

## **Operation Manual**

Prior to use, please read this manual thoroughly. Keep this manual in a convenient place for quick and easy reference.







# 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 6-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.
- For the convenience of entry level users, alkaline dry cell batteries should be used with this transmitter. Be sure to only use high quality alkaline batteries, Never use older manganese dioxide batteries. An optional Ni-MH battery pack is available for those wishing to use rechargeable batteries.
- With our automatic safety system, the receiver will not operate if the correct model has not been selected in the transmitter before flight.

- The transmitter features a large LCD display and input keys that are intuitive and easy to use.
- 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.
- A micro SD card slot enables saving aircraft model data and updating of transmitter software to be easily carried out, without connecting the transmitter to a PC.
- When inputting numerical values, simultaneously pressing the function key allows the value to be changed at a ten-times faster speed.
- The 20-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 channel.
- The throttle curves, pitch curves, and curve mixing use a multiple point adjusting method, and you can also activate an optional exponential curve function that further smoothes the curves.
- Three 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 frequently used functions that the user has selected.
- Switch arrangement stickers are included for each transmitter model type so users can choose switch labeling that they require for airplanes and helicopters.

### Specifications of the Transmitter

項目	規格
Part Number:	NET-R116G
Type of control:	6 channel computer mixing.
RF:	2.4GHz
Modulation:	DMSS (Dual Modulation Spectrum System)
Power source:	4 x AA size alkaline dry cell batteries (not included) An optional 4 cell 4.8V Ni-MH Battery is available for purchae (4H1500mAh or 4H/2000mAh).
Neutral position:	1.5ms

# General Safety Precautions \* It is very important to ensure that you observe the following 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.

### 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 shared 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 urban areas.

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 or airfield, minimize use of devices that can affect the transmitter/receiver and be sure to confirm safety before operation. Also, always follow instructions given by the facility staff.
- If an aircraft is allowed to fly out of sight behind a building, a pylon, trees, etc. so that the radio-waves are blocked, the control response may drop, even resulting in an "out-of-control" situation. Always let the aircraft fly within an area that can be visually observed.

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



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



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

## CAUTION

If incorrect operation methods are used, control issues may occur.

## Initial Operation

Before using this product, ensure all parts have been provided. Connect the switch harness and servos to the receiver, and insert batteries to power the transmitter and receiver. Turn on the transmitter then receiver and confirm that they operate correctly. If they do not operate, check the voltage of 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 fully charge it with the battery charger before use, and confirm the transmitter and receiver are correctly bound. Refer to the Page 11 "Binding Procedure"

In the event of finding any missing parts, malfunctions, etc., please contact your JR agent or distributor in your country.



igtriangleta This indicates actions that are forbidden.

This indicates actions that must be implemented.

- N Out-of-control and dangerous situations can occur. DO NOT use this product on rainy days since it may malfunction if water gets inside the Transmitter or receiver. If use is a necessity, be sure to take waterproofing measures. Injury due to heat generation, fire, or electric shock can occur. Never disassemble or modify this product.
- N Injury due to heat generation, fire, or electric shock can occur. Never disassemble or modify this product.
- $\bigwedge$  DO NOT start the engine with the transmitter throttle in a high speed position. This is very dangerous.
  - 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 (to prevent engine/motor rotation) and then turn on the transmitter power switch followed by the receiver power switch. When turning off the system, turn off the receiver power then the transmitter power in this order.



Injury can be caused. When adjusting the engine (motor), pay attention to the dangers presented. DO NOT start the engine with the transmitter throttle stick in a high speed position. This is very dangerous.

## WARNING

N Failure can be caused. DO NOT use this radio set in combination with a competitor's product (servo, gyro, regulator, etc). Malfunction can occur. As the electronic parts mounted in the transmitter and receiver are susceptible to impact damage, DO NOT allow strong impact or drop them.

### Introduction



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.
- Operating near traffic consisting of cars, motorcycles and mopeds (i.e. engine powered vehicles with spark ignition).
- Near high-tension electric lines, buildings, banks, hospitals or in a mountainous area, etc.
- Near FM/TV stations, 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. get wet and then operate normally after being fully dried, the servos may later malfunction. In such case, DO NOT continue to use the product, and contact your JR dealer or distributor in your country for inspection regardless of normal operation.

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.

### L CAUTION

Prior to flying, check the following items for safety:

- Is there enough battery remaining in the transmitter/receiver? (Is any rechargeable battery fully charged?)
- Is there any fuel spillage on the receiver, servos, 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 holding the model 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 close vicinity for several minutes.

### Dry cell batteries, battery holder, rechargeable batteries and battery charge

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

### **!** DANGER

- Be sure to insert the batteries observing the correct polarity with the battery holder.
- DO NOT use Manganese Dioxide dry cell batteries. Be sure to use Alkaline Dry cell batteries only.
- 🚫 DO NOT mix old and new batteries, or different

brands of battery.

- DO NOT use this battery holder with rechargeable batteries (i.e. Ni-CD, Ni-MH single cells).
- O DO NOT drop or impact the battery holder. Poor connection of Dry cell batteries may result in damage to the battery or the transmitter.

Use a genuine JR optional Ni-MH battery pack (#04142 or #04152). Always stop charging when the specified charging time is reached.



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 the charger.
- A loss of vision may be caused 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

- **O** DO NOT allow the battery or battery holder to contact water or sea water.
- DO NOT scratch or tear off the battery shrink wrap, the lead wire, or the connector.
- > DO NOT use the battery if a scratch is left on the insulating shrink wrap, lead wire, connector, or if the insulation is damaged
- Failure can be caused. Use a genuine JR battery Always. Stop charging when the specified charging time is exceeded.
- Skin may be damaged 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 batteries. Thus, confirm that all rechargeable batteries inside the pack are in a normal state by using a battery checker, etc. Note that the actual charge level of rechargeable batteries cannot be precisely confirmed by testers such as a battery checker. Be sure to judge the state of the battery in a comprehensive way using a device to confirm the recharge time, and operating time. Never charge the battery pack in a high or low temperature environment.

### L CAUTION

- DO NOT store the battery in a place with high Temperature, humidity or dust.
- Store the battery out of reach of children.

### Recycling the Rechargeable Battery

Used Nickel metal-hydride batteries are important resources. Place a piece of tape or similar over the terminal areas, and bring them to and appropriate location that collects small rechargeable batteries for recycling.

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### 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.



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





# Inserting and Removing the Micro SD Card

Compatible Micro SD Cards are 16GB or less in size and must be formatted in FAT format. Inserting and removing Micro SD cards should be carried out after opening the battery cover, with the transmitter switched off. The Micro SD card slot is located below the battery. Note that not all Micro SD cards are compatible with this transmitter.

### Inserting method

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



### Removing The Card

Lightly press in the middle of the Micro SD card until it clicks - the card will then 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 the direction of the arrow, and remove.
- 2) Carefully insert the dry cell battery holder's battery connector into the transmitter battery connection.
- **3)** Fit the dry cell battery holder into the battery box, and mount the battery cover, taking care not to pinch the lead wires.



## Handling of the Rechargeable Ni-MH batteries used for the Transmitter or 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.

### Throttle stroke travel adjustment

- By adding the Throttle stroke adjustment plate to the gimbals, 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 which is explained on Page 54 "Transmitter Setting [TX SETTING] " in the system list for further details of calibration.



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# Notes on stick tension spring adjustment and thethrottle 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 eight (8) 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.
- Close the rear cover, and tighten the screws. Take care of interlocking of the 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.



# **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 damage, 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 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.

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	МОТО
6) AUX1	PIT.	FLAP	FLAP

### Servo connections to the Receiver

## 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 waves 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.

### 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 RA01L 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.

## **Binding Procedure**

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

(pairing the transmitter and receiver)

- 1) Be sure that the remote antenna unit is properly connected to the receiver. Locate the included bind plug, and ensure the transmitter and receiverbatteries 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 57 "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).
- \* 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. If the LED's continue to blink, repeat the procedure from the beginning. Next, disconnect the bind plug from receiver, disconnect the receiver battery and switch off the transmitter.

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 57 "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?
- 2. Is the remote antenna securely connected?3. Is the distance between the transmitter and receiver too close?
- 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.

\* If the Radio wave reception is weak, the LED lights on receiver may flash or turn off.

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### **Functions Common to All Models**



# Names and Functions of the Input Dial

This transmitter employs a jog-dial. When programming the transmitter, all operations can be performed very intuitively using this dial. The dial functions by rotating it left or right, and pressing it.



### Jog Dial

- "click" sound is heard confirming a valid input.
- "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.





• When this key is pressed at the time of entering numbers with the dial, the number changes at ten times the normal speed. Also, by pressing down the dial for three (3) seconds, any set value can be changed to the default

## TRIM [Spoiler Trim, Rudder Trim, Aileron Trim, Elevator Trim]

This function adjusts the response of the trim leavers, which are used to adjust the flight control surface by changing their position. This transmitter uses Advanced Digital Trim (known as ADT) for all the trimming channels. The ADT system is described below.

#### • Trim indication display and audio sound.

The graphic bar on the display shows the amount of ADT which has been input by the trim levers. The Position of the trim can also be recognized by the tone of the audio sound. The actual audio tone can be selectable in "TX SETTING". There are two tones available - High and Low.

These tones can also be muted. Refer to the Page 54 "Transmitter Setting [TX SETTING] "

#### • Auto Repeat Function and Center Click Function

The auto repeat function allows the trim lever to be continually pressed over to the side that you wish to adjust, and the trim value is continuously increased or decreased using a fast-forward action. However, if the trim position reaches neutral (center), it stops for a moment and produces a click sound to inform the user that the trim is in the neutral position. If continuously pressed, the trim continues to move past the neutral position.

### • Trim Step Function

It is possible to adjust the trim step by using the TRIM SYSTEM under the System Mode. Refer to the Page 53 "Trim System [TRIM SYSTEM] "

• Memory function - Trim setting value

ADT is active in each of the model memories and the trim position is automatically memorized, even when switching models. The memorized trim amount and trim step for the model are automatically set, and will not be erased by changing models. In addition, each ADT can be given a different adjustment in each flight mode for each model. When adjusting the ADT with the Flight Mode switch set to optional positions, only the trim amount of the corresponding flight mode will be adjusted.



• Under the Glider mode, to adjust the horizontal movement of the Ailerons, (i.e. the Camber) use the Flaperon trim. Again, all trim is memorized for each flight mode.

# Information Display





# **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.

My List initial Condition XCS POWER MaLST 4084.6V 55 428 4.9V D1 10:00 [NORMAL] t RX MY LIST INFO.

XRB

TE

RX

To add functions to this list, press "EDIT" on display. The display will be shown and "EDIT MODE" will flash.



To complete the editing process, press "OK" to exit edit mode.



- If you wish to delete a function from the 'My List' screen, select Edit mode, move the cursor to the item and press the dial for three (3) seconds. This clears the selected function from "My List".
- Functions Common to All Models It is possible to add either System List items or function list items to "My List".



POWER

MY LIST

EDIT

# Navigation during Model Setting

When a new model has been created, or when the model type is 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.
  - Helicopter (HELI)
    - Swash Type Selection  $\rightarrow$  Swash Mixing Setting

(When CCPM is selected. Example: 3 servo 120 degree, 3 servo 140/135 degree)

- Airplane (ACRO)
  - Wing Type Selection/V Tail Setting
- Glider (GLID)
  - 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 three flight modes for helicopters, up to three flight modes for gliders there is no flight mode selection available for airplanes.
- 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.



### Helicopter flight mode

- NORMAL
- STUNT
- HOLD
- % It is possible to select the flight mode switch on the System List under "Flight Mode Switch".
- \*\* 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 "

### Airplane Flight Mode

※ No Flight mode on Airplanes.

### Glider flight mode

- CRUISE
- LAUNCH
- LAND
- \* 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 > LAND > CRUISE "









### Items which can be modified in each flight mode

### For Helicopter

- Dual-Rate & Exponential [D/R&EXP] · · · · · · Page 20
- Throttle Curve [THRO CURVE] · · · · · · · Page 24
- Pitch Curve [PITCH CURVE] • • • • Page 26
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   Curve Someitinity [CVRO SENS]
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   Program Mixing [PROGRAM MIX 1-3]
- Flight Mode Name [FLIGHT MODE NAME]
   · · · · Page 52
- Flight Mode Switch [FLIGHT MODE SW] · · · · · Page 61
- Memory function Trim setting value
   · · · · · · Page 14



## As an example, screen showing **[**D/R EXPO**]**

### For Glider

- Dual-Rate & Exponential [D/R&EXP] · · · · · · Page 20
- Differential (DIFFERENTIAL)
   Page 35
- Camber system [CAMBER SYSTEM]
   · · · · · · Page 38
   Date System [CAMBER SYSTEM]
- Brake system [BRAKE SYSTEM]
  Program Mixing [PROGRAM MIX 1-3]
  Program 40
- Flight Mode Name [FLIGHT MODE NAME]
  Flight Mode Name [FLIGHT MODE NAME]
- Trim System [TRIM SYSTEM] · · · · · · · · · · · Page 53
- Device Select [DEVICE SELECT] · · · · · · · · Page 62
- Memory function Trim setting value
   · · · · · · Page 14



#### As an example, screen showing 【DIFFENRENTIAL】

\* There is no flight mode for Airplan

# 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

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



POWER

Selection of switch allocation

■D/R&EXP ▶POSØ

AUTO

HOLD

Auto Select

NORMAL: SW STUNT : SW

D/R COM SW: FMOD SW

AUTO

POSØ

POS1

SW

: SW

<u>D∕</u>R SW

FMOD SW

2/2

HOLD

SW

NORM

AIS

2.4GH

T

RX

DMSS

- Dual Rate Combination Switch selection (D/R COM SW)
- It is possible to select a switch as the D/R COM SW. This allows one combined switch for Aileron, Elevator and Rudder dual rate. Designation of the switch is as follows. On a 2 position switch, if the switch is away from the operator, this is "P0" (position 0), and toward the operator is "P1" (Position 1).
- AUTO: (flight mode change) It is possible to set a different Dual Rate or Exponential settings for each flight mode.



- The Dual Rate setting numerical value can be between 0 and 125, and EXPO can be between 0 and  $\pm$  100.
- By moving the appropriate control stick, the numerical values can be independently changed for left and right (up and down), so that the control surface angles and curves can be individually adjusted. When the cursor has an inverse display, the setting values can be modified, and can also be reset to default by pressing the dial for three (3) seconds.

## Caution Note

• Operate the servos and carefully confirm the operational settings before flying.

# Travel adjust (TRAVEL ADJUST)

### Function Explanation

This function allows independent adjustment of servo left/right (or up/down) movement, for each channel. The adjustment is carried out with reference to the neutral position. Adjustment is possible over an adjustment range between 0 and 150% in each directions. The default value is 100%, and this gives standard servo movement.

## Setting Method

Rotate the dial to move to, and select, the channel that you wish to set (inverse display). Then press the dial to display the setting box, and now change the numeric values by rotating the dial.

 $\,$   $\,$  The channel names on the screen will differ according to the model type.





• By moving the appropriate control stick, the numerical values can be independently changed for left and right (up and down), so that the control surface travel can be individually adjusted. When the cursor is at the inverse display, the setting values can be modified. The values can be reset to default values by pressing the dial for three (3) seconds.

## Caution Note

- Operate the servos and carefully confirm the control surfaces move as expected before flying.
- Note that Swash type or Wing type settings may change the channel indications.
  - Swash type [SWASH TYPE] • • Page 64
  - Wing Type [WING TYPE] • • Page 65

# Sub Trim [SUB TRIM]

## Function Explanation

This allows fine trimming of the servos attached to each channel. This trim should be used as a fine adjustment when the servo horn mounting angle is not 90 degrees with regard to the linkage. Note that if large amounts of sub trim are used, it will affect the maximum deflection of the servo. It is therefore recommended to use only small values here.

## Setting Method

Rotate the dial to move to and select the channel that you wish to set (inverse display). Then press the dial to display the setting box, and carry out the numerical value setting.

% The channel names on the screen will differ according to the model type.



## Caution Note

- Operate the servos and carefully confirm the control surfaces move as expected before flying.
- As noted above, this function is a fine tuning function to adjust the servo neutral. It is highly recommended to adjust the neutral as much as possible using the linkages and servo horn positions.
- Note that Swash type or Wing type settings may change the channel indications.
  - Swash type [SWASH TYPE] • • Page 64
  - Wing Type [WING TYPE] • • Page 65



# Reverse Switch [REVERSE SW]

### Function Explanation

This function reverses the servo operating direction (pulse change direction) of each channel.

### Setting Method

Rotate the dial to move to and select the channel that you wish to change (inverse display). Then press the dial to select the rotation direction. "NORM" is the normal direction and "REV" is the reverse direction. Actually operate the servos and carefully confirm the settings before flying.

\* The channel names on the screen will differ according to the model type selected.





# TIPS

- Carefully note that the Reverse switch position will affect the final output value of the signals therefore, it will affect servo movement direction even if the channel is inhibited when used as part of a control mix.
- Note that Swash type or Wing type settings may change the channel indications.
  - Swash type [SWASH TYPE] • • Page 64
  - Wing Type [WING TYPE] • • Page 65

# **IMPORTANT NOTICE**

In the situation where the reverse switch setting is changed after the Fail Safe has been set, the failsafe will operate incorrectly. Therefore, in the situation where the Fail Safe is operated after the throttle channel has been set to reverse, the servo will be move to the Full High position, which is extremely dangerous. After finalizing the transmitter settings, be sure to confirm and re-do as necessary the Fail Safe settings (match the stick to the position that you wish to set and press the Memory key), and be certain to carry out operation confirmation By switching off the transmitter, and checking whether the servos move to the correct position.

# Throttle Curve [THRO CURVE]

### Function Explanation

This function adjusts throttle servo operation in response to throttle stick operation. The servo position can be set independently for a maximum of 5 point positions. In addition, an EXPO (exponential) function is incorporated to allow smooth throttle stick connection of each of the points. This function is available in each Flight Mode for helicopters (maximum 2), and 1 mode for airplanes.



## Setting Method

There are three initial curve points set at the slow, center, and high positions. To add a point, set the stick to the desired position and press "ADD" on the screen using the dial. In the situation where a point is to be deleted, this should be carried out by placing the cursor on "DEL" and press the dial. To change vales at each point, rotate the dial to move to and select the point that you wish to change (inverse display). Then press the dial to select and change the numerical value.



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### **Function List**

- Copy Function
  - There is a function to copy the Normal mode curve to the Stunt curve mode or vice versa. Set the base curve for copying and press "COPY" and push the dial, - confirm copy by pressing the dial "YES"



### For Airplane

There is one throttle curve available and it is possible to change the curve at any time with a toggle switch or button switch to either "ON" or "OFF"



TIPS

- The numerical value "IN" shows the position of the throttle stick and the numerical value "OUT" shows the output value to the servo.
- Adjustment is possible over a range between 0 and 100% for each of the Low or High (up or down) directions.
- The graphic curve indication also reflects the position of the Throttle trim.

## Caution Note

• Actually operate the servos and carefully confirm the settings before flying.

# Pitch Curve [PITCH CURVE]

## Function Explanation



This function adjusts pitch operation in response to throttle stick operation. The servo position

can be set independently for a maximum of 7 point positions. In addition, an EXPO (exponential) function is incorporated to allow smooth throttle stick connection of each of the points. This function is available in each Flight Mode for helicopters (maximum 6), and 2 modes for airplanes.

### **Setting Method**

There are three initial curve points set at the slow, center, and high positions. To add a point, set the stick to the desired position and press the "ADD" key. In the situation where a point is to be deleted, this should be carried out using the "DEL" key. To change vales at each point, rotate the dial to move to and select the point that you wish to change (inverse display). Then press the dial to select and change the numerical value.



Each flight mode is allocated a different pitch curve. It is possible to modify these curves independently for each flight mode.



### • Copy function

It is possible to copy the Normal mode curve to Stunt mode or Hold mode or vice versa. Select the flight mode curve and execute copy by pressing the dial, and them confirm by pressing "YES" to complete the copy operation.



## TIPS

- The numerical value "IN" shows the position of the throttle stick and the numerical value "OUT" shows the output value to the servo.
- Adjustment is possible over a range between 0 and 100% for each of the low and high (up and down) directions.

### Caution Note

• After programming, operate the servos and carefully confirm each Flight Mode setting before flying.

# Tail Curve [TAIL CURVE]

### Function Explanation



This function allows mixing between the pitch and the tail servo. It is also known as revolution

mixing. It allows setting of the mix amounts separately up and down from the hovering point. Intermediate points can also be established in each direction, so that fine tuning can be carried out. In addition, a Mixing Rate setting, which is convenient for detailed adjustment of stunt positions, is possible. A maximum of 2 different curves can be programmed, one for each Flight Mode.

## Setting Method

There are three initial curve points set at the low, center, and high positions. To add a point, set the stick to the desired position and press the dial "ADD". In the situation where a point is to be deleted, this should be carried out by pressing the dial to "DELETE". To change values at each point, rotate the dial to move to, and select, the point that you wish to change (inverse display). Then press the dial to select and change the numerical value



• Input Pitch (PITCH)

The pitch information that is input to the mixer can be selected from the following two types.

- "NORM": This is the stick position referenced to the curve set using the Pitch Curve function.
- ② "ORIG": This is the stick position itself not considering the pitch curve.



• Mixing Rate for Stunt Mode (RATE) This display will be shown when the Flight Mode is set to a stunt position. Even though the graph and output figures will remain the same, a function will be implemented that reduces the actual mixing amount by the multiplier described below. This is the stunt mode common multiplier.

$\lceil 1/1 \rfloor$	:	$\times$	1		
[1/2]	:	$\times$	0	.5	
$\lceil 1/4 \rfloor$	:	$\times$	0	.2	5
[1/10]		:>	<	0.	1



## Caution Note

• When using a Tail Lock (Heading Lock) Gyro, this function will not be required since the tail will be automatically corrected. Each of the setting values must be set to zero.

# Throttle hold [THRO HOLD]

### Function Explanation

This function is used for autorotation landings -it holds the Throttle Servo at a low position,

while the pitch stick continues to work normally. Using a selected switch, the engine can be cut, or fixed at an optional slow position. Further, there is also a Stick Auto function that allows switching of the servo to the Hold position when the stick is lowered to a preset position.

### Setting Method

This function is inhibited "INH" by default. Set the function to ACT. Then adjust the hold position as required. The Hold switch is used by default, but this selection can be modified.

By default, the "HOLD SW" is allocated to POS1. It is possible to allocate this switch to any desired switch location.



• Stick Auto Function (STICK AUTO)

When "STICK AUTO" is set, the servo will change to the Hold position when the stick is lowered past a predetermined position. To deactivate this function simply turn off the allocated switch. Initially this function is inhibited. To activate this function, move the cursor to "INH", and press the dial to "ACT". Move the cursor to the inversed display next to STICK AUTO, Move the throttle stick to the desired position and press the "STO" key to set the position (a numerical value between 0-100 will be displayed on the inversed display). To "INH" this function, press the dial for more than 3 seconds, to CLEAR.

### • Hold delay function (DELAY) It is possible to set a "DELAY" to prevent a sudden increase in engine rotations when the Hold switch is set to OFF. The duration of the delay can be set between 0.1 to 2.0 seconds.



• By setting throttle hold active, this function acts like an additional flight mode. It is possible to set dedicated Dual rates, Pitch Curve, etc to this function.

## Caution Note

• Operate the servos and carefully confirm the control surfaces move as expected before flying.

# Gyro Sensitivity [GYRO SENS]

## Function Explanation

Helicopter

It is possible to adjust the Gyro sensitivity by using the gear channel (GEAR). The sensitivity can

be adjustable manually selecting for each Flight mode or Hold Switch, or can be set using the "AUTO" function. There are two gyro sensitivity modes available - "NORMAL" and Tail Lock (T.LOCK) - choose the type depending on your application.

### Setting Method

Select the switch for changing the gyro sensitivity either manually or "AUTO" and move the cursor to each position to input the numerical sensitivity value on the display. If "AUTO" is selected, individual sensitivity switching for each flight mode will be applied.



• Switch for Gyro Sensitivity (SW) Under manual operation, select either Flight Mode (F.MOD SW) or Hold Switch (HOLD SW) Under auto operation, depending on the flight mode switch, Select "AUTO".

• Gyro sensitivity Switching delay (DELAY) To avoid excessive servo hunting when switching the gyro sensitivity from a low sensitivity to higher sensitivity setting, (when changing to a flight mode with lower rpm, but the blade rpm is not yet stable) it is possible to set a delay on this function. Note: During switching, the time will be delayed only when switching to a higher sensitivity.

• Trim Input Function (TRIM IN) Gyro sensitivity can be input by the rudder trim lever. By setting this function it is easy to adjust the sensitivity using the rudder trim lever during flight.



- Gyro Sensitivity adjustment often consists of two parts as shown in the diagram. Read the instructions with your Gyro unit and become familiar with correct operation. Select the Gyro Sensitivity to suit with your application.
   ※感度の図を表示。
- Concerning Trim Input, it is possible to adjust the Gyro sensitivity value using the rudder trim lever, which is a very useful function for setting the sensitivity during flight.

### Caution Note

• Be sure to understand your Gyro manual to allow correct use of this function. Carefully check the direction of the tail servo and be sure that everything works correctly before flight.



0%

50%

100%

125%

# Swash Mixing [SWASH MIX]

### Function Explanation



This function sets the mixing relating to the swash plate and swash plate servos (1-3) to allow coordinated control of the helicopter. The swash mixing is essential for helicopters that incorporate CCPM systems. CCPM is a type of pitch mixing in which the servos are directly linked to the swash plate. In this transmitter, 3 types of swash plate can be selected. An E-ring function is also incorporated that easily limits the swash maximum angle.

## Setting Method

Set the "SWASH TYPE" according to the helicopter's swash plate configuration. The "SWASH TYPE"s election is in the System List, and should be chosen before proceeding to set the swash mix. Note: Refer to Page 64 for detail. The default settings for the Swash Mix are +60% on Aileron, Elevator and Pitch. If necessary, adjust the mixing amount and directiuon according to the type of helicopter and servos used. Press the dial to display the setting box, and then carry out numerical value adjustment.



Exponential Function (EXP)
 By activating this function, the servo's non-linear output is modified to be more linear in motion.

• E-Ring Function (E-RING)

By activating this function, the e-ring electronically corrects the swash to move in the same angle in all directions. The operation of the stick and e-ring can be confirmed on the graph. The diameter of the circle is the swash tilt angle, which can be set as desired.



- If the servo direction is incorrect, it is possible to set the swash mix in a negative direction to achieve an appropriate setting.
- The setting value in this function should be between 0 to  $\pm$  125, but the practical rang eof useful values is 40-70%. If the mixing amount is too much and you are not able to achieve the desire servo throw, adjust the servo horn hole position outwards to allow more throw.

## Caution Note

• Actually operate the servos and carefully confirmall settings before flight.

# Throttle trim [THRO TRIM]

### Function Explanation

This provides facility for cutting the engine. There is a Trim Memory function to return the trim to its previous position after cutting the engine using the Trim.

### Setting Method

If the Throttle Cut is set to ACT, the Trim Memory will be automatically set to INH. On the screen rotate the dial to move to and select (inverse display), then press the dial to set the item.



### • Throttle Cut Function (THRO CUT)

Throttle cut can be used by setting it to "ACT". Initially the switch is allocated to "TRN SW", POS1. It is possible to allocate this switch to any desired switch location, And set Throttle Cut to the desired position.

• Time Lag (TIME LAG)

This function is to avoid the sudden stopping of the engine if the throttle cut switch is activated in error. This is especially useful when using the momentary switch (Trainer switch). It is possible to use this momentary switch as a timer switch at the same time as throttle cut. When the time lag function is activated, throttle cut only activates when the switch is held on for a certain duration. The timer can be activated by a momentary action as usual. The time lag duration can be set between 0.5 to 2 seconds.

• Throttle Trim Memory (THRO TRIM MEMORY) When the Trim is lowered in a single action, the trim position immediately prior to the movement will be memorized, and when the trim is raised again, the trim will automatically return to the memorized position. The memorized position will be marked on the Trim display.

	V		XGB
THRO TRIM		2/2	24GHz
THRO TRIM	MEMORY		
	THRO T	RIM I	MEMORY

\irplan



• Please carefully confirm the linkage does not jam when the carburetor is closed.

### Caution Note

• Throttle Cut will only work when the helicopter Flight Mode is set to "NORMAL".



# Flight Mode Delay [FLIGHT MODE DELAY]

### Function Explanation

When the Flight Mode is changed, the servos may move suddenly, causing a jerky reaction in flight. To prevent this, it is possible to set a time to each channel separately, during which the servo will move slowly to the new position when switching Flight Modes. This can be set separately in each Flight Mode.

## Setting Method

Rotate the dial to select the desired flight mode in the setting screen, then press the dial to display the time setting box. The time displayed here will be the time for moving the servo to the new position of the Flight Mode that is currently being displayed.



## Caution Note

• Actually operate the servos and carefully confirm the settings before flying.

# Flap System [FLAP SYSTEM]

## Function Explanation

The flaps can be controlled in two stages using a switch. A flap delay is also possible.

Additionally, there is a function that carries out mixing to the elevators or and ailerons. There is also an Auto Throttle function that automatically lowers the flaps when the throttle stick is lowered.

## Setting Method

If the flap channel output has not been set to "SYS" in the Device Select menu, the function will be displayed as being unusable. To use this function, set the flap channel to "SYS".

Set each Flap position in Normal and Land positions. If required, set a numeric value for the delay function.



- Delay function(DELAY) It is possible to adjust the transition timing between Normal (NORM) and Land (LAND) position.
- Flap position switch (SW) This is the switch to change the Flap position between Normal and Land.
- \* Note that this is exactly the same setting procedure as in Device Select under the system list, where the Flap channel input is selected.
- Auto Throttle Function (AUTO THRO)
  By activating "AUTO THRO", the flaps are automatically lowered depending on the throttle stick position. Set the
  throttle stick at the desired position and press the dial to display the box confirm the position.
  Above the point where "AUTO THRO" has been set, "NORM" mode is selected. Below this point the flaps should
  be automatically activated to the desired position.
- Correction mixing for Elevator and Aileron. In order to off-set the pitching action upon activating the flaps, it is possible to set a mix to elevator. It is also possible to set a correction in roll by mixing to the Ailerons when the flaps are deployed.

## Caution Note

• Actually operate the servos and carefully confirm the settings before flying.



# Differential (DIFFERENTIAL)

### Function Explanation

This function can be used when the aileron, rudder, and flap channels have been set to Dual Channel (two servos are set to each control sfunction). Taking ailerons as an example, if the wing is a high-lift style, when the ailerons are moved up and down by the same angle, greater air resistance will be generated on the underside, causing the aircraft to yaw in the opposite direction to the intended turn. Differential acts to correct this effect by moving the down going aileron less than the up going aileron. On a glider there will be situations during, for example,





butterfly movements where differential is not necessary. To prepare for this, the break function cancels the differential setting when the Spoiler stick is lowered.

### Setting Method

### For Airplane

It is possible to turn differential on or off.



- Aileron Differential (AILE) Setting can be activated for the below wing types. FLAPERON / DELTA
- Rudder Differential (RUDD) Settings can be activated for the below wing types. V-TAIL

### For Glider

It is possible to set each control surface differential amount (Aileron, Rudder, & Flap) to the flight mode switch.



- **FLAPERON**
- \* The transmitter is set to Flaperon as the default setting for Glider.
- Rudder Differential (RUDD) Settings can be activated for the below wing types. V-TAIL
- DUAL FLAP
- Break Function (BREAK) This function cancels the differential for each control, and is coupled with spoiler stick position. The stick upper limit will be the minimum (0%), while the lower limit will be the maximum (100%). This is the proportion of differential removed.

## Caution Note

• Actually operate the servos and carefully confirm the settings before flight.
## Aileron to Rudder Mixing [AILE $\rightarrow$ RUDD MIX]



Function Explanation

This function allows smooth coordinated turns for scale model aircraft.

#### Setting Method

It is possible to set Mixing amounts from Aileron to Rudder independently for both right and left directions. It is also possible to allocate a switch to turn the mix on or off.



## Caution Note

• Actually operate the servos and carefully confirm the settings before flight.

## Motor System [MOTOR SYSTEM]

### Function Explanation



This function is used to switch off (HOLD) the motor channel by using a switch or by selecting

various flight mode positions. By using the Delay function, it is possible to smoothly run the motor from low r.p.m. to higher r.p.m. in a linear (smooth) transition (Note: The speed controller must allow a linear transition to utilise this function).

## Setting Method

In order to activate this function, it is necessary to set the "GEAR" channel to "MOTO "under the System List (Note that the Gear channel is set to Motor as default). Set the Motor hold position and allocate a switch or flight mode as desired.



Delay adjustable between INH (0) to 2.0 seconds.

- Hold Delay (HOLD DELAY)
  - $\uparrow$  : Delay time before switching on the motor.
  - $\downarrow$  : Delay time before switching off the motor.

### Caution Note

• Set the speed controller to run the motor and carefully confirm the settings before flying.

## Camber system [CAMBER SYSTEM]

### Function Explanation



It is possible to set up a glider which has full span ailerons or flaps . These control surfaces can

be moved up and down simultaneously to change the wing camber. Because changing the wing camber can vary the rate of descent and the drag, it is possible to change the flight endurance and the glide ratio. These settings can be changed for each Flight Mode. In addition, because the delay time during transition can be adjusted, the aircraft will not react suddenly or Wildly to these changes.

#### Setting Method

Set the amount of Camber (Aileron or Flap) offset in each flight mode. It is possible to set a desired time "DELAY" in the menu.



• Offset Value (OFFSET)

Set the Offset value for both FLAP and Aileron for each flight mode.

AILERON

Set offset values for each Aileron - Left Aileron (LAIL) and Right Aileron (RAIL)

● FLAP

Set a single Flap offset using "FLAP". For "Dual Flaps" set the "LFLP" (Left Flap) and "RFLP" (Right Flap) values independently.

• Time Delay (DELAY)

Set the Time delay when switching between different flight modes. "INH" is no Time Delay. The time delay duration can be set between 0.1 to 6.0 seconds. "HOLD" means without Time Delay. This time delay also affects the trim, in addition to the offset values. The following Trims may be affected.

● Flap Trim 「FLAP TRIM」

Flaperon Trim
 FIPRN TRIMJ
 Elevator Trim
 FLEV TRIMI

#### Caution Note

• Actually operate the servos and carefully confirm the settings before flight.

## Brake system [BRAKE SYSTEM]

#### Function Explanation



This function creates air brakes using the ailerons, flaps and elevators. The function is also

known as Butterfly mixing or Crow mixing. When the spoiler stick is lowered, the flaps will lower and the ailerons will be lifted. Looking from the front of the aircraft you will see the whole wing will no longer generate lift, and will generate a huge amount of drag. A dead band can be set to prevent unintended operation when operating the spoiler stick.

In addition, the trim correction provided by the elevators can be finely adjusted to the corresponding air brake angle using curve points.

#### Setting Method

First set the mixing amount provided from the Spoiler Stick operation to the ailerons and flaps. Then adjust the Stick position where this mixing will be started.



• Brake Start Position (BRAKE START POS)

This adjusts the stick position where the brake operation will be started. It is possible to arrange a 'dead band' to prevent unintended operation when operating the spoiler stick.

## Caution Note

- When this function is operated, the servos will move a considerable amount. At this time, care is required to avoid applying an unreasonable force to each of the control surfaces. Use the Limit Adjust function to apply limits to servo movement to avoid damaging the control surfaces or servos.
- After programming these settings, operate the servos and carefully confirm each of the Flight Mode settings before flying.

## Program Mixing [PROGRAM MIX 1-3]

### **Function Explanation**

If a mixing function is required that is not already incorporated in the transmitter, three program mixing systems are provided for use. These can be used to freely structure your own mixes. For this mixing, either simple (normal) mixing or curve mixing (that allows setting of a curve using multiple points) can be selected.







## Setting Method

#### Normal mixing and Curve mixing

With Helicopter models, there is only one (1) available mixer which can be activated by switch or by flight mode. For Airplane and Glider models, there are two (2) mixers available that can be activated by switch or by flight mode.

• Selection of the Master Channel and Function of Master Include

Select the Master Channel for controlling the program mix. The channel name may be different depending on the airceaft type selection (please refer to the chart below).

There is an option available to include or not include any trim or other mixing to the program mix in regards to the Master channel.

• Slave channel Selection

Select the Channel for mix output. The channel name may be different depending on the aircraft type selection (please refer to chart 2 below).

There is an option available to include or not include any other mixing with the program mix in regards to the Slave channel.

• Throttle stick (Coupling function) (THRO STK) Only for Airplane

It is possible to switch between two desired mix positions using the throttle stick. Initially this is set to INH. Activate the function as necessary.

• Normal Mixing



#### **Function List**



By default, this is set to "INH". Select Normal for using a Normal Program Mix curve. To "INH" this function, move the cursor to the Master/Slave channel selection, then press the dial.

- Mixing Reference Point Offset (OFFSET) By setting an OFFSET, the mixing Reference Point can be changed to the desired Mixing point on the Master Channel.
- Curve Mixing



By default, this is set to "INH". Select CURVE for using Curve type Program Mixing. To "INH" this function, move the cursor to the Master/Slave channel selection, then press the CLR key.

• Curve Point Setting

It is possible to set up to five (5) mixing curve points at desired positions. Initially, there are three curve points set - a Low point, Center point and High point. To add more points, select the Master channel and move the cursor to ADD and press the dial. Or to delete a point, move the cursor to DEL and press the dial. To change the value at a point, move the cursor to the location where you wish to



make the change then press dial to inverse the display, and input the numeric value.

#### Exponential function

By activating mix Exponential, it is possible to smooth the transition between points on the curve.

## TIPS

### Master channel's name, items which can be "INCLUDED" in the mix.

### For Helicopter

Channel name	Items which can be Included
Ch1: Throttle (THRO)	Throttle trim, Throttle Curve (THRO CURVE), Throttle hold (THRO HOLD)
Ch2: Aileron (AILE)	Aileron trim, Dual Rate (D/R&EXP)
Ch3: Elevator (ELEV)	Elevator Trim, Dual Rate (D/R&EXP)
Ch4: Rudder (RUDD)	Rudder Trim, Dual Rate (D/R&EXP)
Ch6: Pitch (PIT.)	Pitch Curve (PIT.CURVE)

#### For Airplane

Channel name	Items which can be Included
Ch1: Throttle (THRO)	Throttle trim, Throttle Curve (THRO CURVE), Throttle Cut (THROCUT)
Ch2: Aileron (AILE)	Aileron trim, Dual Rate (D/R&EXP)
Ch3: Elevator (ELEV)	Elevator Trim, Dual Rate (D/R&EXP)
Ch4: Rudder (RUDD)	Rudder Trim, Dual Rate (D/R&EXP)
Ch5: Gear (GEAR)	
Ch6: Flap (FLAP)	Flap System (FLAPSYS)

#### For Glider

Channel name	Items which can be Included					
Ch1: Flaperon (FPRN)	Brake System (BRAKE SYS), Camber Off Set (CAMBOFST)					
Ch2: Aileron (AILE)	Aileron trim, Dual Rate (D/R&EXP), Camber Off Set (CAMBOFST)					
Ch3: Elevator (ELEV)	Elevator Trim, Dual Rate (D/R&EXP), Brake System, (BRAKESYS)					
Ch4: Rudder (RUDD)	Rudder Trim, Dual Rate (D/R&EXP)					
Ch5: Gear (GEAR)						
Extra: #SPO						
мото	Spoiler trim (TRIM) *When Motor channel input device is set as Spoiler stick. Motor System (MOTO SYS.)					

### Slave channel's name, application items which can be "INCLUDED"

#### For Helicopter

Channel name	Items which can be Included
Ch1: Throttle (THRO)	
Ch2: Aileron (AILE)	
Ch3: Elevator (ELEV)	
Ch4: Rudder (RUDD)	
Ch6: Pitch (PIT.)	

#### For Airplane

Channel name	Items which can be Included
Ch1: Throttle (THRO)	
Ch2: Aileron (AILE)	Aileron Differential (DIFFEREN.)
Ch3: Elevator (ELEV)	
Ch4: Rudder (RUDD)	Rudder Differential(DIFFEREN.)
Ch5: Gear (GEAR)	
Ch6: Flap (FLAP)	

#### For Glider

Cha	annel name	Items which can be Included					
Ch1:	Flaperon (FPRN)						
Ch2:	Aileron (AILE)	Aileron Differential (DIFFEREN.)					
Ch3:	Elevator (ELEV)						
Ch4:	Rudder (RUDD)	Rudder Differential (DIFFEREN.)					
Ch5:	Gear (GEAR)						
Ch6:	Flap (FLAP)						
Extra:	МОТО						
	FLAI	When the Wing type is set to "Dual Flap" (DUAL FLAP) it is possible to mix Aileron to Flap and it is also possible to include Flap Differential (FLAP DIFF) in the mix.					

## Caution Note

• Actually operate the servos and carefully confirm the settings before flight.

#### Explanation of the "INCLUDE" function for program mixing....

If there are several mixing functions being employed, there is normally no relation between each of the indivisual mixers. However, if desired, by using the "INCLUDE" function, it is possible to simplify the mixing methods using this function.

As an example, the chart on the right shows possible mixing to reduce an airplane's flight habits affected by characteristic of the airplane's configuration. To reduce such habits, mixing may be set for Aileron to Elevator and separately the mixing of Elevator to Rudder. As standard, the first mix would not have a flow on effect with the second. So movement of the ailerons would have no effect on the rudder. Using the "INCLUDE" function allows the two separate mixes to be coupled together. Now, Movement of the ailerons would result in movement of the rudder.





#### **Function List**

## Timer (TIMER)

#### Function Explanation

This transmitter incorporates Three Independent Timer systems as well as an Integrated Timer. Each system has two types of timer –a count down timer and a stop watch timer. The timer can be operated by Flight Modes and through free switch selection.

### Setting Method

#### Down Timer

Initially, the timer function is inhibited - "INH". Select (INH) and press the dial and select "Down Timer".

The default value for the DOWN timer is 10:00 - 10minutes and 00 seconds. The Down Timer can be set to a maximum of 59 minutes 59 seconds. As the timer counts down, an alert signal will sound every 10 seconds for times of 1 minute or less, and every second for times of 10 seconds or less. From zero, the timer will start counting up and "+" will be displayed.



Stop Watch Timer (UP TIMER)

Initially, the "STOP" watch up timer function is inhibited - "INH". To activate, select (INH) and press the dial to select the "STOP" timer. The default setting for the STOP timer is 00:00 -0 minutes and 0 seconds. The STOP Timer can run to a maximum of 59 minutes 59 seconds and then returns to 0 minutes, 0 seconds. While the timer is running, a signal will sound every minute.

- Starting and Stopping the timer (START/STOP) This function can be allocated to different switches to start or stop the timer. For example, the start switch could be allocated to the SPS switch on the throttle and the Off switch to the trainer switch or vice versa. Alternatively, the SPS switch could be used to turn the timer on and off . The timer switches are described below. List of timer switches: By Selecting "INH" switch on the "STOP" the timer can be used as to start the timer.
- Integrated Timer (INTEGRATE TIMER) time reset The Integrated Time is recorded individually for each model. When this time exceeds 100 hours, the time will return to zero. This can be used as a reference for maintenance of each aircraft. This time can also be manually reset to zero - set the cursor on the Integrated timer and press the dial to reset.



## ID

- It is possible to move from the Information and Timer screen to each timer function directly.
- It is possible to reset the timer by pressing the CLR key after moving the cursor to the Timer display on the Information and Timer screen.

## Mix Monitor [MIX MONITOR]

#### Function Explanation

This screen gives a list and confirmation of each of the mixing conditions and basic settings incorporated in the transmitter. Because all mixing that is incorporated for each model will be displayed regardless of whether it is set to INH or ACT, it is possible to discover unintentional setting mistakes. Further, each of the items displayed on the screen can be accessed directly, avoiding the trouble of searching for functions, allowing speedy access to settings.

### Setting Method

It is possible to check each Mixing condition on the monitor. Move the cursor using the dial and Press dial to set each function directly.

#### For Helicopter















## Servo Monitor [MONITOR]

### Function Explanation

This function allows simulation of servo operation on the transmitter. Because this gives a 'final output' of all servo signals, provisional confirmation of functions can be carried out before actually connecting the servos. Further, this is useful for discovering unintentional mixing and switch setting mistakes.

## Setting Method

• Servo test outputs are displayed on the screen. Operate each control and switch and carefully confirm the settings.



• Servo Test (SERVO TEST)

A Servo Test can be carried out using this function. Select the required servo test from below four options. Note that if a Limit Adjust has been set (on the function List), servos will not move further than is allowed by the limit setting. In this way you can avoid damaging servos or linkages on the aircraft while performing this test. INH: Inhibited.

NEUTRAL: Set all the servos to their Neutral positions.

SLOW: All servos simultaneously move at Low speed linearly using  $\pm$  100% travel.

QUICK: All servos simultaneously move at High speed linearly using  $\pm$  100% travel.

STEP: Each servo sequentially moves to each side in turn using 100% travel.

## TIPS

It is highly recommended to use the Servo test monitor to check the movement of the control surfaces. Not only checking control movement, it is also possible to confirm which channel has been assigned to the receiver slots. Especially for mixing functions, without powering the model, it is useful to confirm servo movement using this monitor. Indications of the monitor channels are ordered the same as the receiver slots.

O OWER		RG631B Receiver
		JII PROPO RG 631B sets 2-46Hz RECEIVER JUNITED CONTROLOUTE UNITED CONTROLOUTE







## Model Select [MODEL SELECT]

## Function Explanation

This function allows you to start setting up a new model and switch between existing models. Up to 20 unique models can be stored in this transmitter.



For safety reasons, a screen initially appears confirming that you wish to stop radio wave transmission. Select "YES" to continue to this function screen. Next, the current Model number. and Model Name are displayed. Select this item and press the dial.



Now rotate the dial to find the model you wish to switch to and press the dial to select it.

When creating a new model, selecting a name containing "----" will start initial parameter navigation allowing a new model to be created.



## Model Copy & Erase [MODEL COPY/ERASE]

#### Function Explanation

From this screen, copying and erasing of model data is carried out. This can be carried out on both the transmitter memory and on the micro SD Card. In addition, it is possible to copy model data between other matching JR transmitters that have been connected using a trainer cable.

### Setting Method



For safety reasons, a screen initially appears confirming that you wish to stop radio wave transmission. Select "YES" to continue to the function screen. No RF output is transmitted.





Model Copy

Model copy can be selected from INTERNAL, MICRO SD-CARD or TRANSFER.



#### • Copy Source

The Copy Source can be selected as the Internal Memory "INTERNAL", MICRO SD CARD "SD-CARD", and between two transmitters "TRANSFER".

If "Transfer" is selected, the Copy source will be the current model number. If you wish to select from "INTERNAL", or "SD-CARD" be sure to select the particular Model before proceeding.

• Copy Destination

The Copy Destination can be selected from "INTERNAL", "SD CARD", or "TRANSFER".

If wish to select the Destination as "INTERNAL" or "TRANSFER", chose the appropriate Model number first. If data exists on the Copy destination, it cannot be written over. Be sure to erase the data first before copying. When the SD CARD is chosen, be sure to Input the File name first. If the File name chosen is exactly the same as a previous entry, this cannot be copied over. Modify the file name and try again.

### System List

#### • Model Erase



Model data stored on the "INTERNAL" memory or SD CARD can be erased. Be sure to double check the model being erased before continuing.

\* If the currently selected model is erased, the new model creation wizard will automatically start. If you wish to use data from the current model number, be sure to copy it to another model number first and then erase the particular model from the Model Select function.



- The "TRANSFER" of data between transmitters can be only achieve when the Trainer cable (Sold Separately) has been plugged into the XG6 and the transmitter power switch is turned off.
- When a model transferred from another transmitter is used, it will be necessary to re-bind with the receiver.

#### Caution Note

• While this screen is displayed, and during the copy procedure, NEVER remove the Micro SD Card under any circumstances.

There will be a danger of destroying Model Data which is on the card.

- Only insert or remove the Micro SD card when the transmitter power is switched off.
- Actually operate the servos and carefully confirm all settings before flying.



#### Function Explanation

This function allows selection of the model type. The type can be switched between Helicopter  $\Leftrightarrow$  Airplane  $\Leftrightarrow$  Glider. Additionally, this screen will be automatically displayed when creating a new model.

## Setting Method



When entering this function screen from the System List, the currently selected model type can be changed. Select the type that you wish to change to by rotating the dial, then press the dial to confirm. After doing so, you will be asked whether the current





model data is to be reset, so select "YES" to implement the reset.

For safety reasons, a screen initially appears confirming that you wish to stop radio wave transmission. Select "YES" to continue to this function screen. Now no RF output will be transmitted.



## TIPS

• The connections with the receiver should be made as follows:

#### Receiver connection channel list

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

## Caution Note

• Because the previous data will be erased when the model type is changed, any important model data should be copied and backed-up beforehand Also note that when the Model type is changed, the new model setup wizard will automatically start, so chose the Model Type and Wing Types accordingly.

## Model Name [MODEL NAME]

#### Function Explanation

In this screen, the inputting and modification of each model name can be carried out. Select the name from the list of characters and numbers. The Name can contain a maximum of 8 characters or numbers.





### Setting Method

The name of the model that is currently being used can be registered and changed. First, move the cursor to the desired position, and press the dial. By doing this, the cursor will move to the list of characters, allowing you to select your desired characters and input it by pressing the dial.



TIPS

• Since the Model Name is displayed on the Information display and during Model Selection , it is useful to use the brand name of the aircraft.



# Flight Mode Name (FLIGHT MODE NAME) Function Explanation

In this screen, the name given to the different Flight Modes can be changed. The Flight Mode name display is shown with two names, one long name up to six (6) characters and one short name up to four (4) characters, which are used in each of the screens, and each can be freely changed.





### Setting Method

In each Flight Mode, there are displays of a long 6-character name and a short 4-character name. Rotate the dial to select the name that you wish to change, then press the dial and enter the name in the same way as you would for a model name. Note that since Airplane mode has no flight modes, there is no function to be named.





• The Flight Mode name is displayed on the Information display as well as each function showing flight mode condition.

## Trim System [TRIM SYSTEM]

#### Function Explanation

In this screen, the various settings relating to the Trims can be changed. The resolution of each Trim, the Trim type, and whether separate or common trims should be used for each flight mode can be set. Using this function, customers can easily change the trim settings.

#### Setting Method

Trim Step

It is possible to set the trim travel amount per one (1) click. The default is Four (4) steps per click. It is possible to set the step to be between one (1) step and ten (10) steps.

- Trim Type
  - Normal Trim (NORM)
  - Limit Stroke Trim (L.S.T.) • Limit Stroke Trim the trim amount set at each stick center (neutral) position will

  - to avoid damage to servos, linkages and control surfaces by using L.S.T. - Idle Trim (IDLE) • • • • • Idle Trim is a Helicopter only function: This trim only functions at the low position of the throttle stick.

be maximum, while the effect of the trim will disappear at the stick end positions. End point travel adjustment will not be changed by the trim settings. It is possible

• • • Normal Trim is the default trim type. The entire servo operation range will be changed when the trim is moved.

#### For Helicopter



Trim step

4

4

4

4

IDLE

∎TRIM SYSTEM

THROS

AILE:

ELEV:

RUDD:

Trim Type

X136

2.4GHz

T RX

#### For Airplane

- Cross Trim setting Throttle trim and Elevator trim can be switched
  - (Cross Trim) in order to set the trim to the opposite side of the transmitter so as trim can be adjusted without removing fingers from the control stick.

#### For Glider

• Flight Mode Trim for Aileron and Rudder Trim (AILE/RUDD TRIM) It is possible to independently select Aileron and Rudder Trim for each flight mode, or use a common trim setting across all flight modes. COM: Common.

FMOD:Individual trims for each flight Mode.

- Selection of the Spoiler Trim Lever function (SPOI TRIM) It is possible to select the spoiler trim lever function, as a default, it is set to Flaperon. (FRPN), and functions as Flaperon trim. Flaperon trim (FRPN TR): • • •

  - Flap trim (FLAP TR): • • Functionsas Flap trim
- Trim step Trim Type XIBB POWER 2.4GHz ∎TRIM SYST<u>EM</u> FPRN: 4 AILE: 4 FLEV: 4 4 RUDD: \_E/RUDD : FMOI 71 RX SPOI TRIM: FPRN

#### Functions as Flaperon trim

- Spoiler trim(SPOI TR): • • Under device select, it functions as trim for the Motor channel when the Gear channel has been set as Motor (MOTO) and also Spoiler stick (SPOI ST) as an Input device.



- By setting the Trim Step to "0" it is possible to inhibit the operation of a trim lever.
- For Helicopter. It is very useful when using an ESC in non-governor mode to be able to Move the whole Throttle Curve to change the Rotor r.p.m. .







- Opening sound (Sound when the transmitter is first turned on)
- Definition of the tones
  - $lacetheref{eq: HIGH}$   $\cdot$   $\cdot$   $\cdot$  High Tone sound
  - lace LOW  $\cdot \cdot \cdot$  Low Tone sound
  - OFF · · · Mute



Alert Warnings cannot be muted.

OPENING: HIGH

### System List

• Software version (SOFTWARE VER) This indicates the current version of the transmitter's software. For example: 0001-0000 (Ver1.0)



• Stick Calibration (STICK CALIBRATION) This function calibrates the neutral position of the stick and stick travel which is especially useful after changing Stick mode (Mode 1 to Mode 2 or Vice Versa). The calibration procedure is as follows.

- 1) Place both right and left sticks in their center positions, and set the cursor to "SET", and press the dial to calibrate neutral.
- 2) Next move both right and left sticks up and down and right to left and press the dial to calibrate stick travel.
- 3) Be sure to check control movement and neutral positions on the servo monitor screen Refer to the Page 46 "Servo Monitor [MONITOR] "



### Caution Note

• Be careful not to force the stick gimbal during the calibration procedure.

## Trainer [TRAINER] aka: Buddy Box in the USA

#### Function Explanation

This function allows two (2) transmitters to be connected via a Trainer cable (available separately) to allow dual control flight instruction. A skilled pilot can teach a beginner how to fly an aircraft using this trainer system. The XG6 can function as Master (Trainer) or Slave (Trainee). Control can be changed between Master and Slave using the Master Transmitter's Trainer switches (Trainer momentary switch, or Trim Lever).

### Setting Method

- As a Master transmitter When using the XG6 as a "MASTER"
- ① The Main Power must be turned on, the transmitter is transmitting Radio Waves, and is bound to the aircraft.
- (2) The Trainer cable is plugged in.
- ③ The Trim Lever or Trainer Switch (Momentary Toggle switch) are selected using "SW SEL" by turning these ON/ OFF it is possible to switch control from the Master transmitter to the Slave. There are two modes available for the Master transmitter.

#### • NORMAL MODE

The Master transmitter always has priority control. Control data coming from Slave transmitter is only sent to the aircraft by switching control from Master to Slave. The Slave transmitter has to be set to "PPM" mode. The Master transmitter has full control over the model, however, the Slave transmitter does not need to be exactly the same radio, or a high end transmitter. The Slave transmitter should be able to output a "PPM" signal, and have a trainer Jack as the minimum transmitter function requirements.

#### PROGRAM TRAINER

The Master transmitter can be programmed to choose the control channels independently for use by the Slave transmitter. Channel-1 (THRO /SPOI), Channel-2 (AILE), Channel-3 ELEV) Channel-4 (RUDD) - Select one or more of them to be controlled by the Slave transmitter. This allows the beginner pilot to learn a single control independently. This is makes it easier to learn, without the worry of controlling all functions at once. The data coming from Slave to Master is combined with data from the Master transmitter's Settings (Trim, Dual rates, Mixing etc...) before being transmitting to the model. Therefore, The Master transmitter has full control. However, the Slave transmitter does not need to be a full control

radio. Precise adjustments and settings must be done in the Master transmitter. The Slave transmitter must be selected as "SLAVE". This Trainer program is available on most recent JR Computer transmitters.

- As a Slave transmitter When using the transmitter as a "SLAVE"
- ① The Main Power switch must be turned off (No Radio Waves are transmitted).
- ② The Trainer cable must be plugged in. There are two modes available for the Slave transmitter.
  - When the Master transmitter is set to Normal mode, the Slave transmitter should also be set to "NORMAL" mode. There are no specific setting requirements, however, if the radio has a Trainer program, do not set it as "SLAVE".
  - SLAVE MODE

Use this mode when the Master transmitter is set to "Program Trainer". When set as "SLAVE", only the Gimbals stick functions pass control outputs to the Master transmitter. Therefore, settings such as Dual rates and Mixing are ignored completely.

\* Possible to confirm the movement and condition in the "Servo Monitor". Refer to the Page 46 "Servo Monitor [MONITOR] "

#### Caution Note

• Be sure to check for correct function and control prior to commencing flight training using two transmitters. Pay particular attention to control direction, Dual rates, mixing and etc..









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• Binding (BIND)

Set the receiver to the Bind Standby condition. Then rotate the dial to select "BIND" (inverse display) and press the dial. If the display shows "SUCCESS", binding has been successfully completed. If the display shows "TIMEOUT PLEASE TRY AGAIN", the bind process failed and you must try again.

- POWER (RF POWER) Range Check If POWER is changed from "NORMAL" to "LOW", the transmitter RF power is reduced and the LED will flash, allowing a range check to be carried out. Place the Aircraft 40 meters (approx 130 feet) away from the transmitter, and ensure all the controls function normally.
- Regional Settings Mode (DMSS 2.4GHz Band width for France) When using the transmitter in France and its overseas territories, this should be set to "FRANCE". In all other regions this should be set to "GENERAL". In France mode, the 2.4GHz bandwidth that is used will be legally restricted compared to the bandwidth in other regions. Initially it is set to "GENERAL".



- If there is difficulty in binding a receiver, please confirm the following:
  - Are the transmitter and receiver batteries fully charged? Please fully charge the batteries.
  - Are the transmitter and receiver too close to each other? If they are set too close to each other, RF swamping may interrupt the binding process. Please try binding again with the transmitter and receiver further apart.
  - If the transmitter and receiver are on a metal table or desk, binding may be difficult.
     Please try binding on a different surface.
     Each receiver recognizes the transmitter's model ID. If the Model ID does not match with particular model, it may not able to complete the binding. This is to avoid matching the wrong model's ID to the transmitter.

### Caution Note

- Be sure to set the "FAIL SAFE" (under System List) after the binding procedure is complete. It is essential to use the Fail safe to minimize the risks of RF signal loss. Be conscious about safety at all times. Check the actual Fail safe settings by turning off the transmitter, and monitoring the response of the servos. When the model or type is changed in the transmitter, it will be necessary to re-bind the receiver.
- NEVER fly the aircraft in Range Check mode.

## Telemetry System [TELEMETRY]

### Function Explanation

This allows confirmation of the telemetry sensors present in a particular aircraft, gathering information such as Receiver Voltage, Altitude, Temperature or Propeller or rotor blade r.p.m., etc. In addition to the data on the display, alarms are used, so as aircraft conditions can be monitored without taking your eyes off the aircraft.

### Setting Method



#### Receiver battery (RX-BATT) No Link Alarm (NO LINK ALARM)

#### Receiver Battery Alarm

This function alerts to a drop in receiver battery voltage. Initially it is inhibited.

To activate, set the alarm Voltage between 3.0V –9.0V in 0.1V increments.



#### No Link Alarm

This will warn when the transmitter is no longer receiving data from the model. Initially it is set as inhibited. Set the delay after which the alarm should sound to either 10S (10 seconds), 15S (15 seconds), 20S (20 seconds), or 30s (30 seconds).

OWER

#### Temperature (TEMPERATURE)

#### • Units (SCALE)

This selects the units for temperature display - Celcius (  $^\circ$  C) or Fahrenheit ( $^\circ$  F). Select the units as desired.

#### • Alarm (ALARM)

This sets the temperature at which the alarm will sound – between 30 and 500  $^\circ$  C. Initially this alarm is inhibited. Set the temperature to the desired alarm point.

#### Revolutions Per Minute (RPM)

#### • Gear Ratio (GEAR RATIO)

It is possible to monitor the Helicopter's actual rotor blade r.p.m. by entering the gear ratio. Check the gear ratio for each Helicopter by checking your manual. Initially it is set as inhibited. Set the necessary numerical value. Gear Ratios can be set between  $1.00 \sim 20.00$  in 0.01 increments.

#### 

■ TELEMETRY

TEMPERATURE

#### • Number of Blades (PROPELLER)

It is possible to monitor an Airplane's actual Propeller r.p.m by

installation of an optical sensor. It is necessary to input the number of blades of the propeller in order to have actual Propeller r.p.m displayed. Initially, it is inhibited. The number of Propeller blades can be set between 1-20.

#### • Delay (DELAY)

It is possible to display and store the maximum r.p.m. recorded in each flight mode. However, when the flight mode is changed, the sensor may immediately store a maximum value, which would be invalid. To avoid storing incorrect r.p.m. data, this function allows rpm to stabilize before storing any data. Initially it is set to inhibited. Set the desired numerical amount which would suit with your model. The delay can be set from 0.5s (0.5 seconds)  $\sim$  10.0s (10 seconds) in 0.5 seconds increments.



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#### Altimeter (ALTITUDE)

#### • Units (SCALE)

This selects the units –Meter (m) or Feet (ft). Select the units as desired.

• Sound: Audio (SOUND1, 2, 3)

It is possible to select from three (3) types of audio for different altitude indications. Initially it is set to inhibit. If desired, set the alert sound depending on the situation. It is possible to setaltitude between 1 ~2000m in 1.0 meter increments.

Types of Alert:  $\uparrow$ : When the altitude is greater than the set value.  $\downarrow$ : When the altitude is less than the set value.  $\sim$ : When flying within the set altitude range.

- When the alert is set in an altitude range, it can be set between 0.3m ~9.9m in 0.3m increments. If the three (3) conditions overlap, Priority is set as "SOUND3 > SOUND2 > SOUND1".
- Switch Select (SW SEL)

It is possible to set an Alert to be active by switches or stick position, or a combination of those devices by using "SW SEL". Initially it is always turned on.

#### Climb Indicator (VARIOMETER)

#### • Units (SCALE)

This selects the units (m/s, ft/s). Select the units as desired.

• Audio for Ascent (UP SOUND1, 2, 3, 4)

The Climb Rate can be set in 4 different ranges, with an alert for each range. Each one of the settings can have an alert. Initially it is set to "INH". The Climb Rate alert can be set between 0.1m/s ~3.0m/s, in 0.1m/s increments.



\* If the four (4) conditions overlap, Priority is set as "SOUND4 > SOUND3 > SOUND2 > SOUND1".

#### • Audio for Descent (DOWN SOUND)

The Descent Rate can be set in 4 different ranges, with an alert for each range. Each one of the setting can have an alert. Initially it is set to "INH". The Descent Rate alert can be set between  $0.1m/s \sim 3.0m/s$ , in 0.1m/s increments.

• Switch Select (SW SEL)

It is possible to set the Alert to be active by switches or stick position, or a combination of those devices by using "SW SEL". Initially it is always turned on.

#### For Motive Power Battery (FLIGHT PACK)

#### • Motive Power BatteryAlarm (VOLT-ALARM)

It is possible to set an alert for low Motive Power Battery voltage. Initially it is set as Inhibited. Set the alert voltage as desired. The Voltage can be set between  $0.1V \sim 655.3V$  in 0.1V increments.

• Nominal Capacity Value (CAPACITY)

It is possible to set a Nominal Capacity Value to match your Motive Power battery capacity. The remaining battery capacity

value is displayed by deducting the consumed capacity value. It can be set between 0mAh ~30,000mAh, in 10mAh increments.

#### Battery Capacity Alarm (CAPA-ALARM)

It is possible to set a capacity remaining alert based on the Nominal Capacity value of your battery. Initially it is set as Inhibited. To activate, set a percentage between 0% to 100%. The alarm will sound when this calculated percent capacity remaining reaches this figure.



• By using the Information screen, it is possible to display your desired Telemetry information on the first page, together with the Timer and Flight Mode selection on a screen that customers can customize so that it is easy to check. Initially it is set as Inhibited. Select the telemetry information to be displayed, and allocate it to a position on the screen.

### Caution Note

• The Telemetry sensor data is meant as an indication only, and therefore we cannot guarantee the accuracy of any recordings obtained.



■TELEMETRY FLIGHT PACK © VOLT-ALARM: 20.00 CAPACITY: 3300 mAh © CAPA-ALARM: 20% ( 660 mAh)

## Fail safe (FAIL SAFE)

## Function Explanation

If the receiver does not receive a valid RF signal from the transmitter, this function moves the servos to predefined positions, to avoid the scenario of the aircraft crashing at, for example, full throttle. Be sure to set the Fail Safe before flying each aircraft.

## Setting Method

This function allows selections to be made for each channel in case of loss of RF signal. "HOLD", maintains the servo positions as they were immediately before the radio signal was lost. This is the default setting. It is also possible to select "FAIL SAFE". In order to set the "FAIL SAFE" positions (the servos move to predefined positions in the event of loss of radio signal), change the switch for each of the channels on the screen to "FAIL SAFE". The memorizing of each of the Fail Safe positions is carried out by operating the stick to the desired position and holding it there while pressing the "MEMO" key to activate this function.



## Caution Note

- For safety reasons, engine-powered and electric powered aircraft must have their motive power channels set to the slowest speed.
- If the Reverse Switches or Stick Mode are changed after setting the Fail Safe, the motive power failsafe may be set, in error, to the Full Throttle position. In order to avoid making this dangerous mistake, be certain to remember to implement the Fail Safe settings after completing the aircraft set-up.
- Before flying, be certain to confirm the failsafe settings by switching off the transmitter power, and observing that the servos move to the positions intended.





## Flight Mode Switch [FLIGHT MODE SW]

#### Function Explanation

Select the switch to change the flight mode

#### Setting Method

Initially, it is set as Flight mode switch (FMODE SW). If desired, it is possible to choose the switch from the list.





• Use the touch select function which allows switch choice by simply moving the desired switch. This is useful when it is hard to define the switch name.

#### Caution Note

• Actually operate the servos and carefully confirm the settings before flying.

## Device Select [DEVICE SELECT]

### Function Explanation

This screen is where various flight modes can be set, and where switch functions can be defined. Further, channel output assignments can be made here.





Glider

## Setting Method



**Device Select (DEVICE)** 

- Device Select (DEVICE) Here input devices (switches, and levers) can be linked to a particular channel. Select the device as desired.
- Selection of Output (OUT)
  - Here the Output configuration of each channel can be specified.
    - INH: No output.
    - ACT: Allow output standard.
    - SYS: Use this channel for the Flap system.
      - \*\* By setting the flap channel to "SYS", the menu "FLAP SYSTEM" under the function List is activated.

#### System List

#### For Glider

Launch Switch (LAUNCH) ■DEVICE SELECT FLIGHT\_MODE 1/2XC POWER LAUNCH: FMOD SI 1 1/2DEVICE SELECT REV:OFF FLIGHT MODE LAUNCH: INH LAND: MOTO SW Launch Switch Reverse (LAUNCH REV) LAND: INH DEVICE SELECT 2/2DEVICE OUT CH Land Switch (LAND) 5.GEAR: MOTO SW MOTO Selection of Output (OUT) GEAR INH MOTOR **Device Select (DEVICE)** 

• Launch Switch (LAUNCH)

By setting up a LAUNCH (Launch Switch) it is possible to set two additional flight Modes:

- Cruise Mode (CRUISE)
- Launch Mode (LAUNCH)
- \* Launch Switch Reverse (LAUNCH REV)

It is possible to switch the Launch Switch position on the Flight Mode switch.

- OFF : The Upper switch position (POS 0) will be set as Cruise and the Bottom switch position (POS 1) will be set as LAUNCH (Launch Mode).
- ON : The Upper switch position (POS 0) will be set as Launch and the Bottom switch position (POS 1) will be set as Cruise (Cruise Mode).
- Land Switch (LAND)

By setting up a LAND (Land Switch) it is possible to set the following two flight Modes:

Cruise Mode (CRUISE)

● Launch Mode (LAUNCH)

• Device Select (DEVICE)

Here input devices (switches, levers and trim switches) can be linked to a particular channel. Select the device as desired.

• Selection of Output (OUT)

Here the Output configuration of each channel can be specified.

INH : No output.

 $\ensuremath{\mathsf{MOT}}$  : Use this channel for Motor control.

\* When the Motor Channel is set, "MOTOR SYSTEM" on the function List becomes activated.



- Even though a channel's OUT (Output) can be set to "INH", it is possible to use the channel with a "PROGRAM MIX" (on the function List) as a Master channel. It is also possible to set this under "DEVICE SELECT"
- Touch Select function: When selecting a switch, by operating the switch that you wish to use, the switch will be automatically recognize and be set to that function. It is useful when you are not sure of the switch name.
- It is possible to select from the following two (2) movement options when using a trim lever as an Input device: 2P: 2 position movement
   MO: Momentary Movement

MO: Momentary Movement

### Caution Note

• Actually operate the servos and carefully confirm the settings before flying.

## Swash type [SWASH TYPE]

#### Function Explanation



This function allows electronic CCPM mixing to match the mechanical structure and control of the helicopter swash plate. After making the SWASH TYPE selection, detailed settings should be made using Swash Mixing in the Function List.

#### Setting Method



Select the CCPM Swash type on the screen by rotating the dial, and then pressing the dial. This displays a list of Swash Patterns –select the pattern which matches your helicopter. Initially, it is set to 1 servo Normal. Note that the actual mixing amount and direction settings must be carried out in the System List - "SWASH MIXING".

- Swash Types
  - 1 Servo Normal: Mechanical mixing
  - 3 Servo 120° : 120° swash (120° CCPM)
  - 3 Servo 140° /135° : 140° /135° swash (140° /135° CCPM).



### Caution Note

- Actually operate the servos and carefully confirm the settings before flying.
- When the swash type is changed, the display will be as indicated in the diagram on the right.
  - Travel adjust **(**TRAVEL ADJUST**)** • • Page 21
  - Sub Trim [SUB TRIM] • • • Page 22
  - Reverse Switch [REVERSE SW] • • Page 23
  - Servo Monitor [MONITOR] · · · · · Page 46
  - Fail safe [FAIL SAFE] • • • Page 60



When the following swash types are selected, channel allocation is as follows: When 1S Normal is set When 3S 120°, 3S 140° /135° are set

 $\begin{array}{rrrr} \text{AILE} & \rightarrow & \text{CH2} \\ \text{ELEV} & \rightarrow & \text{CH3} \\ \text{PIT.} & \rightarrow & \text{CH6} \end{array}$ 

## Wing Type [WING TYPE]

## Function Explanation

Here the wing type can be set. Dual ailerons and dual flaps, dual elevators, dual rudders, tailless planes, and V-tail wings can be selected.

### Setting Method

This function is used to select the Wing type according to the type of airplane.

#### For Airplane



- Wing Type (WING) Select the Main Wing Type.
  - Normal (NORMAL) For standard airplane wing layouts.
  - Flaperon (FLAPERON) For wings with Dual Ailerons. Also, mixing Dual Ailerons as Flaps is possible. The following channel outputs are used:

Refer to the Page 34 "Flap System [FLAP SYSTEM] "

- Channel 2 (AILE) : Right Aileron (RAIL) Channel 6 (FLAP) : Left Aileron (LAIL)
- Delta (DELTA)
   Lei

It is possible to set up a Delta Wing to use Elevons. The following channel outputs are used: Channel 2 (AILE) : Left Elevon (LEVN) Channel 6 (FLAP) : Right Elevon (REVN)

The actual meaning of "DELTA" is a defined wing shape, and not a tailless airplane. However, JR does call tailless airplanes deltas (e.g. the F-102 or Dassault Mirage III).

 V-Tail (V-TAIL) Used to perform mixing for a V-tail airplane. The following channel outputs are used: Channel 3 (ELEV) : Left Tail (LTAL) Channel 4 (RUDD) : Right Tail (RTAL)

## Caution Note

- Actually operate the servos and carefully confirm the settings before flying.
- Upon setting the Wing type, the following functions have changes to the servo naming on the display:
  - Travel adjust [TRAVEL ADJUST]
    Page 21
    Sub Trim [SUB TRIM]
    Page 22
    Reverse Switch [REVERSE SW]
    Page 23
    Servo Monitor [MONITOR]
    Page 46
    Fail and Factor Sector Se
  - Fail safe [FAIL SAFE] • • • Page 60













Glide

#### For Glider



Dual Aileron is the standard Wing type for Glider.

- Channel 1 : Left Aileron (LAIL)
- Channel 2 : Right Aileron (RAIL)
- Dual Flap (DUAL FLAP) Dual flap is not active by default. To use this function, it must first be activated "ACT".
   Channel 5 : Left Flap (LFLAP)
   Channel 6 : Right Flap (RFLAP)
- V-Tail (V-TAIL)

This is mixing for a V-Tail airplane. The following channel outputs are used: Channel 3 (ELEV) : Left Tail (LTAL) Channel 4 (RUDD) : Right Tail (RTAL)

### Caution Note

- Upon setting the Wing type, the following functions have changes to the servo naming on the display:
  - Travel adjust [TRAVEL ADJUST] • Page 21
  - Sub Trim [SUB TRIM] • • • Page 22
  - Reverse Switch [REVERSE SW] · · · · Page 23
  - Servo Monitor [MONITOR] • • Page 46
  - Fail safe [FAIL SAFE] • • • Page 60
- Actually operate the servos and carefully confirm the settings before flying.







## Throttle Stick Direction [THRO(SPOI) STICK DIRECTION]

#### Function Explanation

This enables the Throttle Stick (Spoiler Stick) direction to be reversed without changing the output signal value – the input value gets changed. This is a completely different function from using the Reverse switch function.

### Setting Method

Initially it is set to "NORM" (Downward: Slow, Upward: High). If necessary set it to "REV" (Downward: High, Upward: Slow).





• It is necessary to use this function (rather than the reverse switch) so that all mixing functions work correctly when flying using this technique.

## Caution Note

• Actually operate the servos and carefully confirm the settings before flying.





## Stick Mode [STICK MODE]

### Function Explanation

This function changes the stick mode between Mode 1, Mode 2, Mode 3 & Mode 4. In the USA, Mode-2 is commonly used. In Japan, Mode 1 is the most common configuration.

### Setting Method

The initial setting is determined by the mode the radio was in when purchased. This function can be used to change this mode.



### Caution Note

If the throttle stick position to be changed (between Mode 1 & Mode 2 or between Mode 3 & Mode 4), the throttle stick and elevator stick Spring location requires changing. Be sure to Calibrate both stick gimbals after changing the Stick Mode.

Refer to the Page 55 "Stick Calibration (STICK CALIBRATION)"







JRPROPO

## XG6 DATA SHEET / HELI

MODEL No.

MODEL NAME

FLIGHT MODE NAME	NORMAL(NORM)	STNT	HOLD
LONG			
SHORT			

\_\_\_\_\_

\_\_\_\_\_

	Т	HRO		AILE	E	ELEV	F	RUDD	0	<b>BEAR</b>		PIT.
REVERSE SW	N	NORM NORM NORM REV REV REV		NORM REV		NORM REV		NORM REV				
SUB TRIM												
TRAVEL	Н	%	L	%	D	%	L	%	+	%	Н	%
ADJUST	L	%	R	%	U	%	R	%	-	%	L	%
FAIL SAFE												

GYRO SENS							
SW SEL	TYPE NORMAL+T.LOCK+ STUNT						
	NORM	Τ·Ν	%				
	STUNT	Τ·Ν	%				
	HOLD	Τ·Ν	%				
	DELAY						
	TRIM IN						

		THRO	AILE	ELEV	RUDD
	NORM				
A.D.T.	STANT				
	HOLD				
TRIA	A STEP				
TRIM TYPE		IDLE • NORM	L.S.T. • NORM	L.S.T. • NORM	L.S.T. • NORM

AILE	POS 0	POS 1		
D/P	%	%		
D/ K	%	%		
EVD	%	%		
EAP	%	%		
	NORM	ST-1	HOLD	INPUT
FINI-AUTO				

ELEV	POS 0	POS 1		
D/P	%	%		
D/R	%	%		
EVD	%	%		
EXP	%	%		
	NORM	ST-1	HOLD	INPUT
FIVI-AUTO				

RUDD	POS 0	POS 1		
D/P	%	%		
D/K	%	%		
EVD	%	%		
EXP	%	%		
	NORM	ST-1	HOLD	INPUT

TUDO	INH	HOLD Pos.		%
	•	STICK AUTO	INH • (	)
HOLD	ACT	Delay	INH • (	s)
	SW SEL			

TIMER					
	TIMER 1				
Timer	Down-T STOP W				
Time					
START					
STOP					



## **XG6 DATA SHEET / HELI**



	TYPE	1s • 3s120° • 3s140° /135°					
SWASH	AILE		%	PIT.	%		
МІХ	ELEV		%	EXP	INH • ACT		
	E-RING	INH • ACT					

			EXP		L	1	2	3	Н
	NORM			IN	0				100
	I NC	JKINI	OFF • ON	OUT					
	ст			IN	0				100
	51	UNI		OUT					
	NC			IN	0				100
	NORM		OFFON	OUT					
	STUNT		OFF • ON	IN	0				100
PITCH Curve				OUT					
	HOLD		OFF • ON	IN	0				100
				OUT					
	NORM	NORM		IN	0				100
TAIL Commo	NORIVI	ORIG		OUT					
	CTUNIT	NORM		IN	0				100
	STUNT	ORIG		OUT					
		MASTER	EXP		L	1	2	3	Н

	THRO CUT	INH • ACT	TRIM	INH • ACT	
THRO TRIM	THRO	+/-	%	TIME LAG:	INH• s
	SW SEL				

		THRO
FLIGHT	NORM	INH• s
DELAY	STUNT	INH• s
	HOLD	INH• s

		CHANNEL +GAIN					-GAIN	OFFSET		
		$\rightarrow$				%	%			
		EXP		L	1	2	3	Н		
	MIX 1		IN	0				100		
		ONFOFF	OUT							
		SW SELECT			INCLUDE					
			CHANNEL		+G/	AIN	-GAIN OFFSET			
			$\rightarrow$			%	%			
DDOCDAM		EXP		L	1	2	3	Н		
MIX	MIX 2	ON • OFF	IN	0				100		
			OUT							
		SW SELECT			INCLUDE					
			CHANNEL		+G/	AIN	-GAIN	OFFSET		
			$\rightarrow$			%	%			
		EXP		L	1	2	3	Н		
	MIX 3		IN	0				100		
			OUT							
		SW SELECT			INCLUDE					
# XG6 DATA SHEET / HELI

THRO STICK DIRECTION REV • NORM



STICK MODE				
	SOUND 1	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
	SOUND 2	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
ALOTTODE	SOUND 3	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
	SW SEL			

VIRIOMETER	SOUND 1	m/s • fps
	SOUND 2	m/s • fps
	SOUND 3	m/s • fps
	SW SEL	

TEMDEDATUDE	ALARM					
TEMPERATURE	INH•(	°C /°F )				

DV DATTEDV	ALARM				
RA-DATTERT	INH • ( V)				

DDM	GEAR RA	ΓΙΟ	PROPEL	LER	DELAY	
RF IVI	INH•(	)	INH•(	)	INH•(	)

	VOLT-AI	ARM	CAPACITY	CAPA-ALARM	
FLIGHT PACK	INH•(	V)	mAh	INH•(	%)

ALARM			
INH • 10s • 15s • 20s • 30s			

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## XG6 DATA SHEET / ACRO

MODEL No.

MODEL NAME

	Т	HRO		AILE		ELEV	F	RUDD	(	GEAR	F	LAP
REVERSE SW	N	ORM REV	Ν	IORM REV	Ν	NORM REV	١	NORM REV	١	NORM REV	N	IORM REV
SUB TRIM												
TRAVEL	Н	%	L	%	D	%	L	%	+	%	Н	%
ADJUST	L	%	R	%	U	%	R	%	-	%	L	%
FAIL SAFE												

\_\_\_\_\_

AILE	POS 0	POS 1
D/P	%	%
D/K	%	%
EVD	%	%
EXP	%	%
INPUT		

ELEV	POS 0	POS 1
D/P	%	%
D/ N	%	%
EVD	%	%
EAP	%	%
INPUT		

RUDD	POS 0	POS 1
D/P	%	%
D/K	%	%
EVD	%	%
	%	%
INPUT		

DEFFERENTIAL	AILE	POS0		%	POS1	%
		TR	RIN IN			
	SW					
	RUDD	POS0		%	POS1	%
		TR	RIN IN			
	SW					

AILE → RUDD MIX		L	%	R	%
	SW				

	EXP		L	1	2	3	Н
THRO Curve	OFF・ON	IN	0				100
		OUT					
	SW SELECT						

FLAP SYSTEM		FLAP		ELEV		AILE	
	NORM	9	%		%		%
	LAND	9	%	1	%		%
	DELAY	INH•	s	INH•	S	INH•	S
	AUTO LAND			INH • THRO(		(	)

WING TYPE	WING	NORMAL • FLAPERON • DELTA
	V-tail	INH • ACT

	THRO CUT	INH • ACT	TRIM MEMORY		INH • ACT
THRO	THRO	+/-	%		
TRIM	TIME LAG:	INH•	S		
	SW SEL				

Airplane

	THRO	AILE	ELEV	RUDD	
A.D.T.					
<b>TRIM STEP</b>					
TRIM TYPE		L.S.T. • NORM	L.S.T. • NORM	L.S.T. • NORM	
THRO/ELEV TRIM: NORM • CROSS					

# **XG6 DATA SHEET / ACRO**



		CHANNEL			+GAIN		-GAIN	OFFSET
			$\rightarrow$			%	%	
		EXP		L	1	2	3	Н
	MIX 1		IN	0				100
		ONFOFF	OUT					
		SW SELECT			INCLUDE			
			CHANNEL		+G.	AIN	-GAIN	OFFSET
	$\rightarrow$				%	%		
DDOGDAM		EXP		L	1	2	3	Н
MIX	MIX 2	MIX 2 ON • OFF SW SELECT	IN	0				100
			OUT					
					INCLUDE			
			CHANNEL		+G/	AIN	-GAIN	OFFSET
			$\rightarrow$			%	%	
міх		EXP		L	1	2	3	Н
	MIX 3		IN	0				100
		UN · OFF	OUT					
		SW SELECT			INCLUDE			

	СН	GEAR	FLAP
	DEVICE	GEAR SW	FLAP SW
DEVICE SELECT			
	OUT	INH • ACT	INH • SYS

TIMER				
	TIMER 1			
Timer Down-T STOP W				
Time				
START				
STOP				

ALUTITUDE	SOUND 1	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
	SOUND 2	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
	SOUND 3	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
	SW SEL			

	SOUND 1	m/s • fps
	SOUND 2	m/s • fps
VIRIOWETER	SOUND 3	m/s • fps
	SW SEL	

TEMDEDATIIDE	ALARM			
TEMPERATURE	INH•(	℃ /°F )		

THRO STICK DIRECTION	REV • NORM
	-

ALARM Т

STICK MODE

DV DATTEDV					
KA-DAITERT	INH•(	V)			

ALARM	DDM	GEAR RA	GEAR RATIO		LER	DELAY	
INH • 10s • 15s • 20s • 30s	KP/M	INH•(	)	INH•(	)	INH•(	)

	VOLT-ALARM		CAPACITY	CAPA-ALARM		
FLIGHTPACK	INH•(	V)	mAh	INH•(	%)	

### XG6 DATA SHEET / GLID

MODEL No.

MODEL NAME

FLIGHT MODE NAME	CRUSE	LAUNCH	LAND
LONG			
SHORT			

\_\_\_\_\_

	I	LAIL		RAIL		ELEV	F	RUDD	(	GEAR	I	FLAP
REVERSE SW	N	ORM REV	Ν	NORM REV	Ν	NORM REV	Ν	NORM REV	Ν	NORM REV	Ν	IORM REV
SUB TRIM												
TRAVEL	Н	%	L	%	D	%	L	%	+	%	U	%
ADJUST	L	%	R	%	U	%	R	%	-	%	D	%
FAIL SAFE												

AILE	PO	S 0	POS 1			
		%		%		
D/ N		%	%			
EVD		%		%		
EAF		%				
FM-AUTO	CRUI	LAUN	LAND	INPUT		

ELEV	PO	S 0	PO	S 1	
		%			
D/K		%	, (		
EVD		%		%	
EAP		%		%	
	CRUI	LAUN	LAND	INPUT	
FINI-AUTO					
RUDD	PO	S 0	PO	S 1	
RUDD	PO	<b>S 0</b> %	PO	<b>S 1</b> %	
RUDD D/R	PO	<b>S 0</b> %	PO	<b>S 1</b> %	
RUDD D/R	PO	<b>S 0</b> % %	PO	<b>S 1</b> % %	
RUDD D/R EXP	PO	<b>\$ 0</b> % % %	PO	\$ 1 % % %	
RUDD D/R EXP	PO	\$ 0 % % % LAUN	PO	\$ 1 % % % % INPUT	

TIMER						
	TIMER 1					
Timer	Down-T STOP W					
Time	10'00"•					
START						
STOP						

		AILE	ELEV	RUDD	
	CRUI				
A.D.T.	LAUN				
	LAND				
TRIM	STEP				
TRIM	TYPE	L.S.T. • NORM	L.S.T. • NORM	L.S.T. • NORM	L.S.T. • NORM

	BRAKE START POSITION		SPOI STICK	$T \rightarrow FRPN$	SPOI	$STICK \to FPAP$		SW SELECT	
				%		%			
BRAKE		EXP		POINT	Г-О	POINT-1	POINT-2	POINT-3	POINT-C
	SPOI STICK $\rightarrow$ ELEV	POI STICK $\rightarrow$ ELEV OFF $\cdot$ ON	IN						
			OUT						

		LFLP(FLAP)	RFLP	LAIL	RAIL	DELAY
САМВ	CRUISE					
SYSTEM	LAUNCH					
	LAND					

мото	SW SELECT					
SYSTEM	HOLD POSITION	%	HOLD DELAY	HIGH ↑	LOW ↓	

	FMOD	AILE	RUDD	FLAP	BRAKE
	CRUISE	%	%	%	%
DIFFERENTIAL	LANCH				
	LAND				



### Data Sheet

			CHANNEL		+G/	AIN	-GAIN	OFFSET
			$\rightarrow$			%	%	
		EXP		L	1	2	3	н
	MIX 1		IN	0				100
		ONFOFF	OUT					
		SW SELECT			INCLUDE			
			CHANNEL		+G/	AIN	-GAIN	OFFSET
PROGRAM MIX MIX 2		$\rightarrow$			%	%		
		EXP		L	1	2	3	Н
	MIX 2	ON • OFF	IN	0				100
			OUT					
		SW SELECT			INCLUDE			
			CHANNEL		+G/	AIN	-GAIN	OFFSET
			$\rightarrow$			%	%	
		EXP		L	1	2	3	Н
	MIX 3		IN	0				100
			OUT					
		SW SELECT			INCLUDE			

	LAND	LAN MO	ICH DE	СН	GEAR
DEVICE SELECT				DEVICE	MOTO SW
		REV.	NORM	OUT	INH • ACT MOT

ALUTITUDE	SOUND 1	m/ft	$\uparrow \boldsymbol{\cdot} \downarrow \boldsymbol{\cdot} \sim$	m/ft
	SOUND 2	m/ft	$\uparrow \cdot \downarrow \cdot \sim$	m/ft
	SOUND 3	m/ft	$\uparrow \cdot \downarrow \cdot \sim$	m/ft
	SW SEL			

	SOUND 1	m/s • fps
VIRIOMETER	SOUND 2	m/s • fps
	SOUND 3	m/s • fps
	SW SEL	

		ALARM	
INH • ( ℃ /°F	TEMPERATURE	°C /°F	)

THRO STICK DIRECTION REV • NORM

RX-BATTERY ALARM

STICK MODE

ALARM
INH • 10s • 15s • 20s • 30s

DDM	GEAR RATIO		PROPEL	LER	DELAY	
	INH•(	)	INH•(	)	INH•(	)
	VOLT-ALARM		CAPACI	ТҮ	CAPA-AI	LARM
	INH•(	V)		mAh	INH•(	%)

## Software Error Screens

### If the Following Messages are Displayed...

If errors occur in transmitter software operation, error displays are shown to indicate the internal error details.

#### Model Data Reading Failure



• Cause

This is displayed if the model data is initialized, and when there are internal memory operation problems.

Response

If the message is repeatedly displayed, please contact your JR sales agent(JR Distributer).

#### This is displayed when the model setting data has not been normally saved.



• Cause

This is displayed if the battery is removed while setting is taking place, and when there are problems in the internal memory.

Response

If the message is repeatedly displayed, please contact your JR sales agent(JR Distributer).

### Repair and After Sales Service

### Be sure to read the warranty carefully

Only if the product is found to be faulty under normal operations, within the warranty period, will we repair the product based on our assessment. The repair will be paid for by the consumer when the damage is due to improper use (crash damage, misuse etc.), or the warrantee period has expired, or without the warranty attached (copies will not be accepted). Note that some damage may not be economical to repair. The scope of the warranty is limited to the Proportional Radio System and excludes aircrafts, engines, accessories and any non JR product. Please note we will not be responsible for any loss of model which was set or recorded by the customer, damage caused by mis-use of the product, nor for any compensation for damage to human life, health or property, nor for any damage incidental to the above. When the warranty period has expired, we will repair the product for cost if requested by the customer, if we judge that the product may be used safely following the repair.

• Please note in advance that the warranty period may vary depending on the JR Sales Agent (JR Distributor) in your country. Please contact them for further details concerning the warranty or After-Sales Service (repair services, purchase of parts and/or the accessories, etc). Please save any important model data on a data sheet or on a SD card, before requesting any repair. The product may be initialized to factory settings during the repair process. We will not be responsible for any damage or loss of data.

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