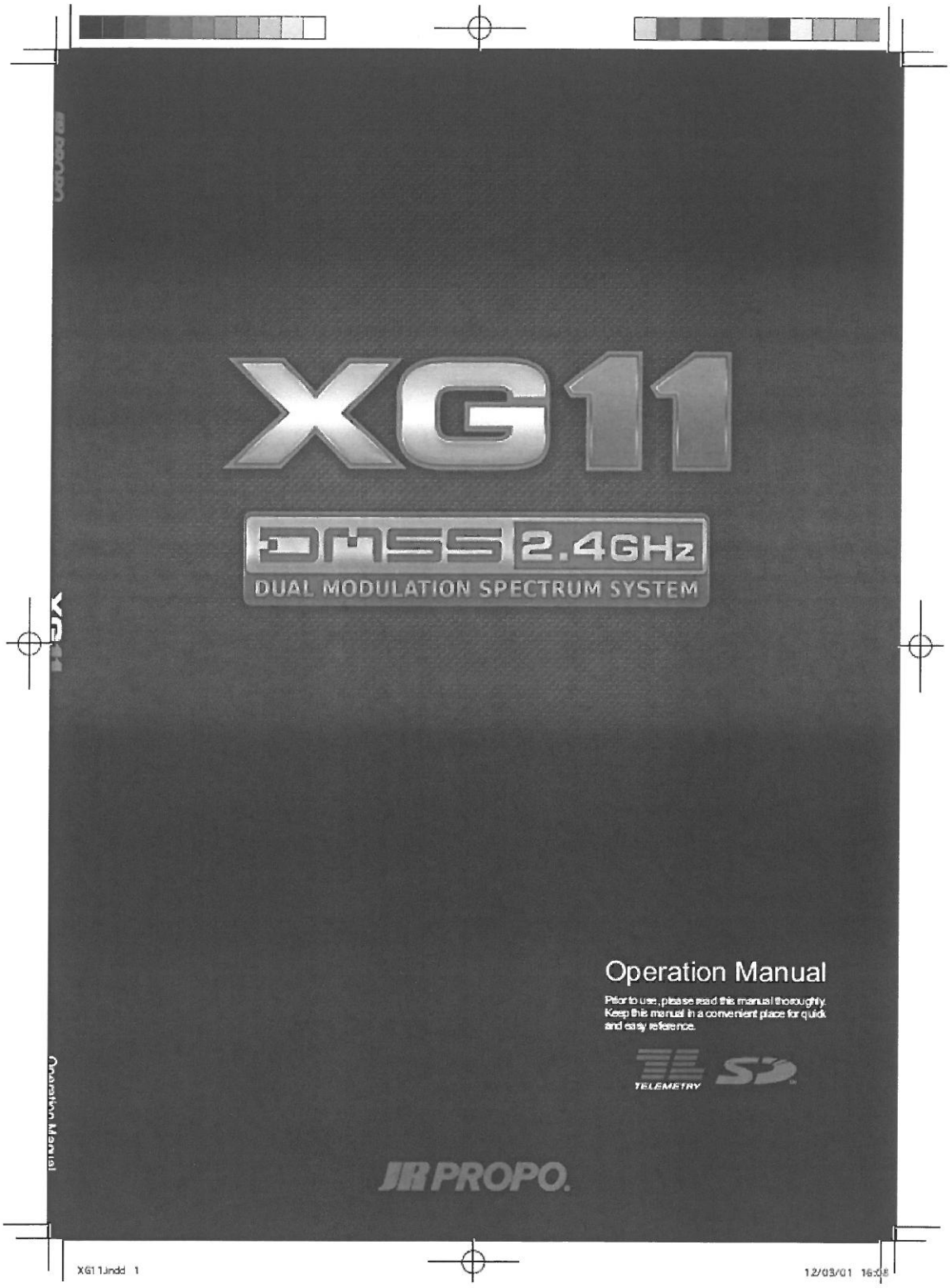
1.6 User Manual



Introduction

Greetings

Thank you for choosing to purchase this JR product.
This is a highly developed product with outstanding functionality and ergonomics that concentrates the essence of the technology built up by this company through many decades of experience. In order to make full use of the features of this radio and to safely enjoy your RC activities, please carefully read this operation manual.
Our whole company hopes that you will enjoy using this product for many years.

Features

This is a multi-function 11-channel transmitter that is capable of supporting many aircraft. It has functionality normally only seen in more expensive transmitters.

- JR's newly developed DMSS system maintains high-speed servo response while allowing simultaneous use of telemetry functions.
- The high-speed telemetry function allows information from the aircraft (that was previously unknown to the user) to be monitored on the transmitter. In addition, alarms with unique sounds alert the user to the situation on the aircraft without even looking at the screen.
- The telemetry sensor connection employs a bus system that does not require a relay box, allowing sensor extensions and additions to be easily carried out. It is acceptable to merely connect the necessary sensors in parallel.
- A new-generation long-life Li-Fe battery is used which contributes to a large reduction in transmitter weight. The charging control circuit is built into the transmitter.
- Using an automatic safety system, the receiver will not operate if the correct model has not been selected in the transmitter before flight.
- The transmitter has an easy to read backlit LCD display and input keys that are intuitive and easy to use.
- An E-ring function is incorporated allowing easy limitation of the operation range of the CCPM swash plate servos.
- A Trim Input function can allocate trim levers to change numerical values of various functions (such as program mix values) during flight.
- A new function synchronizes the operation of servos on multiple flight control surfaces in real time. This completely eliminates the time lag with fast control inputs are required.
- A SD card slot is provided which enables saving of aircraft model data and updating of transmitter software to be easily carried out, without connecting the transmitter to a PC.
- An auto-display function allows digital trim operation to be preferentially displayed on the screen.
- When inputting numerical values, simultaneously pressing the function key allows the value to be changed at a ten-times faster speed.
- A servo speed functions is incorporated for all channels, and it allows adjustment to be carried out in each operation direction.
- The 30 aircraft model memory can be utilized for storing helicopter, airplane, and glider models.
- A Trainer function is incorporated, which also allows training to be carried out individually for each stick channel.
- The throttle curve, pitch curve, and curve mixing use a multiple point adjusting method, and you can activate an optional exponential curve function that further smoothes the curves.
- Six systems of multi-function program mixing are available.
- A Touch Select function is incorporated, which enables automatic switch selection for programmed functions. This selection is easily carried out.
- A 'My List' screen is provided that enables display and simple calling up of only functions that the user has selected.
- Switch arrangement stickers are included for each transmitter model type so users can change the switch arrangement stickers as they please for airplanes and helicopters.
- The stick units have been mounted at a slight angle so that they can be easily operated in all operating range extremes.

Specifications of the Transmitter

ITEMS	SPEC.
Part Number:	NET-P131G
Type of control:	11 channel computer mixing
RF:	2.4GHz
Modulation:	DMSS (Dual Modulation Spectrum System)
Power source:	6.4V Li-Fe battery 2F1400 (1400mA)
Neutral position:	1.5ms

Specifications of the AC adapter

ITEMS	SPEC.
Part number:	NEC-A912C Note: The letter suffix this part number indicates the type of power plug. A: For European plugs B: For UK, Hong Kong plugs C: For Canada, USA & Japan plugs D: For Australia & New Zealand plugs
Input voltage:	AC100V-240V 50/60Hz
Output voltage:	DC9V 1.3A MAX 12W

General Safety Precautions

About the Proportional System

This company cannot be responsible for any accident or failure that may occur from any modification of this product, use of non-genuine parts, natural disaster, or nonobservance of the precautions described in this manual.
Further, for damages caused by an accident or failure, please understand that items (excepting this product and this Company's genuine parts) such as airplanes, competitor's products, etc will not be covered under the warranty.
The use of radio waves required by this product is defined in the Radio Law of Japan.

- When this product is used overseas, authorization by the law of the country will be required.
- When this product is used overseas for a purpose other than as radio control system for a model, it may be subject to the restrictions in accordance with the Export Trade Control Order. In such a case, an export permit under the Order is required.

Basic Precautions for Safe Use of the 2.4GHz System

The 2.4GHz band is not exclusively for use with RC airplanes. This frequency band is in common use with the ISM (industry, science, and medical care) band which is widely used for short-distance transmission such as microwave ovens, wireless LAN, digital cordless phones, audio games, cellphone Bluetooth, and VICS. Therefore, the steering response of the 2.4GHz system may be degraded in an urban area. Further, as it is also used for ham and local area radio communications for mobile identification, please pay attention to possible influences from these. In the event of any adverse radio wave interference on an existing wireless station, immediately stop emitting radio waves and take interference avoidance measures.

- At a race track/airfield, minimize use of device that can affect the transmitter/receiver and be sure to confirm safety beforehand. Also, always follow instructions given by the facility staff.
- If an aircraft is allowed to fly behind a building, a pylon, trees, etc. so that the radio-wave range is blocked, the steering response may drop, even resulting in an "out-of-control" situation. Always let the aircraft fly within a range that can be visually observed.

***It is very important to ensure that you observe the following precautions.**

Indications and Symbols Related to Safety

The following symbols used in this manual indicate the precautions regarding possible danger which may occur following improper handling. Be sure to strictly observe them, as they contain important safety instructions.

DANGER
If incorrect operation methods are used, there will be a danger of death or serious injury.

WARNING
If incorrect operation methods are used, there will be a possibility of death or serious injury.

CAUTION
If incorrect operation methods are used, it can be expected that there will be a possibility of problems occurring.

⃠ This indicates actions that are forbidden.
❗ This indicates actions that must be implemented.

How to Handle

Before starting use, make sure that all the parts are provided. Then, connect the switch harness and servo to the receiver, and insert batteries into the transmitter/receivers. Turn on the transmitter/receiver and confirm that they operate correctly. If they do not operate, check the batteries. If a rechargeable battery is used for the first time after purchase or is used after being left unused for a long period, be sure to charge it with the battery charger before use, and confirm the transmitter and receiver are correctly bound.
Refer to the Page 12 "Binding Procedure (pairing the transmitter and receiver)"
In the event of any missing parts, malfunction, etc., please contact your JR agent or distributor in your country.

WARNING

⃠ **Out-of-control and dangerous situations can be caused.**
DO NOT use the product on rainy days since it may cause malfunction if water gets inside the transmitter/receiver. If use is a necessity, be sure to take waterproof measures.

⃠ **Injury due to heat generation, fire, or electric shock can occur.**
Never disassemble or modify this product.

❗ **The engine and the motor (in the case of an electrically-driven model) can start rotating at high speed, causing danger.**
When turning on the power switch, set the transmitter throttle stick to the lowest speed position (where the engine/motor rotation does not become high) and turn on the transmitter power switch and the receiver power switch in this order.
For turning off power, turn off the receiver and then transmitter in this order.

Introduction

Injury can be caused.
When adjusting the engine (motor), pay attention to dangers presented.

DO NOT start the engine with the transmitter throttle in a high speed position. This is very dangerous.

WARNING

Failure can be caused.
DO NOT use this module set in combination with a competitor's product (servo, gyroscope, etc.).

Malfunction can be caused.
As the electronic parts mounted on the transmitter/receiver are susceptible to impact, DO NOT apply strong impact or drop them.

Out-of-control and dangerous situations can be caused.
When degraded servo movement is detected, immediately stop operating and check the battery power remaining, servos, etc.

DO NOT use the product in the following places, as there is a risk of an out-of-control state or an accident occurring:

- Transceiver interference exists.
- Passing near to traffic consisting of cars and motorbikes.
- Near a high-tension electric line, building, bank, or in a mountainous area etc.
- Near an FM/TV station, or a radio transmitting station for ship radios.
- Near residences and buildings, and near people.

A sudden malfunction may occur and will be dangerous.
Even if the receiver, servo etc. go under water and operate normally after it is fully dried, the servo may malfunction. In such case, DO NOT continue to use the product, and contact this company for inspection regardless of normal operation.

CAUTION

Prior to flying, check the following items for safety:

- Is there enough battery remaining in the transmitter/receiver? (Is the rechargeable battery fully charged?)
- Is there any fuel spillage on the receiver, servo, etc. which was caused by leakage from the fuel tank? Is there enough fuel?
  Check that no linkage is in contact with the airplane body. Also, conduct a vibration test by setting the engine (motor) to high while fixing the body and confirm that each control surface moves correctly.

In the case of the initial flight, avoid flying at great distances, choose a safe place, and perform flying practice in the vicinity for several minutes.

Rechargeable Battery and Battery Charger

Abide by the following to prevent potential leakage, explosion, heat generation, and fire.

DANGER

The AC/DC Adapter is multi-voltage(100V-240V). Be sure to use appropriate outlet plugs.

DO NOT use/Adapter with (+) or (-) set in the opposite direction.

DO NOT place near fire or heat.

DO NOT connect (+) or (-) to any material that may conduct electricity including metals (wire, etc.), carbon materials, etc.

DO NOT disassemble, remodel, or solder.

It may cause a loss of vision if the liquid inside the battery gets into your eyes. Consult a doctor immediately after washing eyes with clean water, and DO NOT rub eye areas.

WARNING

Failure can be caused.
Use a genuine JR battery Always. Stop charging when the specified charging time is exceeded.

DO NOT wet the battery with water or sea water.

DO NOT scratch or tear off the insulating tube, the lead wire, or the connector.

DO NOT use the battery if a scratch is left on the insulating tube, lead wire, and connector, or if the insulation is damaged.

It may damage skin if leaked battery liquid stays on your skin or clothes. Wash away immediately with clean water.

Out-of-control and dangerous situations can be caused.
The rechargeable battery is composed of a combination of several numbers of batteries. Thus, confirm that all rechargeable batteries inside the pack are in normal state by using a battery checker, etc. Note that the actual battery level of the rechargeable batteries can not be precisely confirmed by testers such as a battery checker. Make sure to judge the state in a comprehensive way by using a battery checker, checking the recharging time, and operating time.

CAUTION

DO NOT store the battery in a place with high temperature/humidity or dust.

Store the battery out of reach of children.

DO NOT charge the battery in a place with low temperature (below zero degrees Celsius).

Dispose of old batteries according to the local disposal regulations, and do not throw them away in garbage cans, etc.

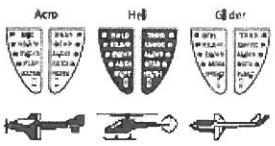
Recycling the Rechargeable Battery

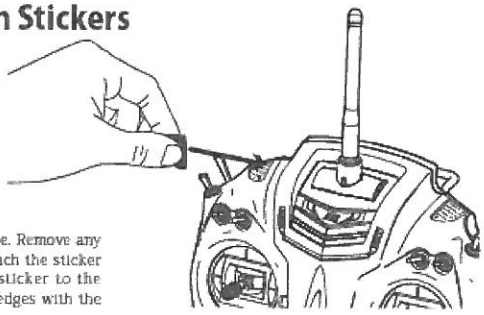
Used Li-Fe batteries and nickel metal-hydride batteries are important resources. Place a piece of tape or similar over the terminal areas, and bring them to cooperative stores that collect small rechargeable batteries.

Contents

Preparation

Switch Identification Stickers

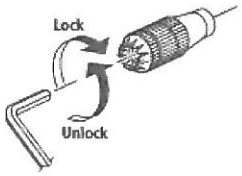




Affix the sticker for your preferred model type. Remove any dust from the affixing surface, and then detach the sticker from the backing paper. Next, apply the sticker to the transmitter surface, carefully matching the edges with the sticker area marked on the transmitter.

Stick Length Adjustment

Undo the recessed set screw located at the tip of the control stick. Now rotate the entire stick to adjust its length. When finished, lock the recessed set screw.



Neck Strap Attachment

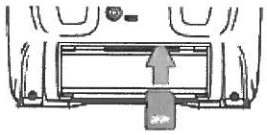
For long flights you may choose to use a neck strap.

Inserting and Removing the SD Card

Compatible SD Cards are 16GB or less in size and be formatted in FAT format.
Inserting and removing SD cards should be carried out after opening the battery cover, with the transmitter switched off. The SD card slot is located below the battery. Further, among the SD cards that are available, some types cannot be used. To ensure compatibility, please use the JR-SDM2G SD card (sold separately).

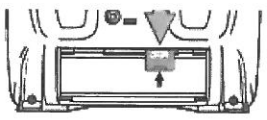
Inserting method

Switch off the transmitter, and then slowly insert the SD card into the slot until you feel a "click". Note correct orientation of the card.



Removing The Card

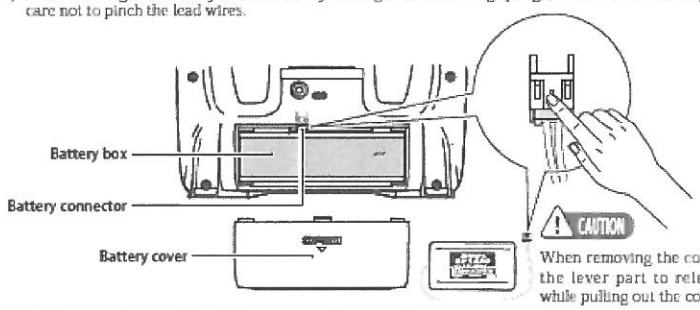
Lightly press in the middle of the SD card until it clicks - the card will pop out slightly when you remove your finger - now carefully pull the card out the rest of the way.



Preparation

Inserting and Removing the Transmitter Battery

1) While pressing the embossed mark on the rear surface of the battery lid, slide the lid in arrowed direction of the arrow, and remove.
2) Carefully insert the rechargeable battery connector into the transmitter battery connector.
3) Fit the rechargeable battery into the battery box together with filling sponge, and mount the battery cover, taking care not to pinch the lead wires.



When removing the connector, press the lever part to release the lock while pulling out the connector.

Charging the Transmitter Battery

Before charging the battery, be certain to read the precautions written on the battery label.
The transmitter operates exclusively with genuine JR Li-Fe batteries. Do not use the transmitter with other rechargeable batteries or with dry cell batteries.
During charging, the transmitter should be switched off. When the transmitter ON, charging will not take place.

Note that if using a flight simulator with the control cable plugged into the trainer jack (and the power switch OFF on the transmitter), it is possible to plug the charge cable into the transmitter and use the AC adaptor to supply power. Since the built-in battery will not be used, this will allow enjoyment while conserving energy.

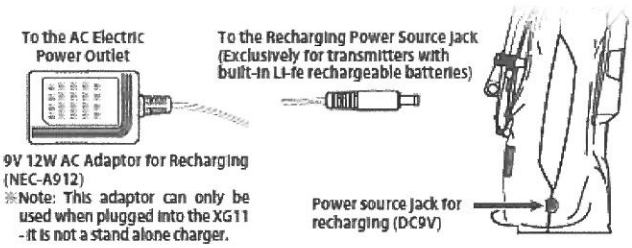
1) Insert the AC adaptor into the AC electric power socket.
2) Insert the plug of the AC adaptor as far as it will go into the DC power jack of the transmitter.
   If the transmitter LED does not illuminate, an error may have occurred.
   In this situation, detach the AC adapter plug, and re-insert it.
   If the LED does not light even after the cable has been removed and inserted several times, please contact your JR agent or distributor in your country.
3) During charging, the transmitter LED will light a reddish purple color. When charging is complete, the LED will switch off. The standard charging time is approximately 3 hours.
4) After charging has been completed, promptly detach all the connections. Absolutely do not leave the charger connected to the transmitter.

※ Be certain to only use the genuine JR XG11 dedicated AC adapter (NEC-A912). Charging cannot be carried out using other AC adapters. Further, do not use this AC adapter for charging products other than the XG11.

WARNING

Warning ! Abnormal heat generation may cause explosion of the battery!
After charging is complete, quickly detach all of the connections including the AC adaptor from outlet.
Never leave the AC adaptor connected to the transmitter or plugged into the AC outlet. This is to avoid possible fire risk after charging the battery.

Do not use the AC adapter while the cord is still bundled together, since there will be a risk of heat generation.



Preparation

Notes on stick tension spring adjustment and the throttle stroke travel adjustment plate

This allows adjustment of the stick spring strength.

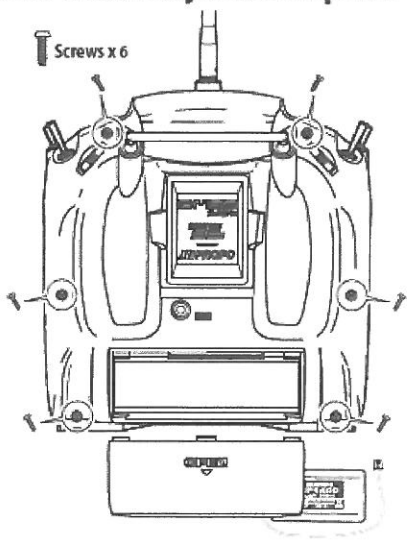
① Be certain to remove the battery before carrying out any adjustments.

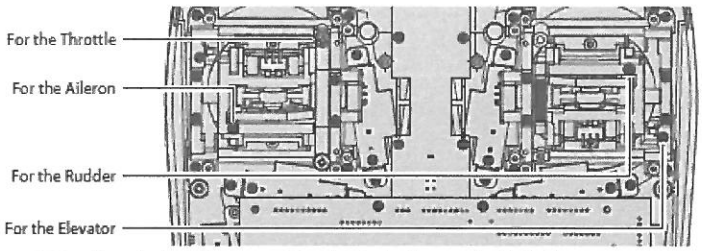
② Remove the screws in the six (6) locations on the rear case.

③ Adjust the springs to the desired spring tension. By carefully adjusting each of the screws, you can achieve a range of spring tensions.

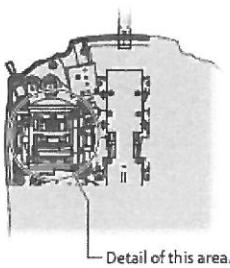
④ Close the rear cover, and tighten the screws. Take care of the interlocking of levers, etc. If you prefer a ratchet on the throttle, replace the spring plate as shown in the drawing on the left at the bottom of this page. The drawing on the right shows the default setting, giving a smooth throttle transition.

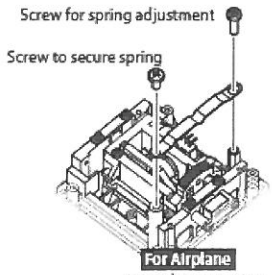
Never Touch the Printed Circuit Board or any related parts inside the transmitter.



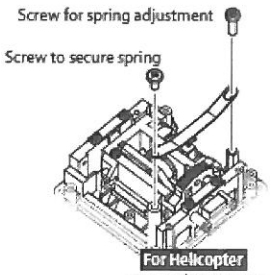


※ Touching the board may result in electric shock, uncontrolled microcomputer operation, or damage to model data, and normal operation may become impossible.





※Ratchet operation

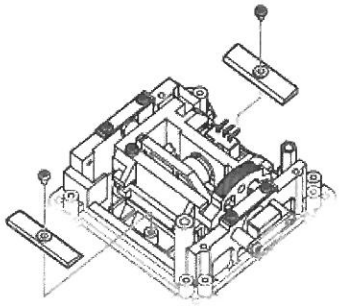


※Smooth operation

Preparation

Throttle stroke travel adjustment

- By adding the Throttle stroke adjustment plate to the gimbal, the throttle stroke is limited by approximately 5 degrees.
- Be sure to install or remove the plate with reference to the drawing.
  When adding this "limiter plate" it is essential to recalibrate the throttle stick range. Be sure to follow this procedure.
  Note:
  Refer to the Page 82 "Transmitter Setting [TX SETTING] " in the system list for further details of calibration.



Handling of the Rechargeable Ni-MH batteries used for the Receiver

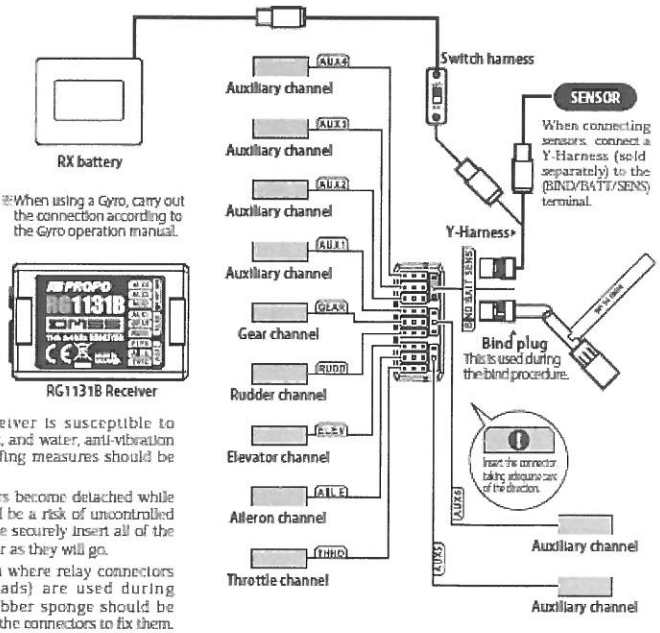
- Because nickel metal hydride batteries have a high self-discharge rate, battery discharge will gradually take place even when the battery is not being used.
- For new batteries and batteries that have not been used for a long time, be certain to fully charge before use.
  In addition, if the battery is repeatedly charged having not been fully discharged, the battery chemistry characteristics may mean that the discharge capacity becomes temporarily reduced, because of a 'memory effect'.
  It is therefore recommended you occasionally fully discharge the battery and then recharge it before use.
- Charging at very high and low temperatures is dangerous.
- Charging nickel metal hydride batteries at high temperatures will cause a noticeable drop in charge capacity. Therefore, do not charge in a hot environment, for example inside a car. Hydrogen gas may be generated during charge and discharge - avoid charging close to any open flame.

Preparation

Receiver Connections

Receiver Connections to the servos and the power supply

JR labels the channels on the receiver with names rather than numbers. From this point onward in the manual, the receiver channels will be described using their names.



- Since the receiver is susceptible to vibration, shock, and water, anti-vibration and waterproofing measures should be implemented.
- If the connectors become detached while flying, there will be a risk of uncontrolled operation. Please securely insert all of the connectors as far as they will go.
- In the situation where relay connectors (extension leads) are used during installation rubber sponge should be wrapped round the connectors to fix them. Be absolutely sure not to leave the connectors hanging unsupported.

Connection list to Receiver

Receiver	Helicopter	Airplane	Glider
1) THRO	THRO	THRO	LAILE
2) AILE	AILE	AILE	RAILE
3) ELEV	ELEV	ELEV	ELEV
4) RUDD	RUDD	RUDD	RUDD
5) GEAR	GYRO	GEAR	GEAR
6) AUX1	PIT.	FLAP	FLAP
7) AUX2	GOV	AUX2	AUX2
8) AUX3	NEDL	AUX3	AUX3
9) AUX4	AUX4	AUX4	AUX4
10) AUX5	AUX5	AUX5	AUX5
11) AUX6	AUX6	AUX6	AUX6

Preparation

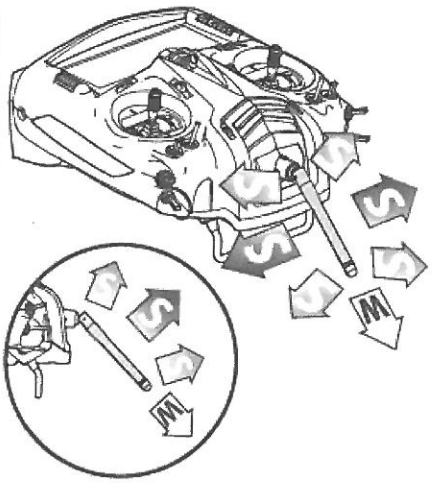
Using the transmitter and receiver. Receiver mounting location.

Please set up the antenna direction as per the following drawing.

The 2.4GHz band radio waves are very directional. The receiver signal is very dependant on the direction of the antenna. Since the antenna receives radio waves from the sides rather than from the tip, please appropriately position the receiver antenna when installing the receiver in the model.

Recommended

As the strong radio wave radiate from the sides of the antenna, this makes the best transmission to the receiver and provides the safest operation.



Not recommended

If the transmitter antenna is folded to the left or right, the radio wave may not be transmitted properly due to the position of the aircraft, helicopter, etc. Please re-adjust the antenna direction considering the flight area of your model.

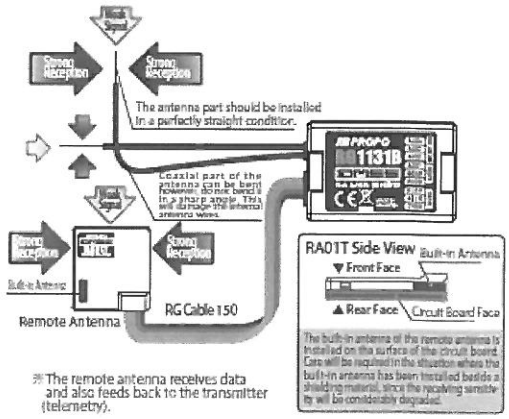
Strong radio wave
Strong radio wave transmitted to the aircraft, helicopter, etc.

Weak radio wave
Radio wave is weak.

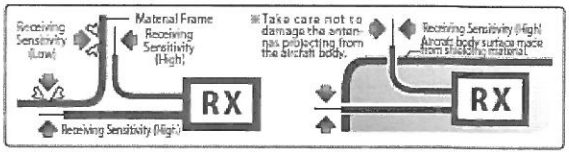
Preparation

2.4GHz Antenna Considerations

2.4GHz band radio waves have strong directionality so receiving sensitivity differs greatly depending on the direction of antenna orientation.



If the antenna is attached directly to a shielding material such as carbon or metal, the receiving sensitivity of the antenna is considerably reduced.



- Multi Coaxial Antenna type receiver (more than one coaxial antenna extending from the receiver)
  Be sure to install the antenna's at right angles to each other, rather than parallel.
- Single Coaxial Antenna type receiver
  Avoid placing the antenna along a carbon fuselage, or surrounded by metal materials.

Remote Antenna Installation

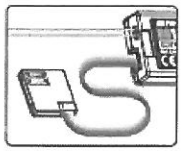
The remote Antenna RA01T receives data from the transmitter, and also feeds telemetry data back to the Transmitter so it is highly recommended to locate the Remote Antenna away from the main Receiver unit, ESC, Regulator, Servos, Gyro Sensors, harness or Power cables, etc to avoid interference.

Preparation

Binding Procedure (pairing the transmitter and receiver)

In order for the transmitter and receiver to communicate, it is essential to pair or bind them together. Please follow this procedure:

1) Be sure that remote antenna unit is properly connected to the receiver. Locate the included bind plug, and ensure the transmitter and receiver batteries are fully charged.

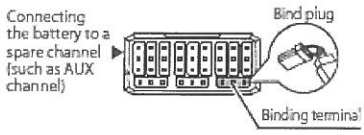


※ Note that the Remote Antenna acts as both a receiver and also transmits data back to the transmitter. Carefully note the orientation of the antenna within the remote unit. This orientation is extremely important.

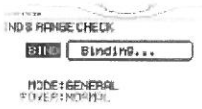
2) On the transmitter access the "BIND & RANGE" menu under the System List.

Refer to the Page 85 "Bind and Range Check [BIND&RANGE] "

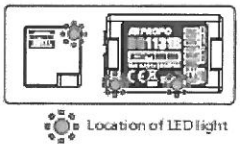
3) Inserting the bind plug into the bind terminal of the receiver and connect the battery to a spare channel (such as the AUX channel) - the LED's on the receiver and the remote antenna will begin to blink (Ready to Bind).
Note:
Be sure to insert the bind plug before connecting the battery.



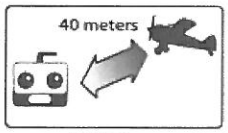
4) Refer to the "BIND & RANGE CHECK" Screen in the transmitter System Setting mode. Press the dial to start the binding process.



5) 'Binding' will flash on the transmitter display, and upon completion of the binding process. It will display "SUCCESS ! PLEASE CHECK FAIL SAFE". Concurrently, both receiver's LED's will stop flashing and be solid - signifying completion of the bind process. Disconnect the bind plug from receiver, disconnect the receiver battery and switch off transmitter. If the LED's continue to blink, repeat the procedure from the beginning.



6) Lastly, connect a servo, turn on the transmitter then receiver, and confirm that communications have been established.



Range Check
This checks the performance of the transmitter by lowering the power output to simulate a long distance range test. Under the" Bind & Range Check" setting screen, move the cursor to the POWER: NORMAL column and change it to LOW. The transmitter LED shall flash Blue to indicate it is set to low power mode. When in this mode, walk a distance of approximately 40m from the aircraft and confirm that the transmitter operates the aircraft normally. Continue testing as you walk around the aircraft. **Refer to the Page 85 "Bind and Range Check [BIND&RANGE] "**

If the bind process or range check is not successful, check the following items:

1. Are the transmitter and receiver batteries fully charged?
2. Is the remote antenna securely connected?
3. Is the distance between the transmitter and receiver too close?
4. When the procedure is carried out on the top of a desk or bench top that is made from metal, the binding procedure may not be successful.

Be sure that the failsafe settings are set in the transmitter.

Please note that when the model or model type is changed in the transmitter, re-binding will be required. Never fly the aircraft in Range Check mode.

Functions Common to All Models

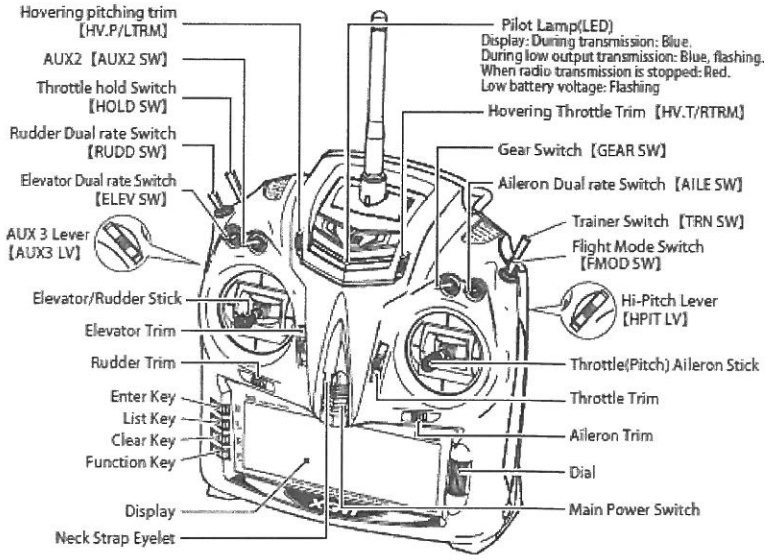
Names of Each Transmitter Control

Note:
Mode 1 transmitter shown

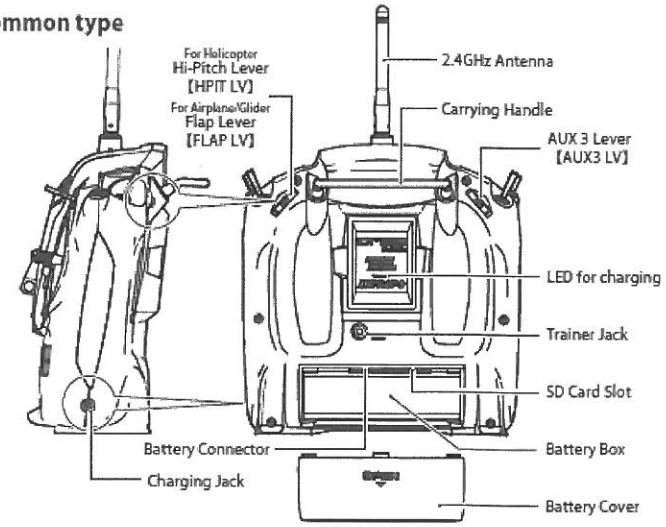
Helicopter Type

The names in square brackets [ ] are the abbreviated characters displayed on each setting screen.

JR gives each switch or lever a name rather than a number on the transmitter. The names and positions are different depending on the model type. Please note this when reading the manual.



Rear : Common type



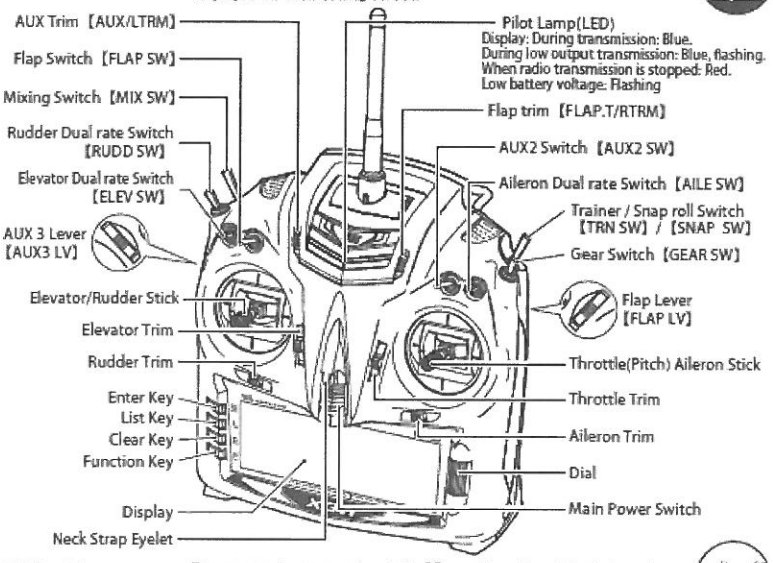
Functions Common to All Models

Names of Each Transmitter Control

Note:
Mode 1 transmitter shown

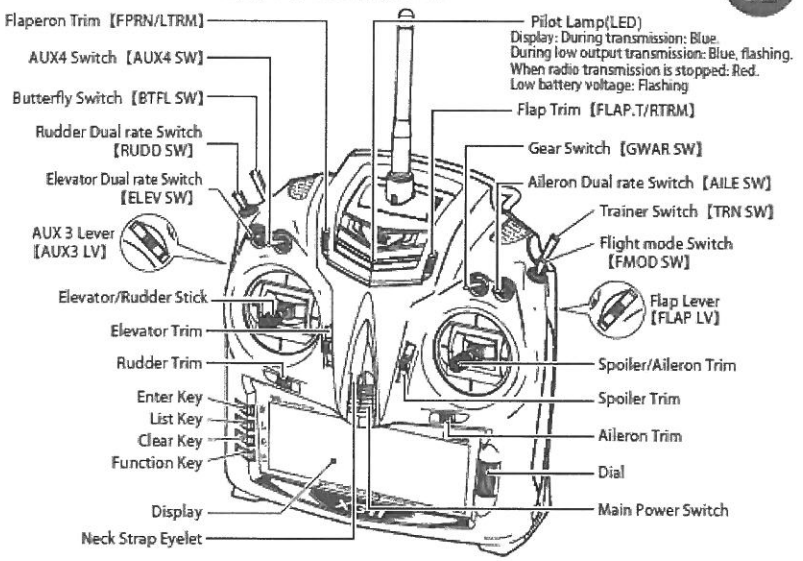
Airplane Type

The names in square brackets [ ] are the abbreviated characters displayed on each setting screen.



Glider Type

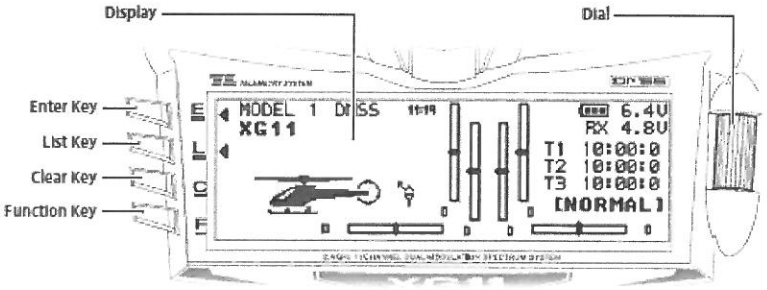
The names in square brackets [ ] are the abbreviated characters displayed on each setting screen.



Names and Functions of the Input Keys

In addition to the standard button keys for input, this transmitter employs a jog-dial. When programming the transmitter, almost all operations can be performed very intuitively using this dial. The dial is used by rotating it left or right, and pressing it.

- A "click" sound is heard confirming a valid input.
- A "click" sound may also be heard without any change to the numerical numbers on the display. This is because numerical numbers below the decimal point are not displayed, even thought the set value is changed internally.
- The button keys on the left side of the transmitter operate when a triangular arrow is displayed on the LCD. When the name of the key (abbreviated) is displayed on the LCD, the key will function as displayed. The key display is as shown in the figure below.



Dial

Turn the dial right or left to select an item and to increase or decrease a preset value. Further, press (click) the dial to select an item or to exit the current item being set.

ENTER Key

If this key is pressed when the INFO screen is being displayed, the screen will change to the My List screen. This can be used for moving to each of the other functions.

LIST Key

In function fixing, when this key is pressed the screen changes to the Function Listing screen.

CLEAR Key

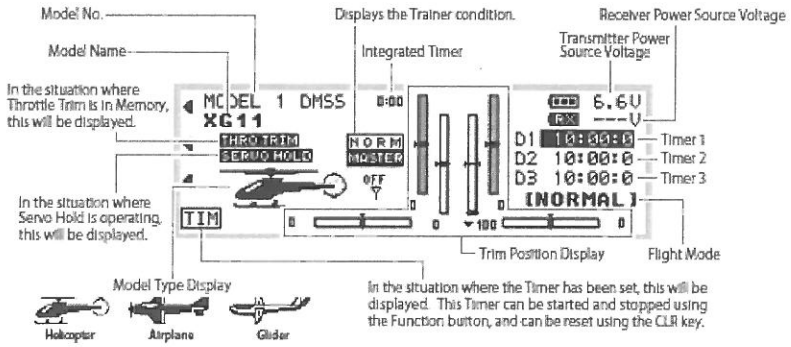
This key has a primary function of resetting a value back to default. It also operates as displayed when an item other than an arrow is displayed on the screen.

FUNCTION Key

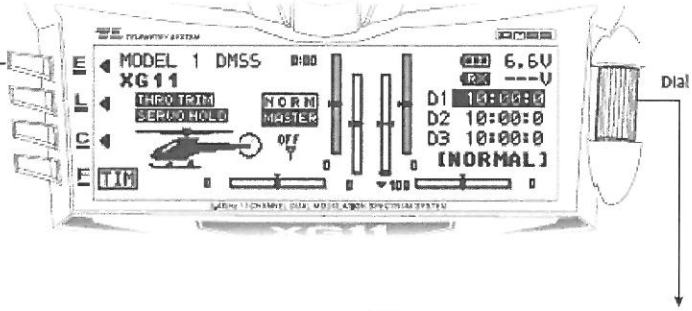
Though this key has no allocated function, it operates as displayed when an item is displayed on the screen.
For example, as a Timer start/stop key etc. Also, when this key is pressed at the time of entering numbers with a dial, the number changes at ten times the normal speed.

Functions Common to All Models

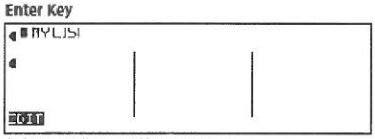
Initial INFO Screen



Pages Accessed from the Initial INFO Screen

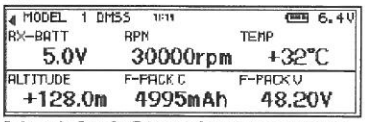


Enter Key



Refer to the Page 17 "My List Screen"

Dial



Refer to the Page 86 "Telemetry System (TELEMETRY) "

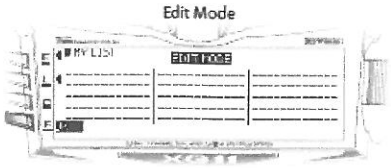
My List Screen

My List Function

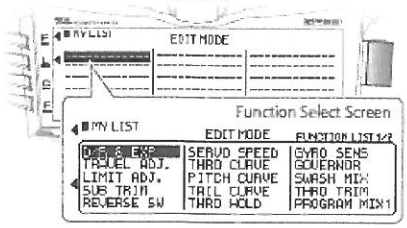
- Frequently used functions can be selected and displayed on the customizable 'My List' for quick access.
  Pressing the ENTER key while on the normal screen will select the My List display.
  Nothing will be displayed on the My List screen until it has been customized.
- To add functions to this list, press the lowermost Function key. The display will be shown and "EDIT MODE" will flash.
- Rotate the dial to move the cursor to the desired position and press the dial to display the items that can be added to the list. Rotate the dial to move the cursor to the item that you wish to add and press the dial.
- By returning to the Edit Mode and pressing the Function key, the input will be completed.
  If you wish to delete a function from the 'My List' screen, move the cursor to the item and press the 'Clear' key.

My List initial Condition

Edit Mode



Edit Mode



Edit Mode

Functions Common to All Models

Navigation during Model Setting

When a new model has been created, or when the model type has been changed, it is necessary to enter basic initial information.

1) Type selection
2) Model Name
3) Complete some basic setup information depending on the model type selected, as shown below.

1 Type Selection

▼

2 Model Name Input

▼

- HELI : Swash Type Selection -> Swash Mixing Setting * When CCPM is selected -> Gyro Channel Selection
- ACRO : Wing Type Selection -> Dual Aileron Selection * When "NORMAL" wing type is selected -> V Tail Selection
- GLID : Dual Flap Selection -> V Tail Selection

Swash Type Selection

▼

※Swash Mixing Setting

▼

Gyro Channel Selection

※When CCPM is selected.

Wing Type Selection

▼

※Dual Aileron Selection

▼

V Tail Setting

※When "NORMAL" wing type is selected.

Dual Flap Selection

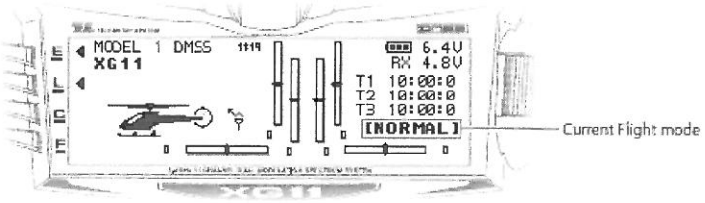
▼

V Tail Selection

FLIGHT MODE

Function Explanation

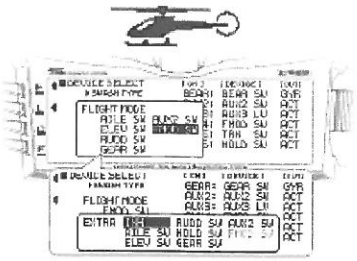
- The Flight Mode function allows switching between various aircraft settings using a switch. This means it is possible to select aircraft flight characteristics using a 'one-touch' operation.
- The maximum number of flight modes which can be selected various with model type. It is possible to select up to six flight modes for helicopters, up to three flight modes for airplanes, and a maximum of five flight modes for gliders.
- The current Flight Mode is displayed on the Initial INFO screen, where it can be confirmed. In addition, it is possible to change the displayed flight mode name using the Flight Mode Name screen in the System List.



※ Important note: By default, the Flight Mode switches in airplane and glider models are not set. Activate Flight Modes using the Device Select screen.

Helicopter flight mode

- NORMAL
- STUNT-1
- STUNT-2
- STUNT-3
- STUNT-4
- HOLD



※ STUNT-3 and STUNT-4 are not active by default. It is possible to activate STUNT-3 and STUNT-4 from the "DEVICE SELECT" menu in the System List.

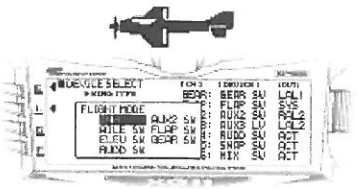
※ Also note that "HOLD" is not active by default – it can be activated in the Function List (see "Throttle hold").

※ The following sequence gives the flight mode priority when the various switches are activated.
"HOLD > NORMAL > STUNT-3/STUNT-4 > STUNT-1/STUNT-2"

Airplane flight mode

- FMOD-0
- FMOD-1
- FMOD-2

※ Airplane flight modes are not activated by default. It is possible to activate these flight modes in the system list, "DEVICE SELECT".



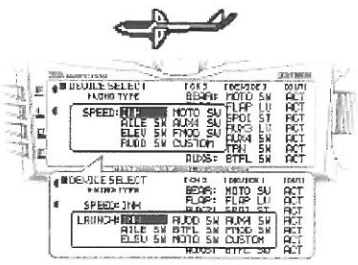
Functions Common to All Models

Glider flight mode

- SPEED
- CRUISE
- THERMAL
- LAND
- LAUNCH
- DIST

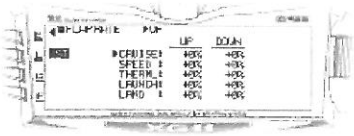
※ Glider flight modes are not activated by default. It is possible to activate these flight modes in the system list, "DEVICE SELECT".

※ The following sequence gives the flight mode priority when the various switches are activated.
"LAUNCH > SPEED/THERMAL > LAND > CRUISE"



Example List of the items which can be selected on each flight mode

Functions which can be modified on each flight mode are digital trims, and settings related to the following functions:



Note:
Each type of aircraft (heli, airplane or glider) uses a different name for each flight mode.

Function List

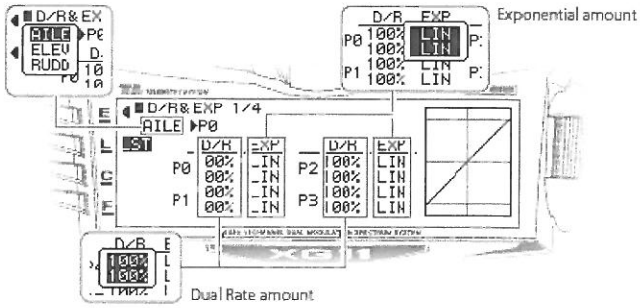
DUAL-RATE & EXPONENTIAL [D/R&EXP]

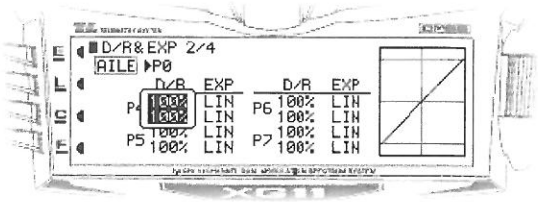
Function Explanation

This function switches aileron, elevator, and rudder control surfaces between different control surface angles and curves, using the Dual Rate switches. By combining the control surface angles with exponential settings, it is possible to carry out various independent settings so that the aircraft response can be changed.
Exponential is a curve adjusting function that logarithmically changes the servo movement in response to the stick action, allowing the movement in the vicinity of the neutral position to be adjusted from mild (+ direction) to quick (- direction) without changing the maximum control surface angle. Adjustments made can be confirmed by looking at the graph on the screen.

Setting Method

Eight independent dual rate settings and exponential settings can be for Aileron, Elevator and Rudder.





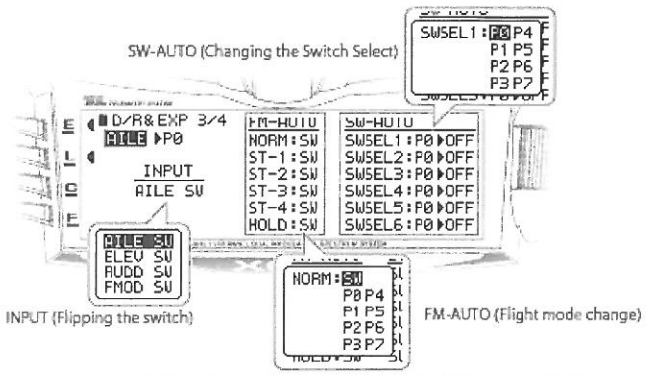
Function List

Note:
Please refer to the explanations for "Names of Each Transmitter Control" to find out which function is allocated to which switch.

- INPUT (Flipping the switch)
  By flipping the switch it is possible to change the dual rate and exponential settings.
  As an example, on a 3 position switch, if the switch is away from the operator, this is "P0" (position 0), in the center (middle) it is "P1" (Position 1), and toward the operator is "P2" (Position 2).
- FM-AUTO: (flight mode change)
  By flipping the flight mode switch, it is possible to automatically change the dual rate and exponential settings for each flight mode.

※ Note that "FM-AUTO" switch selection has a higher priority than "INPUT"

- SW-AUTO (Changing the Switch Selection)
  By using 6 options for SW SEL, it is possible to change the Dual rate Amount, combine with available switches.
  A SPS (Stick Position Switch) can also be selected to change the dual rate amount



※ The following sequence gives the flight mode priority when the 6 kinds of SW-SEL (Switch Select) are activated.
SWSEL1 > SWSEL2 > SWSEL3 > SWSEL4 > SWSEL5 > SWSEL6