

Safe Handling of R/C System and Precautions

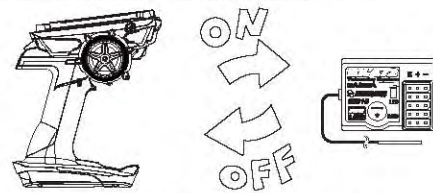
To use your purchased R/C System properly and safely, please read this instruction carefully and make sure to follow the precautions. Improper use of the product or negligence of following safety precautions can cause trouble to others or harm to the user.

■ For safety, please make sure to follow each of the precautions below.

! Warning Precautions for Installation and Operation

- When turning the power switch of R/C System on, please turn on in order of ① Transmitter → ② Receiver. And when turning the power switch off, please do so in order of ① Receiver → ② Transmitter.

☆ If you reverse the order of the switches, it causes sudden high rotation of the engine and the motor and it's extremely dangerous.



- Please use electrical noise countermeasure on the body of your car.

☆ If metals rub against each other, it causes electrical noise which may lead to abnormal performance. Please be sure that all screws and nuts are not loose.

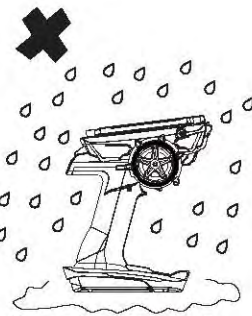
☆ Nitro or gas engine and electric motor can cause noise also. Please use a noise countermeasure such as a plug with resistor or noise killer condenser.

- Please make sure to run a performance check (signal reception test) of R/C System before operation. When it moves abnormally or it doesn't move, please don't operate. Even if the test result on a desk is normal, please be cautious when operating for the first time especially, since the radio wave arrival distance varies depending on the installation method of the receiver, how the antenna is set, the direction of the transmitter antenna is facing and geography.

- Never operate on a rainy day.

☆ The interior of the transmitter is built with sensitive electronic parts. If water runs on the surface of the case and enters inside, it can cause abnormal performance or malfunction and it can be dangerous.

☆ If the receiver or a servo sinks in the water, immediately collect it and dry the interior. When the interior is dry, please submit it to the Sanwa Service for inspection even if it performs normally.



- The receiver is a precise instrument. Please do not add a strong impact or vibration.

☆ Use a thick sponge to prevent vibrations.

- Install the receiver as far as possible from the speed controller, motor and the battery.

- When installing the receiver on a metallic chassis or a carbon chassis, use three layers of double adhesive tape pieces to keep the receiver from touching the chassis.

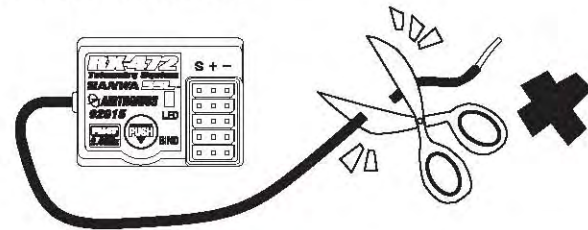
- When there is a radio disturbance, change the installation location of the receiver or change from a vertical placement to a horizontal placement or vice versa.

- Don't place a motor cord or a battery cord close to the receiver since it can cause abnormal performance.

- Keep the antenna of the receiver out as much as possible. And keep it straight and stretched. Don't cut the extra length of the line or bend it.

☆ It's dangerous when the antenna is short since the range of travelling becomes narrow.

☆ Never cut the antenna.



- Don't place the antenna close to a motor cord or a battery cord.

- Using a conductive piano wire on a metallic chassis or carbon chassis can cause abnormal performance from electrical noise. Don't place a piano wire close to the chassis.

! Warning Precaution For Operating RC Car

When operating an RC car, please make sure to follow the following notes and avoid giving trouble to others.

- Maintain the body of the car (boat) in a perfect condition and check the safety.

- Do not operate an RC car in a crowd or on a public road.

- Make sure to disconnect the connector of the power battery and remove the power battery from the car after operation.

- When operating simultaneously with other RC users, make sure to have a control staff and follow the instruction of the control staff.

- Try not to interfere with other people's operation.

- Be sure to apply for a radio control insurance. For application to apply a radio control insurance, inquire a radio control operator registration agency.

- Be sure to install a "muffler (sound absorber)" with a silencing effect on an engine car.

- Don't start engine early in the morning.

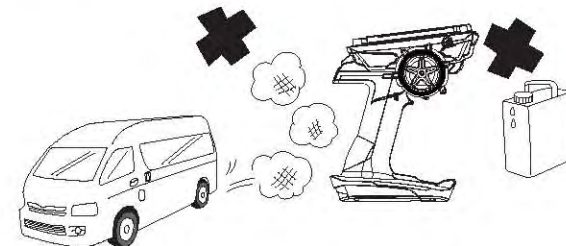
- Please make sure to clean the location used for operation before you leave.

! Note About Operation

- Don't use this RC system for other than model use.

! Note Daily Maintenance

- When exhaust gas or fuel of the engine is on the product, wipe with a soft dry cloth. When the product is heavily stained, soak a soft clean cloth with water or neutral detergent, squeeze tightly and wipe with it. Don't use thinner, benzene, alcohol, motor cleaner or brake cleaner since they can damage the surface finishing and alter the quality.



! Note About Handling the Transmitter

- Don't hit, drop or subject to strong impact. Touching the transmitter, receiver, servos or FET speed controller with a hand stained with tire traction agent can cause malfunction or deforming the case.

! Note Storage Location

- Don't store the product in the following locations:

☆ Extremely hot or cold place.

☆ Place exposed to the direct sunlight for long hours.

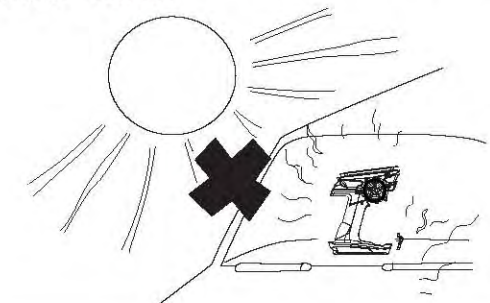
☆ Especially if the product is left in a closed car with a direct sunlight hitting, the temperature inside the car can rise above 80°C depending on the season. It can cause deforming or malfunction.

☆ Place with high humidity and poor ventilation

☆ Place with vibrations

☆ Place with dust, steam or heat

☆ Place that is blown with engine exhaust gas or a place close to a fuel can



What each ! Warning mark indicate ! Note

Precautions you must follow to avoid accidents or injury

Precautions you must follow to avoid malfunctions

Safe Handling of R/C System and Precautions



Note

Precautions to Use the Product Safely

● 2.4 GHz frequency band is not only used for radio control. This frequency band is shared with ISM (Industry, Science and Medical) band. It can be affected by microwave ovens, wireless LAN, digital cordless telephones, audio equipment, Bluetooth of game machines or cell phones and short-range communication such as VICS. Also, be cautious about being affected by amateur radio and premises radio stations for moving body identification since this frequency band is used for them as well. When a harmful radio frequency interference is done to an existing radio station, stop the transmission of the radio frequency immediately and take a measure to avoid the interference.

● For RC circuit, minimize the use of equipment that can affect 2.4 GHz systems and make sure to check the safety beforehand. Also, follow the instruction of the facility manager.

● When operating the models behind a building or a steel tower, blocking the direction of radio wave transmission can cause reduction of operation response or loss of control. Always operate within the range you can visually check.

● Don't grab the transmitter antenna. Doing so can be dangerous since it can weaken the radio signal output and narrow the range of operation.

● Don't attach any metal parts around the antenna of the transmitter.

● If you have the transmitter's antenna extremely close to a servo or speed controller other than the receiver, it can cause malfunction but it is an influence of a strong high frequency output and it is not abnormal.

● The receiver is a precise instrument. Don't subject it to strong impact or vibrations. Use a thick sponge to prevent vibrations.

● Keep the antenna wire of the receiver out as much as possible. And keep it straight and stretched. Don't cut the extra length of the antenna line or bend it.

● Don't place the antenna wire of the receiver close to a electrical noise source like a motor wire or a battery wire.

● When installing the receiver on a metallic chassis or a carbon chassis, use layers of double adhesive tape pieces to keep the receiver from touching the chassis as much as possible.

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Structure and the Standard of the Set

Structure and the Standard of the Set

Structure of the Set

	RX-482 PC (Primary Component)
Transmitter	TX-471
Receiver	RX-482
Servos	—
Accessories	Strap Hook x 1 Trigger Angle Spacer x 1 Brake Trigger +1/+2 x each 1 Grip Pad S size x 1 Receiver Dust Cover x 1 Switch Harness x 1 Instruction Manual x1

•Please check what's included before your use.

Set Specification

<A>Transmitter	
Product No.	TX-471
Output Display	Analog/Digital display (Power Source Voltage Display)
Modulation Method	2.4GHz Spectrum Spread System
Power Source	Size AAA batteries x 3 (Corresponding voltage: DC 2.7 ~ 5.0 V)
Weight	371 g

*Be careful with the input voltage. If voltage above allowable voltage is inputted, the transmitter will be damaged.

Receiver	
Item	RX-482
Modulation Method	2.4GHz Spectrum Spread System
Size	18.2x24.4x27.1mm
Power Source	DC3.7~7.4V
Weight	7.1 g

Before using

Structure and the Standard of the Set

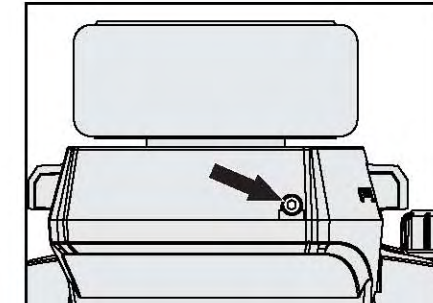
Adjusting the steering and throttle tension

With MT-44, the user can easily adjust the tension of the steering/throttle trigger to match operation of the steering/throttle to the user's preference.

Adjusting the steering tension

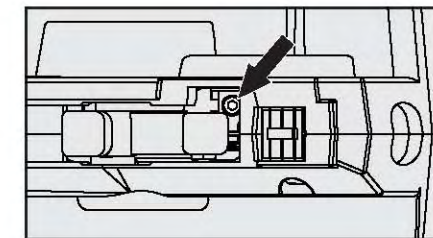
By inserting a hexagon wrench driver (1.5mm) to the place where the arrow is pointing at in the illustration on the right and turning, you can adjust the tension of the steering spring.

*The spring tension is the softest at the time when the product is shipped out from the factory. As you tighten with a hexagon wrench driver (1.5mm), the spring tension will be hardened.



Adjusting TH trigger tension

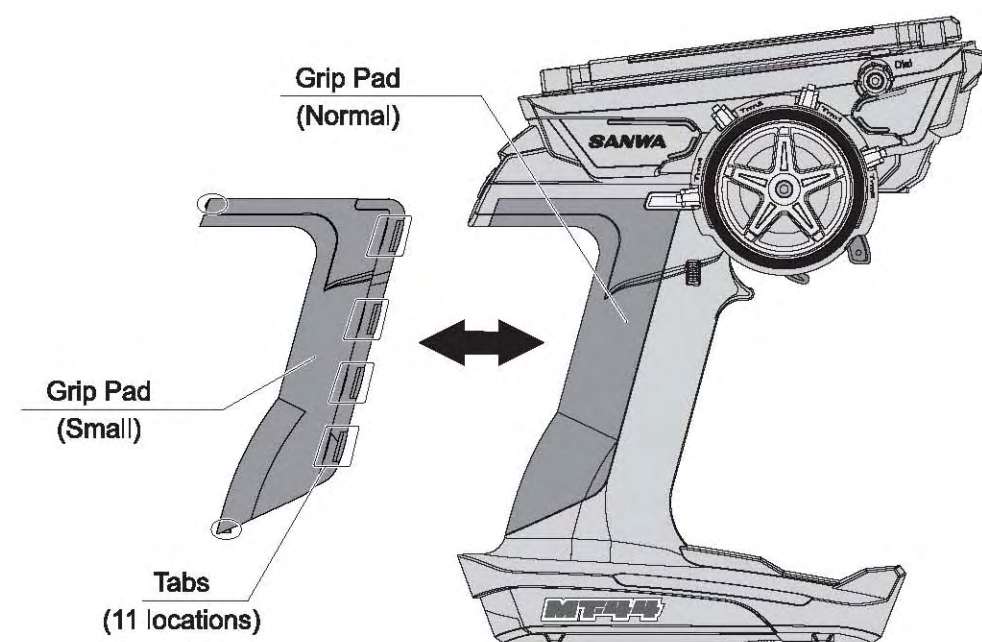
By inserting a hexagon wrench driver (1.5mm) to the place where the arrow is pointing at in the illustration on the right and turning, you can adjust the tension of the throttle spring.



Adjusting the grip pad

The user can choose a grip pad from two types of normal/small to suit the size of the user's hand. (The normal size is installed at the factory.)

Do not pull forcefully because it's locked to the grip of the receiver with tabs of the grip pad (at 11 locations).



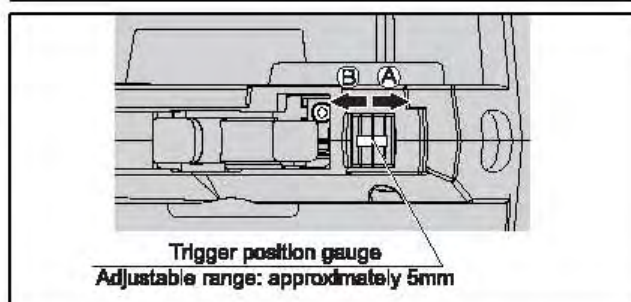
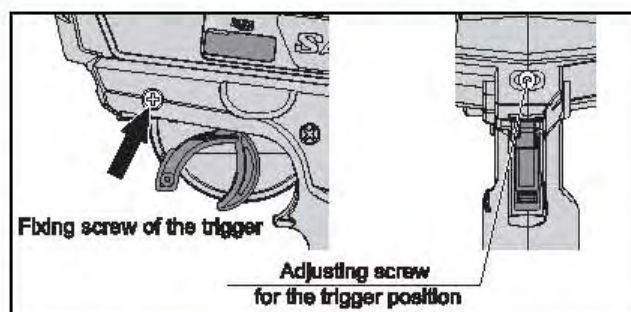
Before using

Before using

Adjusting the full adjustable trigger

Adjusting the trigger position

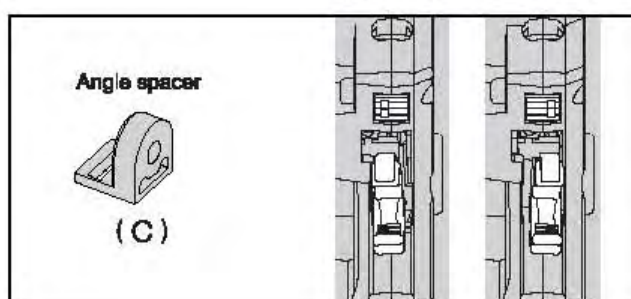
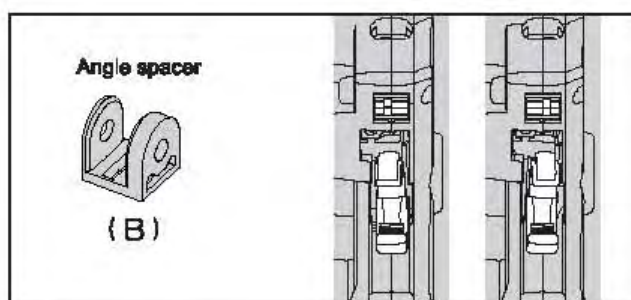
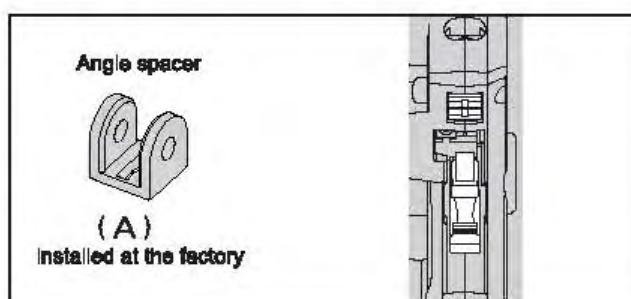
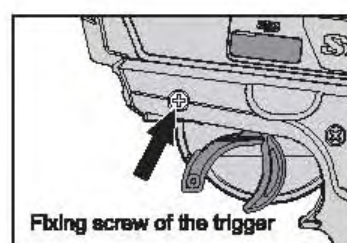
Loosen the fixing screws of the trigger on the back of the transmitter. Then, adjust the adjusting screw of the trigger position on the back of the transmitter to set the trigger at the position of your preference. When you turn the adjusting screw of the trigger position clockwise, the trigger position gauge moves to the direction A. By turning it counter clockwise, the trigger position gauge moves to the direction B. *The range of the trigger movement is 5mm. If you turn the screw forcefully beyond the range, it can cause malfunction. Once you set the trigger position, tighten the fixing screw and adjusting the trigger is done. *Be careful with the direction of turning the screw because the trigger position is set at the furthest point of the A side at the factory.



Adjusting the trigger angle

By switching the angle spacer A/B/C, it is possible to adjust the angle of the throttle trigger to five steps.

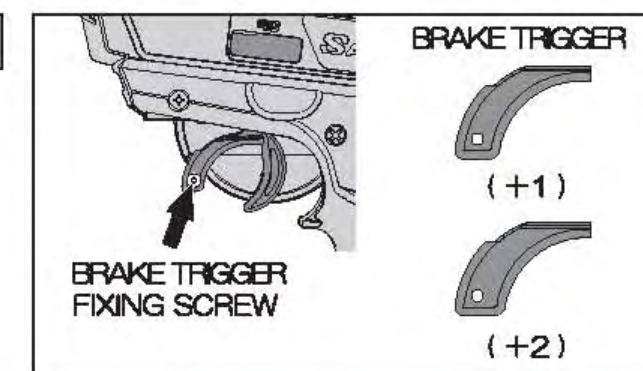
- 1) Remove the fixing screw of the trigger on the back of the transmitter.
- 2) Adjust the angle by changing the direction of the angle spacer to have an angle easy to operate.
- 3) Once the trigger angle is set, fix the fixing screw of the trigger on the back of the transmitter.



Adjustment of Brake Trigger

You can adjust trigger position according to your fingers by replacing brake trigger included. Standard Size, +1 Size, and +2 Size is included.

- 1) Remove the brake trigger fixing screw.
- 2) Select Brake Trigger according to your fingers.
- 3) Fix the brake trigger by the screw.



Before using

About the power source

How to place the transmitter batteries

- ① Open the battery compartment cover by sliding the cover to the direction of the arrow while pressing it lightly.
- ② Place 3 size AAA batteries. Make sure to observe correct polarities.
- ③ Align the convex part of the battery compartment cover and the groove of the battery compartment, slide the cover to the direction of the arrow and close tightly.

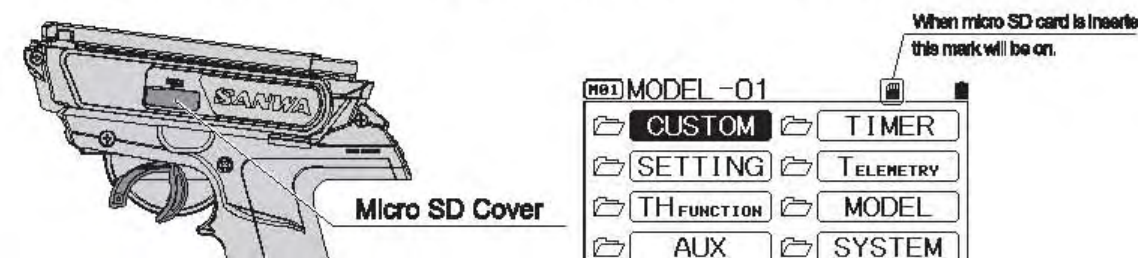
About the optional battery

- When using an optional battery, you can access to the charging port on the side of the battery from the connector cover.



About Micro SD Card

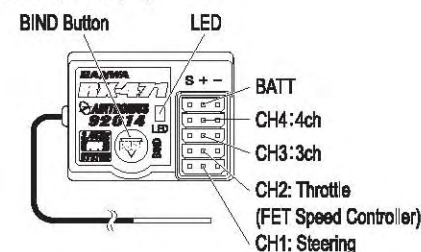
- MT-44 is compatible to Micro SD Cards. By using a Micro SD Card, it is possible to save model data and telemetry data. Also, it is possible to do firmware update using a Micro SD Card when a firmware update of MT-44 is released.
- After inserting micro SD card into MT-44, the file named "MT-44" is made and the folder named "MODEL" is made. The model data is saved in the folder. If the log data is exported, the folder named "Log" is made and the data named "csv" is saved in the folder.



About connection and installation of the receiver

About the receiver

●RX-471(Example)

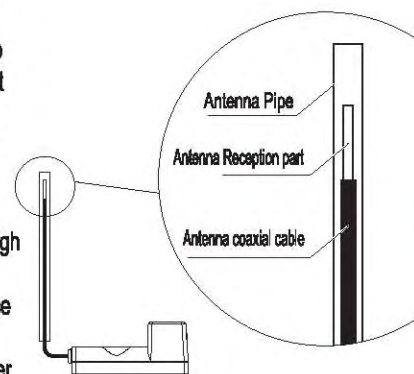


Condition of the Receiver LED

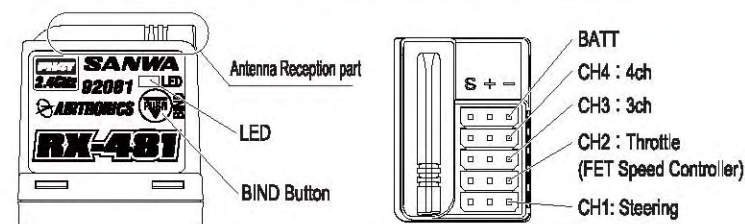
When receiving a signal	Blue light is on
When it cannot receive a signal	—
while setting up BIND	Blue light flashes. Blue light flashes rapidly.
Battery Fail Safe Operation is launched	Blue and Red lights are on.
After Battery Fail Safe Operation is launched, it becomes unable to receive a signal.	Red light is on.

About handling the Antenna

- Reception distance may vary depending on the location where the receiver and the antenna are installed.
- To protect the reception part (3 cm from the top) of the antenna, make sure to place the antenna in the antenna pipe as shown in the right illustration so that the top of the antenna is not exposed outside of the antenna pipe.
- Don't bend the antenna reception part or the antenna coaxial cable because breaking can occur inside.
- Don't pull the coaxial cable forcefully. It may damage the receiver interior.
- Install the antenna on an RC car so that the antenna reception part is in as high place as possible.
- Don't cut or bind the antenna reception part or the antenna coaxial cable since the receiver sensitivity might decrease.
- Keep the receiver antenna away from the motor and the FET Speed Controller (including cables) and raise it straight.



About built-in antenna receiver

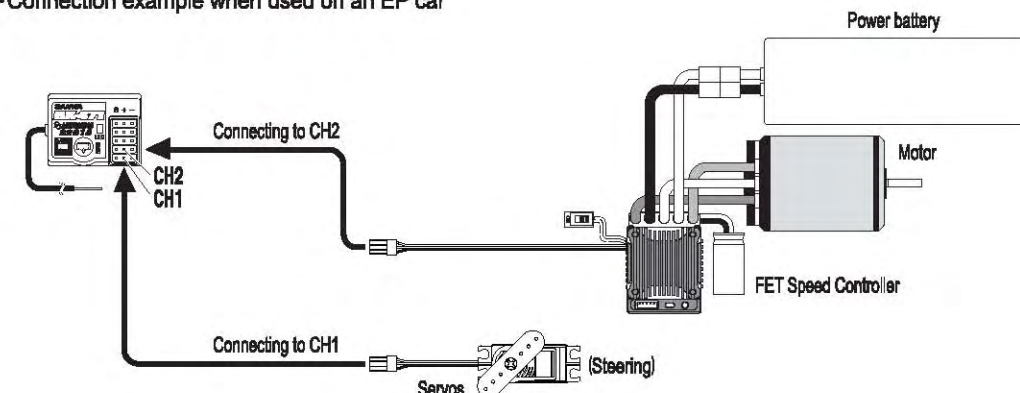


- Reception distance may vary depending on the location where the Antenn Reception part is installed.
- Install the antenna so that the antenna reception part in the above illustration is as high as possible.

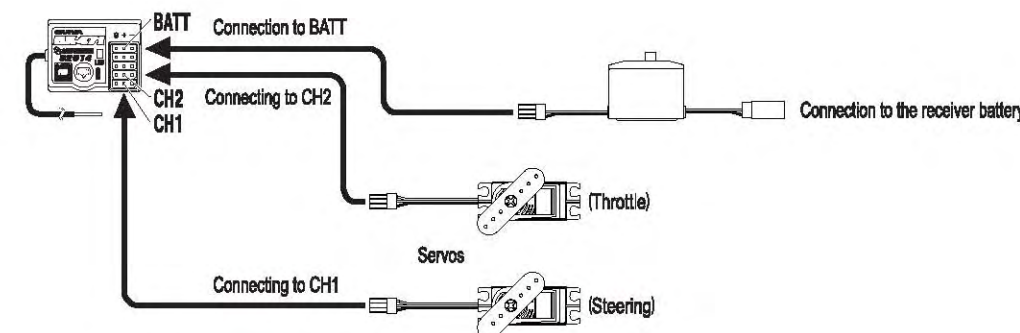
About connection setup

- Connect the receiver and servos as shown in the illustration below.

•Connection example when used on an EP car



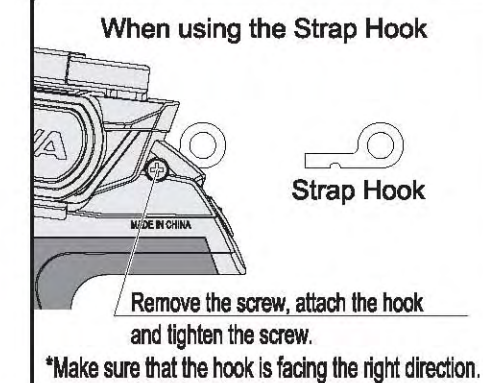
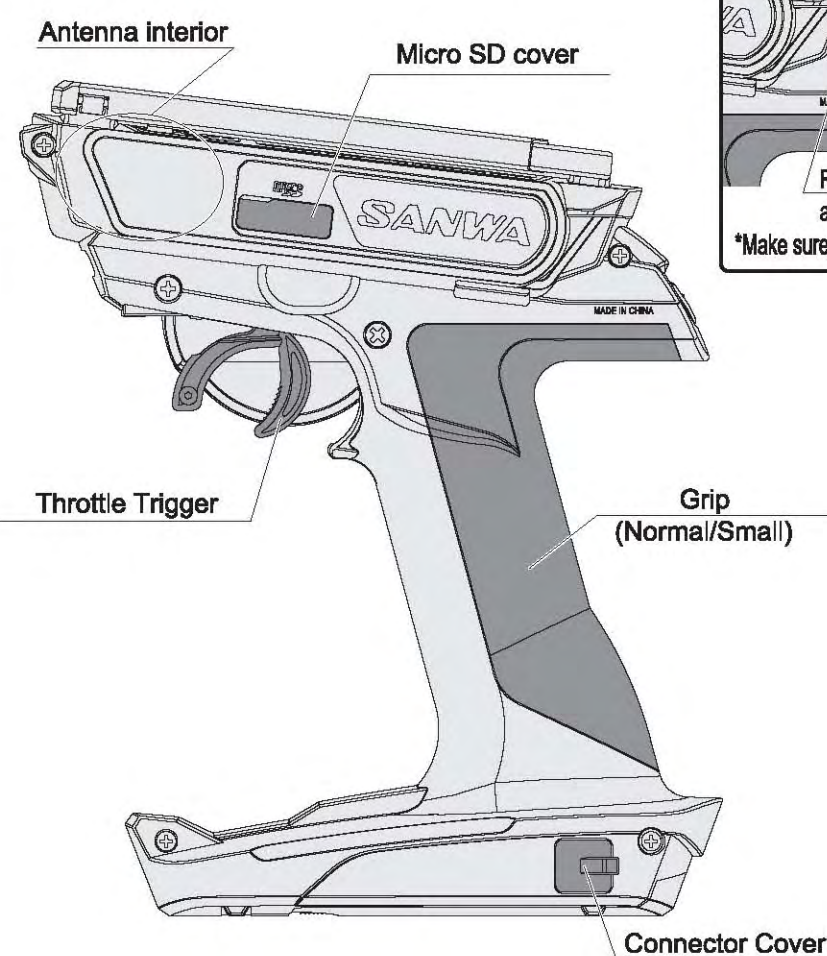
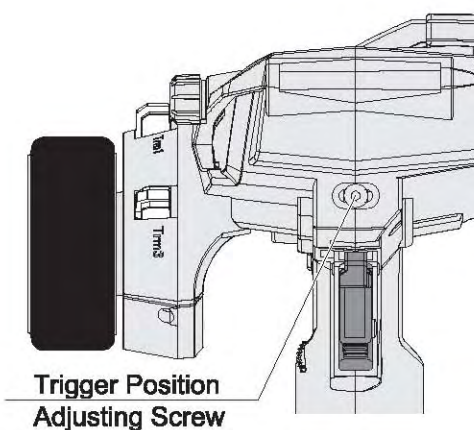
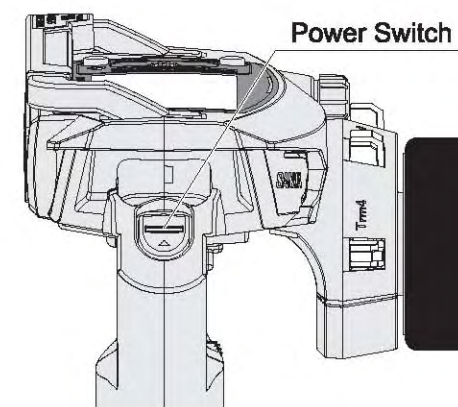
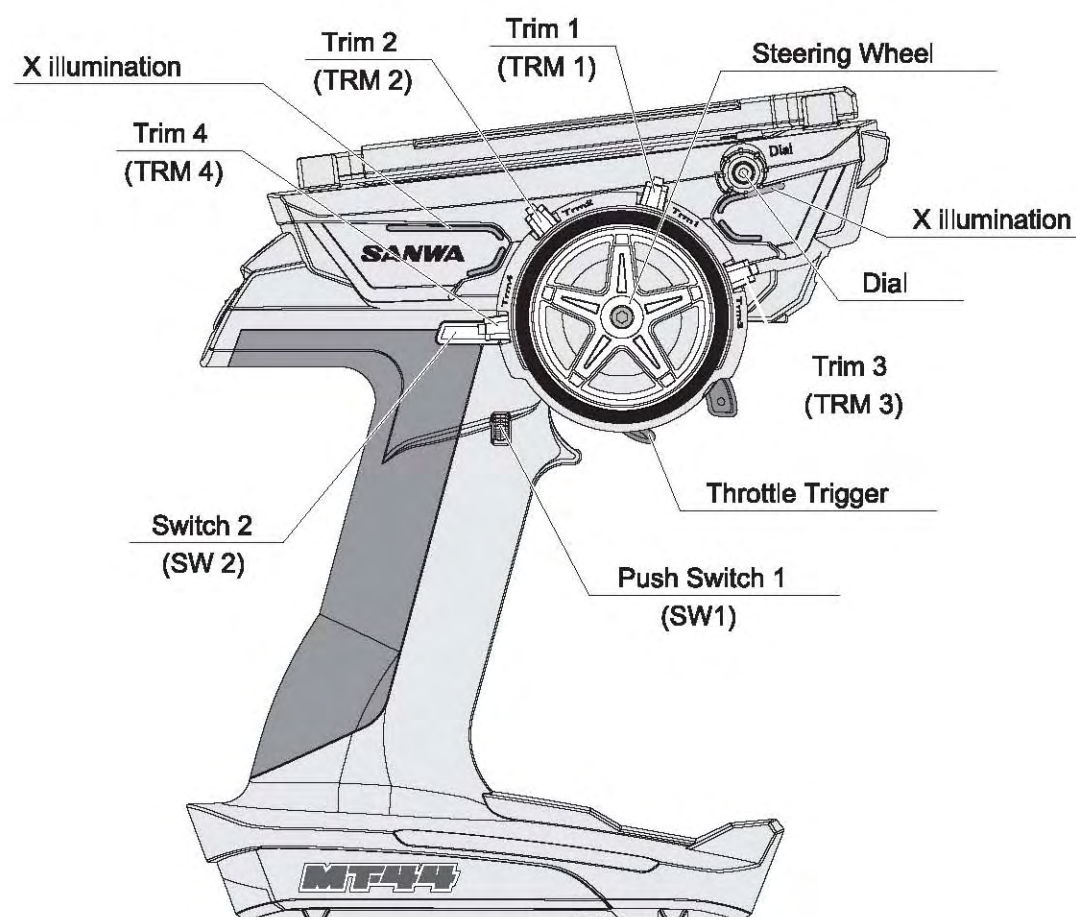
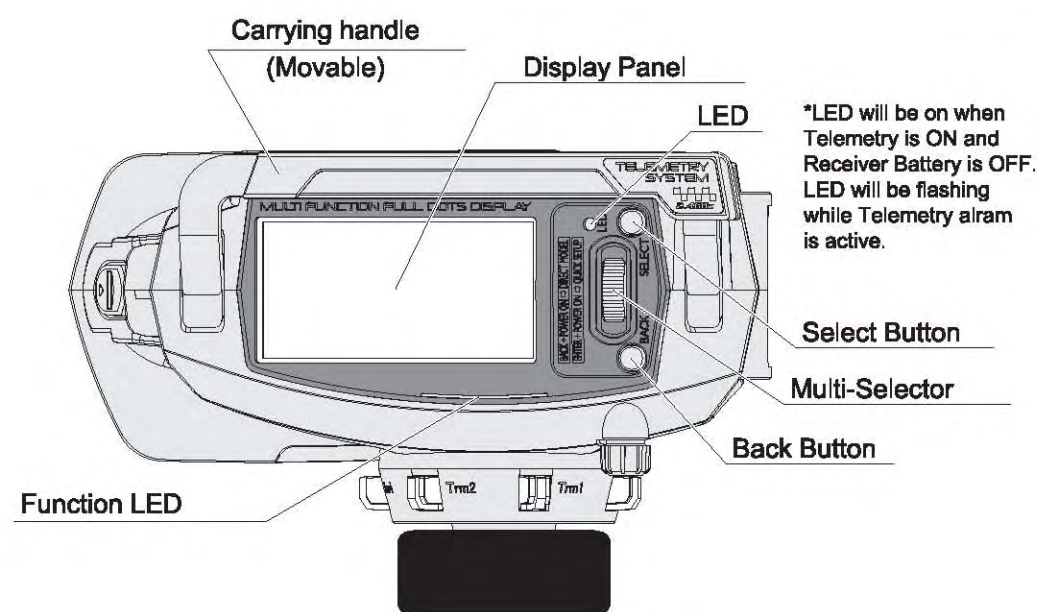
• Connection example when used on a GP (engine) car



! Note

- If the connector is disconnected due to a vibration during operation, it can cause runaway. Connect the connector of the receiver, servos and switches securely.
- Because the receiver is susceptible to vibration, impact and water, make sure to take measures for vibration-proof and waterproof. Negligence of taking these measures can cause runaway.
- When installing the receiver, keep the receiver away from a carbon chassis and metallic chassis.
- If metal parts installed on an RC car touch each other, it can cause noise that affects reception performance and it can cause runaway.
- Make sure to install a noise killer condenser on the brush motor for electric RC cars. Without a noise killer condenser, it can cause noise and runaway.
- For R/C System parts such as the transmitter, receiver, servos, FET Speed Controller and transmitter battery, use genuine SANWA products.
- ※ When combining products other than genuine SANWA products, modifying, adjusting or exchanging parts is done at a place other than SANWA, we do not take any responsibility.

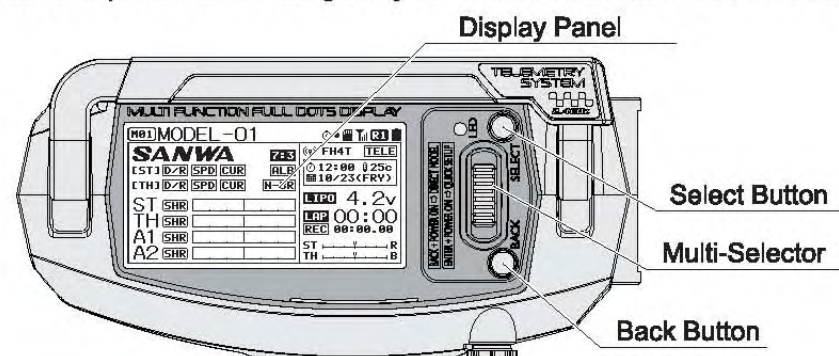
Names of each part of the transmitter



Usage of each feature

About Key operation

- The user can set up and make a calling easily with the Multi-Selector and Select button/Back button.



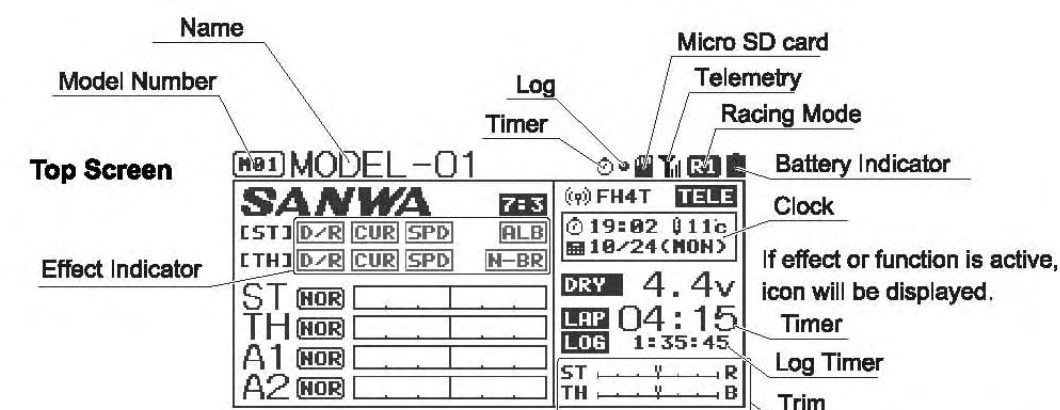
Key operation	Names	Performance
	Enter	● Moves to the setup screen from the top screen. ● Selects a feature and item to set. ● By long pressing the button, the setting goes back to default.
	Multi-Selector Up	● The cursor moves upward. ● The set value increases.
	Multi-Selector Down	● Moves the cursor downward. ● The set value decreases.
	Select	● Selects a channel or feature.
	Back/Cancel	● Goes back to one step before. ● Cancels the setting.

About Power On Alarm

- MT-44 displays "No Operation" with a warning alarm after 10 minutes of no operation of the steering wheel, throttle trigger and switches. Alarm is turned off, if the steering wheel, throttle trigger or a switch is operated. In case you do not use them, turn the power switch off.

About the Display Panel

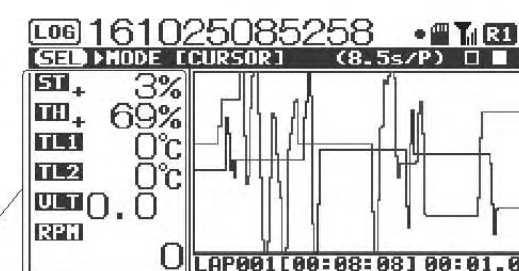
- Each feature of MT-44 allows you to directly select a feature with the Multi-Selector.
 - You can set up each channel feature separately.
 - As you turn the power switch on, the top screen launches after the boost screen is displayed(when the boot setting is on).
- When changing each setting, select the menu by operating the Multi-Selector.



As you move up/down with the Multi-Selector, it becomes a toggle between Top Screen/Telemetry Screen.

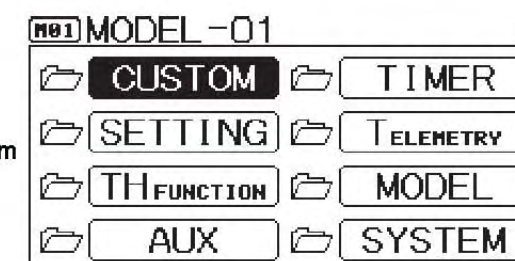
Telemetry Screen

Each Telemetry data



By connecting each sensor to RX461 or RX462, using combination of RX461/RX462 and SUPER VORTEX or SV-PLUS series, and turning the Telemetry feature on, data is sent to the transmitter and it is displayed on the Telemetry Screen.

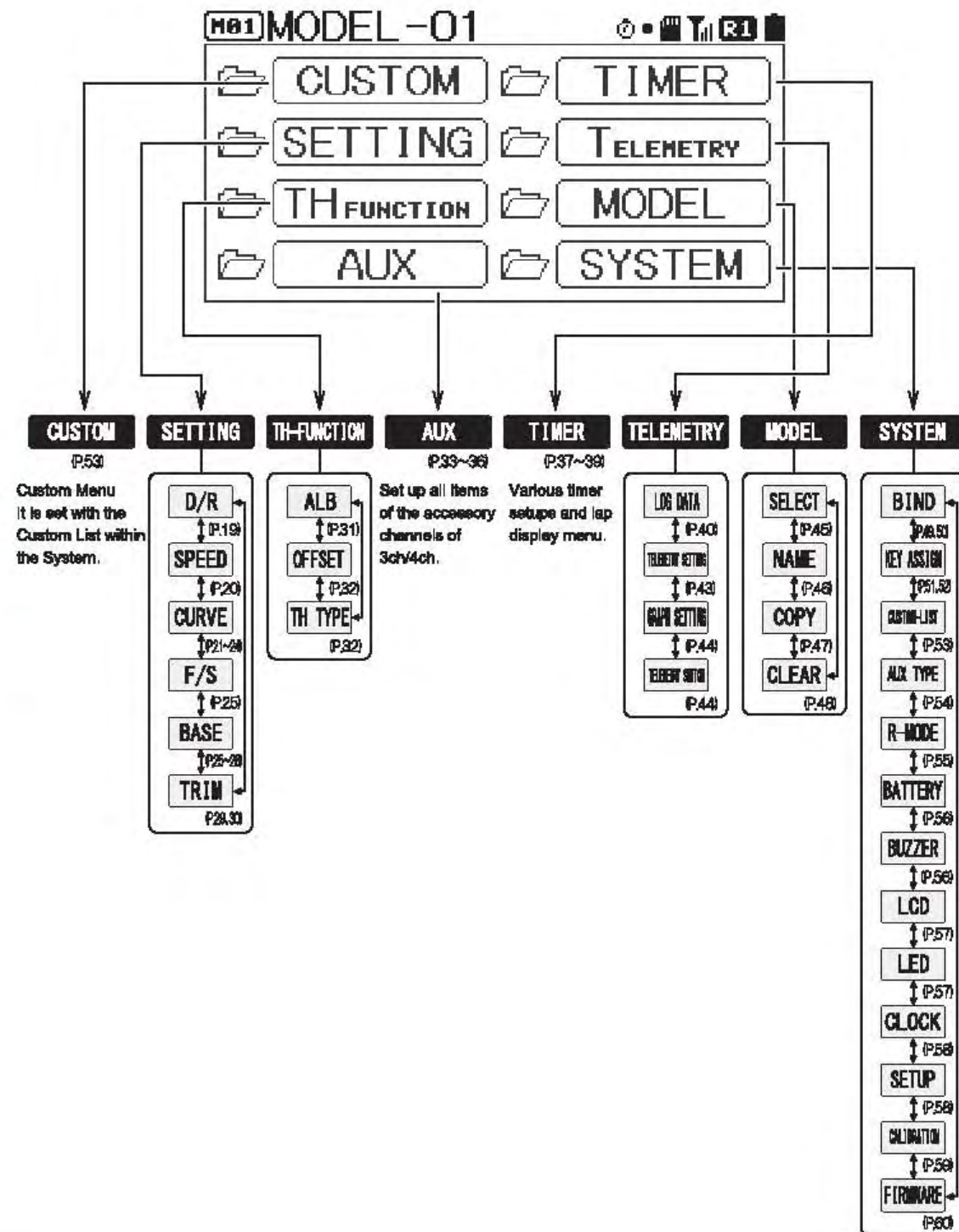
Menu Window
•Select the Menu (Screen example)
•Enter operation from the Top Screen



Usage of each feature

About the Menu structure

- The user can set up features and do model memory call easily by using each key.
- The Menu consists of Setting, AUX, Model, Timer, Telemetry and System Menu, and related features are included in each menu.



Usage of each feature

About Short Cut Menu

MT-44 has a feature of Short Cut Menu that is launched as the user performs key operation when operating the power switch.

If you turn the power switch on while pressing the Back Button, it becomes the Direct Model Select and if you turn the power switch on while doing Enter operation, the Quick Setup feature launches.

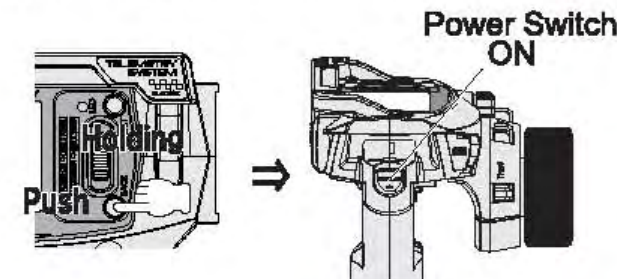
Direct Model Select is a feature for quickly selecting a model to run and Quick Setup is a feature for various setup with easy operation when setting up a new RC car.

Quick Setup feature is set in the following order using the Enter operation after launching. Selecting Model → Selecting Type → Initializing Model → Selecting RF Modes → Selecting Response Mode → BIND → Setting Base

Direct Model Select < DIRECT MODE >

Direct Model Select

- 1) Turn the power switch on while pressing the Back button.

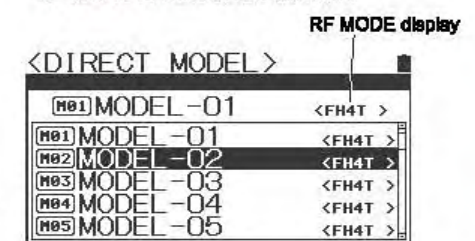


- 2) Selecting Model
Select a Model you wish to call with Multi-Selector.

Selection range: M01 ~ M20

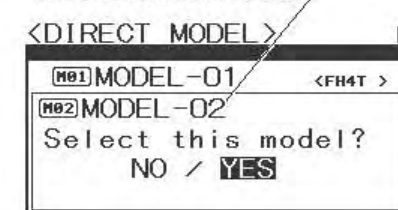
- 3) Move the cursor to the Model you wish to call and do Enter operation. A message is displayed on the screen. Select a Model following the display.

① MODEL Selection Screen

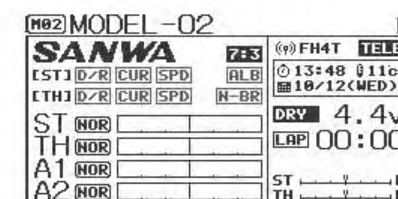


ENTER ↓ ↑ BACK

② Confirmation Screen



NO → Back to ①
YES → Change Model and move to the top.



Usage of each feature

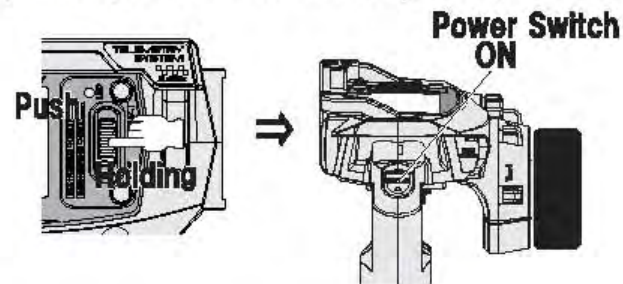
Usage of each feature

About Short Cut Menu

Quick Setup <QUICK SETUP WIZARD>

• Quick Setup

- 1) Turn the power switch on while doing Enter operation



- 2) Quick Setup screen is displayed.

As you do Enter operation, Quick Setup Wizard is launched.

- 3) When the screen is changed to Model selection screen, select a Model to set up by using Multi-Selector. When a Model to set is selected, set with Enter operation.

- 4) When the screen is changed to Car Type selection screen, select a Car Type using Multi-Selector. When a Car Type is selected, set with Enter operation.

Setting up Type

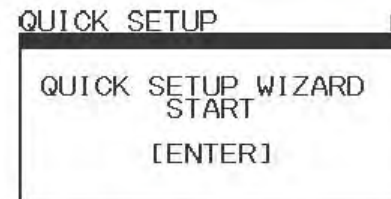
- Setting range: EP CAR STANDARD
EP CAR (LED UNIT)
EP CAR (SVZ)
EP CAR (SVD)
GP CAR STANDARD
1/5 GP CAR DUAL BR1
1/5 GP CAR DUAL BR2
CRAWLER 4WS/MOA
- Default: EP CAR STANDARD

*Channel operation of each type will be as follows.

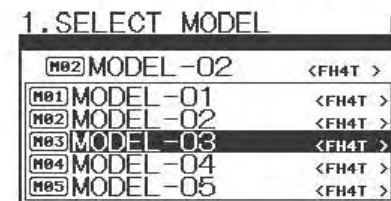
Channel operation specifications for each Type

TYPE	EP CAR STANDARD	EP CAR (LED UNIT)	EP CAR (SVZ)	EP CAR (SVD)	GP CAR STANDARD	1/5 GP CAR DUAL BR1	1/5 GP CAR DUAL BR2	CRAWLER 4WS/MOA
CH1	STEERING	STEERING	STEERING	STEERING	STEERING	STEERING 1	STEERING	STEERING F
CH2	ESC	ESC	ESC	ESC	THROTTLE BRAKE	THROTTLE BRAKE	THROTTLE	ESC F
CH3	AUX1	LED-ST	CODE1	CODE1	AUX1	STEERING 2	BRAKE R	STEERING R
CH4	AUX2	LED-TH	CODE2	CODE2	AUX2	BRAKE F	BRAKE F	ESC R

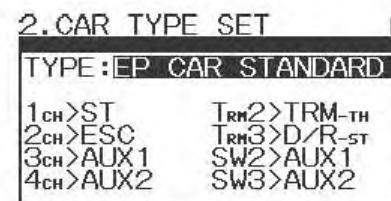
*Select a type to be used according to an RC.



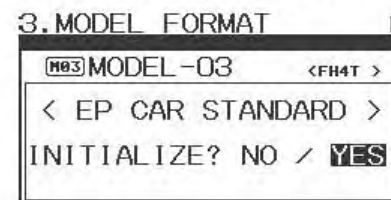
ENTER ↓ ↑ BACK



ENTER ↓ ↑ BACK



ENTER ↓ ↑ BACK



ENTER ↓ ↑ BACK

- 5) When deciding the car type using Enter, the screen changes to Initialization (Model Initialization) screen. Do Initialization following the message.

- 6) When initializing (Initializing Model) is completed, the screen changes to RF Mode Selection Screen. Set RF Mode by using Up key/Down key and finalize with the Enter key for the receiver to be used.

- Setting range: FH4T/FH3
- Default: FH4T

• Compatible Receivers:

FH4T: RX-482, RX-481, RX-472, RX-471,
RX-47T, RX-462, RX-461,
SV-Plus Series
FH3: RX-451R, RX-451, RX-381, RX-380

- 7) Once RF Mode for the receiver is determined, the screen changes to the Response Mode screen. Set Response Mode according to the servos and the equipment to be used. Set with Up key/Down key and finalize with the Enter key.

- Setting range: NOR (Normal/Analog Servos)
SHR (High Response/Digital Servos)
SSR (Super Response/SG Servos)

- Default: NOR (Normal/Analog Servos)

- 8) When Response Mode setting is completed, the screen changes to BIND Set up Screen. Follow the screen message and start Binding.

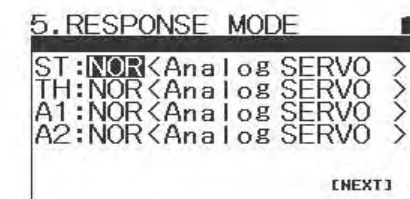
- 9) When Binding (BIND) is done, the screen changes to the Base Set Up screen. Complete setting for each channel (refer to P. 25-28).

- 10) When Base setting is done, Set Up Wizard will end. If you press the Enter button, the screen changes to the Top screen.

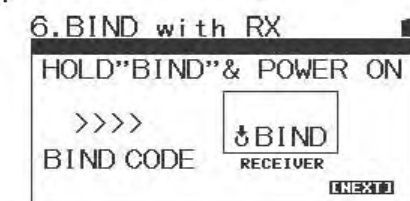
ENTER ↓ ↑ BACK



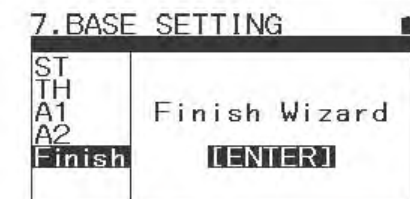
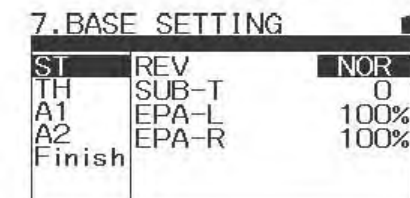
ENTER ↓ ↑ BACK



ENTER ↓ ↑ BACK



ENTER ↓ ↑ BACK



Important

- Please note that the analog servos do not work in SHR/SSR modes. If you mistakenly use the analog servos in SHR/SSR modes, it does not work normally and the servos will be broken. Never use analog servos in SHR/SSR modes.
- For digital servos (SRG, ERB, ERS Series and Digital ERG Series), either NOR or SHR mode works.
- SSR mode works only for SRG Servos, SUPER VORTEX/SV-PLUS series, HV-12, STOCK SPECIAL and HV-01.
- MT-44 will not be SSR mode by using RX-451R to BIND with SHR display. It works as the display shows.
- With SHR/SSR mode, BL-RACER, BL-FORCE, F2000, F2200, F3000 F3300, SBL-01 02 and 03CL do not work. Make sure to use them in NOR mode.
- SV-08, HV-10, HV-12 and F2500 work in NOR/SHR modes.

Usage of each feature

Dual Rates [D/R]

SETTING

- You can adjust rudder angle when operating the steering wheel and throttle trigger to their peak. To correspond to the RC car or road condition, adjust the rudder angle as you operate.
*You can adjust steering for both right and left at the same time and throttle separately for high and brake sides. You can also adjust the brake side more precisely than adjusting with EPA.

- Don't increase the setting rate of dual rates (D/R) from the condition in which the linkage locks by operating the steering wheel and throttle trigger.

- You can also adjust more precisely by adjusting dual rates of the throttle side.

*When AUX1/AUX2 are set to CODE5/CODE10, setting change of D/R will not be reflected to the performance.

- Select features [ST/TH (H, L)/AUX1/AUX2] to adjust with the Select key.

- Determine the feature to adjust with the Enter key and adjust the setting rate with the multi-selector key.

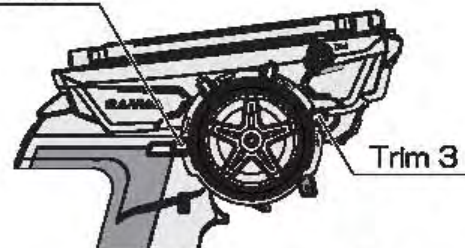
- Adjust the value of DUAL RATE by multi-selector.

- During operation, the steering dual rates can be adjusted with Trim 3, brake dual rates can be adjusted with Trim 4. It's possible to assign other features to Trim 3 and Trim 4 with the key assign trim feature (P. 52).

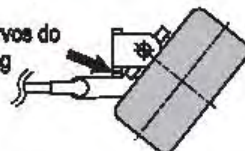
*When cancelling a selected feature, operate the Back button.

- Setting range: ST/TH-H/AUX1/AUX2 : 0%~100%
TH-L : 0%~120%
- Default: ST/TH/AUX1/AUX2 : 100%

Trim 4



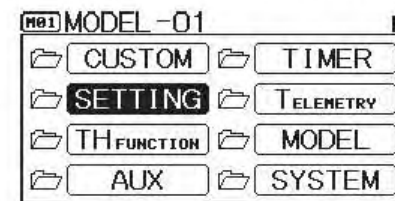
*Make sure that the servos do not lock to make clicking sound! (Note)
The same for throttle.



Note • If the linkage is locked for a long period, it can cause the servo motor breakage.

Supplement

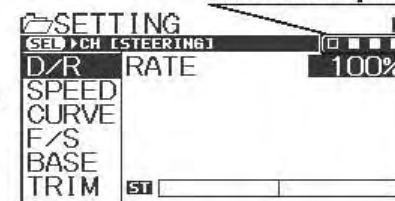
- Adjust the end point of the steering/throttle linkage before adjusting dual rates (P. 27, 28).



ENTER ↓ ↑ BACK

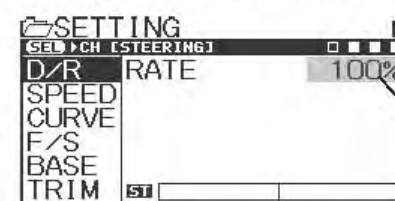
DUAL RATE SETTING SCREEN

Select Channel by Multi-selector button.



ENTER ↓ ↑ BACK

Steering Dual Rates Selection Screen



Flashing

SPEED

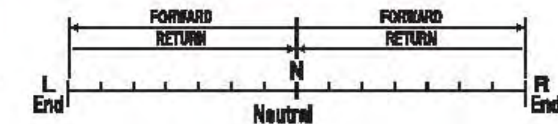
SETTING

- Features to control the speed of the servos used for steering and throttle. By setting, the RC car is not affected even when doing a sudden operation. On the steering side, smooth corner work becomes possible and on the throttle side, stable rising from a corner by throttle work with saved power.
- *When setting AUX TYPE to [CODE5/CODE10], adjusting the speed feature of the AUX channel does not affect the performance.
- *When setting the speed of the AUX channel, do so using steering/throttle as a reference.

[ST] Steering Speed

- A feature to delay the speed of the steering servos against the steering operation. You can set speed for steering forward and returning individually. For steering operation slower than setting, the speed feature does not work.

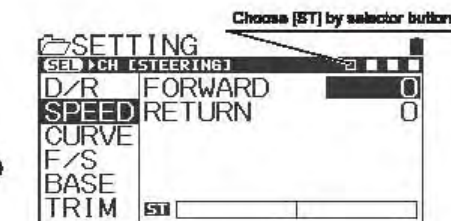
- Select [ST (Steering)] with Up key/Down key.
- Setting on the forward side [FORWARD]
Select [FORWARD] with the Enter key and adjust the setting value with Up key/Down key.



*When cancelling a selected feature, use the Back key.

- Setting range: 0~100
- Default: 0

- Setting on the Return side (RETURN)
Select [RETURN] with the Enter key and adjust the setting value with Up



- Setting range: 0~100
- Default: 0

*Adjust during actual operation. When not using the features or when a setting value cannot be determined even after adjustment, set the value to 0% (linear).

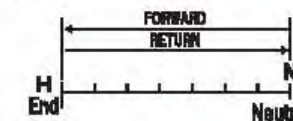
Supplement

- For driving an RC car, steering operation that suits the movement of the RC car is important and excessive operation is not recommended. Steering speed can minimize unnecessary operation and enable smooth cornering.
- When steering speed and steering curve are combined, the effect is doubled.

[TH] Throttle Speed

- A feature to slow down the performance speed of the throttle servos and delay the response of the speed controller against throttle operation. You can set speed for entering throttle (Forward) and returning (Return) individually. The speed feature does not work with throttle operation slower than the setting. *Setting is only for High side and Brake side cannot be set.

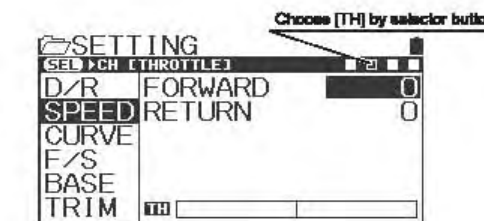
- Select [TH (Throttle)] with Up key/Down key.
- Setting on the forward side [FORWARD]
Select [FORWARD] with the Enter key and adjust the setting value with Up key/Down key.



*When cancelling a selected feature, use the Back key.

- Setting range: 0~100
- Default: 0

- Setting on the Return side (RETURN)
Select [RETURN] with the Enter key and adjust the setting value with Up key/Down key.



- Setting range: 0~100
- Default: 0

*Adjust during actual operation. When not using the features or when a setting value cannot be determined even after adjustment, set the value to 0% (linear).

Supplement

- For driving an RC car, throttle operation that suits the movement of the RC car is important and excessive operation is not recommended. Throttle speed can minimize unnecessary operation and enable smooth performance.
- When throttle speed and throttle curve are combined, the effect is doubled.

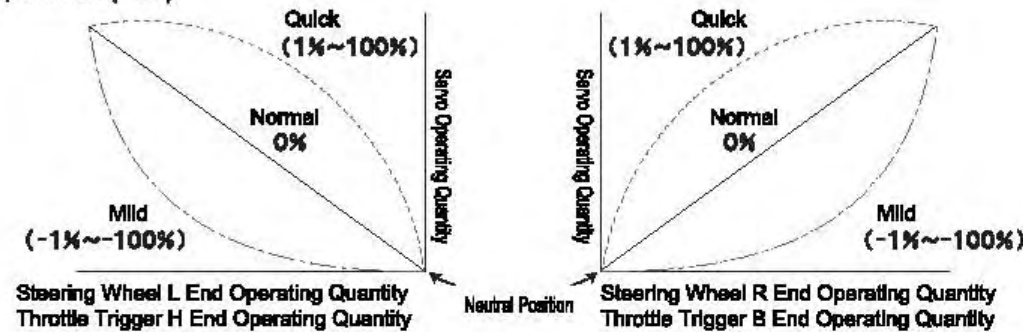
Usage of each feature

Curve [CURVE]

Setting/SETTING

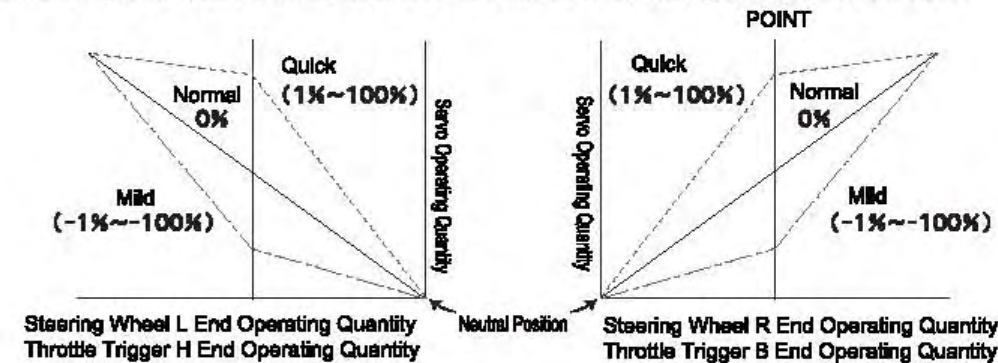
- Features to change the operating quantity of the servos again st operation of the steering wheel/throttle trigger. When the setting value is on the plus (+) side, it responds quickly, when on the minus side (-), it responds mildly.
- You can select a curving movement exponential (EXP) and a linear movement adjustable rate control (ARC).
- * When setting AUX TYPE to [CODE], adjusting the curve feature of the AUX channel does not affect the performance. When setting curve for the AUX channel, do so using steering/throttle as a reference.

• Exponential (EXP)



• Adjustable Rate Control (ARC)

You can change the position where operation is changeable by adjusting the setting of POINT.



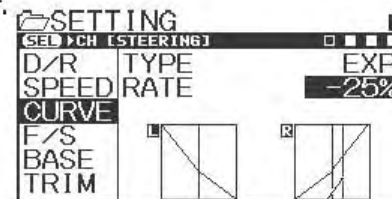
[ST] Steering Exponential

- You can change the steering feature from Mild to Linear to Quick. In general, if you find your RC car oversteering, change the setting to the minus side and if you find under steering, change to the plus side. Steering Exponential is a simultaneous setting for L and R.

- 1) Select ST with the Select button and set CURVE TYPE of ST to [EXP] with the multi-selector.
- 2) Adjust the setting value with the multi-selector.

◦Setting range: -100%~100%
◦Default: 0%

*When cancelling a selected feature, use the Back button.



Steering Operation Position

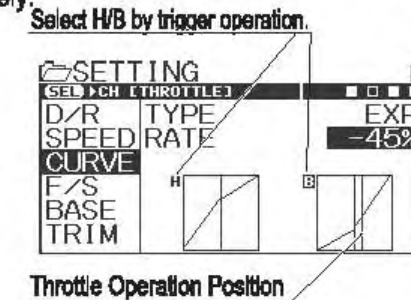
[TH] Throttle Exponential

- You can change the throttle feature from Mild to Linear and to Quick. In general, when operating on a slippery road or if you find over powering, change the setting to the minus side and when operating on a high-grip road or if you find lack of power in the power unit, change to the plus side. You can set the High side and the brake side separately.

*Selection of the High side and the brake side is done by trigger operation.

- 1) Select TH with the Select button and set CURVE TYPE of TH to [EXP] with the multi-selector.
- 2) Adjust the setting value with the multi-selector.

◦Setting range: -100%~100%
◦Default: 0%



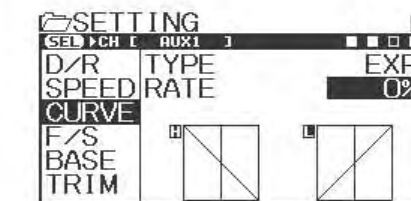
Throttle Operation Position

[AUX1] AUX1 • Exponential

- You can change the operation feature of AUX1 from Mild to Linear to Quick. You can set the High end and the Low end separately.
- *When setting AUX1 to [CODE5/CODE10] in AUX TYPE, changing the setting does not affect the performance.

- 1) Select AUX1 with the Select button and set CURVE TYPE of AUX1 to [EXP] with the multi-selector.
- 2) Adjust the setting value with the multi-selector.

◦Setting range: -100%~100%
◦Default: 0%

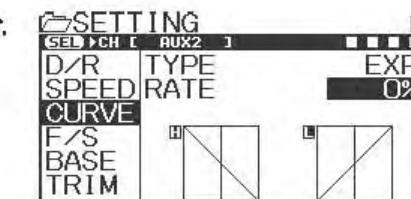


[AUX2] AUX2 • Exponential

- You can change the operation feature of AUX2 from Mild to Linear and to Quick. You can set the High end and the Low end separately.
- *When setting AUX2 to [CODE5/CODE10] in AUX TYPE, changing the setting does not affect the performance.

- 1) Select AUX2 with the Select button and set CURVE TYPE of AUX2 to [EXP] with the multi-selector.
- 2) Adjust the setting value with the multi-selector.

◦Setting range: -100%~100%
◦Default: 0%



Usage of each feature

CURVE

SETTING

[ST] Steering Adjustable Rate Control

- You can change the steering feature from Mild to Linear and to Quick. In general, if you find your RC car oversteering, change the setting to the minus side and if you find understeering, change to the plus side. Steering Adjustable Rate Control is a simultaneous setting for L and R.

1) Select ST with the Select button and set CURVE TYPE of ST to [ARC] with the multi-selector.

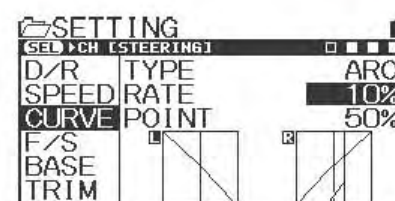
2) Setting Rate [RATE]
Select [RATE] with the multi-selector and adjust the setting value.

- Setting range: -100%~100%
- Default: 0%

3) Setting Point [POINT]
Select [POINT] with the multi-selector and adjust the setting value.

- Setting range: 5%~95%
- Default: 0%

* When cancelling a selected feature, use the Back button.



Steering Operation Position

[TH] Throttle Adjustable Rate Control

- You can change the throttle feature from Mild to Linear and to Quick. In general, when operating on a slippery road or if you find over powering, change the setting to the minus side and when operating on a high-grip road or if you find lack of power in the power unit, change to the plus side. You can set the High side and the brake side separately.

*Selection of the High side and the brake side is done by trigger operation.

1) Select TH with the Select button and set CURVE TYPE of TH to [ARC] with the multi-selector.

2) Setting Rate [RATE]
Select [RATE] with the multi-selector and adjust the setting value.

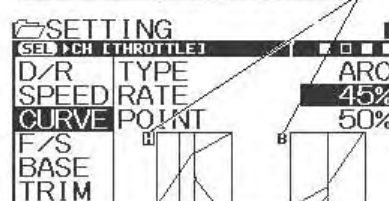
- Setting range: -100%~100%
- Default: 0%

3) Setting Point [POINT]
Select [POINT] with the multi-selector and adjust the setting value.

- Setting range: 5%~95%
- Default: 50%

* When cancelling a selected feature, use the Back button.

Select H/B by trigger operation.



Point Setting Position

[AUX1] AUX1 Adjustable Rate Control

- You can change the AUX1 performance feature from Mild to Linear and to Quick. You can set the High side and the Low side separately.

*When setting AUX1 to [CODE5/CODE10] in AUX TYPE, changing the setting does not affect the performance.

1) Select AUX1 with the Select button and set CURVE TYPE of AUX1 to [ARC] with the multi-selector.

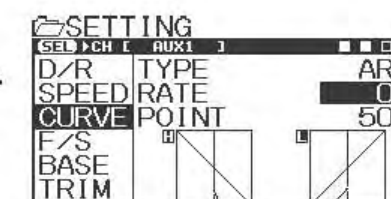
2) Setting Rate [RATE]
Select [RATE] with the multi-selector and adjust the setting value.

- Setting range: -100%~100%
- Default: 0%

3) Setting Point [POINT]
Select [POINT] with the multi-selector and adjust the setting value.

- Setting range: 5%~95%
- Default: 0%

*When cancelling a selected feature, use the Back button.



Point Setting Position

[AUX2] AUX2 Adjustable Rate Control

- You can change the operation feature of AUX2 from Mild to Linear and to Quick. You can set the High side and the Low side separately.

*When setting AUX2 to [CODE5/CODE10] in AUX TYPE, changing the setting does not affect the performance.

1) Select AUX2 with the Select button and set CURVE TYPE of AUX2 to [ARC] with the multi-selector.

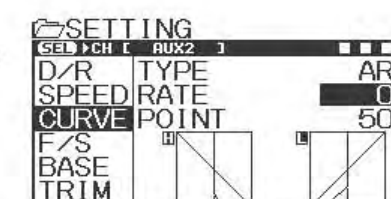
2) Setting Rate [RATE]
Select [RATE] with the multi-selector and adjust the setting value.

- Setting range: -100%~100%
- Default: 0%

3) Setting Point [POINT]
Select [POINT] with the multi-selector and adjust the setting value.

- Setting range: 5%~95%
- Default: 0%

*When cancelling a selected feature, use the Back button.



Point Setting Position

Usage of each feature

Fail Safe [F/S]

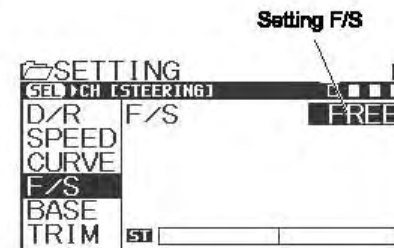
SETTING

- Fail Safe Operation is a feature to keep the servos in a predetermined position for each channel in the event that the receiver cannot receive a signal from the transmitter. A feature to keep the servos in a predetermined position for the servo of the throttle channel (2ch) in the event that the battery voltage on the receiver side of an engine RC car goes below the set voltage is Battery Fail Safe Operation.
- Battery Fail Safe Operation cannot be set when the throttle channel (2ch) is set to FREE/HOLD (*Battery Fail Safe Operation works only for the throttle channel).
- *Don't use Battery Fail Safe Operation feature for electric RC cars.

- 1) Select F/S with the multi-selector and select a channel to set fail safe operation (ST/TH/AUX1/AUX2) with the select button.

- 2) Enter the set channel and operate the multi-selector. The fail safe mode setting changes in order of FREE -> FS -> HOLD.

- Setting range: FREE/FS(100%~100%)/HOLD
- Default: FREE



*About each mode

FREE (Free Mode): When the receiver cannot receive the signal from the transmitter, the signal output to the servo stops and the servo will be free.

FS (Fail Safe Mode): When the receiver cannot receive the signal from the transmitter, the servo will be held in the set position.

HOLD (Hold Mode): The last position before the signal from the transmitter to the receiver is lost will be held.

- When the receiver can receive the signal from the receiver again, each mode of FREE/HOLD/FS is automatically released.

- 3) Setting the Fail Safe (FS)

Move to the position where the Fail Safe Operation is used. When the position is determined, long press the Enter key to set the position when the Fail Safe Operation works.

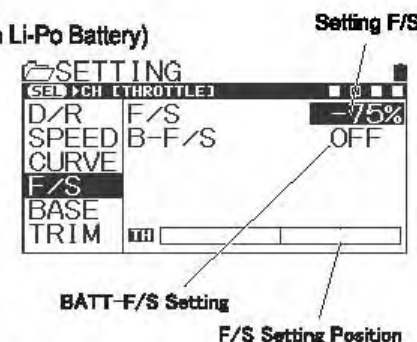
- * For safety reason, we recommend setting the throttle channel on the brake side when setting the Fail Safe.

- 4) Setting the Battery Fail Safe Operation

After setting the throttle channel position, move the cursor to [B-F/S] to set the voltage.

- Setting range: •For FH3: OFF, 3.5v ~ 5.0v (*Not compatible with Li-Po Battery)
- For FH4: OFF, 3.5v ~ 7.4v

*The Battery Fail Safe Operation is a feature to activate Fail Safe Operation when the receiver battery voltage rises up to the set voltage on a GP car. Don't use the Battery Fail Safe feature on electric RC cars.



- 5) Checking the Fail Safe Operation

Turn off the power of the receiver while the Fail Safe Operation is set and check if the servo moves to the position where the Fail Safe Operation is set.

Important

- About the Fail Safe Operation
When the Fail Safe feature is on, check the setting of the Fail Safe before operating. Don't change the setting of the Fail Safe during operation.

BASE

SETTING

- Base [BASE] is a feature to integrate features of the Reverse that determines the direction of the servo of each channel and the speed controller according to a specific RC car, the Sub Trim that adjusts the neutral position and the End Point Adjustment [EPA] that sets the operating quantity into one feature (Base) to allow you to make a setting all at once.

Reverse [REV]

- This is used when operation and the movement of the servo are reversed while operating Steering/Throttle/AUX1/AUX2.

- 1) Select BASE with the multi-selector and select a channel to set (ST/TH/AUX1/AUX2) with the select button.

- 2) Enter with the channel to be set and use the multi-selector. The Reverse setting will be changed.

- * When cancelling a selected feature, use the Back key.

- Setting range: NOR/REV
- Default: NOR



Setting REV

Sub Trim [SUB-T]

- Using the Sub Trim feature, correct the neutral (center) of Steering/Throttle/AUX1/AUX2 so that Trim can be used in the center position. When installing a servo on to an RC car, center the servo with Sub Trim first before adjusting End Point Adjustment.

- 1) Before using, center (0) each main trim.

- 2) Select SUB-T with the multi-selector and select a channel (ST/TH/AUX1/AUX2) to adjust Sub Trim with the select button.

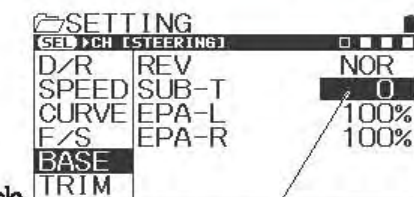
- 3) Determine by Enter operation in the channel to set.

- 4) Install the servo horn (servo servo horn) as close to centered as possible.

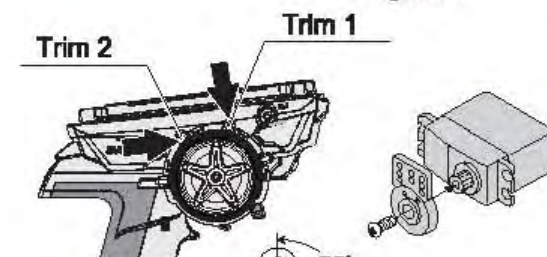
- * For installation position of the servo horn, follow the instruction on the car body side.

- 5) Use the multi-selector to adjust the center.

- Setting range: L150~R150(ST)
H150~B150(TH)
H150~L150(AUX1, AUX2)
- Default: 0



Setting SUB-T



Adjusting the center position

Note:

- When installing the servo horn onto your servo, fix the servo horn as close to the center as possible and center it with Sub Trim. If Sub Trim and the transmitter main trim are off to one side, it causes dead band (the range the servo does not move) to the steering wheel and the throttle trigger.

Important

• About Trim and Sub Trim

Trim is a feature for adjusting the neutral (center) position of the servo. When your model does not run straight after installing the steering servo onto the model, Trim adjusts the main trim of the steering. Also, the neutral position of the carburetor on RC cars needs neutral adjustment of the throttle servo along with linkage adjustment after installing the servo. Neutral position adjustment is necessary not only after installing the servo but for changes that happen during running such as tire wear and chassis twist. MT-S Trim features two types of Trim including Center Trim that adjusts only the neutral position without changing the end of the operating angle and Parallel Trim that moves the end of the operating angle and the neutral position simultaneously. Sub Trim that adjusts the neutral (center) position before fixing the servo horn is Parallel Trim and the main trim is Center Trim.

◦ Center Trim (Main Trim)

Even if you move the neutral position with Trim, the end of the operation angle does not move.



◦ Parallel Trim (Sub Trim)

When you move the neutral position with Trim, the end of the operation angle also moves. When Sub Trim is adjusted after linkage is completed, readjustment of End Point Adjustment (EPA) will be necessary.



Usage of each feature

BASE

- Base [BASE] is a feature to integrate features of Sub Trim that adjusts the direction of the servo of each channel and the speed controller according to a specific RC car and the End Point Adjustment [EPA] that sets the operating quantity into one feature (Base) to allow you to make a setting all at once.

End Point Adjustment [EPA]

- You can adjust left and right operating quantity of the steering servo when operating the steering wheel/throttle trigger and operating quantity of the high side and the brake side of the throttle servo, and the servo operating quantity of AUX1, AUX2 (3ch, 4ch).

[ST-EPA] Steering End Point Adjustment

- Due to linkage, suspension balance and the difference of the tire diameter, left and right cornering radius can be different. In case of this, this feature adjusts the servo operating quantity of left and right so that left and right cornering radius can be the same.

- 1) Before adjusting Steering End Point Adjustment (ST-EPA), make a neutral adjustment of the servo (P.26).
 - Neutral adjustment is to align the center position with Sub Trim by turning the power on and installing the servo horn in the approximate center position.

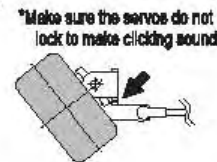
- 2) Select either of [EPA-L/EPA-R] with the multi-selector and determine with the Enter.

- 3) Adjust the operating quantity with the multi-selector.

- *When the cursor is on either of EPA-L/EPA-R, it is also possible to move the cursor by steering operation.

Setting range: L/R 0~150%

Default: L/R 100%



Choose [ST] by select button.

SETTING		
SEL	CH	ST-EPA
D/R	REV	NOR
SPEED	SUB-T	0
CURVE	EPA-L	100%
F/S	EPA-R	100%
BASE		
TRIM		

Note If the linkage is locked for a long period, it can cause the servo breakage.

[TH-EPA] Throttle End Point Adjustment

- It adjusts the High Point of FET Speed Controller, Brake Point, carburetor of engine cars and the brake operating quantity.

- 1) For an engine car, make a neutral adjustment of the servo (P.16) before adjusting the Throttle End Point Adjustment (TH-EPA).
 - Neutral adjustment is to align the center position with Sub Trim by turning the power on and installing the servo horn in the approximate center position.

- 2) Select [TH/Throttle] with the Select button.

- 3) Select either of [EPA-H/EPA-B] with the multi-selector and determine with the Enter.

- 4) Adjust the operating quantity with the multi-selector.
 - When adjusting FET Speed Controller, normally set both the high side and the brake side to 100% and set neutral, high point and brake point on the FET Speed Controller side (Setting method is different depending on the FET Speed Controller).

- * When the cursor is on either of EPA-H/EPA-B, it is also possible to move the cursor by trigger operation.

Setting range: H/B 0~150%

Default: H/B 100%



Choose [TH] by select button.

SETTING		
SEL	CH	TH-EPA
D/R	REV	NOR
SPEED	SUB-T	0
CURVE	EPA-H	100%
F/S	EPA-B	100%
BASE		
TRIM		

Note When EPA setting value is too large on the fully open side of the carburetor and the brake side for throttle linkage, the servo is locked and it can cause the motor malfunction and runaway.

[AUX1-EPA] AUX1 End Point Adjustment

- You can use AUX1 for functions of accessories and adjust the maximum steering angle (operating quantity) with EPA. Since you can set H/L separately, precise adjustment is possible.

*When setting AUX1 to [CODE5/CODE10] in AUX TYPE, the operation will not be reflected even by adjusting EPA.

- 1) Before adjusting AUX1 End Point Adjustment (AUX1-EPA), make a neutral adjustment of the servo (P. 26).
 - Neutral adjustment is to align the center position with Sub Trim by turning the power on and installing the servo horn in the approximate center position.

- 2) Select [AUX1] with the Select button. Select either of [EPA-H/EPA-L] with the multi-selector and determine with the Enter.

- 3) Adjust the operating quantity with the multi-selector.

Setting range: H/L 0~150%

Default: H/L 100%

Choose [AUX1] by select button.

SETTING		
SEL	CH	AUX1
D/R	REV	NOR
SPEED	SUB-T	0
CURVE	EPA-H	100%
F/S	EPA-L	100%
BASE		
TRIM		

[AUX2-EPA] AUX2 End Point Adjustment

- You can use AUX2 for functions of accessories and adjust the maximum steering angle (operating quantity) with EPA. Since you can set H/L separately, precise adjustment is possible.

*When setting AUX2 to [CODE5/CODE10] in AUX TYPE, the operation will not be reflected even by adjusting EPA.

- 1) Before adjusting AUX2 End Point Adjustment (AUX2-EPA), make a neutral adjustment of the servo (P. 26).
 - Neutral adjustment is to align the center position with Sub Trim by turning the power on and installing the servo horn in the approximate center position.

- 2) Select [AUX2] with the Select button. Select either of [EPA-H/EPA-L] with the multi-selector and determine with the Enter.

- 3) Adjust the operating quantity with the multi-selector.

Setting range: H/L 0~150%

Default: H/L 100%

Choose [AUX2] by select button.

SETTING		
SEL	CH	AUX2
D/R	REV	NOR
SPEED	SUB-T	0
CURVE	EPA-H	100%
F/S	EPA-L	100%
BASE		
TRIM		

Usage of each feature

TRIM

SETTING

- For Trim, you can adjust Trim for each channel and set the Trim action (center/parallel).

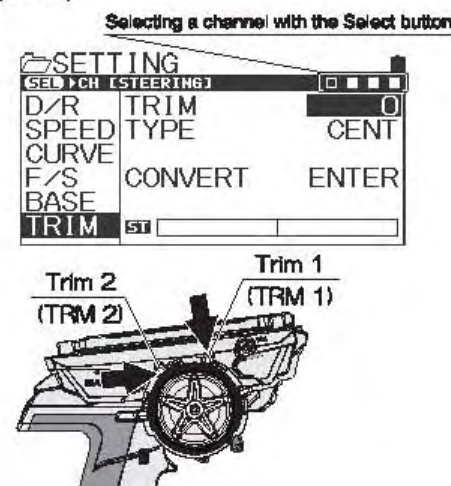
TRIM

- Correct neutral (center) of each channel (ST/TH/AUX1/AUX2) with Trim.
- As default, steering is set for Trim 1 (TRM1), and throttle for Trim 2 (TRM2).
- 1) Select a channel (ST/TH/AUX1/AUX2) for adjusting Trim with the Select button.
- 2) Determine with Enter operation and adjust with the multi-selector.

Setting range: ST:L100~R100
TH:H100~B100
AUX1:H100~L100
AUX2:H100~L100

Default: ST:0
TH:0
AUX1:0
AUX2:0

- Make an adjustment with TRM1 (ST) and TRM2 (TH) during operation. You can change the Trim lever position with the Key Assignments Trim feature (P. 52).



Important

About Trim

Trim is a feature to adjust the neutral (center) position of the servos. After installing the steering servo onto a car, you can adjust with Trim when the car does not move straightly. Neutral position adjustment is necessary not only after installing the servo but for changes that happen during running such as tire wears and chassis twist.

- It's Sub Trim that adjusts the center position when adjusting linkage (P. 26).



- If Trim and Sub Trim are off to one side, it causes dead band (the range the servo does not move) to the steering wheel and the throttle trigger. When installing the servo horn, fix the servo horn as close to the center as possible and center it with Sub Trim.

TRIM TYPE

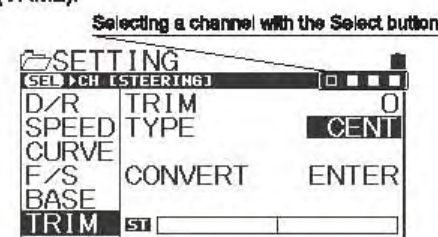
- You can set Trim performance of each channel to Center Trim (CENT) and Parallel (PARA).
- As default, steering is set for Trim 1 (TRM1), and throttle for Trim 2 (TRM2).

- 1) Select a channel (ST/TH/AUX1/AUX2) to set with the Select button.

- 2) Determine with Enter operation and adjust with the multi-selector.

Setting range: CENT (Center Trim)/PARA (Parallel Trim)

Default: CENT (Center Trim)



Important

About Center Trim and Parallel Trim

There are two types of Trim including Center Trim that adjusts only the neutral position without changing the end of the operating angle and Parallel Trim that moves the end of the operating angle and the neutral position simultaneously. Sub Trim that adjusts the neutral (center) position before fixing the servo horn is Parallel Trim and the main trim has options of Center Trim and Parallel Trim. You can select according to your purpose.

Center Trim

Even if you move the neutral position with Trim, the end of the operation angle does not move.



Parallel Trim

When you move the neutral position with Trim, the end of the operation angle also moves. When Sub Trim is adjusted after linkage is completed, readjustment of End Point Adjustment (EPA) will be necessary.

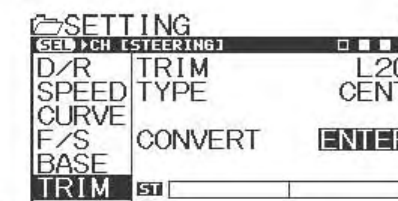


CONVERT

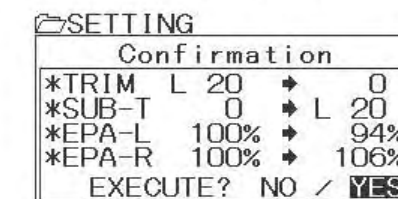
- A feature to convert Trim that has been adjusted in each channel to Sub Trim and EPA and to correct Trim to center. Depending on a setting, there is a case you cannot convert.

- 1) Select a channel (ST/TH/AUX1/AUX2) to convert with the Select button.
- 2) Once a channel to set is determined, launch the convert feature with Enter operation.
- 3) For example, if the converting feature is used when Steering Trim is [L20] and each [EPA] is 100%, the flow will be as shown in right illustration. Trim will be centered [0] and the portion of the Trim movement will be converted to Sub Trim and EPA.

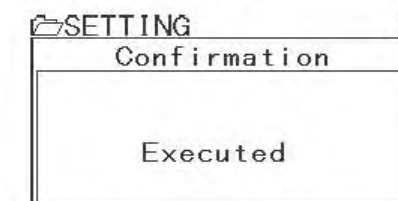
- Conversion can be set in each channel.



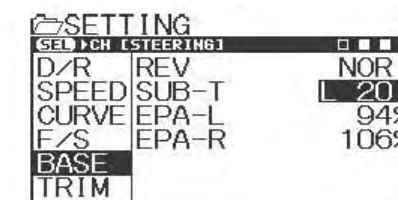
ENTER ↓ ↑ BACK



ENTER ↓ ↑



Conversion is completed. ↓



Usage of each feature

THROTTLE FUNCTION / TH-FUNCTION

- The throttle function allows you to adjust the setting values of ALB (Anti-Lock Brake), OFFSET and TH TYPE (throttle type) of the throttle channel.

Anti-Lock Brake [ALB]

THROTTLE FUNCTION / TH-FUNCTION

- Anti-Lock Brake enables stable braking on a low grip road.
- Because of the stable braking, you can trace cornering lines as intended.

- Select the throttle function with the multi-selector and determine with the Enter operation.
- When selecting [ALB] with the multi-selector and determining with the Enter, the menu changes to ALB setup menu.
- Setting Stroke (STROKE)
Set Stroke of ALB with the multi-selector.
Stroke is the width of repeated actions at the time of braking.

Setting range: OFF, 0~100%

Default: OFF *OFF ALB does not work when it is off.

- Setting Point (POINT)
Set Point of ALB with the multi-selector.
Point is the position where ALB starts acting when operating the brake.

Setting range: 5%~100%

Default: 80%

- Setting Lag (LAG)
Set Lag of ALB with the multi-selector.
Lag is a setting of time lag from the time when operating to the point to the time when ALB starts acting.

Setting range: 0.00s~1.00s

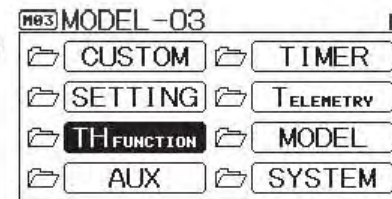
Default: 0.00s

- Setting Cycle (CYCLE)
Set a cycle of ALB with the multi-selector.
Cycle is a frequency setting of repeated actions for braking.

Setting range: 0.01s~1.00s

Default: 0.08s

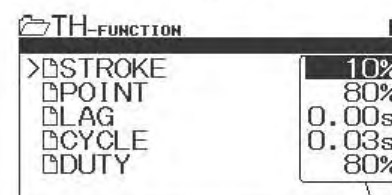
- When Anti-Lock Brake is working, X illumination and Function LED flash.



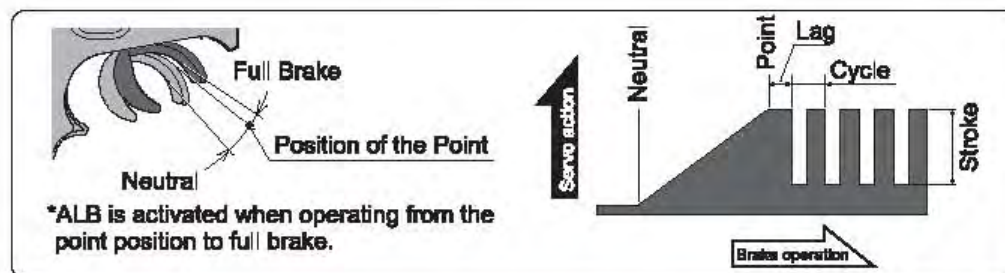
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ENTER ↓ ↑ BACK



Set each Parameter.



! Supplement

- Activate the brake rather strongly not to the extent that the tires of your RC car lose their grips (not to slip) and adjust so that Anti-Lock Brake is activated just before the tires are locked and slide.
- If you set ALB using a speed controller with a back on an RC car, you may not be able to operate back movement. When using a back movement, turn ALB off.

OFFSET

THROTTLE FUNCTION / TH-FUNCTION

- By moving the position of the throttle neutral at the time of starting an engine RC car engine, it improves the start-up performance of the engine.
- You can fix at a position where idling speed is increased so that the engine will not stop during refueling your engine RC car.
- By operating the switch that has been set, you can stop the engine of your RC boat.
- You can use various power sources with Offset feature.
- ON/OFF of the Offset feature is not assigned to the switch and keys at the factory. When using, assign the features with key assignment (P. 51, 52)

- Select the throttle function with the multi-selector and determine with the Enter operation.
- Select [OFFSET] with the multi-selector and determine with Enter. It will change to OFFSET Setting menu.
- Setting Offset [OFFSET]
Set ON/OFF of the Offset feature with the multi-selector.

Setting range: ON/OFF

Default: OFF

- Setting Type [TYPE]
Set Type of the Offset with the multi-selector.

Setting range: I-UP (Idle Up)/N-BR (Neutral Brake)

Default: I-UP

- Setting Point [POINT]
Set Point of the Offset with the multi-selector.

Setting range: H100%~B100%

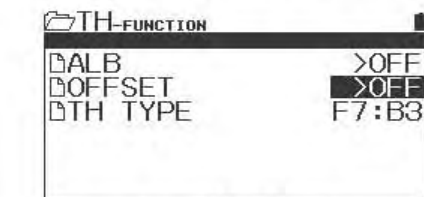
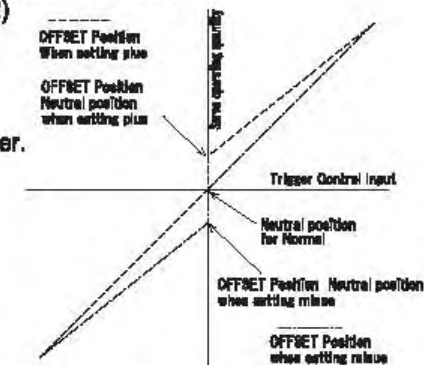
Default: 0%

- Setting Beep [BEEP]
Set Alarm (Beep) that goes off when the Offset is activated.

Setting range: ON/OFF

Default: OFF

- When the Offset feature is working, X illumination and Function LED flash.



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THROTTLE TYPE [TH TYPE]

THROTTLE FUNCTION / TH-FUNCTION

- You can move the neutral position of the throttle and set the operating ratio of the forward side and the brake (backward) side to either 7:3 or 5:5.
- Set the throttle type according to the speed controller to be used.

- Select the throttle function with the multi-selector and determine with the Enter operation.
- Select [TH TYPE] with the multi-selector and determine with Enter.
- Setting the Throttle Type
Set the Throttle Type with the multi-selector.

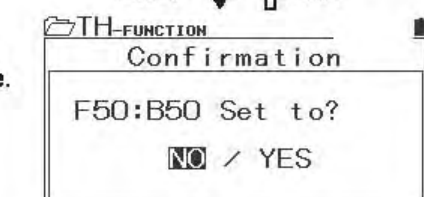
Setting range: F7:B3 / F5:B5

Default: F7:B3

- When changing TH TYPE, the screen changes to the confirmation screen and a message is displayed. Operate following the message.



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Usage of each feature

AUX

- AUX is a feature to set the performance of AUX1 and AUX2 (3ch/4ch). You can choose from STEP AUX (STEP), POINT AUX (POINT), 4WS (4-Wheel Steering: Coordinate Phase, Opposite Phase), MOA (Motor On Axle), AUX-MIX (AUX Mixing: ST to AUX/TH-AUX) and CODE5/CODE10 (Code Communication).

*Setting of AUX TYPE is done in the System Menu. Make a setting according to the purpose of the use.

STEP AUX

AUX

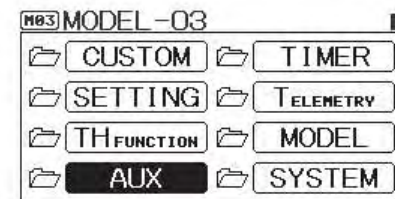
- Setting Step AUX allows you to set the operating quantity by operating assigned Trim or a switch.
- By factory default, the AUX feature is set to the Step AUX.

1) Select [AUX] with the multi-selector and define with the Enter operation.

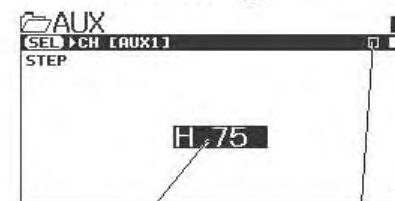
2) Setting Step AUX (STEP AUX)
Determine [CH] to activate with the Select button and set the position of the motion with the multi-selector.

*Operating quantity can be set with EPA (End Point Adjustment, P.27, 28).

*Assign the features to Trim and Dial with Key Assignments according to the used method.



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Motion Position Display

Selecting a Channel with the Select Button

POINT AUX

AUX

- By setting Point AUX and assigning the movement of AUX1/AUX2 (3ch, 4ch) to the switch and Trim, you can move the servo to the set Point.
- The Point that moved can be set with EPA (End Point Adjustment).
- Adjust the Point position according to the usage.

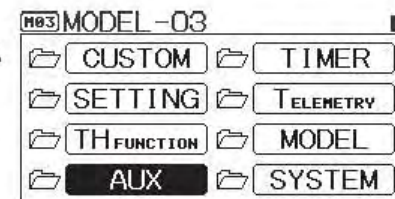
* Amount of Points will be 2 ~ 6 points and can be set with AUX TYPE.

1) Select [AUX] with the multi-selector and set with AUX TYPE.

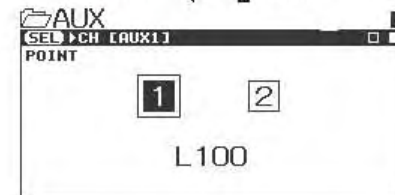
2) Setting Point AUX (POINT AUX)
Determine [CH] to activate with the Select button and set the Point of the motion with the multi-selector.

*Set to [POINT AUX] with (AUX TYPE) of (SYSTEM) according to the usage.

*Assign the features to Dial and Trim with Key Assignments to operate or operate with the multi-selector.



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4-Wheel Steering

AUX

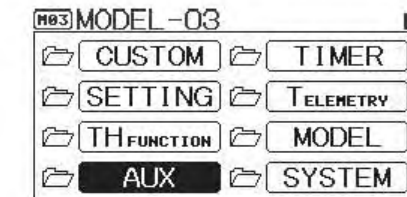
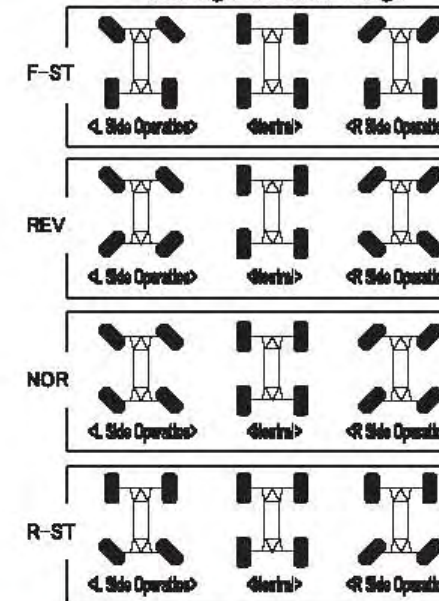
- With the operation of assigned Trim or Switch, control the motion of the 4 Wheel Steering.

1) Select [AUX] with the multi-selector and define with the Enter operation.

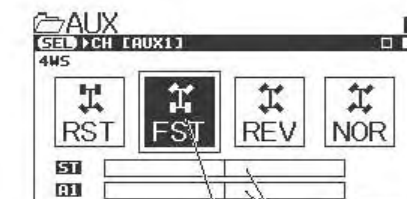
2) Setting Operating Mode
Set the Operating Mode of 4WS with the multi-selector.
Set the Operating Mode according to the usage.

* When using during operation, assign the feature of the Operating Mode to Trim or the switch.

Steering the Motion Image



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Servo Motor
Switching the Operation Mode

Motor On Axle [MOA] (Front-Rear Wheel Separate Drive)

AUX

- By setting Motor On Axle (MOA), you can adjust the drive ratio of front and rear wheels of a front-rear dual motor car.

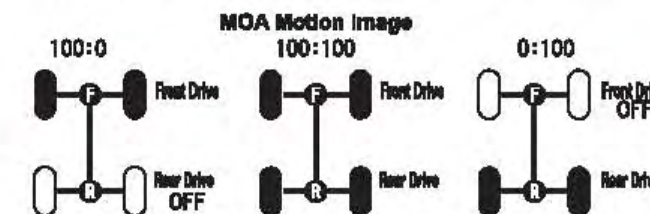
1) Select [AUX] with the multi-selector and define with the Enter operation.

2) Setting Operating Mode
Set the Operating Mode of MOA with the multi-selector.

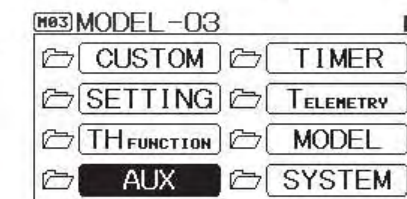
*Adjust Step setting to change the drive distribution of front- rear with [MODE] of [AUX TYPE] of [SYSTEM].

*When using, assign the features to Dial or Trim or operate with the multi-selector.

*Connect the speed controller for controlling the rear motor to the channel (AUX1/AUX2) that is set to MOA.



* By changing the ratio, you can adjust the gear ratio of front-rear.



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Servo Motor
Front-rear drive ratio