

DESCRIPTION OF OPERATION

Power source :

TX: DC 12V (supplied from 1.5V*8cell "AA" alkaline battery)

RX: DC 6V (supplied from 1.5V*4cell "AA" alkaline battery)

System:

K-6X (TX) is composed of Baseband processor subsystem with nixie tube, button and analog control input, and radio system of crystal oscillation circuit, modulation circuit, power amplifier and dipole antenna.

Baseband processor makes voltage change of an analog control input a digital value with the A/D conversion vessel inside CPU, calculates it to the change of pulse width according to it, and is outputted as a ppm signal.

With the ppm signal received from baseband processor, radio system changes the capacity of modulator, performs frequency modulation, takes out the target transmitted frequency by doubler, generates electric power required for transmission at amplifier, and outputs an electric wave from a dipole antenna.

K-8R (RX) is super heterodyne receiver, receives the electric wave from K-6X (TX) from wire antenna, and inputs it into mixer together with the signal of local oscillator.

(Selection of received frequency is performed by exchanging the crystal used for local oscillator)

The signal inputted into the mixer go through filter and IF amp and detected, it is changed into the signal which drives each ch servomotor by sx pulse decoder.

Through these processes, a user is operating the servomotor connected to RX by operation of the analog control input of TX (rudder, elevator, aileron, throttle, etc...) and can control freely the model which carried them.

Ground :

There is no external ground connection. The ground is only that of the printed circuit board.