

# UFUN-50012

## Funen 2 Underwater Luminaire (Constant Voltage)

**LIGMAN**  
LIGHTING USA



RGBW

10w LED - 520 Lumens

IP68• Suitable For Wet Locations

IK07 • Impact Resistant (Vandal Resistant)

Weight 2 lbs

### Construction

#### Stainless Steel

Marine grade 316 stainless steel body

#### Luminaire Housing & Bracket

Marine grade 316 Stainless steel.

#### Memory Retentive -Silicon Gasket

Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

#### Thermal management

LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

#### Surge Suppression

Standard 10kv surge suppressor provided with all fixtures.

#### Hardware

Provided Hardware is Marine grade 316 Stainless steel.

#### Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

#### Optics & LED

Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

#### Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Maximum Delivered Output Lumens 520  
(RGBW 4000K output, Narrow Beam)

**High performing adjustable, surface mounted underwater spotlight range. The complete professional underwater system offering RGBW options and extensive source and optic combinations.**

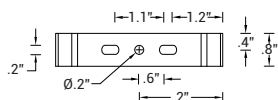
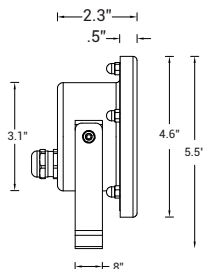
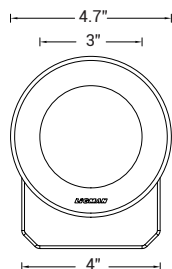
A high powered compact recessed LED underwater projector for lighting small ponds, waterfalls and water jets. The floodlight must be submerged when operating. Stainless steel grade 316 body, stainless steel screws. Cable entry PG.11 cable gland supplied with 7ft of outdoor submersible #18/5 SO Cord 600v power cable. Durable high temperature memory retentive silicon gasket and clear tempered vandal resistant glass.

Driver may change dependant upon wattage requirements.

Special Request 1 Driver to Power Multiple fixtures. Contact factory

Maximum depth 6.5' / Suitable for recessed mount. Stainless Steel Recessing box is included.

Remote driver is included and required. This luminaire is 24v constant voltage and needs connecting in parallel to avoid product failure.



### Mounting Detail

### Additional Options (Consult Factory For Pricing)



A80191  
3" x 10" Remote Enclosure Box



A80291  
4" x 10" Remote Enclosure Box



A52321  
Honeycomb Louvre



A68391  
STICK-DE3  
[Nicolaudie]



A64491  
TPC Touch Screen  
and Controller DMX  
[Pharos]



A64591  
POE Connect  
[Pharos]



A65391  
EDN Ethernet  
Data Node  
[Pharos]



A64691  
TPC Touch Screen  
and Controller DMX 2  
[Pharos]



A64791  
RDM DMX Splitter  
[Pharos]



A65191  
TPC Touch Panel  
Station  
[Pharos]



A66991  
LPCX Lighting  
Playback Controller X  
[Pharos]



A64991  
CLOUD  
[Pharos]

|          |  |      |  |      |      |  |
|----------|--|------|--|------|------|--|
| PROJECT  |  |      |  |      | DATE |  |
| QUANTITY |  | TYPE |  | NOTE |      |  |

ORDERING EXAMPLE || UFUN- 50012 - 10w - W - RGBW30 - 120/277v

|            |                       |                                                                                                    |                                                                                        |                             |
|------------|-----------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------|
| UFUN-50012 |                       |                                                                                                    |                                                                                        |                             |
|            | LAMP                  | BEAM                                                                                               | RGBW COLOR                                                                             | VOLTAGE                     |
|            | 10w LED<br>520 Lumens | N - Narrow 13°<br>M - Medium 19°<br>W - Wide 32°<br>VW - Very Wide 71°<br>E - Elliptical 13° x 42° | RGBW30 - Warm White 3200K<br>RGBW40 - Neutral White 4000K<br>RGBW65 - Cool White 6850K | 120/277v<br>Other - Specify |

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ADDITIONAL OPTIONS

- |                                             |                               |                                 |
|---------------------------------------------|-------------------------------|---------------------------------|
| A80191 - 3"x10" Remote Driver Enclosure Box | A68391 - STICK-DE3            | A64791 - RDM DMX Splitter       |
| A80291 - 4"x10" Remote Driver Enclosure Box | A64491 - TPC + DMX Controller | A65191 - TPC Touch Panel        |
| A52321 - Honeycomb Louvre                   | A64591 - POE Connect          | A65391 - EDN Ethernet Data Node |
| CBL - Custom Cable Length [Specify]         | A64691 - TPC + DMX 2          | A66991 - LPCX Lighting Playback |
|                                             |                               | A64991 - CLOUD                  |



## RGBW DMX/RDM Control

RGBW control requires precise communication between lighting fixtures and IP-based systems. To manage Red, Green, Blue, and White diodes effectively, each fixture must be pre-addressed to ensure accurate individual or grouped control.

### Ligman's Engineered Approach

Ligman offers a structured, performance-driven methodology for RGBW system design and deployment.

#### Fixture Addressing

- Default: Fixtures are factory-programmed with the same DMX address unless otherwise specified.
- Issue: Identical addresses cause all fixtures to respond as one—changing colors simultaneously.

Solution: Assign unique DMX addresses to each fixture during programming or via RDM tools to enable independent or grouped control.

#### Termination Resistors

To prevent signal interference (crosstalk) between fixtures:

- Ligman supplies 120-ohm termination resistors.
- Install inside the last fixture or at its J-Box. – (Resistor will be factory installed on most fixtures, Some will require installation Onsite Depend-ent Upon Fixture and Type.) - Connect between DMX+ and DMX- signal lines.

#### System Design Guidelines

##### Fixture Count

- On 3 or More Fixtures: A terminating resistor is installed at the end of the run.

On 5 or More Fixtures: Ligman may request additional layout details to validate system integrity.

Fixtures with Dual DMX Addresses require more DMX channels, reducing the number of fixtures per run. *(Refer to technical drawings for specifics.)*

- Maximum Distance Without Booster: 984 ft (300 m) from the controller.

Beyond This Limit: DMX/RDM splitters or boosters are required.

#### Custom Layouts

For non-standard RGBW configurations, Ligman requires:

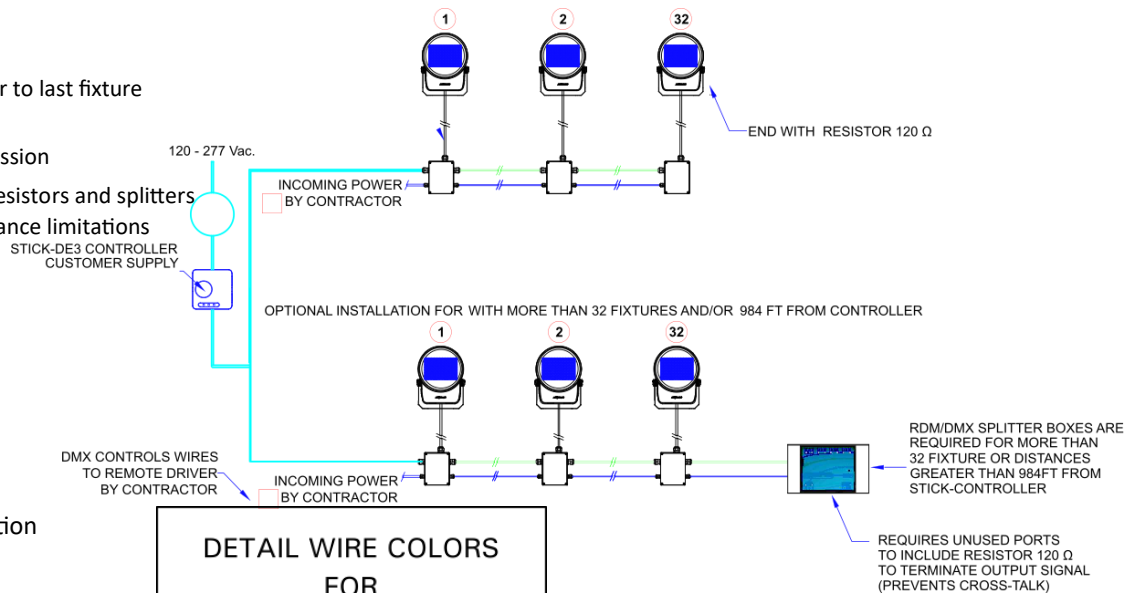
- Fixture quantity per run
- Distance between fixtures

Total cable length from controller to last fixture

#### This ensures:

- Reliable DMX signal transmission
- Proper use of termination resistors and splitters

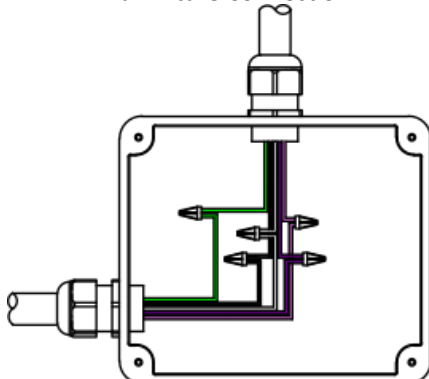
Compliance with fixture and distance limitations



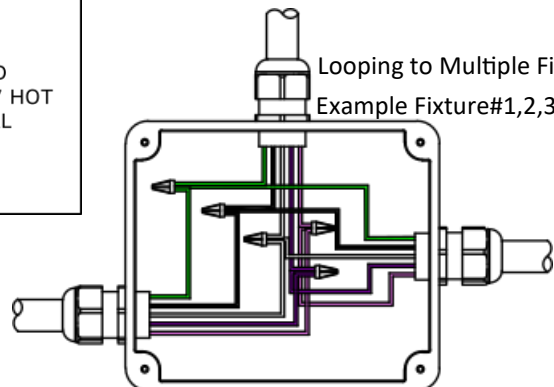
Single Fixture Connection

Or

Final Fixture Connection



Looping to Multiple Fixtures  
Example Fixture#1,2,3,4,ect.





## STICK-DE3

The feature rich lighting controller has been designed to provide a control solution for the most demanding of projects, whilst maintaining an easy to use panel of touch sensitive buttons. The controller integrates a graphical color screen allowing scene photos to be displayed. Easily view the selected zone, scene name and design without the need to navigate through complex menus. Change the speed, color and dimmer using the circular palette.

The lighting levels, color and effects can be programmed from a PC, Mac, Android, iPad or iPhone using the included software.



**Stick-DE3**



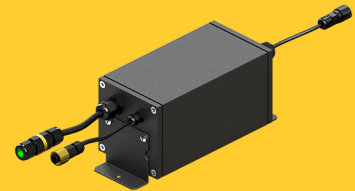
**A64791**

## RDM DMX Splitters

The RDM (Remote Device Management) is a 4 port DMX512 Splitter compatible with the RDM standard to provide DMX output to luminaires and other devices. DMX splitters are an essential requirement for most control systems, allowing multiple separate cable runs from a single DMX output and ensuring electrical isolation.

## DMX Splitter / Booster - Remote IP65 Box

DMX/RDM Splitter, within an IP65 box with 1 channel output, is a digital signal distributor is used with DMX512-A and ANSI E1.20 RDM. 1-port, DMX/RDM isolated splitter engineered to take any architectural, commercial, or entertainment project to the next level. Multiple DMX/RDM Splitter can be chained together to create as many outputs as you need.



## RDM – DMX Repeater

The RDM (Remote Device Management) is a 4 port DMX512 Splitter compatible with the RDM standard to provide DMX output to luminaires and other devices. DMX splitters are an essential requirement for most control systems, allowing multiple separate cable runs from a single DMX output and ensuring electrical isolation.

# Funen Product Family

\* (CV) - Constant Voltage



Funen 1

- UFUN-50002-4w-170lm (RGBW)
- UFUN-50003-4w-358lm (CV)



Funen 2

- UFUN-50012-10w-520lm (RGBW)
- UFUN-50013-8w-984lm (CV)



Funen 3

- UFUN-50022-15w-1133lm (RGBW)
- UFUN-50023-19w-2319lm (CV)



Funen 4

- UFUN-50032-20w-1929lm (RGBW)
- UFUN-50033-32w-4038lm (CV)