

MIPRO[®]

MA-707

Portability

Simplicity

Flexibility

Portable Wireless PA System

User Guide



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 mains disconnected device.
19. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.



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.

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.



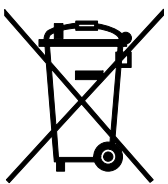
“This product can only be used at the area that the altitude is lower than 2000m for safety purpose.”



“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!

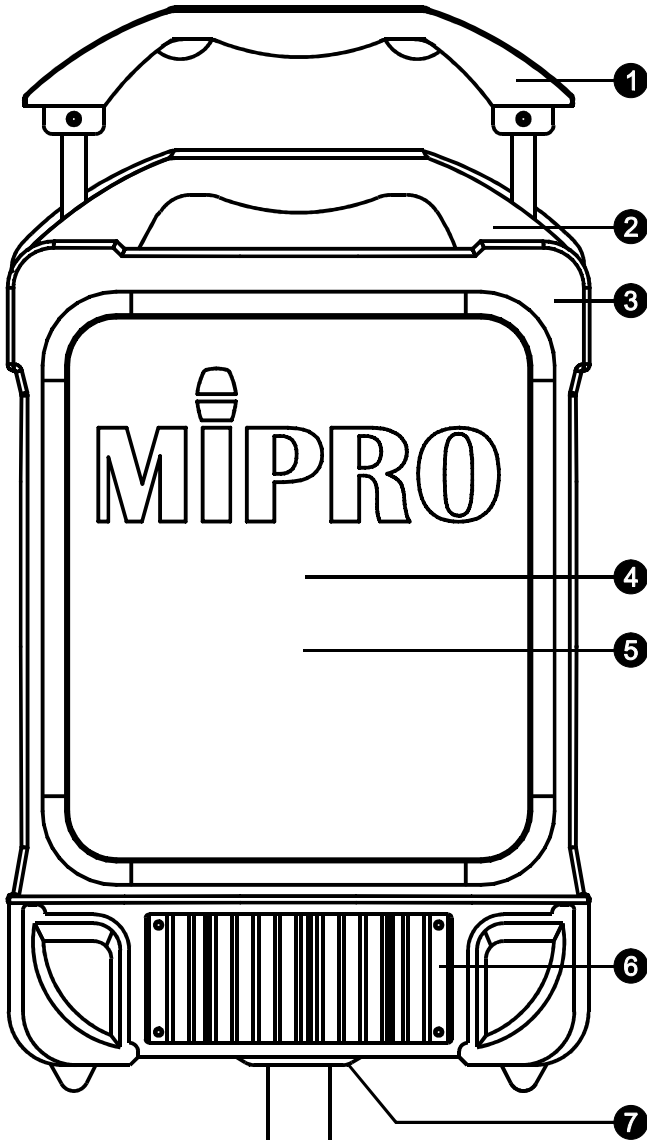
Batteries/NiCad cells often contain heavy metals such as cadmium(Cd), mercury(Hg) and lead(Pb) that makes them unsuitable for disposal with domestic waste. You may return spent batteries/accumulators free of charge to recycling centres or anywhere else batteries/accumulators are sold.

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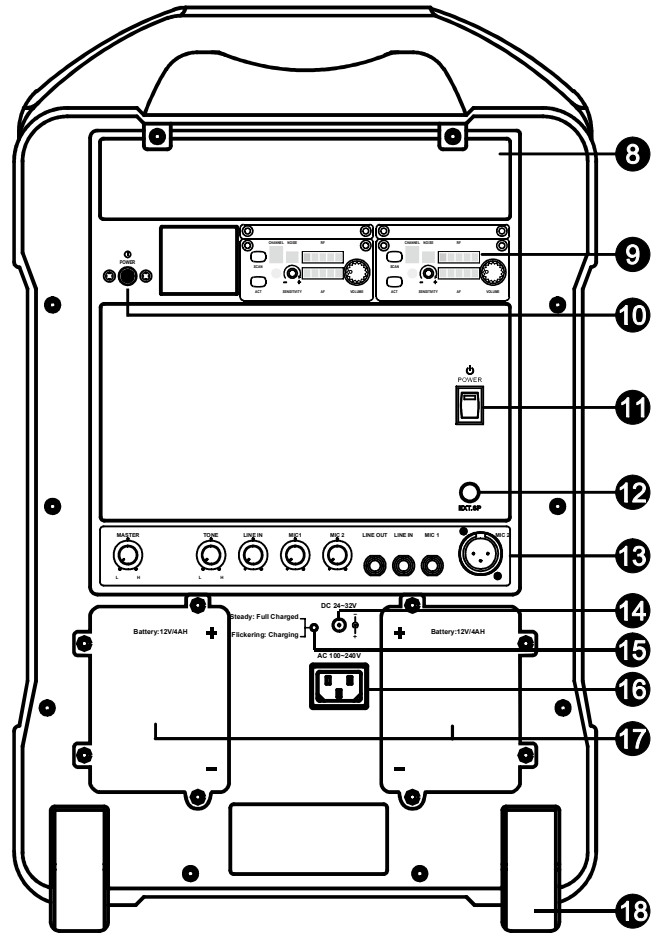
By doing so, you contribute to the conservation of our environment!

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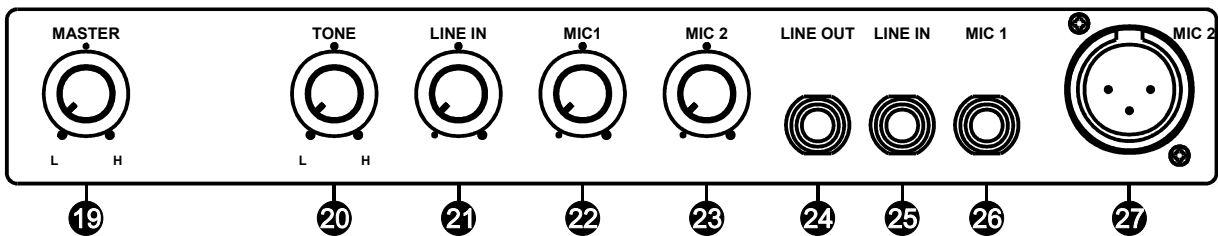
I. Part Names, Fig. 1, 2, 3



Front Panel: Fig. 1



Rear Panel: Fig. 2



Control Panel: Fig. 3

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Front Panel: Fig. 1

- ① Retractable Carry Handle.
- ② Fixed Handle.
- ③ Microphone Storage Compartment.
- ④ Speaker.
- ⑤ Speaker Grille.
- ⑥ Heat Sink.
- ⑦ Tripod Stand Mount.

Rear Panel: Fig. 2

- ⑧ Slot for Optional CD/USB Media Player Module.
- ⑨ Slot for Optional Receiver Module.
- ⑩ AC Power push button.
- ⑪ Master Power Switch with Battery Low Indicator.
- ⑫ Passive Extension Speaker Socket.
- ⑬ Control Panel.
- ⑭ DC 24-32V Power Connector.
- ⑮ Battery Charging Status Indicator.
- ⑯ AC Power Cord Socket.
- ⑰ Battery Compartment Cover Plate.
- ⑱ Trolley Wheels.

Control Panel: Fig. 3

- ⑲ Master Volume Control.
- ⑳ High/Low Tone Control.
- ㉑ Line Input Volume Control.
- ㉒ Microphone 1 Volume Control.
- ㉓ Microphone 2 Volume Control.
- ㉔ 6.3 Ø (1/4") Line Output.
- ㉕ 6.3 Ø (1/4") Line Input.
- ㉖ MIC 1: Unbalanced 6.3 Ø Microphone Input.
- ㉗ MIC 2: Balanced XLR Microphone Input.

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II. Operating Instructions

1. Power On:

Minimize all volume levels before turning on the Master Power Switch ⑪. A lit red battery indicator denotes rechargeable battery is charged. A flashing red battery indicator denotes rechargeable battery is low on power. Simply plug the supplied power cord into the power socket on the back and the other end into an AC power outlet to recharge the battery. Amplifier can be used simultaneously during charging.

2. Master Volume Control:

We recommend the master volume control is turned to the maximum level. Next, adjust volume of other audio input individually to avoid distortion with maximum dynamic range output. Built-in audio limiter serves automatically to prevent the signal level from exceeding a preset limit and stop sound from distorting.

3. Line-input ⑫ and Line-output ⑬ 6.3 Ø (1/4") Jacks:

(A) Reduce the Line Input volume levels ⑭ to minimum. Once powered on, adjust master volume levels ⑪ to maximum, and adjust line input volume to appropriate level.

(B) Line Output jack ⑬ combines all mixed audio. Volume levels are individually adjusted, and not related to master volume control.

4. Wired Dynamic Microphone:

(A) Reduce microphone volume levels to minimum. Once powered on, adjust master volume levels ⑪ to maximum.

(B) Plug an unbalanced 6.3 Ø microphone into MIC 1 Input ⑮ and adjust MIC 1 Volume Control ⑯ for desired sound level.

(C) Plug a balanced XLR microphone into MIC 2 Input ⑰ and adjust MIC 2 Volume Control ⑱ for desired sound level.

(D) Adjust Tone Control ⑲ for high or low tone sound quality.

(E) The wired and wired microphones can be used at the same time, mixed and output sound can be heard simultaneously.

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5. Wireless Receiver Module:

(A) Type of Wireless Receiver Module:

MRM-70B: UHF PLL Diversity Receiver.

(B) Installation:

- (1) Up to two (2) wireless receiver modules can be installed.
- (2) Each receiver has built-in Pilotone & NoiseLock circuitry which reduces noise interferences.
- (3) Unscrew the 2 screws from the MA-707-X filler panel and remove the filler panel before installing the receiver module. After the screws and filler panel have been removed, insert receiver module into the empty slot and push it back to it's mating connector. Uses the screws removed previously to fasten the receiver module in position.

(C) MA-707-X Filler Panel, Fig. 4:

MA-707-X

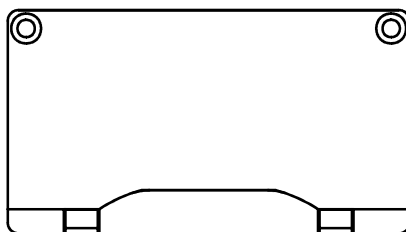


Fig. 4

(D) MRM-70B Part Names, Fig. 5:

MRM-70B

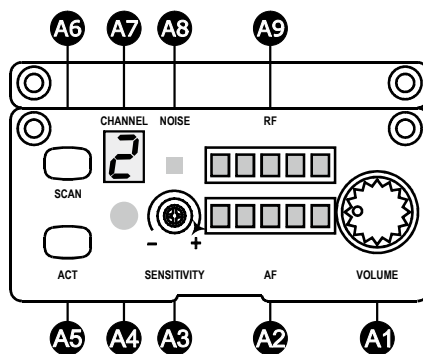


Fig. 5

- A1** Power & Volume knob.
- A2** Audio indicators.
- A3** Sensitivity level adjustor.
- A4** Channel sync ACT window.
- A5** Channel sync ACT button.
- A6** Channel SCAN button.
- A7** Channel display LED screen.
- A8** Noise interference indicator.
- A9** RF indicators.

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6. Operating Wireless Microphones:

- (A) Reduce all volume levels to minimum. Once powered on, adjust master volume levels to maximum.
- (B) Power on the receiver module and reduce volume levels **A1** to minimum.
- (C) RF signal indicators **A9** are lit once receiver is powered on. Adjust receiver volume to desired levels. Audio signal indicators **A2** expands and contracts, pending how loud the input sound.
- (D) Perform the channel synchronization between the receiver and transmitter by power on the transmitter microphone and pressing the Channel sync ACT button and bring the ACT windows within 30cm of each other. Once channel is synchronized successfully, the RF signal indicators **A9** are lit and Audio signal indicators **A2** expands and contracts, pending how loud the input sound.

7. Changing Receiver Channel:

- (A) Scan Automatically for a Non-interference Receiver Channel: Press and hold SCAN button **A6** to perform a channel scan. Existing channel **A7** blinks to denote it is ready to accept parameter changes. During blinking, press and release SCAN button to scan and stop for an open channel. This new channel is now saved. If SCAN button is not pressed within six blinks, it stops blinking and reverts back to the existing channel, Fig. 6.

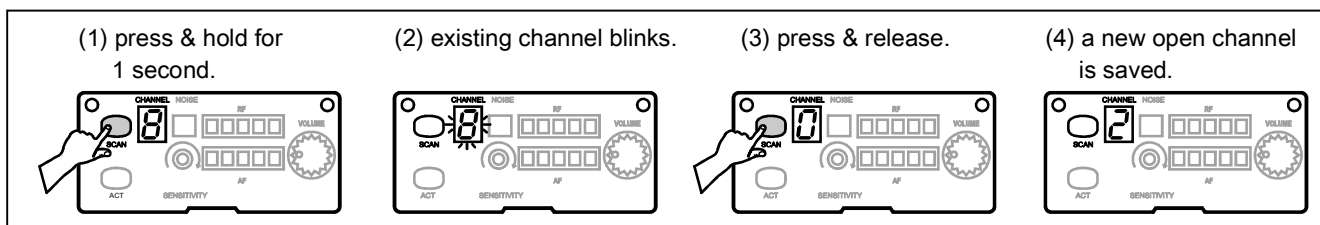


Fig. 6

- (B) Manually Search for a Receiver Channel: Press and hold SCAN button **A6** to perform a manual channel search. Existing channel **A7** blinks to denote it is ready to accept parameter changes. During blinking, press and hold Channel button to force the channel to go forward to the next channel in order. Release Channel button until a desired channel is located. This new channel is now saved. If Channel button is not pressed within six blinks, it stops blinking and reverts back to the existing channel, Fig. 7.

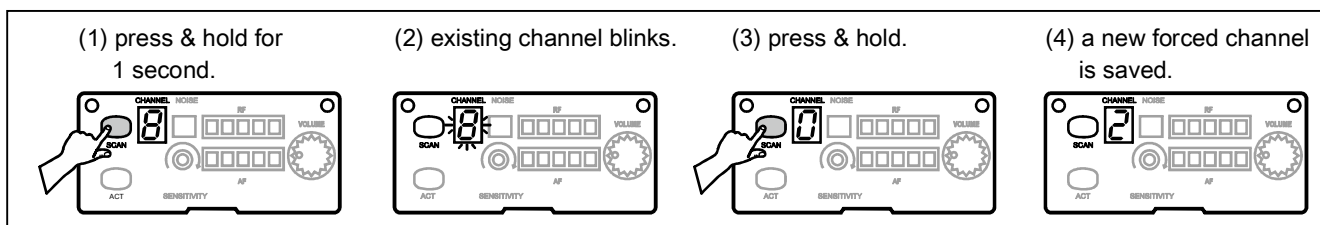


Fig. 7

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8. Reason for Changing a New Receiver Channel:

- (A) Noise or interference is heard during a presentation or performance.
- (B) When two or more receiver modules are installed, therefore, two or more compatible channels are required to be used simultaneously at the same place.

9. Caution:

- (A) Do not attempt to change a new receiver channel during a performance where two or more transmitters/microphones are being used simultaneously to avoid interferences with each other generated by the transmitting microphone signals.
- (B) “_” displays in Channel display screen **A7** denotes this receiver channel is currently experiencing interference, therefore, scan for a new, open receiver channel

10. ACT Channel Synchronization:

- (A) Ascertain both receiver and transmitter are powered on. Press ACT button **A5** on receiver to activate IR (infrared) channel synchronization. Existing channel blinks **A7**.
- (B) Align the ACT sync windows of both transmitter and receiver within 30cm of each other for an automatic channel synchronization, Fig. 8.
- (C) If ACT channel synchronization is performed successfully, the new channel in Channel Display Screen stops blinking, RF indicators are lit and audio indicators are lit once you speak into the microphone.

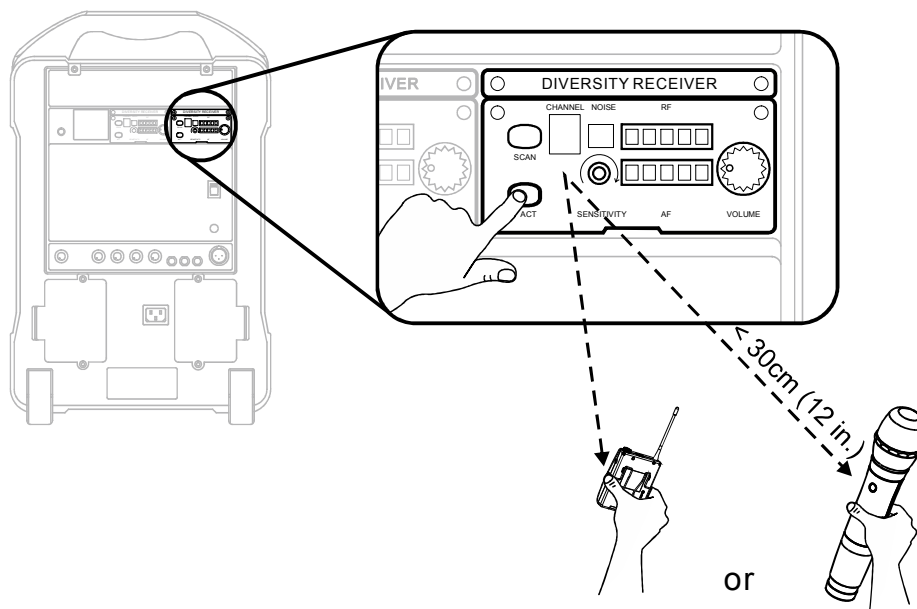


Fig. 8

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III. Connection for External Audio Sources, Fig. 9

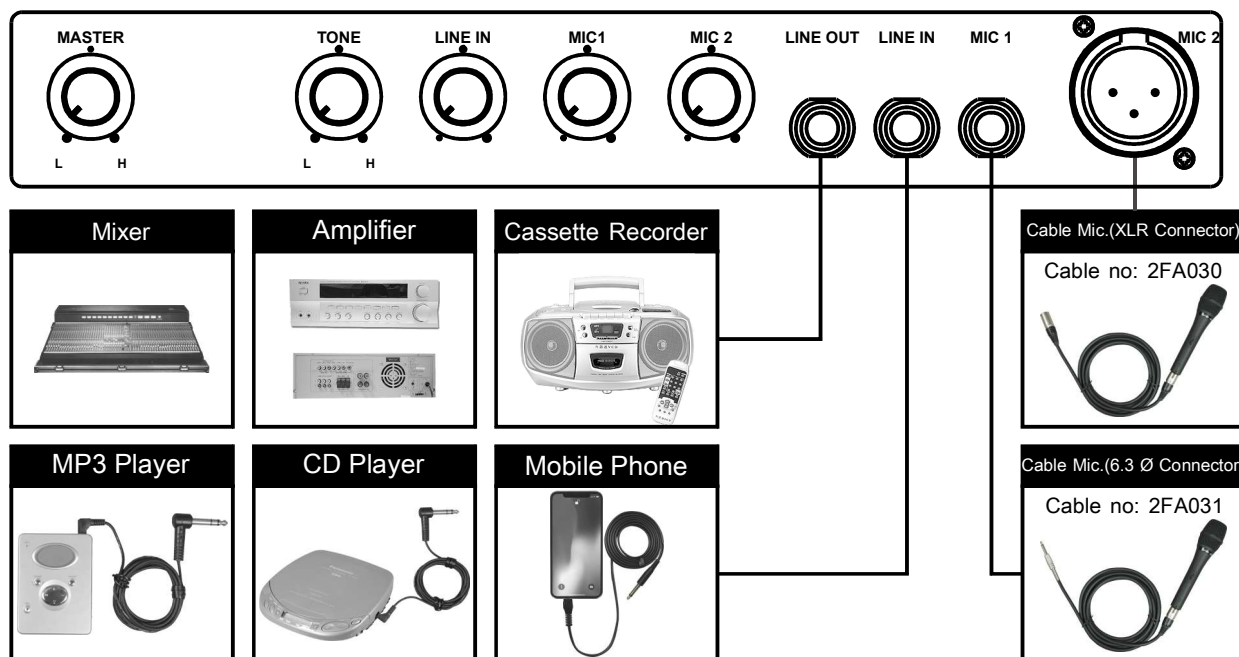



Fig. 9

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IV. Power Supply


1. AC Power Supply:

- (A) Connect AC Power Cord Socket ⑯ and plug the system into an AC outlet to charge the built-in rechargeable batteries. The AC Power and Battery Status Indicator ⑮ blinks red during charging. The AC Power and Battery Status Indicator glows red and stops blinking when it is fully charged.
- (B) AC power provides powers to both the system itself and to the built-in rechargeable batteries. Power switches to DC automatically from AC if the AC plug is detached during operations. Operation works normally in both AC or DC mode. DC power works only if it has built-in rechargeable batteries.
- (C)  CAUTION: AC Power push button ⑩ needs to be pressed (recessed) when plugging the system into an AC outlet. The system cannot provide AC power if the AC Power push button itself is raised.

2. DC Power Supply:

- (A) Two built-in series connection model WP 4.5-12 lead-acid batteries are used.
- (B) Fully charged batteries will yield approximately 7 hours of continuous music and speech. However, service times vary depending on control settings.
- (C) AC Power push button ⑩ needs to be pressed (recessed) when plugging the system into an AC outlet for battery charging. The system cannot provide AC power if the AC Power push button itself is raised.
- (D) The Battery Charging Status Indicator ⑮ will not glow unless Master power ⑪ is turned on. The LED light on Master power glows red when turned on denotes normal status. The LED light on Master power flashes red when turned on denotes battery low status. Simply plug into an AC outlet to recharge the battery. The LED light on Master power do not glow or flashes red (light is off) when turned on denotes over-discharged, abnormal or faulty status.
- (E) Always store system with the batteries fully charged. To preserve built-in battery life, we recommend to fully charged before the first use and after each use. Leave the system plugged into an AC power outlet when not in use. Battery may not hold a charge if they are not recharge often. Recharge the system at least once every 3 months. Remove the batteries when the system will not be used for an extended period of time.

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(F) How to “rescue” rechargeable battery that is not used for a long time, not recharged properly, stored in extremely high temperature environments, resulting in excessive discharged and charging failure? First step, remove the battery and charge it by 18V/2A DC power supply for more than 30 minutes and ascertain battery surface temperature cannot exceed 50°C during charging. Then, install the battery back into the system and turn on the power. The LED light on Master power  flashes red after powered on denotes battery can be recharged normally. If the LED light on Master power is not on once powered on, it denotes battery can no longer holds a charge, therefore, a replacement new battery is required.

3.  Caution: AC and DC Power supply cannot be used at the same time.

V. Installation of MIPRO CD/MP3 Media Player

1. Installation Steps:

(A) Using a Phillips-head screwdriver (not supplied) remove the screws to remove protection cover panel.

(B) Gently insert the MP3 media player module into the slot. Make sure the back edge connector is aligned and firmly connected.

(C) Tighten up the screws.

2. Operations of CD/MP3 Media Player: See a separate player manual enclosed in the master carton.

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VI. Helpful Operating Tips

1. Minimized the master volume control ⑱ before powering on. Adjust the volume controls afterwards.
2. Each audio input volume can be individually controlled and mixed out through the amplifier.
3. Each audio input can be broadcasted and recorded at the same time.
4. This PA system can be installed with an optional wireless microphone system.
5. We recommend placing sound system between the target audience and the presenter, facing the audience and raised above their heads using an optional speaker stand ⑦ or table stand. This set-up helps prevent the annoying feedback by keeping wireless & wired microphone users behind the sound system. The internal power supply rechargeable batteries should be kept fully charged. Always charge the system after use.
6. Detached the power cord from AC power outlet once the system is fully-recharged.
7. Refer to operating instructions for wireless microphone system.
8. Refer to actual product in the event of product description discrepancy.
9. Frequency range, output power and maximum deviation to comply with the regulations of different countries.

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MICROPHONE PROFESSIONALS

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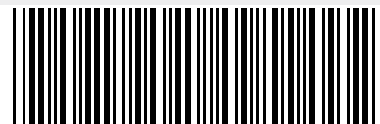
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2005-08-13



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