



## Headworn Microphone User Guide

MU-13d



MU-23d

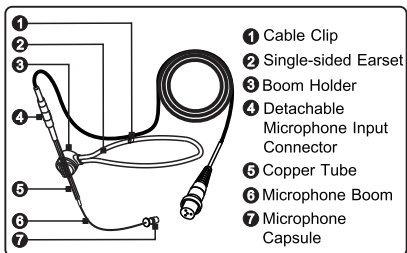


MU-210d

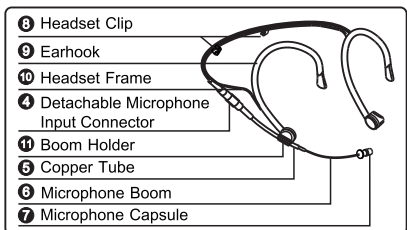


## I. Part Names

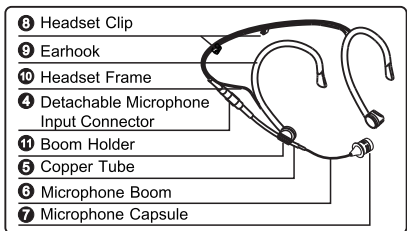
### 1. MU-13d:



### 2. MU-23d:



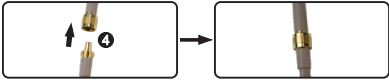
### 3. MU-210d:



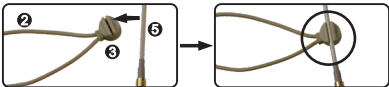
## II. Assembly Illustrations

### 1. MU-13d:

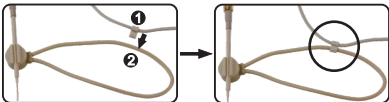
- (A) Tightly screw the detachable microphone input connector (MMCX) ④.



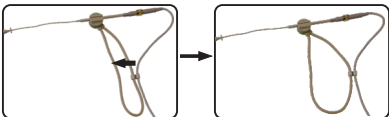
- (B) Select a suitable size of single-sided earset ②. Attach the copper tube ⑤ into the microphone boom holder ③.



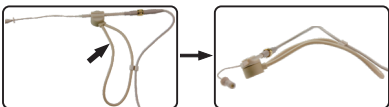
- (C) Clip the cable and earset ② together with the cable clip ①.



- (D) Widen and adjust the earset proportional to fit the user's ear.

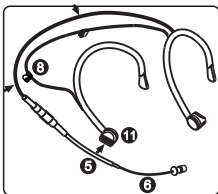


- (E) Bent inward to form an appropriate curvature.



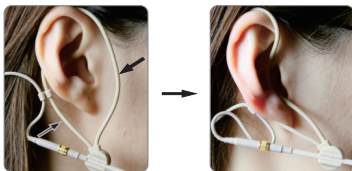
### 2. MU-23d/MU-210d:

- (A) Select a suitable headset frame size. Attach the copper tube ⑤ into the microphone boom holder ⑪.
- (B) Insert the cable by clipping it into the headset clip ⑧.



## III. Wearing MU-13d Earset Microphone

Place the earset over your ear. Press against your earlobe and reshape it for a comfortable and snug feel.



## IV. Adjusting Headworn Microphones

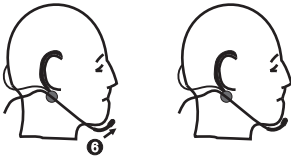
### 1. MU-13d:

For the ideal location, position the microphone boom ⑥ so the microphone is about 1 cm from the corner of your mouth.



### 2. MU-23d/MU-210d:

For the ideal location, position the microphone boom ⑥ so the microphone is about 1 cm from the corner of your mouth.

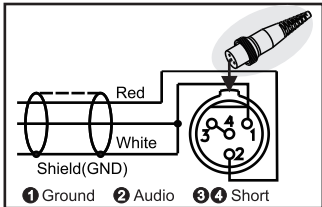


### 3. Caution:

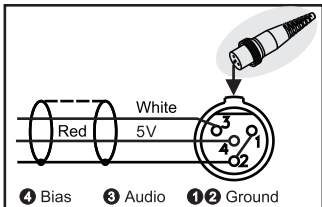
- (A) For distance and angle adjustment, only adjust the microphone boom **6**. Don't bend the copper tube **5**.
- (B) If any undesired noise or signal dropout occurs, ensure the detachable microphone input connector is securely tightened.

## V. Wiring Illustrations

### (2-Wire)



### (3-Wire)



## VI. How to Obtain Ideal Sound Quality When Wearing Headworn Microphone?

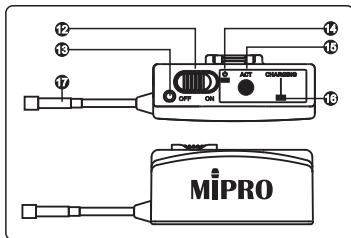
1. Position the microphone and boom so that the microphone is about 1.0 ~ 1.5 cm (0.4 ~ 0.6-inch) from the right or left corner of your mouth to minimize breath or “popping” noise.
2. Omni-directional and Uni-directional types are available. The ideal way to wear the “Omni” type is to have a microphone capsule closer to the corner of the mouth with about 1.0 ~ 1.5 cm away (see Fig. 1 and 2) to minimize breathing or “popping” noise for ideal sound quality. (See Fig. 3).



3. “Uni” type is directional. During a live performance, it has stronger bass sound and higher dynamic range, better suited for “music” effect. However, the ideal wearing position for Uni is more complicated than Omni. Apart from the sensitivity level changes due to distances away from the mouth, it is more susceptible to the Proximity effect and popping noise. In theory, it is recommended to position a unidirectional capsule in front of the mouth for ideal sound quality. However, this position is vulnerable to the problems of popping noise and affects both types of capsules. In reality, the ideal wearing position for sound quality refers to Fig. 4 (about a 45-degree angle and 1.0 ~ 1.5 cm distance away from the edge of mouth).
4. An amplified system is recommended during soundcheck for adjusting the ideal microphone position.
5. Note: Refer to the actual product in the event of product description discrepancy.

## VII. Part Names

### ACT-20T/ACT-22T

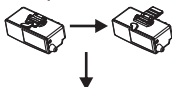


- ⑫ Power On/Off Switch
- ⑬ Charging Socket: Use supplied charger only.
- ⑭ Power Indicator:
  - (A) Fresh Battery - The Power Indicator will illuminate for 1 second and extinguish after power is turned on.
  - (B) Low Battery - The Power Indicator will flash continuously indicating the battery level is low and needs to be recharged within 10 minutes.
- ⑮ ACT (IR) Port: Align both receiver and transmitter ACT ports within 30 cm of each other when the ACT button on the receiver is pressed for a successful ACT synchronization.
  - (A) Successful ACT syncing: The Power Indicator will illuminate for 1 second and extinguish after channels are synchronized successfully.
  - (B) Unsuccessful ACT syncing: The Power Indicator will flash continuously for 5-6 seconds. Check to see if different transmitter and receiver frequency bands are used.
- ⑯ Charging Indicator: Red indicator denotes charging; Green indicator denotes charged. A full charge may take up to 4 hours.
- ⑰ Connecting Cable and Connector

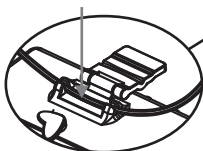


## VIII. How to Install the Headworn Transmitter and Microphone

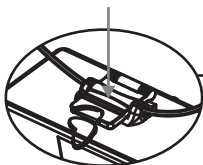
1. Unfasten the latch lock by turning it sideways. Open the latch upward.



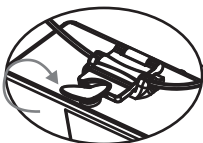
2. Place the headset frame (middle section) into the groove of Miniature Transmitter firmly (see picture). Ensure the two round-shape microphone boom holders are in the same direction as the latch lock.



3. Close the latch.

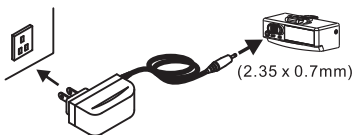


4. Fasten the latch by turning the latch lock firmly in place.



## IX. Charging Method

1. Power off the transmitter.
2. Plug the supplied charger into the AC mains input socket and then plug it into Miniature Transmitter.
3. Charging: Red LED indicator.  
Charged: Green LED indicator.



## X. Cautions

1. Do not use chargers from other brands to avoid insufficient voltage or current.
2. Do not exceed the input supply voltage as it may damage the battery charger, rechargeable battery, and transmitter itself. The output of the MIPRO DC power supply is 12V/0.5A.
3. Note: Rechargeable batteries have a limited number of charge cycles and may eventually need to be replaced. Battery life and number of charge cycles vary by usage and user settings.
4. Refer to the actual product in the event of product description discrepancy.
5. Frequency range and maximum deviation comply with the regulations of different countries.
6. Spraying alcohol directly onto the condenser capsule module will cause severe damage and invalidate the warranty.

## FCC

THIS DEVICE COMPLIES WITH PART 74 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-123 ISSUE 2 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.

## Disposal



**2005-08-13**

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.

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

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