SD-10G AERO

Procedure for obtaining four different In-Flight Selectable Flight Modes using the SD-10G Transmitter for controlling the Fun-Fly Ultra Stick type model with dual Flaps and Ailerons.

Normal:	No Mixing
Flight Mode 1:	Takeoff, with Flaps in Down Position
Flight Mode 2:	Elevator to Flap Mixing. Up Elevator causes the Flaps to go Down. Down Elevator causes the Flaps to go UP.
Flight Mode 3:	Aileron to Flap Mixing. Flaps work in the same direction as the Ailerons.
Flight Mode 4:	Crow. Ailerons go UP, Flaps go Down, with Flaps responding to Aileron commands with Flap to Elevator Compensation.

NOTE: Prior to programming your SD-10G for a specific model, Use **MODEL SELECT**, to select a specific **AERO** model as shown on page 29 of your instruction manual. **BIND** and set the **SAFETY LINK** as indicated on page 21 of your instruction manual. The **SAFETY LINK** should match the currently selected model.

Select **SYSTEM** using the Navigation Pad. Press the **ENTER** key.

Scroll down using the Navigation Pad and highlight **MODEL NAME** by pressing the **ENTER** key. Enter a **MODEL NAME** as described on page 29 of your SD-10G manual. Press **END** when complete. Scroll down using the Navigation Pad to **TYPE**. Press the **ENTER** key. Use the YES/+ and NO/- key to select **AERO**. Use the Navigation Pad and the YES/+ and NO/- keys to make it read: **WING > NORMAL, AILERON >2, FLAP >2, TAIL >NORMAL, THROTTLE >1** Press the **ENTER** key to save the selection option> Press the YES/+ key to **CREATE NEW DATA**. Press the **END** key.

Scroll down using the Navigation Pad and select **CHANNEL ASSIGN**. Press the **ENTER** key. The Default SD-10G Channel Assignments for the above selections are as follows:

#1 Elevator
#2 Left Aileron
#3 Throttle
#4 Rudder
#5 Gear
#6 Right Aileron
#7 Left Flap
#8 Right Flap
#9 AUX 2
#10 AUX

Press the END key

Select **SWITCH ASSIGN** using the Navigation Pad Down arrow. Press **ENTER**. Assign the following switches using the Navigation Pad and the YES/+ and NO/- keys.

FLIGHT MODE	1	>11 >or	>
	2	>10 >or	>
	3	>23 >or	>

FLIGHT MODE 4		>22 >or >
GEAR		> >or >
Throttle Cut Flap Flap	1 2	>34 > or > >11 >or > >22> or >
EL > FL FL > EL		>10 >or > >22 >or >
C-MIX	1	>23 >or >
C-MIX	2	>23 >or >
C-MIX	3	>22 >or >
C-MIX	4	>22 >or >
C-MIX	5	> >or >

Press the END key twice.

NOTE: Turn **OFF** each Flight Mode switch after completion of programming each function and Mix. All values show are trial values. Fine tune after completion of programming your setup.

FLIGHT MODE 1—Takeoff with Flaps in Down Position

Select **SURFACE** using the Navigation Pad. Press **ENTER**

Turn ON Flight Mode 1 Switch (#11)

Press Navigation Pad Down arrow and select **EPA**. Scroll to the right and select the **LF** Use the YES/+ key to input a value of **50%**. Do the same for the **RF**. The screen will show **1 50%** indicating that **FLAP 1** is used for this function. Note that polarity determines the direction of servo throw and value the amount...... Press **END** key twice.

FLIGHT MODE 2 --- Elevator to Flap Mixing

Select **F-MODE**. Press **ENTER Turn ON Flight Mode 2 Switch (#10)** Scroll down to MIXING. Press **ENTER** Scroll down to **EL** > **FL**. Press **ENTER** Use the Navigation Pad and the YES/+ and NO/- keys to make it read:

F-MODE (2) COMMON >SEP EL >LF > 20% EL >RF > 20%

Press the **END** Key twice.

FLIGHT MODE 3 --- Aileron to Flap Mixing

Scroll down to C-MIX. Press ENTER. Turn ON Flight Mode 3 Switch (#23)

Select C-MIX 1.

Use the Navigation Pad and the YES/+ and NO/- keys to make it read and show a graphical display.

 $\begin{array}{ll} F\text{-MODE (3)} \\ \text{COMMON} > \text{SEP} \\ \text{MASTER} > \text{AI} \\ \text{SLAVE} > \text{LF} \\ \text{Point 1} > -50\% \\ \text{Point 9} > +50\% \\ \text{Delay} > 0\% \end{array}$

Press the END key. Press ENTER.

Select C-MIX 2.

Use the Navigation Pad and the YES/+ and NO/- keys to make it read:

F-MODE (3) COMMON > SEP MASTER > AI SLAVE > RF Point 1 > -50% Point 9 > +50% DELAY > 0%

Press the END key. Press ENTER.

FLIGHT MODE 4 --- CROW

Select C-MIX 3.

******Turn OFF Flight Mode 3 and Turn ON Flight Mode 4 Switch (#22)

Use the Navigation Pad and the Yes/+ and NO/- keys to make it read:

F-MODE (4)	•
COMMON	> SEP
MASTER	> AI
SLAVE	> LF
Point 1	> -75%
Point 9	>+75%
Delay	> 0%

Press the END key. Press ENTER.

Select C-MIX 4.

Use the Navigation Pad and the YES/+ and NO/- keys to make it read:

F-Mode (4)	
COMMON	> SEP
MASTER	> AI
SLAVE	> RF
Point 1	> -75%
Point 9	>+75%
Delay	> 0% Press the END key twice.

Use the Navigation Pad to select MIXING. Press the ENTER key.

Select FLAPERON –Press **ENTER** key. **Flight Mode 4 Switch (#22) is still ON.** Use the YES/+ key and NO/- Keys to make the **Flaperon** Mix read as follow

> F-MODE (4) COMMON >SEP ACT/INH > ACT FL >LA 100% FL >RA 100% Press END key.

Scroll down to FL>EL --Press ENTER key.

Use the YES/+ key and NO/- keys to make Flap to Elevator Compensation Mix read as follows: F-MODE (4) COMMON > SEP FL > EL > + or - 10% Press END key three times.

Select SURFACE using the Navigation Pad. Press **ENTER**. Press the Navigation Pad Down arrow and select EPA. Scroll to the right and select **LF**. Use the Yes/+ key to input a value of 100%. Do the same for the **RF** The screen will show **2** 100% indicating **FLAP 2** is used for this function. Note that polarity determines the direction of the Flap servo throw and value the amount....Press the END key twice.

Note: Turn **OFF** each Flight Mode switch after completion of each of the Flight Mode mixes. The above figures are trial values. Fine tune later. The value determines the amount of servo travel and the polarity determines the direction of servo travel.

Jack R. Albrecht Airtronics Technical Support 17 June 2009