

EXTERIOR PROJECTION 500

FULLY WEATHERIZED OUTDOOR LED LIGHTING FIXTURE

SPEC SHEET



HIGHLIGHTS

- Flat-field, high-contrast image projection
- Fully weatherized for trouble-free use with minimal maintenance in outdoor installations
- Packed with features, allowing huge creativity in setting up exciting lighting effects

OVERVIEW

The Exterior™ Projection 500 is a powerful fixture for integrating textures, patterns and graphics in outdoor lighting designs. The fixture can be used for bright and dynamic logo projection as well as precision framing. Using advanced LED technology, it offers outstanding energy efficiency, compact size and unlimited creative possibilities.

KEY MESSAGES

FOUR BEAM ANGLES

From 12° to 51°, select the right beam angle for the specific installation allowing for best possible image projection.

MULTIPLE EFFECTS LAYERS

Allows a range of lighting effects creativity many different looks can be achieved with the same fixture.

GOBO ACCESSIBILITY

The accessible service lid decreases cost, time, and risk to change gobos and colors.

FULLY CONVECTION-COOLED IP66 HOUSING

Ideal for minimal maintenance, low total cost of ownership, and resiliency to weather and other environmental conditions.

EXTERIOR PROJECTION 500

FULLY WEATHERIZED OUTDOOR LED LIGHTING FIXTURE

SPEC SHEET

FEATURES

- Up to 6100 lumens output with 4 beam angles variants from narrow to wide
- Powerful close-range and long-range projection
- Flat-field, high-contrast image projection based on high-power LED engine
- 4 layers of versatile dynamic effects (colors, gobo projection, gobo animation, prisms/frost)
- Crisp image projection
- Rugged IP66-rated housing
- Minimal maintenance –low total cost of ownership



ORDERING INFORMATION

EU MODELS

- | | |
|-----------------------------------------------------|--------------|
| • Exterior Projection 500, Narrow, EU, Aluminum: | P/N 90506500 |
| • Exterior Projection 500, Medium, EU, Aluminum: | P/N 90506505 |
| • Exterior Projection 500, Wide, EU, Aluminum: | P/N 90506510 |
| • Exterior Projection 500, Very Wide, EU, Aluminum: | P/N 90506535 |
| • Exterior Projection 500, Narrow, EU, White: | P/N 90506540 |
| • Exterior Projection 500, Medium, EU, White: | P/N 90506545 |
| • Exterior Projection 500, Wide, EU, White: | P/N 90506550 |
| • Exterior Projection 500, Very Wide, EU, White: | P/N 90506555 |

US MODELS

- | | |
|-----------------------------------------------------|--------------|
| • Exterior Projection 500, Narrow, US, Aluminum: | P/N 90506515 |
| • Exterior Projection 500, Medium, US, Aluminum: | P/N 90506520 |
| • Exterior Projection 500, Wide, US, Aluminum: | P/N 90506525 |
| • Exterior Projection 500, Very Wide, US, Aluminum: | P/N 90506530 |

ACCESSORIES

- | | |
|---------------------------------------------------|--------------|
| • Exterior Projection 500 Glare Shield, Aluminum: | P/N 91611767 |
| • Projection Setup Gobo: | P/N 91616068 |
| • EP-500, Manual Framing Module: | P/N 91611842 |

SPARE PARTS

- | | |
|-----------------------------------------------------------------------|--------------|
| • Silica gel desiccant bag in sealed foil pack: | P/N 37220000 |
| • Goboholder with magnet incl. washer, short spring & long spring: | P/N 50481990 |
| • Goboholder without magnet incl. washer, short spring & long spring: | P/N 50481992 |



HARMAN PROFESSIONAL DENMARK APS • OLOF PALMES ALLÉ 18 • 8200 AARHUS N • DENMARK
HARMAN PROFESSIONAL SOLUTIONS U.S. • 8500 BALBOA BOULEVARD • NORTHRIDGE • CA 91329 • USA

©2018 HARMAN Professional Denmark ApS. All rights reserved. Martin is a registered trademark of HARMAN Professional Denmark ApS registered in the United States and/or other countries. Features, specifications, and appearance are subject to change without notice.

Martin
by HARMAN

EXTERIOR PROJECTION 500

FULLY WEATHERIZED OUTDOOR LED LIGHTING FIXTURE

SPEC SHEET

TECHNICAL SPECIFICATIONS

DYNAMIC EFFECTS

Color wheel	8 interchangeable colors + open
Gobo wheel	6 rotating gobos plus open, indexing, variable rotation
Gobo animation	Variable speed linear animation effect
Prism	Prism wheel with 2 interchangeable prisms, prism rotation and indexing
Frost (wash effect)	Motorized variable
Focus	Motorized, variable 3 m (9.8 ft.) to infinity
Shutter	Strobe and pulse effects, instant open and blackout
Dimming	Electronic, constantly variable 0-100%, 16-bit control

CONTROL AND PROGRAMMING

Control options	DMX, RDM, standalone
DMX channels	13
Configuration, addressing and status	Onboard control panel with OLED display
Control resolution	8-bit DMX control 16-bit DMX control of intensity, focus and gobo rotation/indexing angle.
DMX compliance	USITT DMX512-A
RDM compliance	ANSI/ESTA E1.20

OPTICS

Light source	230 W white light LED engine
LED manufacturer	Prolight Opto
CRI (Color Rendering Index)	72
Color temperature	8300 K
LED lifetime	20 000 hours (to >70% luminous output)*

*Figure obtained under manufacturer's test conditions

PHOTOMETRIC DATA

	Cut-off angle	Total output	Center peak
Narrow	12°	5000 lumens	203 000 cd
Medium	22°	6100 lumens	77 000 cd
Wide	37°	5700 lumens	28 000 cd
Very Wide	51°	3400 lumens	11 000 cd

CONSTRUCTION

Housing	Cast aluminum
Finish	Hard anodized, metallic grey lacquered
Front glass	5 mm (0.2 in.) anti-reflection coated tempered glass
Ingress protection	IP66
Corrosion resistance	C5-M (very high corrosivity / marine, ISO 12944)

Impact resistance	IK08 (with control panel display cover plate installed)
EPA (Effective Projected Area)	0.15 m ²
RoHS compliant	

GOBOS

Suitable material	Borosilicate glass, coatings heat-resistant to 450°C (842° F)
Alternative material	Aluminum 1060, paint on front lens side, 450° C (842° F) HT paint
Gobo diameter	30.0 mm +0/-0.3 mm (1.2 in. +0/-0.02 in.)
Maximum image diameter	23 mm (0.91 in.)
Glass gobo thickness, minimum	1.1 mm ±0.1 mm (0.045 ±0.004 in.)
Glass gobo thickness, maximum	3.0 mm ±0.3 mm (0.12 in. ± 0.012 in.)
Aluminum gobo thickness	0.5 mm ± 0.02 mm (0.020 in. ± 0.001 in.)

INSTALLATION

Orientation	Any (sides must be kept vertical)
Mounting	Adjustable yoke
Minimum distance to illuminated surfaces	0.5 m (20 in.)
Location	Suitable for wet locations. Do not immerse in water.

CONNECTIONS

Power cable entry	IP68 cable gland
Power connection	1.8 m (5.9 ft.) cable tail with bare ends
Power cable type	EU models: H07RN-F 450/700V, Ø10 mm US models: SJTW 14AWG, 300V, Ø9.3 mm
Data cable entry	IP68 cable gland
Data connection	1.8 m (5.9 ft.) combined input + output cable tail with bare ends

ELECTRICAL

AC power	100-240/277 V nominal, 50/60 Hz
Power supply	Auto-ranging electronic switch-mode
Typical half-cycle RMS inrush current	8.4 A
Surge protection	4 kV
Idle power (zero intensity, no effects applied)	32 W, 0.3 A

TYPICAL POWER AND CURRENT

110 V, 60 Hz	320 W, 2.9 A, PF 0.977
230 V, 50 Hz	310 W, 1.4 A, PF 0.971
277 V, 60 Hz	305 W, 1.2 A, PF 0.950

Figures are typical, not maximum. Measurements made at nominal voltage with all LEDs at full intensity. Allow for a deviation of +/- 10%.

EXTERIOR PROJECTION 500

FULLY WEATHERIZED OUTDOOR LED LIGHTING FIXTURE

SPEC SHEET

TECHNICAL SPECIFICATIONS

THERMAL

Cooling Convection, internal forced air

Maximum ambient temperature
(Ta max.) 45° C (113° F) *

Minimum ambient temperature
(Ta min.) -30° C (-22° F)**

*Above this temperature, the fixture regulates output to protect from overheating.

**For instant wake-up with no warm-up mode, leave power applied constantly in ambient temperatures below 0° C (32° F)

APPROVALS

EU safety EN 60598-2-1, EN 60598-2-5
(EN 60598-1), EN 62471, EN 62493

EU EMC EN 55015, EN 55032, EN 55103-2,
EN 61000-3-2, EN 61000-3-3,
EN 61000-4-2, EN 61000-4-3,
EN 61000-4-4, EN 61547

US safety ANSI/UL 1598

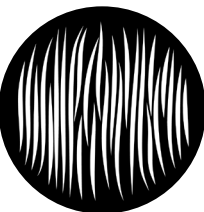
US EMC CFR 47 Part 15 Class A

Canadian safety CSA C22.2 No 250.0

Australia/NZ RCM



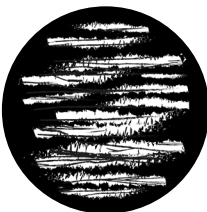
GOBO WHEEL



Gobo 1:
Grass Lines



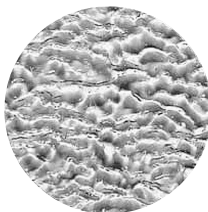
Gobo 2:
Organic Delights



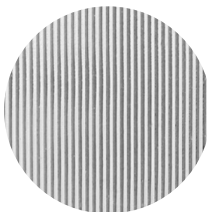
Gobo 3:
Brush It



Gobo 4:
Light Lines

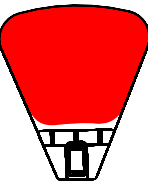


Gobo 5:
Ripple Structure Glass

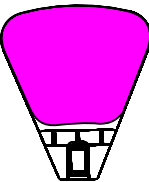


Gobo 6:
Lined Effect Glass

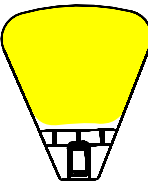
COLOR WHEEL



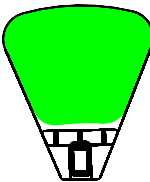
Slot 1:
Red



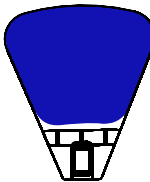
Slot 2:
Magenta



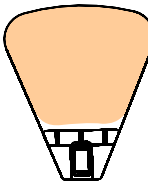
Slot 3:
Yellow



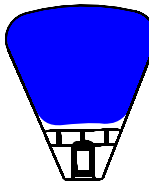
Slot 4:
Green



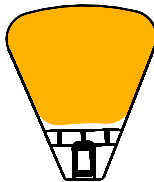
Slot 5:
Dark Blue



Slot 6:
CTO



Slot 7:
Cyan



Slot 8:
Orange

EXTERIOR PROJECTION 500

FULLY WEATHERIZED OUTDOOR LED LIGHTING FIXTURE

SPEC SHEET

PROJECTION DATA - GOBO WITH MAX. IMAGE SIZE

NARROW BEAM ANGLE (12°) MODEL

Distance to projection surface	4 m (13 ft.)	6 m (20 ft.)	8 m (26 ft.)	10 m (33 ft.)	12 m (39 ft.)	14 m (46 ft.)	16 m (53 ft.)	18 m (59 ft.)	20 m (66 ft.)
Projection diameter in meters (ft.)	0.8 (2.6)	1.2 (3.8)	1.5 (5.1)	1.9 (6.3)	2.3 (7.6)	2.7 (8.9)	3.1 (10.2)	3.5 (11.4)	3.9 (12.7)
Center illuminance in lux	12688	5639	3172	2030	1410	1036	793	627	508
Center illuminance in candela	1179	524	295	189	131	96	74	58	47

MEDIUM BEAM ANGLE (22°) MODEL

Distance to projection surface	4 m (13 ft.)	6 m (20 ft.)	8 m (26 ft.)	10 m (33 ft.)	12 m (39 ft.)	14 m (46 ft.)	16 m (53 ft.)	18 m (59 ft.)	20 m (66 ft.)
Projection diameter in meters (ft.)	1.4 (4.7)	2.1 (7.0)	2.9 (9.4)	3.6 (11.7)	4.3 (14.1)	5.0 (16.4)	5.7 (18.8)	6.4 (21.1)	7.2 (23.5)
Center illuminance in lux	4813	2139	1203	770	535	393	301	238	193
Center illuminance in candela	447	199	112	72	50	36	28	22	18

WIDE BEAM ANGLE (37°) MODEL

Distance to projection surface	4 m (13 ft.)	6 m (20 ft.)	8 m (26 ft.)	10 m (33 ft.)	12 m (39 ft.)	14 m (46 ft.)	16 m (53 ft.)	18 m (59 ft.)	20 m (66 ft.)
Projection diameter in meters (ft.)	2.5 (8.1)	3.7 (12.1)	4.9 (16.2)	6.2 (20.2)	7.4 (24.2)	8.6 (28.3)	9.9 (32.3)	11.1 (36.4)	12.3 (40.4)
Center illuminance in lux	1750	778	438	280	194	143	109	86	70
Center illuminance in candela	163	72	41	26	18	13	10	8	7

NARROW BEAM ANGLE (51°) MODEL

Distance to projection surface	4 m (13 ft.)	6 m (20 ft.)	8 m (26 ft.)	10 m (33 ft.)	12 m (39 ft.)	14 m (46 ft.)	16 m (53 ft.)	18 m (59 ft.)	20 m (66 ft.)
Projection diameter in meters (ft.)	3.5 (11.5)	5.3 (17.3)	7.0 (23.0)	8.8 (28.8)	10.5 (34.6)	12.3 (40.3)	14.0 (46.1)	15.8 (51.8)	17.6 (57.6)
Center illuminance in lux	688	306	172	110	76	56	43	34	28
Center illuminance in candela	64	28	16	10	7	5	4	3	3

EXTERIOR PROJECTION 500

FULLY WEATHERIZED OUTDOOR LED LIGHTING FIXTURE

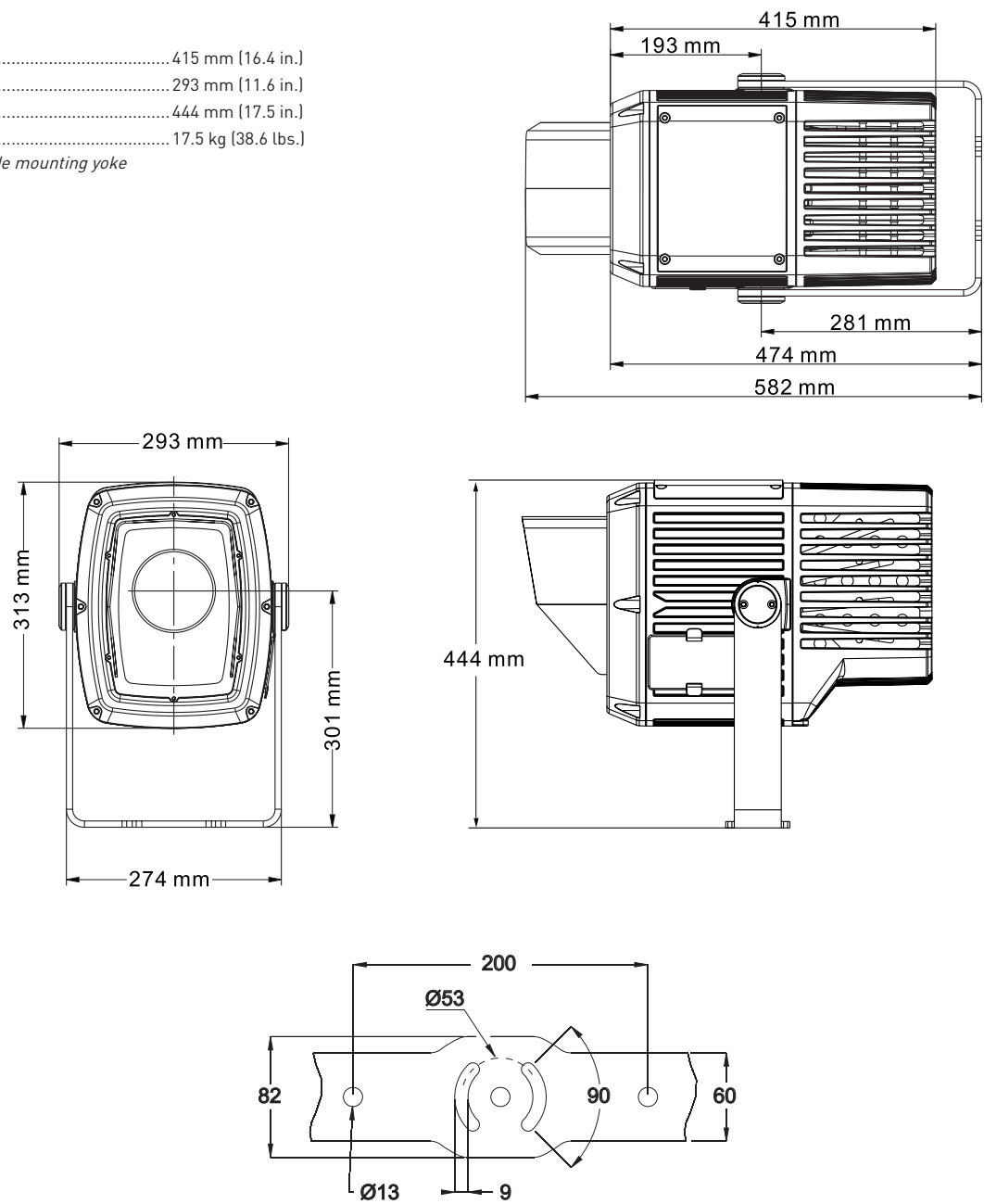
SPEC SHEET

DIMENSIONS

PHYSICAL

Length.....415 mm (16.4 in.)
Width.....293 mm (11.6 in.)
Height.....444 mm (17.5 in.)
Weight.....17.5 kg (38.6 lbs.)

All figures include mounting yoke



Dimension drawing includes optional glare shield