



## Headworn Microphone User Guide

MU-13



MU-23

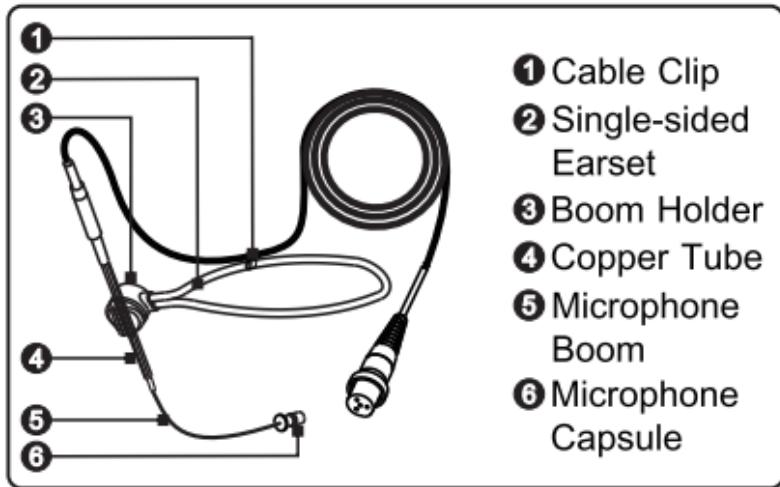


MU-210

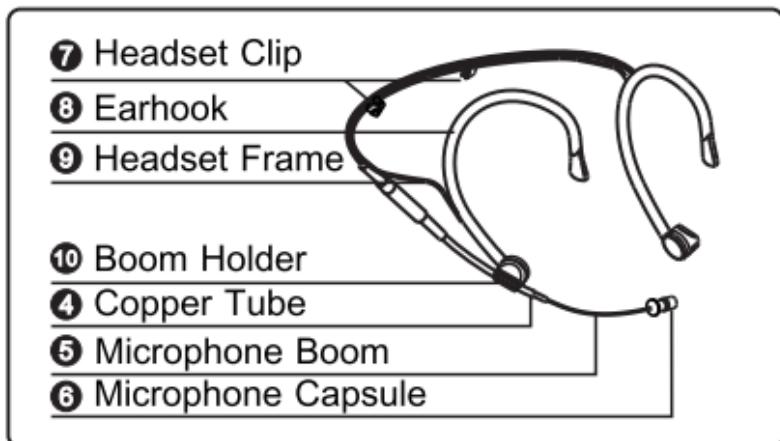


## I. Part Names

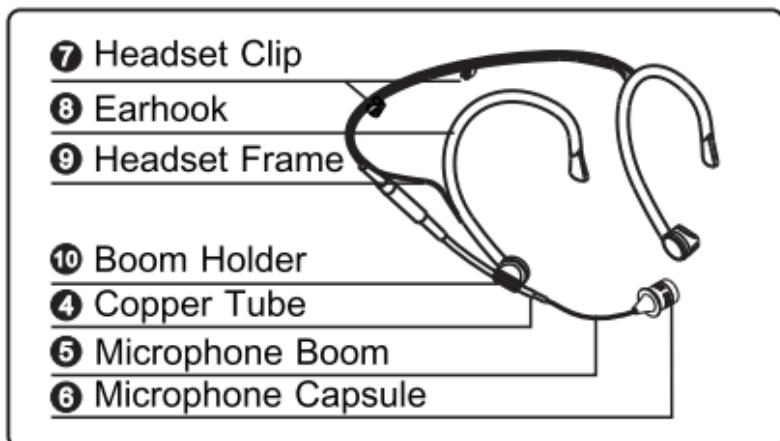
### 1. MU-13:



### 2. MU-23:



### 3. MU-210:



## II. Assembly Illustrations

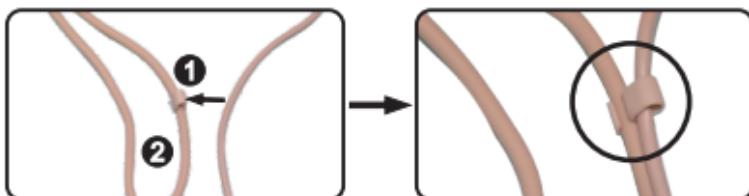
### 1. MU-13:

(A) Select a suitable size of single-sided earset

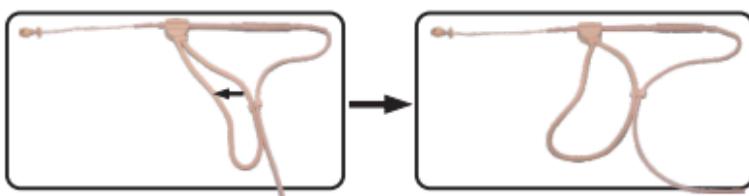
②. Attach the copper tube ④ into the microphone boom holder ③.



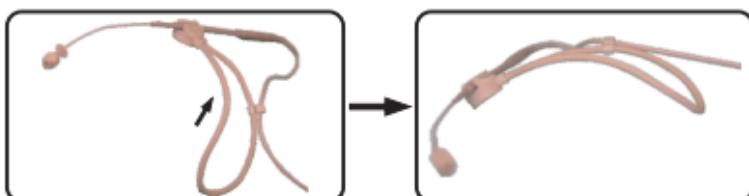
(B) Clip the cable and earset ② together with the cable clip ①.



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



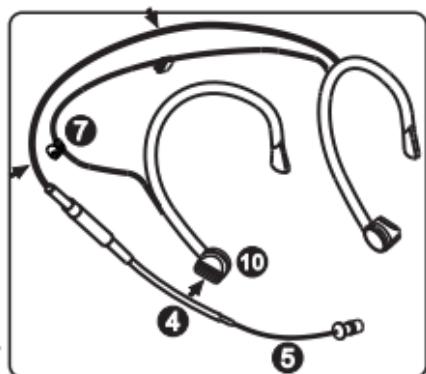
(D) Bent inward to form an appropriate curvature.



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

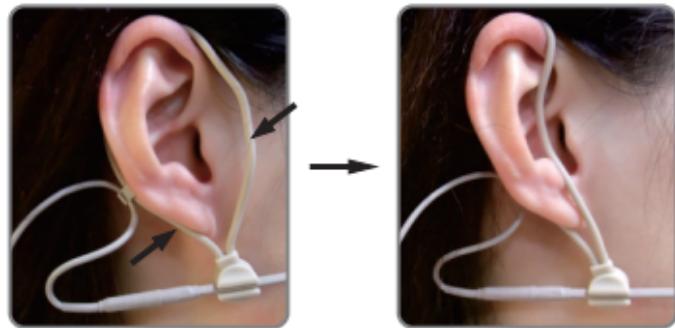
(A) Select a suitable headset frame size. Attach the copper tube ④ into the microphone boom holder ⑩.

(B) Insert the cable by clipping into the headset clip ⑦.



## III. Wearing MU-13 Earset Microphone

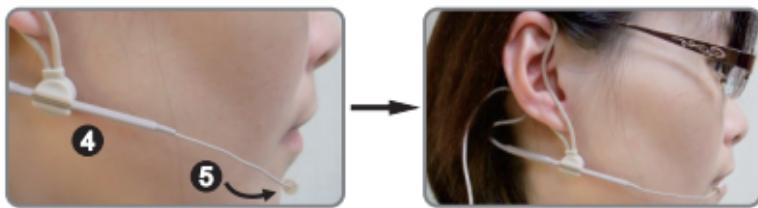
Place the earset over your ear. Press against your earlobe and reshape it for a comfortable and snug feel.



## IV. Adjusting Headworn Microphones

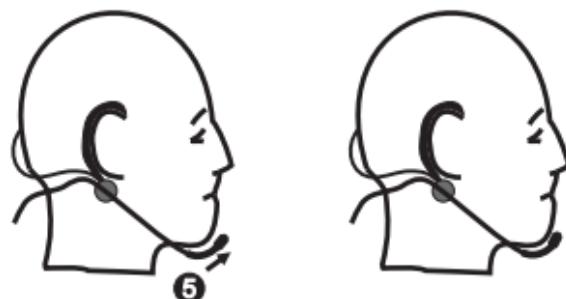
### 1. MU-13:

For the ideal location, position the microphone boom ⑤ so the microphone is about 1 cm from the corner of your mouth.



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

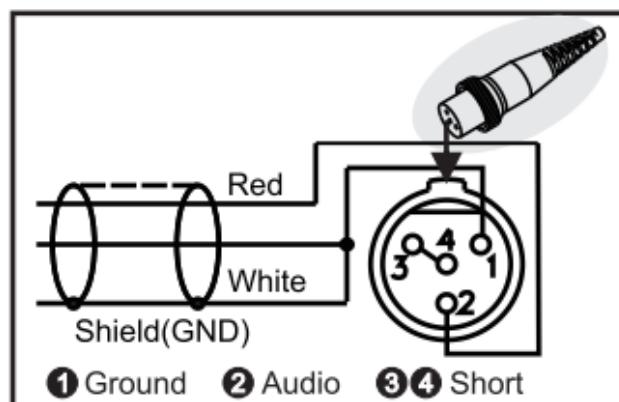
For the ideal location, position the microphone boom ⑤ so the microphone is about 1 cm from the corner of your mouth.



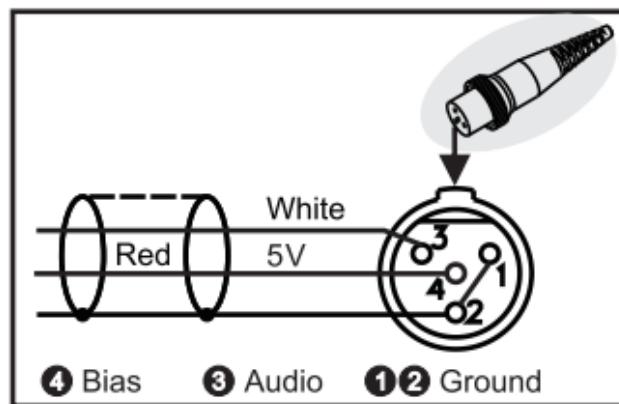
3. Caution: For distance and angle adjustment, only adjust the microphone boom ⑤. Don't bend the copper tube ④.

## V. Wiring Illustrations

(2-Wire)

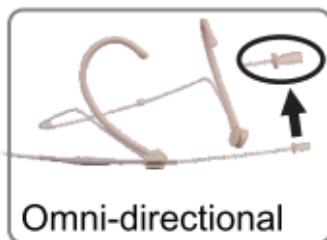


(3-Wire)

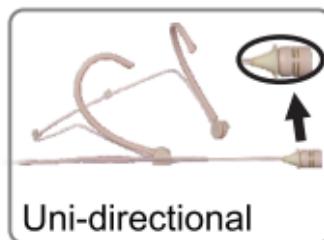


## VI. How to Obtain Ideal Sound Quality When Wearing Headworn Microphone?

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).



Omni-directional



Uni-directional



Fig. 1



Fig. 2



Fig. 3



Fig. 4

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.
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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