







User Manual

L7

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1. General

1.1 Important Notes and Safety Instructions

1.1.1 General Notes

- ARRI L Series fixtures are intended for professional use in the studio and on location and may only be operated by qualified persons.
- Read these instructions carefully before using the device for the first time. The following text contains important information for safe handling.
- Observe the safety instructions and warnings for your own personal safety.
- All components comply with the following European standards and directives:

Low voltage directive

EMC directive

RoHS directive

- Keep these instructions for possible subsequent owners.
- Help protecting our environment by disposing the packing material at your local recycling center.
- Use only original ARRI spare parts and accessories (more information at www.arri.com).

1.1.2. Important Safety Instuctions

 DANGER OF LIFE - MAINS VOLTAGE!
 Disconnect the device from the mains voltage before replacing a damaged fuse!
 Never bridge a fuse!



The housing and the cooling fins can reach high temperatures.

Keep a safety distance of 10" (0,25 m) to adjacent surfaces on all sides.

Keep the cables away from the fixtures.

Do not cover ventilations slots and cooling fins.

CAUTION! High Beam Intensity!

Do not look into the light emission aperture of the fixture.

- Safety devices may only be removed for service purposes by qualified personnel!
- Do not lift or suspend the fixture at the mains cable!
- Note the technical data on page 29,30 and 31.
- Do not use the fixture or accessories if they display any visible damage on any component.
 In case of damage the respective parts must be exchanged or you have to contact an ARRI Service station (see www.arri.com).
- L7 fixtures must not be connected to dimmer systems or dimmer channels in Non-Dim mode.
 Doing so will damage the electronic system of the fixture.
- Check the fixture for the following possible damage before every use:

part	possible damage
housing, lens	fissures, cracks, deformed
cables	deformed, cut, scorched
plug	deformed, broken, scorched
plug connections	damaged
inner thread	overwound









Also read and follow the additional safety leaflet "Operating your ARRI Lampheads safely" L5.70731.E



1.2 Description and features of your Lamphead

The L7 range lampheads are equipped with an electronically controlled LED light source. You can use them like a conventional tungsten Fresnel fixture but with far higher energy efficiency. The newly developed optical system offers a continuous focus range of 15-50° half peak angle and real 'Fresnel' characteristics: an extremely uniform light field and clean shadow rendition. While the L7-T generates light with a color temperature of 3,200K, the L7-C has a tunable light source to generate 2,800K to 10,000K color temperature and even saturated colored light. The light spectrum has been specifically designed for excellent color rendition. All fixtures can be controlled over USB interface, DMX 512 / RDM protocol or on-board control panel (if equipped).

1.2.1 Properties

Focus

Versatility is the key element in traditional Fresnels, especially the ability to spot and flood the beam as needed. Whether it's a flood field for a pullback shot or a tight spot for a bright highlight, the continuous focusability of the L7 performs just as expected.

Versatile beam characteristics

The L7 provides the same ability as conventional Fresnel lenses to cut set elements and shape the light field with barndoors and flags.

Even light field

Clear, defined shadows have traditionally been a trait only of single source tungsten and daylight fixtures. ARRI L7 Fresnels provide the same single shadow properties designers expect, delivering natural results.

■ Vibrant colors, full-spectrum lighting

True-to-life color rendition is an outstanding feature of the L range, comparable to a full-spectrum tungsten source. The fully tuneable White light of the L7 C can be adjusted for different skin tones, camera sensors and mixed-light environments. Full gamut color mixing enables the rendition of all color shades, making color filters dispensible.

Cool light beam

Like all LED light sources the L7 does not emitt infrared or UV radiation and thus no forward heat, making talent feel comfortable in the light beam.

The ARRI L range combines all advantages of LED technology and the traditional Fresnel lens. It integrates seamlessly into established working practices, so that designers can stick with their creative techniques and studios will have no need to change their operating procedures.

1.2.2 Product features

Focus knob

True Blue-style focus knobs provide precise adjustment and rapid flood-to-spot with only three turns. Knobs on both sides of the fixture ensure easy access from all positions.

Sliding stirrup

The sliding stirrup design enables precise compensation for front-end accessories.

Yoke

With an extremely slim profile, the extruded aluminum yoke provides high strength without added weight. An optional poleoperated yoke allows full operation of pan and tilt from the floor and is therefore a popular choice for many studios.

Tilt lock

The high strength tilt lock provides extremely secure locking, eliminating movement and slippage and ensuring that the fixtures will stay where you put them.

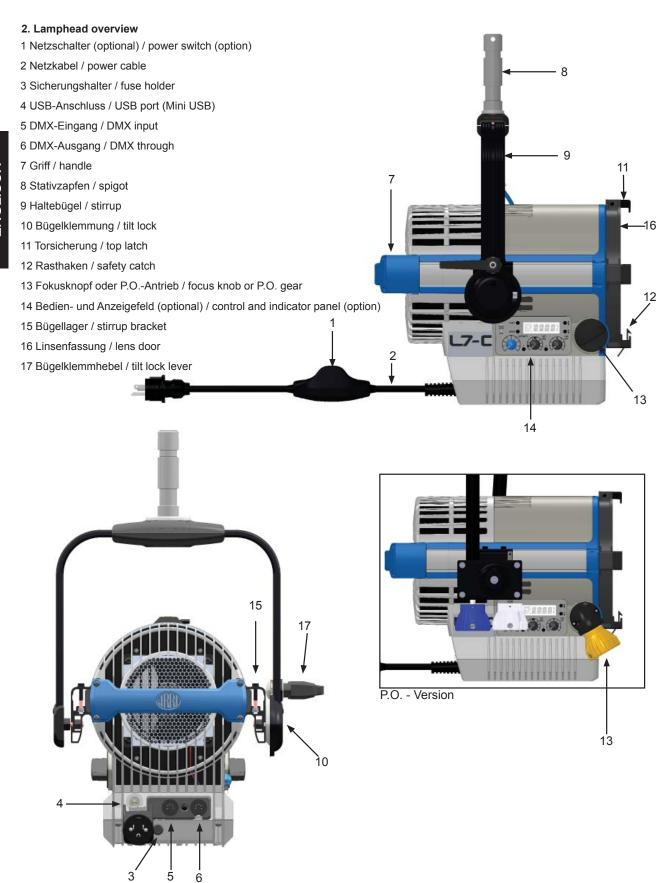
DMX contro

All functions of the L7 are controllable through DMX. The L7 is also fully RDM compatible and is equipped with a feedback channel for reporting all set parameters including system status and hours on the light engine.

On-board control

For location applications the L7 is equipped with an on-board control for manual adjustment of intensity, color temperature and plus/minus Green as well as hue and saturation.







3. Setting up and securing the fixture

Tools needed

Torx screwdriver no. 20

Torque wrench / Allen key no. 10 (50 Nm)

Adjusting the stirrup

On delivery the stirrup (9) is in the basic position, which means it is tilted to the back.

Use the Torx screwdriver no. 20 to slightly loosen the screws on both sides of the stirrup bracket (15) and pull the stirrup bracket towards the rear of the lamphead. The lever of the tilt lock (10) has to be loosened, so that you can tilt the stirrup (9) upwards.

In order to position the stirrup at the ideal balance point move it to a position halfway in-between the front and rear of the lamphead housing. Then tighten the screws at the stirrup bracket (15) again. Now tilt the stirrup to the desired angle and tighten the tilt lock lever. For better leverage, press the knob on the tilt lock lever (17) and turn the lever to the desired position.

Mounting the spigot

Place the spigot (8) and the spacer onto the boring in the stirrup (9), insert the screw with washer and spring washer from below and fasten it with the torque wrench to 50 Nm = 37 lbf ft (pound force feet).

Installation of the PC software

Download the latest LSeries Manager version from the internet (download center: http://www.arri.com/l-series/downloads). Be aware that the installation can only be performed, if you have administrative rights. If your user profile does not grant administrative rights you have to let the installation file (.exe) run as follows: Right-click on the file "start as administrator".

Start the program by double-clicking on the generated shortcut.

After the installation is completed you can connect your lamphead via USB cable to your computer. The LSeries Manager automatically detects the connected lampheads. Make sure that no other DMX program is communicating with the lamphead. You can operate one lamphead with any one USB port.

Tip: After the installation is complete, we recommend connecting the lamphead before you start the LSeries Manager for the first time. Doing this will complete the driver installation and prevent a possible connection time-out.

Note: Wait with connecting your lamphead to the computer until the installation of the LSeries Manager is complete. The LSeries Manager allows you to operate several L7 lampheads and also update them simultaneously.

Securing the lamphead and the accessories

- When mounting the fixture in a hanging position, additionally secure the fixture with a safety cable from the mounting pipe or truss through the fixture stirrup. The safety cable must be properly dimensioned for the fixture and application and must be kept short.
- The carrying capacity of the safety rope must be rated at a minimum of 10 times the weight of the lamphead system including accessories.
- Be aware of the maximum allowed tilt angle of 90° up and 90° down.
- When the lamphead is operated in a hanging position, ensure that the accessories are installed correctly: top latch (11) locked, optional barndoor safety catch (12) snapped in.
- Stands must be set up in a stable position and capable of carrying the load of the lamphead including accessories and cables! Also refer to our safety leaflet "Operating Your ARRI Lampheads Safely"; L5.40731.E.

CAUTION! Lateral load can cause deformation or breaking of the spigot (8) or the stirrup (9)!



4. Basic functions

Securing the fixture

The lamphead must be fastened at its stirrup (9) in a standing or hanging position. The spigot (8) must be inserted into the husk of a matching stand or a matching holding device and must be clampt in and secured there.

Rotation and tilt

The lamphead can be rotated after the screw at the stand or holding device has been loosened. In order to change the tilt, loosen the tilt lock (10). After rotating or tilting the lamphead, the screws or lock levers must be tightened again.

Adjusting the beam angle

The beam angle can be continuously adjusted by turning the focus knob (13). When you do this the entire lens unit is moved out of or into the lamphead housing.

This mechanism protects the fixture in two ways:

- A predetermined breaking point prevents damage at the lamphead if the focus knob is turned with too much torque.
- · A self-impeding gear prevents that the position of the lens unit changes while the lamphead is operated in a tilted position.

Using accessories for light design

Accessories for light design, such as a barndoor or filter holders, can be inserted into the holding brackets on the front of the lamphead. To do this proceed as follows:

- · Firmly press the button at the side of the top latch; the top latch flips upwards.
- Insert the accessory from the upside into the holding brackets, until the safety catch (12) engages. Slightly tilt the safety catch with your finger for support.
- · Close the top latch (11) and make sure that the hook of the top latch engages in the holding ring of the accessory.

DMX interface

The lamphead is equipped with an RDM/DMX interface with a waterproof input socket. The not waterproof DMX distributor box which is mounted at this socket has one DMX in and out and has the purpose of looping the DMX line through to the next lamphead. It can be removed after loosening the fixing screw.

USB interface

The lamphead is also equipped with a USB interface with a mini USB slot, which can be used for updating the fixture's internal firmware, for adjusting operating parameters and for service purposes. The service tool "LSeries Manager" allows you to configure your lamphead via this interface, you can download the LSeries Manager from the ARRI homepage free of charge. (Download center: http://www.arri.com/l-series/downloads)

Turning on and operation

After you have turned on the power switch (or after connecting to mains power for lampheads without a power switch) the lamphead will need a short start-up time before it lights up. The lamphead will operate with the previously used setting. It can now be controlled via the DMX interface or the on-board control.

CAUTION! Hight beam intensity! Do not look into the ligth emission aperture of the lamphead.

5. Setting Options

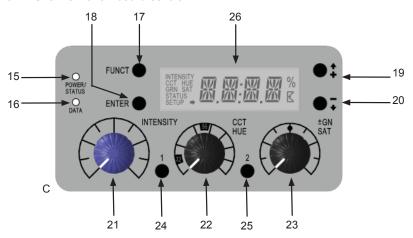
You have four options to configure or control your lamphead:

Туре	control	configuration
on-board control	yes	yes
USB - LS Manager	no	yes
DMX - mixing console or computer	yes	no
RDM - USB on RDM Box with PC software	yes	yes



5.1 Possible settings via on-board control

5.1.1 Overview of on-board control







Depending on the model, your lamphead is equipped with one of the following display or control panels:

- · simple display field (A)
- on-board control with LC display and intensity control (B)
- · on-board control with LC display, intensity and color control (C)

no.	name	short description
15	POWER-/STATUS-LED display	
16	DATA display	signalises a present DMX signal
17	FUNCT - button	function: changes between CCT & HSI mode function: jump one menu level UP
18	ENTER - button	function: jump one menu level DOWN function: confirm settings function: "flash" arrow for activating quick selection (memory button 1 = 3200K, memory button 2 = 5600K)
19	+ / UP / step up value	navigate within a menu level or step up values (keep button pressed for stepping up rapidly)
20	- / DOWN / step down value	navigate within a menu level or step down values (keep button pressed for stepping down)
21	rotary knob INTENSITY	set intensity
22	rotary knob CCT / HUE	set color temperature or hue
23	rotary knob GN / SAT	set green-magenta correction or saturation
24	memory button 1	safe or retrieve settings
25	memory button 2	safe or retrieve settings
26	display	

Status LEDs at on-board control:

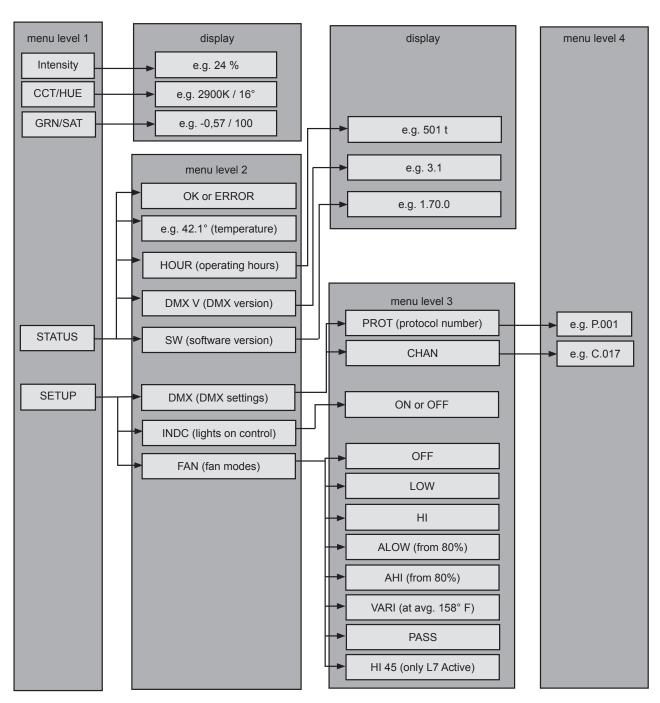
green LED lights up	status OK / lamphead active
blue LED lights up	receiving DMX or RDM data
red LED flashes at 500ms rhythm *	lamphead will shortly reach over temperature
red LED lights up permanently *	over temperature reached
red LED goes out and Green LED lights up *	lamphead has cooled down and can be turned on again
red LED flashes rapidly at 250ms rhythm *	calibration data could not be loaded
* display lights up red when LED is lit	



5.1.2 Menu levels of the on-board control

During the operation of the lamphead the selected operating mode with the current value is displayed. On the first menu level the values for INTENSITY, CCT/HUE and GN/SAT can be retrieved via the + / - buttons. The menu point STATUS, confirmed with ENTER, takes you to the next level which displays information on faultless operation and the temperature. To retrieve values for operating hours, DMX version and software version, press ENTER to jump to the third level. The FUNCT key takes you back to the previous menu level.

Note: The horizontal arrow in the display symbolizes the possibility to jump to the next menu level by pressing ENTER.



Note: In setup or status mode the settings option remains active until another function is executed. In all other modes the display will go back to the respective mode after 2 seconds.



5.1.3 Setting the operating modes

Press the FUNCT key (17) briefly to switch from CCT mode to HSI mode or vice versa.

In CCT mode the lamphead generates White light with optimized color rendition CRI > 95.

In HSI mode the lamphead generates colored light. If saturation is set very low, the lamphead will generate White light, but with optimized color rendition.

5.1.4 Setting the color temperature and Green-magenta adjustment in CCT mode

With the rotary knob CCT/HUE (22) the color temperature can be adjusted continuously.

The rotary knob GN/SAT (23) serves for continuous green-magenta adjustment.

You can retrieve the currently set value for Green-magenta adjustment by pressing the keys + (19) or - (20) repeatedly until GRN is displayed on the left side of the display (e.g. +0.23). The setting for color temperature is always displayed (e.g. 4150K).

5.1.5 Setting the color in HSI mode

With the rotary knob CCT/HUE (22) you can adjust the value for hue continuously.

Use the rotary knob GN/SAT (23) for continuous adjustment of saturation.

You can retrieve the currently set value for saturation by pressing the keys + (19) or - (20) repeatedly until SAT is displayed on the left side of the display (e.g. 45). The setting for hue is always displayed (e.g. 4118°).

5.1.6 Setting intensity in both operating modes

With the rotary knob INTENSITY (21) you can continuously adjust intensity in both operating modes. You can retrieve the currently set value for intensity by pressing the keys + (19) or - (20) repeatedly until INTENSITY is displayed on the left side of the display (e.g. 24%).

5.1.7 Setting the fan functions

You can set the different fan functions via the on-board control from menu level 3.

Proceed as follows:

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27).

Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until FAN is shown in the display (27). Confirm with ENTER (18) again. The currently used fan mode is displayed.

By pressing the keys + (19) or - (20) you can select the desired fan mode (see table below). Confirm your selection with the ENTER key (18). The fan will now work in the desired mode. Press the FUNCT key (17) twice to leave this menu level.

Fan mode	L7 Hybrid	L7 Active	L7-T4	Description of mode
OFF	х			Fan is turned off, it may occur that the lamphead turnes itself off due to overheating. Once the lamphead has cooled down it can be turned on and used again.
LOW	х	х		Fan operates constantly at low speed (silent)
HI	х			Fan operates constantly at maximum speed
A-LOW	х			Fan operates from 80% intensity with 1050 rev/min
A-HI	х			Fan operates from 80% intensity with maximum speed
VARI	×	х		Fan is controlled via the light-engine temperature, fan starts at approx. 70°C / 158° F, steps speed up or down automatically
PASS	Х			No fan, light output is reduced by 20%
HI 45		х		Optimized for an ambient temperature of 45°C / 113° F, fan operates at max. speed, light output is reduced by approx 15%

5.1.8 Setting the DMX address

Go to menu level 4 to set the DMX start address via the on-board control.

Proceed as follows:

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27).

Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until DMX is shown in the display (27). Confirm with ENTER (18) again. Press the key + (19) or - (20) repeatedly until CHAN is shown in the display (27). When you press the ENTER key now the currently used DMX start address is displayed. Use the keys + (19) or - (20) to select a value from C.001 to C.506 an confirm your selection with the ENTER key (18). The DMX start address is now set. Press the FUNCT key (17) three times to leave this menu level.



5.1.9 Selecting the DMX profile

In order to select one of the 15 available DMX profiles via the on-board control you have to navigate to menu level 4. To get there, proceed as follows:

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27).

Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until DMX is shown in the display (27). Confirm with ENTER (18) again. Press the key + (19) or - (20) repeatedly until PROT is shown in the display (27). When you press the ENTER key the currently used DMX profile is displayed. Use the keys + (19) or - (20) to select a value from P.001 to P.015 and confirm your selection with the ENTER key (18). The DMX profile is now selected.

Press the FUNCT key (17) three times to leave this menu level.

5.1.10 Turning lights of on-board control on/off

In order to turn the lights at the on-board control on or off you have to navigate to menu level 3. To get there, proceed as follows: Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27). Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until INDC is shown in the display (27). When you press the ENTER key, the current settings are displayed. Use the + (19) or - (20) keys to select either ON or OFF and confirm with ENTER (18). The light on the display (26) and LED signals (15 and 16) are now turned on or off. Press the FUNCT key (17) twice to leave this menu level.

5.1.11 Status request

In order to request the status via the on-board control proceed as follows:

a) Read operating hours

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27). Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until HOUR is shown in the display (27). When you press the ENTER key the operating hours are displayed (e.g. 501 t). Press the FUNCT key (17) three times to leave this menu level.

b) Read DMX version

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27). Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until DMXV is shown in the display (27). When you press the ENTER key the version is displayed (e.g. 3.1). Press the FUNCT key (17) three times to leave this menu level.

c) Read software version

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27). Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until SW is shown in the display (27). When you press the ENTER key the version is displayed (e.g. 1.70.0). Press the FUNCT key (17) three times to leave this menu level.

d) Read operating temperature

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27). Confirm with the ENTER key (18). Press the key + (19) or - (20) repeatedly until the temperature (e.g. 42.1°) is shown in the display (27). Press the FUNCT key (17) twice to leave this menu level.

e) Read availability

Press the keys + (19) or - (20) repeatedly until SETUP is displayed in the left lower corner of the display (27). Confirm with the ENTER key (18). In the display (27) you can see OK or an error code (e.g. E.004 / see table with error messages on next page). Press the FUNCT key (17) twice to leave this menu level



5.1.12 Error messages

Code	Error	Solution
E.003	Controller over temperature	Let the lamphead cool down. After that the status LED should light up Green again. The lamphead is available for operation. Set the fader to 0 and then set the desired value.
E.004	Light Engine over temperature	See solution for E.003
E.005	Power supply over temperature	See solution for E.003
E.006	Calibration data faulty or read error of light engine memory	NOTICE: Loss of calibration data can only be solved in the factory. (You might have to exchange the light engine and carry out calibration again.)
E.007	Invalid PWM value calculation	This merely serves as a notification that a fault has occurred during calculation.
E.008	Invalid values during calculating step 1	See solution for E.007
E.009	Invalid values during calculating step 2	See solution for E.007
E.010	Fan error. Exeeding deviation from pre-set speed or fan outage. This error can only be detected in fans with speed indicator (3 wire fan).	CAUTION: Only a trained service person is allowed to fix this error! Set the fan to LOW or HI and see if it starts rotating, in order to determine if there is an electrical malfunction. All mechanical tests or repairs may only be carried out by a trained service technician.
From SW v	version 1.72.0	
E.011	On-board control could not be detected, or on-board control ID has not been programmed at the lamphead.	If the on-board control is working, error E.011 can be ignored. However, if the on-board control remains dark (no LED lights up) we recommend contacting a service partner. They can then carry out detailled analyses.
E.012	Temperature sensor(s) are defective or deviation within NTC values too high.	One or more temperature sensores are defective or the deviation within the individual NTCs or BNTCs exceeds the variation tolerance of 54° F. Check the error log (LSeries Manager) to see which temperature sensores are affected. Ask your service partner to fix this error.



5.2 Settings options via DMX

5.2.1 DMX profile

The ARRI L7 range offers 15 DMX profiles, which can be pre-configured by the user. The 8-bit modes should be used with basic DMX control consoles (dimming consoles). The most common modes for operation are mode 01 and mode 02. ARRI recommends the use of the 16-bit mode in combination with a DMX control console, which supports functions up to 16-bit resolution in order to obtain premium results. The increased resolution over the 8-bit mode provides even smoother dimming and continuous color adjustment. Additionally there is a "Coarse/fine" mode which allows you to perform a coarse and fine adjustment with two indiviual DMX channels. The Coarse / Fine modes utilize two DMX channels for most parameters and provide increased resolution over the 8-bit modes for users without 16-bit compatible control consoles.

White and RGBW:

This is the most common mode of operation. It provides control over intensity, color temperature, +/- Green, and individual Red, Green, Blue, and White color channels.

White:

Simplified White-only mode for use when the number of available channels on a DMX control board is limited. It provides control over intensity, color temperature, and +/- Green.

White & HSI:

Provides control over intensity, color temperature, +/- Green, color hue, and color saturation. HSI = Hue, Saturation, Intensity. The advantage of HSI compared with RGBW is, that colors and intesity are exactly the same in each lamphead due to the applied color algorithms.

RGBW:

Simplified White-only mode for use when the number of available DMX channels is limited. It provides control over intensity and individual Red, Green, Blue, and White color channels.

HSI:

Simplified Hue, Saturation and Intensity mode for use when the number of available channels on a DMX control board is limited.

Note: For DMX Implementation Table see page 15 to 20 or http://www.arri.com/l-series/downloads

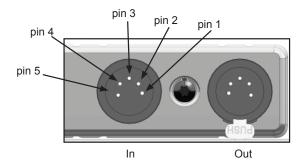
Note: Depending on the selected DMX profile the channels required for each lamphead should be allocated, if necessary up to 16 channels (required for DMX protokoll mode 6) right away.

5.2.2 DMX In / Pin allocation

5-pin-XLR (female connector)

pin 1 : ground (screen)

pin 2 : signal (-) pin 3 : signal (+) pin 4 : not used pin 5 : not used





5.2.3 DMX IMPLEMENTATION TABLE V3.1

Available DMX Modes

fixture	8 Bit Modes	16 Bit Modes	Coarse / Fine Modes
type	1 DMX channel per function required	2 DMX channels per function required	1-2 DMX channels per function required
L7-T	01 - Dimm 8 *	02 - Dimm 16	03 - Dimm C/F (Coarse/Fine)
		•	
	01 - White & RGBW 8 Bit *	06 - White & RGBW 16 Bit	11 - White & RGBW C/F
	02 - White 8 Bit	07 - White 16 Bit	12 - White C/F
L7-C	03 - White & HSI 8 Bit	08 - White & HSI 16 Bit	13 - White & HSI C/F
	04 - RGBW 8 Bit	09 - RGBW 16 Bit	14 - RGBW C/F
	05 - HSI 8 Bit	10 - HSI 16 Bit	15 - HSI C/F
* standard mode	es (factory settings)		

8 Bit Mode

L7-T Mode 01 - DIMM 8 BIT

channel no.	function	DMX value	output value	steps per bit	unit	notes
1	intensity	000255	0 100	0.3922	%	

L7-C Mode 01 - White & RGBW 8 BIT

channel no.	function	DMX value		output value			steps per bit	unit	notes
1	master intensity	000	 255	0		100	0.3922	%	
2	color temperature	000	 255	2,800		10,450	30	К	
		000	 010	neutral / no effect			-		
		011	 020	full minusgreen			-		
	green / magenta value	021	 119	-99]	-1	1	% GN	(1)
3		120	 145	neutral / no effect			-		
		146	 244	1	ļ	99	1	% GN	(1)
		245	 255	full plusgreen			-		
4	white-color crossfade	000	 255	0		100	0.3922	%	(2)
5	red intensity	000	 255	0		100	0.3922	%	
6	green intensity	000	 255	0		100	0.3922	%	
7	blue intensity	000	 255	0		100	0.3922	%	
8	white intensity	000	 255	0		100	0.3922	%	

L7-C Mode 02 - White 8 BIT

channel no.	function	DMX value	Э		output value			steps per bit	unit	notes
1	white intensity	000		255	0		100	0.3922	%	
2	color temperature	000		255	2,800		10,400	30	K	
	green / magenta value	000		010	neutral / no effect			-		
		011		020	full minusgreen	1		-		
		021		119	-99	 	-1	1	% GN	(1)
3		120		145	neutral / no effect	1		-		
		146		244	1		99	1	% GN	(1)
		245		255	full plusgreen	1		-		



L7-C Mode 03 - White & HSI 8 BIT

channel no.	function	DMX value		output value			steps per bit	unit	notes
1	master intensity	000	255	0		100	0.3922	%	
2	color temperature	000	255	2,800		10,450	30	K	
		000	010	neutral / no effect			-		
		011	020	full minusgreen			-		
		021	119	-99]	-1	1	%	(1)
3	green / magenta value				_			GN	
ľ	groom magonia valuo	120	145	neutral / no effect			-		
		146	244	1]	99	1	%	(1)
					_			GN	
		245	255	full plusgreen			-		
4	white-color crossfade	000	255	0		100	0.3922	%	(2)
5	hue	000	255	0		360	1.4118	۰	
6	saturation	000	255	0		100	0.3922	%	

L7-C Mode 04 - RGBW 8 BIT

channel no.	function	DMX value		output value		steps per bit	unit	notes
1	master intensity	000	255	0	100	0.3922	%	
2	red intensity	000	255	0	100	0.3922	%	
3	green intensity	000	255	0	100	0.3922	%	
4	blue intensity	000	255	0	100	0.3922	%	
5	white intensity	000	255	0	100	0.3922	%	

L7-C Mode 05 - HSI 8 BIT

channel no.	function	DMX value		output value		steps per bit	unit	notes
1	intensity	000	 255	0	100	0.3922	%	
2	hue	000	 255	0	360	1.4118	0	
3	saturation	000	 255	0	100	0.3922	%	



16 BIT Mode

L7-T Mode 02 - DIMM 16 BIT

channel no	function		DMX value		output value		steps per bit	unit	notes
1	intonoity	HI	00000	CEESE	0	. 100	0.001529	0/:	
2	intensity	LO		65535		. 100	0.001529	70	

L7-C Mode 06 - White & RGBW 16 BIT

channel no	function		DMX value		output value			steps per bit	unit	notes
1	master intensity	НІ	00000	. 65535	0		100	0.001529	%	
2	master intensity	LO		. 65535	0		100	0.001529	70	
3	color temperature	НІ	00000	. 65535	2,800		10,450	0.1167	К	
4	Color temperature	LO		. 00000	2,800		10,450	0.1107	^	
			00000	. 05000	neutral / no effect			-		
5		н	05001	. 10000	full minusgreen			-		
	green / magenta		10001	. 29999	-99.995]	-0.005	0.005	% GN	(1)
	value		30000	. 40000	neutral / no effect			-		
6		LO	40001	. 59999	0.005]	99.995	0.005	% GN	(1)
			60000	. 65535	full plusgreen			-		
7	white-color	HI	00000	. 65535	0		100	0.001529	%	(2)
8	crossfade	LO		. 00000	0		100	0.001329	/0	(2)
9	red intensity	НІ	00000	. 65535	0		100	0.001529	%	
10	Ted intensity	LO		. 00000	U		100	0.001529	70	
11	green intensity	НІ	00000	. 65535	0		100	0.001529	%	
12	green intensity	LO		. 00000			100	0.001329	/0	
13	blue intensity	HI	00000	. 65535	0		100	0.001529	%	
14	Dide iliterisity	LO		. 00000			100	0.001529	/0	
15	white intensity	HI	00000	. 65535	0	Ť	100	0.001529	%	
16	write intensity	LO		. 00000	"		100	0.001329	/0	

L7-C Mode 07 - White 16 BIT

channel no	function		DMX value	output value			steps per bit	unit	notes
1	intensity.	НІ	00000 05525	0		100	0.004500	%	
2	intensity	LO	00000 65535	0		100	0.001529	70	
3	color tomporatura	н	00000 65535	2 900		10.450	0.1167	L	
4	color temperature	LO	00000 65535	2,800		10,450	0.1167	K	
			00000 05000	neutral / no effect			-		
5		н	05001 10000	full minusgreen	1		-		
	green / magenta		10001 29999	-99.995		-0.005	0.005	% GN	(1)
	value		30000 40000	neutral / no effect			-		
6		LO	40001 59999	0.005		99.995	0.005	% GN	(1)
			60000 65535	full plusgreen			-		



L7-C Mode 08 - White & HSI 16 BIT

channel no	function		DMX val	ue		output value			steps per bit	unit	notes
1	master intensity	HI	00000		65535	0		100	0.001529	%	
2	master intensity	LO	00000		00000	0		100	0.001529	70	
3	aclar tamparatura	HI	00000		65535	2,800		10.450	0.1167	ĸ	
4	color temperature	LO	00000		00000	2,000	•••	10,450	0.1167	^	
			00000		05000	neutral / no effect			-		
5		н	05001		10000	full minusgreen]		-		
	green / magenta		10001		29999	-99.995]	-0.005	0.005	% GN	(1)
	value		30000		40000	neutral / no effect			-		
6		LO	40001		59999	0.005]	99.995	0.005	% GN	(1)
			60000		65535	full plusgreen			-		
7	white-color	HI	00000		65535	0		100	0.001529	%	(2)
8	crossfade	LO	00000		00000	0	•••	100	0.001529	70	(2)
9	hue	HI	00000		65535	0		360	0.005493		
10	Tiue	LO	00000		00000			300	0.000493		
11	acturation	HI	00000		CEESE	0		100	0.001529	%	
12	saturation	LO	00000		65535	0	•••	100	0.001329	70	

L7-C Mode 09 - RGBW 16 BIT

channel no	function		DMX value		output value		steps per bit	unit	notes
1	moster intensity	HI	00000	65535	0	100	0.001529	%	
2	master intensity	LO	00000	00000	0	 100	0.001529	70	
3	red intensity	HI	00000	65535	0	100	0.001529	%	
4	red intensity	LO	00000	00000	0	 100	0.001529	70	
5	green intensity	HI	00000	65535	0	100	0.001529	%	
6	green intensity	LO	00000	00000	0	 100	0.001529	70	
7	blue intensity	HI	00000	65535	0	100	0.001529	%	
8	blue intensity	LO	00000	03333	0	 100	0.001329	70	
9	white intensity	HI	00000	65535	0	100	0.001529	%	
10	writte interisity	LO	00000	00000	0	 100	0.001329	70	

L7-C Mode 10 - HSI 16 BIT

channel no	function		DMX value	е		output value			steps per bit	unit	notes
1	intensity	HI	00000		65535	0		100	0.001529	%	
2	intensity	LO	00000		00000	0		100	0.001529	70	
3	hue	HI	00000		65535	0		360	0.005493	0	
4	nue	LO	00000		00000	O		300	0.005495		
5	saturation	HI	00000		65535	0		100	0.001529	%	
6	Saturation	LO	00000		00000	0	•••	100	0.001529	70	



COARSE / FINE Mode

L7-T Mode 03 - DIMM C/F

channel no.	function	DMX value		output value		steps per bit	unit	notes	
1	intensity	000	255	0	100	0	0.3922	%	
2	intensity (fine)	000	255	0	10		0.0392	%	

L7-C Mode 11 - White & RGBW C/F

channel no.	function	DMX va	alue		output value			steps per bit	unit	notes
1	master intensity	000		255	0		100	0.3922	%	
2	master intensity (fine)	000		255	0		10	0.0392	%	
3	color temperature	000		255	2,800		10,450	30	К	
4	color temperature (fine)	000		255	0		255		К	
		000		010	neutral / no effect			-		
		011		020	full minusgreen			-		
5	groon / maganta valua	021		119	-99]	-1	1	% GN	(1)
٥	green / magenta value	120		145	neutral / no effect			-		
		146		244	1	٦	99	1	% GN	(1)
		245		255	full plusgreen			-		
6	white-color crossfade	000		255	0		100	0.3922	%	(2)
7	red intensity	000		255	0		100	0.3922	%	
8	red intensity (fine)	000		255	0		10	0.0392	%	
9	green intensity	000		255	0		100	0.3922	%	
10	green intensity (fine)	000		255	0		10	0.0392	%	
11	blue intensity	000		255	0		100	0.3922	%	
12	blue intensity (fine)	000		255	0		10	0.0392	%	
13	white intensity	000		255	0		100	0.3922	%	
14	white intensity (fine)	000		255	0		10	0.0392	%	

L7-C Mode 12 - White C/F

channel no.	function	DMX val	ue		output value		steps per bit	unit	notes
1	intensity	000		255	0	 100	0.3922	%	
2	intensity (fine)	000		255	0	 10	0.0392	%	
3	color temperature	000		255	2,800	 10,450	30	К	
4	color temperature (fine)	000		255	0	 255		К	
		000		010	neutral / no effect		-		
		011		020	full minusgreen		-		
_	annon / monanta valva	021		119	-99	 -1	1	% GN	(1)
5	green / magenta value	120		145	neutral / no effect		-		
		146		244	1	 99	1	% GN	(1)
		245		255	full plusgreen		-		



L7-C Mode 13 - White & HSI C/F

channel no.	function	DMX value		output value			steps per bit	unit	notes
1	master intensity	000	 255	0		100	0.3922	%	
2	master intensity (fine)	000	 255	0		10	0.0392	%	
3	color temperature	000	 255	2,800		10,450	30	K	
4	color temperature (fine)	000	 255	0		255	1	K	
		000	 010	neutral / no effect			-		
		011	 020	full minusgreen]		-		
_	annon / monanta valva	021	 119	-99]	-1	1	% GN	(1)
5	green / magenta value	120	 145	neutral / no effect	7		-		
		146	 244	1]	99	1	% GN	(1)
		245	 255	full plusgreen	7		-		
6	white-color crossfade	000	 255	0		100	0.3922	%	(2)
7	hue	000	 255	0		360	1.4118	0	
8	hue (fine)	000	 255	0		25.5	0.100	0	
9	saturation	000	 255	0		100	0.3922	%	
10	saturation (fine)	000	 255	0		10	0.0392	%	

L7-C Mode 14 - RGBW C/F

channel no.	function	DMX value		output value		steps per bit	unit	notes
1	master intensity	000	255	0	 100	0.3922	%	
2	master intensity (fine)	000	255	0	 10	0.0392	%	
3	red intensity	000	255	0	 100	0.3922	%	
4	red intensity (fine)	000	255	0	 10	0.0392	%	
5	green intensity	000	255	0	 100	0.3922	%	
6	green intensity (fine)	000	255	0	 10	0.0392	%	
7	blue intensity	000	255	0	 100	0.3922	%	
8	blue intensity (fine)	000	255	0	 10	0.0392	%	
9	white intensity	000	255	0	 100	0.3922	%	
10	white intensity (fine)	000	255	0	 10	0.0392	%	

L7-C Mode 15 - HSI C/F

channel no.	function	DMX value		output value		steps per bit	unit	notes
1	intensity	000	255	0	 100	0.3922	%	
2	intensity (fine)	000	255	0	 10	0.0392	%	
3	hue	000	255	0	 360	1.4118	0	
4	hue (fine)	000	255	0	 25.5	0.100	0	
5	saturation	000	255	0	 100	0.3922	%	
6	saturation (fine)	000	255	0	 10	0.0392	%	

Remarks:

(1)	"%GN" means the percentage of shift between the neutral color point and the full minusgreen resp. full plusgreen color points derived from Rosco Cinegel gels #3304 resp. #3308.
(2)	"crossfade" means the percentage of shift from the programmed white color point to the programmed RGBW or HSI color point.

5.2.4 Conversion of CCT value to DMX %

You can convert the CCT value to DMX % (or the other way around) with the following formula:

= (10450-2800) x (DMX value in %) / (100 + 2800)

DMX value in $\% = (CCT \text{ value - } 2800) / (10450-2800) \times 100$



The RDM functions listed below are supported from SW version 1.66.08

RDM standard commands:

Command (English)	Description	GET	SET
Discover Unique Branch	Searches RDM device	yes	yes
Discover Mute	Mutes the RDM device, no response messages	yes	yes
Discover Unmute	Activates device for response messages	yes	yes
Supported Parameters	Shows a list of all supported RDM commands	yes	
Parameter Description	Shows a list of commands that are not standard rdm commands, mostly commands from manufacturer. Describes the data type and shows if Set or Get or both are supported for the listed commands.	yes	
Lists RDM protocol version, device model ID, product category, software version ID (from Ma DMX footprint, DMX personality, sub-device co and sender count		yes	
Shows the software version string from main, e.g. Main 1.66.1 Yesn 16 2012 19:10:26		yes	
MX Start Adress DMX address		yes	yes
Identify Device	Identify Flag -> physically flash the light, L7-C flashes Blue and all other White	yes	yes
Required RDM command extensions	·		
Status Message	Display of actual warning / error message of the fixture	yes	
Status ID Description	Detailed description of each warning / status report	yes	
Device Label	This parameter allows you to generate an informative label for each fixture. It can be utilized to identify the rack number of a dimmer or to determine the position of a fixture	yes	yes
Product Detail ID List	This parameter is utilized to retrieve technical details of a fixture. L7 shows LED with PWM control		
Device Model Description	A text description of up to 32 characters for the model type of the fixture. L7 shows L7-C or L7-T		
Manufacturer Label	Display the company name ARRI Lighting		
Boot Software Version ID	PrBo SW Version 2.03.00	yes	
Boot Software Version Label	Shows text from PrBo Bootloader, e.g. PrBo 2.03.00 Jan 16 2012 19:10:26	yes	
DMX Personality	DMX mode	yes	yes
DMX Personality Description	Displays a text description of a DMX mode with up to 32 characters, shown exactly as in the description in the LS-Manager	yes	
Slot Info	Shows a description for each DMX channel in use in the requested DMX mode	yes	



Command (English)	Description	GET	SET
Slot Description	Shows a text description with max. 32 characters for each DMX channel from the requested DMX mode	yes	
Default Slot Value	Shows the default DMX channel value from the requested DMX mode	yes	
Sensor Definition	Sor Definition Shows the definition from a specific sensor and a text description		
Sensor Value	Shows the actual sensor value	yes	
Device Hours	Shows the actual device hours of the fixture	yes	
Lamp Hours	Shows the actual lamp hours of the fixture	yes	
Factory Defaults	This command deletes all user parameters and sets the fixture to factory default	yes	yes
Device Power Cycles	Shows the power cycle value, counts every cold start (switch or power-up)	yes	
Reset Device	Fixture makes a software reset (warm start) and carries out a reboot		yes
Power State	Power state of the fixture, supported power states: POWER_STATE_STANDBY (0x02), POWER_STATE_NORMAL (0xFF), POWER_STATE_FULL_OFF (0x00) POWER_STATE_SHUTDOWN (0x01)		yes
Perform Selftest	Supported test modes and demo modes	yes	yes
Self Test Description	Shows a description for each test / demo mode	yes	



Manufacturer commands			
Command (English)	Description	GET	SET
RDM Fan Mode	Changes the FAN mode of the fixture		
PID:0x8001	- this message supports Set and Get commands - the first data byte is used to show / change the fan mode USER_FAN_MODE_OFF = 0 USER_FAN_MODE_LOW = 1 USER_FAN_MODE_HIGH = 2 USER_FAN_MODE_AUTO_LOW = 3 USER_FAN_MODE_AUTO_HIGH = 4		
RDM Status LED	Switch on /off indication LEDs and LCD back light		
PID:0x8002	- this message supports Set and Get commands - the first data byte is used to switch indication LEDs on and off LEDs and LCD back light on = 0 LEDs and LCD back light off = 1		
Supported from SW-Version 1.72.0, only L7-T4			
RDM L7T4CH CCT ADJ	CCT value, the CCT value can be used to do some settings manually	yes	yes
PID:0x8003			
Supported values from 2600K - 10000K, only L	7-T4	,	
RDM L7T4CH GN ADJ	GN value, the GN value can be used to do some settings manually	yes	yes
PID:0x8004			
Supported values from -1 to +1			
RDM DMX Signal Lost Mode	If the DMX signal gets lost or the DMX device is unplugged the LED fixture holds the last valid signal, or it holds the last valid signal for two minutes and then dimms or switches off immediately.	yes	yes
PID:0x8005	Supported values: 0 -> hold 1 -> hold 2 minutes 3 -> switch off		



5.3 Possible settings via LSeries Manager

5.3.1 LSeries-Manager 1.0.2

This software has been tested on the following operating systems:

Microsoft Windows XP (32 bit)

Microsoft Windows 7 (32 bit)

Microsoft Windows 7 (64 bit)

(Please note that this software is frequently updated, for more information see page 17.)

We cannot guarantee that the software will work properly on not tested operating systems.

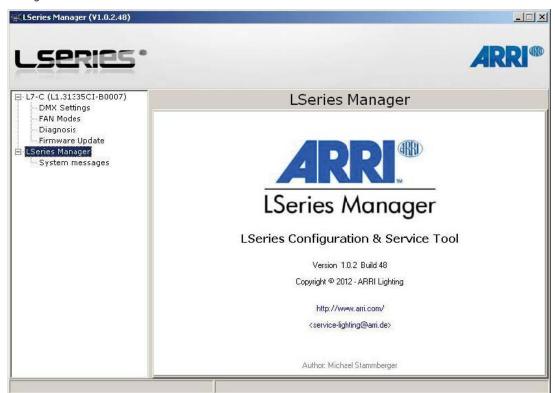
Warning: Do not connect the lamphead with the computer before the installation of the LSeries Manager is complete.

5.3.2 Installing and starting the LSeries Manager

- 1. Visit our LSeries download center at http://www.arri.com/l-series/downloads.
- 2. Download the newest LSeries Manager Bundle Version. (Including the LSeries Manager and the newest firmware version).
- 3. Note that the installation can only be performed with administrator rights. If your user profile does not have administrator rights you have to start the installation file (.exe) as follows: Right-Click on the file "start as Administrator".
- 4. After installation, you can connect the fixture via USB cable to your PC. The LSeries Manager automatically detects the connected lampheads. Make sure that no other DMX application is communicating with the lamphead. You can operate one lamphead with any one USB port.

Note: When the installation is finished, it is recommended to connect a L7 lamphead before you start the LSeries Manager for the first time. This will finalize the USB driver installation on your system and will prevent you from receiving a connection timeout error message.

LSeries Manager home screen





5.3.3 LSeries-Manager Overview

This overview shows you important information about your lamphead, such as the serial number.

You will also find information about your current firmware version and the calibration date of your lamphead.



5.3.4 DMX settings with the LSeries Manager

DMX modes version

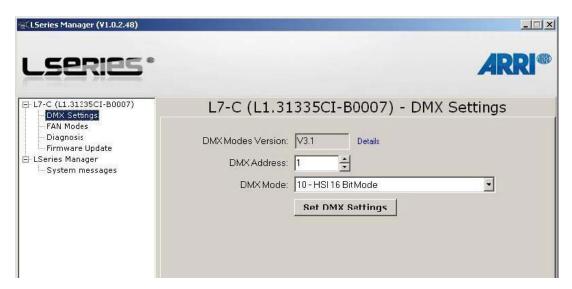
Here you will see the DMX mode version that is currently available for the firmware on your lamphead. By clicking on "Details" it will open in a PDF document containing an overview of the occupation of the individual DMX channels. (You can download the PDF Viewer from this URL: http://get.adobe.com/de/reader/)

DMX address

Here you can set the DMX start address (channel) of your lamphead.

DMX mode

Here you can set the DMX mode. A detailed overview of the occupation of the individual DMX channels can be found by clicking on "Details" (see "DMX-mode version").





5.3.5 Fan control

Fan Mode

Here you can choose the different Fan Modes your lamphead provides. This is possible from firmware version 1.68.2. Click on "Set FAN Mode" to apply the setting.



5.3.6 Diagnosis

Read Service Log

Shows you a detailed service-log which includes the current version, fan settings and current temperatures of your lamphead.

Read Error Log

Shows you the internal error messages from the lamphead.

Clear

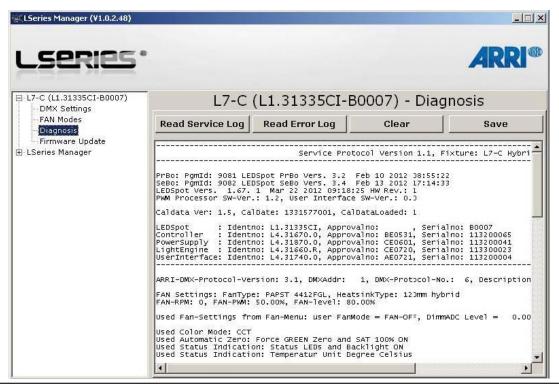
Clears the currently shown logs.

Save

By clicking on "Save" you can save all logs as a .txt file.

These logs are important for your ARRI service partner for a better understanding of your problems.

Note: To access multiple reports in succession, just click on the buttons in any order.



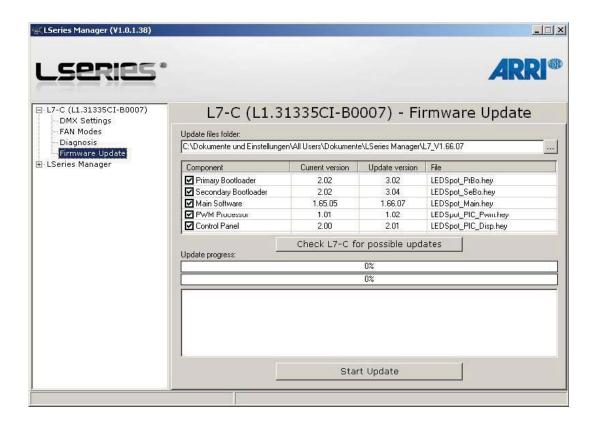


5.3.7 Firmware Update

Carry out the steps in the following order:

- Choose the folder to which you have extracted the firmware version. This is necessary if you have downloaded a single firmware version (not available yet) or the intermediate update.
- The LSeries Manager automatically checks the installed version on your lamphead for a possible update. (If your version is lower than 1.65 you have to press "Check L7 for possible updates"). Please do not change any settings here, unless you have been asked to do so by an ARRI technician.

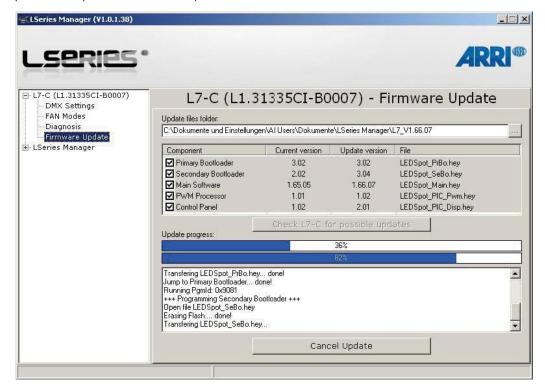
Please check your currently installed firmware! If the bootloaders are lower than version 2.0 you have to install an intermediate update (this should occur only in versions lower than 1.65). After you have installed the intermediate update, you can upgrade to all newer versions. This update is included in all bundle version of the LSeries Manager in the folder "L7_Bootloaders_V2".



Note: If your lamphead does not contain an on-board control panel you do not have to select the position "Control Panel"!



- Now press "Start Update" to execute the update.



Note: Do not interrupt the update process! During the update, do not close the LSeries Manager and do not shut down the computer. In addition, make sure not to shut down the lamphead or disconnect the USB connection (if you do, the update will fail).

When the installation process is complete you will receive the message "Installation finished successfully" on your screen.

If you do not receive this message, the update might have failed. Please try to start the update again. If the problem still persists, you should contact your local ARRI service partner. Please read out the error log of the L-Series Manager. If the lamphead does not react after updating, please also contact your ARRI service partner.

Note: A downgrade (to an older firmware version) of your lamphead can be performed only by an ARRI service partner.

5.3.8 System Messages

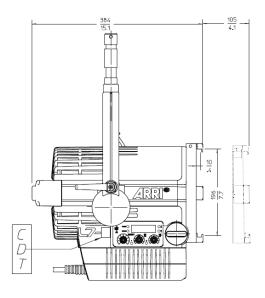
The tab "System Messages" provides internal messages about the lamphead. Each time the software has been closed, the system messages will be deleted.

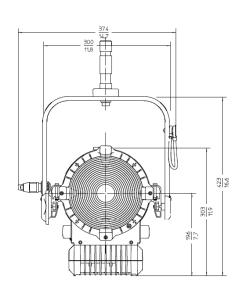




6. Technical Data

Specifications of the L7 range	
Optical system	focussable Fresnel
Lens diameter	175 mm / 7 Inch
Beam angle	15° - 50° (half peak angle)
Handling	Adjustable sliding stirrup, high strength tilt lock, pole operation optional (pan, tilt and focus)
Mounting	28 mm / 1,10 Inch spigot
Tilt angle	+/- 90°
Power supply range	90 - 264V AC, 50-60Hz
Replaceable fuse	2,5A flink "F", breaking capacity: 1500A and 250V AC, size: 5x20 mm / 0,196x0,787 Inch
Power consumption	160 W nominal, 220 W maximum
Power connection	Bare ends / Schuko / Edison Connector
Dimming	0 -100% continuous
Control	5-Pin DMX "In and Through", Optional on-board controller, Mini-USB
Remote Device Management (RDM)	DMX functions, hour counter and standard RDM commands
Mini-USB interface	DMX functions, fixture status and firmware upgrade through PC software
Housing colors	Blue-silver, black
Estimated LED lifetime (L70)	50,000 hours
Certifications	CE, GS, FCC
All specifications are nominal / typical value	ues.



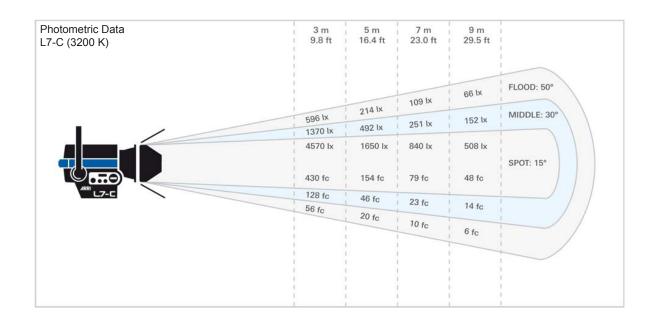


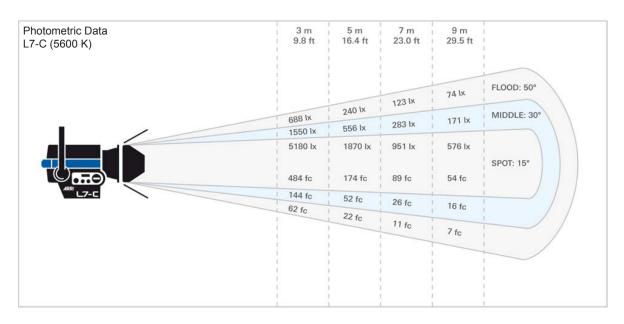


Individual specifications						
Lamphead type	L7-C hybrid	L7-T hybrid	L7-C aktiv	L7-T aktiv		
Weight	10.9 kg / 24 lb (hanging / stand), 12.5 kg / 27 lb (pole operation)	10.9 kg / 24 lb (hanging / stand), 12.5 kg / 27 lb (pole operation)	8.2 kg / 18 lb (hanging / stand), 9.8 kg / 21.6 lb (pole operation)	8.2 kg / 18 lb (hanging / stand), 9.8 kg / 21.6 lb (pole operation)		
White light	Continuously variable correlated color temperature from 2,800 K - 10,000 K	3,200 K	Continuously variable correlated color temperature from 2,800 K - 10,000 K	3200 K		
Colored light	Full RGB+W gamut with hue and saturation control	-	Full RGB+W gamut with hue and saturation control	-		
Color rendition	CRI 95 (3,200 K - 6,500 K)	-	CRI 95 (3,200 K - 6,500 K)	-		
Green-Magenta adjustment	Continuously adjustable	+/- 1/8 (nominal)	Continuously adjustable	+/- 1/8 (nominal)		
Ambient temperature opertion	0° - 35° C / 32° - 95° F	0° - 35° C / 32° - 95° F	0° - 45° C / 32° - 113° F	0° - 45° C / 32° - 113° F		
Protection class	IP 20 (optional IP 23)	IP 20 (optional IP 23)	IP 20 (optional IP 23)	IP 20 (optional IP 23)		
Applications	regular studios	regular studios	small studios / location	small studios / location		
All specifications are nominal / ty	pical values.	•		•		

		Photometric data						
3 m / 9.8 ft	5 m / 16.4 ft	7 m / 23.0 ft	9 m / 29.5 ft					
•		•	<u>'</u>					
4570 lx / 430 fc	1650 lx / 154 fc	840 lx / 79 fc	508 lx / 48 fc					
1370 lx / 128 fc	492 lx / 46 fc	251 lx / 23 fc	152 lx / 14 fc					
596 lx / 56 fc	214 lx / 20 fc	109 lx / 10 fc	66 lx / 6 fc					
	,	•	,					
5180 lx / 484 fc	1870 lx / 174 fc	951 lx / 89 fc	576 lx / 54 fc					
1550 lx / 144 fc	556 lx / 52 fc	283 lx / 26 fc	171 lx / 16 fc					
668 lx / 62 fc	240 lx / 22 fc	123 lx / 11 fc	74 lx / 7 fc					
•			<u>'</u>					
6157 lx / 572 fc	2217 lx / 206 fc	1131 lx / 105 fc	684 lx / 64 fc					
1806 lx / 168 fc	650 lx / 60 fc	332 lx / 31 fc	201 lx / 19 fc					
747 lx / 69 fc	269 lx / 25 fc	137 lx / 13 fc	83 lx / 8 fc					
	4570 lx / 430 fc 1370 lx / 128 fc 596 lx / 56 fc 5180 lx / 484 fc 1550 lx / 144 fc 668 lx / 62 fc 6157 lx / 572 fc 1806 lx / 168 fc	4570 x / 430 fc	4570 x / 430 fc 1650 x / 154 fc 840 x / 79 fc 1370 x / 128 fc 492 x / 46 fc 251 x / 23 fc 596 x / 56 fc 214 x / 20 fc 109 x / 10 fc 5180 x / 484 fc 1870 x / 174 fc 951 x / 89 fc 1550 x / 144 fc 556 x / 52 fc 283 x / 26 fc 668 x / 62 fc 240 x / 22 fc 123 x / 11 fc 6157 x / 572 fc 2217 x / 206 fc 1131 x / 105 fc 1806 x / 168 fc 650 x / 60 fc 332 x / 31 fc					









Warranty regulations

The legal warranty rights against the seller are not effected by this warranty.

In fact this warranty states additional independant claims toward ARRI.

The period of warranty begins with the date of purchase.

The proof of the date of purchase, which is required for the assertion of a claim for warranty, can be furnished by a receipt containing the date of purchase or by a delivery note which also carries the date of purchase. You have a right to claim warranty service subject to the terms and regulations set out in this document if your fixture requires repair during the period of warranty.

This warranty does not apply to

- wear parts
- fixtures whoes serial numbers have been removed or damaged
- inappropriate use or missuse
- fixtures which have been operated disregarding the operating parameters defined in the user manuals enclosed with the product.
- fixtures which have been repaired not using parts manufactured or sold by ARRI
- fixtures which have not been repaired or serviced by ARRI, but by a different supplier.

Limitations of liability

The manufacturer disclaims liability for any damage to persons or properties which are caused by an inappropriate operation of the fixture. Those lie in the responsibility of the operator.

EC Declaration of Conformity

The appliances conform to the essential requirements and the further guidelines of directives 2004/108/EC (EMC) and 2006/95/EC (LVD).

For further information, please visit www.arri.de

Please turn to our International Lighting Product Support if you have any technical questions: lps@arri.com or contact your local ARRI Service Centre (Find your local Service Centre at www.arri.com).

Visit our homepage at **www.arri.com**, for further information and to download our service tools.