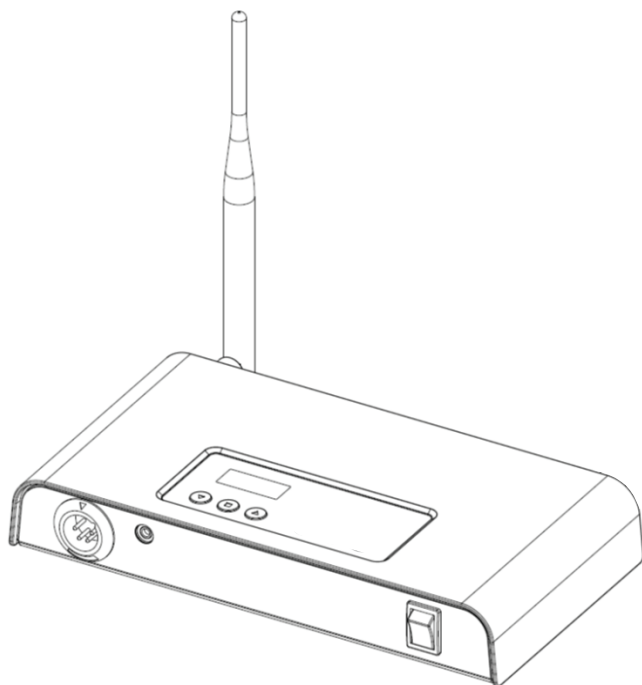# MULTICOM STATIONARY 2.4G

# USER'S MANUAL

# 1. General Information

## 1.1 Introduction

The "Multicom Stationary 2.4G" is designed by using the most advanced Multiplex communication technology.
It serves user-friendly features and extremely convenient to operate including a crystal clear sound quality and also long distance communication coverage.
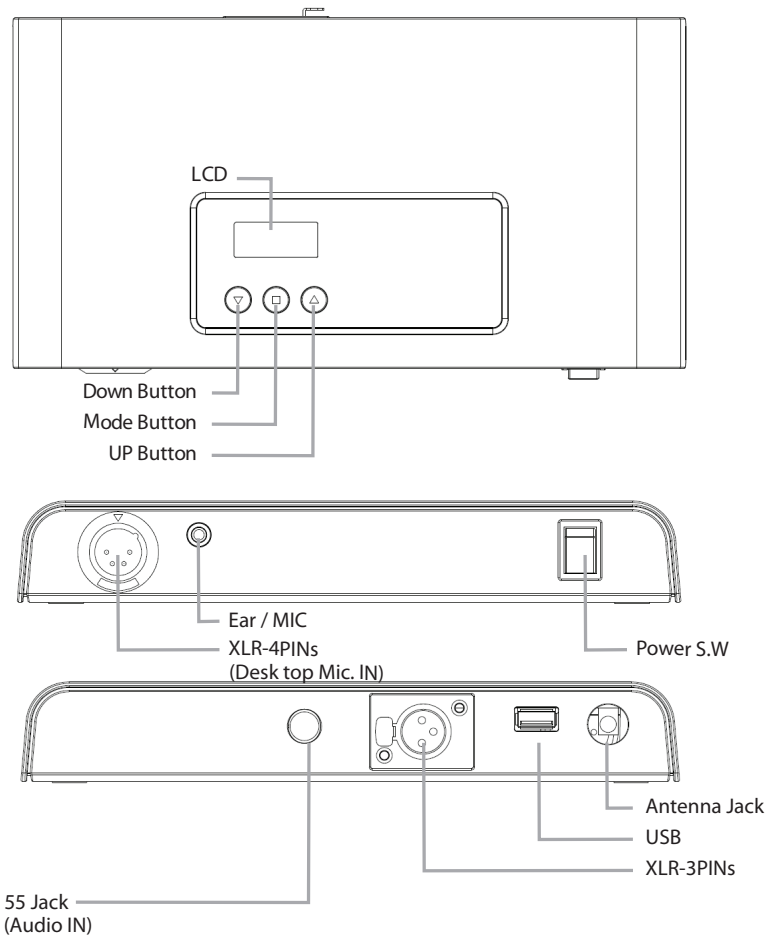It gives the operation as a central broad cast station to the unlimited number of listeners who carry the MTT-R Receiver devices with them and also provides a communication in full duplex with up to two other users who carry the MTT-T Multicom devices.
It is recommendable you read the user's manual thoroughly to enjoy its maximized performance  and features this station has to offer.

## 1.2 Main Features

* Audio publishing to the unlimited number of people who carry the MTT-R Receiver
* Multiplex communication with up to two other users who carry the MTT-T Multicom devices
* Long distance communication coverage over 400m typically
* Crystal clear sound quality
* 39 different Group selection
* Audio output HI/Low selection
* Audio volume control with 9 steps
* Side tone On/Off selection
* Direct microphone sensitivity control with 5 steps
* Convenient dual external power supply source either USB plug for the purpose of its portable using by connection Mobile phone Power bank into it or DC 5.0V adapter via AC input

# 2. Controls and Indicators

LCD

Down Button

Mode Button

UP Button

Ear / MIC

XLR-4PINs
(Desk top Mic. IN)

Power S.W

Antenna Jack

USB

XLR-3PINs

55 Jack
(Audio IN)

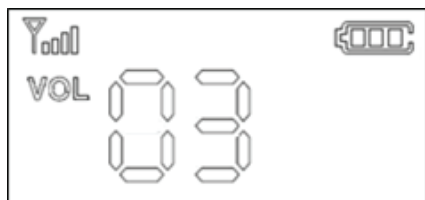| | |
|---|---|
| **Power S.W** | Upward : Power Turn ON  /  Downward : Power Turn OFF |
| **Mode Button** | Selection of Group Number, Device ID, Side Tone On/Off, Mute Mode, Microphone Sensitivity level and Audio Output Loud |
| **Up Button** | Control to be Up the level in the selected mode |
| **Down Button** | Control to be Down the level in the selected mode |
| **EAR/MIC** | 3.5mm External Headset Boom Microphone Jack(EHR-01) |
| **XLR-4PINs** | XLR Headset Jack |
| **Antenna Jack** | Long diversity Antenna Jack |
| **USB** | USB Jack. compatible with Power Bank for mobile phones |
| **55 JACK** | 55 Jack Audio Output |
| **XLR-3PINs** | XLR Jack Audio Output |

# 3. How to use

## 3.1 Power On/Off

Press the "Power S.W" switch to the upward to turn the stationary power on.
The LCD display is on and shows the default volume level with "VOL 03".
If you pressed the "Power S.W" to the downward, the stationary power is
turned off.

## 3.2 Volume Up / Down

It gives you to adjust the hearing volume level with 9 steps as per you
prefer. Press "▲" button to control volume up and "▼" button for
volume down after turn the device power on.
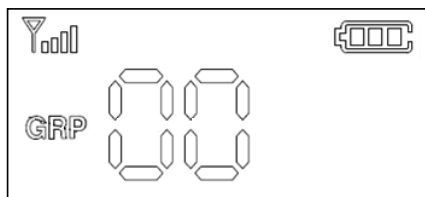It is available to adjust the volume level 0~9 from low to high.

Note; The default volume level is 3 and the volume level returns to 3
all the times whenever you power switch turned off and on.
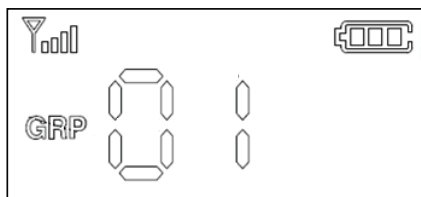
## 3.3 Group selection

Press and hold the "Mode" button longer than 3 seconds after turn the
device power on. The "GRP" symbol on the LCD is blinking.
Select the Group number 0~39 as you desire by press  "▲" or "▼" button
and then release all the buttons longer than 5 seconds to fix it.
 Every radio needs to have a same Group number to communicate
each other in a group.

Show the selected Group Number "00"          Show the selected Group Number "01"
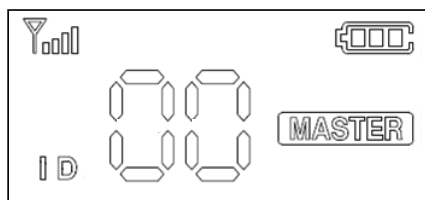
## 3.4 ID selection

In a group, every Stationary needs to have each different ID per Stationary from "00" to "99". The ID "00" becomes a master device in a group and every group needs to have a master device with ID "00" per group without alternative. The "MASTER" is displaying on the LCD as soon as the ID "00" is set.

Press and hold the "Mode" button longer than 3 seconds after turn the device power on. The "GRP" symbol on the LCD is blinking.
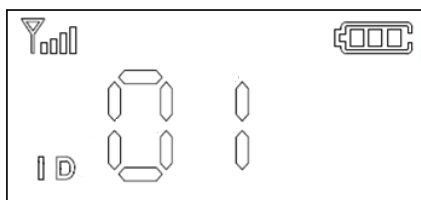
And press the "Mode" button one more time instantly.

The "ID" symbol on the LCD is blinking.

Select each different ID number per Stationary from "00" to "99" in a group by press "▲" or "▼" button and then release all the buttons longer than 5 seconds to fix it.



Display for the Master



Display example for the Slave

If you have any other Multicom who want to communicate with Stationary in full duplex, you need to set the group number as the same group number as the Stationary has and also set the different ID number than the Stationary set.
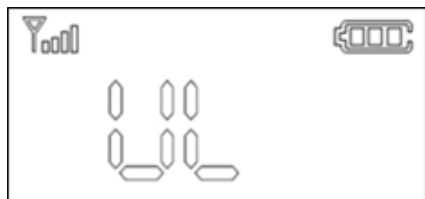
For the listener who has the MTT-R, it is only required to set the same group number as the Stationary has regardless its ID.
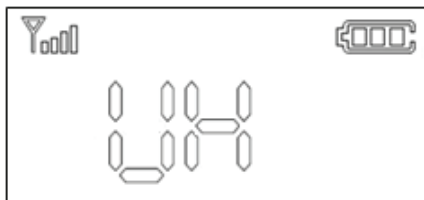
## 3.5 Audio Output mode High / Low

It serves you to choose higher audio output or lower beside of Volume Up / Down. The higher audio output is effective when you listen to the device at the heavy noise place. Press and hold the "Mode" button longer than 3 seconds after turn the device power on.

The "GRP" is blinking on the LCD. Press the "Mode" button 6 times instantly. Select either "UH" for higher audio output or "UL" for lower audio output by press "▲" or "▼" button and then release all the buttons longer than 5 seconds to fix it.

Normal Audio Output mode                          Loud Audio Output mode

Note;

1) Its default setting is "UL".

2) There might be a kind of white noise creation when you set the audio output at "UH". Hence, it is recommendable to set the audio output at "UL" except using the device at the heavy noise surround place.

It is available to select the microphone sensitivity up to 5 steps according to the environment you have. Press and hold the "Mode" button longer than 3 seconds after turn the device power on.
The "GRP" is blinking on the LCD. Press the "Mode" button 5 times instantly. Select the microphone sensitivity level 1 ~ 5 as per you desire by press "▲" or "▼" button and then release all the buttons longer than 5 seconds to fix it.

Note;

1) The "C 1" is the lowest microphone sensitivity level and "C 5" is the highest.
2) Its default setting is "C 1".

## 3.7 Portable using

It is available to use the Stationary as a portable device rather than the fixed station. Please connect the Power bank for Mobile phone into the USB port of Stationary.
After that, place the stationary wherever you prefer

# 4. Specifications

| ITEM | SPECIFICATION |
|---|---|
| Radio Frequency Type | ISM 2405MHz ~ 2477MHz |
| Type | Wireless Microphone/Receiver Unit |
| Radio Interface | ISM 2.4GHz: FSK Modulation with Frequency Hopping |
| Voice Codec | 16bit/8KHz |
| Tx Max. Output Power | 10dBm |
| RX Sensitivity | -95dBm |
| Voice Latency | <35ms |
| Num. of Frequency Channel | 145CH |
| Operation Hopping | 16CH |
| Channel Spacing | 0.5MHz |
| Data Rate | 0.5Mbps |
| Freq. Bandwidth | 2MHz |
| Power Supply | Output Voltage: DC 5.0V |
| Antenna Type | Dipole Antenna (Reverse SMA type) |
| Antenna Gain | 5.0dBi |
| Power Consumption | Avg. 180mA |
| Distance Range(LOS) | 200M |
| Frequency response | 50Hz ~ 4KHz |

▶ The antenna is not standard type, that is special reverse-type.
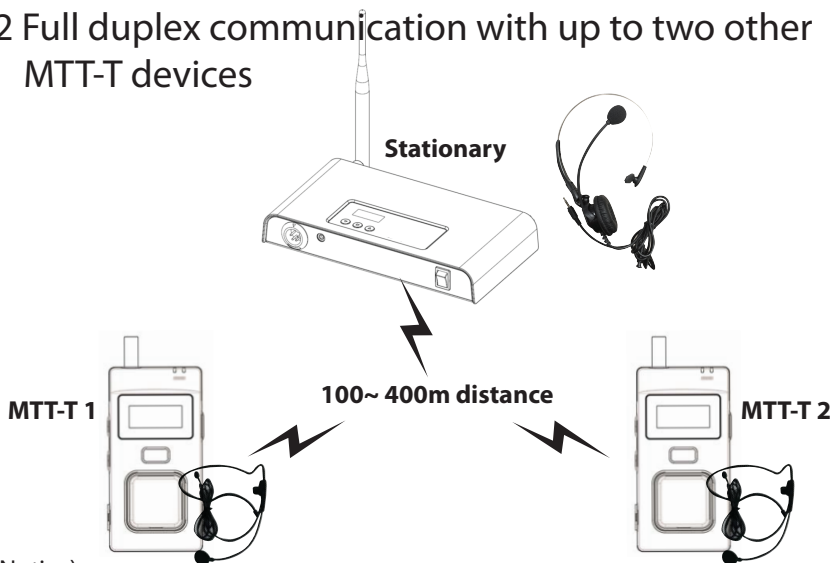   So the using antenna can't be replace by user easily.

# 5. How to install

## 5.1 General Publishing

Speaking only or Speaking and Listening

**100~ 400m distance**

**Unlimited Listeners with MTT-R**

Notice) It is required to tune the same group number only between
Stationary and MTT-R Listening device regardless its ID number.

## 5.2 Full duplex communication with up to two other MTT-T devices

**Stationary**

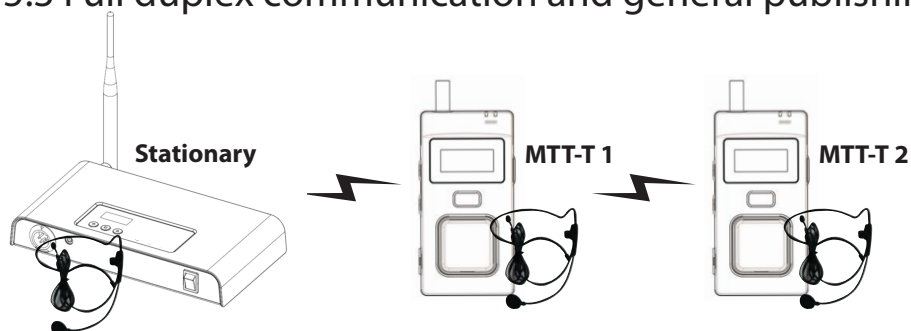**MTT-T 1**     **100~ 400m distance**     **MTT-T 2**

Notice)
It is required to tune the same group number between Stationary and two
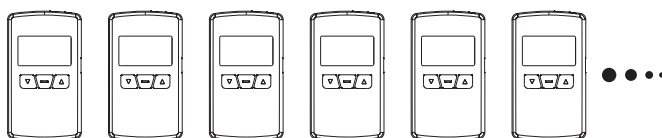other MTT-T devices.
Also, the two other MTT-T devices should have each different ID per device except
the ID "00" of Stationary owned.

## 5.3 Full duplex communication and general publishing

**Stationary**          **MTT-T 1**          **MTT-T 2**

**Full Duplex communications between Stationary, MTT-T1 and MTT-T2**

**Listening all the talking between Stationary, MTT-T1 and MTT-T2**
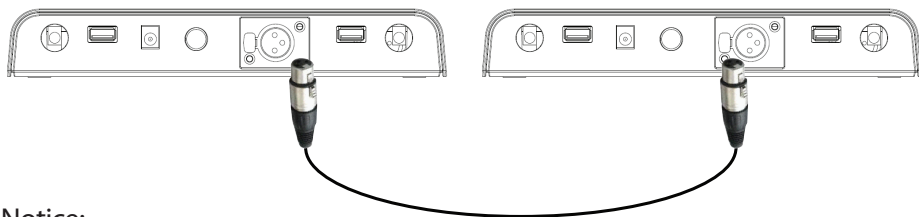
● ● ● ●

Unlimited number of Listeners with MTT-R

## 5.4 Line repeat communication between Stationary and Stationary

It is available to repeat the communication in one Stationary to the other Stationary by cable connection between two stationeries.
Please connect to two XLR 3 port of Stationeries by using "XLR Repeater only cable".

Notice;
It is required to keep a distance longer than 10m at least between Stationary and Stationary. Otherwise, it might cause the interference each other and the drop of performance on both stationeries.

## FCC Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is con-nected.

• Consult the dealer or an experienced radio/TV technician for help.

## Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC Compliance Information :** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

## IMPORTANT NOTE:
## FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20Cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

## CAUTION

To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside, refer servicing to qualified personnel.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure-voltage that may be sufficient to constitute a risk of sock.

This symbol, wherever it appears, alerts you to the important operating and maintenance instructions in the accompanying literature. Please read the manual.

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this equipment near water.

6) Do not using near any heat sources such as radiators, heat resisters, stove, or other equipment that produce heat.

### CAUTION
### RISK OF EXPLOSION IF BATTERY IS REPLACED
### BY AN INCORRECT TYPE.
### DISPOSE OF USED BATTERIES ACCORDING
### TO THE INSTRUCTIONS

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**European CE notice to users and product statements**

This product is CE marked according to the provisions of the R&TTE Directive(1999/5/EC). Hereby, Maytel Co., Ltd declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For further information, please contact    http:// www.maytel.com

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**CE1177**

Maytel Co., Ltd

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## CONTACT INFORMATION

Manufacturer Address   #417 Doosan Venture Digm 126-1, Pyeongchon-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

To locate in-country MAYTEL CO., LTD., distributors of the Multicom Stationary 2.4G (MTT Stationary T-1) please refer to the MAYTEL CO., LTD. Website http:// www.maytel.com

These distributor(s) represent local contacts for this product.

### CORPORATE HEADQUARTERS:

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Tel: +82-31-478-5508

Fax: +82-31-440-9331

Web: http:// www.maytel.com

This   device complies with Industry Canada license-exempt RSS standard(s).

Operation is Subject to the following two condition: (1) this device may not cause interference ,and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**EUROPEAN UNION "DECLARATION OF CONFORMITY"**

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**DECLARATION OF CONFORMITY**

**MAYTEL CO., LTD.**

#417 Doosan Venture Digm 126-1, Pyeongchon-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea

declare under our sole responsibility that the product(s)

Multicom Stationary 2.4G (MTT Stationary T-1) – MS-11 2.4G

to which this declaration relate(s) is in conformance with the following standards:

EN 301 489-1 V1.9.2:2011
EN 301 489-17 V2.2.1:2012
EN 60950-1:2006/A2:2013
EN 300 328 V1.9.1:2015

following the provisions of the 1999/5/EC Directives.

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