

MECHANICAL SPECIFICATIONS

DIMENSIONS

FIXTURE		BOXED FOR SHIPPING	
in:	11.6 x 19.6 x 22.4	in:	19 x 26 x 31
mm:	295.1 x 497.5 x 569.6	mm:	480 x 657 x 784

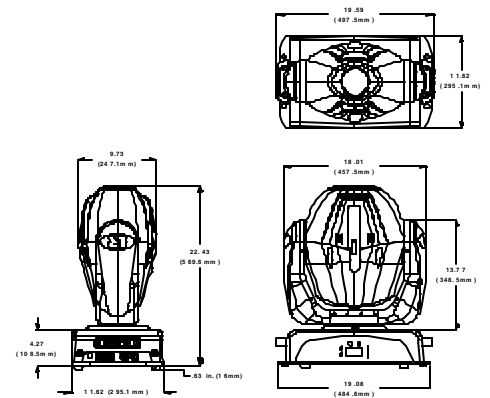
Weight: 22.4 kg (49.3 lb) **Weight:** 30 kg (67 lb)

Mounting Information

Studio Spot 250 may be mounted by attaching suitable clamps with locking washers through the center holes on the base of the fixture. Cheeseborough truss clamps and 1/2" nut/bolt sets may be purchased separately. Studio Spot 250 can also be stood on its rubber feet on a sturdy, stable surface.

Colors available: Black

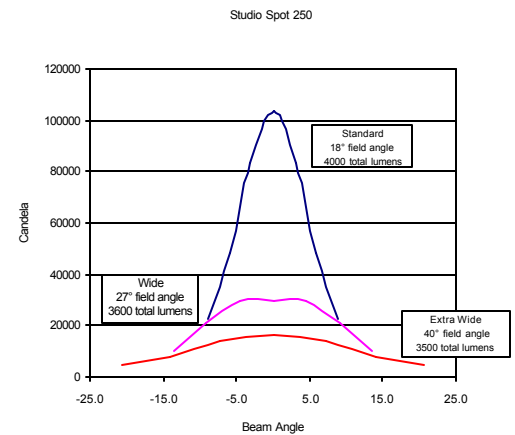
Turning Radius: 17.75 in (450.8 mm)



ELECTRICAL SPECIFICATIONS / LIGHT SOURCE

Lamp	MSD 250/2
Power Consumption	100V, 50HZ @ 3.75A 100V, 50HZ @ 3.13A 230V, 50HZ @ 1.6A 100V, 60HZ @ 3.75A 120V, 60HZ @ 3.13A 208V, 60HZ @ 1.8A
Rated Power	375W
Power Factor	120V, 60HZ: 0.96 230V, 50HZ: 0.90
Light Output	4000 ANSI lumens
Lamp Life	2000 hours
Color Temperature	6500K

Throw	Center Beam Candela	Beam Angle Degrees	Field Angle Degrees
	Center Beam	Beam Diameter	Field Diameter
5	4,200	1.1	1.6
10	1,050	2.1	3.2
15	467	3.2	4.8
20	263	4.2	6.3
25	168	5.3	7.9
30	117	6.3	9.5
35	86	7.4	11.1
40	66	8.4	12.7
45	52	9.5	14.3
50	42	10.5	15.8
55	35	11.6	17.4
60	29	12.6	19.0
65	25	13.7	20.6
70	21	14.7	22.2
75	19	15.8	23.8
80	16	16.8	25.3
85	15	17.9	26.9
90	13	18.9	28.5
95	12	20.0	30.1
100	11	21.0	31.7



For Metric figures, read "Center Beam" values as in lux, and the throw and diameters will be in meters.
For US figures, read "Center Beam" values as in footcandles, and the throw and diameters will be in feet.

$$\text{Illuminance} = \frac{\text{Candela}}{\text{Distance}^2}$$

OPERATION

Pan: 540° **Tilt:** 270°
Field Angle: 18°, 27° (optional), or 40° (optional)

Control Options: DMX-512, On Board Programming/Playback, Time Code Sync, Internal Effects, Fixture Talkback
Address Methods: LED Display, Fixture Talkback

Software Upgrades Operating software may be downloaded from the High End Systems web site (www.highend.com), and uploaded using a High End Systems dongle.

Compliances Studio Spot 250 is CE, CETL, and ETL compliant.

DMX connectors 3-pin or 5-pin male and female XLR connectors

Environmental Tolerances Maximum Ambient Temperature: 50°C (122°F) Maximum Exterior Surface Temperature: 100°C (212°F)
Minimum distance to flammable objects: 3.28 ft (1.0 m) Minimum distance to lighted object: 3.28 ft (1.0 m)

PART NUMBERS

Fixtures
40010001 - Studio Spot MSD 250/2 Automated Spot Fixture, w/lamp
40010002 - Studio Spot MSD 250/2 Automated Spot Fixture, w/Laser Aiming Device, w/lamp

Accessories
26040002 - DMX Upload Dongle
40060001 - Studio Spot 250 18° Standard Angle Lens Assembly
40060002 - Studio Spot 250 27° Wide Angle Lens Assembly
40060003 - Studio Spot 250 40° Wide Angle Lens Assembly

Flight Cases
40070005 - Road Case, Studio Color 250 & Studio Spot 250, Single Fixture Pro
40070006 - Road Case, Studio Color 250 & Studio Spot 250, Single Fixture Standard
40070002 - Road Case, Studio Color 250 & Studio Spot 250, Dual Fixtures Pro

Lamps
55030051 - Studio Spot 250 Replacement Lamp, Philips MSD 250-2

DMX CHANNELS

Channel	Function	Channel	Function
1	Pan - High Resolution	10	Effects Position
2	Pan - Fine Resolution	11	Effects Rotate
3	Tilt - High Resolution	12	Focus
4	Tilt - Low Resolution	13	Iris
5	Color Function	14	Shutter
6	Color Wheel Position	15	Dim
7	Litho Function	16	Motor Speed
8	Litho Position	17	Macros/LAD
9	Litho Rotation	18	Control

DMX Channels: 18
Fixtures per Universe: 28

Internal Preset Scene Memory: 2 banks, 16 scenes per bank

COLOR WHEEL

Color Wheel 1:

Position	Description	Replaceable	Position	Description	Replaceable
1	Open	No	8	Dark Blue	Yes
2	Pink	Yes	9	Red	Yes
3	Aqua	Yes	10	Indigo	Yes
4	Dark Magenta	Yes	11	Orange	Yes
5	Green	Yes	12	Light Blue	Yes
6	Amber	Yes	13	CTO	Yes
7	Yellow	Yes			

Dichroic Glass: Diameter: 1.125 in ± 0.010 in (28.5 mm ± 0.25 mm)
Thickness: 0.069 in ± 0.010 in (1.8 mm ± 0.25 mm)

EFFECTS WHEEL

Effects Wheel 1: Replaceable

Position	Description	Replaceable
1	Open	No
2	Three Facet Prism	Yes
3	Step Prism	Yes
4	Slow Glass	Yes
5	Frost	Yes

Effects Glass: Diameter: 1.430 in ± 0.010 in (36 mm ± 0.25 mm) Image Area: 1.040 in ± 0.010 in (26 mm ± 0.25 mm)
Maximum Thickness: 0.175 in (4.4 mm)

LITHO WHEEL

Litho Wheel 1:

Position	Description	Replaceable
1	Open	No
2	Trism	Yes
3	Off Center Circle	Yes
4	Fade 4	Yes
5	Swirl	Yes
6	Perfora (Rotating) + Sun Spurt (Static)	Yes
7	Belly (Rotating) + Belly Invert (Static)	Yes
8	Radium (Rotating) + Fusion Fire (Static)	Yes



Lithopatterns: Diameter: 0.996 in ± 0.005 in (25 mm ± 0.13 mm) Thickness (rotating litho): 0.105 in ± 0.005 in (2.7 mm ± 0.13 mm)
Image Area: 0.860 in ± 0.005 in (22 mm ± 0.13 mm) Thickness (static litho): 0.069 in ± 0.010 in (1.8 mm ± 0.25 mm)