



# LSeries Manager 1.4

**Software Manual** 

Software Manual



LSeries Manager V1.4 Software Manual | November 12, 2013

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#### History

Date	Version	Author	Changes
18.06.2013	1.2	stammb	Released for LSM V1.2
12.11.2013	1.4	stammb	Released for LSM V1.4



### **1** Download and Installation

This software has been tested on the following operating systems:

Microsoft Windows XP (32 bit) Microsoft Windows 7 (32 bit + 64 bit) Microsoft Windows 8 (32 bit)

In general LSeries Manager should work on all Windows desktop versions up from Windows XP, but there is no guarantee that it will work properly on not tested operating systems.

Please do not connect the lamphead via USB to the computer before the LSeries Manager has been installed!

- 1. Visit our LSeries download center at http://www.arri.com/l-series/downloads
- 2. Download the latest LSeries Manager Bundle Version. (Including the LSeries Manager and the newest firmware version).
- 3. Start the installation by double-clicking on the installer executable. (If the download consists of a zip-file, you have to extract the installer before).

The installation requires administrator privileges. If your user profile does not provide administrator privileges, Windows may ask you for an administrator account login or you have to start the installation by right-clicking on the installer file and choosing "start as Administrator".

### Note:

Once the installation is finished, it is recommended to connect a L7 lamphead before you start the LSeries Manager the first time.

This will finalize the USB driver installation on your system. If this is not done there can be errors when the LSeries Manager attempts a connection to the lamphead for the first time.



### 2 Start the LSeries Manager

The LSeries Manager can be started by double-clicking on the created desktop short cut (or the usual start methods).



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

Each connected lamphead will be added to the tree list on the left side of the program window. Here you can navigate through the different program functions.

### Note:

While the LSeries Manager application is communicating with the lamphead it is recommended (but not mandatory, except while performing a firmware update)

- not to change any settings via the onboard control panel of the lamphead (to avoid inconsistencies)
- and that no DMX or RDM communication takes place with the lamphead (which could lead to communication errors in rare cases)

at the same time.



### 3 Lamphead Overview

🕵 LSeries Manager (V1.4.0.75)			_ 🗆 🗡
Lseries*			<b>ARRI</b> ®
- 40 L7-C (L1.31330CD-1489)	L7-C (L1.	31330CD-1489)	
→ ♥ FAN Modes → ♥ FAN Modes → ■ Diagnosis → ₩ Firmware Update ES-↑ LSeries Manager	Type: Serial Number: Manufacturer:	L7-C L1.31330CD-1489 ARRI Lighting	
	Controller Serial Number: Control Panel Serial Number: Power Supply Serial Number: LedEngine Serial Number: Fan Serial Number: Hardware Version: Firmware Version: Calibration Date:	L4.31671.0-DL2243 124400081 L4.31761.0-AF1132 121502176 L4.31871.0-DL2246 123900003 L4.31661.R-CF1132 122904675 L4.31711.3-AF1141 122300670 3 1.72.01 (PrBL: 3.04.00, SeBL: 3.06.00) 14.11.2012 14:49:45	

In this view you can find an overview of some relevant information about your L7 lamphead:

- fixture type
- serial numbers
- hardware and firmware versions
- calibration date.



# 4 DMX Settings

🕷 LSeries Manager (V1.4.0.75)			
LSERIES*		A	
DIX Settings MX Settings FAN Modes Diagnosis Firmware Update USeries Manager	L7-C (L1.3 DMX Implementation Table: DMX Address: DMX Mode: DMX Signal loss behavior:	1330CD-1489) - DMX Settings :	5

### DMX Implementation Table

Here you will see the version of the DMX implementation table which is used by the currently installed firmware on your lamphead. Clicking on "Details" will open the appropriate PDF document where you can find detailed information about the DMX modes provided by the lamphead.

### DMX Address

Here you can choose the DMX start address (channel or slot) of your lamphead. Depending on the selected DMX Mode the channels required for each lamphead should be allocated, if necessary up to 16 channels right away. Do not overlap! Either several lampheads share the same DMX address range or a lamphead uses its own, individual DMX address range.

### DMX Mode

Here you can select the DMX Mode. A detailed overview of the occupation of the individual DMX channels can be found by clicking on "Details" (see "DMX Implementation Table ").

### **DMX Signal loss behavior**

Here you can change the behavior of the lamphead if it loses its DMX signal.



The DMX Settings will be applied to the lamphead by clicking the button "**Set DMX Settings**".

## 5 Fan Modes

🕵 LSeries Manager (V1.4.0.75)	
Lseries*	<b>ARRI</b> ®
L7-C (L1.31330CD-1489) DMX Settings DMX Settings Diagnosis Firmware Update LSeries Manager	L7-C (L1.31330CD-1489) - FAN Modes
	FAN Mode: 3 - FAN-HIGH Set FAN Mode
,	

### Fan Mode

Here you can choose the different Fan Modes your lamphead provides. This feature is available from firmware version 1.68.2.

The FAN Mode will be applied to the lamphead by clicking the button "Set FAN Mode".



### 6 Diagnosis

🕵 LSeries Manager (V1.4.0.75)				
		(1.1.0100000		<b>ARRI</b> ®
DMX Settings	L/-C	(L1.31330CD	-1489) - Diag	nosis
FAN Modes	Read Service Log	Read Error Log	Clear	Save
Errmware Update Errmanager		Service Pr	otocol Version 1.2, F	ixture: L7-C Hybri
	PrBo: PgmId: 9081 LE SeBo: PgmId: 9082 LE LEDSpot Vers. 1.70.5 PWM Processor SW-Ver Caldata Ver: 1.5, Ca LEDSpot : Ident Controller : Ident PowerSupply : Ident FAN : Ident LightEngine : Ident UserInterface: Ident	DSpot PrBo Vers. 3.4 DSpot SeBo Vers. 3.6 .1744 Feb 08 2013 16 .: 1.5, User Interfa IDate: 1352904585, C no: L1.31330CD, Appr no: L4.31671.0, Appr no: L4.31871.0, Appr no: L4.31761.0, Appr no: L4.31761.0, Appr no: L4.31761.0, Appr	.0.1414 May 30 2012 .0.1414 May 30 2012 :15:17 HW Rev.: 3 ce SW-Ver.: 2.4 alDataLoaded: 1 ovalno: DL2243, Seria ovalno: DL2246, Seria ovalno: DL2246, Seria ovalno: CF1132, Seria ovalno: CF1132, Seria	18:35:59 18:35:21 alno: 1489 alno: 124400081 alno: 12390003 alno: 122904675 alno: 121502176 alno: 2 Description
	FAN Settings: FanTyp FAN-RPM: 1050, FAN-P Used Fan-Settings fr	e: ebmpapst 4412F/2G WM: 0.00%, FAN-level om Fan-Menu: user Fa	LR, HeatsinkType: 120 : 80.00%, act. FAN-RP nMode = FAN-HYBRID-LO	Dmm hybrid M: 1073.73 DW, DimmADC Level =
	Used Color Mode: HSI Used Automatic Zero: Used Status Indicati Used Status Indicati	Force GREEN Zero an on: Status LEDs and on: Temperatur Unit J	d SAT 100% ON Backlight ON Degree Celsius	<b>_</b>

The LSeries lampheads provide some internal logging facilities which may be helpful for failure diagnosis. The logs are important for your ARRI service partner for a better understanding of fixture issues.

#### Read Sevice Log

By clicking this button a detailed service-log will be read-out from the lamphead containing an overview of the system state and further important data.

#### Read Error Log

Clicking this button will read-out the internal error messages history of the lamphead.

### <u>Clear</u>

This clears the currently shown logs.

### <u>Save</u>

By clicking the button "Save" you can save all logs as a .txt file on your PC.



### 7 Firmware Update

### 7.1 Performing a firmware update

🐺 LSeries Manager (V1.4.0.75)				
Lseries*				
□ 🐨 L7-C (L1.31330CD-1489)	L7-C (L1.3	1330CD-1	489) - Fir	mware Update
FAN Modes	Undate files folder:			
Diagnosis	C:\Users\Public\Documents\L	Series Manager\L7_V1.	74.1\	
⊡ LSeries Manager	Component	Current version	Update version	File
	Primary Bootloader	3.04.00	3.04.00	LEDSpot_PrBo.hey
	Secondary Bootloader	3.06.00	3.06.00	LEDSpot_SeBo.hey
	🗹 Main Program	1.70.05	1.74.01	LEDSpot_Main.hey
	PWM Processor	1.05.00	1.05.00	LEDSpot_PIC_Pwm.hey
	Control Panel	2.04.00	2.05.00	LEDSpot_PIC_Disp.hey
		Check L7-C fo	or possible upd	ates
	Update progress:		0%	
			0%	
			0%	
		Star	t Update	

### It is quite simple to perform a firmware update:

- 1. The LSeries Manager checks the currently installed firmware for the necessity of any update automatically and will then pre-select the appropriate firmware modules for update.
  - Only if your currently installed firmware version (main program) is lower than 1.65 you have to click on "Check L7 for possible updates" to initiate the check manually.
  - Please do not change any of the pre-selections unless you have been instructed by an ARRI technician.
  - If your lamphead does not contain an onboard control panel, you do not have to select it.
- 2. The firmware update process can be initiated simply by clicking on "Start Update".

The update will start and the selected firmware components will be transferred and installed on the lamphead. The update process will take some time up to some minutes depending on the selected items:



🛒 LSeries Manager (V1.4.0.75)					<u> </u>
LSERIES*				ARI	<b>81</b> ®
E-C (L1.31330CD-1489)	L7-C (L1.3	1330CD-1	489) - Fir	mware Update	
FAN Modes	Lindate files folder:				
Diagnosis	C:\Users\Public\Documents\LSe	eries Manager\L7_V1.	74.1\		
Firmware Update					
	Component	Current version	Update version	File	
	Primary Bootloader	3.04.00	3.04.00	LEDSpot_PrBo.hey	
	Secondary Bootloader	3.06.00	3.06.00	LEDSpot_SeBo.hey	
	Main Program	1.70.05	1.74.01	LEDSpot_Main.hey	
	PWM Processor	1.05.00	1.05.00	LEDSpot_PIC_Pwm.hey	
	Control Panel	2.04.00	2.05.00	LEDSpot_PIC_Disp.hey	
		Check L7-C fo	r possible upd	ates	
	Update progress:				
			37%		
			75%		
	Running Pgmld: 0x9081 Jump to Secondary Bootloader Running Pgmld: 0x9082 +++ Programming Main program + Open file LEDSpot_Main.hey Erasing Flash	done! +++ lone!			•
		Cano	el Update		
		L7-C (L1.31330C	D-1489): Firmware	update in progress (75%, total 3	7%)

When the installation is complete the message "Update process finished successfully!" should be displayed in the update progress text field.

Nevertheless the firmware update process is so simple, please note the following:

• Be aware of your currently installed bootloaders!

If the bootloaders are lower than version 2.0 an intermediate bootloader update has to be installed to enable the lamphead to be updated to the latest firmware (this should occur only with firmware versions prior 1.65). The intermediate update files are included in all LSeries Manager/firmware bundles

The intermediate update files are included in all LSeries Manager/firmware bundles and are located in the update folder "L7\_Bootloaders\_V2".

• The update process must not be interrupted!

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

- o disable any DMX or RDM communication (especially RDM discovery)
- o do not close the LSeries Manager!
- o do not shut down or switch off the computer!
- do not switch off the lamphead!
- o do not disconnect the USB cable!



### 7.2 Troubleshooting if the update process has failed

The update process of the LSeries Manager is quite robust, nevertheless 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.

Please try to do the following:

1. Do NOT switch off the lamphead!

Please 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 will fail again, do NOT switch off the lamphead! Please note again the error messages.
- 4. Disconnect the USB cable, wait approximately 5 seconds (lamphead should now be removed from the LSeries Manager window) and then reconnect the USB cable. The lamphead should now be recognized by LSeries Manager after a few seconds (maybe with a strange serial number).
- 5. If the lamphead will not be recognized by LSeries Manager: Close LSeries Manager and start it again.
- 6. If the lamphead still is not recognized by LSeries Manager then switch off the lamphead, wait approximately 5-10 seconds and switch it on again.
- If the lamphead will be recognized by LSeries Manager: Try to start the update again.
- 8. If this will fail again, please note again 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 provide 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 Additional functions

By right-clicking on a lamphead entry in the LSeries Manager connected lamphead list a popup menu will be opened providing some additional functions:



### Remove lamphead

Choosing this option will remove the lamphead from the LSeries Manager. It then will be ignored also by the automatic lamphead detection.

The lamphead will be detected again after a restart of the LSeries Manager or if the lamphead will be switched off or disconnected from USB for more than 5 seconds and then switched back on or reconnected to USB.

### Refresh data

This will reread all relevant data from the lamphead and re-initialize the representation of the fixture inside LSeries Manager. This might be necessary if the user has changed some settings directly via the built-in Control Panel or via RDM while the lamphead is connected to the LSeries Manager.

### Set Factory Defaults

This will reset some lamphead settings to factory default values:

- DMX Mode
- DMX Address
- FAN Mode
- Indication LEDs

### **Identify**

This is used to physically identify 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 LSeries Manager and the user has to identify the correct one.

### **Restart**

This will perform a reset of the lamphead. The fixtures firmware will restart as if it has been switched off and on again. LSeries Manager may lose the connection to the device and remove it, then detect it again after the restart has been finished.

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### **Reconnect**

This will perform a reset of the USB connection as if the USB cable has been removed and reconnected again. LSeries Manager will lose the connection to the device for a short time and remove it, then detect it again.

### **9** Program Settings

🛫 LSeries Manager (V1.4.0.75)	
LSERIES*	
L7-C (L1.31330CD-1489) OMX Settings FAN Modes Diagnosis Firmware Update LSeries Manager System messages	LSeries Manager - Program Settings     Common     Jump directly to new connected devices     Expand all nodes of new connected devices     Firmware Updates     Folder for Firmware Update files:     C:\Users\Public\Documents\LSeries Manager\L7_V1.74.1\     C changing the Update files:     C:\Users\Public\Documents\LSeries Manager\UpdateLog\     Save Update logs to folder     C:\Users\Public\Documents\LSeries Manager\UpdateLog\     Always preselect not installed updates of optional components by default on "Check for possible updates"     Log file folders     Default folder for Service log and Error log files:     C:\Users\Public\Documents\LSeries Manager\DiagLog\     Save system messages log to folder     C:\Users\Public\Documents\LSeries Manager\SysMsgLog\
, , , , , , , , , , , , , , , , , , ,	

Here you can change the program settings of the LSeries Manager.

### <u>Common</u>

- Jump directly to new connected devices: If enabled, the LSeries Manager will immediately go to the tree node entry of a new connected device.
- Expand all nodes of new connected devices: If enabled, all sub-entries of a new connected device will be opened and be visible by default.



#### Firmware Updates

- Folder for Firmware Update files: If you have different firmware versions available, you can here change the folder used by default for every new connected fixture.
- Changing the Update Files folder in node "Firmware Update" will also change global folder setting:

It is possible to change the Update Files folder also in the Firmware Update section of a connected fixture (see Firmware Updates). Changing the folder there will only affect the correspondent fixture, unless this checkbox is enabled here.

• Save Update logs to folder:

If enabled, the content of the update progress text field will be stored automatically to an update log file inside the selected folder. This log data might be very helpful if you have to contact an ARRI service partner in case the update process will fail. For this reason it is highly recommended to enable this feature.

 Always preselect not installed updates of optional components by default on "Check for possible updates": Do not enable this, unless you have been instructed by an ARRI technician.

#### Log file folders

 Default folder for Service log and Error log files: This is the default folder where the Service log and Error log files will be stored if you choose "Save" in the Section "Diagnosis".

• Save system messages log to folder:

If enabled, the LSeries Manager will store the System Messages automatically to a log file in the selected folder. Each time the program is started a new file will be created.

These log messages may be helpful for failure diagnosis and are important for your ARRI service partner for a better understanding of fixture issues and/or issues with the LSeries Manager. For this reason it is highly recommended to enable this feature.

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### **10 System Messages**

📹 LSeries Manager (V1.4.0.75)	
LSERIES*	
DMX Settings	LSeries Manager - System messages
FAN Nockings Diagnosis Firmware Update LSeries Manager Program Settings System messages	<pre>15:33:24 LSeries Manager (V1.4.0.75) started on 07.11.2013. 15:33:24 Program settings loaded. 15:33:24 Log System Messages file logging. 15:33:24 Log System Messages to C:\Users\Public\Documents\LSeries Manager\SysMsgLi 15:33:24 DeviceMonitor: Started. Wait for connections. 15:33:24 DeviceMonitor: L7 found. FTDI Serial 'ARVVBY3P'. 15:33:27 Connected: L7-C (L1.31330CD-1489). 15:33:27 Check installed firmware versions of L7-C (L1.31330CD-1489). 15:34:23 Read Error Log of L7-C (L1.31330CD-1489). 15:34:29 Read Service Log of L7-C (L1.31330CD-1489). 15:37:15 Start firmware update of L7-C (L1.31330CD-1489). 15:40:03 Firmware update of L7-C (L1.31330CD-1489). 15:40:05 L7-C (L1.31330CD-1489) finished. 15:40:05 L7-C (L1.31330CD-1489). 15:40:05 L7-C (L1.31330CD-1489). 15:40:06 Read Service Log of L7-C (L1.31330CD-1489).</pre>

The tab "System Messages" provides internal messages concerning the communication of the LSeries Manager with the connected lampheads as well as further information and error messages.

These log messages may be helpful for failure diagnosis and are important for your ARRI service partner for a better understanding of fixture issues and/or issues with the LSeries Manager.

The LSeries manager is able to store these log messages automatically to a log file. It can be enabled or disabled in the Program Settings.