Inside the Box

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RADION LED LIGHTING SYSTEM
Three control buttons, Raise, Cycle and Lower make the Radion simple to use.
See pages 4 and 8 for more information.

MOUNTING EYELETS
Mounting eyelets enable easy and versatile mounting of the Radion light to best suit your needs. EcoTech Marine also provides other mounting solutions (sold separately) that can be combined to group and hang multiple Radions easily.
See page 2 for more information.

USB CABLE
Out of the box, your Radion will operate in Basic Mode only. When connected to a PC or Mac via USB or using a ReefLink, and then logged into EcoSmart Live online, your Radion can use one of the many preprogrammed lighting modes - or you can create your own custom modes.
See page 5 for more information.

POWER SUPPLY
The simplicity of the Radion power supply compliments the beauty of the Radion model you have purchased.
See page 2 for more information.

Customer Support
1-800-785-0338
service@ecotechmarine.com or ecotechmarine.com/support
1. MOUNTING THE POWER SUPPLY (OPTIONAL)

XR15/XR30: Locate power supply where it will not be exposed to any water or moisture.

Mount your power supply where it won’t get wet. Include a “drip loop” - a tied loop of cord hanging down below the level of the electrical outlet. That way, if water happens to run down the cord from the tank, it will drip off onto the floor rather than into the outlet.

2. HANGING THE RADION

The higher you hang your Radion over the water, the wider the light spread - but the lower the light intensity. Wider and/or deeper tanks may require hanging more than one Radion in order to provide sufficient light coverage. To hang your Radion:

1. Attach the four eyelet screws (included) to the corner mounting points of the Radion.
2. Attach hanging wire (not included) to the eyelets.
3. Secure the wire to the ceiling or other mount.

Use an 18-gauge stainless-steel wire, which has a 25-pound (11.3 kilo) working load.

EcoTech Marine also sells additional mounting hardware. Visit ecotechmarine.com/parts-store for more information and to purchase.

3. Installing Your Radion™

1. Mounting the Power Supply (Optional)

XR15/XR30: Locate power supply where it will not be exposed to any water or moisture.

Mount your power supply where it won’t get wet. Include a “drip loop” - a tied loop of cord hanging down below the level of the electrical outlet. That way, if water happens to run down the cord from the tank, it will drip off onto the floor rather than into the outlet.

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Use an 18-gauge stainless-steel wire, which has a 25-pound (11.3 kilo) working load.

EcoTech Marine also sells additional mounting hardware. Visit ecotechmarine.com/parts-store for more information and to purchase.

3. Individual lighting needs will vary depending on your tank inhabitants. Here is a rough guide to get you started:

Suggested coverage for Radion based on mounting 9” above water in a 24” deep tank.

<table>
<thead>
<tr>
<th>RADION</th>
<th>COVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>XR30w PRO</td>
<td>36” X 36”</td>
</tr>
<tr>
<td>XR30w</td>
<td>32” X 32”</td>
</tr>
<tr>
<td>XR15w PRO</td>
<td>24” X 24”</td>
</tr>
</tbody>
</table>

For Hanging Kit: Raising light increases coverage but reduces intensity.

SPS tanks
As a rule of thumb, one XR30w PRO provides coverage for 36x36 inches to a depth of 24” inches when mounted 9 inches above the water. A deeper or wider tank may require additional Radion lights.

LPS or fish-only tanks
May require less light than SPS tanks.

Additional Guidelines

1. If the USB port on your Radion will be difficult to reach after hanging, consider leaving a USB cord plugged into the light and accessible.

2. Ensure the Radion is securely fastened and will not fall or get wet.

Mounting the Radion XR30 or XR15 less than 9 inches above the water may expose the fixture to excessive moisture or contact with water. Water damage is not covered under warranty.

The Radion has an internal fan to disperse heat. For optimum performance, do not operate the Radion in a completely enclosed hood.
Basic Mode

Your Radion operates in Basic Mode out of the box. In Basic mode, the Radion will remain on unless manually powered off. Current settings will remain even after powering off.

1. In Basic Mode, be sure to use an outlet timer (not included) to schedule the light to turn on and off at the appropriate times.

2. See page 8 for an explanation of EcoSmart Live button controls.

RADION CONTROLS

RAISE CYCLE LOWER

Increase relative light intensity
Cycler color and temperature
Decrease relative light intensity

Setting Up a Radion with ReefLink*

1. If you already have a ReefLink and EcoSmart Live account, simply power on your Radion and add the new light through EcoSmart Live.

2. If you just purchased a ReefLink and Radion light(s), set up the ReefLink first. After the ReefLink setup is complete run the New Aquarium setup wizard through EcoSmart Live to set up your new lights (Settings > Aquarium Setup).

If you do not have a ReefLink, proceed with EcoSmart Live setup via USB on page 6.

Refer to the ReefLink quick start guide and the support section of our website for more information regarding the operation of your ReefLink.
EcoSmart Live™ without ReefLink

EcoSmart Live is EcoTech Marine’s configuration platform that enables you to set up your Radion(s) directly through a web browser on a PC or Mac.

To ensure proper setup of your Radion(s), be sure to follow these steps in order!

If you are using more than one Radion, configure ALL of your Radions as a group at the same time.

1. Visit www.ecosmartlive.com using a compatible browser and click the “Register” button.
   Compatible browsers include Chrome, Safari, Firefox and IE10.

2. Create an EcoSmart Live account.

3. When prompted, download the Connection Manager program onto the computer.

4. Run the Connection Manager program. It will appear in your system tray when running.

5. Follow all prompts until you see the DONE button.

6. Plug ALL Radion lights into an electrical outlet.

7. Connect ONLY ONE Radion to your computer via a USB cord.*

8. Using a compatible web browser on your computer, log into EcoSmart Live. Run the setup wizard (Settings > Aquarium Setup).

9. The setup wizard will walk you through the programming of your Radion(s). Refresh your browser if the Aquarium Setup Wizard doesn’t appear immediately.

Connection Manager requires a recent version of JavaScript. If you receive an error upon trying to run the Connection Manager, download and install the most recent version of JavaScript.
### Basic Mode Controls

<table>
<thead>
<tr>
<th>Result</th>
<th>Buttons</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power the Radion ON or OFF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle through the Radion’s different preset color settings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase light intensity by 1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease light intensity by 1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase light intensity rapidly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease light intensity rapidly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feed Mode</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### EcoSmart Live Override Controls

<table>
<thead>
<tr>
<th>Result</th>
<th>Buttons</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Day Power Off</td>
<td>HOLD “Raise,” “Cycle” and “Lower” buttons.</td>
<td></td>
</tr>
<tr>
<td>Override - Day</td>
<td>HOLD “Cycle” and “Raise” buttons.</td>
<td></td>
</tr>
<tr>
<td>Override - Night</td>
<td>HOLD “Cycle” and “Lower” buttons.</td>
<td></td>
</tr>
</tbody>
</table>

- **Feed Mode**: Initiates feed mode in any wireless-enabled EcoSmart VorTech Pumps within range. This will not affect light output.

- **One-Day Power Off**: Once your light has been programmed, this will initiate a one-day power off. This is to help newly introduced fish acclimate. The Radion will turn back on when the next day cycle begins.

- **Override - Day**: When in night mode, this button combination will toggle day mode. Your Radion will stay in day mode until the override period has elapsed, or until you press the button combo again to return to night mode.

- **Override - Night**: When in day mode, this button combination will toggle night mode. Your Radion will stay in night mode until the override period has elapsed, or until you press the button combo again to return to day mode.

- **Result**: When in override mode, EcoSmart Live programming is put on hold. The control buttons will function as though the light were in Basic Mode. After the override period has elapsed, the Radion will return to EcoSmart Live Mode.
Troubleshooting

Below are some common troubleshooting situations and their most common solutions.

If you have issues that you cannot solve, please contact EcoTech Marine Customer Service.

Online: ecotechmarine.com/support Phone: 1-800-785-0338

Always disconnect the Radion from your computer BEFORE turning your Radion on or off.

Issue

Light will not turn on.

Resolution

- Check all cord connections on power supply.
- Make sure the Radion is plugged into power.
- Make sure the power outlet is working properly.

If this doesn’t solve the problem, then turn off the Radion and power it back on without the USB cord plugged in.

- If the Radion was previously programmed, do a factory reset.

- Make sure that no objects (metal or otherwise) are near the Radion buttons.
- If interference continues, you may have external RF interference. You can disable the Radion buttons to avoid this problem. To disable the Radion buttons, right-click on the Connection Manager icon in the system tray and disable the buttons for one or all Radion devices.

Issue

Radion buttons are not responding, or they are triggering without input.

Resolution

- Make sure that no objects (metal or otherwise) are near the Radion buttons.
- If interference continues, you may have external RF interference. You can disable the Radion buttons to avoid this problem. To disable the Radion buttons, right-click on the Connection Manager icon in the system tray and disable the buttons for one or all Radion devices.

Problem

Radion will not connect to the Connection Manager.

Resolution

- Make sure the USB cord is securely plugged into the Radion and computer.
- Ensure that only one Radion is connected via USB.
- Restart the computer.

If these options do not solve the problem, then:

1. Unplug the connected Radion FIRST from the computer and THEN from power.
2. Reconnect the Radion to power.
3. Then reconnect the Radion to the computer using the USB cord.
4. Open the Connection Manager and reconnect.

Problem

Connection Manager has become unresponsive.

Resolution

1. Unplug the connected Radion FIRST from the computer and THEN from power.
2. Restart the computer and restart the Connection Manager.

If this doesn’t work, reinstall the Connection Manager and reconnect the Radion.

Problem

EcoSmart Live cannot find my Radion(s).

Resolution

1. Unplug the Radion that cannot be found FIRST from the computer and THEN from power.
2. Reconnect the Radion to power.
3. Then reconnect the Radion that cannot be found to the computer using the USB cord.
4. Right-click on the Connection Manager and select Factory Reset.
5. Repeat setup procedure.
Troubleshooting

**Issue**

Cannot connect or not working as expected with EcoSmart Live.

**Resolution**

- Make sure your internet connection is working.
- Make sure that you have used the correct username and password to log into EcoSmart Live.
- Make sure that you are using a compatible Web Browser - Google Chrome or Safari.
- Refresh the web browser page.
- Make sure you are running the most up to date version of JavaScript, you can update your version through your control panel.
- Make sure the Radion is connected to the Connection Manager.
- 1. If using USB and Connection Manager make sure that the Connection Manager application is open and running in the system tray.
- 2. If connecting through the Connection Manager or a ReefLink make sure that your firewall or anti-virus software is not blocking the connection.
- 3. If using the ReefLink make sure that you are not also trying to connect using USB and the Connection Manager directly to your PC.

Connected VorTech pumps will not go into Night Mode when Radion goes into Night Mode.

**Resolution**

- Make sure that EcoSmart Participation is enabled in EcoSmart Live under the Settings menu.

There is non-uniform LED illumination under low intensity.

**Issue**

- In EcoSmart Live, choose your light.
- 1. Disconnect via USB and power down all Radions for at least 30 seconds.
- 2. Log on to EcoSmart Live using Google Chrome or Safari.
- 3. Select the “Schedule Options” button then “Export Schedule”.
- 4. Select “Settings” then “New Profile” and “Yes”.
- 5. Log out of EcoSmart Live.
- 6. Connect via USB to a single Radion.
- 7. Right click the Connection Manager icon and select “USB Radion” then “Factory Reset” and “Yes”.
- 8. Repeat step 6-7 for each light.
- 9. Log on to EcoSmart Live and program your lights using the Aquarium Setup.
- 10. Re-import your saved scheduling using the “Schedule Options” button.
- 11. Finally select the “Program All” button to save all changes.

Following this procedure, you will be able to save your current program schedule which can be re-imported, but all other account light settings may be reset to factory default.
**Indicator Lights**

<table>
<thead>
<tr>
<th>Color Combination</th>
<th>Meaning</th>
<th>Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red &amp; white</td>
<td>Radion is powered only through USB.</td>
<td>- Unplug the connected Radion from the computer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Connect the Radion to power.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Then connect the Radion to the computer using the USB cord.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Wait for software update to complete.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Reinstall firmware upgrade option through USB.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To do this, right-click on the Connection Manager and select USB Device &gt; Firmware Upgrade.</td>
</tr>
<tr>
<td>Red &amp; yellow</td>
<td>Blinking white</td>
<td>- Radion overheating warning.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure that the Radion has sufficient air flow and clearance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If not, reposition the Radion in a better spot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Driver temperature error.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If problem persists, contact EcoTech Marine Customer Support.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Hardware issue.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contact EcoTech Marine Customer Support.</td>
</tr>
</tbody>
</table>

**Limited Warranty**

The Radion is warranted to be free from defects in materials and workmanship under normal use for period of one (1) year from the date of original purchase. The LED bulb clusters in the Radion are warranted to be free from defects in materials and workmanship under normal use for period of two (2) years from the date of original purchase. This limited warranty is extended to the original buyer of the Covered Products (the “Buyer”). EcoTech Marine disclaims all warranties, express or implied, to subsequent purchasers or users. If the Buyer gives EcoTech Marine notice as required below of a defect in materials or workmanship, EcoTech Marine shall, at its sole option and expense, repair or replace the defective products and refund the original purchase price. Replacement products may not exactly match replaced products. EcoTech Marine shall not be held liable for damage to any aquarium, aquatic life forms or other personal objects due to improper use of the Covered Products.

 FAILURE TO COMPLY WITH THE INSTALLATION AND OPERATING INSTRUCTIONS VOIDS ALL WARRANTIES UNLESS THE BUYER ESTABLISHES THAT THE DEFECTIVE CONDITION IS NOT RELATABLE TO SUCH INSTRUCTIONS. This Limited Warranty is not transferable and cannot be assigned. The Buyer may not retain the Covered Products for sale or resale, or in any other manner which would affect the manufacturer’s ability to use the product including, without limitation, damages for loss of business profits, business interruption, loss of information or any other consequential or incidental loss to the Buyer or any other person and whether based in contract or tort. EcoTech Marine has been advised of the possibility of such damages. In no event shall EcoTech Marine be liable to you or any other party for any direct, indirect, general, special, incidental, consequential, exemplary or other damages arising out of the use of the Covered Products purchased within the United States, subject to the conditions and limitations stated below. These limited warranties are the exclusive warranties for the Covered Products. EcoTech Marine disclaims all warranties, express or implied, for other products.

**Covered Products.** This Limited Warranty applies to the following Radion fixture hereinafter referred to as the "Covered Products". EcoTech Marine makes the following express limited warranties for the Covered Products purchased within the United States, subject to the conditions and limitations stated below. These limited warranties are the exclusive warranties for the Covered Products.

**IMPORTANT NOTICE:** Read this entire Limited Warranty before purchasing, installing or using this product. By purchasing, installing or using this product, you are agreeing to the provisions of this Limited Warranty. The EG090 Limited Warranty is governed by the laws of the Commonwealth of Pennsylvania, excluding its conflict of laws principles and excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods.

**Limitation of Liability.** All warranties are void if there is damage to the Covered Products that is not a result of a defect in the materials or workmanship. The Buyer is responsible for proper installation of Covered Products in accordance with these limited warranties. The Buyer is responsible for ensuring that all persons using the Covered Products are aware of the conditions of this warranty and therefore Buyer and all such persons are required to take reasonable care of any other person and whether based in contract or tort. In no event shall EcoTech Marine be liable to you or any other party for any direct, indirect, general, special, incidental, consequential, exemplary or other damages arising out of the use of the Covered Products purchased within the United States, subject to the conditions and limitations stated below. These limited warranties are the exclusive warranties for the Covered Products.

**Disclaimer of Warranties.** Neither EcoTech Marine nor its authorized dealers make any other warranties, express or implied, including any implied warranties of merchantability or fitness for a particular purpose. In the event the disclaimer is deemed limited or ineffective, the terms and limitations of any implied warranties shall be as the same as the express warranties contained herein.

**Remedy.** If the Buyer gives EcoTech Marine notice as required below of a defect in materials or workmanship, EcoTech Marine shall, at its sole option and expense, repair or replace the defective products and refund the original purchase price. Replacement products may not exactly match replaced products. EcoTech Marine shall not be held liable for damage to any aquarium, aquatic life forms or other personal objects due to improper use of the Covered Products.

**Notice of Claim.** Buyer shall promptly notify EcoTech Marine of any claim under this Limited Warranty. EcoTech Marine reserves the right to deny any claims made by the Buyer more than one (1) year after any defect or other basis of a claim covered by this Limited Warranty is discovered by the Buyer or should have been discovered by the Buyer.

**Claim Procedure.** To obtain warranty service or technical support, please contact EcoTech Marine’s customer service department at (610) 954-9480. You will receive instructions on how to return the product for repair or replacement. To take advantage of the Limited Warranty, Buyer will be required to supply an original point of purchase receipt. Buyer shall be responsible for shipment and insurance costs to send Covered Products to EcoTech Marine.

**Entire Agreement.** This Limited Warranty, and all of the terms and limitations contained herein, constitutes the entire agreement between EcoTech Marine and the Buyer. By purchasing, installing or using the Covered Products, Buyer is not relying on any oral statements made by anyone, including its authorized dealers, which are in any way different or contrary to the terms and conditions of this Limited Warranty. Buyer acknowledges that authorized dealers are not agents of EcoTech Marine. EcoTech Marine disclaims all warranties, express or implied, for other products.

**Disclaimer of Implied Warranties.** Neither EcoTech Marine nor its authorized dealers make any other warranties, express or implied, including any implied warranties of merchantability or fitness for a particular purpose. In the event the disclaimer is deemed limited or ineffective, the terms and limitations of any implied warranties shall be as the same as the express warranties contained herein.
Regulatory Information

- Do NOT look directly at LEDs regardless of intensity.
- This product carries an ingress protection rating of IPX0 and must not be immersed in water.
- Danger: To avoid possible electrical shock, special care should be taken since water is employed in the use of aquarium equipment.
- Do NOT attempt repairs yourself; return the appliance to the manufacturer for service or discard.
- Do NOT immerse in water. If the appliance falls into the water, DON’T unplug the plug. Disconnect the fuse or circuit breaker that supplies power to the appliance, then unplug and examine for presence of water in the receptacle.
- DO NOT attempt to dismantle or modify LED arrays or driver board assemblies as this may result in injury and will void the warranty.
- Close supervision is necessary when an appliance is used by or near children. Keep out of reach of young children.
- Do not use appliance for other than intended use. The use of attachments not recommended or sold by the manufacturer may cause an unsafe condition.
- Never use cord to pull plug from outlet. Grasp the plug and pull to disconnect.
- European Union – Disposal Information:
  This symbol means that, according to local laws and regulations, your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Some collection points accept products for free. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.
- Do not attempt to dismantle or modify LED arrays or drive board assemblies as this may result in injury and will void the warranty.

RF Module Important Information (Units including RF Module only):
- This product you have purchased contains the EcoTech Marine RF Module, part number 900-00088. This module gives your product the ability to communicate wirelessly to other EcoTech Marine products as well as certain other manufacturers’ products that were designed in compliance with the specifications for our RF Module. Use of this module in products not consented by EcoTech Marine is prohibited. This product is for indoor usage only.
- European Union – Disposal Information:
  This symbol means that, according to local laws and regulations, your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Some collection points accept products for free. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.
- Do not attempt to dismantle or modify LED arrays or drive board assemblies as this may result in injury and will void the warranty.

Radion can be used in the following countries:

\[ \text{NL, PL, PT, RO, SK, SL} \]

\[ \text{AT, BG, BE, CY, CZ, DK} \]

\[ \text{ES, SE, GB, IS, LI, NO} \]

\[ \text{EE, FI, FR, DE, GR, HU} \]

\[ \text{IE, IT, LV, LT, LU, MT} \]