WFT09S RADIO CONTROL SYSTEM PCMS 4096

PCMS RECEIVER DUAL MCU DUAL ANTENNA

INSTRUCTION MANUAL_{V01}

NOTICE
Read the instruction before operation!

WFLY®

www.wflysz.com

Thank you for purchacing WFLY product!

WFT09S

SERVICE
1.Retailers to provide free maintenance for six months (apart from artificial damage)
2. WFLY retailers will always provide life-long maintance

CATALOGUE

HELICOPTER

SYS SETTING

NORMAL SETTING

ADVANCED

AIRPLANE
SYS SETTING

NORMAL SETTING

ADVANCED

GLIDER
SYS SETTING

NORMAL SETTING

ADVANCED

Contents

Thank you for your attention and support to WFLY radio!

WFLY promises every WFT09S radio control system include the following contents:

1. WFT09S 4096 transmitter

2. WFTRFS RF module

3. Battery holder for transmitter

4. Battery holder for receiver

5. Charger

6. Neckstrap

7. Trainer cable/Data transfer cable

8. Simulator cable

9. WFR09S 9 channel receiver PCMS

10. Switch harness

11. English instruction manual.

WFT09S Contents

1. Transmitter

2. RF module

3. Transmitter battery holder

4. Receiver battery holder

5 Charger

6. Neckstrap

7. Trainer cable/Data transfer cable

8. Simulator cable

9. 9ch receiver

10. Switch harness

11. Lithium power step-down device

12. CD manual

TRANSMITTER

MODEL NO.: WFT09S
MODULATION: PPM, PCMS 1024, PCMS 4096
OUTPUT POWER: ≤100mW
POWER SUPPLY: 9.6-12V
CURRENT DRAIN: 250mA
Band: 2.4GHz

TRANSMITTER FRONT

Antenna
Alarm light
Power light
Buzzer
RF light
Switch C
VC
Switch A
Switch D
Switch F
Trainer switch
Switch B
VA VB
Switch E
VL
VR
Rudder/elevator stick
Neckstrap attachment
Aileron/throttle stick
Elevator trim
Throttle trim
Power switch
Rudder trim
Aileron trim
Menu
Left
Exit
Up
Increase
Right
Decrease
Down
LCD
OK

TRANSMITTER BACK

Handle

RF module

DSC

Charge hole

Battery cover
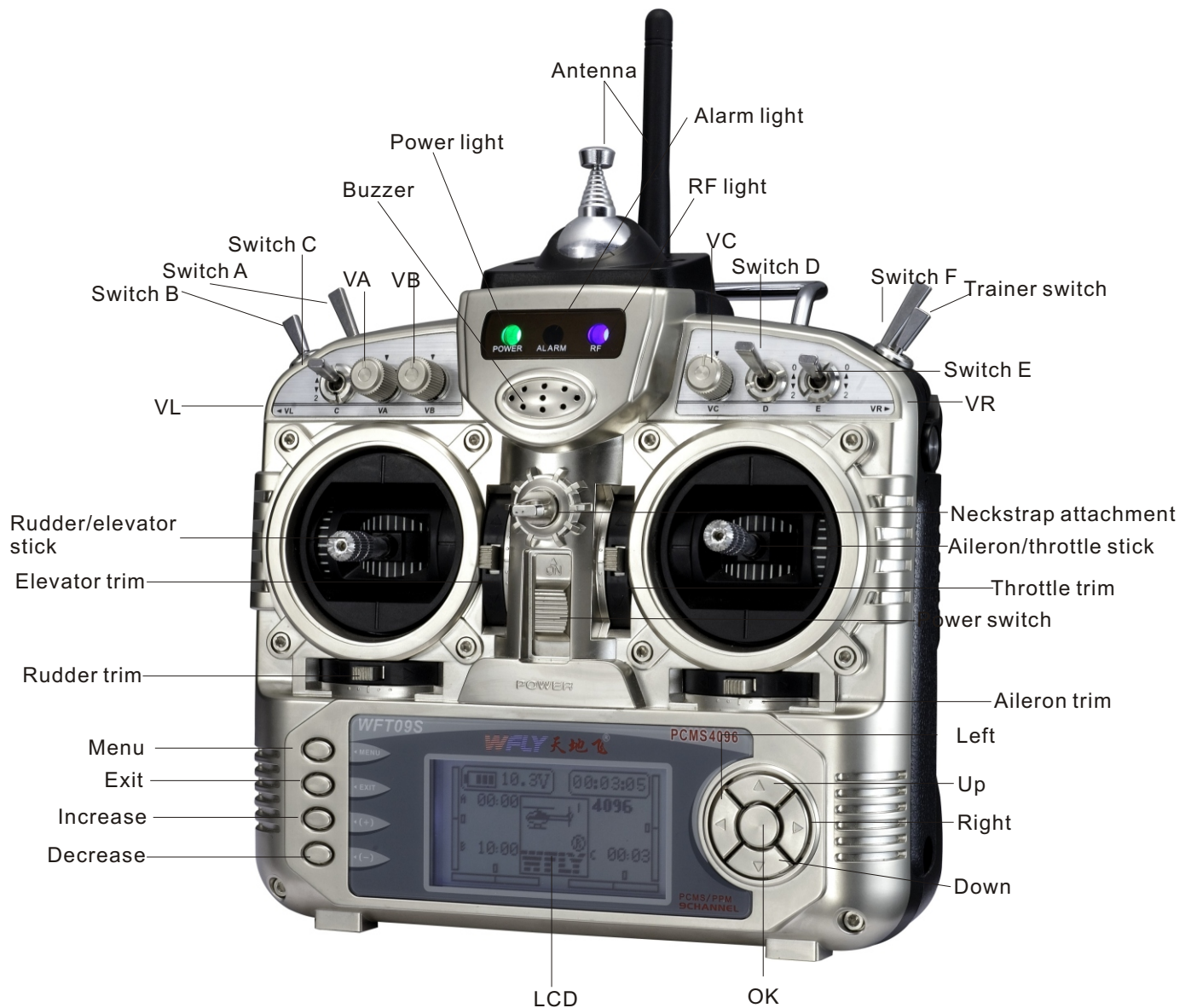
RECEIVER Resolution 4096(with PCMS 4096 modulation)

2.4GHz 9 Channels receiver
Dual MCU, Dual antenna, Resolution 4096 receiver
MODEL NO.: WFR09S
TYPE: 9 CH PPM /PCMS 1024/PCMS 4096
BAND: 2.400-2.483GHz
POWER SUPPLY: 4.8-6V
RECEIVER SENSITIVITY：-97dBm
WEIGHT: 14.8 g
DIMENSION: 44.8mm x27.9mm x16.39mm

WFR09S 9 Channels Receiver (PCMS)

1. AIL：Aileron (Channel 1)-----------------------
2. ELE：Elevator (Channel 2)---------------------
3. THR：Throttle (Channel 3)----------------------
4. RUD：Rudder (Channel 4)-----------------------
5. GYR：Landing Gear/Gyro (Channel 5)---------
6. PIT：Pitch (Channel 6)-----------------------------
7. AUX1：Auxiliary channel 1 (Channel 7)---------
8. AUX2：Auxiliary channel 2 (Channel 8---------
9. Power：Input +4.8-6V-------------------------

(There are 9 rows needles, 3 needles in each row,
from the top needle to the bottom, the 3 needles are PCMS/PPM pulse, +5V and Ground.)
This receiver has Fail safe function.

Characteristic
Can effectively select the best signal
Enhance the reliability
Improve the response speed
Enhance the anti-interference
Increased use of range

Trainer function
Two WFT09S transmitters can transfer data and realize trainer function.

Setting Method :

1).Data transfer function: use Trainer cable/Data transfer cable to
    connect two WFT09S transmitter.
    Select "Send data/receive data" in SYS setting to transfer the data.

2).Trainer function： use Trainer cable/Data transfer cable to connect
    two WFT09S transmitters.
    Insert RF module to the trainer transmitter, student transmitter
    doesn't insert the RF module.
  Pull Trainer switch for student transmitter operating. If any wrong
  operation occurs, trainer pushes trainer switch and student
  transmitter stops sending signal, trainer transmitter controls the
  aircraft.

FLYING SAFETY WARNINGS

Special Symbol Instruction

To use the product safely, please pay attention to the instruction as follows.
Please pay special attention to the symbol as follows:

⚠ **Dangers**：If you use it without proper operation, it is possible to hurt you seriously or may even cause death.

⚠ **Warnings**：If you use it without proper operation, it may make you or others to hurt badly or may even cause death, and it may cause slight hurt or damage to things.

⚠ **Notices**：If you use it without proper operation, it may cause you to hurt slightly or damage things , but it won't hurt you seriously normally.

⚠ **Notices**：Children under 14 must be accompanied and instructed by adults!

⚠ **Notices:** Turn on the transmitter first, then the receiver. When turning off the system, turn off the receiver first, then the transmitter.

⚠ **Notices:** changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Flying Notice(warning) ⊘ **Forbiddance!** ❶ **Obligation!** ⚠ **Warning!**

Do not fly at night , in rain day ,or in strong wind, which will damage the device or plane. This device is not water-proof.

Please check every servo works properly and eliminate any disturbing signals before you play it.

FEATURES

Computerized transmitter

High Speed, High Resolution, optimized 2.4GHz PCMS 4096

Convenient stick adjustment, make you free usage

Tree-like Multilayer Menu, human oriented design

Excellent white LED backlight, less visual tiredness

132 X 64 FSTN LCD, easy operating buttons

85 model memory

10 point curve(in any X and Y direction edition)

Easy complex curve adjustment

Different Sub trim adjustment sound, easy identify the center

Data transfer function, easy teaching and learning

Multi-function, intuitive data setting, easy checking

Tightness and length of the control stick can be adjusted freely

Excellent touch of the stick movement

3 independence timer, all can be set to count down or increment

Buttons

MENU
Menu button brings you to the function list of the transmitter.

EXIT
Exit button is to back the previous menu or exit edit.

+
This button is to increase the value. If you press it for a while, the increasing speed will be faster.

-
This button is to decrease the value. If you press it for a while, the decreasing speed will be faster.

Cursor buttons
Move the cursor.

OK
The button in the middle of the direction buttons is the OK button. The function is as follows:
To enter the function list.
To enter the edit function.
To back the default for long time press.

WFLY 2.4G 4096 PCMS Operation instructions

2.4G system can automatically recognize WFLY PCMS and PPM.

1. Code matching

A. Press Set to start the receiver. The orange LED flashes, indicating the receiver waits for the code matching signal.

Flash — The same setting for WFR07S and WFR09S

B. Hold SET of the module, then press Power to start the transmitter. Press SET again to enter the code matching function. The orange LED of the receiver lights up. Press SET and hold until the orange LED flashes, indicating the receiver enters the code matching status.

Fail safe set   Code matching
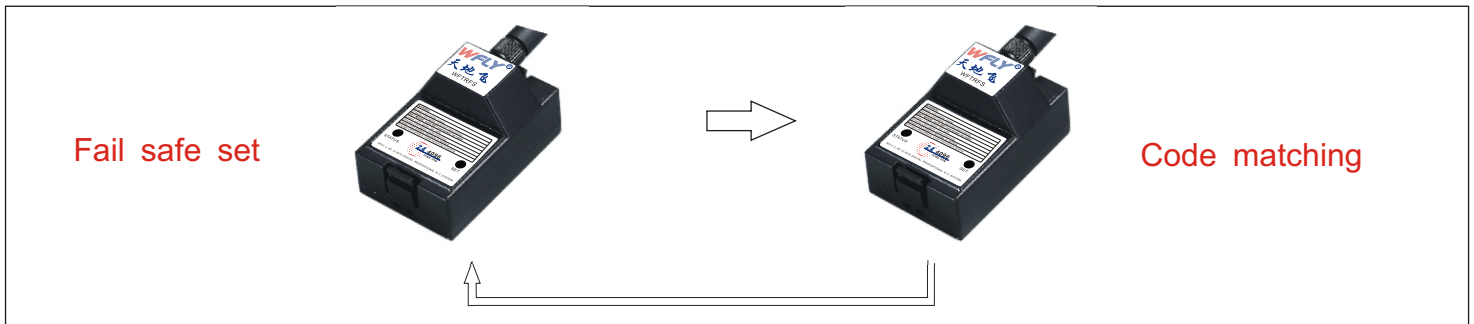
C. If the code matches successfully, the green LED of the transmitter lights up. The LED of the receiver is off.

2. Operation Instructions

The receiver is on. The red LED lights up. Wait for the powering up of the transmitter.

The receiver is on. The green LED of the transmitter lights up. The LED of the receiver is off.
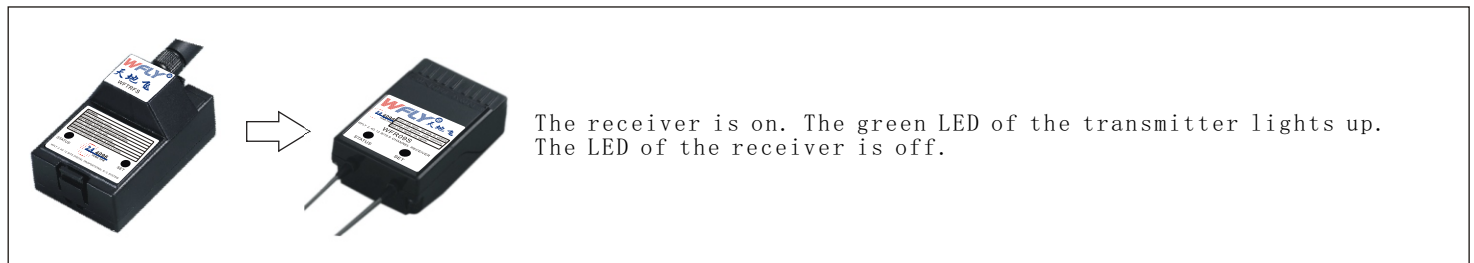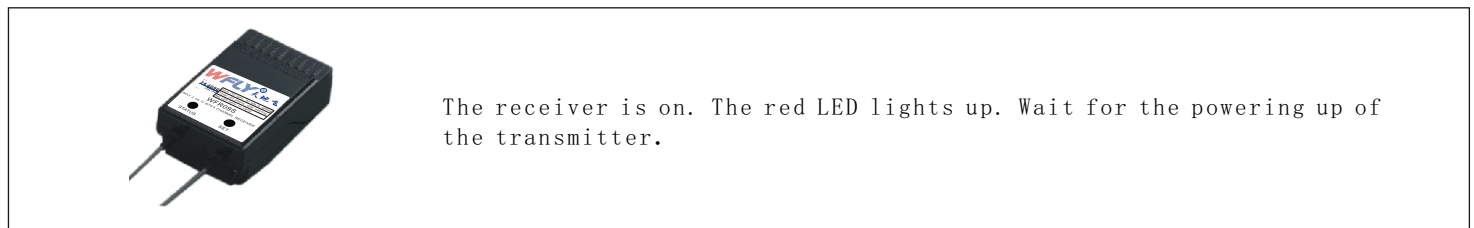
3. Fail Safe Setting

A. Power on receiver.

B. Press Set of the module then start transmitter and hold SET for 2 seconds. The green LED flashes, indicating the transmitter enters the code matching status.

C. The Green LED of receiver flashes, the output data of transmitter is the data of Fail Safe Setting of the receiver.

D. Due to the heavy interference or out of normal range, the receiver enters FailSafe. The Red LED of the receiver lights when it is in Fail Safe status.

HELICOPTER

Press Menu and turn on the transmitter to enter SYS SETTING.
Select MODEL SETTING, press OK button to select the model
type.
Restart the transmitter after setting.

Editing mode and function introduction

1. Opening Screen

Turn on the power switch, the LCD displays as follows.

Voltage — Start time
Timer A — Model type
Timer B — Timer C
Throttle trim display — Elevator trim display
Rudder trim display — Aileron trim display

The opening screen displays the voltage, timer, model, aileron, throttle, elevator and rudder state.
Note: Press EXIT you can see the model name.

Model name

2. Menu Screen
There are "Normal setting", "SYS setting", "Advanced".
A. Normal setting
Turn on the transmitter, press the menu button, the LCD displays as follows.

NORMAL SETTING
① MONITOR
② DUAL RATE & EXPONEN
③ SERVO REVERSE
④ END POINT

Setting method:
1. Use direction button to select the editing part, use up/down buttons to select function item. Left/right direction button to turn page.
2. Press OK button to enter submenu. The submenu function is in the next chapter.
3. Press EXIT button to back previous menu and the data is set automatically.

1. MONITOR
2. DUAL RATE & EXPONENTIAL SETTING
3. SERVO REVERSE
4. END POINT
5. SUB TRIM
6. SWASH PARAM SETTING
7. AUXILIARY CHANNELS
8. THROTTLE CURVE SETTING
9. PITCH CURVE SETTING
10. REVOLUTION MIXING
11. TRIM STEP SETTING
12. THROTTLE CUT SETTING
13. FLY MODEL SWITCH
14. THROTTLE HOLDING SETTING
15. FAIL SAFE
16. TIMER
17. ADVANCED
18. LANGUAGE

B. SYS SETTING

Press Menu and turn on the power switch, the LCD displays as follows.
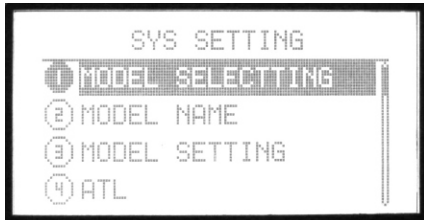
```
     SYS SETTING
① MODEL SELECTTING
② MODEL NAME
③ MODEL SETTING
④ ATL
```

1. MODEL SELECTING
2. MODEL NAME
3. MODEL SETTING
4. ATL
5. MODULATION SETTING
6. SWASH SELECT
7. STICK SETTING
8. ADJUSTMENT
9. REST SETTING
10. SEND DATA
11. RECEIVE DATA
12. SOUND
13. CONTRAST SETTING
14. ENGINEER MODEL
15. ABOUT
16. LANGUAGE

Setting method:

1. Use direction button to select the editing part,use up/down buttons to select function item. Left/right direction button to turn page.

2. Press OK button to enter submenu. The submenu function is in the next chapter.

3. Press EXIT button to back previous menu and the data is set automatically.

C. ADVANCED

1. Enter "NORMAL SETTING", use right direction button to turn page, select "ADVANCED".
Press OK button to enter.

Setting method:

```
      ADVANCED
① GYRO SENS SETTING
② THROTTLE HOVERING S
③ PITCH HOVERING SETT
④ HI/LO PIT SETTING
```

1. Use direction button to select the editing part,use up/down buttons to select function item. Left/right direction button to turn page.

2. Press OK button to enter submenu. The submenu function is in the next chapter.

3. Press EXIT button to back previous menu and the data is set automatically.

SYS SETTING

1.Model selectting

SYS SETTING
① MODEL SELECTTING
② MODEL NAME
③ MODEL SETTING
④ ATL

MODEL SELECTTING

MODEL1 [HeliMODE] PCMS

There are 85 helicopter models. You can select any one to set.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**Model selecting**", OK button is
to enter editing.

Steps:

1. Use up/down direction button to select the model.
2. Press OK button to select.
3. Press EXIT after setting.

2. Model name

This function is to make new names by users.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**Model name**", OK button is to
enter editing.

Steps:

1. You can edit the underlined letter.
2. Press OK button to choose the word you like.
3. Press EXIT after setting.

3. Model setting

You can select the model type. There are three type: HELI, ACRO, GLID.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**Model setting**", OK button is to enter editing.

Steps:

1. Use up/down direction button to select the model type.
2. Press OK button to confirm.
3. Press EXIT after setting.

4. ATL

Adjustable travel limit (ATL) makes throttle trim effective only at low throttle, disabling the trim at high throttle. This prevents pushrod jamming due to idling trim changes. This function defaults to ON. If you are not using channel 3 for throttle, you may want trim operation the same as on all other channels. To do so, set ATL to OFF.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**ATL**", OK button is to enter editing.

Steps:

1. Use direction buttons to select the editing part.
2. Press +/- button to set ATL function.
3. Press EXIT after setting.

5.Modulation setting

Because of the different receiver modulation PPM/PCMS1024 /2.4G PCMS4096, the transmitter should be accordance with the receiver modulation.
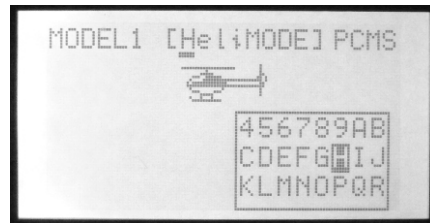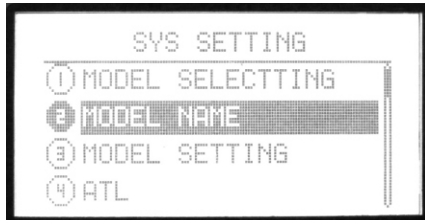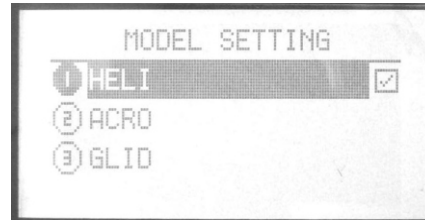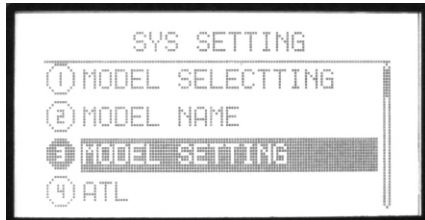
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**Modulation setting**", OK button is to enter editing.

Steps:

1. Use direction buttons to select the editing part.
2. Press OK button to confirm. Restart the transmitter and it works.

6.Swash select

```
      SYS SETTING
  ③ MODEL SETTING
  ④ ATL
  ⑤ MODULATION SETTING
  ⑥ SWASH SELECT
```

```
 Swash:    3CH120
             A: PIT
      B      B: AIL
 120°  ⟨ ⟩C C: ELE
      A
```

```
 Swash:    3CH140
             A: PIT
      B      B: AIL
 140°  ⟨ ⟩C C: ELE
      A
```

```
 Swash:    3CH90
             A: PIT
           B: AIL
 90°A ⊕ B  C: ELE
      C
```

```
 Swash:    4CH90
      D      A: PIT
           B: AIL
 90°A ⊕ B  C: ELE
      C      D: AUX3
```

```
 Swash:    NORMAL
```

```
 Swash:    2CH180
             A: PIT
             B: AIL
 180°  ⟨ ⟩
      A   B
```

There are 6 kinds of swash. You can select the swash
you preferred. If you use 120 degree CCPM helicopter, the servos
will realize mix function automatically. Please select the swash
according to your helicopter swash type.
1 servo (not CCPM, normal helicopter)
2 servos (180 degree)
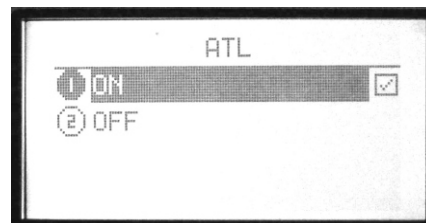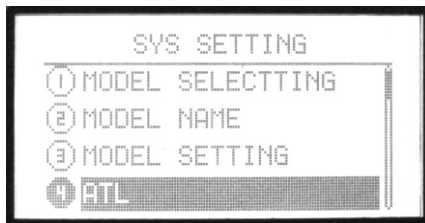3 servos (90, 120, 140 degree)
4 servos (90 degree)

Setting Method:
Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**Swash select**", OK button is
to enter editing.
Steps:
1. Use direction button to select the editing part.
2. Press +/- button to choose the swash type.
3. Press EXIT after setting.

7.Stick setting

```
        SYS SETTING
 ③MODEL SETTING
 ④ATL
 ⑤MODULATION SETTING
 ⑥SWASH SELECT
```

```
        MODEL1
     2         3
  4 ⇔        1 ⇔
```

```
        MODEL2
     3         2
  4 ⇔        1 ⇔
```

```
        MODEL3
     2         3
  1 ⇔        4 ⇔
```

```
        MODEL4
     3         2
  1 ⇔        4 ⇔
```

There are 4 kinds of model, you can use up/down direction button to select the model you preferred.

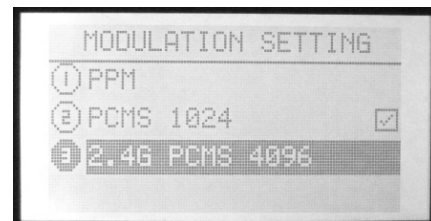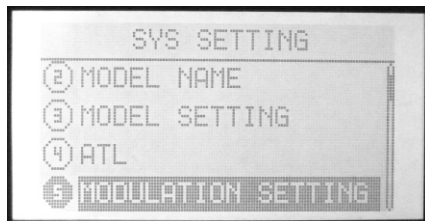1-aileron
2-elevator
3-throttle
4-rudder

Setting Method:
Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**Stick setting**", OK button is
to enter editing.

Steps:
1. Use direction button to select the editing part.
2. Press up/down button to choose Stick mode.
3. Press EXIT after setting.

8.Adjustment

This function is to set the central, high and low point of four sticks when users changed the mode I or II by themselves.
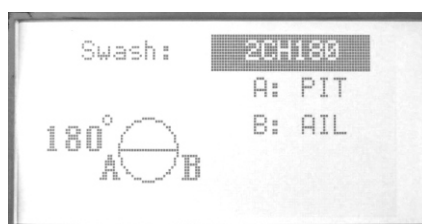
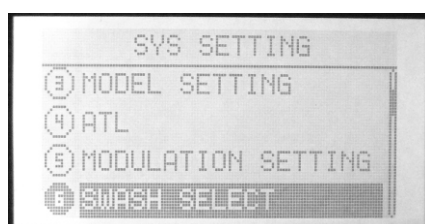**Setting Method:**

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**ADJUSTMENT**", OK button is to enter editing.

Steps:

1. Use direction button to select the editing part. Take the aileron adjustment for example.

2. Make the stick in the mid-point location. Press OK button to select any stick you want to adjust.

3. Select into the Figure 2, when the "center" highlights, press the "ok" button directly (the mid-point has been adjusted), then enter the high adjust.

4. The "high" highlights, take the stick gently in the right side (throttle /elevator in the top, aileron / rudder in the right),press "ok" button (the max adjust is OK), enter the low adjustment.

5.The "low" highlights, take the stick gently in the left side (throttle /elevator in the bottom, aileron / rudder in the left),press "ok" button (the min adjust is OK).

6. Press OK or RESET to confirm the record or reset.

7. If the record is wrong, press OK will back to step 3.

9.Rest setting
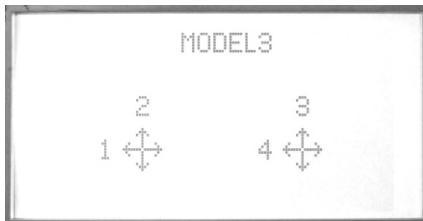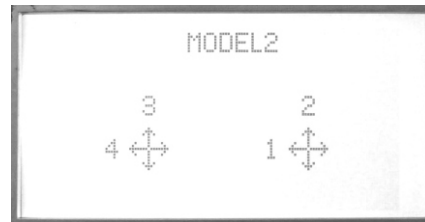

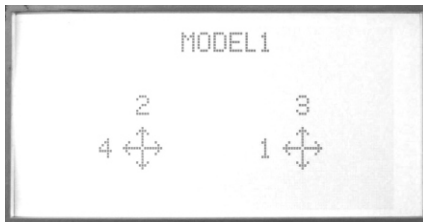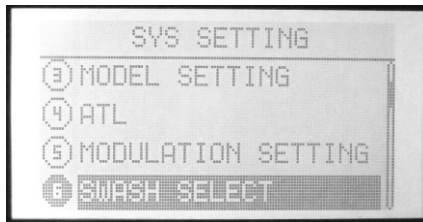This function is to back default.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**Rest setting**", OK button is
to enter editing.

Steps:

1. Use direction button to select the editing part.
2. Press +/- button to back default.
3. Press EXIT after setting.

10. Send data

```
      SYS SETTING
  (7) STICK SETTING
  (8) ADJUSTMENT
  (9) REST SETTING
  (10) SEND DATA
```

```
      MODEL SELECTTING

  MODEL1 [HeliMODE] PCMS
```

```



      Sending ...
```

```
      MODEL SELECTTING

  MODEL1 [HeliMODE] PCMS
```

```



      Power down!
```

Two transmitters (WFT09S) can copy data by a trainer cable/data transfer cable. This function together with the next function "Receive data" can realize the data copy.

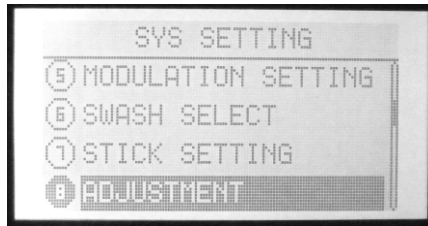### Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**Send data**", OK button is
to enter editing.

Steps:

1. Select the model data you want to send out.
2. Press OK to send.

10.Receive data

Two transmitters (WFT09S) can copy data by a trainer cable/data transfer cable. This function together with the previous function "Send data" can realize the data copy.
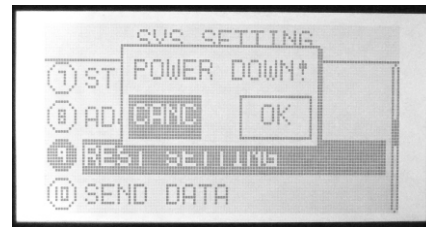
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**Receive data**", OK button is to enter editing.

Steps:

1. Press OK to receive data.
2. Restart the transmitter after receiving the data and it works.

12.Sound

This function is to select the sound ON and OFF.

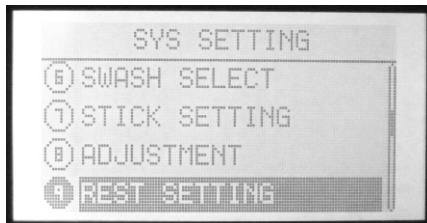**Setting Method:**

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "SOUND", OK button is
to enter editing.

Steps:

1. Use +/- button to select ON and OFF.
2. Press OK button to confirm.
3. Press EXIT after setting.

13.Contrast setting

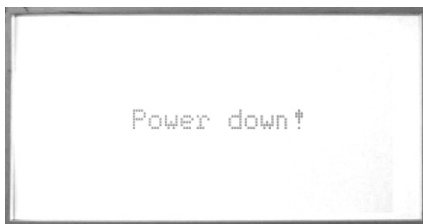This function is to adjust the LCD brightness by increasing or decreasing the contrast value.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**Contrast setting**", OK button is to enter editing.

Steps:

1. Use +/- button to increase or decrease the value.
2. Press OK button for a while is to back default.
3. Press EXIT after setting.

15.About

This item shows the Version of WFLY radio.

16.Language

This function is to select the language. There are 5 language

selectable.For example, the selection is as shown in the picture.

Curve setting

1. Setting introduction
Curve setting is one of the functions of WFT09. We will make detail description here. You can refer to this detail description for the other functions which relates to the curve setting.
There are two kinds of curve setting mode: normal setting and advanced setting.
Normal setting: 7 points curve setting. You can set the curve by set the 7 points value.
Advanced setting: you can add or delete the curve point.
Advanced curve can be added at most 10 points, at least 2 points. You can not only set the value of each point, but also the position of each point.

2. Setting method
Turn on the transmitter, press menu, find "More setting", select "curve setting".
There are two modes: normal, advanced.

Normal curve setting: 7 points curve setting. You can edit the curve point in the left pane.
1. Use left/right direction button to select the editing point. The curve point is marked by a dashed line.
2. Use +/- button to set the value. Press OK button for a while can back to default. You can set the 7 points.
3. Press EXIT after setting.

Advanced curve setting: User can add or delete the curve point. D/R curve has 10 points and every point can be set. Press +/- button for seconds can add/delete curve point. It can at most add to 10 points and delete to 2 points.
When selecting one point, use left/right button to choose the point you want to edit, press OK button to enter editing.
Active the cursor, use up/down direction button to set the left value in the pane, use left/right direction button to set the right value in the pane.
The black cursor is the editing part, which is marked by a dashed line.

NORMAL SETTING(helicopter)

1. MONITOR

Monitor shows the servos' movement situation.
In PCMS, this function is to describe the 9 channels output.
In PPM, this function is to describe the first 8 channels output.

Setting Method:

Press menu button, enter system setting, the first function is the monitor.

2. DUAL RATE & EXPONENTIAL SETTING

(1). AIL

```
NORMAL SETTING
① MONITOR
❷ DR RATE & EXPONENTI
③ SERVO REVERSE
④ END POINT
```

Servo ─── AIL
Switch ─── SWT: A - 0   [0]
Dual rate ─── DR: +100.0% / +100.0%
Exponential ─── EX: 0.0%   / 0.0%
Curve point ─── +100.0% / +100.0%
                -100.0% / -100.0%
                0.0%   / 0.0%

Curve picture
(please refer to Page 27)

0.0%
10.0%

(2). ELE

```
ELE
SWT: A - 0     [ 0 ]
DR: +100.0% / +100.0%
EX: 0.0%    / 0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%    / 0.0%
```

+0.9%
+0.9%

(3). RUD

```
RUD
SWT: A - 0     [ 0 ]
DR: +100.0% / +100.0%
EX: 0.0%    / 0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%    / 0.0%
```

+8.7%
+8.7%

Dual rate is to adjust aileron, elevator and rudder travel range. The range is between 0%-120%.
Exponential setting is to adjust aileron, elevator and rudder sensitivity when the sticks are around the middle. The range is between -100% to +100%.

Setting Method:

1. Select channel
   Aileron, elevator and rudder are selectable. Press +/- buttons to select channel, OK button to finish setting.
2. Set the switch and its position(0,1,2)
   Press direction button to select "SWT", edit it. +/- buttons can select function switch(A-F).
   After selecting the function switch, press right direction button to enter the switch position setting, use +/- buttons to set.
3. Set dual rate
   Press direction button to select "D/R", edit it. Edit one or two parameter.
   +/- buttons can increase or decrease the value.
   Press the OK button is to back default.
4. Set exponential
   Press direction button to select "EX". Exponential can adjust aileron, throttle and rudder sensitivity as the stick at the middle.
5. Set curve point (normal/advanced)
   The box under "EX" shows the curve points.
   Select "Curve setting" in More setting function list.
   Please refer to Page 27 for detail curve setting.
6. Press EXIT after all the values are finished setting.

3. SERVO REVERSE

Direction (Rev-reverse, Nor-normal)

```
NORMAL SETTING
① MONITOR
② DUAL RATE & EXPONEN
③ SERVO REVERSE
④ END POINT
```

Channel

```
AIL  Rev  PIT   Nor
ELE  Nor  AUX1  Nor
THR  Nor  AUX2  Nor
RUD  Nor  AUX3  Nor
GYR  Nor
```

This function is to change the direction of the servos movement.

Setting Method:

Use up/down button to select **Servo reverse**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to switch the servo movement direction.
3. Press EXIT after setting.

4. END POINT

Channel   Side Value

```
   NORMAL SETTING
 ① MONITOR
 ② DUAL RATE & EXPONEN
 ③ SERVO REVERSE
 ④ END POINT
```

```
 AIL   L 100.0%   R 100.0%
 ELE   D 100.0%   U 100.0%
 THR   L 100.0%   H 100.0%
 RUD   L 100.0%   R 100.0%
 GYR   L 100.0%   H 100.0%
```

It is to adjust the end of individual servo's travel. The range is from 0% to 120%.

Setting Method:

Use up or down button to select **End point**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to set the travel value. Press OK for a while backs to default.
3. Press EXIT after setting.

5. SUB TRIM

Channel   Value

```
      NORMAL SETTING              AIL      0
  ⑤ SUB TRIM                      ELE      0
  ⑥ SWASH PARAM SETTING           THR    H 4
  ⑦ AUXILIARY CHANNELS            RUD    L 2
  ⑧ THROTTLE CURVE SETT           GYR      0
```

High/Low

Sub trim makes small changes or corrections to the neutral position of each servo. Range is -120 to +120, default setting is 0.

We recommend that you center the digital trims before making Sub trim changes, and that you tryto keep all of the Sub trim values as small as possible. Otherwise, when the Sub trims are large values, the servo's range of travel is restricted on one side.

Setting Method:

Use up or down button to select Sub trim, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to set the trim value. Press OK for a while backs to default.
3. Press EXIT after setting.
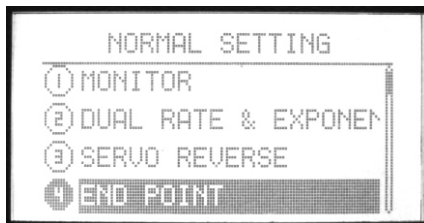
6. SWASH PARAM SETTING

```
NORMAL SETTING
⑤ SUB TRIM
⑥ SWASH PARAM SETTING
⑦ AUXILIARY CHANNELS
⑧ THROTTLE CURVE SETT
```

```
Swash:      3CH120
          AIL   +87.0%
  B
  A   C   ELE   +60.1%
  120°
          PIT   +60.0%
```
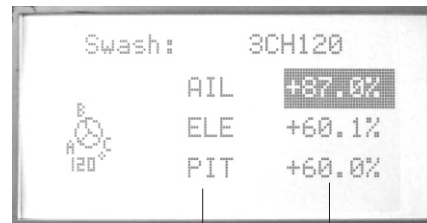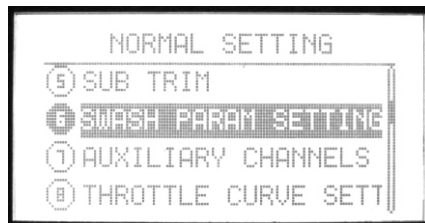
Effection direction   Value

This function is to adjust the aileron, elevator and pitch travel range of swash mixing mode.

Setting Method:

Use up or down button to select **Swash param setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set the travel. Press OK button for a while is to back default(60%).
3. Press EXIT after setting.

7. AUXILIARY CHANNELS SETTING

Channel   Switch   Direction

```
      NORMAL SETTING
 ⑤ SUB TRIM
 ⑥ SWASH PARAM SETTING
 ⑦ IXILIARY CHANNELS S
 ⑧ THROTTLE CURVE SETT
```

```
  CH5   E  Rev

  CH7   VA Nor
  CH8   VB Nor
  CH9   VC Nor
```

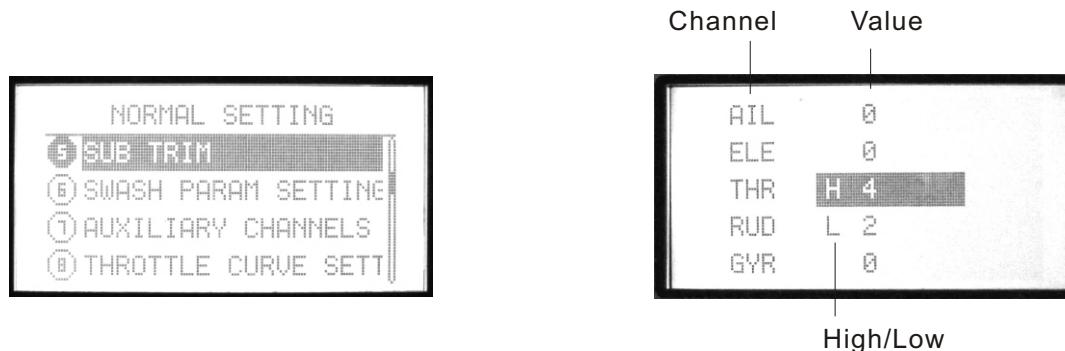This function is for channel 5 to channel 9 function setting.

Setting Method:

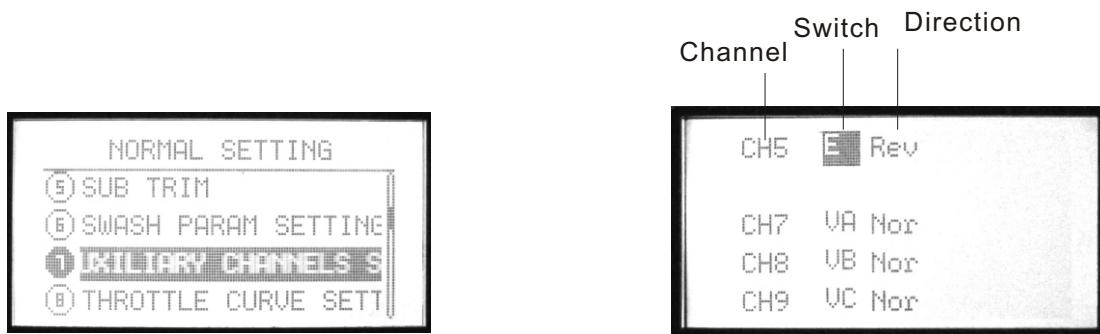Use up or down button to select Swash param setting, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set the switches or knobs. The switches can be set from A to F, the knobs can be set as VA, VB, VC, VL, VR or none(-).
3. Use left or right direction button to set normal or reverse direction of every channel.
4. Press EXIT after setting.

8. THROTTLE CURVE SETTING

```
       NORMAL SETTING
 (5) SUB TRIM
 (6) SWASH PARAM SETTINE
 (7) AUXILIARY CHANNELS
 (8) HROTTLE CURVE SETT
```

Current flight mode

```
      THR
      NORM  [NORM]
 DR:+100.9% /+100.0%
 EX:0.0%   /0.0%
 +100.0% / +100.0%
 -0.5%   / 0.0%
 +50.0% / +50.0%
                 +44.7%
                 +44.8%
```

Flight mode
Dual rate

Curve point

Curve picture
(Please refer to Page 27)

Throttle curve, together with the throttle stick, can be adjusted properly to maximize engine performance at a particular pitch setting.
There are two kinds of curve setting, normal (7 points curve), advanced (2-10 points curve), the range is between 0%-120%. The transmitter can set the following curves:
NORM, IDLE1, IDLE2, IDLE3.

Normal curve is based on hovering, to maximize engine performance at a particular pitch setting.
Idle curve is for engine proper work in a 3D flight, with a good match between throttle and pitch.

Setting Method:

Use up/down button to select **Throttle curve setting**, OK button
is to enter editing.

Steps:

1. Flight(NORM IDLE1 IDLE2 IDLE3)
    Use direction buttons to select editing part. Use +/- button to
   select one curve.

2. Set Dual rate
    Use direction button to select "D/R" and edit (one or two values
    can be set separately
    or together). Press +/- button for seconds can increase or delete
    the value. Press OK button for seconds is to back default(60%).

3. Curve point setting(Normal/Advanced)
    The below pane shows the points curve.
    Select "Curve setting" in "SYS setting", choose the curve.
    For detail curve setting method please refer to Page 27.

4. Press EXIT after setting.

9. PITCH CURVE SETTING

Flight mode
Dual rate
Curve point

Curve picture
(Please refer to Page 27)

Pitch curve, together with the throttle stick, can be adjusted properly to maximize engine performance at a particular pitch setting.
There are two kinds of curve setting, normal (7 points curve), advanced (2-10 points curve), the range is between 0%-120%.
The transmitter can set the following curves:
NORM, IDLE1, IDLE2, IDLE3.

Normal curve is based on hovering, to maximize engine performance at a particular pitch setting.
Idle curve is for engine proper work in a 3D flight, with a good match between throttle and pitch.
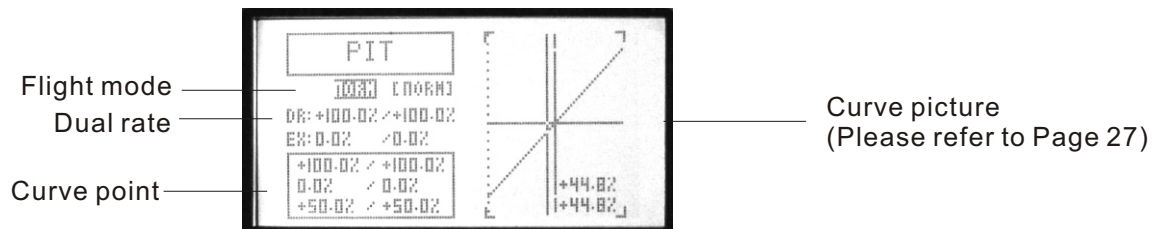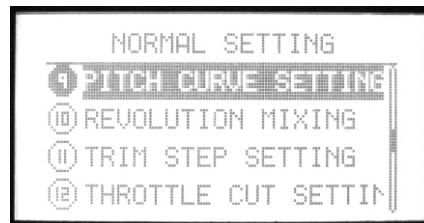
Setting Method:

Use up/down button to select **PITCH CURVE SETTING**, OK button is to enter editing.

Steps:

1. Flight(NORM IDLE1 IDLE2 IDLE3)
   Use direction buttons to select editing part. Use +/- button to select one curve.

2. Set Dual rate
   Use direction button to select "D/R" and edit (one or two values can be set separately
   or together). Press +/- button for seconds can increase or delete the value. Press OK button for seconds is to back default(60%).

3. Curve point setting(Normal/Advanced)
   The below pane shows the points curve.
   Select "Curve setting" in "SYS setting", choose the curve.
   For detail curve setting method please refer to Page 27.

4. Press EXIT after setting.

10. REVOLUTION MIXING

This curve mix adds opposite rudder input to counteract the changes in torque when the speed and collective pitch of the blades is changed.
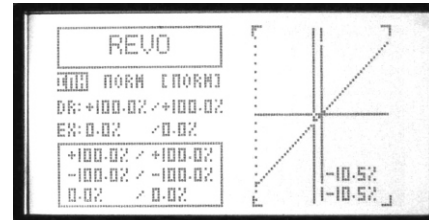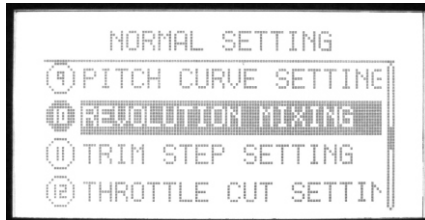
Setting Method:

Use up/down button to select **Revolution mixing**, OK button is to enter editing.

Steps:

1. Flight(NORM IDLE1 IDLE2 IDLE3)
   Use direction buttons to select editing part. Use +/- button to select one curve.
2. Set Dual rate
   Use direction button to select "D/R" and edit (one or two values can be set separately or together). Press +/- button for seconds can increase or delete the value. Press OK button for seconds is to back default(60%).
3. Curve point setting(Normal/Advanced)
   The below pane shows the points curve.
   Select "Curve setting" in "SYS setting", choose the curve.
   For detail curve setting method please refer to Page 27.
4. Press EXIT after setting.

11. TRIM STEP SETTING
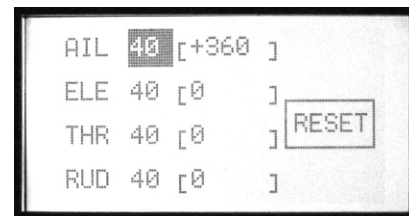
```
NORMAL SETTING
(9)PITCH CURVE SETTING
(10)REVOLUTION MIXING
(11)TRIM STEP SETTING
(12)THROTTLE CUT SETTIN
```

```
AIL  40 [+360 ]
ELE  40 [0    ]
THR  40 [0    ]  RESET
RUD  40 [0    ]
```

This function is to change the rate at which the trim moves when the TRIM LEVER is activated. The range is from 1 to 250. Generally larger trim steps are for models with larger control throws or for first flights to ensure sufficient trim to properly correct the model. Smaller trim steps are later used to allow very fine adjustments in flight.
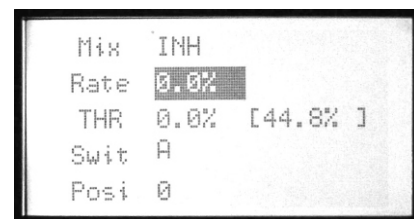
Setting Method:

Use up/down button to select **Trim step setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to adjust the size of the step,
3. Repeat as desired for other channels.
3. Press EXIT after setting.

12. THROTTLE CUT SETTING

```
      NORMAL SETTING
(9)PITCH CURVE SETTING
(10)REVOLUTION MIXING
(11)TRIM STEP SETTING
(12)THROTTLE CUT SETTIN
```

```
Mix  INH
Rate 0.0%
THR  0.0%  [44.8% ]
Swit A
Posi 0
```

This function is to shut off the engine at the end of a flight. The engine can be stopped with one touch of any switch, eliminating the need to move the trim to kill the engine and then readjust prior to each flight. The helicopter THR CUT includes an ON/OFF throttle position (normally a little above idle). You must move the THROTTLE STICK back below the set point before the THR-CUT function can be reset, to avoid sudden engine acceleration.

Setting Method:

Use up/down button to select **Throttle cut setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to turn on/off throttle cut function.
3. Use +/- button to set the throttle rate and trim (range is between +45% to -45%).
4. Use +/- button to set the position.
5. Press EXIT after setting.

13. FLY MODEL SWITCH

Fly mode   Switch Fly mode statue

```
NORMAL SETTING
⑬ FLY MODEL SWITCH
⑭ THROTTLE HOLDING SE
⑮ FAIL SAFE
⑯ TIMER
```

```
IDLE1 F OFF
IDLE2 F OFF
IDLE3 E INH
HOLD  C      NORMAL
```

This function is to select the flight mode.

Setting Method:

Use up/down button to select **Fly model switch**, OK button is to enter editing.

Steps:
1. Use direction buttons to select editing part.
2. Use +/- button to set every fly model.
3. Use +/- button to set fly model ON/OFF position.
4. Press EXIT after setting.

14. THROTTLE HOLDING SETTING

```
NORMAL SETTING
⑬ FLY MODEL SWITCH
⑭ THROTTLE HOLDING SE
⑮ FAIL SAFE
⑯ TIMER
```

```
Mix      INH
Posi     0.0%

RUD MIX  INH
Offset   0.0%
```

This function can make the throttle servo operating at a low speed position at the end of a flight. The range is between -75% and +75%.
User can set the mix function with rudder under the throttle holding state and the mix rate (offset).
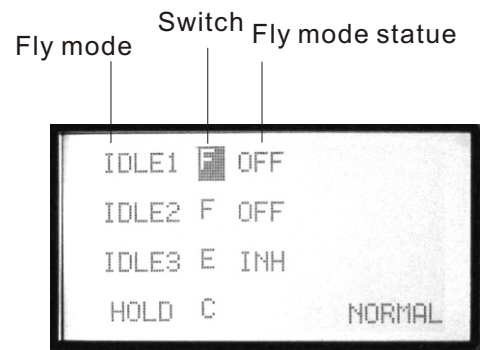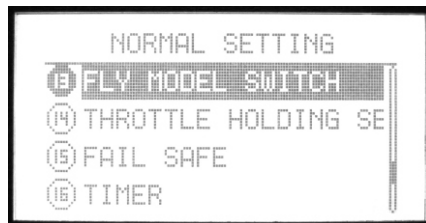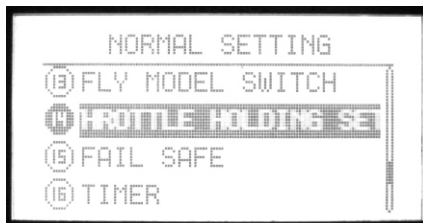This function switch can be found in "**Fly model switch**".

Setting Method:

Use up/down button to select **Throttle holding setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit the mix funtion.
3. Use +/- button to set the throttle holding position.
4. Use +/- button to active or inhibit the rudder mix.
5. Use +/- button to set the mix rate (offset). Press OK button for seconds can back to default.
6. Press EXIT after setting.

15. FAIL SAFE

```
        NORMAL SETTING
  ⑬ FLY MODEL SWITCH
  ⑭ THROTTLE HOLDING SE
  ⑮ FAIL SAFE
  ⑯ TIMER
```

```
   AIL     0.0%              GYR     0.0%
   ELE     0.0%              PIT     0.0%
   THR    -25.0%             AUX1    0.0%
   RUD     0.0%              AUX2    0.0%
   GYR     0.0%              AUX3    0.0%
```

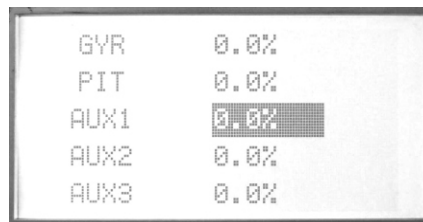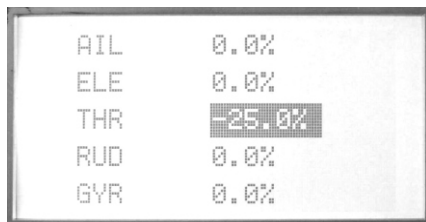This function is to set responses in case of loss of signal or low RX battery.

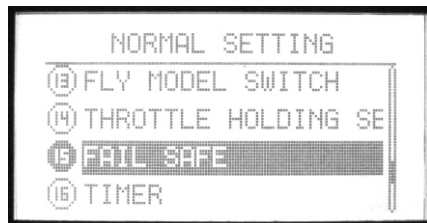### Setting Method:

Use up/down button to select **Fail safe**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to select "hold" or "0.0%"
3. Press OK button to confirm the current parameter.
4. Press EXIT after setting.

16. TIMER

```
   NORMAL SETTING
⑬FLY MODEL SWITCH
⑭THROTTLE HOLDING SE
⑮FAIL SAFE
⑯TIMER
```

```
TIMER A
MM 10 SS 00
MODEL   INC
CTRL  SwitC
Posi  NULL
```

The flight time of every helicopter is different according to the different tank of fuel, engine, ESC, etc. Timer function can alarm you to land before the fuel lacks.
The transmitter can set 3 timers (A, B, C). The longest time can be set as MM99SS59. The countdown timer can alarm user before 10 minutes. The alarm will become 2S/1S from 1S/1S in the last 10 seconds. When the countdown timer is 0, the time will add up.
The timer can be seen in the opening screen. Any switch can be set to control the begin and stop of the time.
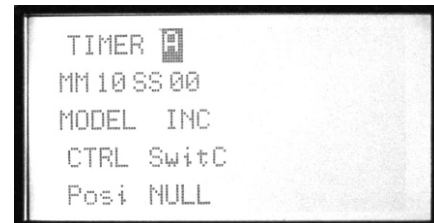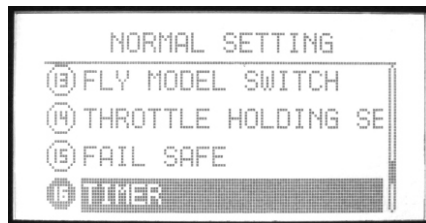
Setting Method:

Use up/down button to select **TIMER**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Set timer. WFT09S can set 3 timers (A, B, C).
3. Use +/- button to set MM..SS... Press OK button for seconds can back to default.
4. Use +/- button to set model.
5. Use +/- button to set control(CTRL).
6. Use +/- button to set the position which can active this function.
7. Press EXIT after setting.

18. LANGUAGE

This function is to select the language, Simplified Chinese and English can be selected.

17. ADVANCED

```
┌─────────────────────────────┐
│     NORMAL SETTING          │
│ ⑮ FAIL SAFE                 │
│ ⑯ TIMER                     │
│ ⑰ ADVANCED                  │
│ ⑱ LANGUAGE                  │
└─────────────────────────────┘
```

To realize an idea fly, there are 21 advanced function in ADVANCED.
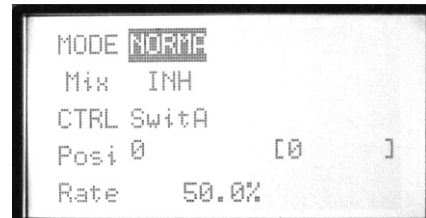
Setting Method:

Use up/down button to select **ADVANCED**, OK button is to enter editing. +/- button can turn page.
About each advanced functions please read the following pages.

ADVANCED FUNCTION INTRODUCTION

(1). GYRO SENS SETTING

```
        ADVANCED
① GYRO SENS SETTING
② THROTTLE HOVERING S
③ PITCH HOVERING SETT
④ HI/LO PIT SETTING
```

```
MODE NORMA
  Mix  INH
  CTRL SwitA
  Posi 0        [0      ]
  Rate   50.0%
```

User can adjust the gyro sensitivity by transmitter,
AVCS gyro (GY) and normal gyro (STD).
Gyro sensitivity switch plug should plug in the fifth channel
of receiver. The auxiliary channel CH 5 won't have any
function now. User can set sensitivity switch from switch A to F,
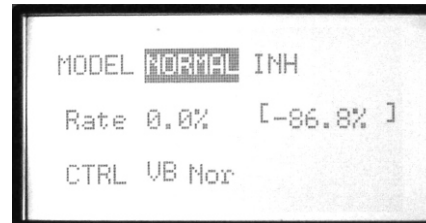and also fly model (NORM, IDLE1,2,3).

Setting Method:

Use up/down button to select **GYRO sens setting**, OK button
is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set fly model at "MODE".
3. Use +/- button to active or inhibit "Mix". Press OK button
   for seconds can back
    default.
4. Use +/- button to set control switch at "CTRL".
5. Use +/- button to set the switch position when the function
    is active.
6. Use +/- button to set the "Rate". Press OK button for seconds
    can back default.
7. Press EXIT after setting.

(2). THROTTLE HOVERING SETTING

```
        ADVANCED
 ①GYRO SENS SETTING
 ② TTLE HOVERING SETT
 ③PITCH HOVERING SETT
 ④HI/LO PIT SETTING
```

```
 MODEL NORMAL INH

 Rate 0.0%   [-86.8%]

 CTRL VB Nor
```

Throttle hovering setting is fine-tuning adjustments for the throttle, affecting performance only around the center point and only in the normal condition.This function can set knob VA/VB/VC to control, turn right the rotor speed becomes faster, turn left the rotor speed becomes slower.
Rotor speed changes caused by temperature, humidity, altitude or other changes in flying conditions are easily accommodated.

Setting Method:

Use up/down button to select **Throttle hovering setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to select "MODEL".
   Use +/- button to active or inhibit this function.
3. Use +/- button to set "Rate". Press OK button for seconds can back default.
4. Use +/- button to set control switch.
5. Press EXIT after setting.

(3). PITCH HOVERING SETTING

Pitch hovering setting is fine-tuning adjustments for the pitch, affecting performance only around the center point and only in the normal condition.

This function can set knob VA/VB/VC/VR/VL to control, turn right the rotor speed becomes faster, turn left the rotor speed becomes slower.

Rotor speed changes caused by temperature, humidity, altitude or other changes in flying conditions are easily accommodated.
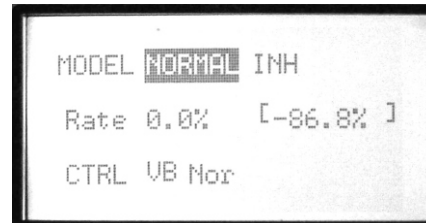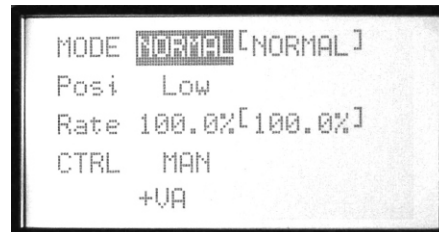
Setting Method:

Use up/down button to select **Pitch hovering setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to select "MODEL".
   Use +/- button to active or inhibit this function.
3. Use +/- button to set "Rate". Press OK button for seconds can back default.
4. Use +/- button to set control switch.
5. Press EXIT after setting.

(4). HI/LO PIT SETTING

```
          ADVANCED
 ① GYRO SENS SETTING
 ② THROTTLE HOVERING S
 ③ PITCH HOVERING SETT
 ④ HI/LO PIT SETTING
```

```
MODE  NORMAL[NORMAL]
Posi   Low
Rate  100.0%[100.0%]
CTRL   MAN
        +VA
```

This function is to set the high and low pitch position at different flying modes.
This function can set knob VA/VB/VC/VR/VL to control or controlled by user "CTRL MAN".
IF "CTRL MAN", the pitch is set by "Rate", the range is between 60%-100%.
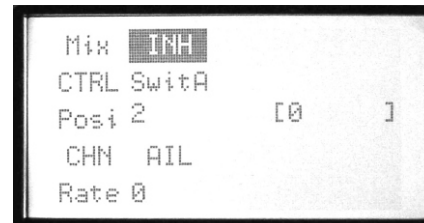
Setting Method:

Use up/down button to select **HI/LO PIT setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to select "MODEL".
   Use +/- button to active or inhibit this function.
3. Use +/- button to set the "Pos", low or high.
4. Use +/- button to set "Rate". Press OK button for seconds can back default.
5. Use +/- button to set control switch.
6. Press EXIT after setting.

(5). TRIM OFFSET SETTING

```
        ADVANCED
 5 TRIM OFFSET SETTING
 6 DELAY
 7 GOVERNOR MIXING
 8 SWASH AND THR MIXIN
```

```
 Mix   INH
 CTRL SwitA
 Posi 2        [0      ]
  CHN   AIL
 Rate 0
```

This function is to adjust the servo trim at hovering state. This function is used to automatically change the trim of a helicopter, for example, when transitioned from hover to flying at high speed. A clockwise-rotation rotor helicopter tends to drift to the right at high speed, so an aileron offset may be applied to offset the helicopter to the left.
The necessary elevator offset varies with model geometry, so it must be determined by noting collective pitch changes at high speed.
The rudder offset is affected by both revolution mixing and trim lever movement while in the offset function.
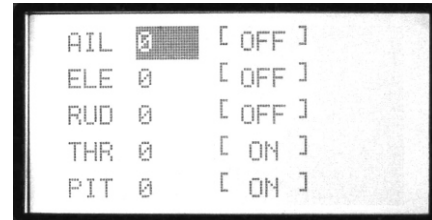
Setting Method:

Use up/down button to select **Trim offset setting**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to set the control switch "CTRL".
4. Use +/- button to set the control switch position "Pos".
5. Use +/- button to set the channel, eg: ailerion, elevator, etc.
6. Use +/- button to set the mix rate "Rate". Press OK button for seconds can back default.
7. Press EXIT after setting.

(6). DELAY

```
        ADVANCED              AIL  0    [ OFF ]
  ⑤ TRIM OFFSET SETTING       ELE  0    [ OFF ]
  ⑥ DELAY                     RUD  0    [ OFF ]
  ⑦ GOVERNOR MIXING           THR  0    [ ON ]
  ⑧ SWASH AND THR MIXIN       PIT  0    [ ON ]
```

This function is to delay the aerobatics or throttle cut when the helicopter is in the air so that to avoid the big trim change. The Delay function provides a smooth transition between the trim positions whenever OFFSET, REVO. MIXING, or THROTTLE HOLD functions are turned on and off.
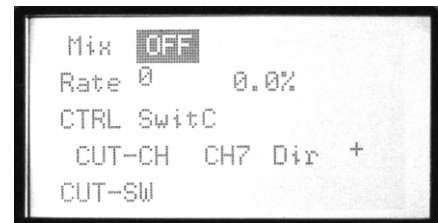
Setting Method:

Use up/down button to select **DELAY**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit this function. Press OK button for seconds can back default.
3. Press EXIT after setting.

(7). GOVERNOR MIXING

```
         ADVANCED
⑤ TRIM OFFSET SETTINE
⑥ DELAY
⑦ GOVERNOR MIXING
⑧ SWASH AND THR MIXIN
```

```
Mix  OFF
Rate 0        0.0%
CTRL SwitC
  CUT-CH  CH7 Dir  +
CUT-SW
```

This function is to set the governor.
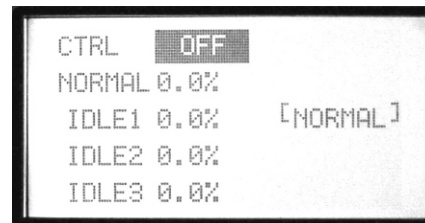The Governor mixing function is used to adjust the Governor speed settings from the transmitter.
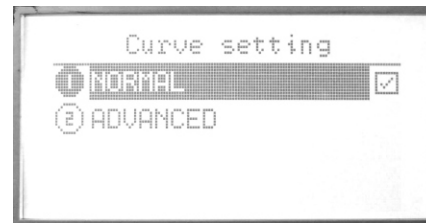
Setting Method:

Use up/down button to select **Governor mixing**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to set the mix rate "Rate". Press OK button for seconds can back default.
4. Use +/- button to set the control switch "CTRL".
5. Use +/- button to set the channel and its direction.
6. Press EXIT after setting.

(8). SWASH AND THR MIXING

```
        ADVANCED              CTRL   [OFF]
 (5)TRIM OFFSET SETTINE      NORMAL 0.0%
 (6)DELAY                     IDLE1 0.0%    [NORMAL]
 (7)GOVERNOR MIXING           IDLE2 0.0%
 (8)SWASH AND THR MIXIN       IDLE3 0.0%
```

This function is to adjust throttle and pitch mix function.

Setting Method:

Use up/down button to select **Swash and THR mixing**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit "Mix".
3. Press EXIT after setting.

(9). CURVE SETTING

There are 2 kinds of setting, Normal and Advanced.

Please refer to page 27.

(10)-(16). PROG. NOR. MIX1-7

The mix program is to adjust the flying pose. There are 7series programs with the same setting method. You can set one mix and one mix with another one mix.

Setting Method
Use up/down button to select **PROG. NOR. MIX**, OK button is to enter editing.

Steps:
1. Use direction buttons to select editing part. Set any two channels mix.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to active or inhibit "Link" and "TRIM".
4. Use +/- button to active or inhibit "CTRL".
5. Use +/- button to set the control switch position.
6. Press EXIT after setting.

(17)-(20). PROG. CUR. MIX1-4
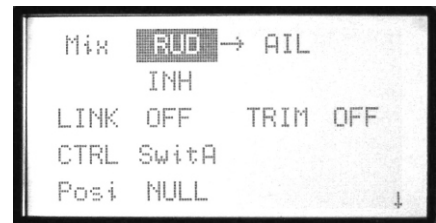
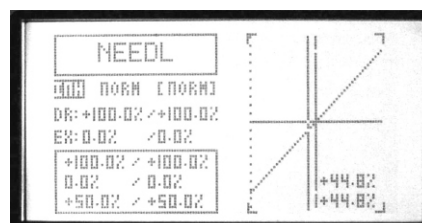There are 4 curve mix program, the curve is made up by 2 to 10 point.

Setting Method:

Use up/down button to select **PROG. CUR. MIX**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part. Set any two channels mix.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to active or inhibit "Link" and "TRIM".
4. Use +/- button to active or inhibit "CTRL".
5. Use +/- button to set the control switch position.
6. Set the curve point.(Normal/Advanced). Please refer to page 27.
7. Press EXIT after setting.

(21). THROTTLE NEEDLE MIXING

Throttle needle is a pre-programmed mix that automatically moves an in-flight mixture servo in response to the Throttle Stick imputs for perfect engine tuning at all throttle settings. This function is particularly popular with contest pilots who fly in a large variety of locations, needing regular engine tuning adjustments, and requiring perfect engine response at all times and in all maneuvers. Also popular to minimize flooding at idle of inverted engine installations or installations with a high tank position. Not need for fuel injection engine, which do this automatically.
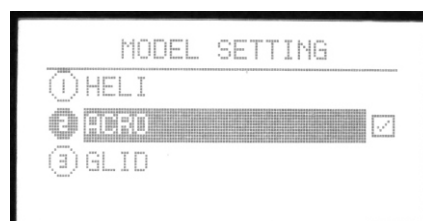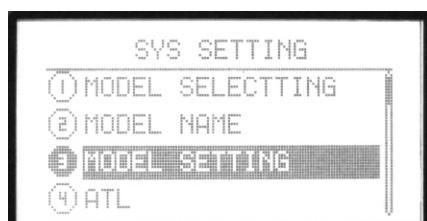
Setting Method
Use up/down button to select **Throttle needle mixing**, OK button is to enter editing.
Steps:
1. Use +/- button to active or inhibit this function.
2. Use +/- button to select one curve. There are 3 curves, NORM, IDLE1, IDLE2, IDLE3.
3. Use direction button to select "D/R"
   Edit one or two parameter.
    +/- buttons can increase or decrease the value.
    Press the OK button is to back default.
4. Use direction button to select "EX"
   Edit one or two parameter.
    +/- buttons can increase or decrease the value.
    Press the OK button is to back default.
    EX can adjust aileron, throttle, rudder sensitivity when the sticks are around the middle.
    There are a lot of mixes when "D/R" and "EX" come together.
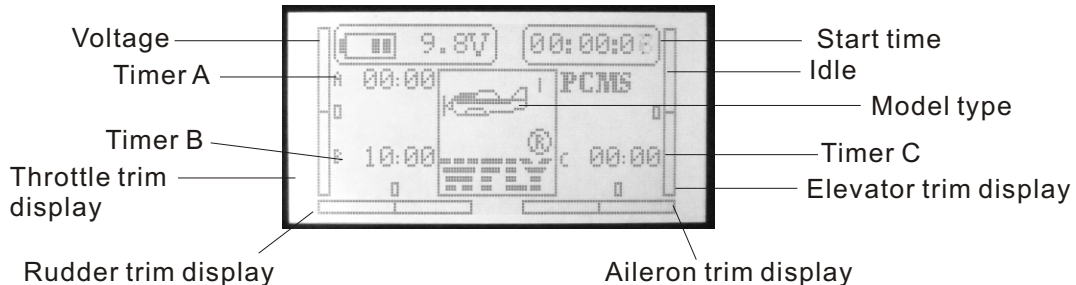5. Curve setting method please refer to page 27.

AIRPLANE

Press Menu and turn on the transmitter to enter SYS SETTING.
Select MODEL SETTING, press OK button to select the model
type.
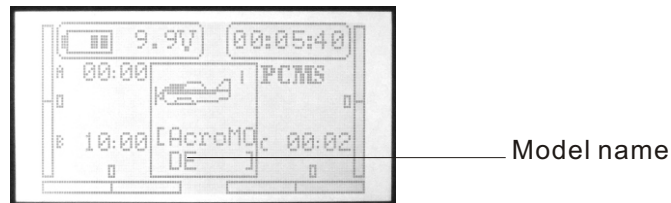Restart the transmitter after setting.

```
SYS SETTING
① MODEL SELECTTING
② MODEL NAME
③ MODEL SETTING
④ ATL
```

```
MODEL SETTING
① HELI
② ACRO          ☑
③ GLID
```

Editing mode and function introduction

1. Opening Screen

Turn on the power switch, the LCD displays as follows.

Voltage — [9.8V] [00:00:0] — Start time
Timer A — 00:00 — PCMS — Idle
— Model type
Timer B — 10:00 — C 00:00 — Timer C
Throttle trim display — Elevator trim display

Rudder trim display — Aileron trim display

The opening screen displays the voltage, timer, model, aileron, throttle, elevator and rudder state.
Note: Press EXIT you can see the model name.

[9.9V] [00:05:40]
00:00 PCMS
10:00 [AcroMo] c 00:02 — Model name
DE

2. Menu Screen
There are "NORMAL SETTING", "SYS SETTING", "ADVANCED".
A. NORMAL SETTING
Turn on the transmitter, press the menu button, the LCD displays as follows.

NORMAL SETTING
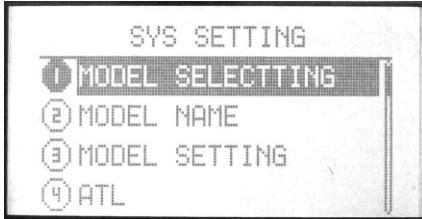① MONITOR
② DUAL RATE & EXPONEN
③ SERVO REVERSE
④ END POINT

1. MONITOR
2. DUAL RATE & EXPONENTIAL SETTING
3. SERVO REVERSE
4. END POINT
5. SUB TRIM
6. AUXILIARY CHANNELS SETTING
7. THROTTLE CURVE SETTING
8. TRIM STEP SETTING
9. FLAPERON
10. FLAP TRIM
11. AIL-DIFF
12. ELEV-FLAP
13. THROTTLE CUT SETTING
14. IDLE DOWN
15. FAIL SAFE
16. TIMER
17. ADVANCED
18. LANGUAGE

Setting method:
1. Use direction button to select the editing part,use up/down buttons to select function item. Left/right direction button to turn page.
2. Press OK button to enter submenu. The submenu function is in the next chapter.
3. Press EXIT button to back previous menu and the data is set automatically.

B. SYS SETTING

Press Menu and turn on the power switch, the LCD displays as follows.

```
         SYS SETTING
① MODEL SELECTTING
② MODEL NAME
③ MODEL SETTING
④ ATL
```

Setting method:

1. MODEL SELECTING
2. MODEL NAME
3. MODEL SETTING
4. ATL
5. AIL-2
6. MODULATION SETTING
7. STICK SETTING
8. ADJUSTMENT
9. REST SETTING
10. SEND DATA
11. RECEIVE DATA
12. SOUND
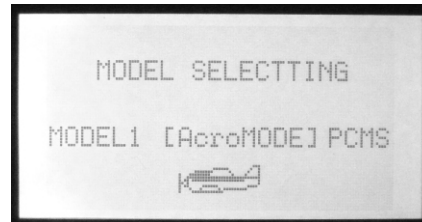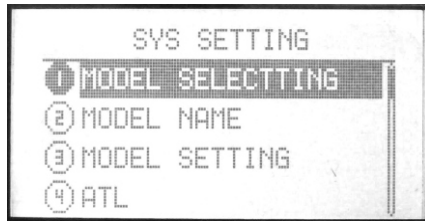13. CONTRAST SETTING
14. ENGINEER MODEL
15. ABOUT
16. LANGUAGE

1. Use direction button to select the editing part,use up/down buttons to select function item. Left/right direction button to turn page.

2. Press OK button to enter submenu. The submenu function is in the next chapter.

3. Press EXIT button to back previous menu and the data is set automatically.

C. ADVANCED

1. Enter "NORMAL SETTING", use right direction button to turn page, select "ADVANCED".
Press OK button to enter.

```
         ADVANCED
① CURVE SETTING
② PROG.NOR.MIX1
③ PROG.NOR.MIX2
④ PROG.NOR.MIX3
```

Setting method:

1. Use direction button to select the editing part,
use up/down buttons to select function item.
Left/right direction button to turn page.

2. Press OK button to enter submenu. The submenu function is in the next chapter.

3. Press EXIT button to back previous menu and the data is set automatically.

SYS SETTING

1.MODEL SELECTTING

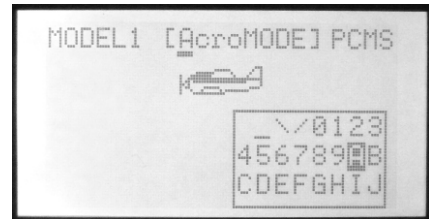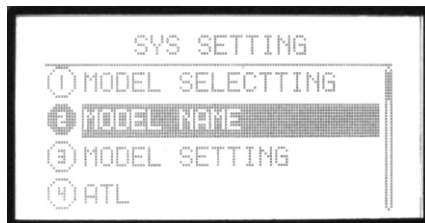There are 85 airplane models. You can select any one to set.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**MODEL SELECTING**", OK button is
to enter editing.

Steps:

1. Use up/down direction button to select the model.
2. Press OK button to select.
3. Press EXIT after setting.

2. MODEL NAME

```
    SYS SETTING
①MODEL SELECTTING
②MODEL NAME
③MODEL SETTING
④ATL
```

```
MODEL1 [AcroMODE] PCMS

         _\/0123
        456789AB
        CDEFGHIJ
```

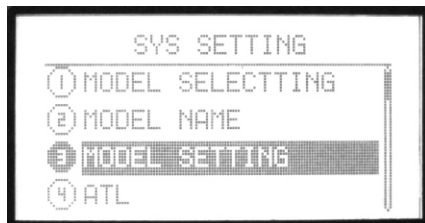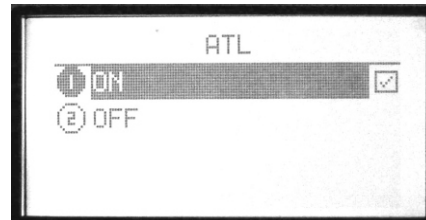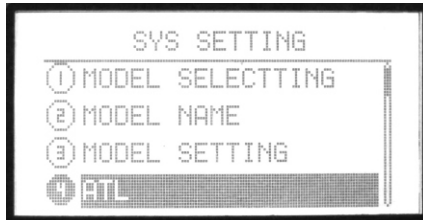This function is to make new names by users.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**MODEL NAME**", OK button is to
enter editing.

Steps:

1. You can edit the underlined letter.
2. Press OK button to choose the word you like.
3. Press EXIT after setting.

3. MODEL SETTING

```
        SYS SETTING                      MODEL SETTING
  ① MODEL SELECTTING               ① HELI
  ② MODEL NAME                     ● ACRO                    ☑
  ● MODEL SETTING                  ③ GLID
  ④ ATL
```

You can select the model type. There are three type: HELI, ACRO, GLID.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**MODEL SETTING**", OK button is to enter editing.

Steps:

1. Use up/down direction button to select the model type.
2. Press OK button to confirm.
3. Press EXIT after setting.

4. ATL

Adjustable travel limit (ATL) makes throttle trim effective only at low throttle, disabling the trim at high throttle. This prevents pushrod jamming due to idling trim changes. This function defaults to ON. If you are not using channel 3 for throttle, you may want trim operation the same as on all other channels. To do so, set ATL to OFF.
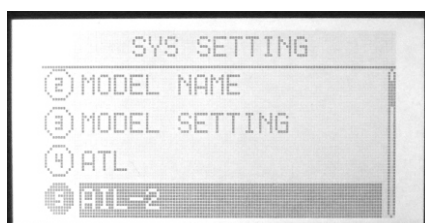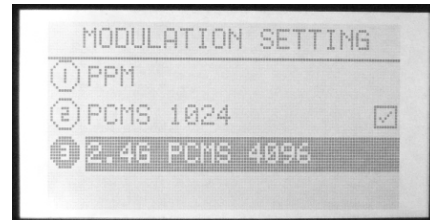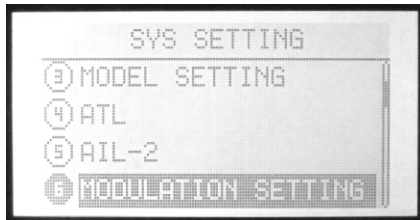
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**ATL**", OK button is to enter editing.

Steps:

1. Use direction buttons to select the editing part.
2. Press +/- button to set ATL function.
3. Press EXIT after setting.

5. AIL-2

SYS SETTING
② MODEL NAME
③ MODEL SETTING
④ ATL
⑤ AIL-2

AIL-2

CH6or7

AIL-2 is another channel for aileron.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "AIL-2", OK button
is to enter editing.

Steps:

1. Use direction buttons to select.
2. Press OK button to confirm.
3. Press EXIT after setting.

6. MODULATION SETTING

Because of the different receiver modulation PPM/PCMS1024/ 2.4G PCMS4096, the transmitter should be accordance with the receiver modulation.
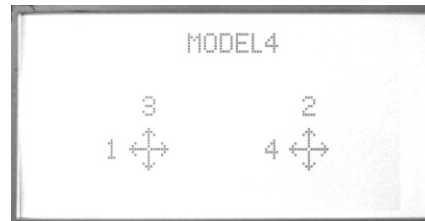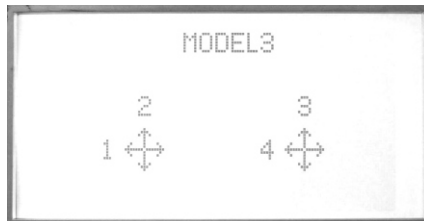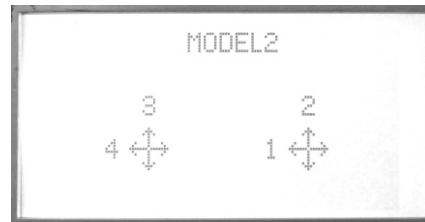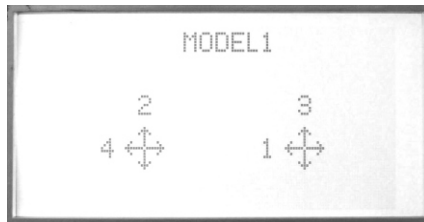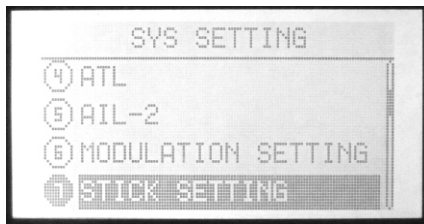
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**Modulation setting**", OK button is to enter editing.

Steps:

1. Use direction buttons to select the editing part.
2. Press OK button to confirm. Restart the transmitter and it works.

7.STICK SETTING

```
        SYS SETTING
(4) ATL
(5) AIL-2
(6) MODULATION SETTING
●  STICK SETTING
```

```
        MODEL1
       2        3
    4 ⟷      1 ⟷
```

```
        MODEL2
       3        2
    4 ⟷      1 ⟷
```

```
        MODEL3
       2        3
    1 ⟷      4 ⟷
```

```
        MODEL4
       3        2
    1 ⟷      4 ⟷
```

There are 4 kinds of model, you can use up/down direction button to select the model you preferred.
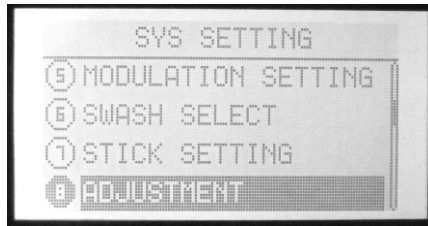
1-aileron
2-elevator
3-throttle
4-rudder

Setting Method:
Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**STICK SETTING**", OK button is to enter editing.

Steps:
1. Use direction button to select the editing part.
2. Press up/down button to choose Stick mode.
3. Press EXIT after setting.

8.Adjustment

This function is to set the central, high and low point of four sticks when users changed the mode I or II by themselves.
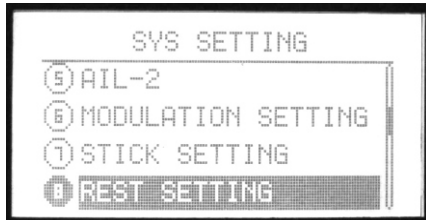
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**ADJUSTMENT**", OK button is to enter editing.

Steps:

1. Use direction button to select the editing part. Take the aileron adjustment for example.

2. Make the stick in the mid-point location. Press OK button to select any stick you want to adjust.

3. Select into the Figure 2, when the "center" highlights, press the "ok" button directly (the mid-point has been adjusted), then enter the high adjust.

4. The "high" highlights, take the stick gently in the right side (throttle /elevator in the top, aileron / rudder in the right),press "ok" button (the max adjust is OK), enter the low adjustment.

5.The "low" highlights, take the stick gently in the left side (throttle /elevator in the bottom, aileron / rudder in the left),press "ok" button (the min adjust is OK).

6. Press OK or RESET to confirm the record or reset.

7. If the record is wrong, press OK will back to step 3.

9.REST SETTING

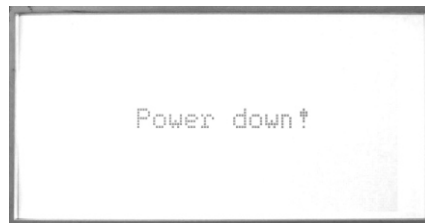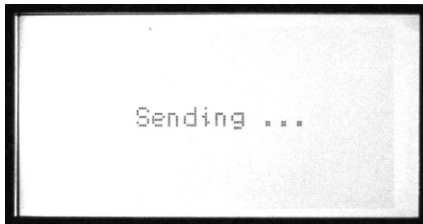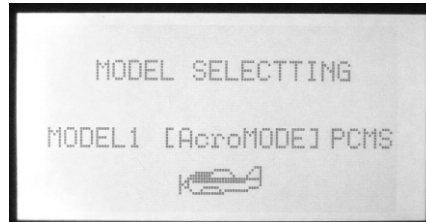This function is to back default.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**REST SETTING**", OK button is to enter editing.

Steps:

1. Use direction button to select the editing part.
2. Press +/- button to back default.
3. Press EXIT after setting.

10. SEND DATA

```
     SYS SETTING
 ①STICK SETTING
 ⑧ADJUSTMENT
 ⑨REST SETTING
 ⑩SEND DATA
```

```
   MODEL SELECTTING

 MODEL1 [AcroMODE] PCMS
```

```


     Sending ...
```

```


     Power down!
```

Two transmitters (WFT09S) can copy data by a trainer cable/data transfer cable. This function together with the next function "Receive data" can realize the data copy.
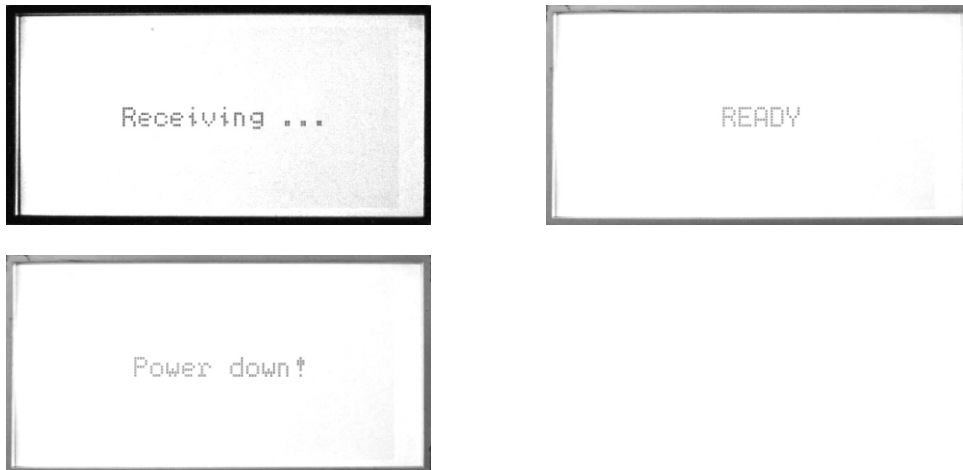
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**SEND DATA**", OK button is to enter editing.

Steps:

1. Select the model data you want to send out.
2. Press OK to send.

11. RECEIVE DATA

Receiving ...

READY

Power down!

Two transmitters (WFT09S) can copy data by a trainer cable/data transfer cable. This function together with the previous function "Send data" can realize the data copy.
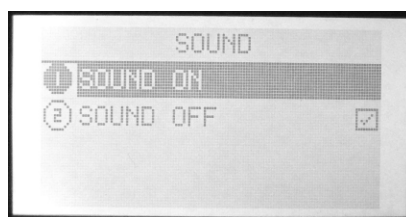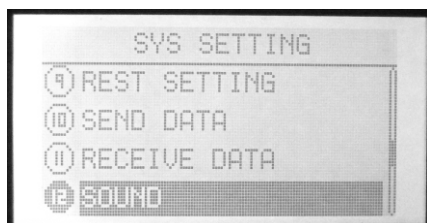
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**RECEIVE DATA**", OK button is to enter editing.

Steps:

1. Press OK to receive data.
2. Restart the transmitter after receiving the data and it works.

12.Sound

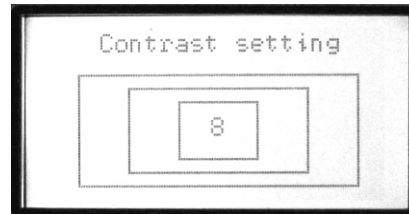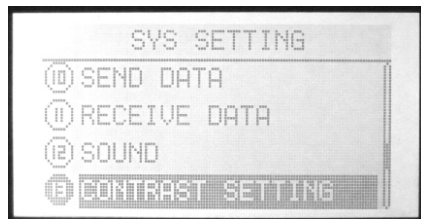This function is to select the sound ON and OFF.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "SOUND", OK button is
to enter editing.

Steps:

1. Use +/- button to select ON and OFF.
2. Press OK button to confirm.
3. Press EXIT after setting.

13.CONTRAST SETTING

This function is to adjust the LCD brightness by increasing or decreasing the contrast value.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**RECEIVE DATA**", OK button is to enter editing.

Steps:

1. Use +/- button to increase or decrease the value.
2. Press OK button for a while is to back default.
3. Press EXIT after setting.

16.LANGUAGE

This function is to select the language. There are 5 language selectable. For example, the selection is as shown in the picture.

NORMAL SETTING(AIRPLANE)

1. MONITOR

Monitor shows the servos' movement situation.
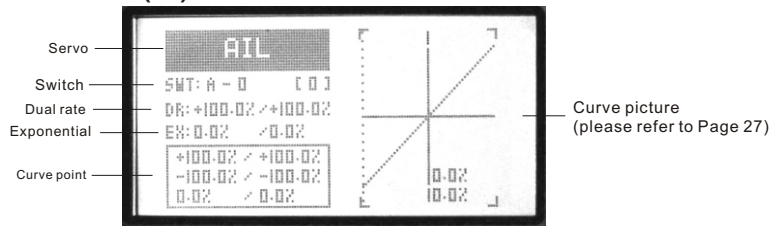In PCMS, this function is to describe the 9 channels output.
In PPM, this function is to describe the first 8 channels output.
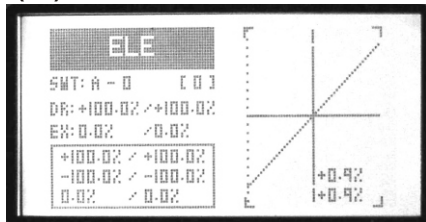
Setting Method:

Press menu button, enter system setting, the first function is the monitor.
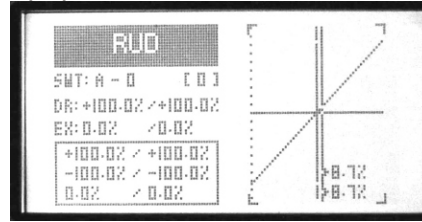
2. DUAL RATE & EXPONENTIAL SETTING

(1). AIL

```
NORMAL SETTING
① MONITOR
② DR RATE & EXPONENT
③ SERVO REVERSE
④ END POINT
```

```
AIL
SWT:A-0     [0]
DR:+100.0%/+100.0%
EX:0.0%   /0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%    / 0.0%
                    0.0%
                    10.0%
```

Servo
Switch
Dual rate
Exponential
Curve point

Curve picture
(please refer to Page 27)

(2). ELE

```
ELE
SWT:A-0     [0]
DR:+100.0%/+100.0%
EX:0.0%   /0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%    / 0.0%
                +0.9%
                +0.9%
```

(3). RUD

```
RUD
SWT:A-0     [0]
DR:+100.0%/+100.0%
EX:0.0%   /0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%    / 0.0%
                +8.7%
                +8.7%
```

Dual rate is to adjust aileron, elevator and rudder travel range. The range is between 0%-120%.

Exponential setting is to adjust aileron, elevator and rudder sensitivity when the sticks are around the middle. The range is between -100% to +100%.

Setting Method:

1. Select channel
   Aileron, elevator and rudder are selectable. Press +/- buttons to select channel, OK button to finish setting.
2. Set the switch and its position(0,1,2)
   Press direction button to select "SWT", edit it. +/- buttons can select function switch(A-F).
   After selecting the function switch, press right direction button to enter the switch position setting, use +/- buttons to set.
3. Set dual rate
   Press direction button to select "D/R", edit it. Edit one or two parameter.
   +/- buttons can increase or decrease the value.
   Press the OK button is to back default.
4. Set exponential
   Press direction button to select "EX". Exponential can adjust aileron, throttle and rudder sensitivity as the stick at the middle.
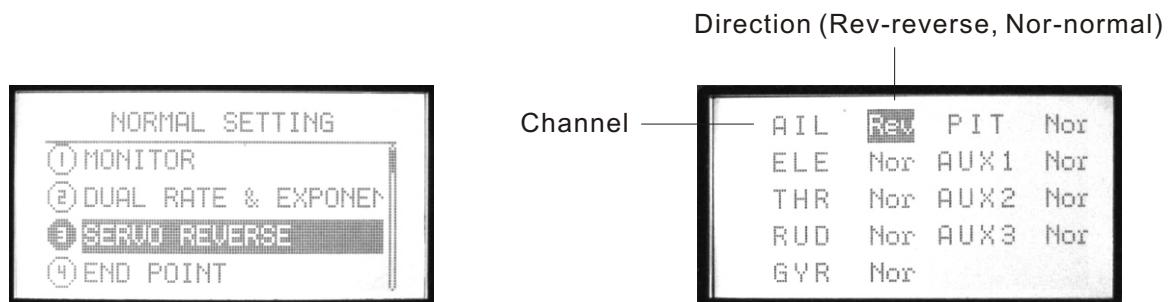5. Set curve point (normal/advanced)
   The box under "EX" shows the curve points.
   Select "Curve setting" in More setting function list.
   Please refer to Page 27 for detail curve setting.
6. Press EXIT after all the values are finished setting.

3. SERVO REVERSE

Direction (Rev-reverse, Nor-normal)

```
NORMAL SETTING
① MONITOR
② DUAL RATE & EXPONEN
③ SERVO REVERSE
④ END POINT
```

Channel

```
AIL   Rev   PIT   Nor
ELE   Nor   AUX1  Nor
THR   Nor   AUX2  Nor
RUD   Nor   AUX3  Nor
GYR   Nor
```

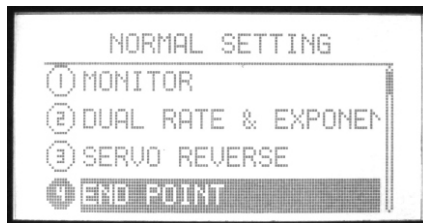This function is to change the direction of the servos movement.

Setting Method:

Use up/down button to select **SERVO REVERSE**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to switch the servo movement direction.
3. Press EXIT after setting.

4. END POINT

Channel　Side　Value

```
NORMAL SETTING
① MONITOR
② DUAL RATE & EXPONEN
③ SERVO REVERSE
④ END POINT
```

```
AIL    L 100·0%    R 100·0%
ELE    D 100·0%    U 100·0%
THR    L 100·0%    H 100·0%
RUD    L 100·0%    R 100·0%
GYR    L 100·0%    H 100·0%
```

It is to adjust the end of individual servo's travel. The range is from 0% to 120%.

Setting Method:

Use up or down button to select **END POINT**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to set the travel value. Press OK for a while backs to default.
3. Press EXIT after setting.

5. SUB TRIM

Channel   Value

```
NORMAL SETTING
⑤ SUB TRIM
⑥ XILIARY CHANNELS S
⑦ THROTTLE CURVE SETT
⑧ TRIM STEP SETTING
```

```
AIL      0
ELE      0
THR    H 4
RUD    L 2
GYR      0
```

High/Low

Sub trim makes small changes or corrections to the neutral position of each servo. Range is -120 to +120, default setting is 0.

We recommend that you center the digital trims before making Sub trim changes, and that you tryto keep all of the Sub trim values as small as possible. Otherwise, when the Sub trims are large values, the servo's range of travel is restricted on one side.
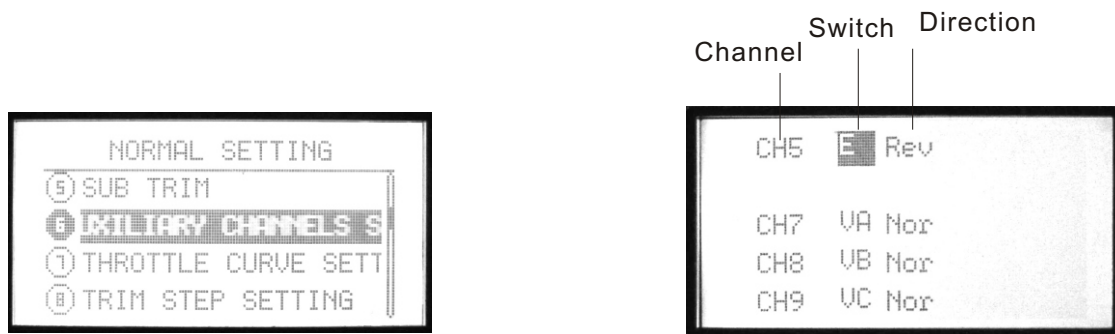
Setting Method:

Use up or down button to select **SUB TRIM**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to set the trim value. Press OK for a while backs to default.
3. Press EXIT after setting.

6. AUXILIARY CHANNELS SETTING

Channel   Switch   Direction

```
  NORMAL SETTING
(5) SUB TRIM
(6) AUXILIARY CHANNELS S
(7) THROTTLE CURVE SETT
(8) TRIM STEP SETTING
```

```
  CH5    E  Rev

  CH7   VA Nor
  CH8   VB Nor
  CH9   VC Nor
```

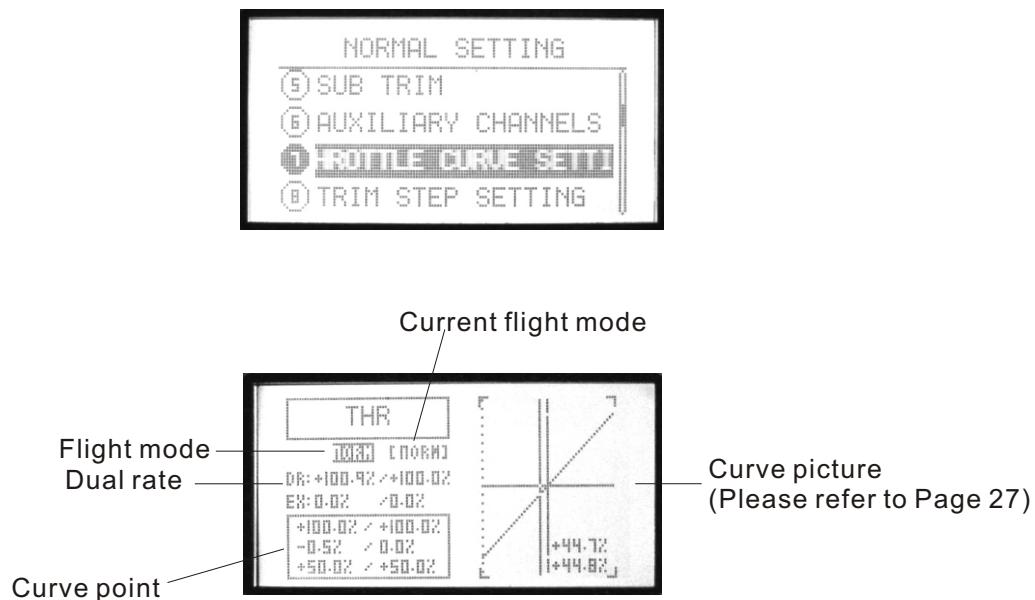This function is for channel 5 to channel 9 function setting.

Setting Method:

Use up or down button to select **AUXILIARY CHANNELS SETTING**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set the switches or knobs. The switches can be set from A to F, the knobs can be set as VA, VB, VC, VL, VR or none(-).
3. Use left or right direction button to set normal or reverse direction of every channel.
4. Press EXIT after setting.

7. THROTTLE CURVE SETTING

```
     NORMAL SETTING
  (5) SUB TRIM
  (6) AUXILIARY CHANNELS
  (7) ROTTLE CURVE SETTI
  (8) TRIM STEP SETTING
```

Current flight mode

```
        THR

Flight mode ──  NORM [NORM]
Dual rate   ──  DR:+100.9%/+100.0%
                EX:0.0%  /0.0%
                +100.0% / +100.0%
                -0.5%  / 0.0%
Curve point ──  +50.0% / +50.0%        +44.7%
                                       +44.8%
```

Curve picture
(Please refer to Page 27)

Throttle curve, together with the throttle stick, can be adjusted properly to maximize engine performance at a particular pitch setting.
There are two kinds of curve setting, normal (7 points curve), advanced (2-10 points curve), the range is between 0%-120%.
The transmitter can set the following curves:
NORM, IDLE1, IDLE2, IDLE3.

Normal curve is based on hovering, to maximize engine performance at a particular pitch setting.
Idle curve is for engine proper work in a 3D flight, with a good match between throttle and pitch.
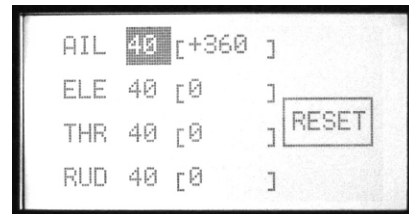
Setting Method:

Use up/down button to select **THROTTLE CURVE SETTING**, OK button is to enter editing.

Steps:

1. Flight(NORM IDLE1 IDLE2 IDLE3)
   Use direction buttons to select editing part. Use +/- button to select one curve.

2. Set Dual rate
   Use direction button to select "D/R" and edit (one or two values can be set separately
   or together). Press +/- button for seconds can increase or delete the value. Press OK button for seconds is to back default(60%).

3. Curve point setting(Normal/Advanced)
   The below pane shows the points curve.
   Select "Curve setting" in "SYS setting", choose the curve.
   For detail curve setting method please refer to Page 27.

4. Press EXIT after setting.

8. TRIM STEP SETTING

This function is to change the rate at which the trim moves when the TRIM LEVER is activated. The range is from 1 to 250. Generally larger trim steps are for models with larger control throws or for first flights to ensure sufficient trim to properly correct the model. Smaller trim steps are later used to allow very fine adjustments in flight.
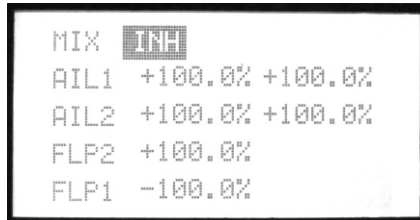
Setting Method:

Use up/down button to select **TRIM STEP SETTING**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to adjust the size of the step. Repeat as desired for other channels. If you select RESET, the current channel trim value change to 0.
3. Press EXIT after setting.

9. FLAPERON

```
NORMAL SETTING            MIX  INH
① FLAPERON                AIL1  +100.0% +100.0%
⑩ FLAP TRIM               AIL2  +100.0% +100.0%
⑪ AIL-DIFF                FLP2  +100.0%
⑫ ELEV-FLAP               FLP1  -100.0%
```

FLAPERON mixing function uses on servo on each of the two ailerons, and uses them for both aileron and flap function.

Setting Method:

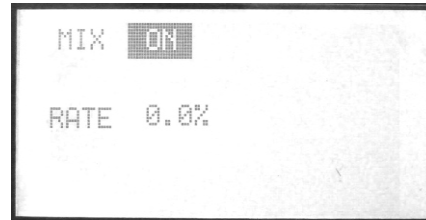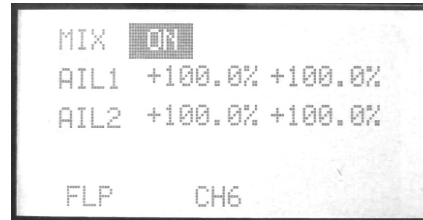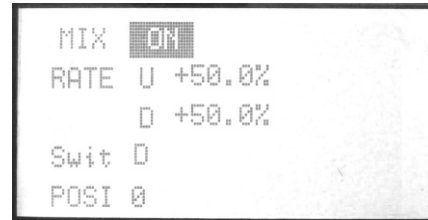Use up/down button to select **FLAPERON**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

10. FLAP TRIM

```
NORMAL SETTING
(9) FLAPERON
(10) FLAP TRIM
(11) AIL-DIFF
(12) ELEV-FLAP
```

```
MIX  ON

RATE  0.0%
```

FLAP TRIM assigns the primary flaperon control to allow trimming in flight of the flap action of flaperons.
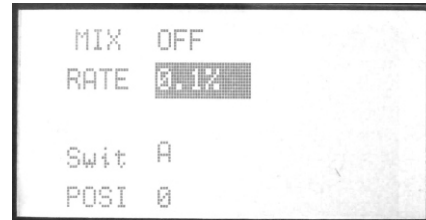
Setting Method:

Use up/down button to select **FLAP TRIM**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

11. AIL-DIFF

```
    NORMAL SETTING              MIX  [ON]
  ⑨ FLAPERON                    AIL1  +100.0% +100.0%
  ⑩ FLAP TRIM                   AIL2  +100.0% +100.0%
  ⑪ AIL-DIFF
  ⑫ ELEV-FLAP                   FLP       CH6
```

Aileron differential(AIL-DIFF) is primarily used on 3-servo wings, with one servo operating inboard flap(s) on Ch6, and AIL-DIFF controlling proper aileron operation of 2 aileron servos, plugged into Ch1 and Ch7.

Setting Method:

Use up/down button to select **AIL-DIFF**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

12. ELEV-FLAP

```
   NORMAL SETTING
(9) FLAPERON
(10) FLAP TRIM
(11) AIL-DIFF
(12) ELEV-FLAP
```

```
MIX   ON
RATE U +50.0%
     D +50.0%
Swit D
POSI 0
```

ELEV-FLAP mixing is the first pre-programmed mix we'll cover. This mix makes the flaps drop or rise whenever the elevator stick is moved. It is most commonly used to make tighter pylon turns or squarer corners in maneuvers. In most cases, the flaps droop (are lowered) when up elevator is commanded.
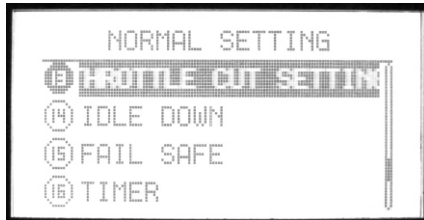
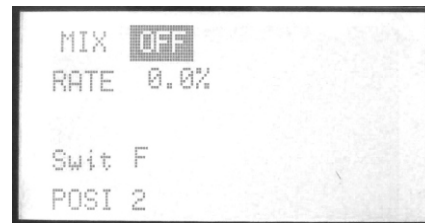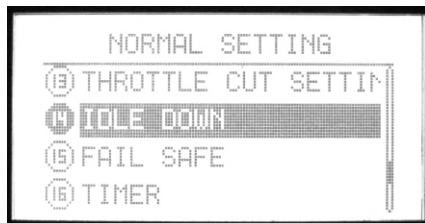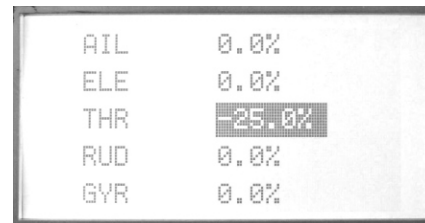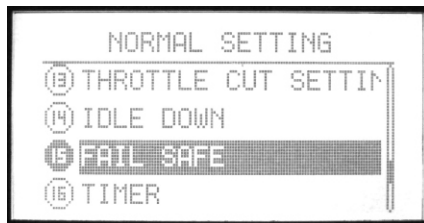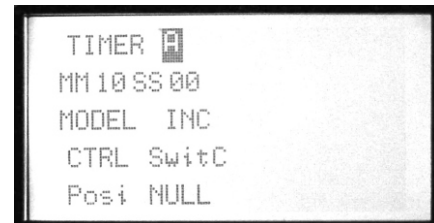### Setting Method:

Use up/down button to select **ELEV-FLAP**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

13. THROTTLE CUT SETTING

```
NORMAL SETTING
(13) THROTTLE CUT SETTIN
(14) IDLE DOWN
(15) FAIL SAFE
(16) TIMER
```

```
MIX   OFF
RATE  0.1%

Swit  A
POSI  0
```

This function is to shut off the engine at the end of a flight. The engine can be stopped with one touch of any switch, eliminating the need to move the trim to kill the engine and then readjust prior to each flight. The helicopter THR CUT includes an ON/OFF throttle position (normally a little above idle). You must move the THROTTLE STICK back below the set point before the THR-CUT function can be reset, to avoid sudden engine acceleration.

Setting Method:

Use up/down button to select **THROTTLE CUT SETTING**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to turn on/off throttle cut function.
3. Use +/- button to set the throttle rate and trim (range is between +45% to -45%).
4. Use +/- button to set the position.
5. Press EXIT after setting.

14. IDLE DOWN

```
NORMAL SETTING
⑬ THROTTLE CUT SETTIN
⑭ IDLE DOWN
⑮ FAIL SAFE
⑯ TIMER
```

```
MIX  OFF
RATE  0.0%

Swit F
POSI 2
```

This function is to lowers the engine idle for: sitting on the run-way prior to take off, stalls and spins, and landings. The normal idle setting is a little higher for easier starts and safe flights with less risk of dead sticks.
The idle down function is not normally used when starting the engine, and its accidental operation may keep your engine from starting.
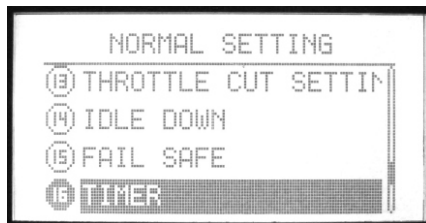
Setting Method:

Use up/down button to select **IDLE DOWN**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

15. FAIL SAFE

```
    NORMAL SETTING          AIL    0.0%
(13)THROTTLE CUT SETTIN     ELE    0.0%
(14)IDLE DOWN               THR   25.0%
(15)FAIL SAFE               RUD    0.0%
(16)TIMER                   GYR    0.0%
```

This function is to set responses in case of loss of signal or low RX battery.

Setting Method:

Use up/down button to select **FAIL SAFE**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to select "hold" or "0.0%"
3. Press OK button to confirm the current parameter.
4. Press EXIT after setting.

16. TIMER

```
   NORMAL SETTING
⑬ THROTTLE CUT SETTIN
⑭ IDLE DOWN
⑮ FAIL SAFE
⑯ TIMER
```

```
TIMER A
MM10SS00
MODEL  INC
CTRL  SwitC
Posi  NULL
```

The flight time of every helicopter is different according to
the different tank of fuel, engine, ESC, etc. Timer function
can alarm you to land before the fuel lacks.
The transmitter can set 3 timers (A, B, C). The longest time
can be set as MM99SS59. The countdown timer can alarm
user before 10 minutes. The alarm will become 2S/1S from
1S/1S in the last 10 seconds. When the countdown timer is
0, the time will add up.
The timer can be seen in the opening screen. Any switch
can be set to control the begin and stop of the time.

Setting Method:

Use up/down button to select **TIMER**, OK button is to enter
 editing.

Steps:

1. Use direction buttons to select editing part.
2. Set timer. WFT09S can set 3 timers (A, B, C).
3. Use +/- button to set MM..SS… Press OK button for seconds
   can back to default.
4. Use +/- button to set model.
5. Use +/- button to set control(CTRL).
6. Use +/- button to set the position which can active this
   function.
7. Press EXIT after setting.

18. Language

This function is to select the language, Simplified Chinese and English can be selected.

17. ADVANCED

```
        NORMAL SETTING
  (15) FAIL SAFE
  (16) TIMER
  (17) ADVANCED
  (18) LANGUAGE
```
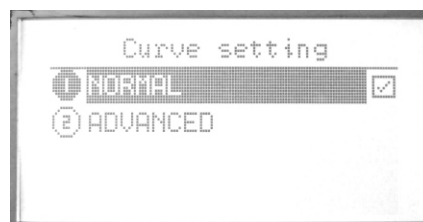
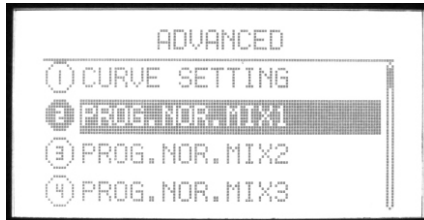To realize an idea fly, there are 20 advanced function in ADVANCED.

Setting Method:

Use up/down button to select ADVANCED, OK button is to enter editing. +/- button can turn page.
About each advanced functions please read the following pages.

ADVANCED function introduction

(1). CURVE SETTING

There are 2 kinds of setting, Normal and Advanced.
Please refer to page 27.

(2)-(8). PROG. NOR. MIX1-7

```
          ADVANCED
①CURVE SETTING
②PROG.NOR.MIX1
③PROG.NOR.MIX2
④PROG.NOR.MIX3
```

```
Mix  AIL → RUD
       INH
LINK OFF    TRIM OFF
CTRL SwitD
Posi NULL           ↓
```

The mix program is to adjust the flying pose. There are 7series programs with the same setting method. You can set one mix and one mix with another one mix.
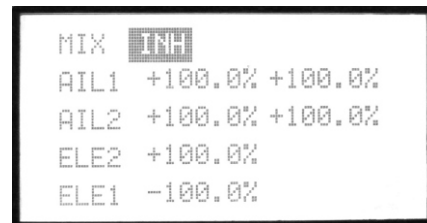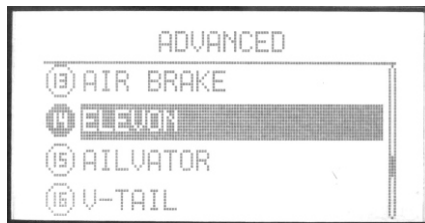
Setting Method
Use up/down button to select **PROG. NOR. MIX**, OK button is to enter editing.

Steps:
1. Use direction buttons to select editing part. Set any two channels mix.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to active or inhibit "Link" and "TRIM".
4. Use +/- button to active or inhibit "CTRL".
5. Use +/- button to set the control switch position.
6. Press EXIT after setting.

(9)-(12). PROG. CUR. MIX1-4

```
        More setting
⑰ PROG.CUR.MIX1
⑱ PROG.CUR.MIX2
⑲ PROG.CUR.MIX3
⑳ PROG.CUR.MIX4
```

```
Mix   RUD → AIL
        INH
LINK  OFF    TRIM  OFF
CTRL  SwitA
Posi  NULL            ↓
```

There are 4 curve mix program, the curve is made up by 2 to 10 point.
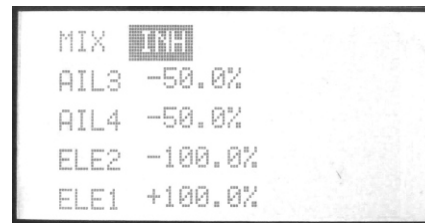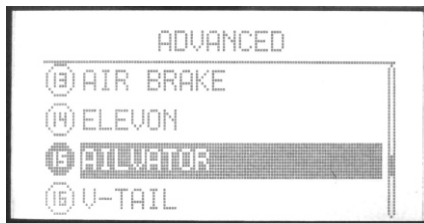
Setting Method:

Use up/down button to select **PROG. CUR. MIX**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part. Set any two channels mix.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to active or inhibit "Link" and "TRIM".
4. Use +/- button to active or inhibit "CTRL".
5. Use +/- button to set the control switch position.
6. Set the curve point.(Normal/Advanced). Please refer to page 27.
7. Press EXIT after setting.

(13). AIR BRAKE

```
          ADVANCED                    MIX  INH
 ⑬ AIR BRAKE                          Swit F
 ⑭ ELEVON                             POSI 2
 ⑮ AILVATOR                           CTRL MAN
 ⑯ V-TAIL                             DELAY-ELE0
```

AIR BRAKE simultaneously moves the flaps, twin ailerons and elevators, and is usually used to make steep descents or to limit increases in airspeed in dives.
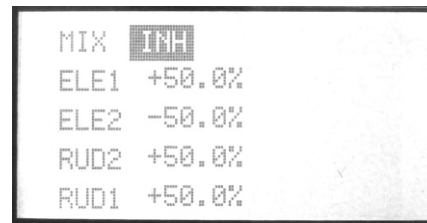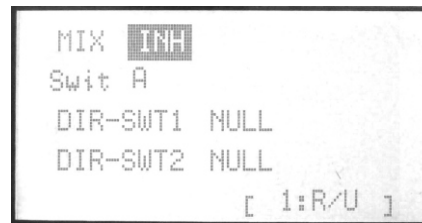
Setting Method:

Use up/down button to select **AIR BRAKE**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to set Swit, POSI. Press OK button for seconds can back default.
4. Use +/- button to set CTRL (MAN/ THR).
5. Use +/- button to set delay value. Press OK button for seconds can back default.
6. Press EXIT after setting.

(14). ELEVON

```
      ADVANCED              MIX  INH
⑬ AIR BRAKE               AIL1  +100.0% +100.0%
⑭ ELEVON                  AIL2  +100.0% +100.0%
⑮ AILVATOR                ELE2  +100.0%
⑯ V-TAIL                  ELE1  -100.0%
```

This function used with delta wings, flying wings, and other tailless aircraft that combine aileron and elevator functions, using two servos, one on each elevon. The aileron/elevator responses of each servo can be adjusted independently.

Setting Method:

Use up/down button to select **ELEVON**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(15). AILVATOR

```
ADVANCED
⑬ AIR BRAKE
⑭ ELEVON
⑮ AILVATOR
⑯ V-TAIL
```

```
MIX   INH
AIL3  -50.0%
AIL4  -50.0%
ELE2  -100.0%
ELE1  +100.0%
```

AILEVATOR mixing function uses one servo on each of the two elevators, and combines the elevator function with the aileron function(unless aileron travel is set to 0).
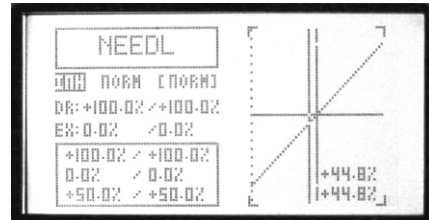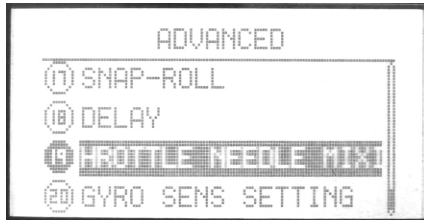
Setting Method:

Use up/down button to select **AILVATOR**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(16). V-TAIL

```
       ADVANCED
(13) AIR BRAKE
(14) ELEVON
(15) AILVATOR
(16) V-TAIL
```

```
MIX   INH
ELE1  +50.0%
ELE2  -50.0%
RUD2  +50.0%
RUD1  +50.0%
```

V-TAIL mixing is used with v-tail aircraft so that both elevator and rudder functions are combined for the two tail surfaces. Both elevator and rudder travel can be adjusted independently on each surface.

Setting Method:

Use up/down button to select **V-TAIL**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(17). SNAP-ROLL

```
         ADVANCED
⑰ SNAP-ROLL
⑱ DELAY
⑲ THROTTLE NEEDLE MI›
⑳ GYRO SENS SETTING
```

```
MIX  INH
Swit A
DIR-SWT1  NULL
DIR-SWT2  NULL
              [ 1:R/U ]
```

This function allows you to execute snap rolls by flipping a switch, providing the same input every time. It also removes the need to change dual rates on the 3 channels prior to performing a snap, as snap-roll always takes the servos to the same position, regardless of dual rates, inputs held during the snap, etc.

Setting Method:

Use up/down button to select **SNAP-ROLL**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(18). DELAY
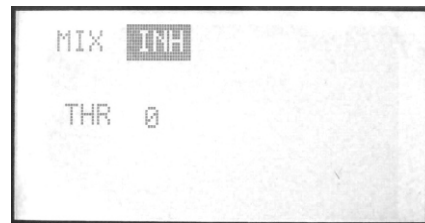
DELAY function is used to slow the response of the throttle servo to simulate the slow response of a turbine engine.
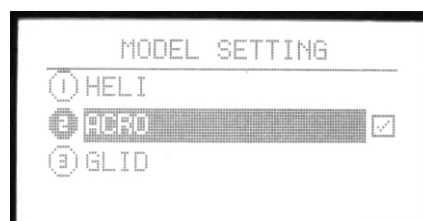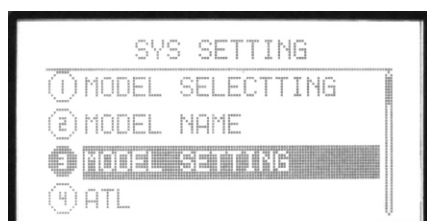
Setting Method:

Use up/down button to select **DELAY**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit this function. Press OK button for seconds can back default.
3. Press EXIT after setting.

(19). THROTTLE NEEDLE MIXING

Throttle needle is a pre-programmed mix that automatically moves an in-flight mixture servo in response to the Throttle Stick imputs for perfect engine tuning at all throttle settings. This function is particularly popular with contest pilots who fly in a large variety of locations, needing regular engine tuning adjustments, and requiring perfect engine response at all times and in all maneuvers. Also popular to minimize flooding at idle of inverted engine installations or installations with a high tank position. Not need for fuel injection engine, which do this automatically.

Setting Method
Use up/down button to select **Throttle needle mixing**, OK button is to enter editing.
Steps:
1. Use +/- button to active or inhibit this function.
2. Use +/- button to select one curve. There're 3 curves, NORM, IDLE1, IDLE2, IDLE3.
3. Use direction button to select "D/R"
   Edit one or two parameter.
   +/- buttons can increase or decrease the value.
   Press the OK button is to back default.
4. Use direction button to select "EX"
   Edit one or two parameter.
   +/- buttons can increase or decrease the value.
   Press the OK button is to back default.
   EX can adjust aileron, throttle, rudder sensitivity when the sticks are around the middle.
   There are a lot of mixes when "D/R" and "EX" come together.
5. Curve setting method please refer to page 27.

(20). GYRO SENS SETTING

```
        ADVANCED
(17) SNAP-ROLL
(18) DELAY
(19) THROTTLE NEEDLE MIX
(20) GYRO SENS SETTING
```

```
CH    CH5
MIX   INH
CTRL SwitA
POSI 0          [2    ]
RATE   0.0%
```

User can adjust the gyro sensitivity by transmitter,
AVCS gyro (GY) and normal gyro (STD).
Gyro sensitivity switch plug should plug in the fifth channel
of receiver. The auxiliary channel CH 5 won't have any
function now. User can set sensitivity switch from switch A to F,
and also fly model (NORM, IDLE1,2,3).

Setting Method:

Use up/down button to select **GYRO sens setting**, OK button
is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set fly model at "MODE".
3. Use +/- button to active or inhibit "Mix". Press OK button
   for seconds can back
   default.
4. Use +/- button to set control switch at "CTRL".
5. Use +/- button to set the switch position when the function
   is active.
6. Use +/- button to set the "Rate". Press OK button for seconds
   can back default.
7. Press EXIT after setting.

GLIDER

Press Menu and turn on the transmitter to enter SYS SETTING.
Select MODEL SETTING, press OK button to select the model
type.
Restart the transmitter after setting.

Editing mode and function introduction

1. Opening Screen

Turn on the power switch, the LCD displays as follows.

Voltage
Timer A
Timer B
Throttle trim display
Rudder trim display

Start time
Modulation
Model type
Timer C
Elevator trim display
Aileron trim display

The opening screen displays the voltage, timer, model, aileron, throttle, elevator and rudder state.
Note: Press EXIT you can see the model name.

Model name

2. Menu Screen
There are "NORMAL SETTING", "SYS SETTING", "ADVANCED".
A. NORMAL SETTING
Turn on the transmitter, press the menu button, the LCD displays as follows.
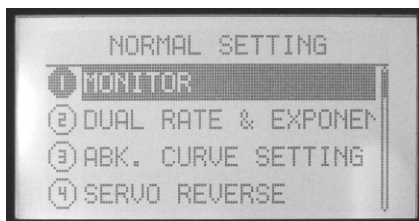
1. MONITOR
2. DUAL RATE & EXPONENTIAL SETTING
3. ABK. CURVE SETTING
4. SERVO REVERSE
5. END POINT
6. SUB TRIM
7. AUXILIARY CHANNELS SETTING
8. TRIM STEP SETTING
9. FLAPERON
10. FLAP TRIM
11. AIL-DIFF
12. ELEV-FLAP
13. FAIL SAFE
14. TIMER
15. ADVANCED
16. LANGUAGE

Setting method:
1. Use direction button to select the editing part,use up/down buttons to select function item. Left/right direction button to turn page.
2. Press OK button to enter submenu. The submenu function is in the next chapter.
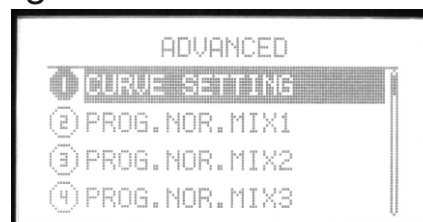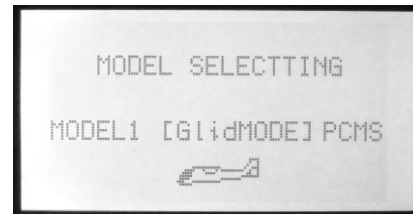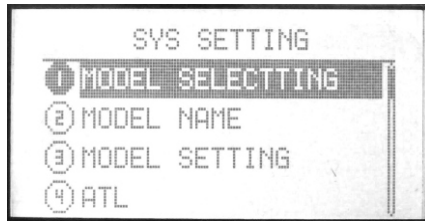3. Press EXIT button to back previous menu and the data is set automatically.

B. SYS SETTING

Press Menu and turn on the power switch, the LCD displays as
follows.

Setting method:

1. Use direction button to select the
editing part,use up/down buttons to
select function item. Left/right direction
button to turn page.

2. Press OK button to enter submenu.
The submenu function is in the next
chapter.

1. MODEL SELECTING
2. MODEL NAME
3. MODEL SETTING
4. ATL
5. AIL-2
6. MODULATION SETTING
7. STICK SETTING
8. ADJUSTMENT
9. REST SETTING
10. SEND DATA
11. RECEIVE DATA
12. SOUND
13. CONTRAST SETTING
14. ENGINEER MODE
15. ABOUT
16. LANGUAGE

3. Press EXIT button to back previous
menu and the data is set automatically.

C. ADVANCED

1. Enter "NORMAL SETTING", use right direction button to turn page,
select "ADVANCED".
Press OK button to enter.

Setting method:

1. Use direction button to select the editing part,
use up/down buttons to select function item.
Left/right direction button to turn page.

2. Press OK button to enter submenu. The submenu
function is in the next chapter.

3. Press EXIT button to back previous menu and the
data is set automatically.

SYS SETTING

1.MODEL SELECTTING

```
SYS SETTING
① MODEL SELECTTING
② MODEL NAME
③ MODEL SETTING
④ ATL
```

```
MODEL SELECTTING

MODEL1 [GlidMODE]PCMS
```

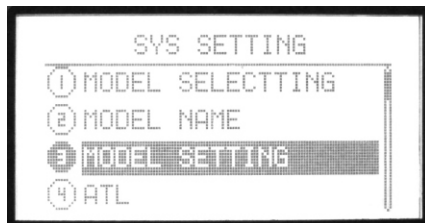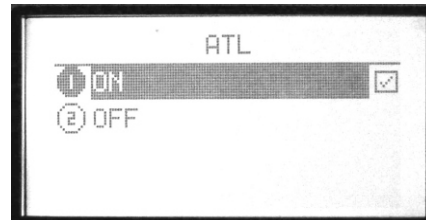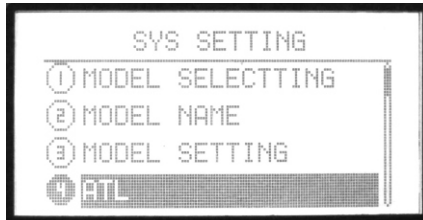There are 85 glider models. You can select any one to set.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**MODEL SELECTING**", OK button is
to enter editing.

Steps:

1. Use up/down direction button to select the model.
2. Press OK button to select.
3. Press EXIT after setting.

2. MODEL NAME
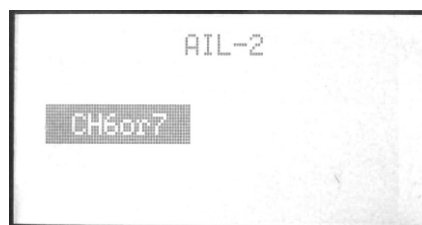

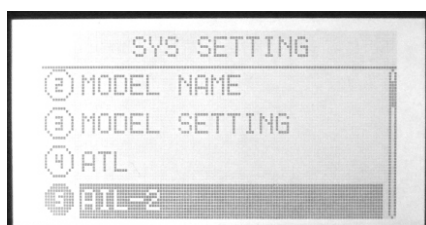This function is to make new names by users.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**MODEL NAME**", OK button is to
enter editing.

Steps:

1. You can edit the underlined letter.
2. Press OK button to choose the word you like.
3. Press EXIT after setting.

3. MODEL SETTING

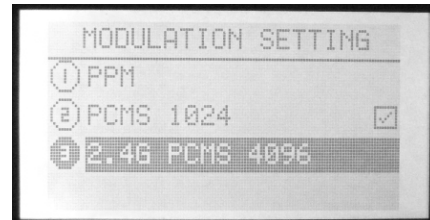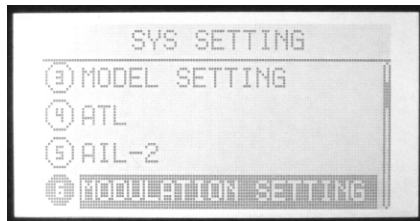You can select the model type. There are three type: HELI, ACRO, GLID.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**MODEL SETTING**", OK button is to enter editing.

Steps:

1. Use up/down direction button to select the model type.
2. Press OK button to confirm.
3. Press EXIT after setting.

4. ATL

Adjustable travel limit (ATL) makes throttle trim effective only at low throttle, disabling the trim at high throttle. This prevents pushrod jamming due to idling trim changes. This function defaults to ON. If you are not using channel 3 for throttle, you may want trim operation the same as on all other channels. To do so, set ATL to OFF.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**ATL**", OK button is to enter editing.

Steps:

1. Use direction buttons to select the editing part.
2. Press +/- button to set ATL function.
3. Press EXIT after setting.

5. AIL-2

AIL-2 is another channel for aileron.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "AIL-2", OK button
is to enter editing.

Steps:

1. Use direction buttons to select.
2. Press OK button to confirm.
3. Press EXIT after setting.

6. MODULATION SETTING

Because of the different receiver modulation PPM/PCMS1024, /2. 4G PCMS4096the transmitter should be accordance with the receiver modulation.
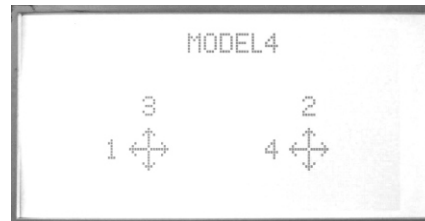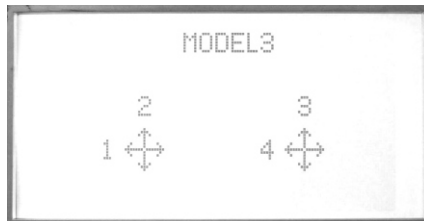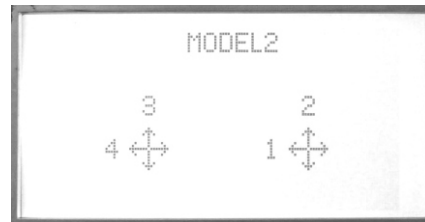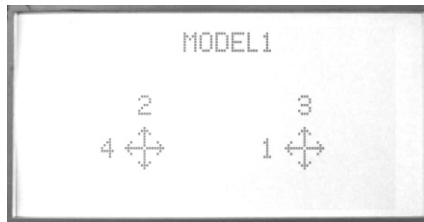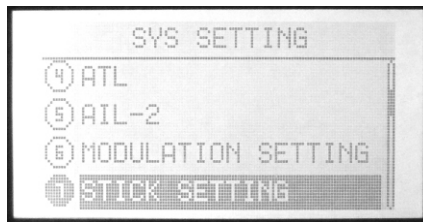
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**Modulation setting**", OK button is to enter editing.

Steps:

1. Use direction buttons to select the editing part.
2. Press OK button to confirm. Restart the transmitter and it works.

7.STICK SETTING

```
      SYS SETTING
  ④ ATL
  ⑤ AIL-2
  ⑥ MODULATION SETTING
  ● STICK SETTING
```

```
        MODEL1
    2           3
  4 ⬍         1 ⬍
```

```
        MODEL2
    3           2
  4 ⬍         1 ⬍
```

```
        MODEL3
    2           3
  1 ⬍         4 ⬍
```

```
        MODEL4
    3           2
  1 ⬍         4 ⬍
```

There are 4 kinds of model, you can use up/down direction button to select the model you preferred.
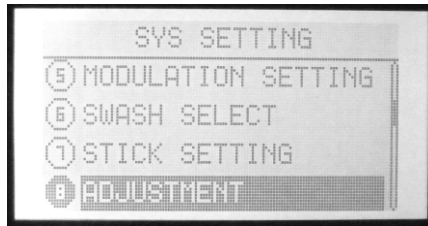
1-aileron
2-elevator
3-throttle
4-rudder

Setting Method:
Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**STICK SETTING**", OK button is to enter editing.

Steps:
1. Use direction button to select the editing part.
2. Press up/down button to choose Stick mode.
3. Press EXIT after setting.

8. Adjustment

This function is to set the central, high and low point of four sticks when users changed the mode I or II by themselves.
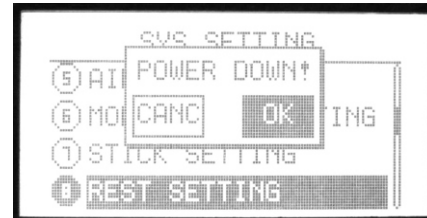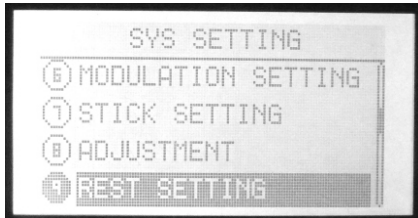
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**ADJUSTMENT**", OK button is to enter editing.

Steps:

1. Use direction button to select the editing part. Take the aileron adjustment for example.

2. Make the stick in the mid-point location. Press OK button to select any stick you want to adjust.

3. Select into the Figure 2, when the "center" highlights, press the "ok" button directly (the mid-point has been adjusted), then enter the high adjust.

4. The "high" highlights, take the stick gently in the right side (throttle /elevator in the top, aileron / rudder in the right),press "ok" button (the max adjust is OK), enter the low adjustment.

5.The "low" highlights, take the stick gently in the left side (throttle /elevator in the bottom, aileron / rudder in the left),press "ok" button (the min adjust is OK).

6. Press OK or RESET to confirm the record or reset.

7. If the record is wrong, press OK will back to step 3.

9.REST SETTING
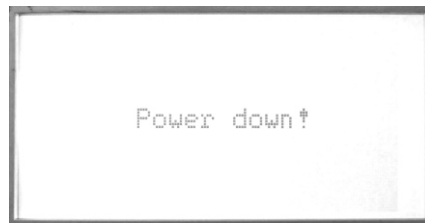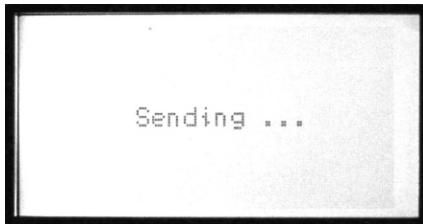

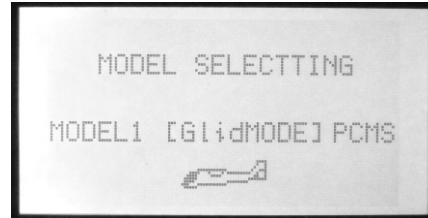This function is to back default.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "**REST SETTING**", OK button is
to enter editing.

Steps:

1. Use direction button to select the editing part.
2. Press +/- button to back default.
3. Press EXIT after setting.

10. SEND DATA

```
SYS SETTING
⑦ STICK SETTING
⑧ ADJUSTMENT
⑨ REST SETTING
⑩ SEND DATA
```

```
MODEL SELECTTING

MODEL1 [GlidMODE] PCMS
```

```
Sending ...
```

```
Power down!
```

Two transmitters (WFT09S) can copy data by a trainer cable/data transfer cable. This function together with the next function "Receive data" can realize the data copy.
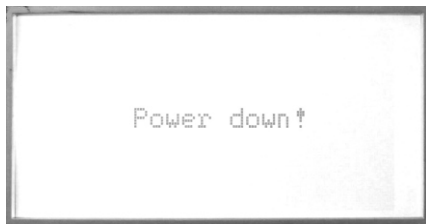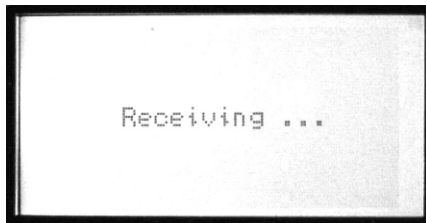
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**SEND DATA**", OK button is to enter editing.

Steps:

1. Select the model data you want to send out.
2. Press OK to send.

11. RECEIVE DATA

Two transmitters (WFT09S) can copy data by a trainer cable/data transfer cable. This function together with the previous function "Send data" can realize the data copy.
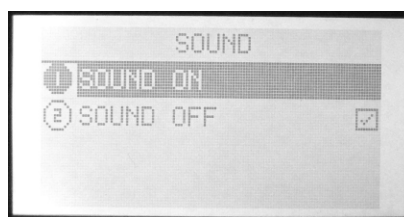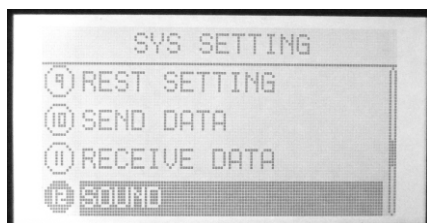
Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**RECEIVE DATA**", OK button is to enter editing.

Steps:

1. Press OK to receive data.
2. Restart the transmitter after receiving the data and it works.

12.Sound

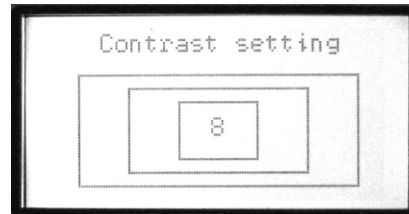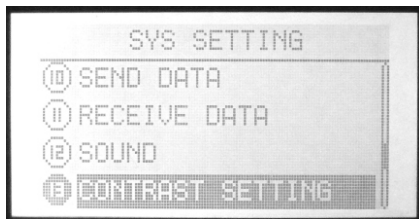This function is to select the sound ON and OFF.

Setting Method:

Press Menu and turn on the transmitter to enter "SYS SETTING"
Use up/down button to select "SOUND", OK button is
to enter editing.

Steps:

1. Use +/- button to select ON and OFF.
2. Press OK button to confirm.
3. Press EXIT after setting.

13.CONTRAST SETTING

This function is to adjust the LCD brightness by increasing or decreasing the contrast value.

Setting Method:
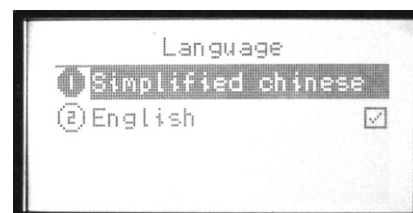
Press Menu and turn on the transmitter to enter "SYS SETTING" Use up/down button to select "**RECEIVE DATA**", OK button is to enter editing.

Steps:

1. Use +/- button to increase or decrease the value.
2. Press OK button for a while is to back default.
3. Press EXIT after setting.

16.LANGUAGE

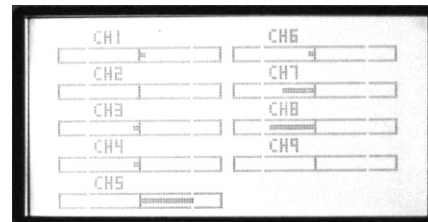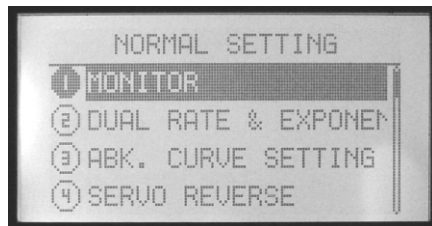This function is to select the language, Simplified Chinese and English can be selected.

NORMAL SETTING(AIRPLANE)

1. MONITOR

Monitor shows the servos' movement situation.
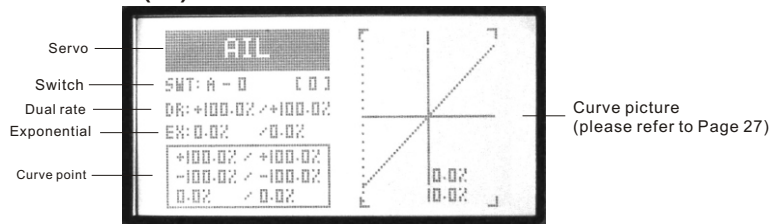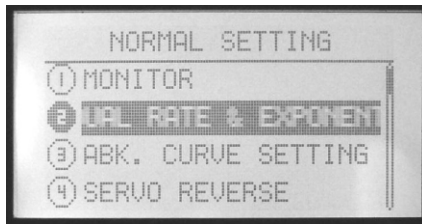In PCMS, this function is to describe the 9 channels output.
In PPM, this function is to describe the first 8 channels output.
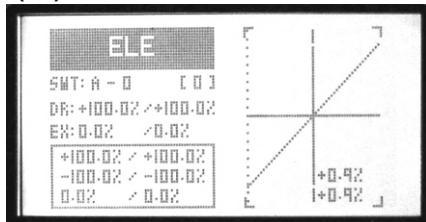
Setting Method:

Press menu button, enter system setting, the first function is the monitor.
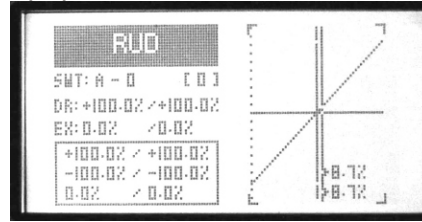
2. DUAL RATE & EXPONENTIAL SETTING

(1). AIL

```
NORMAL SETTING
① MONITOR
❷ IAL RATE & EXPONENT
③ ABK. CURVE SETTING
④ SERVO REVERSE
```

Servo — **AIL**
Switch — SWT: A - 0   [0]
Dual rate — DR: +100.0% / +100.0%
Exponential — EX: 0.0%   / 0.0%
Curve point — +100.0% / +100.0%
           -100.0% / -100.0%
           0.0%   / 0.0%

Curve picture
(please refer to Page 27)

(2). ELE

```
ELE
SWT: A - 0      [ 0 ]
DR: +100.0% / +100.0%
EX: 0.0%    / 0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%   / 0.0%
+0.9%
+0.9%
```

(3). RUD

```
RUD
SWT: A - 0      [ 0 ]
DR: +100.0% / +100.0%
EX: 0.0%    / 0.0%
+100.0% / +100.0%
-100.0% / -100.0%
0.0%   / 0.0%
+8.7%
+8.7%
```

Dual rate is to adjust aileron, elevator and rudder travel range. The range is between 0%-120%.
Exponential setting is to adjust aileron, elevator and rudder sensitivity when the sticks are around the middle. The range is between -100% to +100%.

Setting Method:

1. Select channel
   Aileron, elevator and rudder are selectable. Press +/- buttons to select channel, OK button to finish setting.
2. Set the switch and its position(0,1,2)
   Press direction button to select "SWT", edit it. +/- buttons can select function switch(A-F).
   After selecting the function switch, press right direction button to enter the switch position setting, use +/- buttons to set.
3. Set dual rate
   Press direction button to select "D/R", edit it. Edit one or two parameter.
   +/- buttons can increase or decrease the value.
   Press the OK button is to back default.
4. Set exponential
   Press direction button to select "EX". Exponential can adjust aileron, throttle and rudder sensitivity as the stick at the middle.
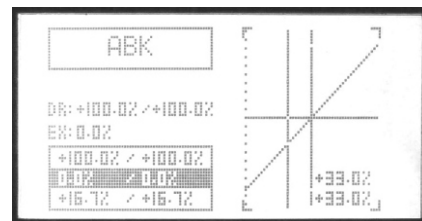5. Set curve point (normal/advanced)
   The box under "EX" shows the curve points.
   Select "Curve setting" in More setting function list.
   Please refer to Page 27 for detail curve setting.
6. Press EXIT after all the values are finished setting.

3. ABK. CURVE SETTING
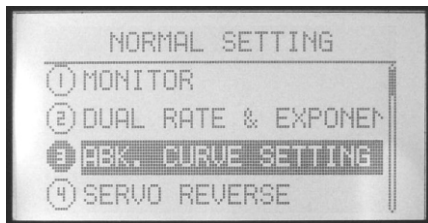
This function is used to make the glider speed down.

Setting Method:

Use up/down button to select **ABK. CURVE SETTING**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to switch the servo movement direction.
3. Press EXIT after setting.

4. SERVO REVERSE

Direction (Rev-reverse, Nor-normal)

Channel

```
NORMAL SETTING
①MONITOR
②DUAL RATE & EXPONEN
③ABK. CURVE SETTING
④ SERVO REVERSE
```
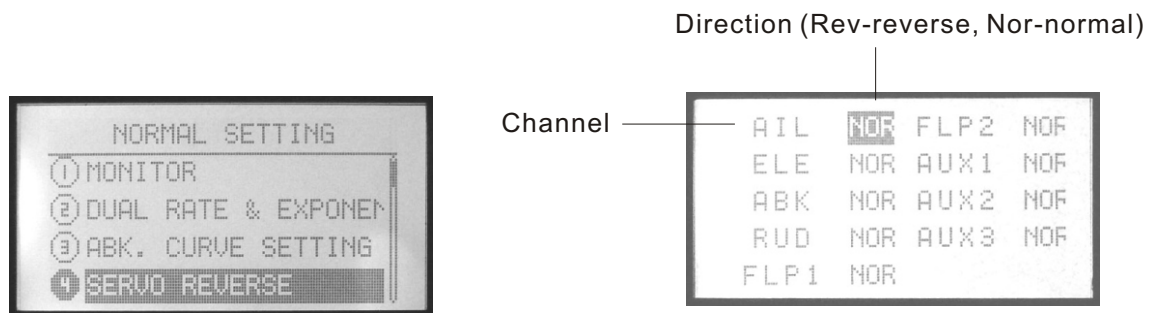
```
AIL   NOR  FLP2  NOR
ELE   NOR  AUX1  NOR
ABK   NOR  AUX2  NOR
RUD   NOR  AUX3  NOR
FLP1  NOR
```

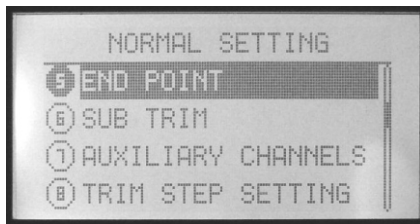This function is to change the direction of the servos movement.

Setting Method:

Use up/down button to select **SERVO REVERSE**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to switch the servo movement direction.
3. Press EXIT after setting.

5. END POINT

Channel Side Value

```
AIL   L  100.0%    R  100.0%
ELE   D  100.0%    U  100.0%
ABK   L  100.0%    H  100.0%
RUD   L  100.0%    R  100.0%
FLP1  -  100.0%    +  100.0%
```

NORMAL SETTING
⑤ END POINT
⑥ SUB TRIM
⑦ AUXILIARY CHANNELS
⑧ TRIM STEP SETTING

```
FLP1  -  100.0%    +  100.0%
FLP2  -  100.0%    +  100.0%
AUX1  -  100.0%    +  100.0%
AUX2  -  100.0%    +  100.0%
AUX3  -  100.0%    +  100.0%
```

It is to adjust the end of individual servo's travel. The range is from 0% to 120%.

Setting Method:

Use up or down button to select **END POINT**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to set the travel value. Press OK for a while backs to default.
3. Press EXIT after setting.

6. SUB TRIM

```
        NORMAL SETTING
   Ⓔ END POINT
   Ⓕ SUB TRIM
   Ⓖ AUXILIARY CHANNELS
   Ⓗ TRIM STEP SETTING
```
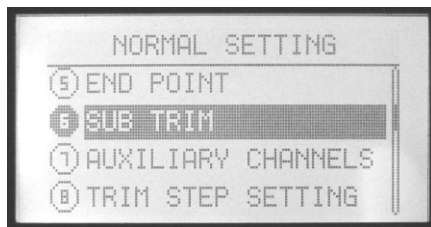
Channel   Value

```
   FLP1      0
   FLP2      0
   AUX1      0
   AUX2      0
   AUX3      0
```

High/Low

```
   AIL       0
   ELE       0
   ABK       0
   RUD       0
   FLP1      0
```

Sub trim makes small changes or corrections to the neutral position of each servo. Range is -120 to +120, default setting is 0.

We recommend that you center the digital trims before making Sub trim changes, and that you tryto keep all of the Sub trim values as small as possible. Otherwise, when the Sub trims are large values, the servo's range of travel is restricted on one side.
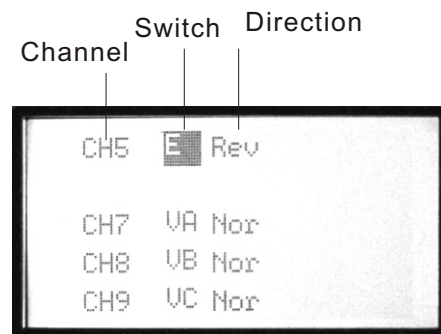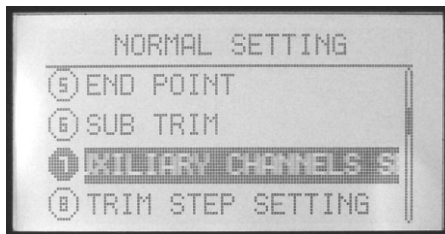
Setting Method:

Use up or down button to select **SUB TRIM**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button or OK button to set the trim value. Press OK for a while backs to default.
3. Press EXIT after setting.

7. AUXILIARY CHANNELS SETTING

Channel   Switch   Direction

```
NORMAL SETTING
⑤ END POINT
⑥ SUB TRIM
⑦ AUXILIARY CHANNELS S
⑧ TRIM STEP SETTING
```

```
CH5    E Rev

CH7    VA Nor
CH8    VB Nor
CH9    VC Nor
```

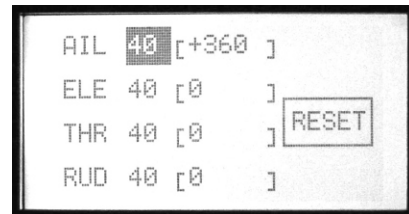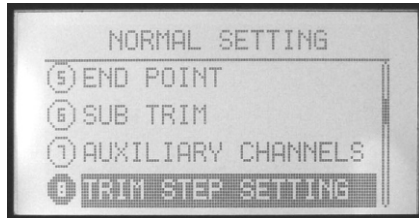This function is for channel 5 to channel 9 function setting.

Setting Method:

Use up or down button to select **AUXILIARY CHANNELS SETTING**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set the switches or knobs. The switches can be set from A to F, the knobs can be set as VA, VB, VC, VL, VR or none(-).
3. Use left or right direction button to set normal or reverse direction of every channel.
4. Press EXIT after setting.

8. TRIM STEP SETTING

```
NORMAL SETTING
⑤ END POINT
⑥ SUB TRIM
⑦ AUXILIARY CHANNELS
⑧ TRIM STEP SETTING
```

```
AIL  40 [+360 ]
ELE  40 [0    ]
THR  40 [0    ]   RESET
RUD  40 [0    ]
```

This function is to change the rate at which the trim moves when the TRIM LEVER is activated. The range is from 1to 250. Generally larger trim steps are for models with larger control throws or for first flights to ensure sufficient trim to properly correct the model. Smaller trim steps are later used to allow very fine adjustments in flight.
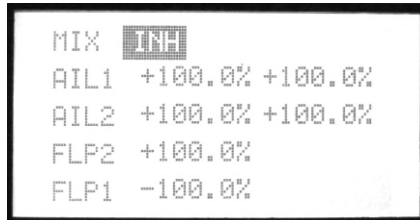
Setting Method:

Use up/down button to select **TRIM STEP SETTING**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to adjust the size of the step. Repeat as desired for other channels. If you select RESET, the current channel trim value change to 0.
3. Press EXIT after setting.

9. FLAPERON

```
NORMAL SETTING
⑨ FLAPERON
⑩ FLAP TRIM
⑪ AIL-DIFF
⑫ ELEV-FLAP
```

```
MIX  INH
AIL1 +100.0% +100.0%
AIL2 +100.0% +100.0%
FLP2 +100.0%
FLP1 -100.0%
```

FLAPERON mixing function uses on servo on each of the two ailerons, and uses them for both aileron and flap function.
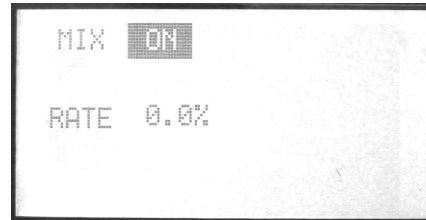
Setting Method:

Use up/down button to select **FLAPERON**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

10. FLAP TRIM

```
    NORMAL SETTING
(9) FLAPERON
(10) FLAP TRIM
(11) AIL-DIFF
(12) ELEV-FLAP
```

```
MIX   ON

RATE  0.0%
```

FLAP TRIM assigns the primary flaperon control to allow trimming in flight of the flap action of flaperons.
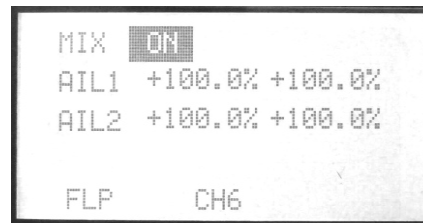
Setting Method:

Use up/down button to select **FLAP TRIM**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

11. AIL-DIFF

```
      NORMAL SETTING
  (9)FLAPERON
  (10)FLAP TRIM
  (11)AIL-DIFF
  (12)ELEV-FLAP
```

```
  MIX   ON
  AIL1 +100.0% +100.0%
  AIL2 +100.0% +100.0%

  FLP      CH6
```

Aileron differential(AIL-DIFF) is primarily used on 3-servo wings, with one servo operating inboard flap(s) on Ch6, and AIL-DIFF controlling proper aileron operation of 2 aileron servos, plugged into Ch1 and Ch7.
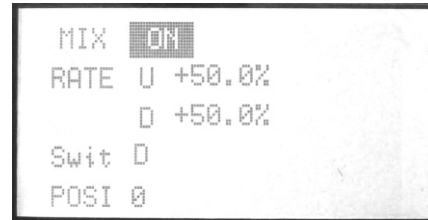
Setting Method:

Use up/down button to select **AIL-DIFF**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

12. ELEV-FLAP

```
      NORMAL SETTING
 (9)FLAPERON
 (10)FLAP TRIM
 (11)AIL-DIFF
 (12)ELEV-FLAP
```

```
 MIX    ON
 RATE  U +50.0%
       D +50.0%
 Swit D
 POSI 0
```

ELEV-FLAP mixing is the first pre-programmed mix we'll cover. This mix makes the flaps drop or rise whenever the elevator stick is moved. It is most commonly used to make tighter pylon turns or squarer corners in maneuvers. In most cases, the flaps droop (are lowered) when up elevator is commanded.
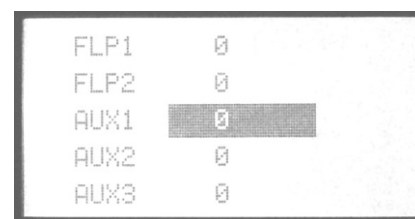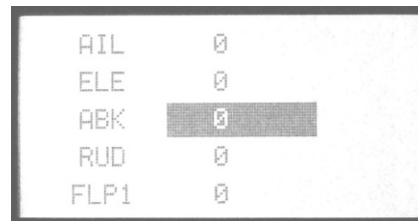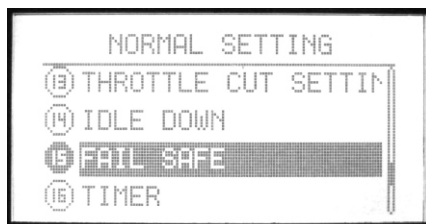
Setting Method:

Use up/down button to select **ELEV-FLAP**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

13. FAIL SAFE

```
NORMAL SETTING
⑬THROTTLE CUT SETTIN
⑭IDLE DOWN
⑮FAIL SAFE
⑯TIMER
```

```
AIL      0
ELE      0
ABK      0
RUD      0
FLP1     0
```

```
FLP1     0
FLP2     0
AUX1     0
AUX2     0
AUX3     0
```

This function is to set responses in case of loss of signal or low RX battery.
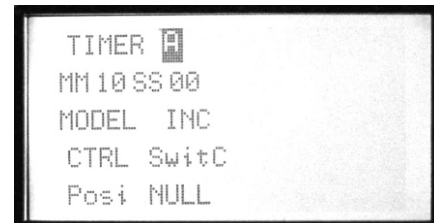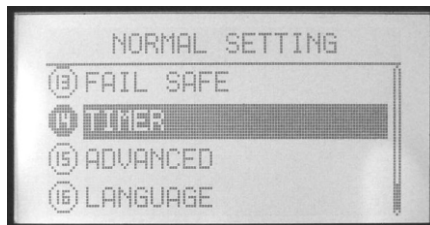
Setting Method:

Use up/down button to select **FAIL SAFE**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to select "hold" or "0.0%"
3. Press OK button to confirm the current parameter.
4. Press EXIT after setting.

14. TIMER

```
NORMAL SETTING
⑬ FAIL SAFE
⑭ TIMER
⑮ ADVANCED
⑯ LANGUAGE
```

```
TIMER A
MM 10 SS 00
MODEL  INC
CTRL  SwitC
Posi  NULL
```

The flight time of every helicopter is different according to the different tank of fuel, engine, ESC, etc. Timer function can alarm you to land before the fuel lacks.
The transmitter can set 3 timers (A, B, C). The longest time can be set as MM99SS59. The countdown timer can alarm user before 10 minutes. The alarm will become 2S/1S from 1S/1S in the last 10 seconds. When the countdown timer is 0, the time will add up.
The timer can be seen in the opening screen. Any switch can be set to control the begin and stop of the time.
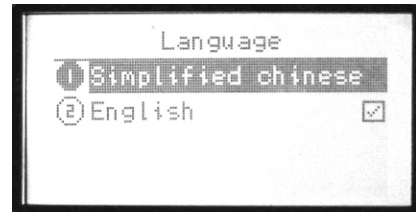
Setting Method:

Use up/down button to select **TIMER**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Set timer. WFT09S can set 3 timers (A, B, C).
3. Use +/- button to set MM..SS... Press OK button for seconds can back to default.
4. Use +/- button to set model.
5. Use +/- button to set control(CTRL).
6. Use +/- button to set the position which can active this function.
7. Press EXIT after setting.

16. Language

This function is to select the language. There are 5 language selectable. For example, the selection is as shown in the picture.
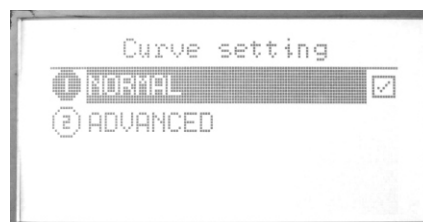
15. ADVANCED

```
        NORMAL SETTING
(15) FAIL SAFE
(16) TIMER
(17) ADVANCED
(18) LANGUAGE
```

To realize an idea fly, there are 20 advanced function in ADVANCED.
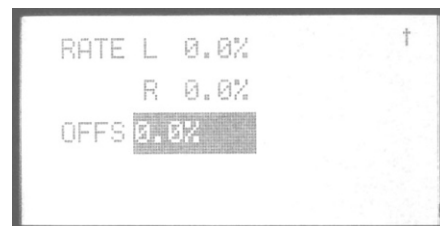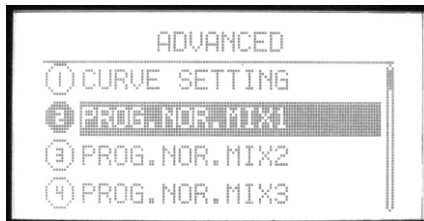
Setting Method:

Use up/down button to select ADVANCED, OK button is to enter editing. +/- button can turn page.
About each advanced functions please read the following pages.

ADVANCED function introduction

(1). CURVE SETTING

There are 2 kinds of setting, Normal and Advanced.

Please refer to page 27.

(2)-(8). PROG. NOR. MIX1-7

```
Mix  AIL → RUD
         INH
LINK OFF    TRIM OFF
CTRL SwitD
Posi NULL              ↓
```

```
ADVANCED
① CURVE SETTING
② PROG.NOR.MIX1
③ PROG.NOR.MIX2
④ PROG.NOR.MIX3
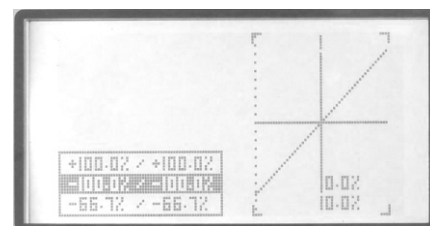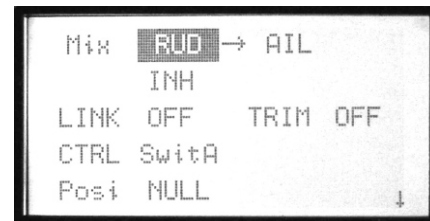```

```
RATE L  0.0%          ↑
     R  0.0%
OFFS 0.0%
```

The mix program is to adjust the flying pose. There are 7series programs with the same setting method. You can set one mix and one mix with another one mix.

Setting Method
Use up/down button to select **PROG. NOR. MIX**, OK button is to enter editing.

Steps:
1. Use direction buttons to select editing part. Set any two channels mix.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to active or inhibit "Link" and "TRIM".
4. Use +/- button to active or inhibit "CTRL".
5. Use +/- button to set the control switch position.
6. Press EXIT after setting.

(9)-(12). PROG. CUR. MIX1-4

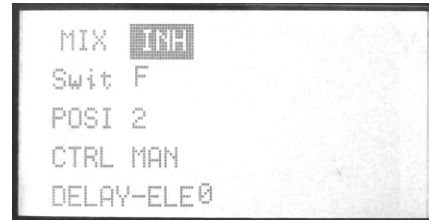There are 4 curve mix program, the curve is made up by 2 to 10 point.

Setting Method:

Use up/down button to select **PROG. CUR. MIX**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part. Set any two channels mix.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to active or inhibit "Link" and "TRIM".
4. Use +/- button to active or inhibit "CTRL".
5. Use +/- button to set the control switch position.
6. Set the curve point.(Normal/Advanced). Please refer to page 27.
7. Press EXIT after setting.

(13). BUTTERFLY

AIR BRAKE simultaneously moves the flaps, twin ailerons and elevators, and is usually used to make steep descents or to limit increases in airspeed in dives.
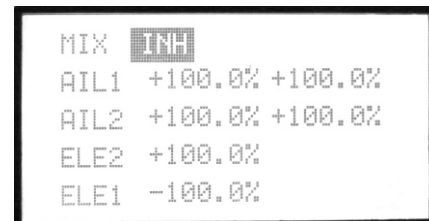
Setting Method:

Use up/down button to select **AIR BRAKE**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit "Mix".
3. Use +/- button to set Swit, POSI. Press OK button for seconds can back default.
4. Use +/- button to set CTRL (MAN/ THR).
5. Use +/- button to set delay value. Press OK button for seconds can back default.
6. Press EXIT after setting.

(14). ELEVON

This function used with delta wings, flying wings, and other tailless aircraft that combine aileron and elevator functions, using two servos, one on each elevon. The aileron/elevator responses of each servo can be adjusted independently.

Setting Method:
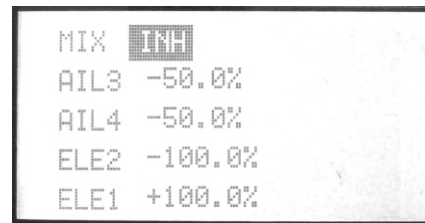
Use up/down button to select **ELEVON**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(15). AILVATOR

```
      ADVANCED              MIX  INH
(13)AIR BRAKE               AIL3 -50.0%
(14)ELEVON                  AIL4 -50.0%
(15)AILVATOR                ELE2 -100.0%
(16)V-TAIL                  ELE1 +100.0%
```

AILEVATOR mixing function uses one servo on each of the two elevators, and combines the elevator function with the aileron function(unless aileron travel is set to 0).
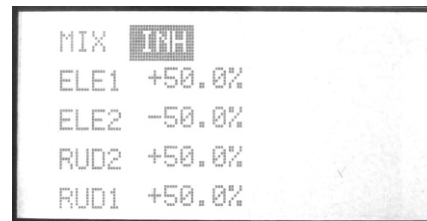
Setting Method:

Use up/down button to select **AILVATOR**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(16). V-TAIL

```
        ADVANCED              MIX   INH
 ⑬ AIR BRAKE                  ELE1  +50.0%
 ⑭ ELEVON                     ELE2  -50.0%
 ⑮ AILVATOR                   RUD2  +50.0%
 ⑯ V-TAIL                     RUD1  +50.0%
```

V-TAIL mixing is used with v-tail aircraft so that both elevator and rudder functions are combined for the two tail surfaces. Both elevator and rudder travel can be adjusted independently on each surface.
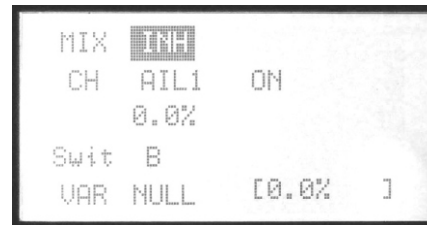
Setting Method:

Use up/down button to select **V-TAIL**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(17). START OFS

This function is used to offset the aileron, elevator, and flap servos to the position that provides maximum lift during launch. Normally the ailerons and flaps are drooped about 20-30, with the flaps drooped slightly more to prevent tip-stailing on tow. The elevator can also be offset in oo trim out any pitch changes caused by the flap and aileron presets.
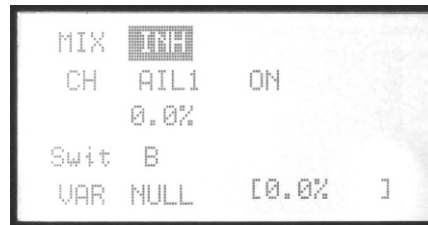
Setting Method:

Use up/down button to select **START OFS**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to set value. Press OK button for seconds can back default.
3. Press EXIT after setting.

(18). SPEED OFS

This function is used to offset the aileron, elevator, and flap servos for minimum drag in cruise and high-speed flight. Normally the ailerons and flaps are raised about 3-5.

Setting Method:

Use up/down button to select **SPEED OFS**, OK button is to enter editing.

Steps:

1. Use direction buttons to select editing part.
2. Use +/- button to active or inhibit this function. Press OK button for seconds can back default.
3. Press EXIT after setting.

TO THE PILOT

WFT09S is the 2.4G version which includes helicopter, airplane and glider function. Thank you for using the radio systems.

We welcome your valuable advice and we will continue developing the radio.

Welcome to contact us!
Www.wflysz.com
sales@wflysz.com
Tel: 0086 755 26581817
Fax: 0086 755 26581821

WFLY

www.wflysz.com