

Aquatic AV AD6005

Aquatic AV AD600.5 5-Channel Compact Marine Amplifier

Instruction Manual

1. INTRODUCTION AND OVERVIEW

This manual provides detailed instructions for the installation, operation, and maintenance of your Aquatic AV AD600.5 5-Channel Compact Marine Amplifier. Designed for harsh marine environments, this amplifier delivers robust audio performance with advanced features for durability and sound quality.

The AD600.5 amplifier boasts 600 Watts of total power, utilizing digital (Class D) technology for efficient operation, reduced heat generation, and lower battery strain. It features gain controls for precise audio matching, Shockwave technology to minimize electromagnetic interference (EMI), and a Bridge Mode for combining channel power, ideal for subwoofer applications. The unit is fully waterproof (IP65 rated) and resistant to UV, salt, and fog, ensuring reliable performance in challenging conditions.

2. PRODUCT FEATURES

- **600 Watt Amplifier:** Delivers 600W of total power across 5 channels for powerful audio output.
- **Digital (Class D) Technology:** Ensures high efficiency, lower heat production, and reduced power consumption.
- **Gain Controls:** Allows precise matching of stereo output to amplifier input levels.
- **Shockwave Technology:** Reduces unwanted EMI for clear and crisp audio.
- **Bridge Mode:** Enables combining power from multiple channels for increased output, suitable for subwoofers.
- **Marine Grade Durability:** IP65 rated waterproof, UV, salt, and fog resistant for extreme environments.

3. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and longevity of your marine amplifier. It is recommended that installation be performed by a qualified marine audio technician.

3.1. Mounting the Amplifier

Select a secure, well-ventilated location away from direct heat sources and excessive vibration. Ensure sufficient space for wiring and air circulation. The amplifier's compact design allows for flexible placement. Use appropriate marine-grade fasteners to secure the unit.

3.2. Wiring Connections

Ensure all power, ground, and remote turn-on wires are of adequate gauge and properly fused. Connect speaker wires to the appropriate channels, observing polarity. For optimal sound, use high-quality marine-grade wiring throughout your system.



Figure 1: Aquatic AV AD600.5 5-Channel Compact Marine Amplifier with connected wiring harnesses. The amplifier unit is blue with the 'Aquatic AV' logo and 'AD600.5' model number visible. Various wiring harnesses are connected to the amplifier, including RCA input cables (red and white connectors) on one side and power/speaker wire bundles on the other side, indicating its connectivity for audio systems.

3.3. Audio Input

Connect your audio source (e.g., marine stereo) to the amplifier's RCA input jacks. Ensure a secure connection to prevent signal loss or interference.

4. OPERATING THE AMPLIFIER

Once installed, the amplifier requires minimal user interaction for daily operation. Adjustments are typically made during initial setup to match your audio system components.

4.1. Gain Adjustment

The gain controls on the amplifier should be set to match the output voltage of your head unit. Start with the

gain at minimum and slowly increase it until the sound is clear and powerful without distortion. Avoid setting the gain too high, as this can lead to clipping and damage to speakers.

4.2. Crossover Settings

The AD600.5 features built-in high-pass and low-pass crossovers. Adjust these settings to direct appropriate frequencies to your speakers and subwoofers. High-pass filters are used for full-range speakers to prevent low frequencies, while low-pass filters are used for subwoofers to only allow low frequencies.

4.3. Bridge Mode Activation

If utilizing the Bridge Mode for a subwoofer, ensure your subwoofer's impedance is compatible with the bridged output. Refer to the specifications section for details on bridged power output and impedance requirements.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your marine amplifier.

- **Cleaning:** Periodically wipe down the amplifier with a damp cloth to remove salt residue, dust, and grime. Avoid using harsh chemicals or abrasive cleaners.
- **Inspection:** Regularly check all wiring connections for corrosion or looseness. Ensure the mounting hardware is secure.
- **Environmental Protection:** Despite its marine-grade construction, avoid prolonged exposure to direct sunlight and extreme temperatures when possible. Ensure the amplifier's cooling fins are free from obstructions for proper heat dissipation.

6. TROUBLESHOOTING

If you encounter issues with your AD600.5 amplifier, refer to the following common troubleshooting steps:

- **No Power:** Check the main power fuse, ground connection, and remote turn-on wire. Ensure the battery voltage is sufficient.
- **No Sound:** Verify all audio input connections (RCA cables) and speaker wire connections. Check the gain settings and ensure the head unit is sending a signal.
- **Distorted Sound:** Reduce the gain settings. Check for proper impedance matching with speakers/subwoofers. Inspect speaker wires for shorts or damage.
- **Overheating:** Ensure the amplifier has adequate ventilation. Check for proper impedance matching, as low impedance loads can cause excessive heat.

If problems persist after following these steps, contact Aquatic AV customer support or a qualified technician.

7. SPECIFICATIONS

Feature	Detail
Model Number	AD6005

Brand	Aquatic AV
Number of Channels	5
Output Power	600 Watts (Total)
Mounting Type	Surface Mount
Package Dimensions	14 x 8 x 5 inches
Item Weight	6 Pounds
Date First Available	October 15, 2019

8. WARRANTY AND SUPPORT

This product is manufactured by Aquatic AV. For specific warranty information, please refer to the warranty card included with your product or visit the official Aquatic AV website. For technical support, troubleshooting assistance, or service inquiries, please contact Aquatic AV customer service directly.

Manufacturer: Aquatic AV