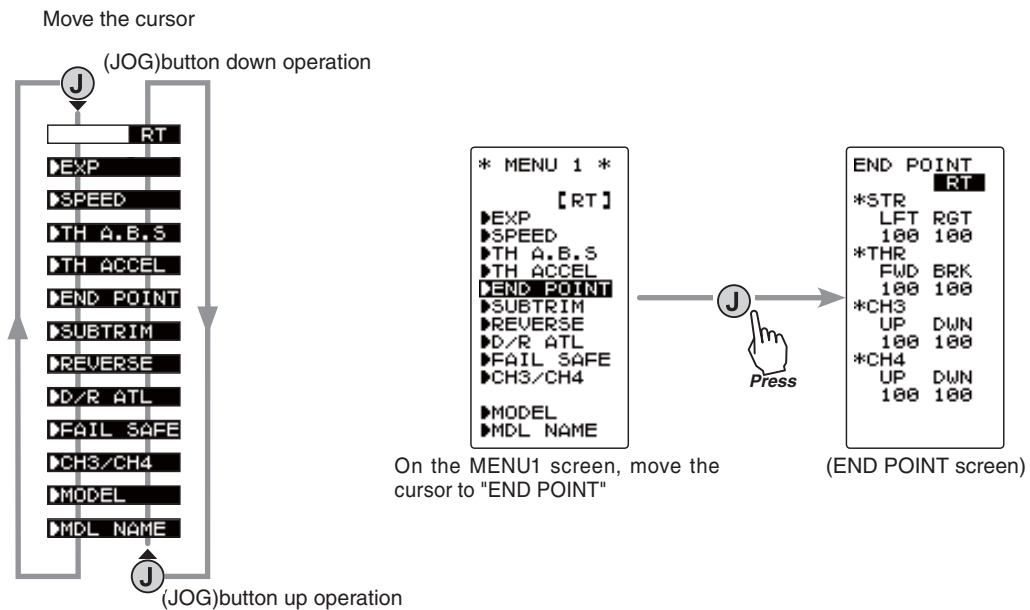


Selecting Items On The Menu Screen

The item indicated by the highlighted cursor on the screen is selected.

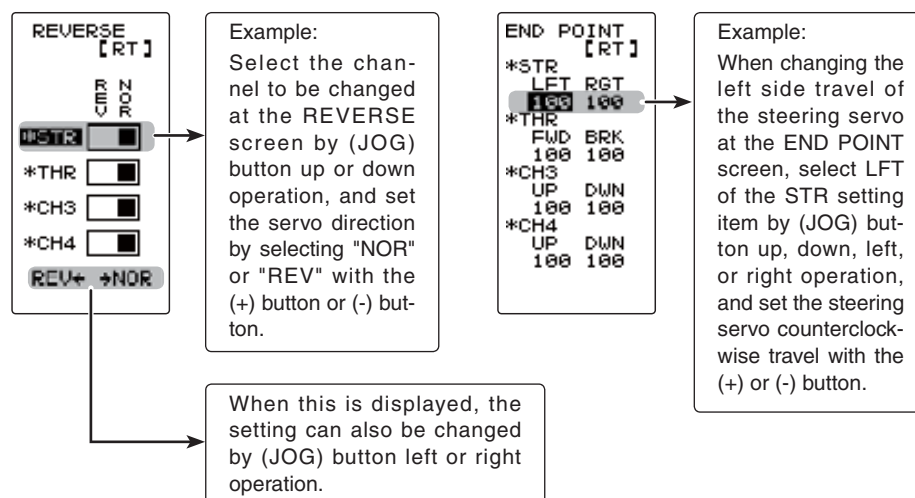
The cursor is moved using the (JOG) button in up or down movements. The cursor movement figure shown below is an example of the MENU 1 screen. However, movement of the cursor is the same in all of the screens.

For instance, if the (JOG) button is pressed when the cursor is at the end point (EPA) on the MENU 1 screen, the end point (END POINT) function setting screen appears.



Value Of Each Function And Changing The Set Value

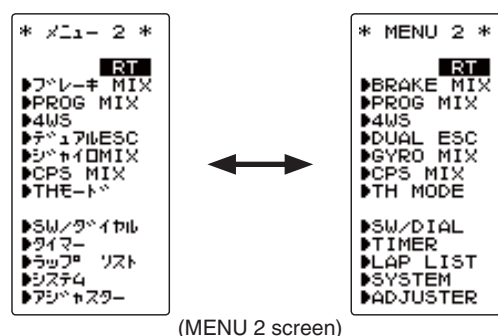
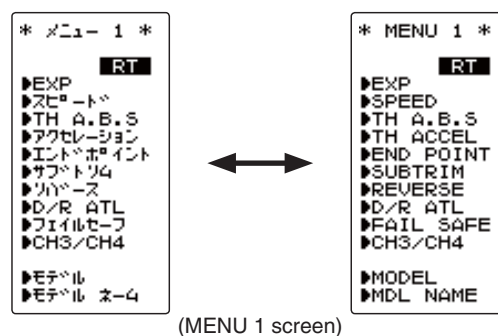
Values, settings, and other data on all the function setting screens are changed with the (+) and (-) buttons.



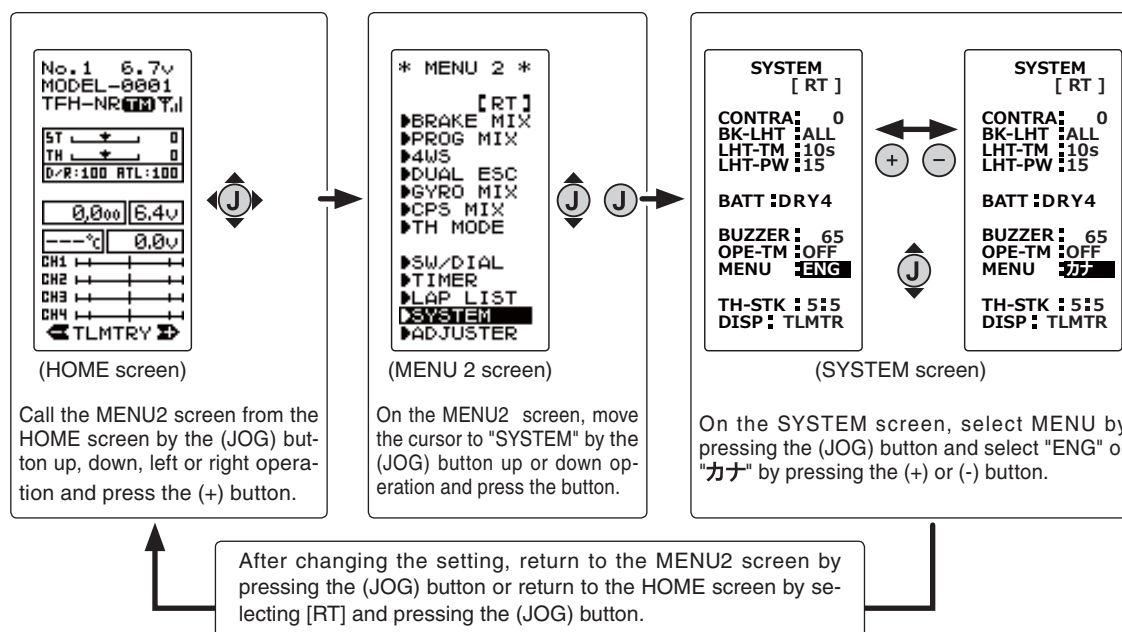
Basic Menu Japanese Katakana Character Display

On the system menu, the basic menu screen shown below can be displayed in Japanese katakana characters.

"KATAKANA" characters	Alphabetic characters
EXP	EXP
スピード	SPEED
TH A.B.S	TH A.B.S
アクセレーション	TH ACCEL
エンドポイント	END POINT
トリム	TRIM
リバース	REVERSE
D/R ATL	D/R ATL
フェイルセーフ	FAIL SFE
CH3/CH4	CH3/CH4
モデル	MODEL
モデル ネーム	MDL NAME
ブレーキ MIX	BRAKE MIX
PROG MIX	PROG MIX
4WS	4WS
デュアルESC	DUAL ESC
ジャイロ MIX	GYRO MIX
CPS MIX	CPS MIX
TH モード	TH MODE
SW/ダイヤル	SW/DIAL
タイマー	TIMER
ラップリスト	LAP LIST
システム	SYSTEM
アジャスター	ADJUSTER



Changing the character



Function Map

Function List

Function Abbreviation	Description Of Function	Page No
RX MODE	Receiver type selection/linking with telemetry type T-FHSS system receiver	P-37
MODEL	Model memory select/ Model memory copy/ Model memory reset	P-47
MDL NAME	Model memory name set/modify, username set/modify	P-50
REVERSE	Servo reversing	P-52
SUBTRIM	Servo center position fine adjustment	P-53
END POINT	End point adjustment	P-54
FAIL SAFE	Fail safe, battery fail safe	P-57
EXP	Steering curve adjustment/ Throttle curve adjustment	P-59
SPEED	Steering servo delay/ Throttle servo delay	P-62
TH ACCEL	Reduces the "lag time" of the throttle from the neutral position.	P-65
TH A.B.S	Pulsing brake	P-67
CH3/CH4	Channel 3&4 servos operation position set/check	P-71
D/R ATL	Steering angle adjustment while running/ Brake side adjustment	P-72
SW/DIAL	Selection of functions operated by switch, digital dial and digital trim	P-73
BRAKE MIX	Front and rear independent brake control for 1/5GP car, etc.	P-76
PROG MIX	Programmable mixing between specific channels	P-78
4WS MIX	4WS mixing	P-80
DUAL ESC	Front and rear ESCs mixing	P-82
GYRO ESC	The sensitivity of Futaba car rate gyros can be adjusted.	P-84
CPS ESC	The CPS-1 of Futaba LED controller can be adjusted.	P-86
TH MODE	Throttle servo forward side and brake side operation rate setting/ Neutral brake/ Idle up at engine start/ engine cut off by switch	P-88
MC LINK	MC851C/602C/402CR/950CR/940CR/960CR Link software setting function	P-92
MDL TRANS	Data copy from T4GRS to another T4GRS	P-100
TIMER	Up, down, or lap timer	P-102
LAP LIST	Lap timer data (lap time, total time) check	P-108
SYSTEM	LCD contrast/backlight/Battery type/buzzer/power left "ON" alarm/Basic menu character display /Throttle stick adjustment/HOME screen display mode	P-109
ADJUSTR	Steering stick and throttle stick correction	P-113
TELEMETRY	Displays the status during operation, of each sensor unit and records the status in a data log.	P-115

Model "MODEL"

Forty model data (data for 40 R/C cars) can be saved in the T4GRS transmitter. This menu selects the model, copies data between models.

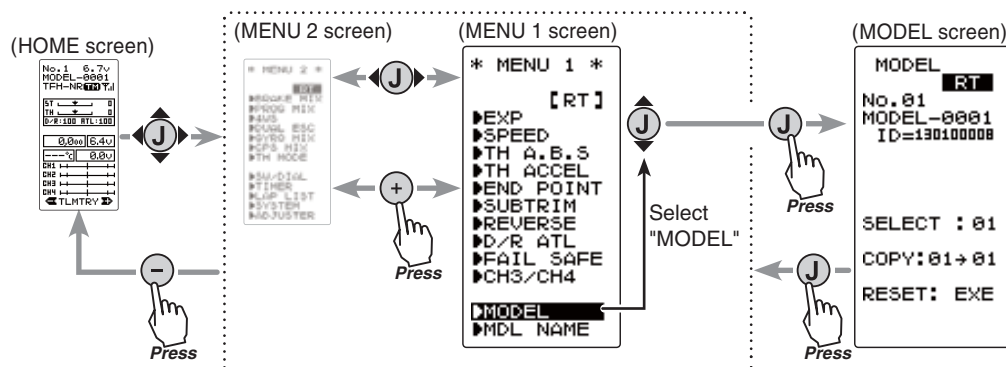
Model Menu Display

The MENU 1 screen is displayed using (JOG) button up, down, left, or right operation at the HOME screen.

The display can be switched to the MODEL screen by selecting "MODEL" and using (JOG) button up or down operation.

The display can be switched to the HOME screen by switching from the MODEL menu screen to the MENU 1 screen by pressing the (JOG) button and then pressing the (-) button at the MENU 1 screen.

When the (JOG) button is pressed from the MODEL menu screen, the display switches to the MENU1 screen and can then be switched to the HOME screen by pressing the (-) button from the MENU1 screen.



Setting item

SELECT :Model selection
COPY :Model copy
RESET :Model reset

MODEL RT
No.01
MODEL-0001
ID=130100000

SELECT : 01
COPY: 01 → 01
RESET: EXE

Current model # and model name
ID of T-FHSS receiver linked last at this model

Model selection function.

Model copy function.

Model reset function.

When a T-FHSS receiver is not linked with a model whose RX type is set to T-FHSS, (NO LINK) is displayed.
When RX type is set to S-FHSS or FHSS other than T-FHSS, nothing is displayed here

MODEL RT
No.01
MODEL-0001
ID=130100000

SELECT : 01
COPY: 01 → 01
RESET: EXE

Model Selection "SELECT"

Forty model data (model data for 40 R/C cars) can be saved in the 4GRS transmitter and used when the relevant model data is called.

Using the model select function

- Display the MODEL screen.

1 (Selection of model select)

Move the cursor to "SELECT" using the (JOG) button up or down operation.

```
MODEL [RT]
No. 01
MODEL-0001
ID=13010000

SELECT 01
COPY: 01 → 01
RESET: EXE
```

Move the cursor to select model # with the (JOG) button.

2 (Model #. selection)

Select the model number with the (+) or (-) button. "01" ~ "40" are displayed.

```
MODEL [RT]
No. 01
MODEL-0001
ID=13010000

MODEL-0002
(NO LINK)

SELECT 02
COPY: 01 → 01
RESET: EXE
```

Model #.
01~40

Select model # with the (+) or (-) button.

3 (Model select execution)

Press the (JOG) button continuously for 1 second. A beeping sound is generated and the model is selected.

```
MODEL [RT]
No. 02
MODEL-0002
(NO LINK)

SELECT 02
COPY: 02 → 02
RESET: EXE

COMPLETE!
```

Modified model # and model name

"COMPLETE!" is displayed.

- Model change is complete when the model No. and model name on the screen change and "COMPLETE!" is displayed.

4 When completed, move the cursor to [RT] by the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

```
* MENU 1 *

[RT]
▶EXP
▶SPEED
▶TH A.B.S
▶TH ACCEL
▶END POINT
▶SUBTRIM
▶REVERSE
▶D/R ATL
▶FAIL SAFE
▶CH3/CH4

▶MODEL
▶MDL NAME
```

When the model is changed, switch the transmitter "OFF" and then "ON" before operation.

Model Copy "COPY"

The contents of the currently selected model data can be copied to another model.

Using the model copy function

- Display the MODEL screen.

- 1** (Selection of model copy)
Move the cursor to "COPY" using the (JOG) button up or down operation.

```
MODEL [RT]
No.01
MODEL-0001
ID=130100008

SELECT : 01
COPY: 01→01
RESET: EXE
```

Move the cursor to "COPY" with the (JOG) button.

- 2** (Model #. selection)
Select the copy destination model number with the (+) or (-) button. "01" ~ "40" are displayed.

```
MODEL [RT]
No.01
MODEL-0001
ID=130100008

MODEL-0002

SELECT : 01
COPY: 01→02
RESET: EXE
```

Model #.
01~40

The copy destination model # with the (+) or (-) button.

- 3** (Model copy execution)
Press the (JOG) button for about 1 second. A beeping sound is generated and the model is selected.

```
MODEL [RT]
No.01
MODEL-0001
ID=130100008

MODEL-0001

SELECT : 01
COPY: 01→02
RESET: EXE
COMPLETE!
```

Model name is also copied.

"COMPLETE!" is displayed.

-Copying is complete when "COMPLETE!" is displayed on the screen.

- 4** When completed, move the cursor to [RT] by the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

```
* MENU 1 *
[RT]
▶EXP
▶SPEED
▶TH A.B.S
▶TH ACCEL
▶END POINT
▶SUBTRIM
▶REVERSE
▶D/R ATL
▶FAIL SAFE
▶CH3/CH4
MODEL
MDL NAME
```

Function

Model "MODEL"

Model Reset "RESET"

This function resets and initializes the contents of the currently selected model data.

However, the adjuster function (ADJUSTER), system setting (SYSTEM), and type of receiver mode (TYPE) are not initialized.

Using the model reset function

- Display the MODEL screen.

- 1** (Selection of model reset)
Move the cursor to "RESET" using the (JOG) button up or down operation.

```
MODEL      [ RT ]
No. 01
MODEL-0001
ID=130100008

SELECT : 01
COPY: 01 → 01
RESET: EXE
```

Move the cursor to "RESET" with the (JOG) button.

- 2** (Model reset execution)
Press the (JOG) button for about 1 second. A beeping sound is generated and the model is selected.

-Resetting is complete when "COMPLETE!" is displayed on the screen.

```
MODEL      [ RT ]
No. 01
MODEL-0001
ID=130100008

SELECT : 01
COPY: 01 → 01
RESET: EXE
COMPLETE!
```

"COMPLETE!" is displayed.

- 3** When completed, move the cursor to [RT] by the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

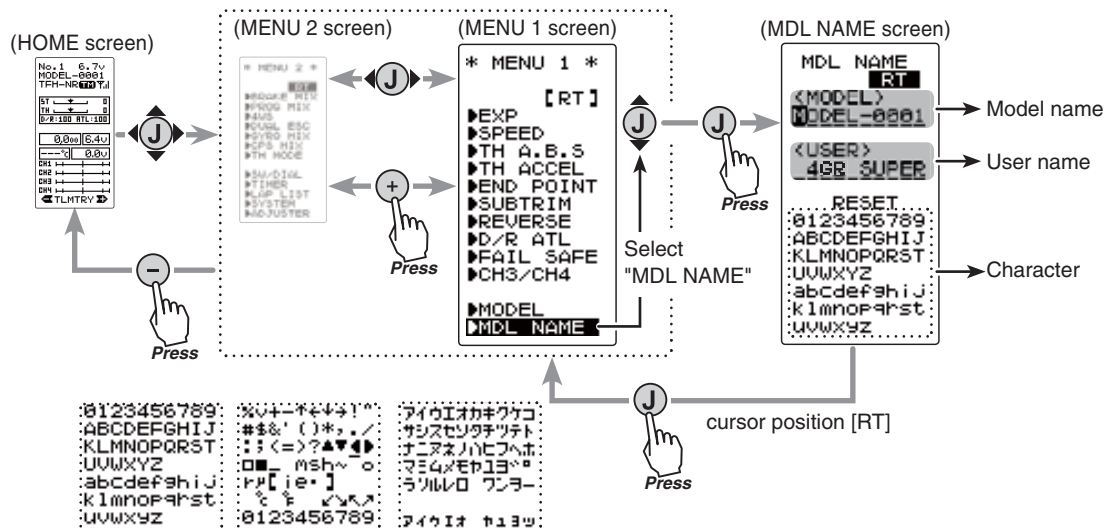
```
* MENU 1 *
      [ RT ]
▶EXP
▶SPEED
▶TH A.B.S
▶TH ACCEL
▶END POINT
▶SUBTRIM
▶REVERSE
▶D/R ATL
▶FAIL SAFE
▶CH3/CH4
▶MODEL
▶MDL NAME
```

The set RX type and T-FHSS receiver ID remain even if the model is reset. The same receiver can be used as is without re-linking

Model Name "MDL NAME"

This function allows you to assign a ten character name to each model memory and user name.

Display to "MDL NAME" screen by the following method:



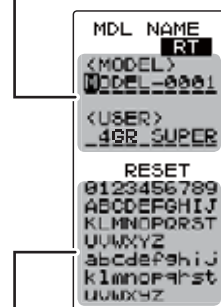
When (JOG) button left or right operation is performed from both the left and right ends of the character list, the page (all 3 pages) is changed and the character set is selected.

(KATAKANA of the 3rd page is displayed when "KANA" is set by the "SYSTEM" function "MENU".)

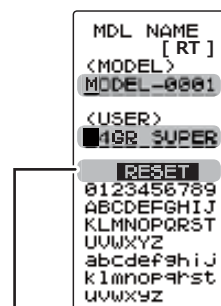
Setting the model name and user name

- 1** (Move the cursor to the character you want to change.)
Select the model name character you want to set or change by moving the cursor using the (+) or (-) button. The selected character blinks.
- 2** (Selecting the character to be used)
Select the character to be used from the character list at the lower section of the screen using the (JOG) button up, down, left, or right operation. The selected character blinks. After selecting the character to be used, press the (JOG) button. The character is entered and the model name or user name character row moves to the right. To clear the model or user name move the cursor to "RESET" using the (JOG) button up, down, left, or right operation, and press the button for about 1 second. A beeping sound is generated and the model name is initialized to the factory setting.
- 3** When completed, move the cursor to [RT] using the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

Move the cursor to the character you want to change by (+) or (-) button.



Select the character by (JOG) button.



Move the cursor to "RESET" by the (JOG) button up or down operation.

Function

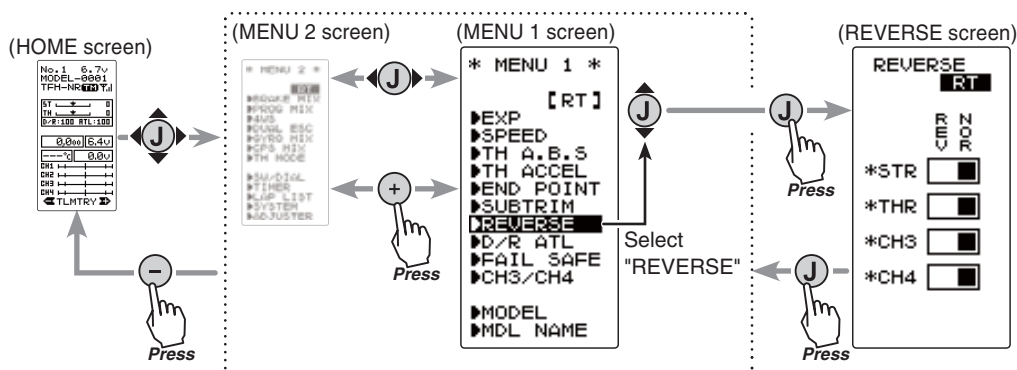
Servo Reverse "REVERSE"

(All channel)

This function reverses the direction of operation of the servos related to transmitter steering, throttle, and channel 3 /4 operation.

However, when the position set by trim or subtrim shifts from the center, the center becomes the opposite side.

Display to "REVERSE" screen by the following method:



Setting item

STR :Steering (1st channel)
THR :Throttle (2nd channel)
CH3 :3rd channel
CH4 :4th channel

Servo Reverse Function Setting

(Preparation)

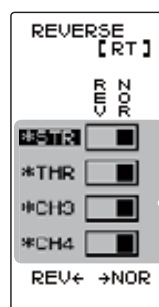
- Select the channel to be set using the (JOG) button up or down operation.

1 (Servo reverse setting)

Use the (+) or (-) button to reverse the servo operation direction.

NOR/REV can also be set using (JOG) button left or right operation

(Each channel can be set similarly.)



Move the cursor to "STR, THR, CH3 and CH4" with the (JOG) button.

Select button

- Select with the (+) or (-) buttons.

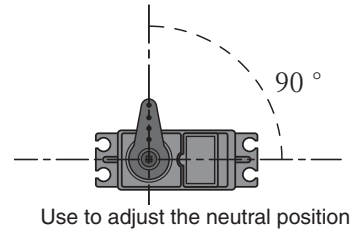
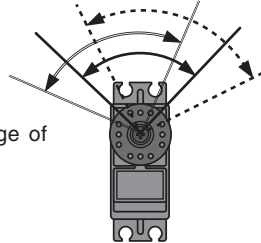
- 2 When completed, move the cursor to [RT] using the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

Subtrim "SUBTRIM"

(All channel)

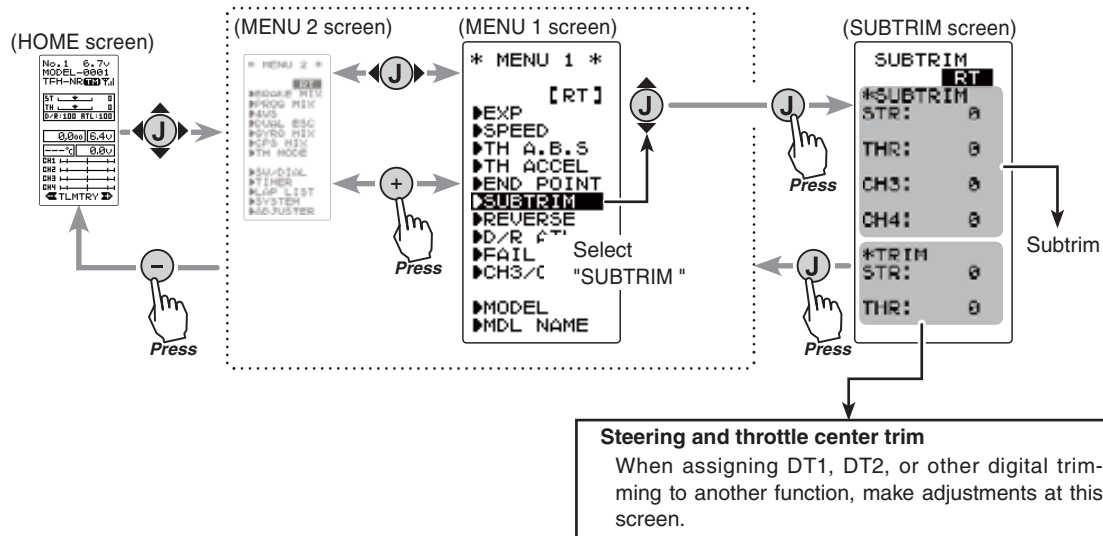
Use this function to adjust the neutral position of the steering, throttle, channel 3 and channel 4 servos.

*Subtrim adjusts the entire range of the servo in the set direction.



Use to adjust the neutral position

Display to "REVERSE" screen by the following method:



Subtrim adjustment

(Preparation)

- Set the steering and throttle digital trims to the neutral "0" position. Set CH3 and CH4 to the center "0" position.

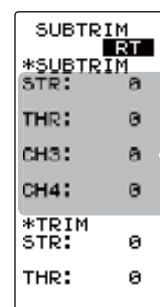
Setting item

STR :Steering (1st channel)
THR :Throttle (2nd channel)
CH3 :3rd channel
CH4 :4th channel

1 (Subtrim adjustment)

Use the (+) or (-) button to adjust the center.

(Each channel can be set similarly.)



Move the cursor to "STR, THR, CH3 and CH4" with the (JOG) button.

Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "0" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Subtrim

ST :L100~R100
TH :B100~F100
CH3 :-100~+100
CH4 :-100~+100
Initial value : 0

2 When completed, move the cursor to [RT] by the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

Subtrim "SUBTR"

Function

End Point Adjuster "END POINT" (EPA)

(All channel)

Use this when performing left and right end point adjustments, throttle high side/brake side operation amount adjustment, channel 3 and channel 4 servo up side/down side operation amount adjustment during linkage.

- Correct the maximum steering angle for left and right steering angles when there is a difference in the turning radius due to the characteristics, etc. of the vehicle.

Maximum steering angle

The EPA function basically determines the maximum steering angle of each channel. The functions shown below may have been adjusted or the operating range set by EPA function may be exceeded. Check the linkage each time the following functions are adjusted.

- Sub trim (all channels) P53
- Program mixing slave side (all channels) P78
- Idle up (throttle) P89
- Throttle off, Engine cut (throttle)..... P91
- Throttle acceration (throttle) P65

ATL trim

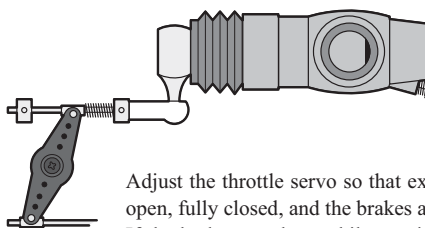
ATL trim allows adjustment of the brake side operation amount during operation. Therefore, when the operating angle is adjusted with throttle EPA, ATL trim must also be taken into account.

Function

Warning

- ① Operate each servo over its full stroke and be sure the linkage does not bind or is not loose.

The continuous application of excessive force to a servo may cause damage and excessive battery drain.

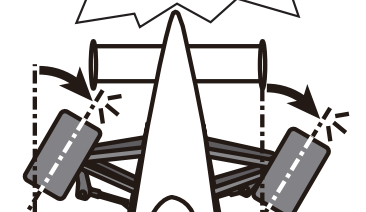


Adjust the throttle servo so that excessive force is not applied when the engine carburetor is fully open, fully closed, and the brakes are applied fully.

If the brakes overheat while running, their ability to function properly decreases. Before running, adjust the suitable maximum servo travel so that excessive force is not applied even when the servo travel is increased while running.

Caution!

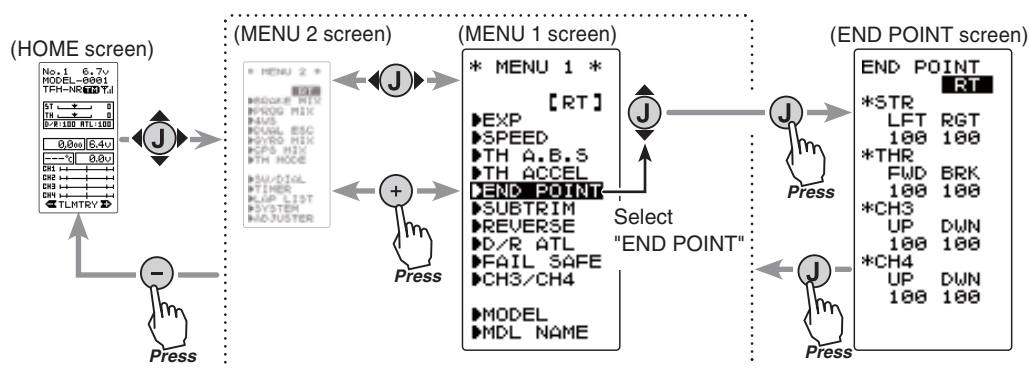
A whining noise indicates that the steering servo is improperly set.



Decide the EPA value at the contact point.

Adjust the steering servo so that excessive force is not applied to the servo by the chassis at maximum servo travel.

Display to "END POINT" screen by the following method:



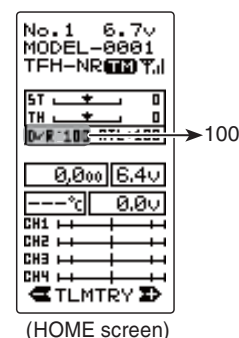
Setting item selection

(Steering and Throttle direction)

- The direction (STR LFT and STR RGT) linked with the steering stick is switched.
- The direction (THR FWD and THR BRK) linked with the throttle stick is switched.

Setting item (channel and direction)

- STR LFT :Steering (left side)
- STR RGT :Steering (right side)
- THR FWD :Throttle (forward side)
- THR BRK :Throttle (brake side)
- CH3/CH4 UP :3rd or 4th channel (up side)
- CH3/CH4 DWN :3rd or 4th channel (down side)



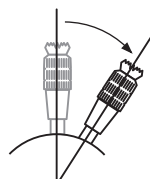
Steering (END POINT) adjustment

(Preparation)

- Before setup of the steering end point adjustment (END POINT), set the steering D/R lever (initial setup: DT3) to the maximum steering angle position 100%.
- Select the setting item "RGT" using the (JOG) button up, down, left, or right operation and make the following adjustments:

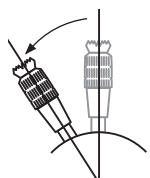
1 Steering (left side) adjustment

Move the steering stick fully to the left and use the (+) or (-) buttons to adjust the steering angle.

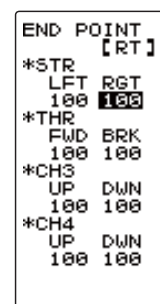


2 Steering (right side) adjustment

Move the steering stick fully to the right and use the (+) or (-) buttons to adjust the steering angle.



3 When complete, return to the MENU1 screen by pressing the (JOG) button.



Adjust button

Adjust with the (+) and (-) buttons.

- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Steering EPA

STR LFT :0~120
STR RGT :0~120
Initial value :100

Function

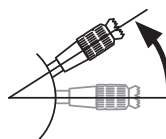
Throttle (END POINT) adjustment

(Preparation)

- Before setting the throttle end point adjustment (END POINT), set the throttle ATL (initial setup: DT4) to the maximum throttle angle position 100%.
- Select the setting item "FWD" by the (JOG) button up or down operation and make the following adjustments:

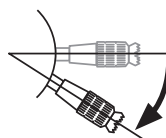
1 Throttle (full power) adjustment

Push the throttle stick forward to the full power position and use the (+) or (-) buttons to adjust the throttle angle. However, when using an FET amp, set to 100%.



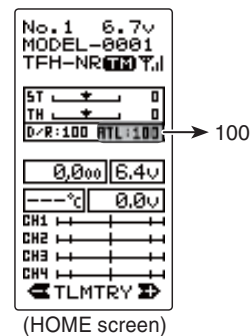
2 Throttle (brake side/reverse side) adjustment

Pull the throttle stick full back to brake/reverse and use the (+) or (-) buttons to adjust the throttle angle. However, when using an ESC, set to 100%.

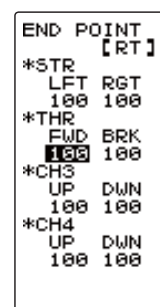


*This function cannot be used with "TH-STK : F10".

- ### 3
- When completed, return to the MENU1 screen by pressing the (JOG) button.



(HOME screen)



Adjust button

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Throttle EPA

THR FWD :0~120
THR BRK :0~120
Initial value :100

3rd & 4th channel servo (END POINT) adjustment

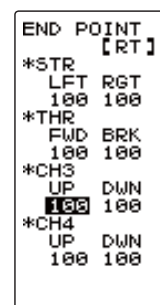
1 3rd/4th channel servo (up position) adjustment

Select the setting item "CH3 or CH4 UP" using the (JOG) button up or down operation, and set the 3rd or 4th channel dial fully to the up using (+ side) and use the (+) or (-) buttons to adjust the servo angle.

2 3rd/4th channel servo (down position) adjustment

Select the setting item "CH3 or CH4 DWN" using the (JOG) button up or down operation, and set the 3rd or 4th channel dial fully to the up position (- side) and use the (+) or (-) buttons to adjust the servo angle.

- ### 3
- When completed, return to the MENU1 screen by pressing the (JOG) button.



Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

3rd & 4th channel EPA

CH3/CH4 UP :0~120
CH3/CH4 DWN :0~120
Initial value :100

Fail Safe Function "FAIL SAFE"

(All channel)

Fail Safe Mode (F/S)

This function moves each servo to a preset position when the receiver does not receive a clear signal from the transmitter.

-When the condition set at "FHSS" is Rx type, fail safe (F/S) can be set only for throttle (TH). Other channels are set to the normal mode.

-The fail safe data is transferred from the transmitter to the receiver 10 seconds after the transmitter power is turned on. The data is transferred every 5 seconds after that. Be careful because normally the transmitter power is turned on first and the receiver power is turned on next and the data is transferred for approximately 10 seconds after the receiver power is turned on.

-For gasoline engine cars, for safety we recommend that this fail safe function be used to set the throttle channel in the direction in which the brakes are applied.

Hold mode (HOLD)

This function holds the servo/s at the position they were in immediately before reception was lost. This applies to the T-FHSS type (R304SB...,etc.) and the S-FHSS type (R2104GF...,etc.) receivers only. When the receiver used is an R603GF/2004GF or other FHSS type, this function is not available.

Off mode (OFF)

In this model the receiver stops outputting a signal to the servos if the transmitter signal is lost. The servos become effectively unpowered.

The F/S, HOLD, and OFF modes are automatically reset when signals from the transmitter can be received again.

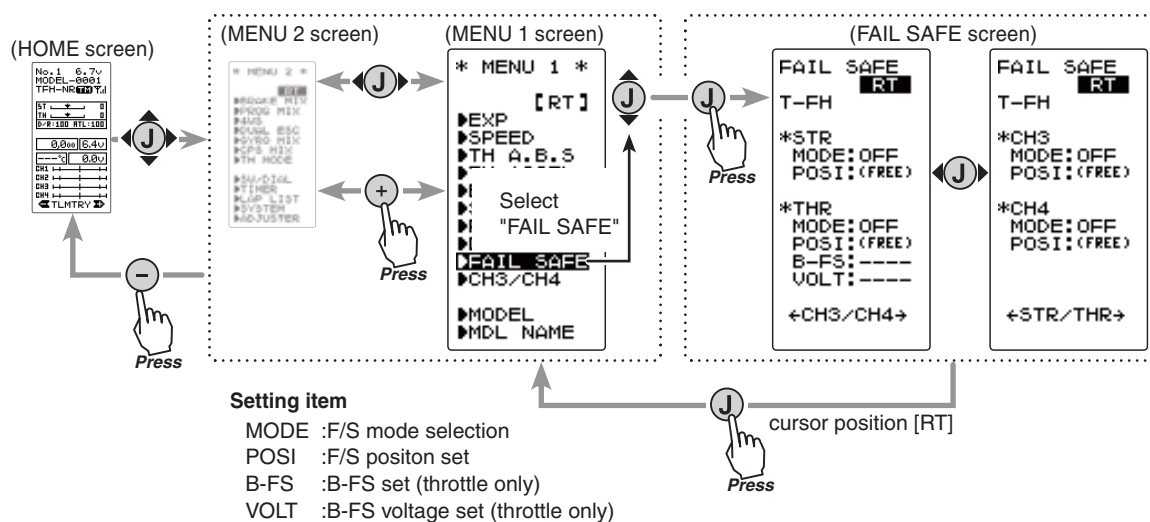
Battery fail safe function (BFS)

If the receiver battery voltage drops below a certain value when this function is enabled, the throttle servo moves to the position set by fail safe function. When the battery voltage recovers, the battery fail safe function is automatically reset.

-This function cannot be used when the throttle (TH) is not set to fail safe (F/S).

-This function is for the T-FHSS type (R304SB...,etc.) and the S-FHSS type (R2104GF...,etc.) receiver only. It cannot be used with the R603GF and R2004FG and other FHSS type.

Display to "FAIL SAFE" screen by the following method:



Fail safe mode selection

(Preparation)

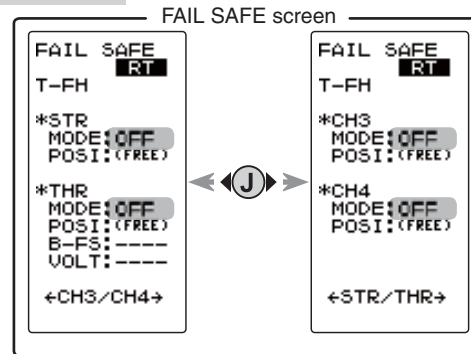
- Select the channels "MODE" to be set using the (JOG) button up, down, left, or right operation.

1 (Mode selection)

Select the mode by (+) or (-) button.

(Each channel can be individually set.)

- ### 2
- When completed, move the cursor to [RT] using the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button. When setting fail safe, set the servo position by the following method.



F/S mode

OFF, HOLD, F/S

F/S mode selection

- Select with the (+) or (-) buttons.

F/S position setup button

- The (JOG) buttons is pressed for about 1 second.

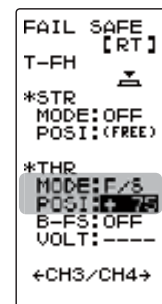
Fail safe function setup

1 (Servo position setup)

When the fail safe function operates, select the setting item "POSI" using the (JOG) button. The steering stick, the throttle stick or 3rd, 4th channel dial should be positioned as required in the event that the failsafe activates. When the (JOG) button is pressed for about 1 second, the servo position is displayed and you can confirm that the function was set.

(Each channel can be set similarly.)

- ### 2
- When completed, move the cursor to [RT] using the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.



Battery fail safe function ON/OFF (T-FHSS/ S-FHSS)

(Preparation)

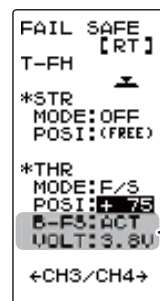
- Select the setting item using the (JOG) button. For Battery F/S function ON/OFF, select "OFF" or "ACT" of "B-FS".

For voltage setting, select RX**v. (The T-FHSS system only.)

The S-FHSS system is fixed at 3.8v.

1 (Battery fail safe function ACT/OFF)

BATT-F/S function ACT/OFF and voltage setting which activates the B-F/S function can be switched by (+) or (-) button.



Battery fail safe function

OFF, ACT

Initial value: OFF

B-F/S Voltage

3.8, 4.0, 4.2, 4.4, 4.6, 4.8, 5.0, 5.3, 5.6, 5.9, 6.2, 6.5, 6.8, 7.1, 7.4(V)

Initial value 3.8v

Example:

NiMH /NiCd 4cell---3.8V

NiMH /NiCd 6cell---4.4V

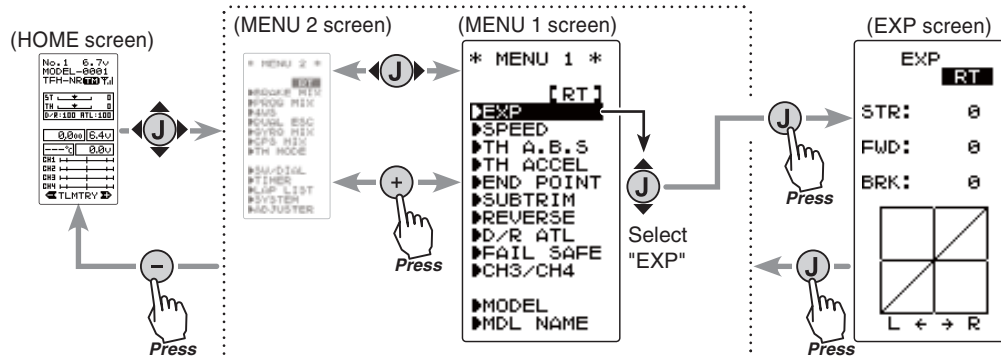
LiFe 2cell---4.8V

LiPo 2cell---5.6V

- ### 2
- When completed, move the cursor to [RT] using the (JOG) button, and return to the MENU1 screen by pressing the (JOG) button.

Exponential Adjustment "EXP" (Steering/Throttle system)

This function is used to change the sensitivity of the servo around the neutral position. Display to "EXP" screen by the following method:



Setting item

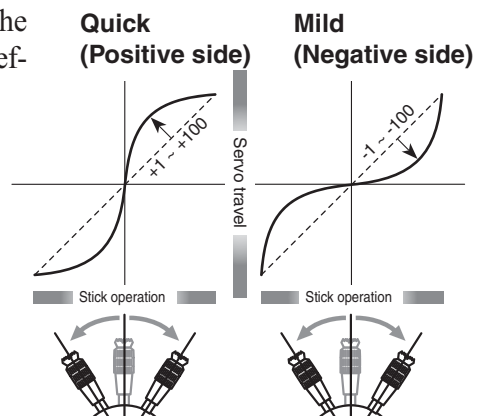
STR :Steering
FWD :Throttle forward side
BRK :Throttle brake/ reverse side

STR (Steering EXP)

This function is used to change the sensitivity of the steering servo around the neutral position. It has no effect on the maximum servo travel.

Racers Tip

When the setting is not determined, or the characteristics of the model are unknown, start with 0%. (When EXP is set to 0%, servo movement is linear.)

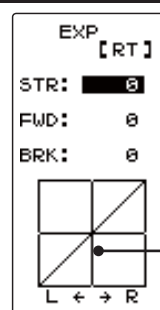


Steering EXP adjustment

(Preparation)

- On the EXP screen, Select the setting item "STR" using the (JOG) button.

- 1 When you want to speed up initial steering operation, use the (+) button to adjust the + side. When you want to make steering operation gentler initially, use the (-) button to adjust the - side.



Adjustment range

-100~0~+100

Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "0" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Vertical cursor moves in step with steering stick operation.

- 2 When completed, return to the MENU1 screen by pressing the (JOG) button.

Function

FWD (Throttle Forward Side EXP) BRK (Throttle Brake Side EXP)

This function is used to change the sensitivity of the throttle/brake servo/ESC around the neutral position. It has no effect on the servo maximum operation amount.

Advice

When the course conditions are good and the surface has good grip, set each curve to the + side (faster initial response). When the road surface is slippery and the tyres do not have good grip, set each curve to the - side (gentler initial response).

Full throttle EXP adjustment

(Preparation)

- On the EXP screen make the following adjustments:

- 1 Select the setting item "FWD" using the (JOG) button up or down operation.

Use the (+) button to adjust for a faster initial throttle response or use the (-) button for a gentler throttle response.

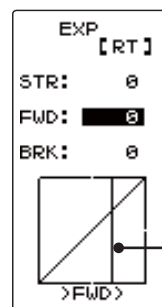
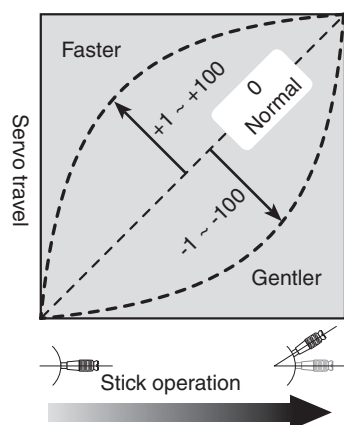
Adjustment range

-100 ~ 0 ~ +100%

Adjust button

Adjust with the (+) and (-) buttons.

- Return to the initial value "0" by pressing the (+) and (-) buttons simultaneously for about 1 second.



- 2 When completed, return to the MENU1 screen by pressing the (JOG) button.

Throttle brake side EXP adjustment

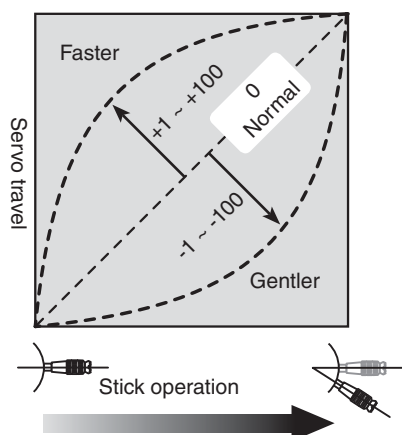
(Preparation)

*This function is not available in "TH-STK : F10 mode"

- On the EXP screen make the following adjustments:

1 Select the setting item "BRK" using the (JOG) button up or down operation.

Use the (+) button to adjust for a faster initial throttle response or use the (-) button for a gentler throttle response.



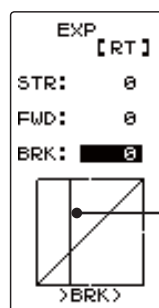
Adjustment range

-100 ~ 0 ~ +100%

Adjust button

Adjust with the (+) and (-) buttons.

- Return to the initial value "0" by pressing the (+) and (-) buttons simultaneously for about 1 second.



Vertical cursor moves in step with throttle stick operation.

2 When completed, return to the MENU1 screen by pressing the (JOG) button.

Dial / Trim Setting

The steering and throttle EXP adjustment (RATE) can be controlled with digital dial or digital trim with the function select switch dial function.

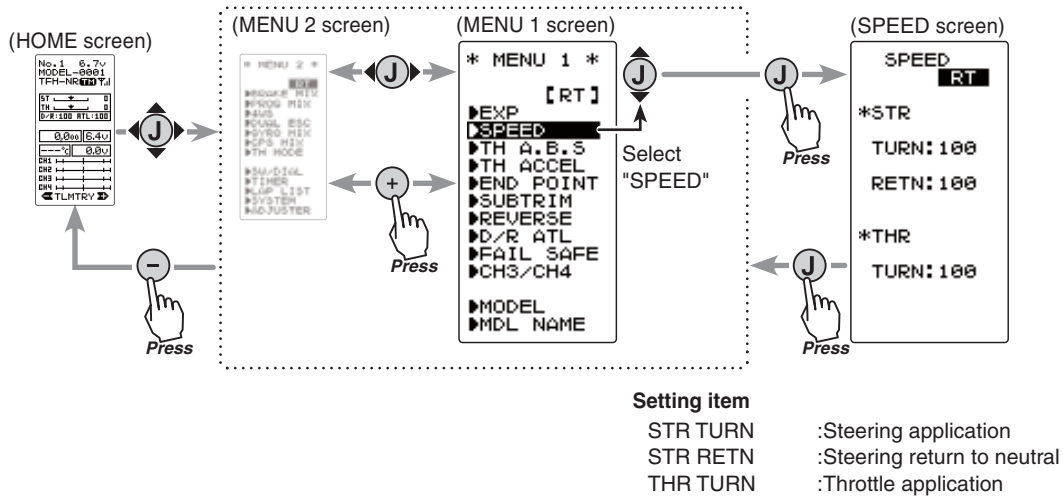
Function

Servo Speed "SPEED"

(Steering system)

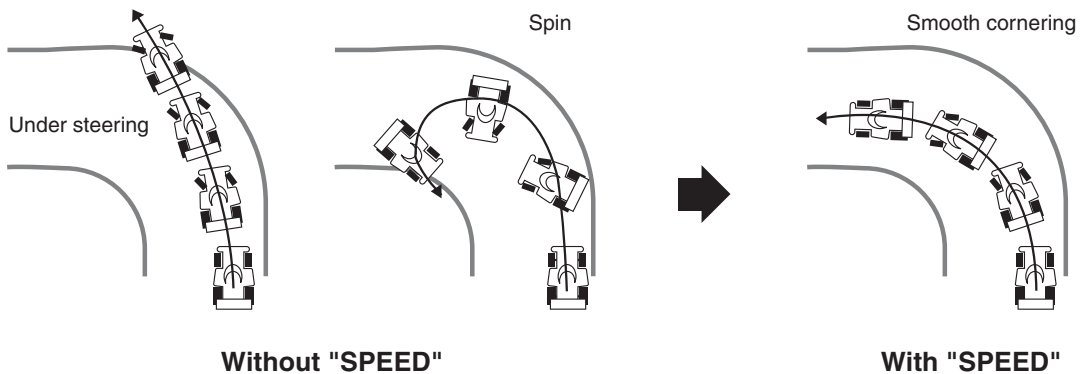
This function is used to change the servo speed.

Display to "SPEED" screen by the following method:



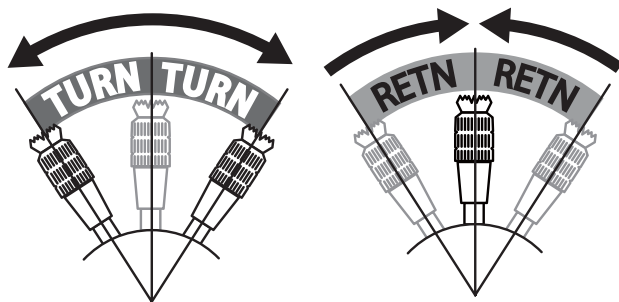
STR (Steering Speed)

Over quick steering may cause momentary understeer, loss of speed or even a spin - the steering speed function can be effective in these cases.



Operation

- This function limits the maximum speed of the steering servo. (Delay function)
- The steering speed when the steering stick is operated (TURN direction) and returned (RETN direction) can be independently set.
- If the steering stick is moved more slowly than the set speed, the steering servo is not affected.



Function

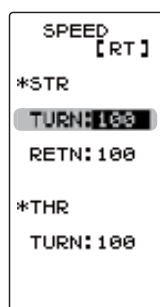
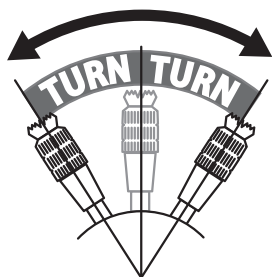
Steering Speed adjustment

(Preparation)

- On the SPEED screen make the following adjustments:

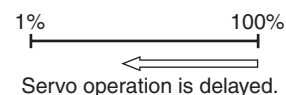
1 "TURN" direction adjustment

On the SPEED screen, Select the setting item STR "TURN" using the (JOG) button up or down operation and use the (+) or (-) buttons to adjust the delay amount.



Adjustment range

1~100% (each direction)
At 100%, there is no delay.

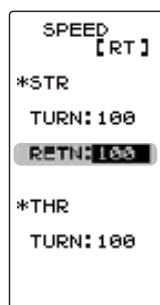
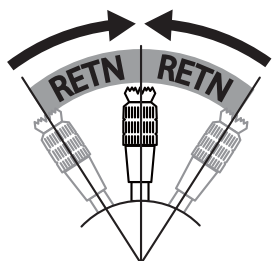


Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

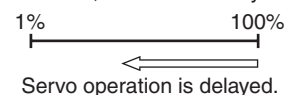
2 "RETN" direction adjustment

Select the setting item STR "RETN" using the (JOG) button up or down operation and use the (+) or (-) buttons to adjust the delay amount.



Adjustment range

1~100% (each direction)
At 100%, there is no delay.



Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

3 When completed, return to the MENU1 screen by pressing the (JOG) button.

Setting example (Steering servo: BLS471SV / BLS371SV) . . . (Setting criteria)

- Onroad TURN side: Approx. 50~80% RETURN side: Approx. 60~100%
- Offroad TURN side: Approx. 70~100% RETURN side: Approx. 80~100%

Dial / Trim Setting

The steering speed adjustment "TURN" and "RETN" can be controlled with digital dial or digital trim with the function select switch dial function.

Function

THR (Throttle Speed)

Sudden throttle stick operation on a slippery surface will cause the wheels to spin, resulting in poor acceleration. Setting the throttle speed function reduces wasteful battery consumption while at the same time enabling smooth, enjoyable operation.



With "SPEED": Quick start without skidding

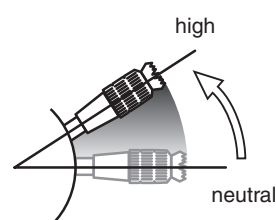


Without "SPEED": Slow start due to skidding

Operation

-Throttle servo (ESC) operation is slowed when the throttle stick is pushed forward so that the wheels will not spin even if the throttle is opened faster than required.

This function is not active when the stick is pulled back for brake/reverse.



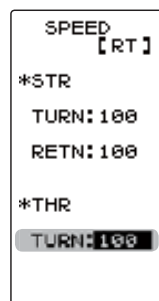
Throttle Speed adjustment

(Preparation)

- On the SPEED screen make the following adjustments:

1 (Delay adjustment)

On the SPEED screen, Select the setting item THR "TURN" using the (JOG) button up or down operation and use the (+) or (-) buttons to adjust the delay amount.

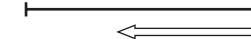


Adjustment range

1~100%

At 100%, there is no delay.

1% 100%



Servo operation is delayed.

Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

2 When completed, return to the MENU1 screen by pressing the (JOG) button.

Dial / Trim Setting

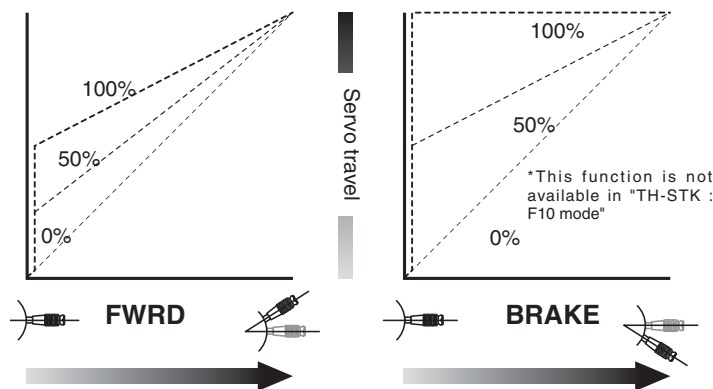
The throttle speed adjustment can be controlled with digital dial or digital trim with the function select switch dial function.

Throttle Acceleration "TH ACCEL" (Throttle system)

The throttle servo will "jump" to a preset position at its maximum possible speed. Unlike exponential, which adjusts the whole throttle movement into a curve, throttle acceleration simply "jumps" away from neutral and then leaves the remaining response linear.

Operation

- Operation near the throttle trigger neutral position becomes an abrupt rise.
- The forward and brake sides can be set separately.
- When the brake mixing function is set, the CH3/CH4 brake can also be set.

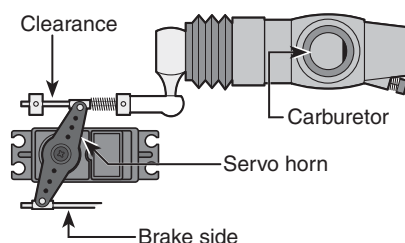


Set value

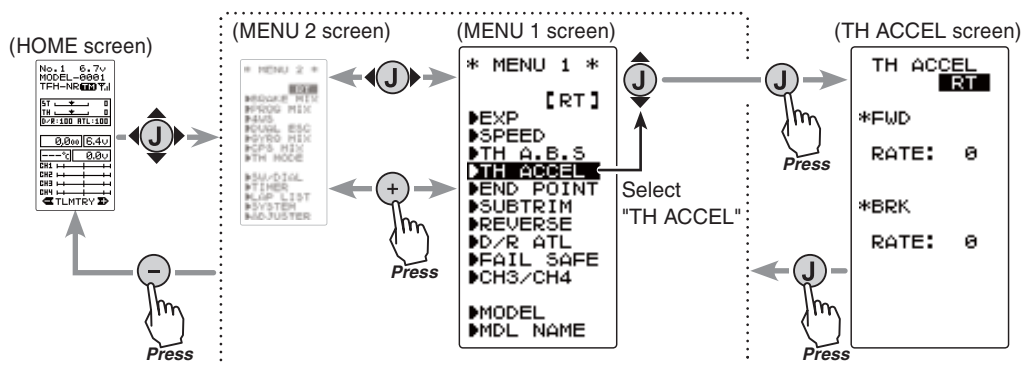
The standard value (100% point) of this setup affects the operation amount set by throttle EPA function.

Convenient usage method

For GP cars, the linkage must have a clearance because one servo controls the engine carburetor and brake. Thus, there is a noticeable time delay at both the forward and brake sides. Sharp response comparable to that of electric motor cars is obtained by reducing this clearance at the transmitter side.



Display to "TH ACCEL" screen by the following method:



Setup item

FWR RATE :Forward side acceleration
BRA RATE :Brake side acceleration

Function

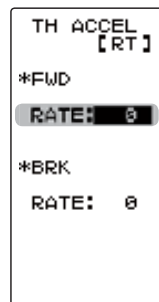
Throttle acceleration adjustment

(Preparation)

- On the TH ACCEL screen make the following adjustments:

1 (Forward acceleration amount adjustment)

Select the setting item FWD "RATE" using the (JOG) button up or down operation and use the (+) and (-) buttons to adjust the acceleration amount.



"0" :No acceleration

"100" :Maximum acceleration (Approximately 1/2 of the forward side throttle angle)

Forward acceleration amount (FWD)

0~100

Initial value: 0

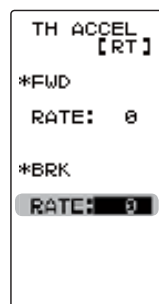
Adjust button

Adjust with the (+) and (-) buttons.

- Return to the initial value "0" by pressing the (+) and (-) buttons simultaneously for about 1 second.

2 (Brake side acceleration amount adjustment)

Select the setting item BRK "RATE" using the (JOG) button up or down operation and use the (+) and (-) buttons to adjust the acceleration amount.



"0" :No acceleration

"100" :Maximum acceleration (Brake side maximum throttle angle)

Brake side acceleration amount (BRK)

0~100

Initial value: 0

Adjust button

Adjust with the (+) and (-) buttons.

- Return to the initial value "0" by pressing the (+) and (-) buttons simultaneously for about 1 second.

4 When completed, return to the MENU1 screen by pressing the (JOG) button.

Function

Dial / Trim Setting

The throttle acceleration adjustment amount (FWD), (BRK) can be controlled with digital dial or digital trim with the function select switch dial function.

*This function is not available in "TH-STK : F10 mode".

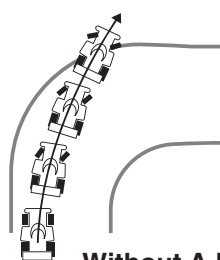
A.B.S. Function "TH A.B.S"

(Throttle system)

When the brakes are applied while cornering with a 4 Wheel Drive or other type of vehicle, understeer may occur. This understeer can be eliminated and cornering improved using this function.

Operation

- When the brakes are applied, the throttle servo will pulse intermittently. This will have the same effect as pumping the brakes in a full size car.
- The brake return amount, delay amount, pulse cycle, and brake duty can be adjusted.



Without A.B.S.

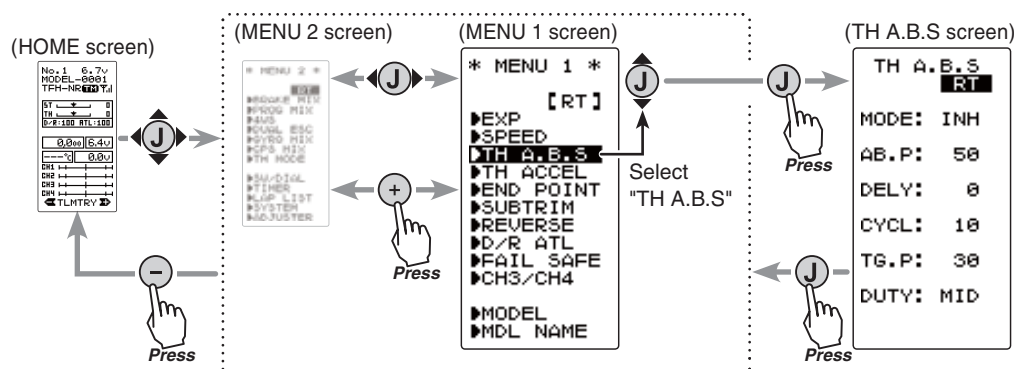


With A.B.S.

Operation display

During ABS operation, the LED blinks.

Display "TH A.B.S" screen by the following method:

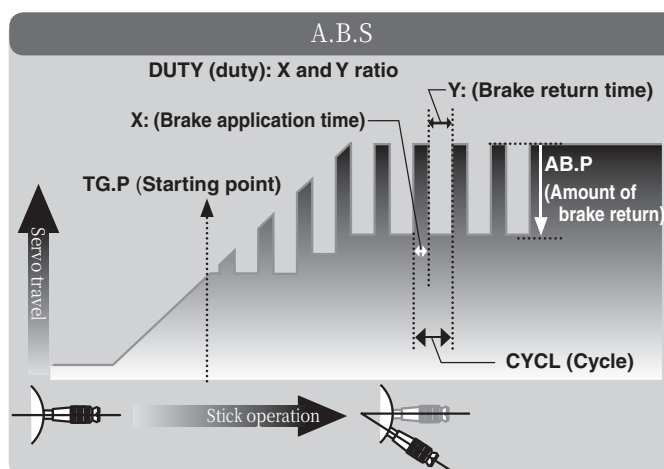


Setup items

MODE	: Function ON/Off	CYCL	: Cycle speed
AB.P	: Brake return amount	TG.P	: Starting point
DELY	: Delay amount	DUTY	: Cycle duty ratio

- AB.P : Amount of brake return

Sets the rate at which the servo returns versus stick operation for brake release. When set to 0%, the ABS function is not performed. When set to 50%, the servo returns 50% (1/2) of the stick operation amount and when set to 100%, the servo returns to the neutral position.



Function

- DELY : Delay

Sets the delay from brake operation to ABS operation. When set to 0%, the ABS function is activated without any delay. At 50%, the ABS function is activated after a delay of approximately 1 second and at 100%, the ABS function is activated after a delay of approximately 2 seconds.

- CYCL : Cycle speed

Sets the pulse speed (cycle). The smaller the set value, the faster the pulse cycle.

- TG.P : Starting point

Sets the starting point at which the ABS function begins to operate at brake operation.

- DUTY : Cycle duty ratio

Sets the proportion of the time the brakes are applied and the time the brakes are released by pulse operation. The ratio can be set to HIGH, MID or LOW.

- MODE : Function ON/OFF

ABS function ON/OFF setting. When using the ABS function, set to "ACT(ON)".

A.B.S function adjustment

1 (Function ON/OFF)

Select the setting item "MODE" using the (JOG) button up or down operation. Set the function to the active state by pressing the (+) or (-) button.

"INH(OFF)" :Function OFF
"ACT(ON)" :Function ON
"ACT(OFF)" :Switch OFF when setting switches

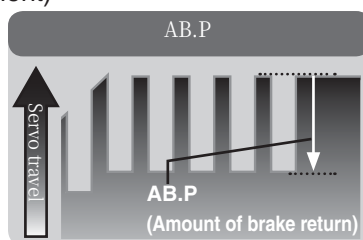
Select button

- Select with the (+) or (-) buttons.

Function ON/OFF (MODE)
INH(OFF), ACT(ON,OFF)

2 (Brake return amount adjustment)

Select the setting item "AB.P" using the (JOG) button up or down operation. Use the (+) or (-) button to adjust the return amount.



"0" :No return
"50" :Return to the 50% position of the brake operation amount
"100" :Return to the neutral position.

Brake return amount (AB.P)

0 ~ 50 ~ 100
Initial value: 50

- Brake return amount (AB.P) is influenced by the "EXP" rate on the brake side.

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

3 (Delay amount setup)

Select the setting item "DELY" using the (JOG) button up or down operation. Use the (+) or (-) button to adjust the delay amount.

"0" :A.B.S. function performed without any delay
"50" :A.B.S. function performed after an approximate 1 sec delay.
"100" :A.B.S. function performed after an approximate 2 secs delay.

Delay amount (DELY)

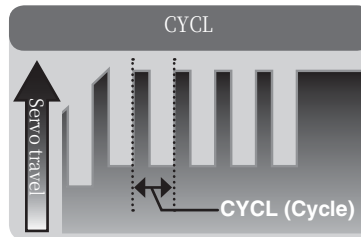
0 ~ 100
Initial value: 0

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

4 (Cycle speed adjustment)

Select setting item "CYCL" using the (JOG) button up or down operation. Use the (+) or (-) button to adjust the pulse speed (cycle).



Cycle speed (CYCL)

1 ~ 30

Initial value: 10

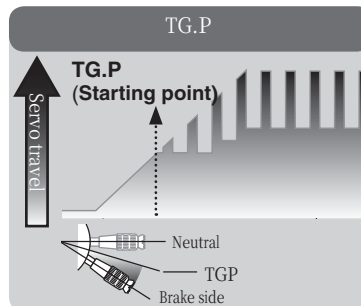
Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

- The smaller the set value, the faster the pulse speed.

5 (Starting point setup)

Select setting item "TG.P" using the (JOG) button up or down operation. Use the (+) or (-) button to adjust the operation point.



Starting point (TG.P)

10 ~ 100

Initial value: 30

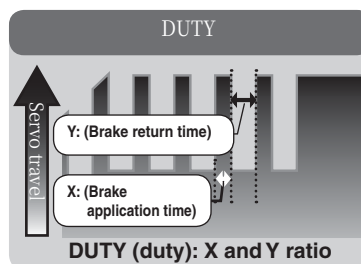
Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

- Sets the throttle stick position at which the A.B.S. function is performed.
The number is the % display with the full brake position being 100.

6 (Cycle duty ratio setup)

Select setting item "DUTY" using the (JOG) button up or down operation. Use the (+) or (-) button to adjust the duty ratio.



Duty ratio (DUTY)

LOW - MID - HIGH

Initial value: MID

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

"LOW" :Brake application time reduced to minimum.(Brakes lock with difficulty)

"HIGH" :Brake application time increased to maximum. (Brakes lock easily)

(Remark) For low grip, set at the LOW side and for high grip, set at the HIGH side.

7 When completed, return to the MENU1 screen by pressing the (JOG) button.

Dial / Trim Setting

The brake return amount (AB.P), delay amount (DELY) and cycle (CYCL) can be controlled with digital dial or digital trim with the function switch dial function.

Switch setting

Use SW1 or SW2 to switch the A.B.S. function ON/OFF.

See the function select switch dial function.

Function

Fail Safe Unit

When the T4GRS is used with the Futaba fail safe unit (FSU), it will operate as described below. However, FSU-1 cannot be used in the high speed mode.

- When the FSU is connected to the throttle channel, and the A.B.S. function has been activated, the FSU LED will flash each time the servo operates. The reason for this is that the FSU responds to sudden data changes caused by A.B.S. function pumping operation. It does not mean that the fail safe function is activated. The servo will not be affected.

Example of A.B.S. function setting when BLS371SV used (There will be a slight difference depending on the state of the linkage.)

- Basic setting

AB.P: Approx. 30% (If this value is too high, the braking distance will increase.)

CYCL: 5~7

DUTY: (When grip is low: LOW side, when grip is high: HIGH side)

DELY: 10~15%

TG.P: Approx. 70%

- When the wheels lock or the car spins, when the brakes are applied fully

AB.P: Increase from 30%

DUTY: Shift to "LOW" side

DELY: Reduce the delay

- When the braking is poor and thus the braking distance extended when the brakes are applied fully

AB.P: Decrease from 30%

DUTY: Shift to "HIGH" side

DELY: Increase the delay

1/5 scale car and others with independent brakes and ABS

ABS can be independently set for the brakes which are controlled by the 3rd CH and 4th CH by using the brake mixing (BRAKE MIX) function described. For more information, read the brake mixing (BRAKE MIX) item.

Channel 3/4 "CH3/CH4"

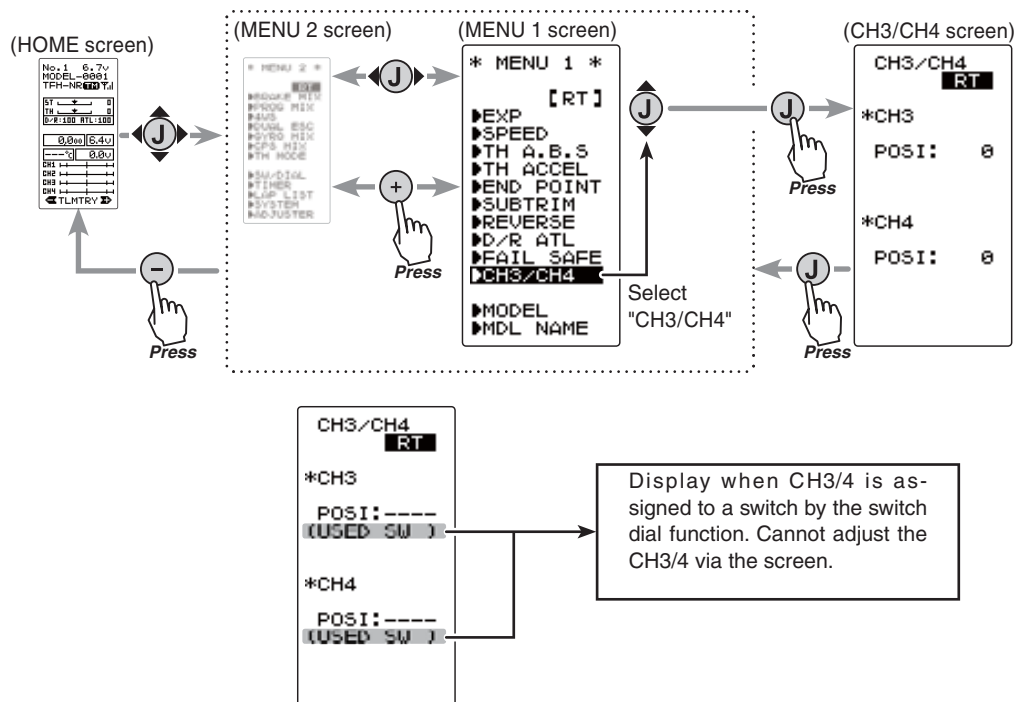
(3/4 channel)

The channel 3/4 servo position can be set from the transmitter. When CH3 is assigned to a dial by the switch dial function, this setting is linked to that dial.

When CH3/4 is not assigned to a dial, it can be set with this screen.

When CH3/4 is assigned to a switch by the switch dial function, you cannot adjust the CH3/4 via the screen.

Display "CH3/CH4" screen by the following method:



Rate / position adjustment on channel menu screen

1 (Function selection)

On each CH3/CH4 screen select CH3 "POSI" or CH4 "POSI" using the (JOG) button up or down operation.

2 (Position setting/rate adjustment)

Use the (+) and (-) buttons to adjust the channel 3 or channel 4 position.

3 When completed, return to the MENU1 screen by pressing the (JOG) button.

Channel 3 position (POSI)

Channel 4 position (POSI)

0~100%

Initial value: 0

Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Function

Steering Dual Rate/ Throttle ATL "D/R ATL"

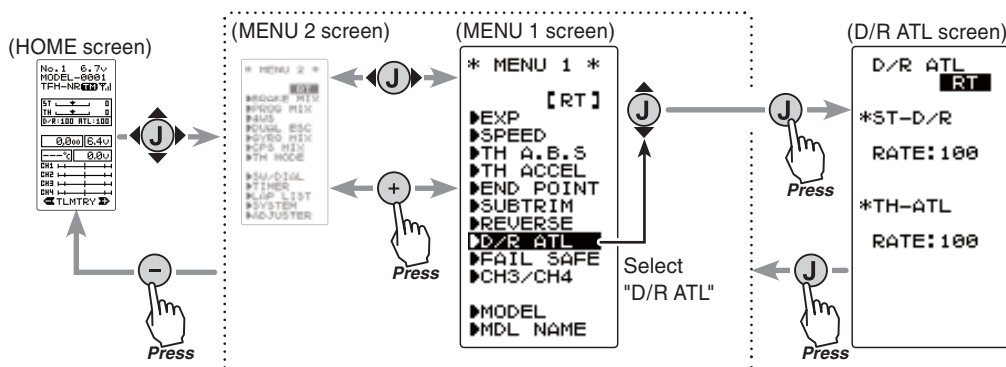
D/R (Steering dual rate)

The steering left and right servo travels are adjusted simultaneously. This setting is linked to transmitter DT3. When DT3 is assigned another function, dual rate can be adjusted with this screen.

ATL (Throttle ATL)

This function decreases the set value when the braking effect is strong and increases the set value when the braking effect is weak. This function is linked to transmitter DT4. When DT4 is assigned another function, this function can be set with this screen.

Display "D/R ATL" screen by the following method:



Dual rate adjustment

1 (Dual rate adjustment)

Select the setting item ST-D/R "RATE" using (JOG) button up or down operation. Adjust the servo travel with the (+) and (-) buttons.

2 When completed, return to the MENU1 screen by pressing the (JOG) button.

D/R rate (RATE)

0~100%

Initial value: 100

Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

ATL function adjustment *This function is not available in "TH-STK : F10 mode".

1 (Brake amount adjustment)

Select the setting item TH-ATL "RATE" using (JOG) button up or down operation. Adjust the servo travel with the (+) and (-) buttons.

2 When completed, return to the MENU1 screen by pressing the (JOG) button.

ATL rate (RATE)

0~100%

Initial value: 100

Adjust button

- Adjust with the (+) and (-) buttons.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Select Switch Dial Function "SW/ DIAL"

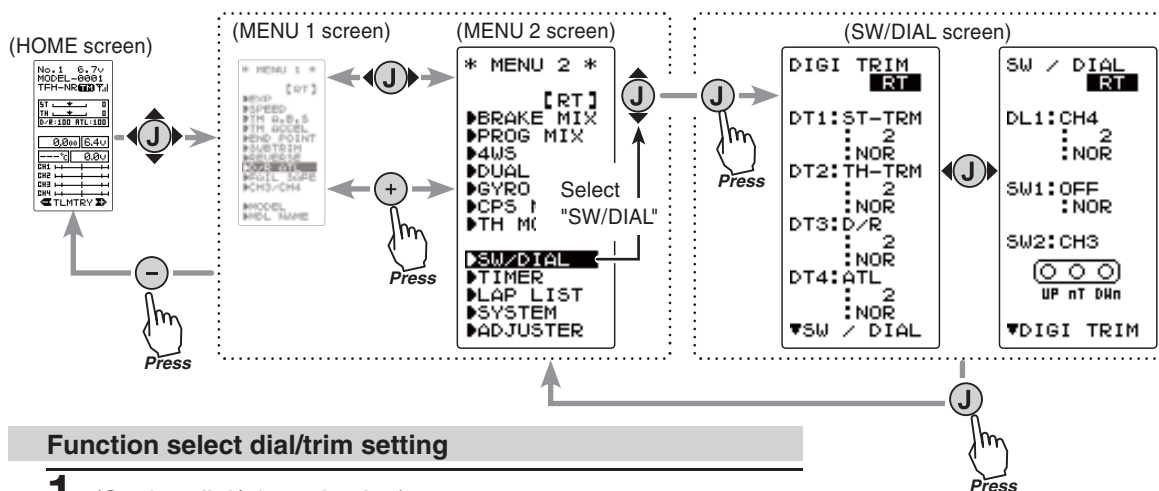
Selection of the function to be performed by digital trim (DT1, DT2, DT3, DT4) dial (DL1) and switch (SW1, SW2).

- The functions that can be assigned to dial, digital trim and switch are listed on the next page.
- The dial and digital trim step amount can be adjusted. (The relationship between set value and step amount is shown in the table on the next page.)
- The direction of operation of the servos can be reversed. (NOR/REV)
- SW1 alternate operation (operation which switches between ON and OFF each time the switch is pressed) is possible.

NOR (Normal) -ON only while pressed, OFF when released.

ALT (Alternate) -Switched between ON and OFF each time pressed.

Display "SW/DIAL" screen by the following method:



Function select dial/trim setting

1 (Setting dial/trim selection)

Select the dial or trim you want to set using the (JOG) button up or down operation.

2 (Function setting)

Select the function with the (+) or (-) button.

- Refer to the list on the next page for the abbreviations of the functions.

(Step amount setting)

Select the step amount you want to set using the (JOG) button up or down operation. Use the (+) or (-) button to set the step amount.

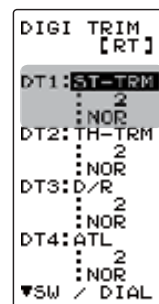
- Refer to the next page for the relationship between set value and step amount.

(Changing the direction of operation)

Select the Direction of operation you want to set using the (JOG) button up or down operation. Use the (+) or (-) button to trim/dial the direction.

3 When completed, return to the MENU1 screen by pressing the (JOG) button.

*Function selection
*Step amount setting
*Direction of operation setting



Function

Adjust button

Adjust with the (+) and (-) buttons.

- Return to the initial value "2" by pressing the (+) and (-) buttons simultaneously for about 1 second.

Function select switch setting

1 (Setting SW selection)

Select the SW you want to set using the (JOG) button up or down operation.

2 (Function setting)

Select the function with the (+) or (-) button.

-Refer to the list for the abbreviations of the functions.

(Changing the SW1 operation system)

Select DIR of <SW1> using the (JOG) button up or down operation. Select ALT or NOR with the (+) or (-) button.

3 When completed, return to the MENU2 screen by pressing the (JOG) button.

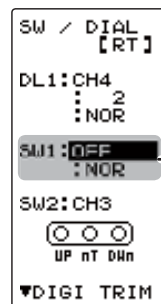
Set table functions (DL1, DT1/DT2/DT3)	
Abbreviation used on setup screen	Function name, etc.
D/R	Dual rate function
ATL	ATL function
EXP-ST	Steering EXP
EXP-FW	Throttle EXP (Forward side)
EXP-BK	Throttle EXP (Brake side)
SPD-TN	Steering speed (Turn side)
SPD-RN	Steering speed (Return side)
ABS.PS	A.B.S. function (Return amount)
ABS.DL	A.B.S. function (Delay)
CYCLE	A.B.S. function (cycle speed)
ACC-FW	Throttle acceleration (Forward side)
ACC-BK	Throttle acceleration (Brake side)
TH-SPD	Throttle speed
ST-TRM	Steering trim
TH-TRM	Throttle trim
CH3	Channel 3
CH4	Channel 4
SUBTR1	Sub trim (CH1)
SUBTR2	Sub trim (CH2)
SUBTR3	Sub trim (CH3)
SUBTR4	Sub trim (CH4)
IDLE	Idle up function
ESC-RT	Dual ESC mixing (4ch ESC rate)
TH-OFF	Throttle off (engine cut)
PMX-A	Program mixing (RGHT/BRAK/DOWN sides)
PMX-B	Program mixing (LEFT/FWRD/UP sides)
BK3-RT	Brake mixing (3ch brake rate)
BK4-RT	Brake mixing (4th brake rate)
4WS-RT	4WS mixing (3ch steering rate)
ESC-MD	Dual ESC mixing (Drive mode select)
GYRO	Gyro mixing (Gain rate)
OFF	Not used

Function

Adjust button

Adjust with the (+) and (-) buttons.

SW1 function selection
Direction of operation setting



SW2 function selection
ON/OFF position is displayed.

Relationship between set value and step amount

(Setting range: 1~10, 20, 30, 40, 50, 100, 2P)

-Steering trim/throttle trim

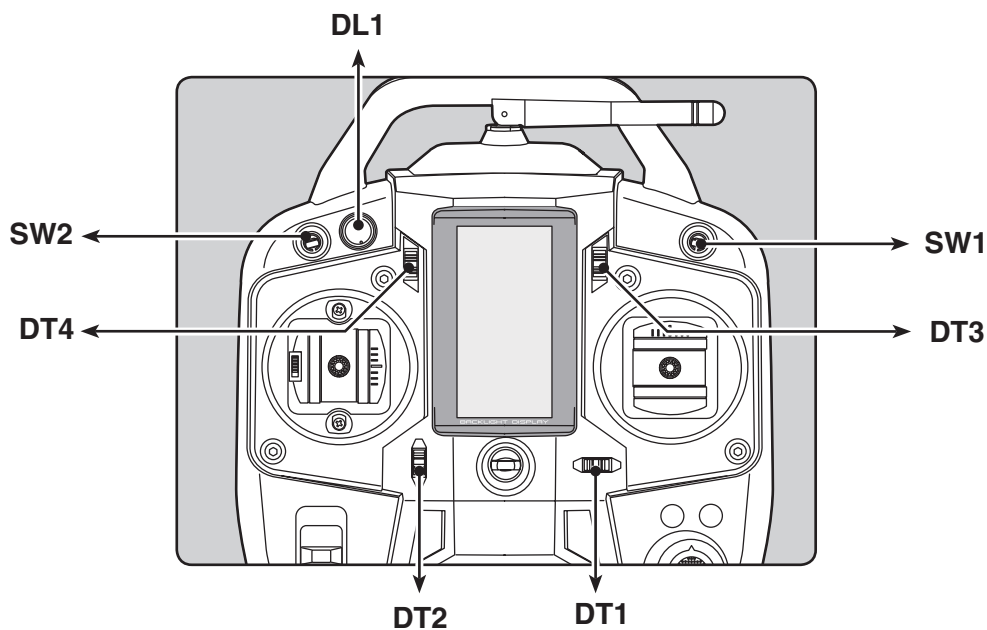
When set to the minimum "1", the total trim operating width is 200 clicks. For "100", the total operating width is 2 clicks and for 2P, the total operating width is 1 click.

-Rate, etc. setting

This is the % value which is operated by 1 click relative to the set value of each rate. Since the total operating width of functions having a rate of -100~0~+100 is 200%, when set to "100", the total operating width is 2 clicks. Since the total operating width of functions with a 0~100 rate is 100%, "100" and 2P are operated by 1 click.

-Channel 3/4

When set to the minimum "1", the total operating width of channel 3 is 200 clicks. For "100", the total operating width is 2 clicks and 2P is operated by 1 click.



Set table functions (SW1)	
Abbreviation used on setup screen	Function name, etc.
NT-BRK	Neutral brake function ON/OFF
ABS	A.B.S function ON/OFF
IDLE	Idle up function ON/OFF
PRGMIX	Program mixing function ON/OFF
TH-OFF	Throttle off (engine cut) function ON/OFF
CH3	Channel 3
CH4	Channel 4
4WS MIX	4WS mixing type select
TIMER	Timer function start/stop
LOGGER	Telemetry log start/stop
GYRO	Switching GYRO mode
OFF	Not used

Set table functions (SW2)	
Abbreviation used on setup screen	Function name, etc.
NT-BRK	Neutral brake function ON/OFF
ABS	A.B.S function ON/OFF
IDLE	Idle up function ON/OFF
PRGMIX	Program mixing function ON/OFF
TH-OFF	Throttle off (engine cut) function ON/OFF
CH3	Channel 3
CH4	Channel 4
OFF	Not used

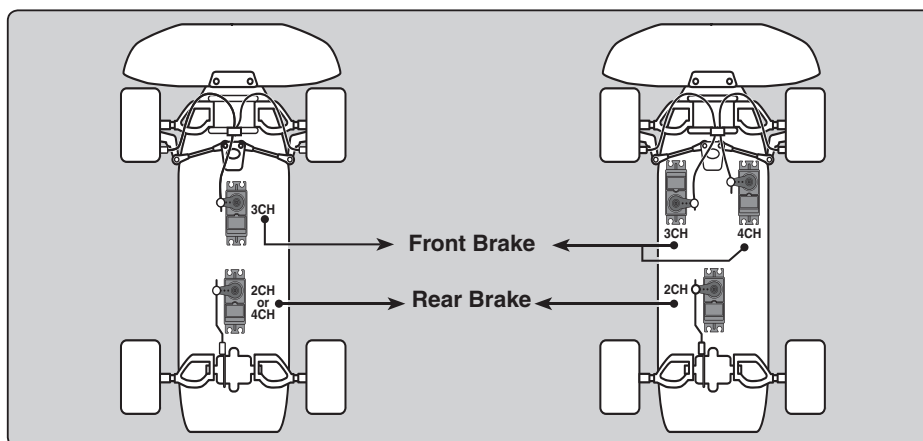
Function

Function Select Trim Dial "TRIM DIAL"

*This function is not available in "TH-STK : F10 mode".

Brake Mixing "BRAKE MIX" (Throttle, 3rd /4th channel system)

This function is used when the front and rear brakes must be adjusted independently such as with a 1/5 scale GP car. This mixing uses the 2nd CH for the rear brakes and the 3rd or 4th CH for the front brakes, or controls the front brakes with the 3rd CH and 4th CH servos, or controls the 2nd CH by independent throttle and controls the rear and front brakes with the 3rd CH and 4th CH.



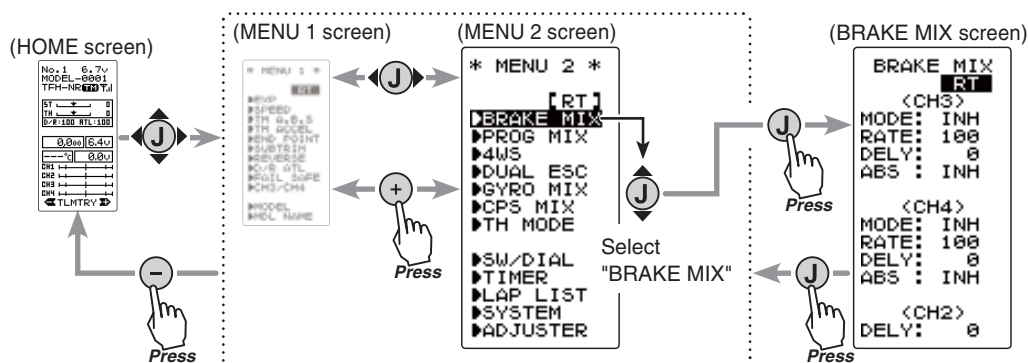
Operation

- When braking, mixing is applied to 2nd CH→3rd CH, 4th CH.
- 3rd CH and 4th CH brake amount, 2nd CH, 3rd CH, and 4th CH brake delay, and 3rd CH and 4th CH brake ABS can be set.

CH3/4 brake ABS function

The ABS function can be used independently at the CH3 and CH4 sides even when the CH2 side ABS function is OFF. The amount of pulsing speed (CYCL), operation point (TG.P), and duty ratio (DUTY) can be set in common with the CH2 side ABS function. (CH3 and CH4 brake return (AB.P) is fixed at 50.)

Display "SW/DIAL" screen by the following method:



Setup item

<CH3>	<CH4>	<CH2>
MODE : Brake function ON/OFF	MODE : Brake function ON/OFF	DELY : Delay amount
RATE : Brake rate	RATE : Brake rate	
DELY : Delay amount	DELY : Delay amount	
ABS : ABS. function ON/OFF	ABS : ABS. function ON/OFF	

Brake mixing adjustment

1 (Brake mixing function ON/OFF)

Using the (JOG) button, select "MODE" of <CH3> for CH3 brake and "MODE" of <CH4> for CH 4 brake.

Use the (+) or (-) button and set the function to the "ACT" state.

"INH" : Function OFF

"ACT" : Function ON

- When "(4WS>OFF)" is displayed below <CH3> ABS, the CH3 brake cannot be used if the 4WS function is not set to "ACT".

- When "(ESC>INH)" is displayed under <CH4> ABS, the CH4 brake cannot be used if the dual ESC function is not set to "INH".

Function ON/OFF (MODE)

INH, ACT

Select button

- Select with the (+) or (-) buttons.

2 (Brake rate)

Using the (JOG) button, select "RATE" of <CH3> for CH3 brake and "RATE" of <CH4> for CH 4 brake, and use the (+) and (-) buttons to adjust the Brake rate amount.

Brake rate (RATE)

0 ~ 100

Initial value:100

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously for about 1 second.

3 (Delay amount setup)

Using the (JOG) button, select "DELY" of <CH3> for CH3 brake, "DELY" of <CH4> for CH 4 brake and "DELY" of <CH2> for CH 2 brake. Use the (+) and (-) buttons to adjust the delay amount.

"0" : No delay

"100" : Maximum delay amount

Delay amount (DELY)

(CH3) 0 ~ 100

(CH4) 0 ~ 100

(CH2) 0 ~ 100

Initial value:0

4 (3rd & 4th channels brake-A.B.S ON/OFF)

Using the (JOG) button, select "ABS" of <CH3> for CH3 brake and "ABS" of <CH4> for CH 4 brake. Use the (+) or (-) button and set the function to the "ACT" state.

Function ON/OFF (ABS)

INH, ACT

Select button

- Select with the (+) or (-) buttons.

5 When completed, return to the MENU2 screen by pressing the (JOG) button.

Setting the 4WS mixing / dual ESC function

To use CH3 of the brake mixing function, 4WS mixing must be set to "INH".

To use CH4 of the dual ESC function and CPS mixing must be set to "INH".

Dial / Trim Setting

The function select switch dial function can control the 3rd/4th channels. Brake rate (RATE) can be controlled with digital dial or digital trim, using the function select dial function.

Programmable Mix "PROG MIX"

(All channels)

This function allows you to apply mixing between the steering, throttle, channel 3 and channel 4.

Additional Functions

-When the steering or throttle channel is the master channel (channel that applies mixing), trim data can be added. (Trim mode)

- The mixing mode selection. (Master mixing mode)

Relating function

steering :EPA, STR EXP, D/R, SPEED, 4WS

throttle :EPA, THR EXP, ATL, ABS, SPEED, BRAKE MIX, NT-BRK, ESC MIX, TH ACCEL

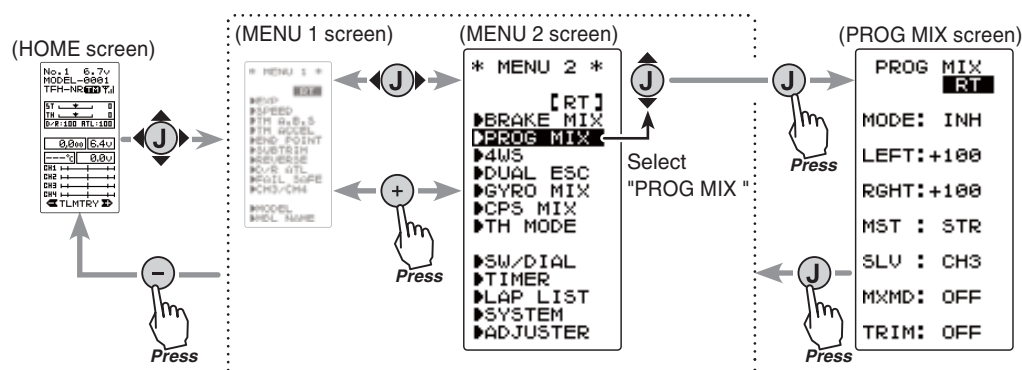
CH3 :EPA,BRAKE MIX,4WS

CH4 :EPA,BRAKE MIX,ESC MIX

Movement of the slave channel side

The movement of the slave channel will be in proportion to the movement of the master channel.

Display "PROG MIX" screen by the following method:



Setup items

MODE	: Function ON/OFF	SLV	: Slave channel
LEFT	: Mixing rate (Left side)	MXMD	: Mix mode
RGHT	: Mixing rate (Right side)	TRIM	: Trim mode
MST	: Master channel		

Program mixing adjustment

(Preparation)

- When "PROG MIX" is turned ON and OFF by switch, set the switch by select switch dial function.

Function SW
PROGMIX

1 (Mixing function ON/OFF)

Select the setting item "MODE" using the (JOG) button up or down operation. Use the (+) or (-) and set the function to the "ON" or "OFF" state.

"INH" : Function OFF

"ON" : Function ON. When the switch is OFF, "OFF" is displayed.

Function ON/OFF (MODE)

INH, ON(OFF)

Select button

- Select with the (+) or (-) buttons.

2 (Master channel)

Select setup item "MST" using the (JOG) button up or down operation, and select the master channel by pressing the (+) or (-) button.

These setup items are different dep-completed on the master channel.
Upper side : LEFT/FWRD/UP
Lower side : RGHT/BRAK/DOWN

PROG MIX
RT
MODE: INH
LEFT: +100
RGHT: +100
MST : STR
SLV : CH3
MXMD: OFF
TRIM: OFF

Program mixing function

Channel selection (MST)

STR, THR, CH3, CH4
Initial value : STR

Select button

- Select with the (+) or (-) buttons.

3 (Slave channel)

Select setup item "SLV" using the (JOG) button up or down operation, and select the slave channel by pressing the (+) or (-) button.

Channel selection (SLV)

STR, THR, CH3, CH4
Initial value : CH3

Select button

- Select with the (+) or (-) buttons.

4 (Left, forward or up side mixing amount adjustment)

Select the setting item "LEFT", "FWRD", or "UP" using the (JOG) button up or down operation. Use the (+) or (-) button and adjust the left, forward, or up side mixing amount.

Mixing amount

-120~0~+120
Initial value: +100

Adjust button

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value "100" by pressing the (+) and (-) buttons simultaneously for about 1 second.

5 (Right, brake or down side mixing amount adjustment)

Select the setting item "RGHT", "BRAK", or "DOWN" using the (JOG) button up or down operation. Use the (+) or (-) button and adjust the right, brake, or down side mixing amount.

*This function is not available in "TH-STK : F10 mode".

Mixing amount

-120~0~+120
Initial value: +100

6 (Mixing mode setup)

Select setup item "MXMD" using the (JOG) button up or down operation, and use the (+) or (-) button to select the mixing mode.

"OFF" : Mixing proportional to master channel operation.

"MIX" : Mixing by master channel another function considered.

Mixing mode (MXD)

OFF, ON
Initial value: OFF

Select button

- Select with the (+) or (-) buttons.

7 (Trim mode setup)

Select setup item "TRIM" using the (JOG) button up or down operation, and use the (+) or (-) button to select the mixing mode.

"OFF" : Trim is removed.

"ON" : Trim is added.

Trim mode (TRIM)

OFF, ON
Initial value: OFF

Select button

- Select with the (+) or (-) buttons.

8 When completed, return to the MENU2 screen by pressing the (JOG) button.

Switch / Dial / Trim Setting

Select the program mixing function ON/OFF switch with the function select switch dial function. Mixing rate (RATE) can be controlled with digital dial or digital trim, using the function select switch dial function.

Function

4WS Mixes "4WS"

(Steering, 3rd channel system)

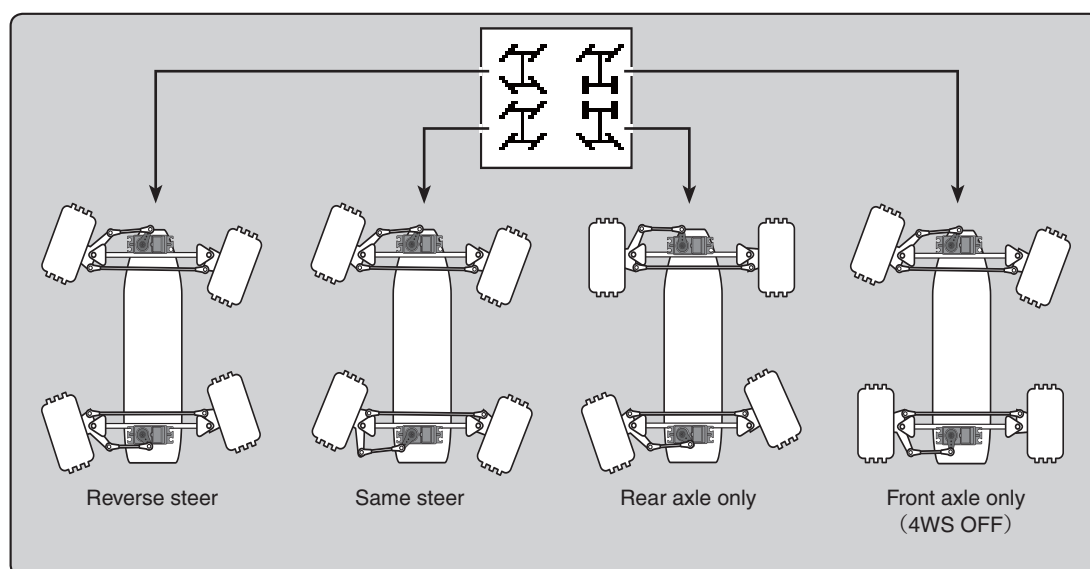
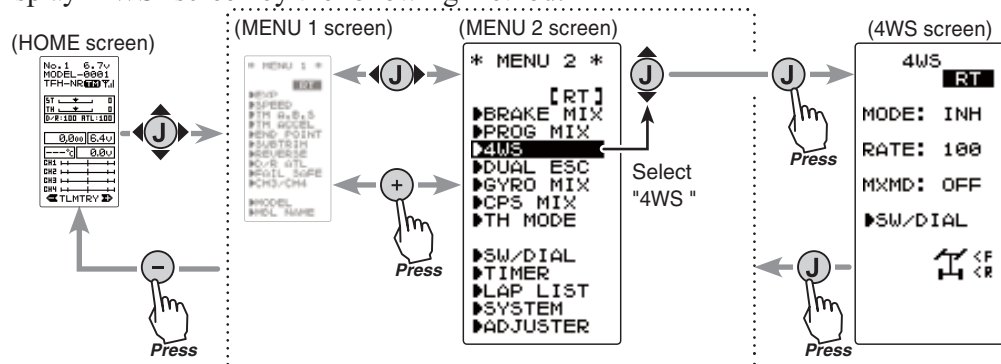
This function can be used with crawlers and other 4WS type vehicles. It is mixing which uses the 1st CH to control the front axle steering and the 3rd CH to control the rear axle steering.

OFF (front axle only), reverse steer, same steer, rear axle only and other 4WS type switching is used by selecting SW1 with the function select switch function. If not selected, <NO SW> is displayed. Therefore, select SW1.

Setting Special mixings

When the 3rd CH was set to ACT at Brake Mixing or when Gyro Mixing is used, 4WS mixing cannot be used.

Display "4WS" screen by the following method:



Function

4WS mixing adjustment

(Preparation)

Since this function is used by switching the type of 4WS with a switch, the switch used by the function select switch dial function is set.

Setup items

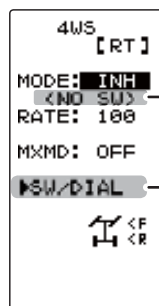
MODE : 4WS Type
RATE : 3ch rate (Rear side)
MXMD : Mix mode

Function SW

4WS

1 (4WS type selection)

Select the setting item "MODE" using the (JOG) button up or down operation. Use the (+) or (-) and set the function to the "ON" or "OFF" state.



< NO SW >
If function's ON/OFF switch is not selected, <NO SW> is displayed.

The function select switch screen can be displayed from this screen.

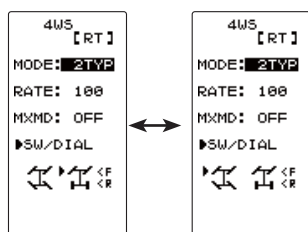
"INH" :Function OFF (front only)
"2TYP" :Front axle only, reverse steer switching
"3TYP" :Front axle only, reverse steer and same steer switching
"4TYP" :Front axle only, reverse steer, same steer, and rear steer only switching

Function ON/OFF (MODE)
OFF, 2TYP, 3TYP, 4TYP

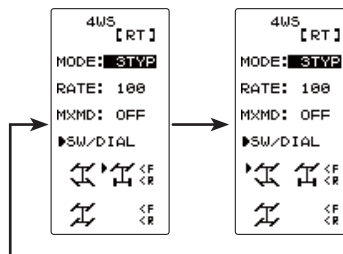
Select button

- Select with the (+) or (-) buttons.

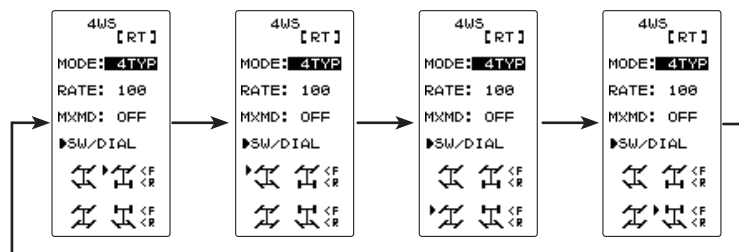
Switched in the order shown in the figure below by set SW



"2TYP" : Front axle only and reverse steer switching



"3TYP" : Front axle only, reverse steer, and same steer switching



"4TYP" : Front axle only, reverse steer, same steer, and rear axle only switching

2 (Rear side travel adjustment)

Select setting item "RATE" using the (JOG) button up or down operation. Adjust the rear axle travel with the (+) or (-) button.

Rear rate (RATE)

0 ~ 100

Initial value:100

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

3 (Mix mode setting)

Select setting item "MXMD" using the (JOG) button up or down operation. Set the mix mode with the (+) or (-) button.

"OFF" :The EXP function of the 1st CH and other settings are not mixed.
"ON" :The EXP function of the 1st CH and other settings are mixed.

Mixing mode (MXMD)

OFF, ON

Initial value: OFF

Select button

- Select with the (+) or (-) buttons.

4 When completed, return to the MENU screen by moving the cursor to the positions other than SW/DIAL and pressing the (JOG) button.

(Throttle system)

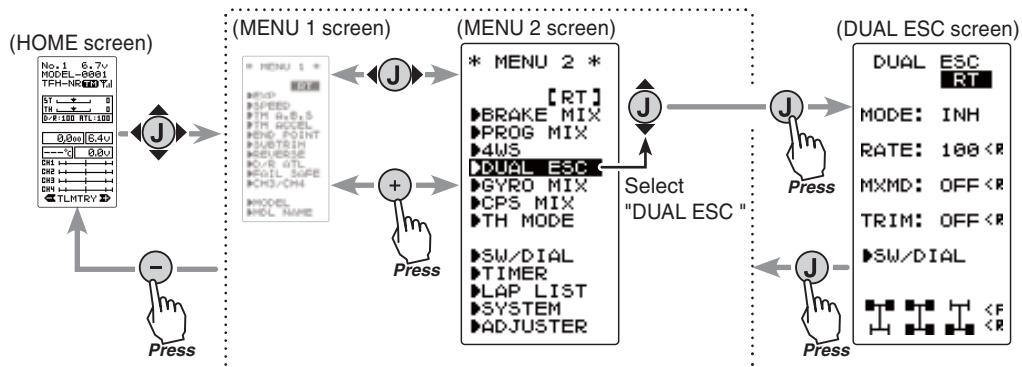
This function is mixing used with crawlers and other 4WD type vehicles and uses the 2nd CH to control the front motor controller and the 4th CH to control the rear motor controller.

Front drive only, rear drive only, or both front and rear drive can be selected using any programmed DT (digital trim) button.

Setting Special mixings

When the 4th CH was set to ACT at Brake Mixing or when CPS Mixing is used, Dual ESC mixing cannot be used.

Display "DUAL ESC" function screen by the following method:..



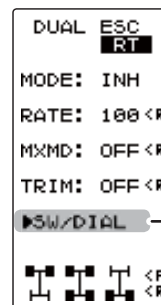
Setup items

MODE : Function ON/OFF
RATE : 4ch rate (Rear side)
MXMD : Mix mode
TRIM : Trim mode

Dual ESC mixing adjustment

(Preparation)

- This function is used to switch between front drive/4WD/rear drive using one of the dials (trim). Set the desired dial (trim) for this function using the SW/DIAL screen.



Function SW
ESC-MD

The function select switch screen can be displayed from this screen.

1 (Dual ESC setting)

Select the setting item "MODE" using the (JOG) button up or down operation. Set the function by pressing the (+) or (-) button.

"INH" : Function OFF
"ACT" : Function ON

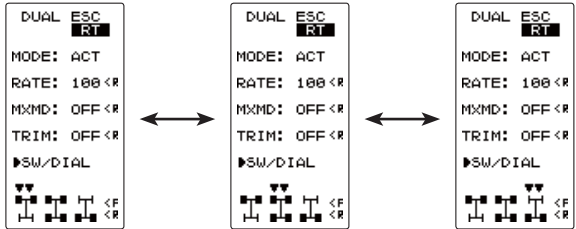
Function ON/OFF (MODE)

INH, ACT

Select button

- Select with the (+) or (-) buttons.

The programmed DT button is used to select the drive type as shown in the figure below.



2 (Rear drive travel adjustment)

Select the setting item "RATE" by the (JOG) button up or down operation. Use when applying a rotation difference to the front and rear wheels by adjusting the rear (CH4) motor controller travel with the (+) or (-) button.

Rear rate (RATE)

0 ~ 120

Initial value:100

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously (approx. 1 sec).

3 (Mix mode setting)

Select the setting item "MXMD" by the (JOG) button up or down operation. Set the mix mode with the (+) or (-) button.

Mixing mode (MXMD)

OFF, ON

Initial value: OFF

Select button

- Select with the (+) or (-) buttons.

"OFF" : CH2 EXP function and other settings are not mixed.

"ON" : CH2 EXP function and other settings are mixed.

4 (Trim mode setting)

Select the setting item "TRIM" by the (JOG) button up or down operation. Set the trim mode with the (+) or (-) button.

Trim mode (TRIM)

OFF, ON

Initial value: OFF

Select button

- Select with the (+) or (-) buttons.

"OFF" : Front drive (CH2) trim data is not included.

"ON" : Front drive (CH2) trim data is included.

5 When completed, return to the MENU screen by moving the cursor to the positions other than SW/DIAL and pressing the (JOG) button.

Dial / Trim Setting

The function select dial function can control the 4th channel's ESC (Rear drive) rate (RATE) with digital dial or digital trim, using the function select switch dial function.

Note:

As this function drives 2 separate motor controllers simultaneously, a mutual load is applied. Use this function carefully so that the motor controllers are not damaged. Futaba will not be responsible for motor controller, motor, and other vehicle trouble due to use of this function.

Function

Gyro Mixing "GYRO MIX"

(Steering system)

This function is a remote gain function which adjusts the sensitivity of the Futaba car rate gyro at the T4GRS side, and is mixing that uses the 3rd CH to adjust the gyro sensitivity.

When using the T4GRS and switching between AVCS and NORMAL modes use SW1 with the function select switch function.

For a description of the car rate gyro mounting method and handling, refer to the rate gyro instruction manual.

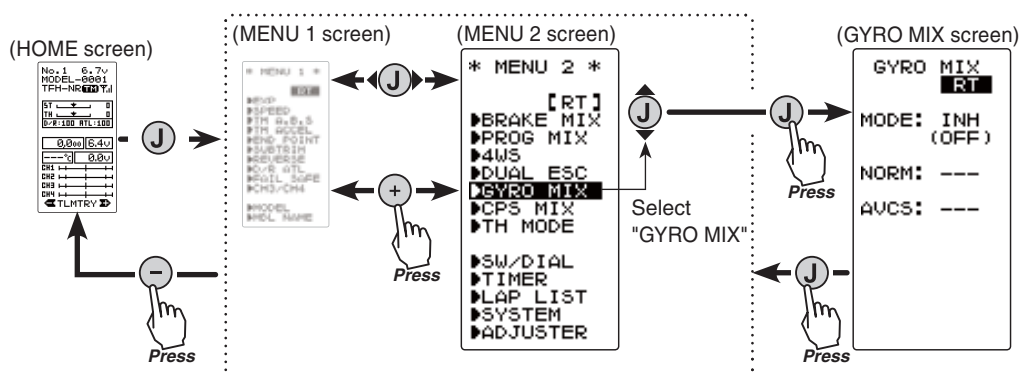
Setting Special mixings

When the 3rd CH was set to ACT at Brake Mixing or when 4WS Mixing is used, Gyro mixing cannot be used.

Dial / Trim Setting

The gain amount can be adjusted by using the function switch dial function.

Display "GYRO MIX" screen by the following method:

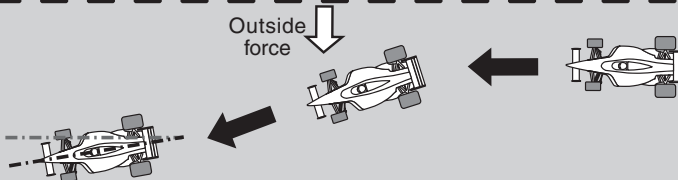


AVCS / NORMAL Modes

The gyro has 2 operating modes: NORMAL mode and AVCS mode. In the AVCS mode, the angle is controlled simultaneously with NORMAL mode rate control (swing speed). The AVCS mode increases straight running stability more than that of the NORMAL mode. Because the feel of operation is different, choose your favorite mode.

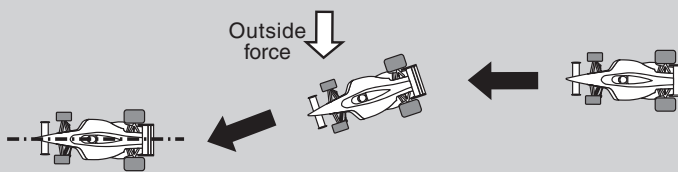
NORMAL

Countersteers against outside force, but cannot correct the skid direction.



AVCS

Corrects the skidding direction and forcefully maintains the heading.



Gyro mixing adjustment

(Preparation)

- Refer to the gyro instruction manual and connect the gyro to the receiver. When using remote gain, connect gyro sensitivity adjustment to the 3rd CH of the receiver.
- When using gyro mixing by switching between the NORM (normal) and AVCS modes, use the function select switch dial function to set the switch to be used.

Setup items

MODE : Gyro mode
NORM : Normal mode gain
AVCS : AVCS mode gain

Function SW

GYRO
SW type
ALT

1 (Gyro mixing setting)

Select the setting item "MODE" using the (JOG) button up or down operation. Set the function by pressing the (+) or (-) button.

"INH" : Function OFF
"NORM" : NORMAL mode gain
"AVCS" : AVCS mode gain
"SEL" : Switching Normal mode and AVCS mode
(Displayed <NO SW> when the Gyro Mode SW is not used.)

Function selection (MODE)

INH, NORM, AVCS, SEL

Select button

- Select with the (+) or (-) buttons.

```
GYRO MIX [RT]
MODE: NORM
( ON )
NORM: 30
AVCS: ---
```

"NORM" mode

```
GYRO MIX [RT]
MODE: AVCS
( ON )
NORM: ---
AVCS: 30
```

"AVCS" mode

```
GYRO MIX [RT]
MODE: SEL
( ON )
NORM: 20
AVCS: 40
SW/DIAL
```

"SELE" mode

Shows the gyro mode select switch mode.

Displayed when the Gyro Mode SW is not used.

```
GYRO MIX [RT]
<NO SW>
MODE: SEL
(OFF)
NORM: 30
AVCS: 30
SW/DIAL
```

The function select switch screen can be displayed from this screen.

Function

2 (NORMAL gain adjustment)

Select the setting item "NORM" using the (JOG) button up or down operation. Adjust the NORMAL gain with the (+) or (-) button.

(AVCS gain adjustment)

Select the setting item "AVCS" using the (JOG) button up or down operation. Adjust the AVCS gain with the (+) or (-) button.

NORMAL / AVCS gain (NORM / AVCS)

0 ~ 120
Initial value: 30

Adjustment buttons

- Use the (+) and (-) buttons to make adjustments.
- Return to the initial value by pressing the (+) and (-) buttons simultaneously for about 1 second.

3 When completed, return to the MENU screen by moving the cursor to the positions other than SW/DIAL and pressing the (JOG) button.