

SPP5107F/H Receiver working description

The receiver SPN5107 is power strip for appliance use indoor only, has two group of outlets, each group has 4 outlets plus two always ON outlet. Total power supply is 1800Watts. It is designed to operate on a single fixed frequency at 433 MHz. And be controlled by RCU range in 100 feet at line of sight. While operating, the PROTECTING red LED lighted to indicate protection is work and GROUNDED green LED lighted to indicate grounding is work. The signal 433MHz from RC07 received at ANT and proceed by U1 PT4302 for amplified and down conversion which mix with carrier signal generated by a SAW(Surface Acoustic Wave) resonator Y1 frequency is 13.226 MHZ then demodulated with ASK method, after that send signal to decoder U3 HS2272C to decode and generate data send to trigger circuit U4 4031 then control relay ON/OFF which you send from RC07.

The surge circuit Z1 ~ Z6 and relative parts are designed for protect the appliance plug on outlets when peak current or voltage occurred.

Power managing IC U2 LNK304PN handles the switching circuit to supply DC for all control IC and relay from AC. This power saving function is key point of next generation of power strip.