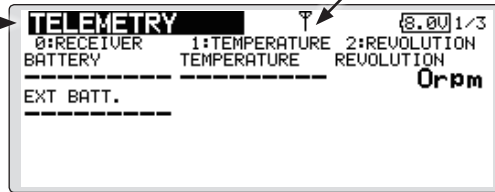# TELEMETRY

Displaying data from the receiver

This screen displays your choice of data from the receiver.

Also warnings can be activated regarding other data from your aircraft. For example, if the receiver voltage drops, the user can be warned by an alarm (and vibration).

*Only receiver voltage can be used in FASSTest 12CH mode.

*The FASSTest 18CH mode can use all the telemetry functions.

● Receiver → Transmitter. The reception strength is shown.

● Select [TELEMETRY] in the Linkage menu and access the setup screen shown below by pushing the RTN button.
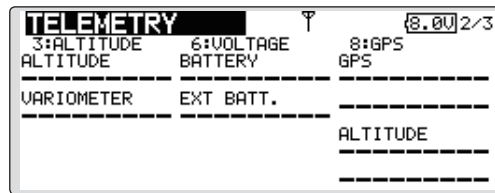
● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>

Scrolling
● Moving cursor

● Push the S1 button to call next page.
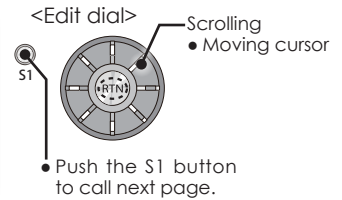
● Push S1 button to advance to next page.

How to see telemetry data

1. Telemetry screen can be called select [TELEMETRY] in the Linkage menu and access the setup screen by pushing the RTN button.

2. If each item is chosen and the RTN button is pushed, an alarm setup can be performed with the minimum/maximum after a transmitter is turned on.

   *Receiver voltage can be checked immediately. An optional sensor will need to be attached to S.BUS2 of a receiver if you would like to see other information.

   *No special setup is necessary if each sensor displayed is left as in the default setup. Separate sensor ID is also unnecessary. However, if two or more of one kind of sensor is used, setup is required in the "SENSOR" menu.

⚠ WARNING

🚫 Do not watch the transmitter screen during flight.

   *You may loose sight of the aircraft during flight and this is extremely dangerous. Have an assistant on hand to check the screen for you. A pilot should NEVER take his eyes off his aircraft.

TELEMETRY : RECEIVER [BATTERY]

Displaying data from the receiver battery voltage

In this screen, the battery voltage of a receiver is displayed.

If it becomes higher or lower than the setting an alarm and/or vibration will alert you.

*Only receiver voltage can be used in FASSTest 12CH mode.

*The FASSTest 18CH mode can use all the telemetry functions.

● Receiver battery voltage

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

● Select [Rx-BATT.] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
RECEIVER              8.0V 1/1
BATTERY
              5.3V
        5.3V/  5.3V
EXT.BATT.
              0.0V
        0.0V/  0.0V
```

<Edit dial>

S1

Scrolling
● Moving cursor

● ↓The "down" arrow will indicate that an alarm will sound when the voltage drops to below the setting.

● Select [BATTERY] in the RECEIVER screen and access the setup screen shown below by pushing the RTN button.

```
RECEIVER              7.7V 1/1
BATTERY
 ALARM      VIBRATOR    LIMIT
↓INHIBIT  TYPE 2       4.0V

 SPEECH
 OFF
```

● A setup of the voltage on which the alarm operates.

● ALARM is chosen from BUZZER, VOICE, and INHIBIT.

● The ON/OFF switch of SPEECH is chosen.

Alarm set

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.

2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.

3. Move the cursor to the LIMIT [4.0V] item and push the RTN button to switch to the data input mode.

4. Ajust the rate by scrolling the edit dial.

   Initial value: 4.0V

   Adjustment range: 0.0V~100.0V

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

"VIBRATOR" type

If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1 →

TYPE 2 → →

TYPE 3 → → → →

TELEMETRY : RECEIVER [EXT BATT.]

Displaying data from the EXT battery voltage port

*CA-RVIN-700 must be installed in the aircraft.

The EXT-VOLT screen will display the data from the EXT-battery output from the R7008SB receiver. In order to use this function, it is necessary to connect external voltage connector of the R7008SB receiver to a CA-RVIN-700 or SBS-01V to the battery you desire to measure the voltage of the EXT-battery.
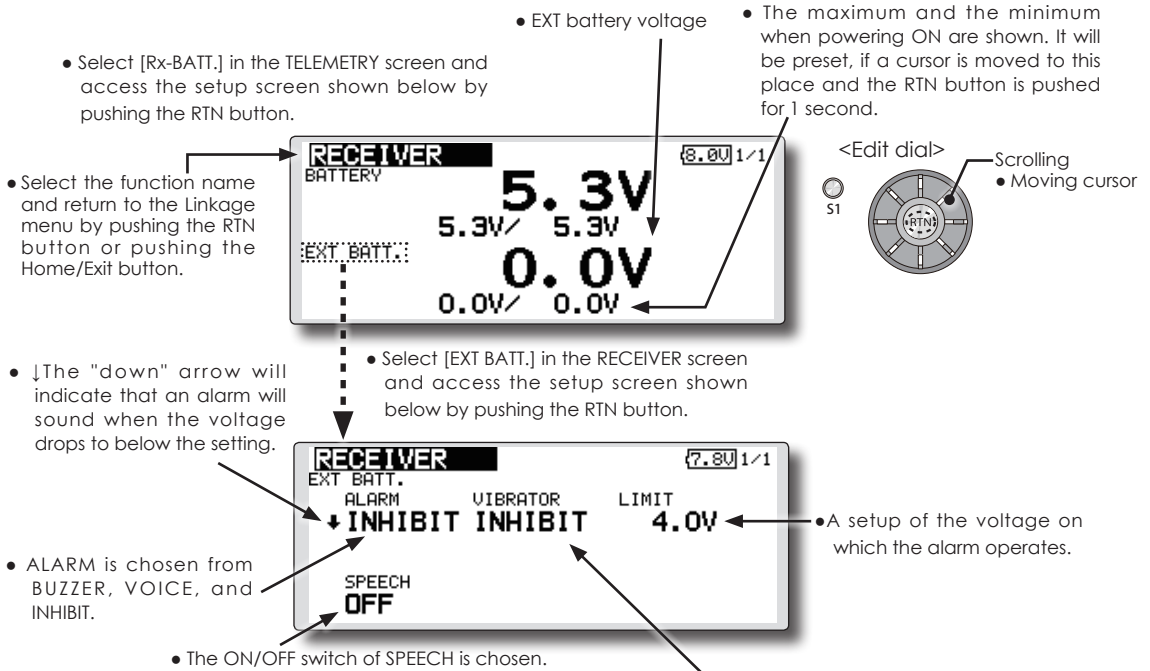
You will be alerted by an alarm or vibration if the voltage set by you is exceeded.

*FMR-03 isn't equipped with EXT-battery port.

*Only receiver voltage will be received in the FASSTest 12CH mode.

*The FASSTest 18CH mode will display all telemetry data.

● EXT battery voltage

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

● Select [Rx-BATT.] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
RECEIVER                    8.0V 1/1
BATTERY
              5.3V
        5.3V/  5.3V
EXT.BATT.
              0.0V
        0.0V/  0.0V
```

<Edit dial>

S1

Scrolling
● Moving cursor

● ↓The "down" arrow will indicate that an alarm will sound when the voltage drops to below the setting.

● Select [EXT BATT.] in the RECEIVER screen and access the setup screen shown below by pushing the RTN button.

```
RECEIVER                    7.8V 1/1
EXT. BATT.
   ALARM      VIBRATOR    LIMIT
 ↓INHIBIT  INHIBIT      4.0V

   SPEECH
   OFF
```

●A setup of the voltage on which the alarm operates.

● ALARM is chosen from BUZZER, VOICE, and INHIBIT.

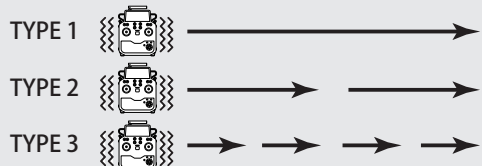● The ON/OFF switch of SPEECH is chosen.

Alarm set

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, and INHIBIT, and pushes RTN.

2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.

3. Move the cursor to the LIMIT [4.0V] item and push the RTN button to switch to the data input mode.

4. Ajust the rate by scrolling the edit dial.

   Initial value: 4.0V

   Adjustment range: 0.0V~100.0V

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

"VIBRATOR" type

If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

TELEMETRY : TEMPERATURE

Displaying data from the temperature
*A temperature sensor must be installed in the aircraft.

Temperature is a screen which displays/sets up the temperature information from an optional temperature sensor.

The temperature of the model (engine, motor, battery, etc.) which is flying can be displayed.

If it becomes higher or lower than the setting an alarm and/or vibration will alert you.

*Only receiver voltage can be used in FASSTest 12CH mode.

*The FASSTest 18CH mode can use all the telemetry functions.

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

● Temperature

● Select [TEMPERATURE] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>

Scrolling
● Moving cursor

● Select [TEMPERATURE] (small font display) in the TEMPERATURE screen and access the setup screen shown below by pushing the RTN button.

● A setup of the temperature on which the alarm operates.

● ↑ An upward arrow will show that an alarm will sound when the temperature rises above the set value.

● ↓ A downward arrow will show that an alarm will sound when the temperature drops below the set value.

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

● The ON/OFF switch of SPEECH is chosen.

Alert set : Hot warning

1. Move the cursor to the ↑ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [℃] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 100℃
   Adjustment range: 0℃ ~200℃
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Alert set : Low-temperature warning

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [℃] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 0℃
   Adjustment range: 0℃ ~200℃
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

TELEMETRY : RPM SENSOR

Displaying data from the RPM

*A RPM sensor must be installed in the aircraft.

RPM sensor is a screen which displays / sets up the rotation information from an optional RPM sensor.

The rotation of the model (engine, motor, etc.) which is flying can be shown.

If it becomes higher or lower than the setting an

alarm and/or vibration will alert you.

*Only receiver voltage can be used in FASSTest 12CH mode.

*The FASSTest 18CH mode can use all the telemetry functions.

● Select [RPM sensor] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● RPM

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

●Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
RPM SENSOR          7.7V 1/1
ROTATION
                    Orpm
        Orpm/       Orpm
```

<Edit dial>

Scrolling
● Moving cursor

S1

●Select [ROTATION](small font display) in the RPM sensor screen and access the setup screen shown below by pushing the RTN button.

●A setup of the revolution on which the alarm operates.

● ↑An upward arrow indicates that the alarm will sound when the RPM rises above the set value.

```
RPM SENSOR          7.7V 1/1
ROTATION
  ALARM    VIBRATOR    LIMIT
↑ INHIBIT  INHIBIT   2000rpm
↓ INHIBIT  INHIBIT      Orpm
  SPEECH  SENSOR TYPE GEAR / BRADE
  OFF     MAGNET       1.00
```

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

● ↓A downward arrow indicates that the alarm will sound when the RPM falls below the set value.

● The ON/OFF switch of SPEECH is chosen.

●"MAGNET" or "OPTICS" is set according to the sensor you use.

SBS-01RM : MAGNET
SBS-01RO : OPTICS

● In "MAGNET", the gear ratio of your engine (motor) you are using is entered.

● In "OPTICS", the number of blades of the propeller (r o t o r) your model is entered.

Alarm set : Over rotations

1. Move the cursor to the ↑ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [2,000rpm] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 2,000rpm
   Adjustment range: 0rpm~150,000rpm
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Alarm set : Under rotations

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [0rpm] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 0rpm
   Adjustment range: 0rpm~150,000rpm
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

TELEMETRY : ALTITUDE

Displaying data from the altitude

*An altitude sensor or GPS sensor must be installed in the aircraft.

ALTITUDE is a screen which displays / sets up the altitude information from an optional altitude sensor or GPS sensor. The altitude of the model which is flying can be known. If it becomes higher (low) than preset altitude, you can be told by alarm. To show warning by vibration can also be chosen. Data when a power supply is turned on shall be 0 m, and it displays the altitude which changed from there. Even if the altitude of an airfield is high, that shall be 0 m and the altitude difference from an airfield is displayed.

This sensor calculates the altitude from atmospheric Pushure. Atmospheric Pushure will get lower as you go up in altitude, using this the sensor will estimate the altitude. Please understand that an exact advanced display cannot be performed if atmospheric Pushure changes in a weather situation.

  *Only receiver voltage can be used in FASSTest 12CH mode.
  *The FASSTest 18CH mode can use all the telemetry functions.

● Select [ALTITUDE] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

● Altitude

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.
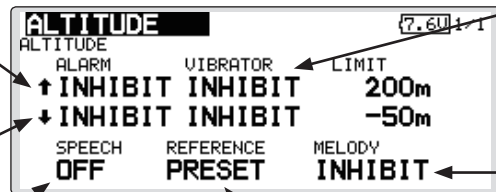
<Edit dial>

Scrolling
● Moving cursor
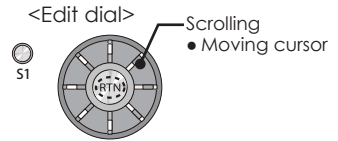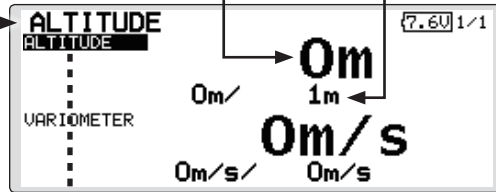
● ↑ An upward arrow indicates the alarm will sound when the altitude reaches above your set value.

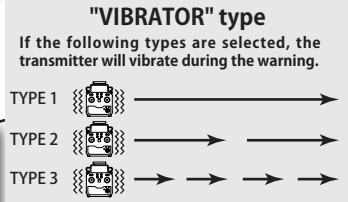● ↓ A downward arrow indicates the alarm will sound when the altitude reaches below your set value.

●Select [ALTITUDE](small font display) in the TEMPERATURE screen and access the setup screen shown below by pushing the RTN button.

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1
TYPE 2
TYPE 3

●If this is set to MODE1-4, a rise and dive are told by a different melody.

MODE1: Little rise/dive→Melody changes (sensitively)
⋮
MODE4: Big rise/dive→Melody changes (insensible)

●The ON/OFF switch of SPEECH is chosen.

First, the set of a reference is required.

1. The model and transmitter to which the altitude sensor was connected are turned on.
2. Move the cursor to the [PRESET] of "REFERENCE" item.
3. Push the RTN button is pushed for 1 second. (To terminate the input and return to the original state, push the Home/Exit button.)

*Atmospheric Pushure is changed according to the weather also at the same airfield. You should preset before a flight.

Alarm set : High side

1. Move the cursor to the ↑ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [m] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 200m
   Adjustment range-500m~+3,000m
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Alarm set : Low side

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [m] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: -50m
   Adjustment range-500m~+3,000m
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

TELEMETRY : ALTITUDE [VARIOMETER]

Displaying data from the variometer

*An altitude sensor or GPS sensor must be installed in the aircraft.

VARIO is a screen which displays / sets up the variometer information from an optional altitude sensor or GPS sensor.

The variometer of the model which is flying can be known.

If it becomes higher or lower than the setting an alarm and/or vibration will alert you.

To ensure that the pilot is aware as to the model's status, the FMT-03 incorporates a different melody for ascent and descent. Additionally, depending upon the rate of climb or descent, the tones vary to indicate whether or not the airplane is climbing or descending at a rapid rate.

*Only receiver voltage can be used in FASSTest 12CH mode.
*The FASSTest 18CH mode can use all the telemetry functions.

● Variometer

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

● Select [ALTITUDE] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>

Scrolling
● Moving cursor

● Select [VARIOMETER](small font display) in the TEMPERATURE screen and access the setup screen shown below by pushing the RTN button.

● ↑ An upward arrow indicates the alarm will sound when the variometer reaches above your set value.

● ↓ A downward arrow indicates the alarm will sound when the variometer reaches below your set value.

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1
TYPE 2
TYPE 3

● The ON/OFF switch of SPEECH is chosen.

● If this is set to MODE1-4, a rise and dive are told by a different melody.

MODE1: Little rise/dive→Melody changes (sensitively)
⋮
MODE4: Big rise/dive→Melody changes (insensible)

Alert set : Rise side

1. Move the cursor to the ↑ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [m/s] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: +1m
   Adjustment range -50m/s~+50m/s
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Alert set : Dive side

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [m/s] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: -1m
   Adjustment range -50m/s~+50m/s
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

TELEMETRY : VOLTAGE [BATTERY]

Displaying data from the battery voltage

*SBS-01V must be installed in the aircraft.

*Only receiver voltage can be used in FASSTest 12CH mode.

*The FASSTest 18CH mode can use all the telemetry functions.

In this screen, the battery voltage is displayed. In order to use this function, it is necessary to connect External voltage connector of FMR-03 ⇔ SBS-01V ⇔ Battery

SBS-01V measures two batteries. The power battery connected to two lines is displayed on EXT-VOLT. The battery for receivers connected to 3P lines is displayed here.

●Select [VOLTAGE] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

●Battery voltage

●The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.
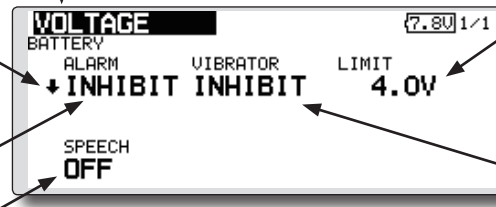
●Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>

Scrolling
● Moving cursor

S1
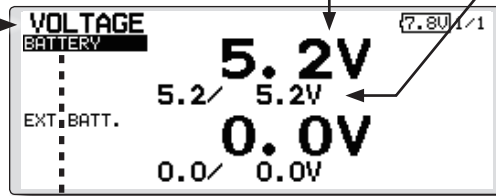
●↓The "down" arrow will indicate that an alarm will sound when the voltage drops to below the setting.

●Select [BATTERY] in the VOLTAGE screen and access the setup screen shown below by pushing the RTN button.

●A setup of the voltage on which the alarm operates.

●ALARM is chosen from BUZZER, VOICE, and INHIBIT.

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

●The ON/OFF switch of SPEECH is chosen.

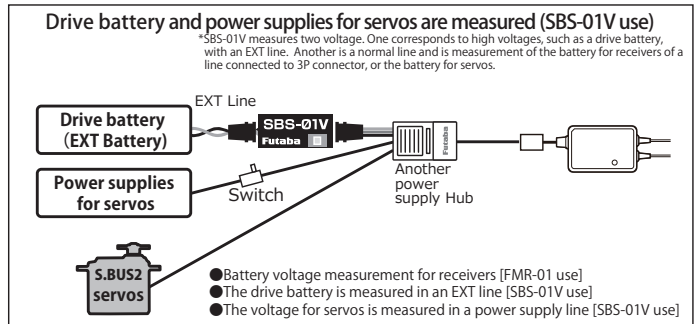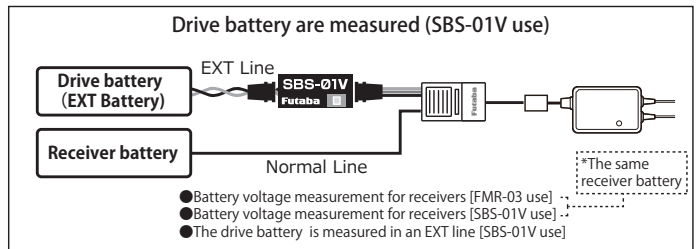**Alarm set**

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.

2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.

3. Move the cursor to the LIMIT [4.0V] item and push the RTN button to switch to the data input mode.

4. Ajust the rate by scrolling the edit dial.

   Initial value: 4.0V

   Adjustment range: 0.0V-100.0V

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

< Two examples of wiring are shown >

Drive battery are measured (SBS-01V use)

EXT Line

Drive battery (EXT Battery)

SBS-01V
Futaba

Receiver battery

Normal Line

*The same receiver battery

●Battery voltage measurement for receivers [FMR-03 use]
●Battery voltage measurement for receivers [SBS-01V use]
●The drive battery is measured in an EXT line [SBS-01V use]

Drive battery and power supplies for servos are measured (SBS-01V use)

*SBS-01V measures two voltage. One corresponds to high voltages, such as a drive battery, with an EXT line. Another is a normal line and is measurement of the battery for receivers of a line connected to 3P connector, or the battery for servos.

EXT Line

Drive battery (EXT Battery)

SBS-Ø1V
Futaba

Power supplies for servos

Switch

Another power supply Hub

S.BUS2 servos

●Battery voltage measurement for receivers [FMR-01 use]
●The drive battery is measured in an EXT line [SBS-01V use]
●The voltage for servos is measured in a power supply line [SBS-01V use]

*Refer to the manual of SBS-01V for the details of wiring.

TELEMETRY : VOLTAGE [EXT-VOLT]

Displaying data from the EXT battery voltage port

*SBS-01V must be installed in the aircraft.

In this screen, the EXT battery voltage is displayed. In order to use this function, it is necessary to connect External voltage connector of FMR-03 ⇔ SBS-01V ⇔ Battery

SBS-01V measures two batteries. The power battery connected to two lines is displayed on EXT-VOLT.

*Only receiver voltage will be received in the FASSTest 12CH mode.

*The FASSTest 18CH mode will display all telemetry data.

● EXT battery voltage

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

● Select [VOLTAGE] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
VOLTAGE                    (7.8U)1/1
BATTERY
              5.2V
         5.2/  5.2V
EXT BATT.
              0.0V
         0.0/  0.0V
```

<Edit dial>

S1

Scrolling
● Moving cursor

● ↓The "down" arrow will indicate that an alarm will sound when the voltage drops to below the setting.

● Select [EXT BATT.] in the RECEIVER screen and access the setup screen shown below by pushing the RTN button.

```
VOLTAGE                    (7.8U)1/1
EXT BATT.
  ALARM      VIBRATOR    LIMIT
 ↓INHIBIT INHIBIT       4.0V

 SPEECH
 OFF
```

●A setup of the voltage on which the alarm operates.

● ALARM is chosen from BUZZER, VOICE, and INHIBIT.

● The ON/OFF switch of SPEECH is chosen.

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

Alarm set

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, and INHIBIT, and pushes RTN.

2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.

3. Move the cursor to the LIMIT [4.0V] item and push the RTN button to switch to the data input mode.

4. Ajust the rate by scrolling the edit dial.

   Initial value: 4.0V

   Adjustment range: 0.0V~100.0V

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

TELEMETRY : GPS [DISTANCE]

Displaying data from the Distance Screen

*A GPS sensor must be installed in the aircraft.

The Distance screen displays and sets altitude data from an SBS-01G GPS Sensor (sold separately), and allows the distance to the airborne aircraft to be read by the transmitter. When the aircraft flies inside or outside the set distance an alarm and vibration alerts the pilot.
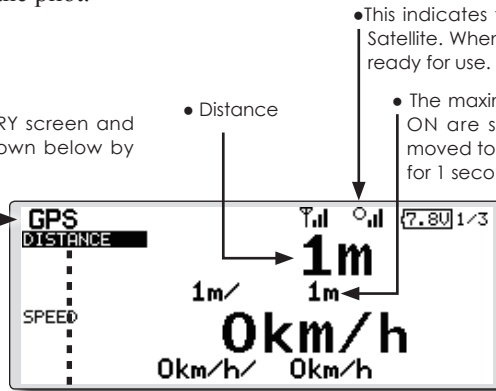
*The GPS sensor is necessary, and is sold separately. Mount and connect the sensor in accordance with the sensor instruction manual.

*Only receiver voltage can be used in FASSTest 12CH mode.

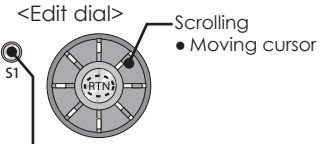*The FASSTest 18CH mode can use all the telemetry functions.

●This indicates the receiving accuracy from a GPS Satellite. When three bars are displayed, the GPS is ready for use.
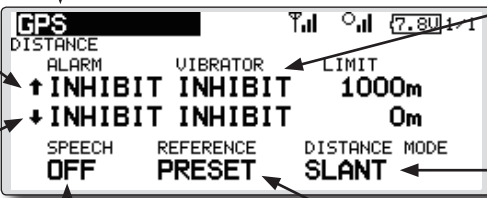
● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

● Select [GPS] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● Distance

<Edit dial>

Scrolling
● Moving cursor

●Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
GPS                    Yₐₗₗ  Oₐₗₗ  7.8U 1/3
DISTANCE
                          1m
                    1m/       1m
SPEED
                  0km/h
              0km/h/   0km/h
```

● Push the S1 button to call next page.

●Select [DISTANCE](small font display) in the TEMPERATURE screen and access the setup screen shown below by pushing the RTN button.

"VIBRATOR" type

If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1 ⟶

TYPE 2 ⟶

TYPE 3 ⟶

● ↑ An upward arrow indicates the alarm will sound when the distance reaches above your set value.

```
GPS                    Yₐₗₗ  Oₐₗₗ  7.8U 1/1
DISTANCE
ALARM       VIBRATOR     LIMIT
↑INHIBIT INHIBIT      1000m
↓INHIBIT INHIBIT         0m
SPEECH     REFERENCE   DISTANCE MODE
OFF        PRESET      SLANT
```

● ↓ A downward arrow indicates the alarm will sound when the distance reaches below your set value.

●The ON/OFF switch of SPEECH is chosen.

●Move the cursor to the [PRESET] of "REFERENCE" item. Push the RTN button is pushed for 1 second. Sets the current aircraft position as the starting point.

*Positioning time of GPS

When powered up, the SBS-01G begins to acquire GPS satellite data. This process can take several minutes. Please do not move the model during this process. During acquisition, the LED on the SBS-01G will blink green; after the satellites signals have been acquired, the LED will become solid green, and the GPS signal strength display on the transmitter will show three bars.

Moving the model before the satellites are fully acquired will cause a delay in acquiring the satellite signal.

●Altitude calculated as either straight line distance (slant) or surface distance on a map can also be selected.

Slant

Altitude

Surface
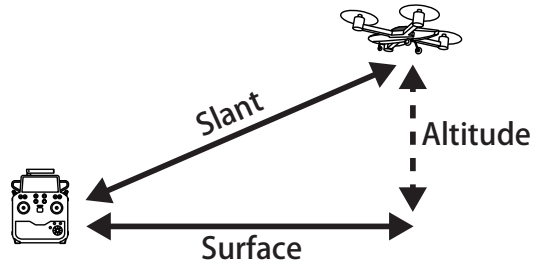
●Select <SLANT> <SURFACE> to "DISTANCE MODE", scroll either to the desired method and push the RTN button.

First, setting the pointos of reference is required.

1. The model and transmitter on which the GPS sensor is connected are turned on.
2. Move the cursor to the [PRESET] of "REFERENCE" item.
3. Push the RTN button is pushed for 1 second. (To terminate the input and return to the original state, push the Home/Exit button.)

*Now, the position of the present model was set to 0 m.

Setting a "too far" alarm distance

1. Move the cursor to the ↑ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [m] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 1,000m
   Adjustment range 0m~3,000m
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Setting a "too close" alarm distance

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [m] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 0m
   Adjustment range 0m~3,000m
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.

5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Speed

position

Distance
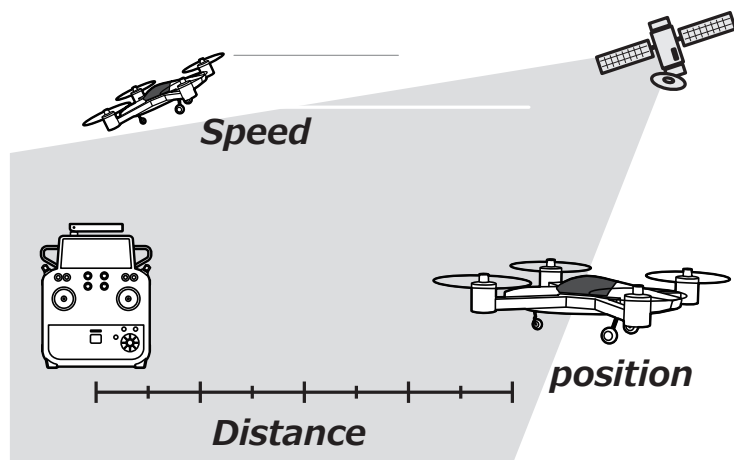
TELEMETRY : GPS [SPEED]

Displaying data from the speed
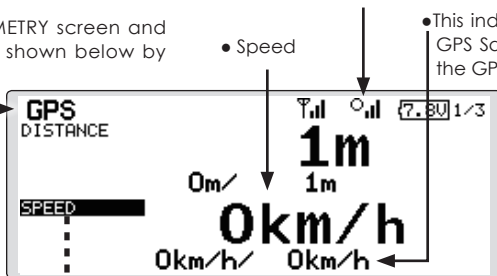*A GPS sensor must be installed in the aircraft.

The speed screen displays and sets the speed data from an SBS-01G (GPS sensor) sold separately.

The speed of the aircraft during flight can be displayed. After flight, the maximum speed during flight can be viewed. Because this speed is based on position data from a GPS satellite, the ground speed is displayed instead of air speed. Consequently, with a head wind, the displayed speed decreases and with a tail wind, the displayed speed increases.

*The GPS sensor is necessary, and is sold separately. Mount and connect the sensor in accordance with the sensor instruction manual.
*Only receiver voltage can be used in FASSTest 12CH mode.
*The FASSTest 18CH mode can use all the telemetry functions.

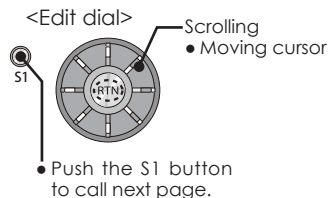● Select [GPS] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

● The maximum and the minimum when powering ON are shown. It will be preset, if a cursor is moved to this place and the RTN button is pushed for 1 second.

●This indicates the receiving accuracy from a GPS Satellite. When three bars are displayed, the GPS is ready for use.
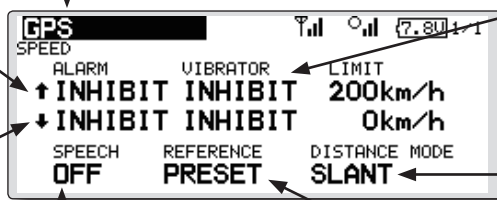
● Speed

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>

Scrolling
● Moving cursor

● Push the S1 button to call next page.

●Select [SPEED](small font display) in the TEMPERATURE screen and access the setup screen shown below by pushing the RTN button.

"VIBRATOR" type
If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

● ↑ An upward arrow indicates the alarm will sound when the speed reaches above your set value.

● ↓ A downward arrow indicates the alarm will sound when the speed reaches below your set value.

●It links with the "DISTACE" display.

●The ON/OFF switch of SPEECH is chosen.

●Pushing [PRESET] sets the current aircraft position as the starting point.

Alarm setting when speed increases

1. Move the cursor to the ↑ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.
3. Move the cursor to the LIMIT [km/h] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 200km/h
   Adjustment range 0km/h-500km/h
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.
5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

Alarm setting when speed decreases

1. Move the cursor to the ↓ALARM item, and it chooses from BUZZER, VOICE, INHIBIT, and pushes RTN.
2. When not operating vibrator, it is "VIBRATOR" to INHIBIT. TYPE1-3 will be chosen if it is made to operate.

3. Move the cursor to the LIMIT [km/h] item and push the RTN button to switch to the data input mode.
4. Ajust the rate by scrolling the edit dial.
   Initial value: 0km/h
   Adjustment range 0km/h-500km/h
   (↑LIMIT ≧ ↓LIMIT)

*When the RTN button is pushed for one second, the rate is reset to the initial value.
5. Push the RTN button. (To terminate the input and return to the original state, push the Home/Exit button.)

*Speed alarm precaution

Since the GPS speed sensor displays the ground speed, it cannot be used as a stall alarm. For example, an aircraft that stalls at 50km/h will stall if the tailwind is 5km/h or greater even through 55km/h is displayed by ground speed. In addition, with an aircraft that will fail in midflight at 400km/h at an over-speed alarm, when the headwind reaches 30km/h the airplane will fail in midair due to over speeding even at a ground speed of 370km/h.

TELEMETRY : GPS [ALTITUDE, VARIOMETER, POSITION]

*A GPS sensor must be installed in the aircraft.

The altitude, variometer, position screen displays and sets the data from an SBS-01G (GPS sensor) sold separately.

*The GPS sensor is necessary, and is sold separately. Mount and connect the sensor in accordance with the sensor instruction manual.
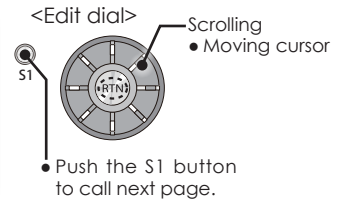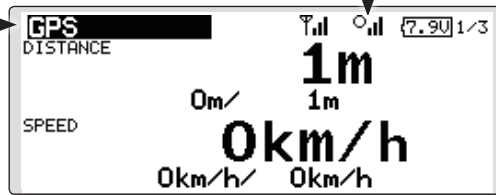
*Only receiver voltage can be used in FASSTest 12CH mode.

*The FASSTest 18CH mode can use all the telemetry functions.

●This indicates the receiving accuracy from a GPS Satellite. When three bars are displayed, the GPS is ready for use.

● Select [GPS] in the TELEMETRY screen and access the setup screen shown below by pushing the RTN button.

●Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
GPS                    Tıl  Oıl (7.9U)1/3
DISTANCE
                        1m
              0m/       1m
SPEED
              0km/h
           0km/h/    0km/h
```

<Edit dial>

S1

Scrolling
● Moving cursor

● Push the S1 button to call next page.

● Push S1 button to advance to next page.

● Refer to the former page for a setup about ALTITUDE and VARIOMETER.

```
GPS                    Tıl  Oıl (7.9U)2/3
ALTITUDE
                        1m
              0m/       1m
VARIOMETER
              0m/s
           0m/s/     0m/s
```

● Push S1 button to advance to next page.

```
GPS                    Tıl  Oıl (7.9U)3/3
POSITION
N 35°24.7285
E140°19.5831
```
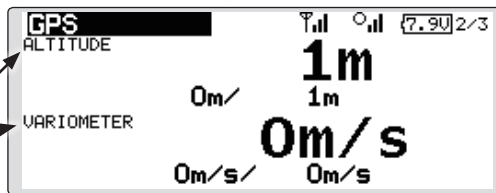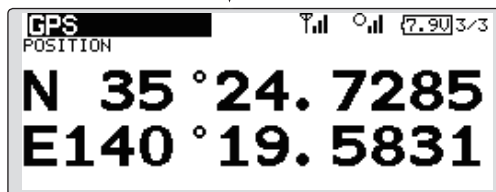
● The position of the present model is displayed.

TELEMETRY : Servo sensor [Current] [Temperature] [Angle]

The SBS-01S can monitor and display the in-flight current, operating angle, and internal temperature of up to two S.BUS2 servos.

If you forget to connect the servo wiring during fuselage assembly, or the servo was disconnected, an alarm can be activated at the transmitter.

*SBS-01S must be installed in the aircraft.

*Only receiver voltage will be received in the FASSTest 12CH mode.

*The FASSTest 18CH mode will display all telemetry data.

to S.BUS2 port ← **SBS-01S**

S.BUS servo

Calling of a servo sensor screen.

① [Linkage menu]→[Telemetry]

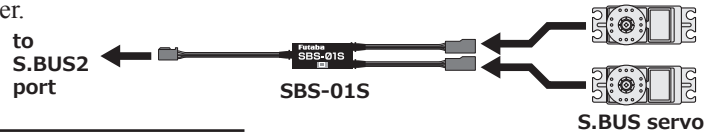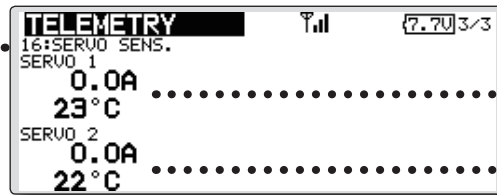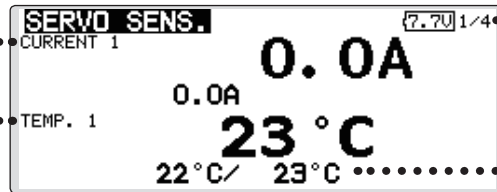② Select [SERVO SENS] in the TELEMETRY screen and access the next screen shown below by pushing the RTN button.

```
TELEMETRY          Y.il   (7.7U)3/3
16:SERVO SENS.
SERVO 1
     0.0A
    23°C  · · · · · · · · · · · · ·
SERVO 2
     0.0A  · · · · · · · · · · · · ·
    22°C
```

The current and the temperature of servo 1

The current and the temperature of servo 2

Page

1/4 : Servo1: Current・Temp

2/4 : Servo1: Angle
       Servo2: Current

3/4 : Servo2: Temp・Angle

4/4 : Servo1・2 : Connect

Servo sensor screen

To current setup screen

To temperature setup screen

```
SERVO SENS.              (7.7U)1/4
CURRENT 1
                O. OA
         0.0A
TEMP. 1
                23°C
           22°C/  23°C  · · · · ·
```
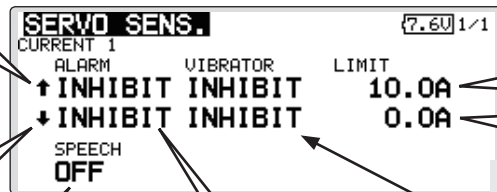
Max. and min. values since the power was turned ON will display.

Alarm setting

↑ An upward arrow indicates the alarm will sound when the current reaches above your set value.

↓ A downward arrow indicates the alarm will sound when the current reaches below your set value.

The ON/OFF switch of Speech is chosen.

```
SERVO SENS.              (7.6U)1/1
CURRENT 1
   ALARM      VIBRATOR    LIMIT
 ↑INHIBIT    INHIBIT     10.0A
 ↓INHIBIT    INHIBIT      0.0A
   SPEECH
   OFF
```

A setup of the current on which the alarm operates.

Alarm is chosen from Buzzer, Voice, and Inhibit.

"VIBRATOR" type

If the following types are selected, the transmitter will vibrate during the warning.

TYPE 1

TYPE 2

TYPE 3

Connect Alarm setting

If you forget to connect the servo wiring during fuselage assembly, or the servo was disconnected, an alarm can be activated at the transmitter.

When the Alarm or Vibrator options are activated, the servo connection will display.

```
SERVO SENS.              (7.7U)4/4
CONNECTION 1  · · · · · · · · · ·
NOT CONNECTED

CONNECTION 2  · · · · · · · · · ·
NOT CONNECTED
```

```
SERVO SENS.              (7.8U)1/1
CONNECTION
              ALARM      VIBRATOR
  SERVO 1   INHIBIT    INHIBIT
  SERVO 2   INHIBIT    INHIBIT
```

*This alarm and display is limited to the S.BUS servos connected to the servo sensors.

TELEMETRY : Current sensor [Current] [Voltage] [Capacity]

The SBS-01C has the capability of measuring current, voltage and capacity (consumption) from drive battery at the same time.

*Current sensor must be installed in the aircraft.

*Only receiver voltage will be received in the FASSTest 12CH mode.

*The FASSTest 18CH mode will display all telemetry data.

Drive Battery — **To Receiver** — **SBS-01C** — **ESC** — **Motor**

BATT ESC
RESET
Futaba
SBS-01C
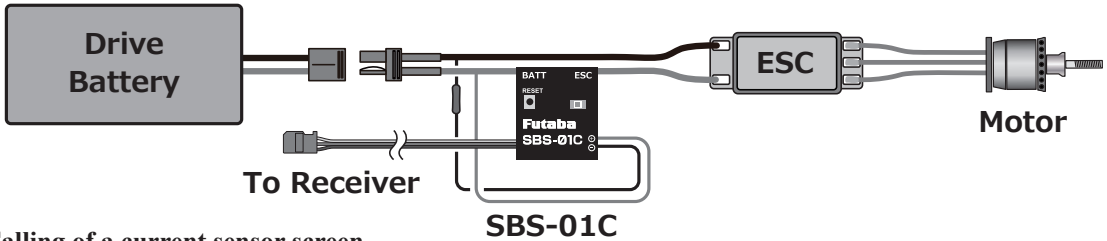
Calling of a current sensor screen.

① [Linkage menu]→[Telemetry]

② Select [Current] in the TELEMETRY screen and access the next screen shown below by pushing the RTN button.

```
TELEMETRY            Ψ    7.4U 3/3
16:CURRENT      24:SERVO SENS.
CURRENT         SERVO 1
————————        ————————
VOLTAGE         ————————
————————
CAPACITY        SERVO 2
————————        ————————
                ————————
```

Current sensor screen

To current setup screen

To voltage setup screen

```
CURRENT                   7.6U 1/2
CURRENT
              0A
        0A/   0A
              0. 0V
        0.0V/  0.0V
```
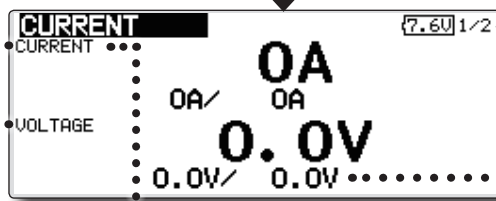
Page
1/2 : Current・Voltage
2/2 : Capacity

Max. and min. values since the power was turned ON will display.

Alarm setting

↑ An upward arrow indicates the alarm will sound when the current reaches above your set value.

↓ A downward arrow indicates the alarm will sound when the current reaches below your set value.

The ON/OFF switch of Speech is chosen.

Alarm is chosen from Buzzer, Voice, and Inhibit.

```
CURRENT                   7.5U 1/1
CURRENT
ALARM      VIBRATOR    LIMIT
↑INHIBIT   INHIBIT     100A
↓INHIBIT   INHIBIT       0A
SPEECH
OFF
```
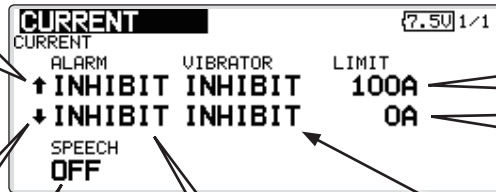
A setup of the current on which the alarm operates.

"VIBRATOR" type

If the following types are selected, the transmitter will vibrate during the warning.
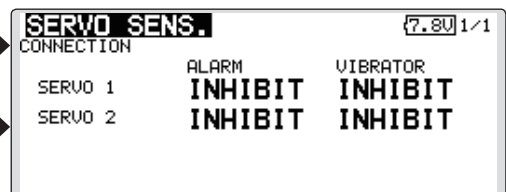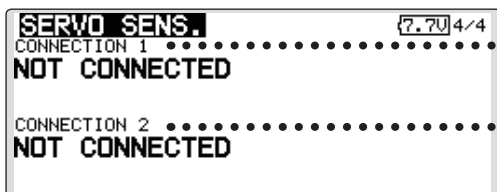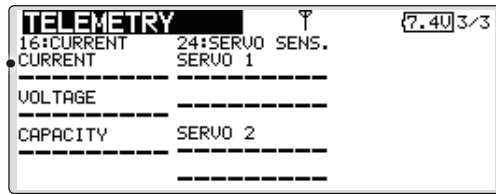
TYPE 1

TYPE 2

TYPE 3

SENSOR

Various telemetry sensors setting

This screen registers the telemetry sensors used with the transmitter. When only one of a certain type of sensor is used, this setting is unnecessary and the sensor can be used by simply connecting it to the S.BUS2 port of the transmitter.

When using 2 or more of the same kind of sensor, they must be registered here.

● Select [SENSOR] in the Linkage menu and access the setup screen shown below by pushing the RTN button.

[What is a slot?]

Servos are classified by CH, but **sensors** are classified in units called **"slot"**. There are **slots** from **#1** to **#31**.

Altitude sensors, GPS sensors and other data sensor units may use **multiple slots**.

Using a sensor which uses two or more slots, the required number of slots is automatically assigned by setting up a **start slot**.

When 2 or more of the same kind of sensor are used, the sensors themselves must allocate unused slots and memorize that slot.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
SENSOR                    (7.7U)1/3
 1 TEMPERATURE     7 VOLTAGE
 2 RPM SENSOR      8 GPS
 3 ALTITUDE        9 GPS
 4 ALTITUDE       10 GPS
 5 ALTITUDE       11 GPS
 6 VOLTAGE        12 GPS
```
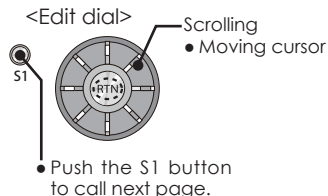
<Edit dial>

Scrolling
● Moving cursor

S1

● Push the S1 button to call next page.

*3 slots of altitude sensor are used.
*8 slots of GPS sensor are used.

● Push S1 button to advance to next page.

```
SENSOR                    (7.7U)2/3
13 GPS           19 INHIBIT
14 GPS           20 INHIBIT
15 GPS           21 INHIBIT
16 INHIBIT       22 INHIBIT
17 INHIBIT       23 INHIBIT
18 INHIBIT       24 INHIBIT
```

● Push S1 button to advance to next page.

```
SENSOR                    (7.7U)3/3
25 INHIBIT       31 INHIBIT
26 INHIBIT          RELOAD
27 INHIBIT          REGISTER
28 INHIBIT          CHANGE SLOT
29 INHIBIT
30 INHIBIT
```

● As shown in the table below, an altimeter requires 3 contiguous slots and a GPS sensor requires 8 contiguous slots. In addition, since the GPS (SBS-01G) start slots are 8, 16, and 24.

< Assignable slot >

*Altimeter, GPS, and other sensors that display a large amount of data require multiple slots.
*Depending on the type of sensor, the slot numbers that can be allocated may be limited.

Sensor	The required number of slots	The number which can be used as a start slot	Selling area
TEMP (SBS-01T/TE)	1 slot	1 ～ 31	Global
RPM (SBS01RM/RO/RB)	1 slot	1 ～ 31	
Voltage (SBS-01V)	2 slots	1,2,3,4,5,6,8,9,10,11,12,13,14,16,17,18,19,20,21,22,24, 25,26,27,28,29,30	
Altitude (SBS-01A/02A)	3 slots	1,2,3,4,5,8,9,10,11,12,13,16,17,18,19,20,21,24,25,26,27, 28,29	
Current (SBS-01C)	3 slots	1,2,3,4,5,8,9,10,11,12,13,16,17,18,19,20,21,24,25,26,27, 28,29	
S.BUS Servo (SBS-01S)	6 slots	1,2,8,9,10,16,17,18, 24,25,26	
GPS (SBS-01G)	8 slots	8,16,24	
TEMP125-F1713	1 slot	1 ～ 31	Europe
VARIO-F1712	2 slots	1,2,3,4,5,6,8,9,10,11,12,13,14,16,17,18,19,20,21,22,24, 25,26,27,28,29,30	
VARIO-F1672	2 slots	1,2,3,4,5,6,8,9,10,11,12,13,14,16,17,18,19,20,21,22,24, 25,26,27,28,29,30	
GPS-F1675	8 slots	8,16,24	

SENSOR : RELOAD

This page is set when using multiple telemetry sensors of the same type.

When using multiple sensors of the same type the sensors must be registered in the transmitter. Connect all the sensors to be used to the FMT-03 as shown in the figure at the right and register them by the following procedure. The ID of each sensor is registered in the transmitter.

● Call page 3/3 by pushing the S1 button 2 times from the [SENSOR] menu.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
SENSOR                    (7.7V)3/3
25INHIBIT      31INHIBIT
26INHIBIT         RELOAD
27INHIBIT         REGISTER
28INHIBIT         CHANGE SLOT
29INHIBIT
30INHIBIT
```

S.I/F

3-way hub or Y-harnesses

SENSOR SENSOR SENSOR SENSOR SENSOR
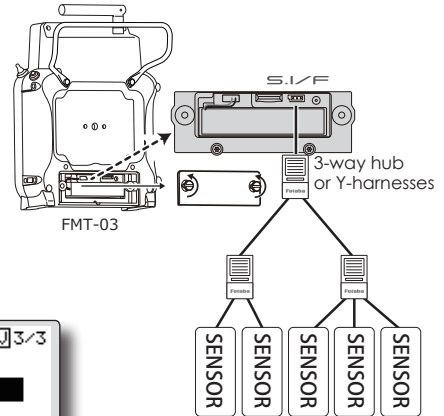
FMT-03

All the sensors to be used are connected.

*It is not necessary to carry out multiple connection of the battery like a T18MZ/T14SG.

(It will damage, if it connects.)

Reading all the sensors to be used

1. Connect all the sensors to be used to the FMT-03 through a hub as shown in the figure above.

2. Move the cursor to "RELOAD" on page 3/3 of the [SENSOR] screen.
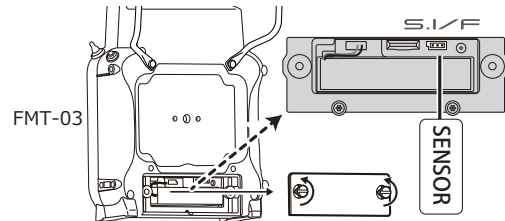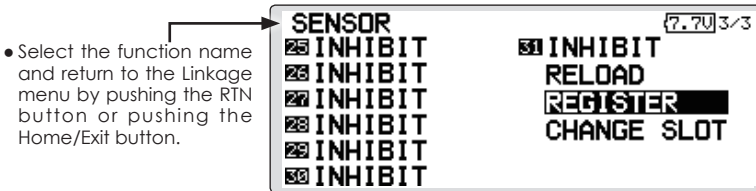
3. Push the RTN button.

   All the sensors are registered and can be used.

SENSOR : REGISTER

This page is set when using multiple telemetry sensors of the same type.

This function registers an additional sensor. Connect the sensor as shown in the figure at the right and register it by the following procedure. The sensor ID is registered in the transmitter.

● Call page 3/3 by pushing the S1 button 2 times from the [SENSOR] menu.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
SENSOR                    (7.7V)3/3
25INHIBIT      31INHIBIT
26INHIBIT         RELOAD
27INHIBIT         REGISTER
28INHIBIT         CHANGE SLOT
29INHIBIT
30INHIBIT
```

S.I/F

FMT-03

SENSOR

*It is not necessary to carry out multiple connection of the battery like a T18MZ/T14SG.

(It will damage, if it connects.)

Additional sensor registration

1. Connect the sensor to be used to the FMT-03 through a hub as shown in the figure at the right.

2. Move the cursor to "REGISTER" on page 3/3 of the <Sensor> screen.
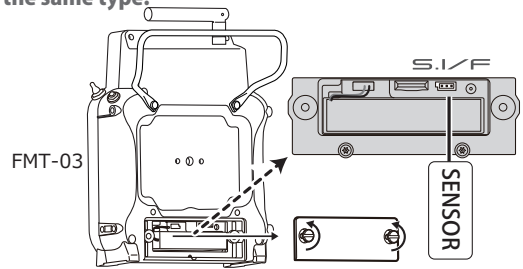
3. Push the RTN button.

   The sensor is registered and can be used.

*When the number of slots needed in registration is insufficient, an error is displayed and registration cannot be performed. Disable unused slots or perform the following relocate.
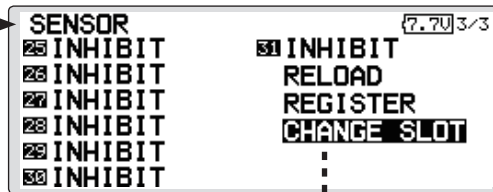
<Functions of Linkage Menu> 85

SENSOR : CHANGE SLOT

This procedure changes the slot number of one registered sensor.

This page is set when using multiple telemetry sensors of the same type.

FMT-03

• Call page 3/3 by pushing the S1 button 2 times from the [SENSOR] menu.

• Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
SENSOR                    7.7V 3/3
25 INHIBIT        31 INHIBIT
26 INHIBIT           RELOAD
27 INHIBIT           REGISTER
28 INHIBIT           CHANGE SLOT
29 INHIBIT
30 INHIBIT
```

*It is not necessary to carry out multiple connection of the battery like a T18MZ/T14SG.

(It will damage, if it connects.)

• Select [CHANGE SLOT] in the SENSOR screen and access the setup screen shown below by pushing the RTN button.

```
CHANGE SLOT               7.7V 1/1
 SENSOR TYPE
 START SLOT
 SLOT LENGTH
                   READ   WRITE
```
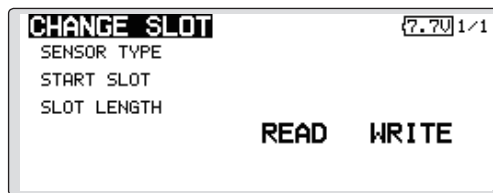
Sensor slot change

1. Connect the sensor to be changed to the FMT-03 through a hub as shown in the figure above.

2. Move the cursor to "CHANGE SLOT" on page 3/3 of the <Sensor> screen.

3. Push the RTN button. A sensor details screen appears.

4. Move the cursor to "READ" and push the RTN button.

5. The current start slot is displayed. Move the cursor to the number of the start slot and change it to the desired value. (Cannot be set to a slot that cannot be allocated like the table of all pages.)

6. Move the cursor to "WRITE" and push the RTN button.

TELE. SETTING

Speech interval set, data logging of telemetry.

The set of the speech interval of telemetry data, and a switch setup for carrying out logging of the telemetry data to micro SD card and a setup of a logging interval are carried out.

Telemetry data can be checked with PC after a flight.

*The software which displays the logging data of micro SD card on PC has not been put on the market yet.

● Select [TELE. SETTING] at the linkage menu and call the setup screen shown below by pushing the RTN button.
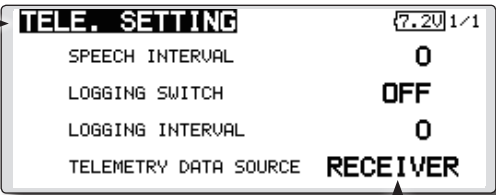
● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

TELE. SETTING	7.2U 1/1
SPEECH INTERVAL	0
LOGGING SWITCH	OFF
LOGGING INTERVAL	0
TELEMETRY DATA SOURCE	RECEIVER

<Edit dial>

S1

Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

● RECEIVER : Data from a receiver is recorded.

● TRAINER : Data from a trainer connector is recorded.

*The special use for which usual isn't used.

Speech interval setting

1. Select the Linkage Menu [TELE. SETTING] and push the RTN button.
2. The TELE. SETTING setup screen is displayed.
3. Select numerical value beside[SPEECH INTERVAL] and push the RTN button.
4. Ajust the time by scrolling the edit dial.
   Initial value: 0
   Adjustment range 0~30
5. Push the RTN button.

Logging switch setting

1. Select the Linkage Menu [TELE. SETTING] and push the RTN button.
2. The TELE. SETTING setup screen is displayed.
3. Select [OFF] beside [LOGGING SWITCH] and push the RTN button.
4. Move the cursor to the [SWITCH] item and call the switch setup screen by pushing the RTN button and select the switch and ON direction.

   (For a detailed description of the setting method, see [Switch Setting Method] at the end of this manual.)

Logging interval setting

1. Select the Linkage Menu [TELE. SETTING] and push the RTN button.
2. The TELE. SETTING setup screen is displayed.
3. Select numerical value beside [LOGGING INTERVAL] and push the RTN button.
4. Ajust the time by scrolling the edit dial.
   Initial value: 0
   Adjustment range 0~100
5. Push the RTN button.

WARNING

Mixing warning normal reset

The warning display at power ON can be turned ON/OFF for each function. Use by setting functions which may be dangerous if operated at power ON to ON. Initial setting is all ON.

● Select [WARNING] at the linkage menu and call the setup screen shown below by push the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
WARNING                    7.5V 1/1

CONDITION      ON      MOTOR       ON
THROTTLE CUT   ON      AIRBRAKE    ON
IDLE DOWN      ON      SNAP ROLL   ON
THR POSITION   ON
```

<Edit dial>

S1

Scrolling
● Moving cursor
● Selecting mode
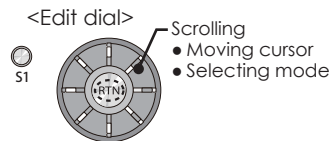
Warning ON/OFF setting

1. The settings can be changed individually. When set to [OFF], a warning is not displayed at power ON.

FMT-03 trainer system makes it possible for the instructor to chose which channels and operation modes that can be used in the students transmitter. The function and rate of each channel can be set, the training method can also be matched to the student's skill level. Two FMT-03s must be connected by an optional Trainer Cord, and the Instructors' transmitter should be programmed for trainer operation, as described below.

When the Instructor activates the trainer switch, the student has control of the aircraft (if MIX/FUNC/NORM mode is turned on, the Instructor can make corrections while the student has control). When the switch is released the Instructor regains control. This is very useful if the student gets the aircraft into an undesirable situation.

● Setting data are stored to model data.
● Student rate can be adjusted at MIX/FUNC/ NORM mode.
● Activated student channels can be selected by switches.

NOTE: This trainer system can be used in the following manner;

1. With the FMT-03 transmitter and a conventional transmitter, if the channel order is different, it is necessary to match the channel order before using this function.

   You can select the channel of input data from student's transmitter in the "FUNC" or "MIX" mode.

2. A transmitter of anything but FMT-03 doesn't correspond to this trainer system.

3. Be sure that all channels work correctly in both transmitters before flying.

● Select [TRAINER] at the system menu and call the setup
screen shown below by pushing the RTN button.

● Select the function name
and return to the Linkage
menu by pushing the RTN
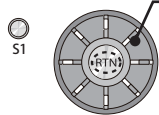button or pushing the
Home/Exit button.

TRAINER `7.6V 1/1`
ACT/INH   **INH**
TEACHER/STUDENT **STUD**
CHANNEL MODE   **8CH**

<Edit dial>
S1
Scrolling
● Moving cursor
● Selecting mode

When using at the student side

1. Select the mode.

  *When changing the mode, use the edit dial to move to the
item you want to change and push the RTN button to switch
to the data input mode and change the mode by turning the
edit dial to the left or right. The display blinks. Push the
RTN button to change the mode.

"TEACHER/STUDENT": Select [STUD] (student).

"ACT/INH": Enable operation by changing to
[ON].
"CHANNEL MODE": Select [16CH].

TRAINER `8.3V 1/1`
ACT/INH   **ON**
TEACHER/STUDENT **STUD**
CHANNEL MODE   **16CH**

Note: In "student mode", only the teacher
side can turn on and off the power to the
student's transmitter. Keep the power switch
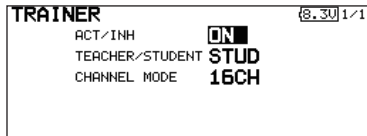always at off position.

When using at the teacher side

1. Select the mode.

  *When changing the mode, use the edit dial to move to the
item you want to change and push the RTN button to switch
to the data input mode and change the mode by turning the
edit dial to the left or right. The display blinks. Push the
RTN button to change the mode.

"TEACHER/STUDENT": Select [TEACH].

"ACT/INH": Enable operation by changing to
[OFF] or [ON].
"CHANNEL MODE": Select [16CH].

TRAINER `7.6V 1/5`
ACT/INH   **OFF**
TEACHER/STUDENT **TEACH**
CHANNEL MODE   **16CH**
SWITCH   **SH**
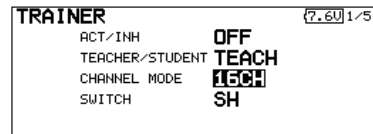
2. Select the trainer switch.

  *When setting or changing the switch, use the edit dial to
move to the "SWITCH" item, call the switch setup screen by
pushing the RTN button and set the desired switch and ON/
OFF direction.

(See "Switch selection method" at the end of
this manual for selection method details.)

  *The switch mode can also be selected when setting the
ON position on the switch setup screen. When [NORM] is
selected, normal ON/OFF operation is performed. When
[ALTERNATE] is selected, the trainer function is alternately
turned on and off each time the switch is operated. .

Note: The trainer function won't be turned
on unless the Instructor's transmitter receives
signals from the student's transmitter. Be
sure to confirm this after connecting your
trainer cable.

3. Select the operating mode for each channel.

TRAINER `7.6V 2/5`
CH FUNCTION   MODE   SW   RATE   STU.CH
1 AILERON   **FUNC**   --   **+100**   **CH1**
2 ELEVATOR   **OFF**   --
3 THROTTLE   **OFF**   --
4 RUDDER   **OFF**   --
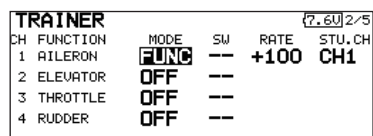
*Use the edit dial scrolling to move the cursor to the "MODE" item of the channel you want to change and push the RTN button to switch to the data input mode and change the mode by turning the edit dial to the left or right. The display blinks. Push the RTN button to change the mode.

"NORM": The model is controlled by signals from the student transmitter.

"MIX" mode: The model is controlled by signals from the teacher and student transmitters. (Reset the student's model data to the default condition.)

"FUNC" mode (function mode):

The model is controlled by signals from the student transmitter with the teacher AFR setting. (Reset the student's model data to the default condition.)

"OFF": Only the teacher side operates.

*The setting above allows setting of the servo throw relative to the amount of student side operation when [MIX] or [FUNC] was selected.

When changing the rate, use the edit dial scrolling to move the cursor to the [RATE] item of the channel you want to change and use the edit dial to adjust the rate.

Setting range: -100~+100

Initial value: +100

Push the RTN button to end adjustment and return to the cursor move mode.

*When the RTN button is pushed for 1 second, the rate is reset to the initial value.

3. Set the switch of each channel.

*When setting the switch at each channel, use the edit dial to move to the "SW" item of the channel you want to change, call the switch setup screen by pushing the RTN button, and select the switch.

"--" : Always ON.

"SA"-"SH": The switch which enables student side operation can be selected. (See "Switch selection method" at the end of this manual for selection method details.)

```
TRAINER                    (7.6V)2/5
CH FUNCTION      MODE  SW  RATE  STU.CH
 1 AILERON       FUNC  --  +100  CH1
 2 ELEVATOR      OFF   --
 3 THROTTLE      OFF   --
 4 RUDDER        OFF   --
```

Trainer student channel setting function

Which channel of the signal from the student's transmitter can be assigned as the instructor functions input signal when "FUNC" or "MIX" was set as the trainer function instructor's transmitter mode setting can be set. This makes trainer connection easy even when the instructor side and student side channel assignment is different.

*When the instructor's transmitter mode is set to "NORM", the signal of the same channel of the student's transmitter is output as is. (The same as before.)

STICK ALARM

Throttle stick positional alarm

An alarm (single beep) can be sounded at the specified throttle stick position.

*Alarm function ON/OFF can be set by switch.

● When INH is selected, the function cannot be used. When ON or OFF is selected, the function is activated. ON and OFF changes are linked to the switch.

● Select [STICK ALARM] at the linkage menu and call the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
STICK ALARM          7.2U 1/1
                          100%
ACT/INH     INH
POSITION    50%           50%
SWITCH      OFF
                          0%
```

<Edit dial>

Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

● The current throttle stick position.

● Stick alarm position.

● e.g., Always to make them stick alarm in spite of switch.

```
HARDWARE SEL. CONDIT1  6.6U 1/1
    HARDWARE LIST
J1 SA SE J6 DA T3
J2 SB SF J5 DB T4
J3 SC SG DC T1 T5
J4 SD SH DD T2 T6
```

● Select " —— "

```
ON/OFF        CONDIT1  7.2U 1/1
--
             ON/OFF   ON
```

● Select "ON"

Stick alarm setting procedure

*Perform the following settings after using the edit dial to move the cursor to the item you want to set.

1. Activate the function:

   Move the cursor to the [ACT/INH] item and push the RTN button to switch to the data input mode.

   Switch the blinking from "INH" to "ACT" by turning the edit dial to the left and then push the RTN button.

2. Switch setting:

   Move the cursor to the [SWITCH] item, call the switch setup screen by pushing the RTN button, and select the switch and ON direction.

   (For a detailed description of the setting method, see [Switch Setting Method] at the back of this manual.)

3. Alarm position setting:

   Move the cursor to the [POSITION] item and push the RTN button to switch to the data input mode.

Adjust the alarm position operation by turning the edit dial to the left or right.

Initial value: 50%

Adjustment range: 0%-100%

(When the RTN button is pushed for 1 second, the offset rate is reset to the initial value.)

Push the RTN button to end adjustment and return to the cursor move mode.

100%

50%

0%
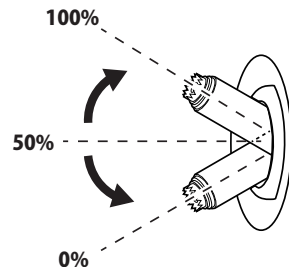
DATA RESET

Model memory setting data reset. (by item)

This function is designed to allow you to reset selected portions or all of the settings saved in the active model memory. You may individually choose to reset the following sets of data;

T1-T6:

Reset the digital trim setting.

*All the conditions, or the condition currently being displayed (the entire group for group setting), can be selected.

*The trim step amount and trim rate are not reset.

Model menu setting:

Resets all the functions in the Model menu except condition select.

All model setting:

Resets all Linkage and Model menu functions except for frequency, model select, and model type.

Function Name:

A function name is reset.

Telemetry:

Reset the telemetry setting.

● Select [DATA RESET] at the linkage menu and call the setup screen shown below by pushing the RTN button.

● Select the function name and return to the Linkage menu by pushing the RTN button or pushing the Home/Exit button.

```
DATA RESET               [8.3V]1/2
T1-T6(ALL CONDITION)
T1-T6(CURRENT+GROUP COND.)
MODEL MENU SETTING
ALL MODEL SETTING
```

<Edit dial>

S1

Scrolling
● Moving cursor

● Push the S1 button to call next page.

● Push S1 button to advance to next page.

```
DATA RESET               [8.3V]2/2
FUNCTION NAME
TELEMETRY
```
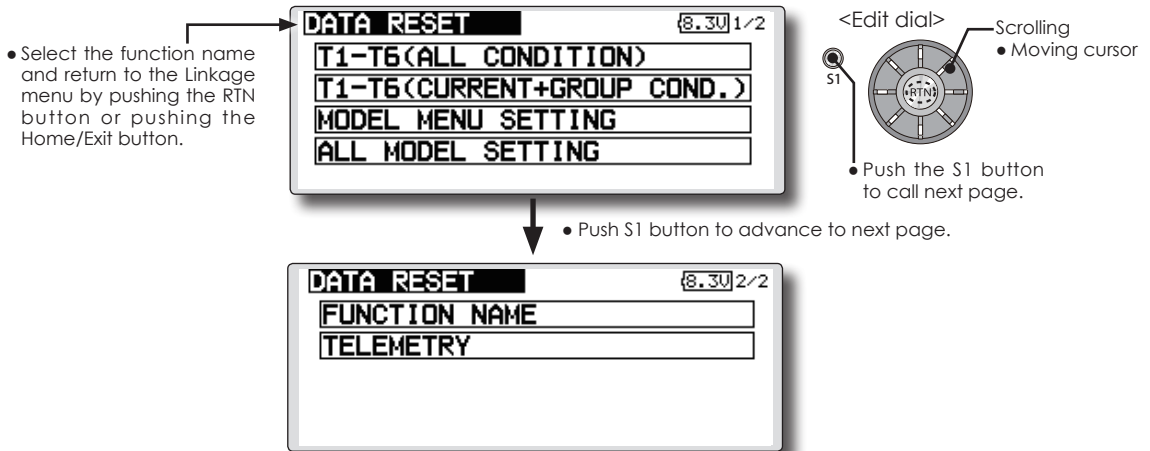
Data resetting method

1. Move the cursor to the item you want to reset and push the RTN button.

   *A confirmation message appears.

2. Execute reset by pushing the RTN button again. (Operate edit dial or S1 button to stop resetting.)

   [T1-T6 (ALL CONDITION)]: Resets only the T1-T6 (all conditions)

   [T1-T6 (CURRNT+GROUP COND.)]: Resets only the data of T1-T6 (condition in use and all the conditions set to group mode)

   [MODEL MENU SETTING]: Resets all the functions in the model menu, except the condition selection functions.

   [ALL MODEL SETTING]: Resets all the functions in the linkage menu and model menu except the frequency, model select, and model type functions.

   [FUNCTION NAME]: Resets only the function name functions.

   [TELEMETRY]: Resets only the telemetry functions.

MODEL MENU (COMMON FUNCTIONS)

This section describes the AFR, program mixing, and other functions common to all model types.

Before setting the model data, use the Model Type function of the Linkage Menu to select the model type matched to the fuselage. When another model type is selected thereafter, the AFR, program mixing, and other setting data will be reset.

The functions in the Model Menu can be set for each flight condition. When you want to use the system by switching the settings for each condition by switch, stick position, etc., use the Condition Select function to add flight conditions. (Up to 8 conditions can be used)

Note: The setup screens in the instruction manual are typical examples.

- Select the [MODEL] at the home screen and call the model menu shown below by pushing the RTN button.
- Use the edit dial to select the function you want to set and call the setup screen by pushing the RTN button.

(Model Menu screen example)

*The Model Menu screen depends on the model type.

- Select the [MODEL MENU] and return to the home screen by pushing the RTN button or pushing the Home/Exit button.

```
MODEL MENU    CONDIT1  7.5V 1/1
SERVO MONITOR PROG. MIXES
COND. SELECT  GYRO
AFR
DUAL RATE
```

<Edit dial>

S1

Scrolling
● Moving cursor

●Calling setup screen
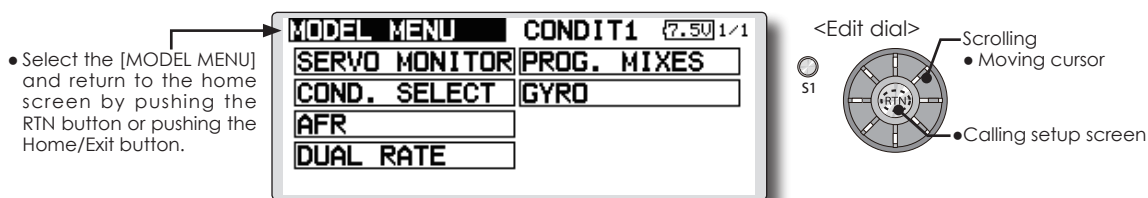
Model Menu functions (Common) list

●SERVO MONITOR

Servo test and servo position display (For a description of its functions, see the Linkage Menu section.)

●COND.SELECT

Flight conditions addition, deletion, copy, condition renaming, and condition delay can be set.

●AFR

Sets the function rate and curve of all the operation functions.

●DUAL RATE

A D/R curve which can be switched with a switch, etc. can also be added.

●PROG. MIX

Program mixing which can be freely customized. Up to 10 mixes can be used for each condition.

●GYRO

This is a dedicated mix when a Futaba GY series gyro is used.

CONDIT. SELECT

Flight condition's addition, deletion, copy, condition renaming, and condition delay can be set. [All model types]

The functions in the Model Menu can be used by switching the settings of up to 8 flight conditions by using the Condition Select function to add flight conditions. Add conditions, as required.

When you do not want to use the Condition Select function, this setting is unnecessary. In this case, use the flight conditions assigned at initial setting.

● Since switching by stick and lever position, in addition to ordinary toggle switch, is possible as the flight condition selector switch, this function can be linked with other operations.

● A Condition Delay function can be set. Unnecessary fuselage motion generated when there are sudden changes in the servo positions and when there are variations in the operating time between channels during condition switching can be suppressed. The delay can be set for each channel.
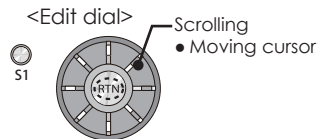
When setting the delay function at the switching destination condition, the related function changes after a delay corresponding to the set amount.

● When multiple conditions were set, their operation priority can be freely changed.

● The condition name can be changed. The selected condition name is displayed on the screen. When a condition has been added, give it a name which can be easily confirmed.

● Select [CONDIT. SELECT] at the model menu and call the setup screen shown below by pushing the RTN button.
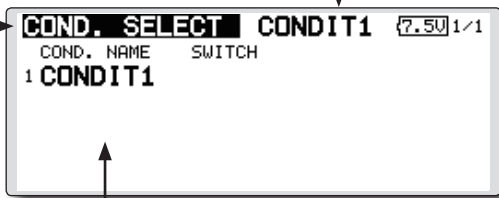
●Select the function name and return to the preceding screen by pushing the RTN button or pushing the Home/Exit button.

(Currently selected condition name)

<Edit dial>
Scrolling
● Moving cursor

(Conditions List)

*Perform the settings below after using the edit dial to move the cursor to the item you want to set.

Condition addition

1. Use the edit dial to move the cursor to any condition in the conditions list and push the RTN button.

   Move the cursor to the condition you want to add.

2. Move the cursor to [ADD] and push the RTN button.

   *Only the number of the conditions which can be added is displayed.

3. Add the condition by pushing the RTN button again. Push the RTN button to end adjustment and return to the cursor move mode.

4. Move the cursor to [SWITCH] item, call the switch setup screen by pushing the RTN button, and select the switch and ON direction to be used in condition switching.
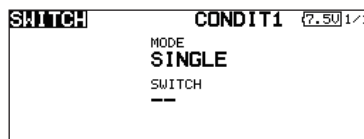
(For a detailed description of the setting method, see [Switch Setting Method] at the back of this manual.)
*The data (except the condition name) of the condition currently being used is copied to the added condition.

Condition deletion

1. Use the edit dial to move the cursor to the condition you want to delete in the conditions list and push the RTN button.

   *The number before the condition name become reverse-video to show that it is to be deleted.

2. Move the cursor to [REMOVE] and push the RTN button.
   *A confirmation message is displayed.
   *Note that if initially operated up and down, the objective condition changes.

3. When the RTN button is pushed again, the condition is deleted. (Operate the edit dial or S1 button to stop deletion.)

   Push the RTN button to end adjustment and return to the cursor move mode.

Condition name change

1. Use the edit dial to move the cursor to the condition you want to change in the

conditions list.

*The number before the condition name become reverse-video to show that it is to be deleted.

2. Move the cursor to [RENAME] and push the RTN button.

*The condition name setup screen appears.

```
COND. SELECT          (7.5V)1/3
CONDIT 1
CONDIT 1              ABCDEFGHIJ
                     KLMNOPQRST
CANCEL  ENTER        UVWXYZabcd
                     efghijklmn
←  →    DELETE        opqrstuvwx
                     yz !"#$%&'
```

3. Change the condition name as described below:

[Moving cursor in input box]

Select [←] or [→], and push the RTN button.

[Deleting a character]

When [DELETE] is selected and the RTN button is pushed, the character immediately after the cursor is deleted.

[Adding a character]

When a candidate character is selected from the character list and the RTN button is pushed, that character is added at the position immediately after the cursor.

*A name of up to 8 characters long can be entered as the condition name. (A space is also counted as 1 character.)

5. At the end of input, select [ENTER] and push the RTN button. (To terminate input and return to the original state, select [CANCEL] and push the RTN button.)
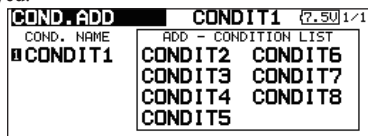
Condition copy

1. Use the edit dial to move the cursor to any condition in the conditions list and push the RTN button.
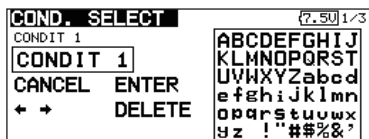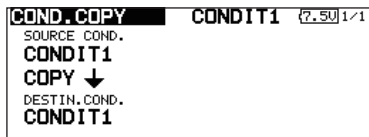
2. Use the edit dial to move to [COPY].

3. Push the RTN button.

*The copy screen appears.

```
COND.COPY     CONDIT1  (7.5V)1/1
SOURCE COND.
CONDIT1
COPY ↓
DESTIN.COND.
CONDIT1
```

4. Use the edit dial to move the cursor to the "SOURCE COND." (copy source) item and push the RTN button.

*The models already saved are displayed at the right side of the screen.

5. After using the edit dial to move the cursor to the copy source condition, push the RTN button.

*The copy source condition is displayed at the "SOURCE COND." position.

6. Use the edit dial to move the cursor to "DESTIN.CND." (copy destination) and push the RTN button.

*The models already saved are displayed at the right side of the screen.

7. After using the edit dial to move the cursor to the copy destination condition, push the RTN button.

*The copy destination conditions are displayed at the "DESTIN.COND." position.

8. Use the edit dial to move the cursor to [COPY] and push the RTN button.

9. When the RTN button is pushed again, copy is executed. (Operate edit dial or S1 button to stop copying.)

Push the RTN button to end adjustment and return to the cursor move mode.

Priority change

1. Use the edit dial to move the cursor to the condition whose priority you want to change in the condition list.

2. Move the cursor to [UP] or [DOWN] of [PRIORITY] and push the RTN button. (The last condition becomes the highest priority.)

*The initial setting condition cannot be shifted. The priority is the lowest.

Condition delay setting

1. Use the edit dial to move the cursor to the condition you want to change in the condition list and push the RTN button.

2. Move the cursor to [DELAY] and push the RTN button.

*The condition delay setup screen appears.

```
COND.DELAY    CONDIT1  (7.5V)1/4
CH    FUNCTION    DELAY  GROUP
CH1   ELEVATOR      0    GROUP
CH2   RUDDER        0    GROUP
CH3   THROTTLE      0    GROUP
CH4   AILERON       0    GROUP
```

3. Use the edit dial to move the cursor to the "DELAY" item of the channel you want to set and push the RTN button to switch to the data input mode.

Adjust the delay amount with the edit dial.

Initial value: 0

Adjustment range: 0~27 (maximum delay)

Push the RTN button to end adjustment and return to the cursor move mode.

● The setting mode (group [GROUP]/single [SINGLE] mode) can be switched.

(For more information, see the description at the back of this manual.)

AFR

The function rate and curve of each operation function can be set. [All model types]

AFR function is used to adjust the throw and operation curve of the stick, lever, and switch functions for each flight condition. This is normally used after End Point has defined the maximum throw. When mixing is applied from one channel to another channel, both channels can be adjusted at the same time by adjusting the operation rate through the AFR function.

● Operation curve adjustment: Three types of curves (EXP1, EXP2, and POINT) can be selected. A maximum 17 points curve can be used for the point curve type. (Initial setting: 9 points) The number of points can also be increased and decreased and curves from complex curves to simple curves can be used.

● Operation speed adjustment: The operation speed of each function when the function is operated (including at flight condition switching) can be adjusted. The function operates smoothly at a constant speed corresponding to the set speed.

● Select [AFR] at the model menu and call the setup screen shown below by pushing the RTN button.

[AFR, D/R]: Displays the currently selected rate (AFR, D/R).

(Currently selected condition name)

●Select the function name and return to the preceding screen by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>
Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

● Push the S1 button to call next page.

●Operation curve setting

(For a description of the setting method, see the description at the back of this manual.)

●Function selection

●Servo speed setting

(For a description of the setting method, see the description at the back of this manual.)

(Number of D/R curves set at the currently selected condition)

●Group/single mode switch (GROUP/SINGLE)

(For more information, see the description at the back of this manual.)

Function selection method

1. Use the edit dial to move the cursor to [FUNC.] and push the RTN button to switch to the data input mode.
2. Select the desired function by scrolling the edit dial to the left or right, push the RTN button.

   *The setting mode (group [GROUP]/single [SNGLE] mode) can be switched (For more information, see the description at the back of this manual.)

DUAL RATE

D/R curves which can be switched by switch, etc. can be added. The curve can be adjusted by the AFR function.
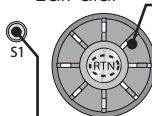
● Up to 6 rates can be added for each condition.
● D/R is set for each condition and is not reflected at other conditions.
● D/R at the top of the D/R list has priority.

● Select [DUAL RATE] at the model menu and call the setup screen shown below by pushing the RTN button.

● Select the function name and return to the preceding screen by pushing the RTN button or pushing the Home/Exit button.

DUAL RATE		CONDIT1	7.5V 1/2
D/R NAME	STATUS	FUNCTION	SWITCH
1 D/R 1	INH	AILERON	--
2 D/R 2	INH	AILERON	--
3 D/R 3	INH	AILERON	--
4 D/R 4	INH	AILERON	--

<Edit dial>

Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

S1

● Push the S1 button to call next page.

Dual rate adding

1. Move the cursor to the [INH] display of an unused D/R and push the RTN button to switch to the data input mode.

   Turn it off by scrolling the edit dial to the left and activate the D/R function by pushing the RTN button.

2. Move the cursor to the "FUNCTION" item and push the RTN button to switch to the data input mode.

   Select the function by scrolling the edit dial and push the RTN button.

3. Move the cursor to the [SWITCH] item and call the switch setup screen by pushing the RTN button and select the switch and ON direction. Alternate mode can be assigned to dual rate switch.

   (For a detailed description of the setting method, see [Switch Setting Method] at the end of this manual.)

PROG. MIXES

Program mixing which can be freely customized. Up to 10 mixings can be used for each condition. [All model types]

Programmable mixing may be used to correct undesired tendencies of the aircraft, and it may also be used for unusual control configurations. Mixing means that the motion of a command channel, called the "master," is added to the motion of the mixed channel, called "slave."

You may choose to have the Master's trim added to the Slave channel response ("Trim" setting). The mixing curve can be changed so that the undesired tendencies can be corrected effectively by setting the EXP1/EXP2/POINT modes. The Delay function can be programmed for each rate. The Delay is used to change the rate smoothly when switching mixes. You may define Mixing ON/OFF switch, control or you may choose to have mixing remaining on all the time. Mixing ON/OFF delay

time can be adjusted.

The Programmable mixing includes a powerful link function, which allows Programmable mixing to be linked with the special mixing functions, or with other programmable mixing functions. The link function can be set up for Master and Slave channel individually.

The slave channel AFR mode (STK-STK mode) may be selected, where the slave channel AFR and D/R settings are observed when Link function is set. The knob for fine tuning can be set up for every mixing circuit. (Fine tune function)
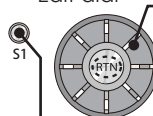
The programmable mixing (in mixing mode) STK to STK mixing function can be used even when the Master is a stick or other hardware.

● Select [PROG. MIXES] at the model menu and call the setup screen shown below by pushing the RTN button.

● Select the function name and return to the preceding screen by touching the RTN button or pushing the Home/Exit button.

```
PROG. MIXES   CONDIT1  7.5V 1/3
     MIXING        MODE      GROUP
  1  INHIBIT      MIXING     GROUP
  2  INHIBIT      MIXING     GROUP
  3  INHIBIT      MIXING     GROUP
  4  INHIBIT      MIXING     GROUP
```

<Edit dial>

Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

S1

● Push the S1 button to call next page.

Mix setup screen call
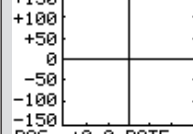
● Move the cursor to the mix No. whose function you want to activate and call the setup screen by pushing the RTN button.

*When the function is activated, the master and slave channel name or is displayed.

●Group/single mode switching (GROUP/SINGLE)

(For more information, see the description at the back of this manual.)

●Current mix number

(Currently selected condition name)

```
PROG. MIX 1   CONDIT1  7.5V 1/3
+150              MODE      OFFSET    INH
+100              EXP 1      +0.0
 +50              RATE A    RATE B
   0               +0.0      +0.0
 -50              EXP A     EXP B
-100               +0.0      +0.0
-150
POS  +0.0 RATE  +0.0
```

●Mix operating display

●Operation curve setting

(For a description of the setting method, see the description at the back of this manual.)

●Link setting

●Master CH → MASTER

●Slave CH → SLAVE

PROG. MIX 1   CONDIT1 / 7.5V 2/3
FUNCTION,H/W   LINK   MODE
MASTER **AILERON**   OFF TRIM **OFF** ← ●Trim mode setting
SLAVE **ELEVATOR**   OFF STK→STK **OFF** ← ●Slave CH AFR mode
     CTRL   RATE(%)
FINE TUNING **--**   **+0** (+0)

●Fine tuning trim setting
(For a description of the setting method, see the description at the back of this manual.)

●ON/OFF → STATUS
→ SWITCH

PROG. MIX 1   CONDIT1 7.5V 3/3
        IN   MODE   OUT
STATUS **INH**   SPEED   **0 LIN.**   **0** ← ●Servo speed setting
SWITCH **--**   MASTER **SLAVE**
       START   STOP
   DELAY **0.0s 0.0s** ← ●Mix ON/OFF delay

●Servo speed setting
(For a description of the setting method, see the description at the back of this manual.)

●Switch selection
(For a description of the switch setting method, see the description at the back of this manual.)

*Perform the settings below after using the edit dial to move the cursor to the item you want to set.

●**Group/single mode selection**

1. When you want to activate functions for only selected conditions, move the cursor to the [GROUP] item and push the RTN button to switch to the data input mode.
2. Turn the edit dial to the left until [SINGLE] starts to blink and then push the RTN button.

*The mode changes to the single mode [SINGLE].

*When using common settings at each conditions, remain in the [GROUP] mode.

●**Activate the function.**

1. Move the cursor to [INH] and push the RTN button to switch to the data input mode.
2. Turn the edit dial to the left until [ACT] starts to blink and then push the RTN button.

*The function is activated. (ON or OFF display)

*ON/OFF switch and mix rate are not set even through the function is activated.

●**ON/OFF switch setting**

Move the cursor to the [SWITCH] item, call the switch setup screen by pushing the RTN button, and select the switch and ON direction.

(For a description of the setting method, see [Switch Setting Method] at the back of this manual.)

*Always on when [--].

●**Master channel setting**

1. Move the cursor to the [FUNCTION.H/W] item of [MASTER] and push the RTN button to switch to the data input mode.

Select the function by scrolling the edit dial and push the RTN button.

2. When you want to link this mixing with other mixes, move the cursor to the [LINK] item and push the RTN button to switch to the data input mode.

Set the link mode to [+] or [-] by scrolling the edit dial and push the RTN button.

*Check the direction by actual operation.

*Master channel control can be set to simple operating amount of sticks and VR which do not include ATV, AFR, D/R, and mixing setting. In this case, the switch setup screen is displayed by pushing the RTN button with "H/W" selected by function selection. Select master channel side control. (To terminate the "H/W" selection, select the [--] display and push the RTN button.

●**Slave channel setting**

1. Move the cursor to the [FUNCTION.H/W] item of [SLAVE] and push the RTN button to switch to the data input mode.
Select the function by scrolling the edit dial and push the RTN button.
2. When you want to link this mix with other mixes, move the cursor to the [LINK] item and push the RTN button to switch to the data input mode.

Set the link mode to [+] or [-] by scrolling the edit dial and push the RTN button.

*Check the direction by actual operation.

●Trim mode ON/OFF setting

1. When changing the trim mode, move the cursor to the [TRIM] item and push the RTN button to switch to the data input mode.

   Select ON/OFF by scrolling the edit dial and set the selection by pushing the RTN button.

   *When mixing includes master side trim, select [ON] and when mixing does not include master trim, select [OFF].

   *Effective when a function is set at the master channel.

●Slave channel AFR mode setting (STK-STK)

1. Move the cursor to the [STK-STK] item, select the mode by scrolling the edit dial, and change the mode by pushing the RTN button.

   *When link is set at the slave side, and you want to add AFR (D/R) to the mixing rate, select [ON].

   *This is effective when the linkage is the same, but the travels are substantially different.

●Mixing curve setting

   (For a description of the curve setting method, see the description at the back of this manual.)

●Fine tuning trim setting

   Operation control [CTRL], operation mode [MODE], and rate [RATE] adjustment is possible by [FINE TUNING] item.

   (For a description of the fine tuning trim setting method, see the description at the back of this manual.)

●Servo speed setting

   Adjustment is possible with the [SPEED] item.

   (For a description of the servo speed setting method, see the description at the back of this manual).

●Mixing ON/OFF delay setting

   Delay time at mix ON [START] and delay time at mix OFF [STOP] adjustment is possible by [DELAY] item.

   *This function is inactive when a mixing switch is not set.

1. Move the [START] or [STOP] item and push the RTN button to switch to the data input mode.

2. Adjust the delay time by scrolling the edit dial.

   Initial value: 0.0 sec

   Adjustment range: 0~4 sec

   (When the RTN button is pushed for 1 second, the delay time is reset to the initial value.)

   Push the RTN button to end adjustment and return to the cursor move mode.

●Offset mode setting

   Offset mode is function which allows simultaneous offset control of up 4 slave functions per circuit.

1. Use [MODE] setting to select the program mixing oparation mode. [MIXING] is the normal mixing mode and [OFFSET] is the offset mode.

2. Move the cursor to [INHIBIT] of the mixing No. set to the offset mode and push the RTN button. The setup screen is displayed.

3. Press the S1 button. Page 5/5 is displayed.

4. Move the cursor to the [STATUS] item and switch to the data input mode by pushing the RTN button.

5. Turn the dial to the left and right until [ACT] blinks, and then push the RTN button. To deactivate the function, switch to [INH].

●ON/OFF switch selection

   Move the cursor to the page 5/5 [SWITCH] item, call the switch setup screen by pushing the RTN button, and then select the switch and ON direction. (For a detailed description of the selection method, see [Switch Selection Method] at the back of the instruction manual.)

●Slave No. selection

   Setting of the slave No. from 1 to 4 at pages 1/5~4/5 is displayed. When the S1 button is pushed, the displayed slave No. is switched.

●Slave function setting

   Move the cursor to the [FUNCTION] item and switch to the data input mode by pushing the RTN button. Select the function by scrolling the dial and then push the RTN button.

●Offset rate setting

   The function operation offset amount when the mixing switch is ON and OFF can be set independently.

1. Move the cursor to the [ON] or [OFF] item and switch to the data input mode by pushing the RTN button.

2. Turn the dial to the left and right and set the offset rate when the switch is ON or OFF.

   Initial setting : 0%

   Setting range : -300%~+300%

3. After setting, switch to the cursor move mode by pushing the RTN button.

*At adjustment, the offset rate is reset to the initial value by pushing the RTN button for 1 second.

●**Fine tuning trim setting**

Operation control [CTRL], operation mode [MODE], and rate [RATE] adjustment is possible by [FINE TUNING] item.

(For a description of the fine tuning trim setting method, refer to [Fine tuning trim setting] at the back of this manual.)

●**Operation mode setting**

The operation mode when the switch was operated is selected. Normal mode [NORM] or timer mode [TIME] can be selected.

[Normal mode]

After the switch is set to ON, mixing is turned ON after the time set by start delay ([START]) has elapsed. Similarly, after the switch was set to OFF, mixing is turned OFF after the time set by stop delay ([STOP]) has elapsed.

[Timer mode]

After the switch was set to ON, mixing is turned ON after the time set by start delay ([START]) has elapsed. Mixing is automatically turned OFF after the time set by stop delay ([STOP]) has elapsed. Examples of use are jet plane and scale model retractable landing gear and cover linked mixing, etc.

●**Servo speed setting**

The speed at function operation can be adjusted. (For a description of the setting method, refer to [Servo speed setting] at the back of the instruction manual.)

●**Delay setting**

Mixing operation at mixing switch ON ([START]) and OFF ([STOP]) can be delayed by [DELAY] item.(When switch is set.)

1. Move the cursor to the [START] or [STOP] item and switch to the data input mode by pushing the RTN button.

2. Turn the dial to the left and right and set the mixing operation delay time at switch ON or OFF.

Initial setting : 0sec

Setting range : 0sec~35sec

3. After adjustment, switch to the cursor move mode by pushing the RTN button.

*At adjustment, the delay time can be reset to the initial value by pushing the RTN button for 1 second.

GYRO

[Corresponding model type]: Multicopter/Airplane/glider, general

This function is used when a GYA Series gyro is used to stabilize the aircraft's attitude. The sensitivity and operation mode (Normal mode/GY mode) can be switched with a switch.

● Three rates (Rate 1/Rate 2/Rate 3) can be switched.
● Up to 3 axes (Gyro/Gyro 2/Gyro 3) can be simultaneously controlled.

*Initial setting does not assign a sensitivity channel. Use the Function menu of the Linkage Menu to assign the sensitivity channel (Gyro/Gyro2/Gyro3) used to a vacant channel beforehand.

Set [Control] and [Trim] other than Function to [--].

● Select [GYRO] at the model menu and call the setup screen shown below by pushing the RTN button.

●Select the function name and return to the preceding screen by pushing the RTN button or pushing the Home/Exit button.

(Currently selected condition name)

<Edit dial>

Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

● Push the S1 button to call next page.

● Group/single mode switching

(For more information, see the description at the back of this manual.)

● The operation mode (AVCS/NOR) and sensitivity of the 3 axis controlled by Gyro/Gyro2/Gyro3 can be set.

● Three rates (Rate 1/Rate 2/Rate 3) can be used.

Move the cursor to the [RATE] item and push the RTN button to switch to the data input mode. Adjust the rate by scrolling the edit dial.

● When using this function, move the cursor to the [ACT] item and push the RTN button to switch to the data input mode. Turn the edit dial to the left and push the RTN button.

● When a Futaba GYA gyro is used, when [GY] type is selected, the sensitivity set value is directly read in both the AVCS and NORM modes.

● When setting a switch, move the cursor to the SWITCH item and press the RTN button to call the selection screen, and then select the switch and set its ON direction.

(For a description of the switch selection method, see the description at the end of this manual.)

COMMON OPERATIONS USED IN FUNCTION SETUP SCREEN

This section describes the functions often used at the function setup screen. Refer to it when setting each function.

Operations related to flight conditions

Group/single mode switching (GROUP/SINGLE)

When setting multiple flight conditions, linking the setting contents with all conditions (group mode) or setting independently (single mode) can be selected. The mode can be changed at the [GROUP] item on each setup screen.

[Group/single mode switching]

GROUP
GROUP ⇄ GROUP **SINGLE**

1. Use the edit dial to move the cursor (reverse-will display) to the [GROUP] item on the setup screen and push the RTN button to switch to the data input mode.

2. Turn the edit dial to the left until switch [SINGLE] starts to blink.

   *At this point, the mode has still not been changed.

   *When changing from [SINGLE] to [GROUP], turn the edit dial to the right.

3. Change the mode by pushing the RTN button.

●Group mode (GROUP)

The same setting contents are set to all the flight conditions.

●Single mode (SINGLE)

Set this mode when the setting contents are not linked with other conditions.

Condition delay setting

Unnecessary fuselage motion generated when there are sudden changes in the servo position and variations in the operating time between channels can be suppressed by using the condition delay function of the condition select function [COND. SELECT].

When the delay function is set at the switching destination condition, a delay corresponding to that amount is applied and the related functions change smoothly.

[Setting method]

DELAY
0

*At the condition delay setup screen [COND.DELAY], move the cursor to the [DELAY] item of the channel you want to set and perform the following settings:

1. Switch to the condition you want to set and push the RTN button to switch to the data input mode.

2. Set the delay by turning the edit dial.

   Initial value: 0

   Adjustment range: 0~27 (maximum delay)

   (When the RTN button is pushed for 1 second, the delay is reset to the initial value.)

3. Push the RTN button to end adjustment and return to the cursor move mode.

Operations related to fine tuning VR

●VR selection ──────→   ──────●Rate adjustment

```
              CTRL   MODE    RATE(%)
FINE TUNING   RS     SYM.    +0 (  +0)  ←──── (Fine tuning VR operation position)
```

●Operation mode selection

*The operation modes which can be selected depend on the function.

[Setting method]

1. Control selection

   Use the edit dial to move the cursor (reverse-will display) to the [CTRL] item and push the RTN button to call the selection screen.

   Move to the control you want to set by turning the edit dial to the left or right and push the RTN button.

2. Mode selection

   Use the edit dial to move the cursor to the [MODE] item and push the RTN button to switch to the data input mode.

   Turn the edit dial to the left or right and switch to the operation mode ([LIN.], [ATL+], [ATL-], or [SYM.]) corresponding to the set control and push the RTN button.

3. Rate adjustment

   Move the cursor to the [RATE] item and push the RTN button to switch to the data input mode.

   Turn the edit dial to the left or right and set the rate.

   Initial value: 0%

   Adjustment range: -100%~+100%

   (When the RTN button is pushed for 1 second, the rate is reset to the initial value.)

   Push the RTN button to end adjustment and return to the cursor move mode.

[Fine tuning VR operation mode]

[LIN.] Mixing rate 0% at center of VR. When the VR is turned clockwise and counterclockwise, the mixing rate increases and decreases, respectively.

[ATL+] Mixing rate 0% at left end of VR. When the VR is turned, the mixing rate increases.

[ATL-] Mixing rate 0% at right end of VR. When the VR is turned, the mixing rate increases.

[SYM.] When the VR is turned to the left or right of the neutral position, the mixing rate increases.

Operations related to servo speed

Servo speed setting

The servo speed at each function operation (including flight condition switching) can be adjusted. The servos operate smoothly at a fixed speed corresponding to the set speed. The operating speed (IN side) and return speed (OUT side) can be set individually.

Switch the operation mode according to the set function.

"SYM." mode: Used with ailerons and other self neutral functions.

"LIN." mode: Used with functions which hold the operation position of the throttle and switch channel, etc.

[Setting method]

```
           IN   MODE   OUT
  SPEED    █0  LIN.    0
```

1. Use the edit dial to move the cursor (reverse-will display) to the [MODE] item and push the RTN button to switch to the data input mode.

   Turn the edit dial to the left or right and switch to the operation mode ("SYM." or "LIN.") corresponding to the set function and push the RTN button.

2. Move the cursor to the direction ([IN] or [OUT]) item you want to set and push the RTN button to switch to the data input mode.

   Turn the edit dial to the left or right and set the speed.
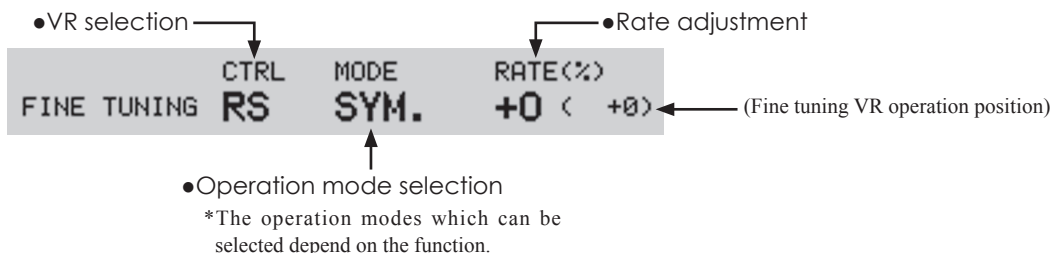
   Initial value: 0

   Adjustment range: 0~27 (maximum delay)

   (When the RTN button is pushed for 1 second, the servo speed is reset to the initial value.)
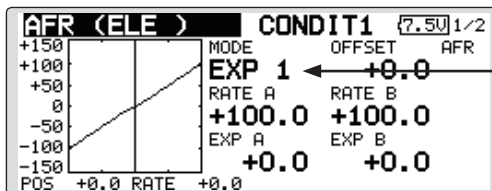
   Push the RTN button to end adjustment and return to the edit mode.

Curve setting operation

This section describes the setting procedure of curves which are used with the AFR function and each mixing function.

Curve type selection

Three types of curves (EXP1, EXP2 and POINT) can be selected.

Curve type selection
1. Use the edit dial to move the cursor (reverse-will display) to the [MODE] item and push the RTN button to switch to the data input mode.
2. Display the curve you want to use by turning the edit dial to the left or right.
*The curve type blinks.
3. When the RTN button is pushed, the curve type is changed. (Operate the edit dial or S1 button to stop the change.)
[EXP1]: EXP1 curve
[EXP2]: EXP2 curve
[POINT]: point curve

Setting by curve type

When the curve type is selected as described above, adjustment items corresponding to the curve type appear on the screen. Adjust each curve as described below.

EXP1/EXP2 curve adjustment

(EXP1 curve)
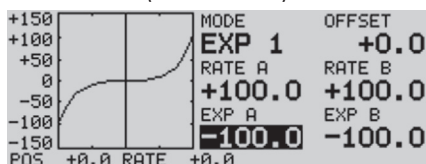
Using the EXP1 curve is effective in smoothing starting of the ailerons, elevator, rudder, etc.

(EXP2 curve)
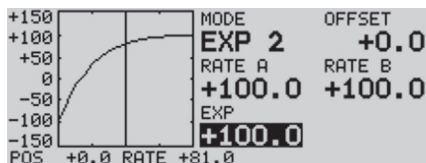
Using the EXP2 curve is effective in engine rise and other engine control.

The curve left and right rates ([RATE A], [RATE B]) and EXP curve rate ([EXP A], [EXP B]) can be adjusted individually. ([EXP] for EXP2)

The curve can also be offset horizontally ([OFFSET]) in the vertical direction.

[Rate setting]

1. Use the edit dial to move the cursor (reverse-will display) to the [RATE A], [RATE B], [EXP A], or [EXP B] setting item and push the RTN button to switch to the data input mode.

2. Set the rate by turning the edit dial to the left or right.

Initial value: +100.0% (rate)/+0.0% (EXP rate)

*Initial value differs depending on function.

Adjustment range: -200.0~+200.0% (rate)/-100.0~+100.0% (EXP rate)

(When the RTN button is pushed for 1 second, the rate is reset to the initial value.)

Push the RTN button to end adjustment and return to the cursor move mode.

[Offsetting the curve horizontally in the vertical direction]

1. Use the edit dial to move the cursor (reverse-will display) to the [OFFSET] setting item and push the RTN button to switch to the data input mode.

2. Move the curve in the vertical direction by turning the edit dial to the left or right.

Initial value: +0.0%

(When the RTN button is pushed for 1 second, the rate is reset to the initial value.)

Push the RTN button to end adjustment and return to the cursor move mode.

Point curve (POINT) adjustment

(Point)

```
+150    MODE      OFFSET
+100    POINT      +0.0
+50
0       POINT     RATE
-50       9       +10.0
-100
-150
POS  +0.0 RATE +10.0
```

Up to 11 or 17 points curve can be used. (differs with function)

Initial point number: 9 points (17 points curve), 11 points (11 points curve)

*The set points can be freely increased, decreased, and offset.

[Rate adjustment of each point]

1. Use the edit dial to move the cursor (reverse-display) to the [POINT] or [RATE] item and push the RTN button to switch to the curve setting mode.

*It is changed from the reverse-display to the square box display.

*In this mode, push the RTN button to switch the [POINT] item and [RATE] item alternately.

2. Move the cursor (square box) to the [POINT] item by pushing the RTN button.

3. Turn the edit dial to the left or right and select the point whose rate you want to set.

*The mark ■ on the curve shows the currently selected point. The mark □ on the curve shows the currently deleted point.

4. Move the cursor (square box) to the [RATE] item by pushing the RTN button and set the rate by turning the edit dial to the left or right.

Repeat steps 2 through 5 and adjust the curve.

Push the S1 button to end adjustment and return to the cursor move mode.

[Point addition]

1. In the curve setting mode, push the RTN button to move the cursor to the [POINT] item and turn the edit dial to the left or right and move the cursor on the curve to the position (mark □) you want to add.

2. When the RTN button is pushed for 1 second, the point is added.

[Point deletion]

1. In the curve setting mode, push the RTN button to move the cursor to the [POINT] item and turn the edit dial to the left or right and move the cursor on the curve to the position (mark ■) you want to delete.

2. When the RTN button is pushed for 1 second, the point is deleted.

[Offsetting the curve horizontally in the vertical direction]

1. Use the edit dial to move the cursor (reverse-will display) to the [OFFSET] item.
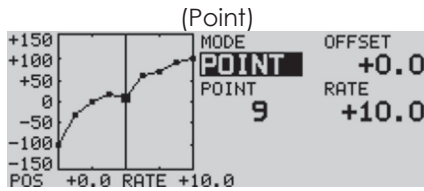
2. Move the curve in the vertical direction by turning the edit dial to the left or right.

Initial value: +0.0%

(When the RTN button is pushed for 1 second, the curve is reset to the initial value.)

Push the RTN button to end adjustment and return to the cursor move mode.

Switch selection method

The various functions used in the FMT-03 can be selected by switch. The switch (including when stick, trim lever, or VR are used as a switch) setting method is common to all functions.

Switch selection

When a switch is selected at a mixing function, etc., the selection screen shown below is called.

(Switch selection screen example)

```
HARDWARE SEL. CONDIT1 [6.6V]1/1
┌── HARDWARE LIST ──┐
 J1 SA SE J6 DA T3 --
 J2 SB SF J5 DB T4
 J3 SC SG DC T1 T5
 J4 SD SH DD T2 T6
```
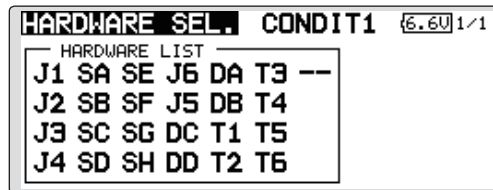
Switch selection

1. Use the edit dial to move the cursor (highlights) to the switch you want to select and push the RTN button.

   *The switch blinks.

2. To return to the preceeding screen, move the cursor to the [HARDWARE SEL.] at the top of the screen and push the RTN button.

   Or, move the cursor to the [ON/OFF] and call the ON/OFF position setting screen by pushing the RTN button.

When switch was selected

When switch was selected, ON/OFF position setting is also performed.

```
ON/OFF        CONDIT 1 [7.5V]1/1
SA
      ▶OFF
       OFF
       ON
             ALTERNATE NORMAL
```
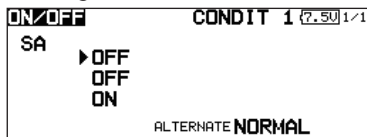
*The ON/OFF setting state of each position is displayed.

1. When you want to change the ON/OFF setting, use the edit dial to move the cursor and push the RTN button to switch to the data input mode. Switch the ON/Off display by turning the edit dial to the left or right.

   *ON/OFF display blinks.

2. When the EDIT button is pressed, the ON/OFF setting is changed. (Operate the edit dial or S1 button to stop the change.)

3. To return to the preceeding screen, move the cursor to the [ON/OFF] at the top of the screen and push the RTN button.

When stick, trim lever, or knob selected

When a stick, trim lever, or knob is used as a switch, four operation modes can be selected by the following mode and type combination:

```
ON/OFF            CONDIT 1 [7.5V]1/1
 J1      -100%  POSITION  SET
ON/OFF          ON/OFF    NORMAL
 +0% ▶    0%    MODE      LINEAR
■ OFF           ALTERNATE NORMAL
□ ON     +100%
```

1. When you want to change the mode, move the cursor to [MODE] and push the RTN button to switch to the data input mode. Switch the display to the mode you want to change by turning the edit dial to the left or right and then make the change by pushing the RTN button.

   ●Mode: [LINEAR]/[SYMMETRY]

   *Set the ON/Off point by the method described on the next page.

Alternate mode setting

   ●Mode: [NORMAL]/[ALTERNATE]

1. Move the cursor to the [ALTERNATE] item and push the RTN button to switch to the data input mode.

2. Change to the mode you want to set by turning the edit dial to the left or right.

   *The mode display blinks.

3. Push the RTN button. (Operate the edit dial or S1 button to stop the change.)

4. To return to the preceeding screen, move the cursor to the [ON/OFF] at the top of the screen and push the RTN button.

Operation modes

The operation modes when stick, trim lever, or knob are selected is described below.

Linear mode

This mode sets ON/OFF at the left or right (up or down) with the set point as the reference.

Symmetrical mode

Left and right (up and down) operations are symmetrical about the neutral position. For instance, when you want to switch DR1 with the aileron stick, when the stick is moved to the left or right, DR1 can be turned on at the same left and right position.

Shifting the ON/Off point

The ON/OFF point can be shifted. ON/OFF at a free position can be changed.
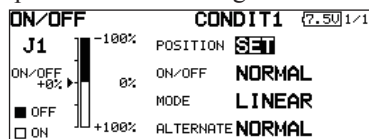
● Black range: OFF range

● White range: ON range

[Setting method]
1. First, use the edit dial to move the cursor to the [POSITION] item.
2. Move the stick, trim lever, or knob to the point you want to change and push the RTN button. The point is shifted.
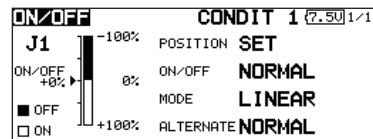3. To return to the preceeding screen, move the cursor to the [ON/OFF] at the top of the screen and push the RTN button.

Logic switch (Condition Select function only)

The logic switch function lets you turn operation on and off by combining two switches. For instance, the condition is activated when 2 switches are turned on.

Logic mode

AND: When both switches are ON, the condition is ON.

OR: When either switches is ON, the condition is ON.

EOR: When the two switches are in different states, the condition is ON.

```
SWITCH        CONDIT1  7.5U 1/1
         MODE
         SINGLE

         SWITCH
         --
```
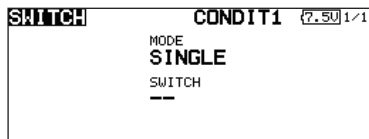
Switch mode selection

1. Move the cursor to the [MODE] item and push the RTN button to switch to the data input mode.
2. Turn the edit dial to the left and select the [LOGIC].

   *[LOGIC] display blinks.

3. Push the RTN button to change to the logic switch mode.

           (Logic switch setting screen)

```
SWITCH        CONDIT2  7.4U 1/1
         MODE
         LOGIC

SWITCH A   LOGIC      SWITCH B
--         AND        --
```
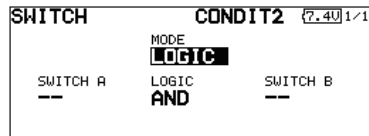
Swich selection

1. Select the switch A and B. (Refer to the description at the previous page.)

Logic mode selection

1. Move the cursor to the [LOGIC] item and push the RTN button to switch to the data input mode.
2. Turn the edit dial to the left or right and select the logic mode.

   *The mode display blinks.

3. Push the RTN button to change to the logic mode.

4. To return to the preceeding screen, move the cursor to the [SWITCH] at the top of the screen and push the RTN button.

UPDATING

Your Futaba FMT-03 transmitter programming can be updated easily online. When functions are added or improved, the update file can be downloaded from our website. Copy the update files to the SD card and then use the following procedure to update the program.

Check our web site for the FAQ regarding updating for more information.

Updating procedure

Note: If the battery fully discharges during program updating, updating will fail. When the remaining battery capacity is 50% or less, always recharge the battery before updating.

Note: The model data in the transmitter can be used unchanged after updating, but to be safe, back up the model data before updating.

1. Copy update files to a SD card. Typical structure of folders of the card for update are following.
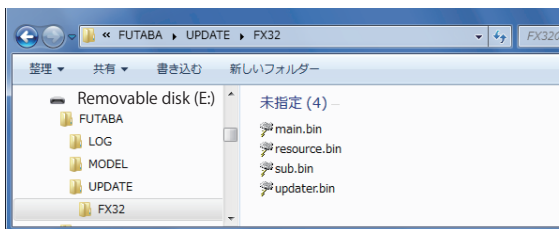
2. Attach the SD card into the SD slot of the FMT-03.

① Open the battery cover. (Minus driver is used.)

SD card slot

*Don't mistake the direction that the micro SD card is inserted.

② It inserts until it locks micro SD card into SD card slot.
*It is releasable if a card is pushed once again.
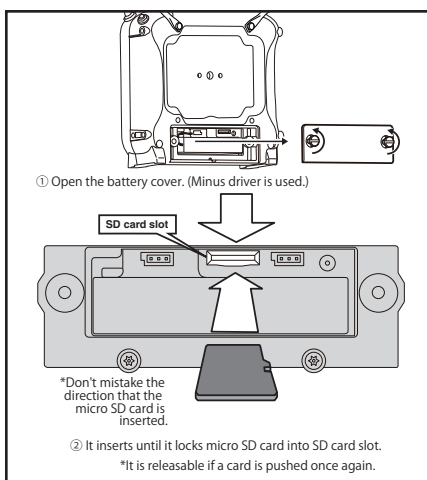
3. Press the Home/Exit switch and turn on the power switch, and FMT-03 should begin to update.
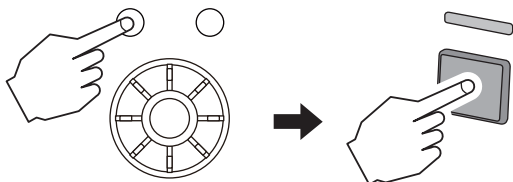
4. When updating is complete, the screen shown below appears.
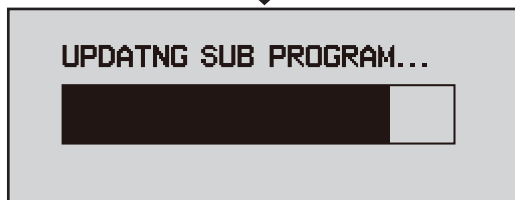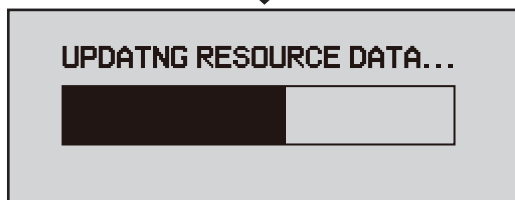
5. Turn off the power switch. After the monitor LED goes off, switch the update switch in the down direction.

After the updating above has been completed, turn on the power and then check the system program version at the system menu information screen.

6. If writing goes wrong, the following error message will come out.

"LOW BATTERY"
"UPDATE FILE NOT FOUND"
"BROKEN FILE"
"WRITE ERROR"

Reference

FMT-03 is equipped with a stick of multi-copter exclusive use. Therefore it's unsuitable for use of an airplane, a glider and a helicopter.

AIRPLANE/GLIDER/HELICOPTER FUNCTIONS

FMT-03 is equipped with a stick of multi-copter exclusive use. Therefore it's unsuitable for use of airplane, glider and helicopter.
But, FMT-03 is also equipped with the function of the airplane, glider and helicopter. It's indicated on a page after this by reference.

MODEL MENU (AIRPLANE/GLIDER FUNCTIONS)

The dedicated mixes, etc. usable when airplane or glider model type is selected are displayed in this Model Menu functions section. First use the Model Type function of the Linkage Menu to preset the model type, wing type, and tail type matched to the fuselage used. Other settings reset the data used in mixing function, etc.

These dedicated mixes can be set for each flight condition, as required. When you want to use the system by switching the settings for each condition by switch or stick position, use the

Condition Select function to add flight conditions. (Up to 8 conditions can be used)

Note: The FMT-03 is designed so that the airplane and glider model types can handle aircraft of the same wing type.

The functions common to airplanes and gliders, except some dedicated functions, are summarized without regard to the model type.

The setting items are different, depending on the number of servos, etc. according to the wing type used. The setup screens in the instruction manual are typical examples.

(Model Menu screen example)

*The Model Menu screen depends on the model type. This screen is for model type 4AIL+4FLP.

- Select the [MODEL] at the home screen and call the model menu shown below by pushing the RTN button.
- Use the edit dial to select the function you want to set and call the setup screen by pushing the RTN button.

- Select the [MODEL MENU] and return to the home screen by pushing the RTN button or pushing the Home/Exit button.
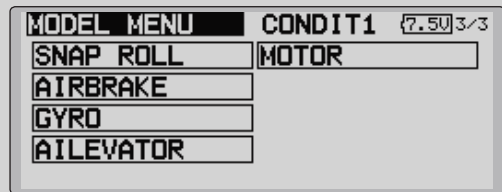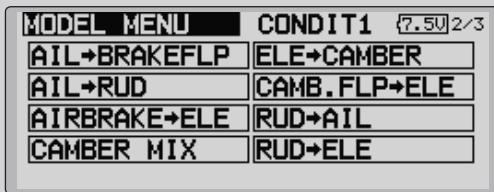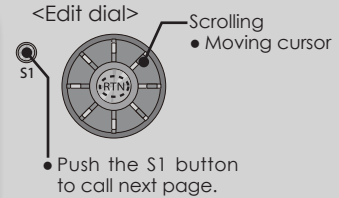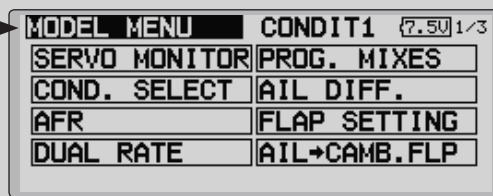
Model Menu functions list

AIL DIFFERENTIAL

This function adjusts the left and right ailerons. Roll axis correction and fine tuning with a VR are also possible. This is convenient when making settings during flight.

[Airplane/glider, 2 ailerons or more]

FLAP SETTING

The flaps can be adjusted independently. For a 4 flaps model, the camber flaps can be mixed with the brake flaps. [Airplane/glider, 2 flaps or more]

AIL to CAMBERFLP

This mix operates the camber flaps in the aileron mode. It improves the operation

characteristic of the roll axis. [Airplane/glider, 2 ailerons + 2 flaps or more]

AIL to BRAKEFLP

This mix operates the brake flaps in the aileron mode. It improves the operation characteristic of the roll axis. [Airplane/glider, 4 flaps or more]

AIL to RUD

This mix is used when you want to operate the rudder at aileron operation. Banking at a shallow bank angle is possible. [Airplane/glider, general]

AIRBRAKE to ELE

This mix is used to correct operation of the airbrakes (spoilers) when landing. [Airplane/glider, general]

Reference

FMT-03 is equipped with a stick of multi-copter exclusive use. Therefore it's unsuitable for use of an airplane, a glider and a helicopter.

RUD to AIL

This mix is used to correct roll maneuvers, knife edge, etc. of stunt planes. [Airplane/glider, general]

CAMBER Mix

This mix adjusts the camber and corrects the elevators. [Airplane/glider, 2 ailerons or more]

ELE to CAMBER

This mix is used when you want to the mix camber flaps with elevator operation. Lifting force can be increased at elevators up. [Airplane/glider, 2 ailerons or more]

CAMBERFLP to ELE

This mix is used to correct for attitude changes when the camber flaps are being used. [Airplane/glider, 2 ailerons + 1 flap or more]

BUTTERFLY (Crow)

This function is used when powerful brake operation is necessary. [Glider, 2 ailerons or more]

TRIM MIX 1/2

The ailerons, elevators, and flaps trim offset rate can be called by switch or condition selection. [Glider, 2 ailerons or more]

AIRBRAKE

This function is used when airbrakes are necessary when landing or when diving, etc. during flight. (Airplane, general)

GYRO

This is a dedicated mix when a GYA Series gyro is used. [Airplane/glider, general]

V-TAIL

This function adjusts the elevators and rudder of V-tail models. [Airplane/glider, V-tail specifications]

AILEVATOR

This function adjusts the elevators and ailerons of models with elevator specifications. [Airplane/glider, elevator specifications]

WINGLET

This function adjusts the left and right rudders of winglet models. [Airplane/glider, winglet specifications]

MOTOR

The operation speed when the motor of F5B and other EP gliders is started by switch can be set. [EP glider, general]

RUD to ELE

This function is used to correct roll maneuvers, knife edge, etc. of stunt planes. [Airplane, general]

SNAP ROLL

This function selects the snap roll switch and adjusts the steering angle of each rudder. Servo speed can also be adjusted. [Airplane general]

AIR BRAKE

RUDDER 1
Winglet
(at Flying wing)
AIL1
(Main Aileron)
FLP 3
(Brake Flap)
FLP 4
(Brake Flap)
AIL 2
(Main Aileron)
RUDDER 2
Winglet
(at Flying wing)

AIL 3
(Chip Aileron)
FLP 1
(Camber Flap)
FLP 2
(Camber Flap)
AIL 4
(Chip Aileron)

V-TAIL

ELEVATOR
(RUDDER 2)
RUDDER
(ELEVATOR 2)

AILVATOR

ELEVATOR
(AILERON 5)
ELEVATOR 2
(AILERON 6)

< **Model Menu (Airplane/Glider Functions)** > **115**

Reference

FMT-03 is equipped with a stick of multi-copter exclusive use. Therefore it's unsuitable for use of an airplane, a glider and a helicopter.

Servo connection by Airplane/glider type

The FMT-03 transmitter channels are automatically assigned for optimal combination according to the type selected with the Model Type function of the Linkage Menu. The channel assignment (initial setting) for airplane/glider type is shown below. Connect the receiver and servos to match the type used.

*The set channels can be checked at the Function screen of the Linkage Menu. The channel assignments can also be changed. For more information, read the description of the Function menu.

Airplane/glider/motor glider

●Airplane and V tail

RX CH	1AIL Airplane	Glider EP	Glider	2AIL Airplane	Glider EP	Glider	2AIL+1FLAP Airplane	Glider EP	Glider	2AIL+2FLAP Airplane	Glider EP	Glider
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Aileron2	Aileron2	Aileron2
6	Airbrake	Airbrake	Airbrake	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Flap	Flap	Flap
7	AUX5	AUX5	AUX5	AUX5	AUX5	AUX5	Flap	Flap	Flap	Flap2	Flap2	Flap2
8	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	AUX5	AUX5	AUX5	Gear	AUX6	AUX6
9	AUX3	AUX3	AUX3	AUX3	AUX3	AUX3	AUX4	AUX4	AUX4	AUX5	AUX5	AUX5
10	AUX2	AUX2	AUX2	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3	AUX4	AUX4	AUX4
11	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3
12	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2
13	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
14	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
15	AUX1	AUX1	AUX1	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly
16	AUX1	AUX1	AUX1	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

RX CH	2AIL+4FLAP Airplane	Glider EP	Glider	4AIL+2FLAP Airplane	Glider EP	Glider	4AIL+4FLAP Airplane	Glider EP	Glider
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
3	Throttle	Rudder	Rudder	Throttle	Rudder	Rudder	Throttle	Rudder	Rudder
4	Rudder	Aileron2	Aileron2	Rudder	Aileron2	Aileron2	Rudder	Aileron2	Aileron2
5	Gear	Flap	Flap	Gear	Aileron3	Aileron3	Gear	Aileron3	Aileron3
6	Aileron2	Flap2	Flap2	Aileron2	Aileron4	Aileron4	Aileron2	Aileron4	Aileron4
7	Flap	Flap3	Flap3	Aileron3	Flap	Flap	Aileron3	Flap	Flap
8	Flap2	Flap4	Flap4	Aileron4	Flap2	Flap2	Aileron4	Flap2	Flap2
9	Flap3	Motor	AUX7	Flap	Motor	AUX7	Flap	Flap3	Flap3
10	Flap4	AUX6	AUX6	Flap2	AUX6	AUX6	Flap2	Flap4	Flap4
11	AUX5	AUX5	AUX5	AUX5	AUX5	AUX5	Flap3	Motor	AUX7
12	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	Flap4	AUX6	AUX6
13	AUX3	AUX3	AUX3	AUX3	AUX3	AUX3	AUX5	AUX5	AUX5
14	AUX2	AUX2	AUX2	AUX2	AUX2	AUX2	AUX4	AUX4	AUX4
15	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly	AUX3	Butterfly	Butterfly
16	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

● **Ailevator**

RX CH	1AIL Airplane	1AIL Glider EP	1AIL Glider	2AIL Airplane	2AIL Glider EP	2AIL Glider	2AIL+1FLAP Airplane	2AIL+1FLAP Glider EP	2AIL+1FLAP Glider	2AIL+2FLAP Airplane	2AIL+2FLAP Glider EP	2AIL+2FLAP Glider
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2
6	Airbrake	Airbrake	Airbrake	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2
7	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Flap	Flap	Flap	Flap	Flap	Flap
8	AUX5	AUX5	AUX5	AUX5	AUX5	AUX5	Gear	AUX6	AUX6	Flap2	Flap2	Flap2
9	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	AUX5	AUX5	AUX5	Gear	AUX6	AUX6
10	AUX3	AUX3	AUX3	AUX3	AUX3	AUX3	AUX4	AUX4	AUX4	AUX5	AUX5	AUX5
11	AUX2	AUX2	AUX2	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3	AUX4	AUX4	AUX4
12	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3
13	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2
14	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
15	AUX1	AUX1	AUX1	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly
16	AUX1	AUX1	AUX1	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

RX CH	2AIL+4FLAP Airplane	2AIL+4FLAP Glider EP	2AIL+4FLAP Glider	4AIL+2FLAP Airplane	4AIL+2FLAP Glider EP	4AIL+2FLAP Glider	4AIL+4FLAP Airplane	4AIL+4FLAP Glider EP	4AIL+4FLAP Glider
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2	Elevator2
6	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2
7	Flap	Flap	Flap	Aileron3	Aileron3	Aileron3	Aileron3	Aileron3	Aileron3
8	Flap2	Flap2	Flap2	Aileron4	Aileron4	Aileron4	Aileron4	Aileron4	Aileron4
9	Flap3	Flap3	Flap3	Flap	Flap	Flap	Flap	Flap	Flap
10	Flap4	Flap4	Flap4	Flap2	Flap2	Flap2	Flap2	Flap2	Flap2
11	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Flap3	Flap3	Flap3
12	AUX5	AUX5	AUX5	AUX5	AUX5	AUX5	Flap4	Flap4	Flap4
13	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	Gear	AUX6	AUX6
14	AUX3	AUX3	AUX3	AUX3	AUX3	AUX3	AUX5	AUX5	AUX5
15	AUX2	Butterfly	Butterfly	AUX2	Butterfly	Butterfly	AUX4	Butterfly	Butterfly
16	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

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Reference

FMT-03 is equipped with a stick of multi-copter exclusive use. Therefore it's unsuitable for use of an airplane, a glider and a helicopter.

● **Tailless wing**

The output CH of each system — FASSTest 18CH / FASSTest 12CH

RX CH	2AIL Airplane	2AIL Glider EP	2AIL Glider	2AIL+1FLAP Airplane	2AIL+1FLAP Glider EP	2AIL+1FLAP Glider	2AIL+2FLAP Airplane	2AIL+2FLAP Glider EP	2AIL+2FLAP Glider
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Aileron2	Aileron2	Aileron2
6	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Flap	Flap	Flap
7	AUX5	AUX5	AUX5	Flap	Flap	Flap	Flap2	Flap2	Flap2
8	AUX3	AUX3	AUX3	AUX5	AUX5	AUX5	Gear	AUX6	AUX6
9	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3	AUX5	AUX5	AUX5
10	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3
11	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2
12	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
13	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
14	AUX1	AUX1	AUX1	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly
15	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
16	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

RX CH	2AIL+4FLAP Airplane	2AIL+4FLAP Glider EP	2AIL+4FLAP Glider	4AIL+2FLAP Airplane	4AIL+2FLAP Glider EP	4AIL+2FLAP Glider	4AIL+4FLAP Airplane	4AIL+4FLAP Glider EP	4AIL+4FLAP Glider
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Flap	Flap	Flap	Aileron3	Aileron3	Aileron3	Aileron3	Aileron3	Aileron3
6	Flap2	Flap2	Flap2	Aileron4	Aileron4	Aileron4	Aileron4	Aileron4	Aileron4
7	Flap3	Flap3	Flap3	Flap	Flap	Flap	Flap	Flap	Flap
8	Flap4	Flap4	Flap4	Flap2	Flap2	Flap2	Flap2	Flap2	Flap2
9	AUX4	AUX4	AUX4	AUX4	AUX4	AUX4	Flap3	Flap3	Flap3
10	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Flap4	Flap4	Flap4
11	AUX5	AUX5	AUX5	AUX5	AUX5	AUX5	AUX4	AUX4	AUX4
12	AUX3	AUX3	AUX3	AUX3	AUX3	AUX3	Gear	AUX6	AUX6
13	AUX2	AUX2	AUX2	AUX2	AUX2	AUX2	AUX5	AUX5	AUX5
14	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly	AUX3	Butterfly	Butterfly
15	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
16	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW

Reference

FMT-03 is equipped with a stick of multi-copter exclusive use. Therefore it's unsuitable for use of an airplane, a glider and a helicopter.

●Tailless wing Winglet 2Rudder

RX CH	2AIL Airplane	2AIL Glider	2AIL Glider EP	2AIL+1FLAP Airplane	2AIL+1FLAP Glider	2AIL+1FLAP Glider EP	2AIL+2FLAP Airplane	2AIL+2FLAP Glider	2AIL+2FLAP Glider EP
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	RUD2	RUD2	RUD2	RUD2	RUD2	RUD2	RUD2	RUD2	RUD2
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Aileron2	Aileron2	Aileron2
6	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Flap	Flap	Flap
7	AUX5	AUX5	AUX5	Flap	Flap	Flap	Flap2	Flap2	Flap2
8	AUX3	AUX3	AUX3	AUX5	AUX5	AUX5	Gear	AUX6	AUX6
9	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3	AUX5	AUX5	AUX5
10	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2	AUX3	AUX3	AUX3
11	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX2	AUX2	AUX2
12	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
13	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1	AUX1
14	AUX1	AUX1	AUX1	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly
15	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
16	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

RX CH	2AIL+4FLAP Airplane	2AIL+4FLAP Glider	2AIL+4FLAP Glider EP	4AIL+2FLAP Airplane	4AIL+2FLAP Glider	4AIL+2FLAP Glider EP	4AIL+4FLAP Airplane	4AIL+4FLAP Glider	4AIL+4FLAP Glider EP
1	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron	Aileron
2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2	Aileron2
3	Throttle	Motor	AUX7	Throttle	Motor	AUX7	Throttle	Motor	AUX7
4	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder	Rudder
5	Flap	Flap	Flap	Aileron3	Aileron3	Aileron3	Aileron3	Aileron3	Aileron3
6	Flap2	Flap2	Flap2	Aileron4	Aileron4	Aileron4	Aileron4	Aileron4	Aileron4
7	Flap3	Flap3	Flap3	Flap	Flap	Flap	Flap	Flap	Flap
8	Flap4	Flap4	Flap4	Flap2	Flap2	Flap2	Flap2	Flap2	Flap2
9	RUD2	RUD2	RUD2	RUD2	RUD2	RUD2	Flap3	Flap3	Flap3
10	Gear	AUX6	AUX6	Gear	AUX6	AUX6	Flap4	Flap4	Flap4
11	AUX5	AUX5	AUX5	AUX5	AUX5	AUX5	RUD2	RUD2	RUD2
12	AUX3	AUX3	AUX3	AUX3	AUX3	AUX3	Gear	AUX6	AUX6
13	AUX2	AUX2	AUX2	AUX2	AUX2	AUX2	AUX5	AUX5	AUX5
14	AUX1	Butterfly	Butterfly	AUX1	Butterfly	Butterfly	AUX3	Butterfly	Butterfly
15	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber	Camber
16	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator	Elevator
DG1	SW	SW	SW	SW	SW	SW	SW	SW	SW
DG2	SW	SW	SW	SW	SW	SW	SW	SW	SW

The output CH of each system — FASSTest 18CH / FASSTest 12CH

* Output channels differ by each system of a table. When using a system with few channels, there is a wing type which cannot be used. It cannot be used when there is a function required out of the range of the arrow of a figure.

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AIL DIFF.

[Airplane/glider, 2 ailerons or more]

The left and right aileron differential can be adjusted independently. The differential rate can also be adjusted according to the flying state by setting a fine tuning VR.

AIL1 (Main Aileron)
AIL 2 (Main Aileron)
AIL 3 (Chip Aileron)
AIL 4 (Chip Aileron)
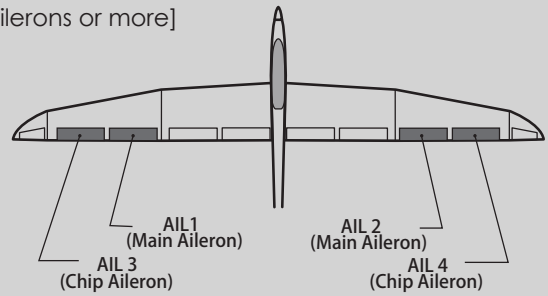
● Select [AIL DIFF.] at the model menu and call the setup screen shown below by pushing the RTN button.

(Currently selected condition name)

● Group/single mode switching

(For more information, refer to the description at the back of this manual.)

●Select the function name and return to the preceding screen by pushing the RTN button or pushing the Home/Exit button.

<Edit dial>

Scrolling
● Moving cursor
● Selecting mode
● Adjusting value

AIL DIFF.	CONDIT1	7.5U 1/1
	LEFT	RIGHT
AILERON	100%	100%
AILERON2	100%	100%
AILERON3	100%	100%
AILERON4	100%	100%

GROUP **GROUP**

FINE TUNING **--** **CURVE**

AIL-AFR

● Aileron left/right adjustment

● Fine tuning VR setting

*The graph is operated by setting a VR, etc.

● Calls the AFR screen directly when adjusting aileron operation AFR.

● Overall adjustment by Rate A and Rate B.

AIL DIFF.	CONDIT1	7.5U 1/1
+100	MODE	OFFSET
+50	**EXP 1**	**+0.0**
0	RATE A	RATE B
-50	**+100.0**	**+100.0**
-100	EXP A	EXP B
POS +0.0 RATE +0.0	**+0.0**	**+0.0**

<Wing type: 4 ailerons screen>

*The display screen is an example. The actual screen depends on the Model Type.

Setting method

● Move the cursor to the aileron (AIL) 1~4 left (or right) setting item and push the RTN button to switch to the data input mode.

Adjust the aileron angles when the stick is moved to the left (or right) end.

Push the RTN button to end adjustment and return to the cursor move mode.

*The aileron AFR screen can be directly called from the AIL differential setup screen. ([AIL-AFR])

● When setting the fine tuning VR, move the cursor to the "--" item and push the RTN button to call the selection screen, and then select the fine tuning VR.

Push the RTN button to end adjustment and return to the cursor move mode.

● The fine tuning rate can be set by curve.