

## **24'' JD RC Dozer**

### **49.860 MHz transmitter operational description**

The transmitter of tractor is supplied 6.0volt by four batteries (AA). The tractor is designed on a signal fixed frequency in the 49.820-49.900MHz band. See the attached block diagram and schematic.

There are eleven function keys . One of keys are pressed ,the IC which produces the digital signal that will modulate the carrier signal .The carrier signal is generated by a crystal oscillator circuit consists of a 49.860MHz crystal (X1)and a pnp transistor (Q3). The RF amplifier stage (Q4).The modulated output of the RF amplifier stage is capacitively coupled (via C12) to the antenna through a “pi”matching network consists of (C13,C14,T1,L5). IC control mixing's power on/off through Q1 Q2. One of keys are pressed, IC will produce corresponding signal at “C1”,After being amplified by Q4 , the signal is launched by the antenna . The TRY ME can send signal through IC and data lines so that TX could directly control RX. Every lights acts as a power on indicator. Whichever keys is not pressed ,the light could extinguish after 30 second.

All tuning and Verification are performed by the manufacturer and there are no adjustments that can be made by the user . No external ground is required or used with transmitter.