

ケンツメディコ
KENZMEDICO

*The only domestic Japan-made stethoscope manufacturer
High quality Japan-made stethoscope
Approx. 40% share of the number of stethoscopes sold in Japan*

**Design
Your
Smile**

健康創造の
スズケングループ

The KENZMEDICO quality which diagnoses sound



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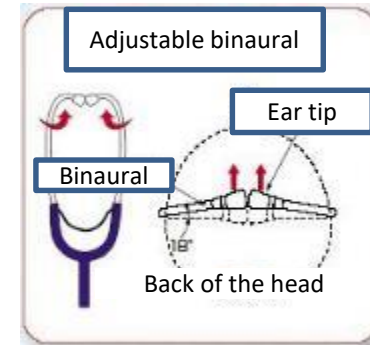
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Stéréophonette Premium No.175

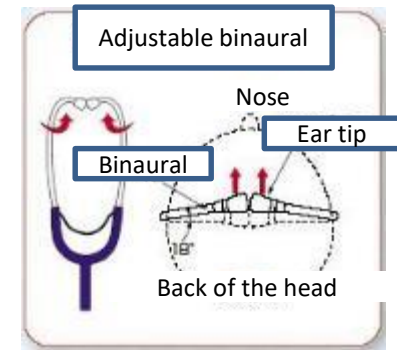
The highest grade model single-head type for Stereophonette



- ① Right and left independent sound from chest piece to ear tip makes users to figure out stereo information like expansion and direction of sound origin AS WELL AS strong/weak and quality of sound.
- ② Massive feeling because of stainless chest piece and binaural. Superior auscultation can be created by sound conduction coming from hard stainless material.
Good reputation from Respiratory · Cardiology specialist.
- ③ High-class looking makes users to be comfortable for use.

Stéréophonette No.171

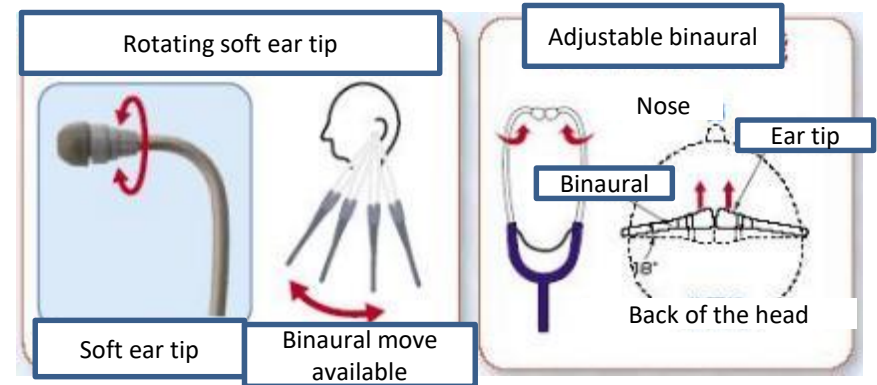
The highest grade model for Stereophonette



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Stéréophonette No.178

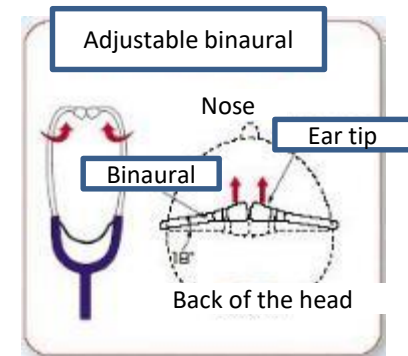
The standard type of Stereophonette



- ① Right and left independent sound from chest piece to ear tip makes users to figure out stereo information like expansion and direction of sound origin AS WELL AS strong/weak and quality of sound.
- ② **360 degree rotating soft ear tip** makes fitting to be comfortable and not to irritate the ears. Fitting to all users by adjustable binaural.
- ③ **Non-chilling ring and cover ring** DO NOT feel patients not to be chilled.
- ④ 6 colors of tube selectable (Black · Navy-blue · Burgundy)





Stéréophonette No.333

Single-head type of Stereophonette



- ① Right and left independent sound from chest piece to ear tip makes users to figure out stereo information like expansion and direction of sound origin AS WELL AS strong/weak and quality of sound.
- ② It is a single-head type, however it has superior sound conduction because of Zinc die-cast chest piece.
High reputation from Respiratory specialist and executive nurses.

Specification of Stéréophonette

Stereophonette				
Manufacturer	KENZMEDICO	KENZMEDICO	KENZMEDICO	KENZMEDICO
Model name	No.175	No.171	No.178	No.333 (single)
Material of chest piece	Stainless	Stainless	Zinc die-cast	Zinc die-cast
Material of binaural	Stainless	Stainless	Brass	Brass
Binaural angle adjust	○	○	○	○
Diaphragm (Adult)	○	○	○	○
Bell (Adult)	×	○	○	×
Tube	two-in-one	two-in-one	two-in-one	two-in-one
Rotating ear tip	○	○	○	○
Antibacterial treatment	×	×	×	×
Repairable spring equipped with binaural	○	○	○	○
Length	70cm	73 c m	68 c m	75 c m
Weight	250g	230 g	200 g	150 g
Number of color	2	1	6	6
				

What is Stéréophonette?

The chest piece is divided into right and left by a central partition, and sound is conducted through two-in-one tube with two sound routes. In other words, it is high quality stethoscope which you can hear the independent sound from right and left ear.

By ordinary stethoscope, you hear the sound from right and left ear AS one sound. It is like to hear mono sound from radio.

By Stereophonette, you can hear the sound from right and left ear independently and **auscultated information like direction, conduction and expansion of the sound will increase drastically.**



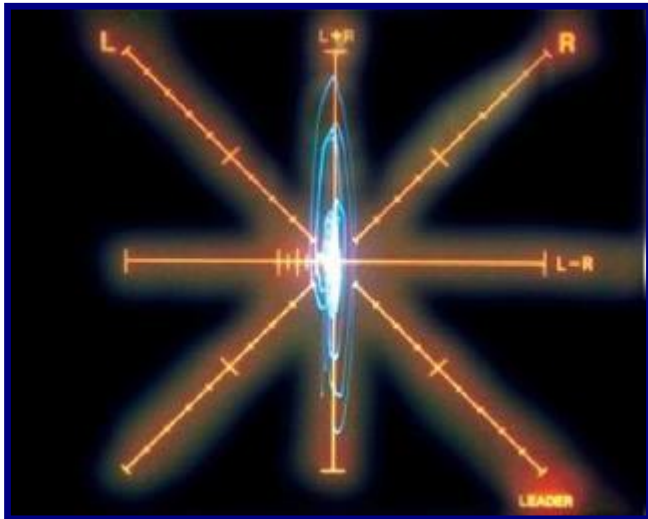
Stereo sound auscultation

The sound with expansion and direction

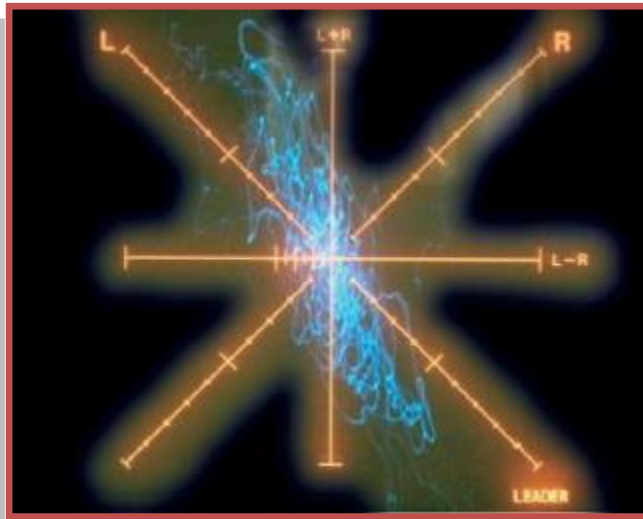
The diagnostic information (like direction of abnormal sound) can be easily recognized by direction and conduction of sound from the abnormal sound origin of cardiopulmonary.

EX : Realistic adverse sound of aortic valve disease WITH direction
Sound causing from interstitial pneumonia can be heard.
(It is difficult to hear by ordinary stethoscope.)

Expanded sound inspection by audio system monitor



Existing stethoscope



Stéréophonette



How to use Stereophonette efficiently?

In order to know the superiority of Stereophonette, the best way is that you actually will try to use it.

There is a method to let you understand the superiority in 10 seconds.

Let your customer hang on Stereophonette to the ears and face diaphragm as Figure 1 below.



Figure 1

Then, slide the finger putting on diaphragm from left to right like from Figure 2 to Figure 4.

(Crossing divided line on chest piece by finger)

Customer can feel the sound conduction moving from right to left.



Figure 2

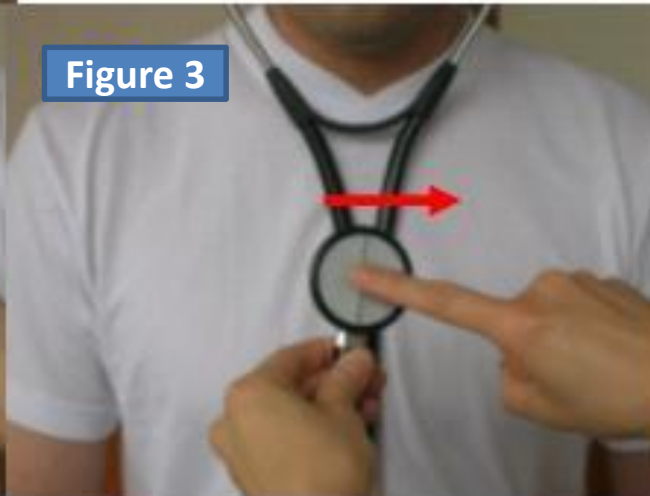


Figure 3



Figure 4

Mastering bedside auscultation skills using a stethoscope.

Tsunekazu Takashina MD, PhD, FACC, FAHA
 Chairman, Japanese Educational Clinical Cardiology Society
 Visiting Professor, The University of Arizona College of Medicine
 Visiting Professor, Kinki University, School of Medicine

Stereophonette SX178



A heart sound is "organ language" that a patient's organ speaks. Clinicians communicate with patients through "spoken language" that patients use to report their own symptoms. Furthermore, changes of facial expression and postures such as placing the fist on the chest due to chest pain are "body languages". The clinicians must understand these "languages in clinical practice".

Traditionally, an impressive number of clinicians are putting more emphasis on verbal history and diagnostic devices than on bedside physical examinations. The necessary basic skills that clinicians should acquire are a series of physical examination procedures that start from interviewing the patient while observing the facial body language of the patient. This is followed by anthropometry, palpation, and auscultation procedures. It is important for clinicians to be confident in their own medical skills.

You will discover the attractions of auscultation that you have never found in conventional stethoscopes by using "Stereophonette SX 178", the stethoscope developed by KENZMEDICO which enables you to capture heart sound as stereophonic frequency. The stethoscopes will never be replaced in clinical practice no matter how times will change.

[Practice in Bedside Auscultation]

Considerations for auscultation

1. Choose a quiet room. The examiner as well as the patient should be relaxed. Stop breathing while the auscultation is going on. (By doing these, auscultation accuracy will be improved by 20 %.)
2. Select a stethoscope which has a solid tube of proper length and diaphragms that can be applied tightly into the ears.
3. Know the auscultation sites correctly. (See the figures below.)
4. Confirm the side position of the chest piece.
 (Wear the stethoscope and confirm stereo effects by softly rubbing the diaphragm surface "from right to left" or "from left to right" with the fingertip.)
5. Know the timing of the heart murmurs (in systole or diastole).
6. Know the point of maximum intensity of the heart murmur. (Any organic change occurs right there.)
7. If it is a systolic murmur, identify the timing as early, mid, or late systolic. The same things also apply in diastolic murmurs.
8. Know the intensity of the heart murmur. (Levine's Classification I/VI to V/VI.)

Levine's Classification

- Grade I/VI : Very faint to recognize the murmur that beginners cannot detect.
- Grade II/VI : Faint, but easy to recognize the murmur if you listen carefully.
- Grade III/VI : Loud enough for beginners to detect the sound.
- Grade IV/VI : Loud murmur with palpable thrill due to chest palpation.
- Grade V/VI : Very loud, and you can detect the sound even if the stethoscope is partially away from the chest wall.
- Grade VI/VI : Loudest murmur, and you can detect the sound even if the stethoscope is off the chest wall.

9. Apply "breathing holding test" or "changing of body position test" during auscultation.
10. Touch the pulse of radial or median artery with one hand during auscultation.
 (This custom should be acquired because the artery pulses are palpable during mid-systole.)
11. Always verbally reproduce the auscultation findings you detected using cardiophonetics and copy the heart sound as much as possible.
12. Graphically represent mechanism of the heart sound/murmur.
13. Subtle changes caused by inspiration/expiration in the auscultation of the breath sound can be identified by using the stereophonette.

Precordial auscultation sites

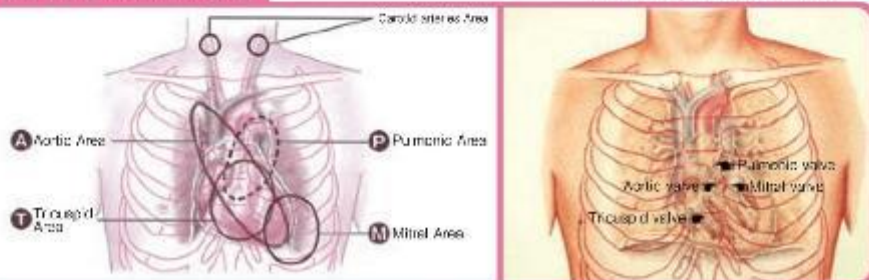


Illustration by Tsunekazu Takashina

KENZMEDICO

Considerations for auscultation in each site

a. Auscultation of carotid artery

In carotid artery stenosis:

systolic bruits can be heard over the bilateral carotid arteries. If the stenosis is severe, sustained bruits can be heard.



b. Auscultation of the aortic area (upper) (2nd interspace/right margin of sternum)

Normally, S2 is louder than S1 in this area.

In aortic stenosis:

systolic ejection murmur over the aortic area to the bilateral carotid arteries can be heard. In this case, bruits can be detected from right to left or from left to right by pressing the diaphragm surface vertical to the direction of the aorta.



c. Auscultation of the aortic area (lower) (3rd interspace/mid to left margin of sternum)

In aortic regurgitation:

according to the blood flow, early systolic ejection murmur can be detected from right to left, and early diastolic regurgitant murmur can be detected from left to right as stereophonic frequency. (The murmurs can also be heard in the tricuspid area.)



d. Auscultation of the pulmonic area (2nd interspace/left margin of sternum)

*S2 is louder than S1 in this area.

*The splitting of S2 is particularly important in this area.

Normally (physiological splitting or respiratory splitting), on inspiration, the S2 splits approximately 0.02 sec.

If any disease is present, the splitting of S2 is distinguishing.

In atrial septal defect, the fixed splitting of S2 can be detected.



e. Auscultation of the tricuspid area (3rd interspace/left margin of sternum)

*The loudness of S1 and S2 are almost same in this area.

*The splitting of S1 and a click sound may be heard.

In mitral stenosis, the opening snap can be heard.

In tricuspid insufficiency, the prominent Rivers Corvalli's sign can be detected.

The pansystolic murmur increases on inspiration, and decreases on expiration.



f. Auscultation of the mitral area (Cardiac apex = 5th interspace/midclavicular line)

In this area, S1 is louder than S2. In addition, S3 and S4 can be heard.

*For auscultation of patient, it is recommended to use the left lateral recumbent position and left surface of the sternocostal.

In mitral stenosis,

the mid-diastolic rumbling murmur can be heard from left to right through auscultation by placing the left side of the bell surface upward and placing right side downward.

In mitral regurgitation,

S3 following the pansystolic murmur can also be detected.

(Also, perform auscultation of sites such as back and lower left axilla because the frequency can be diffused into these areas.)



You can download all files related to the following website: "Mastering bedside auscultation skills a stethoscope" by Dr. Tsunekazu Takashina from KENZMEDICO's website.

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