

Palm transmitter working principle

Single chip U1 is as the main control unit, to manage and control those module functions of keypad input, LED screen display, keypad number and transmitting board. To save power consumption, usually the single chip will turn off all the unnecessary function modules, and keep in a dormancy status of low power consumption.

When press the key button, the single chip is activated, and recognize the key value, through the U3's driver, the number information will be displayed on the LED screen. Input the digit and press #, there is a long voice prompt, at the same time power on the transmitter to make it work, after a delay of 50mS, in the output end, there is a series of modulated impulse added to the modulated end of the transmitting board, to make the 72.25MHz crystal oscillate and become the FM wave of $\pm 4.5\text{KC}$. The six times harmonic wave 433.5MHz of 72.25MHz crystal oscillate frequency, through the SAW filter wave's modulated signal, via T2, amplified by T2 tube, through the low pass filter, to the antenna and finally send it.

After the modulated impulse of the single chip is output, close the transmit and display, the single chip will be back to the dormancy status and wait for activation next time.