



ALSM ARRI Lighting Service Manager

USER MANUAL

March 2024 • V 5.5.0 • English

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1 About this Document

For useful information in addition to these manuals please have a look at the [ARRI learn & help](#) section on the [ARRI website](#).



[ARRI Lighting Service Manager](#)

Document Revision History

Version	Release	Date	Note
5.5		March 2024	Version for ALSM 5.5.0 Fixed typos. Added service functions. Added offline diagnose
5.4		October 2023	Version for ALSM 5.4.0 Added LiOS and SkyPanel X instructions. Edited chap. 9: Context Menu. Edited chap. 10: Program Settings.
5.3.2		March 2023	Version for ALSM 5.3.2. No changes.
5.3.1		December 2022	Version for ALSM 5.3.1. Added DMX User Presets to chap. 9.2.
5.3		July 2022	Version for ALSM 5.3.0. Supported Mac OS versions changed.
5.2		April 2022	Release for ALSM 5.2.0. Edited chap. 10: Appearance of the devices in the device tree.
5.1.1		May 2021	Added chap. 5.1: Connected lamp heads with description of the used symbols in the device list. Edited chap. 9: Documentation of the context menu.
5.1		February 2021	Release for ALSM 5.1.0. Orbiter supports network over USB. Download of Orbiter log as .tar.gz
5.0		August 2020	Release for ALSM 5.0.0. Added Orbiter related descriptions.
4.2		April 2019	Release for ALSM 4.2.0 Changed text in chapter 6.3 for adding light engine compensation.
4.1		November 2018	Release for ALSM 4.1.0. Added VCP driver installation for Windows 10.
4.0.1		October 2018	Release for ALSM 4.0.0. Added note for Mac in chapter 8.

4.0	May 2018	Release for ALSM 4.0.0. Updated screenshots with additional GUI elements. Added some comments.
3.2	February 2018	Release for ALSM 3.2.0. Fan Settings moved to Settings tab.
3.0	April 2016	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.
2.2.0	April 2016	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.
2.1	December 2015	Release for ALSM 2.1.0. General bug fixing & stability improvement. Implemented support for ARRI SkyPanel. Implemented update of boot loader for L10.
2.0	March 2015	Release for ALSM 2.0.0. Based on the LS manager manual.

2 Download and Installation

Supported Operating Systems

This software has been tested on the following operating systems:

- **Windows**
Minimum Microsoft Windows 7
- **Mac OS**
Minimum Apple Mac OS X 10.13 High Sierra

2.1 Windows Installation

Prepare the USB VCP driver on Windows 10 for SkyPanel Classic

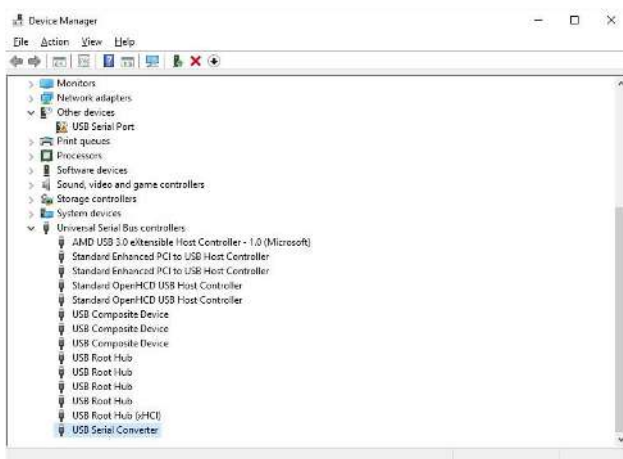
If the ALSM is installed on Windows 10 for the first time, the USB driver needs to be configured. The original Windows 10 VCP driver is not able to communicate with the ARRI SkyPanel classic. For this it is necessary to uninstall the original VCP driver and install a compatible VCP Driver. The ALSM software package includes the recommended driver.

Please do the following steps:

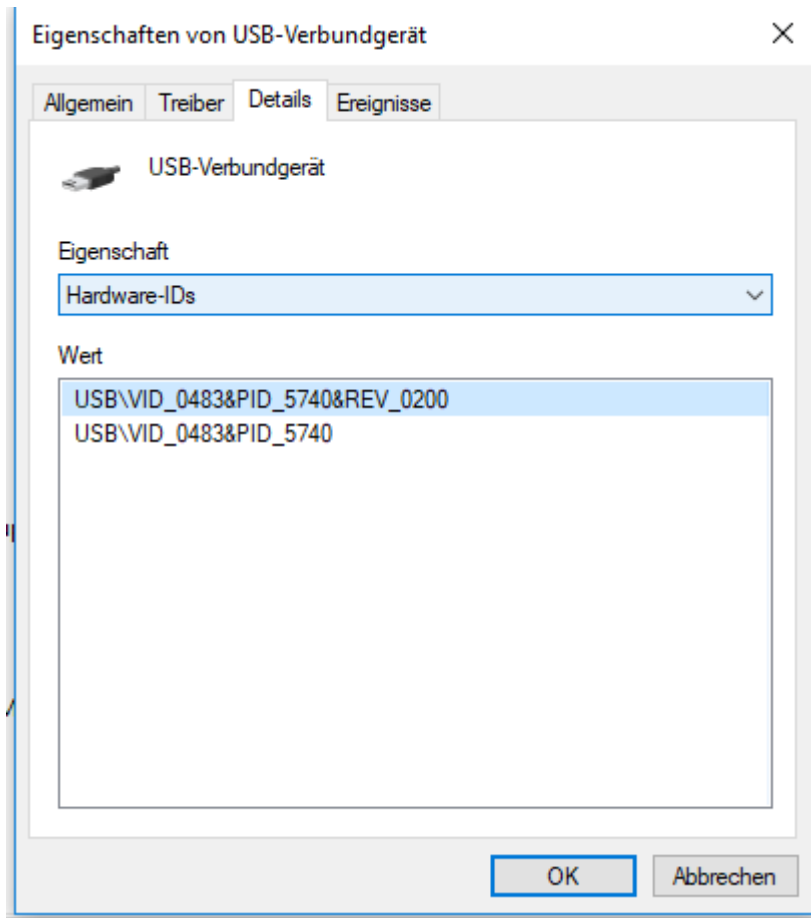
- 1) Change the USB mode of your SkyPanel Classic from “*normal*” mode to “*service*” mode.
- 2) Connect a SkyPanel Classic via USB to your PC.
- 3) Open the Window “*Device Manager*”.

HINT

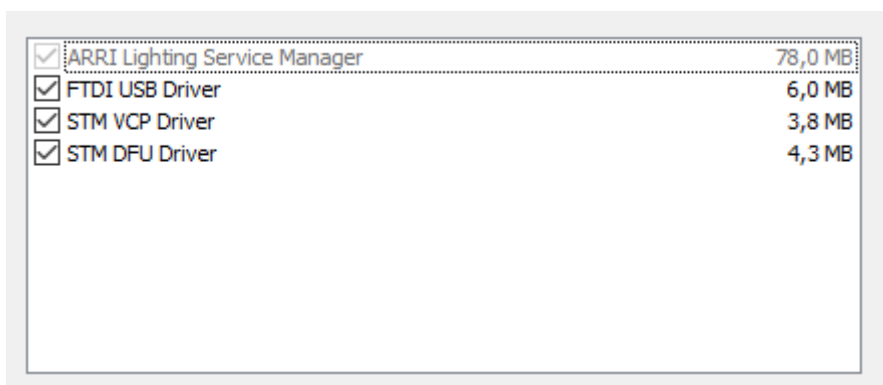
Do not connect an ARRI SkyPanel Classic that is in “normal” USB-mode to your computer. Connection is only allowed in “service” USB mode. “Normal”-mode can cause a damage of your computer’s USB-port!



- 4) Open every “USB Serial Converter“. 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**).



- 5) Right click on this “USB Serial Converter“ in the device list.
 6) Choose “Delete Driver Software“.
 7) Confirm “Device Uninstall“.
 8) Remove all USB connected SkyPanel Classic.
 9) Now Install ALSM incl. all drivers by running the setup.



- 10) Connect the ARRI SkyPanel Classic via USB cable.
 11) ALSM should show the ARRI SkyPanel Classic with an icon in the device list.
 ⇒ Now your PC is ready to connect any ARRI SkyPanel Classic in the future.

Windows Standard Installation

The standard installation can be done, if the Windows USB driver is already configured as described in chapter Windows Installation Preparation [▶ 7] 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.

HINT

Windows: Do not connect the lamphead via USB to the computer before the ALSM 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”.

If you plan to connect a SkyPanel Classic via USB you should connect it before starting the ALSM for the first time.

This will finalize the USB driver installation on the system. Otherwise errors might occur when the ALSM tries to connect to the lamphead via USB for the first time.

If you have installed the ALSM on a Windows 10 device for the first time, some more installation is necessary. See chapter Windows Installation Preparation [▶ 7].

HINT

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

2.2 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.

HINT

If you want to connect ARRI SkyPanel Classic via LAN, please ensure that your computer does not block LAN traffic over **port 23 (Telnet)**.

3 Limitations

The ALSM 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 Classic with firmware version 1.0.0 or higher.
- ARRI Orbiter with firmware version 1.0.0 or higher.
- ARRI SkyPanel X with firmware version 3.0.0 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 ALSM 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 Classic with boot loader version 0.87.0 or higher.
- ARRI Orbiter with firmware version 0.9.9 or higher.
- ARRI SkyPanel X with firmware version 3.0.0 or higher.

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



Windows: Automatic detection of connected lampheads via LAN and Bonjour works since Windows 10 reliable. On all other Windows-Version please add lampheads manually if they do not appear in the treeview. See Connection via LAN [► 11] for more information.

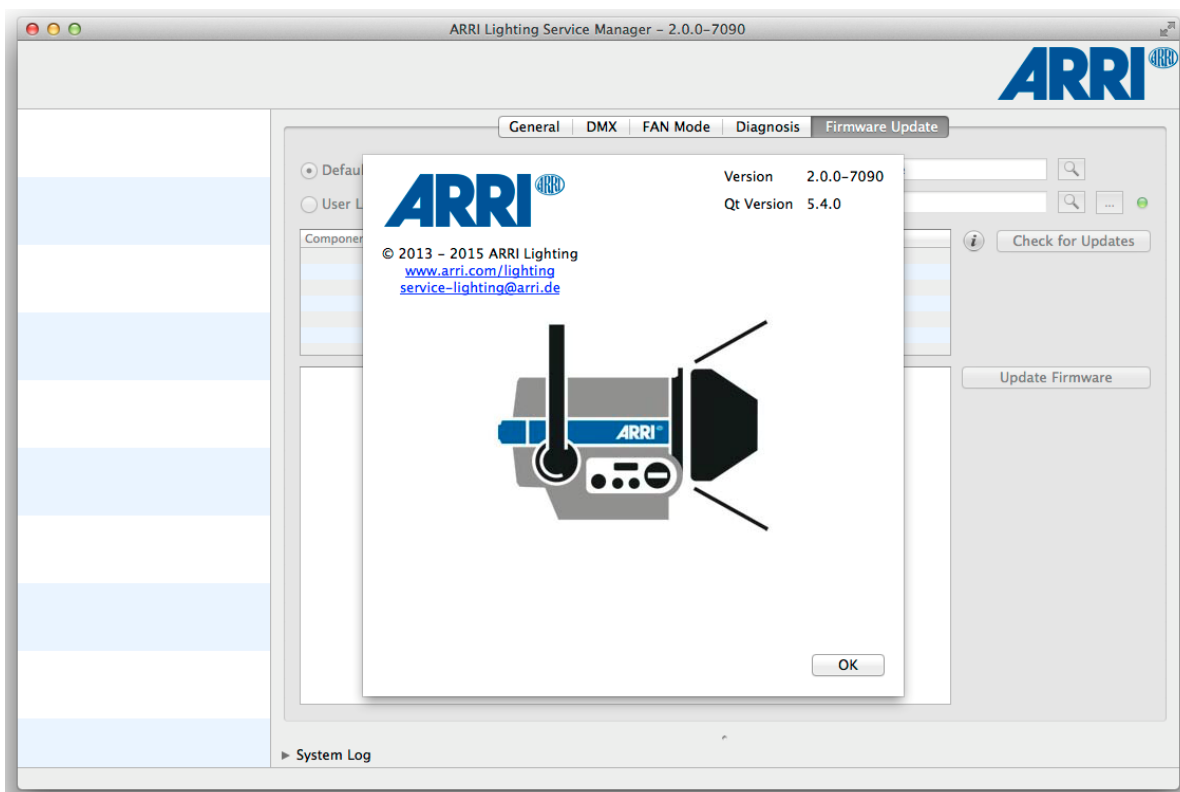
4 Start the ALSM



Windows: Double-click on the desktop short cut or the usual start methods will start the ALSM.



Mac-OS: Double-click the application symbol in the applications directory or the usual start methods will start the ALSM.



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

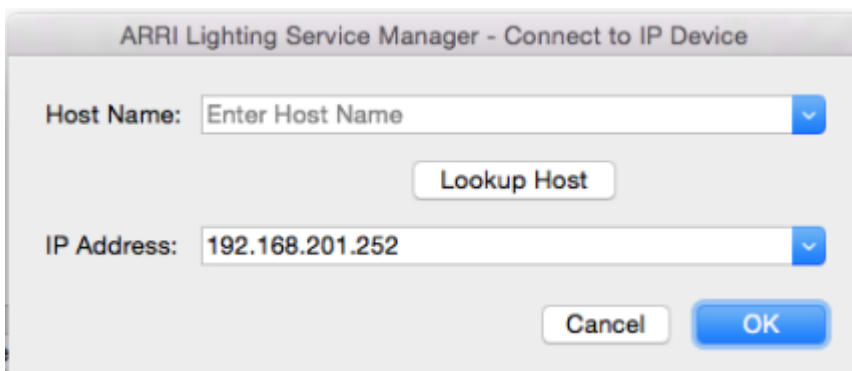
4.1 Connection via LAN

Automatic LAN Connection

The ALSM 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 ALSM.

Manual LAN Connection

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. Enter the IP-address of the desired lamphead.



NOTE: Using the LAN-connection is the preferred way to connect an ARRI SkyPanel Classic.



Windows: Automatic detection of connected lampheads via LAN and Bonjour works since Windows 10 reliable. On all other Windows-Versions please add lampheads manually if they do not appear in the lamphead list.

HINT

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

Manual LAN Connection of multiple lampheads

If the automatic lamphead detection fails, it is possible to scan an IP range for ARRI lampheads. Use the right mouse button > Connect LiOS devices in IP range.

e.g.: ALSM tries to find ARRI lampheads in IP 192.168.0.1 – 192.168.0.100.

4.2 Connection via USB

The ALSM detects lampheads connected via USB to the computer automatically. Multiple lampheads can be connected simultaneously by utilizing additional USB ports.

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

HINT

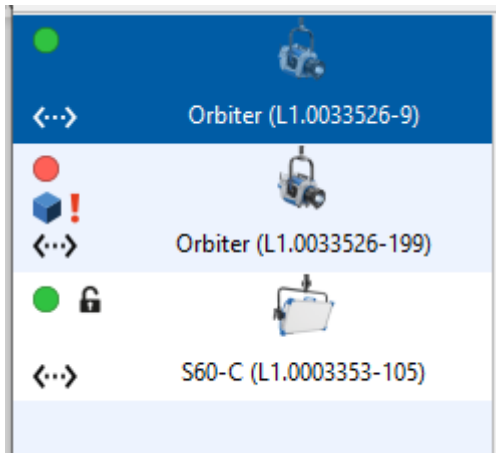
Do not connect an ARRI SkyPanel Classic that is in “normal” USB-mode to your computer. Connection is only allowed in “service” USB mode. “Normal”-mode can cause a damage of your computer’s USB-port!

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

Ensure that “Apple Bonjour Print Service” is installed on your PC and enabled in the settings of the ALSM. USB connection is supported for ARRI LiOS devices like Orbiter or SkyPanel X using a network over USB connection. See Network [▶ 40] for more information.

5 Work with connected lampheads

5.1 Connected Lampheads



Each detected lamp head 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.

While the ALSM is connected to a lamphead it is recommended:

- 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.

If any settings were changed on the lamphead's control panel or its webpage, the data must be refreshed in the ALSM. This can be done by pressing *"Refresh data"* in the context menu or by selecting the lamphead in the device list and pressing *F5*.

Symbols:

	Error State: Green for "OK", Red for "Error".
	Connection type: IP connection or USB connection.
	Firmware update required: Appears, if the activated firmware of the ALSM is newer than the installed firmware on the lamphead.
	The web portal of this lamphead is locked/unlocked (only valid for ARRI SkyPanel Classic).
	This SkyPanel X is part of an array (a group of up to three SkyPanel X).

5.2 Selection of Lampheads

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.

Selection of multiple lampheads

For the selected lampheads a common device view is shown on the right side of the ALSM application. Any changes can be applied to all selected lampheads by clicking *"Apply Settings"*. All not chosen properties are omitted.

SkyPanel Classic

It is possible to select multiple ARRI SkyPanel Classic. It is not possible to mix SkyPanel Classic and LiOS lampheads in one multi selection.

Multi selection of ARRI SkyPanel Classic is allowed for devices with a firmware version higher than 3.0.0.

If you select multiple ARRI SkyPanel Classic of type “-C” (color) or “-RP” (remote phosphor) you can import settings to all selected ARRI SkyPanel Classic out of a settings-file from your computer. See Export and Import of Favorites, Settings, Presets and DMX Presets [▶ 35] for more details.

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

LiOS Lampheads

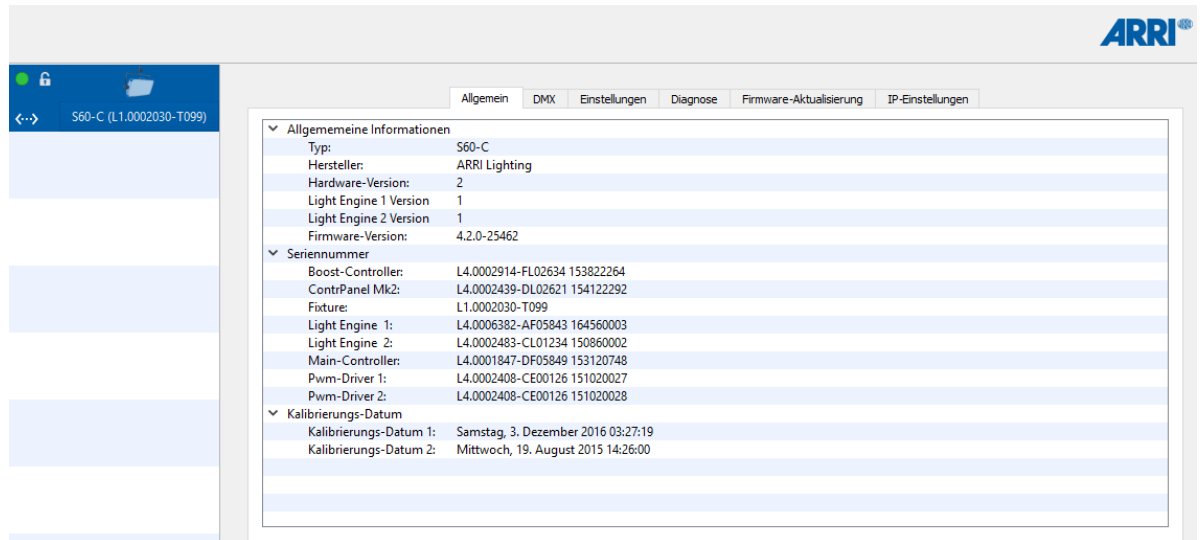
Orbiters and SkyPanel X use LiOS as operation system and therefore can be mixed in one multi selection.

6 Device Views for Selected Lampheads

6.1 General

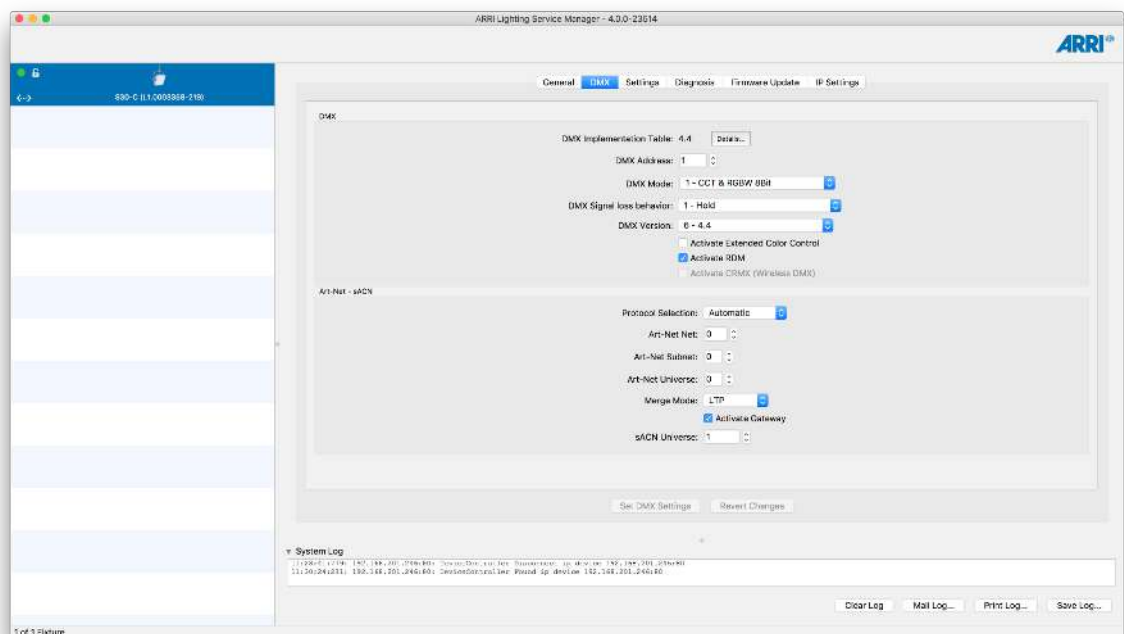
This view displays information about your lamphead:

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



6.2 DMX Settings

In the DMX settings view all available DMX settings are shown for the selected lamphead(s).



DMX Implementation Table

Displays the version of the DMX implementation table of your lamphead. Click on *"Details"* to open a PDF document with detailed information about the DMX modes available.

DMX Address

The DMX start address ("channel", "slot") of the lamphead can be changed here. 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

The DMX mode can be changed here. Please find a detailed description of each mode and the number of channels required in the DMX implementation table.

DMX Signal loss behavior

The DMX signal loss behavior can be changed here.

DMX Protocol Version

The DMX protocol version can be changed here.

DMX Crossfade Transition Type

Change here the transition type for crossfading between two color modes during DMX control.

Activate Extended Color Control

Activates the Extended Color Control functionality (if supported).

Activate RDM

Activates the RDM functionality on the device (if supported).

Activate CRMX

Activates wireless DMX on the device (if supported).

Activate DMX Reduce Channels

Activates "reduce channels" on the device (if supported).

Activate DMX Valid Filter

Activates the DMX valid filter on the device (if supported).

Activate DMX Termination

Activates DMX Termination on the device (if supported).

Activate DMX Preset Activation Confirmation

If activated, the lamphead flashes red, after a DMX preset has been activated. (Only visible, if supported)

Protocol Selection

Displays the current protocol-selection: Auto select – Art-Net-Only – sACN-Only – Off

Art-Net Net / Subnet / Universe

Displays the current Art-Net settings

Merge Mode

Displays the current Merge Mode: LTP - HTP

Activate Gateway

Displays if the gateway is activated

sACN Universe

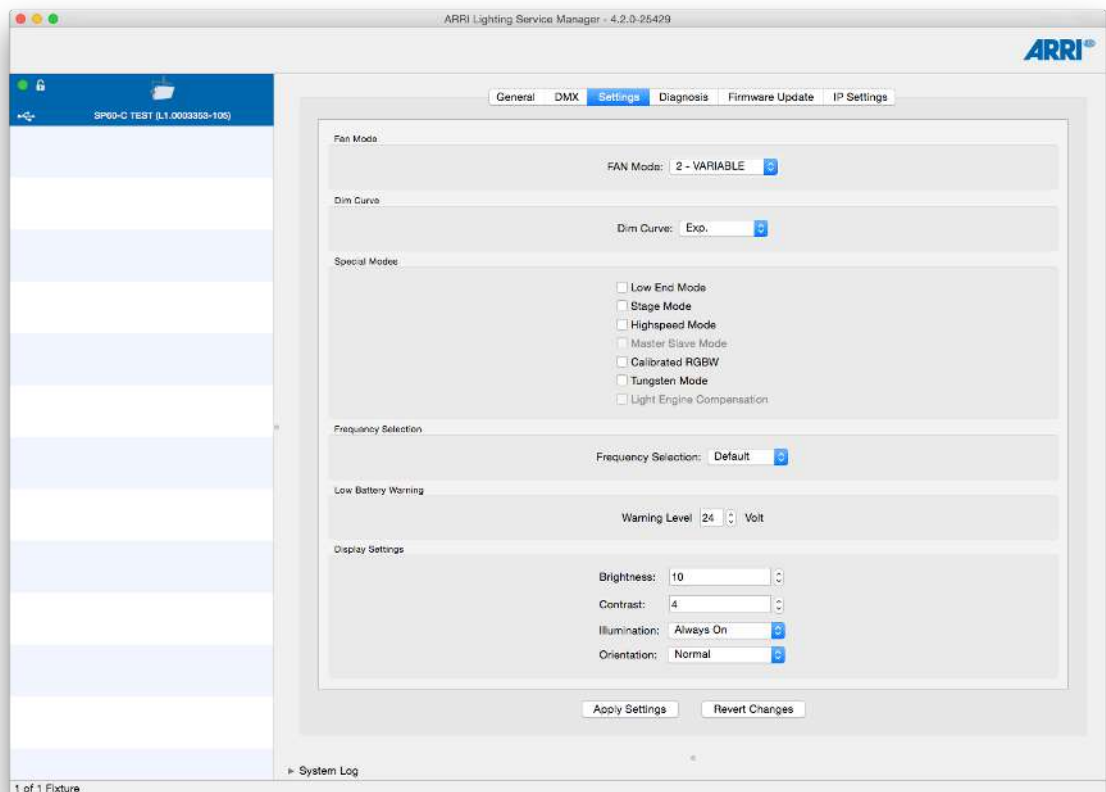
Displays the current sACN Universe

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 ALSM 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 ALSM may ask to apply or revert changed settings in order to perform other requested functions.

6.3 Settings

In the settings tab all available settings are shown for the selected lamphead(s).

**Fan Mode / Operational Mode**

Displays the recent fan mode. Set the fan mode with the arrows right of the information.

Dimming Curve

Displays and changes the dimming curve.

Cue Transition Type

Change here the transition type for crossfading between two color modes for active cue mode.

Special Modes

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

Displays and changes the Frequency Selection.

Low Battery Warning Level

Displays and changes the warning level for the case if low battery.

Display Settings

Displays and changes all display settings like Brightness, Contrast, Illumination and Orientation.

Bluetooth Settings

Enable, disable and change the Bluetooth code of the lamphhead.

Click *“Apply Settings”* to apply the settings.

6.4 Diagnosis

6.4.1 Online

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

The screenshot shows the ARRI Lighting Service Manager software interface. The main window is titled "ARRI Lighting Service Manager - 5.5.2-26047". The interface is divided into several sections:

- Left Panel:** A list of connected fixtures with icons and names:
 - Orbiter Robot-Framework (10.30...)
 - Orbiter (10.30.4.142)
 - SkyPanel-X (10.30.4.53)
 - SkyPanel-X (10.30.5.106)
 - Orbiter (192.168.123.16)
- Top Panel:** Navigation tabs for "General", "DMX", "Settings", "Diagnosis", "Firmware Update", and "IP Settings". The "Diagnosis" tab is currently selected.
- Diagnosis Content:**
 - Service Protocol for LADS fixture (Created 2024-03-25_09-02-51):** A table showing fixture details:

name	serial	svVersion	hwVersion	type	date	time
Fixture	L1.0038526-9	D3.1.0-145874	A		Feb 22 2024	11:22:44
Main-Controller	L4.Sep	3.0.7-99930			14 Sep 2023	15:48:20
Light Engine 1		1.1.0-145874	A	1	Aug 28 2023	14:55:07
Led Driver 1	no serial	1.1.0.1	0	time		
Color Sensor		1.5.5	A	65535	14.11.2019	
Optics	10.0000000-1					
Power Supply						
 - Counter:**
 - Current Fixture Uptime: 0 days, 0 hours, 21 min, 20 sec
 - System Hours: 2835 hours 28 minutes
 - Power Up Cycles: 647 cycles
 - Light Engine Hours: 650 hours 4 minutes
 - System Log:** A scrollable log showing system events:


```
07:40:22:949: ApplicationController: Save system logs: C:/Users/Lutz01/Documents/ARRILightingServiceManager
07:40:22:959: ApplicationController: Save update logs: C:/Users/Lutz01/Documents/ARRILightingServiceManager
07:40:22:989: ApplicationController: Save diagnosis logs: C:/Users/Lutz01/Documents/ARRILightingServiceManager
07:40:23:117: ApplicationController: ARRI Lighting Service Manager-5.5.2-26047 started on Windows 10 Version 2009 at 25 Mar 2024 07:40:23 +0100
07:40:23:127: ApplicationController: Ideal thread count is 9
07:40:23:132: ApplicationController: HTTP Service is started on port 8080
```

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.

Save Device Log (LiOS only)

Click this button to save the complete Log Archive as .tar.gz. Use this log type for your communication with the ARRI Service Partner.

Clear Log

Clears the currently displayed log.

Mail Log

Click the button "Mail Log" to mail the log using an 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 case 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.

Filter Functions

The current log entries can be filtered by key words.

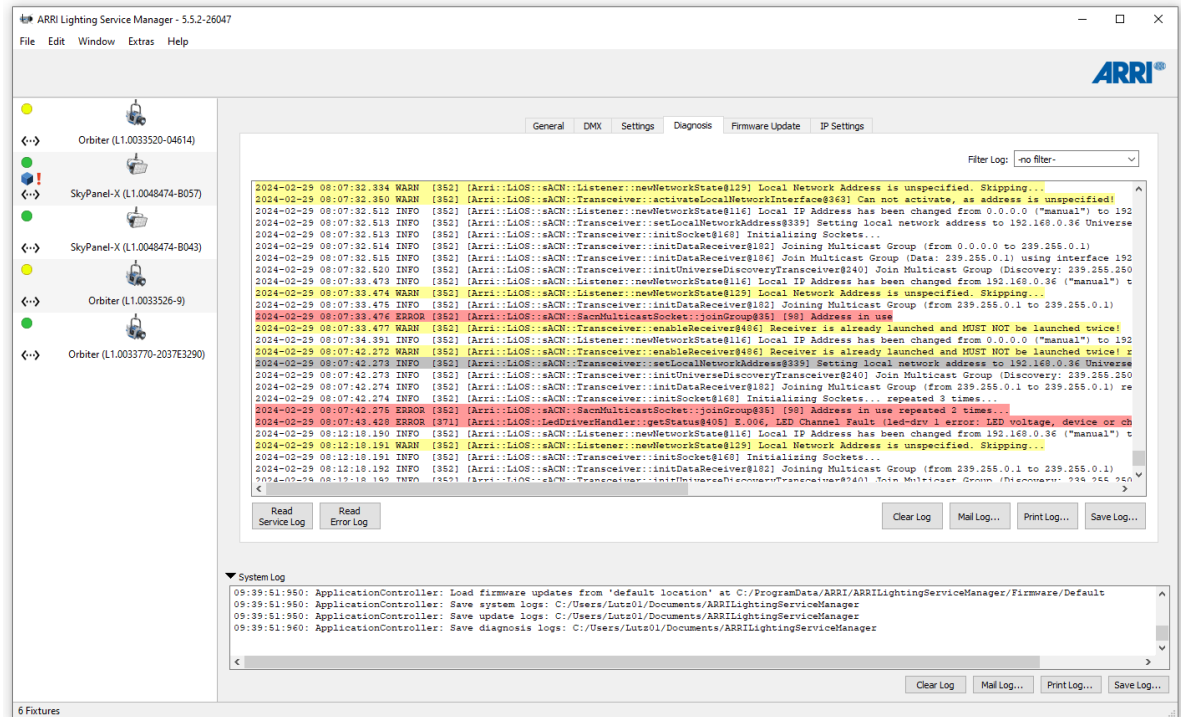
In the dropdown menu, you can find predefined key words. It is also possible to enter a custom regular expression. (See <https://regex101.com/> for more informations)

6.4.2 Offline

To analyze a saved "tar.gz" log from any lamphead with LiOS firmware, please do the following steps:

1. Untar and unzip the log to a folder (e.g. with 7 Zip on Windows)
2. Drag and drop this folder into the alsm

The dropped log file is shown then:



To get more information about any device log entry, select “Show details in Syslog”:



A dialog windows is shown with the syslog. It contains more details about the selected line with 20 log entries before and 10 log entries after the according time. The selected line is shown in bold letters.

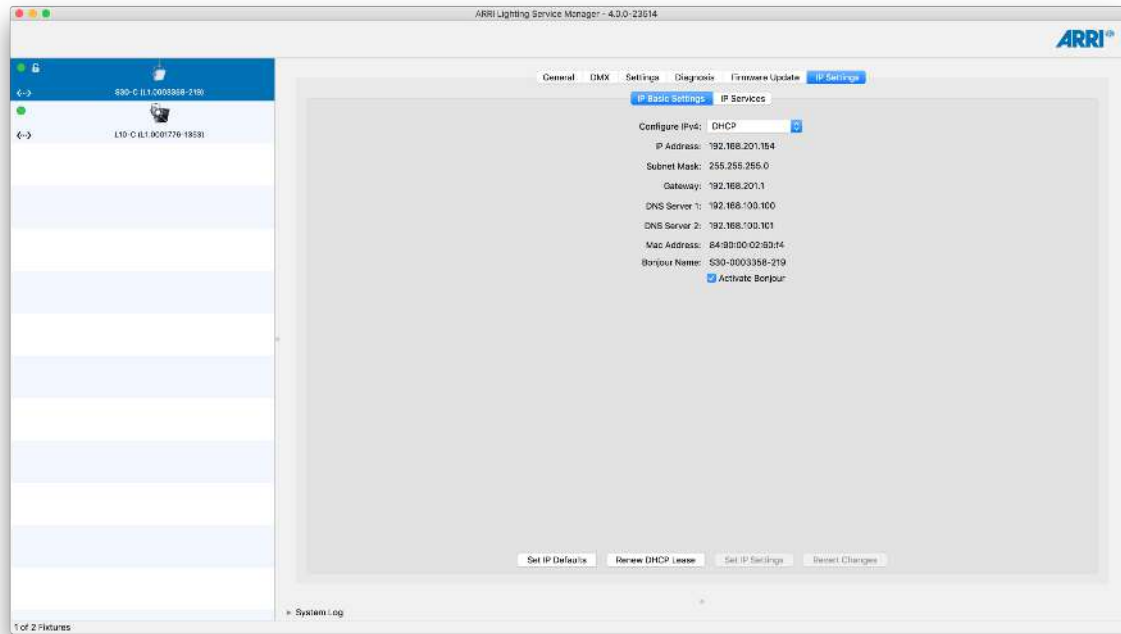
6.5 Firmware Update

See Firmware Update [▶ 27] for a detailed description how to update your lamphheads.

6.6 IP Settings

IP Basic Settings

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



Activate Bonjour

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

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

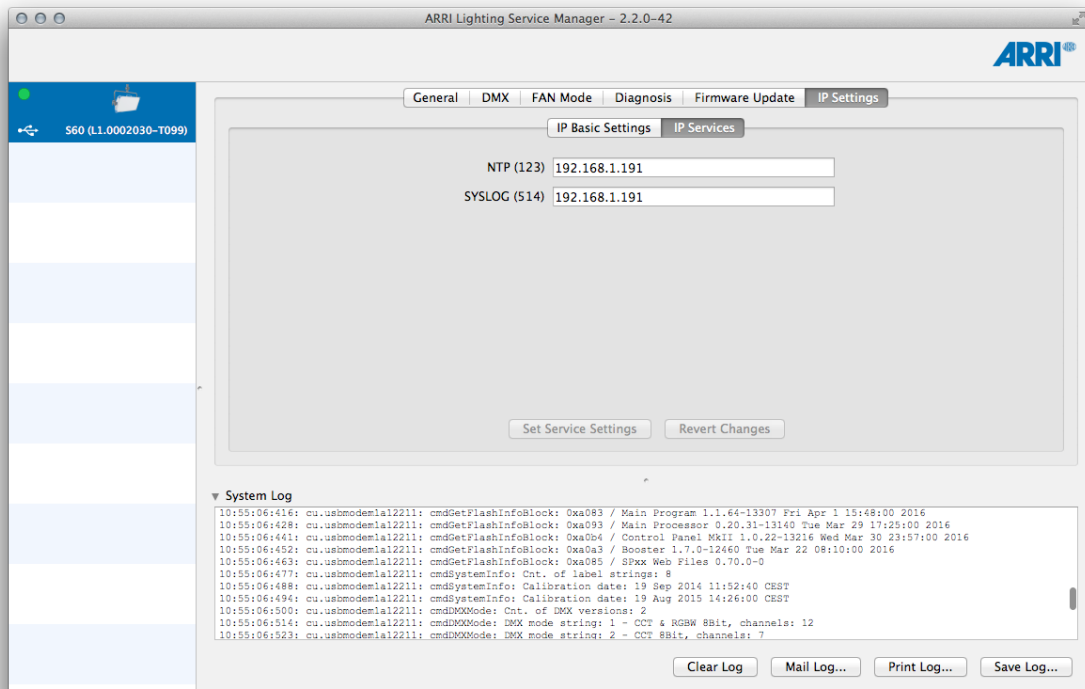
Click this button to apply all changed settings. The fixture may disconnect for a short time when connected over LAN.

HINT

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 lamphead via USB.

IP Service Settings

For all LAN connected ARRI lampheads, the ALSM supports changing the IP service settings for the NTP as well as the SYSLOG service. In the braces, the used port is mentioned (123 and 514).



7 Bootloader Update

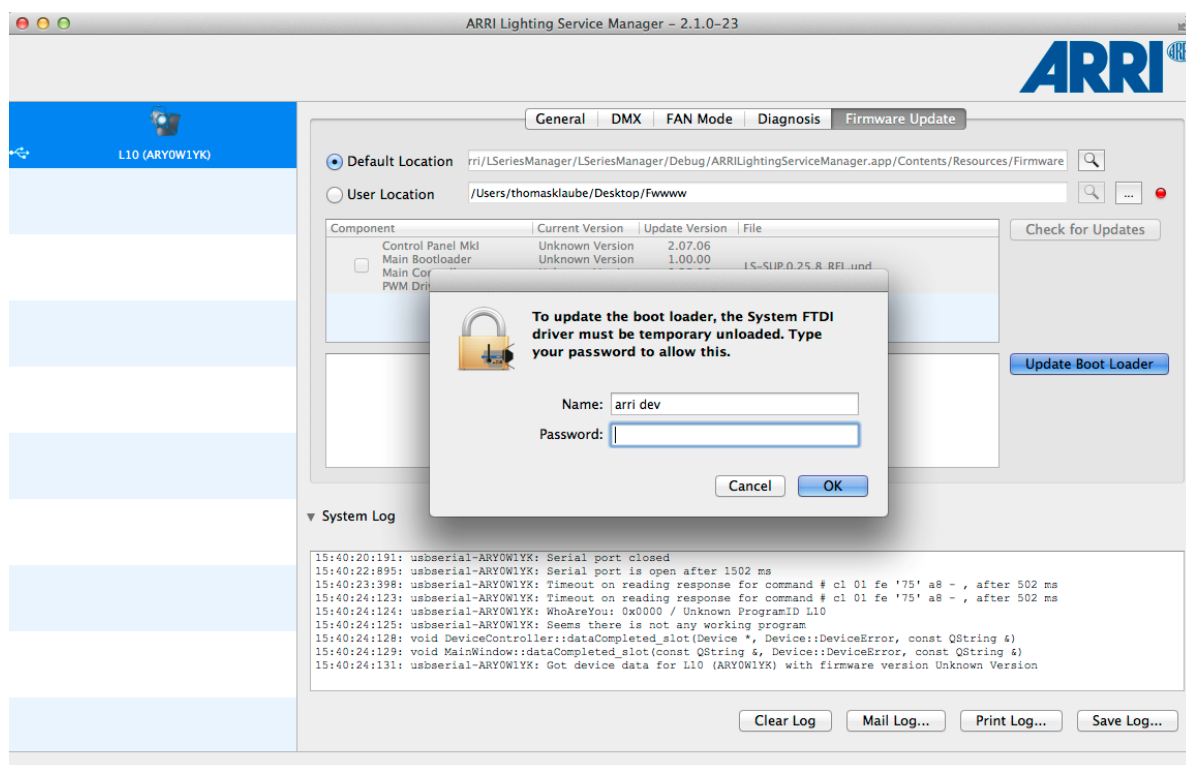
A bootloader update might be necessary for L-Series and SkyPanel Classic lampheads, if

- the lamphead has been switched off during a firmware update procedure and does not boot up.
- the fixture refuses a firmware update because of a very old bootloader.

7.1 For ARRI L10

The ALSM 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 been finished successfully.



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 ALSM. After the reconnection a firmware update is required.

7.2 For ARRI SkyPanel Classic

For updating the boot loader of an ARRI SkyPanel Classic two steps are necessary:

1. Unprotect the bootloader.
2. Update the bootloader.

Unprotect the bootloader

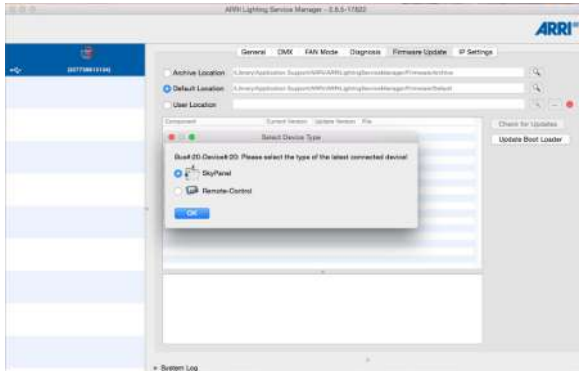
In order to perform a boot loader update on a SkyPanel Classic with the ALSM it is necessary to set the device to the DFU boot loader mode by pressing the *“Reset Button”* next to the USB port for approximately 5 seconds.

Connect the ARRI SkyPanel Classic via USB to the computer.

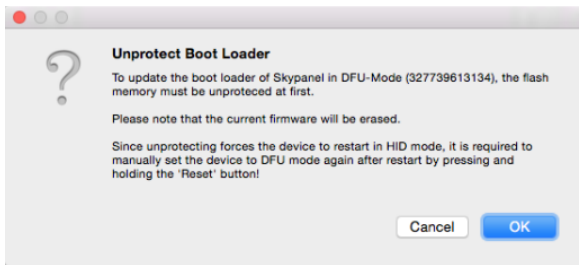


If you do this on your Windows 10 device for the first time, the device might not be found. In this case please follow the instructions of the application note “ARRI AN180517 ALSM Win10 How to EN.pdf” to install the drivers properly.

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



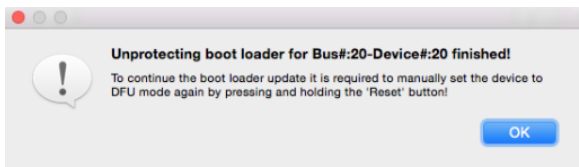
The ALSM will show a dialog, where you can choose whether your connected device is an ARRI SkyPanel Classic or a SkyPanel Remote Control. Please select “SkyPanel”.



The ALSM will show a warning message. Click “OK” to proceed.

Now the device disconnects from ALSM to perform the unprotecting procedure. This means the device disappears from the device list of the ALSM.

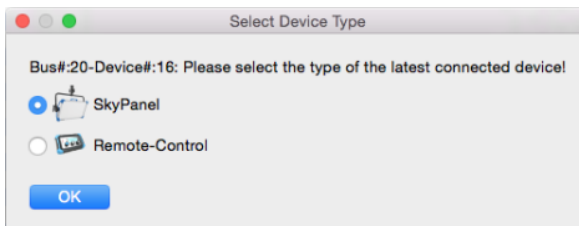
Keep the device connected to the computer for approximately 20 seconds until the following message box appears:



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

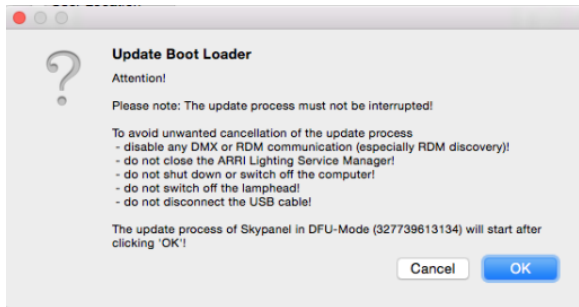
Update Bootloader

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 ALSM will show a dialog, where you choose whether your connected device is an ARRI SkyPanel Classic or a SkyPanel Remote Control. Please select “SkyPanel”.

The ALSM recognizes the boot loader mode and offers another “Boot Loader Update” in the tab “Firmware Update”.



The ALSM shows a warning message. Click “OK”, if you want to proceed.

Since the device memory is already unprotected the new boot loader file gets uploaded to the device. After the file upload, the device immediately disconnects from ALSM to reboot with the new boot loader. After a successful bootloader update a firmware update is required.

7.3 Flash SkyPanel Remote Control

Transmit the firmware to a SkyPanel Remote Control

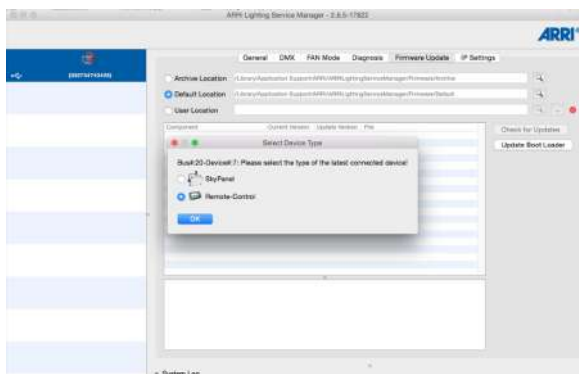
With this procedure you will flash your SkyPanel Remote Control with the latest basic firmware delivered with your ALSM.

To perform a firmware update with the ALSM it is necessary to set the device into DFU mode by pressing the “Reset Button” on the back of the Remote Control case for approximately 5 seconds.



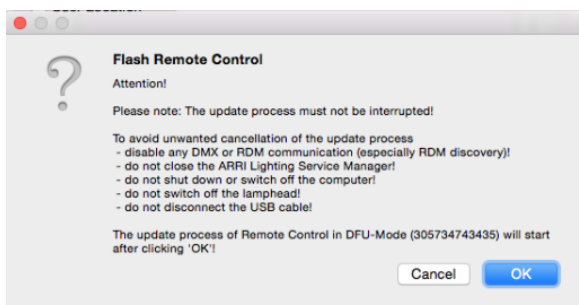
If you do the update of your Remote Control on your Windows 10 machine for the first time, the device might not be found. In this case please follow the instructions of the application note “ARRI AN180517 ALSM Win10 How to EN.pdf” to install the drivers properly.

Connect the SkyPanel Remote Control via USB to the computer.



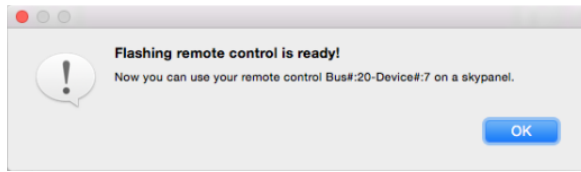
The ALSM will show a dialog, where you choose the device type. As your connected device is a SkyPanel Remote Control. Please select “Remote Control”.

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



The ALSM will show a warning message. Click “OK” to proceed.

Now the device disconnects from ALSM to perform the file transmission procedure. This means the device disappears from the device list of the ALSM.



After transmission is completed a message box will appear.

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

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

Test the updated SkyPanel Classic Remote Control

Ensure on your ARRI SkyPanel Classic, that “*Fixture Settings*” > “*USB Mode*” “*Normal*” is activated.

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

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

7.4 Bootloader Update for LiOS Lampheads

LiOS lampheads such as Orbiters and SkyPanel X do not need a bootloader update.

In case of any firmware update trouble, a recovery update can be necessary.

To perform a recovery update:

- 1) Prepare a USB flash drive as described in USB Flash Drive Functions for LiOS Lampheads (Orbiter and SkyPanel X) [▶ 31].
- 2) Switch off your Orbiter or SkyPanel X.
- 3) Insert the LiOS USB Recovery flash drive.
- 4) Switch on your Orbiter or SkyPanel X.
- 5) Press the reset button for 10 seconds.
- 6) The recovery update process starts.
- 7) The lamphead will appear in the device list of the ALSM after the update process has been finished.

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:

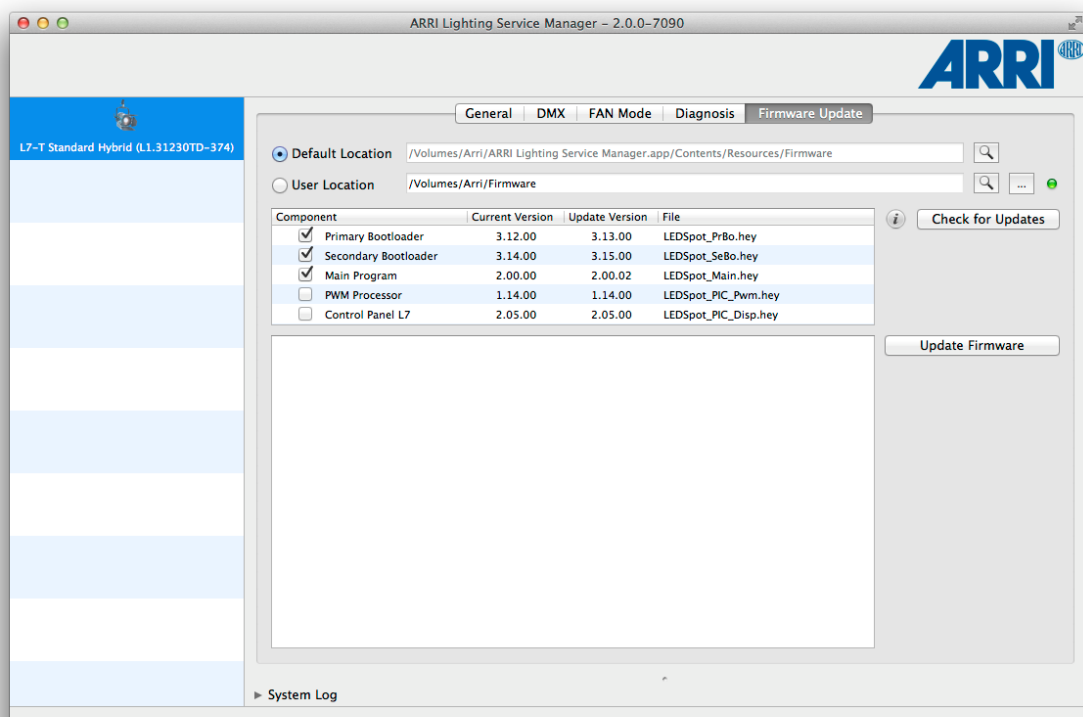
- 1) Disable any DMX or RDM communication (especially RDM discovery).
- 2) Do not close the ALSM.
- 3) Do not shut down or switch off the computer.
- 4) Do not switch off the lamphead.
- 5) Do not disconnect the USB cable.

If your firmware update has been interrupted anyhow and your lamphead does not boot, try to upload the bootloader manually or do a recovery update (see Bootloader Update [▶ 23]).

8.1 Firmware Update with ARRI L5/L7

The ALSM checks the currently installed firmware for updates automatically. It automatically selects the appropriate firmware modules that need to be updated.

Do not change the selection of the sub components unless an ARRI Service Partner has instructed you to do so.



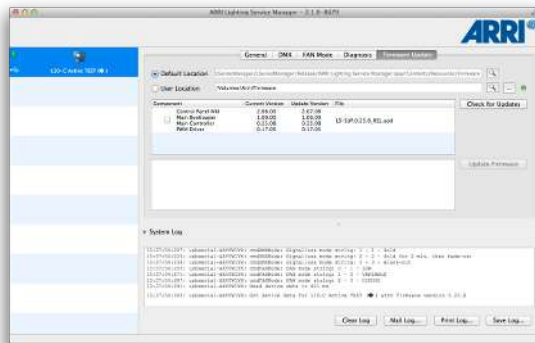
8.2 Firmware Update with ARRI L10, SkyPanel Classic, Orbiter and SkyPanel X

For all ARRI L10, SkyPanels Classic, Orbiter and SkyPanel X 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 firmware package that contains all required components.

For all ARRI SkyPanel Classic a Firmware update via a LAN connection is the preferred way. An automatic formatting of the lamphead's flash memory 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 Classic is in progress *"Stop Update"* has no effect. The Firmware update will be finished anyway.

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



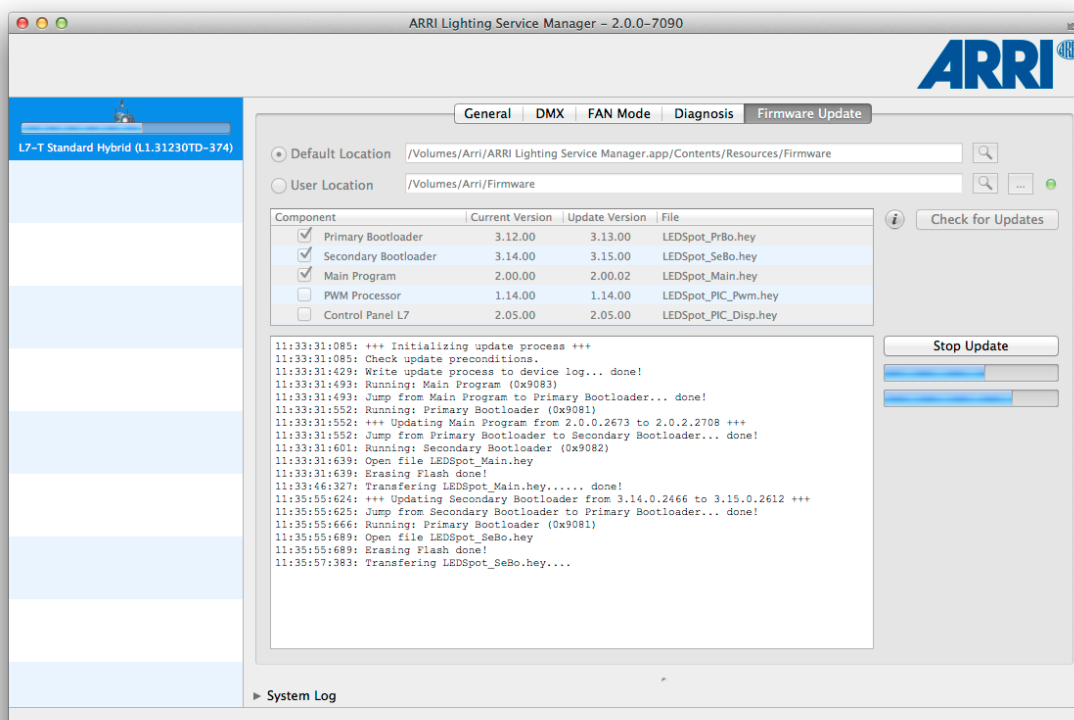
- Click *"Check for updates"* to force the check.
- Click *"Update Firmware"* to start the firmware update process.

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.

When the firmware update is finished, the lamphead is shut down und started again. This causes the connection to shut down and to disconnect from ALSM. Therefore, the lamphead will be removed from the device list. As soon as the restart is completed the ALSM detects the formerly disconnected ARRI lamphead again.



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:

- 1) Disable any DMX or RDM communication (especially RDM discovery).
- 2) Do not close the ALSM.
- 3) Do not shut down or switch off the computer.
- 4) Do not switch off the lamphead.
- 5) Do not disconnect the LAN or USB cable.

8.3 Troubleshooting for failed Firmware Updates

The update process of the ALSM 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 procedure.

Here you find a step-by-step tutorial what you should do after an update has failed.

For all ARRI SkyPanel Classic 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 SkyPanel Classic 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.

lease ensure that your computer does not block LAN traffic over **port 23 (Telnet)**.

Update Process after a failed update:

- 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 of the ALSM. This data might be very helpful for the ARRI Service Partner if the next steps fail. The system messages log will also be helpful.
- 2) Try to start the update again.
- 3) If the update fails again, do NOT switch off the lamphead. Note the error messages.
- 4) Disconnect the LAN or the USB cable. Wait approximately 5 seconds (lamphead should now be removed from the ALSM window). Reconnect the LAN or USB cable. ALSM should now recognize the lamphead after a few seconds (maybe with a strange serial number).
- 5) If the lamphead is not recognized by ALSM, close ALSM and start it again.
- 6) If ALSM still does not recognize the lamphead, switch off the lamphead. Wait approximately 5-10 seconds and switch it on again.
- 7) If ALSM 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 and the update has not been possible, please contact your local ARRI Service Partner. It is important to store the collected ARRI error messages and log data and send it to the ARRI Service Partner if requested.

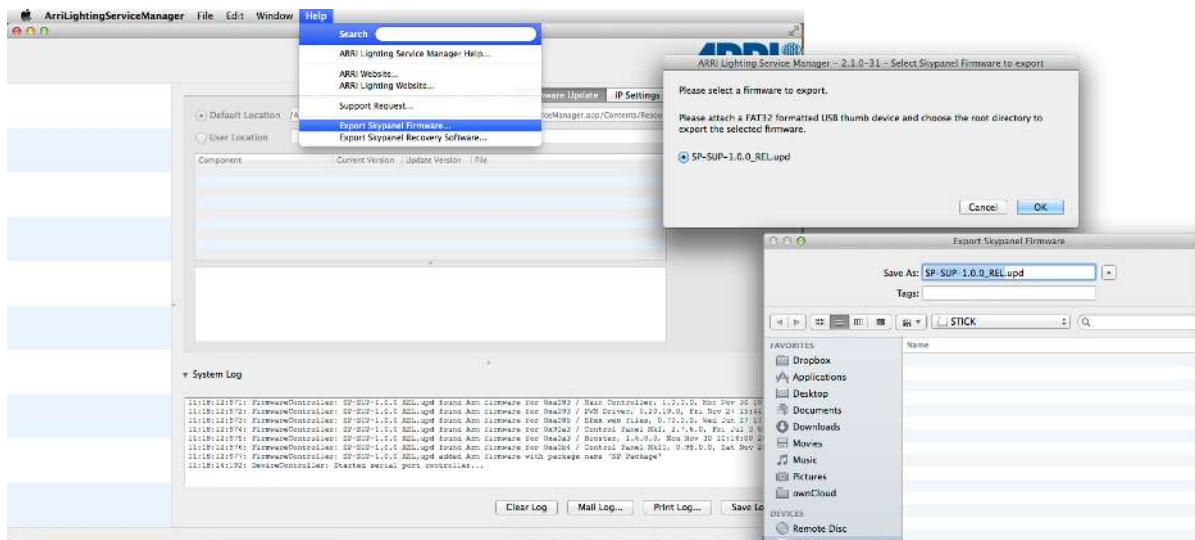
NOTE: Lampheads with an incomplete firmware installation will no longer work properly – even if it seems so at first sight.

8.4 USB Flash Drive Functions for SkyPanel Classic

For all ARRI SkyPanel Classic models it is possible to perform a firmware update as well as a recovery update using a USB thumb drive. For both functions use ALSM to export the required data. For more information please read documentation delivered with your ARRI SkyPanel Classic.

Export SkyPanel Classic Firmware

To export the firmware, use the menu “Help” > “Export SkyPanel Classic Firmware...”.

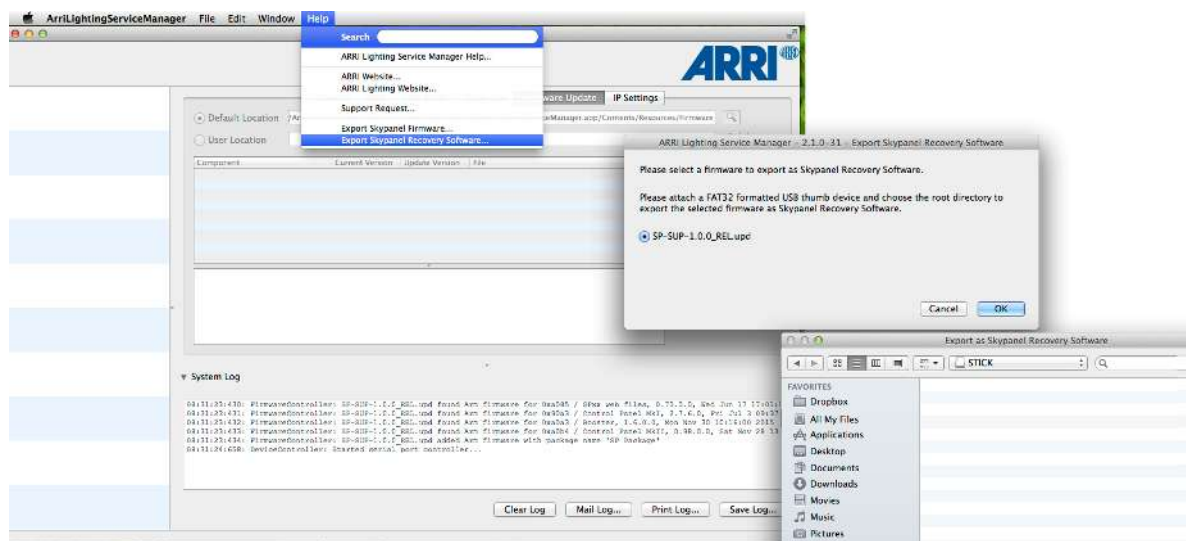


Ensure the USB thumb drive is formatted in FAT32 (this should be standard). Then upload the correct firmware to the root directory of the FAT32 formatted USB thumb drive.

When using “Export SkyPanel Classic 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 SkyPanel Classic Recovery Software

To export the recovery update file, use the menu *“Help” > “Export SkyPanel Classic Recovery Software...”*.



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

After selecting *“Export SkyPanel Classic 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, the lamphead will always perform the RECOVERY update during startup.

8.5 USB Flash Drive Functions for LiOS Lampheads (Orbiter and SkyPanel X)

For all ARRI lampheads using LiOS as operating system it is possible to perform a firmware update as well as a recovery update using a USB thumb drive. For both functions use ALSM to export the required data.

For more information please read documentation delivered with your ARRI Orbiter or SkyPanel X.

Export LiOS Firmware

Insert a USB thumb drive to your PC. Ensure the USB thumb drive is formatted in FAT32 (this should be standard).

Select *“Help” > Export LiOS Firmware”*.

Follow the instructions given by ALSM.

Create LiOS USB Recovery Flash Drive

The USB Recovery Flash Drive is needed, if a normal update process fails.

Insert a USB thumb drive to your PC. Ensure the USB thumb drive is formatted in FAT32 (this should be standard).

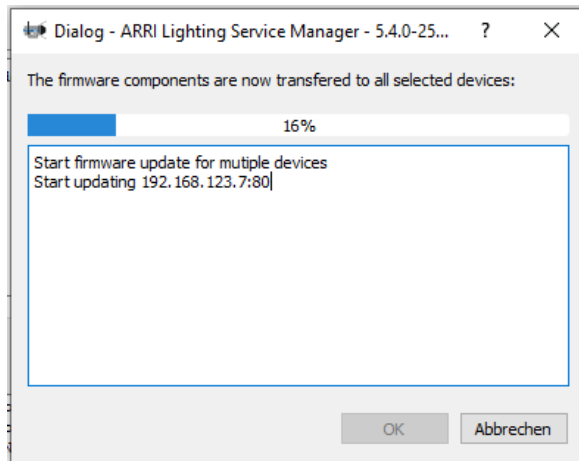
Select *“Help” > “Create LiOS USB Recovery Flash Drive”*.

Follow the instructions given by ALSM.

The ALSM now

- Creates a folder “orbiter” in the root of the USB flash drive.
- Copies the selected firmware package into this folder.
- Creates a file “recovery”.

8.6 Update of Multiple Lampheads



To update multiple lampheads, select the fixtures to be updated in the lamphead list. Press “*Update Firmware*” in the “*Firmware*” page and confirm the shown messages. The dialog shown on the left appears and shows the update progress.

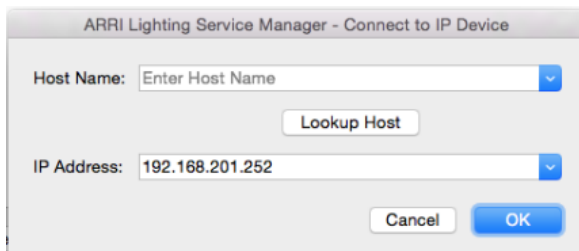
9 Context Menu Functions

Right click in the fixture list opens a context menu. The available functions depend on:

- Selection count.
- Selected lamphead type.

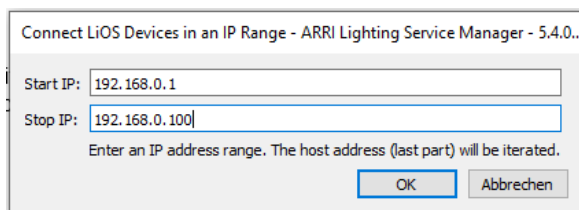
9.1 General Functions

Connect to IP device



“Connect to IP Device” opens a dialog, where you can enter the IP-address of the lamphead you want to connect.

Connect Devices in IP Range



“Connect Devices in IP Range” opens a dialog, where you can enter an IP address range. The ALSM connects to all ARRI lampheads within this IP range. e.g.: ALSM tries to find ARRI lampheads in the IP range 192.168.0.1 – 192.168.0.100.

Sort Devices

Choose here, if you want to sort the lampheads in the device list by

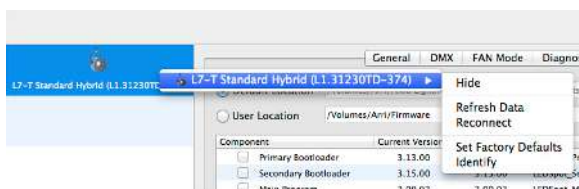
- Type or
- IP address.

Update Device List

Choose this option, if you want to update the fixture list using bonjour, because you are missing some lampheads in the list. The data of already existing lampheads is not refreshed.

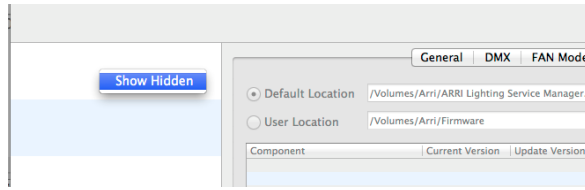
9.2 Functions for Single Selected Lampheads

Hide



Removes the lamphead from the ALSM list but keeps the lamphead connected. If there are any changed settings for this lamphead that has not been applied to the lamphead, the ALSM 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 ALSM. 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 ALSM.

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

Reset

This function restarts the selected lamphead.

NOTE: Some lamphead types do not support this feature.

Reconnect

This performs a reset of the USB connection as if the USB cable has been removed and reconnected again. ALSM may lose the connection to the device for a short time and removes it. It will then 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 ALSM asks to apply or revert them.

Identify

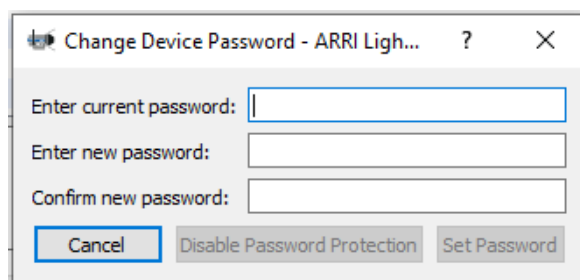
This physically identifies a lamphead by flashing blue.

Clear Error State

This clears the error state of a device. If the error persists, it will appear again.

Change Password (ARRI SkyPanel Classic only)

This menu item opens a dialog to configure the password settings of the ARRI SkyPanel's web portal.



The dialog offers three functions:

1. Enter the current password and “*Disable Password Protection*”.
2. Enter a new password, confirm the password and “*Set Password*”.
3. Cancel the dialog.

If you have set a password, you will be asked for this by your web browser when entering the ARRI SkyPanels web portal. The username is “webuser”.

If you have forgotten your password, you can disable the password protection via a factory reset of the ARRI SkyPanel.

Remove from Array

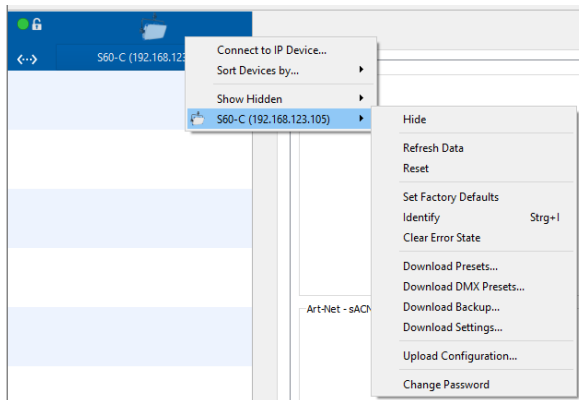


This symbol shows that the lamphead (e.g. SkyPanel X) is part of an array. An array is a composition of up to three LiOS devices that react as one single lamphead.

The function removes the current selected lamphead from its array.

9.3 Export and Import of Favorites, Settings, Presets and DMX Presets

Depending on the fixture type, the ALSM offers additional menu points in the context menu that allows export and import settings and presets.

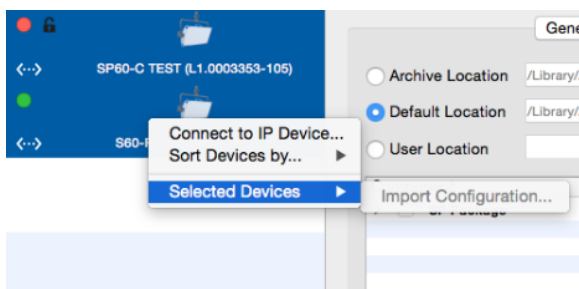


There are four ways to export presets and settings:

1. **Export Presets / Save Favorites:** This creates a Light Presets file (<device name>Presets.json) that you can use on any other device.
2. **Export DMX Presets:** This creates a DMX Presets file (<device name>DMXPres.json) that you can use on any other device.
3. **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!
4. **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.

9.4 Functions for multiple selected ARRI SkyPanel Classic

A selection of multiple fixtures can be done by pressing STRG and clicking on the desired lampheads in the fixture list.



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 SkyPanel Classic.

Never import a <device name>Settings.json file from another fixture as TCP/IP network settings will be overwritten.

9.5 Service Functions

If the lamphhead supports service functions, a sub menu can be found in the context menu for this:

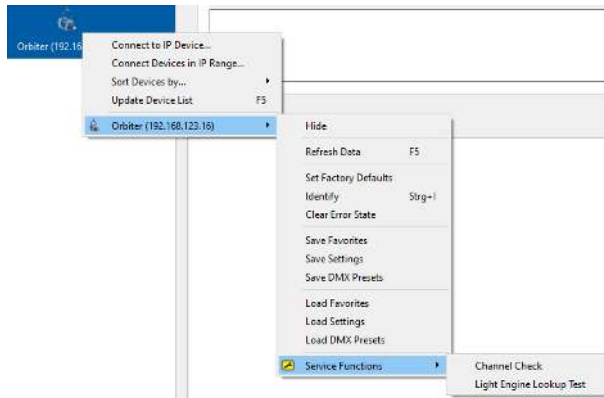


Illustration 1: Fixture_Contextmenu_ServiceFunctions

9.5.1 Channel Check

“*Channel Check*” starts the channel check of the fixture. A Result dialog shows, if the test has been successful or not.



DANGER

Light flashed up!

Do not look into the lamphhead or use safety glasses!

9.5.2 Light Engine Lookup Test

“*Light Engine Lookup Test*” starts the look up test of the fixture.

The test controls the light engine channels one by one to see, if any LEDs or any LED driver channel is broken.



DANGER

Light flashed up!

Do not look into the lamphhead or use safety glasses!

9.5.3 Update Calibration

For Orbiters with LiOS 3.1 a calibration update is necessary. This calibration update is needed for the ARRI ALEXA operational mode.

The ALSM contacts the ARRI server, downloads the needed file and uploads it to the lamphhead.

After a reboot the lamphhead will light up, as it will do a channel check automatically.



DANGER

Light flashed up!

Do not look into the lamphhead or use safety glasses!

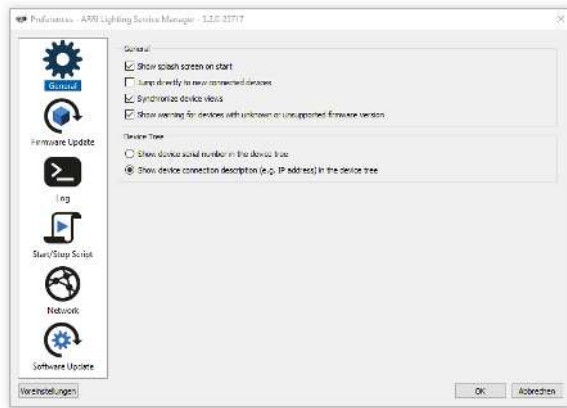
NOTICE

The ALSM needs internet access for this feature!

10 Program Settings

Sets the program settings of the ALSM.

10.1 General



- Show splash screen on start.
- Jump directly to new connected devices: Enable this, if you want new connected lampheads (e.g. found by the bonjour service) to be selected in the device tree. If disabled, new connected lampheads appear in the device tree. The old selection stays.
- Synchronize device views: If enabled, the device views of all connected lampheads always show the same tab view.
- Show warning for devices with unknown or unsupported firmware version.



S60-C (L1.0003353-105)

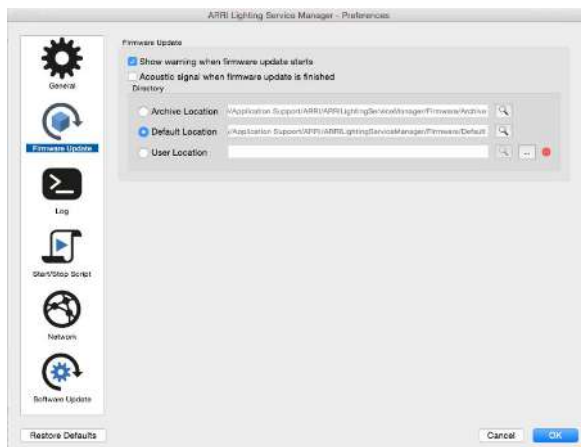


S60-C (192.168.123.111)

Show device serial number in the device tree.

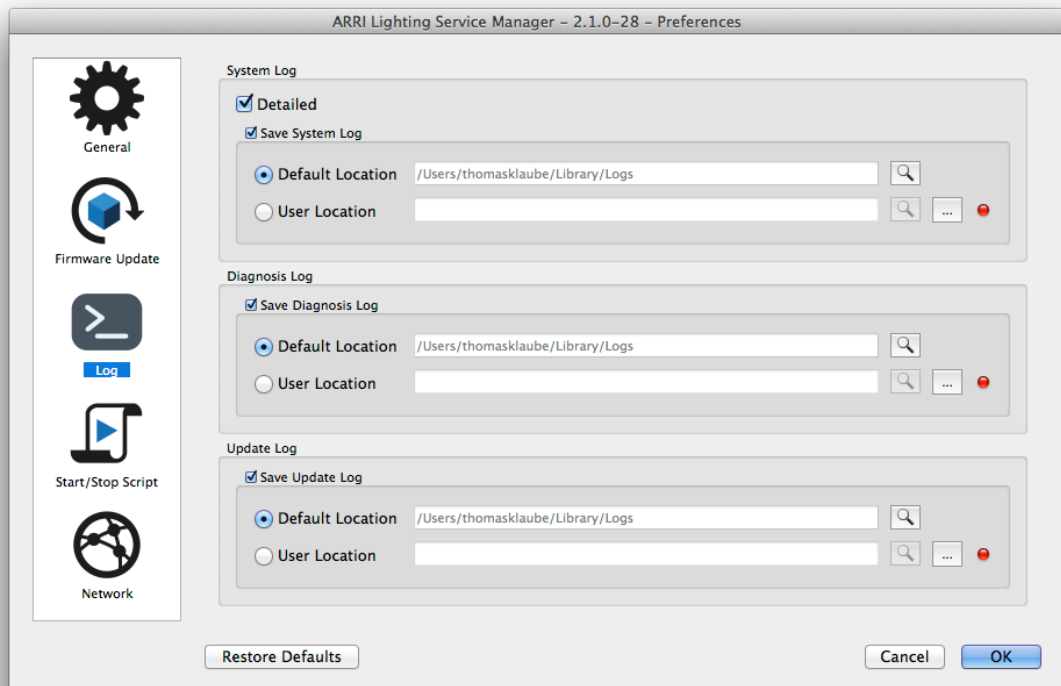
Show device connection description (e.g. IP address in the device tree).

10.2 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.

10.3 Log



System Log

Detailed: If enabled, ALSM displays the system log messages with more debugging details.

Save System Log: If enabled, the ALSM 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 ALSM. It is highly recommended to enable this feature.

ALSM allows saving log files at the default or a user location.

Diagnosis Log

Save Diagnosis Log: If enabled, the ALSM 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 ALSM. It is highly recommended to enable this feature.

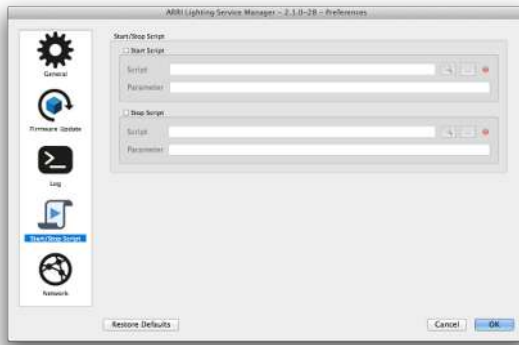
ALSM allows saving log files at the default or a user location.

Update Log

Save Update Log: If enabled, the ALSM 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 ALSM. It is highly recommended to enable this feature.

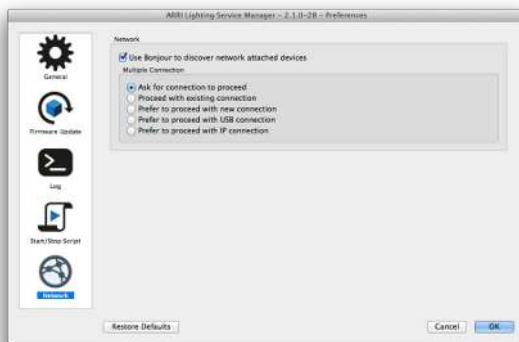
ALSM allows saving log files at the default or a user location.

10.4 Start / Stop Script



ALSM allows executing shell scripts (on Mac OS X) or batch scripts (on Windows) while starting or stopping the ALSM.

10.5 Network



The ALSM allows connecting to ARRI lampheads over a local network.

Activate Bonjour in order to discover network attached devices.

On the Microsoft Windows operating system Bonjour is not available by default and requires a user installation.

ARRI lampheads also can be connected by an USB cable. LiOS lampheads use an IP connection over the USB cable. The Bonjour service is needed for this to find the USB connection automatically.

10.6 Software Update



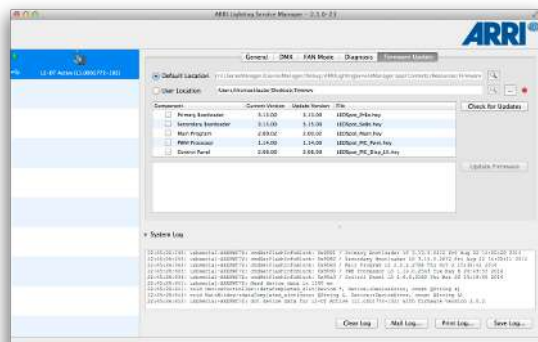
ALSM supports the automatic search for software updates over the Internet. Use this setting to activate or deactivate this service.

11 System Log

The "System Log" tab shows all messages of the ALSM 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 ALSM.

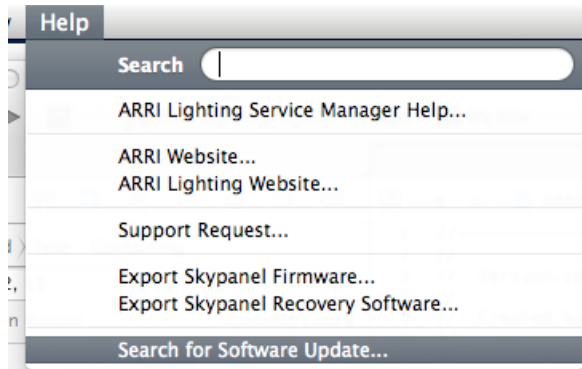
The ALSM stores the log messages automatically to a log file. This setting can be enabled or disabled in the Program Settings.



- 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.

12 Software Update over the Internet

ALSM supports the automatic search for software updates over the Internet once per day if activated. See Program Settings [▶ 38] for details.

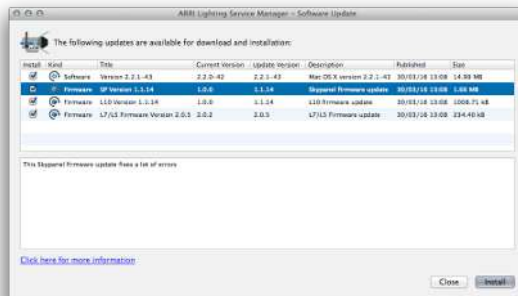


You can always initiate a manual search for ALSM or firmware update components by using the menu function *“Help” > “Search for Software Update”*.

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

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

After ALSM has found new software items, the following dialog is shown:



For the activation of the downloaded firmware components the ALSM 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 ALSM after the installation process.

ARRI 