



Exterior Inground 400 Series

The Exterior™ Inground 400 series is a range of uncomplicated, easy-to-use color-changing LED luminaires. Perfect for installations with visible light sources, the Exterior Inground series combines the benefits of dynamic light and discreet installation. The recessed housing can be made to fit any type of surface with a trim ring available in beveled and flush-mount versions, for discreet installation both day and night.

The series is available in various configurations. The Exterior Inground 400™ has a narrow beam. The Exterior Inground 410™ blends the output of its RGBW LED sources in its lenses, delivering perfectly pre-mixed colors. And the Exterior Inground 420™ gives variable color temperature white light from 2700 to 6500 K.

GALLERY



Bright, efficient in-ground fixture with full LED color mixing

Advanced optical performance with uniform distribution of light and color

Durable, low-maintenance construction

FEATURES

- Choice of premixed RGBW, single-color RGBW or variable CT white LEDs
- Built-in glare shield for high visual comfort
- Flush-mount and beveled trim ring options for installation in any groundwork
- Choice of five beam angle options
- Remote control and configuration via DMX and RDM
- Rugged drive-over IP67 housing

TECHNICAL SPECIFICATIONS

Physical

Fixture:

Height: 315 mm (12.4 in.)

Outer diameter at top of fixture: 310 mm (12.2 in.)

Weight: 14.7 kg (32.5 lbs.)

Top ring (trim ring):

Flush-mount top ring outer diameter: 329 mm (13.0 in.)

Flush-mount top ring thickness: 7 mm (0.3 in.)

Beveled top ring outer diameter: 340 mm (13.4 in.)

Beveled top ring thickness: 5 mm (0.2 in.)

Installation Sleeve:

Installation sleeve height: 400 mm (15.8 in.)

Installation sleeve base flange external diameter: 416 mm (16.4 in.)

Dynamic Effects

All models

Intensity: 0 - 100%

Exterior Inground 400 and 410

Color mixing: RGBW

Exterior Inground 420

Color temperature control: 2700 K - 6500 K

Control and Programming

All models

Control systems: DMX, RDM

DMX addressing and fixture setup: RDM

Fixture status monitoring: Multi-color status LED visible through top glass

Firmware update: Serial upload via DMX link

DMX compliance: USITT DMX512-A

RDM compliance: ANSI/ESTA E1.20

Receiver: RS-485

Exterior Inground 400 and 410

DMX channels: 3/4

Exterior Inground 420

DMX channels: 2

Optics

All models

LED manufacturer: Cree

Minimum LED lifetime: 50 000 hours (to >70% luminous output)*

*Figure obtained under manufacturer's test conditions

Exterior Inground 400

Light source: R, G, B and W single-color LEDs

Beam angle options

No diffuser: 7°

Narrow diffuser: 10.5°

Medium diffuser: 20°

Wide diffuser: 41°

Asymmetric diffuser: 52° x 12°

Directional (8°): 67° x 24°

Directional (20°): 69° x 24°

Exterior Inground 410

Light source: RGBW quad-color LEDs

Beam angle options

No diffuser: 21°

Narrow diffuser: 22°

Medium diffuser: 29°

Wide diffuser: 50°

Asymmetric diffuser: 59° x 25°

Directional (8°): 76° x 33°

Directional (20°): 79° x 33°

Exterior Inground 420

Light source: Warm (2700 K) and cool (6500 K) LEDs

Beam angle options

No diffuser: 7°

Narrow diffuser: 10.5°

Medium diffuser: 20°

Wide diffuser: 41°

Asymmetric diffuser: 52° x 12°

Directional (8°): 67° x 24°

Directional (20°): 69° x 24°

Photometric Data

Exterior Inground 400

Maximum luminous output: 5700 lumens

Exterior Inground 410

Maximum luminous output: 4800 lumens

Exterior Inground 420

Maximum luminous output: 6600 lumens

Construction

Fixture housing: Aluminum

Front glass: 19 mm (0.8 in.) tempered glass (clear and anti-skid versions)

Finish: Black powder coating over anodizing

Trim ring (top ring): Stainless steel

Installation method: In installation sleeve

Color: Black

Corrosion resistance: C5-M (very high corrosivity / marine, ISO 12944)

Protection rating: IP67

Impact resistance: IK10

RoHS compliant

Installation sleeve: Hot-dip galvanized steel

Weight resistance (in installation sleeve with stable groundwork): 4000 kg (from vehicle tire for example)

Installation

Installation method: Installation sleeve (ordered separately)

Minimum distance to illuminated surfaces: 0.2 m (0.6 ft.)

Connections

Power connection: 1.8 m (5.9 ft.) cable tail without connector

Data connection: 1.8 m (5.9 ft.) open ended 5-conductor combined input + output cable tail

Power and data cable entries: IP68/69 cable glands

Electrical

AC power: 100-277 V~ nominal, 50/60 Hz

Power supply unit: Integrated, auto-sensing multi-voltage
Power consumption, steady state, all LEDs at zero intensity: 11 W

Typical Power and Current
120 V, 60 Hz: 1.3 A, 142 W, PF 0.99
230 V, 50 Hz: 0.7 A, 142 W, PF 0.97

Measurements made at nominal voltage. Allow for a deviation of +/- 10 %:

Thermal

Cooling: Conduction / convection

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

Minimum ambient temperature (Ta min.): -30° C (-4° F), power must be maintained below 0° C (32° F)

Maximum surface temperature, steady state, at 40° C ambient: 90° C (194° F)

Total heat dissipation (calculated, +/- 10%): 490 BTU/hr.

Approvals

EU safety: EN60598-2-5 (EN60598-1), EN60598-2-13, EN62471, EN62493

EU EMC: EN55015, EN61547, EN61000-3-2, EN6100-3-3, EN61000-4-2, EN6100-4-4, EN6100-4-5

US safety: ANSI/UL 1598

US EMC: 47 CFR Part 15 Class A

Canadian safety: CSA C.22.2 No. 250

Australia/NZ (pending): RCM

Accessories

Installation sleeve for Inground 400: P/N 91611841

Installation Lid for flush mount top ring installations: P/N 91616086

Installation Lid for beveled top ring installations: P/N 91616087

Please order Installation Sleeves separately from fixtures

Ordering Information

Inground 4xx, new install: P/N 90507100HU

Inground 4xx, replacement (for existing Inground 200 installations): P/N 90507150HU

Inground 4xx, replacement (for existing Inground 200 installations), no top ring or top glass: P/N 90507110HU

Products are ordered pre-configured by selecting from a range of options - see elsewhere on website or contact your Martin™ supplier

