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3 - CH PCM/PPM Radio Control System Introduction Manual

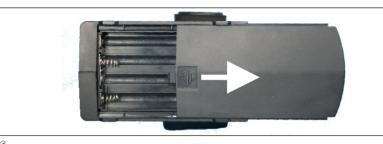
- Thank you for purchasing our 'Xinyi' R/C system.
- Before using, read this manual carefully.



DIGITAL PROPORTIONAL R/C SYSTEM N-4Q



3.1 Handling Procedure For Batteries



Battery Replacement

- 1.Remove the battery cover from the transmitter by sliding it in the direction of the arrow.
- 2. Remove the used batteries.
- 3.Load the new AA size batteries. Pay very close attention to the polarity marking and reinsert accordingly.
- 4 .Slide the battery cover back onto the case.



Always be sure your reinsert the batteries in the correct polarity order. If the batteries are loaded incorrectly, the transmitter may be damaged.

When the transmitter is not used, always remember to remove the batteries. If the batteries do happen to leak, clean the batteries case and contacts thoroughly. Make sure the contacts are free of corrosion.

Battery Disposal

Some countries require special handling of used of batteries ,please contact the agencies responsible for recycling hazardous wastes in your local area.

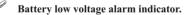
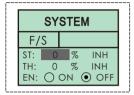
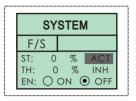


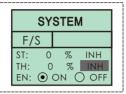
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2.10.5 SYS (F/S)

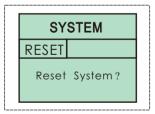






- Fail safe function comes into effect when receiver does not receive the data. This function does not work in PPM mode. The servo value of rudder channel and throttle channel in the fail status can be set through fail safe function.
- In the power on interface, press "ENTER" to enter function interface, and select "SYS" by "+" or "-". Now press "ENTER" to enter "SYSTEM" menu and select "F/S" by "+" or "-". and then press "ENTER" and come to the fail safe interface.
- In "ST" line, to set the servo value of rudder channel at fail safe status. The value: 120% to +120%. ACT/INH is the function of allow/prohibit. When selecting "ACT", the rudder servo will be locked at the set value when failing.
 - In "TH" line, to set the throttle servo value. The same way as in "ST" line.
 - "EN", is the start or close switch of fail safe function.

2.10.6 SYS (RESET)



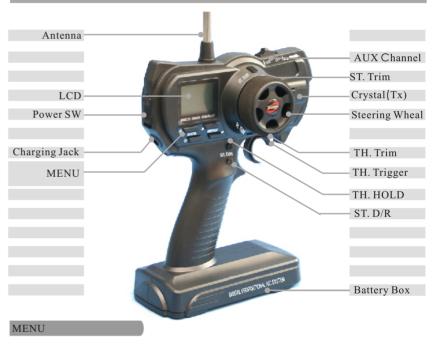
- All the setting in the system will be back to the default status by this reset function. It takes about 30 seconds.
- In the power on interface, press "ENTER" to enter function interface, and select "SYS" by "+" or "-". Now press "ENTER" to enter "SYSTEM" menu and select "RESET" by "+" or "-". and then press "ENTER" and come to the system reset interface.
- All the system data will come back to the default value by pressing "ENTER". Remark: when the remote controller shows disordered code in the process of reset function, recovery operation is needed.

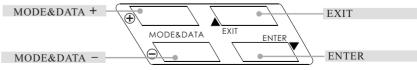
1.1 Basic Introduction

N-4Q is a 3 channel pistol grip radio controller. Channel 1: rudder, Channel 2: throttle, Channel 3: AUX

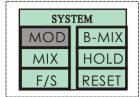
N-4Q will start the initial inspection of the system when it is switched on. It takes about 30 seconds if the RC is used for the first time. Otherwise, it takes only $1\sim3$ seconds for the inspection.

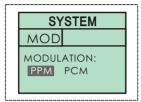
1.2 N-4Q Transmitter Chart





2.10.1 SYS (MOD)

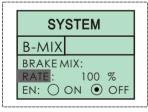




In the power on interface, press "ENTER" to enter function interface, and select "SYS" by "+" or "-". Now press "ENTER" to enter "SYSTEM" menu and select "MOD" by "+" or "-". and then press "ENTER" and come to the modulation interface.

When mode is FM, PPM or PCM can be selected in this menu.

2.10.2 SYS (B-MIX)



Brake Mix is used when two servos are equipped for braking. If this function is allowed in setting, the third channel(AUX) is used for brake mix channel, and the switch doesn't work.

In the power on interface, press "ENTER" to enter function interface, and select "SYS" by "+" or "-". Now press "ENTER" to enter "SYSTEM" menu and select "B-MIX" by "+" or "-". and then press "ENTER" and

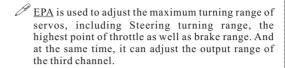
come to Brake Mix setting interface.

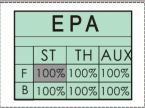
"RATE" is the rate of brake end between 3rd channel and 2nd channel. Value range: $0\sim 120\%$: Default value: 100%.

"EN" is the start or close switch of this function. Select "ON" to start the function, and "OFF" to close the function.

Leave the setting by pressing "EXIT" when the setting is finished.

2.3 **EPA**

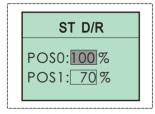




 $\overline{\text{EPA}}$ adjusting value range: 0~120 %, default is 100%

- 1.Press "ENTER" in the power on interface and enter function menu. Press "+" or "-" to choose "EPA". And press "ENTER" and enter EPA adjusting interface.
- 2. Press "ENTER" to choose each adjusting item, and then press "+" to increase and "-" to decrease the value of the corresponding item.
- 3. Press "EXIT" to save your setting and leave <u>EPA</u> interface, and back to the function menu interface.

$2.4 \, \mathbf{D/R}$

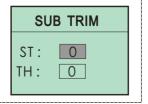


<u>D/R</u> is used to change the action range of steering servo when turning the steering wheel. Increasing D/R will make the steering wheel action more sensitive.

 $\underline{D/R}$ adjusting value range: 0~120%, default is 100%

- 1.Press "ENTER" in the power on interface, and enter function menu interface. Press "+" or "-" to choose $\overline{D/R}$, and press "ENTER" to enter $\overline{D/R}$ adjusting interface.
- 2.Press "+" to increase and "-" to decrease D/R value.
- 3.Press "EXIT" to save your setting and leave $\underline{D/R}$ interface, and back to the function menu interface.

2.5 SUB TRIM



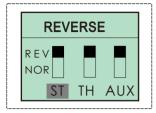
<u>SUB TRIM</u> adjusting value range: -100~+100%, default is 0%

1.Press "ENTER" in the power on interface, and enter function menu interface. Press "+" or "-" to choose <u>TRIM</u>, and press "ENTER" to enter <u>SUB TRIM</u> adjusting interface.

2.Press "+" to increase and "-" to decrease <u>SUB</u> TRIM value.

3.Press "EXIT" to save your setting and leave <u>SUB TRIM</u> interface, and back to the function menu interface.

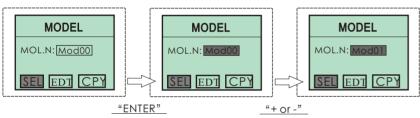
2.6 **REV**



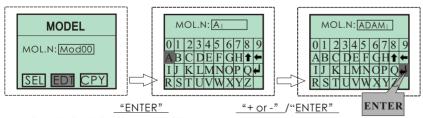
- 1.Press "ENTER" in the power on interface, and enter function menu interface. Press "+" or "-" to choose <u>REVERSE</u>, and press "ENTER" to enter REVERSE adjusting interface.
 - 2.Press "ENTER" to choose each Channel.
- 3.Press "+" to increase and "-" to choose "REV" or "NOR".
- 4.Press "EXIT" to save your setting and leave <u>REVERSE</u> interface, and back to the function menu interface.

2.7 MDL

Press "ENTER" in the power on interface, and enter function menu interface. Press "+" or "-" to choose MDL, and press "ENTER" to enter MODEL adjusting interface.



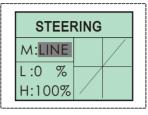
- 1.Press "ENTER" to choose "mod00".(SEL)
- 2. Press "+" or "-"to choose "mod00~mod15"
- 3.Press "EXIT" to save your setting and leave <u>SEL</u> interface, and back to the function menu interface.



- 1. Press "+" or "-"to choose "EDT".
- 2.Press "ENTER" to enter rename mode ,Press "+" or "-"to choose "0.1.2....I"

4. Press "EXIT" to save your setting and leave $\overline{\text{EDT}}$ interface, and back to the function menu interface.

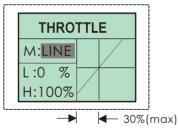
2.8 ST.C

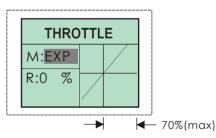




- 1. Press "ENTER" in the power on interface and enter function menu. Press "+" or "-" to choose "ST.C". And press "ENTER" and enter STEERING adjusting interface.
- 2.Press "+" or "-" to choose "LINE" or "EXP", Press "ENTER" to choose "L" or "H", and then press "+" to increase and "-" to decrease the value of the corresponding item
 - 3.<u>LINE</u> adjusting value range:
 - (L): $0 \sim 50$ %, default is 0%
- $(\underline{H}):50\sim100\%$, default is 100%
- 4.EXP adjusting value range: -100%~+100 %, default is 0%
- 5. Press "EXIT" to save your setting and leave <u>STEERING</u> interface, and back to the function menu interface.

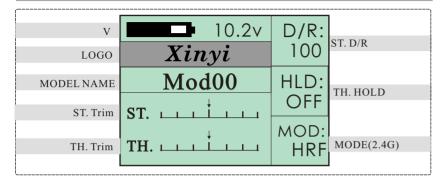
2.9 TH.C



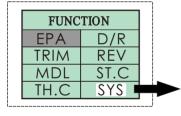


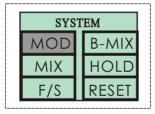
- 1.Press "ENTER" in the power on interface and enter function menu. Press "+" or "-" to choose "TH.C". And press "ENTER" and enter <u>THROTTLE</u> adjusting interface.
- 2.Press "+" or "-" to choose "LINE" or "EXP", Press "ENTER" to choose "L" or "H" and then press "+" to increase and "-" to decrease the value of the corresponding item.
 - 3.LINE adjusting value range:
 - (L): $0 \sim 50$ %, default is 0%
- (H):50~100 %, default is 100%
- 4.EXP adjusting value range: -100%~+100 %, default is 0%
- 5. Press "EXIT" to save your setting and leave <u>THROTTLE</u> interface, and back to the function menu interface.

2.1 MENU FUNCTION



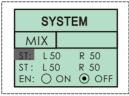
2.2 Characteristics of system

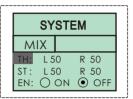




- Respectively adjust EPA of three channels
- Support D/R function of Steering channel
- Meutral trims of Steering and throttle
- Respectively set the reverse of the three channels
- Choose EXP curve or LINE curve freely, and line curve can adjust the two ends.
- Custom model name, 5 letters at most for each name, 16 memories model data. Each data can be duplicated between them to avoid repeat establishment.
- Battery change reminding function.

2.10.3 SYS (MIX)







- MIX allows three custom channels mixing. There are main channel and sub-channel in the mix selection. The servo travel value of the sub channel is changed along with the change of the main channel according to the setting rate.
- In the power on interface, press "ENTER" to enter function interface, and select "SYS" by "+" or "-". Now press "ENTER" to enter "SYSTEM" menu and select "MIX" by "+" or "-". and then press "ENTER" and come to the mix setting interface.
- Firstly main channel setting. Select channel No. (ST, TH, AUX) by "+" or "-". L and R separately correspond to the rate of Left and Right servos of the main channel mix
- Secondly sub channel setting. Select channel No. (ST, TH, AUX) by "+" or "-". L and R separately correspond to the rate of Left and Right servos selected in the sub channel.
- "EN". is the start or close switch of this function. Select "ON" to start the function, and "OFF" to close the function.

For example: current setting: ST: L 50% R 30%

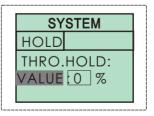
TH: L 20% R 50% EN: select "ON"

If throttle servo is 60% on the right and rudder servo is 50% on the right, and then after setting, throttle servo is: 50*30%+60%*50%=45%.

- Throttle servo will act along with the action of rudder servo.

Leave the setting by pressing "EXIT" when the setting is finished.

2.10.4 SYS (HOLD)



- Throttle hold can be performed by pressing the switch to stop the engine. It can be performed for accident braking. When pressing the switch, throttle trigger doesn't work until the switch is pressed again.
- In the power on interface, press "ENTER" to enter function interface, and select "SYS" by "+" or "-". Now press "ENTER" to enter "SYSTEM" menu and select "HOLD" by "+" or "-". and then press "ENTER" and come to the throttle hold interface.
- "VALUE" refers to servo value in throttle hold position. Value range:-120 \sim +120% :Default value:0% .

Caution

- To work your R/C with your models correctly and safely, read this manual carefully and keep it in a safe way as a reference introduction in the future.
- Warning:
 - 1. This product is only equipped for radio controlled models;
 - 2. The usage of this product should be approved by local relevant law or regulations;
 - 3. We will be not responsible for the damages caused by unauthorized modification, adjustment or replacement of parts of this product;
 - 4. The manual may be altered without prior notice. Please contact us if you have any corrections or clarifications that should be made in the manual.
- Please pay more attention on the parts in this manual, which marked with "warning".
- Because of disturbance, do not work your radio control system simultaneously with others at the same frequency.
- Before starting the transmitter, make sure the transmitter batteries are well loaded .The voltage of transmitter batteries never be lower than 8.6V. And please check and confirm that the servos are all well and properly connected.
- Please take off batteries from transmitter after flying and during the transportation.
- Please check and have a test on control surfaces to confirm the transmitter handling of each part prior to each takeoff. The frequencies of the module and the receiver should be the same.
- Keep the radio system away from moist, high temperature and strong shake. Do not clean the product with solvent.
- The antenna do not touch anything else when power switch is turned on. Do not leave this product and its accessories within the reach of small children.
- Please use this product according to your local relevant law or regulation, we are not responsible for any incidents or damages.

2.11 Trim ADJ.



Please start the motor or the engine while marking the adjustment of these settings.

- 1. Connect the receiver, servos, and other components and then turn on the power switches to transmitter and receiver.
- 2.Be sure the Steering trim and Throttle trim on the transmitter are at their neutral position.
- 3. When turning on the transmitter, please make sure the transmitter antenna is completely extended. Turn on the transmitter before turning on the receiver, while turn off the receiver before turning off the transmitter.

Steering Trim

Steering neutral adjustments can be made by moving the steering trim knob to the left or the right.

Racers Tip

Always check and be sure the servo is at its neutral position before installing a servo. Adjust the servo horn hole position and linkage so both are parallel. When a servo saver is used place it as closer to center position as possible. Be sure the steering trim on the transmitter at the neutral position.

Trim Operation And Maximum Trav.

Changing the trim can effect the overall settings, when adjustments are made with the trims, please recheck your installation for maximum servo travel.(Sreeting EPA right side and left side).

When Trim movement goes to extremes

That means if you make a lot of trim movement to get a servo to the neutral position, please reposition the servo horn or servo saver on the servo and inspect your linkage installation.

Throttle Trim

Throttle neutral adjustments can be made by moving the throttle trim to the left or the right.

Racers Tip

When using a electronic speed control, please set the throttle trim to neutral and make adjustments to the speed control. On a gas powered model, set the trim to neutral and adjust the linkage to the point where carburetor is fully closed in accordance with the engine instruction manual.

Trim Operation and Travel

Trim adjustments will effect the overall servo travel, so please check the (back-ward) movement after the adjustment

When trim movement is goes to extremes

That means if you make a lot of the trim movement to get the servo to the neutral position, please recenter the servo horn closer to the neutral position and inspect your throttle linkage.

NOTE: This equipment has been tested and found to comply with the limits for a digital device, pursuant to Part 95 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

4.1 Connection between Receiver and Servos

- The receiver and the servos must be properly connected for your models.
- If ESC in the model can support power, connect it with "Ch2" channel directly.



Technology Data

	3-CHR/C	3-CH R/C	3-CH R/C
Type:	N-4Q		0
Specification:	LCD		4
Code format:	PPM/PCM		0:
Channels:	3		On:
Frequency:	27/40/72/75M (One type of them)		
DC:	9.6V, <200mA		
Measurement:	295*204*105mm (packing meas.)		91
Net weight:	590g		0

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