

Model No: 60-4307 (49.860MHz)

## CIRCUIT DESCRIPTION

In transmit pushing the left switch, the transistor Q1 and Q2 output 1KHz signal to modulate the oscillator Q3 which generates the oscillate of 49.860MHz. This oscillator is the transmitter. The antenna is transformer coupled to the oscillator with the tuning circuit. Similarly, pushing the right switch Q1 and Q2 output 400Hz signal to modulate the oscillator Q3. In receive L1 being tuned on 49.860MHz frequency, the amplifier Q1 amplify and detect the signal from the antenna. When IC PT8A976BW receives the 1kHz signal, make the pin F output to drive Q2. Similarly IC PT8A976BW receives the 400Hz signal, make the pin B output to drive Q3. Finally Q2 or Q3 drive Q4 and Q7 or Q5 and Q6 driving the motor forward or backward.

## ANTENNA AND GROUND CIRCUITRY

This unit makes use of an external flexible 27 centimeters long antenna. The antenna is inductively coupled. The unit relies on the ground tract of the printed circuit board. No external ground is provided. Energy is supply with a 9-volt battery.