

ESC PROGRAMMING and FAILSAFE TECHNICAL NOTICE

FAILSAFE SETTING

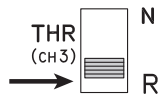
IMPORTANT: Before installing the propeller, it's important for safety reasons to ensure that the failsafe on the receiver is at the 0% throttle preset position as indicated in the instructions below.

1. Install the AA batteries into the transmitter.

Throttle stick is in the minimum position!

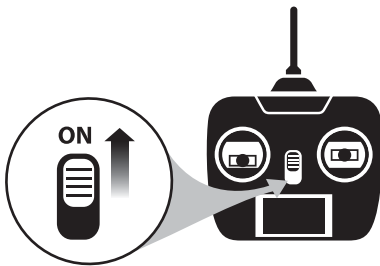


2. Make sure the throttle stick is in the minimum position or 0% throttle.

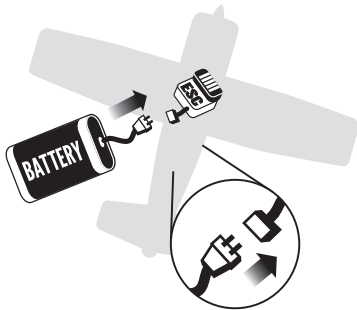


3. Make sure the servo reversing switch for CH3 Throttle (located on the front of the transmitter) is in the "R" position.

4. Power on the transmitter.



5. Plug in the battery to the aircraft.



6. Press the LINK button on the TR624 receiver and hold for 2 seconds. The red LINK light should blink and then stay on.



The failsafe is now set. In the event that the receiver

loses signal from the transmitter the throttle will revert to 0%. If you would like to set the failsafe to a different position, refer

to the instructions below. **Always remove the propeller from the aircraft before adjusting the failsafe.**

FAILSAFE FUNCTION

The included Tactic TR624 receiver has a failsafe feature which engages in the event that the radio signal from the transmitter is interrupted. If radio contact is broken, this safety feature causes the servos to automatically move either to a certain position, or hold their last position to prevent the model from moving in an erratic manner. Channels 1, 2, 4, 5, and 6 will enter a "hold" mode, whereby the servos will lock in their last recognized position.

The servo or ESC connected to Channel 3, normally being the throttle control, will move to a pre-set position. The factory default failsafe position for Channel 3 is to move to **0% throttle**. Motor/prop movement should stop if the receiver loses signal from the transmitter. The throttle servo's failsafe position can be manually re-set to any other position if desired, as follows:

IMPORTANT NOTE: Before manually resetting the failsafe, make sure the servo reversing switches are in the correct position for the application and the propeller is removed.

1. Apply power to the Tx and Rx.

2a. If using an ESC, do NOT arm the ESC. Do NOT attempt to adjust the throttle's failsafe position if the ESC is armed.

2b. If using a gas or glow powered engine, do NOT attempt to adjust the throttle's failsafe position while the engine is operating.

3. Move the Tx throttle stick to the desired position for the throttle control to move if the Rx goes to failsafe.

4. Press and hold the LINK button on the receiver, and the Rx's LED should blink twice. Release the LINK button, and the receiver's LED should turn on (stop flashing). The Tx and Rx should now be linked, with the throttle failsafe in the new position as set above.

NOTE: If you replace the ESC with a different ESC which has a signal loss feature, the pre-set failsafe position is irrelevant as the signal loss feature will cease the throttle operation if the signal is lost.

OPERATION / STARTUP

1. When powering up the model to run the motor or fly, **always** lower the throttle stick and turn on the transmitter first **before** connecting the battery to the ESC (similarly, always disconnect the battery from the ESC before turning off the transmitter).

2. Always securely hold onto the model when connecting the battery. Holding the model and expecting the propeller to turn will prevent an accident or injury.

Each time you connect the battery to the aircraft, the ESC will send electrical pulses to the motor causing it to chime three times (“♫ 1 2 3”) followed by a single, longer beep (“beep”), followed by either one or two more short beeps depending on whether the brake is On or Off (more on the motor brake below). Now the model is ready to fly and the propeller will turn when the throttle is advanced.



If the transmitter is **not** turned On before the battery and ESC are connected (so the receiver is not receiving a signal) the motor will still chime three times (“♫ 1 2 3”), but then will sound consecutive beeps (“beep,” “beep,” “beep,”...) until the transmitter is turned On, at which time it will resume the starting sequence of the single, long beep (“beep”) and one or two short beeps.

If the throttle stick is not all the way down when the battery is connected to the ESC, the motor will beep rapidly (“beep, beep, beep, beep, beep...”) until either the battery is disconnected or the throttle stick is returned to the Off position. Then the normal beep sequence will resume.

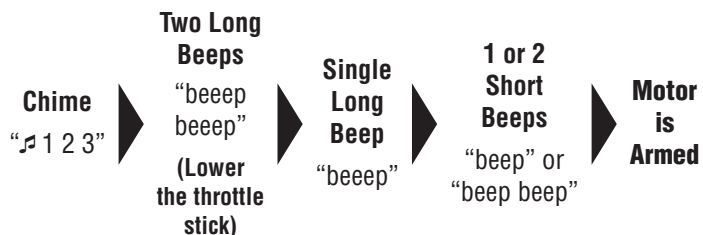
If the chime sounds followed by continuous, slow beeps (“beep...beep...beep...beep...”), then the receiver is not receiving a signal from the transmitter. You may need to link the receiver to the transmitter, or check the connection between the ESC and the receiver.

THROTTLE CALIBRATION

If you connect the battery to the ESC and hear the three chimes (“♫ 1 2 3”), but then the motor beeps rapidly (beep, beep, beep, beep, beep, beep...) and does not run when you move the throttle stick, the ESC is not detecting the end points of the throttle stick and requires **calibration**. Recalibration may also be required if you ever switch to a different transmitter, or if you adjust the throttle trim or throttle end points in your transmitter:

1. Remove the propeller.
2. Turn on the transmitter and advance the throttle to the “up” position.
3. Connect the battery to the ESC and hear the chime followed by two long beeps (“beep, beep”) indicating that the ESC has read the top of the throttle range.
4. Move the throttle stick to the low position and again hear a single long beep (“beep”) (signaling that the ESC has

read the bottom end of the throttle range) followed by one or two short beeps signaling the completion of the procedure. Now the throttle has been calibrated.

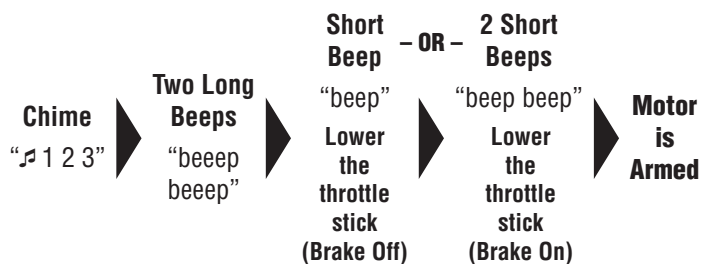


Note: If this recalibration does not work, increase or decrease the throttle trim or end point for low throttle on your transmitter and repeat the procedure.

BRAKE SETTING

The ESC is preset from the factory with the motor brake **off**, but if you inadvertently turn on the brake, or if the ESC was not set correctly, follow these instructions to turn On or Off the brake:

1. Remove the propeller.
2. Turn on the transmitter and move the throttle stick all the way up.
3. Connect a battery to the ESC to power up the ESC and radio.
 - A. Hear the chimes (“♫ 1 2 3”) followed by two long beeps (“beep, beep”) followed by a pause, a short beep (“beep”), another pause, then two more short beeps (“beep, beep”).
 - B. If you do nothing, the brake will not be changed. Disconnect the battery from the ESC.
 - C. To change the brake setting (on or off) reconnect the battery to the ESC with the transmitter on and the throttle stick all the way up. Lower the throttle stick after the single short beep to turn the brake **off**; or lower the throttle stick after the two short beeps to turn the brake **on**:



- D. After the throttle stick is lowered to turn the brake on or off, the single, long beep will sound (“beep”) followed by a single short beep (brake off) or two short beeps (brake on) depending on how you just programmed the brake.