**i2Systems®**

Simply
Advanced.™

CLIENT

PROJECT

★★★★★
MADE IN THE
**USA**

### PRO FEATURE
Wire together One, Two
and Three-Color lights
all on the same circuit

SMOOTH
DIGITAL
DIMMING TO
**1%**

# Apeiron™ PRO

## DIMMABLE MARINE-GRADE LED DOWNLIGHT

The Apeiron PRO is the world's most
technologically advanced Marine LED
downlight. Truly a first of its kind. A finely
tuned blend of classic style and the latest
digital technology.

3.15" Round  
3.15" Square / Round  
3.15" Square / Square  

1.37" Deep 3W  
2.05" Deep 6W  

## FEATURES

**True-to-Life Color**
With 90+ color rendering (CRI) ,
engineered optics, and i2Sync™
Technology, expect beautiful,
consistent white light.

**1% Dimming**
Smoothly dim to a low-level, 1%
intensity using our LightLink™
Dimmers or most any 3rd party
lighting system.

**3-Color Option w/ Dimming**
With the click of your dimmer
switch, simply select, then dim
White, Red, and a Third color
choice. Powered by award-winning
i2Wave™ Technology.

**Protected**
3-Stage Surge Suppression,
onboard SmartDriver™ and
i2Thermal™ Active Thermal
Management offer a level of fixture
protection not found anywhere else.

**Rugged & Waterproof**
Machined from solid aluminum
and formed with PVD Titanium-
Coated or Mil-Spec Powder-Coated
stainless steel, expect industry-
leading fit and finish that will last.
IP67 waterproof rated*.

*IP67 rated. Not for use in submersible applications.*

MARINE GRADE | LED | REFIT FRIENDLY

LIGHTLINK | 1% DIMMING | FC | ANSI LED BINNING | IP 67 | LM 79 TESTED | LM 80 TESTED LEDS | RoHS COMPLIANT 2002/95/EC | ★★★★★ MADE IN THE USA

### Typical Applications

- General Lighting
- Soffit
- Pilot House
- Perimeter
- Mezzanine

### Quick Specs

| | |
|---|---|
| 3W | Power A503 |
| 6W | Power A506 |
| 90+ | CRI (3000°K) |
| 150 | 3W Lumen Output Typ. |
| 300 | 6W Lumen Output Typ. |
| 120° | Beam Angle |

### LED Color

- 3000°K Warm White
- 4000°K Neutral White
- 5700°K Cool White
- Red (2nd Color opt)
- Green (3rd Color opt)
- Blue (3rd Color opt)

### Finish Color

- Polished Chrome **(PVD TITANIUM)**
- Polished Gold **(PVD TITANIUM)**
- Brushed Nickel **(PVD TITANIUM)**
- White **(MIL-SPEC POWDER COATED)**
- Off-White **(MIL-SPEC POWDER COATED)**

# Apeiron™ PRO

**DIMMABLE MARINE-GRADE LED DOWNLIGHT**

A perfect balance of technical sophistication and elegance, the Apeiron PRO offers a finely tuned blend of traditional style and digital technology.

**i2Systems**

LIGHTLINK · IP 67 · FC · ANSI LED BINNING · LM 79 TESTED · LM 80 TESTED LEDS · RoHS COMPLIANT 2002/95/EC

| CUSTOMER COMPANY | CUSTOMER CONTACT |
|---|---|
| P.O.# | CUSTOMER PHONE # |

SHIPPING ADDRESS

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## FIXTURE BUILDER

**A50** — [ ] – [ ] [ ] [ ] – [ ]

**FIXTURE TYPE**

Apeiron PRO

**OUTPUT**
- **3** 3W
- **6** 6W

**FINISH**

**PVD Titanium Coated**
- **1** Polished Chrome
- **2** Polished Gold
- **4** Brushed Nickel

**Powder Coated**
- **3** White
- **5** Off-White

**BEZEL SHAPE**
- **1** Round
- **2** Square / Round
- **4** Square / Square

**WHITE LED COLOR**
- **AAG** Cool White 5700°K
- **BBD** Neutral White 4000°K
- **CBBR** Warm White 3000°K, High CRI

**LED COLOR 2**
- **H** Red

**LED COLOR 3**
- **D** Green
- **E** Blue

*Leave LED Color 2 and 3 boxes blank if they don't apply.*

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## ACCESSORIES

### DIMMING CONTROL

**LIGHTLINK**

| | | |
|---|---|---|
| [ ] | **LL-101-PRO** | Momentary Switch Dimmer |
| [ ] | **LL-105-R** | 0-10V Bridge, 12/24V DC |
| [ ] | **LL-205-10V** | 0-10V Bridge, 120-277V AC |

**LightLink Dimmers dim up to 50 Apeirons using a single control wire for dimming.**

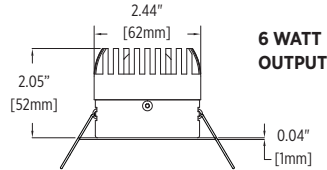*See below for additional dimming information and wiring diagrams.*

### TRIM RING EXTENDERS

| | PN | FINISH |
|---|---|---|
| [ ] | **3120177-11** | Chrome |
| [ ] | **3120177-21** | Gold |
| [ ] | **3120177-31** | White |
| [ ] | **3120177-41** | Nickel |
| [ ] | **3120177-51** | Off-White |

*Extends round bezel from 3.15" to 3.75" diameter.*

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## QUICK SPECS

| MODEL | STANDARD OUTPUT | HIGH OUTPUT |
|---|---|---|
| Input Voltage | 9-30V DC | 18-30V DC |
| Input Power | 3 Watts | 6 Watts |
| Lumens | *Under Test* | *Under Test* |
| Beam Angle | *Under Test* | *Under Test* |
| Efficiency | *Under Test* | *Under Test* |
| Operating Temp | -20°C to 40°C | -20°C to 40°C |
| Max. Case Temp | 50°C | 50°C |
| IP Rating | IP67 | IP67 |
| Wiring | 9", 18AWG | 9", 18AWG |
| Housing | Stainless Steel Trim, Anodized Aluminum Housing | Stainless Steel Trim, Anodized Aluminum Housing |
| Lens | Tempered Glass w/ Diffuser | Tempered Glass w/ Diffuser |

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# Apeiron™ PRO

**DIMMABLE MARINE-GRADE LED DOWNLIGHT**

## DIMENSIONS

3.15"
[80mm]

3.15"
[80mm]

3.15"
[80mm]

2.44"
[62mm]

1.37"
[35mm]

0.04"
[1mm]

**3 WATT OUTPUT**
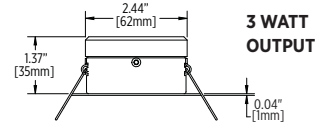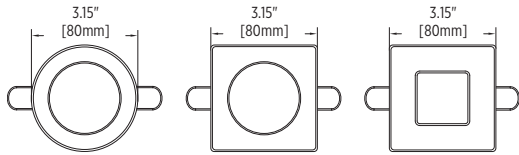
*Bezel thickness may vary depending on configuration specified*

2.44"
[62mm]

2.05"
[52mm]

0.04"
[1mm]

**6 WATT OUTPUT**

## MOUNTING

Ø 2.75" [70mm]

## WIRE FUNCTION

**RED**
9-30V DC *(3W)*
18-30V DC *(6W)*

**BLACK**
Common Ground

**YELLOW**
Dimming Control
(Optional)
*Do not exceed 30V max*
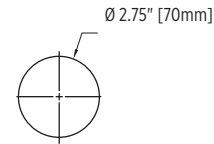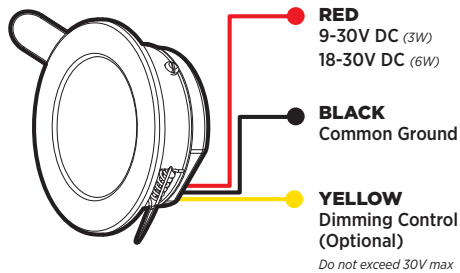
**LIGHTLINK**   *See wiring examples below.*

### Using 3rd Party Multiplex & PWM Dimmers:

The Yellow Dimming Control wire is engineered to work with i2Systems LightLink™ Dimmers and 3rd party PWM type dimmers.

To use a 3rd party PWM dimmer, drive the Yellow Dimming Control Wire using a Pulse Width Modulation (PWM) Controller. By driving the Yellow Dimming Control Wire Low to DC Common, the Fixture turns off. By driving the Yellow Dimming Control Wire High to DC Positive (i.e. +24V), or by allowing the wire to Float (no connection), the Fixture turns on to 100%.

The PWM signal must be a Square Wave at a fixed frequency and a maximum voltage of 30V DC. Frequency range may be between 100Hz and 1kHz (user selected). A wiring example is shown on the last page of this spec sheet.

## PROTECTION FEATURES

### Active Thermal™

Active Thermal dims the Apeiron to help reduce the risk of overheating.

### Electrical Protection

• Dim Line Protected to 30V DC
• 3-Stage Surge Suppression
• Reverse Polarity Protection
• Auto-Reset Fuse

Product is rated for exterior applications, however it is not rated for submersible applications and should not be mounted in conditions where there is, or is a possibility of, standing water. When installing in wet or damp locations, it is good practice to seal all fixtures and junction boxes with electronics grade RTV silicone sealant to ensure that moisture cannot enter or accumulate in wiring compartments, cables, or other electrical parts. Product should not be installed in extreme locations, including but not limited to those outside of its temperature/humidity ratings and/or applications where product is subject to high pressure water, water runoff or downspouts.

# Apeiron™ PRO

**DIMMABLE MARINE-GRADE LED DOWNLIGHT**

For additional examples and dimming details,
visit **www.i2Systems.com/marine-LED**
to download our Dimming Guide.

## WIRING EXAMPLE

### 12/24V DC NO DIMMING



**BATTERY** — +12/24V / Common — **Fuse**
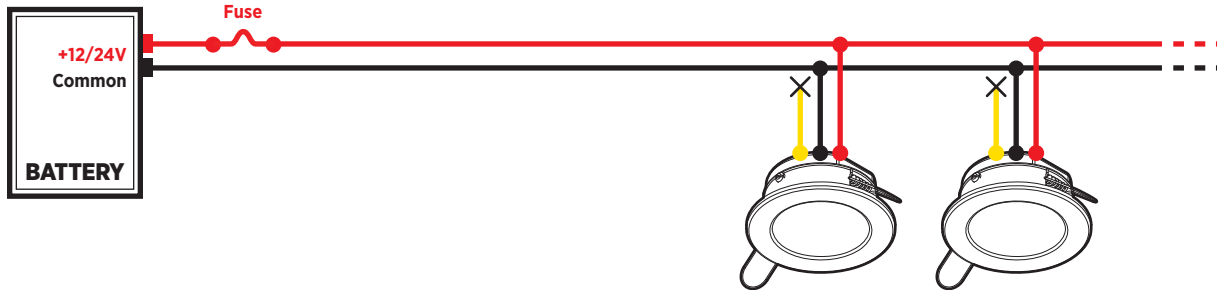
## WIRING EXAMPLE

### 12/24V DC PUSH BUTTON SWITCH DIMMING



**BATTERY** — +12/24V / Common — **Fuse**

Up to 50 Fixtures
per LL-101-PRO Dimmer

**LIGHTLINK**™

**LL-101-PRO** — DIM / COMMON / VIN / MOM SW 1 / MOM SW 2

**Momentary Switch**

Press & Hold Switch to Dim
Tap to turn On & Off
Double Click to cycle through to desired color
Triple Click to change to Red LED

A second switch may be added to separate Dimming and
Color Selection Functions. Refer to our Dimming Guide
located at www.i2systems.com/marine-LED

## WIRING EXAMPLE

### 12/24V DC 3RD PARTY MULTIPLEX DIMMER*



**BATTERY** — +12/24V / Common — **Fuse**

+12/24V

**MULTI MODULE** — Solid State Output / Solid State Return / PWM Capable Solid State Output / PWM Return
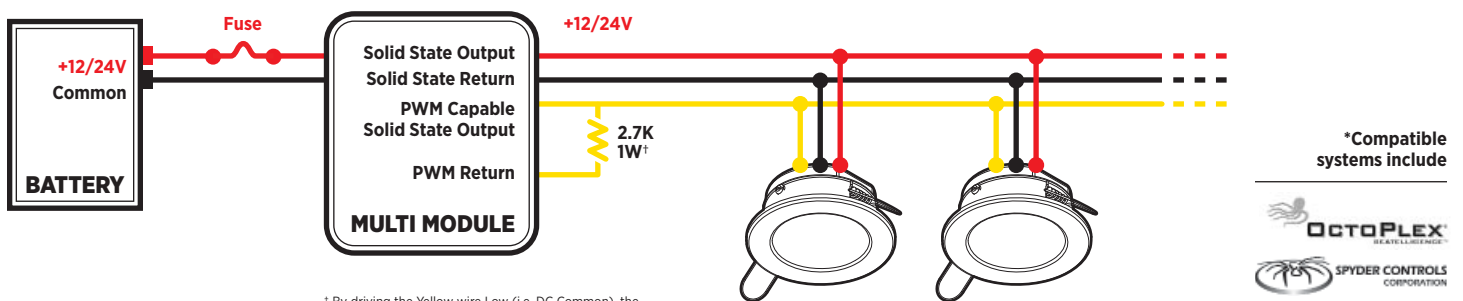
**2.7K 1W**†

† By driving the Yellow wire Low (i.e. DC Common), the
Fixture turns off. Many Multiplex type systems were originally
designed for halogen lamps and do not Drive Low, in which
case in this example a 2.7K, 1 Watt Pull Down Resistor pulls
down the Yellow Dimming Line to DC Common when the
PWM is not driven High (thus shutting off the Fixtures).

**\*Compatible systems include**

OCTOPLEX
SPYDER CONTROLS CORPORATION
E-PLEX
CAPI2
EmpirBus™
VANTAGE