

● Startup Screen and Initial Screen

When the transmitter is switched on, the startup screen will display, followed by the initial screen.

※ Pressing the ENTER key during the startup screen will allow you to proceed to the initial screen.

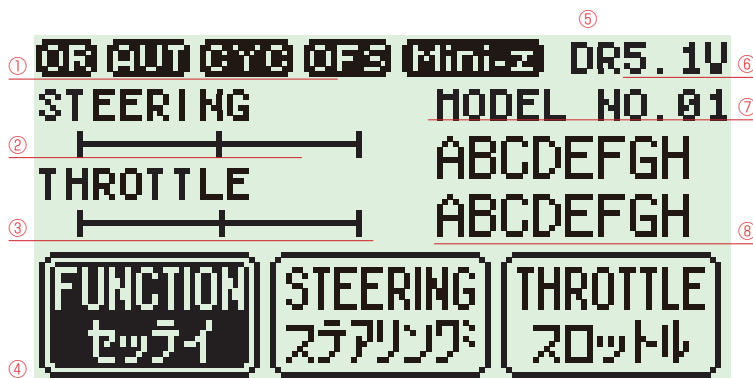
[Startup Screen]



① Version Information :

Displays the version of the program that is installed in the Master Unit's CPU. This product's performance may be upgraded via paid or free upgrades. Check the Kyosho website for information regarding such upgrades. (<http://www.kyosho.com>)

[Initial Screen]



① Function Monitor: Functions that are active will be lit up.

OR : Steering and Brake travel Override
AUT : Throttle Auto Start
CYC : Cycle (Throttle Acceleration/Throttle ABS)
OFS : Offset (Drag Brake/Idle Up)

② Steering Trim Monitor: Displays the position of the steering trim.

③ Throttle Trim Monitor: Displays the position of the throttle trim.

④ Top menu: Display three kinds of setting items

FUNCTION Modify settings related to functions.
STEERING Modify settings related to the steering.
THROTTLE Modify settings related to the throttle.

⑤ Power Source Type: Displays the type of battery being used.

LP : Li-po DR : R03/AAA/UM4 Alkaline Batteries
LF : Li-Fe NI : Ni-MH

(Notice) If you switch battery types, make sure to also change the [Battery Management] setting.

⑥ Voltage: Displays the current power source voltage.

⑦ Model Number: Displays the currently selected model number.

⑧ Model Name: Displays the name of the currently selected model number.

● VR information setting

Adjust the steering and throttle resistance information. ※ Please perform the VR information configuration to calibrate your system.

- When using EX-6 for the first time.
- When changing a steering unit for a different product or when putting it back together.
- When changing a grip unit for a different product or when putting it back together.
- When using and confusion has occurred in the positional information.

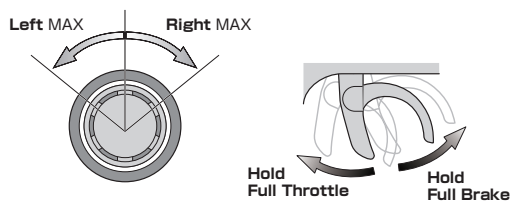
1. Select [FUNCTION] on the initial screen and push the ENTER key.
2. Select [SYSTEM] on the function screen and push the ENTER key.
3. Select [VR INFO] on the system screen and push the ENTER key.
4. Move the wheel slowly to the full left and right lock (numbers will change as the steering is moved) and release the wheel back to neutral.
5. Move the trigger slowly to the full throttle and full brake positions (numbers will change as the throttle is moved) and release the trigger back to neutral.
6. Then select YES (press ENTER) to adjust and save the settings.

3. Example before setting

| VR INFORMATION | VRインフォメーション | |
|----------------|-------------|------|
| ST- LEFT | ヒダリ | 2204 |
| NUT | センター | 2198 |
| RIGHT | ミギ | 2194 |
| TH- HI | ゼンシン | 2078 |
| NUT | センター | 2075 |
| LOW | ブレーキ | 2072 |

OK?
YES

4.5, Move slowly to full stroke, then release.



6, Small window [Yes] comes active.

| VR INFORMATION | VRインフォメーション | |
|----------------|-------------|------|
| ST- LEFT | ヒダリ | 3949 |
| NUT | センター | 2198 |
| RIGHT | ミギ | 487 |
| TH- HI | ゼンシン | 3313 |
| NUT | センター | 2075 |
| LOW | ブレーキ | 1463 |

OK?
YES

※ When operating the VR INFORMATION and pressing the BACK key will cancel the operation.

● How to change the Modulation mode

EX-6 has two Modulation modes.

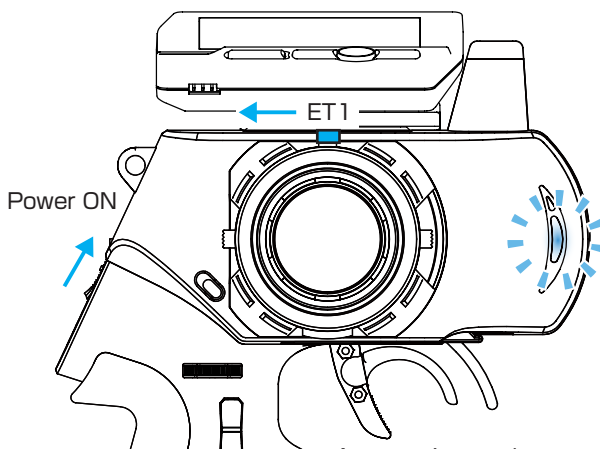
※ When attaching the Xpansion unit, this operation is the same.

《Functions》

- MINI-Z ASF mode : LED Solid
ASF support of MINI-Z series is steerable.
- MINI-Z MHS mode : LED Flashing slowly
Operating MINI-Z MHS mode. (MR-03 VE PRO)

▲ Only MINI-Z with ASF/MHS system are operable. FHS (MINI-Z sports) it will not be able to steer the.

- ① Turn off EX-6 switch.
- ② Push the ET1 lever to the left and power on.
- ③ Hold ET1 lever until the buzzer sounds and the LED of EX-6 turns on (approximately two seconds).



Approximately two seconds, LED turns on.

▲ If the pilot LED is blinking fast, this is a warning that the battery voltage is low. Please change to new batteries or for a battery pack which has been charged.

▲ Model selection changes and modulation mode changes are not linked.

● Pairing

Case of using the Xpansion unit

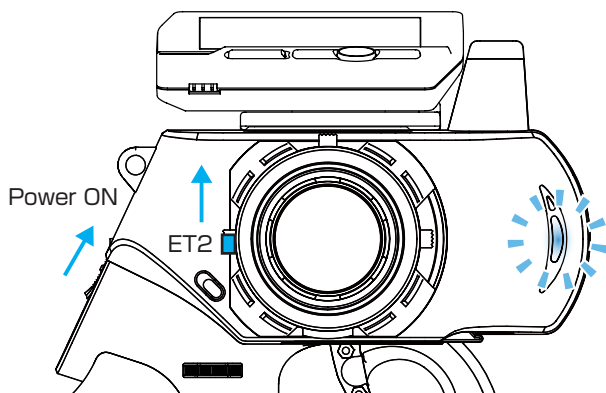
※ Refer to p.11 pairing Operation when not using the Xpansion unit.

In order for the receiver to operate, it must store the transmitter's unique ID in its memory in a process called "pairing." Even if a single transmitter is used to control multiple receivers, each receiver must go through the pairing process with the transmitter before being used for the first time.

※ Please adjust the modulation mode before pairing. (p.20) A receiver does not work normally in a different mode.

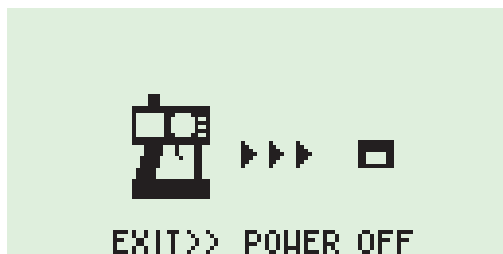
1. Preparing the Transmitter

- ① While pushing the ET2 lever up, power on. The pilot LED lights up, release ET2 lever.



- ② Displays the initial screen, then pairing display is shown. (indicating transmitter is transmitting the pairing signal.)

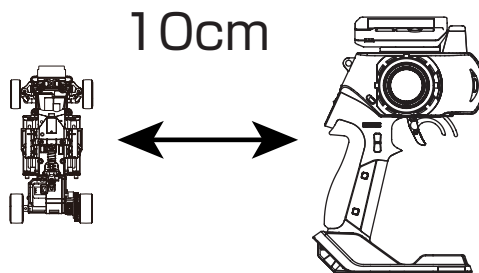
<France mode pairing >
FRANCE mode pairing is possible when the ET2 lever is released after LED turns off. Please use this feature if the situation is needed.



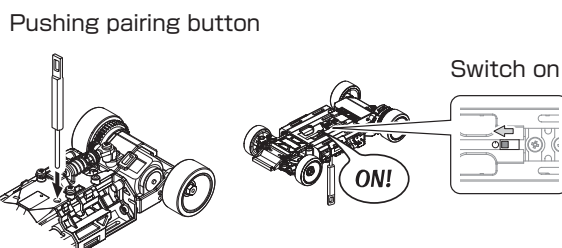
- ⚠ Or have someone else the pairing in the vicinity, when the pairing work does not work under the influence of wireless LAN, microwave ovens, please perform again shifted or time for a little bit and away from there.

2. Preparing the MINI-Z

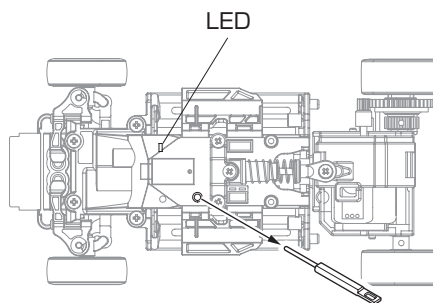
- ① Bring distance of EX-6 and MINI-Z close to about 10cm.



- ② Switch on MINI-Z while pushing the pairing button of MINI-Z.



- ③ After the MINI-Z's LED has lit up, release the pairing button. Then check that the MINI-Z's LED lights up again (indicating pairing completion)



3. Preparations for Operation

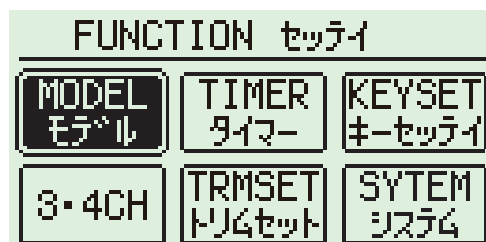
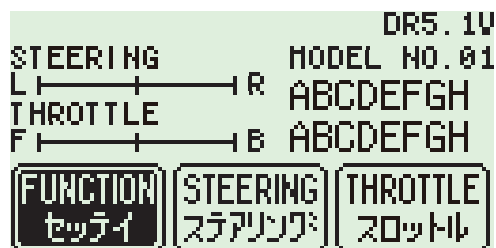
- ① Switch off MINI-Z.
- ② Switch off the EX-6 main power, then switch on EX-6 again.
- ③ Bring distance of EX-6 and MINI-Z close to about 30cm. Switch on the MINI-Z and check that the receiver LED is lit. If the LED flashes, the MINI-Z is not getting the EX-6 signal and the pairing procedure should be repeated.

- ⚠ If the mode is changed (General or France), please conduct pairing procedures with the MINI-Z you are using again.

TOP MENU

FUNCTION

This is an index which displays the 6 different function menus.



Model Menu (MODEL)

Operations such as selecting or copying a model.

Timer Menu (TIMER)

Operating timer-related functions.

Key set Menu (KEY SET)

Modify system-related functions such as key assignment.

3CH/4CH Menu (3/4ch)

Modify settings related to 3CH and 4CH.

Trim set Menu (TRIM SET)

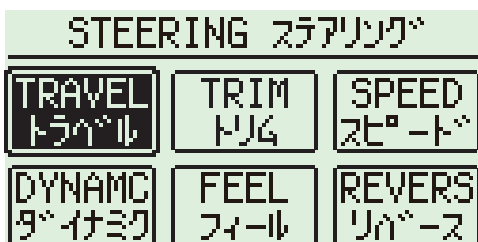
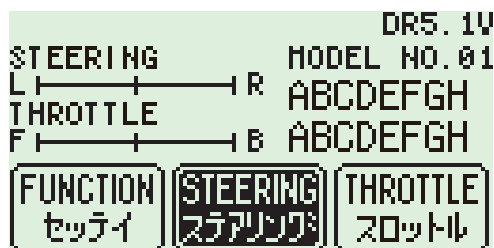
Easy adjust function for steering trim and balance.

System Menu (System)

Modify system-related functions such as VR information or calculator.

STEERING

This is an index which displays the 6 different function menus.



Steering Travel

Modify the overall amount of steering movement.

Steering Trim

Modify the neutral position of the steering angle.

Steering Turn Speed

Modify the speed of the steering's movement.

Steering Dynamics

Modify the movement speed ratio which corresponds to steering angle and Modify how much the steering initially turns from neutral position.

Steering Feel

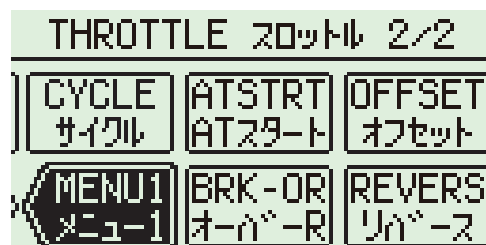
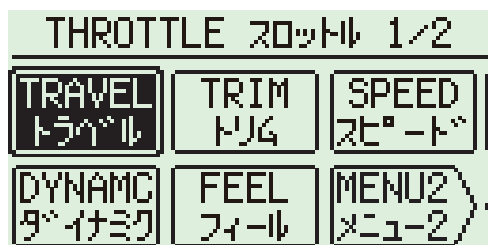
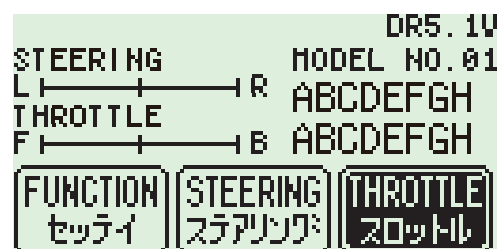
Modify the feeling of the steering's movement.

Steering Reverse

Modify the steering direction.

THROTTLE

This is an index which displays the 10 different function menus. (Separated in 2 pages.)



Throttle Travel

Modify the maximum throttle movement.

Throttle Trim

Modify the neutral position of the throttle.

Throttle Speed

Modify the speed of the throttle's movement.

Throttle Dynamics

Modify the movement speed ratio which corresponds to throttle angle and Modify how much the throttle initially moves from the neutral position.

Throttle Feel

Modify the feeling of the throttle movement.

MENU2

Go to throttle menu2.

MENU1

Go back to throttle menu1.

Brake Override

Modify the maximum amount of braking and steering travel assigned to a switch.

Throttle Reverse

Modify the throttle direction.

Throttle Cycle

Modify the amount of brake pumping and acceleration.

Throttle Auto-Start

Set the amount of automatic startup for the throttle.

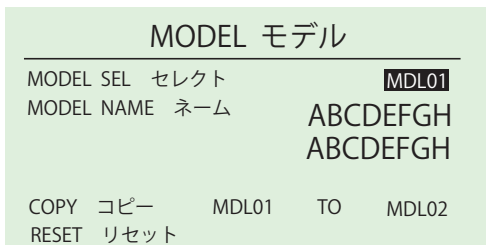
Idle Up

Modify the neutral position of the throttle trigger or neutral braking.

FUNCTION

Model menu

Save various settings as model memories Up to 20 model memories can be named and stored.



▶ MODEL SEL

Switch between different model memories.

▶ MODEL NAME

Names the model memories.

▶ MODEL COPY

Copies model memories.

▶ MODEL RESET

Resets model memories.

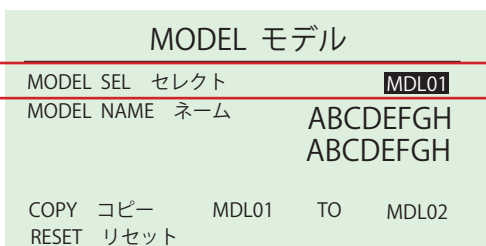
▶ MODEL SEL

Switch between different model memories.

[Example]

If you have multiple cars, it is convenient to have a separate model memory for each one. Even in the case of only one car, you could save specific settings for different courses in different model memories as well.

Select the model to be used.



[Setting Range] MODEL:01 - 20

P All of the various settings are registered under a model memory.

P The settings which will be switched by Model Select are...

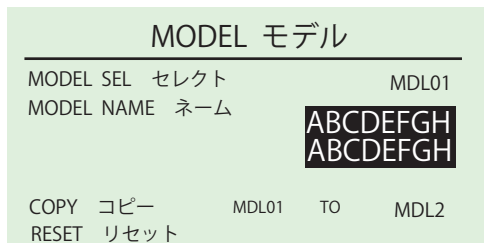
- 1)Steering Setting
- 2)Throttle Setting
- 3)3CH Setting
- 4)4CH Setting
- 5)Steering and Throttle Response
- 6)Steering and Throttle Feel
- 7)Setup Functions (ET1-ET5, BT1 function assignments)
- 8)Stopwatch Settings

! Switching model memory while driving may cause setting mismatches and lead to an uncontrollable model. Please place the car on a stand or switch it off before switching model memories.

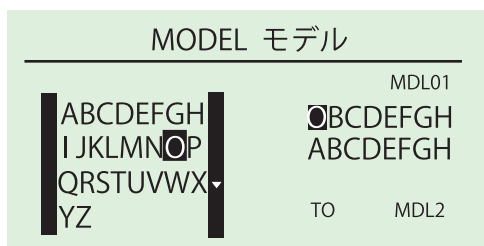
! Model selection changes and modulation mode changes are not linked. Refer to p.20 changing the modulation mode.

▶ MODEL NAME

This function is used to name the model memory that is currently in use. Distinguish each model memory with different names, which may also be edited. The set model name will be displayed on the initial screen and model select screen.

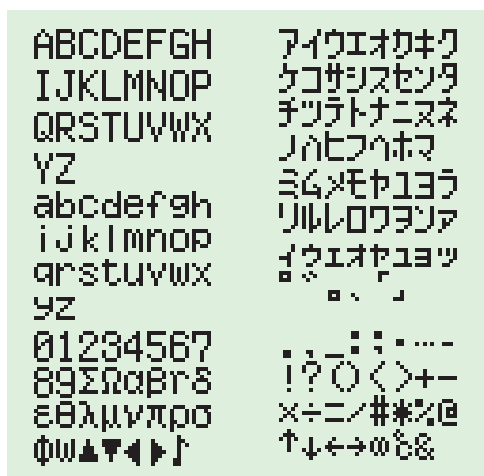


Choose one character at a time from the left side.



[Setting Range] Maximum 16 characters.

《Selectable Characters》



P To delete a character, overwrite the character to be deleted by using the blank space at the end of each page of characters.

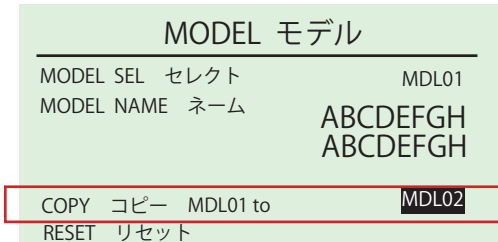
▶ MODEL COPY

Copies the current model memory to a different model memory.

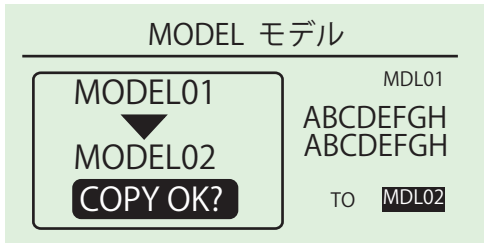
[Example]

When changing settings on the same car to match driving conditions, it is convenient to copy the original memory before modifying it. This function also allows you to try out new settings while keeping your original one.

Select the model memory to copy to, then hold the ENTER key to copy.



Small window [COPY OK?] appears, then push the ENTER key.



[Setting Range] MODEL:01 - 20

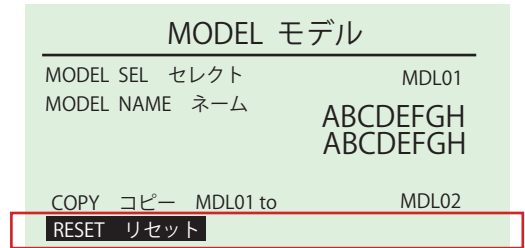
- P** When selecting the model memory to copy to, that model memory's name will be displayed.
- P** The settings which will be copied by Model copy are...
 - 1)Steering Setting
 - 2)Throttle Setting
 - 3)3CH Setting
 - 4)4CH Setting
 - 5)Steering and Throttle Response
 - 6)Steering and Throttle Feel
 - 7)Setup Functions (ET1-ET5, BT1 function assignments)
 - 8)Stopwatch Settings

! The contents of the copy destination model memory that is being copied to will be overwritten. Overwritten data cannot be recovered, so be careful to avoid undesired memory overwrites.

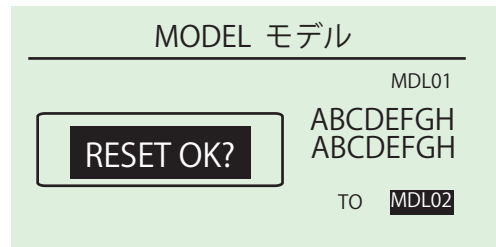
▶ MODEL RESET

Return the current model memory to default factory setting values.

Select [RESET] (hold ENTER key) to reset.



Small window [RESET OK?] is displayed, then push the ENTER key.



! Deleted data cannot be recovered. Be careful to avoid undesired resets.

TIMER Menu

Operating Timer-related functions.

《Functions》

▶ TRGSTART Trigger Start

Prepares the stopwatch for activation via the throttle movement.

▶ LAP HISTORY

Displays the lap times recorded by the stopwatch.

▶ ALARM

Alarm will sound after the set amount of time has elapsed.

ALARM STOP

Sets an alarm buzzer to the continue sound mode (CONTINUE) or to the sound stop mode(STOP).

P.ALAM

Sets a warning buzzer to sound at a set time prior to the alarm.

NAVI

Adjusts the lap navigation settings.

START/STOP

Assigns a key to activate/deactivate the stopwatch .

LAP


Assigns a lap key.

| FUNCTION セット | | |
|--------------|------------------|-----------------|
| MODEL モデル | TIMER タイマー | KEYSET キーセット |
| 3-4CH | TRMSET トリグセット | SYSTEM システム |

▶ TRGSTART Trigger Start

Move the cursor to [TRGSTART] and hold the ENTER key. TRGSTART will switch to READY for a brief moment, then push assigned [START/STOP]key or move throttle trigger.

| TIMER タイマー | |
|------------|------------|
| TRGSTART | LAPHISTORY |
| ALARM | 5MIN STOP |
| P. ALM | 10SEC |
| NAVI | 00300 |
| START/STOP | OFF |
| LAP | OFF |


 When the [START/STOP] key is set to OFF, it does not activate.

▶ LAP HISTORY

Displays the lap times recorded by the stopwatch. Scroll down when the R key is pushed, and scroll up the L key is pushed. When pressing the BACK key, you are returned to the Timer screen.

| LAPHISTORY ラップキログ | |
|-------------------|------------|
| 001 | 00' 02" 20 |
| 002 | 00' 05" 51 |
| 003 | 00' 05" 09 |
| 004 | 00' 04" 72 |
| 005 | 00' 02" 70 |
| TTL | 00' 20" 25 |

 100 lap times are memorized.

 Only the last recorded lap times may be checked and previously recorded results will not be saved. (Even if the transmitter is switched off, the last recorded times will remain in the memory.)

▶ ALARM

Move the cursor to set the various parameters.

| TIMER タイマー | |
|------------|------------|
| TRGSTART | LAPHISTORY |
| ALARM | 5MIN STOP |
| P. ALM | 10SEC |
| NAVI | 00300 |
| START/STOP | OFF |
| LAP | OFF |

【Setting Range】

MIN (minute) SEC (second)

ALARM

: 1 MIN ~ 99 MIN (Default : 5 MIN)

Alarm will sound after the set amount of time has elapsed.

* Convenient for setting the anticipated race completion time.

ALARMSTOP

: STOP / CONT (Default : STOP)

Sets an alarm buzzer to the continue sound mode (CONTINUE) or to the sound stop mode(STOP).

* STOP Buzzer sound stop about 5 seconds.

* CONT Until the START/STOP key is pressed the Buzzer sound will continue.

P.ALAM

: 0 ~ 30 SEC (Default : 10 SEC)

Sets a warning buzzer to sound at a set time prior to the alarm.

* Convenient for setting a warning for when a race is about to end.

NAVI


: 0 SEC 00 ~ 99 SEC 99 (Default : 0 SEC 00)

Adjusts the lap navigation settings.

* Convenient for setting a target lap.

START/STOP


: OFF, ET1 ~ 5, BT1 (Default : OFF)

Assigns a key to activate/deactivate the stopwatch .

LAP

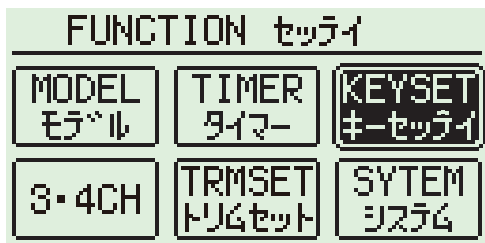
: OFF, ET1 ~ 5, BT1 (Default : OFF)

Assigns a key for recording lap times.

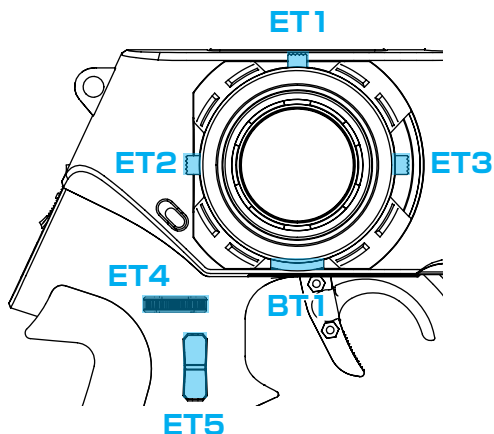
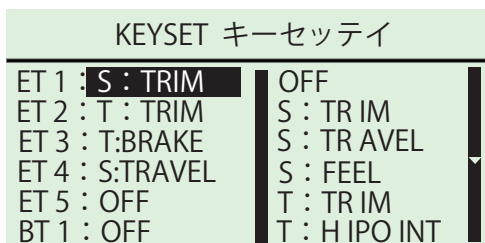
 The use the timer function, this parameter must be set to a non-OFF value.

KEYSET Key setting

Assign a key (ET1- ET5, BT1) to a function.



If you select a key, the item is displayed to the right. It is assigned to a key by choosing an item.



※ To use (ET4, ET5), No.10526 Expert grip (separately available option: Kondo Kagaku Co., Ltd.) is required.

[Setting Range] ○ : Assignment Possible

| Setting function | ET1 ~ 5 | BT1 |
|---------------------------------|---------|-----|
| OFF (No Assignment) | ○ | ○ |
| S:TRIM (Steering Trim) | ○ | x |
| S:TRAVEL (Steering Travel) | ○ | x |
| S:FEEL (Steering Feel) | ○ | x |
| T:TRIM (Throttle Trim) | ○ | x |
| T:HIPOINT (Throttle High Point) | ○ | x |
| T: BRAKE (Throttle Brake) | ○ | x |
| T:FEEL F (Throttle Feel F) | ○ | x |
| T:FEEL B (Throttle Feel B) | ○ | x |
| T:OFFSET (Throttle Offset) | ○ | ○ |
| T:OFSTKY (Throttle Offset Key) | ○ | x |
| T: BRAKEOR (Throttle Override) | ○ | ○ |
| T:AUTOST (Throttle Auto-Start) | ○ | ○ |
| TIMER (Timer) | ○ | ○ |
| LAPTIME (Lap Time) | ○ | ○ |

The entry of 3/4CH is displayed only when a key is set to 3/4CH function setting.

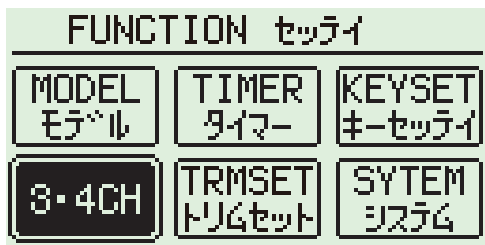
| |
|---|
| 3(4) : POS (3・4 CH / Control) |
| 3(4) : SMMODE (3・4 CH / 4WS Mixing Mode) |
| 3(4) : SMCENT (3・4 CH / 4WS Mixing Center) |
| 3(4) : SMTRVL (3・4 CH / 4WS Mixing Travel) |
| 3(4) : AMMODE (3・4 CH / Amp Mixing Mode) |
| 3(4) : AMTH (3・4 CH / Amp Mixing Throttle Hold) |
| 3(4) : TMBRAKE (3・4 CH / Throttle Mixing Brake) |
| 3(4) : TMCENT (3・4 CH / Throttle Mixing Center) |
| 3(4) : TMHIPO (3・4 CH / Throttle Mixing High Point) |
| 3(4) : TMDLAY (3・4 CH / Throttle Mixing Delay) |
| 3(4) : TMSTEER (3・4 CH / Throttle Mixing Steering) |
| 3(4) : TMON (3v CH / Throttle Mixing ON/OFF) |

[Default]

| |
|----------------|
| ET1 : S:TRIM |
| ET2 : T:TRIM |
| ET3 : T: BRAKE |
| ET4 : OFF |
| ET5 : OFF |
| BT1 : OFF |

3・4CH 3・4ch Menu

Settings related to 3CH and 4CH operations.



《Functions》

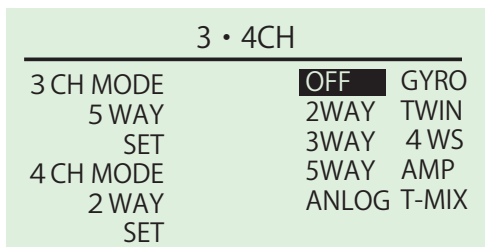
▶ MODE

| | |
|-------|-------|
| OFF | GYRO |
| 2WAY | TWIN |
| 3WAY | 4WS |
| 5WAY | AMP |
| ANLOG | T-MIX |

▶ SET

Set the usage choice for channels 3 and 4 modes.

The MODE of 3CH or 4CH is selected from the right.
Change the setting of the item chosen with the SET key.



P The functions which may be set are the same for both 3CH and 4CH. Set them to match the desired purpose.

【Default】

3CH MODE : 5WAY
4CH MODE : 2WAY

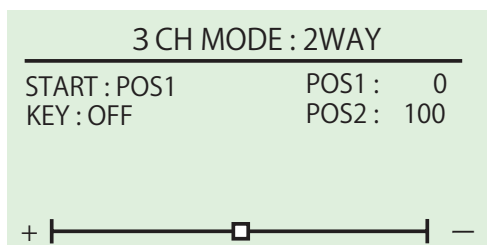
▶ 2WAY MODE

Modify the 2-position output settings.

※ Not used in MINI-Z.

【Example】

May be used to activate/deactivate an engine starter unit or a semi-trailer's support legs.



【Setting Range】

START : POS 1, POS 2 (Default : POS 1)

Sets the starting position.

KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns a key to use for switching positions.

POS 1 : -100 ~ 100 (Default : 0)

Sets Position 1's output position.

POS 2 : -100 ~ 100 (Default : 100)

Sets Position 2's output position.

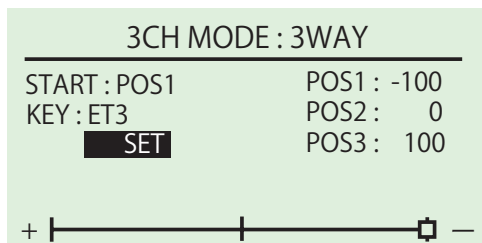
▶ 3WAY MODE

Modify the 3-position output settings.

※ Not used in MINI-Z.

【Example】

May be used for gear changing operations or when you wish to set a 3-position control scheme for the servo.



【Setting Range】

START : POS 1, POS 2, POS 3 (Default : POS 1)

Initial position is configured.

KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns a key to use for switching positions.

POS 1 : -100 ~ 100 (Default : -100)

Sets Position 1's output position.

POS 2 : -100 ~ 100 (Default : 0)

Sets Position 2's output position.

POS 3 : -100 ~ 100 (Default : 100)

Sets Position 3's output position.

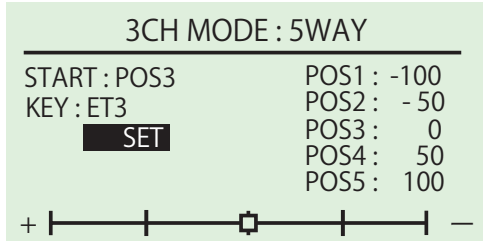
Gyro control settings of MINI-Z PRO series, please refer to the ▶ 5WAY (5WAY).

▶ 5WAY MODE

Modify the 5-position output settings.

[Example]

In MINI-Z MHS (such as MR-03VE PRO), it will control the gain of the steering gyro. As follows START: POS3, KEY: it will set in ET3.



[Setting Range]

START : POS 1, POS 2, POS 3, POS 4, POS 5
Sets the starting position. (Default: POS 3)

KEY : OFF, ET1 ~ 5, BT1 (Default : OFF)
Assigns a key to use for switching positions.

POS 1 : -100 ~ 100 (Default : -100)
Sets Position 1's output position.

POS 2 : -100 ~ 100 (Default : -50)
Sets Position 2's output position.

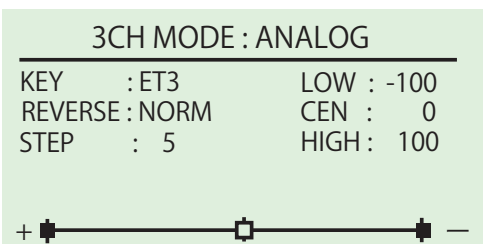
POS 3 : -100 ~ 100 (Default : 0)
Sets Position 3's output position.

POS 4 : -100 ~ 100 (Default : 50)
Sets Position 4's output position.

POS 5 : -100 ~ 100 (Default : 100)
Sets Position 5's output position.

▶ ANALOG MODE

These settings are to enable continuous output for channels 3 or 4. ※ Not used in MINI-Z.



[Setting Range]

KEY : OFF, ET1 ~ 5, BT1 (Default : OFF)
Assigns a key to use for switching positions.

REVERSE : NOR (Normal) , REV (Reverse) (Default : NORM)
Sets operation direction.

STEP : 1 ~ 25 (Default : 5)
Sets the amount of change for the operation.

LOW (Low Position) : -100 ~ 0 (Default : -100)

Sets the lowest value for the operation range.

CEN (Center Position) : LOW ~ HIGH (Default : 0)

Sets the neutral position for the operation range.

HIGH (High Position) : 0 ~ 100 (Default : 100)

Sets the highest value for the operation range.

[How to Use Analog Settings]

Low Position Side :

Between LOW and CEN are 100 steps within which the intervals can be adjusted.

High Position Side :

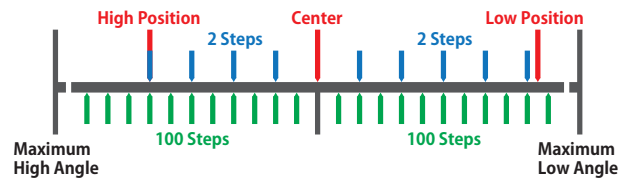
Between CEN and HIGH are 100 steps within which the intervals can be adjusted.

Example) When STEP value is 2

When LOW side is set to 5 intervals.

When HIGH side is set to 4 intervals.

Movement Range
Interval Position



P Center position is the starting position.

P Low/High positions cannot be exceeded. Operations which try to do so will stop just before the Low/High positions.

▶ GYRO MODE

This function modifies the setting for using gyro receiver.

※ It is not for the gyro for the MINI-Z. It is not used in MINI-Z.

[Example]

Such as Kondo Kagaku Co., Ltd. gyro KR-212FHG, you can use when you want to control the gyro system for sensitivity adjustment using the 3CH · 4CH.

[How to set Gyro mode]

GYRO is configured to channels 3/4 control modes.

ET3 : 3ch control (Steering gyro gain control)

ET5 : 4ch control (Throttle gyro gain control)

Adjust it to moderate gyro gain while running.

P Specification of channel 3 and 4 of the gyro mode memory (storage) is memorized.

! The functions which may be set are both 3CH and 4CH.

! When the 3ch/4ch mode is changed from GYRO mode to another mode or OFF, the 3ch mode will return to the setting for (OFF).

! Please prepare the gyro system (ex. KR-212FHG) separately. The gyro effect is not provided only in the main system of transmitter.

▶ TWIN SERVO MODE

This function modifies the setting for using 2 steering servo. Using left steering servo 1ch, and right steering servo 3ch or 4ch. ※ Not used in MINI-Z.

[Example]

Ackerman control is possible when using for drift cars using twin servos.

| 3CH MODE : TWIN SERVO | | | |
|-----------------------|------|--------------------|------|
| LEFT — ST (1 CH) | | RIGHT — ST NORM | |
| L · LEFT | 70% | R · LEFT | 70% |
| L · RIGHT | 70% | R · RIGHT | 70% |
| L · SPEED | 100% | R · SPEED | 100% |
| L · TRIM | 0 | R · TRIM | 0 |

[Setting Range]

LEFT-ST (1CH)

L-LEFT : 30 ~ 100% (Default: 70%)

Sets the highest value for the 1CH servo left operation.

L-RIGHT : 30 ~ 100% (Default: 70%)

Sets the highest value for the 1CH servo right operation.

L-SPEED : 1 ~ 100% (Default: 100%)

Sets the steering speed for the 1CH servo operation.

L-TRIM : -50 ~ 50 (Default: 0)

Sets the neutral position for the 1CH servo operation range.

RIGHT-ST

NORM (Normal) , REVS (Reverse) (Default: NORM)

Sets operation direction of 3CH or 4CH servo.

R-LEFT : 30 ~ 100% (Default: 70%)

Sets the highest value for the 3(4)CH servo left operation.

R-RIGHT : 30 ~ 100% (Default: 70%)

Sets the highest value for the 3(4)CH servo right operation.

R-SPEED : 1 ~ 100% (Default: 100%)

Sets the steering speed for the 3(4)CH servo operation.

R-TRIM : -50 ~ 50 (Default: 0)

Sets the neutral position for the 3(4)CH servo operation range.

▶ 4WS

This function is related to an R/C car's 4-wheel steering feature. If 3CH or 4CH is assigned to control the rear axle, it will operate in conjunction with 1CH (steering). The direction of the rear axle steering may also be changed. ※ Not used in MINI-Z.

| 3CH MODE : 4 WS | |
|-----------------|------------------|
| MODE | NORMAL ->KEY:OFF |
| LEFT | 70 |
| CENTER | 0 ->KEY:OFF |
| RIGHT | 70 |
| TRVL | 100 ->KEY:OFF |
| REVERSE | NORM |

[Setting Range]

MODE (Default: NORMAL)

NORMAL (front and rear axles turn in the same direction)

REVERSE (front and rear axles turn in opposite directions)

F STEER (steer front axle only)

R STEER (steer rear axle only)

LEFT : 0 ~ 100 (Default: 70)

Adjusts the rear axle servo movement range when steering is turned to the left.

CENTER : -50 ~ 50 (Default: 0)

Adjust the rear axle servo's neutral position.

RIGHT : 0 ~ 100 (Default: 70)

Adjusts the rear axle servo movement range when steering is turned to the right.

TRAVEL : 0 ~ 150 (Default: 100)

Adjusts the overall amount of movement of the rear axle servo when the steering is at full lock.

REVERSE : NORM (Normal) , REVS (Reverse) (Default: NORM)

Sets operation direction of 3CH or 4CH servo.

MODE → KEY : OFF, ET1 ~ 5 (Default: OFF)

Assigns ET keys to be used for 4WS Mixing MODE.

CENTER → KEY : OFF, ET1 ~ 5 (Default: OFF)

Assigns ET keys to be used for 4WS Mixing CENTER.

TRVEL → KEY : OFF, ET1 ~ 5 (Default: OFF)

Assigns ET keys to be used for 4WS Mixing TRAVEL.

▶ AMP Mixing MODE

※ Not used in MINI-Z.

Used when the front and rear wheels are controlled by separate ESCs and motors. If 3CH or 4CH is set to the front-wheel drive function, it will operate in conjunction with 2CH's throttle operations.

| 3CH MODE : AMP | | |
|----------------|---------------|---------------|
| MODE | NORMAL | ->KEY:OFF |
| TH HOLD | 0 | ->KEY:OFF |
| HIPOINT | 100 | ->KEY:OFF |
| BRAKE | 100 | ->KEY:OFF |
| TRIM | 0 | |
| REVERSE NORM | | ->KEY:OFF >>> |

[Setting Range]

MODE (Default: NORMAL)

NORMAL(drives both front and rear wheels)

BURN(drives rear wheels only)

DIG(drives front wheels only)

F HOLD(drives front wheels at a set speed)

R HOLD(drives rear wheels at a set speed)

TH HOLD : -100 ~ 100 (Default: 0)

This function adjusts the set speed used for (F HOLD) and (R HOLD) selected in Amp Mixing Mode.[F HOLD] adjusts the front wheel drive while [R HOLD] adjusts the rear wheel drive.

※ This setting is activated when F HOLD or R HOLD mode is selected.

[Example] May be used for rock crawlers, etc.

HIPOINT : 0 ~ 150 (Default : 100)

Adjusts the maximum amount of throttle to be applied to the front wheels. Equivalent to the [Throttle High Point] function.

※ This setting is activated when NORMAL, DIG, or R HOLD mode is selected.

P This makes it easy to adjust the amount of maximum throttle, particularly on a glow engine car.

P If the amp mixing high point is set low and the amp mixing trim is set to a high value toward acceleration, the resulting throttle movement may be extraordinarily small.

! On glow engine cars, an overly high setting value will increase load on the servo and lead to it being damaged. Check carefully while adjusting.

! On electric cars, a setting value that is too small may cause problems with the ESC settings. Make adjustments starting from the default setting (100).

! Brake will not operate if the value is set to 0.

BRAKE : 0 ~ 150 (Default: 100)

Modify the maximum amount of reverse (brake) to be applied to the front wheels.

Equivalent to [Throttle Brake] function.

※ This setting is activated when NORMAL, DIG, or R HOLD mode is selected.

! On glow engine cars, an overly high setting value will increase load on the servo and lead to it being damaged. Check carefully while adjusting.

! On electric cars, a setting value that is too small may cause problems with the ESC settings. Make adjustments starting from the default setting (100).

! Brake will not operate if the value is set to 0.

TRIM : -50 ~ 50 (Default : 0)

Adjusts the neutral position of the front wheels.

P The setting position cannot exceed what is set by [High Point] or [Brake].

REVERSE : NORM (Normal) , REVS (Reverse)

Changes the movement direction of the front wheels. (Default: MORM)

P For electric cars, the throttle is set by the ESC so there is no need to set this function. However, some older ESCs will not function properly unless reverse is also set.

MODE → KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns ET or BT keys to activate the various front wheel drive modes.

TH HOLD → KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns ET keys to be used for the set speed used for TH HOLD.

HIPOINT → KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns ET or BT keys to adjust HIPOINT value.

BRAKE → KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns ET or BT keys to adjust BRAKE value.

REVERSE → KEY : OFF, ET1 ~ 5 (Default : OFF)

Assigns ET or BT keys to changes the movement direction of the front wheels.

[Setting Range]

ET MODE SET

Assigns ET or BT keys to activate the various front wheel drive modes.

| 3CH MODE:AMP | |
|--------------|-------------|
| ET MODE SET | |
| NORMAL | : ON |
| BURN | : ON |
| DIG | : ON |
| F HOLD | : ON |
| R HOLD | : ON |
| <<< | |

NORMAL : ON, OFF (Default : ON)

BURN : ON, OFF (Default : ON)

DIG : ON, OFF (Default : ON)

F HOLD : ON, OFF (Default : ON)

R HOLD : ON, OFF (Default : ON)

P Assigning these keys may be convenient for rock crawlers or when you need to adjust Amp Mixing settings.

▶ T-MIX Throttle Mixing MODE

※ Not used in MINI-Z.

Mainly used for 1/5 scale R/C cars where the left/right front wheels' braking operation is controlled by an independent servo.

If 3CH is assigned to front right wheel brake and 4CH is assigned to front left wheel brake, they will operate in conjunction with 2CH (throttle) and 1CH (steering).

[Example]

Simplifies adjustment of the independent brake channel (servo) on 1/5 scale R/C cars.

| 3CH MODE : T-MIX | | |
|------------------|-----|---------------|
| BRAKE | 100 | ->KEY:OFF |
| CENTER | 0 | ->KEY:OFF |
| HIPOINT | 100 | ->KEY:OFF |
| DELAY | 0 | ->KEY:OFF |
| STEER | 0 | ->KEY:OFF |
| ON/OFF | ON | ->KEY:OFF >>> |

[Setting Range]

BRAKE : 0 ~ 150 (Default : 100)

Modify the maximum amount of front brake servo movement.

CENTER : -50 ~ 50 (Default : 0)

Modify the front brake servo's neutral position.

HIPOINT : 0 ~ 150 (Default : 100)

Modify the maximum amount of throttle to be applied to the front brake servo.

※ To avoid operating only the brakes, set value to 0.

DELAY : 0 ~ 100 (Default : 0)

Delays the operation of the front wheel servo brake.

STEER : -100 ~ 100 (Default : 0)

Modify the amount of brake applied by the front wheel brake servo in relation to steering input.

ON/OFF : ON, OFF (Default : ON)

Enables Throttle Mixing to be activated via ET keys.

BRAKE → KEY : OFF, ET1 ~ 5 (Default : OFF)

CENTER → KEY : OFF, ET1 ~ 5 (Default : OFF)

HIPOINT → KEY : OFF, ET1 ~ 5 (Default : OFF)

DELAY → KEY : OFF, ET1 ~ 5 (Default : OFF)

STEER → KEY : OFF, ET1 ~ 5 (Default : OFF)

ON/OFF → KEY : OFF, ET1 ~ 5 (Default : OFF)

⚠ These setting must be set for both front right brake (3CH) and front left brake (4CH).

3CH MODE : T-MIX

FOWARD CURVE: 0 %
 BRAKE CURVE: 0 %

REVERSE : NORM

<<<

[Setting Range]

FORWARD CURVE : -100% ~ 100% (Default : 0%)

BRAKE CURVE : -100% ~ 100% (Default : 0%)

Ⓟ Positive values (+1 to +100) equal high initial response followed by mild response.
 Negative values (-1 to -100) equal a mild initial response followed by high response.

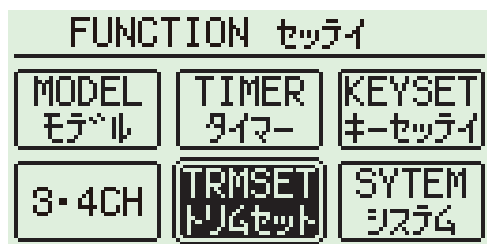
REVERSE : NORM, REVE (Default : NORM)

This function reverses the front brake servo's movement direction. It is useful for when servo output movement does not match inputs after the servo has been installed.

⚠ Use of Throttle Mixing Steering may increase load on the servo and cause increased wear or damage. Check the servo while adjusting.

TRIM SET

The convenient function that can set trim and travel while operating steering wheels.



▶ STEER AUTO TRIM

- ① Move the cursor to "SET" and push the ENT key, "SET" will start blinking.
※ At this time, the steering trim becomes 0 forcibly.
- ② Hold the steering wheel of the transmitter to the position that you want to make neutral.
Set the steering neutral position by pushing the ENT key while holding the position.



P As for this function, only the numerical value of the steering trim changes. Does not influence the numerical value of the steering subtrim.

- !** After pushing "SET", the steering servo moves because the neutral position has changed.
Release the steering handle, the servo moves to the new neutral position.

▶ STEER AUTO BALANCE LEFT

- ① Move the cursor to "SET" and push the ENT key, "SET" will start blinking.
※ At this time, the steering travel(L) becomes 100 forcibly.
- ② Hold the steering wheel of the transmitter to the position that you want to make the Left end point.
Set the steering travel(L) position when pushing the ENT key while holding the position.

P As for this function, only the numerical value of the steering travel(L) changes. Does not influence the numerical value of the steering travel and travel(R).
When the quantity of movement is short, set automatic balance again after increasing steering travel.

- !** After pushing "SET", the steering servo moves because the travel(L) position has changed.
Release the steering handle, the servo moves to the neutral position.

! Use of Steering auto balance may increase load on the servo and cause increased wear or damage. Check the servo while adjusting.

! When operating the steering wheel to the right in steering auto balance(L), it will not set correctly. Be careful to the direction of operation.

▶ STEER AUTO BALANCE RIGHT

- ① Move the cursor to "SET" and push the ENT key, "SET" will start blinking.
※ At this time, the steering travel(R) becomes 100 forcibly.
- ② Hold the steering wheel of the transmitter to the position that you want to make the Right end point.
Set the steering travel(R) position when pushing the ENT key while holding the position.

P As for this function, only the numerical value of the steering travel(R) changes. Does not influence the numerical value of the steering travel and travel(L).
When the quantity of movement is short, set automatic balance again after increasing steering travel.

! After pushing "SET", the steering servo moves because the travel(R) position has changed.
Release the steering handle, the servo moves to the neutral position.

! Use of Steering auto balance may increase load on the servo and cause increased wear or damage. Check the servo while adjusting.

! When operating the steering wheel to the left in steering auto balance(R), it will not set correctly. Be careful to the direction of operation.

SYSTEM MENU

Menu related to various system settings.

| FUNCTION セッテイ | | |
|---------------|------------------|------------------|
| MODEL モデル | TIMER タイマー | KEYSET キーセッテイ |
| 3-4CH | TRMSET トリムセット | SYSTEM システム |

| SYSTEM システム | | |
|---------------|------------------|-----------------|
| DISPLY ゲーム | BATTERY バッテリー | CULC. ケイサンキ |
| SOUND サウンド | VRINFO VRインフォ | KEYSPD キーソフト |

▶ DISPLAY MENU

Setting about LCD display.

| DISPLAY ゲーム | | |
|---------------------|--------|---|
| CONTRAST ノウド | | 4 |
| LIGHTMODE バックライト | KEY-ON | |
| LIGHTTIME ライトタイム | | 5 |

[Setting Range]

CONTRAST : 1 ~ 5 (Default : 4)

Adjusts the contrast of the LCD.

LCD contrast become low when the numerical value is reduced.

- P** LCD contrast will characteristically be darker when warm and lighter when cold. Make corresponding contrast adjustments if this is a concern for you.

LIGHTMODE

Backlight mode of the LCD : OFF, ON, KEY-ON

Sets the light activation mode.(Default: KEY-ON)

LIGHTTIME : 1 ~ 60 (Default: 5)

Sets the time between a key operation (other than steering or throttle) and the LCD backlight turning off when [LIGHT MODE] is set to [KEY-ON].

- !** When the backlight is set to [KEY-ON], it will only be activated by ET/BT key operation, not by steering or trigger operation.

▶ BATTERY

Select the type of battery used.

| BATTERY バッテリー | |
|---------------|-------------|
| DRY カンデ ンチ | LiFe リフェ |
| NI-MH ニッケル | LIPO リポ |

[Setting Range]

DRY(Alkaline Batteries),

Primary warning buzzer 4.0V or less

Second warning buzzer, movement stop 3.8V or less
LIFE(Li-Fe Battery)

Primary warning buzzer 6.2V or less

Second warning buzzer, movement stop 6.0V or less

NI-MH(Ni-MH Battery)

Primary warning buzzer 4.0V or less

Second warning buzzer, movement stop 3.8V or less

LIPO(Li-Po Battery)

Primary warning buzzer 7.0V or less

Second warning buzzer, movement stop 6.0V or less

- P** According to the selected power source type, a low voltage warning will be displayed. Transmitter signals will not be cut at this time, but problems with control may be experienced. Stop operation immediately and replace batteries.

- P** When setting a battery type by mistake, the warning message can be canceled by pushing and holding the BACK key to display the initial screen. Please set it to right battery again.

! Change Power Management After Switching Battery Type!

If the battery used does not match the Power Management setting, the battery may be over-discharged and damaged. This may also result in fire, so make sure you pay special attention.

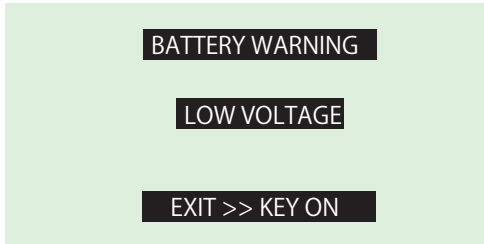
! WARNING ! Warning Display

▶ Battery Level Warning

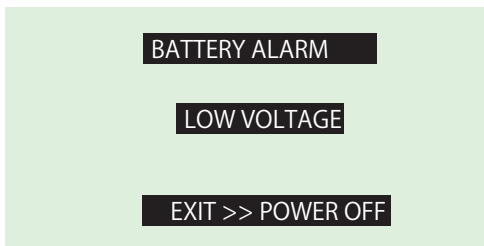
During driving, this warning will be displayed if the battery voltage is below the required level.

You may still operate the model, but it is recommended to replace the battery immediately

※ In the case of DRY/Ni-MH setting, the LED (blue) of the main body of EX-6 flashes on and off, too.



Furthermore, when the power supply voltage decreases, it is displayed and normal operation will not be able to continue. Switch it off immediately, and replace the batteries immediately.



P When setting a battery type by mistake, the warning message can be canceled by pushing and holding the BACK key to display the initial screen. Please set it to right battery again.

▶ CALCULATOR

calculate the gear ratio.

| CALCULATOR ケイサンキ | | | |
|------------------------|------|--------------------------------|--|
| SPUR GEAR スパ - | 110 | FINAL RATIO ギヤレ 7.333 | |
| PINION GEAR /ピニオン | 30 | | |
| TRANSRATIO x2ジゲンスツク | 2.00 | | |

[Setting Range]

SPUR GEAR : 1 ~ 999 (Default : 110)
 PINION GEAR : 1 ~ 999 (Default : 30)
 TRANSRATIO : 1.00 ~ 99.99 (Default : 2.00)

[How to use]

When the spur, pinion and transmission ratio are inputted, the gear ratio is automatically calculated and shown on the right side of the display.

▶ SOUND

Adjusts the sound level of the transmitter buzzer.

| SOUND サウンド | |
|------------------------|---|
| BUZZER TONE オンテイ | 2 |
| BUZZER PATTERN パターン | 1 |
| BUZZER VOLUME ボリューム | 5 |

[Setting Range]

BUZZER TONE : 1 ~ 7
 (Default : 2)
 BUZZER PATTERN : 1 ~ 7
 (Default : 1)
 BUZZER VOLUME : 0 ~ 5
 (Default : 5)

▶ VR INFORMATION

Adjust the potentiometer of the steering and throttle.

※ Please always set it:

- When using EX-6 for the first time.
- When changing a steering unit for a different product or when putting it back together.
- When changing a grip unit for a different product or when putting it back together.
- During use, when the volume was worn out.

- 1, Select [FUNCTION] on the initial screen and push the ENTER key.
- 2, Select [SYSTEM] on the function screen and push the ENTER key.

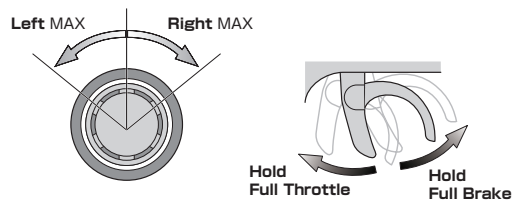
- 3, Select [VR INFO] on the system screen and push the ENTER key.
- 4, Move the wheel slowly to the full left and right lock (numbers will change as the steering is moved) and release the wheel back to neutral.
- 5, Move the trigger slowly to the full throttle and full brake positions (numbers will change as the throttle is moved) and release the trigger back to neutral.
- 6, Select the "YES" on the right side of the display screen.

3, Example before setting

| VR INFORMATION | VRインフォメーション | |
|----------------|-------------|------|
| ST- LEFT | ヒタリ | 2204 |
| NUT | センター | 2198 |
| RIGHT | ミギ | 2194 |
| TH- HI | ゼンシン | 2078 |
| NUT | センター | 2075 |
| LOW | ブレーキ | 2072 |

OK?
YES

4,5, Move slowly to full stroke, then release.



6, Small window [Yes] comes active.

| VR INFORMATION | VRインフォメーション | |
|----------------|-------------|------|
| ST- LEFT | ヒタリ | 3949 |
| NUT | センター | 2198 |
| RIGHT | ミギ | 487 |
| TH- HI | ゼンシン | 3313 |
| NUT | センター | 2075 |
| LOW | ブレーキ | 1463 |

OK?
YES

※ When operating the VR INFORMATION and pressing the BACK key will cancel the operation.

⚠ Do not operate steering wheel and throttle trigger while pressing ENTER, as this may change the data values and affect subsequent operations. If this function is not adjusted properly, improper operation may result.

⚠ VR Information timing may vary depending on usage. If problems persist even after using VR Information, contact your local kyosho distributor to arrange repairs. (If you do not know well, we recommend that you give us consult to our user consultation room)

▶ KEYSPEED

Adjusts the delay between operations if the ET/BT key is pressed repeatedly.

| KEYSPEED キーソクド | |
|----------------------|---|
| KEYSPEED キーソクド | 3 |
| MENUSPEED メニューソクド | 3 |


[Setting Range]


KEYSPEED : OFF ~ 5

(Default : 3)

MENUSPEED : OFF ~ 5

(Default : 3)

 OFF:Key Repeat Disabled.
The larger value will shorten the delay time.

 The ET/BT keys speed is fixed and can not be independently changed.

▶ OPERATION ALARM

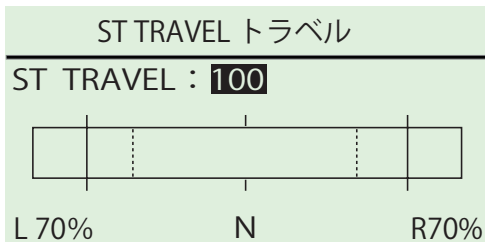
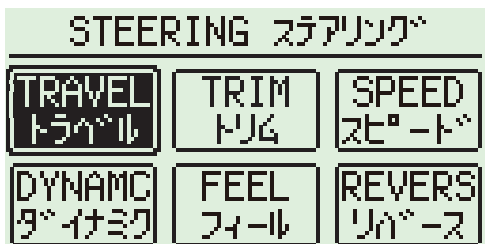
When there is no input to the transmitter in over three minutes, an alarm will sound. The alarm is canceled when operating steering wheel, throttle trigger, ET, BT key, ENT key, L R key, BACK key.

※ This function setting can not be changed nor turned off.

STEERING

TRAVEL

Modify the overall amount of steering movement.



▶ ST TRAVEL

Modify the overall amount of steering movement.

▶ L (BALANCE)

Modify the left steering angle end point.

▶ R (BALANCE)

Modify the right steering angle end point.

▶ ST TRAVEL Steering Travel

Adjust the overall amount of steering servo movement when the steering wheel is at full lock.

[Setting Range]

ST TRAVEL : 0 ~ 150
(Default : 100)

P Since the Balance setting value is a ratio of the Travel setting value, if the latter is modified the actual movement value and the displayed graphic will also change.(the Travel value will not change).

A Steering will not operate if the Travel value is set to 0.

▶ ST BALANCE L R Steering BalanceL R

Adjust the left/right steering angles independently. This enables the turning radii to match up during cornering.

[Setting Range]

ST BALANCE L : 30 ~ 100
(Default : 70)
ST BALANCE R : 30 ~ 100
(Default : 70)

P The set percentage is a ratio of the value set by the Steering Travel.

P Steering balance can be adjusted by using the steering wheel and ET key!

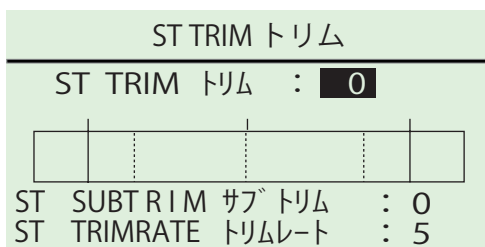
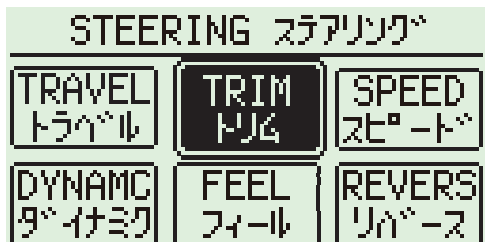
If an ET key that is assigned to steering trim is pressed while the steering is turned over halfway in either direction, the balance of the direction of the turn can be adjusted.

P If the trim is set to a large value, a large left/right value discrepancy may result. If adjusting steering balance for the first time, follow the procedures below.

- ① Set trim value to 0.
- ② Adjust sub trim so that the car drives in a straight line when steering is in neutral position.
- ③ Use steering travel to match the overall steering angle range.
- ④ Use steering balance to match the left/right turning radii.
- ⑤ If the car does not drive straight at this point, use trim to correct.

TRIM MENU

Adjusts the neutral/center position of the steering angle range.



▶ ST TRIM Steering Trim

Modify the neutral position of the steering angle.

▶ ST SUBTRIM Steering Subtrim

Shift the overall steering angle range.

▶ ST TRIMRATE Steering trim rate

Modify the amount of movement which corresponds to one click of the Trim button.

▶ ST TRIM

Adjusts the neutral/center position of the steering angle range.

[Setting Range]

ST TRIM : L50 ~ 0 ~ R50
(Default : 0)

P Setting adjustments prior to driving should be carried out with the sub trim, not the trim.

A The setting range cannot exceed what is set by [Steering Travel] or [Steering Balance].

▶ ST SUBTRIM

Adjust the position of the overall steering angle range.

※ Also refer to Trim and Sub Trim Operation. (p.13)

[Setting Range]

ST SUBTRIM : L80 ~ 0 ~ R80
(Default : 0)

▶ ST TRIMRATE

Adjusts the amount of movement associated with one click of the trim button.

[Setting Range]

ST TRIM RATE : 1 ~ 10
(Default : 5)

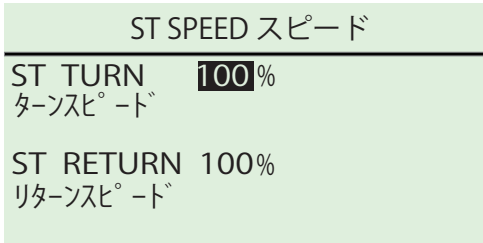
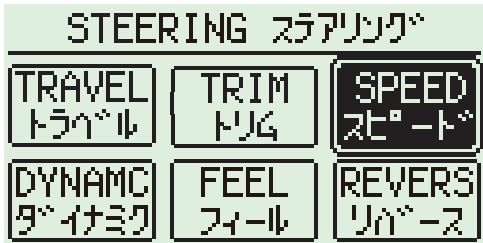
P Although the amount of movement of one interval can be adjusted, the lower the number the smaller the amount of movement.

P The overall number of intervals does not change, so a change in trim rate will result in a change in the range in which the trim can be used to make corrections.

P If the trim rate is changed when the trim is already set, the trim may be thrown off. If the trim setting is 0 then this does not apply.)

ST SPEED Steering SPEED

Modify the speed of the steering servo movement.



▶ ST TURN Steering Turn Speed

Modify the speed of the steering's turn movement.

▶ ST RETURN Steering Return Speed

Modify the speed of the steering's return movement.

▶ ST TURN Steering Turn Speed

This function limits the maximum speed of the steering servo by adjusting the steering turn direction [TURN] setting.

[Setting Range]

ST TURN SPEED : 1 ~ 100%
(Default : 100%)

[Example]

When the car motion is too quick, you can reduce it. It will be easy to control the car.

P For each setting, it has changed the optimal numerical value in a variety of factors, such as your car, the road surface. Conduct test drives to find the best setting values.

▶ ST RETURN Steering Return Speed

This function limits the maximum speed of the steering servo by adjusting the steering return direction [RETURN] setting.

[Setting Range]

ST RETURN SPEED : 1 ~ 100%
(Default : 100%)

P For each setting, it has changed the optimal numerical value in a variety of factors, such as your car, the road surface. Conduct test drives to find the best setting values.