



User Guide

MA-101B

Personal UHF Wireless Public Address System



MA-101G

5.8 GHz Personal Wireless PA System




! IMPORTANT SAFETY INSTRUCTIONS !


1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarised or ground plug: A polarised plug has two blades with one wider than the other. The wide blade is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments / accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16. Apparatus should not be exposed to dripping or splashing and no objects filled with liquids, should be placed on the apparatus.
17. Use only with the battery which specified by manufacturer.
18. The power supply cord set is to be the main disconnected device.




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.



 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.

FC & IC - ID

THIS DEVICE COMPLIES WITH PART15 OF THE FCC RULES AND RSS-123 ISSUE2 OF CANADA. 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.



"This product can only be used at the area that the altitude is lower than 2000m for safety purpose."



R 201-180636



"This product can be used in non-tropical locations only for safety purpose."

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



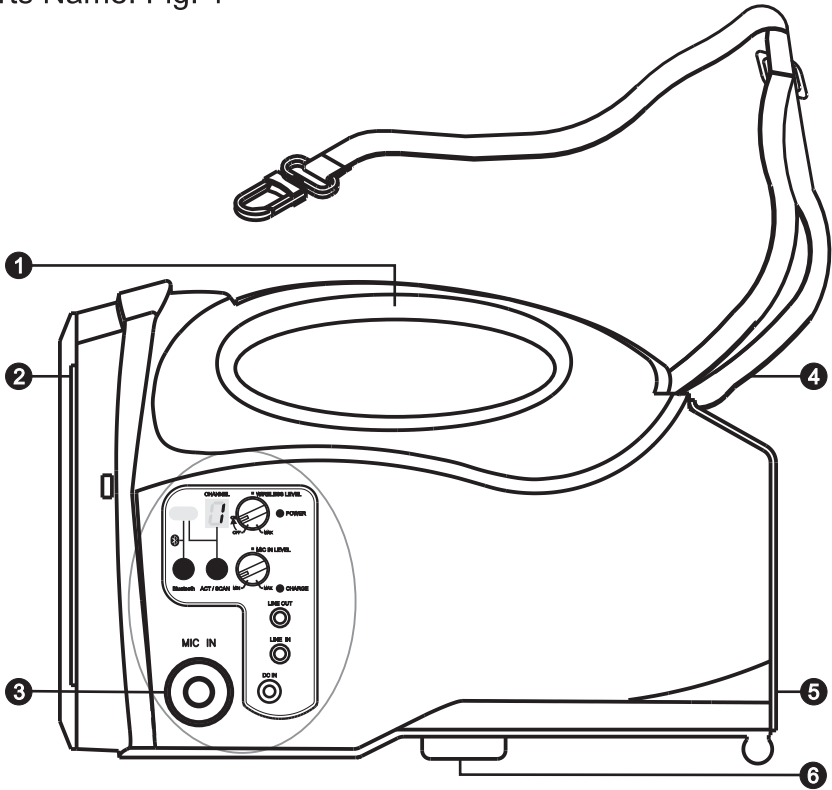
Disposing of used batteries with domestic waste is to be avoided!

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.

2005-08-13

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

I. Parts Name. Fig. 1



MA-101B

MA-101G (5.8 GHz)

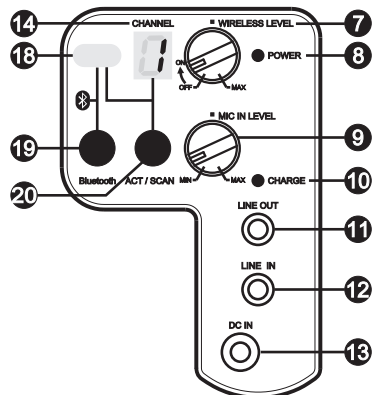
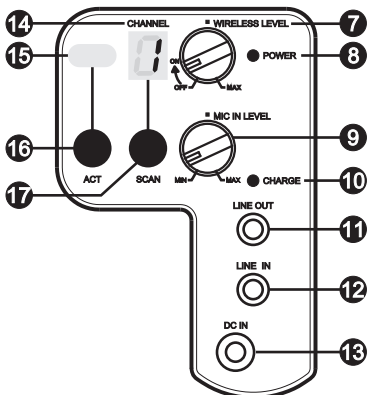


Fig. 1

- | | |
|--|---|
| ❶ Molded Carry Handle | ❶❶ 3.5 Ø Line Output Connector |
| ❷ Speaker | ❶❷ 3.5 Ø Line Input Connector |
| ❸ 6.3 Ø Wired Dynamic Mic Input Jack | ❶❸ DC Power Input Jack |
| ❹ Adjustable Shoulder Strap | ❶❹ CHANNEL Indicator |
| ❺ Rechargeable Battery Compartment Cover | ❶❺ Receiver ACT (Sync) Window |
| ❻ Microphone Stand Adapter | ❶❻ Receiver ACT (Sync) button |
| ❼ Power Switch / Wireless Mic Volume Control | ❶❼ Receiver Channel SCAN button |
| ❽ Power on Indicator Light | ❶❽ Bluetooth® Status Indicator / ACT (Sync) Window |
| ❾ Wired Mic Volume Control | ❶❾ Bluetooth® Power button |
| ❿ Battery Charging Indicator | ❶❿ Receiver ACT (Sync) button / Channel SCAN button |

II. Operating Instructions

1. Operating Wired Microphone:

- Plug a 6.3 Ø wired dynamic microphone into Mic Input Jack ❸ and turn on wired microphone volume control.
- Turn on Power Switch ❷, Power on indicator light glows red ❸.
- Adjust Wired Mic Volume Control ❾ for desired volume level.
- Both wired and wireless microphones can be used simultaneously.

2. Operating Wireless Microphone:

- Turn on Power Switch ❷, Power on indicator light ❸ glows red.
- Power on indicator light glows from red to green after handheld transmitter microphone or bodypack transmitter is turned on.
- Adjust Wireless microphone volume control for desired volume level.
- Same wireless microphone (transmitter) can transmit simultaneously to multiple wireless PA systems to increase the sound levels and expand the coverage area. (Each MA-101G ID Code, however needs to be programmed to the same code of each other).

3. Auxiliary Input (Line Input):

Connect a line-level audio source into the 3.5 Ø line input jack ❶❷ and power on ❷. Desired volume level is adjusted from the audio source.

4. Line Output to Another Audio Equipment:

The 3.5 Ø line output **11** is available to send the audio signal to Mic Input or Line Input of another audio equipment. Desired volume level is adjusted from the Power Switch/Wireless Mic Volume Control **7**.

5. Pairing Bluetooth® Receiver (only for MA-101G 5.8GHz)

- (A) Turn on Power Switch **7**, Power on indicator light **8** glows red.
- (B) Turn on the Bluetooth of the mobile device and bring the mobile device within reception range.
- (C) Press & hold the Bluetooth Power button **19** for 3-5 seconds until blue / red light is flashing intermittently to indicate the receiver is now ready to be paired.
- (D) If the indicator is not flashing intermittently or not flashing, repeat by press & hold for 3~5 seconds until blue / red indicator is flashing intermittently.
- (E) Search Bluetooth devices and click on "MIPRO MB-xx" for receiver ID. Enter "0000" when prompted to enter a PIN code. This will cause your device to pair with the Bluetooth receiver.
- (F) Once paired and connection is made, the blue color indicator lights on. You can play the music on your device.
- (G) To cancel Bluetooth function by press & hold Bluetooth Power Button & Indicator for 3 seconds.
- (H) Power off and on the Bluetooth receiver for changing connected device. Repeat the directions in "Pairing Bluetooth Receiver" to connect a different device.
- (I) Pairing Bluetooth® for two devices:
Turn on one device first and operate steps A~F, then turn on the other one and do steps A~E. Press the Bluetooth button twice for each device, during blue/red indicator light flashing intermittently, two Bluetooth receivers are pairing with each other. Once paired, the blue color indicator light will flash intermittently or stay on. Now play the music from the paired smartphone and get stereo sound amplification.

6. System Setup Scenarios:

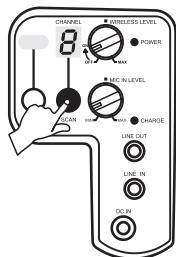
MA-101 system can be hand or shoulder carried, on an elevated surface or installed in a tripod microphone stand.

III. Wireless Microphone Operating Instructions

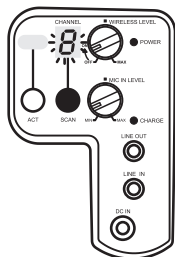
1. Receiver Channel Set-up:

- (A) Automatic Channel Scan Selection: Press and hold the Channel SCAN button for 1 second to access the SCAN function. Channel indicator blinks and displays current channel. During channel blinking, press and release Channel SCAN button to scan for the best available channel. Once blinking stops, the new channel is saved automatically. See Fig. 2.

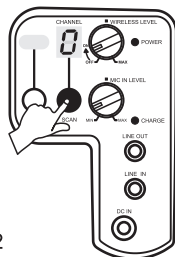
(1) Press & hold SCAN for 1 second



(2) Current channel displays and blinks



(3) Press & release SCAN to scan for a clear channel



(4) New channel is saved

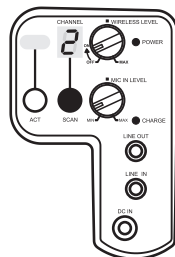
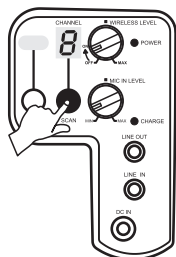


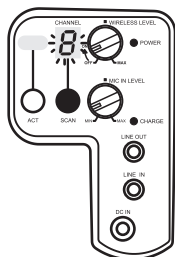
Fig. 2

- (B) Manually Selecting a Channel: Press and hold the Channel SCAN button for 1 second. Channel indicator blinks and displays current channel. During channel blinking, press and hold Channel SCAN button to force the receiver to change to the next available programmed channel every one or two blinks. Once blinking stops, the new channel is saved automatically. See Fig. 3.

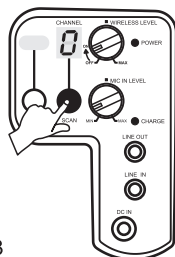
(1) Press & hold SCAN for 1 second



(2) Current channel displays and blinks



(3) Press & hold SCAN to force for a new channel



(4) New channel is saved

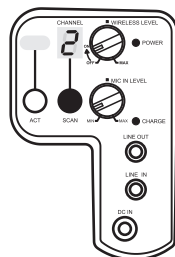


Fig. 3

- (C) Purpose for Scanning a New Channel: Existing channel is experiencing noise interferences or problems during operation. Two or more wireless microphones are required to be used simultaneously at same location.
- (D) Caution during Changing Channel: Do not change channel during a live performance with multiple wireless microphones in operation as it may cause interference.

2. MA-101G ID (Identification) CODE:

- (A) Setting ID code enables the user to increase compatible channels at the same venue using the same operating channel, especially in a heavily congested Wi-Fi environment and interferences.
- (B) MA-101G 5.8 GHz has 9 available ID codes:
1→2→3→4→5→6→7→8→P, P is random ID code.
- (C) Setting ID code:
 - (1) Press & hold the SCAN button. Concurrently, turn on the Power Switch/Wireless Mic Volume Control. Press & release the SCAN button will move up to the next available ID code. Turn off the Power Switch/Wireless Mic Volume Control to save this ID CODE.
 - (2) Turn on the Power Switch/Wireless Mic Volume Control back on again to perform the ACT synchronization with embedded ID code. Without performing this ACT synchronization step, no sound output because the ID codes has been changed even though the same channel number remains the same.

3. Automatic Transmitter Channel Sync. Fig. 4:

- (A) Turn on the transmitter.
- (B) Press the ACT sync button on the receiver. The Channel indicator will blink indicating that ACT sync mode is active.
- (C) Align the sync windows of both transmitter and receiver at a distance of <30 cm (12-inch) and hold until Channel indicator stops blinking.
- (D) Sync is done successfully when Channel indicator stops blinking, the system is ready for use.
- (E) If ACT sync fails, repeat the sync procedure, carefully maintaining alignment between windows of both transmitter and receiver.

Note: When ACT sync button is accidentally pressed, press button once again to cancel.

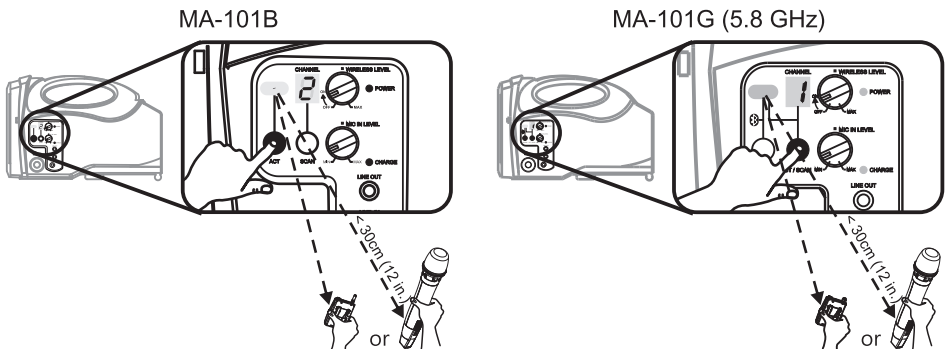


Fig. 4

5. Caution in Operating MA-101G (5.8 GHz):

- (A) Position the MIPRO receiver at least 5-meter away from 5.8 GHz Wi-Fi or other 5.8 GHz transmitting devices.
- (B) User can scan environment for current 5.8 GHz Wi-Fi devices being used and signal strength with smartphone app. Ascertain position the MIPRO receiver away from these 5.8 GHz Wi-Fi transmitting devices.
- (C) A clear, line-of-sight provides the optimal reception range between the transmitting antenna and receiver.

IV. Operating the Rechargeable Battery

1. Operating Instructions:

- (A) We recommend fully charging before first using the system.
- (B) Plug into the DC Power Input Jack **13** and plug the other end into a live electrical outlet.
- (C) Once plugged, the Battery Charge Indicator **10** starts blinking to denote charging in progress. Over-discharged battery may take few minutes for indicator to start blinking. No blinking indicates the rechargeable battery has reached the end of its usable life.
- (D) A still red LED indicates insufficient power, recharging is required. A blinking green LED indicates charging in progress. A still green LED indicates fully charged.
- (E) When not in use, the battery will slowly self-discharge. If system will not be used for an extended period of time, it is advised to fully charge before storing. We also recommend to charge the system every three months when not used.
- (F) This system has a dual-step automatic power shut-off function. Power supply will automatically shut-off once LED indicator glows red for an extended of time to prevent possible damage. Plug in to recharge the system immediately from excessive self-discharged.
- (G) If you find that the operation time of system becomes noticeably decreased, even after fully charging, the battery should be replaced.
- (H) With proper care and charging, it is unlikely to replace the rechargeable battery for some time. Contact MIPRO customer service or your local distributor for a single 14.8V replacement rechargeable battery.

2. Replacing the Rechargeable Battery:

- (A) Turn off the system. Open the battery compartment by pressing down on the two tabs at the top of the battery compartment. The door will hinge open. See Fig. 6.
- (B) The battery is “spring loaded” behind an interior steel plate. Remove the interior steel plate by sliding it upwards and battery. See Fig. 7.

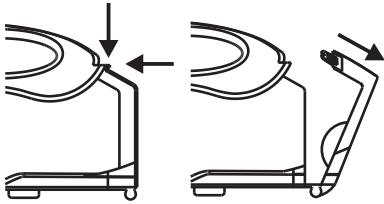


Fig. 6

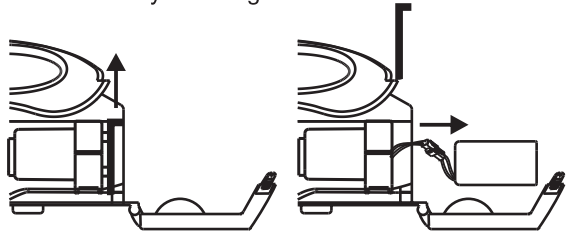


Fig. 7

- (C) Press and release the tabs to disconnect the rechargeable battery pack from the connecting cable. See Fig. 8.

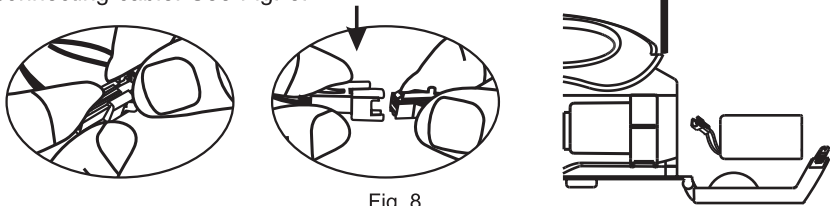


Fig. 8

- (D) Connect a new rechargeable battery pack to the connecting cable. Slide the battery pack back into the slot carefully. Insert the interior steel plate downwards. See Fig. 9.
- (E) Close the battery compartment door. Lift up on the two tabs until they “click” into place. See Fig. 10.

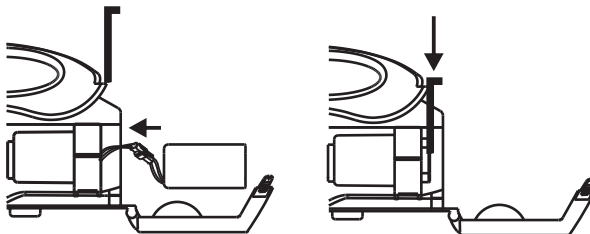


Fig. 9

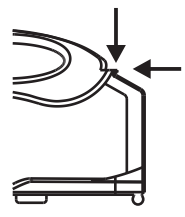


Fig. 10

V. Notes

1. Design and specifications are subject to change without prior notice. Refer to actual product in the event of product discrepancy.
2. Frequency range, output power and maximum deviation adhere to local telecom regulations.

VI. Connection Scenarios. Fig. 11

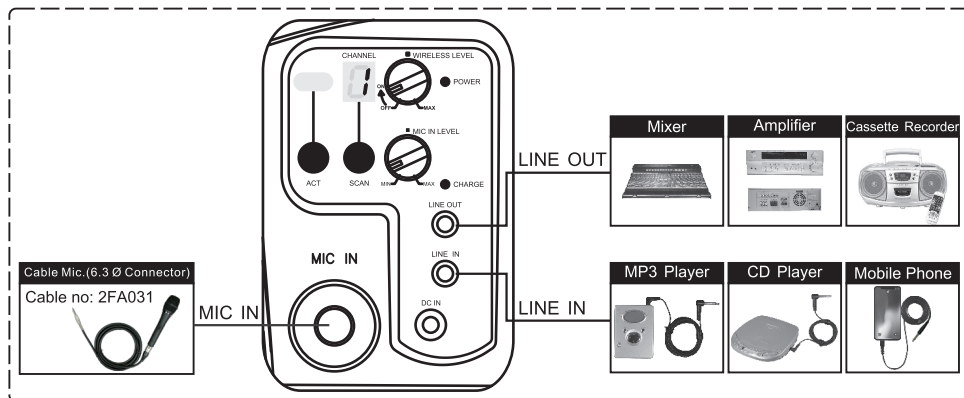


Fig. 11

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).

End Product Labeling

This transmitter module is authorized only for use in devices where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in visible area with the following: " Contains FCC ID: M5X- KB64ABC "

End Product Manual Information

The user manual for end users must include the following information in a prominent location
"IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be colocated 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.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or colocation with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate FCC authorization. This device is intended only for OEM integrators under the following conditions: The antenna must be installed such that 20 cm is maintained between the antenna and users. As long as a condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

MIPRO[®]
MICROPHONE PROFESSIONALS

MIPRO Electronics Co., Ltd

Headquarters: No. 814, Beigang Rd., Chiayi City 600079, Taiwan
Tel : +886.5.238.0809 Fax : +886.5.238.0803
www.mipro.com.tw mipro@mipro.com.tw



2 CE578D

All rights reserved. YM 022/05

Do not copy or forward without prior approvals of MIPRO.

Specifications and design subject to change without notice.