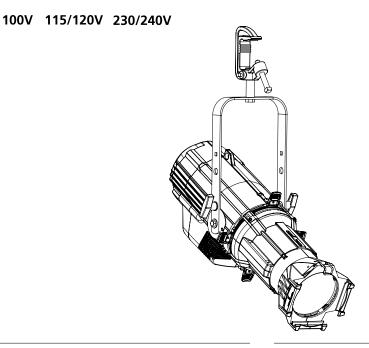
# **Source Four LED**<sup>™</sup>

## **Source Four LED Series**



### GENERAL INFORMATION

**Source Four LED** is the merging of the Source Four and Desire product lines. It offers the high quality optics and control of a Source Four with the grace and powerful color control of Desire

**Source Four LED Lustr+** fixtures are based on the x7 Color System<sup>™</sup> utilizing six colors plus high-intensity white to achieve true, usable broad-spectrum color. Rich vibrant colors as well as subtle theatrical tints are all possible with this color changing fixture. Explore new opportunities by pairing with incandescent light from the ETC's original Source Four line of fixtures to provide maximum flexibility and range.

**Source Four LED Daylight** are high-output non-variable white light fixtures with a 5600K color temperature

**Source Four LED Tungsten** are non-variable white light fixtures with a 3000K color temperature

Lustr+, Daylight, and Tungsten light engines work with all Source Four lens tubes to deliver a high quality controllable beam of LED light. For the best results it is highly recommended that EDLT versions are used. We also offer a special LED only version of the 50° lens tube.

### ORDERING INFORMATION

### Source Four LED Light Engine with Shutter Barrel

(For use with fixed field lens tubes only)

MODEL	DESCRIPTION	
S4LEDLS	Source Four LED Lustr+ w. shutter barrel, black	
S4LEDTS	Source Four LED Tungsten w. shutter barrel, black	
S4LEDDS	Source Four LED Daylight w. shutter barrel, black	

### Source Four LED Light Engine Body

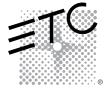
(For use with zoom lens tubes and retrofit of existing fixtures)

MODEL	DESCRIPTION	
S4LEDL	Source Four LED Lustr+ – body only, black	
S4LEDT	Source Four LED Tungsten – body only, black	
S4LEDD	Source Four LED Daylight – body only, black	

Color options: -1 = White, -5 = Silver Grey /Custom Colours

Fixture ships with a soft focus diffuser in gobo holder and a 1.5m PowerCon power input cable with connector of choice. See page 2 for connector options.

### Please note: Lens tubes to be ordered separately.



### SPECIFIC ATIONS

### GENERAL

- 60 LED array
- ETL listed to UL1573 the standard for stage and studio lighting units
- IP20-rated for indoor use
- Power and DMX in/thru connections for easy setup
- User-friendly control interface with multiple modes and fixture settings

### PHYSICAL

- Rugged die-cast all-metal housing
- Available in black (standard), white or silver (optional) or custom colors (contact factory)
- C-clamp
- Positive locking Double-clutch fixture body
- Slot for glass or stainless steel patterns and Soft Focus Diffuser
- Wide accessory slot with sliding cover for motorized pattern devices or optional iris
- Hanging yoke standard. Optional yoke/floor stand available

### ELECTRICAL

- 100VAC to 240VAC 50/60 Hz universal power input
- Neutrik power in and thru connections
- Up to 9 fixtures (15A max) may be linked via power thru connector
- Requires power from a non-dim source

### LED\*

- 50,000 hour LED life (50,000 hours to 70% intensity)
- 60 Luxeon® Rebel LED emitters

\*See additional LED notes on page three

### COLOR

- Exclusive x7 Color System<sup>™</sup> seven-color LED array
- Beautifully illuminates skin tones and other objects for natural appearance and high color rendering
- Broad-spectrum color interacts seamlessly with conventional sources
- Exclusive optional red-shift option emulates tungsten dimming performance

### OPTICAL

- Available with Lustr+, Daylight, or Tungsten LED arrays
- Use the included soft-focus diffuser for creating washes or soft light
- Best performance using ETC's EDLT lens tubes
- Can use all ETC Source Four Interchangeable lens barrels: 5°, 10°, 14°, 19°, 26°, 36°, 50°, 70°, and 90° field angles as well as 19°, 26°, 36°, and 50° EDLT lenses
- For better performance use the new LED 50° barrel

### CONTROL

- DMX512 in and thru via five-pin XLR connectors
- Multiple control options including RGB, strobe, and consolefree Master/Slave mode
- See DMX Control Table for additional information
- 15-bit virtual dimming engine provides smooth, high quality theatrical fades and minimizes color shift during dimming
- RDM functionality for address and setting changes

### SPECIFIC ATIONS

### THERMAL

- Ambient operating temperature of -4° to 104°F (-20° to 40°C)
- Active electronic thermal management for droop-free operation
- Quiet fan cooling
- Fixture is designed for continuous operation up to 104°F (40°C) ambient temperature and requires free flow of air around fixture housing

### ADDITIONAL ORDERING INFORMATION

### **Power Input Cables**

Use information below to order 5' power input leads with factory fitted connectors

MODEL	DESCRIPTION		
DPA-A 5' PowerCon <sup>™</sup> to parallel blade U-ground (Edison) connector			
DPA-B 5' PowerCon to 20A two pin and ground (stage pin) connector			
DPA-C	5' PowerCon to grounded 20A twistlock connector		
DPA-X	5' PowerCon to bare-end power input lead		

### **Power Thru Jumpers**

Note: Power thru jumpers connect to fixture's output (thru) connector to provide link to successive fixtures

MODEL	DESCRIPTION	
DPJ-5	5' PowerCon to PowerCon <sup>™</sup> fixture to fixture jumper	
DPJ-10	10' PowerCon to PowerCon fixture to fixture jumper	

### Diffusers

MODEL	DESCRIPTION	
S4LED-SFD	Source Four LED—Soft Focus Diffuser (included)	
S4LED-SWD6	Source Four LED—Smooth Wash Diffuser for 6.25 gel frame slots	
S4LED-SWD7	Source Four LED—Smooth Wash Diffuser for 7.5 gel frame slots	
S4LED-SWD12	Source Four LED—Smooth Wash Diffuser for 10° lens tubes	
S4LED-SWD14	Source Four LED—Smooth Wash Diffuser for 5° lens tubes	

The Soft Focus Diffuser fits into a standard A-Size pattern holder and delivers beautiful homogenized light when not in sharp focus. Also, use with patterns for dappled and soft edge projections.

The Smooth Wash Diffuser is used when extra-smooth blending of multiple Source Four LED fixtures is required. The smooth wash diffuser is placed into the gel frame slot of the lens tube.

# PREFERRED LENSING OPTIONS (Lenses sold separately)

### **Fixed Beam Lenses**

MODEL	DESCRIPTION
LED50LT	LED specific 50° EDLT with lenses installed
LED50LT-1	LED specific 50° EDLT (white) with lenses installed
436EDLT	36° EDLT w/lens installed
436EDLT-1	36° EDLT (white) w/lens installed
426EDLT	26° EDLT w/lens installed
426EDLT-1	26° EDLT (white) w/lens installed
419EDLT	19° EDLT w/lens installed
419EDLT-1	19° EDLT (white) w/lens installed
490LT	90° w/lens installed
490LT-1	90° (white) w/lens installed
470LT	70° w/lens installed
470LT-1	70° (white) w/lens installed
414LT	14° w/lens installed
414LT-1	14° (white) w/lens installed
410LT	10° w/lens installed
410LT-1	10° (white) w/lens installed
405LT	5° w/lens installed
405LT-1	5° (white) w/lens installed

### **Zoom Lens Assemblies**

Use with light engine body models.

MODEL	DESCRIPTION	
41530LT	Source Four 15-30 Zoom lens assembly	
42550LT	Source Four 25-50 Zoom lens assembly	

### **Power Consumption at Full Capacity**

MODEL	VOLTAGE (V)	CURRENT (A)	MAX POWER (W)
S4 LED Lustr+™	120	1.11	129.9
S4 LED Daylight™	120	1.39	163.63
S4 LED Tungsten™	120	1.35	157.4

### ADDITIONAL ORDERING INFORMATION

### Fixture\_Accessories

MODEL	DESCRIPTION	
400CC	C-Clamp (included)	
400SC	Safety Cable	
400PH-A	Pattern holder (A size)	
400PH-B	Pattern hlder (B size)	
400PH-G	Glass pattern holder	
400RS	Drop-In Iris	
400CF	Colorframe (6.25")	
407CF	7.5" square color frame	
400DN	Donut	
400TH	Top Hat	
400HH	Half Hat	
DPSJ-X	25' PowerCon to Edison input power cable with inline switch	

### NOTES ABOUT LED LUMINAIRES

All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. Based on the LED manufacturer's B50 L70 specification, a Selador luminaire will achieve ~70% of its initial output after 50,000 hours of typical usage. In individual situations, LEDs will be used for different durations and at different levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustment to presets, cues or programs.

### CRI AND CQS RATINGS

Source Four LED fixtures were evaluated for CRI and CQS performance using measured output spectrum and optimized mix solutions for a best spectral match to black body sources at 3200K and 5600K.

FIXTURE	CRI	CQS	Color Fidelity	Duv
S4 LED Lustr+ Reg at 3200K	84	87	87	0
S4 LED Lustr+ Reg at 5600K	92	92	92	0
S4 LED Daylight at 5600K	71	70	69	0.001
S4 LED Tungsten at 3000K	86	86	86	0.001

All Source Four LED luminaire versions provide excellent color rendering to the eye, particularly at higher color temperature settings such as 5600K. In most cases the Duv is 0.000. A Duv rating of 0.000 indicates that the color mix used is exactly on the black body line, with no green or magenta tint.

### CONTROL OPTIONS

User settings on Source Four LED fixtures allow multiple operational modes and settings for either console operation via DMX protocol or stand-alone operation. The expanded LCD display provides easy navigation to all possible settings and options. Some of the setting options are:

- Multiple DMX choices ranging from a simple RGB profile – which effectively controls all seven LED colors via three channels – to nine-channel 'direct' color and intensity control
- Multiple dimming curve options
- Preset colors and sequences for stand-alone (no console required) operation
- White point selection white light and color behavior based on a specific color temperature white light, i.e. 3200K, 5600K, etc
- Loss of data behavior options instant off, hold last look for two minutes, etc
- Output modes three output options that offer the user a

choice between maximum output and maximum consistency See the user manual for a complete explanation of all of the control settings and options for the Source Four LED.

### **Quick Setups**

To assist in managing the numerous control and fixture behavior choices, five combinations of operational settings are available to quickly get started. These settings are specifically created for different applications and are easily accessible at the fixture display. Each setting can then be modified as required to take advantage of all of the possible control features.

Setting Title	Profile	Description	Typical Features*
General	Direct	Factory Default: For general purpose use including interior architectural applications	Standard dimming curve     Regulated output for     color consistency
Stage	HSI Plus 7 Enabled	Theatrical lighting: Duplicates the color and dimming behavior of tungsten stage lighting fixtures	<ul> <li>Incandescent dimming curve</li> <li>Regulated output for color consistency</li> <li>3200K white point setting</li> </ul>
XT Arch	HSI	Exterior architectural lighting: Provides a high degree of color consistency in high ambient temperature envionments	<ul> <li>Standard dimming curve</li> <li>Protected output</li> <li>3200 white point setting</li> </ul>
High Impact	RGB	Event lighting: Enables quickest response, simple RGB control and strobe channel for maximum effect usage	Quick dimming curve     Boost mode for     maximum intensity     5600K white point setting
Studio	Studio	Studio Factory Default: Enables three parameter control of white light (intensity, white point, and tint) via DMX from console or from fixture display – no console required	Linear dimming curve     Regulated output mode     for color consistency

\*See user manual for complete list of features for each Quick Setup

### CONTROL OPTIONS

### **DMX Input Channel Profiles**

DMX Profile	DMX Channels	Channel Assignments	Notes
Direct	10	1 – Red 2 – White 3 – Amber 4 – Green 5 – Cyan 6 – Blue 7 – Indigo 8 – Intensity 9 – Strobe 10 – Fan Control	Direct control of each individual color with a separate master intensity channel. Color calibration of LEDs is not active in this mode. This profile will produce additive color cross- fades.
HSI	6	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – Fan Control	High resolution hue (two- channels), saturation, and intensity control. HSI mode will produce color cross-fades around the color space.
HSIC	7	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – Fan Control 7 – Color Point (CCT)	High-resolution hue, saturation and intensity control as above, with the addition of a color point channel to adjust the color temperature of the fixture in both white light and color. Color cross-fade performance is the same as HSI.
RGB	6 (Ch. 4 not used)	1 – Red 2 – Green 3 – Blue 4 – n/a 5 – Strobe 6 – Fan Control	Effectively addresses all seven colors via three channels of control. RGB profile will produce additive color cross-fades.
Studio	6 (Ch. 4 not used)	1 – Intensity 2 – Color Point (CCT) 3 – Tint 4 – n/a 5 – Strobe 6 – Fan Control	Controls fixture as a white light unit. If no DMX, i.e. console input, is present, fixture can be adjusted for these three parameters on the U/I at the back of the unit.
Additior	nal profile op	tions	
Plus 7		Seven additional color control channels are availa RGB, HSI, and HSIC input profile settings. For exa HSI with 'Plus 7' enabled becomes a 15-channel profile:	
		<ol> <li>Hue (coarse)</li> <li>Hue (fine)</li> <li>Saturation</li> <li>Intensity</li> <li>Strobe</li> <li>Fan Control</li> <li>n/a</li> <li>Plus7</li> <li>Control on/off</li> <li>Red</li> <li>White</li> <li>Amber</li> <li>Green</li> <li>Cyan</li> <li>Blue</li> <li>Indigo</li> </ol>	The desired color and intensity is achieved by using the HSI or RGB channels Placing channel seven at a value over 51% gives the fixture a 15-channel profile. Channels 9-15 represent the native colors of the fixture and allow the operator to adjust individual color channels to fine tune the color output.
Strobe		Variable strobe control: 0% is no strobe. The fixture output will strobe more rapidly as the strobe channel value approaches 100%.	

## CONTROL OPTIONS

Daylight and Tungsten (only)

### **Quick Set-Ups**

Setting Title	Profile	Description	Typical Features
Studio	Studio	Enables control of intensity from luminaire U/I; no console required	<ul> <li>Linear dimming curve</li> <li>Regulated output for intensity stability</li> </ul>
Single Channel	Direct	For general purpose architectural use	<ul> <li>Standard dimming curve</li> <li>Regulated output for color consistency</li> </ul>
Stage	Direct	Matches conventional luminaire performance	<ul> <li>Incandescent dimming curve</li> <li>Regulated output</li> </ul>

### **DMX Input Channel Profiles**

DMX Profile	DMX Channels	Channel Assignments	Notes
Studio	3	1 – Intensity 2 – Strobe 3 – Fan Control	Control of parameters is also enabled from the luminaire's user interface. No console required.
Direct	3	1 – Intensity 2 – Strobe 3 – Fan Control	

10.6" 268mm

### PHOTOMETRY

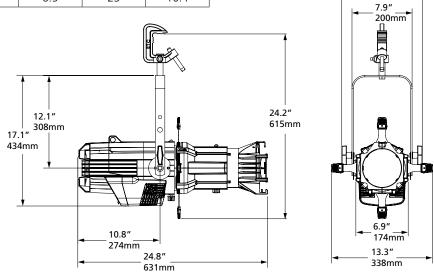
The Source Four LED Photometry Guide and complete IES photometry data files may be downloaded from the ETC website. Go to http://www.etcconnect.com

### PHYSICAL

### Source Fource LED Weights and Dimensions

	WEIG	GHT*	SHIPPING WEIGHT	
	lbs.	kgs	lbs	kgs
With Barrel	18.3	8.3	28	12.7
Without Barrel	14.3	6.5	23	10.4

\* Does not include mounting hardware or lens tube





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