Desire Series



Type(s)
Project
Date
Notes

GENERAL INFORMATION

The Selador Desire D40XTI brings the amazing control of the seven-color x7 Color System to your permanent application. With its IP66 rating, this fixture is ready for installation inside or outside – wherever you need it. The x7 Color System produces the widest range of spectrally-balanced saturated and tinted color choices available. The D40XTI offers a rugged die-cast enclosure, noiseless fan-free operation, and multiple lens options that can be changed on-site.

D40XTI LED Arrays

The D40XTI luminaire is available with any one of the following color arrays to best suit the intended application.

- D40XTI Vivid: Best all-around use as a color-changing wash fixture
- D40XTI Lustr+: Optimized with six colors plus high-intensity white LEDs to create an ideal frontlight wash fixture; full-range color, with an emphasis on lighter colors and white
- D40XTI Studio HD: Combines warm-white and cool-white LEDs with five carefully-chosen x7 LED colors, to fill in white LED spectral apps with variable color-temperature mixing for the richest variable white light possible in an LED fixture

Also available in the following static-white arrays:

- D40XTI Studio Daylight Contains forty 5600 K LEDs for high-intensity, non-variable cool-white output
- D40XTI Studio Tungsten Contains forty 3000 K LEDs for high-intensity, non-variable warm-white output

ORDERING INFORMATION

Selador Desire D40XTI

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
SELD40XTI-V	D40 Vivid wash fixture	7410A1101	7410A1101-0X	
SELD40XTI-L	D40 Lustr+ frontlight wash fixture	7410A1105	7410A1105-0X	
SELD40XTI-H	D40 Studio HD wash fixture	7410A1102	7410A1102-0X	
SELD40XTI-D	D40 Studio Daylight wash fixture	7410A1107	7410A1107-0X	
SELD40XTI-T	D40 Studio Tungsten wash fixture	7410A1106	7410A1106-0X	

Color options: -1 / -1X = white, -5 / -5X = silver gray/custom colors

Note: D40XTI luminaires ship with a hanging yoke, attached leads and a data- termination board. C-clamp, lenses or other accessories are not included.



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Desire Series

PRODUCT SPECIFICATIONS

Source

LED details	40 Lumileds LUXEON® Rebel LED		
Max lumens	Vivid: 2,252 Lustr+: 2,593 Studio HD: 3,194 Studio Daylight: 4,332 Studio Tungsten: 5,023		
Lumens per watt	Vivid: 23.6 Lustr: 25.2 Studio HD: 33.2 Studio Daylight: 43.1 Studio Tungsten: 52.8		
L70 rating (hours to 70% output)	50,000 hours		

Color

Colors used	Lustr+: Red, Amber, Green, Cyan, Blue, Indigo, White Vivid: Red, Red-Orange, Amber, Green, Cyan, Blue, Indigo Studio HD: Red, Amber, Green/Cyan, Blue, Warm White, Cool White Studio Daylight: White Studio Tungsten: White
Color temperature range	2,700–6,500 K
Calibrated array	Vivid: Yes Lustr: Yes Studio HD: Yes Studio Daylight: No Studio Tungsten: No
Red shift	Yes (not available on static-white)

Optical

Beam angle range	8°–17°
Gate size	N/A
Aperture size	7.5 in
Pattern projection	No
Pattern size	N/A
Camera flicker control/Hz range	Yes: 900–25,000 Hz
Notes	Secondary lenses available for multiple beam-spread options

Control

Input method	DMX512 via termination board		
Protocols	DMX512/RDM		
Modes (footprint)	See page 8		
RDM configuration	Yes		
UI type	None (configure via RDM)		
Local control	No		
Onboard presets	Yes		

Control

Onboard sequences	Yes
Onboard effects	No
Fixture-to-fixture control	No
Notes	15-bit virtual dimming engine

Electrical

Voltage range	100–240 VAC 50/60 Hz		
Input method	Waterproof, 72 in power lead Requires power from non-dimmable source		
Inrush	15 A at 120 V (First half-cycle) 40 A at 240 V (First half-cycle)		
Fixtures per circuit*	10 (15 A may be fed on same circuit)		
Wattage typical	110		
Current draw	1/0.5 A		

 $[\]star$ All measurements are for 120 V, 60 Hz. Results may vary in different regions.

Thermal

Ambient operating temp	-20°-40° C (-4°-104° F)
Fan (controllable)	No
Droop compensation	Yes
dB range	N/A
BTUs/hour	375.32

Physical

Materials	Die-cast, all metal housing		
Color options	Black, white, silver, or custom color		
Mounting options	Single-pole mount, wall or square pole mount, twin fixture pole mount		
IP rating	IP66 for exterior, wet location use		
Weight	6.8 kg (15 lb)		
Included accessories	Hanging yoke, termination board, accessory ring for installation of secondary lenses		
Notes	Cable diameter: Power 0.36 in / Data 0.34 in Effective projected area (EPA): 0.74		

Warranty

Fixture	5 years	
LED array	10 years	

Regulatory and Compliance

Approved regulatory	cETLus Listed
standards	Conforms to UL1598
	Certified to CSA C22.2 No. 250.0
	CE Compliant

Desire Series

PRODUCT FEATURES



NOISELESS, FAN-FREEConvection cooling for acoustically sensitive installations



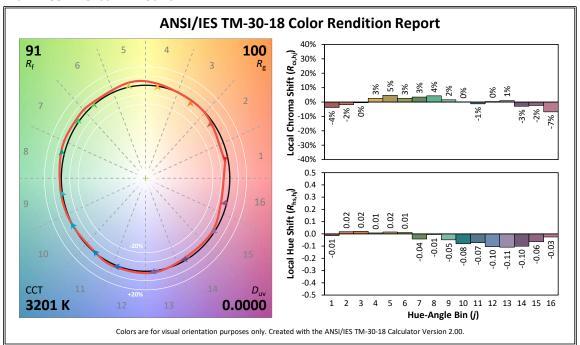
MULTIPLE LED ARRAY OPTIONSAlso available in static white arrays



POWER LEADRugged, durable fixture ETL 1598-rated for permanent indoor use and IP66-rated for long-term outdoor use.

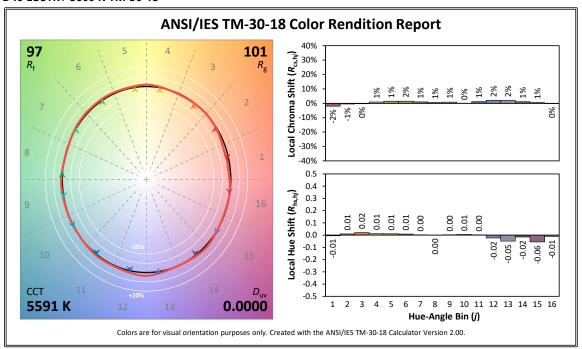
COLOR METRIC INFORMATION

D40XTI LUSTR+ 3200 K TM-30-18

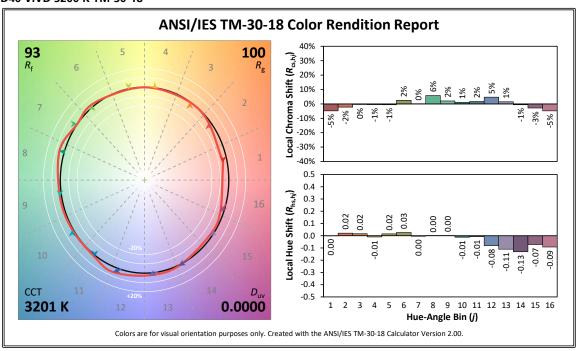


COLOR METRIC INFORMATION

D40 LUSTR+ 5600 K TM-30-18

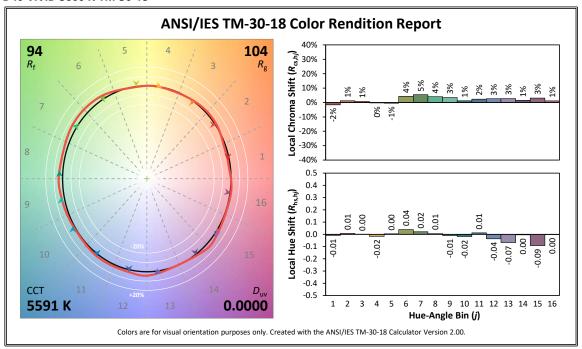


D40 VIVD 3200 K TM-30-18

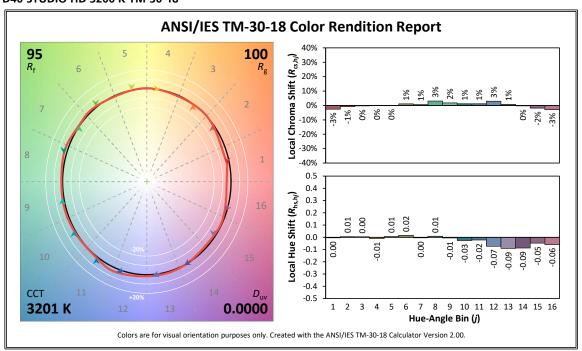


COLOR METRIC INFORMATION

D40 VIVID 5600 K TM-30-18

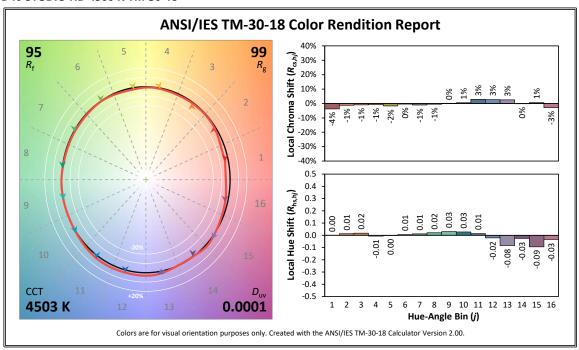


D40 STUDIO HD 3200 K TM-30-18

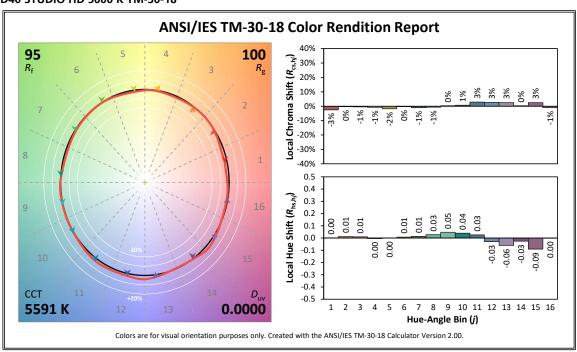


COLOR METRIC INFORMATION

D40 STUDIO HD 4500 K TM-30-18



D40 STUDIO HD 5600 K TM-30-18



ETC utilizes a nationally recognized 3rd party lab for luminaire testing according to IES LM-84. See etcconnect.com/About/News/ETC-Fixture-Ratings-and-Warranties-Extended.aspx.

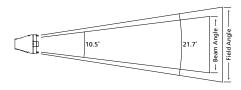
All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. In individual situations, LEDs will be used for different durations and levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustments to presets, cues or programs.

PHOTOMETRICS

D40XTI Vivid

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Full	10.5°	57,265	2,252	845	23.6
Regulated - Full	10.5°	47,449	1,866	700	22.7
Regulated 3200 K	10.5°	32,749	1,288	483	24.1
Regulated 5600 K	10.5°	33,876	1,332	500	22.2

Metric conversions: For meters, multiply feet by 0.3048. For lux, multiply foot-candles by 10.76.

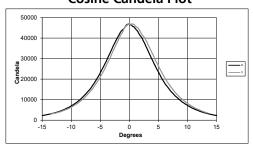


Throw Distance (d)	10.0 ft	15.0 ft	20.0 ft	30.0 ft	217.8 ft
	3.0 m	4.6 m	6.1 m	9.1 m	66.4 m
Field Diameter	3.8 ft	5.7 ft	7.7 ft	11.5 ft	
	1.2 m	1.8 m	2.3 m	3.5 m	_
Illuminance (fc)	474	211	119	53	1
Illuminance (lux)	5,107	2,270	1,277	567	10.76

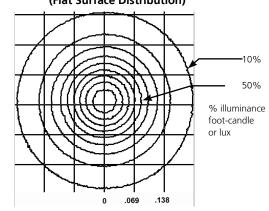
To determine center beam illumination in foot-candles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.308. For beam diameter at any distance, multiply by 0.145.

Cosine Candela Plot



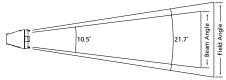
Iso-Illuminance Diagram (Flat Surface Distribution)



D40XTI Lustr+

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Full	10.5°	71,324	2,593	1,042	25.2
Regulated - Full	10.5°	64,071	2,329	936	25.0
Regulated 3200 K	10.5°	46,299	1,683	676	29.4
Regulated 5600 K	10.5°	40,173	1,460	587	26.8

Metric conversions: For meters, multiply feet by 0.3048. For lux multiply foot-candles by 10.76.



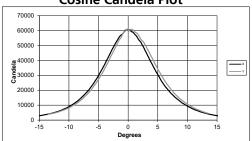
Throw Distance (d)	10.0 ft	15.0 ft	20.0 ft	30.0 ft	253.1 ft
	3.0 m	4.6 m	6.1 m	9.1 m	77.2 m
Field Diameter	3.8 ft	5.7 ft	7.7 ft	11.5 ft	
	1.2 m	1.8 m	2.3 m	3.5 m	_
Illuminance (fc)	641	285	160	71	1
Illuminance (lux)	6,897	3,065	1,724	766	10.76

To determine center beam illumination in foot-candles at any throw distance, divide candela by the throw distance squared.

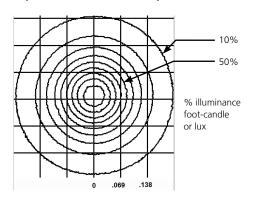
For field diameter at any distance, multiply distance by 0.301.

For beam diameter at any distance, multiply by 0.145.

Cosine Candela Plot



Iso-Illuminance Diagram (Flat Surface Distribution)

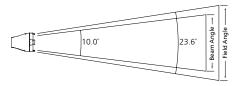


PHOTOMETRICS

D40XTI Studio HD

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Full	10.0°	65,670	2,492	939	24.0
Regulated - Full	10.0°	61,518	2,334	880	24.0
Regulated - 3200K	10.0°	42,089	1,597	602	23.4
Regulated - 5600K	10.0°	43,543	1,652	623	23.9

Metric conversions: For meters, multiply feet by 0.3048 For lux, multiply foot-candles by 10.76

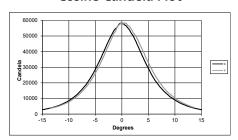


Throw Distance (d)	10.0 ft	15.0 ft	20.0 ft	30.0 ft	248.0 ft
	3.0 m	4.6 m	6.1 m	9.1 m	75.6 m
Field Diameter	4.2 ft	6.3 ft	8.3 ft	12.5 ft	
	1.3 m	1.9 m	2.5 m	3.8 m	_
Illuminance (fc)	615	273	154	68	1
lluminance (lux)	6,622	2,943	1,655	736	10.76

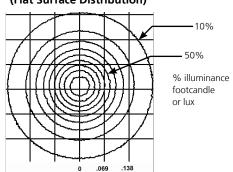
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared

For field diameter at any distance, multiply distance by 0.417 For beam diameter at any distance, multiply by 0.175

Cosine Candela Plot



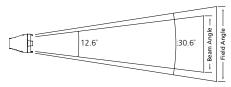
Iso-Illuminance Diagram (Flat Surface Distribution)



D40XTI Studio Daylight

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Full	12.6°	67,325	4,332	1,640	43.1
Regulated - Full	12.6°	61,743	3,973	1,504	43.0

Metric conversions: For meters, multiply feet by 0.3048 For lux, multiply foot-candles by 10.76

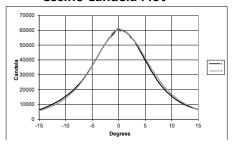


Throw Distance (d)	10.0 ft 3.0 m	15.0 ft 4.6 m	20.0 ft 6.1 m	30.0 ft 9.1 m	248.5 ft 75.7 m
Field Diameter	5.5 ft 1.7 m	8.2 ft 2.5 m	10.9 ft 3.3 m	16.4 ft 5.0 m	-
Illuminance (fc)	617	274	154	69	1
Illuminance (lux)	6,646	2,954	1,661	738	10.76

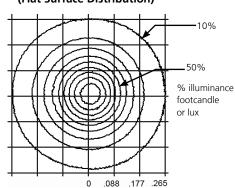
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared

For field diameter at any distance, multiply distance by 0.390 For beam diameter at any distance, multiply by 0.198

Cosine Candela Plot



Iso-Illuminance Diagram (Flat Surface Distribution)



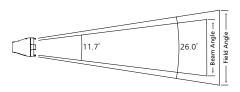
Desire Series

PHOTOMETRICS

D40XTI Studio Tungsten

Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Regulated - Full	11.7°	97,389	5,023	2,018	52.8

Metric conversions: For meters, multiply feet by 0.3048. For lux, multiply foot-candles by 10.76.

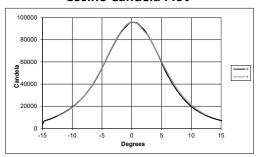


Throw Distance (d)	10.0 ft	15.0 ft	20.0 ft	30.0 ft	310.9 ft
	3.0 m	4.6 m	6.1 m	9.1 m	94.8 m
Field Diameter	4.6 ft	6.9 ft	9.2 ft	13.9 ft	
	1.4 m	2.1 m	2.8 m	4.2 m	_
Illuminance (fc)	966	429	242	107	1
Illuminance (lux)	10,402	4,623	2,600	1,156	10.76

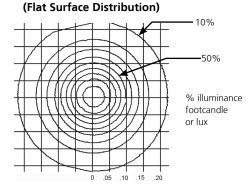
To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

For field diameter at any distance, multiply distance by 0.462. For beam diameter at any distance, multiply by 0.205.

Cosine Candela Plot



Iso-Illuminance Diagram



CRI AND CQS RATINGS

Desire 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 3200 K and 5600 K.

All D40XTI Studio luminaire versions provide excellent color rendering to the eye, particularly at higher color-temperature settings, such as 5600 K. 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.

Notes to videographers:

- All Desire fixtures use Luxeon Rebel ES emitters specified by the strictest binning standards. However, on-camera LED response varies
 with different cameras and settings. Daylight LEDs can appear slightly greener than other 5600 K sources on camera.
- Fixtures with non-variable, single-color daylight arrays, such as Studio Daylight, may use standard color-correction filters (Rosco 3314, Rosco 3316 or similar) to achieve the desired on-camera result.
- Camera tests using your specific setup are recommended to determine the best configuration.

NOTES ABOUT LED LUMINAIRES

All LED sources experience some reduction of light output and some color shift over time. LED output will vary with thermal conditions. Thermal conditions can be affected by ambient temperatures and orientation. See the <u>D40 Ambient Temperature and Power Budgeting Guide</u> for more details. 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 adjustments to presets, cues or programs.

Desire Series

ADDITIONAL ORDERING INFORMATION

Secondary Lens Options

The following lenses are cut for D40 fixtures and create round, linear or oblong field patterns as described below. These lenses are not sized for use in Selador Classic fixtures.

Note: This is the same material as Selador Classic lenses.

MODEL	DESCRIPTION	PART NUMBER
Narrow Linear Field	Linear lenses may be combined to create desired field size	
D40XTI-LN	D40XTI Narrow, Linear Diffuser Kit	7410K1062
D40XTI-LM	D40XTI Medium, Linear Diffuser Kit	7410K1063
D40XTI-LW	D40XTI Wide, Linear Diffuser Kit	7410K1064
D40XTI-LXW	D40XTI Xtra Wide, Linear Diffuser Kit	7410K1065
Round Field	Any one of the following round lenses may be installed permanently in the fixture at the factory as a special order	
D40XTI-RN	D40XTI Narrow, Round Diffuser Kit, black	7410K1054
D40XTI-RM	D40XTI Medium, Round Diffuser Kit, black	7410K1055
D40XTI-RW	D40XTI Wide, Round Diffuser Kit, black	7410K1056
DX40XTI-RXW	D40XTI Xtra Wide, Round Diffuser Kit, black	7410K1057
Oblong Field		
D40XTI-ON	D40XTI Narrow, Oval Diffuser Kit, black	7410K1058
D40XTI-OM	D40XTI Medium, Oval Diffuser Kit, black	7410K1059
D40XTI-OW	D40XTI Wide, Oval Diffuser Kit, black	7410K1060

Desire lenses compared to Source Four PAR EA

Fixture Accessories

MODEL	DESCRIPTION	PART NUMBER
D40XTIWM	Wall-mount kit (black)	7410K1050
D40XTIWM-1	Wall-mount kit (white)	7410K1050-1
D40XTISPM	Single pole-mount kit (black)	7410K1051
D40XTISPM-1	Single pole-mount kit (white)	7410K1051-1
D40XTIDPM	Double pole-mount kit (black)	7410K1052
D40XTIDPM-1	Double pole-mount kit (white)	7410K1052-1
D40XTIL	Egg crate (black)	7410K1066
D40XTIL-1	Egg crate (white)	7410K1066-1
D40XTIHH	Half shield (black)	7410K1067
D40XTIHH-1	Half shield (white)	7410K1067-1
400CC	C-clamp (does not ship with fixture)	7060A2009 (not CE)
400SC	Safety cable (32 in)	7060A1022
D40XTIG	D40XTI Glass Lens	7410A4001

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CONTROL OPTIONS

User settings on D40XTI fixtures allow multiple operational modes and settings for either console operation via DMX protocol or standalone operation. The expanded LCD display provides easy navigation to all possible settings and choices. Some of the setting options are:

- Multiple DMX options, 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 standalone (no console required) operation
- White-point selection: white light and color behavior based on a specific color-temperature white light, such as 3200 K or 5600 K
- 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 D40XTI.

Quick Setups

Use one of five Quick Setups on the fixture display to get started. You can modify the setting as needed.

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	Incandescent dimming curve Regulated output for color consistency 3250 K white-point setting
XT Arch	HSI	Exterior architectural lighting: Provides a high degree of color consistency in high ambient-temperature environments	Standard dimming curve Protected output 3200 K white-point setting
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 5600 K white-point setting
Studio	Studio	Video/film lighting: 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	DMX	Channel	Notes		
Profile	Channels	Assignments	Notes		
Direct	9	1 – Red 2 – Orange (white if Lustr+) 3 – Amber 4 – Green 5 – Cyan 6 – Blue 7 – Indigo 8 – Intensity 9 – Strobe	Direct control of each individual color with a separate master-intensity channel. Color calibration of LEDs is not active in this mode. The nine-channel profile will produce the highest-quality color crossfades		
HSI	5 1 – Hue (coars 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe		High-resolution hue (two channels), saturation, and intensity control. HSI mode will produce color crossfades around the color space		
HSIC	6	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – 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 crossfade performance is the same as EHSI		
RGB	5 (Ch. 4 not used)	1 – Red 2 – Green 3 – Blue 4 – n/a 5 - Strobe	Effectively addresses all seven colors via three channels of control. RGB profile will produce medium-quality color crossfades		
Studio	3	1 – Intensity 2 – Color Point (CCT) 3 – Tint	Controls fixture as a white-light unit. If no DMX, (console input, for example) is present, the fixture can be adjusted for these three parameters on the user interface at the back of the unit		
Additional	orofile options	5			
Plus 7		available in RGB,	color-control channels are HSI, HSIC, and Studio profile aple, HSI with 'Plus 7' enabled annel profile:		
		1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – n/a 7 – Plus 7 Control on/off 8 – Red 9 – Orange (white if Lustr+) 10 – Amber 11 – Green 12 – Cyan 13 – Blue 14 – Indigo	The desired color and intensity are achieved by using the HSI or RGB channels. Placing channel seven at a value over 51% gives the fixture a 14-channel profile. Channels 8-14 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

Studio Daylight and Studio Tungsten only

Quick Setups

Setting Title	Profile	Description	Typical Features*
Studio	Studio	Simple mode for linear intensity control	Linear dimming curve Regulated output for intensity stability
Single Channel	Direct	For general-purpose architectural use	Standard dimming curve Regulated output for consistency
Stage	Direct	Matches conventional luminaire performance	Incandescent dimmingcurve Regulated output

DMX Input Channel Profiles

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

LENS INFORMATION

Desire diffusion angle measurements

NOMI	NAL								
	No Lens	Very Narrow	Narrow	Medium	Wide	Extra Wide	Narrow Oval	Medium Oval	Wide Oval
D40XTI		25°	35°	45°	75°	N/A	20° x 40°	30° x 70°	35° x 80°
LUSTR+	22	26	27	47	79	101	23 x 43	35 x 63	35 x 63
VIVID	22	26	27	49	80	102	23 x 43	35 x 63	35 x 63
STUDIO HD	24	26	26	48	79	102	23 x 43	35 x 63	35 x 63
STUDIO D	31	33	42	51	82	106	25 x 48	38 x 68	38 x 68
STUDIO T	26	29	30	51	82	105	22 x 42	36 x 65	70 x 97

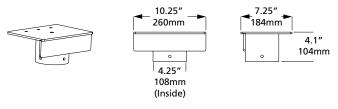
Values in black refer to old lens descriptions.

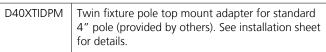
Desire Series

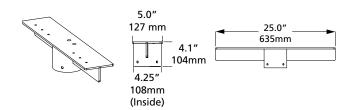
MOUNTING OPTIONS

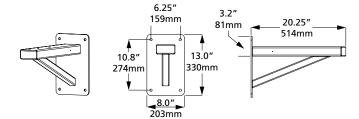
MODEL	DESCRIPTION
D40XTISPM	Single-pole-mount pole-top mounting adapter for 4" pole (provided by others). See installation sheet for details.

MODEL	DESCRIPTION
D40XTIWM	Wall or square pole mount. See installation sheet for details.









Desire Series

PHYSICAL

Selador D40XTI Weights and Dimensions

Total weight depends on how the individual fixture is configured.

WEIG	SHT*	SHIPPING WEIGHT		
lb	kg	lb	kg	
15	6.8	18	8.2	

^{*} Does not include mounting hardware

