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.

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 (-2°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