E-flite A-10 Thunderbolt II Twin 64mm EDF BNF Basic (EFL011500) Addendum

For updating the ESC firmware and enabling motor/thrust reversing

IMPORTANT: The Spektrum Avian Dual Smart ESC has two independent ESCs inside that must be updated/programmed individually with the same settings.

Required Items:

- Desktop or Laptop computer running Windows 7 or higher
- Servo extension 3+" or longer
- 6S Flight Battery to Power the ESC
- Spektrum USB SmartLink App for your PC
- Spektrum Smart ESC Programmer (SPMXCA200)
- USB connector, included with the ESC Programmer

Optional: For easier programming/updating in the future, attach a 12" servo extension (EXLREX12L) to each of the programming leads and route to the battery compartment.

See the complete instructions for the Spektrum ESC Programmer here:

<u>https://www.horizonhobby.com/on/demandware.static/-/Sites-horizon-</u> <u>master/default/dw28558c9c/Manuals/Spektrum-SmartLink-ESC-Update-and-Programming-</u> <u>Instructions.pdf</u>

Download the SmartLink APP for your PC here - Download here -

Accessing the ESC

- 1. Remove the (4) 3 x 10mm and (2) 3 x 16mm screws Motor Nacelle Assembly. Note: the 3 x 16mm are the middle two screws.
- 2. Carefully lift the Motor Nacelle Assembly from the fuselage and pull up lifting the ESC out of the fuselage just until the short programming leads on the front of the ESC are accessible.
- 3. Be very careful to avoid damaging the foam and other parts while the Nacelle Assembly is not secure.

Updating the Firmware (NOTE: Updating the firmware is optional but recommended)

- 1. Connect a servo extension to one of the short programming leads/connectors on the front of the ESC. Note: Orange corresponds to gray on the ESC.
- 2. Connect the other end of the extension to the Spektrum Smart ESC Programmer (SPMXCA200) using the port marked "ESC" on the left side of the programmer. Match the polarity as marked.
- 3. Connect a USB cord with USB C connector to the Port marked "USB" on the programmer
- 4. Launch the Spektrum SmartLink application on your PC.
- 5. Connect a flight battery to the IC5 connector to power the ESC.
- 6. Connect the USB cord to your computer.
- 7. Click the "Firmware Upgrade" button.
- 8. Click the down arrow on the "Available Versions" of the firmware and select "04.0.09-6S".
- 9. Click "Upgrade".

- 10. The "Progress Status:" bar will appear while it is updating the firmware.
- 11. Once complete, disconnect the extension from the programming lead and connect it to the other short programming lead. Then repeat steps 7-10.
- 12. Once complete, disconnect all the leads from the ESC and the programmer.

Enabling the Motor/Thrust Reversing

- 1. Connect a 3+" servo extension to one of the short programming leads/connectors.
- Connect the other end of the extension to the Spektrum Smart ESC Programmer (SPMXCA200) using the port marked "ESC". Match the polarity as marked. Note: Orange corresponds to gray on the ESC.
- 3. Remove the battery hatch from the fuselage.
- 4. Connect a flight battery to the IC5 connector to power the ESC.
- 5. On the programmer press the "EDIT" button.
- 6. Once you see the "Brake Type" Repeatedly press the "Edit" button until "Reverse" is selected.
- 7. Press "Select" to change the "Brake Force".
- 8. Continue pressing the "Edit" button until "7" is shown and press "Select".
- 9. The default channel is Aux2/Channel 7, if you would like this on a different channel repeatedly press the "Select" button until "Thrust Rev" is shown.
- 10. Repeatedly press the "Edit" button until the desired channel appears.
- 11. Press the "Save" button on the programmer to lock in the changes.
- 12. Once complete, disconnect the extension from the programming lead and connect it to the other programming lead. Repeat steps 4-11.
- 13. Repeat steps 3-8.
- 14. The motor/thrust reverse feature is now enabled on the ESC.

Reassembly

OPTIONAL: Connect two 300mm/12" servo extensions to the programming leads and route them into the receiver compartment for easier ESC programming/updating without removing the motor nacelle assembly in the future.

- 1. From the battery compartment, gently pull on the battery connector to help move the ESC back into the fuselage.
- 2. Look under the nacelle assembly to make sure the motor wires are located in the channels and fit the assembly back to the fuselage.
- 3. Secure the assembly to the fuselage with the 6 screws.