

EXHIBIT E

DESCRIPTION OF ELECTRICAL CIRCUITRY

BASE UNIT:

A) WHEN A BELL SIGNAL ENTERS FROM TEL LINE

- 1) The bell detection circuit, i.e., the transistor(Q101) begins to operate and its output is inputted to pin 55 of IC201(CPU).
- 2) To obtain a display synchronized with the bell signal, an IN USE signal is output from pin 23 of IC201(CPU) and INUSE LED(LED201) is lighted up.
- 3) A portable phone receives a bell from the base station.
When the portable phone is switched from the STANDBY to TALK, the base station receives a carrier modulated by data indicating the switch from STANDBY to TALK.
The data demodulated at the base station is inputted to pin 19 of IC201, and passes through Q103 to make the circuit relay, then, release the muting and enables talk.

B) WHEN A LINE LOOP IS MADE BY A PORTABLE PHONE

- 1) When the operator of the portable phone switches STANDBY to TALK, the TALK mode data enters the base station and is demodulated at the RF Unit of the base station, and is inputted to pin 19 of IC201.
- 2) In this time, an IN USE signal is output from pin 23 of IC201, and the IN USE LED (LED201) is lighted up.

C) RECIEVER UNIT OPERATION

- 1) A signal is received by the antenna, and passes through the 904.56~925.04MHz band pass filter FL730, and is inputted to the RF AMP Q730.
- 2) The received signal and local signal made by VCO (852.81~873.29MHz) are mixed by IC750 to obtain 1st IF signal.
This signal goes out from pin 23 of IC750.
- 3) The base band signal is fed to pins 28 of IC800, and is demodulated by IC800 to control data and audio signal.
- 4) This audio signal is transmitted to the telephone line by IC401.

D) TRANSMISSION UNIT OPERATION

- 1) An audio signal from the line passes through the interface transistor(Q105) and is amplified by Q108 and IC401.
- 2) The audio signal goes out from pin 13 of IC401 is inputted to pin 4 of TxVCO.
- 3) TxVCO modulates this signal and output to pin 42 of IC750.
The modulated signal goes out from pin 33 of IC750 and output to antenna through Tx AMP (Q720, IC701).