

## A group of Mobile Communication Trainers LT-3000 / LTE-1000

These equipments provide instructions on basic concepts of mobile communication to students who study for mobile communication, information technology and electronics.

LTE Cellular Mobile  
Communication



LTE-1000

Equipments for experiment  
on mobile communication



LT-3000

# **MOBILE** Telecom Trainer **Model: LT-3000**

An experimental equipment to educate basic concept of the Full Duplex wireless system and Mobile telecommunication.



[November 23, 200]

# MOBILE Telecom Trainer

## Model: LT-3000

### LT-3000 Features

- Full Duplex Voice & Data Communication
- Half Duplex Voice & Data Communication
- Practice of RF interference & mobile environment
- Chatting by using Computer.
- Board level and full system level experiment is available using one set
- Auto Mode and Manual mode can be selectable
- Built-in Software equal to the Commercial Products.
- Operating like as Commercial Mobile Products in Auto Mode.
- 16 x 2 Character LCD.
- LED Indicator.
- Over Charge Protection.



# Mobile

### LT-3000 Experiment Steps

- 1) Board Unit Module Experiment : Power, Audio, Control, Radio Frequency
- 2) Half Duplex Audio and Data Experiment : Half Duplex Transmitting and Receiving Experiment
- 3) Full Duplex Audio and Data Experiment : Full Duplex Communication Experiment
- 4) Mobile Environmental Experiment : RF Interference Experiment Among Systems
- 5) Data Communication : Chatting Practice by Serial Communication.

### Specifications:

- ❖ Communication Method : Full Duplex / Half Duplex
- ❖ Channel Access : Multi Channel Access
- ❖ Frequency Range :
  - Base : 46.51 ~ 46.97 [MHz]
  - Remote : 49.67 ~ 49.99 [MHz]
- ❖ Output Power : +4.5 [dBm] Max
- ❖ Channels : 15 Duplex Channels
- ❖ Bandwidth / Channel : 25 [kHz]
- ❖ Modulation : FM
- ❖ Frequency Stability :  $\leq \pm 5$  [ppm]
- ❖ Receiving Sensitivity : Over 20 [dB] SINAD (at -100 [dBm])
- ❖ Auto Channel Scan Time :  $\leq 200$  [ms]
- ❖ Data rate : 2,400 bps

### Kit Components

- 1) Parts for Radio Frequency board
- 2) Parts for Audio Frequency board
- 3) Parts for Power board
- 4) Parts for Control board
- 5) Microcomputer including software program
- 6) Handset, adaptor, coaxial cable, etc.
- 7) Operation Manual
- 8) Textbook

