### 9. OPERATING INSTRUCTIONS

### **TOA WIRELESS MICROPHONE model WM-4220**

### **General description**

The WM-4220 hand held wireless microphone has been manufactured for use with a UHF system. It incorporates a cardioid pick-up pattern and has been designed for use in speech reinforcement applications. The built-in compressor -expander circuit minimizes the influence from ambient noise.

### **Battery insertion**

- 1)Hold the microphone body and rotate the microphone grip counterclockwise. The microphone grip is designed to be completely removed from the body.
- 2)The battery compartment accepts one 6LR61 battery. Please insert the battery according to the instructions attached to the inside of the battery compartment. Please observe correct polarity when inserting the battery.
- 3) Replace the microphone grip by sliding and relightening it clockwise.

## Operating the microphone

- 1)Make sure that the receiver and the wireless microphone are of the same channel(frequency).
- 2) If they are not identical in channel (frequency), you have to adjust the bank and channel switches.
- 3)Place the microphone ON/OFF switch in the ON position. The orange LED indicates the circuit is active.
- 4)Make sure to shift the ON/OFF switch back to the off position after using the WM-4220 wireless microphone.

## **Battery replacement**

- 1)A brand-new battery will provide the power for enough to operate the unite continuously for 10 hours.
- 2)As long as the battery has sufficient power for the microphone to function properly, the orange LED will light. When the orange LED starts to fade and then flashing, replace it with a new one.

#### **Operational Hints**

- (1) The microphone's service distance is 3-150 m. When the microphone user moves in a facility, signal dropouts (momentary losses of signal reception) may be encountered. These dropouts are caused by the building's architectural designs or materials which block the travel of or reflect the radio signal. If this occurs, the user needs to change locations for better signal reception.
- (2) The proper operation of your wireless system may be interfered with by other system operating on the same frequency. In such cases, change the operating frequency of your system. It is recommended that the Scan function (of the WT-4800) be used to avoid the frequency interference, which always searches and shows idle frequencies.
- (3) |Should you have any questions regarding the use or availability of TOA wireless products, please contact your local TOA dealer.

#### **Audio level**

This wireless microphone is designed to satisfy the most of the popular presenters. The audio level is set at 125dBspl .

# **Specifications**

Model	WM-4220
Carrier Frequency	16 frequencies (Selectable from 690 MHz and 806 MHz)
Frequency Stability	Less than 0.005%
Oscillator	Crystal-controlled PLL-synthesizer
Modulation System	Reactance modulation
RF Carrier Power	Less than 50mW
Effective Radiated Power	Less than 10mW
Maximum Input Level	125dBspl
Maximum Deviation	±40 kHz
Microphone Element	Unidirectional erectlet condenser microphone
Frequency Response	100 to 15000 Hz
Pre-emphasis	50 µsec
Antenna	Whip antenna (Internal)
Battery Type	6LR61(Alkaline 9V)
Battery Life	More than 10 hours
Current Consumption	50mA TYP.(at 9.0V)
Ambient Temperature	14°F to 122°F (–10°C to 50°C)
Tone Frequency	32.768 kHz
Controls	Power ON/OFF, Bank and Channel select,
Battery	Checker, illegal Channel
Color	Black
Dimensions	ø"1.5" X 8.76"(ø38 X 222.5mm)
Weight	0.594 lbs.(250 g) with battery

# FCC license requirement FCC

This system requires a FCC license for legal operation. Obtain the application form FCC at the address listed on the form and mail it to the FCC after completing it, following the instructions below. When the application is approved, the FCC will mail the license to you.