TACTIC™
PURE RELIABLE 2.4
TTX300

TTX300

2.4GHZ RADIO CONTROL SYSTEM INSTRUCTION MANUAL

SLT™
SECURE LINK TECHNOLOGY

Thank you for making the Tactic TTX300 2.4GHz SLT system your choice for radio control! This system uses modern 2.4GHz Spread Spectrum technology – an innovation that allows for automatic channel selection and interference-free control of R/C models.

For safe operation and best results, it's strongly recommended to read this manual in its entirety before use! Also read and understand the instructions included with the model. Damage resulting from misuse or modification will void your warranty.

FEATURES

- 2.4GHz Spread Spectrum Technology
- Ergonomic and stylish case design
- Transmitter can bind to multiple receivers
- Tiny, lightweight receiver with internal antenna
- Built-in fail-safe
- Steering and Throttle trim dials
- Steering rate adjustment
- Power LED with low battery warning indication
- Multi-function programmable 3rd channel
- Steering and throttle end point adjustments

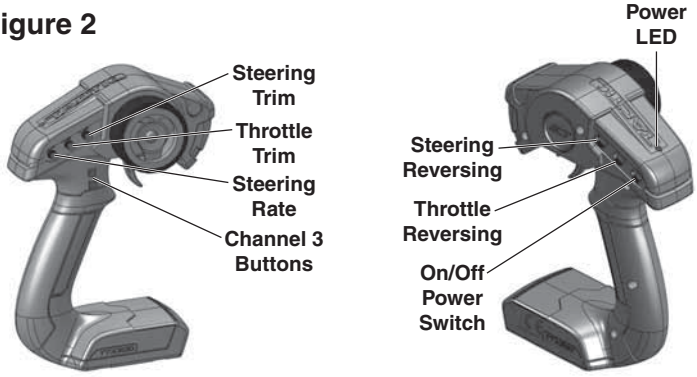
TRANSMITTER

Figure 1

The transmitter (Tx) requires 4 “AA” batteries. Non-rechargeable alkaline or rechargeable nickel-cadmium (NiCd) or nickel-metal hydride (NiMH) cells can be used. Do not mix old and new cells, or mix non-rechargeable alkaline cells with rechargeable NiCd or NiMH cells, etc. See the SERVOS AND ACCESSORIES section at the end of this manual for optional rechargeable NiCd and NiMH batteries and chargers. Note the TTX300 transmitter does not include a charge jack for rechargeable cells. A separate “AA” cell charger will be necessary.

IMPORTANT: Do not operate an R/C model with weak batteries as it could result in reduced range and/or possible loss of control!

Figure 2



Press the power switch to turn the Tx on (see figure 2). The “POWER” LED should illuminate. If not, turn off the Tx and check the batteries to make sure each cell is firmly in place and in the proper direction. If the Tx LED blinks, the batteries are low on power and should be replaced.

BIND THE RECEIVER TO THE TRANSMITTER

For proper installation and operation of the 2.4GHz transmitter and receiver system, it is necessary to “bind” them together electronically. This ensures sole communication between the two and prevents other transmitters from being able to control the receiver. To bind the Tx and Rx:

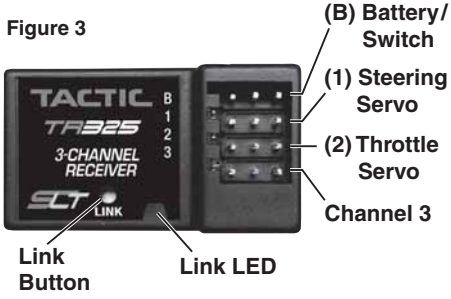
1. Turn on the transmitter.
2. Apply power to the receiver (see the INSTALLATION section that follows for how to do this).

3. If the receiver's LED flashes once and then stays on, the Rx is already bound to the Tx and you can skip to the next section. Otherwise, push and hold the receiver's "BIND" button until its LED glows red and then turns off after about one second.
4. Release the bind button.
5. If the binding is successful, the LED will flash once and then remain ON.
6. Test for proper Tx / Rx functionality by completing the next section. If it doesn't seem the radio has bound properly, repeat steps 1-6 above.

INSTALLATION

Receiver: Mount the receiver as specified in your model's instructions. As a guideline, mount in a secure location using double-sided tape. Route the servo wires so they do not interfere with any moving parts. For boat applications, it's highly recommended to wrap the receiver in a balloon or enclose it in a water-tight box.

Figure 3



Servos: See the SERVOS AND ACCESSORIES section at the end of this manual for a full list of optional servos. CENTER THE TRIM DIALS on the Tx. Mount the servos inside the model and connect the linkages to the servo using an appropriate length servo arm. Make sure all mechanical linkages are free of obstructions and can move smoothly. Connect the servos to the receiver as shown in Figure 3. Turn the transmitter's trim dials to finely adjust the servo's center point as needed to match the installation.

Electronic Speed Control (ESC): If using an electronic speed control, connect it to channel 2 of the receiver (throttle). Center the transmitter's throttle trim and follow the ESC instructions for programming.

PROGRAMMING

Several of the TTX300 features are adjusted electronically by entering the programming mode. To enter the programming mode, follow these steps:

1. With the transmitter turned off, turn steering wheel full right, pull the trigger to the full throttle position and turn the transmitter's power switch to ON. The LED will flash to confirm when performed correctly.
2. Release the wheel and trigger at this time.

End Point Adjustments

Steering:

1. Enter programming mode.
2. LEFT EPA: Turn wheel FULL COUNTERCLOCKWISE, use 3rd channel push buttons to adjust.
3. RIGHT EPA: Turn wheel FULL CLOCKWISE, use 3rd channel push buttons to adjust.

Throttle:

1. Enter programming mode.
2. THROTTLE EPA: Pull trigger to the FULL THROTTLE position, use 3rd channel push buttons to adjust.
3. BRAKE EPA: Push trigger to the FULL BRAKE position, use 3rd channel push buttons to adjust.

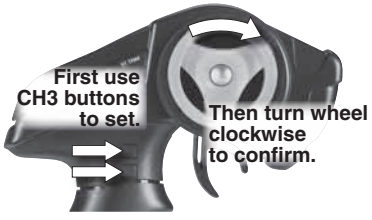
Channel 3:

The TTX300 3rd channel is programmable and offers a wide variety of options to suit many applications. Selecting the number of positions and end point adjustments are performed at the same time. To change the function and set end point adjustments for CH3, follow these steps:

REVERSE: Press and hold the bottom push button and power ON transmitter. The LED will flash one time. After 3 seconds, the LED will flash two times when performed correctly. Release the bottom push button.

MULTI-POSITION: The TTX300 3rd channel can be programmed to function as 2 position, 3 position, 4 position or proportional control switch. Selecting each position and end points for each position are performed simultaneously. The default position of CH3 is 2 position. To change the function of CH3, follow these steps:

1. Enter programming mode: Press and hold the top push button, power ON transmitter. Continue to hold until the LED flashes five times. Release the top push button.
2. Use CH3 push buttons to adjust CH3 accessory/servo to desired 1st position. Turn steering wheel clockwise (right) to confirm position 1. The LED will flash one time to confirm position 1 has been saved. **Note:** Press and holding CH3 push buttons will adjust rapidly. Press and release will finely adjust positions.



⚠ Moving the steering wheel during adjustment of CH3 will save the position. Do not move steering wheel unless position is ready to be saved.

3. Use CH3 push buttons to adjust CH3 accessory/servo to desired 2nd position. Turn steering wheel clockwise (right) to confirm position 2. The LED will flash two times to confirm position 2 has been saved. If programming for two position switch, skip to step 6. Otherwise, proceed to step 5 to program 3rd or 4th position.
4. If programming as 3 or 4 position switch, follow the procedures in steps 2 and 3 and select additional positions (3 and/or 4). Turn steering wheel clockwise (right) to confirm each individual position. The LED will flash in relation to the position that is being saved. Three flashes is 3rd position, 4 flashes is 4th position. Proceed to step 6 when programming as 3 or 4 position switch has been completed.
5. To program CH3 as proportional, enter programming mode and select desired position 1 as listed in Step 2 above. Use CH3 push buttons to adjust to desired end point and turn steering wheel clockwise four times. The LED will flash five times to confirm the position has been saved.
6. After programming of CH3 is completed, turn off transmitter to save settings.

SYSTEM CHECK

Turn on the Tx, then the Rx. Make sure all servos operate according to the movement of the Tx controls (refer to figure 4).

Steering: Turn the steering wheel left and right. Make sure there are no obstructions with the steering servo's movements, and the servo moves in the proper direction. If the steering wheel is turned to the right but the model turns left, reverse the position of the Steering Reversing switch.

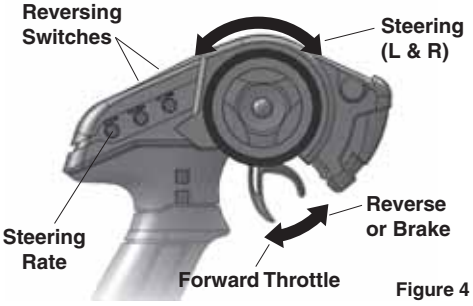


Figure 4

Steering Rate: This dial adjusts the limits that the steering servo can travel on each side. Turning the dial will widen or narrow the steering end points. Adjusting this dial to your preference can help to customize control of steering in different applications.

Throttle: Squeeze the throttle trigger to make the car move forward. If the car moves backwards, reverse the position of the Throttle Reversing switch. (See the model's instruction manual for specific set-up instructions.) Push the trigger forward for reverse or brake function.

Failsafe: This radio system includes a "fail-safe" function, which will automatically center (bring to neutral) all servos if the receiver loses signal

communications from the transmitter. When the receiver regains signal it will automatically resume normal function.

Range Check: The "range" or safe operating distance from the Tx to the Rx is typically as far as you can clearly see the model. Before operating the model, perform a simple range check to make sure the transmitter maintains good radio contact with the receiver within your operating area.

SYSTEM CHECK

- **NEVER** allow water or moisture to make contact with the electronic components inside the transmitter, receiver, servos, switch harness, etc.! This could lead to failure or improper functionality of components and poor control of vehicle which could pose a safety hazard.
- **NEVER** operate R/C equipment if you are physically impaired as it could pose a safety hazard to yourself or others in the area.
- **NEVER** allow small children to operate/control model R/C equipment without the supervision of an adult.
- **NEVER** allow the transmitter's throttle trigger to accidentally be moved away from the neutral position while the vehicle is powered up.
- **ALWAYS** range check the radio system before use.
- **ALWAYS** make sure that all transmitter movements operate all servos properly in the model.
- Do not store your radio equipment in extremely hot or cold locations, in direct sunlight, or in locations with high humidity. Store R/C equipment in a cool and dry location.
- Do not allow chemicals to come in contact with any parts of the radio system. Substances such as glow fuel, gasoline, CA glue, etc. could permanently damage plastic parts of the radio system.
- If rechargeable batteries were installed in the transmitter, remove the batteries before placing the radio in long-term storage.

TROUBLESHOOTING

RANGE IS SHORT: Interference – *check Rx installation and servo connections.* Low Tx or Rx battery – *replace the batteries or recharge if applicable.* Crash damage – *send the radio to Hobby Services for repair*.

RUNTIME IS SHORT: Low Tx or Rx batteries – *replace the batteries*. Obstructed servo linkages causing excess battery drain – *free the linkages/pushrods.*

Tx POWER SWITCH ON BUT SERVOS DO NOT FUNCTION: Tx or Rx batteries are low or – *replace the batteries or check Tx or Rx battery polarity*.

Switch harness or ESC is connected incorrectly – *check all connections and the ESC instruction manual*. Rx is not binded to the Tx properly – *perform binding process again*. Rx antenna located too closely to engine, motor, servos or other moving mechanical parts which might be creating unwanted electrical noise – *relocate the Rx inside the model or relocate the ESC*.

INTERFERENCE OR SERVOS GLITCHING: Out of range – *operate the model more closely to the transmitter*. Outside radio interference (pagers, strong industrial or other commercial transmitters in the area) – *check your local R/C club for confirmation of dangerous/interfering frequencies in your area.*

CONTROL SURFACE MOVES IN THE WRONG DIRECTION: Change the position of that channel's reversing switch.

ONLY ONE SERVO GLITCHES: Servo is bad – *replace the servo or send to Hobby Services for repair.*

Contact Hobby Services for other problems.

TTX300 SPECIFICATIONS

TRANSMITTER
Channels: 3
Frequencies: 2.403-2.480GHz
Protocol: Tactic SLT
Modulation: FHSS spread spectrum
Input Power: 3.40-7.00V DC, four 1.5V alkaline or 1.2V NiCd/NiMH "AA" single cells.
Output Power: <0.1W
Power On Indicator: red LED

RECEIVER
Channels: 3
Receiving Frequencies: 2.403-2.480GHz
Modulation: FHSS spread spectrum
Input Power: 3.40 - 7.00V DC, four "AA" alkaline, NiCd or NiMH cells
Dimensions: .75 x .55 x 1.4" (19 x 14 x 35 mm)
Weight: 18 oz (5.2 g)

FCC STATEMENT

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions.

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Rf Radiated Exposure Statement: The equipment complies with FCC Rf radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNUAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

SERVOS AND ACCESSORIES

Stock #	Description
TACM0235	TSX35 Standard Servo Sport
TACM0240	TSX40 Standard Servo High Speed MG 2BB
TACM0245	TSX45 Standard Servo High Torque MG 2BB
TACM0247	TSX47 Standard Servo Digital High Torq MG 2BB
TACM0255	TSX55 Standard Servo Ultra Torque MG 2BB
TACM0257	TSX57 Standard Servo Digital Ultra Torq MG 2BB
TACM0265	TSX65 Std Servo Digital Ultra Torq High Volt MG 2BB
TACM2000	Switch Harness FUT J Conn No Charge Lead
TACM2001	Switch Harness w/Charge Lead Futaba J
TACM2002	Switch Harness w/Charge Plug Universal
TACM2020	4 Cell AA Battery Holder w/Fut J Connector
TACM2090	Servo Extension 6” (150mm) Futaba J
TACM2091	Servo Extension 6” (150mm) Futaba J (10)
TACM2092	Servo Extension 6” (150mm) Universal
TACM2093	Servo Extension 12” (300mm) Futaba J
DTXP4704	Onyx AA Alkaline Battery (4)
DTXP4191	Onyx 110 AC/DC Peak Charger
DTXP4225	Onyx 225 AC/DC Advanced Charger
DTXP4235	Onyx 235 AC/DC Advanced Charger with Balancing
DTXP4245	Onyx 245 AC/DC Dual Charger with Balancing
DTXP4615	Power Kit w/ 1500mAh NiMH, AC Wall Charger, 8 “AA” Alkalines
DTXC3164	Onyx 1/10th 3930kV Brushless System
DTXC3165	Onyx 1/10th 4420kV Brushless System
DTXC3166	Onyx 1/10th 5900kV Brushless System
DTXC3172	Onyx 1/10th 3650kV Short Course Brushless System
DTXC3174	Onyx 1/10th 4550kV Short Course Brushless System

CE COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

INSTRUCTIONS FOR DISPOSAL OF WASTE EQUIPMENT BY PRIVATE USERS IN THE EUROPEAN UNION:

This symbol on the product or its packaging indicates this product must not be disposed of with other household waste. Instead, it is the user’s responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or location where you purchased the product.

DECLARATION OF CONFORMITY:

Product: Tactic TTX300 2.4GHz 3-Channel Pistol Tx Rx
Item number: TACJ0300
Equipment class: 1

TACTIC TTX300 TRANSMITTER AND TACTIC TR325 RECEIVER:

The objects of the declaration described here are in conformity with article 3.1(a) the requirements of safety contained in the European 2006/95/EC Directive and article 3.1(b) the requirements of EMC contained in Directive 2004/108/EC and article 3.2 requirements of radio equipment in Directive 1999/5/EC.

EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011
ETSI EN 300 328 V1.8.1
ETSI EN 301 489-1 V1.9.2 (2011-09)
ETSI EN 301 489-17 V2.2.1 (2012-09)
ETSI EN 62311:2008

US standard: FCC 15.247
Japan standard: ARIB STD-T66
Canada standard: RSS210&RSS GEN
Product name: TTX300
Product type: TACJ0300
Brand: Tactic

Tactic
c/o Hobbico, Inc.
2904 Research Road
Champaign, IL USA 61826

INDUSTRY CANADA NOTICE

This device complies with Industry Canada license-exempt RSS standard(s). 1. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. 2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the IC radio frequency exposure limits, Human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Avis d'Industrie Canada

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. Cet appareil numérique ne dépasse pas les Rèlements sur l'interférence radio par un appareil numérique de classe B stipulées dans les Règlement sur l'interférence redio d'industrie Canada.

2.Les changements ou modifications de cette unité non expressément approuvés par la partie responsable de la conformité pourraient annuler l'autorité de l'utilisateur à utiliser l'équipement.

IC RF Déclaration sur la radioexposition:

Cet appareil est conforme avec l'exposition aux radiations IC Définies pour un environnement non contrôlé. Les utilisateurs finaux dovivent suivre les instructions de fonctionnement spécifiques pour satisfaire la conformité aux expositions RF.

TAIWAN NATIONAL COMMUNICATIONS COMMISSION (NCC) STATEMENT

根據NCC低功率電波輻射性電機管理辦法 規定:

1. 經型式認證合格之低功率射頻電機, 非經許可, 公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

2. 低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時, 應立即停用, 並改善至無干擾時方得繼續使用。

前項合法通信, 指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

WARRANTY AND REPAIR

1-YEAR LIMITED WARRANTY

Tactic warrants this product to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. During that period, Tactic will, at its option, repair or replace without service charge any product deemed defective due to those causes. You will be required to provide proof of purchase (invoice or receipt). This warranty does not cover damage caused by abuse, misuse, alteration or accident. If there is damage stemming from these causes within the stated warranty period, Tactic will, at its option, repair or replace it for a service charge not greater than 50% of its then current retail list price. Be sure to include your daytime telephone number or e-mail address in case we need to contact you about your repair. This warranty gives you specific rights. You may have other rights, which vary from state to state.

For service on your Tactic product, send it post paid and insured to:

HOBBY SERVICES
3002 N. Apollo Dr., Suite 1
Champaign, IL 61822

Tel: (217) 398-0007
(9:00am - 5:00pm CST, M-F)
E-mail: hobbyservices@hobbico.com

*For warranty and service information if purchased outside the U.S.A. or Canada, ask your retailer for more information.

In the European Union, send it postpaid and insured to:

Service Abteilung Revell GmbH
Henschelstrasse 20-30
32257 Bünde Germany

Tel: 01805-110111 (nur für Deutschland)
E-mail: Hobbico-Service@Revell.de

Distributed in the EU by Revell GmbH, Bünde Germany

- **This product is suitable only for people of 14 years and older. This is not a toy!**
- **WARNING: CHOKING HAZARD - May contain small parts. Keep away from children under 3 years. Please retain packaging for future reference.**
- **No part of this manual may be reproduced in any form without prior permission.**
- **The contents of this manual are subject to change without prior notice.**
- **Tactic is not responsible for the use of this product.**

QUICK REFERENCE CHART

CHANNEL 1	FUNCTION	REVERSING SWITCH	DIRECTION	SERVO ACTION	DEFAULT SETTING
	Steering Wheel	Normal	Clockwise (right)	Anti-Clockwise	Mechanical. No default settings from Factory Reset.
			Anti-Clockwise (left)	Clockwise	
	Steering Trim	Normal	Clockwise (right)	Anti-Clockwise	
			Anti-Clockwise (left)	Clockwise	
	Steering Dual Rates	n/a	Clockwise (right)	Wide	
			Anti-Clockwise (left)	Narrow	

CHANNEL 2	FUNCTION	REVERSING SWITCH	DIRECTION	SERVO ACTION	DEFAULT SETTING
	Throttle Trigger	Normal	Throttle (pull)	Clockwise	Mechanical. No default settings from Factory Reset.
			Brake (push)	Anti-Clockwise	
	Throttle Trim	Normal	Clockwise	Anti-Clockwise	
			Anti-Clockwise	Clockwise	

CHANNEL 3	FUNCTION	ACTION	DEFAULT SETTING
	Reverse	Press and hold CH3 bottom push button. Power on transmitter. Continue to hold until LED flashes. Release bottom push button.	Normal
	2, 3, or 4 Position Switch	Refer to CHANNEL 3 PROGRAMMING section (page 4).	X
	Proportional	Refer to CHANNEL 3 PROGRAMMING section (page 4).	

END POINT ADJUSTMENTS	FUNCTION	ACTION		DEFAULT SETTING
	CH1 EPA	Enter Programming Mode: Wheel full clockwise (right), trigger full throttle (pull), power on Tx		
		Left EPA	Turn wheel anti-clockwise. Use CH3 buttons to adjust.	0
		Right EPA	Turn wheel clockwise. Use CH3 buttons to adjust.	0
	CH2 EPA	Enter Programming Mode: Wheel full clockwise (right), trigger full throttle (pull), power on Tx		
		Throttle EPA	Pull trigger to full throttle. Use CH3 buttons to adjust.	0
		Brake EPA	Push trigger to full brake. Use CH3 buttons to adjust.	0
	CH3 EPA	Enter Programming Mode: Wheel full clockwise (right), trigger full throttle (pull), power on Tx		
		Refer to CHANNEL 3 PROGRAMMING section (page 4).		0

DEFAULT	FUNCTION	ACTION	DEFAULT SETTING
	Factory Reset	Wheel full anti-clockwise (left), trigger full brake (push), power on transmitter. LED will flash 5x and reset radio to default.	See Above⬆

TACTIC™

PURE RELIABLE 2.4

TTX300

tacticrc.com

FCC ID: IYFTTX300

Made in China

TACJ0300 v3