

## DESCRIPTION OF OPERATION

### **Power source**

TX: DC 6~12V (supplied from 1.5V\*4~8cell "AA" alkaline battery)

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

### **System**

The KDS-7XII SYSTEM consists of two systems: RF system (The transmitter, consists of MCU, a single-chip 2.4GHz radio modem, and power amplifier), and RX system (The receiver, consists of MCU, the same single-chip as RF system).

The RF system MCU controls the radio modem to transfer data and command, the transfer speed is about 88 packets per second. The RF system was associated with a unique 24-bit number, assigned at manufacturing as its ID. This ID is used to identify the binding transmitter.

The receiver got packet from transmitter through its radio modem same as RF system, and generate PWM pluses to drive the servos. The receiver stores the ID of binding transmitter in its NVRAM (non-volatile memory) , it only receives the signal sent from binding transmitter. The user can rebind the receiver with other transmitter by using the 'Binding line'.

Once bound, the receiver will scan for the binding transmitter each time after power up, or lose signal after a period of time.

### **Ground**

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