

## **Description of the Electrical Circuitry**

### **Hand Held Transceiver O44J2000R**

A) When one or more of the buttons of the Transceiver is pressed:

- 1) When one or more of I, II, III or IV buttons is/are pressed, the button instruction is transferred to U201 (CPU).
- 2) U201 (CPU) transfers the ID code and button instruction to Q108 through R125.
- 3) Q108 generates the radio frequency carrier of 447.7 MHz that was modulated by the data from U201.
- 4) The signal from Q108 is amplified by the Transistor Q107, Q106, then sent to Antenna T1.

B) When a signal enters from the antenna:

- 1) U201 (CPU) monitors the 447.7 MHz through Antenna T1.
- 2) When U201 receives 447.7 MHz signal, the signal is amplified by Transistor Q104, Q102, then sent to the Mixer Transistor Q103.
- 3) Q105 sends self-generated frequency 469.1 MHz to Mixer Transistor Q103.
- 4) Transistor Q103 heterodynes the signals from Q102 and Q105 to generate 21.4Mhz that is sent to Intermediate Frequency IC, U101.
- 5) Intermediate Frequency IC demodulate the signal to digital code and then send it to U201 (CPU).
- 6) The CPU recognizes the ID and instruction, then activates the Beeper Buz1 and indicates the information on the LCD1.