Circuit's Operation Description for 2142-A

Operation Frequency: 27.045MHz
Modulation Type: FSK

The TX of the mouse is mainly consisted of optical IC (U1), MCU & RF circuit (U2).

U2, L2 and D1 provide the circuit with a stable DC 3 V. X1 is an oscillator for system. X2 and U2 are for RF modulation and amplification. When the mouse is moving on the desktop, photoelectric processor IC-U1 collects optical signals reflected by the desktop, and transfers them into the U2. Meanwhile U2 receives data of key and coder. All data will be modulated and amplified to be transmitted from pin 8 of U2.

SW-ID is a ID switch. When it is switched on, U2 transmits an ID code to the receiver which can recognize the ID for communication. D4 is an indicator of power. It will flash if battery power is low. When K1 is switched, the mouse will enter sleep mode as U2 with low voltage.