

**AQUACRAFT**<sup>®</sup>  
Models

# Mini Rio<sup>™</sup>

**WARNING:**

- Never attempt to swim after a stalled RC boat.
- Never operate your RC boat while standing in the water.
- Never operate your RC boat in the presence of swimmers.
- Always use a Personal Flotation Device (PFD) when boarding and operating your retrieval craft, i.e. Jon boat or duck boat.  
NOTE: Because of the sharp running hardware included with this RC boat, we do not recommend a rubber blow up raft.
- RC boat running hardware is very sharp. Be very careful when working on and around the metal parts.
- While the motor is running pay close attention to the propeller. Do not come in contact with the propeller at any time the engine is running or serious injury will result.
- AquaCraft products are to be used by ages 14 and over.

[aquacraftmodels.com](http://aquacraftmodels.com)

## ITEMS INCLUDED



### ITEMS INCLUDED:

- Mini Rio
- Tactic TTX300 transmitter
- 7.2V 6 cell 1100mAh NiMH battery
- 12 volt quick charger

## WARRANTY

AquaCraft will warrant your Mini Rio for 90 days after the purchase from defects in materials or workmanship of original manufacture. AquaCraft, at their option, will repair or replace at no charge, the incorrectly made part. This warranty does not cover damage caused by crash, abuse, misuse, alteration or accident. To return your boat for repairs you need to provide proof of purchase. Your store receipt or product invoice will suffice. IN NO EVENT SHALL THE PURCHASER BE ENTITLED TO ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state. (Outside USA and Canada, contact local importer for warranty information.)

Hobby Services  
3002 N. Apollo Drive, Suite 1  
Champaign, Illinois 61822  
Attn: Service Department  
Phone: (217) 398-0007 9:00 am - 5:00 pm Central Time M-F  
E-mail: [hobbyservices@hobbico.com](mailto:hobbyservices@hobbico.com)

### STANDARD REPAIR SERVICE

After the 90-day warranty has run out you can still have your Mini Rio repaired for a service fee by the experts at AquaCraft. To speed up the repair process, please follow these four simple steps:

**Important Note:** For standard repair service you must specify whether you wish the charges to be billed COD or if you wish to be notified of the charges so you can send a check.

1. Please return the ENTIRE system, boat and radio.
2. Make sure batteries are removed from the transmitter.
3. Send written instructions which include a list of all items returned, a THOROUGH explanation of the problem or problems of the service needed. Be sure to include your return address and daytime phone number. If you have access to e-mail please provide us with your e-mail address to help speed communication.
4. Send to the address above.

## INTRODUCTION

Thank you for purchasing the AquaCraft Mini Rio! We want the time you spend with your new Mini Rio to be fun and successful, so please fully read the manual. If for any reason you think this model is not for you, return it to your local dealer immediately. **NOTE:** Your hobby dealer cannot accept a return on any model after final assembly or after your boat has been subject to operation.

## SPECIFICATIONS

### Mini Rio Boat Specifications:

- Hull Length: 14.25" [362mm]
- Overall Length: 16" [406mm]
- Width: 4.75" [108mm]
- Height: 2.5" [63mm]
- Overall Height (less antenna): 3.25" [82mm]

### Boat Features:

- Water resistant access hatches
- Tough ABS construction
- 380 water cooled motor
- Micro flex wire drive system
- Dual wedge rudder steering system
- Transom mounted water pickup
- Side rail cushioning
- 1/8" [3.2mm] prop shaft
- Two Blade 30mm FRP propeller

### Radio System:

- Tactic 3-Channel Pistol Grip Transmitter
- 2n1 Rx/ESC unit
- AquaCraft Micro Steering Servo

## BOAT TERMINOLOGY

**BOW:** The front of the boat.

**STERN:** The back of the boat.

**PORT:** This is the left side of the boat when aboard and facing the front (bow). An easy way to remember this is that port and left both contain four letters.

**STARBOARD:** This is the right side of the boat when aboard and facing the front (bow).

**HULL:** The body of the boat.

**DECK:** The top of the boat.

**TRANSOM:** The back of the boat.

**KEEL:** The center of the bottom of the boat.

**STRAKE:** Lift rail(s) located on the bottom of the boat.

**RUDDER:** The hinged vertical plate mounted at the stern that controls steering.

**STRUT:** The propeller support bracket mounted on the transom of the boat.

## SAFETY PRECAUTIONS

- **Never ever attempt to swim after a stalled RC boat. Do not get in the water for any reason to retrieve your boat. To aid you in retrieving a stalled RC boat, set up a fishing reel with a tennis ball tied to the end of the line. Or better yet, get yourself a small Jon boat so you can row out and pick up your boat. Remember to use a PFD any time you enter your retrieval craft.**
- AquaCraft products are to be used by ages 14 and over.
- Do not touch the propeller anytime the motor is running. Pay equally close attention to items such as loose clothing, shirtsleeves, ties, scarves, long hair or anything that may become entangled in the spinning propeller. If your fingers, hands, etc. come in contact with the spinning propeller, you may be severely injured.
- The speed and mass of this boat can inflict property damage and severe personal injury if a collision occurs. Never run this boat in the presence of swimmers or where the possibility of collision with people or property exists.
- Electric motors produce heat. Do not touch any part of your motor until it has cooled.
- This boat is controlled by radio signals, which are susceptible to possible interference from other R/C transmitters, paging systems, or other electrical noise.
- In the event that weeds become entangled in the propeller, stop the motor before attempting to remove them.
- If your Mini Rio should happen to stall, water currents will slowly carry it to shore. The bad news is that the boat could be carried to the opposite shore. When surveying areas to run your Mini Rio, keep variables in mind such as wind direction, size of the lake, etc. It is not advisable to run R/C boats on any free-flowing bodies of water such as creeks or rivers.
- Always remove the battery pack from the boat before charging.
- Only use the specified battery when operating the Mini Rio.

## ORDERING REPLACEMENT PARTS

To order replacement parts for the AquaCraft Mini Rio use the order numbers in the replacement parts list that follows. Replacement parts can be purchased from your local hobby shop or by mail order. If you need assistance locating a dealer to purchase parts, visit [aquacraftmodels.com](http://aquacraftmodels.com) and click on "Where to buy". If you are missing parts, contact Hobbico Product Support at:

Phone: 217.398.8970 Fax: 217.398.7721

[aquacraftmodels.com](http://aquacraftmodels.com)

E-mail: [productsupport@hobbico.com](mailto:productsupport@hobbico.com)

AQUB6225	Cowl
AQUB6250	Flex Drive Cable with Drive Dog
AQUB6325	Decal Sheet Orange
AQUB6327	Decal Sheet Blue
AQUB6401	Deck Lids
AQUB6402	Cowl Latch
AQUB7105	Boat Stand
AQUB7757	30mm FRP Prop
AQUB7852	Drive Dog w/ Prop Nut
AQUB7894	Motor Coupler
AQUB8723	Rudder (2)
AQUB8724	Rudder Control Arms
AQUB8725	Rudder Support Brackets
AQUB8726	Rudder Linkage Set
AQUB9021	RX/ESC 2.4GHz
AQUB9045	Transom Water Pick Up
AQUB9214	Water Cooling Plate
AQUG1061	380 Motor W/Connectors
AQUM7050	Steering Servo
AQUP9929	12V Peak Charger
TACJ0300	TTX300 Pistol Grip 2 Channel Transmitter
— Hop Up —	
AQUB7731	AquaCraft 31mm FRP Propeller Blue

## MANUAL SPECIFICATION AND DESCRIPTION CHANGES

All pictures, descriptions, and specifications found in this instruction manual are subject to change without notice. AquaCraft maintains no responsibility for inadvertent errors in this manual.

## PREPARATIONS

**These are the components you will need to operate your Mini Rio:**

- 4 "AA" batteries



- Small personal retrieval system. This might be as simple as a tennis ball tied to the end of a fishing reel. Better yet, a small Jon boat and personal floatation device (PFD, preferred!) so you can row out and properly retrieve your boat.

**Extra supplies you might want to have with you during the operation of your Mini Rio:**

As with any hobby, it is a good idea to assemble a useful collection of tools and accessories to bring along when you head out to the pond. These are some items you will want to keep handy.

- Extra “AA” Batteries
- Pliers (HCAR0625)
- Hobby Knife (RMXR6901)
- Metric Allen Key Set (GPMR8020)
- GrimRacer™ Speed Grease Drive Cable Lubricant (AQUB9500)

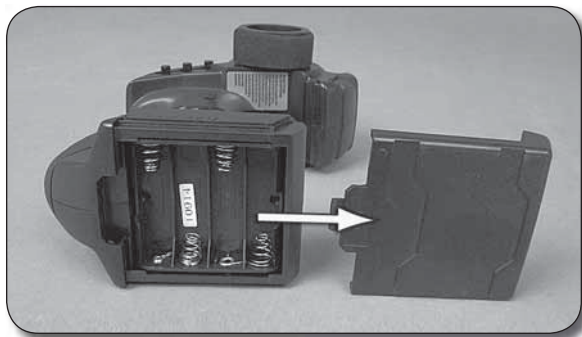


**Other Useful Items to Have On Hand:**

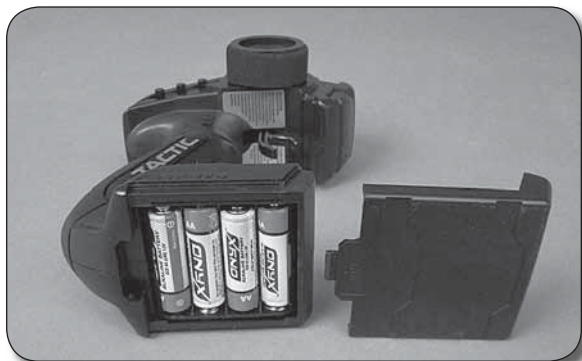
- |                          |                                    |
|--------------------------|------------------------------------|
| • Waders or rubber boots | • Folding table                    |
| • Paper towels           | • Lawn chairs                      |
| • Spray-on cleaner       | • First-Aid kit                    |
| • Sunglasses             | • Cooler with plenty of ice & soda |
| • Sun block              | • Canopy or shelter                |

**ASSEMBLY**

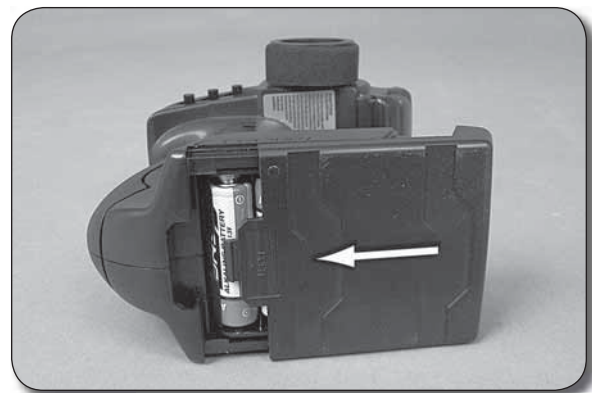
**INSTALLING THE TRANSMITTER BATTERIES**



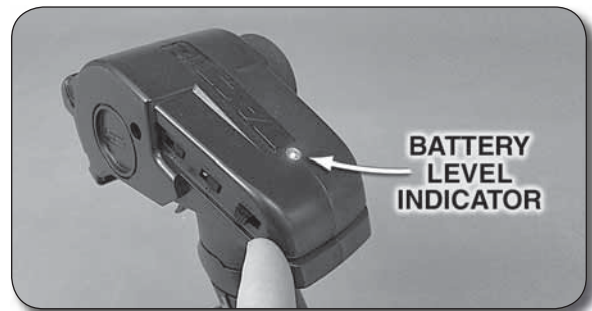
1. Slide off the battery door from the bottom of the transmitter.



2. Install 4 “AA” batteries into the transmitter in the configuration molded into the battery floor.



3. Reinstall the battery door onto the bottom of the transmitter.



4. Turn the transmitter “ON” using the switch on the transmitter’s left side. The battery level indicator light (LED) should glow red. If the light is flashing, the batteries are low and need to be replaced.

**ACCESSING AND CHARGING THE BATTERY PACK**



1. Remove the cowl by rotating the lock near the front of the windshield.



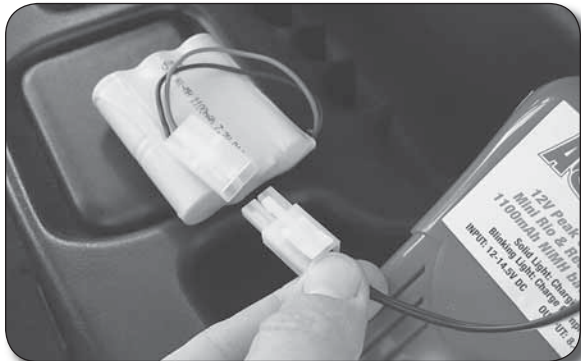
2. Remove the cowl.



3. After removing the cowl, grab the bar on the top of the round opening covers and rotate to remove the covers.



4. Plug the charger into an automobile's 12 volt power outlet. Once the charger is plugged in it will start to beep and the light on the front will begin to flash. Place the charger outside your automobile.



5. Join the battery and charger connectors. The connectors are designed to only connect one way to prevent the battery from being hooked up backwards.

After you attach the battery to the charger the beeping will stop and the light will stay illuminated to indicate the charger is charging properly. It's a good idea to check the battery pack every five minutes or so. If at anytime the battery becomes hot, remove the battery from the charger. Allow the battery to cool completely before attempting to use it. When the charge is complete the charger will start to beep and the light will flash.

Note: It is normal for the battery to be warm after charging it. It's also a good idea to allow the battery to cool before placing it in the boat.

After charging is completed, unplug the charger from the power outlet. Disconnect the battery and charger connectors by pushing the small tab on down while gently pulling the connectors apart.

### IMPORTANT PRECAUTIONS

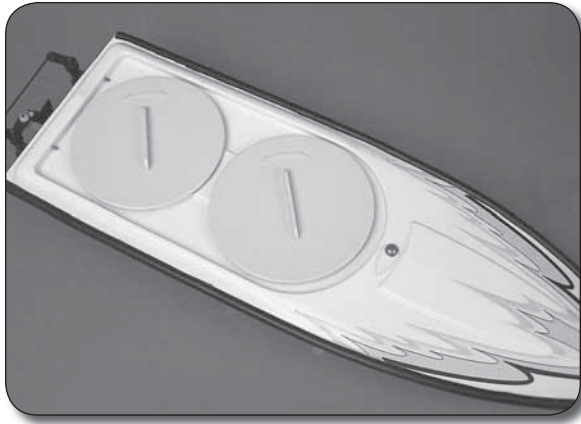
- Do not charge the battery with the vehicle's engine running.
- Always place the battery and charger outside the vehicle when charging.
- Charge only the Mini Rio's 6-cell 7.2 V 1100mAh NiMH rechargeable battery. Do not attempt to charge other battery types, as damage may occur to the battery and charger.
- Do not allow water or foreign objects into the charger.
- Do not cover the air intake vents on the charger as this can cause the charger to overheat and become damaged.
- Do not leave the charger unattended while charging. Disconnect the battery immediately if the charger and/or if battery become hot.
- Do not charge hot batteries.
- Keep out of the reach of children.



6. Install the hook and loop to the battery and install the battery in the boat. You will notice the plug can only be attached one way. Pay attention to the polarity of the plug. Plug the battery into the RX/ESC combo unit.



7. Tuck the battery plug under the deck of the boat to keep the wires away from the drive components. **Make sure the battery pack and wire are NOT touching the drive components.**



8. Re-install the covers by aligning the tabs on the bottom of the covers with the tabs in the openings. Rotate the covers 45° to secure them in place.



9. Place the cowl on the boat and turn the front lock to hold it in place. Your boat is now ready for operation.

## POWER UP

***It is important to follow the below sequence each time you operate your boat.***

### POWER UP BEFORE A RUN:

1. Turn on the transmitter. Make sure the light on the top is glowing red.
2. Plug in the 7.2V battery pack. Turn on the receiver switch.
3. You will hear a faint "BEEP." Fully squeeze the throttle trigger and hold for 1 second. Again you will hear a faint "BEEP". Release the throttle trigger and wait one second. You should hear two faint "BEEP-BEEP"s. Never during the arming procedure push the throttle trigger forward. Your boat is now armed and ready to operate.
4. Install the round hatch covers.
5. Install the canopy.

### POWER DOWN AFTER A RUN:

1. Remove the canopy.
2. Remove the round hatch covers.

3. Unplug the 7.2V battery.
4. Turn off the transmitter.
5. Use a paper towel to remove any water that might have entered the hull.

### LAUNCHING AND DRIVING YOUR MINI RIO:

1. Place the boat in water that is at least 8" deep. Make sure the water is free of weeds, sticks or other floating debris.
2. Slowly advance the throttle to get the boat a safe distance from shore. Adjust the steering trim knob on your transmitter until the boat tracks straight when the steering wheel is at neutral.
3. *Enjoy driving your MINI RIO!*
4. When your boat starts to slow down, it's time to drive it back to shore. Typical run times are 6 to 9 minutes depending on the charge and condition of your battery pack.

**IMPORTANT:** If your boat takes on a large amount of water and stalls in the middle of the lake, don't worry. Your Mini Rio has foam flotation so it will not sink. You will, however, have to retrieve the boat and remove the hatch covers to remove any water that might have entered the boat. If the inside of the boat is flooded, remove the water and let the boat fully dry before operating it again.

### REVIEW:

Turn on transmitter.

Plug in battery, wait one second, "BEEP".

Fully Squeeze Trigger, hold one second, "BEEP".

Release Trigger, wait one second, "BEEP-BEEP" (do not push forward).

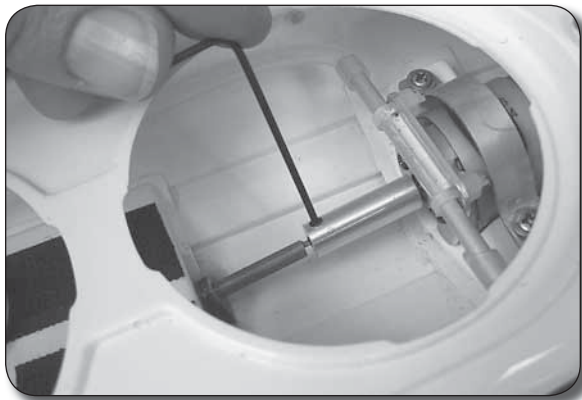
Your boat is now ready to operate.

## MAINTENANCE

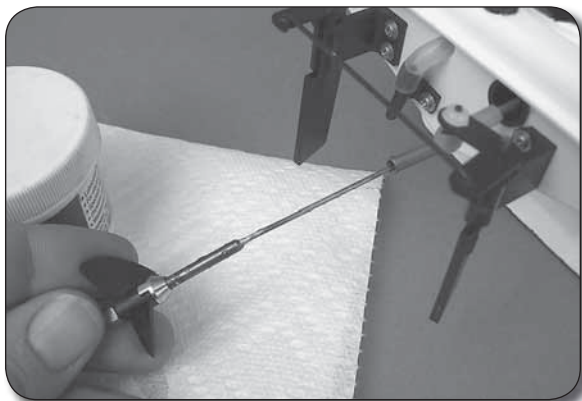


1. It is important to remove and lubricate the drive cable after a day of running. Make sure the power to the boat is turned off and the battery pack is unplugged. To lubricate the cable you will need:

- 1.5mm Allen wrench
- GrimRacer Cable Grease (AQUB9500)
- Paper Towel



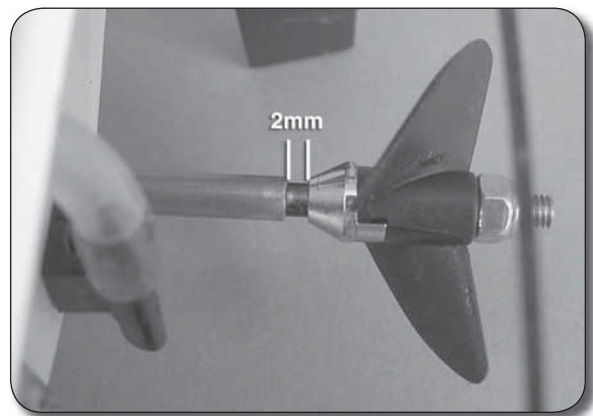
2. Using a 1.5mm Allen wrench, loosen the set screws holding the drive cable to the motor coupler. It is important to note that there are two set screws holding the cable in position.



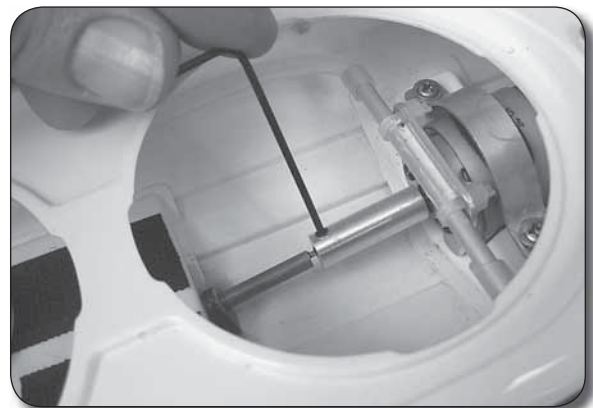
3. Slip the cable out the back of the boat. Wipe off any grease and water that might be on the cable.



4. Using GrimRacer speed grease, apply a small amount to the cable and slide the cable back into the boat. Be careful to align the cable to the hole in the end of the motor coupler.



5. Leave about 1/16" [2mm] gap between the front of the drive dog and the back of the shaft tube.



6. Tighten the set screws to hold the cable in place. Do not over tighten the set screws. It is also a good idea to tighten one screw lightly and then the other. Go back and forth between screws to keep even tension on the drive cable.



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