# Earphone Assembly Manual

**The 8th generation DIY kit ”TANE"**

final

## List of Parts


**A** tuning sheet

**B** front body

**C** driver

**D** rear body

**E** sponge

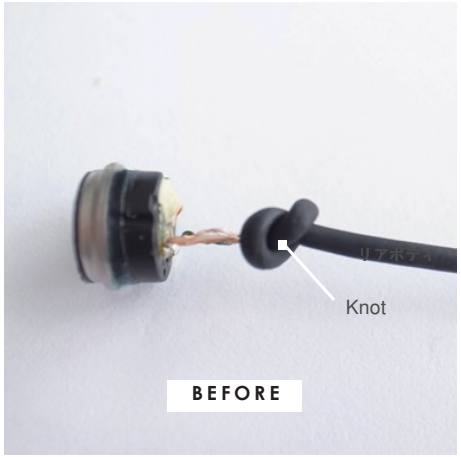
**F** sponge ring

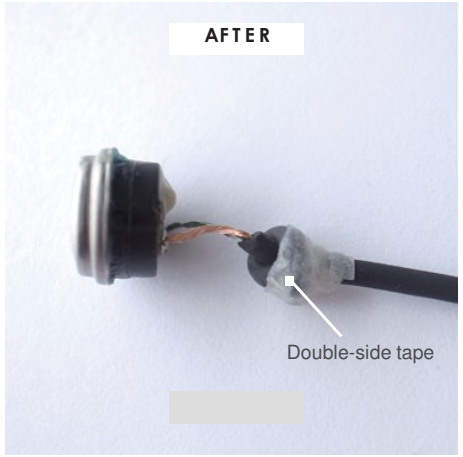
**G** double-sided tape

**H** earpieces

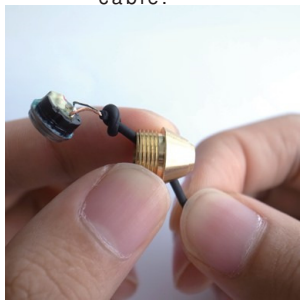
## Assembly

**1** Put the double-sided tape on the knot of the cable.



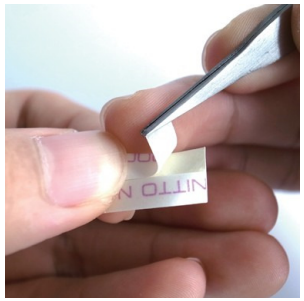




**1-①** Push out the cable.

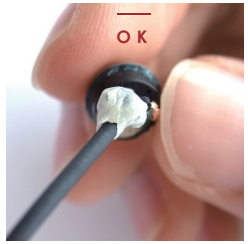


For distinguish L/R, put the masking tape on L side.
(L: Green, R: Red)

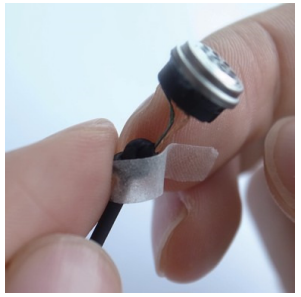
**1-②** Remove the double-sided tape from the sheet

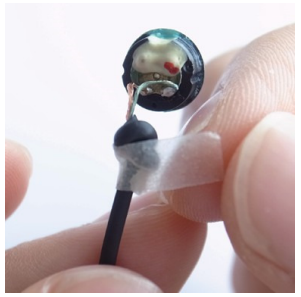


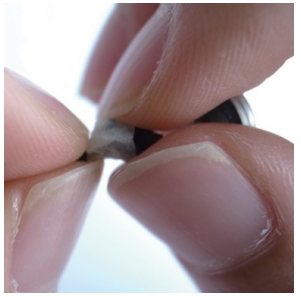
For not to make a space between double-sided tape and the cable, tape it firmly by using fingers.




**1-③** Wind the tape from the root of the knot, then fill the spaces between double-sided tape and the cable by pressing fingers

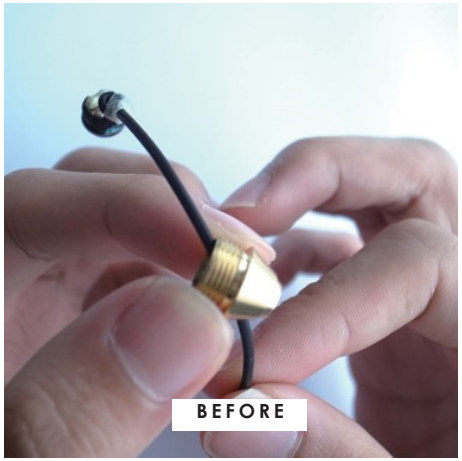






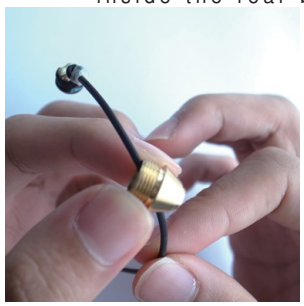
## Assembly

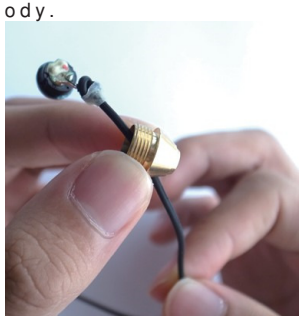
**2** Place the driver unit inside the rear body.





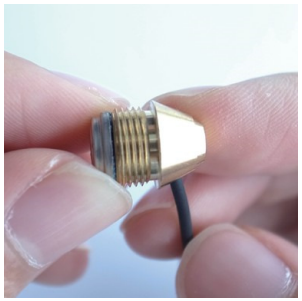
**2-①** Pull the cable gently, and draw in the driver unit inside the rear body.





Be careful not to pull the cable so hard.

**2-②** Place the driver unit inside the rear body, then press firmly by fingers



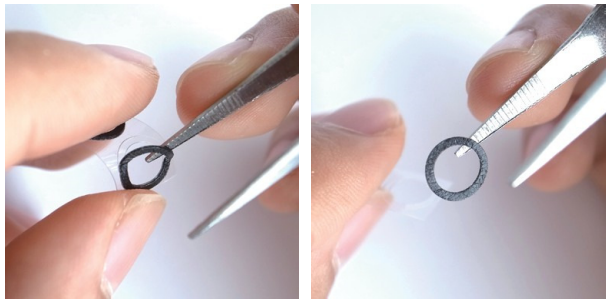
If the driver unit is not place it firmly in its position and loose, it may cause disconnection. Ensure that the driver is place it firmly inside the rear body.


## Assembly

**3** Attach the sponge ring to the driver unit.

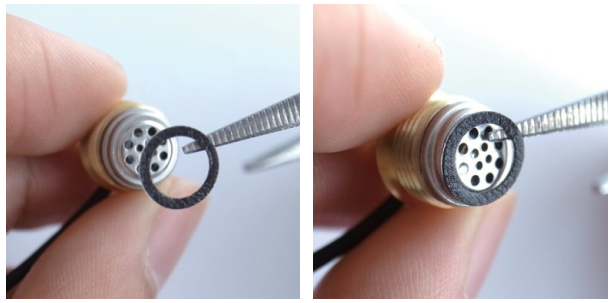


**3-①** By curving the sheet, remove sponge ring with a pair of tweezers.



The sponge ring is soft and changes its shape so easily, ensure that take sufficient care not to pull the sponge ring so hard.

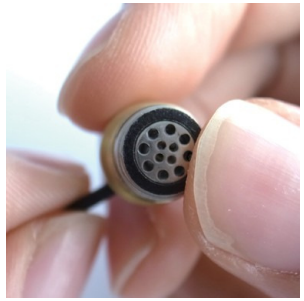
**3-②** Attach the sponge ring to the rim of the driver unit



The sponge ring is installed to prevent air leakage from the front side. Ensure that the sponge ring does not change in shape or that it does not move from its position. These cause may result in air leakage.

**3** Pressing lightly with fingers.

**3-③** Pressing lightly with fingers

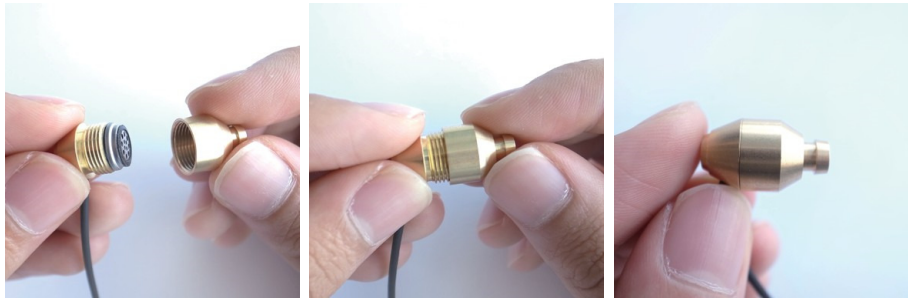


## Assembly

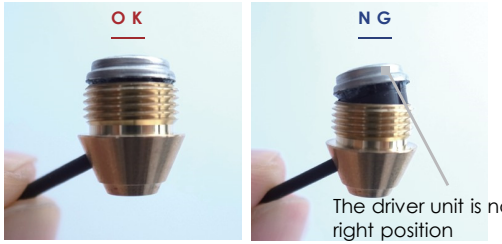
**4** Screw the front body into the rear body.



**4** ① Screw the front body gently into the rear body

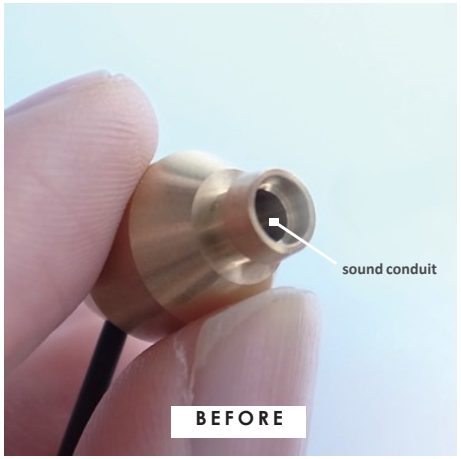


If the driver unit is not place it firmly in its position and loose, it may cause disconnection. Please double-check to ensure that the driver unit is place it firmly inside the rear body.



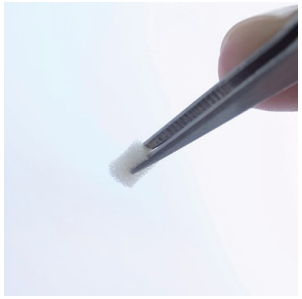
## Assembly

**5** Insert the sponge into the sound conduit of the front body.



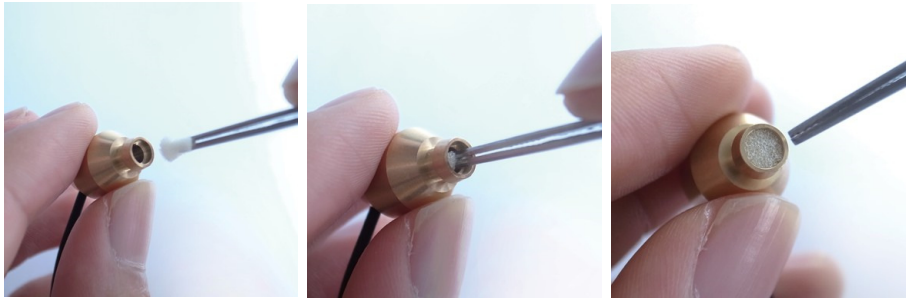


**5-①** Grasp the sponge vertically with a pair of tweezers

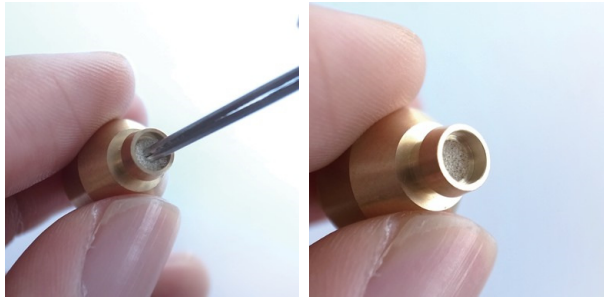


Of the 3 types of the sponges, use the white one.

**5-②** Insert into the sound conduit of the front body



**5-③** Slide down the sponge softly to place into the inner of the rim of the sound conduit



**Attach the earpiece and you're done!**

♫ **Let's try out the sound !**

※To experience the difference of the sound by tuning, please use the same sound source, same play part and the same volume.

# Sound variation by tuning

final

**Sound Tuning sheets | Feuilles de réglage du son**

FI-DO8BSB

| | | |
|---|---|---|
| for housings | BLACK 0.700 | ① |
| | BLACK 0.550 | ② |
| | BLACK 0.450 | ③ |
| | WHITE 0.168 | ④ |
| | WHITE 0.130 | ⑤ |
| | WHITE 0.092 | ⑥ |
| for drivers | WHITE 0.168 | ⑦ |
| | WHITE 0.130 | ⑧ |
| | WHITE 0.092 | ⑨ |

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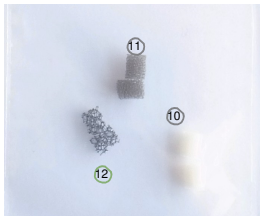


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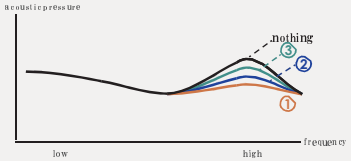
**front body sound conduit** + **filter**

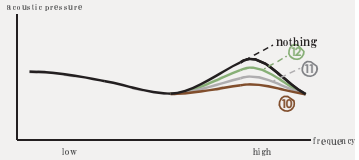
Difference of the sound signature when attaching the filter into the front body sound conduit




When the tones from the driver unit pass through the filter, it mainly reduces high tones. The more thicker it is, it reduces high frequency tones.

**front body sound conduit** + **sponge**

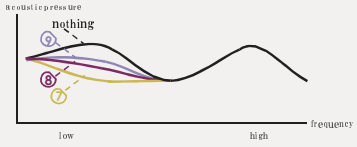
Difference of the sound signature when inserting the sponge into the front body sound conduit




When the tones from the driver unit pass through the sponge filter, it mainly reduces high tones. The more thicker it is, it reduces more high frequency tones. Inserting sponge horizontally which makes its density up reduces more high tones. The effect on frequency band will be a bit different from the filter described in left.

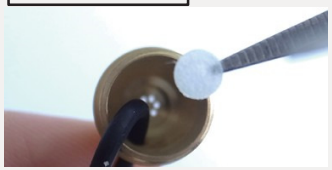
**opening of the driver unit** + **filter**

Difference of the sound signature when attaching the filter across the driver unit

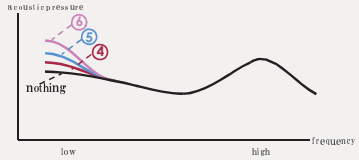



Attaching the filter on backside of the opening of the rear body controls the movement of vibrating plate (diaphragm) which reduces middle range to lower range. It changes muffled sound to clear sound. This tuning point makes the most significance influence on changing the sound signature.

**backside of the opening of the rear body** + **filter**



Difference of the sound signature when attaching the filter onto the backside of the opening of the rear body

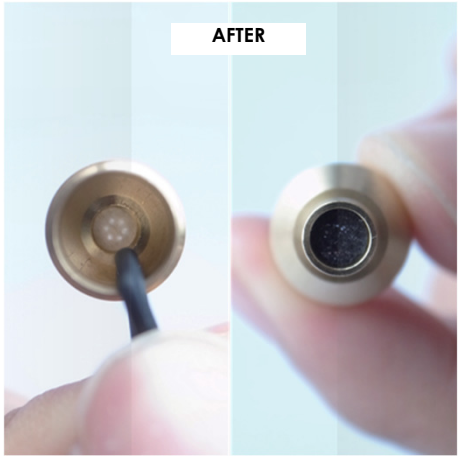



Attaching the filter on backside of the opening of the rear body controls mainly the characteristics of frequency under 200Hz. When the filter gets thicker to thinner, bass will increase. There are several openings on it, making a hole on each opening makes more precise tuning possible.

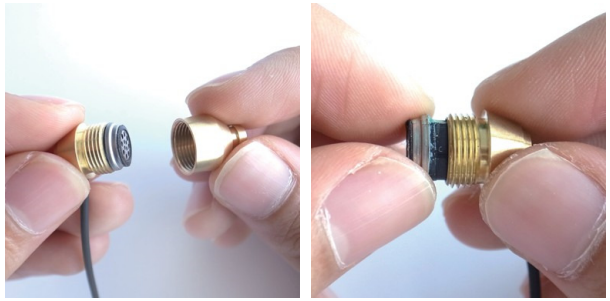
- The mentioned above is the change caused by physical characteristics. You will get the impressions that when lows go up, high go down. Otherwise, when high go down, low go up.
- The mentioned above is the change based on the sound tuning sheets offered, but even when using the other materials for tuning, the characteristics change that occurs related to density of the filter. High density makes more change is what is in common.
- This genuine sound tuning sheet is one of the tuning materials made only for workability. Its effect will be different when using silk, cotton, and natural materials for tuning from industrial products even using same density. In general, it will be more preferable changes. Using natural materials for tuning, please note the growth of mold, corrosion, allergy, and etc. Please be careful and act on your own responsibility.

## Tuning

**1** Attach the filter into the sound conduit of the front body and the backside of the opening of the rear body.

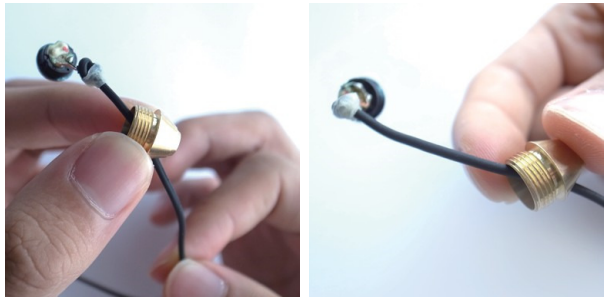

**1-①** Remove the front body, slowly pull the driver unit

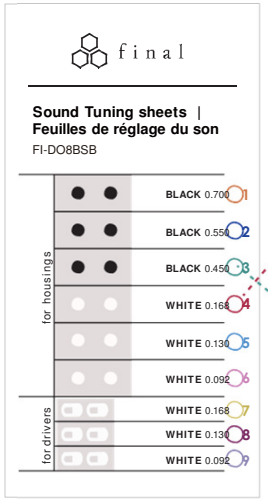


Be careful not to rotated the driver unit when removing the front body.
Be careful not to pull hard the driver unit's metal cover when pulling the driver unit out.

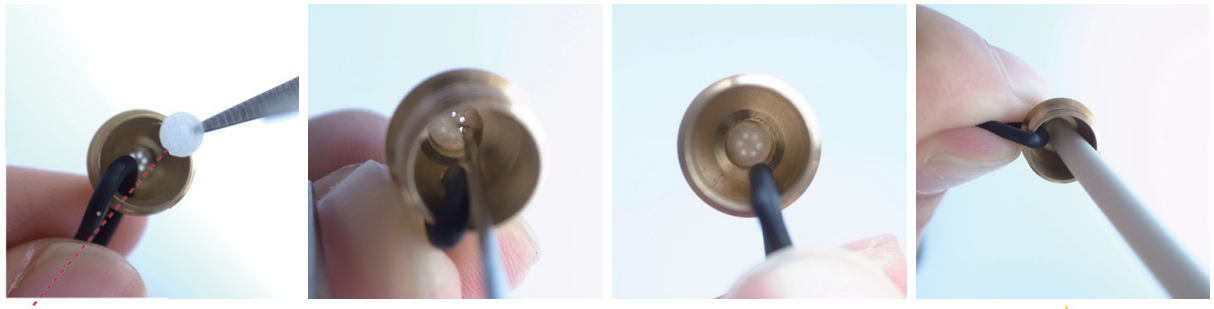
Push out the cable for 5cm.

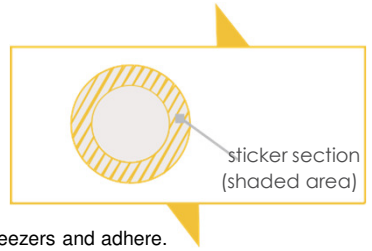
**1-②** Push out the cable for 5cm



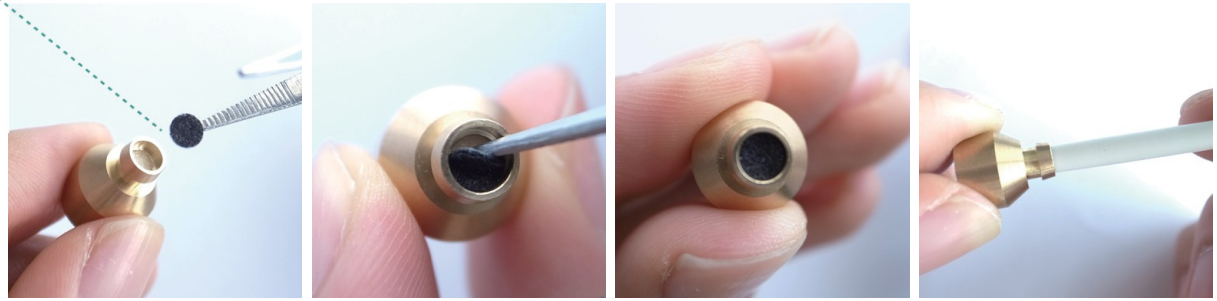



1-③ Attach the filter ④ into the backside of the opening of the rear body, Press the sticker section by jig or tweezers and adhere.



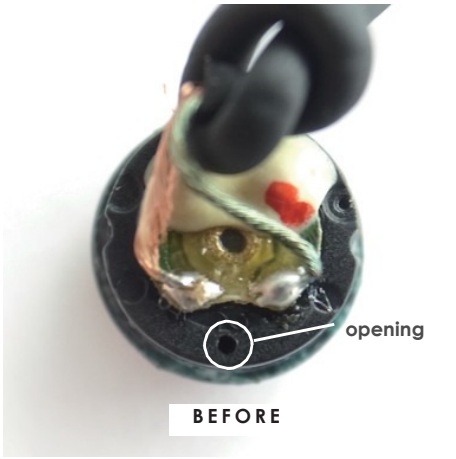


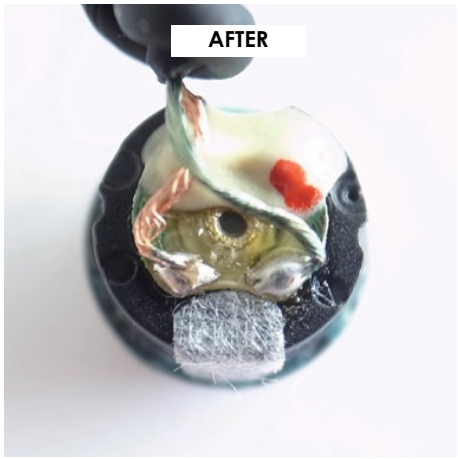

1-④ Attach the filter ③ one the inner rim of the sound conduit, press the sticker by jig or tweezers and adhere.



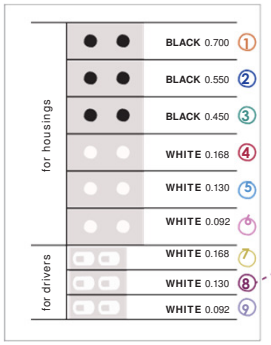
## Tuning

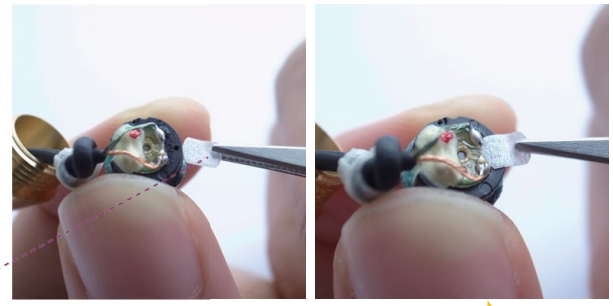
**2** Attach the filter to the opening of the driver unit



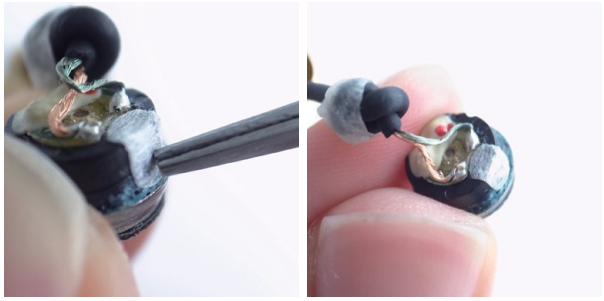




**2-①** Affix the filter ⑧ to the opening of the driver unit

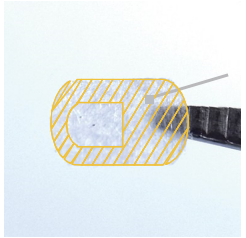


**2-②** Press the sticker section by using the tip of the tweezers and adhere.



sticker section (shaded area)

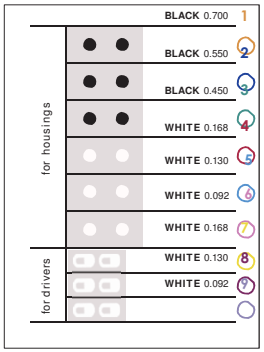


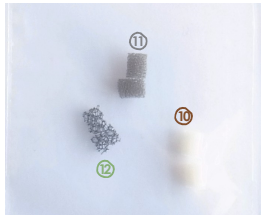
If the sticker section of the filter is across the opening of the driver unit, air can not pass through it; ensure that this adhesive section does not cover the opening.

Place the driver unit inside the rear body again, screw the front body and attach the earpiece.

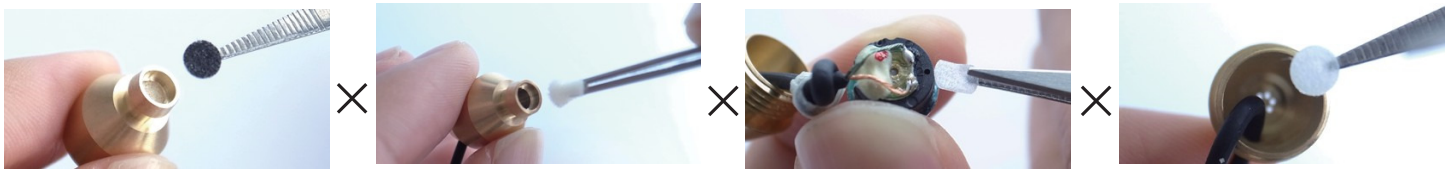
Let's try out the sound

## The characteristics changes in frequency by using basic final tuning sheet




③ ⑩ ⑧ ④



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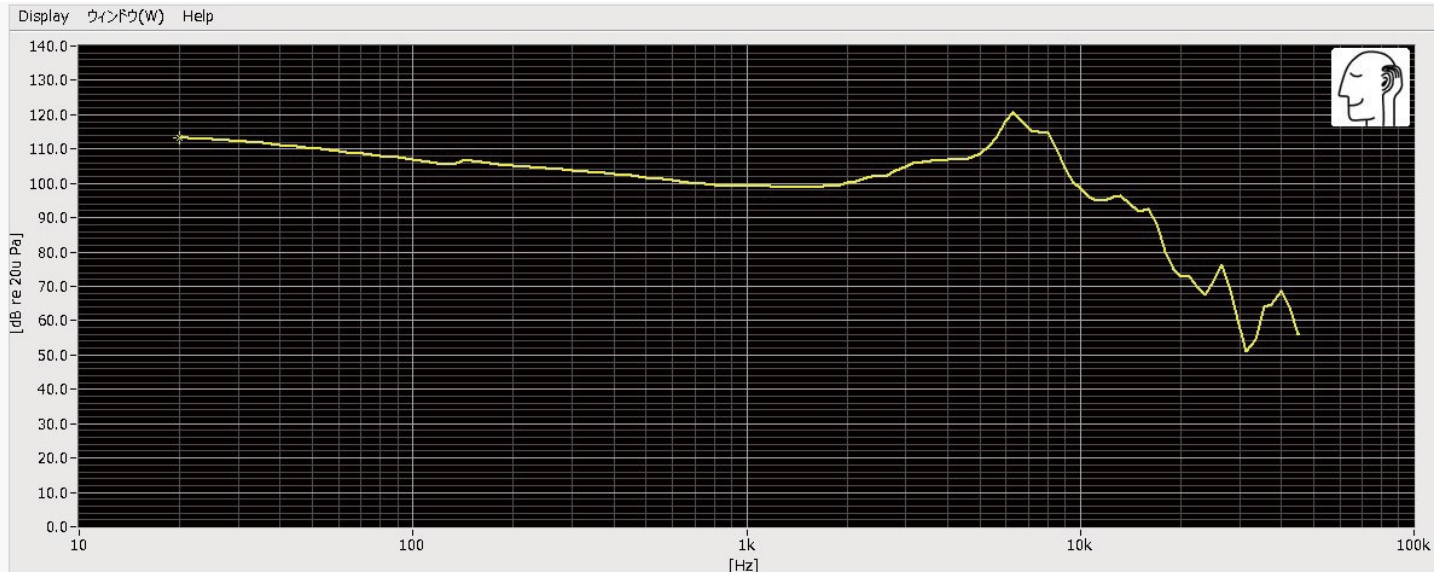


※ measuring method based on IEC standard (up to 20KHz)
※ over 20KHz is declined by measuring method above.