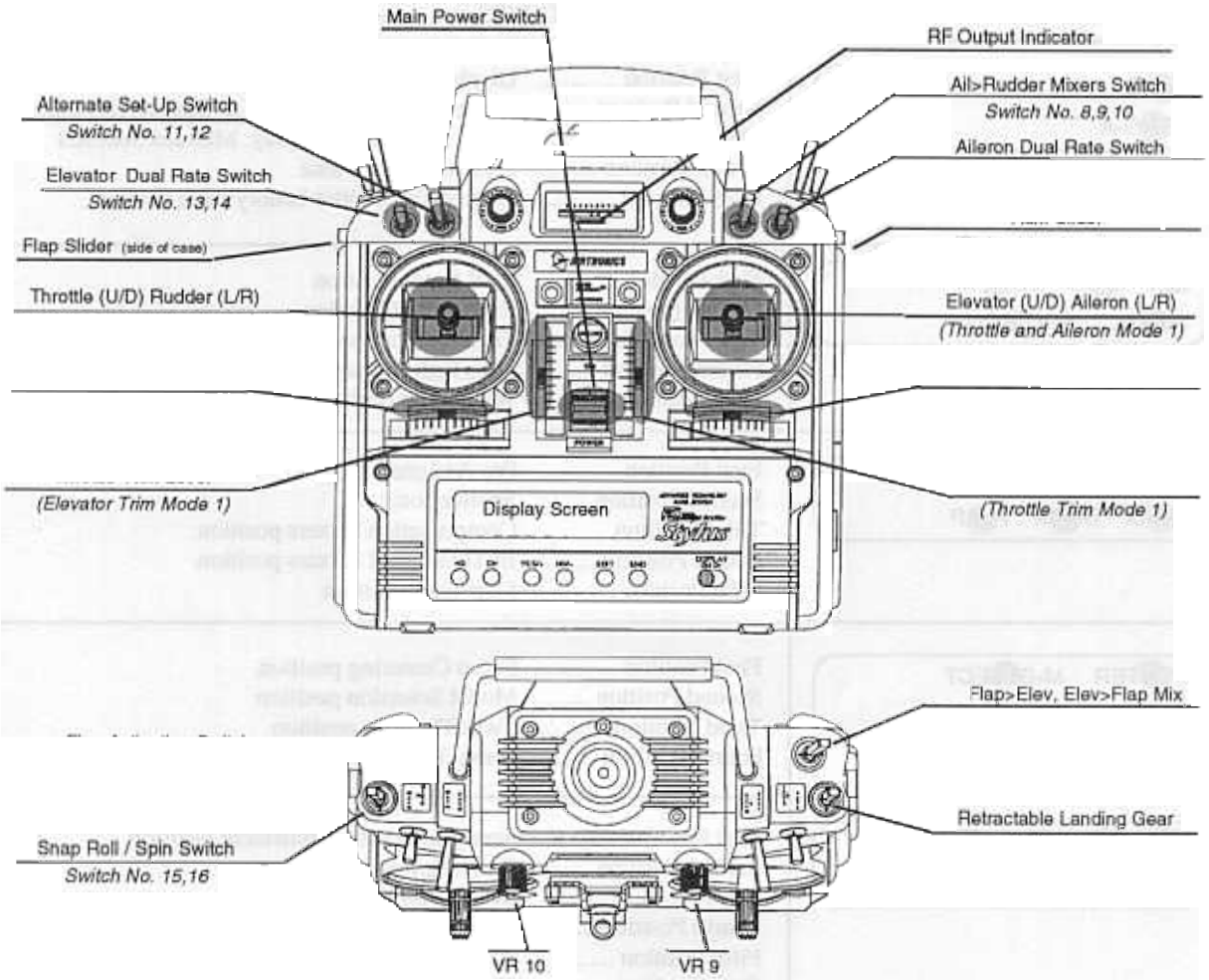
Stylus User's Manual — AIRPLANE



Read This!!

Before doing ANY programming for your model, make certain that you have selected the desired model TYPE (AERO, HELI or GLID).

IF YOU CHANGE TYPES, (to Aircraft or Glider) or if you use the Data Reset at any time, the switch assignments will need to be checked. The chart at the right shows the intended 'default' switch assignments. It is recommended that you at least start out with these assignments, as this will make your system consistent with this manual. *Later, you may change switch assignments to personalize your setup for your own flying preferences.*

NOTE: A "0" default setting means that function is not presently assigned to a switch. To make the function operative you must assign it to a switch or assign it to be always on.

SCREEN ONE	Default
SR (A)	16
SR (B)	15
S,F>E	1
E>F	3
SCREEN TWO	
D/R A1	7
A2	6
E1	14
E2	13
SCREEN THREE	
D/R R1	0
R2	0
ALTERNATE	11
SCREEN FOUR	
Gear	4
C-Mix 1	0
C-Mix 2	0
C-Mix 3	0
SCREEN FIVE	
B-M 1	0
B-M 2	0
Aux	0
STW	0
SCREEN SIX	
AI>RU (1)	10
2	8
FLAP 1	18
2	19

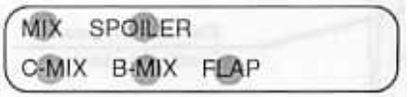
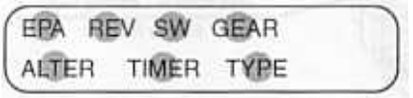
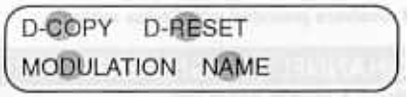
The receiver channel assignments below apply to both the PCM and FM receivers provided with Stylus systems.

RECEIVER CHANNEL ASSIGNMENTS

Receiver Plug No.	Plug In Servo For:
1	Throttle
2	Aileron
3	Elevator
4	Rudder
5	Gear
6	Flap
7	Second Aileron Servo or Spoiler
8	Second Throttle or Aux.

This same order applies to the servo reversing screen positions.

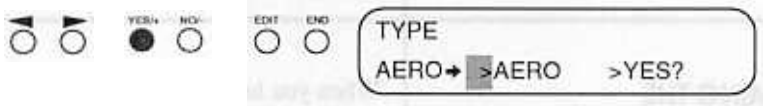
Stylus Menu Summary — Airplane Menus

MENU SAMPLE	EXPLANATION/ACCESS *(Note; positions are left to right, top row, then left to right, bottom row)*
	First Position ..... Displays present model type Second Position ..... Designates Integral Timer or Stopwatch Function Third Position ..... Stopwatch/Timer Display, Minutes:Seconds Fourth Position ..... Present Model Name Fifth Position ..... Present Transmitter battery pack voltage
	First Position ..... Dual Rates position Second Position ..... Exponential position Third Position ..... Trim Memory position Fourth Position ..... Snap Roll or Spin position Fifth Position ..... Wing Type position
	First Position ..... Pre-Assigned Mixers position Second Position ..... Spoiler position Third Position ..... Compensation Mixers position Fourth Position ..... Bi-Directional Mixers position Fifth Position ..... Flap Trim position
	First Position ..... Servo Centering position Second Position ..... Model Selection position Third Position ..... Twin Throttles position Fourth Position ..... Cross-Trim position
	First Position ..... Servo End Point Adjustment position Second Position ..... Servo Reversing position Third Position ..... Switch Assignments position Fourth Position ..... Retractable Landing Gear Setup position Fifth Position ..... Alternate Function position Sixth Position ..... Timer Set position Seventh Position ..... Aircraft Type position
	First Position ..... Data Copy position Second Position ..... Data Reset position Third Position ..... Transmitter Modulation position Fourth Position ..... Name Assignment position
	First Position ..... Fail-Safe Assignment position Second Position ..... Transmitter Screen contrast position Third Position ..... "Click" or beep activation position Fourth Position ..... RAM or ROM card menus position
	First Position ..... Mode 1,2 selection position Second Position ..... Switch Alarm position Third Position ..... Battery Fail Safe position

TO SELECT AIRPLANE SET-UP:

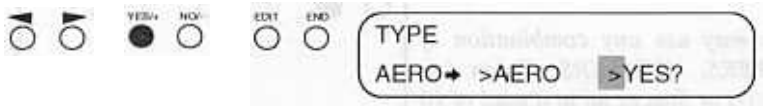
Press EDIT key to arrive at the screen shown below. Press > button to place cursor over TYPE.

Now press the YES/+ button. You will see a screen such as that shown below.



Possible choices are:
AERO, for powered aircraft
HELI, for helicopter
GLID, for sailplanes.

If AERO is not currently displayed to the right of the cursor position, press the YES/+ button or NO/- button until AERO is displayed. (The possible choices are: AERO, for powered aircraft; HELI, for helicopter, or; GLID for sailplanes.) To confirm your selection press the > key to move the cursor to the >YES position, then press the YES/+ key.



AIRPLANE SETUP

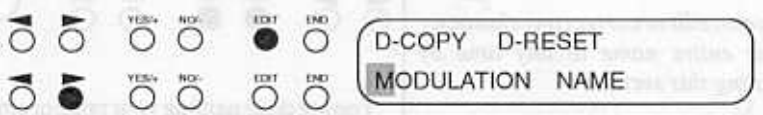
In this section you will learn to name and save your aircraft set-up(s), implement the AERO control functions, and tailor the servo movement and centering for each control.

Pressing the END key on the front control panel will bring you to the following screen, the INITIAL SCREEN:

This screen tells you several valuable things as stated in the Introduction section of this manual. If you are not familiar with this screen, please refer to that section!

Note - if the SW Alarm (Switch Alarm) function is set to be "On," and an Alternate set-up has been designated, then an audio alarm will sound if you power-up the transmitter while the Alternate Set-up switch is in the "On" position. (See "Switch Alarm" section on Page 69.)
Move the Alternate Set-up switch to the "off" position to deactivate the alarm.

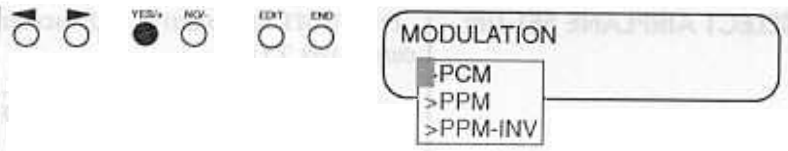
To set up your model, press the EDIT key until you reach this screen:



Press the > key to move the cursor to MODULATION. Press the YES/+ key, and this screen will appear: (See next page)

Basic Airplane Setup ...

PCM modulation can only be used if you are using a PCM receiver!



This screen allows you to select PPM/FM operation or PCM/FM operation. You can also set PPM/FM Inverted operation for use with other brands of PPM/FM receivers that require this mode.

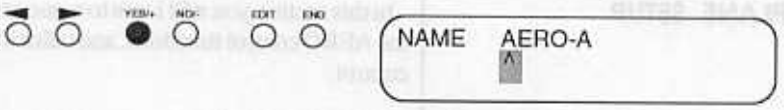
Press the YES/+ or NO/- key to change the currently displayed choice. *PCM modulation can only be used in conjunction with a P/N 92185 PCM receiver!*

NAMING THE PRESENT AIRPLANE

When you have set the proper modulation, press the END key to return to the prior screen. Press the > key to place the cursor over the NAME position.

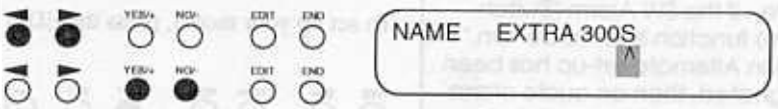
You may use any combination of LETTERS, NUMBERS, Colon (:), Dash (-) or Spaces up to a total of 10 characters.

With cursor positioned over NAME, press the YES/+ key to reach this screen:



Press both the YES/+ and NO/- keys at the same time to RESET the present name, if any.

The cursor will now be pointing to the first NAME space. You may use any combination of LETTERS, NUMBERS, Colon (:), Dash (-) or Spaces up to a total of 10 characters. To select the character for the first position, press the YES/+ or NO/- key to move through the available characters. When you reach the desired letter or character, press the > key to move to the next position. Continue until you have completed your present model's name or description, then press END to return to the prior screen.



You may edit or correct any character or the entire name at any time by repeating this section.

You are done naming your present aircraft. You may edit or correct any character or the entire name at any time by repeating this section.

FAIL SAFE

Now press the EDIT key to bring up the menu below. The cursor is over F-SAFE. This menu position allows you to enable or disable the Failsafe function of your Stylus.

FAILSAFE is ONLY available when you are using a PCM receiver and transmitting in the PCM Modulation mode. If you are transmitting PPM FM you will not be able to enable the F-SAFE function.

Press the YES/+ key to see this screen:

The arrow at the end of the second menu line indicates there are more screens for this function. Pressing the > Key will take you through all of the screens for the failsafe function, as follows:

NOTE: If interference is present when Failsafe is not active, in PCM Modulation, the receiver will 'hold' the last command received until the signal is again established.

The settings for the Fail-Safe menu positions can not be set by the +/- Keys. Instead, you program the desired Failsafe servo position for each by placing the control stick or switch in the desired position; for example, low throttle, slight up elevator, etc. Each control function is set individually. Start with the first Fail-Safe setting, TH (Throttle). The default setting is INH (inhibit). To assign a Fail-Safe position for the throttle servo, position the cursor as shown.

Now position the Throttle stick on the transmitter to the desired Fail-Safe position. Now press the YES/+ key to set the position in memory.

To turn off or inhibit one of the Fail-Safe setting, move the cursor to that menu position and press BOTH the YES/+ and NO/- keys at the same time.

To check your settings (after programming all of your failsafe positions) simply turn the transmitter power switch OFF and check that the controls go to the preset positions. These are the positions the radio will assume if control is temporarily lost due to interference or transmitter problems.

To turn off or inhibit one of the Fail-Safe setting, move the cursor to that menu position and press BOTH the YES/+ and NO/- keys at the same time.

Fail Safe ...

Note that the Fail Safe data you have programmed is NOT retained in the PCM 92185 receiver after the receiver's power switch is turned off.

To restore the Fail Safe data you have programmed into your transmitter back into the receiver, proceed as follows:

With the transmitter RF switch and the receiver switch both in the ON position, select the Fail Safe screen

The cursor will be flashing over the F-SAFE position.

Now press the YES/+ key. This will send the previously programmed Fail Safe position data to the receiver. Turn off the transmitter RF switch to test the Fail-Safe position data.

SPOIRON OPTION

The Stylus has the ability to control different aircraft Wing types, including conventional single aileron servo, dual aileron servos on individual channels with differential adjustment, and wings with flaperons/spoilerons.

To select the type of control set-up appropriate for your aircraft, press the EDIT key until the following screen appears:

Press > button to place cursor over SPOIRON position. Press YES/+ key to see following screen:

Electronic Differential

It is only possible to electronically adjust differential when using TWO CHANNELS for aileron, with one servo on each side of the wing driving that wing's aileron.

The INH position allows only one channel for aileron function.

Differential (AI-DIFF) refers to the ratio of up-to-down movement of each aileron. Many aircraft need more movement from the upward deflecting aileron than from the downward deflecting aileron in order to eliminate unwanted yaw when ailerons are applied.

When the cursor is over the AI- DIFF> position, pressing the YES/+ button or NO/- buttons will adjust the differential throw in the ailerons. NOTE: It is only possible to electronically adjust differential when using TWO CHANNELS for aileron, with one servo on each side of the wing driving that wing's aileron. The display to the right of the cursor (default setting 0%) shows the amount of differential presently programed. The range is from -100% to +100%. However, since INH is presently displayed, no differential adjustment will be effected.

INH, for single-channel aileron operation.

SPOIRON, for two channel operation of ailerons with optional spoileron or flaperon operation.

In order to use the electronic differential adjustment, you must use two channels for aileron control. With the cursor in the first position in the screen, press the YES/+ key.

The Spoiron function is now active. This will allow two channels for aileron function, and allows electronic differential adjustment.

You will now have two channels assigned to the aileron/spoileron function. Plug these servos into CHANNELS 2 and 7 of your receiver. Note that both servos respond equally when you move the aileron stick on the transmitter. With the differential set at 0% the servos will move equally in response to transmitter aileron stick movement to the right or to the left.

NOTE: When Spoiron is inhibited, only the servo plugged into channel 6 responds to Flap switch positions. The amount of movement depends on the EPA settings for channel 6 (as well as the position of the Flap Slider on the left side of the case), and requires that the SW (Switch Assignment) for Flap 2 and Flap Trim are activated. When Spoiron is ACTive, both aileron servos respond to flap commands - the amount and direction is determined by the Spoiler (not Spoiron) menu settings.

Press the > key to place the cursor over the AI- DIFF> position.

NOTE:

The "Spoiron" function in this menu is used ONLY to tell the program that two channels are being used for aileron surfaces. This will allow you to adjust the surfaces independently, and also allows other advanced options.

Don't confuse the "Spoiron" software designation with "Spoilerons" on an airplane wing, i.e. surfaces which act as both ailerons and/or spoilers (deflecting upward together to add drag and spoil lift.)

The Spoiler or Spoileron functions are adjusted in their own menus - see page 40-42 for more.

Differential ...

Now, with the cursor over the AI- DIFF> position, press the YES/+ or NO/- key to set the amount of differential.

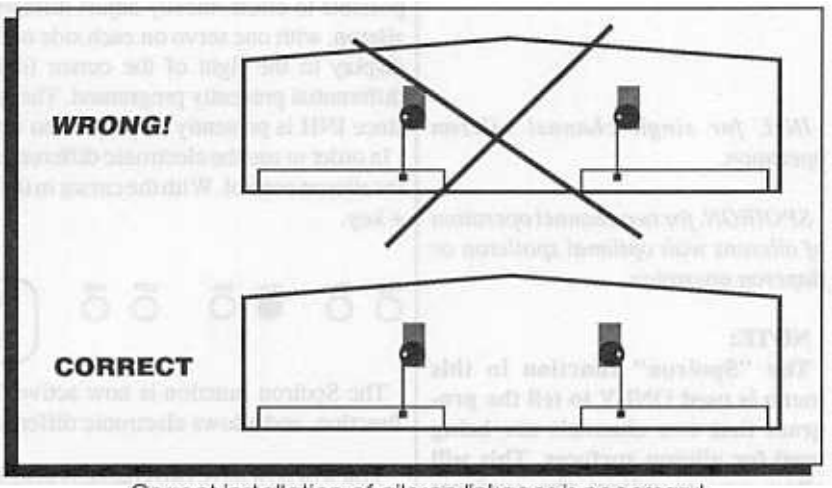
In this example the differential is set to +50 percent. This means that the downward-deflecting aileron will move half as far as the upward-deflecting aileron. The setting can be either positive or negative. Final adjustment will be determined by actual flight testing.

SERVO LINKAGE FOR DUAL-SERVO AILERON OPERATION

When using two channels for aileron operation you must take care to install your wing servos and linkages for proper operation.

Both servos will rotate in the same direction with the application of aileron stick commands. This means that the aileron (or spoileron or elevon) linkages must be installed so that they are mirror-images of each other, NOT in identical fashion. See diagram below.

Aileron (or spoileron or elevon) linkages must be installed so that they are mirror-images of each other, NOT in identical fashion.



Correct installation of aileron linkages is necessary!

Because the servos will rotate in the same direction with the application of aileron stick commands, you must mechanically design your installation so that the ailerons move in opposite directions when aileron is applied.

Reversing the aileron, elevator or spoileron functions will reverse the rotation of BOTH servos when using SPOIRON.

You may either install both aileron pushrods on the inside of their servo output arms, or install both aileron pushrods on the outside of the servo output arms. Direction of operation may then be controlled by reversing the aileron operation with the transmitter's reversing function.

Reversing the aileron, elevator or spoileron functions will reverse the rotation of BOTH servos when using the SPOIRON ACT choice.

SERVO REVERSING

Stylus allows you to electronically REVERSE the direction of rotation for each of the servos in use. This allows you to hook up your control linkages and pushrods in the most mechanically desirable manner, without regard to the direction of servo movement. (Note that when using two channels for aileron controls, you must install the servo linkages as outlined on the previous page).

After installing your linkages, check to see if any of the controls move in the wrong direction when you move the transmitter controls. If so, proceed as follows.

Stylus allows you to electronically REVERSE the direction of rotation for each of the servos in use.

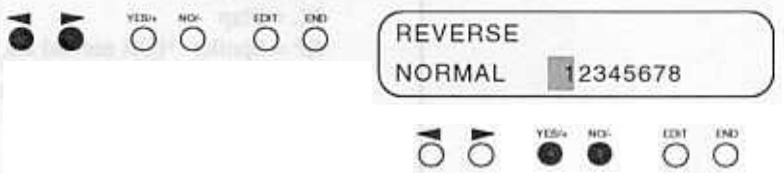
Press the EDIT key until you arrive at the following screen:

Press the > key to position the cursor over the REV position.

Now press the YES/+ key to see the following screen:

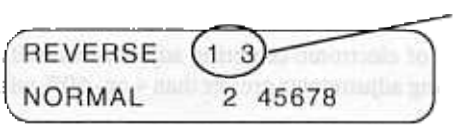
The default positions shown have all channels operating in the NORMAL direction, so all channel numbers are in the lower row as shown above.

If, for instance, you wish to change the direction of rotation of the servos operating on channels number 1 and number 3, press < or > keys to position the cursor over the desired channel number(s), then press the YES/+ or NO/- key to change that channel to the REVERSE direction.



Reversing Position	Reverses This
1	Throttle
2	Aileron
3	Elevator
4	Rudder
5	Gear
6	Flap
7	Second Aileron Servo or Spoiler
8	Aux. or Second Throttle

Those channels you have changed to reverse rotation will now appear in the upper row in the REVERSE position.



In this example, Channels 1 and 3 have been set for REVERSE rotation.

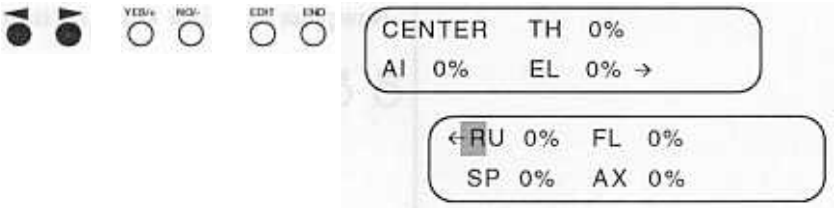
SETTING CONTROL CENTERING

The Stylus allows you to fine-tune the CENTER or neutral position of all flight control servos. After hooking up your controls and mechanically centering all linkages to the approximate positions, press the EDIT key to arrive at the following screen:

Now press the YES/+ key. You will see this screen:

By pressing the > key (or < key) you can position the cursor over the desired control function. Note the arrow at the far right of the bottom row of this screen; this indicates that there are more cursor positions than presently displayed. If you continue to press the > key past the EL position, you will see the remainder of the CENTER screen positions as shown below.

It is desirable to adjust the control linkages as close as possible to the correct center positions, then use the CENTER commands to "fine tune" the exact position of the control surface when the transmitter control is in neutral.



The channels for which electronic centering is available are abbreviated in the CENTER menus as follows:

TH = Throttle
AI = Aileron*
EL = Elevator
RU = Rudder
FL = Flap
SP = Spoiler *(OR second aileron if Spoiron is ACT)
AX = Auxiliary Channel

The value displayed as percentage (%) to the right of each channel abbreviation shows the present centering adjustments. Default position is zero.

IMPORTANT NOTE:

It is desirable to adjust the control linkages as close as possible to the correct center positions, then use the CENTER commands to "fine tune" the exact position of the control surface when the transmitter control is in neutral.

Using a very large amount of electronic centering adjustments will decrease the total throw available for that channel. In particular, centering adjustments greater than + or - 50% will tend to make the extreme stick position on one end less responsive.

Setting Control Centering ...

To adjust the centering of any channel, press the > or < key to place the cursor over that channel's position. (For this example we'll adjust the centering of the Elevator servo; so position the cursor over the EL position as shown).

Now, by pressing the YES/+ or NO/- keys you can adjust the centering for the selected channel. The value range possible is from -100% to +100%.

By positioning the cursor over each channel position for which centering adjustments are desired, then setting the CENTER position with the YES/+ or NO/- keys, set the centering for each channel.

END POINT ADJUSTMENTS (EPA)

The Stylus allows you to adjust the 'End Points,' or servo travel limits, for all flight channels.

There are no EPA screens for channels 5 and 7, which are for Gear and Spoiler. These functions have separate menus that allow for adjustments.

If you are using two aileron servos on two channels, then the EPA for channel 2 will affect the End Points for BOTH of the aileron servos.

In general, it is best to use as close to 100 percent servo throw as possible. This allows for the best possible resolution and centering of all control surfaces. However, in some cases it is not possible to use full servo movement — such as those instances where short control horns must be used because of aircraft design considerations, or with fixed-length control horns such as a throttle arm.

To electronically adjust End Points for servo travel, press the EDIT key to arrive at the following screen:

In general, it is best to use as close to 100 percent servo throw as possible. This allows for the best possible resolution and centering of all control surfaces.

Now press the YES/+ key to see the first EPA screen.

End Point Adjustments (EPA) ...

Note that there is an arrow pointing to the right at the bottom right corner of the screen. This means that there are more cursor positions than are presently displayed.

Pressing the > key repeatedly will 'push' the cursor off this screen and bring up the second screen of the EPA menu, as shown below.


```
EPA  1-L  2-R  3-U
>100%  >100%  >100%→
```

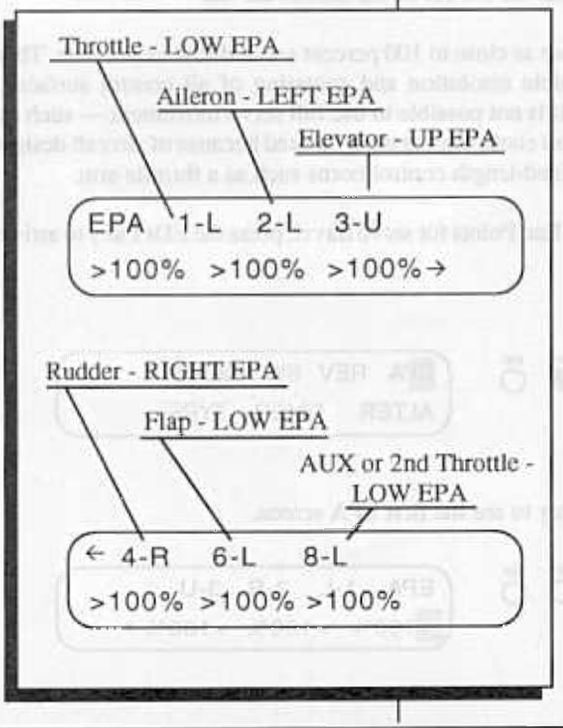
```
← 4-R  6-L  8-L
>100% >100% >100%
```

When the throttle stick is in the low position, the EPA will read "1-L," when the throttle stick is in the High position, the EPA will read "1-H." Similarly, the aileron EPA will read 2-L or 2-R when the stick is moved left or right, respectively. In a similar manner, you can determine which End Point your adjustments will affect by moving the appropriate stick in the direction of the desired End Point adjustment.

How To Use The EPA Screens

In the EPA screens, the top row shows the six channels for which EPA adjustments are available AND the current End Point (High, Low, Right or Left) for which the adjustments can be made. The bottom row of data is the present setting for the currently displayed End Point.

The order of functions displayed in the EPA menus is: Throttle, Aileron, Elevator, Rudder, Flap and Aux or Second Throttle. (from left to right in the EPA screens).



To set your individual End Points, use the < or > keys to position the cursor over the desired control function's present setting.

```
EPA  1-L  2-L  3-U
>100%  >100%  >100%→
```

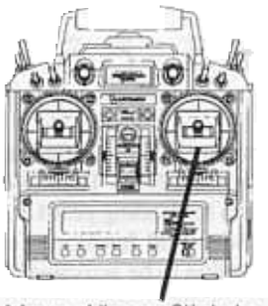
In this example, we have selected the EPA setting for the second function, Aileron. On the top row, the present display shows "2-L," which means you can now make changes in the LEFT travel limit for the Aileron servo(s).

Pressing the YES/+ or NO/- keys will increase or decrease the amount of servo rotation caused by full LEFT deflection of the aileron stick. The range of EPA adjustment is from 0-150%.

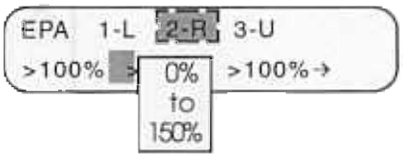

```
EPA  1-L  2-L  3-U
>100%  >120%  >100%→
```

EPA Screens ...

To set the EPA for RIGHT MOVEMENT of the Aileron function, move the aileron stick to the right. Now the EPA screen will show as follows:



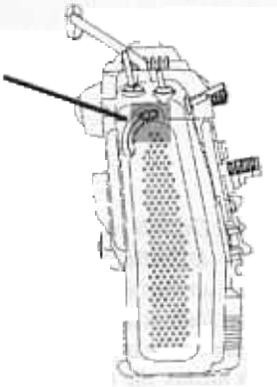
Move Aileron Stick to the right. →



The **2-R** now in the second position means that your End Point Adjustment will now apply to the RIGHT extreme of servo travel.

In a similar manner, you can determine which End Point your adjustments will affect by moving the appropriate stick in the direction of the desired End Point adjustment.

The fifth, or 'FLAP End Point Adjustment' position, is set by moving the slider on the left upper face of the transmitter to determine which end of the flap throw is being adjusted. The display will read either 6-H or 6-L depending on which way the control set, for HIGH or LOW Flap EPA setting, respectively. The Flap Switch must be in the Flap #1 position to make this End Point change. (Other menus also affect flap deployment).



The sixth EPA setting (for Channel 8) is determined for EITHER the slider on the RIGHT side of the transmitter OR the throttle stick depending on whether Twin Throttles are active.

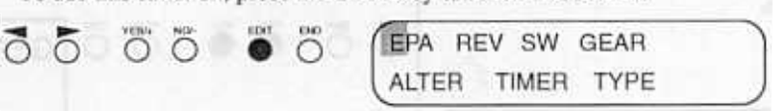
LANDING GEAR ADJUSTMENT

In most cases (in fact, almost all cases in the past) the total servo throw for the landing gear function can not be set by the transmitter, because most retract servos are SWITCHED (non-proportional) servos. With these servos, mechanical adjustment is the only method available to ensure proper operation of the retracts.

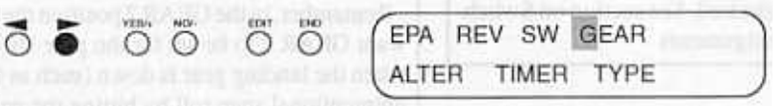
Airtronics now offers a high-torque PROPORTIONAL retract servo, P/N 94739. With this servo and the STYLUS transmitter, End Point Adjustments for the retract servo are possible, independently setting the "Down" and "Up" lock positions. (These proportional retract servos still offer an advantage over "normal" servos in both torque and extended travel range. In most cases a standard servo is not recommended for retractable landing gear activation.)

With this servo and the STYLUS transmitters, End Point Adjustments for the retract servo are possible, independently setting the "Down" and "Up" lock positions.

To use this function, press the EDIT key to reach this screen:



Press > key to position cursor over GEAR position.

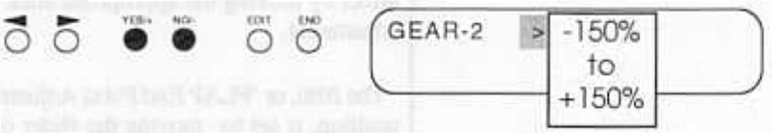


Landing Gear Adjustment ...

With the cursor over the GEAR position, press the YES/+ key to see the following screen:

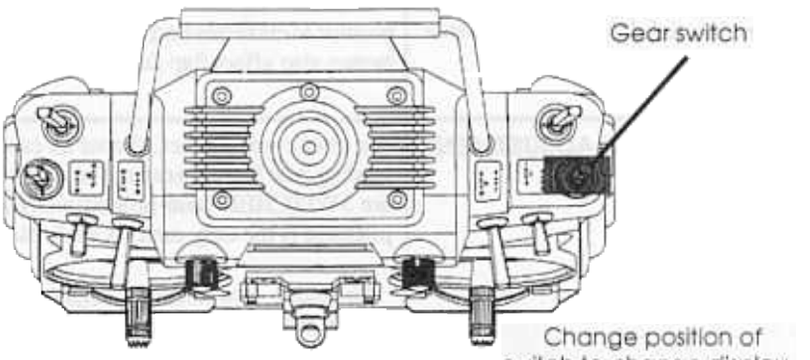
The number after GEAR (in this case GEAR -2) denotes the present position of the GEAR switch - NOT THE SWITCH NUMBER. Position GEAR 2 is the default position for landing gear UP. This is important, because in the GEAR UP position the Snap Roll function is enabled, allowing your currently programed Snap Roll function to be activated by pressing the Snap Roll switch.

To adjust the end point for the landing gear UP position, press the YES/+ or NO/- key to reach the desired pushrod travel for the up position. The range possible is from -150% to +150%.



To set the end point for the landing gear DOWN position, set the retract switch on the right side of the transmitter to the "#4" position. Note that this has the switch "Down" for landing gear Down. The Gear display screen will now show GEAR 1, as shown below.

In the GEAR DOWN switch position, Snap Roll is DISABLED. This is a safety feature, so that when the landing gear is down (such as take-off) you can not accidently cause an unintentional snap roll by hitting the wrong switch.



Change position of switch to change display from GEAR 1 to GEAR 2.

NOTE: **The Snap Roll function is disabled in the Gear 1 (down) position whether you are using a proportional OR switched retract servo.**

As for the GEAR 2 position, press the YES/+ or NO/- key to reach the desired pushrod travel for the gear down position.

Note that the Gear Function can be reassigned to a different switch if desired. See section on Switch Assignments

Remember, in the GEAR 2 position the Snap Roll function is enabled, so you will want GEAR 2 to be set for the gear UP position. This is a safety feature, so that when the landing gear is down (such as take-off) you can not accidently cause an unintentional snap roll by hitting the wrong switch.

FLAPS

- FLAPERONS
- SPOILERONS

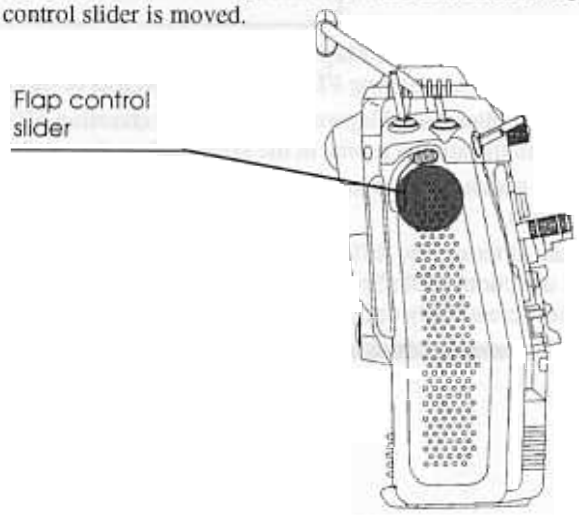
The Stylus allows extreme flexibility in the set-up and operation of the Flap function. There are three separate systems for determining the amount of Flap function that will be realized when the Flap switches are activated:

•The End Point, or total throw available in either direction, is set in the EPA screen. This determines total throw available regardless of which flap switch is used. The Flap control slider on the left side of the transmitter face will determine how much of the presently available Flap is activated, and which direction the Flap moves, **in the Flap 1 Switch position.** When the Flap slider is moved to the extreme top or bottom position, the flap throw will be the total amount available *(as determined by the present End Point setting for the respective directions).* For instance, if the Flap control potentiometer is turned half-way towards the + position, then half of the presently set Flap throw in the + direction will be enacted when the Flap switch is activated.

• The Flap menu has a setting for Flap 2 Switch position. This is a pre-set (by you) amount of flap deflection and does not change when the Flap control slider is moved.

The Flap control slider on the left side of the transmitter face will determine how much of the presently available Flap is activated, and which direction the Flap moves, ***in the Flap 1 Switch position.***

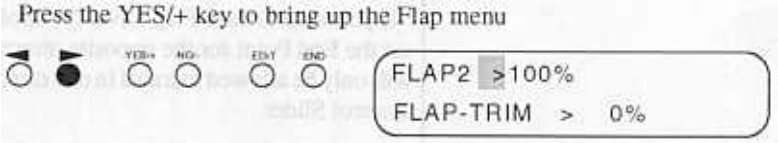
The Flap menu has a setting for Flap 2 Switch position. This is a pre-set (by you) amount of flap deflection and does not change when the Flap control slider is moved.



To set the neutral point of the Flaps, press the EDIT key to reach this screen:

Press the > or < key to position the cursor over the FLAP position.

Press the YES/+ key to bring up the Flap menu



Flaps ...

- FLAPERONS
- SPOILERONS

With the cursor over the FLAP-TRIM position, press the YES/+ OR NO/- key to adjust FLAP-TRIM. (Flap neutral position) Range is from -100 to +100.

Now move the cursor back to the FLAP 2 position and use the YES/+ or NO/- keys to adjust the Flap 2 setting. The range available is from 0% to 100% and will determine how much flap is deployed when the FLAP 2 switch is activated.

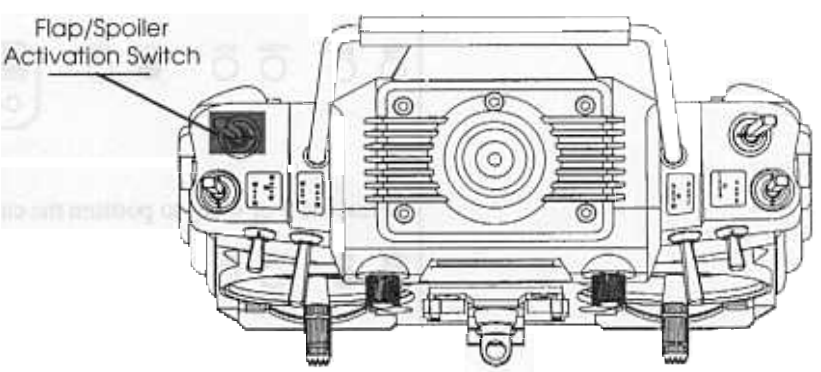
NOTE: The **Flap-Trim, Flap End Point Adjustments** and the **Flap Control Slider** all have the same function whether you are using **FLAPS, FLAPERONS** or **SPOILERONS,** or **SPOILERS**

When using Spoilerons or Flaperons (activated by choosing ACT in the 'SPOIRON' screen) the flap settings will affect both the aileron servos in the same surface-throw direction.

When using standard, separate flap and aileron servos, the FLAP settings and adjustments will affect only the FLAP servo.

In mechanical terms, the difference between FLAPERONS and SPOILERONS is that Flaps deploy in a downward direction, while Spoilers or Spoilerons deploy in an upward direction. Flaps create both lift and drag; Spoilers create only drag.

The amount and direction of Flap or Spoiler deployment are now set, and can be activated by flipping the Flap Switch located on the upper left top of the transmitter. Flap 1 is the #18 position, Flap 2 is #19. This same switch activates any Spoiler settings that have been programmed.



Note that the Flap Function can be reassigned to a different switch if desired. See section on Switch Assignments

If you wish to have Flap travel (or Spoiler travel) possible in one direction only, set the End Point for the opposite direction at 0%; now the Flap/Spoiler surface will only be allowed to travel in one direction regardless of the position of the Flap Control Slider.

Flaps ...

- FLAPERONS
- SPOILERONS

The options for Flaps, Flaperons, Spoilerons and Spoilers give you a great deal of flexibility in setting up your aircraft. Following are some notes that will help you to decide how to set up your model.

FLAPS - as separate control surfaces

Either one or two servos (with a Y-Harness) can be connected to the channel 6 receiver output. Set Flap Switch SP,FL to (1) 17, (2) 19. Place Flap slider all the way down with Flap switch in #19 position and set 6-L end point. Push slider all the way up and with switch in #17 position set 6-H end point. Use Flap 2 and Trim with switch in #19 position to fine tune. Operate with slider up.

FLAPERONS - Ailerons that also respond to Flap control inputs.

Must use two aileron servos and two channels, receiver outputs #2 and #7, and set the SPOIRON menu to ACT. To have variable control of the amount of Flap action (downward deflection of both aileron surfaces) you will need to use one of the C-Mixers, with Flap as master and Spoiler as Slave channels. The amount of mixing is set in the C-Mix menus, while the amount of Flaperon deployment for position 2 can be set with the Flap 2 menu. In Flap 1, the Flap slider will control the amount of Flaperon deployed; in Flap 2 the pre-set amount of flap will be deployed. Note that you can use this set-up even if you are also using separate flap surfaces plugged into receiver channel 6.

SPOILERS - as separate control surfaces

Either one or two servos (with a Y-Harness) can be connected to the channel 7 receiver output. Only settings made to the SPOILER menus will affect servo movement. Preset movement is set in the Spoiler menu and controlled by the Flap switch. The spoilers are deployed (in the same amount) when the Flap Switch is set to either the Flap 1 or Flap 2 position.

SPOILERONS - Ailerons that also respond to Spoiler control inputs.

Must use two aileron servos and two channels, receiver outputs #2 and #7, and set the SPOIRON menu to ACT. The amount of Spoileron that will be deployed is set in the Spoiler menu. The Spoiler function is activated when the Flap Switch is set to either the Flap 1 or Flap 2 positions; the amount of Spoileron deployment is the same in either Flap Switch position. (Note that you can use this set-up even if you are also using separate flap surfaces plugged into receiver channel 6.)

Other variables that may affect how you set up your model include:

Using the E→F mixer allows you to set the FLAP to respond WITH movement of the Elevator stick. There is no pre-set mixer to allow the Spoilers to respond with elevator movement.

The F→E mixer allows you to set the ELEVATOR to respond to FLAP commands. Although you can also use the S→E mixer to set the ELEVATOR to respond to SPOILER commands, remember that the amount of Spoiler movement is pre-set and therefore the amount of Elevator mixing will also be pre-set. With the F→E mixer the amount of elevator mixing will respond to either the pre-set flap position or the variable flap slider position.

NOTE that you must assign a switch in order to activate either the E→F mixer or F→E mixer, or else set them to be always on.

SPOIRON/FLAPERON NOTES

When the SPOIRON function is set to ACT, the centering function is separate for each aileron channel. In the CENTERING menus, the AI center adjusts the servo connected to channel 2 and the SP center adjusts the servo connected to channel 7. EPA for aileron adjusts both aileron servos (channel 2 and 7) equally.

When the SPOIRON function is set to INH, the centering menus for the SP function will affect ONLY the Spoiler channel.

The FLAP menus for EPA and Centering will affect ONLY the #6 channel regardless of the selection in the SPOIRON menu.

SPOILERS OR SPOILERONS

Spoiler adjustments are made in the SPOILER Menu - not to be confused with the SPOIRON menu.

First, press EDIT to reach the following screen:

Press the > key to position the cursor over Spoiler.

Now press the YES/+ key to bring up the Spoiler menu:

Now use the YES/+ or NO/- keys to set the Spoiler or Spoileron deflection as desired.

The amount of Spoiler (or Spoileron) deployed is determined by the VALUE set in the Spoiler menu; the direction of Spoiler (or Spoileron) deployed is determined by the VALUE (+ or -) set in the Spoiler menu.

NOTE that the FLAP switch also activates the Spoiler or Spoileron function. In order to see the Spoilers react to the Spoiler menu settings you must have the Flap switch set to either the Flap 1 or Flap 2 positions. (If you are also using Flaps, the Flap servo(s) will also move when the Flap 1 or Flap 2 switch is activated.)

MIXING:
Flap → Elevator
Elevator → Flap
Spoiler → Elevator

Stylus allows electronic mixing of the Flap and Elevator controls in three distinct ways; (1) Flap → Elevator, and/or (2) Elevator → Flap, and/or Spoiler → Elevator. Note that you must assign a switch for these functions to operate, or else set the function(s) to be always on.

FLAP → ELEVATOR MIXER

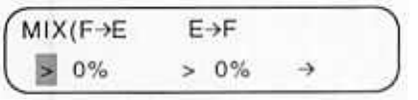
The first option, Flap → Elevator, allows for automatic adjustment of Elevator trim whenever the flaps are deployed. This is a valuable option, as most aircraft will need a change in pitch trim whenever flaps are deployed. By making this adjustment with an electronic mixer, the pilot does not have to alter the elevator trim lever position each time the flaps are used, and thus does not have to re-trim the elevators for normal flight.

By making this adjustment with an electronic mixer, the pilot does not have to alter the elevator trim lever position each time the flaps are used, and thus does not have to re-trim the elevators for normal flight.

To use Flap → Elevator mixing, press the EDIT key to reach this screen:

Since the cursor is positioned over the MIX position, press the YES/+ key.

The following screen will now appear:



The cursor will be over the first position, which corresponds with the F → E mix position. To set the amount of elevator trim change that will occur with the application of Flaps, press the YES/+ or NO/- key to alter the setting. The range for this function is from -100% to +100%. For now, press the YES/+ key to set the F → E mix to 35%.

Note that this mixer is a TRIM function, and 35% of the available elevator trim is NOT the same as 35% of total available elevator THROW.

With this setting, you will have 35% of the total available elevator trim added when you deploy the flaps. Note that this mixer is a TRIM function, and 35% of the available elevator trim is NOT the same as 35% of total available elevator THROW.

Flight testing will be required to find the optimum AMOUNT and DIRECTION of F → E mix. Both of these variables are set within this screen, by changing the value of the mixing percentage from 0-100, or its sign from -/+.

(Continued on next Page)

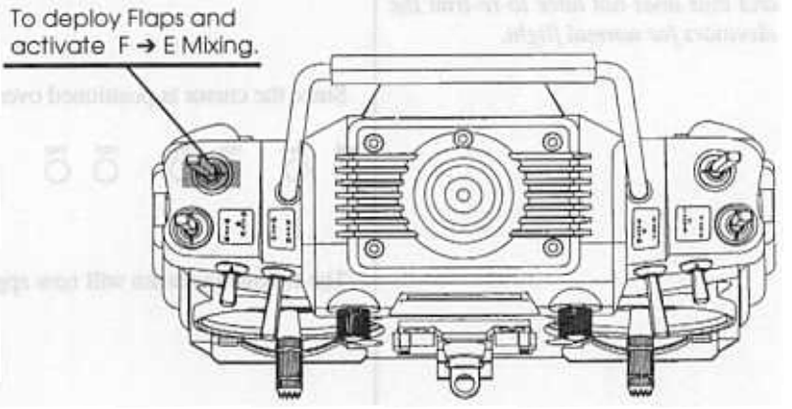
Flap → Elevator Mixer ...

In general, high-wing trainer or sport models will tend to 'balloon' upwards with the application of Flaps. In this case, you will want to set the mixer to cause DOWN-elevator trim when flaps are applied. Conversely, many high performance low wing models and most delta-wing jets will tend to nose downward with flap application; for these models, set the mixer to add UP-elevator trim when flaps are deployed.

If you are using the Flap switch to deploy Spoilers or Spoilerons, in most cases you will want to add some UP-elevator trim with the spoiler deployment. Again, the proper amount and direction of trim change needed can only be determined through actual flight testing of your specific aircraft. Please proceed with caution, and start with reasonably small amounts of trim change until you are certain of the amount needed.

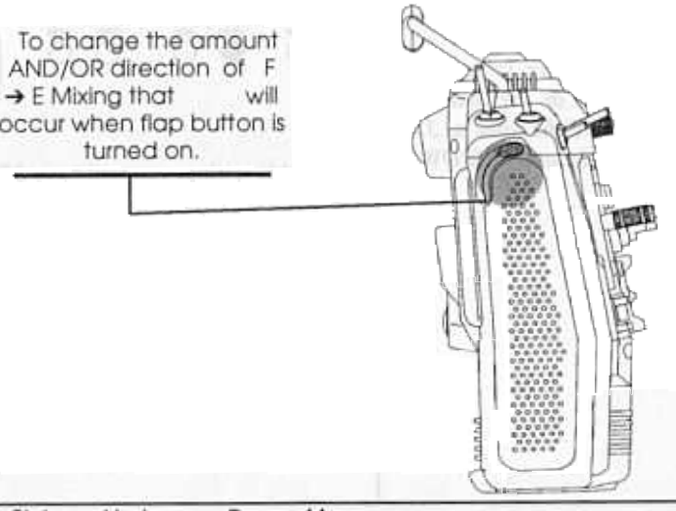
The proper amount and direction of trim change needed can only be determined through actual flight testing of your specific aircraft.

Once set, the Flap → Elevator Mixing is activated by setting the Flap switch to the on position, either Flap 1 or Flap 2.



Changing the direction of the Flap slider setting will change the direction of BOTH the flap deployment AND the elevator trim change.

The amount of presently available Flap deployment and of Flap → Elevator Mixing in the Flap 1 position can be adjusted (at the same time) by changing the Flap Control slider on the left side of the transmitter. Turning the slider to either extreme position will cause the largest amount of movement. Changing the direction of the Flap slider setting will change the direction of BOTH the flap deployment AND the elevator trim change.



Flap → Elevator Mixing is only active when the S,F → E switch is set to the ON position. The Stylus defaults are to have Flap → Elevator Mixing on in the Switch #1 position. You can change this to another switch or to be always on in the SWITCHES menu covered elsewhere in this manual.

Flap → Elevator Mixer ...

Special Note For Pilots of Models WITHOUT Flaps

Almost all full-sized aircraft use elevator trim to set the approach angle (and therefore airspeed) to reduce the workload on the pilot. With the Flap → Elevator Mixing function, you can do the same without having to reset your elevator trim after each landing approach.

It may be advantageous to use the Flap → Elevator Mixing function EVEN ON AIRCRAFT THAT DO NOT USE FLAPS!

One instance where this may be desirable is in the case of an intermediate trainer or sport model with a fairly powerful engine. Many such models, even when assembled with the recommended amount of down-thrust, will have a strong tendency to nose-down when throttle is reduced to idle. This will require a fair amount of up-elevator to be added and held throughout the approach to landing. Almost all full-sized aircraft use elevator trim to set the approach angle (and therefore airspeed) to reduce the workload on the pilot. With the Flap → Elevator Mixing function, you can do the same without having to reset your elevator trim after each landing approach.

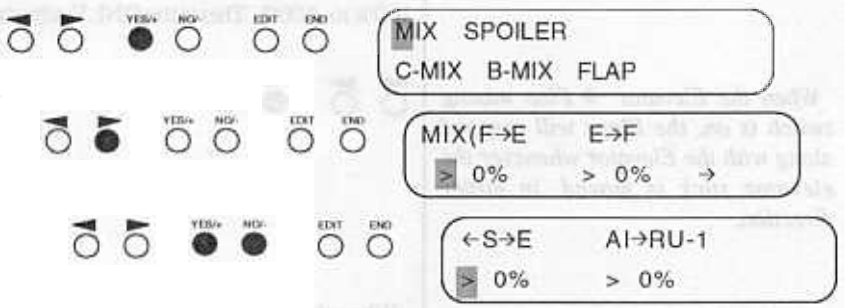
To use Flap → Elevator Mixing on models without flaps, proceed as if you were setting up a model WITH flaps. In the End-Point Adjustment screen, set one direction's End Point for Flaps at 0% and the other at 100%. This will prevent the Flap → Elevator Mixing from working in both directions, regardless of the Flap Slider setting. Now set the F → E Mix to either +100% or -100%, whichever setting causes the elevator trim to change upwards when Flap switch is turned on.

Once set, the amount of Up-elevator trim realized with Flap → Elevator Mixing can be adjusted with the Flap Control Potentiometer.

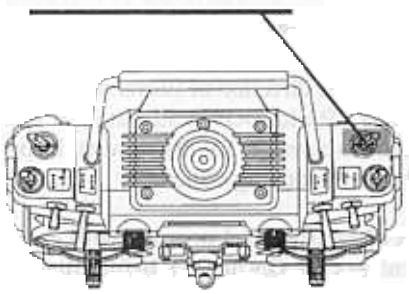
Now you can set your landing trim by simply turning on the Flap switch. **CAUTION: Be certain to re-set the elevator trim by turning the Flap switch OFF before your next flight, or an unexpected climb will result!**

Spoiler → Elevator Mixer

Spoiler → Elevator Mixing works in the same manner as Flap → Elevator Mixing except that the Elevator trim is activated with the application of Spoiler rather than Flap.



Elevator → Flap Mixing



Another option in the MIX screen is for Elevator → Flap mixing. With this option, you can cause the Flaps to move whenever the Elevator stick is moved. This function is most commonly used for aerobatic and competition Fun-Fly models, where deploying flaps with elevator control can make for tighter corners on maneuvers such as the square loop or round loops with a smaller radius.

The Elevator → Flap mix is usually used only during certain maneuvers. Therefore, it is assigned to a switch so that the function can be activated only when desired. The default setting assigns this function to the #1.2.3 switch, with the #3 position being 'ON.'

Elevator → Flap Mixing ...

To use Elevator → Flap mixing, press the EDIT key to reach this screen:

Since the cursor is positioned over the MIX position, press the YES/+ key.

The following screen will now appear:

Press the > key to position the cursor over the E>F position:

You can now use the YES/+ or NO/- keys to adjust the amount and direction of flaps that will be deployed when the elevator stick is moved. The range is from 100% to -100%. This is the ONLY adjustment that affects Elevator → Flap mixing.

When the Elevator → Flap mixing switch is on, the Flaps will respond along with the Elevator whenever the elevator stick is moved, in either direction.

When the Elevator → Flap mixing switch is on, the Flaps will respond along with the Elevator whenever the elevator stick is moved, in either direction. This is true even if you have the End Point Adjustment for one direction of Flap travel set at zero.

The Flap Control Slider has no affect on Elevator → Flap Mixing.

You can set the Flaps to respond OPPOSITE the direction of Elevator control; i.e. Flaps DOWN with UP Elevator and Flaps UP with DOWN Elevator, or you can set Flaps to respond in the SAME direction as elevator. The difference is in the SIGN (+ or MINUS) of the value set in the E → F mixing screen.

CAUTION! Start with small amounts of mixing, and proceed with care. Always ensure that you know whether mixers are ON or OFF before flight!.

DUAL RATES

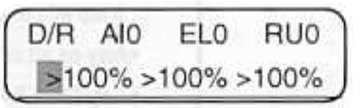
Dual Rate adjustments allow you to switch from your 'standard' control deflection to a reduced or increased amount of throw by simply flipping a switch. The actual speed of signal processing and servo movement are not affected by the Dual Rate settings, only the amount of total servo throw available.

Stylus allows Dual Rate settings for Aileron, Elevator and Rudder. To access the Dual Rate settings, press the Edit key to reach this screen:

With the cursor positioned over the D/R position, press the YES/+ key.

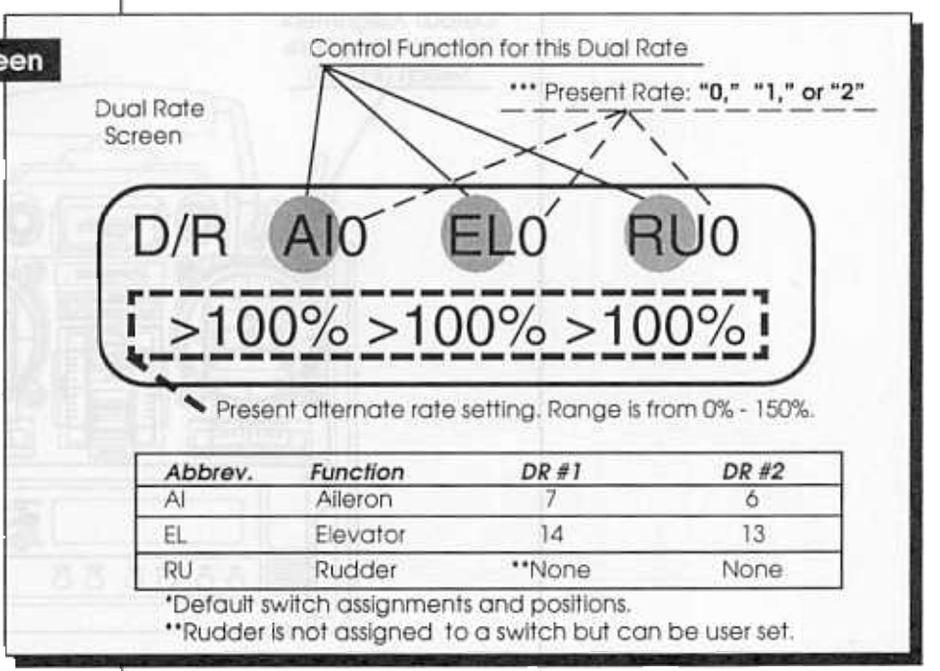
Dual Rate adjustments allow you to switch from your 'standard' control deflection to a reduced or increased amount of throw by simply flipping a switch.

The Dual Rate screen will appear as shown below:



This screen tells you the present rate status and, when a Dual Rate switch is set to an ON position, the alternate rate for that control function that is presently set in the program. See diagram below.

The DUAL RATE Screen



***** Present Rate Display Explanation:**
0 is Normal
1 is Dual Rate #1
2 is Dual Rate #2

Abbrev.	*Function*	*DR #1*	*DR #2*
AI	Aileron	7	6
EL	Elevator	14	13
RU	Rudder	**None	None

*Default switch assignments and positions.
**Rudder is not assigned to a switch but can be user set.

You may wish to change the Dual Rate #2 positions above to be OFF (in the Switches menus) or assign the Dual Rate for a function or functions to a 3-position switch so that you can activate any of the 3 rates available from a single switch.

(Continued on next Page)

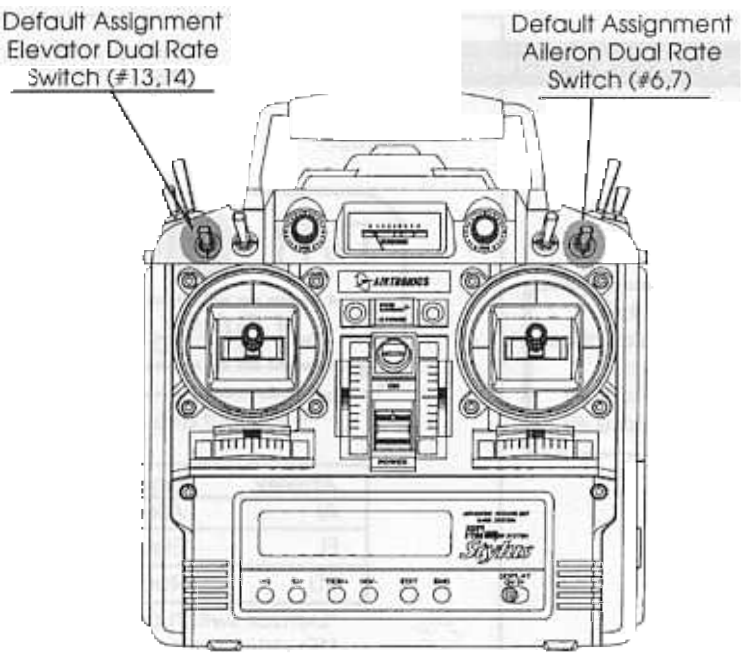
Dual Rates ...

The Dual Rate screens, used with the Switch assignment options, offer far more flexibility than traditional 'dual rate' switches.

It is important to understand that the term "Dual Rate" is used because it is an old and familiar description. It does NOT, however, provide a very complete description of the many options possible when using the Dual Rate functions of the Stylus.

The Dual Rate screens, used with the Switch assignment options, offer far more flexibility than traditional 'dual rate' switches. It is almost impossible to list all of the options possible with the Stylus's Dual Rate functions; you should study this portion of the manual along with the sections covering Exponential and Switch Assignments to arrive at the optimum use of these functions on your specific aircraft. Here are some important pointers about the Dual Rate functions of the Stylus:

- There are THREE possible rates available for each of the three controls: Aileron, Elevator and Rudder. These rates are (0) Normal, (1) Dual Rate #1, and (2) Dual Rate #2.
- You may assign any of the possible rates (Normal, Dual Rate #1 and Dual Rate #2) to cause **reduced** or **increased** throw of that control.
- Any or all of the Dual Rate positions may be assigned to any switch.
- Any Dual Rate switch may also activate or deactivate Exponential settings.
- If you activate the switches for BOTH Dual Rate #1 and Dual Rate #2 at the same time, regardless of which is activated first, Dual Rate #1 will be active.

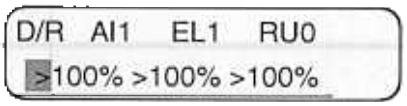


In the standard default settings, the Aileron and Elevator Dual Rate switches are assigned to the 'standard' locations as shown above. Rudder is not assigned to a switch, and thus cannot have a Dual Rate (or Expo) set unless you change the default switch assignments as explained in a later section of the manual.

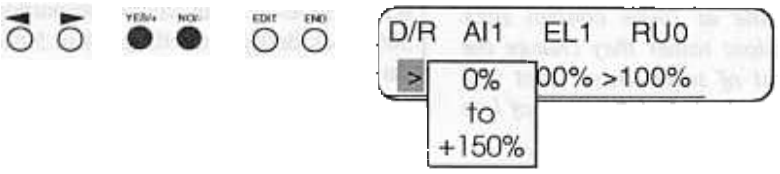
Dual Rates ...

To set an alternate rate for any of the three possible control function, turn the switch for that function to the Dual rate 'On' position. Below we'll assume that the Aileron and Elevator dual rate switches are both in the on position — note that the number following the abbreviations for these functions has changed to "1."

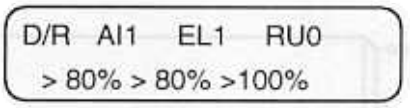
AI and EL display Dual Rate #1 is activated. →



By positioning the cursor over the Aileron and/or Elevator positions you may now set the amount of control response available in Dual Rate #1 position by pressing the YES/+ or NO/- keys.



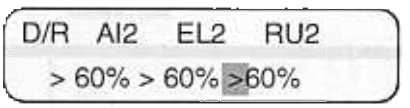
Here we have set the Dual Rate #1 to be 80% of the "Normal" throw for both the Aileron and Elevator channels. The possible range is from 0% of normal to 150%. (Note that you can not increase servo deflection if you already have set the servo throw to its maximum possible settings in the End Point Adjustment menus.)



CAUTION:
Proceed with care when setting dual rate functions to ensure that you will have adequate control deflection available in any possible dual rate position. Setting a dual rate to a very low or 0% setting may cause the loss of control of that function!
Always make sure that you are aware of the present status of any rate assignments that you have selected.

If you wish to have Dual Rates available for all channels, and/or want to have three rates available for the flight control functions, you will need to change some switch assignments as shown in the "Switch Assignments" section of this manual. For now, assume that you have assigned switch #6 to activate the Dual Rate #1 function for Aileron and Elevator. (You may also assign Dual Rate #1 for Rudder to this switch). When you set the switch to the "On" position, both controls assigned to it will display the number "1" in the Dual Rate Screen.

You can now assign Dual Rate #2 positions to the #7 switch. In this example we'll assume that Dual Rate #2 for Aileron, Elevator and Rudder have all been assigned to the #7 switch position. When this switch is set to #7, you will see the present settings for Dual Rate #2, as shown below.



In the example above we have set the Dual Rate #2 functions to provide 60% of the "Normal" servo throw for all three control surface functions. The range available is from 0% to 150% of the present "Normal" setting.

Dual Rates ...

For maximum flexibility in the set-up of your aircraft, you will want to study the instructions for setting EXPONENTIAL and ALTERNATE MODE before completing switch assignments and rates for the Dual Rate function. You must assign Exponential Throw options to the same switch(es) as your Dual Rates, or you may decide to alter any or all of your control settings with one switch by using the Alternate Mode option.

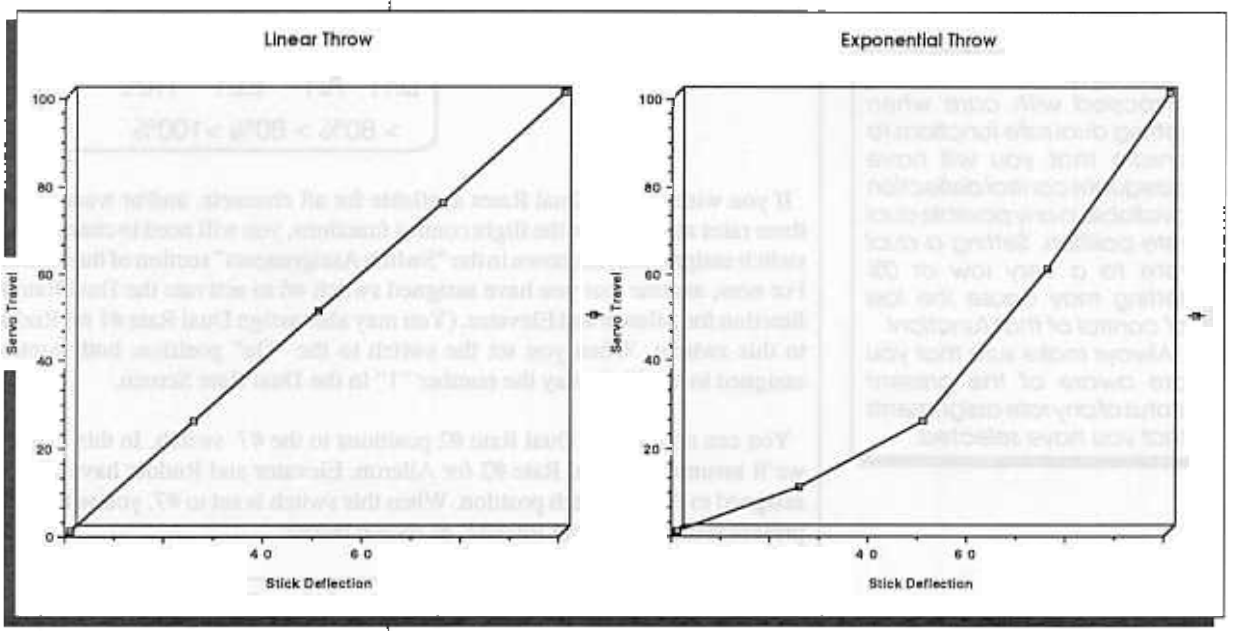
EXPONENTIAL

Stylus allows the pilot to choose two settings for Exponential Throw for each of the primary flight channels Aileron, Elevator and Rudder.

Exponential settings DO NOT change the amount of servo travel available at 100% control stick deflection; rather they change the amount of servo travel that will occur with stick deflections of less than 100%.

Exponential Throw is primarily used to 'soften' or decrease the stick sensitivity of a control around the neutral point. With Exponential disabled, a control function servo will move in an amount proportional to the amount of stick deflection; i.e. 50% stick deflection will result in 50% servo travel; 75% stick deflection will cause the servo to travel to 75% of its presently set maximum throw.

Exponential settings DO NOT change the amount of servo travel available at 100% control stick deflection; rather they change the amount of servo travel that will occur with stick deflections of less than 100%. The first 25% of stick deflection may be set to result in only 10% of total servo throw, making the control less sensitive around neutral. *See illustration below.*



If you have not used Exponential functions before, you will want to start with a very small amount of Exponential (10% - 20%) to determine whether you like this sort of control response. Exponential is most useful where strong control response is desired at extreme stick positions, but softer response to small stick movement is desired in order to make very accurate, small corrections to flight path.

(Continued on next Page.)

Exponential ...

To activate Exponential Throw you must have Dual Rates assigned to a switch. The positions for Exponential #1 and Exponential #2 for each flight control function correspond to the Dual Rates switch position(s) for those functions. In other words, if you have assigned the #7 switch position to turn on Dual Rate #1, then this same switch position will activate Exponential #1 settings for the same control functions. (Note, however, that you can leave the Dual Rates set at 100% so that switching a Dual Rate switch on will activate Exponential only.)

Press the Edit key to bring up the following screen:


```
D/R  EXP  TRIM-M
S-ROLL  SPOIRON
```

Press the > key to place the cursor over the EXP position.


```
D/R  EXP  TRIM-M
S-ROLL  SPOIRON
```

With the cursor positioned over the EXP position, press the YES/+ key. The Exponential screens will appear as shown below:

```
EXP  AI1     EL1
   > 0%   > 0%  →
```

```
←  RU0
   > 0%
```

These screens tells you the present Exponential status and, when a Dual Rate/ Exponential switch is set to an ON position, the Exponential setting for that control function or functions. Refer to Page 19 for an explanation of the screen positions, which are identical for Dual Rate and for Expo.

The possible range for Exponential settings for each function is from 0% (Linear Throw) to 100% (Maximum Exponential).

To set an Exponential rate for any of the three possible control function, turn the switch for that function(s) to the Dual Rate 'On' position. Below we'll assume that the Aileron and Elevator dual rate switches are both in the on position — note that the number following the abbreviations for these functions displays "1."

AI and EL display Dual Rate and Exponential position #1 is activated. →

```
EXP  AI1     EL1
   > 0%   > 0%  →
```

By positioning the cursor over the Aileron and/or Elevator positions you may now set the amount of Exponential available in Dual Rate #1 position by pressing the YES/+ or NO/- keys.


```
EXP  AI1     EL1
   > 0%      0%  →
     to
   +100%
```

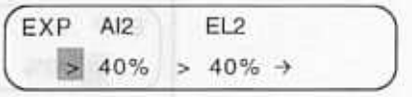
Exponential ...

Here we have set the Exponential available in Dual Rate position #1 to be 20% of the maximum for both the Aileron and Elevator channels. This is a good staring point for determining the suitability of Exponential throw for your aircraft and flying style.

If you wish to have Exponential available for all channels, and/or want to have two Exponential rates available for the flight control functions, you will need to change some switch assignments as shown in the "Switch Assignments" section of this manual. For now, assume that you have assigned switch #6,7 to activate the Dual Rate/Exponential #1 function for Aileron and Elevator. (You may also assign Rate #1 for Rudder to this switch). When you set the switch to the "On" position, both controls assigned to it will display the number "1" in the Exponential Screen.

CAUTION:
Proceed with care when setting Exponential functions to ensure that you will have adequate control deflection available in any possible switch position. Setting Exponential to a very high or 100% setting will require very large stick movements to achieve small control responses.
Always make sure that you are aware of the present status of any rate assignments that you have selected.

You can now assign Dual Rate/Exponential #2 positions to the #6,7 switch. In this example we'll assume that Exponential Rate #2 for Aileron, Elevator and Rudder have all been assigned to the #6 switch position. When this switch is set to #6, you will see the present settings for Rate #2, as shown below.



In the example above we have set the Rate #2 functions to provide 40% of the maximum amount of Exponential throw for all three control surface functions. Changing these settings is done in the same manner as the Dual Rate setting; i.e. press the > or < keys to position the cursor over the desired control function, then press the YES/+ or NO/- keys to adjust the Exponential setting.

In general, large amounts of Exponential are useful only in instances where very large control surface deflection is required at extreme throw, while very small amounts of control response are necessary for smaller control stick inputs. One example of models for which large Exponential settings may be useful is the highly maneuverable 'Competition Fun Fly' style of aircraft.

For most sport and aerobatic models, an Exponential setting from 10% to 25% will give the desired "softness" around neutral.

For the most flexibility in setting up an aircraft model to your liking, study the available options for Dual Rates, Exponential, Switch Assignments and Alternate Modes. The combinations possible when using all of these options allow for in-air alteration of one or several control parameters to several possible set-ups.

COMPENSATION MIXERS

Each of these mixers can be assigned to a switch or can be set to remain active or inactive at all times.

Stylus has three Compensation Mixers available in Aircraft mode to handle advanced mixing needs. Each of these mixers can be assigned to a switch or can be set to remain active or inactive at all times.

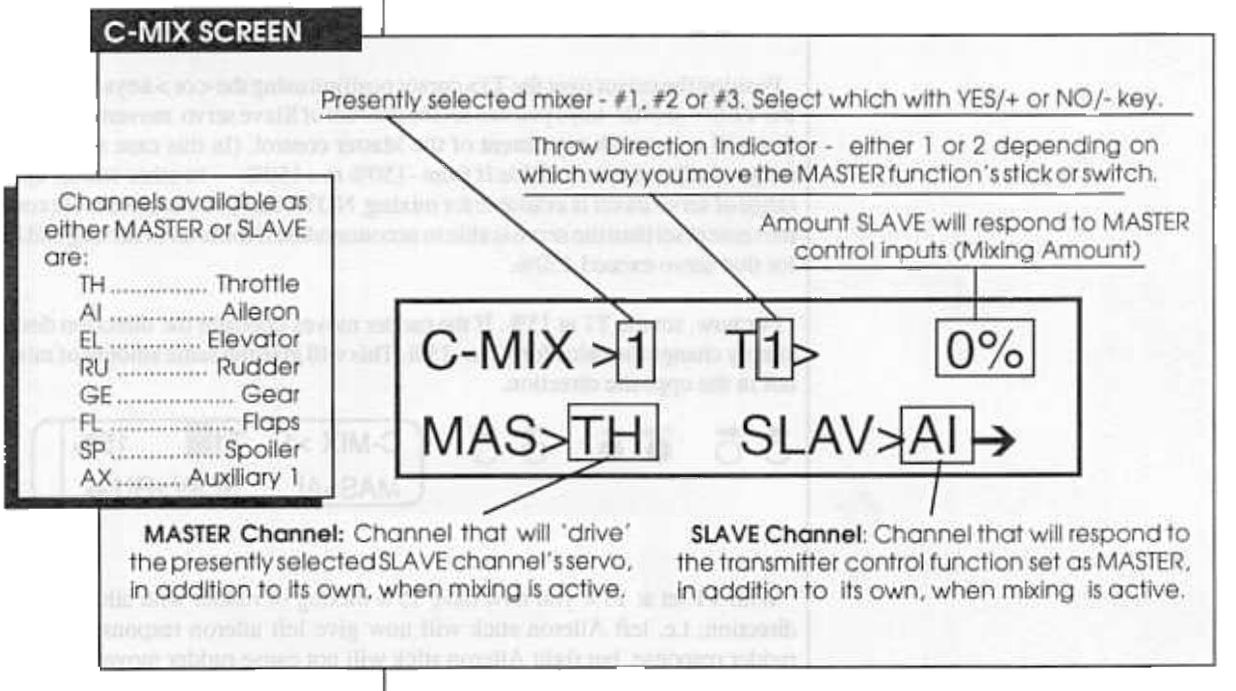
The purpose of the Compensation Mixer is to allow one transmitter control input to affect two flight functions. A common use would be to mix aileron and rudder to achieve coordinated turns without moving the rudder stick.

To set up such a mix, press the EDIT key until the following screen appears:

Press the > key to position the cursor over the C-MIX position.

Now press the YES/+ key to see the initial C-MIX screen.

C-MIX SCREEN



(Continued on next Page)

Compensation Mixers ...

Usually the first thing you'll want to set is the MASTER and SLAVE channels. Press the > or < key to position the cursor over the MAS> position.

MASTER channel is the channel that will drive both its own servo(s) AND the slave channel's servo when the Master channel's transmitter control is moved. The SLAVE channel's servo(s) will respond to the Master channel's transmitter control AS WELL AS responding normally to its own transmitter control.

Now press the YES/+ or NO/- keys to cycle through the channels available until you reach the desired MASTER channel. In this example we want the rudder to automatically respond when we move the aileron stick, so Aileron must be the MASTER channel.

Now move the cursor to the SLAV> position, then use the YES/+ or NO/- keys to select Rudder as the SLAVE channel.

Remember, the MASTER channel is the channel that will drive both its own servo(s) AND the slave channel's servo when the Master channel's transmitter control is moved. The SLAVE channel's servo(s) will respond to the Master channel's transmitter control AS WELL AS responding normally to its own transmitter control.

Having selected the Master and Slave channels, the next step is to set the amount of mixing and the direction of the Slave channel's response to the Master channel's transmitter control.

Position the cursor over the T1> cursor position using the < or > keys. By pressing the YES/+ or NO/- keys you can set the amount of Slave servo movement (rudder) that will occur with movement of the Master control. (In this case aileron.) The range of adjustment available if from -150% to +150% — in other words, the full range of servo travel is available for mixing. NOTE that you can have more control movement set than the servo is able to accommodate if the total of mixing and EPA for that servo exceed 150%.

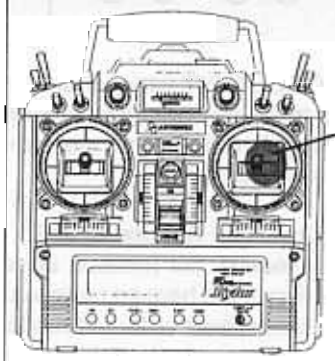
For now, set the T1 at 15%. If the rudder moves opposite the direction desired, simply change the value for T1 to -15%. This will give the same amount of mixing, but in the opposite direction.

With T1 set at 15% you now have 15% mixing of rudder with aileron in ONE direction; i.e. left Aileron stick will now give left aileron response PLUS left rudder response, but right Aileron stick will not cause rudder movement.

(Continued on next page)

Compensation Mixers ...

To program mixing for both directions of Master stick movement you must set both T1 and T2. To change from T1 to T2 for programming, simply move the transmitter control for the MASTER channel. (In this example the Aileron stick). Note that when you move the control in one direction T1 is displayed in the mixing screen, and when you move the control in the opposite direction T2 is displayed.



Move the Aileron stick to the right and T2 will be displayed in the mixing screen.

Now you can set the mixing for T2 by pressing the YES/+ or NO/- keys.

C-MIX >1	T2>	15%
MAS>AI	SLAV>RU →	

At this point you will have automatic rudder response along with aileron response whenever you move the Aileron stick on the transmitter. The rudder servo will still respond normally to movement of the transmitter's rudder stick.

Optimum amounts of mixing must be determined by in-flight testing.

MIXING NOTES

Because each direction of mixing can be set individually, you can change both the AMOUNT and DIRECTION of the slave channel's response to movement of the master channel's control.

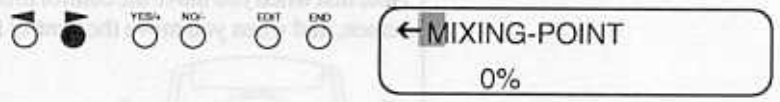
By changing the value from + to - for both T1 and T2 you will reverse the slave channels response to the master channel BUT NOT to it's own transmitter control. An example of this type of mixing would be in an airplane with too much dihedral where a "yaw only" response from rudder is desired. To mix out undesired rolling with application of rudder, the Rudder channel is set as Master and Aileron is set as slave. T1 and T2 are then set to give aileron movement OPPOSITE the direction of rudder movement whenever rudder is applied. (i.e. right rudder causes left aileron and vice-versa). Aileron response to movement of the Aileron stick is unaffected.

There are times where the desired deflection of the Slave channel is the same regardless of Master control movement. An example of this would be using a Compensation Mixer to fix an aircraft that "pulls" towards the top in both knife edge attitudes. In this case rudder would be the Master channel and Elevator would be Slave. By setting one of the T1 or T2 settings to +10 and the other to -10 (as determined by observing servo movement) you can set the mixing to cause Down elevator with the application of either Right OR Left rudder. In this case you may wish to assign the mixer to a switch (See Switch Assignments section.) so that rudder corrections during landing won't change elevator trim.

(Continued on next Page)

Compensation Mixers ...

The arrow to the right of the SLAV> channel position indicates that there are more settings than can be displayed in the present screen. Press the > key to move the cursor past the arrow and the next screen will appear.



The MIXING-POINT setting is an advanced mixer function. It is set by moving the Master transmitter control to a desired point and then pressing the YES/+ key. The display will read whatever amount of transmitter control deflection you had when the key was pushed.

The Mixing Point function SHIFTS the point at which the mixing RATE "neutral" is located. For instance, assume you have set Rudder as Master and Aileron as Slave, and have set twice as much mixing (aileron response) for right rudder stick movement as for left rudder stick movement. Now, hold the rudder stick about 1/2 towards the right stick limit and press the YES/+ button in the mixing point menu. The menu will now show a value around 50%. Now, the Aileron response to rudder stick movement will be the same for the first 1/2 of rudder stick movement to the right as to the left; only rudder stick movements to the right of MORE THAN 50% will cause the higher mixing rate for right rudder to activate.

SNAP ROLL SWITCH

Surface positions CAN be over-ridden by the transmitter sticks even when the Snap Roll switch is held in the on position.

Stylus allows up to four different Snap Roll programs to be set and stored. Any TWO of these four can be selected as the S-ROLL programs that will occur when the Snap Roll switch is activated. When a S-ROLL switch is turned on, the flight controls will assume the positions set. Surface positions CAN be over-ridden by the transmitter sticks even when the Snap Roll switch is held in the on position.

To reach the S-ROLL settings, press the EDIT key until the following screen is displayed:

Press the > key to position the cursor over the S-ROLL position.

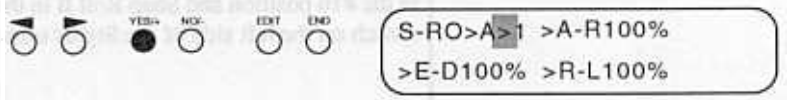
Now press the YES/+ key to display the S-ROLL screen. It will probably look like this:

(Continued on next Page)

Snap Roll Switch ...

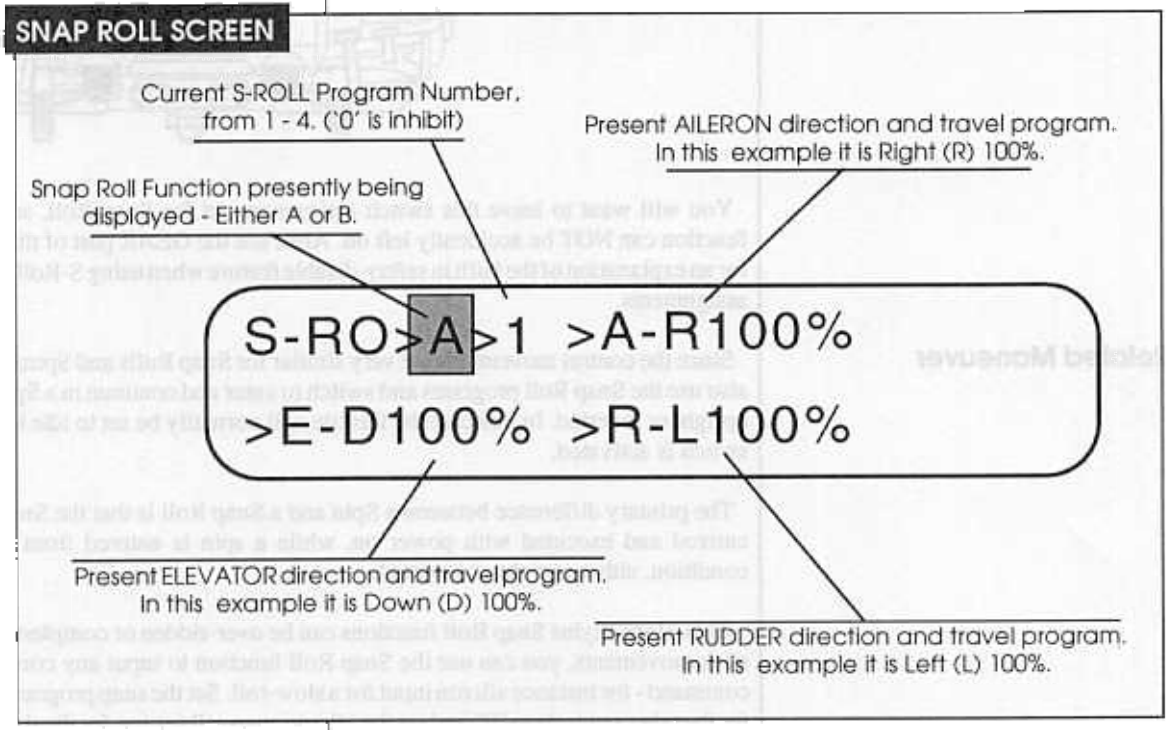
The default screen will show S-RO>A>0, with the "0" indicating that none of the Snap Roll programs is presently selected for Snap Roll "A". This means that nothing will happen when the Snap Roll A switch is turned on. Press the > key to move the cursor to the "0" position.

Now press the YES/+ key to display the S-RO>A>1 screen.



The screen information can be read and adjusted as explained below:

SNAP ROLL SCREEN



To change any of the control travel settings, move the cursor to that control position with the > or < keys, then press the YES/+ or NO/- keys to adjust that control's S-ROLL program. The range of throw is from 0% to 150% for each of the three flight controls; Aileron, Elevator and Rudder.

Note that only the AMOUNT of travel is adjustable, not the direction. There are four S-ROLL program screens, which allow you to select from either right or left snap rolls either upright or inverted, as follows:

Program 1 ..... Outside Right Snap
Program 2 ..... Left Outside Snap
Program 3 ..... Right Inside Snap
Program 4 ..... Left Inside Snap

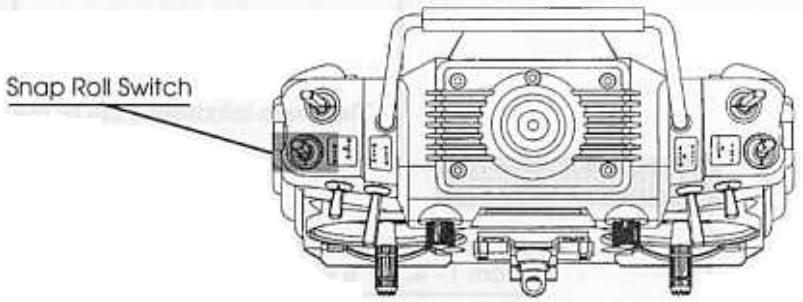
Stylus has TWO Snap Roll switch positions, for Snap Roll A and B. Use the YES/+ or NO/- keys to change the program you are currently setting.

(Continued on next Page)

Snap Roll Switch ...

The program (0 through 4) that is presently displayed in the S-ROLL> screen is the program that will be activated when the snap roll switch for the presently displayed snap roll function (Either A or B) is turned on. The amount of control input needed must be set according to in-flight testing.

The Snap Roll Switch is factory set to be the #15-16 switch, with Snap Roll "A" in the #16 position and Snap Roll B in the #15 position. This is the spring-loaded switch on the left side of the Stylus transmitter.



You will want to leave this switch assignment set for Snap Roll, so that the function can NOT be accidently left on. Also, see the GEAR part of this section for an explanation of the built in safety-disable feature when using S-Roll and Gear assignments.

Related Maneuver

Since the control movements are very similar for Snap Rolls and Spins, you can also use the Snap Roll programs and switch to enter and continue in a Spin, either upright or inverted. In this case the throttle will normally be set to idle before the switch is activated.

The primary difference between a Spin and a Snap Roll is that the Snap Roll is entered and executed with power on, while a spin is entered from a stalled condition, either upright or inverted.

Also, since Stylus Snap Roll functions can be over-ridden or complemented by stick movements, you can use the Snap Roll function to input any constant rate command - for instance aileron input for a slow-roll. Set the snap program settings for the other controls to "0" and set the aileron snap roll setting for the desired roll rate. Now, activating this Snap Roll switch will position the ailerons as programmed while the rudder and elevator will respond to your stick commands.

SAFETY REMINDER:

Because there are both Inside (up-elevator) and Outside (down-elevator) S-Roll programs available, it is VERY IMPORTANT that the pilot is always aware of which S-Roll program, if any, is presently active. You do not want to have the model respond in an unexpected manner when the Snap Roll Switch is activated.

BI-DIRECTIONAL MIXERS

Besides being far simpler to adjust electronically than mechanically, using a B-MIX function for these type of control setups is also far easier to install and service, saves weight, and eliminates control hookup slop inherent in sliding tray or other mechanical installations.

Stylus provides two Bi-Directional Mixers for advanced, user-assigned mixing functions. Bi-Directional mixing means that two channels are mixed so that inputs to either channel cause servo movements for both channels. The most common use of these mixers are for combined-function control surfaces; i.e. Elevons (ailerons also serve as elevators, as in flying wing setups), Tailerons (elevators also provide roll commands as per full-size F-16), Ruddervators (V-Tail setup with two surfaces acting as both elevators and rudders) and so on.

Besides being far simpler to adjust electronically than mechanically, using a B-MIX function for these type of control setups is also far easier to install and service, saves weight, and eliminates control hookup slop inherent in sliding tray or other mechanical installations.

Since Bi-Directional Mixing is normally used to establish primary flight control setups, these mixers are usually set to be ON at all times; however both B-MIX functions can be assigned to a switch. At any rate, no mixing will occur unless you have set the B-MIX to be on (in the SW menus) or assigned it to a switch that has been activated.

To access the B-Mix functions press the Edit key to display this screen:

Press the > key to position the cursor over the B-MIX position.

Now press the YES/+ key to see the initial B-MIX screen.

The first cursor position (shaded above) displays either 1 or 2 to designate which of the B-MIX programs is presently displayed.

The CH-A and CH-B positions will show INH for "inhibit" in the default mode. These positions are where you program which flight channels you wish to mix together for this B-Mix. Channels that can be assigned to either CH-A or CH-B are:

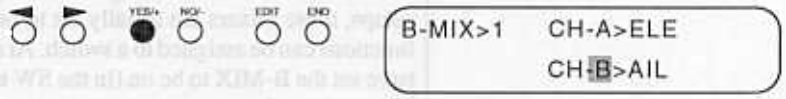
THR	Throttle
AIL	Aileron
ELE	Elevator
RUD	Rudder
FLA	Flaps
GEA	Gear
SPO	Spoiler
AUX	Auxiliary

Bi-Directional Mixers ...

Due to the nature of Bi-Directional mixers it makes no difference which control function is assigned to Channel A or Channel B; both channels will respond to their own control stick or switch AS WELL AS to the control stick or switch for the mixed channel. (If the servo outputs are reversed, swap the assignments of channel A and B.)

For demonstration purposes let's assume you want to set up a B-MIX for Elevons on a flying wing type aircraft. This means that the two control surfaces on the trailing edge of the wing will act as both ailerons for roll control and elevators for pitch control.

Use the > key to position the cursor over the CH-A position, then press YES/+ key to assign ELE to CH-A. Now press the > key to move to the CH-B position and use the YES/+ key to set CH-B for AIL.



Now move the Aileron or Elevator stick; note that both channels' servo(s) respond to movement of either channel's stick.

NOTE: When using a B-MIX function the rotation of the servos must be checked before making control linkage hookups. For example, in the above mix for Elevons note that you must make your control hookups in IDENTICAL fashion for the right and left control surfaces. (Both servo linkages must be on either the left or right of the servo output arm - this is opposite of the hookup used with two aileron channels.)

B-MIX — Centering

The CENTER menus will affect only the servo(s) normally assigned to a receiver channel when a B-MIX is active. In the above example, the CEN menu for Aileron will affect ONLY the servo plugged into receiver output #2 (the normal aileron channel) while the CEN menu for Elevator affects only the servo plugged into receiver channel #3, elevator.

This allows for electronic adjustments to center each of the elevon surfaces independently.

B-MIX — End Point Adjustments

The EPA menus for BOTH channels assigned to a B-Mix will affect ALL servos involved in the B-Mix function. In the above example, the EPA menu for Aileron will affect the response of BOTH channels when responding to Aileron stick inputs; the EPA menu for Elevator will affect the response of BOTH channels when responding to Elevator stick inputs.

Total servo throw available for each function used in a B-MIX will be somewhat reduced (as compared to non-mixed functions).

NOTE: Any MIX or C-MIX that affects one of the channels assigned to a B-MIX will affect ALL servos assigned to that B-MIX.

AILERON → RUDDER MIXERS

Stylus offers two Aileron → Rudder mixers. These mixers are assigned (initially) to the #10 and #8 switch positions for AI → RU mix 1 and AI → RU mix 2, respectively.

AI → RU mixing allows you to program the aircraft so that an aileron stick deflection will also cause the rudder servo to respond in the same direction (right aileron - right rudder). This "automatic" coordination of rudder with aileron is useful in many high wing/scale models that suffer from adverse yaw with aileron application. (The rudder servo will still respond to rudder stick movement as well as aileron stick movement.)

To use Aileron → Rudder mixing, press the EDIT key to reach this screen:

Since the cursor is positioned over the MIX position, press the YES/+ key.

The following screen will now appear:

Continue pressing the > key until the cursor scrolls to the next screen.

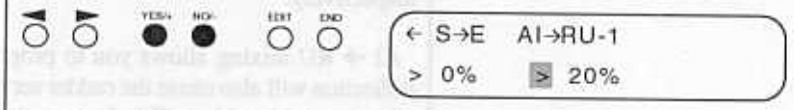
Press the > key once more to move the cursor to the AI → RU position.

The top line of the menu shows a "0" after the AI → RU position. This indicates that there is no AI → RU mixer active at this time. Moving the #8-9-10 switch to the #10 position will activate AI → RU mix 1; moving the switch to the #8 position will activate AI → RU mix 2. (These are the default switch assignments and can be changed as you wish.)

To make adjustments to either AI → RU mixer you must move the switch to activate that AI → RU mix function. The top line of the menu will show which mixer (if any) is active by a number designator after the AI → RU position.

AI → RU Mixers ...

With the switch positioned to activate one of the AI → RU mixers, you can now use the YES/+ and NO/- keys to adjust the amount of mixing that will occur.



In the above menu we have set the amount of mixing for AI → RU mixer 1 to be 20%. Changing the AI → RU mixer switch to activate AI → RU mixer 2 allows setting the amount of rudder response when that mixer is activated.

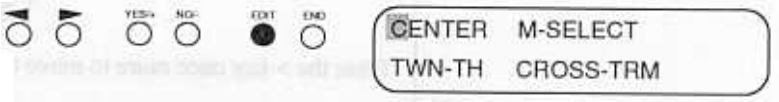
The range of mixing available for the AI → RU mixers is from 0-150%. This means that you can program any amount of rudder coupling with aileron that you desire, from none to the full amount of rudder throw available. Mixing is available only in the SAME direction for both controls; i.e. right aileron stick movement will cause right rudder deflection and left aileron stick movement will cause left rudder deflection.

One reason to use both AI → RU mixers is to allow for changing control effectiveness at various airspeeds. For instance, a large scale Piper Cub may respond best at cruise speed with the AI → RU mixer set at 25%. However, at approach and landing speeds the Ailerons will lose effectiveness to a far greater degree than the rudder; thus the rudder will respond to a greater degree than desired. So, the other AI → RU mixer could be set to cause a smaller amount of mixing for this part of the flight.

TWIN THROTTLES

Stylus allows the use of two receiver channels for throttle. This is useful for models of twin-engine aircraft. When the TWN-TH function is ON, receiver channels #1 and #8 both respond to throttle stick movements.

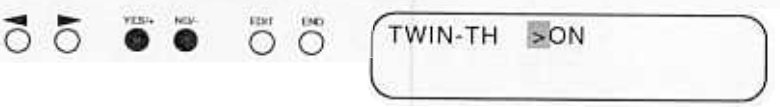
To activate the TWN-TH function, press the Edit key to display this screen:



Use the > key to move the cursor to the TWN-TH position.

Now press the YES/+ key to display the TWN-TH screen:

There's only one cursor position in this menu. Press the YES/+ or NO/- keys to toggle the TWIN-TH function on or off.



Twin Throttles ...

When the TWN-TH function is ON, you can tailor the servo movements for each throttle servo independently using the Centering, EPA and REV menus. The servo hooked to the receiver output #1 responds to menus for TH or #1 channel. The servo hooked to the receiver output #8 responds to menus for AX or #8 channel.

Mixing that uses the Throttle function as a slave channel will only affect the servo hooked to the receiver output #1. It is, however, possible to mix Rudder and Throttle so that the Throttle servos will respond to Rudder stick movement (for taxi maneuvers, etc.) You would have to use TWO C-Mix functions; one will slave throttle to rudder, the other will slave AUX to rudder. Use only one travel direction for each mixer so that - for instance - left rudder increases throttle to the right engine. Assign both C-Mix functions to the same switch position.

CAUTION - it is possible to cause binding if the total of Throttle stick input and rudder-induced throttle mixing exceeds the upper limit of the carb barrel movement! Limit use of the above type of mixing to throttle movements below half-throttle; when ready to take off, turn these C-Mixers off.

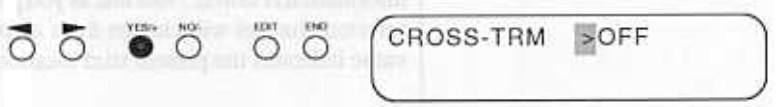
CROSS TRIMS

Some pilots prefer to "cross," or transpose the position of, the throttle and elevator trim levers. This means that the trim lever next to the throttle stick becomes the elevator function trim, and the trim lever next to the elevator stick becomes the throttle function trim. Stylus gives you the option of either "normal" or cross trim setups.

To access the Cross Trim function press the Edit key to display this menu:

Press the > key to move the cursor to the CROSS-TRM position.

Press the YES/+ key to access the CROSS-TRM function.



Press the YES/+ or NO/- keys to toggle the CROSS-TRM function ON or OFF.

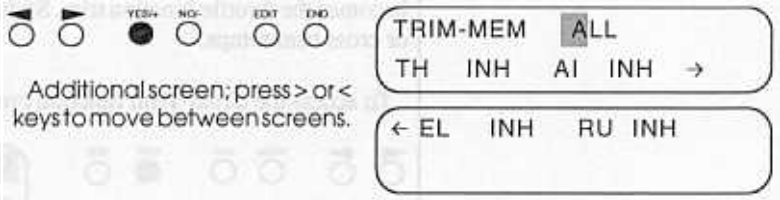
TRIM MEMORY

Stylus offers a Trim Memory function for all flight control channels. This function allows the trim levers to be re-set to the center positions while maintaining the trimming information in memory. This is useful because the pilot can then ensure that the trims are in the proper position just by checking that the trim levers are all centered. Also, by always having the trim levers centered for ALL aircraft stored in transmitter memory the pilot can change from one model's program to another without having to worry about trim positions for each model.

By always having the trim levers centered for ALL aircraft stored in transmitter memory the pilot can change from one model's program to another without having to worry about trim positions for each model.

Trim Memory is used after flight testing and trimming the aircraft. When trimming is complete, program Trim Memory as follows: press the Edit key to reach this screen...

Press the > key to position cursor over TRIM-M, then press YES/+ key to display the TRIM-M screen.



Additional screen; press > or < keys to move between screens.

The cursor will be over the ALL position. This position will store trim information for ALL channels if desired, by pressing the YES/+ key when the cursor is over ALL.

To store memory information for selected channels ONLY, press the > or < keys to position the cursor over the desired channel indicator, then press the YES/+ key. Move to the next channel indicator and repeat until desired channels' trim information is stored. Note that as you press the YES/+ key, the trim value for each selected channel will change from zero to a value from -200% to +200%. This value indicates the present trim location.

After storing the trim information for all desired channels, TURN OFF the transmitter. Move the trim levers to the neutral positions (within 1-2 notches from center) for all channels for which you have stored trim information. When you turn the power back on, the servos should stay in the previously trimmed positions.

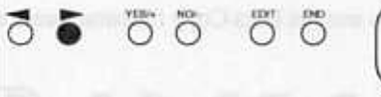
To inhibit a value stored in any function's trim memory, position the cursor over that function in TRIM-M and press both the YES/+ and NO/- keys simultaneously so that it reads "INH."

SWITCH ASSIGNMENTS

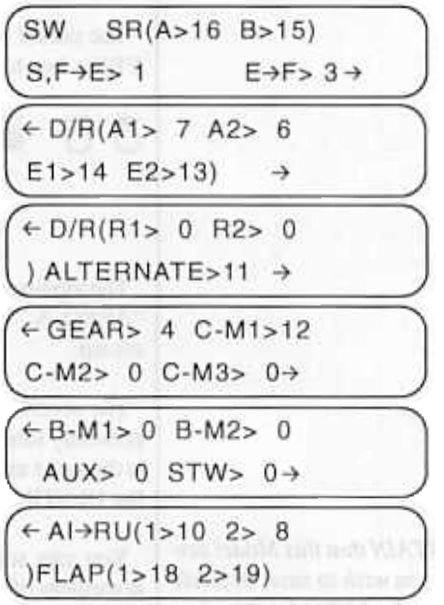
A very useful feature of Stylus is the ability to assign functions to switches however you prefer, rather than forcing you to adapt to one particular switch layout.

To observe or change switch assignments, press the Edit key to reach this screen:

Press the > key to place the cursor over the SW position.



Now press the YES/+ key to see the first SW screen. There are a total of six Switch Assignment screens as seen below. To move from one screen to another press the > or < keys to move the cursor past the arrow positions.



At each cursor location (designated by ">") you can change the switch assignment number that follows to any switch number from 1 to 19, or '0' for inhibit, or 'On' to turn the function on at all times.

At each cursor location (designated by ">") you can change the switch assignment number that follows to any switch number from 1 through 19, or '0' for inhibit, or 'On' to turn the function on at all times.

Note that more than one function may be assigned to a single switch. This can be useful in the case of similar functions, such as dual rates for Aileron, Elevator and Rudder all being assigned to a single switch. However, to avoid accidentally enacting a function, extreme care must be used when assigning switches. It is suggested that you keep a list of all switch assignments for each model in the transmitter's memory.

Also, it is a good idea to assign similar functions to the same switch from one aircraft to the next. Always be aware of which functions are active at any time before starting or flying your aircraft.

Switch Assignment Chart

Write Your SW Choice In Below Lines:		
SCREEN ONE	Default	Set
SR (A)	16	
SR (B)	15	
S,F>E	1	
E>F	3	
SCREEN TWO		
D/R A1	7	
A2	6	
E1	14	
E2	13	
SCREEN THREE		
D/R R1	0	
R2	0	
ALTERNATE	11	
SCREEN FOUR		
Gear	4	
C-Mix 1	0	
C-Mix 2	0	
C-Mix 3	0	
SCREEN FIVE		
B-M 1	0	
B-M 2	0	
Aux	0	
STW	0	
SCREEN SIX		
AI>RU (1)	10	
2	8	
FLAP 1	18	
2	19	

DATA COPY

A valuable feature of the Stylus is the Data Copy function. With this function the entire set of control parameters for one aircraft can be 'copied' from one Model set-up into another. (For instance, if you have your aircraft program in Model 1 and nothing in Model 2, you can copy the Model 1 program into Model 2 with the Data Copy function).

Having copied your control set-up, you can now use M-SELECT to load the Model 2 program, and then make control changes to that set-up. This allows you to experiment with different control options without changing your original parameters (in this example, still stored as Model 1).

Having copied your control set-up, you can now use M-SELECT to load the Model 2 program, and then make control changes to that set-up. This allows you to experiment with different control options without changing your original parameters.

To use the Data Copy function, press the Edit key to reach this screen:

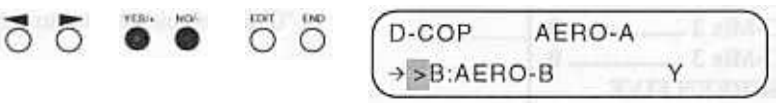
The cursor is already positioned over the D-COPY position, so now press the YES/+ key to see the D-COPY screen.

The top line of the screen shows the PRESENTLY LOADED model; in this case "AERO-A" This is the model that can presently be copied INTO another model set-up.

The second line shows the data destination, or which Model (1 through 4) the presently loaded data will be copied INTO. It is presently set as AERO-A, which is the same as the source model. Pressing the YES/+ or NO/- keys allow you to set the DESTINATION for the data being copied.

MAKE CERTAIN that this Model set-up is not one you wish to save, because when you copy the AERO A set-up into AERO B, all data that was in AERO B is REPLACED with the AERO A data!

You can select ANY of the three other available setups for a destination, regardless of the model type presently set for that setup.



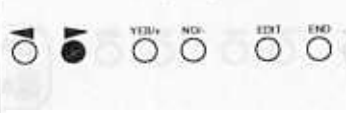
Above, the destination has been set to AERO-B. MAKE CERTAIN that this Model set-up is not one you wish to save, because when you copy the AERO-A set-up into AERO-B, all data that was in AERO-B is REPLACED with the AERO-A data! At this point AERO-B is still intact, so if you wish to change the destination for the copied data, do so before proceeding.

(Continued on next Page)

Data Copy ...

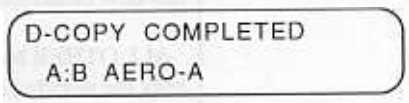
Having selected both the desired data source (AERO-A) AND the desired data destination (in this example, AERO-B) you can now proceed to confirm the D-COPY function.

Press the > key to place the cursor over the >Y position as shown.



Press the YES/+ key to confirm your D-COPY selection.

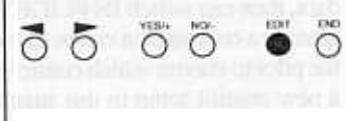
The screen will change to the following screen to inform you that the process has been completed, and that Model A and Model B now have the same data (in this case, AERO-A).



DATA RESET

If you want to 'undo' all of your programed parameters at one time, you can use the Data Reset function. This function will 'Reset' all settings to the factory default settings.

Press the Edit key to display the following screen:



NOTE!

Using the Data Reset function will cause the Stylus to reset the switch assignments.

Always check switch assignments whenever loading a new model, changing model type or after using the Date Reset function.

Press the > key to place the cursor over the D-RESET position.

Now press the YES/+ key to display the D-RESET screen:

The first cursor position shows the current MODEL (EXTRA 300 here) that will be RESET if you continue. Press the YES/+ or NO/- to change this Model if desired.

(Continued on next Page)

Data Reset ...

Note that the bottom line displays the model memory location (A through D) followed by the currently assigned model name. (in this case EXTRA 300).

When you are certain that the selected Model setup is the one you wish to reset, press the > key to position the cursor over the >YES position.

ALL OTHER Models in memory are unaffected by the DATA-RESET function, only the selected Model setup is affected.

Now press the YES/+ key to confirm that you wish to Reset the data for this Model.

Note that the bottom line now displays AERO-A — the default name for this Model setup. (This will replace any name you had assigned to this setup.) The data has now been reset to factory default settings.

ALL OTHER Models in memory are unaffected by the DATA-RESET function, only the selected Model setup is affected.

ALTERNATE

The ALTERNATE function is one of the most powerful functions of the Stylus. This function allows the pilot to switch from one Model Setup to another Model Setup DURING FLIGHT!

The ALTERNATE function is one of the most powerful functions of the Stylus. This function allows the pilot to switch from one Model Setup to another (compatible) Model Setup DURING FLIGHT! There are two particularly helpful uses for this function:

1. A pilot may Copy the current setup and make adjustments to the copied data, then can switch IN FLIGHT between the two Model Setups. In this manner a comparison can be made easily, during a single flight, allowing the pilot to choose which control set-up is most comfortable. Also, trying a new control setup in this manner allows the pilot to instantly change back to a known setup by simply flipping one switch.

2. A pilot may change ANY or ALL flight control parameters with a single switch for greatly differing flight conditions. For instance, the Alternate settings might include landing trim for elevators, gear down, high rate for flight controls and removal or addition of exponential characteristics on flight controls — all by flipping a single switch.

In order to use the ALTERNATE function, you must first assign it to a switch. (See Switch Assignments section).

Next you need to have an ALTERNATE setup that is compatible to your standard setup. The recommended manner to achieve this is to start with a completely tested Model setup, then use the DATA COPY function to copy this setup to a new Model Setup that will be assigned as the Alternate setup.

(Continued on next Page)

Alternate ...

Having assigned a switch and determined a suitable Alternate Model setup, you may program your Alternate.

Press EDIT key until the following screen appears:

```
EPA  REV  SW  GEAR
ALTER  TIMER  TYPE
```

Press the > key to move the cursor to the ALTER position.

```
EPA  REV  SW  GEAR
ALTER  TIMER  TYPE
```

Press the YES/+ key to display the Alternate screen.

```
ALTERNATE
>OFF
```

The cursor location's display will read OFF, meaning that no Alternate Model is presently selected. By pressing the YES/+ or NO/- keys you can scroll through the four Models in memory to choose the desired Alternate Model.

```
ALTERNATE
>B:AERO-B
```

Make certain that you know which mode (normal or Alternate) you have selected at all times!

In the above example the bottom line shows that Model B, named AERO-B, has been selected as the present Alternate Model.

NOTE that it is possible to select an incompatible set-up as the Alternate; i.e. you can select a HELI Model setup as an alternate for your airplane. However, in this case the Alternate function will be ignored even if you do turn the Alternate switch on.

Make certain that you know which mode (normal or Alternate) you have selected at all times!

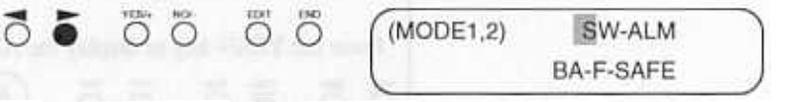
To make changes to the setup that you have selected as your Alternate, use the switch you have assigned to activate the Alternate Set-up to load that (Alternate) Model into memory, (in other words, turn the Alternate Set-up Switch ON) then make any adjustments desired, then turn the switch to OFF position to re-load the primary Model.

SWITCH ALARM

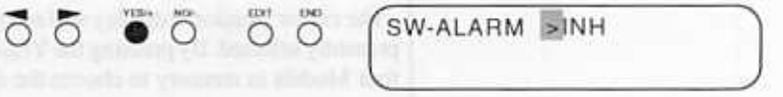
Stylus offers a Switch Alarm function that will alert you if you turn on the transmitter while you have an Alternate Set-Up switch in the ON position. This is a safety feature that will help to prevent you from starting your engine or taking off without realizing you are using the Alternate Set-Up programs.

The SW-ALM function is NOT active in the default settings. To activate the SW-ALM function, press EDIT key until the following screen appears:

Press the > key to move the cursor to the SW-ALM position.



Press the YES/+ key to display the SW-ALARM menu:



The cursor position will read "INH," for Inhibit. To activate the Switch Alarm function, press the YES/+ or NO/- keys.

The display will change to read "ACT," or Active.

When the SW Alarm (Switch Alarm) function is set to be "On," and an Alternate set-up has been designated, then an audio alarm will sound if you power-up the transmitter while the Alternate Set-up switch is in the "On" position.

Move the Alternate Set-up switch to the "off" position to deactivate the alarm.