

MIPRO®

MR-823 | MH-80 | MT-801 | MT-801a

UHF Dual-Channel Diversity Wireless Microphone 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 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 PART 15 OF THE FCC RULES AND RSS-210 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.

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!

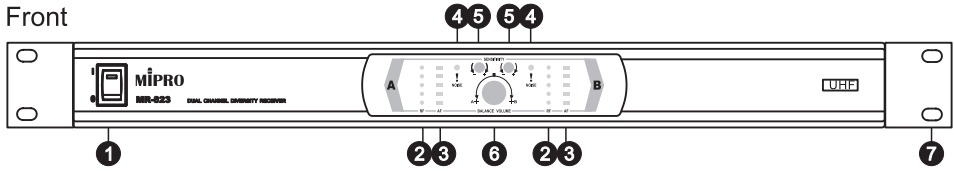
Batteries / NiCad cells often contain heavy metals such as cadmium(Cd), mercury(Hg) and lead(Pb) that makes them unsuitable for disposal with domestic waste. You may return spent batteries/ accumulators free of charge to recycling centres or anywhere else batteries/accumulators are sold.

2005-08-13

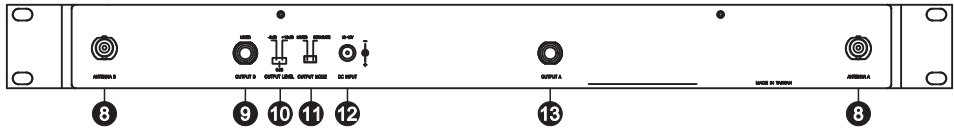
By doing so, you contribute to the conservation of our environment!

I. MR-823 Part Names, Fig. 1

Front



Rear



Rear

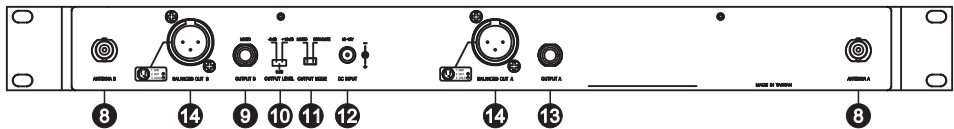


Fig. 1

- 1** Power Switch
- 2** Radio Frequency indicators
- 3** Audio Frequency indicators
- 4** Noise warning indicator
- 5** Sensitivity level adjuster
- 6** Balanced volume control
- 7** Rackmount brackets (optional)
- 8** Antenna Input Connectors
- 9** Unbalanced B 6.3 Ø Audio Output Jack
- 10** Unbalanced Level Switch
- 11** Balanced & Unbalanced Mixed Switch
- 12** DC Input Jack: center pin is positive and sleeve is ground
- 13** Unbalanced A 6.3 Ø Audio Output Jack
- 14** Balanced XLR Audio Output Jack

II. Receiver Installation

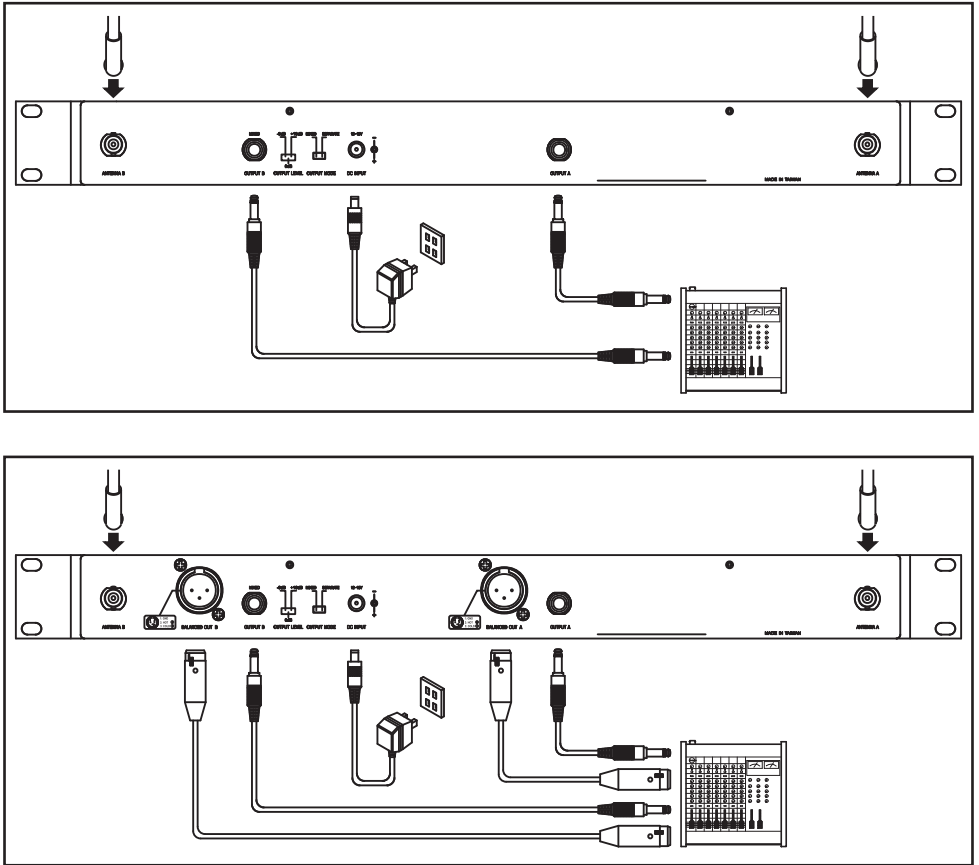


Fig. 2

(The adaptor image is just for reference only)

1. Install two detachable antennas to Antenna Input Connectors ⑧, Fig. 2.
2. Plug DC plug into the DC Input Jack ⑫ and the power cord, into a power outlet, Fig. 2.

3. Audio Output Connection:

- (A) Using audio output cables with “XLR” or “Cannon” type connectors, connect one end to the balanced output jacks **14**, of the receiver, and the other end to the “MIC IN” input jack of the mixer or amplifier. The configuration of the 3-pin connector is as shown in Fig. 3.
- (B) Using audio output cable attached with “6.3mm Phone Jack” type, connect one end from the unbalanced output jack **9** **13**, of the receiver, and the other end to the “LINE-IN” input jack of the mixer or amplifier.
- (C) For mixed output, switch Balanced & Unbalanced Mixed Switch **11** to MIX.
- (D) Guitar Amplifier Connection: Plug a 6.3 Ø both end cable, one end to Unbalanced B 6.3 Ø Audio Output Jack of receiver and one end to input socket of electric guitar amplifier. Adjust “Level Switch” of receiver to “+10dB” position.

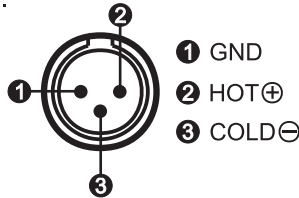


Fig. 3

4. Receiver Rackmount Installation:

- (A) Can be installed into an EIA-standard 1U Rack and fasten with optional rackmount kit, Fig. 4.
- (B) For ideal reception and performance, install the receiver at least 1 meter (3 feet) above the ground and away from EMI / RFI “noise” sources, Fig. 5.

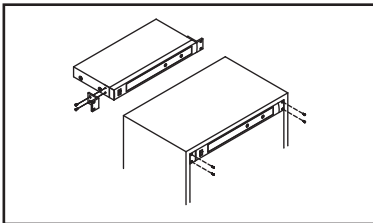


Fig. 4

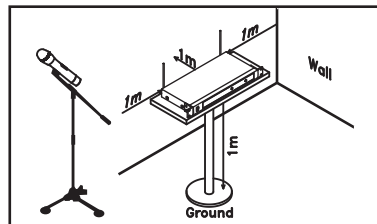


Fig. 5

III. Receiver Operating Tips

1. Minimize mixer/P.A. volume and power is off for transmitter before powering on the receiver.
2. Adjust Sensitivity Level Adjuster ⑤ for ideal receiver sensitivity level. When “NOISE” indicator ④ is lit when transmitters are powered-on or during performance it indicates the receiver is receiving interference signals.
3. Loud noise may bursts when transmitter is powered off, but NOISE indicator is lit indicating receiver is experiencing interfering signals. Adjust Sensitivity Level Adjuster to the left (counter clock) to minimize the interference noise. Change to a new receiver with a different frequency may be required if unable to overcome the interfering noise.
4. Under normal circumstances, the RF LED indicators ② lights up when a transmitter is turned on near the receiver to indicate the receiver is ready for normal operation. Once sounds enter into the microphone the Audio LED indicators ③ will illuminate according to the strength of sound level. If the LEDs do not illuminate or sound is not present at the output, the system is not functioning properly and must be checked.

IV. CAUTION

1. Since the installation of the antenna influences the operating efficiency of the receiver, the most important rule is to minimize the distance as much as possible between the receiving antenna and the microphone for the best reception and performance.
2. The output voltage of the external DC power supply should not be below 12V, otherwise it will not work properly. If the voltage is over 15V some components of the receiver will be damaged due to excessive current draw.
3. Use supplied antennas to ensure ideal receiver sensitivity.
4. Use MIPRO external antenna systems for extended reception range.
5. Use an antenna divider system to simplify multiple receiver antennas installation for improved reception quality.
6. For multiple compatible channels operation, use the non-interference frequencies within the same group for best frequency coordination.

V. MH-80 Part Names, Fig. 6

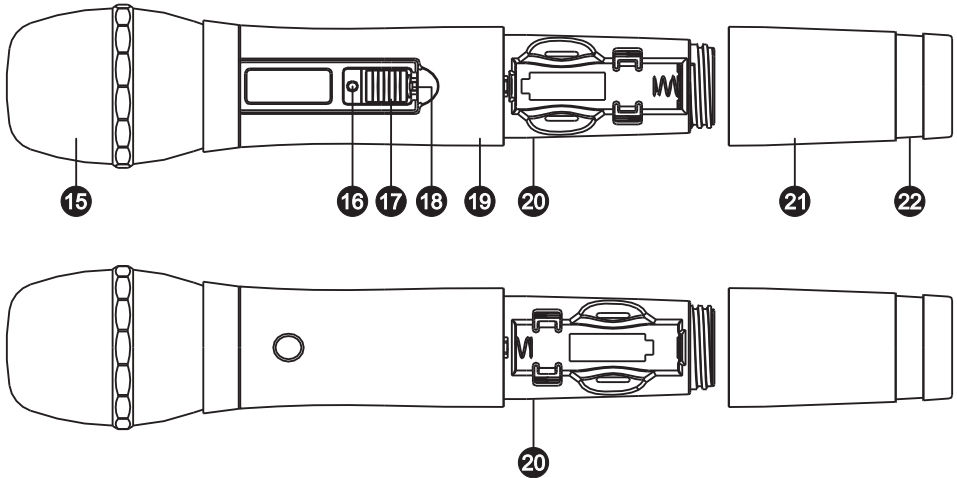


Fig. 6

- ⑮ Microphone Module
- ⑯ Battery Status Indicator
- ⑰ Power Switch
- ⑱ Power Lock Button
- ⑲ Housing
- ⑳ Battery Compartment
- ㉑ Battery Cap
- ㉒ Color-coded ID Ring

VI. MH-80 Battery Installation, Fig. 7

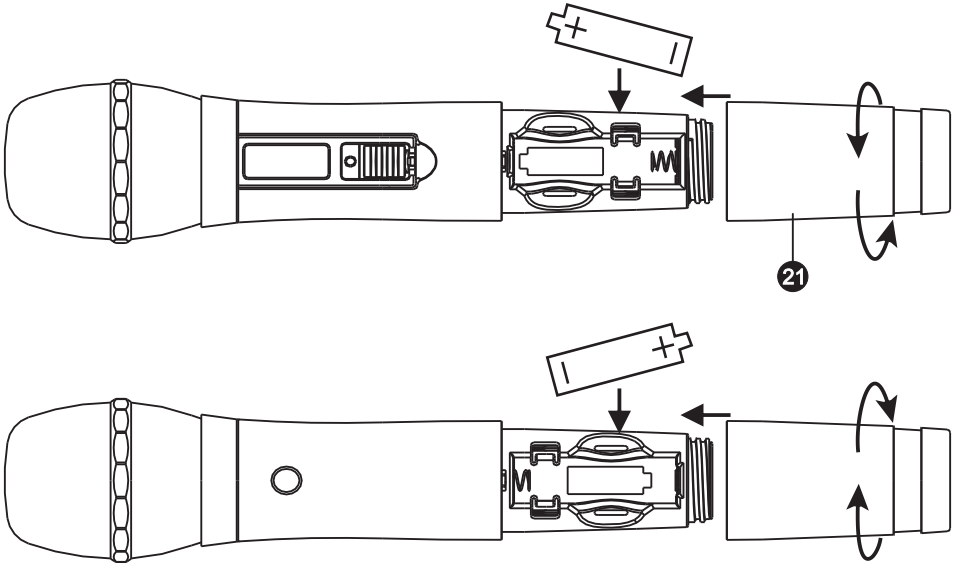


Fig. 7

1. Unscrew battery cap in a counter-clockwise direction.
2. Insert two AA-size batteries into the battery compartment according to the correct polarity.

VII. MH-80 Operating Instructions

1. The Battery Status Indicator **16** flashes once and goes off when power is turned on to denote normal status.
2. The receiver audio indicator increases or decreases according to level of sound enter the handheld transmitter microphone.

VIII. MH-80 Caution

1. Power off when not in use to conserve battery life. Remove the battery when it will not be used for an extended period of time.
2. Avoid holding the rear section of handheld transmitter microphone in order to prevent attenuating the transmission efficiency of the antenna.
3. Covering the microphone head with your palm affects sound quality, directionality and feedback of the microphone.
4. Distance between the microphone and the mouth has a significant impact on sensitivity and sound quality.
5. For ideal microphone pickup, keep the microphone grill clean, sanitized, and free from foreign obstructing objects.

IX. MT-801 | MT-801a Part Names, Fig. 6

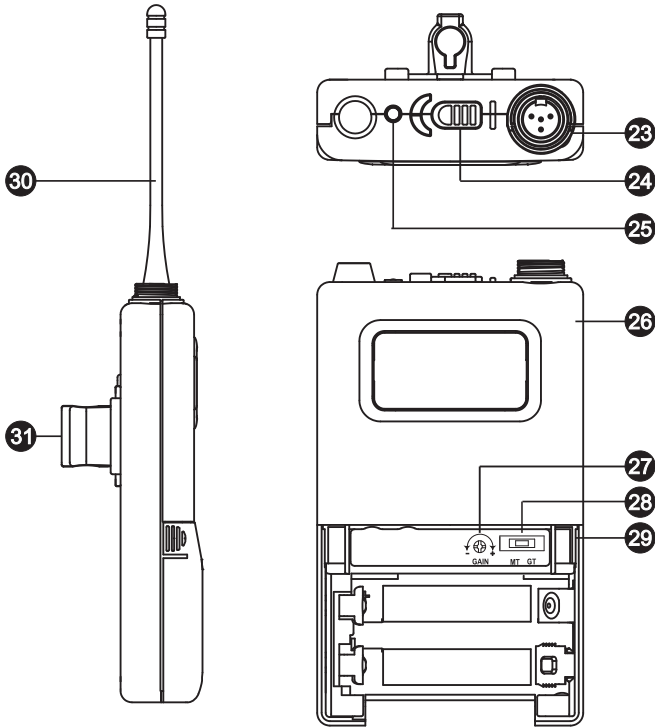


Fig. 8

- 23 4-Pin AF Jack Input Connector
- 24 Power On/Off Switch
- 25 Battery Status Indicator
- 26 Housing
- 27 Gain Control
- 28 GT/MT Level Selector
- 29 Battery Compartment
- 30 Transmitting Antenna

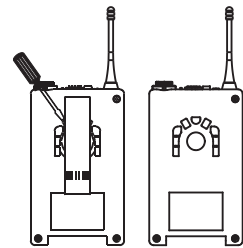


Fig. 9

- 31 Detachable Belt Clip: Allows the transmitter to be worn on a belt, waistband or guitar strap for a 360 degrees rotating. To detach simply use a screwdriver at a 45 degree angle to unfasten, See Fig. 9.

X. MT-801 | MT-801a Audio Input

1. Power off. Align and insert a lavalier, headworn microphone or instrument cable into 4-pin Mini-XLR Male Connector 23 .
2. Fasten the connector accordingly and tighten it in the clockwise direction, see Fig. 10.

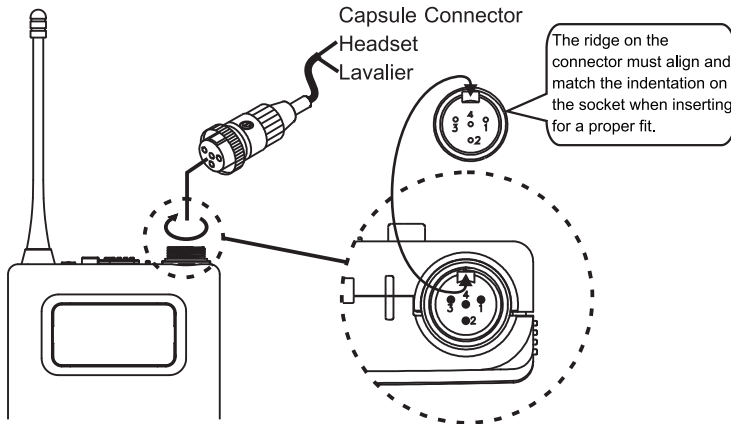


Fig.10

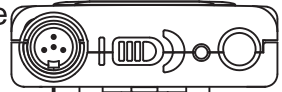
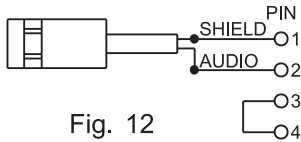
XI. MT-801 | MT-801a Operating Instructions

1. Press both sides of the transmitter to open battery compartment cover to adjust Guitar (GT) or Microphone (MT) position.
2. The Battery Status Indicator flashes once and goes off when power is turned on to denote normal status.
3. Adjust gain control for ideal level. Gain control has no effect when the switch is at the "GT" position (Guitar).

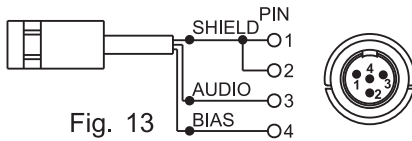
XII. MT-801 | MT-801a

4-Pin Microphone Input Jack Wiring, Fig. 11

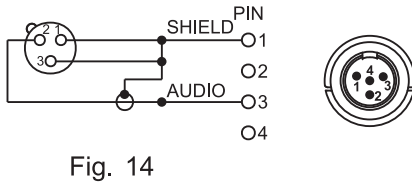
1. 2-Wire Electret Condenser Microphone Capsule, Fig. 12:



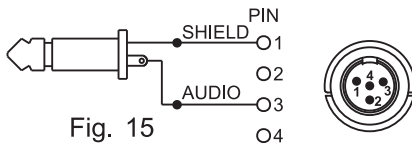
2. 3-Wire Electret Condenser Microphone Capsule, Fig. 13:



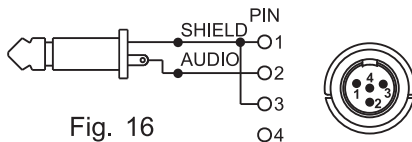
3. Dynamic Microphone, Fig. 14:



4. Electric Guitar, Fig. 15:



5. Line-input (impedance 8KΩ attenuation 10dB), Fig. 16:



XIII. MT-801 | MT-801a Battery Instructions

1. Press side hinges to open battery compartment cover, see Fig. 17.
2. Insert two AA-size batteries according to the correct polarity, see Fig. 18.
3. Power off when not in use to conserve battery life. Remove the battery when it will not be used for an extended period of time.

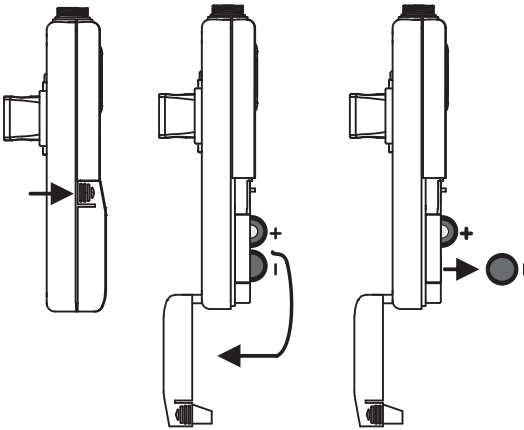


Fig. 17

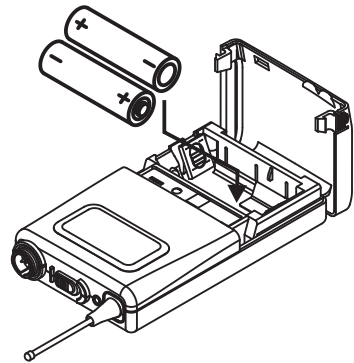


Fig. 18

XIV. Note

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 to adhere to local telecom regulations.

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