



**PaxBellum**

**ARID Reactor  
N-Series  
Start Guide**



# ARID N Series

## N18 + N24 PARTS



### Lid

- Barb fitting (1/2"HB x 1/2"MNPT (N18 only)
- 1/2" FNPT threaded elbow fitting
- quick-disconnect fittings. (1/2" MNPT x 3/4" barb, for N24 only)

### Light Sleeve Armature

- Removable Diffuser Discs (N18 has 1, N24 has 2)
- Retainer rings (N18 has 2, N24 has 4)
- Five spiraltube strands
- Uniseal
- Light Sleeve
- \*replace yearly

### Hang-On Tank Bracket

(\*N18 only)

### Chamber

- Chamber Body
- Logo viewing window
- 100% light blocking wrap
- O-ring
- 5 thumb screws (N18 only)
- 7 thumb screws (N24 only)
- 1/2" barb fittings (N18 only)
- Feet

### LED Array

Heat Sink + Heat Pipe cooling technology

### Optional Parts:

- Ca Injection Assembly
- QD fittings for N18 (two pairs, un-valved)
- Chamber Liner, 3 pak

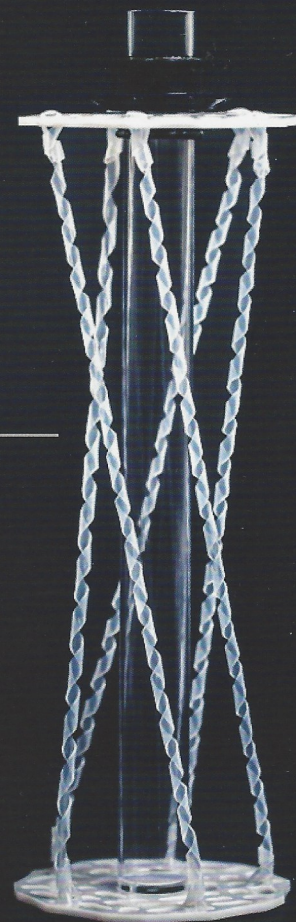
\*For replacement parts, please contact your LFS/dealer

### Power Supply

N18: 12vdc, 90-250vac, 50-60Hz, 1.5amp  
N24: 12vdc, 90-250vac, 50-60Hz, 2amp

### All models come with:

2 spare thumb screws  
2 quick-disconnect fittings.  
(1/2" MNPT x 3/4" barb, for N24 only)  
1 packet of dielectric Superlube for o-rings, seals, and dc power connection



### Solution Starter Pack

N18: 125ml Nitrate/Molybdenum  
N18: 30ml Iron/Manganese

N24: 250ml Nitrate/Molybdenum  
N24: 60ml Iron/Manganese





## Stats + Facts

### What is it?

The ARID Reactor is an acronym for Algae Remediation Illuminated Device. It is a specially designed life support system for use in aquariums and aquaculture.

### The ARID Replaces:

GFO, Chemical absorbents, Bio-pellet reactors, Zeo-vit, Carbon dosing, De-nitrifiers, Lanthanum Chloride dosing, Refugiums (as nutrient export), Algae Turf Scrubbers, Protein Skimmers.

### What does it do?

By harnessing photosynthesis the ARID biosorption system can drive down phosphate to ideal levels for SPS coral growth without the need to buy/replace chemical media. This bio-filtration system works on the principals of "bio-stoichiometry"; or balanced control of products and reactants in a closed biological system by use of a bio-medium as nutrient export. In this case algae and bio-film. With the ARID system, specific nutrients and ratios can be controlled with precision. By running on a reverse daylight cycle from your tank, pH & dissolved O2 is kept higher and stable over 24hrs. Sealed from atmospheric gases, the ARID system depends on dissolved CO2, which keeps CO2 levels and organics minimal. Nitrates are rapidly depleted and may need to be dosed.

## ARID Models

### N18:

Rated for 40-150 US gal.  
Flow 150-200 gph  
LED Power 13w  
Footprint 6.5"  
Height 16.375"  
Integrated Hang-On Bracket

### N24:

Rated for 120-300 US gal.  
Flow 200-400 gph  
LED Power 20w  
Footprint 9.5"x8.25"  
Height 22.625"

### C30:

Rated for 250-500 US gal.  
Flow 350-750 gph  
LED Power 30w  
Footprint 11.5"x10"  
Height 30"

### C36:

Rated for 300-1000 US gal.  
Flow 600-1000 gph  
LED Power 42w  
Footprint 13"x12"  
Height 34"

## Getting Started

1 - Carefully unpack contents from box and ensure all parts listed are present.

2 - Locate Power Supply, power cable, and LED Array power connector. Apply Superlube to inside and outside of connectors. Connect power supply to LED Array.

3 - Plug power cable into Power Supply and the other end into any standard 90-250VAC 50-60HZ wall receptacle. Check that all the LEDs light properly. Unplug the LED Array and power supply, set them to the side.

4 - Place the power supply close enough to the reactor that it can be plugged into both a power receptacle and your ARID reactor. Ensure tat the power supply is NOT close to an open water source and is protected from water spray or salt creep. POWER CORDS, POWER SUPPLY, HEAT SINK, AND LED LIGHT ARRAY ARE NOT WATERPROOF. We recommend plugging the power supply into a GFCI socket, and placing a drip loop on the DC cable side of the power supply, and placing it elevated off the floor. CAUTION: Not placing the power supply in a safe location and using a GFCI socket can lead to permanent damage to your ARID Reactor or cause electrical shock.

5 - Plumb the ARID Reactor into your aquarium system. Your reactor model requires 150-200 GPH (for N18) or 200-400 GPH (for N24) of flow. Your ARID Reactor should be plumbed with the fittings and tubing no smaller than 1/2" ID (N18) or 3/4" ID (N24). Your ARID Reactor is designed with a bottom-up flow pattern; connect feed pump to the bottom fitting of your ARID Reactor using either flexible vinyl tubing or rigid PVC. Be sure there are no blockages or obstructions. A valve can be used on the inlet side for precise control of water flow.

6 - Start your ARID Reactor with at least 1-2 (for N18) or 2-3 (for N24) large handfuls of Chaetomorpha algae in each of the two open segments of the Light Sleeve armature. Make sure the algae is evenly spread around the Light Sleeve. Use the spiral strands to wrap and hold the algae to aid in spacing out your algae for even exposure to the light.

7 - Carefully load the Light Sleeve Armature into the Chamber of your ARID Reactor.

8 - Check the surface of the flange O-ring to ensure it is clean of any debris or strands of algae.

9 - Secure lid by twisting it clockwise until it stops. Pinch the lid and flange together while using your other hand to tighten the thumb screws snugly. Alternate tightening opposite screws CAUTION: Thumb screws can break if over tightened.

10 - Connect flexible tubing to the output fitting on the lid and place the other end into your sump, ensure the plumbing is secure and there are no kinks or blockages.

11 - Turn flow ON to your ARID Reactor and check for leaks around the flange seal and fittings.

12 - Using a timer or controller, create a schedule for your ARID Reactor's lighting system. Your ARID Reactor should be on a reverse light schedule. It is best for your ARID Reactor to turn on 1 hour before the tank light turn off and remain on 1 hour after they turn on. Plug the power supply into a timer or appropriate socket of your controller.

13 - Start dosing the Iron+Manganese supplement as instructed on the bottle.

14 - Read our FAQ + Troubleshooting Guide and join online forums to learn more about the ARID system. Then read some more, knowledge is the key to success with reef aquariums.

Happy Reefing!



# ARID Limited Warranty

Thank you for purchasing an ARID macroalgae reactor. To be covered by this limited warranty, the product must have been purchased directly from Pax Bellum, LLC or, an authorized retailer in the United States.

How long does the warranty last?

It is certified that the ARID reactor(s) are guaranteed for free replacement or repairs up to 1 year from the date of purchase against assembly/manufacturing/material faults. Pax Bellum LLC is responsible for any kind of problem in the product within one year of its purchase.

Who do you contact to get warranty service?

In case of guarantee claims, please contact Pax Bellum LLC (MANUFACTURER) at 802-293-6213, Mon-Fri between the hours of 9:30am to 6:30pm Eastern Standard Time, to obtain return instructions. You must submit proof of purchase in the form of a bona fide, dated bill of sale, receipt, or invoice (or copy thereof) evidencing that your request for service is made within the warranty period.

What will the company do if the product fails?

No charge will be made for parts or labor involved: Only transport charges shall be paid by the consumer/buyer. Pax Bellum LLC will not be responsible for any damage to or loss of the product while it is in transit to us. We recommend that you use a carrier that will track your shipment and ensure the product's safe delivery. Pax Bellum LLC cannot accept any returns sent C.O.D.

ARID reactors are guaranteed to be free of all workmanship and materials defects. The guarantee covers free replacement of parts during the guarantee period of 1 year from the date of purchase.

What parts and repair problems are covered?

Pax Bellum LLC Warrants to you, the original purchaser (this limited warranty is not transferable), that under normal use and service, the product will be free from defects in material and workmanship for a period of one year from the date of purchase (warranty period).

If you discover a defect covered by this limited warranty during the warranty period, and return the product to Pax Bellum LLC, we will repair or replace the product, at our option, using new components. There is no warranty or condition of any kind as to any defects discovered after the warranty period expires.

Does the warranty cover "consequential damages?"

Under no circumstances, does the warranty cover consequential damages also known as "special damages".

Does the warranty cover "compensatory damages?"

Under no circumstances, does the warranty cover compensatory damages. Use or misuse of products manufactured by Pax Bellum LLC that result in personal or property damage is the sole responsibility of the purchaser.

Are there any conditions or limitations on the warranty?

Product would be replaced or repaired free of cost if there is any problem with its working, but under the following conditions the warranty would not be provided:

If the product is not operated or maintained in accordance with the operational manual supplied by Pax Bellum LLC.

Any misuse, abuse, or negligence such as, but not limited too;

- Dismantling, tampering with, or modification in any way not covered by the instruction manual resulting in damage.
- Placing the unit in a location subjected to water, or salt spray resulting in electrical short.
- Any fault occurred due to incorrect power supply.
- Hindering adequate cooling of the light assembly.
- Running the ARID lights in the reactor for extended periods without water.

Any accidents or acts of God such as, but not limited too;

- If the unit is damaged after a fall, or a shock.
- If the unit is submerged in water resulting in electrical short.
- Exposure to extreme heat, or cold.
- Damage resulting from lack of knowledge in plumbing or hand tool technology.

Cosmetic damage.

These are the terms and conditions of warranty. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.



Made in the USA

**US PATENTS:**

**9,388,372**

**9,695,389**

**9,949,451**