Principle of Work for 2611TA Host

The working procedure for TA is: it first receives the information from 433.5 Mhz micro-power wireless call button, translate it to the information with indicating significance, the code is POCSAG code format, then send it through the $450.025 \text{ MHz} \sim 469.975 \text{ MHz}$ large power transmitter via antenna to make the relevant mobile receiver to receive the messages.

Receiver working procedure: RF wireless signal of the call button which is received from antenna, amplified by high frequency amplifier tube QD1, QD2, to the receiving chip U104, inside which the signal is demodulated, and turns to the wave of TTL power level, via the reshaping of U1 active filter, delivers to single chip U101 for decoding. The field strength is by the receiving chip to send the field strength data to single chip directly driving LED to light on.

Transmitter working procedure: single chip U101 encodes those prestored receiver ID code and messages to be sent to POCSAG format, passes them on to transmitting chip U102 with commands method, controls transmitting chip U102 to generate carrier wave and modulation signal, at the same time single chip controls RF power amplifier to power on, after the RF signal is amplified, it will be sent through the antenna.

Thus, the relay process from receiving to transmitting is finished.

Finally shut off the transmitter and wait for next time transmitting.