

# MIPRO<sup>®</sup>

## User Guide

### MTG-100Ha Handheld Transmitter



**MIPRO<sup>®</sup>**  
MICROPHONE PROFESSIONALS

**MIPRO Electronics Co., Ltd**

Headquarters : 814 Pei-Kang Road, Chiayi, 60096, Taiwan  
Tel : +886.5.238.0809 Fax : +886.5.238.0803  
www.mipro.com.tw mipro@mipro.com.tw

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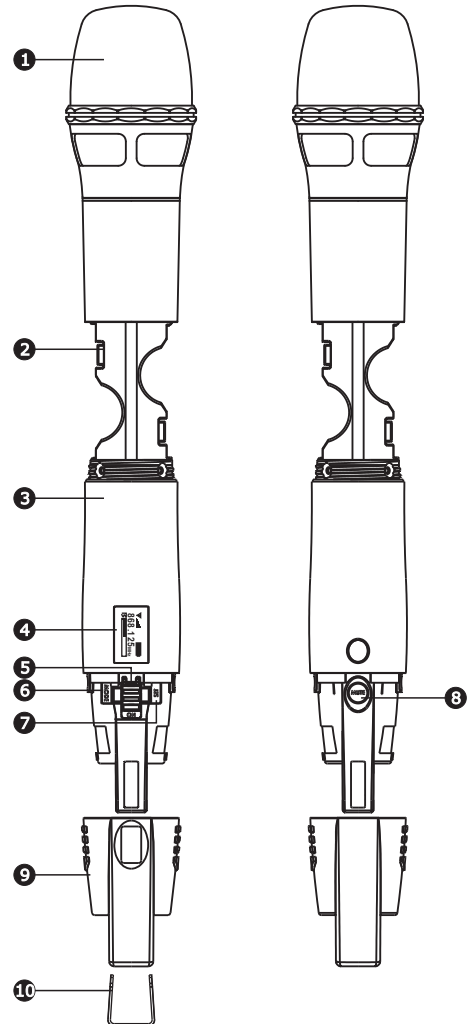


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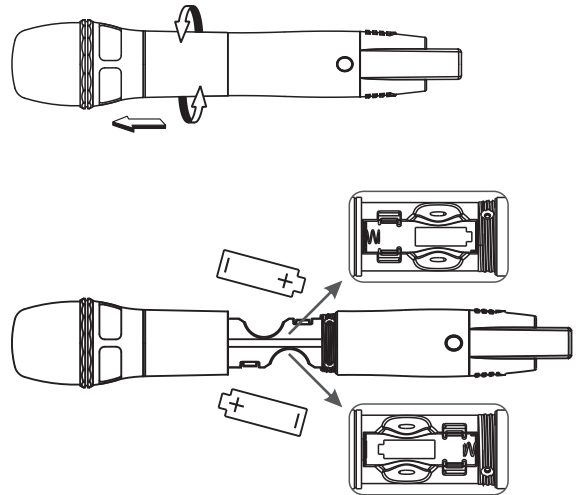
## Handheld Controls and Indicators



- ❶ **Capsule Module:** Protects detachable microphone capsule module and internal foam prevents breathing, wind and POP noises.
- ❷ **Battery Compartment:** Holds 2 'AA' batteries.
- ❸ **Housing:** Protects transmitter PCB, battery compartment and batteries.
- ❹ **LCD Panel:** Displays transmitter parameters.
- ❺ **Power On/Off Switch:** Slides the power switch to the "ON" position for use or to the "OFF" position when not in use.
- ❻ **MODE Button:** Allows access to 8 available functions displaying in LCD panel.
- ❼ **SET Button:** Parameter selection button.
- ❽ **MUTE Button:** To mute and un-mute the audio signal temporary.
- ❾ **Protection Cover:** Protects power switch and prevents user has direct access to power switch.
- ❿ **Channel ID Clip:** For channel identification (Optional)

## Operating Instructions for Insertion & Removing Battery

- Turn the microphone housing and pull it toward capsule grille to expose battery compartment.
- Insert two new AA alkaline batteries in the battery compartment with correct polarity orientation.
- Turn power switch to ON position after battery installation. If LCD does not lit, please check battery polarity or change to fresh batteries.



### Caution:

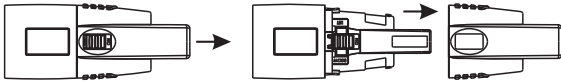
Always power off after each use. Remove the internal battery if it will not be used for an extended period of time.

## Patented Protection Cover

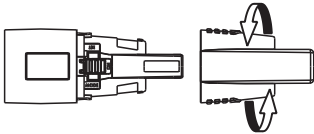
Protection cover's patented design protects accidental access to power switch and its rugged material and snug fit offer protection to both power switch and PCB during accidental drop.

### Steps:

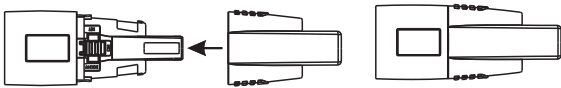
- Remove protection cover.



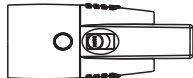
- Reverse protection cover.



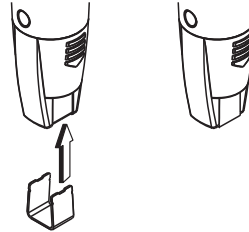
- Install the protection cover after turning will cover up power switch.



Mute function is open for easy access



- When power is off, reverse-installation of protection cover will turn on the switch automatically. To turn off the system, remove the cover to turn off.
- Protection cover must be attached during operation for full protection.
- Channel identification clip can be attached to the bottom of protection cover.



## LCD Display Screen

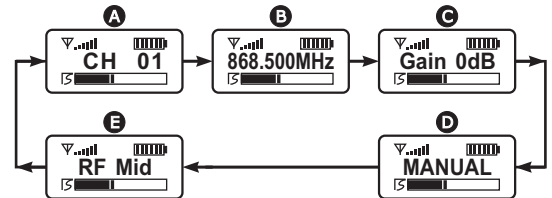
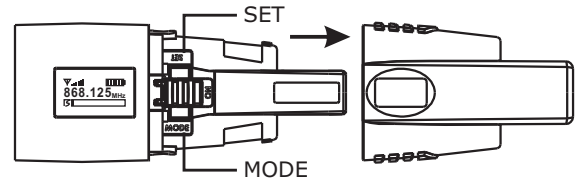
### Fully Lit LCD Display



- A1** Transmitted RF Signals
- A2** Current Function Display
- A3** AF (audio) MUTE
- A4** Transmitter Battery Meter

## How to Setup Transmitter Parameters

- Remove protection cover to expose MODE button and SET button.
- **MODE Button**  
Press "MODE" button to access one of the six functions below.
- **SET Button**  
Press "SET" button and LCD will start flashing. During flashing, press SET button to change parameters.



- A** Channel
- B** Frequency
- C** Sensitivity Level
- D** MUTE Mode
- E** RF Output Power

## Channel Set-Up

- Press MODE button until CH mode appears.
- Press SET button once to activate function. CH 00 blinks once when activated.
- Press SET button increases the channel number by one.
- Press MODE button to confirm and save the change.



## Frequency

- The displayed frequency corresponds to the selected channel number. Frequency cannot be changed.



## Sensitivity Level Set-Up

- Gain Levels: Microphone Input (-12dB ~ 9dB).
- Press MODE button until Gain mode appears.
- Press SET button once to activate function. Gain 0 dB blinks once when activated.
- Press SET button for -12, -9, -6, -3, 0, 3, 6, or 9 dB.
- Press MODE button to confirm and save the change.

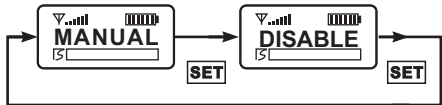
Note:

- Approximately 70% of the level indicator is optimal and recommended.



## MUTE MODE: Mute model selection

- Press MODE button for selection of MUTE MODE. Selection of MANUAL or DISABLE can be selected once the MUTE MODE LCD starts blinking.
- Press SET button to select and set MANUAL or DISABLE.
- LCD will stop blinking and change will not be saved if setting is not done within 5 seconds.
- MANUAL: Mute function is controlled by the Mute button at "MANUAL" mode.
  - Press Mute button to enter mute status. At mute status, AF indicators will become "AF MUTE" and blink continuously. Press Mute button again to release mute status.
  - AF MUTE status will be released automatically when turning off.
- DISABLE: MUTE button is not operable.

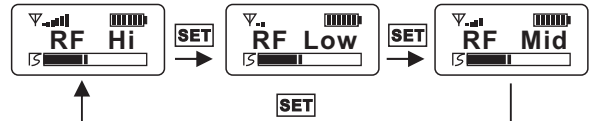


## RF Output Power Set-Up

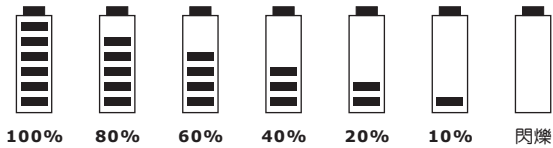
- Press MODE button until RF mode appears.
- Press SET button once to activate function. RF Hi, Mid or Low blinks once when activated.
- Press SET button for Hi, Mid or Low power.
- Press MODE button to confirm and save the change.

### Notes:

- \* Low or Mid setting is recommended for indoor, smaller environment.
- \* Hi setting has 10mW RF power output.



## Battery Level Status



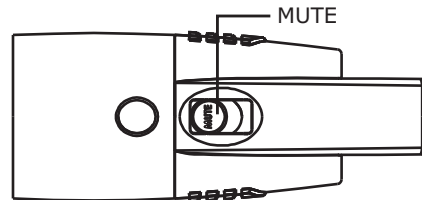
- Change to new, fresh battery when zero or one level indicator (10%) remains or when the battery icon is flashing indicating a lower battery level. Power will shut-off automatically if continuous use without changing to protect from being overly discharged.

### Notes:

- The portable receiver and transmitter are equipped with a programmable automatic shut-off timer which, upon expiration will turn off.
- The shut-off timer is pre-programmable with MIPRO PC interface software and is currently factory set for a duration of 6 hours (360 minutes).
- Thirty (30) seconds before the shut-off timer elapses a TIME OUT message will appear on the LCD screen and then it will be powered off automatically to conserve the battery.

## Setting MUTE

- Press MUTE button to enter MUTE mode.
- Press MUTE button again to release mute status ; AF MUTE status will be released automatically when turning off.
- MUTE button can be activated at "MANUAL" mode.





## General Tips for Improving System Performance

1. Performer should avoid holding the microphone over or near the antenna section as this will deteriorate transmission efficiency. Severe deterioration if performer directly covers up the antenna section with both hands.
2. Many performers tend to hold the microphone by the top grille. Unfortunately, this position seriously degrades both the sound quality and directionality of a microphone. Even the most expensive microphones will have its original sound quality compromised by this method. Grabbing a microphone by the grille will isolate the capsule's acoustic resonance circuit and or change the capsule resonator's frequency. This results in an inferior performance in both frequency response and the separation of directionality. In addition, a palm's sound-focusing effect will tend to strengthen resonances in certain frequencies and can cause unwanted echo.
3. A proper technique is required for using directional microphones because the distance between the microphone and your mouth has a significant impact on sensitivity and performance. There is an inverse relationship between microphone sensitivity and the distance from the mouth to the microphone. Consequently, performers with a "weaker" sound level cannot expect to hold the microphone too far away from their mouth and compensate by turning up the amplifier volume to increase the sound level as this can easily cause echo or feedback. In contrast, performers with a "louder" sound level should not hold the microphone too close as this can easily result in distortion by causing the amplifier system to be overloaded.

4. Furthermore, a large-diaphragm directional microphone has a very distinct proximity effect. When the microphone is close to the mouth, the bass response is strengthened as the distance gets closer. Therefore, if a performer's sound is insufficient in bass, they can hold the microphone closer and use the proximity effect to help compensate for the lower bass level. Conversely, if a performer's voice is too heavy in the bass register, increasing the distance between the microphone and their mouth will decrease the proximity effect and reduce the bass response, thus making their voice become clearer and brighter.
5. It is recommended to keep the grille and sponge windscreen clean to avoid any substance blocking the proximity effect of the microphone.

### Notes

1. Refer to actual product in the event of product description discrepancy.
2. Frequency range and maximum deviation comply with the regulations of different countries.

## FCC

### Federal Communication Commission Interference Statement

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

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

(Example - use only shielded interface cables when connecting to computer or peripheral devices).

## FCC Radiation Exposure Statement

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

For the Handheld Wireless Microphone:

When transmitting, hold the radio in a vertical position with its microphone 0.5 cm away from your mouth and keep the antenna at least 0.5 cm away from your head and body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

THIS DEVICE COMPLIES WITH 15.247 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

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

## IC

This device complies with Industry Canada RSS-210 ISSUE 8 standards. Operation is subject to the following two conditions:


- (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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:


- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.


## **WARNING**

1. **FOR OUTDOOR USE:**  
To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
2. **UNDER WET LOCATION:**  
Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, such as vases should be placed on the apparatus.
3. **SERVICE INSTRUCTIONS:**  
CAUTION - These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

 This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

 This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

**Disposal** Dispose of any unusable devices or batteries responsibly and in accordance with any applicable regulations.



2006-08-18

Disposing of used batteries with domestic waste is to be avoided!

Batteries / NiCad cells often contain heavy metals such as cadmium(Cd), mercury(Hg) and lead(Pb) that makes them unsuitable for disposal with domestic waste. You may return spent batteries/accumulators free of charge to recycling centres or anywhere else batteries/accumulators are sold.

By doing so, you contribute to the conservation of our environment!