

SYNERGY5
PROFILE

THE TOUCH OF LIGHT



SYNERGY5

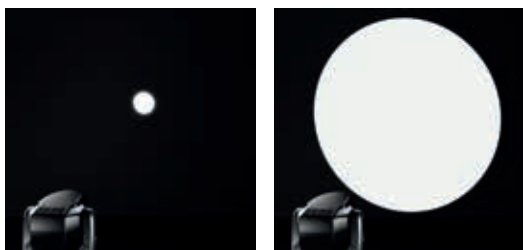
PROFILE



HIGH POWER COMPACT LED
MOVING HEAD WITH BUILT-IN
ROTATING FRAMING SYSTEM

POWERFUL OUTPUT WIDE ZOOM RANGE

A custom-designed 4.6° to 43° zoom system (over 1:9 ratio) with auto focus is coupled with a 420 W pure white LED source (7000 K 16,500 Lumens output). This carefully studied match delivers a massive 49,900 Lux luminosity (4.6° @ 5 m) with an evenly diffused and flat beam.



49,900 Lux - 4.6° / 5m - Ø 40cm 1,483 Lux - 43° / 5m - Ø 394cm

Gobos are perfectly focused at any zoom angle and at any distance. The linear Frost filter lets you change from hard-edge to soft-edge projections.

The 'softener filter' eliminates the shadows typically created by the latest-generation multi-chip LEDs, giving a perfectly homogeneous projection.



ROTATING FRAMING SYSTEM

The framing system of SYNERGY 5 PROFILE features 4 blades operating on 4 discrete planes.

This setup allows each blade to fully enter / exit the visual field with a real 'curtain' effect, and rotate 60° (+/- 30°). Also the whole framing system can rotate 90° (+/- 45°).

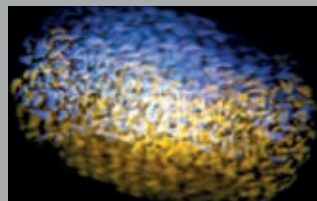
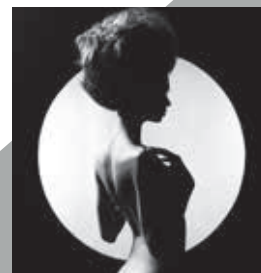
This way you can generate any 3 or 4 sides regular or irregular polygons, and change smoothly or super-fast to each other.

Framing system indexing ensures a precise playback of any cue.

SELECTABLE CRI >90 OR >75

SYNERGY 5 PROFILE offers two CRI options (DMX-selectable):

- CRI >90 for life-like colors and beautifully natural skin tones in theatre and TV shootings;
- CRI >75 for a terrific luminosity in large concerts and events.



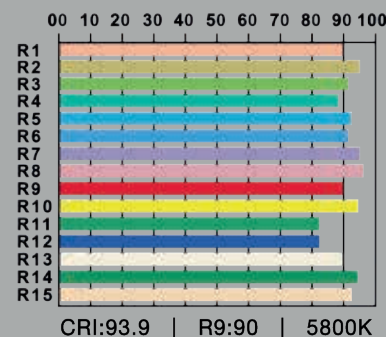
DYNAMOVE FX ENGINE

Dynamove is a revolutionary FX engine which delivers a range of stunning 3D-like dynamic animation effects. Powerful macros put at your fingertips a variety of ready-to-use multi-layer lighting effects.

A FAITHFUL REPRODUCTION OF COLORS

The light generated by SYNERGY has a CRI >90, with component R9 (red) - measured with a spectrophotometer - greater than 80.

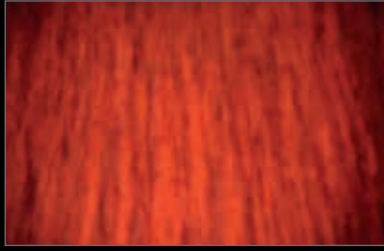
A high R9 value is decisive for an exact perception of any nuance. In fact, a percentage of red is present in many colors, and its accurate rendering is essential for their faithful reproduction.



VIRTUAL ANIMATION WHEEL



WATER



FIRE



CLOUD



FLAME

SYNERGY 5 PROFILE introduces the ground-breaking Virtual Animation Wheel; this new effect fully replaces the classic animation wheel, and lets you create a range of outstanding dynamic backgrounds.

ADVANCED COLOR MIXING

The right color for your lighting design is always at hand. Just choose it in the built-in virtual color palette of gel filters emulation.

19 FIRE	132 MEDIUM BLUE
20 MEDIUM AMBER	136 PALE LAVENDER
25 SUNSET RED	137 LAVENDER
68 SKY BLUE	138 PALE GREEN
101 YELLOW	139 PRIMARY GREEN
104 DEEP AMBER	147 APRICOT
105 ORANGE	151 GOLD TINT
106 PRIMARY RED	154 PALE ROSE
111 DARK PINK	156 CHOCOLATE
113 MAGENTA	181 CONGO BLUE
117 STEEL BLUE	200 DOUBLE CT BLUE
118 LIGHT BLUE	201 FULL CT BLUE
122 FERN GREEN	204 FULL CT ORANGE
126 MAUVE	341 PLUM

SOFTENER FILTER

The 'softener filter' eliminates the shadows typically created by the latest-generation multi-chip LEDs, giving a perfectly homogeneous projection.

Hi-Q DIMMING

The patented 'Hi-Q Dimming' technology, that only DTS uses in its products, guarantees a perfect linearity in the increase / attenuation of brightness of multi-chip white LED sources – even at low dimming levels – without 'steps' between adjacent values; light projections are therefore completely flicker-free in television shootings.

EXCEPTIONALLY SILENT OPERATING MODE

The efficient dissipation system of the SYNERGY ensures a constant silent operation.

Under normal operation conditions at full power (16,500 Lumens output) the measured noise level is only 37 dBA @ 1 m (fans setting = Silent).

You can switch directly from Silent mode to Standard via DMX, as needed.

	FANS SETTING	
	STANDARD (DEFAULT)	SILENT
IDLE	38.2 dBA	34.9 dBA
FULL POWER	38.6 dBA	35.0 dBA

	FANS SETTING	
	STANDARD (DEFAULT)	SILENT
IDLE	39.2 dBA	35.8 dBA
FULL POWER	39.5 dBA	36.3 dBA

	FANS SETTING	
	STANDARD (DEFAULT)	SILENT
IDLE	38.8 dBA	36.0 dBA
FULL POWER	39.0 dBA	36.2 dBA

	FANS SETTING	
	STANDARD (DEFAULT)	SILENT
IDLE	40.2 dBA	37.3 dBA
FULL POWER	40.1 dBA	37.4 dBA

TOTAL CONTROL & NETWORKING

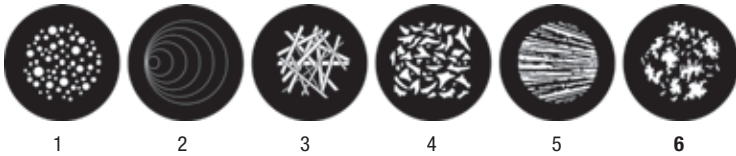
Art-Net 4 and sACN are on board. Supporting the latest versions of these protocols means to be geared for the large scale installations of the future and for top-end Ethernet networks.

PHOTOMETRIC DATA

BEAM ANGLE 4.6°		mt 5 ft 16.40	mt 10 ft 32.81	mt 15 ft 49.21	mt 20 ft 65.62	mt 25 ft 82.02
	Lux Center [lx]	49940	12485	5549	3121	1998
	Foot Candles [fc]	4641	1160	516	290	186
	Diameter [cm]	40	80	120	161	201
	Diameter [ft]	1.32	2.64	3.95	5.27	6.59

BEAM ANGLE 43°		mt 3 ft 9.84	mt 6 ft 19.68	mt 9 ft 29.53	mt 12 ft 39.37	mt 15 ft 49.21
	Lux Center [lx]	4119	1030	458	257	165
	Foot Candles [fc]	383	96	43	24	15
	Diameter [cm]	236	473	709	945	1182
	Diameter [ft]	7.75	15.51	23.26	31.02	38.77

ROTATING GOBO WHEEL



COLOR WHEEL



OUTPUT

- 420 W pure white LED source (7000 K 16,500 Lumens output)
- Double CRI (DMX-selectable): CRI >90 or CRI >75
- Average LED life: 50,000 hours (70% lumen output)

OPTICAL GROUP

- 49,900 Lux (4.6°@ 5 m)
- 4.6° - 43° linear zoom with autofocus
- Linear soft frost filter (Medium and Heavy frost filters available on demand)
- Electronic dimmer / shutter / strobe
- (0.3 to 33.3 flash/sec)

COLOR GENERATION

- Linear CMY
- Linear CTO (3000 K – 7000 K)
- Gel filter emulation
- 6-color wheel
- Two-color generation

DYNAMIC EFFECTS

- Dynamove FX Engine (DTS Patent)
- Virtual Animation Wheel
- Customizable rotating 6-gobo wheel
- Circular 24-facet rotating prism
- Linear 6-facet rotating prism

ROTATING FRAMING SYSTEM

- 4-blade rotating framing system
- Real 'curtain' effect for each blade
- 60° rotation for each blade (+/- 30°)
- 90° full system rotation (+/- 45°)

CONTROL

- LCD graphic display + 4 soft-keys; Auto-flip; Key-Lock function
- Standard and Silent operation modes
 - Noise level at Silent mode: 37dBA @ 1m (normal operation, full power)
- Art-Net 4, sACN, RDM/DMX protocols
- Firmware updatable via DTS firmware uploader dongle

- Li-Fe backup battery for controlling the display settings even when the unit is not powered

DMX

- 44 DMX channels (default)
- 53 DMX channels
 - 16 bit index for insertion and rotation of each blade
 - 16 bit index for blade system rotation

PAN & TILT

- Pan: 540°: 2.7 sec.
Tilt: 240°: 1.6 sec.
- Tri-phase stepper motor technology; 16-bit resolution
- Selectable speed ranges
- Pan / Tilt lock

POWER SUPPLY

- Wide-range 100-277Vac 50-60 Hz
- Power consumption: 550 W max
- Power Factor: PF >0.90

CONNECTIONS

- DMX: XLR 3-pole and 5-pole In / Out panel connectors
- Power supply: powerCON TRUE1 In / Out panel connectors
- Art-Net / sACN: etherCON RJ45 connector

CIRCUITS PROTECTION

- Overvoltage and overtemperature circuits protection

PHYSICAL

- IP20
- Weight: 35 Kg (77 lbs)
- Finishing: Black

OPERATING TEMPERATURE

- 10° / 45° C

DTS reserves the right to modify any technical specification without prior notice.

DMX CHANNELS

- | | | |
|-------------------|----------------------------|---------------------------|
| 01 PAN msb | 16 GEL FILTERS EMULATION | 31 DYNAMOVE MACROS |
| 02 PAN lsb | 17 GOBO | 32 BLADES EFFECTS SPEED / |
| 03 TILT msb | 18 GOBO ROTATION/INDEX msb | DYNAMOVE MACROS SPEED |
| 04 TILT lsb | 19 GOBO ROTATION/INDEX lsb | 33 PRISM MODE |
| 05 SPEED MOVEMENT | 20 GOBO SHAKE | 34 PRISM 1 POSITION |
| 06 RESERVED | 21 BLADES SYSTEM ROTATION | 35 PRISM 1 ROTATION/INDEX |
| 07 DIMMER msb | 22 BLADE 1 INSERTION | 36 PRISM 2 POSITION |
| 08 DIMMER lsb | 23 BLADE 1 ROTATION | 37 PRISM 2 ROTATION/INDEX |
| 09 SHUTTER | 24 BLADE 2 INSERTION | 38 SOFTEN FILTER |
| 10 COLOUR WHEEL | 25 BLADE 2 ROTATION | 39 FROST |
| 11 COLOUR MODE | 26 BLADE 3 INSERTION | 40 FOCUS msb |
| 12 CYAN | 27 BLADE 3 ROTATION | 41 FOCUS lsb |
| 13 MAGENTA | 28 BLADE 4 INSERTION | 42 ZOOM |
| 14 YELLOW | 29 BLADE 4 ROTATION | 43 FIXTURE CONTROL |
| 15 CTO | 30 BLADE EFFECTS | 44 RESET |



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