



# 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  
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  
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  
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  
Surge protection: 4 KV

#### 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, EN61000-3-3, EN61000-4-2, EN61000-4-4, EN61000-4-5

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*

