

Desire Series



Type(s)	
Project	
Date	
Notes	

GENERAL INFORMATION

ETC's Desire Series D40XT puts the seven-color x7 system into a round theatrical wash light fully sealed and rated for IP66 outdoor use. The x7 Color System produces the widest range of spectrally-balanced saturated and tinted color choices available. The D40XT offers a rugged die-cast enclosure, noiseless fan-free operation, multiple lens options and advanced user interface. Its watertight construction makes it ideal for outdoor events and installations.

D40XT LED ARRAY OPTIONS

D40XT fixtures are based on the x7 Color System that uses seven different LED colors to achieve true, usable broad-spectrum color. The D40XT luminaire is available with any one of the following x7 color arrays to best suit the intended application.

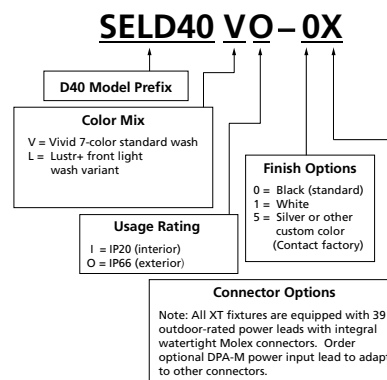
- D40XT Vivid – the x7 Color System array balanced for best all-around use as a color-changing wash fixture
- D40XT Lustr+ – optimized with six colors plus high-intensity white LEDs to create an ideal front light wash fixture. Full range color, with an emphasis on lighter colors and white.

ORDERING INFORMATION

Selador D40XT

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
SELD40VO	D40 Vivid wash fixture – for high-intensity color mixing across the spectrum for widest color wash use	7410A1001-0X	7410A1001-0X	
SELD40LO	D40 Lustr+ front light wash fixture – optimized for skin tones and light tints for use as a theatrical front light	7410A1005-0X	7410A1005-0X	

Note: D40XT luminaires ship with hanging yoke and attached leads equipped with watertight Molex power connectors and watertight DMX connectors. C-clamp, lenses or separate power lead are not included. Order DPA-M Bare-end to Molex adaptors separately for XT luminaires if required.



PRODUCT SPECIFICATIONS

Source

LED details	40 Lumileds LUXEON® Rebel 2.5 W LED
Max lumens	Vivid: 2,252 Lustr+: 2,593
Lumens per watt	Vivid: 23.6 Lustr+: 25.2
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
Color temperature range	2,700–6,500 K
Calibrated array	Vivid: Yes Lustr: Yes
Red shift	Yes

Optical

Beam angle range	8°–71°
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 watertight 5-pin XLR
Protocols	DMX512/RDM
Modes (footprint)	See page 4
RDM configuration	Yes
UI type	LCD
Local control	Yes
Onboard presets	Yes
Onboard sequences	Yes
Onboard effects	No
Fixture-to-fixture control	Yes
Notes	15-bit virtual dimming engine

Electrical

Voltage range	100–240 VAC 50/60 Hz
Input method	Waterproof, 39 in power in and thru
Inrush	15 A at 120 V (First half-cycle) 40 A at 240 V (First half-cycle)
Fixtures per circuit*	9 (15 A power thru connector) 10 (R20 module or similar)
Wattage typical	110
Current draw	1/0.5

*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	Yoke
IP rating	IP66 for exterior wet location use
Weight	6.4 kg (14 lb)
Included accessories	Hanging yoke, 5 ft power cord, media holder

Warranty

Fixture	5 years
LED array	10 years

Regulatory and Compliance

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

PRODUCT FEATURES

**NOISELESS, FAN-FREE**

Convection cooling for acoustically sensitive installations

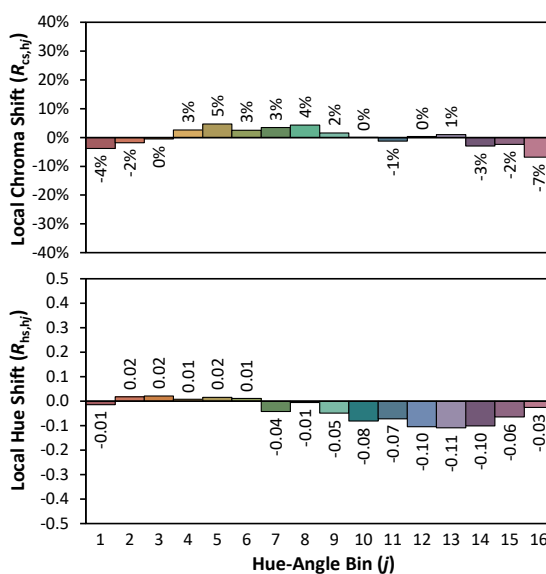
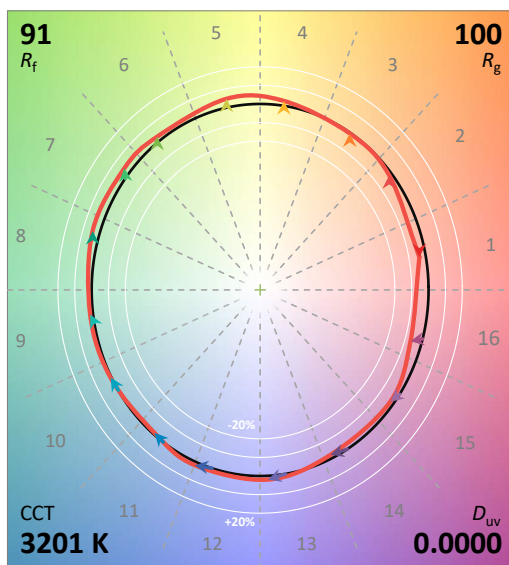
**EXCLUSIVE X7 COLOR SYSTEM**

Combining a balanced recipe of seven LED colors to give you the most color mixing options possible.

**WATERTIGHT FIVE-PIN XLR**

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

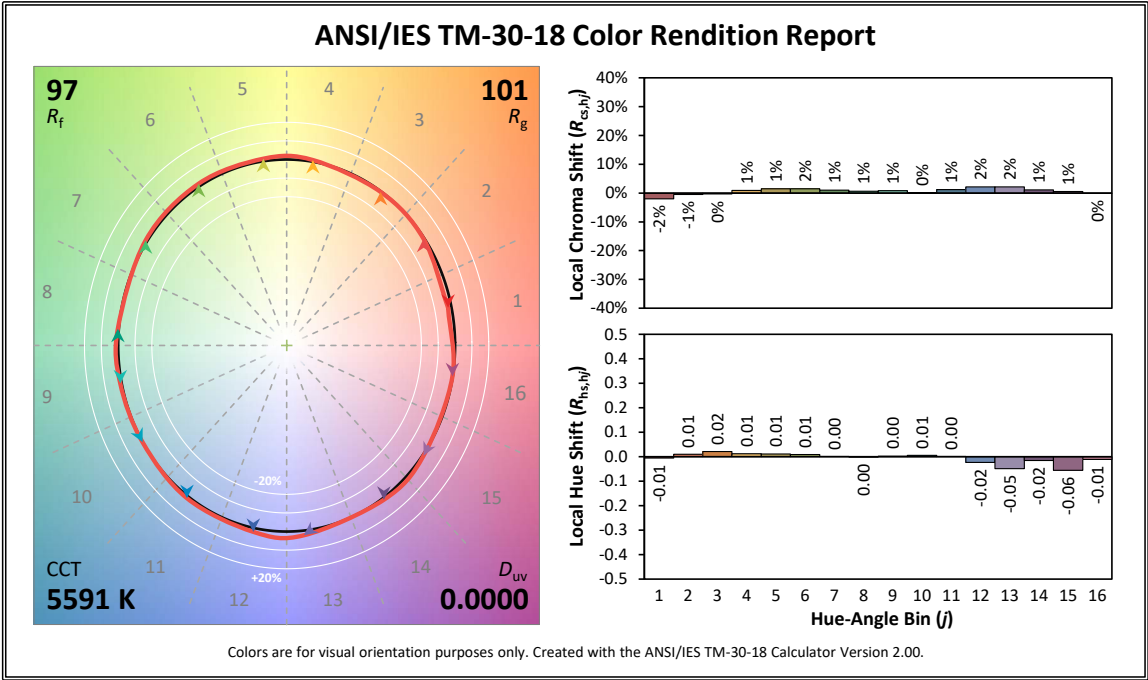
COLOR METRIC INFORMATION

D40 LUSTR+ 3200 K TM-30-18**ANSI/IES TM-30-18 Color Rendition Report**

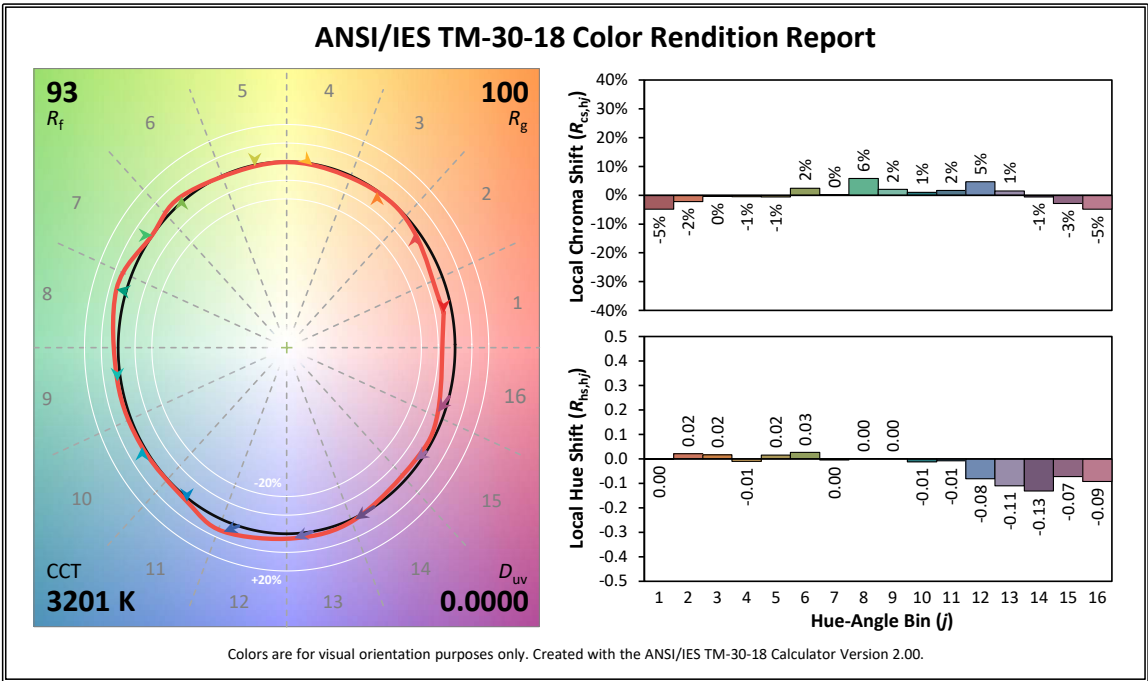
Colors are for visual orientation purposes only. Created with the ANSI/IES TM-30-18 Calculator Version 2.00.

COLOR METRIC INFORMATION

D40 LUSTR+ 5600 K TM-30-18

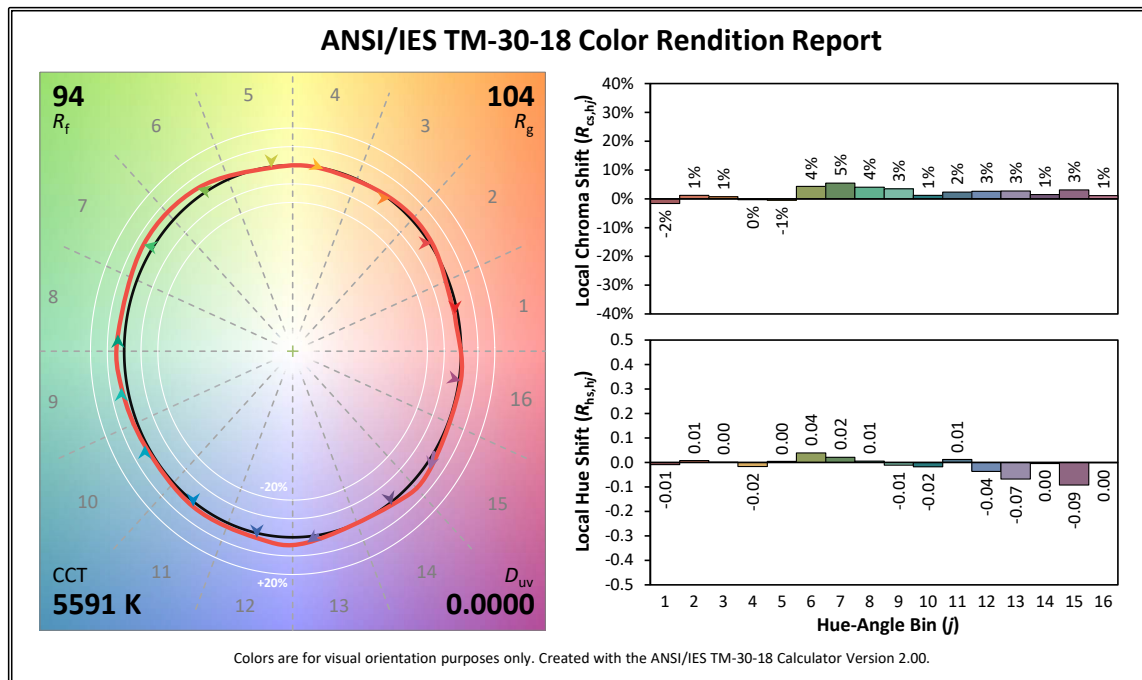


D40 VIVID 3200 K TM-30-18



COLOR METRIC INFORMATION

D40 VIVID 5600 K TM-30-18



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.

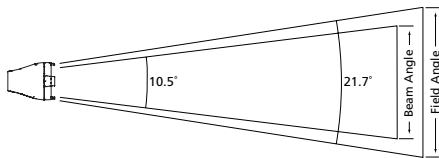
All D40 luminaire versions provide excellent color rendering to the eye, particularly at higher color-temperature settings, such as 5600 K. In most cases, the D_{uv} is 0.000. A D_{uv} rating of 0.000 indicates that the color mix used is exactly on the black body line, with no green or magenta tint.

PHOTOMETRICS

D40XT 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	438	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.

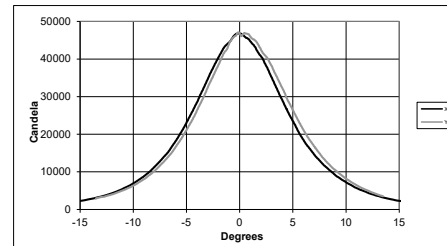
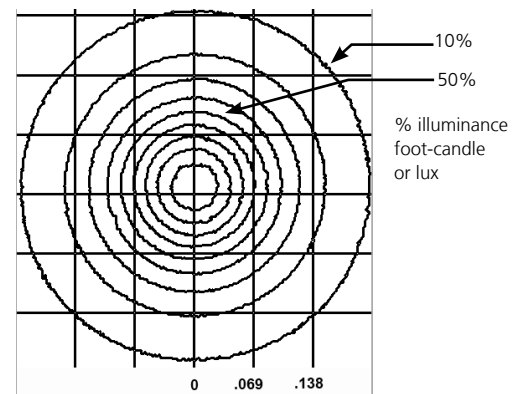


Throw Distance (d)	10.0 ft 3.0 m	15.0 ft 4.6 m	20.0 ft 6.1 m	30.0 ft 9.1 m	217.8 ft 66.4 m
Field Diameter	3.8 ft 1.2 m	5.7 ft 1.8 m	7.7 ft 2.3 m	11.5 ft 3.5 m	—
Illuminance (fc)	474	211	119	53	1
Illuminance (lux)	5,107	2,270	1,277	567	10.76

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 0.383.
For beam diameter at any distance, multiply by 0.184.

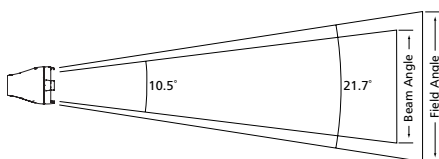
Cosine Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

D40XT 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 footcandles by 10.76.

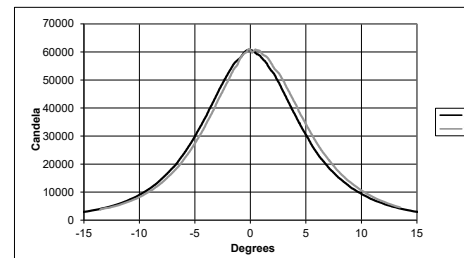
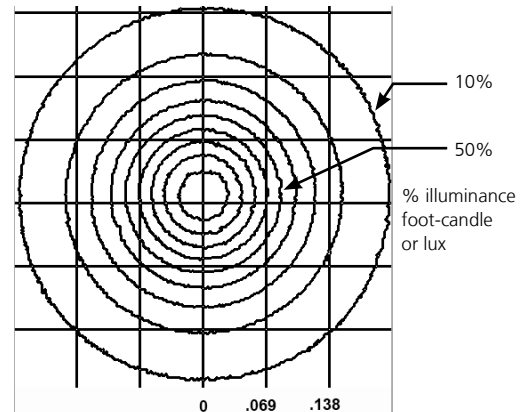


Throw Distance (d)	10 ft 3.0 m	15.0 ft 4.6 m	20.0 ft 6.1 m	30.0 ft 9.1 m	253.1 ft 77.2 m
Field Diameter	3.8 ft 1.2 m	5.7 ft 1.8 m	7.7 ft 2.3 m	11.5 ft 3.5 m	—
Illuminance (fc)	641	285	160	71	1
Illuminance (lux)	6,987	3,065	1,724	766	10.76

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 0.383.
For beam diameter at any distance, multiply by 0.184.

Cosine Candela Plot

Iso-Illuminance Diagram
(Flat Surface Distribution)

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		
SELLN-7.5	7.5 in narrow lens	7410K1018	
SELLM-7.5	7.5 in medium lens	7410K1019	
SELLW-7.5	7.5 in wide lens	7410K1020	
SELLEW-7.5	7.5 in extra wide lens	7410K1021	
Round Field	Any one of the following round lenses may be installed permanently in the fixture at the factory as a special order		
SELRN-7.5	7.5 in narrow lens (round field)	7410K1011	
SELRM-7.5	7.5 in medium lens (round field)	7410K1012	
SELRW-7.5	7.5 in wide lens (round field)	7410K1013	
SELRXW-7.5	7.5 in extra wide lens (round field)	7410K1039	
Oblong Field			
SELON-7.5	7.5 in narrow lens (oblong field)	7410K1014	
SELOM-7.5	7.5 in medium lens (oblong field)	7410K1015	
SELOW-7.5	7.5 in wide lens (oblong field)	7410K1016	

[Desire lenses compared to Source Four PAR EA](#)

LENS INFORMATION

Desire diffusion angle measurements

NOMINAL									
	No Lens	Very Narrow	Narrow	Medium	Wide	Extra Wide	Narrow Oval	Medium Oval	Wide Oval
D40XT		25°	35°	45°	75°	N/A	20° x 40°	30° x 70°	35° x 80°
LUSTR+	22	26	32	54	77	97	29 x 43	33 x 63	33 x 97
VIVID	22	26	32	54	77	97	29 x 43	33 x 63	33 x 97
STUDIO HD	22	26	32	54	77	97	29 x 43	33 x 63	33 x 97
STUDIO D	31	33	38	60	81	97	36 x 48	33 x 63	35 x 97
STUDIO T	31	33	38	60	81	97	36 x 48	33 x 63	35 x 97

Values in black refer to old lens descriptions.

ADDITIONAL ORDERING INFORMATION

Power Input Cables

Use information below to order 5 ft power input leads with factory fitted connectors. Desire D40XT luminaires ship with 39 in outdoor-rated power leads and integral watertight Molex connectors. Order optional DPA-M power cable to adapt to other input connectors

MODEL	DESCRIPTION	
DPAM-5*	5XT Outdoor UL Power Lead – 1 m Molex Female to bare end	
DPAM-25*	XT Outdoor UL Power Lead-Long – 25 ft Molex Female to bare end	

*Not included with fixture.

Power Pass Thru

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

MODEL	DESCRIPTION	PART NUMBER	
DPJM-5	XT Outdoor UL 5 ft Molex to Molex Extension	W6437	
DPJM-10	XT Outdoor UL 10 ft Molex to Molex Extension	W6438	

Fixtures Accessories

MODEL	DESCRIPTION	PART NUMBER	
SELD40FSY	Yoke with floor-stand attachment	7410K1003	
400BD*	Barn door (Use only as a flexible top hat to diminish aperture glare. Not for beam shaping)	PSF1019	
407CF*	Color frame (use for round and oblong lenses)	7061A3007	
400L*	Egg crate louver	PSF1028	
400PTH3*	Top hat 3 in tube	PSF1022	
400PTH6*	Top hat 6 in tube	PSF1023	
400PHH*	Half hat 6 in tube	PSF1027	
400CC *	C-Clamp (does not ship with fixture)	7060A2009 (not CE)	
400SC *	Safety cable (32 in)	7060A1022	

*Note: Accessories are not intended for permanent installations.

CONTROL OPTIONS

User settings on D40XT 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 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 stand-alone (no console required) operation
- White point selection – white light and color behavior based on a specific color temperature white light, i.e., 3200 K, 5600 K, 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 D40XT.

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 Profile	DMX Channels	Channel 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 cross-fades.
HSI	5	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe	High resolution hue (two-channels), saturation, and intensity control. HSI mode will produce color cross-fades 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 cross-fade 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 cross-fades
Studio	3	1 – Intensity 2 – Color Point (CCT) 3 – Tint	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 UI at the back of the unit.
Additional profile options			
Plus 7		Seven additional color control channels are available in RGB, HSI, HSIC, and Studio profile settings. For example HSI with ‘Plus 7’ enabled becomes a 14-channel 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 is 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%.	

PHYSICAL

Selador D40XT Weights and Dimensions

WEIGHT*		SHIPPING WEIGHT	
lb	kg	lb	kg
14	6.4	17	7.8

* Does not include mounting hardware

