

AQUACRAFT[®]
Models



BRISTOL TRAWLER

INSTRUCTION MANUAL

WARNING

-  Never attempt to swim after a stalled R/C boat.
-  Never operate your R/C boat while standing in the water.
-  Never operate your R/C 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 R/C boat, we do not recommend a rubber blow up raft.
-  R/C 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.

Introduction

Thank you for purchasing the AquaCraft Bristol Trawler. We want the time you spend with your new R/C boat 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 place of purchase immediately. **NOTE: Your hobby dealer cannot accept a return on any model after final assembly or after your boat has been operated.**

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.

Items Included



- Bristol Trawler
- Tactic TTX490 Transmitter
- Mast Assemblies (boxed)
- Boat Stand

Parts Needed to Complete Your Model

- 1 - ElectriFly® 11.1V 3S 2200mAh 30C LiPo Battery (GPMP0861)
- 1 - Duratrax Onyx 150 LiPo Balancing Charger (DTXP4195)
- 6 - AA Dry Cell Batteries (DTXP4708)
- 1 - HIGHLY RECOMMENDED ElectriFly SafeCharge™ LiPo Battery Charge Bag (GPMP0751)

RECOMMENDED OPTIONAL PARTS AND TOOLS

- ElectriFly LiPo 3S 11.1V 3200mAh 25C (GPMP0871)
- 1.5mm Hex Wrench (DTXR0288)
- 2mm Hex Wrench (DTXR0289)
- 2.3mm Hex Wrench (DTXR0290)
- 5.5mm Nut Driver (DTXR0212)
- Great Planes Cell Match (GPMM3210)
- Needle Oiler (ZONR3105)

Boat Features

- Fiberglass hull.
- Tactic TTX490 2.4GHz 2-stick transmitter.
- LiPo ready (3S) 30 Amp ESC with low battery warning system and battery cut off circuit.
- LED mast lighting.
- Custom wood boat stand.

Important LiPo Performance and Care Information!

To get the most performance and safety from your LiPo battery, please read and understand the following information.

CHARGING

Always follow the manufacturer's recommendation for charging and maintaining your batteries. We would, however, like to expand on this for R/C boating use.

- Never leave a charger and battery unattended while charging.
- Use only the recommended batteries and appropriate charger.
- Refer to the instructions included with your charger for proper battery charging procedure.

For best performance and longest battery life, never charge your LiPos at a charge rate higher than 1C. (1000mAh = 1amp, 2000mAh = 2amps and so on). Remove the battery pack from the model and charge in a LiPo Sack (GPMP0751) or other safe charge container.

OPERATION CHARGING AND DISCHARGING

We have found it best to use only 80% of the rated mAh of the battery pack per discharge (boat run). You will experience rapid depletion of battery pack performance if you continue to discharge your pack below the 80% usage target.

NOTE: Your Bristol Trawler's ESC has a stutter bump warning system that warns you of low battery voltage. This system starts its warning at 10.2V total giving you time to bring the boat back to shore before the ESC cuts off at 9.2V. This is a built-in safety system for you, your boat and your batteries. It's important to note that a 2S pack (7.2V) will not operate your boat or any battery pack (i.e. number of cells) that falls below the listed warning and cut off voltages.

Although this system is in place we still recommend adjusting your run times to not exceed 80% battery usage.

Always unplug and remove the battery from the boat after use. NEVER leave your battery pack plugged into the boat when not in use.

STORAGE

Store your battery pack/s in a LiPo Sack (GPMP0751) or other battery containment device. It is best to store them in a cool, dry place and on a fire-resistant surface. It is also a good idea to charge your batteries to either a full charge (if you feel you will be using the packs frequently) or at 11.4V for a 3S pack (or 3.8V per cell) for longer storage.

Warranty Service

AquaCraft will warranty your Bristol Trawler for 90 days after the purchase from defects in materials or workmanship of original manufacture. AquaCraft, at their discretion, will repair or replace the incorrectly made part at no charge. This warranty does not cover damage caused by crashes, abuse, misuse, alterations or accidents. To return your boat for repairs you need to provide proof of purchase, your store receipt or product invoice. **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. You may also have other rights, which vary from state to state.

Outside the USA and Canada, contact your local importer for warranty information.

HOBBY SERVICES Ph: (217) 398-0007
Attn: Service Department 9:00 am - 5:00 pm
3002 N. Apollo Drive, Suite 1 Central Time M-F
Champaign, Illinois 61822

E-mail: hobbyservices@hobbico.com

Safety Precautions

- **Never ever attempt to swim after a stalled R/C boat. Do not get in the water for any reason to retrieve your boat. To aid in retrieving a stalled R/C boat, set up a fishing reel with a tennis ball tied to the end of the line. 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 close attention to items such as loose clothing, shirtsleeves, ties, scarves, long hair or anything that may become entangled in the spinning prop. 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 possible electrical noise.
- You might be enticed to operate your boat at a very far distance. Please avoid "taking her out" too far. The radio system is capable of 1000' or more of operation but radio reception variables exist, causing possible loss of control.
- If weeds become entangled in the propeller, stop the motor and unplug the battery before attempting to remove them.

- If your boat should happen to stall, water currents will slowly carry it to shore. Keep in mind that the boat could be carried to the opposite shore. When surveying areas to run your boat, keep variables in mind such as wind direction and lake size. 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.

Specifications

BRISTOL TRAWLER BOAT

Hull Length: 32.25" [820 mm]
Width: 8.75" [222 mm]
Height: 29" [737 mm]
Weight: 100 oz [408 g] (less battery)
Run Time: 15 to 30 minutes (depending on battery)

MOTOR

Low RPM 540: 8,200 RPM at 12V DC
Operating current: .9amps 12V DC (without loading)
Input: 8 to 14V
Dimension: 38 × 57 mm (1.5" × 2.25")
Weight: 224 g (7.9 oz)

ESC

Rated Current: 30A (35A @ 60S)
Max Input Voltage: 13V
Battery Connector: Deans® Ultra Plug®
Motor Connector: Bullet Plugs
Wire Gauge: 14G
Warning System: 10.2V Stutter Bump
LVC: 9V
BEC Max Current: 2A
Dimensions: 35 mm × 34 mm × 9 mm
Servo Connector: Universal

Boat Terminology

BOW: Front of the boat.

STERN: Back of the boat.

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

STARBOARD: Right side of the boat.

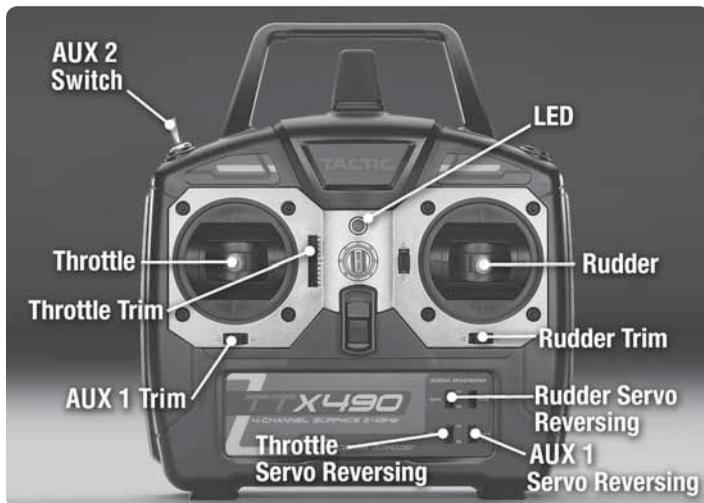
HULL: Body of the boat.

DECK: Top of the boat.

RUDDER: Hinged vertical plate mounted at the stern.

Understanding Your Transmitter

To help you better understand your transmitter and its functions, here is a picture outlying the operation features.



SERVO REVERSING AND RECEIVER ASSIGNMENTS

- CH 1 = Steering (right stick, left and right)
- CH 2 = AUX 2 (momentary switch)
- CH 3 = Throttle (left stick, up and down)
- CH 4 = AUX 1 (left stick, left and right)

Assembly Sequence

INSTALLING THE TRANSMITTER BATTERIES

IMPORTANT NOTE: The transmitter is not water resistant and should never come in contact with water!



Slide off the battery door from the back of the transmitter and install 4 "AA" batteries into the transmitter in the configuration molded into the battery floor. Reinstall the battery door.

Turn the transmitter "ON" by shifting the power on switch to the up position. The battery indicator light (LED) should glow red. If the light is flashing and the transmitter beeping, the batteries might be installed incorrectly or are low and need to be replaced.

CHECK THE RADIO SYSTEM

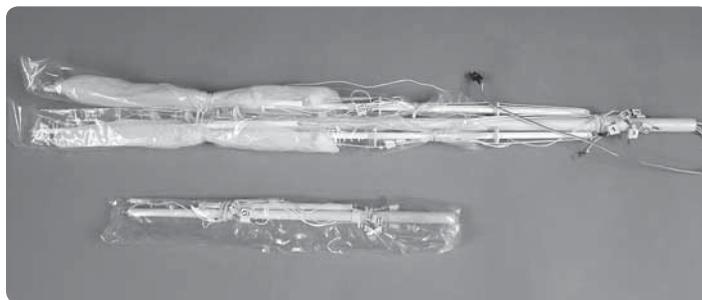
1. Turn on the TX.
2. Turn on the ESC. It will beep once to confirm it has power, then it will pause for 1 second and beep again to confirm it is armed.

3. Stand behind the boat and move the rudder stick to the left. The back of the rudder should move to the left. If not, flip the CH 1 servo reversing switch to the opposite position and check again.
4. Let go of the rudder stick. The rudder should return to center (pointing straight). If not, adjust the rudder trim.

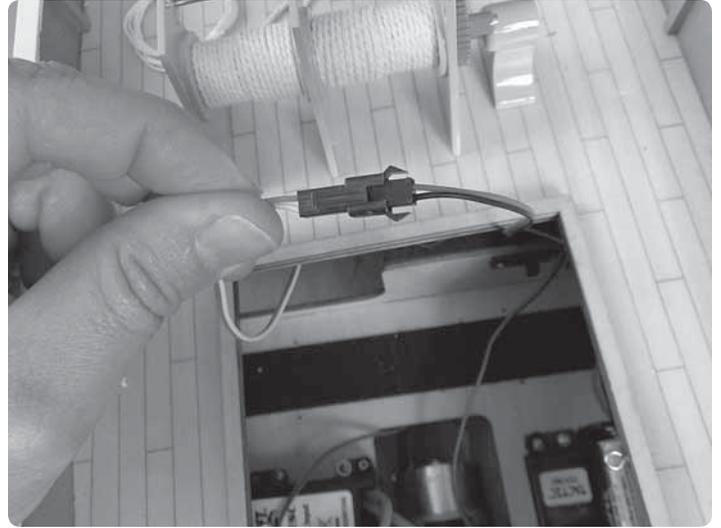
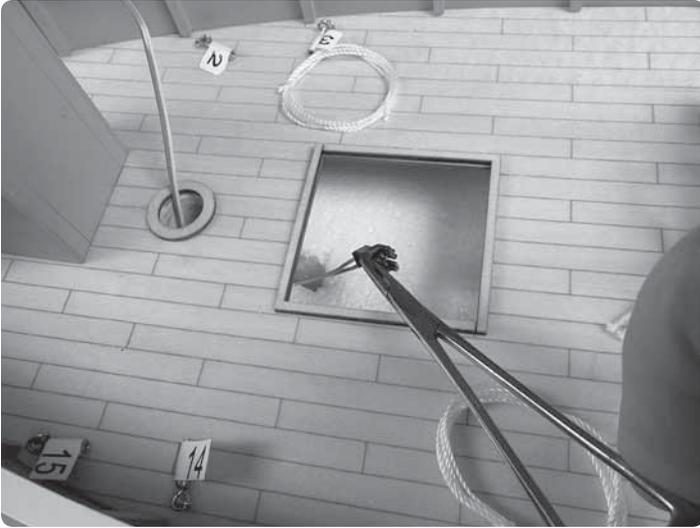
ASSEMBLE THE MASTS



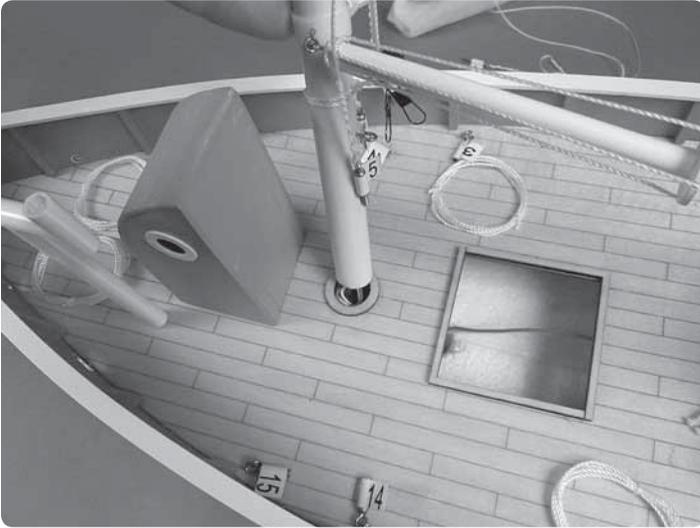
Remove the cabin house by lifting it carefully and moving it to the side. A set of hooks and rubber bands are used to secure the cabin. Detach them. Move it away for now to avoid the clutter and any possibility of damage during the next steps.



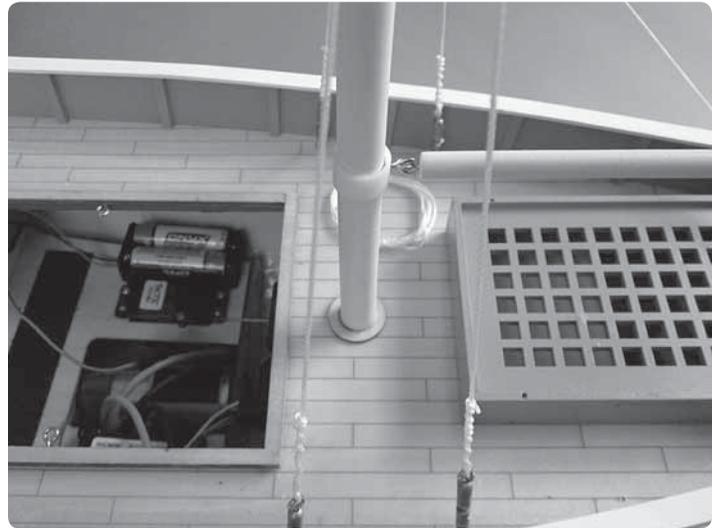
Remove the mast assemblies from the carton. Take care in moving these parts around to avoid tangling the lines. If you need any help you can always call Product Support or refer to pictures on the AquaCraft Models website.



Clip the mast lighting connector to one of the two loose ends inside the cabin.



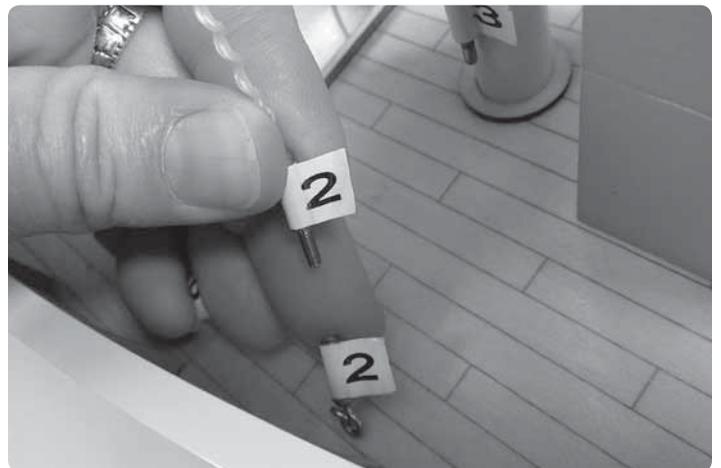
Insert the forward mast (the longest one) into the forward deck mounting hole. Start by fishing the lower wires for the lighting system through the hole, then follow with the mast. A hemostat helps greatly in fishing the wire in place.



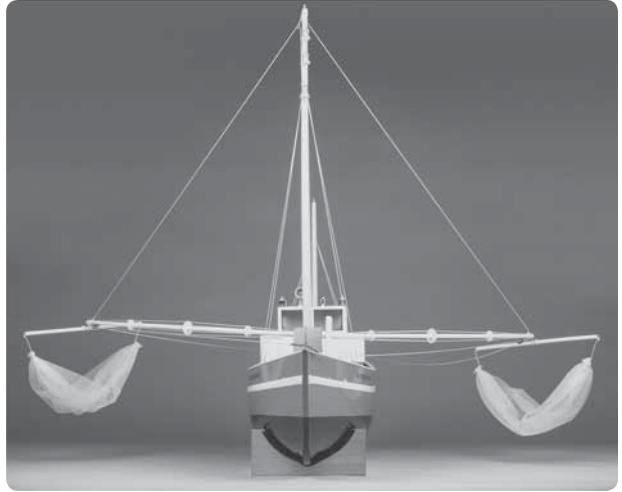
Next, install the rear mast. Take your time adjusting the mast so that the aft boom is facing rearward.



Don't worry about the mast being too loose or not perfectly straight up and down. The rigging will be used to secure and hold the mast in place.



You will see that the turnbuckles to the rigging lines are numbered. Simply match number to number going around the boat from 1 to 15. Do not overtighten the turn buckles. Make sure they are all attached to their corresponding number. You can go back later and adjust the tension as needed.



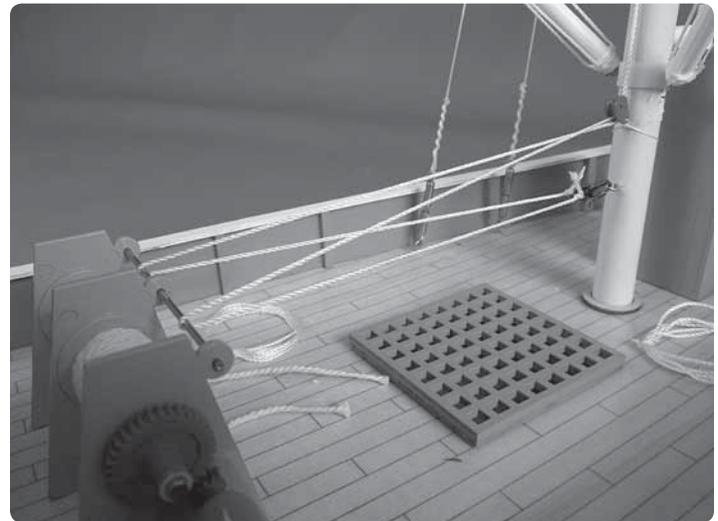
POSITIONING THE OUTRIGGERS



This really has more to do with your liking but we will describe the attachment positions for the outriggers. We have operated the boat with the outriggers in all positions. The lower position can cause the netting to dip into the water in breezy conditions. Be mindful of this as you operate your boat.



If you like you can cut the line and adjust the keepers to a line length as preferred.



You might also buy some line to make a lanyard leading from the aft mast to aid in the attachment to the top of the aft mast. Different length lanyards provide you with a variety of boom positions.

INSTALLING THE BATTERY PACK IN THE BOAT

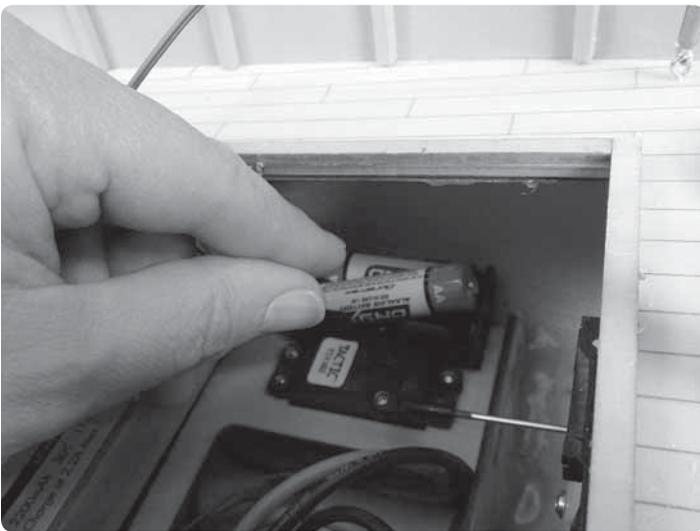


In your boat you will find a length of hook and loop on the battery tray. Remove the piece of hook and loop and install on to the battery back.

Launching and Driving the Bristol Trawler



Install the battery into the boat as shown in the picture.



At this time you can also install two AA batteries into the battery holder that powers the lighting system. The switch is located forward of the main power battery pack that turns the light on and off.

With the transmitter on, plug a charged battery into the ESC. You will hear the motor beep three times letting you know the motor and ESC have power. Moving the left stick forward should result in counter clockwise rotation of the propeller. Moving the stick back should result in the propeller turning clockwise. If this not correct, unplug the battery and switch reversing switch 3 and test again. (Normal switch position is down.)

NOTE: The throttle trim lever allows more or less reverse power without changing the full forward operation. To do this simply plug in the battery with the throttle trim lever in the lowest position. During power up the system will program to this trim setting. This will provide the least amount of reverse power. Moving the trim lever to the top and plugging the battery in will provide the most amount of reverse power. You can position the trim lever within the extents of the movement to custom adjust the amount of reverse you want by simply adjusting the throttle trim lever up or down and plugging in the battery.

1. Turn the power on to the transmitter and receiver (in that order).
2. Place the boat in water that is at least 12" deep and free of weeds, sticks and obstacles.
3. Advance the throttle to half speed and note if the boat has a tendency to turn right or left. Adjust the steering trim on the transmitter until the boat runs straight when the steering is at neutral.
4. After you have completed a run, unplug the boat's power battery. This safely powers down the boat. Then, turn off your transmitter.

IMPORTANT: If your boat takes on a large amount of water and stalls in the middle of the lake, don't worry, **your boat has foam floatation so it will not sink.** You will, however, have to retrieve the boat and remove the cabin hatch and battery. Remove any water that might have entered and allow the boat to fully dry before operating it again.

Maintenance

It is important to remove and re-lubricate the drive system after a day of running. Make sure the battery pack is unplugged. Use a needle oiler to place one drop of oil on each end of the motor shaft as well as each end of the drive shaft.

Ordering Replacement Parts

To order replacement parts for the AquaCraft Bristol Trawler, use the order numbers in the replacement parts list. 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 www.aquacraftmodels.com and click on "Where to buy". If you are missing parts, contact Product Support at:

Phone: 217.398.8970

Fax: 217.398.7721

E-mail: productsupport@hobbico.com

Parts List

AQUB7760	3-Blade Metal Prop w/Nut
AQUB7860	Drive System
AQUB9205	Rigging Coupler (12)
AQUB9210	Rigging Line 5m Roll
AQUG7012	550 Motor
AQUM7040	ESC
TACM0235	TSX35 Standard Servo Sport
TACJ2490	TTX490 2.4GHz 4 Channel SLT Transmitter (Surface)
TACL0400	TR400 2.4GHz 4 Channel Receiver



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