



Transmitter

- 01.MCU will scan the button and optical sensor singal. If any signal change come from above mention. It will turn convert the data package With checking the low battery status data, and prepares turn on the RF power setting the channel switch (ch1), Touch link button link to receiver..
- 02.When MCU received the signal of any key. Firstly, MCU will turn on the RF power, transmitter button or optical sensor data.
- 03.Power amplifier is to support enough current to drive the antenna.
- 04.. Matching circuit is to match the impedance between PA and antenna..

Receiver

- 01.When the PC power on, the receiver will start the PnP process. No-matter the interface is PS2.
- 02.MCU will program power, If IC will perform the exact frequency,(27.55MHz) touch link button lock channel Frequency..
- 03.When the RF signal comes (27.095MHz), the low noise amplifier (LNA) will amplify the signal about 14 dB.
- 04.The adding signal to pall through mixer I will generate 455KHz intermediate frequency (IF). It means that the original signal (27.095MHz) will down convert to 455KHz..
- 05.IF1 filter is performing a filtering function of 455KHz (IF1).
- 06.When the (L0 27.55MHz signal pall through the 1st mixer, it will generate the 1st IF1 455KHz.
- 07.After the IF1 amplifier will work for an AGC (auto gain control) function, and the signal more stable.
- 08.A 455KHz resonator will perform the LO function.
- 09.When the IF1 (455KHz) pall through discriminator, the demodulating signal will come out. We called it base band signal.
- 10.AF AMP will work as a data slicker, it amplify the signal to 8square wave digital signal.
- 11.This digital signal will send to MCU. MCU will sample the signal to check it is valid or not.
- 12.IF the signal it valid, MCU will convert the signal of the interface to PC. NO-matter is PS2 and USB let PC to do their exact activity.

Features of Equipment under Test

Items	Description
Type of Modulation	FSK
Number of Channels	1
Channel Width	50KHz
Carrier Frequency	27MHz
Antenna Type / Gain	Integrated Antenna / -0.5dBi
Testing Duty Cycle	100.00%
Power Rating (DC/AC, Voltage)	3V dc from Battery
Temperature Range (Operating)	0 ~ 40 °C