AR7200BX

Unique SmartSafe Functionality of AR7200BX

The AR7200BX features a unique SmartSafe™ failsafe function that operates in the following manner:

During power up and before the RF connection, no output pulses are present on the throttle. The ESC will not arm.

- When the RF connection is made between the transmitter and receiver, the throttle servo output pulse is driven to the bound failsafe position (normally low throttle) regardless of the throttle stick position. The output pulse remains at the bound failsafe position until the throttle stick is returned to low throttle. At this point the ESC is armed, however, the receiver is "locked" at low throttle.
- When you move the throttle stick to the low position, the system allows normal throttle control of the throttle output pulses.

This feature was developed to prevent the throttle from returning to a high throttle position (idle up active) after a brown out, as the cyclic servos will not recover until re-initialization.

The Issue

To enter the programming, calibration, or data reset modes, many ESCs (Castle, E-flite, Align and others.) require the first pulse to be at full throttle (1.9ms). SmartSafe, as described above, prevents this from happening with the AR7200BX.

Recommended Solution
Using a Separate Receiver Pack to Pre-Connect the AR7200BX

1. I**t is highly recommended that you first disengage the gear train by removing the pinion gear anytime you plan to access the programming mode.**
2. Disconnect the battery from the ESC and disconnect the ESC from the receiver.
3. Carefully remove the red wire from the ESC throttle lead connector. This will prevent the possibility of damaging the BEC when you power the receiver using a separate receiver pack.
4. Turn on the transmitter.
5. Using a separate receiver pack, plug the receiver pack connector into any port (other than throttle) in the AR7200BX. Allow the system to connect and initialize.
6. Release the throttle output pulse by moving the throttle to the low position. Move the throttle to the full throttle position to enter programming mode.
7. With the throttle at full, plug in the ESC throttle lead connector (with the red wire disconnected) into the AR7200BX throttle port and plug in the main LiPo battery. Power on the LiPo battery through the ESC or switch harness, if applicable. The ESC should enter the programming mode.
8. Program the ESC as normal. Disconnect the LiPo battery and the receiver pack after you finish programming the ESC.
9. Attach the red wire to the ESC throttle lead connector. Plug the throttle lead connector into the throttle port on the AR7200BX.