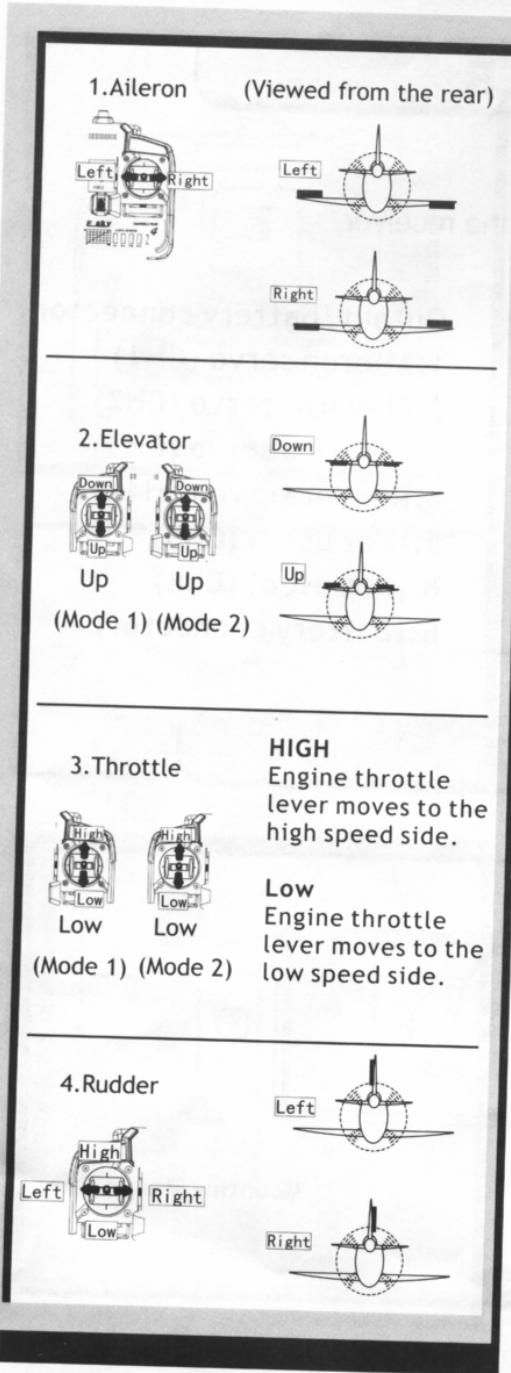


TRANSMITTER OPERATION AND MOVEMENT OF EACH SERVO



Before making any adjustments, learn the operation of the transmitter and the movement of each servo. (In the following descriptions, the transmitter is assumed to be in the standby state.)

AILERON OPERATION

When the aileron stick is moved to the right, the right aileron is raised and the left aileron is lowered, relative to the direction of flight, and the plane turns to the right. When the aileron stick is moved to the left, the ailerons move in the opposite direction.

ELEVATOR OPERATION

When the elevator stick is pulled back, the tail elevator is raised and the tail of the plane is forced down, the air flow applied to the wings is changed, the lifting force is increased, and the plane climbs (UP operation). When the elevator stick is pushed forward, the elevator is lowered, the tail of the plane is forced up, the air flow applied to the wings is changed, the lifting force is decreased, and the plane dives (DOWN operation).

THROTTLE OPERATION

When the throttle stick is pulled back, the engine throttle lever arm moves to the SLOW (low speed) side. When the throttle stick is pushed forward, the throttle lever arm moves to the HIGH (high speed) side.

RUDDER OPERATION

When the rudder stick is moved to the right, the rudder moves to the right and the nose points to the right, relative to the direction of flight. When the rudder stick is moved to the left, the rudder moves to the left and the nose points to the left and the direction of travel of the plane changes.

ADJUSTMENTS

The operating direction, neutral position, and steering angle of each servo are adjusted.

CAUTION !

The basic linkage and adjustments of the fuselage conform to the fuselage design drawings and kit instruction manual. Be sure that the center of gravity is at the prescribed position.

ADJUSTMENT PROCEDURE

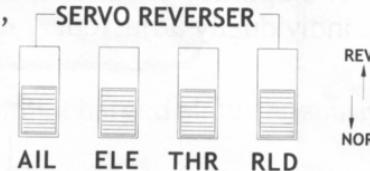
Before making any adjustments, set all the SERVO REVERSER switches on the front of the transmitter to the lower (NOR) position.
(Switch the switches with a small screwdriver, etc.)

Turn on the transmitter and receiver power switches and make the following adjustments:

1. Check the direction of operation of each servo

If a servo operates in the wrong direction, switch its SERVO REVERSER switch. (The direction of operation can be changed without changing the linkage.)

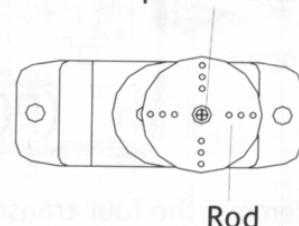
*Note that the direction of the aileron servo is easily mistaken.



2. Check the aileron, elevator, and rudder neutral adjustment and left-right(up-down)throw.

Check that when trimmed to the center, the servo horn is perpendicular to the servo and check the neutral position of the fuselage control surfaces (aileron, elevator, rudder, etc.). If the neutral position has changed, reset it by adjusting the length of the rod with the linkage rod adjuster.

Perpendicular



When the throw is unsuitable (different from steering angle specified by the kit instruction manual), adjust it by changing the servo horn and each control surface horn rod.

3. Check the engine thorttle (speed adjustment) linkage.

Change the servo horn installation position and hole position so that the throttle is opened fully when the throttle stick is set to HIGH (forward) and is closed fully when the throttle stick and throttle trim are set for maximum slow (backward position and lower position, respectively).

4. After all the linkages have been connected, recheck the operating direction, throw, ect.

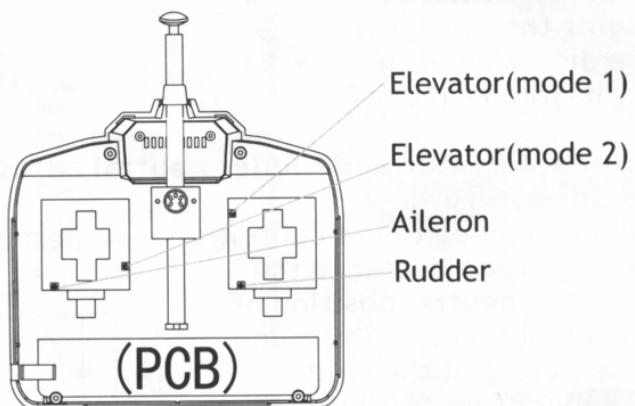
*Before flight, adjust the aircraft in accordance with the kit and engine instruction manuals.

5. Fly the plane and trim each servo.

STICK LEVER SPRING TENSION ADJUSTMENT

The stick spring strength can be adjusted.

The operating feel of the aileron, elevator, and rudder sticks can be individually adjusted.



1. Remove the four transmitter rear case screws and remove the rear case.
2. Adjust the spring strength by turning the screw of the channel you want to adjust
3. Close the rear case and tighten the four screws.

CHARGING THE NICD BATTERY

WARNING!

Never plug the special charger into an AC outlet other than specified. If the charger is plugged into an AC outlet other than specified, overheating, sparking, etc, may cause burns, fire, etc.

Use the special charger, or digital proportional R/C quick charger, sold separately to charge the digital proportional R/C nicd battery.

Overcharging will cause burns, fire, injury, or blindness due to overheating, breakage, electrolyte leakage, etc.

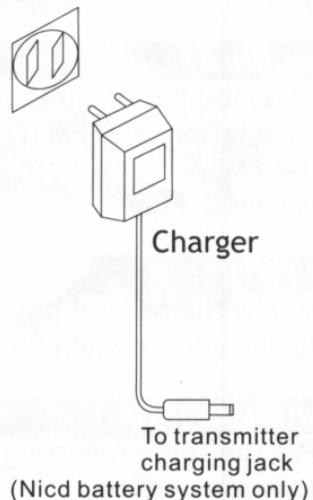
CAUTION!

When not using the nicd battery charger, disconnect it from the AC outlet.

CHARGING THE NICD BATTERY

The transmitter and receiver nicd batteries can be charged simultaneously or independently.

1. Connect the charger transmitter connector to the transmitter charging jack and the charger receiver connector to the receiver servo nicd battery.
2. Connect the charger to a 110VAC outlet.
3. Check that the charging LED light.
4. At the end of charging, disconnect the charger from the AC outlet.



GLOSSARY

The following defines the symbols and terms used in this instruction manual.

AILERON (AIL.)

Control surface at the left and right sides of the main wing of an aircraft. It usually controls turning of the aircraft.

CHANNEL

Represents the number of control systems. It can also represent the number of servos that are operated.

DOWN

Means down elevator. It is the direction in which the trailing edge of the elevator is pointing down.

ELEVATOR(ELE.)

Control surface that moves up and down of the horizontal stabilizer of an aircraft. It usually controls up and down.

LINKAGE

Mechanism that connects the servos and the fuselage control surfaces.

MODULATION METHOD

Two modulation methods are used/with radio control: AM (amplitude Modulation) and FM (Frequency Modulation). Radio sets for aircraft mainly use FM. Another method that encodes and transmits the modulated signals is called "PCM".

NEUTRAL

Means the neutral position. It is the state in which a transmitter stick returns to the center when not operated.

NORMAL (NOR.)

For the servo reversing function, it is the normal side. The opposite side is the reverse side.

PROPORTIONAL

Because today's radio control sets control servos in proportion to stick operation, radio control equipment is called proportional.

RUDDER (RUD.)

Tail control surface that controls the direction of the aircraft.

REVERSE (REV.)

With the servo reversing function, this is used to mean the reverse side. The opposite side is the normal side.

ROD

A bar that connects the servos and the fuselage control surfaces.

SERVO HORN

A part that is installed to the shaft of a servo and changes the rotating motion of the servo to linear motion and transmits the linear motion to a rod. Servo horns come in various shapes

SERVO MOUNT

Fuselage base for installing a servo to the fuselage.

STICK

Rod for operating the transmitter.

THROTTLE (THR.)

Part that controls the air mixture at the engine intake. When opened (throttle high side), a large air mixture is sucked in and the engine speed increases. When closed (throttle low side), the engine speed decreases.

TRIM

A device that fine adjusts the neutral point of each servo for safe flying. It is a mechanism that corrects bad tendencies of the aircraft.

UP

Means up elevator. Direction in which the trailing edge of the elevator is pointing up.