

# MX-6 3-CHANNEL 2.4GHZ RADIO SYSTEM USER'S GUIDE

## EPA - END POINT ADJUSTMENT

### Adjusting the Steering End Point Adjustment Percentage Values:

Your model's turning radius can differ from left to right because of variations in linkage, suspension balance, tire diameter or weight distribution. In such cases, Left Steering servo travel and Right Steering servo travel are adjustable using the End Point Adjustment function.

- 1) Press the MENU UP or MENU DOWN keys to open the EPA menu. EPA will flash and ST L or ST R 100% will be displayed.



- 2) Rotate the steering wheel to the left and release it. ST L should be displayed. Press the INCREASE or DECREASE keys to increase or decrease the Steering Left End Point Adjustment percentage value. Increasing the percentage value will increase steering servo travel in that direction and decreasing the percentage value will decrease steering servo travel in the that direction.

EPA ST L setting range is 0% to 150%. The default setting is 100%.



- 3) Rotate the steering wheel to the right and release it. ST R should be displayed. Press the INCREASE or DECREASE keys to increase or decrease the Steering Right End Point Adjustment percentage value. Increasing the percentage value will increase steering servo travel in that direction and decreasing the percentage value will decrease steering servo travel in the that direction.

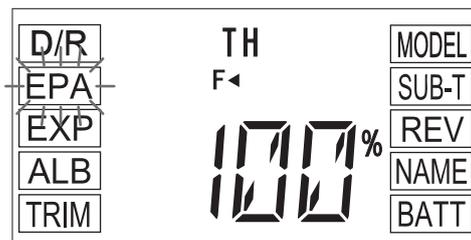
EPA ST R setting range is 0% to 150%. The default setting is 100%.



### Adjusting Throttle End Point Adjustment:

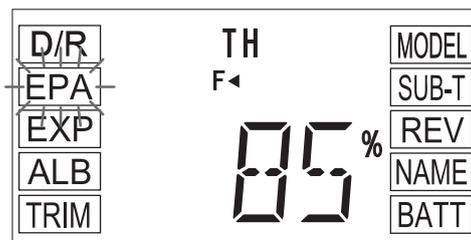
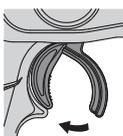
Your model's carburetor may not open completely or it may open too much and cause the throttle servo to bind. If you're using an electronic speed control, the electronic speed control may not command full power or the brake may not engage adequately. In such cases, Throttle Forward servo travel and Throttle Brake servo travel can be independently adjusted using the End Point Adjustment function.

- 1) From within the EPA menu, press the MENU UP or MENU DOWN keys to display TH F or TH B 100%.



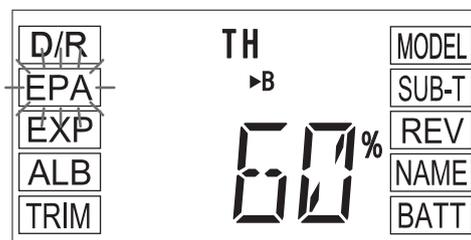
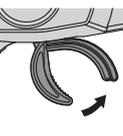
- 2) Pull the throttle trigger and release it. TH F should be displayed. Press the INCREASE or DECREASE keys to increase or decrease the Throttle Forward End Point Adjustment percentage value. Increasing the percentage value will increase throttle servo travel in that direction and decreasing the percentage value will decrease throttle servo travel in the that direction.

EPA TH F setting range is 0% to 150%. The default setting is 100%.



- 3) Push the throttle trigger and release it. TH B should be displayed. Press the INCREASE or DECREASE keys to increase or decrease the Throttle Brake End Point Adjustment percentage value. Increasing the percentage value will increase throttle servo travel in that direction and decreasing the percentage value will decrease throttle servo travel in the that direction.

EPA TH B setting range is 0% to 150%. The default setting is 100%.



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## EPA - END POINT ADJUSTMENT

### Adjusting the Auxiliary Channel 3 End Point Adjustment Percentage Values:

Auxiliary Channel 3 can be used for a number of different uses. One of the more common uses would be for the reverse function in a glow-powered monster truck. Often, the transmission only requires a small amount of travel, but the servo binds because of too much servo travel. In such a case, Auxiliary High servo travel and Auxiliary Low servo travel are adjustable using the End Point Adjustment function.

- 1) From within the EPA menu, press the MENU UP or MENU DOWN keys to display AUX H or AUX L 100%.



- 2) Push the Auxiliary Lever down. AUX L should be displayed. Press the INCREASE or DECREASE keys to increase or decrease the Auxiliary Low End Point Adjustment percentage value. Increasing the percentage value will increase auxiliary servo travel in that direction and decreasing the percentage value will decrease auxiliary servo travel in the that direction.

EPA AUX L setting range is 0% to 150%. The default setting is 100%.



- 3) Push the Auxiliary Lever up. AUX H should be displayed. Press the INCREASE or DECREASE keys to increase or decrease the Auxiliary Low End Point Adjustment percentage value. Increasing the percentage value will increase auxiliary servo travel in that direction and decreasing the percentage value will decrease auxiliary servo travel in the that direction.

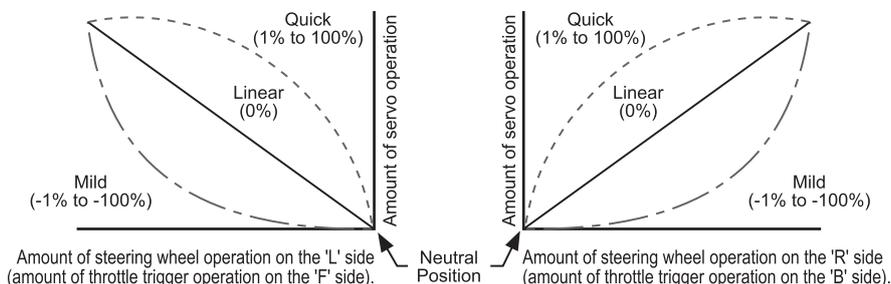
EPA AUX H setting range is 0% to 150%. The default setting is 100%.



## EXP - EXPONENTIAL

The Exponential function allows you to vary the amount of servo travel in relation to the movement of the steering wheel and throttle trigger near the Neutral positions to change the way those functions react to control movement. Decreasing the Exponential percentage values will soften the control feel around Neutral and increasing the Exponential percentage values will heighten the control feel around Neutral. Using a lower negative value allows for smoother control. Using a higher positive value may result in more 'twitchy' control response.

The Exponential function can be adjusted for the Steering channel and the Throttle channel.



### Adjusting the Steering Exponential Percentage Value:

Steering Exponential can be variably adjusted from Mild through Linear to Quick to allow you to set the most effective steering response for your model. Generally, if your model over-steers, reduce the Exponential percentage value, and if your model under-steers, increase the Exponential percentage value.

- 1) Press the MENU UP or MENU DOWN keys to open the EXP menu. EXP will flash and ST 0% will be displayed.



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## EXP - EXPONENTIAL

### Adjusting the Steering Exponential Percentage Value, Continued:

- 2) Press the INCREASE or DECREASE keys to change the Steering Exponential percentage value. Decreasing the Steering Exponential percentage value will make the steering less sensitive around Neutral and increasing the Steering Exponential percentage value will make the steering more sensitive around Neutral.



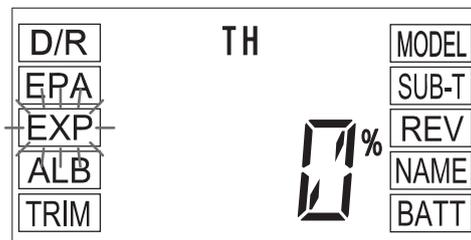
EXP ST setting range is -100% (Mild) to 100% (Quick). The default setting is 0% (Linear).

**!** Changes to the Steering Exponential percentage value affects the Left and Right sides equally.

### Adjusting the Throttle Exponential Percentage Value:

Throttle Exponential can be variably adjusted from Mild through Linear to Quick. In general, reduce the Exponential percentage value on a slippery track or with a model that has a higher-torque motor or engine to help prevent your model from spinning out during acceleration. Increase the Exponential percentage value on a high-grip track where your model is less likely to spin out, or with a model that has a lower-torque motor or engine.

- 1) From within the EXP menu, press the MENU UP or MENU DOWN keys to display TH 0%.



- 2) Press the INCREASE or DECREASE keys to change the Throttle Exponential percentage value. Decreasing the Throttle Exponential percentage value will make the throttle less sensitive around Neutral and increasing the Throttle Exponential percentage value will make the throttle more sensitive around Neutral.



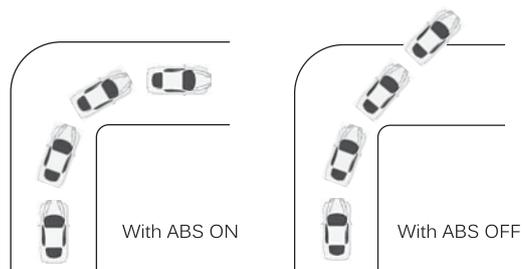
EXP TH setting range is -100% (Mild) to 100% (Quick). The default setting is 0% (Linear).

**!** Changes to the Throttle Exponential percentage value affects the Forward and Brake sides equally.

## ALB - ANTI-LOCK BRAKING

The Anti-Lock Braking function makes it possible to achieve stable braking even on a slippery surface. With stable braking, your model is better able to trace an exact line under braking. When the Anti-Lock Braking function is Active, the throttle servo will pulse when you apply brake. Three Pulse Rate values are available to suit your particular model, track conditions and driving style.

**!** The Anti-Lock Braking function is primarily used on gasoline or glow (nitro) models that feature a throttle servo. It can be used on an electric model that uses an electronic speed control, however, if your electronic speed control features a reverse function, the Anti-Lock Braking function will not operate properly.



**!** Use the fastest Pulse Rate value that allows your model's tires to not slip and loose traction under the hardest braking. Be aware that using the Anti-Lock Brake function will never result in your model losing traction under braking. It only improves braking under less than ideal conditions.

### Activating the Anti-Lock Braking Function:

- 1) Press the MENU UP or MENU DOWN keys to open the ALB menu. ALB will flash and TH OFF will be displayed.



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## ALB - ANTI-LOCK BRAKING

### Activating the Anti-Lock Braking Function, Continued:

- 2) Press the INCREASE or DECREASE keys to choose the desired Anti-Lock Braking Pulse Rate value. The Pulse Rate value determines how fast the throttle servo pulsates the brake. Experimentation will be necessary to determine which Pulse Rate value to use.



ALB setting range is OFF, SLW (Slow), NOR (Normal) and FST (Fast). The default setting is OFF.

Due to the nature of the Anti-Lock Braking function, we suggest using a high-quality, strong throttle servo. If your throttle servo is not strong enough, the Anti-Lock Braking function may not operate optimally.

## TRIM - SERVO TRIM

The Servo Trim function allows you to view the currently programmed Servo Trim value for the steering and throttle channels and, if desired, allows you to change the Trim values from within the TRIM menu, using the programming keys.

The transmitter features Digital Trim Memory. Any amount of Steering or Throttle Trim that you set during use by pressing the Trim Switches or using the TRIM menu is automatically stored in memory for that specific channel and for that specific Model Number. The Trim values for each model will automatically be loaded when the transmitter is turned ON.

Before adjusting the Trim values, you should first adjust the servo Sub-Trim values to center the servo horns. For more information, see the *Servo Sub-Trim* section on pages 16 and 17.

The Servo Trim function should not be used to center the steering and throttle servos. Use the Servo Sub-Trim function for that. The Servo Trim function is used to make trim adjustments to your model during use. For example, if your models always pulls to the left while driving, apply enough Steering Right Trim to make you model drive straight.

### Changing the Steering Servo Trim Values:

- 1) Press the MENU UP or MENU DOWN keys to open the TRIM menu. TRIM will flash and ST 0 will be displayed.



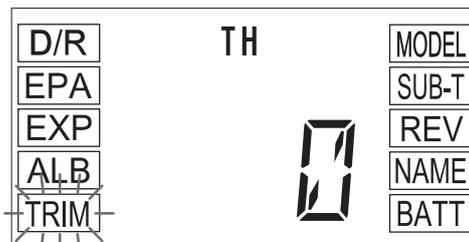
- 2) Press the INCREASE or DECREASE keys to adjust the Steering Servo Trim value either Right or Left. The actual direction will differ based on the steering channel's Servo Reversing setting.

TRIM ST setting range is R25 to L25. The default setting is 0.



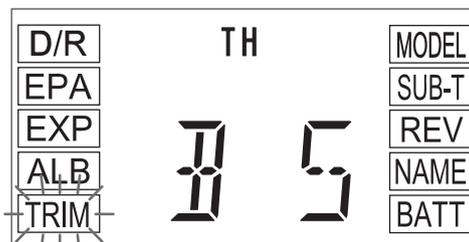
### Changing the Throttle Servo Trim Values:

- 1) From within the TRIM menu, press the MENU UP or MENU DOWN keys to display TH 0.



- 2) Press the INCREASE or DECREASE keys to adjust the Throttle Servo Trim value either Forward or Brake. The direction will differ based on the throttle channel's Servo Reversing setting.

TRIM TH setting range is F25 to B25. The default setting is 0.

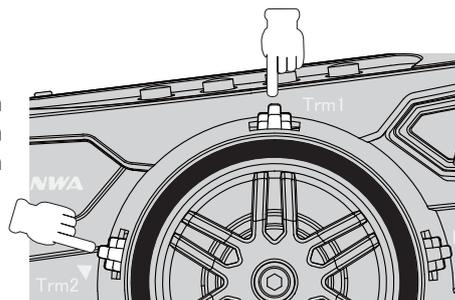


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## TRIM - SERVO TRIM

### Controlling the Servo Trim Function:

- 1) Steering and Throttle Servo Trim can be adjusted at any time while driving. Trim Switch Trm1 controls the Steering Right and Left Servo Trim and Trim Switch Trm2 controls the Throttle Forward and Brake Servo Trim. When you press the Trim Switches, the Servo Trim values change in 1° increments.



! Each time you press a Trim Switch a single audible tone is heard and the Servo Trim value will be displayed on the LCD screen for approximately 5 seconds, then revert to the last menu you were in.

! Pressing the INCREASE and DECREASE keys at the same time will NOT reset the Servo Trim values to zero, since there is no 'default' Servo Trim setting.

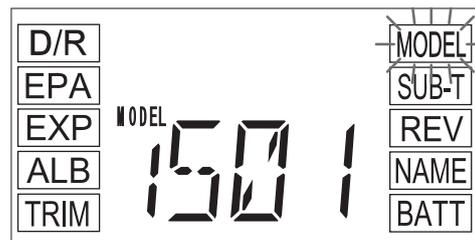
## MODEL - MODEL SELECT

The Model Select function allows you to store and retrieve Programming Data for any model 1 through 10. If you're using your transmitter with more than one model, use the Model Select function to load the Programming Data for the particular model that you wish to drive. The currently selected Model Number is displayed next to the Voltage Monitor.

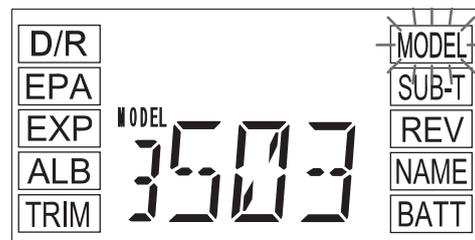
**WARNING:** Model Programming Data changes immediately upon selection. Do not attempt to attempt to select a different model when your model's receiver is turned ON under actual operational conditions. You may lose control of your model or the servos may be damaged.

### Selecting a Model:

- 1) Press the MENU UP or MENU DOWN keys to open the MODEL menu. MODEL will flash and MODEL 1 S01 will be displayed.



- 2) Press the INCREASE or DECREASE keys to select the desired Model Number.



## SUB-T - SERVO SUB-TRIM

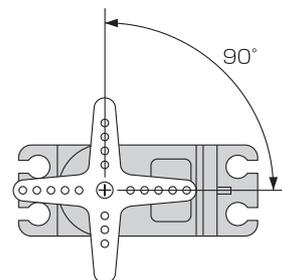
The Servo Sub-Trim function allows you to fine-tune the Neutral trim setting for the steering and throttle channels, making it possible to center the Trim Switches while ensuring the steering and throttle servo horns remain centered.

It's not unusual that when you center a servo and install the servo horn, the servo horn is not perfectly centered. The Servo Sub-Trim function allows you to center the servo horn perfectly, without altering the servo End Point travel.

! Before using the Servo Sub-Trim function you should make sure that the Steering and Throttle Trim values are set to '0'. For more information, see the *Servo Trim* section on pages 15 and 16.

### Installing the Servo Horn:

- 1) Install the servo horn (or servo saver) onto your servo, making sure that the servo horn (or servo saver) is as close to being centered as possible.



! In some cases, you can get the servo horn (or servo saver) closer to being centered by rotating the servo horn (or servo saver) 180° and reinstalling it.

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## SUB-T - SERVO SUB-TRIM

 After adjusting the Servo Sub-Trim values, use the End Point Adjustment function to set the desired amount of maximum servo travel in both directions. For more information, see the *End Point Adjustment* section on pages 11 through 13.

### Changing the Steering Servo Sub-Trim Value:

1) Press the MENU UP or MENU DOWN keys to open the SUB-T menu. SUB-T will flash and ST 0 will be displayed.



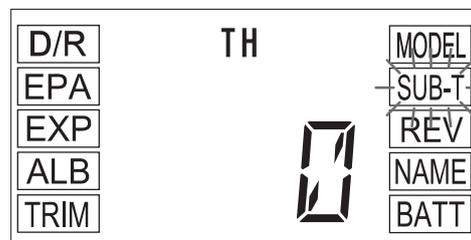
2) Press the INCREASE or DECREASE keys to adjust the Steering Servo Sub-Trim value either Right or Left to center the servo horn (or servo saver). The direction will differ based on the steering channel's Servo Reversing setting.

SUB-T ST setting range is R25 to L25. The default setting is 0.



### Changing the Throttle Servo Sub-Trim Value:

1) From within the SUB-T menu, press the MENU UP or MENU DOWN keys to display TH 0.



2) Press the INCREASE or DECREASE keys to adjust the Throttle Servo Sub-Trim value either Forward or Brake to center the servo horn (or adjust it's Neutral point). The direction will differ based on the steering channel's Servo Reversing setting.

SUB-T TH setting range is F25 to B25. The default setting is 0.



## REV - SERVO REVERSING

The Servo Reversing function allows you to electronically switch the direction of servo travel. For example, if you rotate the steering wheel to the right and your model turns left, you can use the Servo Reversing function to make your model turn right. The Servo Reversing function can be adjusted for the Steering channel, Throttle channel and Auxiliary channel 3.

 When you change the direction of Steering or Throttle servo travel, the servo horn may no longer be centered. If this occurs, use the Servo Sub-Trim function to center the servo horn(s). For more information, see the *Servo Sub-Trim* section above and on the previous page.

### Changing the Servo Reversing Values:

1) Press the MENU UP or MENU DOWN keys to open the REV menu. REV will flash and ST NOR will be displayed.



2) Press the MENU UP or MENU DOWN keys to choose which channel you would like to change the Servo Reversing value for, then press the INCREASE or DECREASE keys to change the direction of servo travel.

REV setting range is NOR and REV. The default setting for all channels is NOR.



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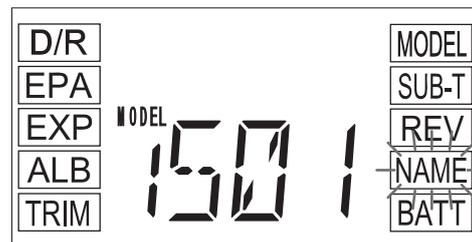
## NAME - MODEL NAMING

The Model Naming function allows you to name each of the 10 different models. This makes it easy to keep track of multiple models. The Model Name can consist of up to 3 upper-case letters, numbers or symbols, or a combination of all three.

 Before naming your model, use the Model Select function to choose the Model Number you would like to name. For more information, see the *Model Select* section on page 16.

### Changing the Model Name:

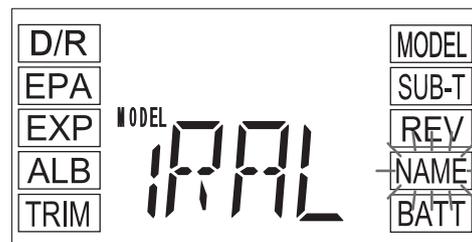
1) Press the MENU UP or MENU DOWN keys to open the NAME menu. NAME will flash and MODEL 1 S01 will be displayed.



2) Turn the steering wheel right or left to select the character you would like to change. The currently selected character will flash.

3) Press the INCREASE or DECREASE keys to select the desired character.

4) Repeat steps 2 and 3 to change any desired remaining characters.



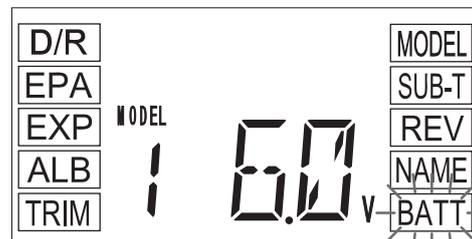
## BATT - VOLTAGE MONITOR

The Voltage Monitor function displays the transmitter's battery voltage in 0.1 volt increments. The current model number is also displayed.

 A Low Voltage Alarm warns you when the transmitter batteries need to be replaced or recharged (if using rechargeable batteries). The Low Voltage Alarm will sound when the transmitter batteries reach 4.6 volts. If the Low Voltage Alarm sounds while you are driving, you should stop as soon as it's safe, then replace or recharge the transmitter batteries.

### Viewing the Transmitter Battery Voltage:

1) Press the MENU UP or MENU DOWN keys to open the BATT menu. BATT will flash and the current model number, along with the transmitter batteries' voltage, will be displayed.



 The BATT menu is the transmitter's default menu. Each time the transmitter is turned ON, the BATT menu will be displayed. In addition, the BATT menu can be displayed at any time from within any other menu by pressing the MENU UP and MENU DOWN keys at the same time.