

System Mode

From this part of the manual, an explanation is given of the system mode, which carries out the basic settings of this transmitter. For the method of setting this mode, please read the explanation at right.

This is a common explanation for both the airplane and helicopter types.

The system listing mode is entered by pressing the power

switch to switch the transmitter ON while pressing the **(ENT)** key. Selecting an item and pressing the **(ENT)** key once again will allow setting of each item to be carried out.

In this mode, the functions described below can be selected in order by rotating the dial in the same way as in the function mode.

For the methods of setting each function, please read each of the explanations given below.

Note that in this mode, no radio waves are output.

33 MODEL SELECT & COPY (System Mode)

This transmitter is capable of carrying out setting of 18 models of different aircraft bodies and of memorizing all the settings.

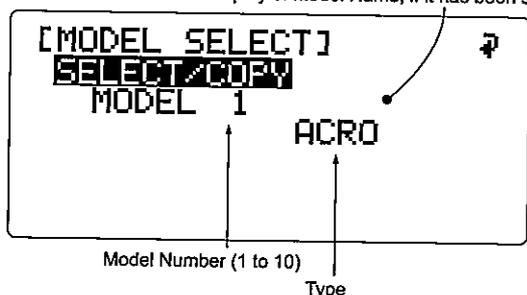
Because the type selection function can also be freely carried out for each model, it will be possible to use the transmitter for multiple functions.

For example, model 1 can be set as a helicopter, while model 2 can be set as an airplane.

Note that the model name (see next section) should be used to ensure that no mistakes are made during model selection.

By pressing the dial, it will be possible to switch between model select and model copy.

Display of Model Name, if it has been set.



Model Number Selection



Model Switching

Setting Method

For the display in the figure above, model switching can be carried out. By rotating the dial it will be possible to select the model number. The settings will switch to those of the displayed model.

Model Copy

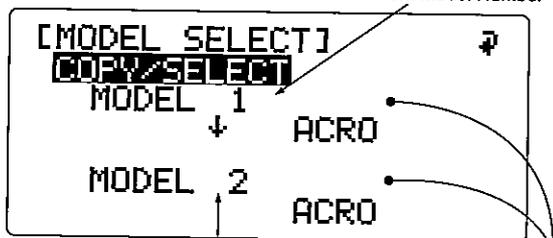
This function transfers all of the setting data from the current model to another model. Pressing the dial in the condition shown in the figure above will change to the condition shown in the figure below. Rotate the dial to select the model with the data that is to be transferred, then press the **(CLR)** key to implement the transfer.

In order not to lose valuable data, it is recommended to utilize **[34]** Model Name and to check the model name before carrying out the transfer.

Caution Item

Take care when using this function, since implementing the copy function will cause the newly transferred data to delete the data of the model on the side that the data is transferred to.

Current Model Number

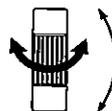


Model Number to be Transferred

Display of Model Name, if it has been set.

Model Number Selection

Press **(CLR)** to implement the copying



Press the dial

Selection of the model number for transfer

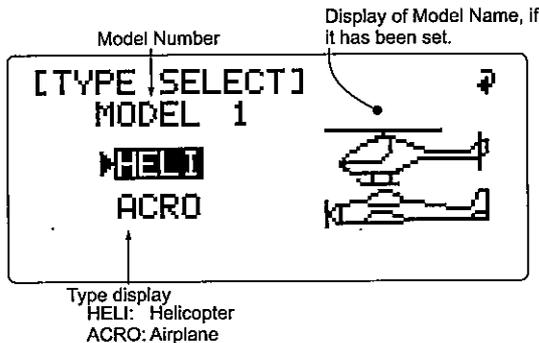
34 TYPE SELECT (System Mode)

Switching between Airplane and Helicopter Model Types (System Mode)

In this transmitter, it will be possible to carry out helicopter or airplane function setting by using the type selection function. Model switching can not be carried out in this screen. After carrying out model switching and selection of the model number that you wish to initialize, carry out the

type switching in this screen.

The function here is the type switching of the current selected model. In the situation where type switching has been carried out, the data will be reset (initialized). Note that the band and modulation will not be reset.



Model Switching



Type Switching

Setting Method

Rotate the dial to move the triangular arrow to match the airplane type (ACRO) or helicopter type (HELI) as shown in the figure above, and then press the dial. Once the type has been determined, press the **ENT** key to exit from the system mode. The settings will not change even after the power has been switched OFF.

● Caution Items

By carrying out Type switching, because the previous Model setting data will be cleared to the initial values of the Type that was switched to, be certain to confirm the Model Number before implementing this function in order to avoid clearing valuable data.

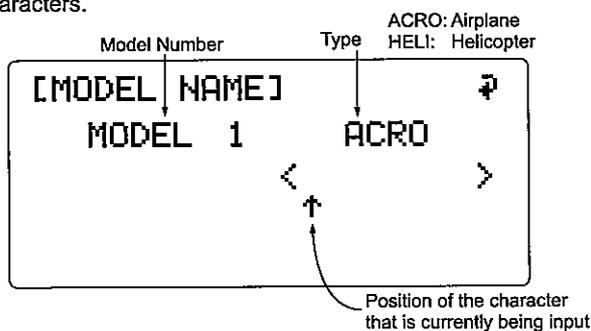
35 MODEL NAME (System Mode)

It is possible to input a Model Name for each Model. The Model Name that has been input will appear in the normal displays. It will be convenient and eliminate worry about mistaking the models to incorporate the aircraft name in the Model Name. The Name can contain a maximum of 8 characters.

● Setting Method

Rotate the dial to match the up arrow with the position you wish to input, and then press the dial. Rotating the dial allows selection of a character, and pressing the dial again confirms the character.

Note that during the character input condition, a space can be input by pressing the **CLR** key.



Selection of the Input Position



Press **CLR** to input a space

Press the dial

Select the Character

● Characters that can be Input

! " # \$ % & ' () * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A
B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c
d e f g h i j k l m n o p q r s t u v w x y z { | } ~ ← ↑ ↓ → •

36 BIND (System Mode)

In this function, the receiver binding (pairing) and transmission settings for each country can be carried out.



●BIND

In the situation where the receiver has been set to the binding mode (by inserting the binding plug into the receiver and then switching on the receiver power), move the cursor to BIND ON using the dial. Pressing the dial starts the binding.

Confirm that all of the receiver LEDs light, and check the operations of all the servos that have been connected.

In addition, also confirm the [10] and [27] Fail Safe and Hold operations. In the situation where the Fail Safe settings are mistaken, the motor may rotate unexpectedly, so take care with these settings.

●MODE

By moving the cursor to "MODE" and pressing the dial, it will be possible to alternate between "GENERAL" and "FRANCE".

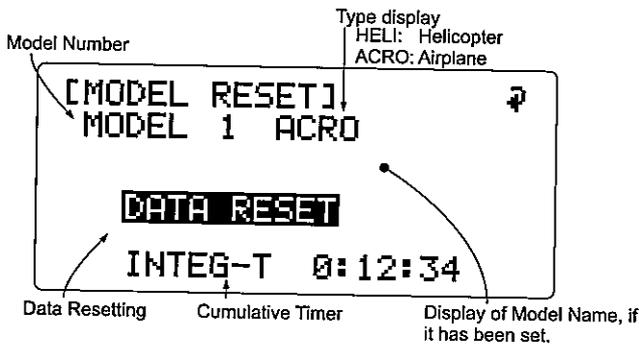
When using the transmitter in France, select "FRANCE", and in other countries select "GENERAL".

37 MODEL RESET (System Mode)

This function presets all of the setting data of the current model to the initial conditions.

Model switching can not be carried out in this screen. Implement the initialization after selecting the model number that is to be initialized using [33] Model Select & Copy.

In the situation where you only wish to reset the cumulative timer, switch the item to INTEG-T and carry out the reset.



Item Switching

Press CLR to reset the data or clear the timer (Set it to 0:00:00)



■Data Resetting

This function presets all of the functions and the setting values of the current model to the initial conditions. The data of other models will not be affected. In order not to delete valuable data, be certain to confirm the model number before carrying out the implementation.

●Setting Method

Rotate the dial to match the cursor with "DATA RESET". The CLR key implements the reset.

■Cumulative Timer Reset

The cumulative timer is separate for each model. After 60 hours, the timer will return to zero. This should be used as a rough guide for the maintenance periods of each aircraft body.

●Caution Items

Because the previous model setting data will be cleared to the initial values when a data reset is implemented, be certain to confirm the model number before implementing the function to prevent deleting valuable data.

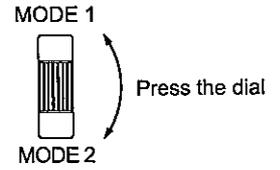
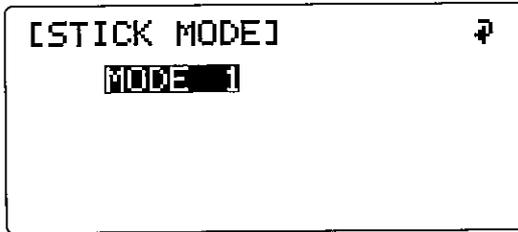
After implementing the function, there is no means of restoring the data.

●Setting Method

By rotating the dial to match the cursor to "INTEG-T", and pressing the CLR key, the time will be cleared (reset to 0:00:00).

38 STICK MODE (System Mode)

The Mode of the sticks can be chosen with this function. You can choose from Mode 1 or 2. You will need to remove the back case transmitter cover and swap the throttle ratchet and elevator spring.



Pressing the dial. If "MODE 2" is displayed and the transmitter will be "MODE 2". Pressing again "MODE 1" is displayed and the transmitter will be "MODE 1".

39 TRAINER (System Mode)

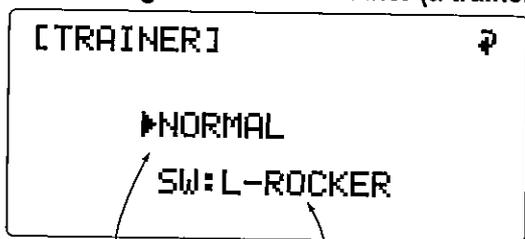
This transmitter incorporates two systems, the normal trainer that is generally used (a switching system in which all the operations are assigned to be carried out by the master machine side (teacher) or by the slave machine side (student), and the pilot link trainer (a system in which the only the stick channels can be switched with the stick operations on the slave side). If the latter pilot link trainer is used, the transmitter will become an ideal trainer in which the operator can concentrate only on carrying out training using the stick operations without considering the switch operations.

Further, the transmitter incorporates a slave mode (SLAVE/P-LINK). Although normally it will be necessary to match the slave and master machine settings, this mode allows the transmitter to be used as a slave machine without carrying out these settings. Please refer to the following description.

Basic Connections and Conditions

1. Insert the trainer cord into the DSC jacks in both transmitters to connect them. (The trainer cord is sold separately.)
2. **Switch ON the power of the master machine, while leaving the slave machine power switch set to OFF.** (The slave machine will not emit radio waves.) Note that when the transmitter enters the master condition, "MAST." will be shown on the normal display. In the situation where normal connection is not made due to some abnormality, "NO TRAINEE" will be shown flashing on the master machine normal display, and an alarm will sound for a period of 5 seconds.
If the trainer switch is not pressed, the operation will be carried out on the master side, and the trainer will operate on the slave side only while the trainer switch is being pressed.

When using as a Normal Trainer (a trainer in which all functions are simultaneously switched)

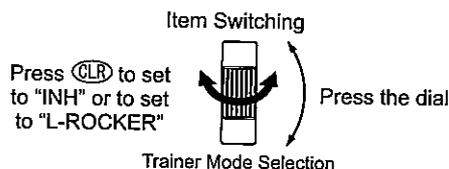


Normal Trainer Display Trainer Switch Selection
L-ROCKER: Operation using Top Side of Left Side Lever (FLAP LEVER)
R-ROCKER: Operation using Top Side of Right Side Lever (AUX2 LEVER)

Setting Method

In the situation where the switch setting is to be changed, rotate the dial to match the triangular arrow with the "SW" side, then press the dial to select the switch. Note that using the (CLR) key, the settings will be reset to "INH" or "L-ROCKER".

All of the operations will be switched using the trainer



switch. Accordingly, it will be necessary to set all of the functions to be the same on the master side and the slave side.

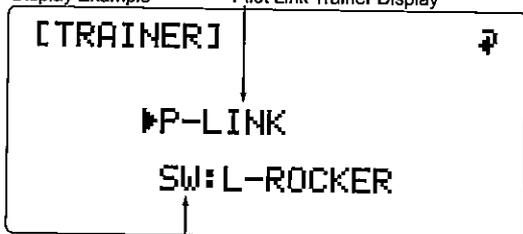
That is, the transmitters should be set to the condition where either transmitter can be used to fly independently. (The basic connections and conditions should be carried out as described above.)

Note that the (CLR) key returns the settings to "INH" (operation stopped).

During use as Pilot Link Trainer

Master Side
Display Example

Pilot Link Trainer Display



Normal Trainer Display L-ROCKER: Operation using Top Side of Left Side Lever
R-ROCKER: Operation using Top Side of Right Side Lever

All of the stick channels can be operated on the slave side, while the other channels are operated on the master side. The master side mixing will all be effective. That is, the slave conveys the normal stick operations to the master, while the master treats these stick operations as though they are its own stick operations. For the setting method, refer to the normal trainer. Note that in the figure above, pressing the (CLR) key will return the setting to INH (operation stopped).

For the items other than the basic connections and conditions, set the points described at right using the slave machine.

Slave Machine Settings

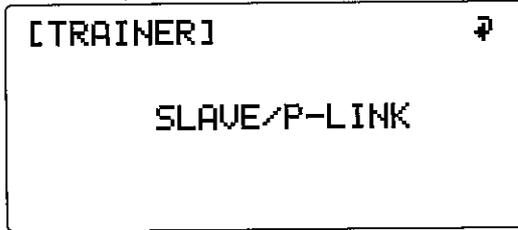
1. All of the settings are set to the standard conditions. Namely, the stick channels should be set to the normal settings where they are moved using only the sticks and trim levers.
(The slave mixing should all be set to zero.)
2. Each of the trim levers must have the same neutral points in the master and slave when switching the trainer. For this reason, the trim positions should be finely adjusted.
Note that the throttle stick should be matched at the full slow position.
3. If the slave machine is capable of carrying out left and right control surface angle adjustment, the maximum control surface angle of the master and slave should be set to the same using both end full operation of each stick, and each of the left and right control surface angles should be finely adjusted so that there are no dead areas.
Note that the operation confirmation should be carefully carried out so that the master and slave allocation has been clearly determined before flying.

MEMO;

The pilot link trainer is the same as the previous programmable function trainer, from which the channel selection has been removed. Further, these trainers are compatible.

■ About the Slave Mode (Pilot Link + Slave) (Only when using as the Pilot Link Trainer)

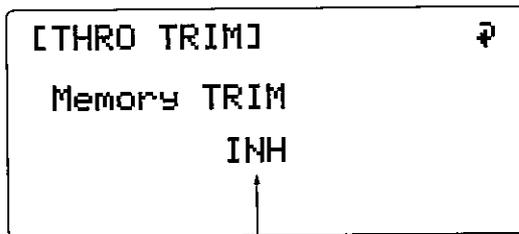
Slave Side Display Example



As previously described, this transmitter incorporates a slave mode (Pilot Link/Slave) that allows use as a slave machine without carrying out settings. When changing to this mode, because all the mixing will automatically be stopped and the modulation will change to PPM, on the slave side it will only be necessary to switch OFF the power and connect the cord to the DSC jack. (When using as a normal trainer, do not use this mode.)

40 THROTTLE TRIM (System Mode)

The throttle trim operation carries out the setting for switching between the normal trim operation and the memory trim operation.



Memory Trim Condition
INH: Trim is Normal Operation
ACT: Trim is Memory Trim Operation

● Setting Method

By rotating the dial it will be possible to set the throttle trim operation switching. "ACT" indicates the memory trim condition. Note that pressing the CLR key can set the operation to "INH".

● About the Memory Trim Operation

By setting the memory trim operation to the "ACT" condition, the operation will change from normal operation to the one described below.

Only in the situation in the repeat operation when the trim has been lowered to the lowest position, in the first operation the next time the trim is raised the trim will return to the trim position where the previous repeat operation started. Namely, there is a memorizing function for the idling position. After carrying out the repeat operation, if you remove your hand from the trim and then carry out a trim operation that lowers the trim operation again, this function will clear the previous position and memorize the position once more.

Press CLR to set to "INH".



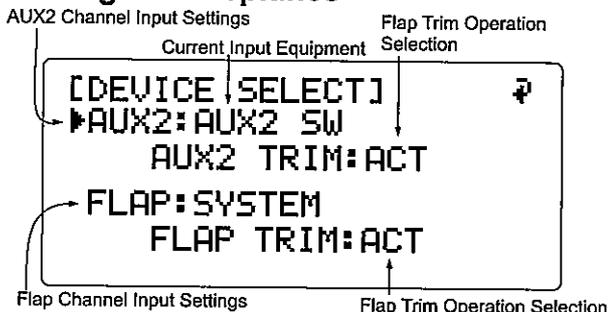
Press the dial to switch to trim mode.

41 DEVICE SELECT (System Mode)

In this function, it is possible to change the allocation of the AUX2 channel and flap channel (for airplanes) or the gear channel (for helicopters) input equipment.

Take care with these settings, since setting multiple functions will result in simultaneous operation of the functions.

■ Settings for Airplanes



● AUX2 Channel Input Settings (Select from Item 1)

It is possible to select the switching switch for the AUX2 (7ch) operation.

This should be selected in the situation where "INH" is not to be used, or in the situation where you wish to use the transmitter as a slave in program mixing.

The trim operation selection determines whether or not trim will be applied to the AUX2 LEVER. When the item is not shown it can not be selected.

● Flap Channel Input Settings (Selection from Item 2)

It is possible to select the switching switch for the flap channel (6ch) operation.

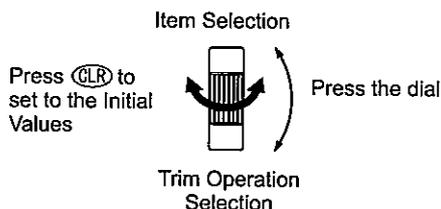
By selecting "FLAP LV.," it will be possible to fully operate this channel using the flap trim. However, in this situation, the flap system will not be able to be used.

Note that in the situation where the trainer function is to be used, for the reason that the FLAP LEVER is set as the trainer switch in the initial settings, even if the settings are made it will not be possible to use this for trimming or as a lever.

● Setting Method

Rotate the dial to match the triangular arrow with the item that you wish to set, and then press the dial. Next, rotate the dial to match the switch that you wish to set.

Further, the (CLR) key will be effective during the selection. By pressing the (CLR) key, it will be possible to return each item to the initial condition (the condition in the figure below).



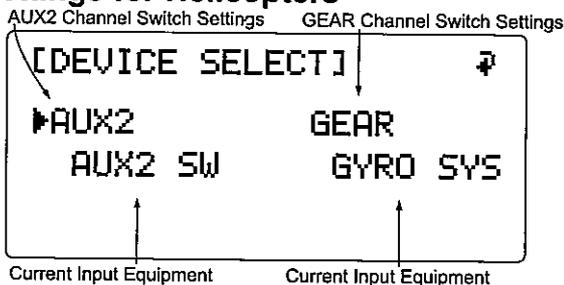
Selection Items 1

- AUX2 SW: Switching using the Left Front AUX2 Switch
- FLAP SW: Switching using the Right Shoulder Flap Switch (Using the flap system)
- AUX2 LV.: Full Operation using the AUX2 LEVER
- INH: Input Invalid

Selection Items 2

- SYSTEM: Switching using the Right Shoulder Flap Switch (Using the flap system)
- FLAP LV.: Full Operation using the FLAP LEVER
- INH: Input Invalid

■ Settings for Helicopters



● AUX2 Channel Switch Settings (Selection from Item 1)

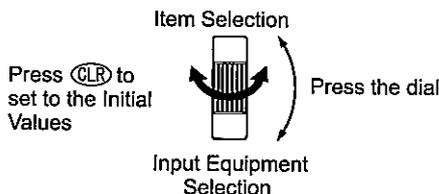
It is possible to select the switching switch for the AUX2 (7ch) operation.

Selection will be possible in the situation where "GYRO SYS" is not using the GEAR channel.

● GEAR Channel Switch Settings (Selection from Item 2)

It is possible to select the switching switch for the GEAR channel (5ch) operation.

This should be selected in the situation where "INH" is not to be used, or in the situation where you wish to use this as a slave in program mixing.



Selection Items 1

- AUX2 SW: Switching using the Left Front Center AUX2 Switch
- F.MOD SW: Switching using the Right Shoulder Flight Mode Switch
- INH: Input Invalid
- GYRO SYS: Using the gyro sensitivity switching channel

Selection Items 2

- GYRO SYS: Using the gyro sensitivity switching channel
- AUX2 SW: Switching using the Left Front Center AUX2 Switch
- GEAR SW: Switching using the Right Front Center GEAR Switch
- INH: Input Invalid

In the situation where the allocation has been changed, the function of each switch will be different from that displayed. Therefore, take particular care not to mistake the operations during flights.

(1) System Mode (Situation when Selecting the Airplane Type)

42 WING TYPE (System mode: Airplanes)

In this transmitter, flaperon, delta (elevon) and V-tail wing mixing can be carried out.

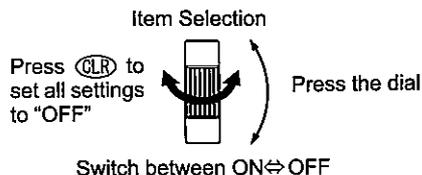
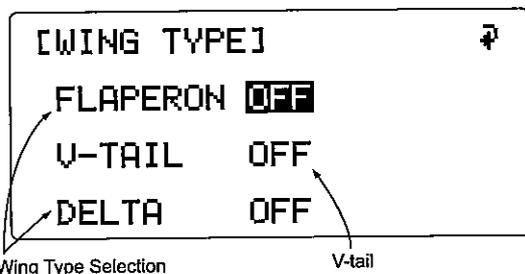
When using flaperons and delta (elevons), the adjustment of the differential amounts can be carried out using the items in [8] Differential.

When the items have been set to "ON", items that can not be used jointly will be cleared from the display.

●Setting Method

Rotate the dial to match the item that you wish to set. Next, press the dial to set the type that you wish to set to "ON".

Further, the (CLR) key will be effective during the selection. By pressing the (CLR) key, it will be possible to return all of the items to their initial condition (the "OFF" condition).



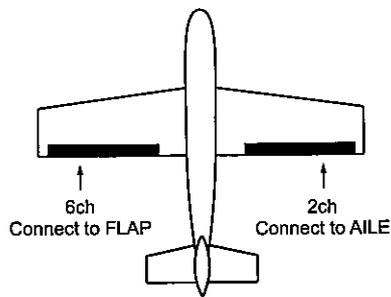
●Situation when using Flaperons

The connection will make a linkage between the servo connected to FLAP of the left wing aileron and the servo connected to AILE of the right wing aileron.

By setting FLAPERON to ON, the flaperons will operate. Because the left and right control surface angle adjustment of the corresponding channels will be carried out separately for each servo, the adjustment of the movement amount of the aileron stick operation should be carried out using the dual rate. In addition, the aileron operation differential adjustment setting will also be possible.

The flap operation is adjusted using the flap trim located at upper left of the transmitter main unit front face.

The reverse switches correspond to each of the servos. Further, the individual servo neutral adjustments should be implemented according to the sub trim section.

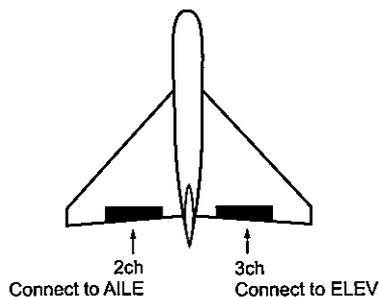


●Situation using Delta (Elevons) in Delta Airplanes

The connection will make a linkage between the servo connected to AILE of the left wing movable part and the servo connected to ELEV of the right wing movable part.

By setting DELTA (Elevon: Settings for Delta airplanes) to ON, the elevons will operate. The operation amount of each servo will automatically be set to 75%. Further, because the left and right control surface angle adjustment of the corresponding channels will be carried out separately for each servo, the adjustment of the movement amount of each stick operation should be carried out using the dual rate. In addition, the aileron operation differential adjustment setting will also be possible.

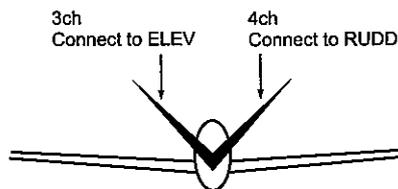
The reverse switches correspond to each of the servos. Further, the individual servo neutral adjustments should be implemented according to the sub trim section.



●Situation when using V-tail (V-tail Airplanes)

The connection uses the servo connected to ELEV for the left tail moveable part, and the servo connected to RUDD for the right tail moveable part. When the V-tail setting is changed to active (ACT), V-tail operation will be set. At this time, the servo operation amount will automatically become 75%. In addition, because the adjustment of the left and right control surface angles of the corresponding channels will be carried out separately for each servo, the adjustment of the operation amount using each stick operation should be implemented using each Dual Rate. Further, the reverse setting of each servo should be carried out corresponding to each servo. In addition, the adjustment of each servo to the neutral position should use the Sub Trim.

Note that when the Wing Type is selected as Delta, setting will not be possible.



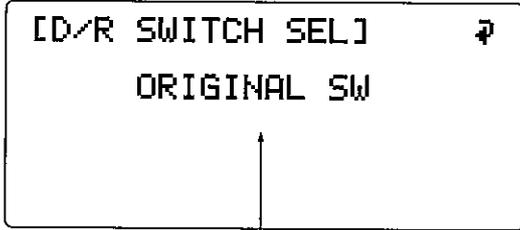
43 D/R SWITCH SEL (System mode: Airplanes)

In this function, it is possible to carry out switching of the dual rate switch input equipment allocation. For selections other than "ORIGINAL SW", it will be possible to carry out switching of each of the elevon, elevator, or rudder dual rates using one switch.

Take care with these settings, since setting multiple functions will result in simultaneous operation of the functions.

● Setting Method

Rotate the dial to display the switch that you wish to set. Further, the **CLR** key will be effective during the selection. By pressing the **CLR** key, it will be possible to return each item to the initial condition (the "ORIGINAL SW" switch condition).



Current Input Equipment

Switch Selection

Press **CLR** to set to the Initial Values



Input Equipment Selection Items

- ORIGINAL SW: As displayed (As the initial settings)
- COM AILE D/R: Common Use with the AILE D/R Switch
- COM ELEV D/R: Common Use with the ELEV D/R Switch
- COM RUDD D/R: Common Use with the Left Shoulder RUDD D/R Switch
- FLAP SW Pos2: Common Use with the Right Shoulder FLAP Switch, Front Side Switch is POS-1
- FLAP SW Pos0: Common Use with the Right Shoulder FLAP Switch, Back Side Switch is POS-1

(2) System Mode (Situation when Selecting the Helicopter Type)

44 SWASH TYPE (System Mode: Helicopter)

In the situation when using a helicopter that incorporates a CCPM system, this function automatically carries out the mixing operation of servos connected to the swash plate. Selection is possible according to the aircraft body being used.

1-Servo (Normal type helicopter without CCPM), 2-Servo (180 degree interval type), 3-Servo (120 degree interval type), and 3-Servo (90 degree interval type) can be selected.

In the situation where settings other than 1-servo (Normal) are made, [20] Swash Mixing will be displayed in the function mode, and setting will be possible.

● Setting Method

Rotate the dial to match the type that you wish to set. In addition, the (CLR) key will be effective during selection. Pressing the (CLR) key will return to the initial condition (NORMAL: 1-Servo Condition).

Type Selection

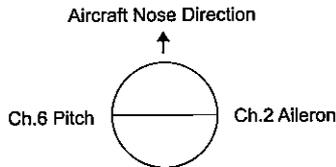
Press (CLR) to set to
1-SERVO: NORM



Initial Condition
The setting is 1-Servo (Normal).

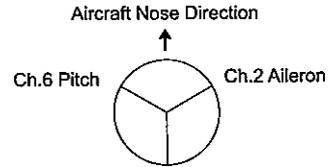


SWASH TYPE



2-servo (180°)

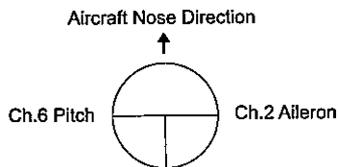
When the 2-servo 180° type has been selected.



Ch.3 Elevator

3-servo (120°)

When the 3-servo 120° type has been selected.



Ch.3 Elevator

3-servo (90°)

When the 3-servo 90° type has been selected.