## PLL SYNTHESIZED DIVERSITY SYSTEM

#### UHF OPERATING MANUAL

- Battery Charging Method
  - (a) Squeeze the protruding handle and pull out the battery charger case (16).
  - (b) Insert polarity correctly with the included one or two rechargeable battery.
  - (c) Push in the battery case (16) until it clicks and firmly into the receiver.
  - (d) Red light (17)(18) indicates the charging status. Green light denotes fully charged status. If re-inserted the already charged battery for re-charging again, the red light appears for approx. 8 minutes and will automatically cut off charging current and change to green light ready status again.
  - (e) Do not insert any non-rechargeable battery or other brands of batteries for charge as it will damage the battery charger itself.

### 4. SWITCHABLE CHANNELS FUNCTIONS

- 1. Functions:
  - (a) This system incorporates advanced PLL synthesized oscillator design. Preprogrammed with 30 switchable frequencies. Allow the user to freely select any of the preprogrammed frequencies.
- 2. Change channel when:
  - (a) Existing channel is being interfered or channel is malfunction.
  - (b) Select channel for multiple non-interference usage.
- 3. Caution while changing channels:
  - (a) When multiple channels are utilized do not change channel to avoid exiting channel interference.
  - (b) The indented switch button is a fragile component. Do not exert too much force or use improper tool to avoid inflicted damage.
  - (c) When numeric knob reaches "-" it indicates an empty channel. Proceed until a numeric number appears.

### 5. CAUTION

- Since the installation of antenna influences the operating efficiency of the receiver, the most important rule is to minimized the distance between receiving antenna and microphone as short as possible for better reception and performance.
- The external DC power supply should not be below 12V, otherwise it would not work properly. If it is over 15V, some components of the receiver will be damaged due to higher current. Use minimum 1A power supply.
- This system utilizes computer transformer. It is equipped with 85 ~ 265V switching power supply to avoid switching and it is not affected by power instability.

## HANDHELD WIRELESS MICROPHONE

UHF OPERATING MANUAL

This microphone utilizes advanced modular assembly and PLL synthesized design. Preprogrammed with 30 frequencies allows the user to freely select non-interference channels. It also incorporates "Pilotone & NoiseLock dual-squelch" to eliminate noise interference.

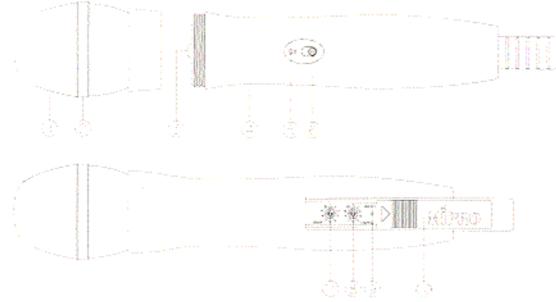


Fig. 1

### 1. PARTS NAME AND FUNCTIONS

- 1. Grille: Protects cartridge and prevents " POP noise.
- Rolling Proof Color Ring: For frequency differentiation and its polygonal shape prevents microphone from rolling.
- 3. Battery Compartment: Designed to accommodate one piece 9V battery.
- 4 Housing: Upper portion to be connected to capsule module and battery. Internally, it holds transmitter PCB.
- 5. Battery Status Indicator: Indicates the power on / off and battery status. When power switch is turned ON, the red LEDs indicator flashes briefly, indicating normal battery status. If no flash occurs, it has either no battery or the battery is drained or installed incorrectly. After power on and the indicator stays lighted. It warns the battery is weak and a new battery replacement is thus necessary.
- 6 Power On-off Switch: Slide the switch for power " ON " or " OFF "
- Group Changer Cover: Open cover to switch to Group Frequency Selection.
- 8. Channel Selection Cover: Open cover to switch to desired frequencies.
- 9 Unused Indicator: When LED glows it indicates an untransmitt signal or an empty group or channel was selected. When microphone is power ON, LED will glow for approx 2 seconds and then fades.
- 10 Selector Cover: Protect channel changers and accidental switching.

# HANDHELD WIRELESS MICROPHONE

UHF OPERATING MANUAL

### 2. BATTERY INSTALLATION

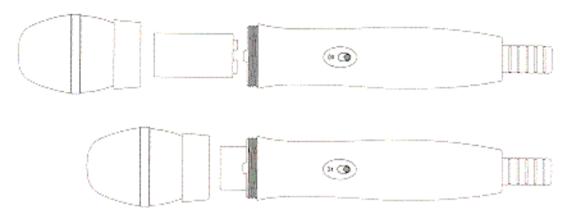


Fig. 2

- 1. Unscrew battery cap in counter-clockwise direction (Fig. 2).
- 2. Insert a 9V battery into the battery compartment according to the correct polarity as shown in Fig.2. The moment the battery touches the terminals of compartment, the indicator (5) will flash briefly. This means the polarity is correct. However, if no flash occurs, this indicates wrong insertion. Please re-insert the battery according to its correct polarity.

### 3. OPERATING INSTRUCTIONS

1. When microphone is switched on:

At the moment of the power is switched on, the indicator will flash briefly indicating normal operation.

2. After microphone is switched on:

The SIGNAL LED indicator (4) or (11) of receiver glows. The more LED glows indicating received signal strength is stronger. If only red LED illuminates it denotes abnormal receiving status.

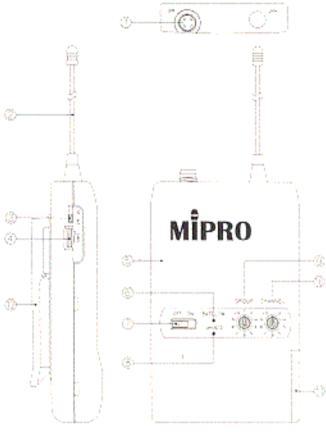
3. During Usage:

The AUDIO LED indicator (3) or (10) of the receiver will illuminate according to the sound strength input to the microphone. When approaching red LED lights on, it denotes the maximum sound press level but does not represent distortion.

4. When the microphone is not in use:

Make sure to turn off the microphone to extend the battery life. Remove the battery from the battery compartment if microphone is not in used. If a rechargeable battery was used, take it out and insert to the built-in battery charger on the receiver for recharge

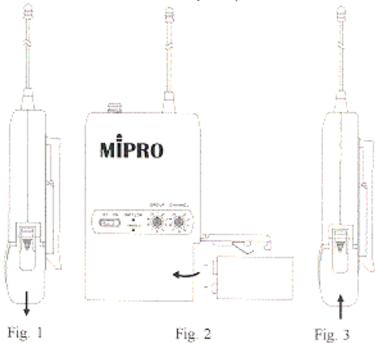
### 1. PARTS NAME AND FUNCTIONS



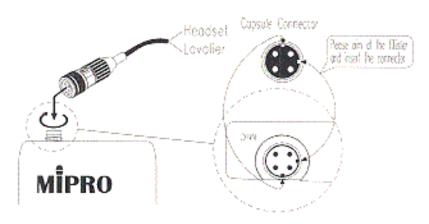
- AF Input Jack: Connects to either lavaliere or headset microphone. (See 5 ways of connection on AF Input Connections)
- 2. Transmitting Antenna: 1/4 λ transmitting antenna.
- GT/MT Level Select Switch: Switch GT position for electric guitar usage ONLY. Gain Control is irrelevant for "GT". Switch to "MT" for condenser microphone, wired microphone or Line-in. Gain Control works in "MT" for input sensitivity adjusting.
- 4. Gain Control: Adjusts the desirous input gain.
- Transmitter Housing: Packages the PCB and battery.
- 6. Battery Status Indicator: Indicates the power on / off and battery status
  - (a) When power switch is turned on: The LED indicator flashes briefly, indicating normal battery status.
  - (b) When RED light illuminates at either power on or during usage: The battery level is low, therefore, a new battery replacement is thus necessary.
- Power Switch: Switch to ON position for operation. Switch to OFF position when not in use.
- Unused Status Indicator: When LED lights on, it denotes un-transmitted signals.
- 9. Group Changer: For Group Selection.
- Channel Changer: Preprogrammed with 30 frequencies. Allow 1-30 channels switchable option.
- 11. Battery Compartment and Cover: Accommodates one piece 9V battery.
- Detachable Belt Clip: Pull slightly towards you and push down according to the arrow direction to release the belt clip.

### 2. OPERATING INSTRUCTIONS

- 1. Push down and open the battery compartment cover (11) as shown in Fig. (1), (2).
- Insert a 9V battery into the battery compartment according to the correct polarity as shown in Fig. (2). Then push up to close the battery compartment as shown in Fig. (3).

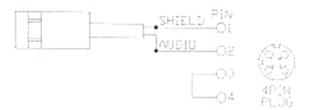


- Before power on, ascertain if same channel (10) was set up for both receiver and microphone. If not adjust to same channel accordingly.
- The LED indicator flashes briefly when power on indicating normal battery status. If no flash occurs it has either no battery, the battery is drained or installed incorrectly. Change accordingly.
- Adjust Gain Control to desired volume. (Gain Control is irrelevant when switch to GT position).
- Plug the microphone connector into the input jack (1) and tighten the connector screw by clockwise direction as shown in Fig. (4).

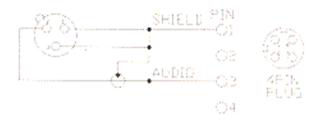


## 3. AF Input Connections

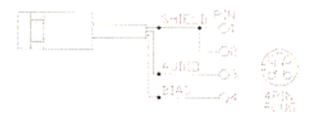
(1) 2-Wire Electret condenser microphone Capsule



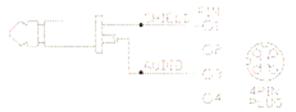
(2) 3-Wire Electret condenser microphone Capsule



(3) Dynamic Microphone



(4). Electric Guitar



(5) Line-in (Impedance 8K Ω ATT, 10dB)

