.

If the firmware of the ARRI SkyPanel has a newer firmware for the SkyPanel Remote Control an update will start immediately.
8. Firmware update

Do not interrupt the firmware update process!

Apple Mac: Please ensure that your computer does not change to the power save mode!
This would interrupt the update process!

Lampheads with an incomplete firmware installation will not work properly – even if it seems so at first sight. To avoid interruption of the firmware update process:

- Disable any DMX or RDM communication (especially RDM discovery)
- Do not close the ARRI Lighting Service Manager!
- Do not shut down or switch off the computer!
- Do not switch off the lamphead!
- Do not disconnect the USB cable!

If your firmware update has been interrupted anyhow and your lamphead does not boot anymore try to upload the bootloader manually (see chapter 7).

8.1. Firmware update with ARRI L5 / ARRI L7:

The ARRI Lighting Service Manager checks the currently installed firmware for updates automatically. It automatically selects the appropriate firmware modules that need to be updated:

Do not change any of the selection unless an ARRI Service Partner has instructed you to do so.
8.2. Firmware update with ARRI L10 / ARRI SkyPanel / ARRI Orbiter:

For all ARRI L10 / ARRI SkyPanel / ARRI Orbiter models the user does not have to select the appropriate firmware modules. Although the firmware update still consists of several modules there is only one single package containing all required data.

For all ARRI SkyPanels a Firmware update via a LAN connection is the preferred way! Here an automatic formatting of the lampheads disk is performed. This could be necessary, if a formerly done update has been interrupted during file transfer.

If the file transfer process via a LAN connection to a SkyPanel is in progress “Stop Update” has no effect! The Firmware update will be finished anyway.

Please ensure that your computer does not bloc LAN traffic over port 23 (Telnet)!

Click “Check for updates” to force the check.

Click “Update Firmware” to start the firmware update process.

Apply or revert changed settings before updating the firmware.

The firmware update takes up to some minutes depending on the selected items.
When the firmware update is finished the message “Update process finished successfully!” is displayed in the update progress text field.

In contrast to other ARRI lamphead models the firmware update procedure for ARRI SkyPanel and ARRI Orbiter is a bit different. When the firmware update is finished the controller board of ARRI SkyPanel and ARRI Orbiter needs to restart the new firmware. This causes the connection to shut down and to disconnect from ARRI Lighting Service Manager. Therefore, the ARRI SkyPanel will be removed from the device list. As soon as the restart is completed the ARRI Lighting Service Manager detects the formerly disconnected ARRI SkyPanel again.

![Image of ARRI Lighting Service Manager interface]

**Do not interrupt the firmware update process!**

Lampheads with an incomplete firmware installation will not work properly – even if it seems so at first sight. To avoid interruption of the firmware update process:

- Disable any DMX or RDM communication (especially RDM discovery)
- Do not close the ARRI Lighting Service Manager!
- Do not shut down or switch off the computer!
- Do not switch off the lamphead!
- Do not disconnect the LAN or USB cable!
8.3. Troubleshooting for failed Firmware Updates

The update process of the ARRI Lighting Service Manager is quite robust, but there is always a little chance for failure.

First of all: Don’t panic! Mostly it is possible to repeat the update. Here you find a step-by-step tutorial what to do after an update has failed.
For all ARRI SkyPanels a Firmware update via a LAN connection is the preferred way! Here an automatic formatting of the lampheads disk is performed. This could be necessary, if a formerly done update has been interrupted during file transfer (e.g. Error 29).

For all ARRI SkyPanels a Recovery update via USB stick maybe solves your Problem (e.g. Error 29). Here an automatic formatting of the lampheads disk is performed. This could be necessary, if a formerly done update has been interrupted during file transfer.

Please ensure that your computer does not block LAN traffic over port 23 (Telnet)!

Please try to do the following:

1. Do NOT switch off the lamphead!
   Note the error messages. The content of the update progress text field will be stored automatically to an update log file if you have enabled this feature in the Program Settings. This data might be very helpful if you have to contact an ARRI Service Partner in case the next steps will be without success. In addition the system messages log will also be helpful.

2. Try to start the update again.

3. If this fails, do NOT switch off the lamphead!
   Again note the error messages.

4. Disconnect the LAN or the USB cable. Wait approximately 5 seconds (lamphead should now be removed from the ARRI Lighting Service Manager window). Reconnect the LAN or USB cable. ARRI Lighting Service Manager should now recognize the lamphead after a few seconds (maybe with a strange serial number).

5. If the lamphead is not recognized by ARRI Lighting Service Manager, close ARRI Lighting Service Manager and start it again.

6. If ARRI Lighting Service Manager still does not recognize the lamphead, switch off the lamphead.
   Wait approximately 5-10 seconds and switch it on again.

7. If ARRI Lighting Service Manager recognizes the lamphead, try to start the update again.

8. If this fails again, please again note the error messages.

If the lamphead does not react or the problem still persists please contact your local ARRI Service Partner. It is important to store the collected error messages and log data to send it to the ARRI Service Partner if needed.

Note: Lampheads with an incomplete firmware installation will no longer work properly – even if it seems so at first sight.
8.4. USB Stick Functions with ARRI SkyPanel

For all ARRI SkyPanel models it is possible to perform a **firmware update** as well as a **recovery update** using a USB Stick. For more information please read documentation delivered with your ARRI SkyPanel.

For both functions use **ARRI Lighting Service Manager** to export the required data.

- **Export Firmware Update**

To export firmware update data use the menu “Help” -> “Export SkyPanel Firmware…”

Check if the USB Stick is formatted in FAT32 (this should be the standard). Upload the correct firmware to the root directory of the FAT32 formatted USB Stick.

When using “*Export SkyPanel Firmware*…” you get a file save dialog which lets you decide the name and the place of the exported file. Please do not change the name, use the default.
- Export Recovery Update

To export recovery update data use the menu “Help” -> “Export SkyPanel Recovery Software…”

Check if the USB Stick is formatted in FAT32 (this should be the standard). Upload the correct firmware on the root directory of the FAT32 formatted USB Stick.

After selecting “Export SkyPanel Recovery Software…” you get a directory save dialog which lets you choose a directory where to save the export file. The file name is always “SPxx_recovery.upd”.

Note: If both the RECOVERY and the FIRMWARE update are installed on the USB Stick it will always perform the RECOVERY.
9. Additional Functions

Right click on a lamphead entry in the ARRI Lighting Service Manager lamphead list to open a popup menu with some additional functions:

9.1. Functions for single selected lampheads

**Hide**
Removes the lamphead from the ARRI Lighting Service Manager list but keeps the lamphead connected.

If there are any changed settings for this lamphead that has not been applied to the lamphead, the ARRI Lighting Service Manager asks to apply or revert them.

**Show Hidden**
This shows all hidden lampheads. Right-click an empty entry in the lamphead list and choose the popup-menu entry Show Hidden.

**Refresh data**
This refreshes all relevant data from the lamphead and reinitializes the view of the fixture inside ARRI Lighting Service Manager. This might be necessary if the user has changed some settings directly via the built-in fixture menu or via RDM while the lamphead is connected to the ARRI Lighting Service Manager.

If there are any changed settings for this lamphead that has not been applied to the lamphead, the ARRI Lighting Service Manager asks to apply or revert them.

**Reconnect**
This performs a reset of the USB connection as if the USB cable has been removed and reconnected again. ARRI Lighting Service Manager may lose the connection to the device for a short time and removes it. Then it will be detected again.
Set Factory Defaults
Resets all editable lamphead settings to factory default values.

If there are any changed settings for this lamphead that has not been applied to the lamphead, the **ARRI Lighting Service Manager** asks to apply or revert them.

Identify
This physically identifies a lamphead by flashing its lights (L7-C flashes blue, all other white). This may be helpful if more than one lamphead is connected to **ARRI Lighting Service Manager** and the user has to identify the correct one.

9.2. Export and Import of Settings and Presets

If connected to a ARRI SkyPanel, the **ARRI Lighting Service Manager** offers additional menu points in the context menu that allows export and import settings and presets.

There are three ways to export presets and settings:

- Export Presets / Save Favorites:
  This creates a Light Presets file (<device name>Presets.json) that you can use on any other device.

- Backup Settings:
  This creates a complete backup of the device including all TCP/IP, DMX and RDM settings (<device name>Settings.json). Do not use this file on other fixtures!

- Clone Settings / Save Settings:
  This creates a Fixture Settings file (<device name>Clone.json) that you can use on any other device of the same type.
9.3. Functions for multiple selected ARRI SkyPanels

Right click on a selection of ARRI SkyPanels.

**Import Configuration**

This feature is only enabled, if the selection consists solely of ARRI SkyPanels –C (Color) or ARRI SkyPanels –RP (Remote Phosphor).

After having clicked on that item you will be asked to choose a settings file. This settings file will be imported to all selected ARRI SkyPanels.

⚠️ Never import a `<device name>Settings.json` file from another fixture as TCP/IP network settings will be overwritten.
10. Expert Mode
The Expert Mode gives the possibility to apply a bar code after a service case.

The Expert Mode needs to be enabled first. Please ask your ARRI service partner for this.

10.1. Service Case – Rewrite barcode to the fixture

After a main board change it might necessary to rewrite the “old” barcode to the fixture.

Do not change the barcode, if there is no service reason for this!
The barcode is essential for identifying your device!

1) Use the context menu of the fixture to find the “Expert Mode”.

2) Click on “Set Fixture Settings”

3) The following dialog appears:

4) Enter the fixture barcode

5) Click OK to apply the bar code

6) Confirm the summary with OK
11. Program Settings

Sets the program settings of the **ARRI Lighting Service Manager**.

**General**

- *Show splash screen on start:*
- *Jump directly to new connected devices:*
- *Synchronize device views:*
  If enabled, the device views of all connected lampheads show the same sub view.
- *Show warning for devices with unknown or unsupported firmware version:*
**Firmware Update**

- **Show warning when firmware update starts:**

- **Acoustic signal when update is finished:**

- **Directory:**
  You can either choose a User Location to add firmware files or choose the default location. In the archive location you find older firmware versions.
Log

System Log
- **Detailed:**
  If enabled, *ARRI Lighting Service Manager* displays the system log messages with more debugging details.

- **Save System Log:**
  If enabled, the *ARRI Lighting Service Manager* saves the system log messages automatically to a log file in the selected folder. The system log messages might be helpful for your ARRI Service Partner in order to better understand fixture issues and/or issues with the *ARRI Lighting Service Manager*. It is highly recommended to enable this feature.

*ARRI Lighting Service Manager* allows saving log files at the default or a user location.

Diagnosis Log
- **Save Diagnosis Log:**
  If enabled, the *ARRI Lighting Service Manager* saves the diagnosis log messages automatically to a log file in the selected folder. The diagnosis messages might be helpful for your ARRI Service Partner in order to better understand fixture issues and/or issues with the *ARRI Lighting Service Manager*. It is highly recommended to enable this feature.

*ARRI Lighting Service Manager* allows saving log files at the default or a user location.

Update Log
- **Save Update Log:**
  If enabled, the *ARRI Lighting Service Manager* saves the update log messages automatically to a
log file in the selected folder. The update messages might be helpful for your ARRI Service Partner in order to better understand fixture issues and/or issues with the ARRI Lighting Service Manager. It is highly recommended to enable this feature.

ARRI Lighting Service Manager allows saving log files at the default or a user location.

**Start/ Stop Script**

![Start/Stop Script Interface](image)

ARRI Lighting Service Manager allows executing shell scripts (on Mac OS X) or batch scripts (on Windows) in order to setup the desired environment.
Network

**ARRI Lighting Service Manager** allows connecting to ARRI SkyPanel devices over a local network. Activate *Bonjour* in order to discover network attached devices. On *Microsoft Windows* operating systems *Bonjour* is not available by default and requires user installation. In some situations an ARRI SkyPanel can be connected by USB as well as over the local network.
Software Update

ARRI Lighting Service Manager supports the automatic search for software updates over the Internet. Use this setting to activate or deactivate this service.
12. System Log

The "System Log" tab shows all messages of the ARRI Lighting Service Manager and the connected lampheads.

The log messages might be helpful for your ARRI Service Partner in order to better understand fixture issues and/or issues with the ARRI Lighting Service Manager.

The ARRI Lighting Service Manager is able to store these log messages automatically to a log file. This setting can be enabled or disabled in the Program Settings.

- **Clear Log**
  This clears the complete log.

- **Mail Log**

- **Print Log**
  This prints the log on the system printer.

- **Save Log**
  This saves the log as a .txt file on the computer.
13. Software Update over the Internet

ARRI Lighting Service Manager supports the automatic search for software updates over the Internet once per day if activated. See Chapter 10 for details.

You can always initiate a manual search for ALSM or firmware update components by using the menu function “Search for Software Update”. This you will find in the Help Menu.

In order to execute automatic or manual search for software updates a working Internet connection is required when the ARRI Lighting Service Manager starts.

This might not work from inside a Virtual Private Network (VPN).

After ARRI Lighting Service Manager has found new software items, the following dialog is shown:
For the activation of the downloaded firmware components the **ARRI Lighting Service Manager** restarts automatically. New firmware components will be saved to the default location. The current firmware components will be moved to the archive location.

Installation of downloaded ALSM software requires a manual restart of the **ARRI Lighting Service Manager** after the installation process.