Operational Description (RF part)

The HANDSET and BASE have the different RF modules, RU0926H18HKB and RU0902B18HKB respectively, which is a short –range, full duplex wireless radio transceiver. See the attached block diagrams and schematics.

RX Audio/DATA Part

Audio signals, which are received and demodulated in the RF module, are expended by Compander IC (KA8507D) and then adjusted by variable resistor (SVR2). The adjusted audio signals are amplified, and transmitted to Earphone.

DATA, which are received and demodulated in the RF module, are amplified via transistors, TR8 & TR1, and then transmitted to RX DATA port on the Microprocessor (KS57P01504), which has 4K-byte one-time-programmable ROM.

TX Audio/DATA Part

Audio signals, which are input by MIC, are compressed by Compander IC and then adjusted by SVR1. The adjusted audio signals are modulated in the RF module. TX DATA, which are controlled by the Microprocessor, are directly modulated and radiated.

EEPROM & RESET circuit

EEPROM is used for storage of the identification code.

As Power-ON-Reset functions, this circuit is activated in LOW.

ANTENNA

The external 50Ω antenna is connected via SMA connector and no external ground is required or used with BASE.