



XP2-SSi

2.4GHz 2CH RADIO SYSTEM

XP3-SSi

2.4GHz 3CH RADIO SYSTEM



No. 29218

No. 29219



Please read all instructions thoroughly before operating this device.

The contents are subject to change without prior notice due to product improvements and specification changes.

INSTRUCTION MANUAL

INTRODUCTION

Congratulations on your purchase of Team Associated's XP 2.4GHz Radio Control System. Designed using state-of-the-art wireless and advanced-programming technology, the XP 2.4GHz Radio Control System will advance and simplify control of your surface model while providing many years of enjoyment. Featuring spread spectrum and smart-frequency hopping systems, the XP 2.4GHz Radio Control System delivers precision control without risk of interference.

A variety of standard features developed to enhance user friendliness include Steering/Throttle trim adjustment, Steering/Throttle servo reversing, Throttle/Brake ATV, and Steering dual-rate adjustment.

Before installing and operating your new radio system, please take a few minutes to familiarize yourself with the various features of the system by reading this instruction manual thoroughly.

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ADVANCED TECHNICAL FEATURES

iFHSS+ Data Mode:

An improved data format and protocol provides faster and more reliable data transmission with reduced power consumption.

FHSS - Frequency Hopping Spread Spectrum:

Advanced frequency-hopping program on the spread spectrum base increases safety and reliability with virtually interference-free communication.

SIBL - Security ID Binding Link:

SIBL insures that the transmitter and receiver bind only to each other and prevents interference from other radios.

FSPC - Failsafe Programmable Individual Channel:

If signal loss results, the system's fail-safe program returns each channel to its pre-programmed position.



FEATURES

TRANSMITTER:

- Advanced 2.4GHz frequency-hopping spread spectrum technology
- Steering/Throttle trim adjustment
- Steering/Throttle servo reversing
- Throttle/Brake ATV (Adjustable Travel Volume)
- Steering dual-rate adjustment
- LED battery voltage indicator
- Low battery alarm
- Folding antenna
- Advanced iFHSS+ data mode

RECEIVER:

- The TRS402SSi 2.4GHz 4Ch receiver's compact size and small footprint makes it easy to install in most electric or nitro powered vehicles.
- XP2-SSi and XP3-SSi transmitters can also bind with the TRS401ss receiver when iFHSS mode has been selected. The selection switch can be found on the back of the transmitter.

SYSTEM CONTENTS

Item	XP2-SSi	XP3-SSi
Item No.	29218	29219
Transmitter	XP2-SSi	XP3-SSi
Receiver	TRS402SSi	
Servos	Not Included	
Accessories	Switch harness x 1, Receiver Battery holder x 1	

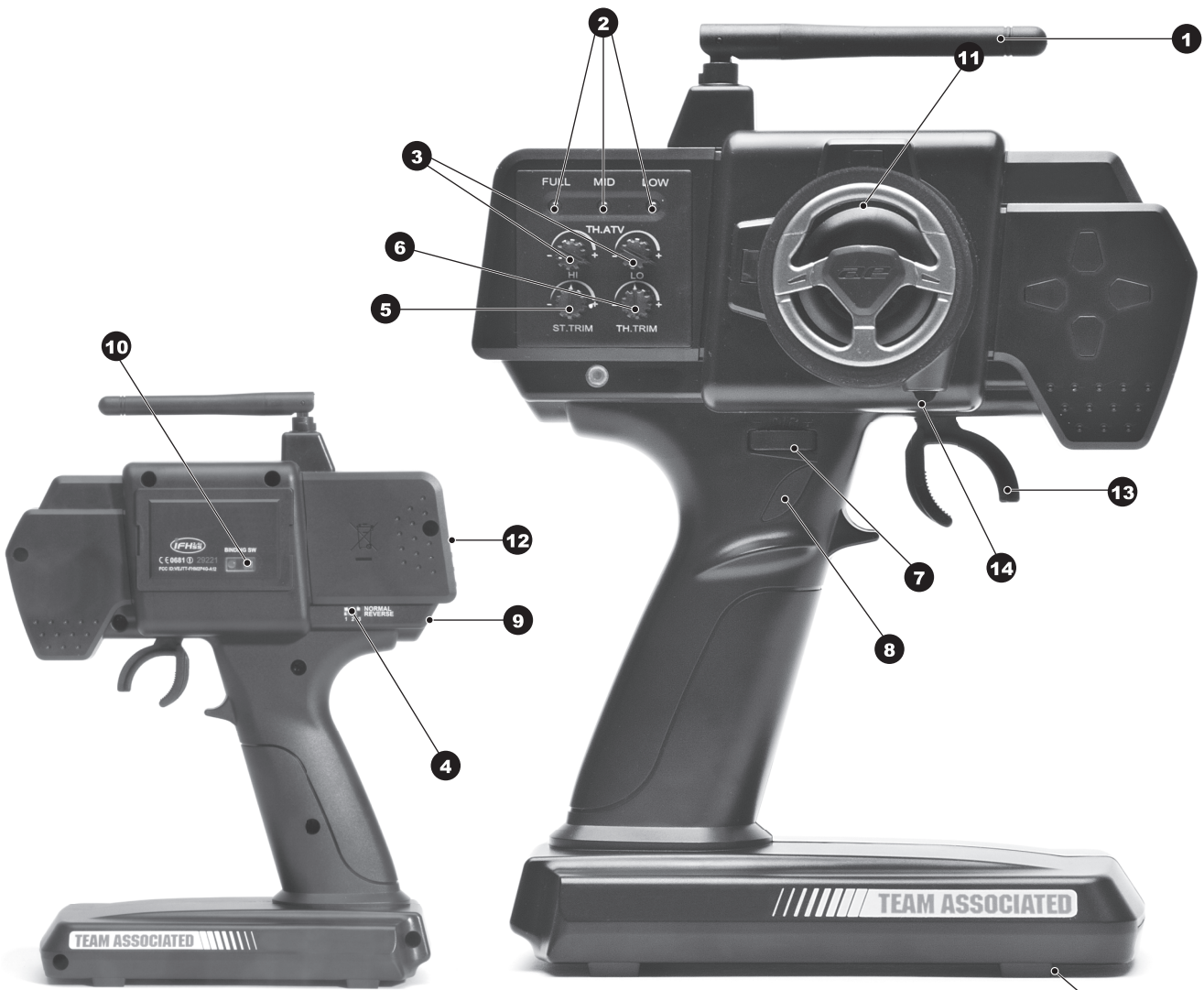
SPECIFICATIONS

Transmitter	XP2-SSi	XP3-SSi
Item No.	29218	29219
Configuration	Pistol Grip	
Encoder	2Ch	3Ch
Frequency	2.4GHz	
Modulation	GFSK (PPM)	
Current Drain	40mA@7.2V	
Frequency Band Width	2402~2479MHz	
Transmitter System	FHSS	
ID No.	13bit	
Servo Reverse	Ch1-Ch2	Ch1-Ch3
Display	LED	
Model Memory	None	
Antenna Type	1/4 λ Dipole Sleeve	
Antenna Peak Gain	2dBi Typical	
Power Requirement	6 AA/7.2V NiMH/2S LiPo	

Receiver	TRS402SSi
Item No.	29217
Frequency	2.4GHz
Channel	4Ch
BEC	No
Modulation	PPM
Type	Single Antenna w/gain
Battery Power	4.8V-7.4V

XP2-SSi
2.4GHz 2CH RADIO SYSTEM

XP3-SSi
2.4GHz 3CH RADIO SYSTEM



- ① Transmitter Antenna
- ② Battery Level Indicator
- ③ Throttle ATV (Hi/Low)
- ④ Servo Reversing/Mode Switches
- ⑤ Steering Trim
- ⑥ Throttle Trim
- ⑦ Steering Dual-Rate
- ⑧ AUX Channel 3 Button
- ⑨ External Charging Jack
- ⑩ 2.4GHz Binding SW
- ⑪ Steering Wheel
- ⑫ Power Switch
- ⑬ Throttle Trigger
- ⑭ Steering Tension Adjustment
- ⑮ Battery Cover



TRANSMITTER CONTROLS

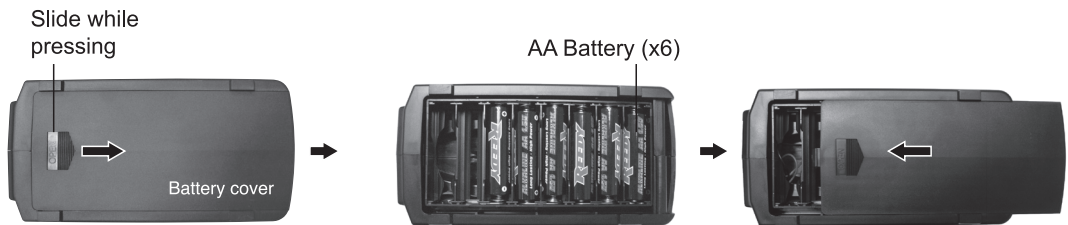
1. **Transmitter Antenna:** Straighten the antenna before operating your model.
2. **Battery Level Indicator:** Three LEDs indicate the voltage level of the battery. If the red LED flashes, please replace or recharge the batteries.
3. **Throttle ATV Hi/Lo:** Allows independent adjustment of the maximum throttle servo travel in each direction.
4. **Servo Reversing Switches:** Reverses a servo's direction of rotation. These switches are positioned so that they can't be moved accidentally.

iFHSS/iFHSS+ Switch: iFHSS+ mode provides faster and more reliable data transmission. iFHSS+ mode can only be used with the TRS402SSi receiver. To use your XP2-SSi/XP3-SSi radio with the TRS401ss receiver, iFHSS mode must be selected.
5. **Steering Trim:** Allows small adjustments to the steering so that your model will travel straight when the steering wheel is in its neutral position.
6. **Throttle Trim:** Allows small adjustments to the throttle to shift the neutral position.
7. **Steering Dual-Rate (D/R):** Adjust this level + or - to add or reduce the amount of steering throw.
8. **AUX Button:** Provides an extra function for additional controls (XP3-SSi only).
9. **External Charging Jack:** Used when charging NiMH rechargeable batteries.
10. **2.4GHz Binding SW:** The binding SW button is located on the back of the radio. Please refer to Page 7 for additional details regarding binding the radio and receiver.
11. **Steering Wheel:** Controls the vehicle's steering
12. **Power Switch:** Slide to turn the transmitter ON or OFF
13. **Throttle Trigger:** Pull or push to control the vehicle's movement forward or backward.
14. **Steering Tension Adjustment:** Use a Phillips screwdriver to change the tension of the steering wheel making it harder or easier to turn.
15. **Battery Cover:** Slide to remove the cover to remove or install batteries.

INSTALLATION

Transmitter Battery Replacement / Installation

- 1) Slide the battery cover in the direction shown to remove the cover.
- 2) Install six (6) alkaline or rechargeable AA size batteries into the battery holder.
- 3) Slide the battery cover back into place making sure it is completely closed and secure.
- 4) Turn the power ON. If the power indicator LED fails to light, check the batteries for insufficient contact or incorrect polarity.



Check:

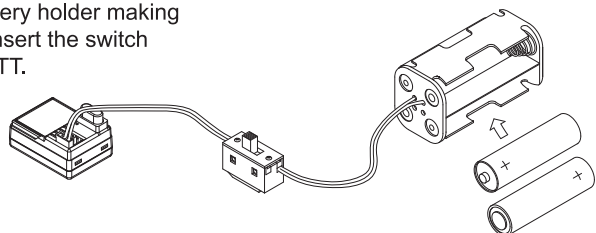
- a) Use only new alkaline cells all of the same brand.
- b) Make certain that the contacts in the battery hold stay clean by using a pencil eraser to gently remove any corrosion or dirt that may accumulate on them. Clean the tabs each time new batteries are installed.
- c) If using a rechargeable battery pack, remove the battery holder and unplug it from the transmitter. Then plug the battery into the transmitter.
- d) When a NiMH rechargeable battery is installed in the transmitter, it can be charged using the external charging jack located on the transmitter.

Caution:

- a) Do not attempt to charge alkaline batteries. They may EXPLODE!
- b) When charging a rechargeable battery using the external charging jack, set the power switch to OFF. The charger plug must be the correct type (positive (+) inside and negative (-) outside, TAMIYA N-3U type or equivalent). The wrong type may burst causing personal injury and/or property damage.
- c) Always be sure the batteries are installed in the correct polarity order. If the batteries are installed incorrectly, damage to the transmitter may result.
- d) When the transmitter is not in use for more than one week, remove the batteries from the transmitter.

Receiver Battery Replacement / Installation:

Insert four (4) fresh AA cells into the receiver battery holder making sure that the correct polarity order is observed. Insert the switch harness plug into the receiver socket marked BATT.

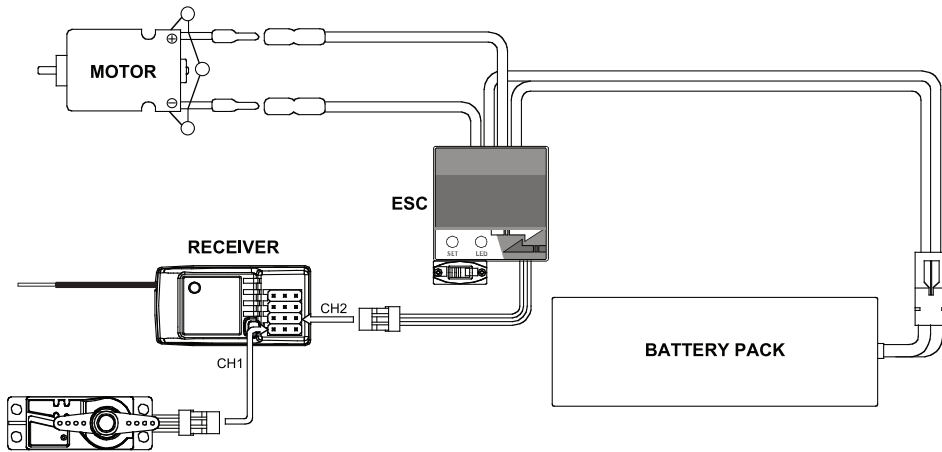




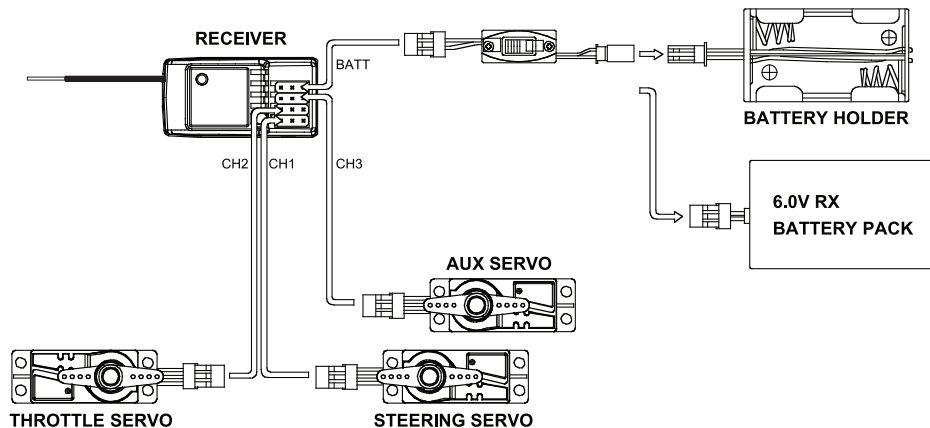
Radio Installation

- 1) Connect the receiver, servo(s), and switch harness/battery pack as shown in the diagrams below.
- 2) Install the receiver in the location reserved for it inside the vehicle using double sided tape.
- 3) Route the receiver antenna into the antenna tube making sure to prevent it from bending too tightly or to kink.
- 4) Never cut or shorten the antenna. Doing so will limit range and/or cause interference.

Electric Powered Model Installation



Gas Powered Model Installation



To prevent loss of radio range do not kink or cut the gray wire, do not bend or cut the metal tip, and do not bend or cut the white wire at the end of the metal tip.



BINDING PROCESS

Before operating the vehicle, the transmitter and receiver must be manually bound. This binding will allow the receiver to accept the transmitter's signals and prevent interference from other transmitters. Manual binding is a one-time operation that will not have to be completed again. To manually bind the transmitter and receiver, follow the steps below:



- 1) Press and hold the BINDING SW button on the back of the transmitter while turning on the transmitter.
- 2) When the LED flashes red/green, release the BINDING SW button. The transmitter is now binding.
- 3) Press and hold the binding button on the receiver while turning on power to the receiver. The binding process will begin automatically indicated by the receiver LED flashing green/red.
- 4) Successful binding is confirmed when the binding LED on the transmitter blinks green. The LED on the receiver will turn green. Once binding is complete, the system will automatically connect and the vehicle can now be controlled by the transmitter.

Note: The binding process may take between 3 and 10 seconds to execute. If binding fails, the LED on the receiver will turn red. Please turn off the power and repeat steps 1 through 4.

HOW TO SET THE FAIL-SAFE (F/S) POSITION

How to Set the Fail-Safe (F/S) Position

If signal loss results, the system's fail-safe program returns the steering and throttle to their pre-programmed positions. The default F/S position was automatically set to neutral during the binding process. However, the F/S positions for steering and throttle can be customized by completing the following steps:

- 1) Turn on the transmitter followed by the receiver.
- 2) Press and hold the binding button on the receiver until the green light begins to flash (approximately 10 seconds).
- 3) While still pressing the binding button, move the throttle trigger and steering wheel to the desired F/S position.
CAUTION: Always set the throttle trigger to the neutral or 50% brake position so that the vehicle will stop safely in the event of signal loss.
- 4) Release the binding button. The LED will turn solid red, and then two seconds later it will switch to solid green. The F/S position is now set.
- 5) To check that the F/S is working properly, move the throttle trigger to the full brake position and steering wheel to full lock. While holding them in this position, turn off the transmitter. The F/S function should return the throttle and steering to their F/S position.
- 6) If the F/S setup fails, retry steps 1 through 5. After successful setup, the vehicle can be operated safely.

It is recommended that the throttle F/S position be set to 50% brake in nitro powered cars and forward-only electric cars. In electric cars with reverse enabled, the throttle F/S position should be set to neutral. In all cars, it is recommended that the steering F/S position be set to neutral.

FUNCTIONS

1. Servo Reversing:

It is sometimes necessary to reverse the output direction of the servo(s). The direction of rotation for each individual servo can be changed by flipping the reversing switch that corresponds to the channel number on the receiver where the servo is plugged in. Under normal circumstances, Ch 1 is steering, Ch 2 is throttle, and Ch 3 is for an auxiliary function. Use the reverse switches as needed.



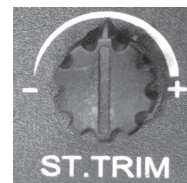
2. iFHSS+/iFHSS Data Mode

iFHSS+ Data Mode is the default setting and provides the fastest and most reliable data transmission with reduced power consumption. When using the XP2-SSi/XP3-SSi with a TRS401ss receiver, iFHSS Data Mode must be selected.

3. Steering Trim:

• Neutral position trim:

By turning the ST TRIM knob clockwise or counter-clockwise, the steering neutral can be adjusted as needed so that the vehicle runs straight.



HINT

When installing your servo, be sure that the trim knob is in its neutral position.

• Servo Travel:

Changing the steering trim will affect servo travel. After adjustments are made, please confirm that the desired steering travel is achieved.

HINT

If it takes most of the steering trim movement for the servo to reach the neutral position, re-position the servo horn/servo saver and make the necessary adjustments to your steering linkage.

4. Throttle Trim:

• Neutral position trim:

By turning the TH TRIM knob clockwise or counter-clockwise, the throttle neutral can be adjusted as needed.



HINT

When using an ESC, set the throttle trim to neutral and make adjustments to the ESC. Under normal operation, this will not require adjustment. On fuel powered models, set the trim to neutral and adjust the throttle linkage to the point at which the carburetor fully closes. See the engine instruction manual for details on setting up the throttle linkage.

HINT

If it takes most of the throttle trim movement for the servo to reach the neutral position, re-position the servo horn and make the necessary adjustments to your linkage.

5. Throttle ATV:

Throttle ATV allows the servo travel to be independently adjusted on either side of neutral. This adjustment allows proper travel adjustment for throttle and brake in fuel powered vehicles.



HINT

For electric powered vehicles, the TH ATV knobs should be set to maximum. Maximum brake can be adjusted by reducing the TH ATV LO setting.

FUNCTIONS

5. Steering D/R:

The steering dual-rate allows the user to make changes to the amount of steering servo travel. By changing the amount of travel in the steering servo, the user is able to adjust the overall steering of the vehicle to suit a particular driving style, preference, or changing track conditions.



HINT

Never adjust the servo travel beyond the mechanical limits of the vehicle. Doing so will place additional stress on the servo which could lead to premature failure.

FCC INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices). 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, and (2) This device must accept any interference received, including interference that undesired operation may cause.

FCC RADIATION EXPOSURE STATEMENT

This 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 radiation and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

USING CAUTION AT THE RACE TRACK

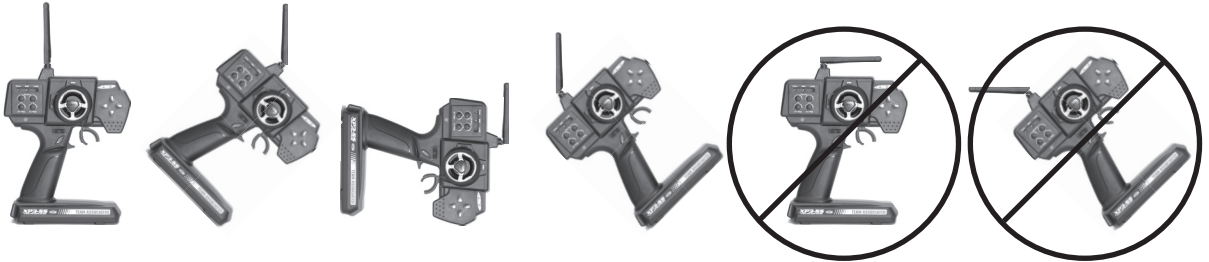
- Do not operate the model or use the radio in the rain, in the presence of lightning, or at night.
- Do not operate the model or use the radio if you have been drinking alcohol or are under the influence of any other substance that will affect your skills.
- Always confirm that the radio has sufficient battery power before operating.
- Keep out of reach of children.
- Do not store the radio in temperatures below -10° C (14° F) or above 40° C (104° F) or in humid, dusty, or in high-vibration environments. Keep the radio away from direct sunlight.
- To prevent corrosion, remove the batteries from the radio if it will be stored for more than one week.



ANTENNA ORIENTATION

To prevent signal loss and achieve maximum range, the transmitter antenna must be positioned so that it remains as close to perpendicular to the ground as possible. The antenna should never be pointed directly at the vehicle, nor should it be pointed directly away from it.

Please see the examples below for the correct antenna orientation:



ACCESSORIES

TX & RX



29218 / 29219
XP2-SSi 2.4GHz Radio System
XP3-SSi 2.4GHz Radio System



29217
TRS402SSi Receiver Only

Receiver Batteries



304
RX Battery
1600mAh 7.4V LiPo



305
RX/TX Battery
1300mAh 6.6V LiFe



612
1600 Series 6.0V NiMH
Hump Receiver Pack



613
1600 Series 6.0V NiMH
Flat Receiver Pack



630
PRO LiPo RX Battery
1600mAh 7.4V 10C

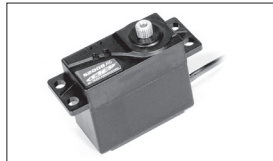


631
LiPo RX Battery
2100mAh 7.4V

Servos / Accessories



29125 Servo S1903MG,
with metal gears



29126 High Torque Servo,
S2008MG



29128 Micro Servo,
C1016



638
RX Battery
1700mAh 6.6V LiFe



29167 High Torque / Speed
Digital Servo,
DS1015

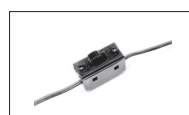
Spare Parts:
29211 Case
29210 Gear Set
29212 Accessory Pack



29166 Digital Servo,
DS1313
Spare Parts:
29211 Case
29209 Gear Set
29212 Accessory Pack



29116 4-Cell Battery Harness



29115 Switch Harness

Regulator



636
6.0V 5A Voltage Regulator

SERVICE / WARRANTY

Team Associated aspires to bring you the highest level of quality and service in the market. Our products are tested and raced around the world with the sole purpose of delivering state-of-the-art performance for enthusiasts of all levels. To view Team Associated's most up-to-date product information, please visit www.teamassociated.com or www.rc10.com. To purchase Team Associated products and accessories, please visit your favorite retail outlet. All Team Associated products have been carefully inspected prior to shipment. However, your Team Associated XP Series radio system is warranted to the original purchaser for one full year from the date of purchase against defects in material and workmanship. During this period, Team Associated will repair or replace, at its discretion, any defective components.

Equipment that has been mishandled, abused, improperly installed, or has been damaged due to a crash or other cause is not covered under warranty. Equipment that has been repaired or modified by an unauthorized person or agency is also void of warranty.

This warranty is for the original product only. Associated Electrics, Inc. shall not be liable for any loss or damages, whether direct or indirect, incidental or consequential, or from any special situation, arising from the use, misuse, or abuse of this product. This limited warranty gives you specific rights. You may also have other rights, which vary from state to state.

Do not return the equipment to the point of purchase as they are not authorized to honor warranty claims or perform service. Remove the radio equipment in question from the model and remove all accessories. Do not send the entire vehicle and be sure the item(s) is packed in a strong cardboard box with plenty of soft packaging material. We recommend using a shipper's tracking service. Team Associated is not responsible for any items lost in transit.

Please return the items to Team Associated, Attn: Service Department, and include the following:

1. Your full name, mailing address, telephone number, and email address.
2. A note, inside the box, describing in detail the problems you are having or the service you are requesting.
3. A copy of the original sales receipt showing the purchase date.

Once received, warranty service will be performed and items returned promptly. You will be notified by telephone when an item does not fall under the terms of the warranty and service charges are required. Please see www.rc10.com/rc/replacexp for details regarding Team Associated's XP Lifetime Product Replacement Policy.

TROUBLESHOOTING

Do not attempt to operate your model if your transmitter is not working properly. Use the following guidelines to find a solution to the problem. If you are unable to solve the problem, contact Team Associated for service.

