



products with a watertight reputation

4/3/2 CHANNEL WATERPROOF AMPLIFIER

AQ-AD600.4

USER / INSTALLATION MANUAL



WATERPROOF AMPLIFIER with



**PLEASE READ THIS INSTRUCTION MANUAL BEFORE
INSTALLATION AND OPERATION**



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Congratulations on your purchase of an Aquatic AV AQ-AD600.4 Amplifier. It has been designed, engineered and manufactured to bring you the highest level of performance and quality, and will afford you years of listening pleasure. Thank you for making Aquatic AV your choice for marine audio entertainment!

1.1 Using Your Amplifier

Working safely with your battery

Disconnect the negative battery terminal before doing any electrical work. Always disconnect the negative (–) battery post first, followed by the positive (+), and when it's time to go back together, connect the positive (+) post first, followed by the negative (–). This can minimize the chance of sparks and voltage spikes, and is a good general practice when dealing with any DC electrical system.

Grounding

Bad grounds under are the number one cause of problem installs.

Always use the shortest length of ground wire possible between chassis ground and the amplifier. Never use a ground wire longer than the one we provide.

The ground wire and power wire are equally important; if either one of them is compromised, the amplifier's performance will degrade or cease to function.

Fuses

Always install a master fuse within 12" of the battery for any additional equipment added to your installations electrical system. The mini-fuse installed on the main amplifier only protects the internal circuitry, not the wiring. In the event of a short, failure to install a fuse near the battery can cause damage to your electrical system or the possibility of fire.

Speaker Polarity

The way speaker wires are marked for polarity (+/–) varies from brand to brand. Some manufacturers use the stripe as positive (+), while others use the stripe as negative (–). Be sure to check the documentation of each component you're dealing with before making connections.

Cutting Cables

Always route wires and cables safely, avoiding sharp edges and burrs along the way. Use wire loom when possible. Check for proper length to both termination points, knowing where each component mounts, before you cut anything.

1.2 Shockwave Technology

Aquatic AV's Shockwave Technology brings together outstanding sound quality, high performance characteristics and unprecedented reliability into a single amplifier.

Protected against water and dust with an Ingress Protection rating of IP65 means you can literally hose down our Shockwave Technology amplifiers thanks to a number of unique features exclusive to Aquatic AV.

Conformal coated circuit boards protect the smallest components from any humidity or atmospheric moisture, while custom molded grommets around cable extrusions and gaskets between all meeting points eliminate any chance of water or dust intrusion. Aluminium and Stainless Steel are used in chassis construction eliminating any risk of rust or corrosion.

Designed to support the widest variety of applications, Shockwave Technology amplifiers operate both 4ohm and 2ohm speaker configurations.

Shockwave Technology incorporates Digital IC's with specially designed low-noise circuitry to produce high-quality, true sound reproduction from any source. The technology used also reduces unwanted EMI (Electromagnetic Interference), which can cause noise in your audio system.

Using gold plated RCA's and high quality connectors ensures the best possible listening experience.

Digital amplifiers are much more efficient than traditional amplifiers; producing less heat, lowering power consumption, reducing strain on batteries and charging systems.

Shockwave Technology amplifiers combine all these features into a single, compact unit and when compared with the competition, still make considerable reductions in both size and weight!

Aquatic AV's Shockwave Technology is now the only sensible amplifier solution for wet, dusty or harsh environments.

2.1 Contents

When first unpacking your new amplifier please check first that the package contains all of the items below. If something is missing, contact the store where you purchased the product.

- 4/3/2 channel waterproof amplifier
- Output cable with connector
- Four (4) Stainless Steel mounting screws
- Owner's Manual

2.2 Key Features

- Maximum Power 4x 150 Watts (2 Ohms)
- Bridged Power 2x 300W (4 Ohms)
- Power and Protection LED
- Line Inputs
- Bridgeable / Trimode Operation
- Variable Gain Controls (200mV to 4V)
- Variable Low Pass Crossover & Fixed High Pass Crossover
- Up to +18dB Variable Bass Boost
- PCB with Conformal Coating
- Waterproof IP65
- Hardwired Input / Output and Speaker Cables
- Signal-to-Noise Ratio: 76dB

Aquatic AV understands that amplifiers are placed in many different kinds of installations, so we have included an input sensitivity control to help you integrate the amplifier into your system regardless of the nature of your input source, and features both high pass and low pass crossovers.

Aquatic AV marine amplifiers are constructed using a special corrosion resistant coating on the printed circuit board to prevent damage from the high humidity.

In order to prevent the intrusion of water into the amplifier enclosure, we have provided the connections at the end of waterproof wires/cables, and tightly grommeted the wires as they pass through the end panels. An additional important and unique component is the rubber pad which seals all control openings.

3.1 Installation Precautions

Before you drill or cut any holes, investigate your vessel's layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring.

Never operate the amplifier when it is unmounted. Attach all audio system components securely within the amplifier to prevent damage, especially in an accident.

Do not mount this amplifier so that wire connections are unprotected, in a pinched condition, in contact with any metal surfaces in your marine vessel, or likely to be damaged by nearby objects.

Before making or breaking power connections in your system, disconnect the marine vessel battery. confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals.

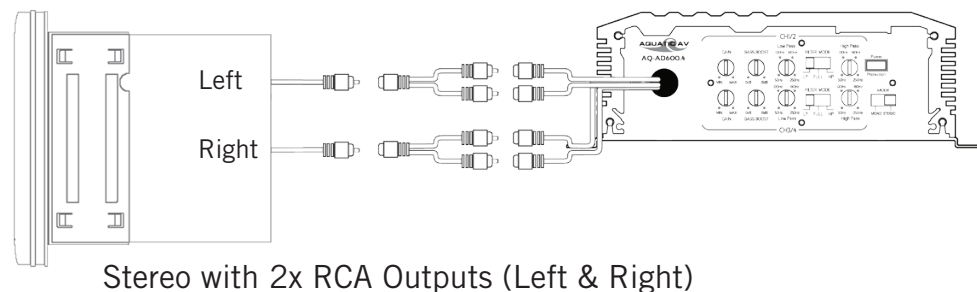
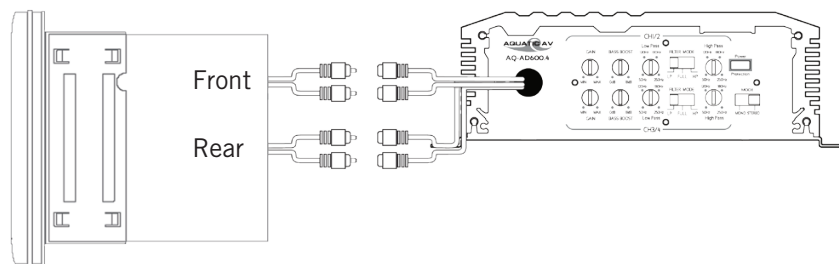
If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the amplifier. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by the manufacturer's warranty.

Input Wiring

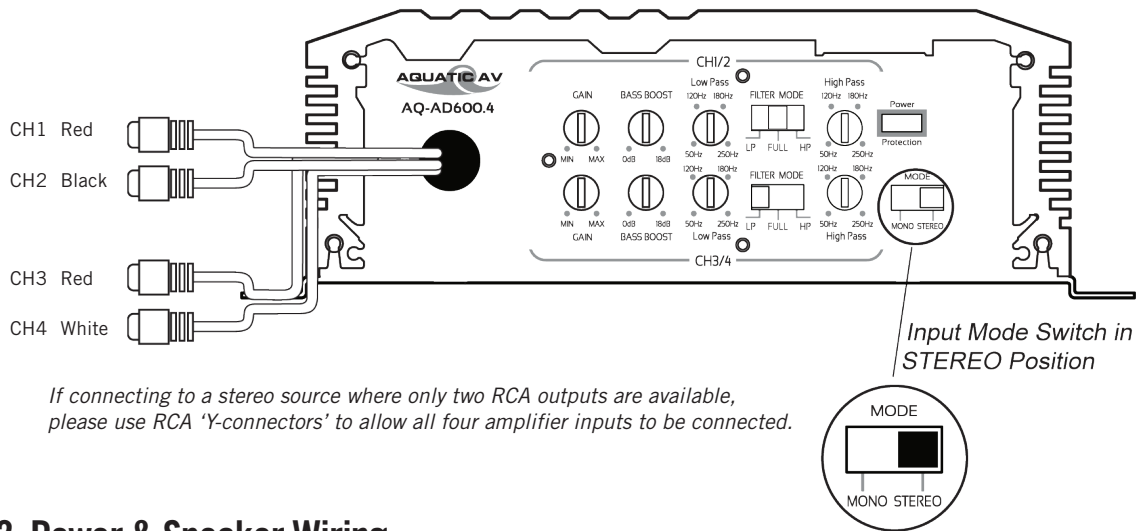
4.1 Input Wiring

The AQ-AD600.4 amplifier requires all four RCA inputs to be connected to provide correct operation. When the amplifier is used in conjunction with a stereo source where only two RCA outputs are available, please use RCA 'Y-connectors' to allow all four inputs to be connected.

Always use high-quality RCA cables for best audio performance.

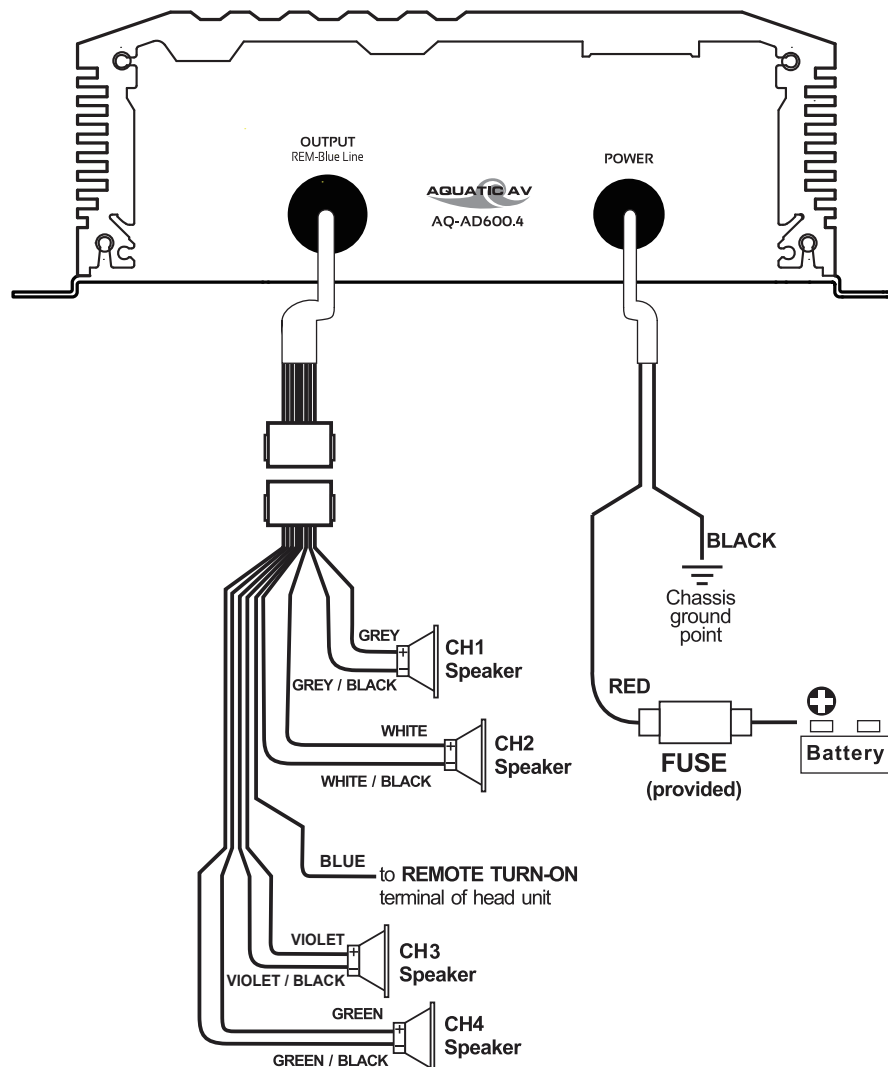


5.1 Input Settings



If connecting to a stereo source where only two RCA outputs are available, please use RCA 'Y-connectors' to allow all four amplifier inputs to be connected.

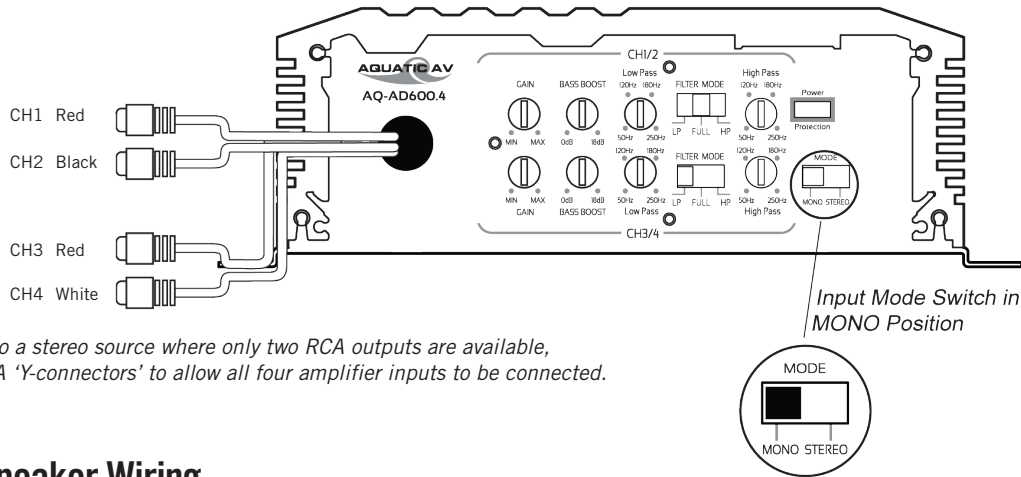
5.2 Power & Speaker Wiring



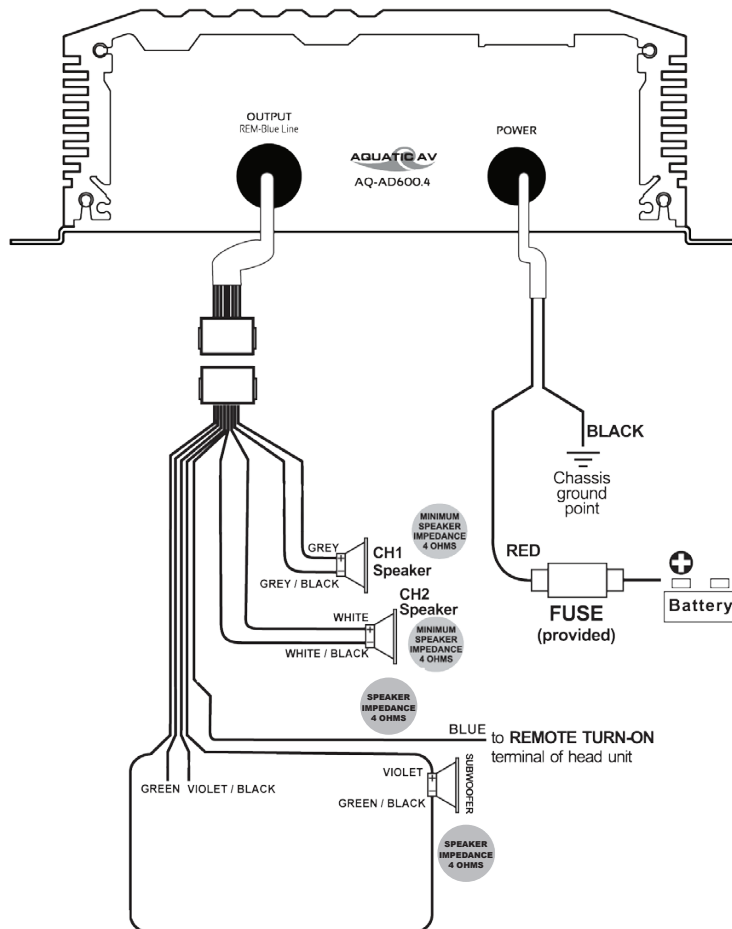
3 Channel Mode operation allows you to connect this amplifier to one pair of main speakers on channels 1 & 2, plus a subwoofer on output channels 3 & 4. The main speakers will operate in STEREO while the subwoofer simultaneously operates in MONO.

To set the amplifier to run in this mode, put the crossover switch in the FULL position.

6.1 Input Settings

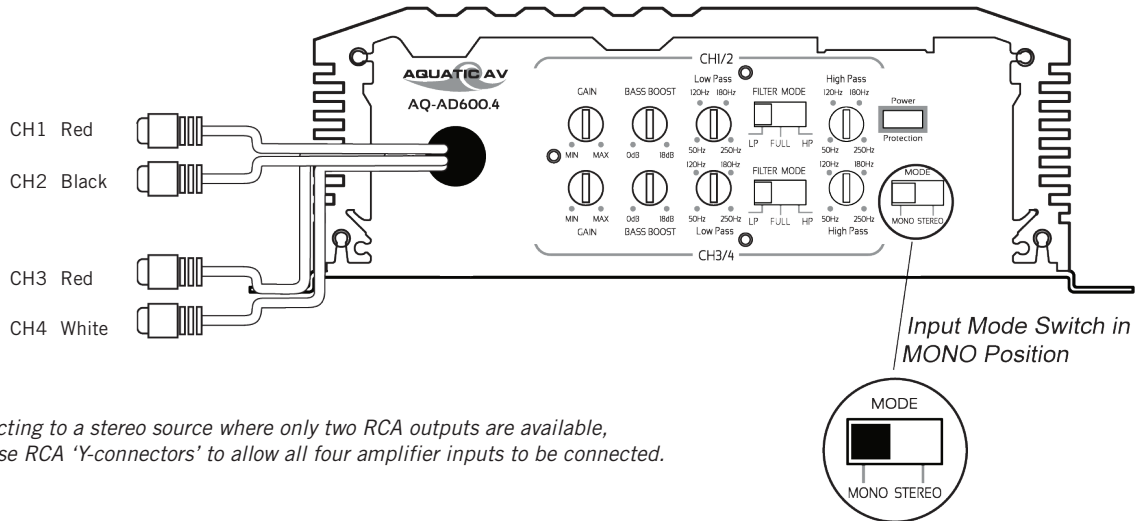


6.2 Power & Speaker Wiring

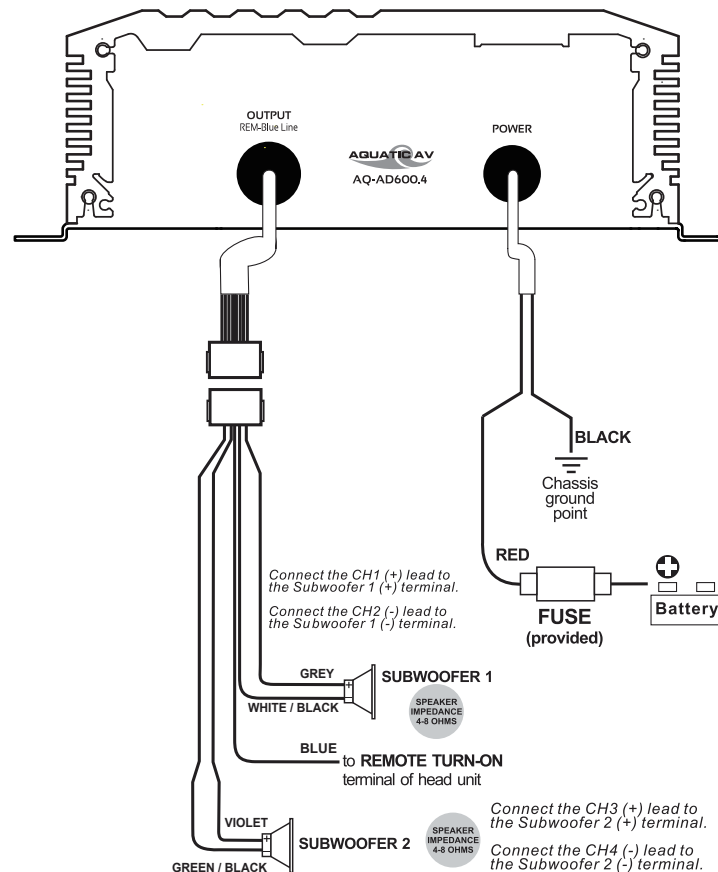


Bridged Mode operation allows you to connect a subwoofer on a single pair of output channels, so a maximum of two subwoofers can be run from the amplifier. The subwoofer will operate in MONO.

7.1 Input Settings



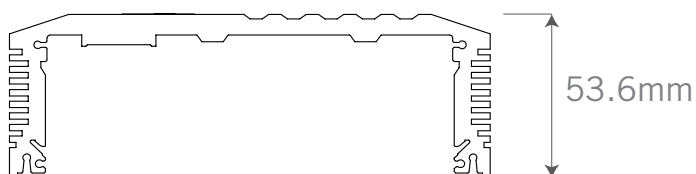
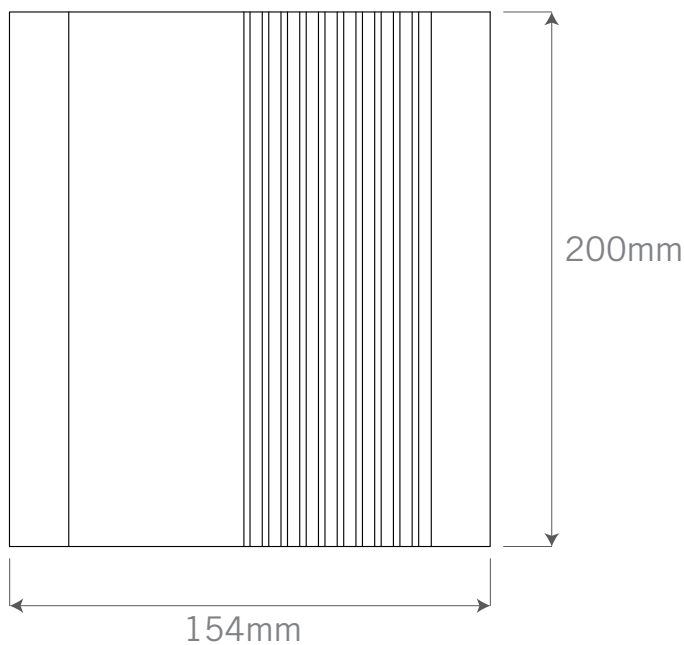
7.2 Power & Speaker Wiring



8.1 Specifications

Type.....	Class D Digital Amplifier
Waterproof.....	Yes IP65
Input Channels.....	4x RCA
Output Channels.....	4/3/2
Output Impedance (per channel).....	2 Ohms / 4 Ohms
Power Output (max) @ 4 Ohms, 10% THD.....	400W (4x 100W)
Power Output (max) @ 2 Ohms, 10% THD.....	600W (4x 150W)
Power Output - bridged @ 8 Ohms, 10% THD.....	2x 200W
Power Output - bridged @ 4 Ohms, 10% THD.....	2x 300W
Frequency Response.....	15Hz - 25,000Hz
Input Sensitivity.....	200mv to 4V
Dimensions (HxWxD).....	53.6 x 200 x 154mm
Additional Features.....	Gold Plated Connectors

8.2 Dimensions



Aquatic AV offers a limited warranty of our products on the following terms:

Length of warranty

2 years on audio systems, electronics, speakers, and accessories (receipt required).

Coverage

This warranty covers only the original purchaser of a Aquatic AV product purchased from an authorized Aquatic AV dealer in the United States. In order to receive service, the purchaser must provide Aquatic AV with a copy of the receipt stating the customer name, dealer name, product purchased and date of purchase.

Defective products

Products found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at Aquatic AV's discretion.

What is not covered

Damage caused by accident, abuse, improper operations, theft. Any cost or expense related to the removal or reinstallation of product. Service performed by anyone other than an authorized Aquatic AV service center. Any product with the serial number or tamper labels defaced, altered, or removed. Subsequent damage to other components. Any product not purchased from an authorized Aquatic AV dealer.

Limit on implied warranties

Any implied warranties including warranties of fitness for use and merchantability are limited in duration to the period of the express warranty set forth above. Some states do not allow limitations on the length of an implied warranty, so this limitation may not apply. No person is authorized to assume for Aquatic AV any other liability in connection with the sale of the product.

How to obtain service

You must obtain a return material authorization number (RMA) to return any product to Aquatic AV. You are responsible for shipping charges of returned products to Aquatic AV.

Please record the model and serial number[s] of your equipment in the space provided below as your permanent record and will assist us with your factory warranty coverage. These numbers can be found on the underside of the amplifier.

Model number[s]:	Serial number[s]:

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